IMPORTANCE OF GROUNDWATER DEPTH, SOIL TEXTURE AND ROOTING DEPTH ON ARID RIPARIAN EVAPOTRANSPIRATION

Volume I

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ABSTRACT

Water resources in the Southwest are very limited for a population that has grown by 24% in the past 10 years. For optimal water resource and wilderness management it is of great importance to quantify evapotranspiration of arid riparian vegetation. Saltcedar and other phreatophytes have been reported to consume large amounts of fresh water. However this study shows that groundwater depth and soil textures are more important in the determination of evapotranspiration rate than is vegetation. The Bosque Del Apache Refuge in Central New Mexico along the Rio Grande is used as an experimental site where evapotranspiration was measured in cottonwood-willow-grass (90.4 cm/y evapotranspiration) and dense saltcedar (132.5 cm/y evapotranspiration) plots. Measurements of soil water content, soil salinity, groundwater salinity and groundwater depths were made in the experimental sites of cottonwood and saltcedar stands. Transpiration rates between the two vegetation communities are comparable if the effects of soil textural differences, groundwater depths and flooding were accounted for. The computer model Hydrus 1D was used to investigate the manner in which actual evapotranspiration depends on soil texture (clay, loam or sand), groundwater level (1, 2, or 5 m depth), rooting depth (0.3 cm, 1 m, or 3 m) and reference evapotranspiration (6 mm/day or variably calculated from weather data). Analysis of 75 virtual soil models shows that: (i) groundwater depth is most strongly correlated to evapotranspiration rate, (ii) fine soils hold more water and allow for more evapotranspiration, and (iii) deeper rooted vegetation transpires more than shallow rooted vegetation. Hydrus 1D models were then created for the experimental sites. These models were calibrated to measured evapotranspiration, soil and vegetation parameters, and then groundwater depths were augmented. Groundwater depth was shown to correlate stronger to evapotranspiration than any soil or vegetation parameter.

1. INTRODUCTION

1.1. IMPORTANCE OF EVAPOTRANSPIRATION IN ARID ENVIRONMENTS

Evapotranspiration is a very important part of the water balance and of the fresh water cycle. It is estimated that globally 71,400 km^3 or 480 mm of water evaporates from the land surface every year (Baumgartner & Reichel, 1975). Evapotranspiration affects the climate, soils and vegetation as well as streams and groundwater.

Evapotranspiration partially determines the amount of water in the air. This changes atmospheric heat and vapor transport. Thus, evapotranspiration can affect regional climate and weather. Evapotranspiration can also interact with microclimates. For example, a forest grove and clearing will have different air and soil temperatures and water contents partially as a result of differences in evapotranspiration rates.

Soils and vegetation are the medium through which water moves to the atmosphere over land. Plants have various properties that determine how much water they draw from soils. A healthy plant's physiological adaptations to the environment and its growth rate will determine its ability to remove water from soils, and the ease with which a plant will yield water to the atmosphere. Soil water content, texture, and structure will have the most effect on evapotranspiration rates.

Evapotranspiration can remove great amounts of water from streams and lakes in arid regions in particular. It can also be a discharge for shallow groundwater and severely limit groundwater recharge. Thus, the small amounts of freshwater inflow in arid environments are greatly diminished by evapotranspiration. Quantification of evapotranspiration is very important in the determination of other water balance parameters, because of the great effect of evapotranspiration on fresh water systems. Calculations of runoff, and groundwater recharge can be drastically effected by actual evapotranspiration values (Hendrickx & Walker, 1997).

Groundwater recharge in particular is very sensitive to actual evapotranspiration rates. In arid environments this is particularly so, because the values of groundwater recharge are on the order of the error values of precipitation minus evapotranspiration. Therefore, better determination of actual evapotranspiration is critical for determination of groundwater recharge.

In arid regions, fresh water is a rare commodity, and the loss of the water to the atmosphere has a very serious human impact. Human populations in the arid Southwest of the US are growing rapidly. From 1990 to 1999, the population of Arizona, Colorado, New Mexico, Nevada, and Utah grew 24% from 11.451 to 14.513 million (US Census Bureau, 1999). Consequentially the water resources in the Southwest continue to be important as water resources dwindle. Understanding more about evapotranspiration trends may help reduce this loss in the future. A more accurate evaluation of evapotranspiration may also be helpful for water management strategies.

Evapotranspiration is also important for irrigation and agriculture as well as for wilderness management. A good understanding of evapotranspiration is important for crop management as it is tied to plant health and productivity. Knowledge of water loss is important for irrigation schemes and minimization of evapotranspiration with techniques such as drip irrigation may be beneficial. Forest fire prevention and minimization of evapotranspiration losses in wetlands and riparian systems can be very important in the West. Studies of evapotranspiration may also help manage lands and surface waters such that salinization is minimized.

1.2. QUANTIFYING EVAPOTRANSPIRATION

Though the study of evapotranspiration is important, obtaining accurate and reliable data can be very difficult. The measurement of evapotranspiration fluxes can be difficult because of the nature of, and high degree of variability within measurable parameters. Evapotranspiration depends on various factors that vary in time and space such as climate, soil properties and vegetation. Each of these parameters may be highly variable in both time and space. These parameters can be averaged over time, however the hysteretic nature of fluid flow in soils and vegetation would produce inaccurate calculations of evapotranspiration.

Weather parameters such as wind, solar radiation and temperature can change an order of magnitude in less than a day (Allen et al., 1998). Solar radiation and temperature vary in daily and seasonally sinusoidal manner, as opposed to precipitation, which is more sporadic and less predictable. Variations in soil parameters such as texture, structure, stratigraphy, and wetness may induce relatively large differences in evapotranspiration rates. Soil properties as well as vegetation properties have a strong effect on the spatial variability of evapotranspoiration. Vegetation species, spatial distributions, density, orientation and leaf area can have an effect on spatial patterns of evapotranspiration. Vegetation parameters such as growth rate, maturity, rooting depth, and health also effect temporal variations in evapotranspiration rates.

Another complication in the measurement of evapotranspiration data is the nature of the data itself. Some properties are physically difficult to measure. Heat fluxes and water vapor fluxes in particular are difficult to physically measure accurately (Jensen et al., 1990). Methods have been devised that measure water vapor density. However, water vapor moves upward mostly through turbulent mixing of air with the help of wind (Jensen et al., 1990). Thus, the net movement of water in air is difficult to ascertain.

1.3. SCOPE OF THIS PROJECT

The objective of this study is to evaluate groundwater depth, soil texture, crop rooting depth and precipitation as factors effecting evapotranspiration in an arid riparian area of New Mexico. These factors will be evaluated to determine their influence on evapotranspiration.

First, measured data reported in the literature is analyzed to determine correlations and patterns involved with the factors affecting evapotranspiration. Groundwater level, salinity and soil moisture data is analyzed to determine seasonal trends, and groundwater level data is used to analyze daily trends. Next, Hydrus 1D was used to create 75 virtual soil models, which can be used to identify, rank and analyze some of the factors effecting evapotranspiration. These 75 evapotranspiration models in virtual soils show the relative importance of and patterns of soil texture, rooting depth, and groundwater level with respect to evapotranspiration. Finally, Hydrus 1D was used to model evapotranspiration from saltcedar and cottonwood stands in the Bosque

del Apache, New Mexico. Climate, vegetation, soil and groundwater data taken at the site are used to simulate evapotranspiration. The model is calibrated to measured evapotranspiration and then the groundwater level is augmented producing 18 models, which will be used to determine the effect on evapotranspiration.

2. BACKGROUND AND HISTORY

2.1. SOUTHWESTERN VEGETATION AND INVASION OF SALTCEDAR

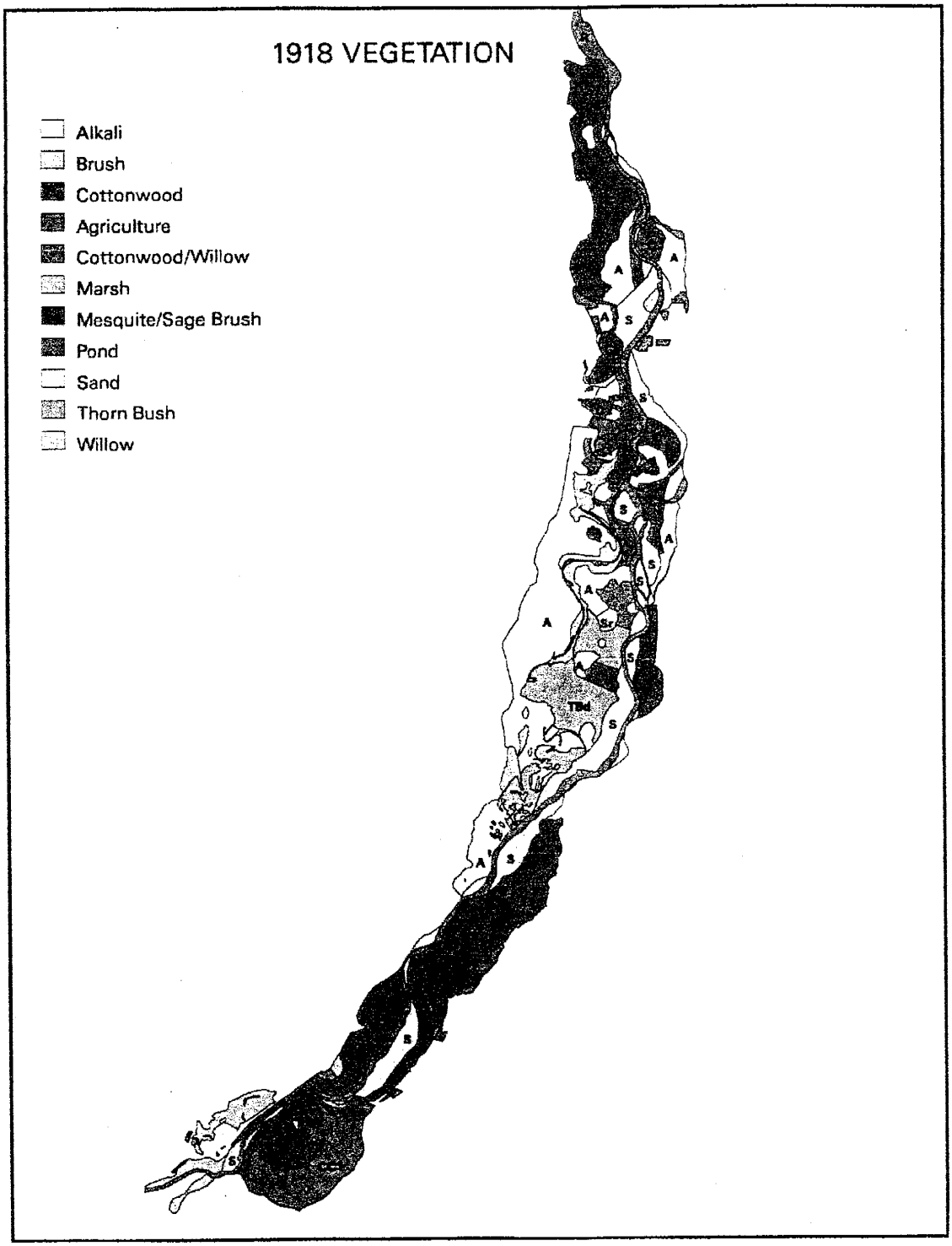
In the arid Southwest, most plants may be classified as phreatophytes, xerophytes and halophytes. Halophyte species are adapted to saline or alkali soils, and are found along playas and other saline soils (Robinson, 1958). Xerophyte species adapted to drought, and survive on scant and infrequent rain, and are common across deserts (Robinson, 1958). Phreatophytes are unlike other classes in that they tap groundwater resources instead of relying only on soil water and precipitation (Robinson, 1958). These plants are found along irrigated lands, water canals, and natural drainage basins (Robinson, 1965).

Phreatophytes can consume large amounts of fresh water because of their ability to use groundwater (White, 1932; Robinson, 1958). This has prompted research interest in phreatophytes in the Southwest. The most common types of phreatophytes in the Southwest are alfalfa, saltcedar, mesquite, willow, cottonwood, greasewood, rabbitbrush, pickelweed and saltgrass (Robinson, 1958).

Previously, a great diversity of phreatophytes and xerophytes existed along desert streams (Map 1). These ecological systems change over time with climatic and stream flow cycles in complex patterns (Turner, 1974; Robinson, 1965). A great many riparian systems in the Southwest have changed. Many streams in the Southwest have thinned and have become more channelized and single-species saltcedar cedar stands have replaced many riparian vegetation systems (Turner, 1974; Robinson, 1965).

Stream channels will narrow naturally when flows decrease. This may happen when precipitation decreases or as water use increases. People have channelized streams to control flow and/or decrease flooding of fertile valley lands. Streams may become more channelized when dense vegetation (saltcedar in particular) holds banks and clogs overflow channels (Turner, 1974). The results of smaller stream channels and clogged overflow channels is a decrease in

Map 1. 1918 Vegetation in the Bosque Del Apache National Wildlife Refuge †



† This map illustrates the diversity in vegetation communities that existed previous to the invasion of saltcedar species.

flood frequency but an increase in the extent and damage of floods (Turner, 1974; Robinson, 1965).

A more dramatic change in the riparian areas of the Southwest is the invasion of saltcedar. There are approximately 75 species of saltcedar (*Tamarix sp.*) however, only a few species are a serious ecological and water consumptive threat (Robinson, 1965; Cuningham et al., 1973; Weeks et al., 1987). The origin of and route to the United States of saltcedar is in question.

Various species of saltcedar may have originally come from the Mediterranean region, the Mid-East and/or Asia (Robinson, 1965). One or more species may have accompanied Spanish explorers in the 16th century (Robinson, 1965). *Tamarix* species seem to have been very rare in the New World before the 20th century; few records of their presence in the United States existed until 1854 (Robinson, 1965). The plants were used as garden ornamentals and for hedges in the later 1800s and early 1900s.

The negative affects of *Tamarix sp.* on surface water and soils were not recognized early on. In fact a *Tamarix* species was planted along the Rio Puerco and Rio Salado (tributaries to the Rio Grande) in the 1920s for erosion control and was also noted along the Pecos River in 1912 in New Mexico (Robinson, 1965). *Tamarix sp.* began to appear lightly dispersed along some streams in a few Southwest states in the 1920s and 1930s. Over the past 40 years, the plants spread dramatically.

Since the 1960s *Tamarix sp.* can be found wild in Arizona, New Mexico, Texas, Oklahoma, Kansas, Colorado, Utah, California, Nevada, Oregon, Idaho, Montana, and Wyoming (Robinson, 1965). The plants have become the dominant species of many stream banks in the Southwest, and have even spreading to cooler and more humid areas.

There are several properties of the widespread Tamarix species that allow for their domination of riparian portions of the Southwest. Saltcedar produce prodigious amounts of seed and grow in very dense thickets (Robinson, 1958; Robinson, 1965). This allows the vegetation to seed more soils and choke-off competing vegetation. The speed of saltcedar growth is remarkable when water is not limiting (as observed in the experimental field sites by Darold

Roland, Behnaum Moayyad and Salim Bawazir). This allows saltcedar to out-compete other seedlings. Another important property of these species is their ability to survive in somewhat saline environments (Robinson, 1958). In fact, saltcedar species concentrate salts in soils by dropping leaves with high salt concentrations, and by transpiring large quantities of water (Hem, 1967; Robinson, 1965). These adaptations allow the plants to create environment toxic to some competing species. Some species of saltcedar with these properties are *T. pendandra, T. chinensis,* and *T. ramosissima* (Robinson, 1965; Devitt et al., 1998; Weeks et al., 1987)

The adaptations that allow these species to grow and spread rapidly make the plants high water consumers. Evidence of high water consumption by saltcedar and other phreatophytes spurred on research of evapotranspiration in riparian systems in the Southwest. Some of this research prompted policies of phreatophyte control and eradication along southwestern streams. Certainly saltcedar has negative effects on native ecology, flood management and water resources. However, further studies are necessary to aid proper and effective surface water and wilderness management.

2.2. PREVIOUS STUDIES

2.2.1. Methods Most Often Used to Study Evapotranspiration

There are various methods to measure or estimate evapotranspiration. The first measurement strategies that were developed were based on a mass or volume balance on the surface and in the subsurface. Principally, these methods used the water balance approach (van Hylckama, 1980):

$$\text{Evapotranspiration} = \text{Inflow} - \text{Outflow} \pm \Delta\text{Storage} \qquad (1)$$

The fluxes in the above equation have units of mm/day. Large-scale studies use the water balance approach to measure evapotranspiration for entire drainage basins or sections of drainages (Jensen et al., 1990). Smaller-scale studies use lysimeter tanks to enclose the system

of study. The tanks can be meters to hundreds of meters squared in aerial dimension. The inflows and outflows of the system of study are systematically monitored and regulated such that the evapotranspiration of the lysimeter tank or basin can be calculated, as a residual (Jensen et al., 1990).

Other traditional methods for estimating evapotranspiration include the salt balance and transpiration well methods. The salt balance method works on the principle that concentrations of dissolved salts (in particular sodium chloride) increase from the concentrations in precipitation due to evapotranspiration, which removes pure water to the atmosphere. Therefore, chemical concentrations of rain and groundwater can be used to calculate both overall recharge and evapotranspiration. The transpiration well is used to measure shallow groundwater levels over daily periods. The amplitude of the daily fluctuation of the groundwater depths in these wells is used to calculate the daily water loss from the groundwater due to evapotranspiration (Gatewood et al., 1950).

More recently, measurement strategies have been developed to calculate evapotranspiration through surface energy budgets. Latent heat is the energy produced from the volatilization of water due to evapotranspiration. The latent heat can be calculated as a residual of the surface energy balance (Jensen et al., 1990):

$$LE = R - H - G \pm A \tag{2}$$

$$ET = LE/(\rho_w \lambda_v) \tag{3}$$

Where LE = latent heat flux [W/m^2], R = net radiation [W/m^2], H = sensible heat flux [W/m^2], G = ground heat flux, A = advected heat flux [W/m^2], ET = evapotranspiration rate [m/s], ρ_w = density of water [kg/m^3] and λ_v = heat of vaporization [J/Kg]. Energy balance calculations may develop relatively large errors, because of the complexity of atmospheric transport (Gay, 1986).

The Bowen Ratio method uses a ratio of sensible heat/latent heat coefficients, in such a way that the transport coefficients cancel out (Jensen et al., 1990). Thus, field measurements are made more simply and accurately. The equations are as follows (Jensen et al., 1990):

$$LE = (R - G \pm A)/(1+B) \quad (4)$$

$$B = H/LE = \gamma^*(\Delta T/\Delta e) \quad (5)$$

Where B = Bowen Ratio [-]; L, R, G and A are in units of W/m^2; γ = pychrometric constant [$Pa/^oC$]; ΔT = change in temperature from the canopy to 3 m above the canopy [^oC]; and Δe is the difference in vapor pressure of water from the vegetation level to above in the ambient atmosphere [Pa].

The third major measurement strategy is based on measuring vertical vapor fluxes as a direct measure of evapotranspiration. This is accomplished by: (i) Simultaneous measure of vertical wind and vapor pressure (eddy-correlation), (ii) Sonic measurement of vapor flux (sonic anemometer), and/or (iii) Laser measurement of vapor flux (LIDAR). LIDAR (light detection and ranging) is a system designed to scan the air over a given study area in order to produce a three-dimensional map of water vapor and estimate vapor fluxes over time by refractive indexing (Cooper, 1997). These measurement techniques often involve simultaneous measurements of surface energies as part of the method or to compliment and check the measurements. The eddy-correlation method is the most common and well-tested method of this type.

2.2.2. Water Balance Studies

Water balance studies can be simple calculations or very broad and extensive projects. Evapotranspiration can simply be calculated as the difference between precipitation and net runoff (stream outflow). Alternatively, soil moisture, groundwater flow, and surface flow can be spatially and temporally correlated with atmospheric data to calculate evapotranspiration as a function of time and space.

Bowie and Kam (1968) and Hendricks (1960) studied evapotranspiration from a 6.6 km stretch of Cottonwood Wash in Arizona. The upper 4.2 km reach was less densely populated by cottonwood and willow than was the lower 2.4 km reach. Water balance calculations neglected soil water content and groundwater flow to determine evapotranspiration (Hendricks, 1960; Bowie & Kam, 1968). Evapotranspiration values calculated in this study are relatively low for these species in the arid West yet consistent with values measured in the Bosque del Apache: average April to September daily evapotranspiration is 0.393 cm/day, maximum actual evapotranspiration (from monthly data) is 0.785 cm/day, and average yearly total evapotranspiration is 111.63 cm/y (Hendricks, 1960; Bowie & Kam, 1968).

Culler et al. (1976) used a water balance method to study evapotranspiration from saltcedar and mesquite for the Gila River Phreatophyte Project in Arizona. The study area is 24 km long and involves a tremendous amount of measurements. Their water balance equation involves: precipitation, steam flow and stream storage components, three soil moisture components, and three groundwater flow components (Culler et al., 1982):

$$ET = Q_I - Q_O + Q_O + \Delta C + P_A + \Delta \bar{M}_S + \Delta \bar{M}_I + \Delta \bar{M}_C + G_B + G_I - G_O + \Delta \bar{M}_{TC} \quad (6)$$

Where ET = evapotranspiration [m^3], Q_I = surface inflow of the Gila River [m^3], Q_O = surface outflow of the Gila River [m^3], Q_T = surface inflow of the Gila River tributaries [m^3], ΔC = change in Gila River channel storage [m^3], P_A = average precipitation on the area [m^3], $\Delta \bar{M}_S$ = average change in water content in the uppermost unsaturated zone of soils [m^3], $\Delta \bar{M}_I$ = average change in water content in the middle unsaturated zone [m^3], $\Delta \bar{M}_C$ = average change in water content in the capillary fringe of the unsaturated zone [m^3], G_B = groundwater inflow from depth [m^3], G_I = groundwater inflow from saturated alluvium [m^3], G_B = groundwater outflow from alluvium [m^3], and $\Delta \bar{M}_{TC}$ = lateral groundwater flow through the capillary zone from adjacent terrace.

Compared to other studies of these species, the evapotranspiration values are low (Culler et al., 1982): average April to September daily evapotranspiration is 0.285 cm/day, maximum actual

evapotranspiration (from monthly data) is 0.55 cm/day, and average yearly total evapotranspiration is 72.5 cm/y.

Hanson and Dandy (1976) evaluated the accuracy of the water balance calculations at the Gila River Project. They found that errors are of the same order (40 to 200%) as the evapotranspiration values calculated by Culler et al. (1982). This is due to the culmination of the relatively large sampling errors. However, the trends seem to be more accurate, and one may have more confidence in the average values than error values indicate because the nature of the errors seems to have added noise to the data, which can be somewhat diminished by averaging data (Hanson & Dandy, 1976).

Welder (1988) studied water consumption by saltcedar along a 132 km stretch of the Pecos River in New Mexico. No specific evapotranspiration values were calculated, but changes in stream flow were evaluated to indicate evapotranspiration trends. This project specifically studies the effects of vegetation modification and eradication in attempts to reduce consumptive losses. Gateway et al. (1950) also used various water balance approaches in their studies of evapotranspiration in the 1930s and '40s. Although these researchers use very sound methods available at the time, the results are presented on a volumetric basis are not readily comparable to other results presented here.

Water balance studies are very inaccurate for regional scale studies, and may require a great deal of measurements. These techniques seem to have become out-dated, although the water balance approach still is valid for small-scale work, such as with the lysimeter method.

2.2.3. Lysimeter Studies

Lysimeters provide a very controlled and direct way to measure evapotranspiration. Precipitation is monitored, and groundwater levels can be maintained. All inflows and outflows can be measured so that the residual is evapotranspiration. The drawback is that the natural environment or a segment of that environment must be recreated within the lysimeter. It is often a difficult task to try to recreate soil and vegetation characteristics that mimic a natural environment.

Gateway et al. (1950) use small lysimeters to study evapotranspiration from saltcedar, cottonwood, and willow in Arizona. Some of these early lysimeters were the size of large planting pots, only large enough to accommodate the roots of single plants (Gateway et al., 1950). These researchers used almost every method available to that date and evaluated each method. They found that all the methods contained a large amount of error, yet the results were comparable, and that lysimetry tended to produce the largest evapotranspiration rates (Gateway et al., 1950). These are some of Gateway et al. (1950) lysimeter results: saltcedar average yearly total evapotranspiration is 123 cm/y, cottonwood/willow average yearly total evapotranspiration is 233 cm/y, willow average yearly total evapotranspiration is 138 cm/y, and mesquite average yearly total evapotranspiration is 83 cm/y.

McDonald and Hughes (1960) conducted a lysimeter study of small to mid-sized phreatophytes along the lower Colorado River near Yuma, Arizona. The lysimeters for this time were of relatively large size (2X2m, depth not given), yet these researchers state that the lysimeters are not large enough or designed to study large phreatophytes such as willow, saltcedar or cottonwood (McDonald & Hughes, 1960). Table 1 shows the results of the study (McDonald & Hughes 1960). This study shows that some grasses can consume more water than the phreatophyte quailbrush, and more than twice as much as the xerophyte fourwing saltbrush can.

Robinson (1970) conducted a lysimeter study of woody phreatophytes along the Humboldt River in Nevada. Greasewood, willow, wildrose and rabbitbrush were grown in large (3X3X2 to 9X9X5 m) lysimeters, which allowed for a more accurate study of large brushy vegetation. Table 2 shows some of the results (Robinson, 1970). Water content profiles indicate that greasewood and wildrose draw most of their water from the unsaturated portions of soils. Because willow and rabbitbrush draw water from the groundwater they have the ability to become greater consumers of water.

Van Hylckama (1974) used lysimeters to study evapotranspiration from saltcedar, and the effects of salt cedar control along the Gila River in Arizona. Large (9X9 m) tanks with sandy soils and various groundwater levels were used. The data show some correlation of water level

Table 1. Results of McDonald and Hughes (1960) lysimeter studies on the phreatophytes and grass listed below in Yuma, Arizona, along the lower Colorado River are shown below.

Vegetation		Vegeta-tion Height	Ground-water Depth	Average April to Sept. Daily ET †	Max. ET (from Monthly Data)‡	Avg. Yearly Total ET§
Common Name	Scientific Name					
		m	m	cm/day	cm/day	cm/y
Arrowweed brush	*Plucheaser*	1-2.5	1.6-1.7	1.03	2.16	242
Quailbrush brush	*Atriplex lentiformis*	0.5-1.6	1.6-1.75	0.423	0.75	96.7
Fourwing Saltbrush	*Atriplex canescens*	Short brush	1.6-1.75	0.315	0.51	72.4
Bermuda grass	*Cynodon dactylon*	Short grass	1.1	0.836	1.21	177

† Average evapotranspiration rate during the hottest summer months when evapotranspiration rates are at their peak.

‡ Maximum evapotranspiration rate. Results were reported as monthly rates and were converted to daily rates for ease of comparison. These values should serve as conservative estimates of maximum evapotranspiration rates.

§ Average yearly evapotranspiration rate for all years of study.

Table 2. Robinson (1970) conducted lysimeter studies on the phreatophytes below along the lower Humboldt River, in Nevada.

Vegetation		Vegetation height	Ground-water Depth	Average May to Oct. Daily ET†	Avg. Yearly Total ET‡
Name	Scientific Name				
		cm	m	cm/day	cm/y
Greasewood	*Sarcobatus vermiculatus*	36-69cm	1.5-2.3m	0.316cm/day	40.1cm/yr
Rabbitbrush	*Chrysothamnus*	39-72cm	1.5-1.9m	0.386cm/day	50.7cm/yr
Willow	*Salix*	86-174cm	1.25-1.8m	0.694cm/day	86.5cm/yr
Wildrose	*Rosa*	36-86cm	1.3-1.9m	0.25cm/day	48.0cm/yr

† Average evapotranspiration rate during the hottest summer months when evapotranspiration rates are at their peak.

‡ Average yearly evapotranspiration rate for all years of study.

to evapotranspiration. The study also shows how build-up of salts decreased evapotranspiration. Table 3 shows some of the van Hylckama (1974) results.

Lysimeter techniques are accurate and reliable. The method is very useful in studying crop evapotranspiration on the small scale in a very controlled manner. The results from the studies are difficult to extrapolate to large regions because the method does not sample enough of the environment to account for variability, and does not recreate natural soil structure and stratigraphy well.

2.2.4. Bowen Ratio Studies

Instead of attempting to measure actual water flows in a system, one can measure energy fluxes and vapor fluxes to determine evapotranspiration. A great advantage of these methods is that the natural systems need not be disturbed for the measurements. These methods are primarily the Bowen ratio and eddy-correlation methods. There is some flexibility within these methods as to the scale of study, and they are generally implemented at scales intermediate between lysimeter and regional water balance studies.

Gay (1986) conducted a Bowen Ratio evapotranspiration study along the lower Colorado River in Arizona in saltcedar stands from 1980 to 1981. He compared the measured evapotranspiration to potential evapotranspiration as calculated by the Penman equation and found that the saltcedar evapotranspiration never surpassed the potential evapotranspiration (Gay, 1986). The evapotranspiration values are median to high values, for *Tamarix chinensis* in Arizona in the sandy soil, shallow groundwater system (Gay, 1986): average April to September daily evapotranspiration is 0.86 cm/day, maximum actual evapotranspiration (from monthly data) is 1.1 cm/day, and average yearly total evapotranspiration is 173 cm/y.

Devitt et al. (1998) used the Bowen Ratio method to determine evapotranspiration from another variety of saltcedar, *Tamarix ramossisima*. The study was conducted along the Virgin River in southern Nevada from 1994 to 1996. Although previous works had shown that saltcedar evapotranspiration could be as high as twice the potential evapotranspiration, this research shows that saltcedar evapotranspiration never surpassed potential evapotranspiration as

Table 3. van Hylckama (1974) conducted lysimeter studies on the saltcedar along the Gila River, in Arizona, using groundwater depth as a variable.

Saltcedar Evapotranspiration Rates			
	Groundwater depth:		
	1.5m	**2.1m**	**2.7m**
Average Apr-Sept daily ET, cm/day	0.958cm/day	0.671cm/day	0.43cm/day
Average yearly total ET, cm/y	215.6cm/yr	149.4cm/yr	96.6cm/yr

calculated by the Penman equation (Devitt et al., 1998). In fact Devitt et al. (1998) found that saltcedar water usage was similar to watered grass, and that saltcedar removal would not salvage substantial quantities of water. In 1994 the drought lowered evapotranspiration (Devitt et al., 1998): average April to September daily evapotranspiration is 0.34cm/day, maximum actual evapotranspiration (from monthly data) is 0.77 cm/day and yearly total evapotranspiration is 75 cm/y. In 1995 the vegetation began to recover. In 1996 a more open saltcedar canopy caused increased evapotranspiration rates because of increased advection and heat loss (Devitt et al., 1998): average April to September daily evapotranspiration is 0.68 cm/day, maximum actual evapotranspiration (from monthly data) is 1.12 cm/day and yearly total evapotranspiration is 145 cm/y.

2.2.5. Eddy-correlation Studies

Carman (1983) studied evapotranspiration from two phreatophytes in Nevada using eddy-correlation and Bowen ratio methods and compared these to Penman potential evapotranspiration calculations. Evapotranspiration rates of rabbitbrush in Smith Creek Valley, and greasewood in nearby at Soda Lake were studied. The research generally agrees with Robinson's lysimeter work (Carman, 1993). Carman found that eddy-correlation measurements (Table 4) were generally lower than the Bowen ratio measurements, possibly due to the difficulty of accurately measuring very slow and/or very fast wind speeds and turbulent fluctuations in wind (Carman, 1993).

Weaver et al. (1986) used the energy balance, Bowen ratio and eddy-correlation methods to determine evapotranspiration rates from saltcedar and replacement vegetation (grasses and forbs) along the Pecos River in New Mexico. The latent heat determined from the energy balance was used as a maximum or potential evapotranspiration for comparison with values obtained by Bowen ratio and eddy-correlation methods. Eddy-correlation values were significantly and consistently lower than Bowen ratio values (Weaver et al., 1986). However, eddy-correlation measurements were within approximately 10% error (Weaver et al., 1986). This work shows that attempts to reduce evapotranspiration by mowing and burning saltcedar may in

Table 4. Carman (1993) conducted lysimeter studies on Rabbitbrush and Greasewood in Smith Creek Valley and Soda Lake, Nevada. Some results are listed below.

Rabbitbrush Vegetation			
	Method Used for Evapotranspiration Measurement		
	Eddy-correlation †	Bowen ratio †	Penman PET ‡
Average Apr-Sept daily ET, cm/d §	0.18	0.21	1.11
Maximum daily ET, cm/d ¶	0.42	0.31	1.73
Yearly total ET, cm/y #	32	52	200
Greasewood Vegetation			
	Method Used for Evapotranspiration Measurement		
	Eddy-correlation †	Bowen ratio †	Penman PET ‡
Average Apr-Sept daily ET, cm/d §	0.12	0.14	0.89
Maximum daily ET, cm/d ¶	0.27	0.19	1.57
Yearly total ET, cm/y #	18	27	178

† Methods discussed in section 2.2.1.

‡ Calculation of potential evapotranspiration using the Penman equation used by Carman (1993) to compare other values with.

§ Average evapotranspiration rate during the hottest summer months when evapotranspiration rates are at their peak.

¶ Maximum evapotranspiration rate. Results were reported as monthly rates and were converted to daily rates for ease of comparison. These values should serve as conservative estimates of maximum evapotranspiration rates.

Average yearly evapotranspiration rate for all years of study.

fact eventually increase evapotranspiration. Increased evapotranspiration rates resulted from vigorous regrowth of saltcedar subsequent to eradication efforts (Table 5) (Weaver et al., 1986).

Later results showed that there was little correlation between groundwater level and evapotranspiration in this New Mexico shallow water system of 0.9 to 2.7m groundwater depth (Weeks et al., 1987). These researchers found that as groundwater depth increases saltcedar roots were quickly able to adapt and soon began to transpire at high rates.

Like Bowen ratio methods, eddy-correlation methods are relatively accurate and do not require significant alteration of the field environment. Eddy-correlation measurements may underestimate actual evapotranspiration rates under conditions where wind speeds are difficult to measure and Bowen ratio methods may overestimate evapotranspiration rate under hot and very dry conditions. Both methods may continue to improve with improvements in technology.

2.2.6. Groundwater Depth and Evapotranspiration Correlation

Many researchers realize that the depth to groundwater is an important factor affecting evapotranspiration (White, 1932; McDonald & Hughes, 1968; Robinson, 1970). However, the structure of many projects does not allow for adequate exploration of the topic. Early research that accounted for groundwater depth effects usually focused on bare soil evaporation from lysimeter tanks. Evaporation rates in these studies are correlated to soil texture, and groundwater depth. White (1932) estimated evaporation from a clay loam soil in Escalente Valley, Utah (Figure 1). McDonald and Hughes (1968) measured yearly evaporation from a silt-loam soil near Yuma, Arizona (Figure 1). Robinson (1970) studied a silty sand soil by the Humboldt River in Nevada (Figure 1). These researchers' results show a very good correlation of evaporation to groundwater depth (Figure 1) (White, 1932; McDonald & Hughes, 1968; Robinson, 1970).

Few studies correlate total evapotranspiration with groundwater depth. Some cannot make good correlations because of the influences of seasonal climate changes and because of plant growth cycles overprinting groundwater depth effects. This is particularly true of water

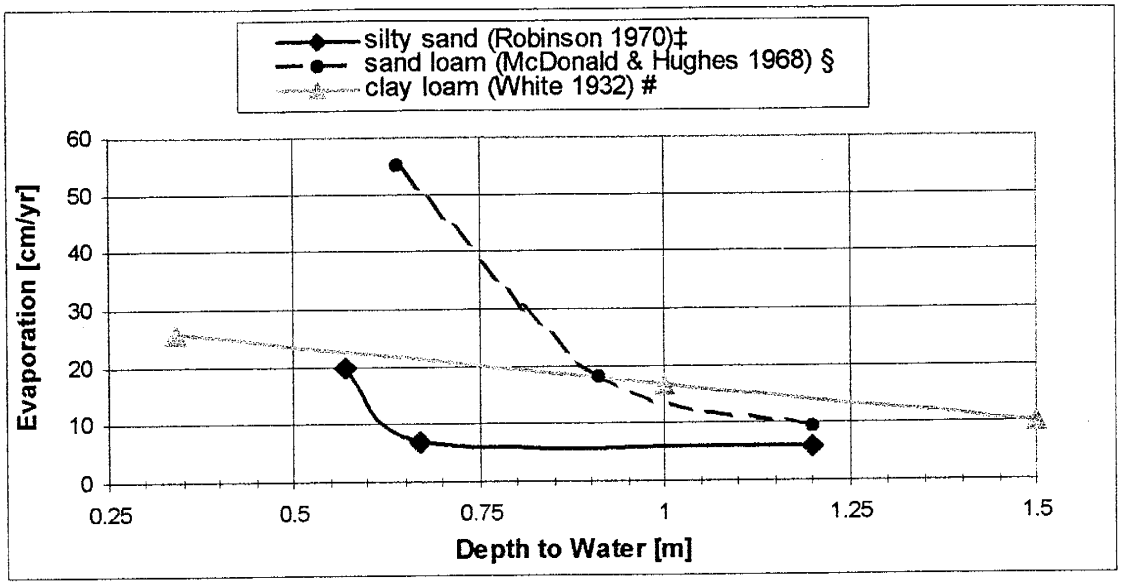
Table 5. Weaver et al. (1993) conducted evapotranspiration studies on saltcedar and grass in New Mexico, along the Pecos River.

Average Daily Evapotranspiration Rates by Method (cm/d) †						
Method of Evapotranspiration Measurement ‡	Vegetation					
	Wet (flood) Oldgrowth Saltcedar	Dry Oldgrowth Saltcedar	Mowed Regrowth Saltcedar	Burned Saltcedar	Grass and Forbs	Grass
Eddy-correlation	0.26	0.19	0.23	0.24	0.10	0.11
Bowen ratio	0.42	0.23	0.36	0.29	0.16	0.16
Energy balance	0.47	0.28	0.45	0.37	0.21	0.16

† Average daily evapotranspiration rate for all years of study.

‡ Methods discussed in section 2.2.1.

Figure 1: Bare Soil Evaporation †



† Evaporation data reported by various authors on soils with no vegetation using lysimetry.

‡ Robinson 1970 show a correlation between groundwater level and evaporation in the coarse textured silty sand soil.

§ McDonald & Hughes 1968 show a strong correlation between groundwater level and evaporation in the medium textured sand loam soil.

White 1932 was the first study to show a consistent trend of groundwater level and evaporation in the fine textured clay loam soil.

balance studies. Weeks et al. (1987) found that evapotranspiration did drop when water levels dropped, however, the effect was temporary and offset by vigorous root adaptation in saltcedar in New Mexico. Vegetation adaptation to groundwater depth fluctuations may be expected in areas where water level fluctuations are common such as along the Pecos River (Weeks et al., 1987).

The most controlled field approach to the study of evapotranspiration is through the use of lysimeters. Van Hylckama (1974) found a strong correlation of evapotranspiration and groundwater depth in lysimeter studies for saltcedar in sandy soil along the Gila River in Arizona: 215 cm/y evapotranspiration rate with groundwater at 1.5 m depth; 150 cm/y evapotranspiration rate with groundwater at 2.1 m depth; and less than 100 cm/y evapotranspiration rate with groundwater at 2.7 m depth.

Groundwater depths are an important factor determining evapotranspiration rates. It is surprising that more research has not been devoted to the study of this factor. Reliable lysimeter studies such as those of van Hylkama (1974) show that groundwater level is very important. The work of Weeks et al. (1987) show complications of field studies with fluctuations in groundwater level, such as salinization effects and vegetation adaptations.

2.2.7. Saltcedar Evapotranspiration Verses Native Vegetation Evapotranspiration

Evapotranspiration rates vary dramatically for different sites and types of vegetation. An underlying theme to many evapotranspiration projects is that phreatophytes consume large quantities of water (Robinson, 1958). It is evident that some plant species use a great deal of water and others do not. Comparing various values of evapotranspiration from past research will help determine which southwestern species may be particularly water wasteful. Tables 6 and 7 show yearly evapotranspiration rates from various species at various locations.

Table 6. Average Yearly Evapotranspiration for Various Arid Region Phreatophytes Other than Saltcedar.

	Method Used to Measure Evapotranspiration						
	Lysimetry				Water balance		Eddy-correlation
	Location						
	Escalente Valley, UT	Safford Valley, AZ	Yuma, AZ	Humboldt Valley, NV	Cottonwood Wash, AZ	Gila River, AZ	Western, NV
	Researchers						
	White 1932	Gateway et al. 1950	McDonald & Hughes 1968	Robinson 1970	Bowie 1968	Culler et al. 1982	Carman 1993
Vegetation	Yearly Evapotranspiration Rates, cm/y						
Cottonwood	180	233	-	-	96-125-	-	-
Willow	140	138	-	86.5	96-125	-	-
Mesquite	100	-	-		-	72.5	-
Arrowweed	-	-	242		-	-	-
Quailbrush	-	-	96.7	-	-	-	-
Fourwing Saltbrush	-	-	72.4	-	-	-	-
Greasewood	-	-	-	40.1	-	-	18-27
Rabbitbrush	-	-	-	50.7	-	-	32-52
Wildrose	-	-	-	48.0	-	-	-
Bermuda	-	-	177	-	-	-	-

Table 7. Average Yearly Evapotranspiration for Saltcedar in Various Arid Regions

Method	Researchers	Location	Evapotranspiration Rate, cm/y
Lysimetry	White 1932	Escalente Valley, UT	220cm/yr
Lysimetry	Gatewood et al. 1950	Safford Valley, AZ	223cm/yr
Lysimetry	Van Hylckama 1974	Gila River, AZ	87-229cm/yr
Water balance	Culler et al. 1982	Gila River, AZ	72.5cm/yr
Water balance	Welder 1988	Pecos R, NM	183cm/yr
Bowen ratio	Gay 1986	Colorado R. NV	173cm/yr
Bowen ratio	Devitt et al. 1998	Virgin R, NV	75-145cm/yr
Eddy-correlation	Weeks et al. 1987	Pecos R, NM	77-107cm/yr

Lysimeter studies reported higher evapotranspiration rates overall, and those using Bowen ratio and eddy-correlation methods reported the lowest evapotranspiration rates. Average values of evapotranspiration rates for some Southwest phreatophyte vegetation are: 175 cm/y mean cottonwood evapotranspiration (White, 1932; Gateway et al., 1950; Bowie, 1968), 174 cm/y mean saltcedar evapotranspiration (White, 1932; Gateway et al., 1950; van Hylkama, 1974; Gay, 1986; Weeks et al., 1987; Welder, 1988; Devit et al., 1998), 86 cm/y mean willow evapotranspiration (White, 1932; Culler et al., 1982), 46 cm/y mean rabbitbrush evapotranspiration (Robinson, 1970; Carman, 1993) and 31 cm/y mean greasewood evapotranspiration (Robinson, 1970; Carman, 1993).

In general vegetation which draws more water from the saturated zone such as cottonwood, saltcedar and mesquite have the ability to consume more water (Robinson, 1970). Slow growing species, adapted to arid climates and deep groundwater, such as greasewood, wild rose, rabbitbrush and fourwing saltbrush tend to use less water, but can transpire large amounts of water when available. Fast growing phreatophytes that are found near water such as saltcedar, arrowweed, and quailbrush tend to consume large quantities of water particularly when such vegetation is able to grow rapidly. Cottonwood and saltcedar are found to be large consumers of water even when groundwater levels are deeper than 3 m and soils are dry.

2.2.8. Mowing and Eradication Efforts

There have been several attempts to reduce the evapotranspiration loss by phreatophytes in the arid Southwest, because of the scarcity of water. Eradication of certain plants from riverbanks has been proposed as a solution to water loss. Riverbanks of the Colorado River, Rio Grande, Pecos River and other rivers have been cleared of vegetation because of the belief that substantial amounts of water would be saved (Weeks et al., 1987; Bowie and Kam, 1968; Culler et al., 1982).

Whether or not these efforts were of any use is questionable (Bowie and Kam, 1968; Culler et al., 1982). Calculations of water usage have indicated great salvage of water if certain species are removed from a given area. Four reasons why phreatophyte control measures may

not conserve water for human use: (i) rapid regrowth of mowed, plowed, poisoned or burned phreatophytes; (ii) overestimation of evapotranspiration by phreatophytes; (iii) underestimation of evapotranspiration by replacement vegetation; (iv) an increase in soil evaporation when vegetation is removed due to capillary rise.

There have been cases where removal of phreatophytes has saved substantial amounts of water. One case that shows substantial water salvage is in the Escalante Valley in Utah. Alfalfa was substituted for native greasewood, rabbitbrush and saltgrass with seasonal evapotranspiration reductions of 12% to 40% (White, 1932). It is not certain whether or not such efforts would be profitable in other locations.

Evapotranspiration varies from location to location and from species to species. It is very possible that one may overestimate phreatophyte water consumption over large areas. The vegetation that replaces eradicated species may have similar water consumption properties.

There has been some interest in eradicating invasive saltcedar and replacing this with native species. Some assume that native vegetation will transpire much less than saltcedar (White, 1932; Robinson, 1970). However, some native phreatophytes can consume very large quantities of water. For example, replacing saltcedar (mean evapotranspiration rate of 175 cm/y) by cottonwood and willow (evapotranspiration rates between 87 and 233 cm/y) may not save any water (White, 1932; Gateway et al., 1950; Robinson, 1970; Devitt et al., 1978). Culler et al. (1982) show that replacing saltcedar and mesquite by grass could not save any water, and that evapotranspiration rates would remain between 70 and 80 cm/y.

Even if replacement vegetation evapotranspiration rates are significantly less than in-place vegetation, eradication efforts may not be helpful. Eradication of some phreatophytes can be very difficult, and incomplete removal can have little or no effect. Van Hylckama (1974) shows that thinning a stand of saltcedar by 50% only reduces evapotranspiration by approximately 15%. This study also shows how cutting saltcedar to the root will only reduce evapotranspiration for approximately two months. Weeks et al. (1987) show that evapotranspiration rates from saltcedar recovering from a burn (112 cm/y) or mowing (127 cm/y) may increase from those of oldgrowth (92 cm/y) due to vigorous growth and recovery of vegetation. Bowie and Kam (1968)

indicate that there is no truly effective way to remove willow and saltcedar. Mowing, poisoning, and plowing were not completely effective (Bowie & Kam, 1968).

The eradication of saltcedar along the Pecos River in New Mexico did not produce any significant salvage of water (Welder, 1988). Saltcedar was removed, and replacement vegetation was eventually well established and saltcedar removed. Even with an increase in precipitation stream flow increases were not of the order of those calculated for saltcedar removal (Welder, 1988). Therefore, some eradication efforts have not proved to be effective, and eradication may not be the solution to water shortages.

2.3. OBJECTIVES

This work will show that groundwater level, not vegetation, is the most important factor affecting evapotranspiration. The important effects of soil texture will also be evaluated. Modeling is used as an effective tool of comparison and prediction, and is supported by the large measured data sets. Virtual homogeneous soil systems (Section 3.4.1.2) were modeled in order to compare the effects of groundwater level, rooting depth and soil texture. These simulations represent a simplified version of natural environments and are hereafter referred to as virtual soils. The modeling program Hydrus 1D, which was used for these models, will be evaluated as suitable software for the modeling of evapotranspiration by comparing model results to actual measured evapotranspiration. Evapotranspiration was modeled in the Bosque for cottonwood and saltcedar sites and will be shown to have accurate results (Section 4.3). Measurements of soils and groundwater in the experimental site will be summarized, analyzed and correlated to evapotranspiration measurements.

Many previous studies have evaluated the water consumption trends of phreatophyte species, and yet not focused on the effects of soil texture and water levels. Groundwater depth and soil texture are not often considered in the water conservation strategies, therefore these factors are not often addressed in research. This study is like others in that direct field measurements of soil moisture, groundwater level, and evapotranspiration were taken in an arid riparian region.

3. METHODS AND MATERIALS

3.1. EXPERIMENTAL SITE

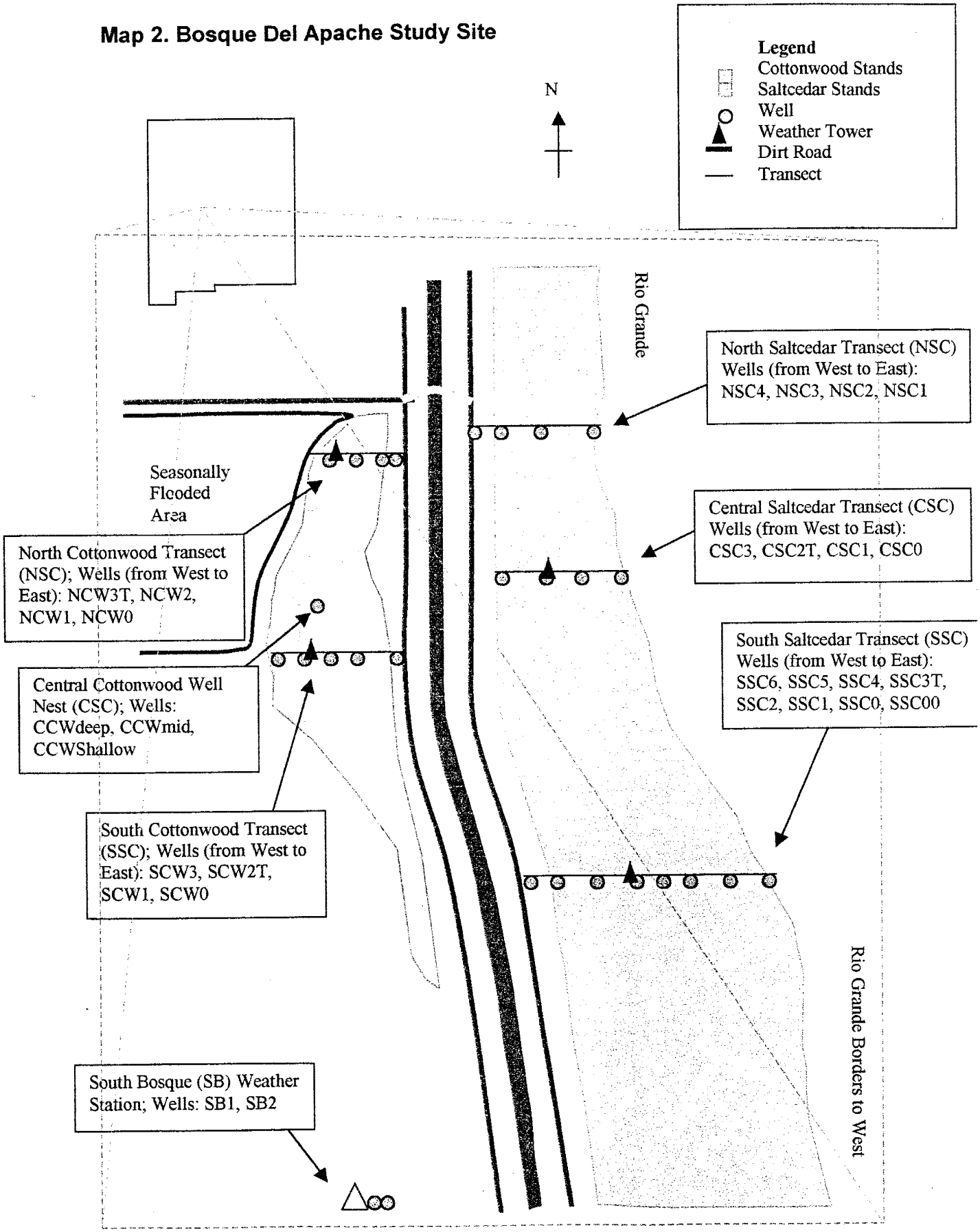
The Bosque del Apache National Wildlife Refuge is located in central New Mexico along the Rio Grande (Map 2). The Refuge encompasses a lush riparian ecosystem in an otherwise relatively barren semi-desert. According to the Bosque Refuge weather data, the region has low precipitation (20 to 30 cm/y, mean of 24 cm/y), high summer maximum temperatures (35 to 40 °C), and a short winter with moderate minimum temperatures (-10 to 0 °C). This makes the region a good study site for research on evapotranspiration in arid riparian environments.

The Refuge is managed primarily for the habitat of wintering waterfowl. Managed flooding is necessary to provide marsh habitat because of channelization, and damming of the Rio Grande. Previous to the implementation of large-scale flow control of the Rio Grande and the construction of large municipal and agricultural drains on the river, the Rio Grande supplied large areas of marshland for waterfowl in an otherwise arid region (Map 1).

According to Refuge vegetation surveys, saltcedar was not present in the Refuge prior to 1918 (Map 1). Found wild throughout the Southwest after the 1940s, *Tamarix* species likely migrated down the Rio Grande after the 1920s when planted upstream in the Rio Puerco and Rio Salado for erosion control (Robinson, 1965). Saltcedar has become a very prominent species in the area after the, occupying long stretches of the riverside in continuous, single-species thickets. The Refuge has begun to restore native vegetation (cottonwood – *Populus sp.*) to some of the regions transformed by saltcedar. Future Refuge plans include large-scale cottonwood reforestation efforts.

The experimental site is composed of an area of native vegetation and an area of invasive species in the central region of the Bosque del Apache National Wildlife Refuge (Map 2). The native vegetation study area is composed of a 0.8 km long plot (155 m wide) of cottonwood-willow-grass vegetation bounded to the East by the low-flow channel and to the West by seasonal

Map 2. Bosque Del Apache Study Site



marsh and willow-brush land (Map 2). These relatively young, and wide spaced vegetation communities were established by the Bosque Refuge. Although the cottonwood trees are mature, the vegetation community was established only seven years prior to the field investigations. The invasive species study area is composed of a 1.6 km long plot (150-500 m wide) of continuous dense saltcedar bounded to the East by the Rio Grande and to the West by the low-flow channel. The mature saltcedar stands were relatively unaltered by Bosque personnel, and are spaced so that branches of one tree interlock with the next. Two weather stations, one in the northern and one in the southern portions of the study area were installed.

Three measurement transects containing two micrometeorology towers and 16 observation wells were established in the saltcedar area. The moist saltcedar soils have complex, greatly varying soil stratigraphies ranging from sand-loam to dense clay textures (Appendix B). The average soil stratigraphy of the North Saltcedar Transect is as follows: clay 0-60 cm, very fine sandy loam 60-105 cm, silty clay loam 105-120 cm, fine sandy loam 120-180 cm, fine sand 180-245 cm, and medium sand 245-340 cm. The average soil stratigraphy of the Central Saltcedar Transect is as follows: silty loam 0-60 cm, sandy clay loam 60-80 cm, sandy loam 80-160 cm, very fine sand 160-200 cm, sandy clay loam 200-300 cm, and loamy sand 300-380 cm. The average soil stratigraphy of the South Saltcedar Transect is as follows: silty clay loam 0-25 cm, sandy clay 25-70 cm, sandy clay loam 70-120 cm, sandy loam 120-215 cm, clay 215-250 cm, fine sand 250-290 cm, silty clay loam 290-350 cm and sand 350-400 cm.

Two measurement transects containing one micrometeorology tower and 11 observation wells were established in the cottonwood area. Two observation wells are located adjacent to the South Bosque weather station South of the cottonwood measurement site. The cottonwood soils have laterally similar soil stratigraphies and are dry with sand and silt textures with a fine silt or silty clay layer near the surface. The average soil stratigraphy of the North Cottonwood Transect is as follows: silt 0-3 cm, silty clay loam 3-30 cm, silty sand 30-120 cm, loamy sand 120-130 cm, fine to medium sand 130-470 cm, and gravely coarse sand 470-580 cm. The average soil stratigraphy of the South Cottonwood Transect is as follows: silt 0-5 cm, silty clay loam 5-30 cm, very fine loamy sand 30-60 cm, very fine sand 60-100 cm, fine sand 100-245 cm, and loamy

medium sand 245-400 cm. Differences in soil texture and stratigraphy and groundwater levels between the two regions complicate the comparison of evapotranspiration between the two sites (Map 3).

3.2. FIELD MEASUREMENTS

3.2.1. Soil Water Content

Soil water content is measured with the CPN503DR neutron probe. Neutron probe measurements were taken at each well along two transects in each of the saltcedar (Central Saltcedar – CSC, and South Saltcedar - SSC) and cottonwood (Central Cottonwood – CCW, and South Cottonwood - SCW) stands. This data produced soil water contents profiles. The measurements were performed once a month and more often during flooding, and as the trees grew and dropped leaves in spring and fall. These measurements were calibrated and checked by taking soil samples, which were later analyzed for soil water content in the lab.

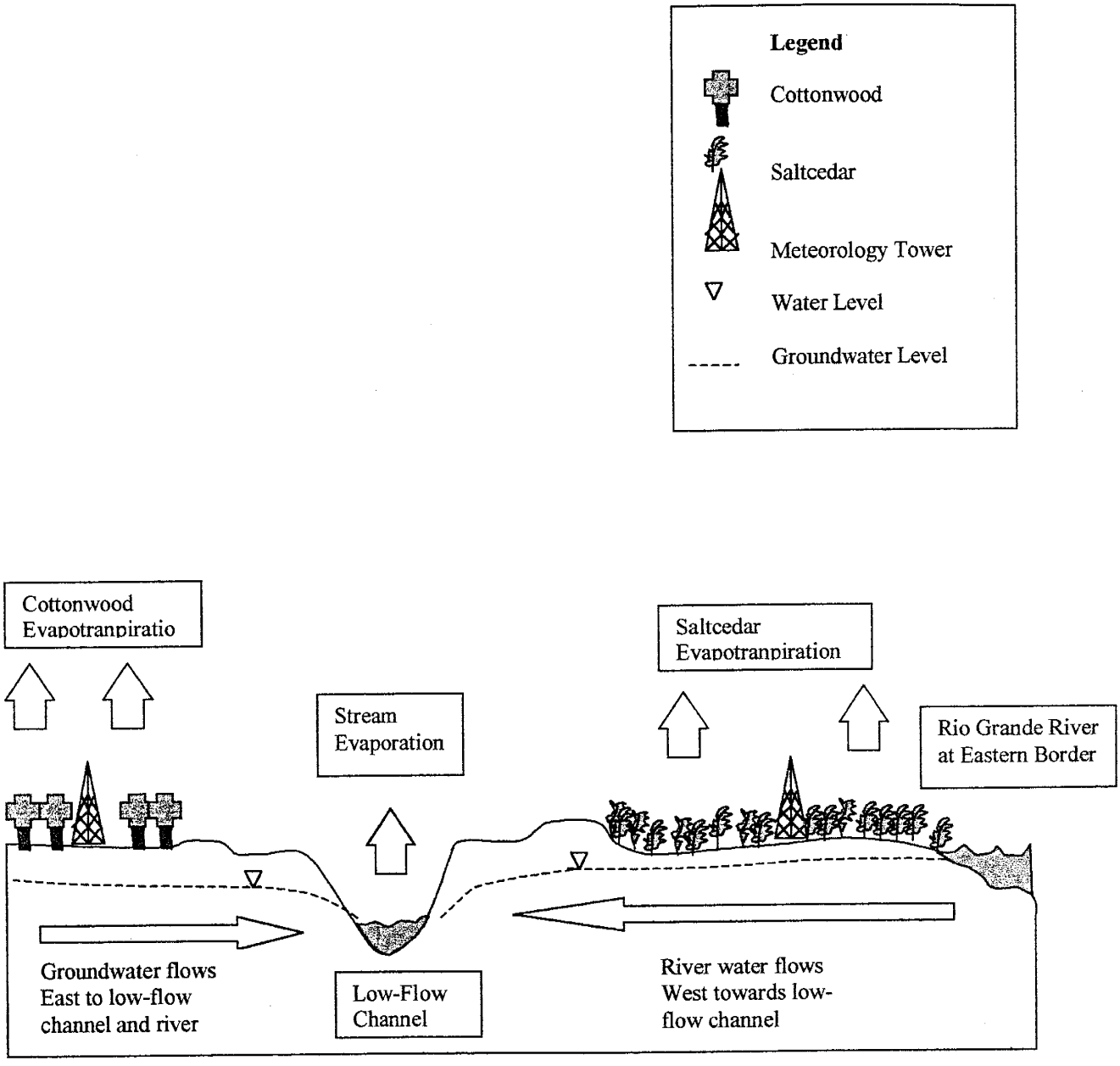
Soil water content is linearly proportional to the soil's ability to reflect neutrons (Goodspeed, 1981):

$$\theta = m^*(C_R) + b \qquad (7)$$

Where θ = volumetric soil water content [-], C_R = ratio of counts of reflected neutrons to a standard count [-], m and b are parameters determined by calibration of the instrument. The neutron probe consists of a low-level radioactive source that emits neutrons at a relatively constant rate. The americium source is completely enclosed in a steel cylinder along with a sensor that detects the slower moving reflected neutrons (Gardener et al., 1991; CPN, 1985).

The steel cylinder is lowered down an access tube to various depths and reflected neutrons are counted for a fixed period of time. A standard count is taken at each access tube each time measurements are taken, with the instrument sitting above a steel plate and the cylinder retracted. The ratio of measured counts to a standard count is obtained for various

Map 3. Cross-section of Study Area



depths. Water contents are then calculated from a calibration curve of count ratio to soil water content. Count ratio measurements are more consistent over time than raw count measurements (CPN, 1984). These ratios account for some drift in the neutron emittance rate and any small drift in sensor sensitivity (CPN, 1985).

Neutron probe readings can change up to 20% with large changes in bulk soil density (Williams & Sinclair, 1981). This may not be a great factor in the Bosque site, where almost no soil compaction has occurred, and where soil density changes are primarily due to textural differences. The textural differences are accompanied by soil water content differences that have a stronger effect on neutron probe readings than do bulk density changes, according to a sensitivity analysis done in the calibration process.

Relatively high concentrations of iron oxides and organic compounds will cause the neutron probe readings to rise (Williams & Sinclair, 1981). The mature, well-weathered sediments in this area contain few iron oxides in the vadose zone, and this should not be an important source of error in this area. The soils in this area are low in organic matter (less than 1%) except for pockets of soil containing buried driftwood. The organic matter seems to have little effect on the readings. The most important factor affecting water content results in this area is the effect of chloride on the neutron probe (Abeele, 1978). The PVC cased piezometers used in this study have a strong dampening effect on the count ratios measured in the Bosque. Therefore, the calibration process accounted for this effect.

Abeele (1978) at Los Alamos National Laboratories studied the affects of access hole diameter, and casing on neutron probe readings. Neutron counts decreased with access hole diameter increases (Abeele, 1978). Neutron probe access hole size was not an issue in this study, as all holes are a uniform 2" diameter in the experimental sites. The Los Alamos study showed that PVC has a marked effect on the neutron probe results. Therefore, a factory calibration curve for the Bosque site would prove to be inadequate for the calculation of water content. The CPN factory calibration curve consisted of a line drawn through 2 points of water content verses neutron probe count, in a uniform aggregate with aluminum cased access holes.

To determine more accurate calibrations for the Bosque sites six calibrations were performed at four locations in the Bosque. Each neutron probe measurement in the calibration process was correlated with three volumetric water content measurements obtained from samples at the same depth and time. The soil samples were collected by hand auger, and analyzed for soil texture and gravimetric water content adjacent to the site being calibrated. Soil pits were sampled and analyzed for bulk density and soil texture in order to obtain volumetric water contents for the calibration sites.

The various calibrations did not show significant trends relating to soil texture or stratigraphy. Therefore, the six calibrations were averaged in to one calibration curve in order to minimize errors incurred by local spatial variability in water content and sampling error. Refer to Appendix B on neutron probe calibration to see results of these calibrations.

The averaged calibration curve was found to be within approximately 5% maximum difference of water content on the individual data points within the range of data. In order to determine the accuracy of the average calibration curve two tasks were performed. First, the Bosque average calibration curve and its difference from the CPN calibration curve were correlated to Abeele's 1978 Los Alamos study with different access hole casings. This correlation shows that the Bosque calibration with PVC casing is consistent with the effects of PVC. Then, sensitivity analysis was performed to determine the effects of changes in bulk densities due to spatial variability, stratigraphy changes and sampling error. This shows that neutron probe errors are less than 10% for soil water contents ranging from 2% to 35% water content and less than 5% for soil water contents between approximately 5% and 25% water content.

3.2.2. Groundwater Depth

Groundwater depths were measured by hand in the 29 wells periodically with a measurement tape equipped with a sounding bell at the end. Waterlogger down-hole pressure transducers with data-loggers were installed in 16 wells. These allowed for the collection of water level data every half-hour. These data were downloaded in the field. The pressure data were converted to depth to water, sorted, and checked by hand measurements.

Waterlogger pressure transducers collect data on pressure of overlying water and temperature. Measurements collected every 30min and stored in data-logger. These are downloaded every month. Pressures are converted to cm of water, then to depth to water.

$$h = \rho_w g/p \tag{8}$$

$$Z = D - h \tag{9}$$

Where h = height of water above pressure transducer [cm], ρ_w = density of water [kg/m^3], g = gravity [m/s^2], p = pressure at pressure transducer [Pa], D = length from surface to pressure transducer [cm], and Z = depth to water [cm].

3.2.3. Soil and Water Salinity

Groundwater and river water salinity was measured with a Hach C10150 Conductivity Meter at the Rio Grande and in all wells at least once a month. The EM-38 ground conductivity meter was used to measure soil electrical conductivity along each transect once a month, and more frequently during the intensive measurement period. The electrical conductivities are used as a relative measure of soil salinity.

The EM-38 instrument emits electromagnetic energy into a soil. In response, the soil is induced to emit a secondary electromagnetic signal, which is recorded by the EM-38 instrument. The secondary signal is a function of salinity, soil water content and soil texture. The electromagnetic response of the soil is most sensitive to magnetic and metallic minerals, ionic compounds including salts, polar molecules including water and soil intergranular contact (McNeill, 1980; Hendrickx et al., 1992; Sheets et al., 1994). The EM-38 measures soils to 150cm when placed vertically with a maximum sensitivity at approximately 60cm depth. The EM-38 measures to 75cm when placed horizontally and has a maximum sensitivity at the top few centimeters. Both vertical and horizontal measurements were taken to obtain overall and surface measurements.

A Hach C10150 Conductivity Meter was used to measure electrical conductivity of the groundwater. These conductivities were used to calculate total dissolved solids in water. The electrical conductivity of water is directly proportional to the concentration of dissolved ionic constituents. Because dissolved ionic salts are by far the major constituents of the total dissolved solids, and the Rio Grande waters are calcium/magnesium carbonate dominated waters, the total dissolved solids can be calculated from measured conductivity values (Polemo et al., 1980; Langmuir & Mahoney, 1985):

$$TDS = 0.6786*EC \tag{10}$$

Where *TDS* = total dissolved solids [ppm] and *EC* = electrical conductivity [dS/m].

3.2.4. Evapotranspiration

Three micro-meteorology towers were set up and maintained by Salim Bawazir, PHD candidate of New Mexico State University (NMSU). Dr. Bawazir also maintained the weather stations in the Bosque del Apache. This data were obtained by NMSU, which then calculated reference and actual evapotranspiration rates, which were shared with New Mexico Institute of Mining and Technology.

An intensive measurement period occurred from July 10th to the 23rd, during which Los Alamos National Laboratories tested their LIDAR system for measuring evapotranspiration and provided a very detailed and robust data set of evapotranspiration fluxes. There was a problem in timing, however as the intensive measurement period occurred when the Rio Grande stage rose above its stream banks. The subsequent flooding of the saltcedar stands tremendously increased evapotranspiration rates in that area, and made this data set unrepresentative of the seasonal trends. An intensive measurement period was also conducted in September of 1998 when the equipment was installed. This period was more representative of evapotranspiration trends in the Bosque del Apache.

3.2.4.1. *Actual Evapotranspiration with the Eddy-correlation Method*

The eddy-correlation method was used to obtain evapotranspiration values in the Bosque del Apache field site. The method is a combination of the energy balance and mass balance methods. In the energy balance method, latent heats, which are used to calculate evapotranspiration, are calculated as a residual of other energy fluxes at the surface (Jensen et al., 1990):

$$LE = R_n - H - G \pm A \tag{11}$$

$$ET = LE/\rho_w\lambda_v \tag{12}$$

Where L = latent heat flux [W/m^2], R_n = net radiation [W/m^2], H = sensible heat flux [W/m^2], G =ground heat flux [W/m^2], A = advected heat flux [W/m^2], ET = evapotranspiration [m/s], ρ_w = water density [kg/m^3], and λ_v = latent heat of vaporization [J/kg].

Evapotranspiration is calculated by mass balance using humidity and wind data at small time intervals (Jensen et al., 1990):

$$ET = F_u - F_d \tag{13}$$

Where F_u = water flux upward [cm/day], F_d = water flux downward [cm/day] and ET = evapotranspiration [cm/day].

The eddy-correlation method uses measurements of both surface energy fluxes and air humidity and wind speed, which are plugged into the Penman-Montieth equation to calculate evapotranspiration (FAO, 1998; Monteith, 1965):

$$\lambda_v ET = [\Delta(R_n - G) + \rho_a c_p(e_s - e_a)/ r_a]/[\Delta + \gamma(1 + r_s/r_a)] \tag{14}$$

Where λ_v = latent heat of vaporization [J/kg], ET = evapotranspiration [m/s], Δ = slope of saturation vapor pressure – temperature curve [N/m°C], $(e_s - e_a)$ = vapor pressure deficit [Pa], ρ_a = air density [kg/m^3], c_p = specific heat of air [J/°C], γ = psychrometric constant [Pa/°C], r_s = bulk surface resistance [-], r_a = bulk aerodynamic resistance [-].

Net radiation is measured with a net radiometer. Ground heat flux is measured with ground heat flux plates. A psychrometer measures the psychrometric constant. Sensible and latent heats are measured by measuring vertical wind speed, temperature and humidity at two elevations above the canopy on sub-second intervals. Three-dimensional sonic anemetry was used to measure vapor fluxes for one month.

The large data sets obtained were used to calculate latent heats averaged every 30-sec. These were averaged to calculate daily evapotranspiration fluxes. Any individual 30 sec calculation may be in error of up to approximately 20% (Blanford & Gay, 1992). The large degree of error is due to an accumulation of many measurement errors as well as a tremendous degree of spatial and temporal variability creating poor 30-sec averages. Averaging the data to daily values and then to 10-day values creates much more reliable evapotranspiration data sets with approximately 10 % error from measured data. These data agree favorably with the 3-D sonic anemetry data, which served as a check.

3.2.4.2 *Reference Evapotranspiration from Weather Station Data*

Two weather stations are maintained by NMSU at the Bosque del Apache site. These weather stations are located approximately 2800 m N and 1200 m S of the field sites. One station is located in a more vegetated area within 200 m of the Rio Grande, and the other is a less vegetated dryer area. Radiation data is collected with a radiometer. Precipitation data is collected with a tipping bucket. Air and soil temperature and wind-speed data are also collected.

Reference evapotranspiration is calculated from the weather station data using the Penman-Montieth Equation. The weather station data is maintained at the NMSU weather

website at http://weather.nmsu.edu . These reference evapotranspiration and precipitation data were used in the Hydrus 1D program for all models.

3.3. SOIL SAMPLING AND LABORATORY MEASUREMENTS

Four soil pits dug in the Bosque del Apache were sampled to determine soil hydraulic properties. These properties were used in the modeling of evapotranspiration from the Bosque sites. The soil pit sites were located in areas adjacent to the micometeorology towers in areas that were representative of the areas sampled by meteorological measurements (Map 3). The sites were chosen by electromagnetic surveys and by reviewing soil properties obtained from well installation.

Fourteen column (25 cm tall, 15 cm diameter) cores were obtained from the soil pits to sample undisturbed representative soil units. Saturated hydraulic conductivities and wetting and drying curves were obtained from each sample in a New Mexico Institute of Mining and Technology laboratory by Sung-Ho Hong, graduate student.

The saturated hydraulic conductivities were determined by constant head and falling head methods depending on response time (Stolte, 1997; Weitz et al., 1997). Drying curves were determined by gravity draining a saturated column to approximately 3 m of suction head, and simultaneously measuring volumetric water content and matric potential. Some columns were then desiccated and rewetted to produce the wetting curves.

Water content and matric potential were measured at three depths within the soil column. Water content was determined by time domain reflectometry (TDR), a very accurate method for the determination of water content by electromagnetic conductance and inductance of soil materials (Ferré, 1998). Matric potentials were measured by minitensiometers. The wetting and drying curves were averaged and van Genuchten parameters were determined by fitting the curves using a Microsoft Excel solver algorithm.

3.4. HYDRUS 1D MODEL

The US Salinity Laboratory Hydrus One-dimensional program is a combination of heat flow, water flow, contaminant flow, root water uptake and plant growth modeling programs for the vadose zone. The program is described by the US Salinity Laboratory as an MS Windows program for used simulating water flow and solute transport in one dimensional variably saturated media with a graphical interface. It has applications primarily for agriculture and shallow contaminant remediation. The water flow and root water uptake portions of this program were used for this study. The flow model uses Richard's Equation solved by a Garlikin type linear finite element/finite difference method. The code has been developed from previous US Salinity Lab codes and is written in FORTRAN.

The root water uptake model is incorporated into the flow model by adding a sink term to the Richard's Equation. Each depth of the soil profile is assigned a different sink term, which is dependent of the amount of water present, root density and the potential or reference transpiration. Thus, flow is calculated at each node by the following form of the Richard's Equation (Simunek et al., 1998):

$$\partial\theta/\partial t = (\partial/\partial x)*[\partial h/\partial x + 1] - S(\theta(h), r, T_r) \quad (15)$$

Where ∂ = partial differential del operator [-], θ = volumetric water content [cm^3/cm^3], t = time [days], h = soil water pressure [cm], x = vertical dimension [cm], r = root density function [-], T_r = reference transpiration rate, S = root uptake sink term [cm/day].

Root uptake is dependent of on the water available at any given node according to the Feddes parameters. Feddes parameters limit uptake to below reference transpiration levels at high and low water contents, where low soil aeration and low soil hydraulic conductivity would prevent plants from obtaining water at their maximum levels.

The Brooks and Correy and the van Genuchten soil hydraulic parameters are curve-fitting parameters developed to fit soil moisture retention curves. These parameters are able to fit a

variety of curves. Van Genuchten parameters are affective in fitting curves that contain elbows such as sand moisture retention curves. Van Genuchten parameters were used preferentially in all models presented in this study. The sharp elbow shape of the van Genuchten curves creates difficulties in mathematics, which can cause instability in modeling calculations. Therefore, the Brooks and Correy parameters were used in some of the theoretical models. Both modeling parameters are widely used and tested (Sejna, 1999)

3.4.1. Modeling Evapotranspiration in Virtual Soils

In order to understand how evapotranspiration is effected by groundwater depth, soil texture and rooting depth 75 virtual soil models were created. Virtual soils are simplified homogenous systems with ideal soil parameters taken from literature (Sejna, 1999). Three rooting depths were chosen (0.3 m, 1 m and 3 m) which pertain to short grass, herbs and annuals, and shrubs or trees. Four rooting patterns were used to cover the maximum range of root density profiles. Root density increased linearly upward, increased linearly downward, and remained constant in three density profiles, and slowly tapered downward, similar to the rooting patterns observed in the field in the other root density profile. Three groundwater depths were chosen (1 m, 2 m and 5 m) which are representative of the shallow groundwater in riparian environments. Three soil types (clay, loam and sand) were chosen to cover the range of soil textures. Combinations of rooting depth and rooting pattern, groundwater depth, and soil texture was modeled in order to determine the relationships amongst the parameters and with evapotranspiration producing 75 models.

3.4.1.1. *Groundwater Depth in Virtual Soil Models*

Three groundwater depths (1 m, 2 m, and 5 m) were chosen to simulate conditions found in flat riparian regions. Models with groundwater depths less than one meter produced larger evaporation and smaller transpiration fluxes, with little change in total evapotranspiration. Models with groundwater depths between five than ten meters produced slightly smaller transpiration fluxes, and were more difficult to run. Groundwater deeper than 10 m is not common in most

riparian regions. The bottom boundary condition is a constant pressure head, which allows groundwater depth to be set at a fixed position in the soil profile.

The groundwater depth on any given model is shown by the first number in the name of the virtual soil model. For example, the model Sand2m1m has a groundwater depth of two meters.

3.4.1.2. *Soil Texture in Virtual Soil Models*

Three soil textures (sand, loam, and clay) were chosen to simulate the widest range of soil textures commonly found in riparian areas. Sand soils transmit water from the groundwater table with little resistance with all but the lowest water contents, yet retain less water for root uptake. Clay soils transmit water from the groundwater table with great resistance, yet retain less water for root uptake than coarse-textured soils. Loam soils are intermediate between sand and clay soils. The soil texture on any given model is shown by the first four letters in the name of the virtual soil model. For example, the model Sand2m1m has a sand textured soil.

The van Genuchten soil hydraulic parameters provided in the Hydrus 1D database are used. However, there was some difficulty in running the model for the sand soils. The soil water retention curve flattens out at low tensions and changes very little over a wide range of soil water pressures. Under dry conditions, as soil water tensions change, water contents may change by a millionth of a percent or less. Thus, large errors result and modeling becomes difficult and inaccurate. For these reasons, the Brooks and Correy soil hydraulic parameters were used for the sand soil models.

Virtual soil models in this work have uniform, homogeneous soil profiles. This was necessary in order to simplify modeling and to be able to compare the effects of soil texture on evapotranspiration directly. Riparian soils are commonly horizontally stratified due to deposition of sediment and soil development. In general, soil stratification hinders flow to the surface. Thus, stratified soils would be expected to produce less soil evaporation than homogeneous soils.

3.4.1.3. *Rooting in Virtual Soil Models*

Rooting depth is another important factor involved in the virtual soil models. The rooting patterns built in to the models were meant to simulate short grasses, herbs and annuals, and shrubs and trees. The root uptake behavior is governed by the Feddes parameters in the Hydrus 1D database. The 0.3 m rooting plants are modeled by Feddes grass parameters (Fig. 2). The 1m rooting plats are modeled by the pasture parameters (Fig. 3). The 3 m rooting plants are modeled by deciduous fruiting tree parameters (Fig. 4).

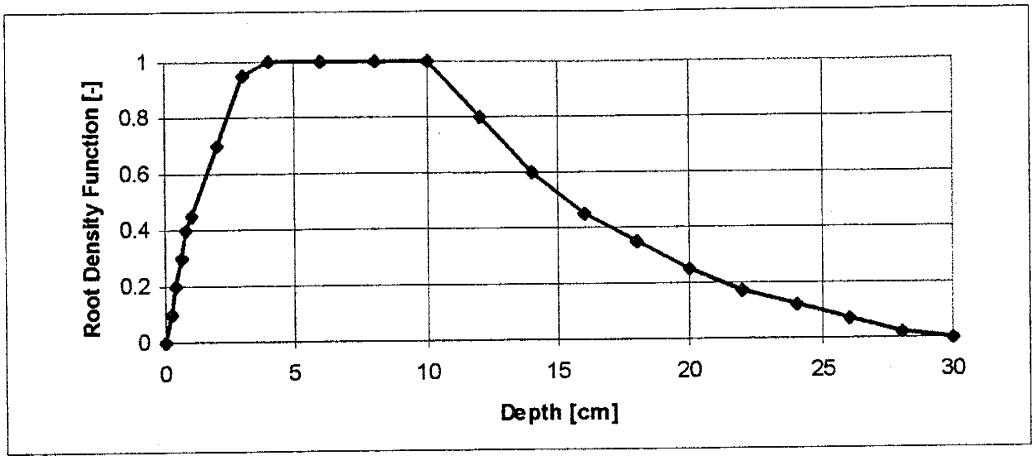
The 0.3 m rooting pattern (Fig. 2) is a very shallow rooting depth that is often assumed for short grasses in the literature (Hendricks et al., 1994; Michael, 1994; Wooton & Standley, 1912). After digging many soil pits in an arid environment, it has been found that grasses tend to have a very dense mass of roots near the surface.

The one meter rooting pattern (Fig. 3) is a general hypothetical rooting pattern meant to simulate herbaceous plants such annuals, forbs and even tall grasses. Root densities increase from 50% at 3cm depth to 100% at 15cm depth. The root density is highest near the surface, and drops off substantially after 60cm depth. This is consistent with reported data (Cannon, 1911; Forseth et al., 1984).

The three-meter rooting pattern (Fig. 4) is meant to simulate woody species. The three-meter depth is a modest estimate for rooting depth of shrubs and trees. This pattern does not readily account for the taproots of hydrophilic species. The root density tails significantly with depth. This simulates the tendency of plants to draw water from near surface before they draw water from deeper in the profile. The rooting patterns and depths of woody shrub and tree species vary tremendously and are functions of groundwater level, climate and physiology (Weaver, 1919; FAO, 1975). In general, tree root density tends to drop below 1 or 2 m (Cannon, 1911; Barbow et al., 1977; Kemp et al., 1997).

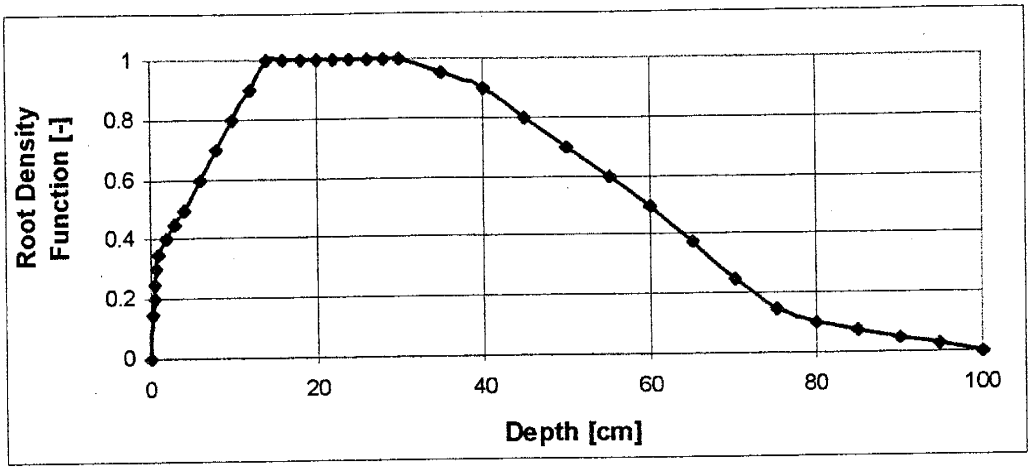
In order to determine how the choice of rooting pattern affected evapotranspiration results, three rooting patterns were created to represent a diverse set of rooting pattern possibilities (Fig. 5). These anomalous rooting patterns (Fig. 5) represent the widest spectrum of rooting pattern possibilities. One pattern has a maximum rooting density at the surface that

Figure 2: 30cm Rooting Pattern †



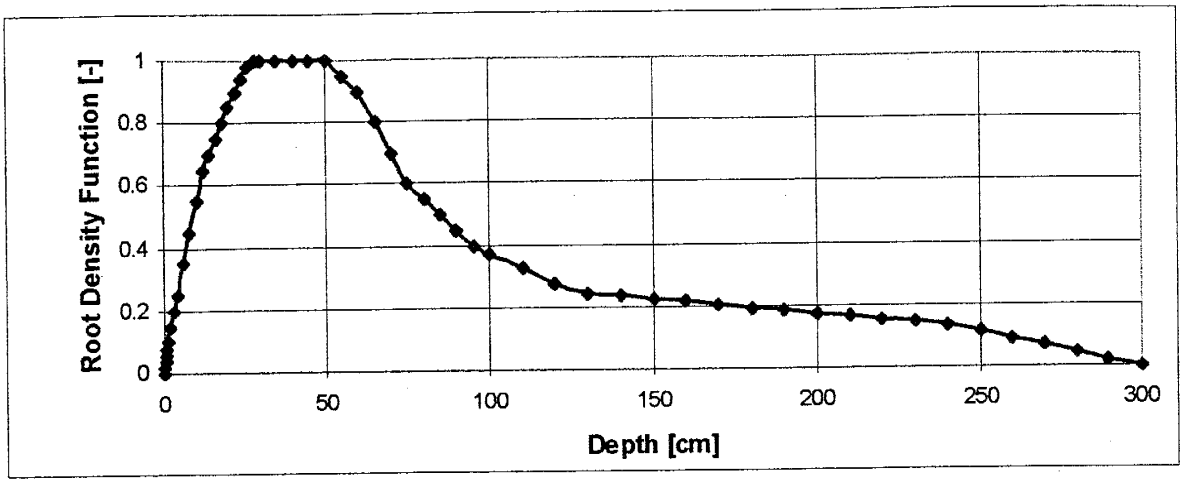
† This shallow rooting pattern is used in virtual soil models. It is an idealized pattern meant to simulate short grasses and small herbs.

Figure 3: 1m Rooting Pattern †



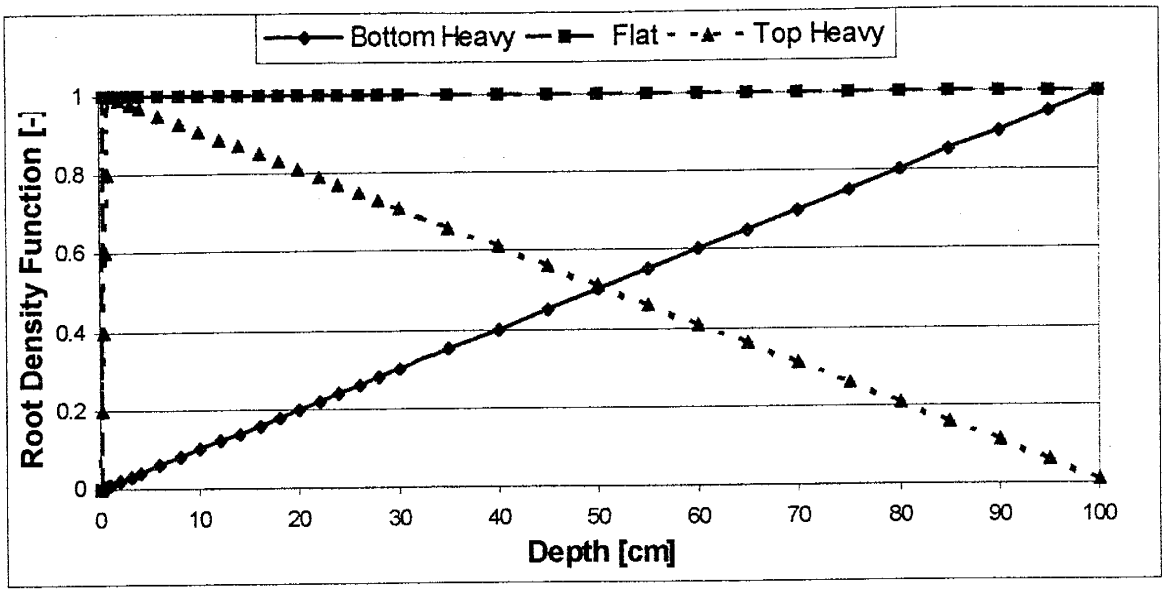
† This mid-depth rooting pattern is used in virtual soil models. It is an idealized pattern meant to simulate tall grasses and various herbs.

Figure 4: 3m Rooting Pattern †



† This deep rooting pattern is used in virtual soil models. It is an idealized pattern meant to simulate woody vegetation.

Figure 5: Anomalous Rooting Patterns †



† The above anomalous rooting patterns are used in virtual soil models. They represent extremes in rooting pattern meant to test the effect of rooting pattern on evapotranspiration.

decreases linearly with depth to a maximum. Another pattern has a maximum rooting pattern at depth, which decreases linearly towards the surface to zero. The third pattern has a constant rooting density with depth. The three anomalous patterns were modeled at each groundwater level and each soil texture to produce 27 models. When the anomalous and representative rooting patterns were modeled with each groundwater level and soil texture, 54 models were produced.

Root growth and adaptation was not considered in this study. In the natural environment, rooting depth and patterns adapt to groundwater level. Rooting was treated as a fixed parameter in this study in order to isolate the affect of rooting on evapotranspiration and to simplify comparisons with groundwater level and soil texture. There was no uniform method of allowing rooting to adapt the groundwater level in each model. Any such attempts would not be supported by any measurements taken in the Bosque sites. Thus, although vegetation rooting and groundwater level are interrelated parameters, they will be treated as independent separate functions.

3.4.1.4. *Weather in Virtual Soil Models*

The top boundary condition was an atmospheric boundary condition without surface runoff. This means that the evapotranspiration demand of the atmosphere is the variable boundary condition that is controlled by potential evaporation and potential transpiration. A boundary condition of atmospheric boundary with surface runoff is very similar except that water is allowed to flow off of the surface of the soil. This is not an issue when the soil surface is perfectly level, as in the case of the models created in this research. All theoretical models ran for half a year (183days). Reference evapotranspiration is held constant at 6 mm/day throughout this period for the first 54 models. This removes the complexity of seasonal cycles and simulates the long hot summer and arid conditions of the region. Then, 21 of the 54 models were run with reference evapotranspiration, calculated from measured Bosque del Apache climate data. Only 21 models using seasonal variability were used, as the results were tremendously consistent with the previous 54 theoretical models (Table 8). Precipitation and reference evapotranspiration data

Table 8. Virtual Soil Model Descriptions

Virtual Soil Model Name	Rooting Depth, cm	GW Depth, m ‡	Reference ET, mm/day *	Soil Texture	Hydraulic Parameter Model
Clay1mF	Flat profile §	1	6 **	Clay	Van Genuchten
Clay1mT	Bottom Heavy †	1	6	Clay	Van Genuchten
Clay1mB	Top Heavy ††	1	6	Clay	Van Genuchten
Clay1m30cm	30 ¶	1	6	Clay	Van Genuchten
Clay1m1m	100 #	1	6	Clay	Van Genuchten
Clay1m3m	300 ‡‡	1	6	Clay	Van Genuchten
Clay2mF	Flat profile	2	6	Clay	Van Genuchten
Clay2mT	Bottom Heavy	2	6	Clay	Van Genuchten
Clay2mB	Top Heavy	2	6	Clay	Van Genuchten
Clay2m30cm	30	2	6	Clay	Van Genuchten
Clay2m1m	100	2	6	Clay	Van Genuchten
Clay2m3m	300	2	6	Clay	Van Genuchten
Clay5mF	Flat profile	5	6	Clay	Van Genuchten
Clay5mT	Bottom Heavy	5	6	Clay	Van Genuchten
Clay5mB	Top Heavy	5	6	Clay	Van Genuchten
Clay5m30cm	30	5	6	Clay	Van Genuchten
Clay5m1m	100	5	6	Clay	Van Genuchten
Clay5m3m	300	5	6	Clay	Van Genuchten
Loam1mF	Flat profile	1	6	Loam	Van Genuchten
Loam1mT	Bottom Heavy	1	6	Loam	Van Genuchten
Loam1mB	Top Heavy	1	6	Loam	Van Genuchten
Loam1m30cm	30	1	6	Loam	Van Genuchten
Loam1m1m	100	1	6	Loam	Van Genuchten
Loam1m3m	300	1	6	Loam	Van Genuchten
Loam2mF	Flat profile	2	6	Loam	Van Genuchten
Loam2mT	Bottom Heavy	2	6	Loam	Van Genuchten
Loam2mB	Top Heavy	2	6	Loam	Van Genuchten
Loam2m30cm	30	2	6	Loam	Van Genuchten
Loam2m1m	100	2	6	Loam	Van Genuchten
Loam2m3m	300	2	6	Loam	Van Genuchten
Loam5mF	Flat profile	5	6	Loam	Van Genuchten
Loam5mT	Bottom Heavy	5	6	Loam	Van Genuchten
Loam5mB	Top Heavy	5	6	Loam	Van Genuchten
Loam5m30cm	30	5	6	Loam	Van Genuchten
Loam5m1m	100	5	6	Loam	Van Genuchten
Loam5m3m	300	5	6	Loam	Van Genuchten
Sand1mF	Flat profile	1	6	Sand	Van Genuchten
Sand1mT	Bottom Heavy	1	6	Sand	Van Genuchten
Sand1mB	Top Heavy	1	6	Sand	Van Genuchten
Sand1m30cm	30	1	6	Sand	Van Genuchten
Sand1m1m	100	1	6	Sand	Van Genuchten
Sand1m3m	300	1	6	Sand	Van Genuchten
Sand2mF	Flat profile	2	6	Sand	Brooks & Correy
Sand2mT	Bottom Heavy	2	6	Sand	Brooks & Correy
Sand2mB	Top Heavy	2	6	Sand	Brooks & Correy
Sand2m30cm	30	2	6	Sand	Brooks & Correy
Sand2m1m	100	2	6	Sand	Brooks & Correy

Virtual Soil Model Name	Rooting Depth	GW Depth	Reference ET	Soil Texture	Hydraulic Parameter Model
Sand2m3m	300	2	6	Sand	Brooks & Correy
Sand5mF	Flat profile §	5	6	Sand	Brooks & Correy
Sand5mT	Bottom Heavy †	5	6	Sand	Brooks & Correy
Sand5mB	Top Heavy ††	5	6	Sand	Brooks & Correy
Sand5m30cm	30 ¶	5	6	Sand	Brooks & Correy
Sand5m1m	100 #	5	6	Sand	Brooks & Correy
Sand5m3m	300 ‡‡	5	6	Sand	Brooks & Correy
Clay1m.3mRPET	30	1	Bosque data	Clay	Van Genuchten
Clay1m3mRPET	300	1	Bosque data	Clay	Van Genuchten
Clay2m.3mRPET	30	2	Bosque data	Clay	Van Genuchten
Clay2m3mRPET	300	2	Bosque data	Clay	Van Genuchten
Clay5m.3mRPET	30	5	Bosque data	Clay	Van Genuchten
Clay5m3mRPET	300	5	Bosque data	Clay	Van Genuchten
Loam1m.3mRPET	30	1	Bosque data	Loam	Van Genuchten
Loam1m3mRPET	300	1	Bosque data	Loam	Van Genuchten
Loam2mFRPET	Flat profile	2	Bosque data	Loam	Van Genuchten
Loam2mTRPET	Bottom Heavy	2	Bosque data	Loam	Van Genuchten
Loam2mBRPET	Top Heavy	2	Bosque data	Loam	Van Genuchten
Loam2m.3mRPET	30	2	Bosque data	Loam	Van Genuchten
Loam2m3mRPET	300	2	Bosque data	Loam	Van Genuchten
Loam5m.3mRPET	30	5	Bosque data	Loam	Van Genuchten
Loam5m3mRPET	300	5	Bosque data	Loam	Van Genuchten
Sand1m30cm	30	1	Bosque data	Sand	Van Genuchten
Sand1m3m	300	1	Bosque data	Sand	Van Genuchten
Sand2m30cm	30	2	Bosque data	Sand	Brooks & Correy
Sand2m3m	300	2	Bosque data	Sand	Brooks & Correy
Sand5m30cm	30	5	Bosque data	Sand	Brooks & Correy
Sand5m3m	300	5	Bosque data	Sand	Brooks & Correy

‡ Constant groundwater depth used in given model.

§ Anomalous rooting pattern, where rooting density is constant with depth forming a vertical line in a plot of root density profile as discussed in section 3.4.1.3.

† Anomalous rooting pattern, where rooting density is zero at the soil surface and increases linearly with depth as discussed in section 3.4.1.3.

†† Anomalous rooting pattern, where rooting density is at a maximum at the soil surface and decreases linearly with depth as discussed in section 3.4.1.3.

¶ Typical rooting pattern of grasses.

Typical rooting pattern of herbs, annuals and vegetation of moderate rooting depth.

‡‡ Typical rooting pattern of phreatophytes.

* Reference evapotranspiration rate used as model input.

** Model input value used as a typical summer reference evapotranspiration rate for arid regions.

*** Daily reference evapotranspiration calculated from measured Bosque Del Apache climate data using the Penman Montieth Equation.

were taken from the North Bosque weather station for the 21 models using variable reference evapotranspiration (Fig. 6, Appendix A). This was done because this station has humidity and wind data more accurately reflecting conditions at the study sites. The 183day output is taken from the last 183 days of the run, which occurred during March 15 to September 15 of 1999 (peak growing/peak evapotranspiration season).

3.4.1.5. *Virtual Soil Model Calibration and Parameterization*

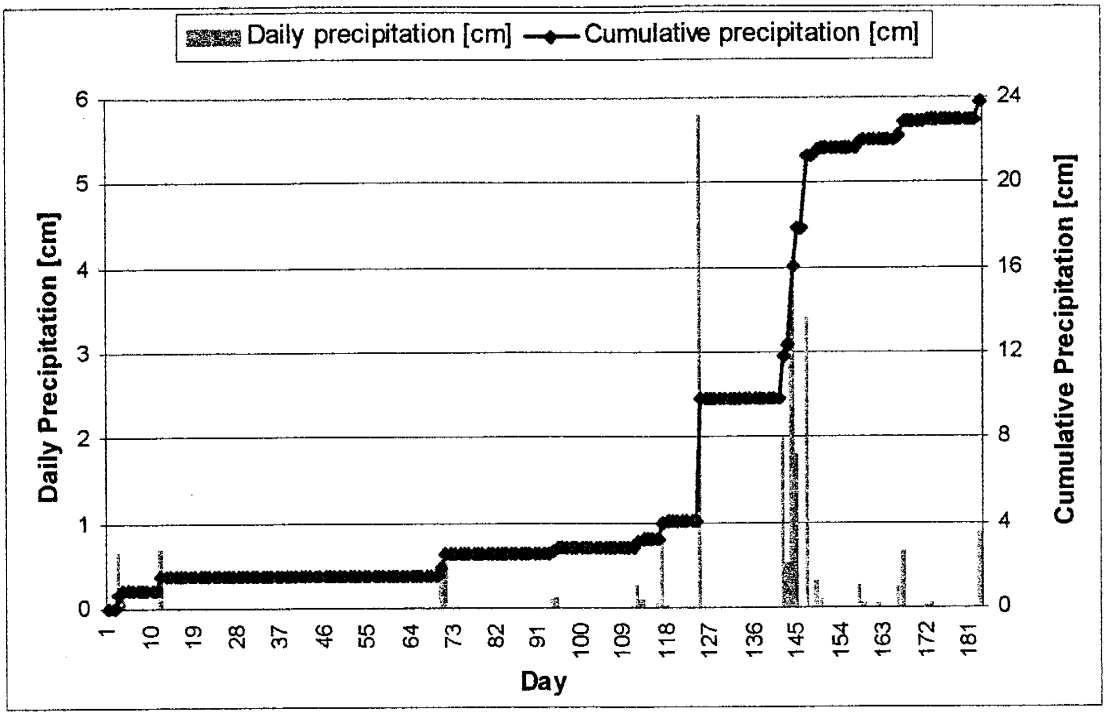
Calculations of water flow made by the Hydrus program have the largest errors in areas where water content is lowest, and at boundaries between soil horizons and at the soil surface (Senja, 1999). Soil profile discritization schemes were created to deal with this effect. The node spacing is the densest at the soil surface and decreases with depth (Table 9, Appendix A). Another source of error was found to be model equilibration time.

Evapotranspiration occurs at high rates during the first phase of evapotranspiration when soil moisture and hydraulic conductivity are high. After some time, during the second and third phases of evapotranspiration, evapotranspiration rates drop-off and then level out somewhat. This study attempts to model the third phase of evapotranspiration which are observed in dry natural systems such as the Bosque field sites.

Modeling experience showed that only by running models for a long calibration period, could phase three evapotranspiration results be produced during the model growing season. A series of theoretical models were run with various lengths of equilibrium time to determine how long the equilibrium period must be in order to obtain accurate and representative evapotranspiration results.

Because clay soils have lower hydraulic conductivities than coarse-textured soils, they require longer periods of modeling time to reach evapotranspiration phase three. These clay models were run with equilibrium periods of 0, 365, 442, 730 and 803 days previous to the 183 days of the evapotranspiration model season (Fig. 7). Evapotranspiration results for all equilibration periods retained the same patterns, in the models with shallow groundwater levels, fine textured soils and deep rooting have higher evapotranspiration rates. The values of

Figure 6: Virtual Soil Model Precipitation †

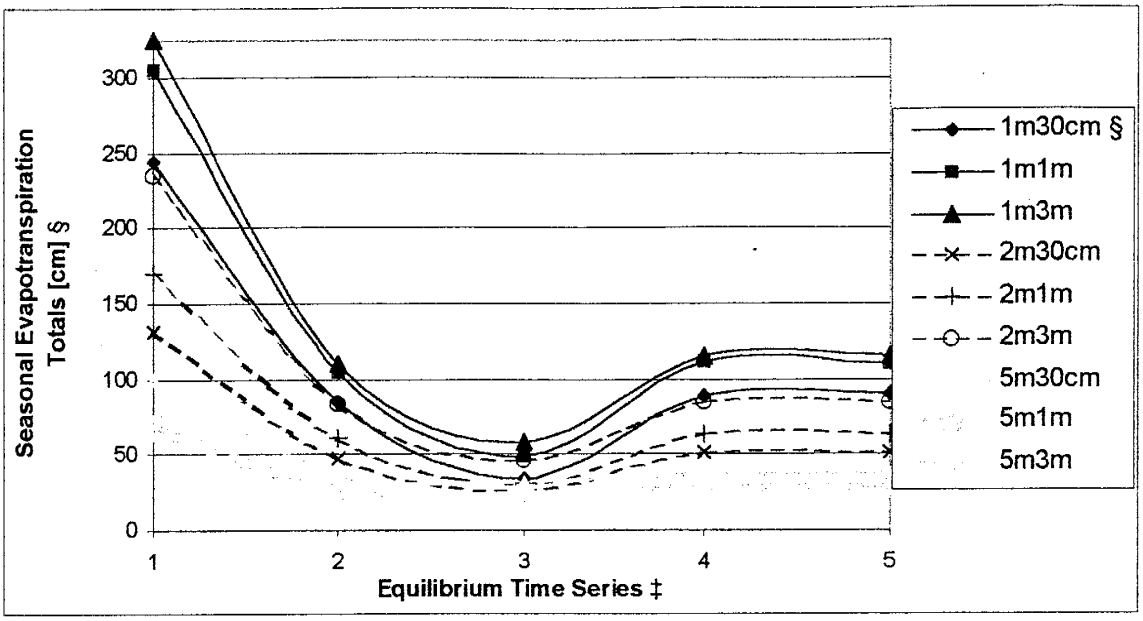


† This precipitation data were collected from the Bosque weather stations and used as model input.

Table 9. Virtual Soil Model Profile Discritization

Discritization for Clay, Loam and Sands with 1m Water Table	
Depth from Surface, cm	Nodal Spacing
Top 0-1	1mm discritization
1- 255	1cm discritization
255-550	5cm discritization
Discritization for Sand Soils with Water Tables of 2 and 5 m	
Depth from Surface, cm	Nodal Spacing
Top 0-2	1mm discritization
2- 61	1/2cm discritization
61-255	1mm discritization
255-550	5cm discritization

Figure 7: Evapotranspiration vs. Equilibrium Times †



† The virtual soil models in clay soils were run for various lengths of time to determine an appropriate equilibration time for phase III evapotranspiration rates. Clay models were used because they require the longest equilibration time.

‡ Equilibrium Time Series Key: (1) = 548 day evapotranspiration totals with no equilibrium period; (2) = 183 day evapotranspiration totals after a 365 day equilibrium period; (3) = 175 day evapotranspiration totals after a 442 day equilibrium period; (4) = 183 day evapotranspiration total after a 730 day equilibrium period; (5) = 183 day evapotranspiration totals after a 803 day equilibrium period

§ Legend Key: 1m30cm is the model with 1m groundwater depth and 30cm rooting depth; 1m1m is the model with 1m groundwater depth and 1m rooting depth; 1m3m is the model with 1m groundwater depth and 3m rooting depth; 2m30cm is the model with 2m groundwater depth and 30cm rooting depth; 2m1m is the model with 2m groundwater depth and 1m rooting depth; 2m3m is the model with 2m groundwater depth and 3m rooting depth; 5m30cm is the model with 5m groundwater depth and 30cm rooting depth; 5m1m is the model with 5m groundwater depth and 1m rooting depth; 5m3m is the model with 5m groundwater depth and 3m rooting depth.

evapotranspiration change substantially, however when the equilibration times are two years or less (Fig. 7). Evapotranspiration results change by a maximum of 1.2% when equilibrium times are two years or more. The equilibrium time of 2.2 years was chosen for all theoretical models according to the results in Table 10, and given that the clay models require the most time for equilibration.

Each model is meant to examine different factors that affect evapotranspiration. Table 10 summarizes the basic differences between the virtual soil evapotranspiration models.

The models were run for 3, 4 and 6 weeks for sand, loam, and clay models respectively from a unit gradient at a 6mm potential evapotranspiration rate, the resulting drier profiles were used as the initial condition for all 75 models (Table 8).

3.4.2. Modeling Evapotranspiration in Field Soils

Three Hydrus 1D models were created to simulate conditions found in the Bosque del Apache field sites. The models were calibrated so that their evapotranspiration results would match those of measured data. One model was used to represent the cottonwood site, which was relatively uniform in soil stratigraphy, and had little lateral variation in rooting pattern overall. Two models were used to represent the saltcedar region, which is highly variable in soil stratigraphy. Two models representing average conditions in the central and southern saltcedar transects were created to account for some of the variability found in this site.

Reference evapotranspiration and precipitation input data was taken from North Bosque weather station data. This data is presented in Appendix A and discussed in the theoretical model, and weather station sections of the methods and materials portion of this paper. The weather data set accounted for each day in 1999. Groundwater level, soil stratigraphy, soil hydraulic properties, and root distribution data were taken from measured data. Cottonwood root density profile shows bulges at the surface, and at two regions at depth (Fig. 8, Appendix A). This allows the vegetation to obtain water from rainfall and the water table, which shifts seasonally. Average soil stratigraphies were determined from soil pits and well installation logs. Saltcedar root distributions are less distinctive (Fig. 9). They taper downward from high root

Table 10. Total Evapotranspiration Fluxes Verses Equilibrium Time

Equilibrium Time series:	I †	II ‡	III §	IV ¶	V #
	Cumulative Seasonal Evapotranspiration, cm				
Model Name					
Clay1m30cm	244.04	84.52	34.40	88.71	89.71
Clay1m1m	305.53	105.21	49.66	110.91	109.91
Clay1m3m	324.44	110.62	58.04	114.91	115.91
Clay2m30cm	131.63	47.99	26.90	51.52	51.53
Clay2m1m	170.24	61.50	30.62	63.50	63.52
Clay2m3m	234.84	82.96	46.72	84.26	85.26
Clay5m30cm	63.44	25.84	23.40	27.11	27.21
Clay5m1m	71.74	28.45	24.83	28.81	28.81
Clay5m30cm	99.94	37.02	31.49	37.41	37.41

† 548 day model time run. No equilibration period. Modeled evapotranspiration results used for the entire 548 period of model run time.

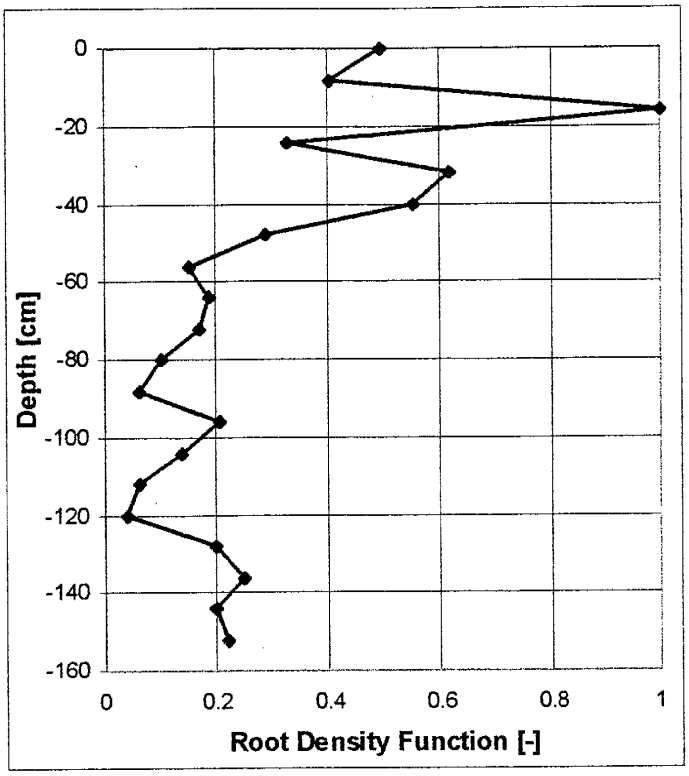
‡ 548 day model time run. 365 day equilibration period. Modeled evapotranspiration results used for the last 183 day period of model run time.

§ 617 day model time run. 442 day equilibration period. Modeled evapotranspiration results used for the last 175 day period of model run time.

¶ 913 day model time run. 730 day equilibration period. Modeled evapotranspiration results used for the last 183 day period of model run time.

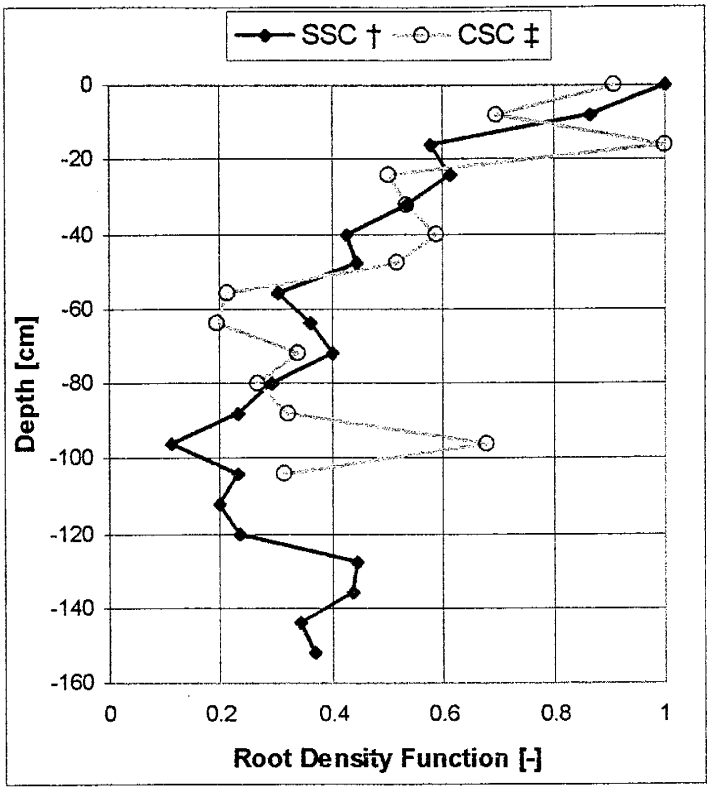
986 day model time run. 803 day equilibration period. Modeled evapotranspiration results used for the last 183 day period of model run time.

Figure 8: South Cottonwood Root Profile †



† Roots counts were made along three walls of a 2m deep soil pit in the center of the south cottonwood transect.

Figure 9: Saltcedar Root Profiles



† Roots counts were made along three walls of a 2m deep soil pit in the center of the south saltcedar transect.

‡ Roots counts were made along three walls of a 1.7m deep soil pit in the center of the central saltcedar transect.

counts near the surface. Saltcedar roots contain many more fine hair roots and fewer taproots than the cottonwood vegetation.

Soil hydraulic properties for these models were determined from sampled soil columns examined in the laboratory as described in the soil analysis methods and materials portion of this paper. The upper boundary condition is atmospheric with surface runoff. This boundary condition was chosen so that daily meteorological data would factor into evapotranspiration calculations. The option of surface runoff allowed the program to run smoothly when floodwaters were introduced. Because the surface of the soil is level, floodwaters and rainwater will not flow laterally off of the soil surface. The lower boundary condition is variable pressure head boundary where the boundary pressure is determined by the groundwater level.

When the saltcedar models were run using only measured climate data, the resulting summer evapotranspiration rates were 5 to 65% lower than measured evapotranspiration rates. Analysis of field notes showed when flooding occurred, the extent of flooding and the approximate depth of the floodwater on the soil surface. When floodwater was introduced on the soil surface, modeled evapotranspiration results became very similar to the measured results. Flood input and Feddes root model parameters were augmented slightly to match modeled evapotranspiration to measured evapotranspiration.

There was no flooding in the cottonwood region. This allows the soils to remain very dry. This leads to mathematical instabilities in the computer calculations of fluid flow, as water flows upward from a fine soil into very dry sand, and from the sand into the atmosphere. In order for the model to run to completion and to match measured evapotranspiration patterns more accurately, Feddes parameters had to be adjusted so that the matric potentials were diminished. The Feddes parameters presented in Tables 11 & 12 create more root uptake from more moist regions yet preserve the overall transpiration trends. Precipitation data from North and South Bosque weather stations vary slightly. An average of the two data sets was used in order to match measured cottonwood evapotranspiration data more accurately. Figure 10 shows the precipitation data used in the cottonwood models.

Table 11. Saltcedar Model Feddes Root Model Uptake Parameters

Feddes Parameter	Value
P0 †	-20 cm
P0pt ‡	-30 cm
P2H §	-300 cm
P2L ¶	-1000 cm
P3 #	-8000 cm
r2H ††	0.75 cm/day
r2L ‡‡	0.3 cm/day

† Matric potential below which root uptake commences.

‡ Matric potential at which root uptake can reach maximum potential.

§ Matric potential at which root uptake is limited by both maximum potential and the r2H rate of transpiration.

¶ Matric potential at which root uptake is limited by the maximum potential and the r2L rate of transpiration.

Matric potential below which transpiration ceases.

†† Maximum rate of transpiration under normal conditions.

‡‡ Maximum rate of transpiration under water stress conditions.

Table 12. Cottonwood Model Feddes Root Model Uptake Parameters

Feddes Parameter	Value
P0 †	-1 mm
P0pt ‡	-2 cm
P2H §	-80 cm
P2L ¶	-250 cm
P3 #	-1500 cm
r2H ††	0.75 cm/day
r2L ‡‡	0.5 cm/day

† Matric potential below which root uptake commences.

‡ Matric potential at which root uptake can reach maximum potential.

§ Matric potential at which root uptake is limited by both maximum potential and the r2H rate of transpiration.

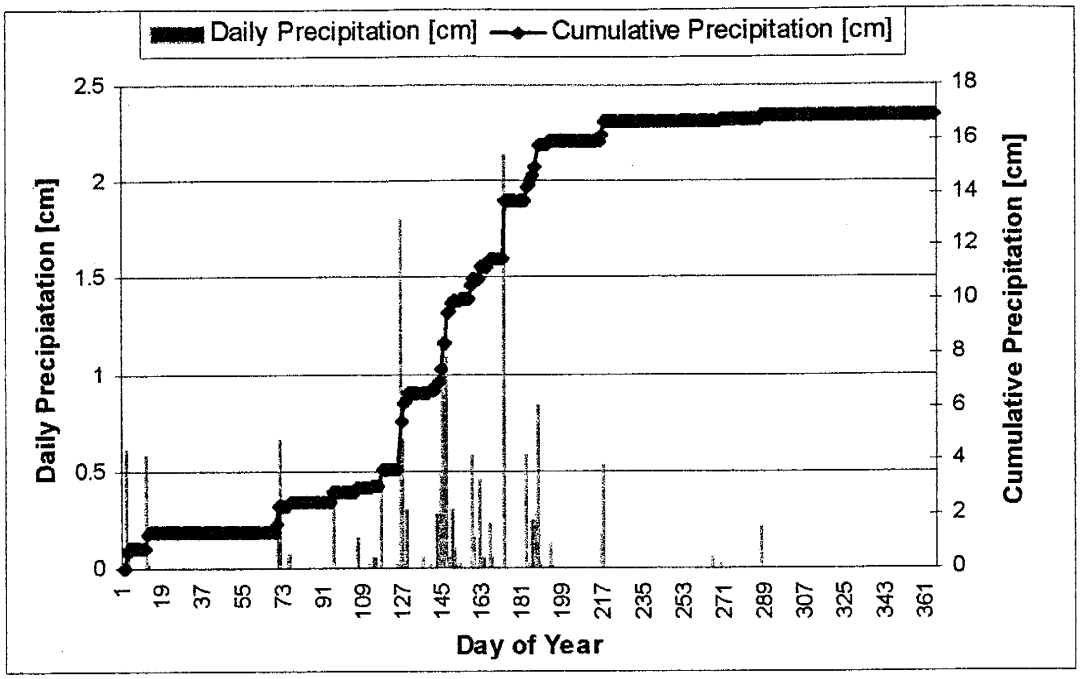
¶ Matric potential at which root uptake is limited by the maximum potential and the r2L rate of transpiration.

Matric potential below which transpiration ceases.

†† Maximum rate of transpiration under normal conditions.

‡‡ Maximum rate of transpiration under water stress conditions.

Figure 10: Bosque Model Precipitation †



† This precipitation data were collected from the Bosque weather stations and used as model input.

The models were run for three years with the last year used for data and the first two used as an equilibration period. Once the models were calibrated to the measured data 15 more models were created with the groundwater levels augmented such that the yearly averages were at depths of 30, 50, 100, 200, 500 and 700 cm for each of the three original models (Table 13). This was done to study the effects of groundwater level on evapotranspiration in more models with more realistic data.

Table 13. Bosque Model Organization

Model Name	Average Water Level, cm	Region of Study
CSCMatP193	-30	Central saltcedar transect
CSCMatP171	-50	Central saltcedar transect
CSCMatP120	-100	Central saltcedar transect
CSCMat	-200	Central saltcedar transect
CSCMatM283	-500	Central saltcedar transect
CSCMatM483	-700	Central saltcedar transect
SCWMatP246	-30	Southern cottonwood transect
SCWMatP224	-50	Southern cottonwood transect
SCWMatP173	-100	Southern cottonwood transect
SCWMat	-270	Southern cottonwood transect
SCWMatM226	-500	Southern cottonwood transect
SCWMatM426	-700	Southern cottonwood transect
SSCMatP182	-30	Southern saltcedar transect
SSCMatP162	-50	Southern saltcedar transect
SSCMatP112	-100	Southern saltcedar transect
SSCMat	-211	Southern saltcedar transect
SSCMatM288	-500	Southern saltcedar transect
SSCMatM488	-700	Southern saltcedar transect

4. RESULTS AND DISCUSSION

4.1. FIELD MEASUREMENTS

Measurements were taken in the Bosque field sites from September 1998 to May 2000. Groundwater depth measurements were taken for the entire period. Salinity and soil water content measurements were taken to December 1999. These measurements were taken in order to correlate with evapotranspiration data measured by Dr. Bawazir at New Mexico State University, as well as to provide for modeling input.

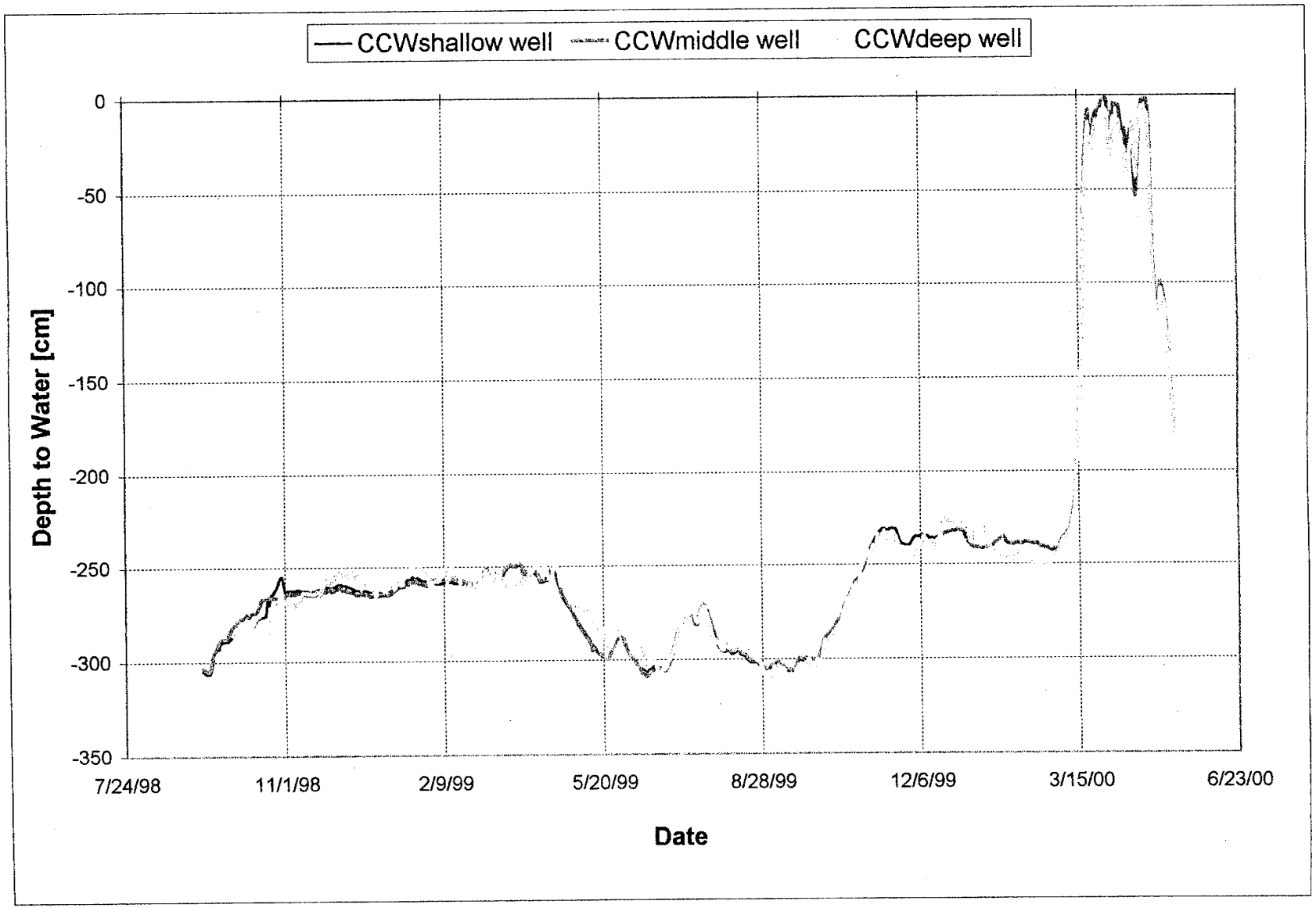
4.1.1. Monthly Averaged Groundwater Depths

Appendix B shows daily averages of groundwater levels for various wells in the Bosque field site. When plotted, these data show several spatial and seasonal trends. In the saltcedar site, water flows from the Rio Grande eastward across the field site to discharge in the low-flow channel. In the cottonwood site, water flows from the West to drain in the low-flow channel with contributions from irrigated lands and flooding ponds to the West and Northwest. According to field data, there is also a deeper (>10 m) flow regime of brackish water flowing westward toward the Rio Grande and low-flow channel (Map 1).

4.1.1.1. *Cottonwood Groundwater*

Figures 11 to 16 show water depths data from the five transects and nested piezometers in the field sites. The nested piezometer (CCW) shows very consistent groundwater depth data indicating that there is very little vertical flow except for some upward flow during May and June of 1999 (Fig. 11). Groundwater depths drop during the summer, and rise during winter. This is due to flooding of areas approximately 700 m to the Northwest of this site. The flooded areas are maintained and managed for waterfowl wintering on the Bosque del Apache Wildlife Refuge. In March, of 2000 a levee, which was built to retain flood pond water, broke and flooded a great

Figure 11: Central Cottonwood Groundwater Depths



portion of the cottonwood region. This accidental flood shows up as a groundwater level spike in all cottonwood groundwater depth data. This does not affect evapotranspiration values, which were recorded for 1999.

The groundwater depths in the South cottonwood transect show trends that are very similar to the central cottonwood data. The groundwater depths shallow to the West, indicating flow to the East. Peaks in groundwater level in mid-summer correspond well with summer monsoon season indicating summer recharge in the local vicinity. In general, the South Cottonwood transect (SCW) data all follow the same trend, indicating a relatively simple groundwater flow regime of West to East flow (Fig. 12). The winter groundwater depth variability is generally accounted for by variations in flood stage to the West. As the flood stage rises or falls in the West, groundwater depth decreases or increases in response. The summer water level variability is generally accounted for by precipitation, evapotranspiration and drainage canal water level.

The water levels in the North cottonwood area are more strongly affected by flooding ponds approximately 300 m to the West (Fig. 13). The well adjacent to the low-flow channel (NCW0) has relatively steady water levels reflecting the relatively constant stage in the low-flow channel (Fig. 13). Flooding in West swells the groundwater table to the West and causes a large gradient to the East. This induces an eastward flow during winter. When flooding ceases and groundwater depth increases in summer, there is little gradient from West to East, and more gradient from North to South. This induces flow parallel to the flow of surface waters, with some eastward flow component towards the low flow channel.

4.1.1.2. *Saltcedar Groundwater*

In the saltcedar areas, river stage, precipitation and evapotranspiration influence groundwater depths. Wells NSC1 and SSC00 in the North and South transects reflect river stage. The groundwater table slopes downward away from the river indicating Rio Grande discharge. The further the well is from the river, the more dampened the river stage signal becomes. The three distinct flooding episodes in late May, mid-June and August have blurred in the data to two peaks in groundwater (Figs. 14-16). Groundwater levels never reached

Figure 12: Central Saltcedar Groundwater Depths

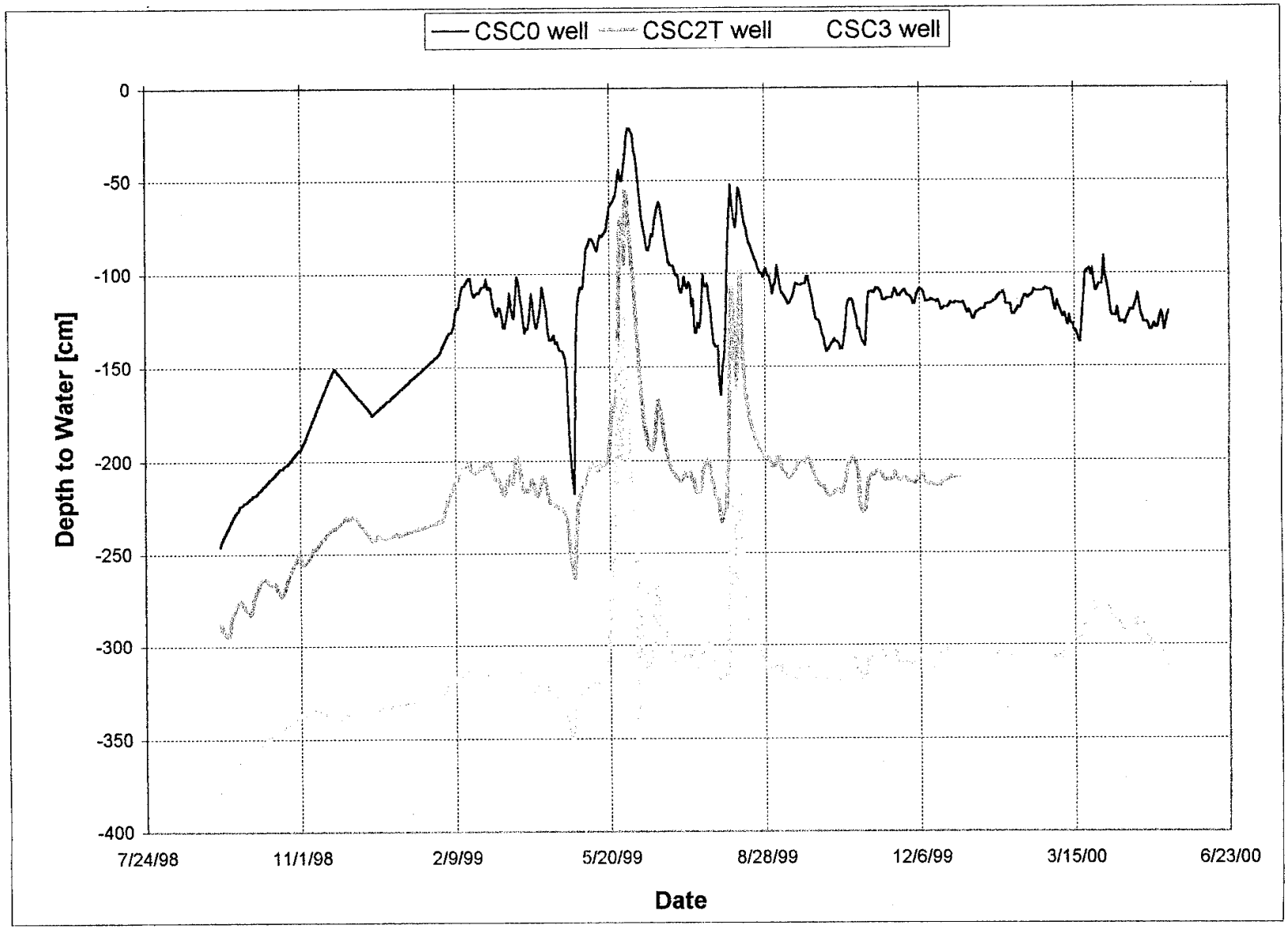


Figure 13: North Cottonwood Groundwater Depths

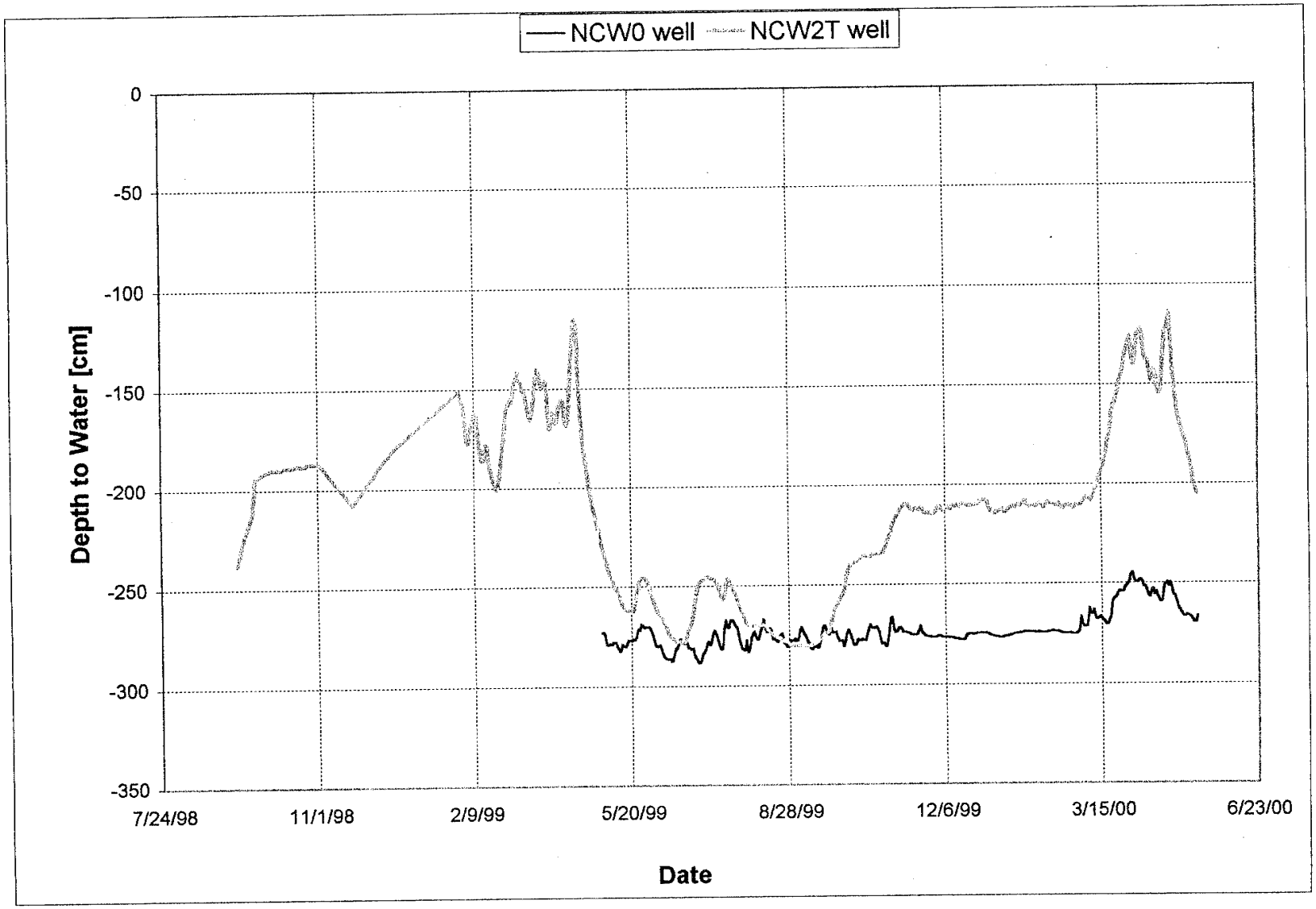


Figure 14: North Saltcedar Groundwater Depths

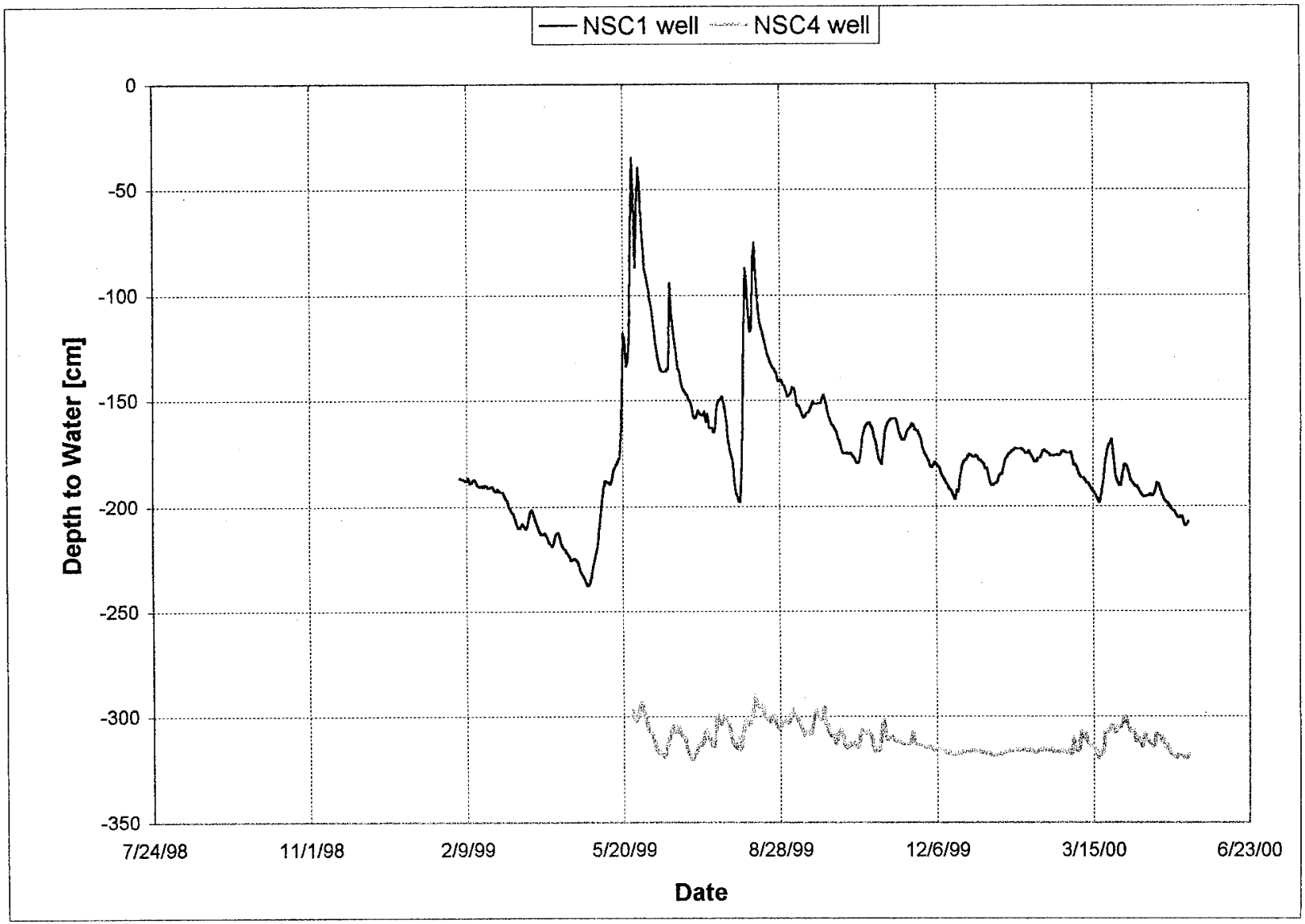
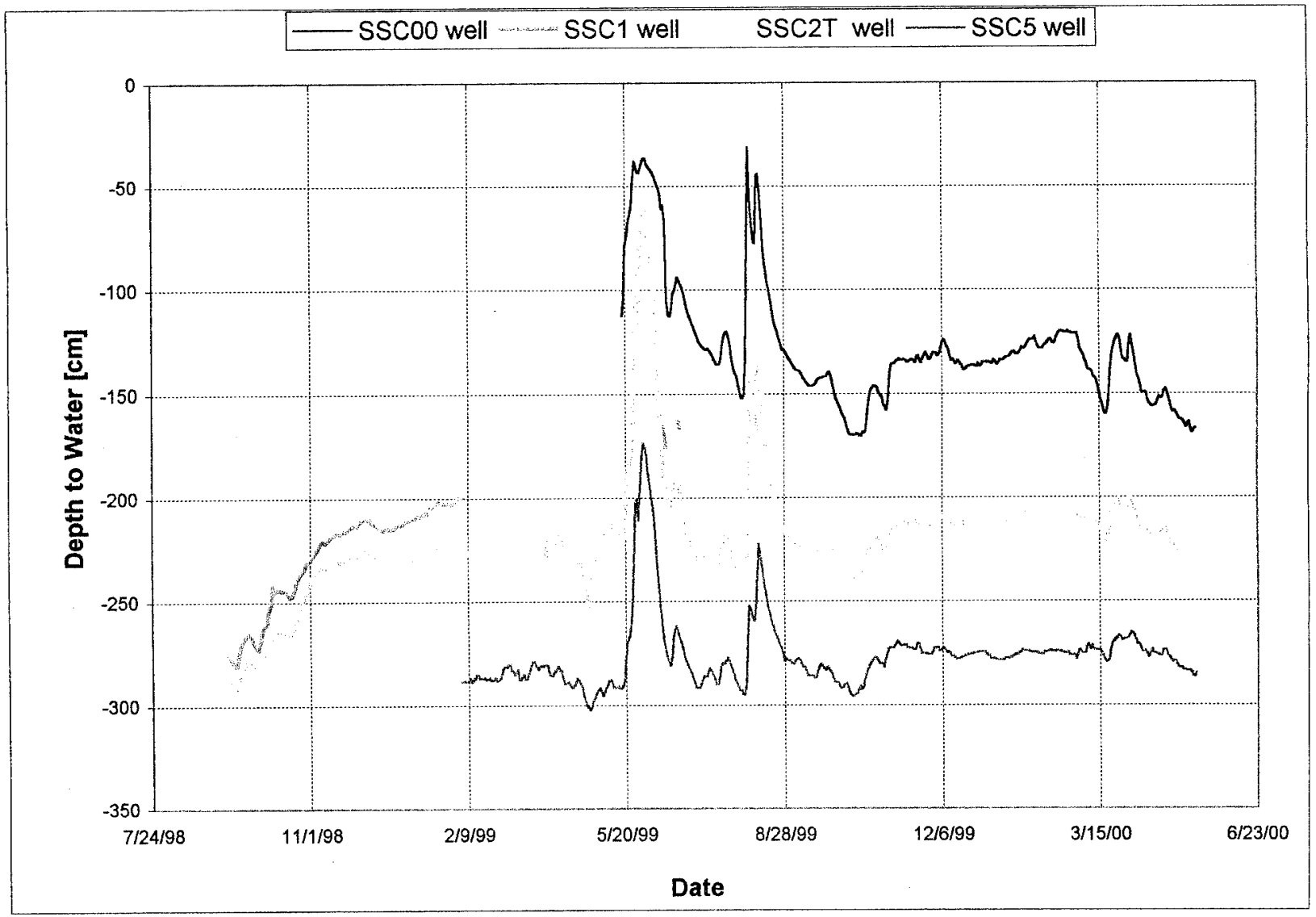


Figure 16: South Saltcedar Groundwater Depths



equilibrium with floodwater, so that an unsaturated soil lay beneath ponding water in a majority of areas during the entire flood period.

The eastern portion of the central transect and central portion of the southern saltcedar transect received the most flood water (35cm to 130cm deep). Therefore, these areas (SSC2T & CSC3) have the largest peaks in groundwater depth (Figs. 15 & 16). A depressed river stage in winter and spring increase groundwater depths across the salt cedar area. The effects of evapotranspiration on groundwater levels are not easily detected in the groundwater data at these time scales.

The water depth data indicate a rather uniform East to West groundwater flow. The complex soil stratigraphy would indicate a more complex flow pattern controlled by hydraulic conductivity heterogeneity. Floodwater flow occurs in a complex pattern controlled by topography and vegetation debris. However, the groundwater data indicate a general East to West flow with little North to South flow except near the river (Figs. 14-16).

4.1.2. Daily Groundwater Depth Fluctuations

Different patterns emerge from the groundwater depth data once the time scale is reduced. The groundwater depth plots from 30 min interval data show a different pattern that shows root uptake as the dominant influence on daily water level fluctuations. In both the cottonwood and saltcedar sites, groundwater depth fluctuations on daily sinusoidal cycle such 4that groundwater depths are at a minimum during the afternoon, and at a maximum during the pre-dawn morning hours. The vegetation draws water from the soil such that the water levels drop during the hours when photosynthesis occurs and roots take in water. The groundwater levels recover and/or soil moisture returns to the water table at night.

These fluctuations can be distinguished from noise because of the regular patterns and because the daily cycles do not occur in winter when plants are not actively transpiring. Small daily oscillations are observed in April, which in amplitude a peak from July to September in the cottonwoods and in May to July in the saltcedar (Fig. 17). The maximum daily fluctuations are 3 to 6 cm in the saltcedar and 1.5 to 3.5 cm in the cottonwood (Fig. 18).

Figure 17: Saltcedar Daily Fluctuations

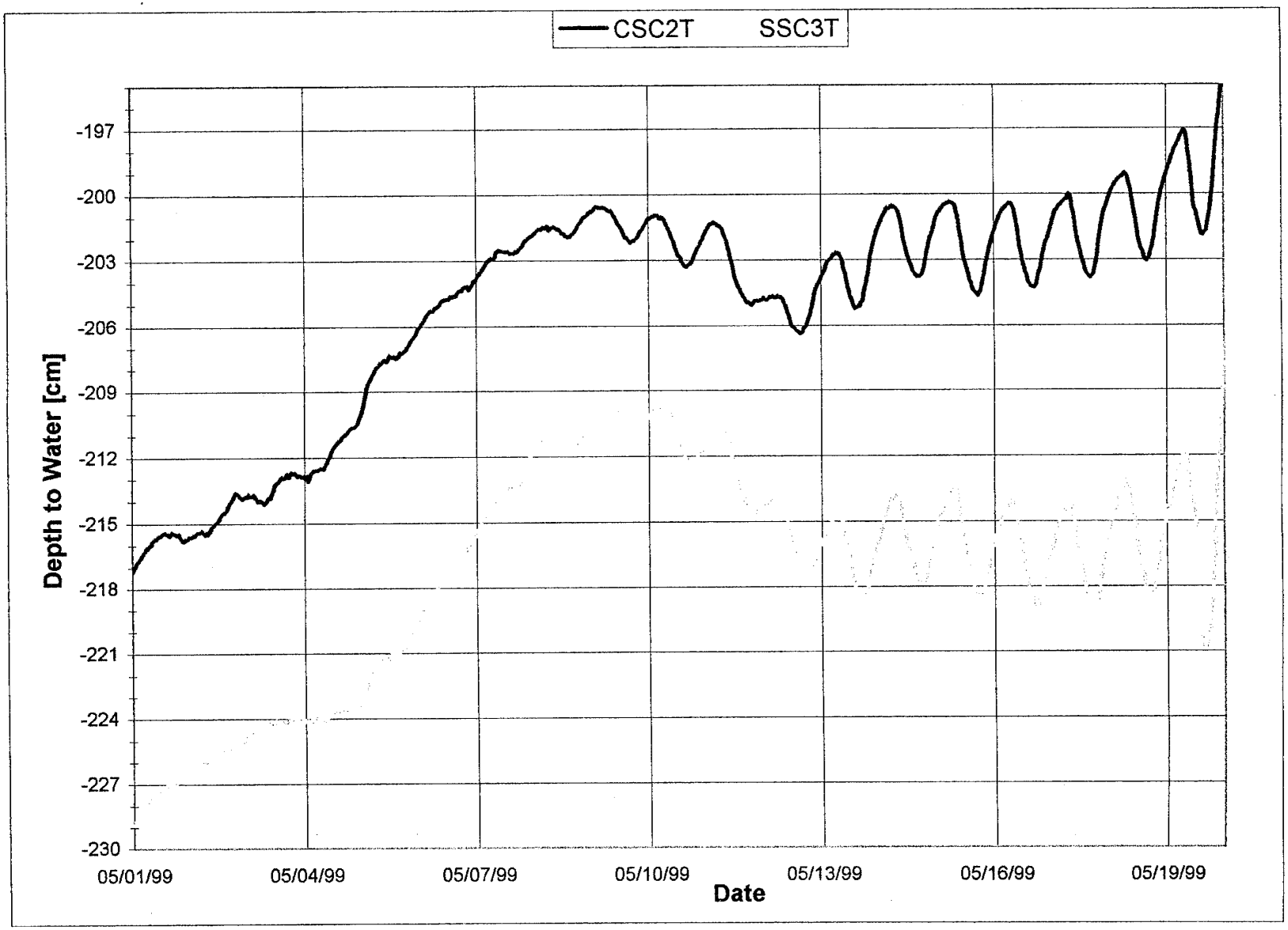
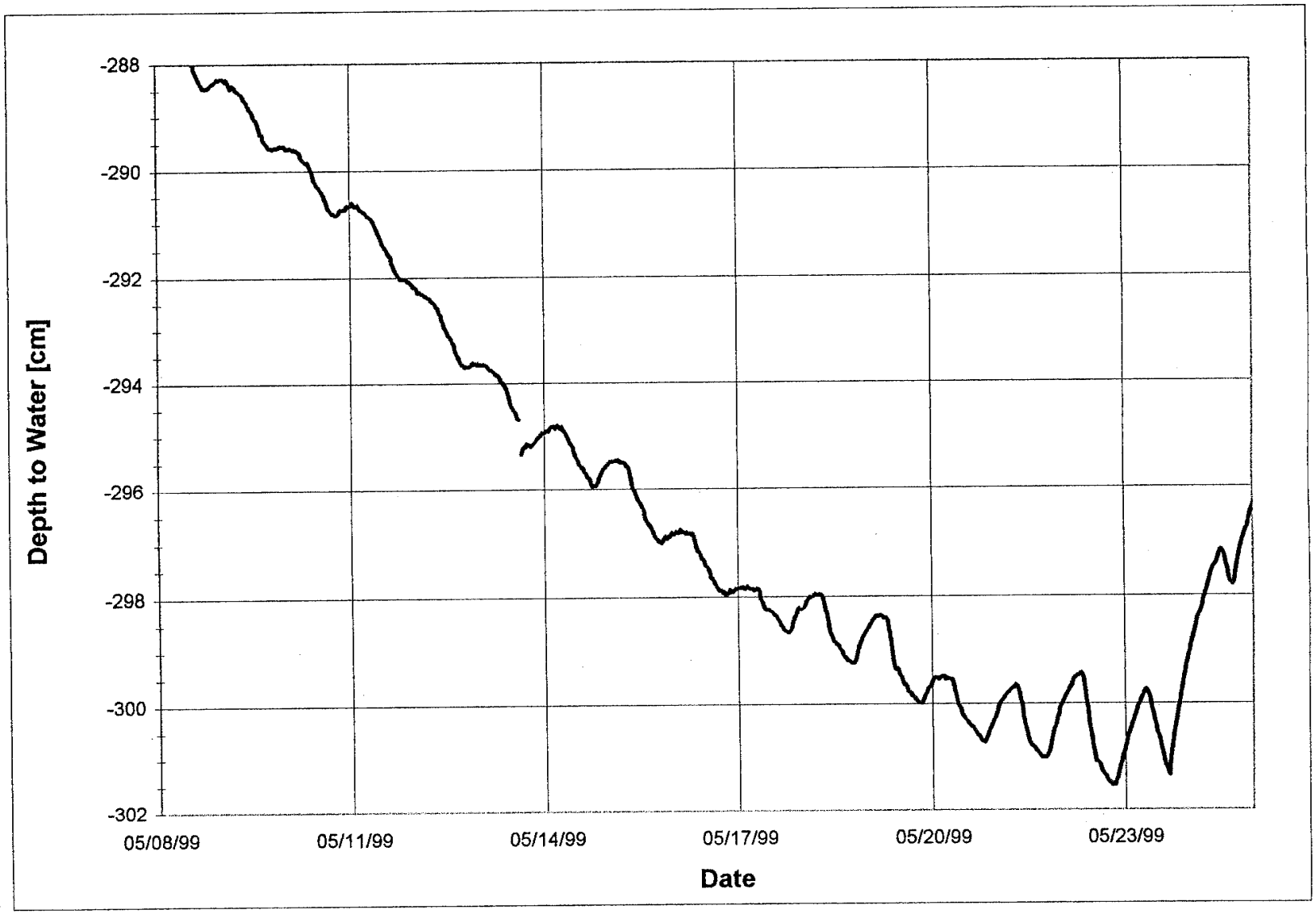


Figure 18: SCW3T Daily Fluctuations



The mature saltcedar trees produce a great deal of new growth in the first months after spring budding. Thereafter growth slowed according to field observations, along with the daily oscillations in groundwater level. It is not certain whether this is a yearly occurrence. After this period of rapid growth flooding occurred, which initially increased transpiration, but may have diminished soil aeration and increased salinity to the point where plant health and root uptake may have suffered. A few wilted plants were noted in August of 1999. It is not certain whether the flooding events increased transpiration in 1999 overall by supplying more soil moisture or decreased transpiration by waterlogging soils. It is likely, however that the tremendous amount of evaporation accompanying the floods in mid and late summer surpassed any diminishment in transpiration.

Because the cottonwood vegetation activity (growth and photosynthesis) is slower and steadier than the activity of saltcedar, daily oscillations are smaller and the peak transpiration season is spread out over a larger season (Fig. 18). The daily oscillations in the saltcedar (4 to 6cm in summer) site are approximately double that of the cottonwood (0.5 to 3 cm in summer) (Figs. 17 & 18). This does not indicate that saltcedar transpiration was double that of the cottonwood. According to field measurements, unsaturated portions of the saltcedar soils contain between 20% and 35% water by volume, and the saturated zone contains approximately 38% water. The unsaturated sands of the cottonwood site contain approximately 7% water, and the saturated zone contains approximately 36% water. According to the soil moisture data and soil retention curve data, 3 and 6 cm amplitude oscillations in the saltcedar may translate to approximate transpiration rates of 3.0 and 6.0 mm/day respectively. Similarly, 0.5 and 3 cm amplitude oscillations in the cottonwood translate approximate transpiration rates of 0.9 and 5.3 mm/day. According to Dr. Bawazir's measurements, average daily July evapotranspiration was 7.43 mm/y in the saltcedar stands, and 4.90 mm/y in the cottonwood stands.

It appears that saltcedar transpiration is somewhat higher than cottonwood transpiration. According to the patterns found in the daily fluctuation data and the fact that saltcedar are more densely populated, there is reason to believe that plant density and physiology do affect

transpiration. Yet, soil water content and texture seem to be more important factors when compared to modeling results and soil measurements. One may not conclude that saltcedar species are significantly greater water consumers than native vegetation even when groundwater level data indicate higher transpiration in the saltcedar than in the cottonwood site. Evapotranspiration differences between the two sites are caused by soil texture and moisture disparities as well as vegetation differences between the two study areas. This study will show that a great deal of the difference in evapotranspiration may result from soil textural, and moisture differences. Plant physiology may play a role in the evapotranspiration differences, but this may be of much less importance.

4.1.3. Soil Water Content

Soil water content data measurements were taken from September 1998 to December 1999 (Appendix B). These data show some seasonal trends and some behavioral differences between the vegetation communities (Figs. 19-24). The soil moisture profiles are heavily influenced by soil stratigraphy.

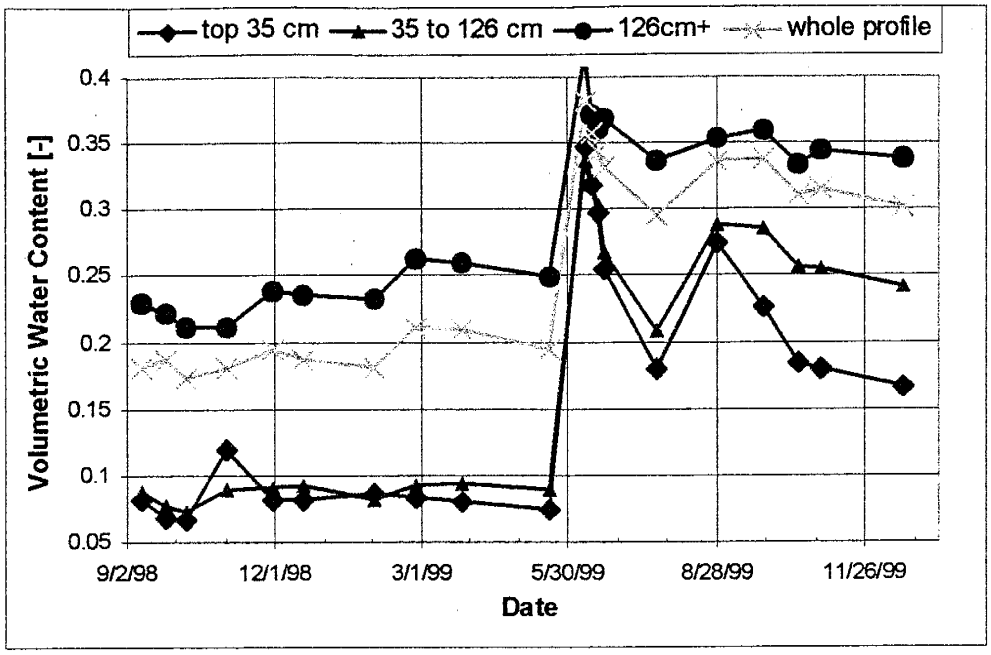
4.1.3.1. *Saltcedar Soil Water Content*

Soil moisture was higher in the salt cedar site due to fine soil texture, and flooding. The flood peaks in June and August were evident (Fig. 19). There is only slight depletion of soil water in the rooting zone, in May, July and late August that can be attributed to vegetation (Fig. 19). Overall, saltcedar area soil water content is highest in the summer (Fig. 19).

Soil water content is very low in the cottonwoods except in the top clay loam layer, and near the water table. The small effect of the rainy season can be seen in June soil water content (Fig. 20). The shallowing of groundwater depth in the cottonwood stands during the winter, which is caused by flooding to the Northwest, increases soil moisture overall to the seasonal maximum (Fig. 20). Overall, soil moisture decreases in the summer except for during the monsoon rain events (Fig. 20).

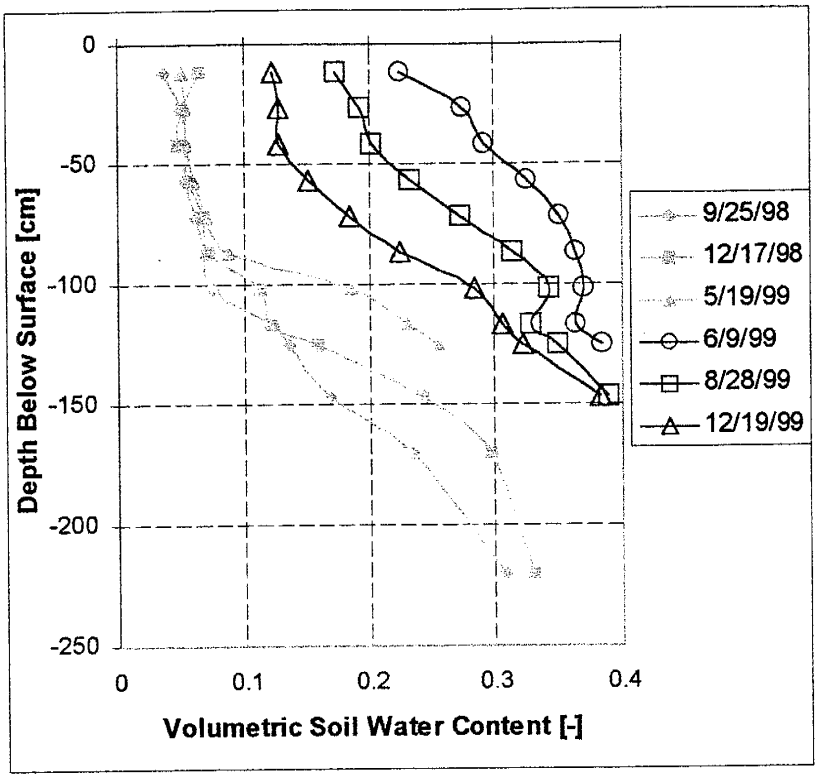
Figures 21-24 and data in Appendix B show discrete soil water content data. The plots were created to show the maximum seasonal shifts in the soil water content profile. The data for

Figure 19: SSC2T Average Water Content Profile †



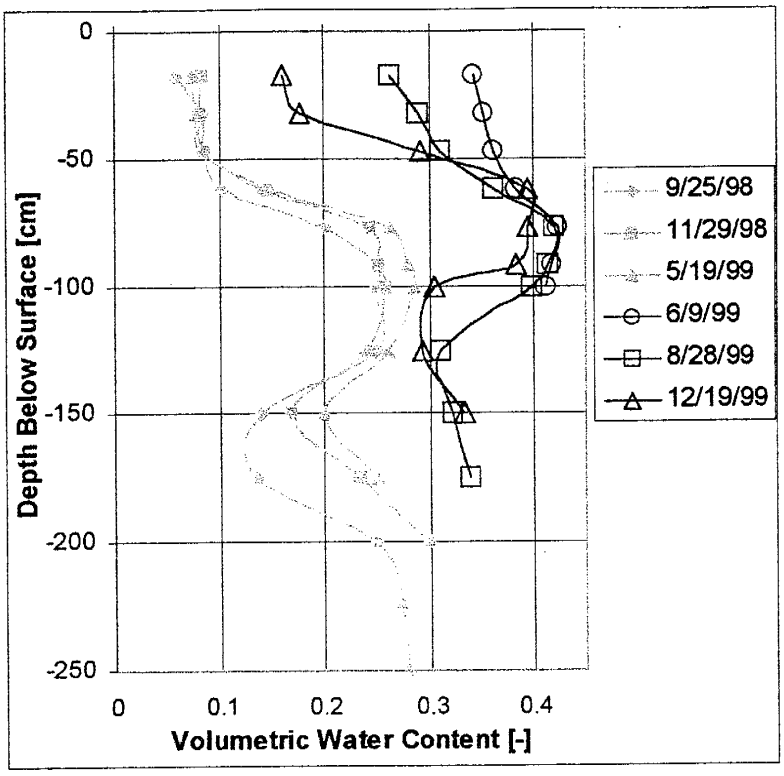
† Soil moisture is measured using the neutron probe method and calibrated by soil sampling. The above measurements were taken at the SSC2T is the well which is located adjacent the micrometeorology tower in the south saltcedar transect. Data were averaged for various portions of the soil profile, which behaved similarly in order to better display results chronologically.

Figure 21: CSC2T Soil Water Content †



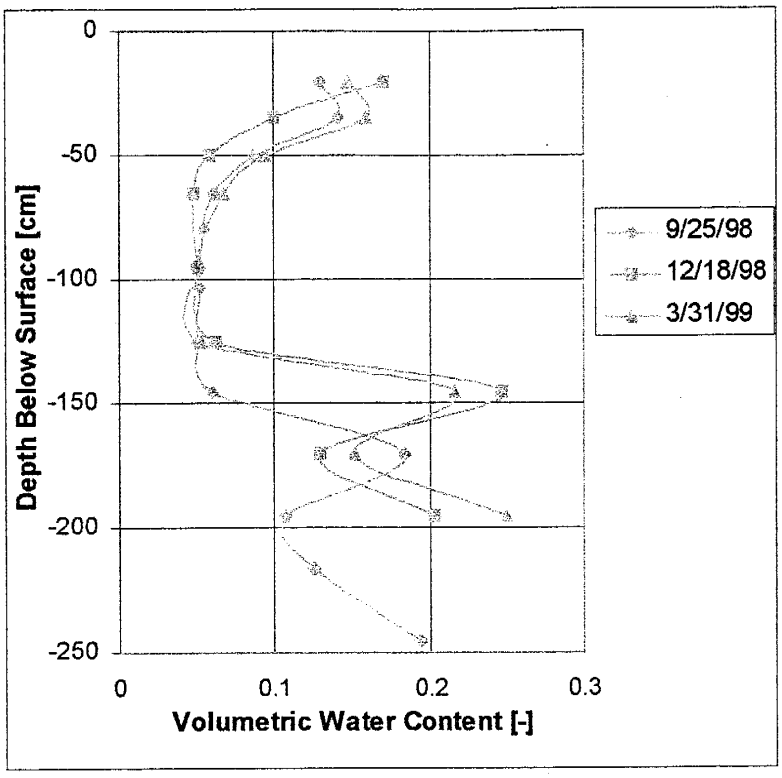
† Soil moisture is measured using the neutron probe method and calibrated by soil sampling. The above measurements were taken at the CSC2T is the well which is located adjacent the micrometeorology tower in the central saltcedar transect.

Figure 22: SSC3T Soil Water Content †



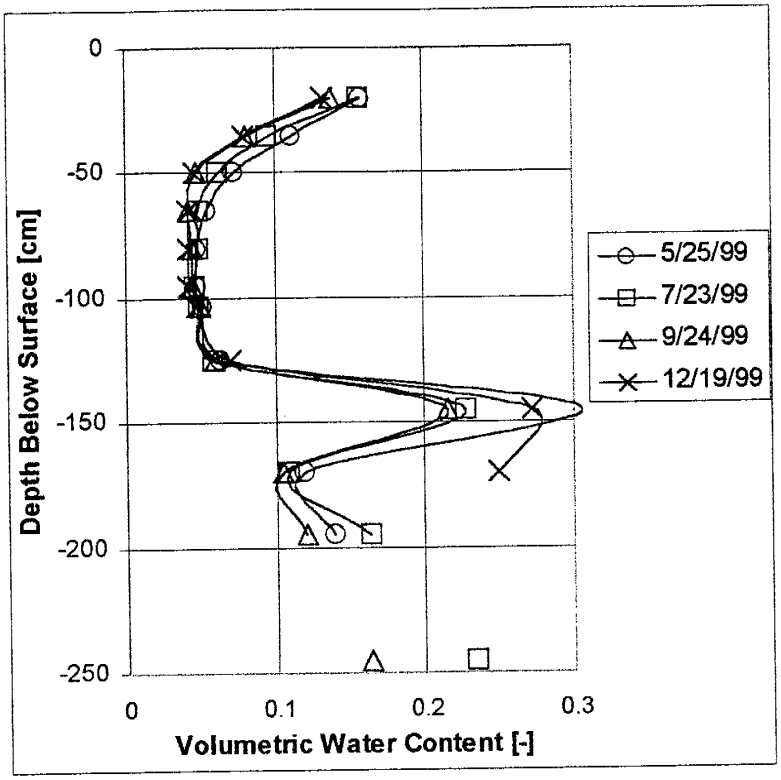
† Soil moisture is measured using the neutron probe method and calibrated by soil sampling. The above measurements were taken at the SSC2T is the well which is located adjacent the micrometeorology tower in the south saltcedar transect.

Figure 23: SCW2T Soil Water Content †



† Soil moisture is measured using the neutron probe method and calibrated by soil sampling. The above measurements were taken at the SCW2T is the well which is located adjacent the micrometeorology tower in the south cottonwood transect.

Figure 24: SCW2T Soil Water Content †



† Soil moisture is measured using the neutron probe method and calibrated by soil sampling. The above measurements were taken at the SCW2T is the well which is located adjacent the micrometeorology tower in the south cottonwood transect.

the CSC2T well (central saltcedar transect) show a seasonal pattern of wetting in mid-summer and drying in the fall (Fig. 21). The central saltcedar transect received less floodwater along most of its length during the 1998 floods than during the 1999 summer floods. The result is that by September 25, 1998 the soil profile has already become dry (Fig.21). The soil water content profile remains very similar from this date to the May 19, 1999 measurements (Fig. 21). In spring, the Rio Grande stage rises, causing some increases in soil moisture and a rise in the water table. Spring also sees a drying in the top 60 cm of the soil profile due to an increase in evapotranspiration. The June 9, 1999 data show a rapid increase in soil water content due to flooding (Fig. 21). The dense surface clays prevent quick infiltration in most areas, thus soil water content actually increases from below when flooding occurs. Subsequent floods insure that the soils remain wet into late summer. Thereafter, evapotranspiration from the top 60 cm and gravity drainage from the lower portions of the soils dry the soils somewhat by the end of the year. Preferential drying seems to occur at 130 cm, possibly due to root extraction.

The South saltcedar transect shows a somewhat different seasonal soil water content pattern (Fig. 22). Flooding which occurred in mid-summer 1998 produced a bulge in soil moisture at approximately 1 m depth under the dense, cracked, surface clays (Fig. 22). The top 60 cm dried considerably after the 1998 flood, due to evapotranspiration. Also drainage from below has dried the lower sections, but not the central portion of the profile at one meter depth. Over the winter, the bulge in soil water content has flattened slightly. There has been very little water flow to this point. In the spring, when field notes indicated that saltcedar begin to grow vigorously and groundwater levels rose, groundwater was drawn up into the soil by capillary action and high matric potentials. The top 60 cm remain relatively dry due to the large evapotranspiration drafts according to tensiometer, and neutron probe data (Fig. 22). In the June 9, 1999 data (Fig. 22), the floodwaters have nearly saturated the entire profile except for the top 60 cm. Subsequent to flooding, river stage and groundwater levels drop causing soil moisture to drain from below. As this drainage occurs, the surface layers dry due to evapotranspiration drafts. The draining and evapotranspiration leave a soil water content bulge at approximately 75 cm depth by August 8, 1999 (Fig. 22). Soil moisture is depleted from the top 50 cm substantially after the flooding, and

pulls the moisture bulge in the center of the profile is pulled upward slowly indicating evapotranspiration drafts are occurring in the top 50 cm and the high matric potentials pulls soil moisture upwards (Fig. 22). At the end of the year a water content bulge remains in the center of the profile similar to the previous year's water content profile. Thus, the excess soil moisture is never allowed to drain from the soil profile because of the slow drainage in heavy soils and because of yearly floods.

4.1.3.2. *Cottonwood Soil Water Content*

The soil water content profiles in the South cottonwood site are very dry, and only vary slightly seasonally (Appendix B). This is primarily due to the coarse well-draining soils. A fine upper unit and lenses of clay at 1.45 m depth retain higher water contents throughout the year. Near the end of the 1998 growing season, a dry profile can be observed (Fig. 23). Soil water content was very low below 1 m depth due to evapotranspiration drying and low groundwater levels. The surface was very dry, yet the near surface was much less dry due to a small retention of summer monsoon rainwater (Fig. 23). Low evaporation drafts and frost deposition of moisture on the soil surface replenished soil moisture near the surface, from January into spring (Fig. 23). After the growing season began, soil moisture diminished all year in the near surface, despite summer monsoons, and a very dry soil from which to draft water (Fig 24). Moisture increased in the top 1.4 m of the soil profile, due to heavy rains in mid-summer, yet the moisture added to the upper soil units was quickly removed (Fig. 24). This removal seemed to occur from above, as there is no evidence of infiltration from neutron probe data, and evapotranspiration rates rise at this time. In fall groundwater depths shallow and capillary action wets the lower portion of the soil particularly at 1.4 m depth.

In general, the seasonal trends for the saltcedar and cottonwood regions are quite different. In the moist saltcedar sites, moisture cycles seem to be controlled by flooding and evapotranspiration drying in the top 60 cm. In the dry cottonwood sites, the soil water content is controlled by soil texture, groundwater level and evapotranspiration drying through the top 1.4 m.

Cottonwood vegetation seems to drain water from the vadose zone even under very dry conditions as evapotranspiration drafts exceed precipitation influxes. These plants utilize precipitation water very quickly and efficiently, not allowing soil water to infiltrate deeply (Fig. 24). Soil moisture, and evapotranspiration data indicate that cottonwood obtained water from the vadose zone and surface water when available, then relied on groundwater when necessary.

Soil moisture data does not show that saltcedar preferentially depleted any soil horizon. This vegetation obtain water from when it is most easily removed (van Hylckama, 1974). During dry periods, the saltcedar drafts water from near the water table, and after the soils had been wetted by floodwater, saltcedar removed water primarily from near surface soils.

4.1.4. Salinity

Salinity measurements were taken with the hopes that groundwater salinity would reflect evapotranspiration fluxes. The patterns observed are complex. In the area of cottonwood stands, winter flood ponds feed more saline water into the groundwater. These more saline waters are flushed through during the summer monsoon season in mid and late summer. This is evident in Figure 25 and Figure 26, which show total dissolved solids drastically decreased during this period.

The saltcedar sites have a reverse trend (Figs. 27 & 28). Fresh river water flushes more saline water in winter and spring. Summertime evapotranspiration, floodwater evaporation, and saline leaf residue increase groundwater salinity in the summer and fall (Robinson, 1958; Hem, 1967). Salinity spikes are most evident in the central portions of the saltcedar transects. River water flushes the saline water more slowly in these regions. There is a larger bulge in salinity in the center of the southern and central saltcedar transects where flooding was more sustained and stagnant (Figs. 27 & 28).

Groundwater salinity increases from that of the Rio Grande water (300 to 600 ppm in total dissolved solids) to more than 2,000 ppm in total dissolved solids in the central portions of the saltcedar transects. A great deal of the increased salinity is due to the characteristics of the heavy soils in the saltcedar sites, which allow high evapotranspiration rates and cause slow

Figure 25: North Cottonwood Groundwater Salinity

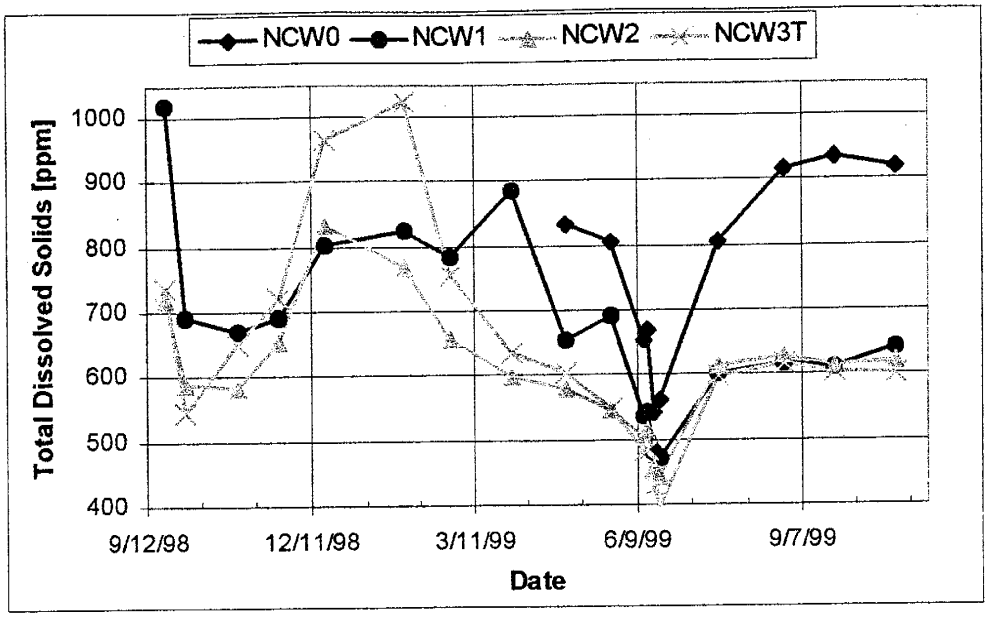


Figure 26: South Cottonwood Groundwater Salinity

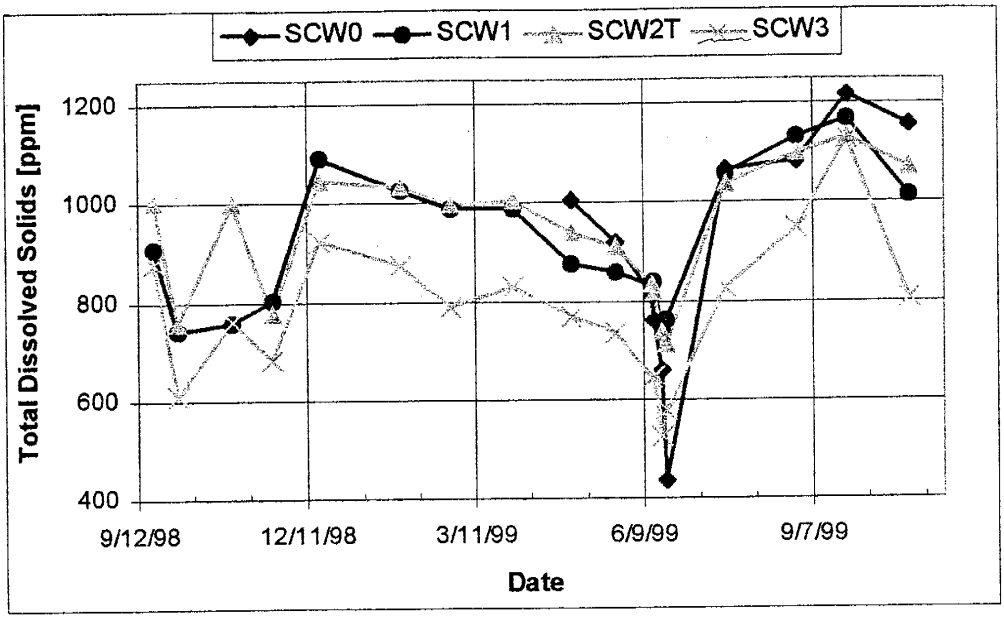


Figure 27: Central Saltcedar Groundwater Salinity

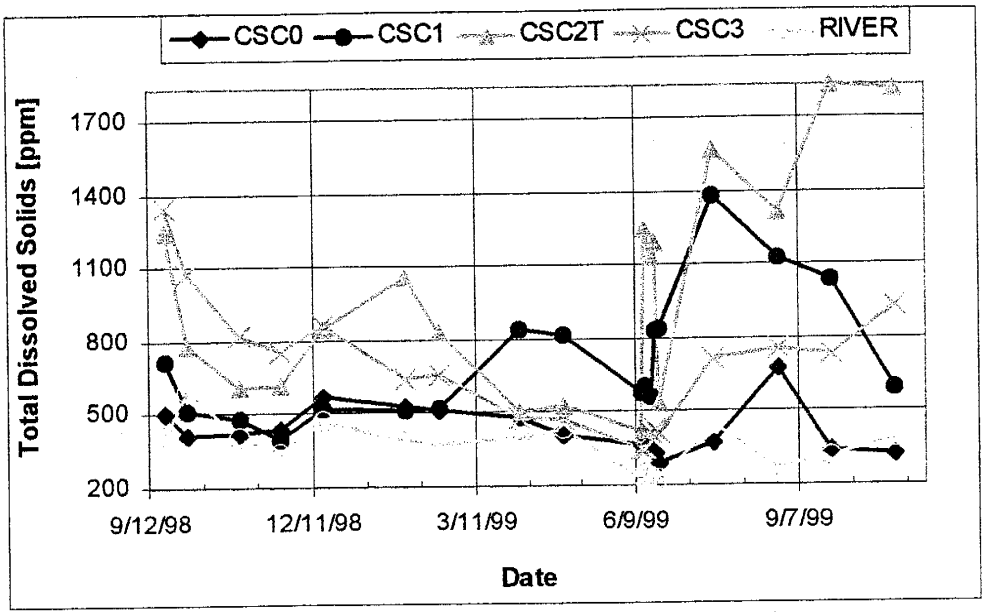
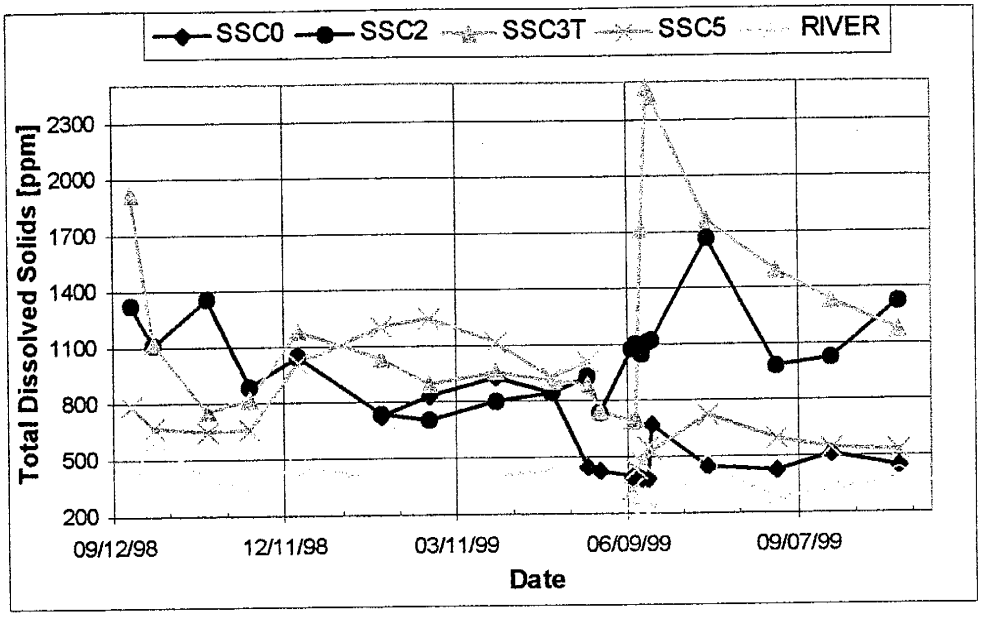


Figure 28: South Saltcedar Groundwater Salinity

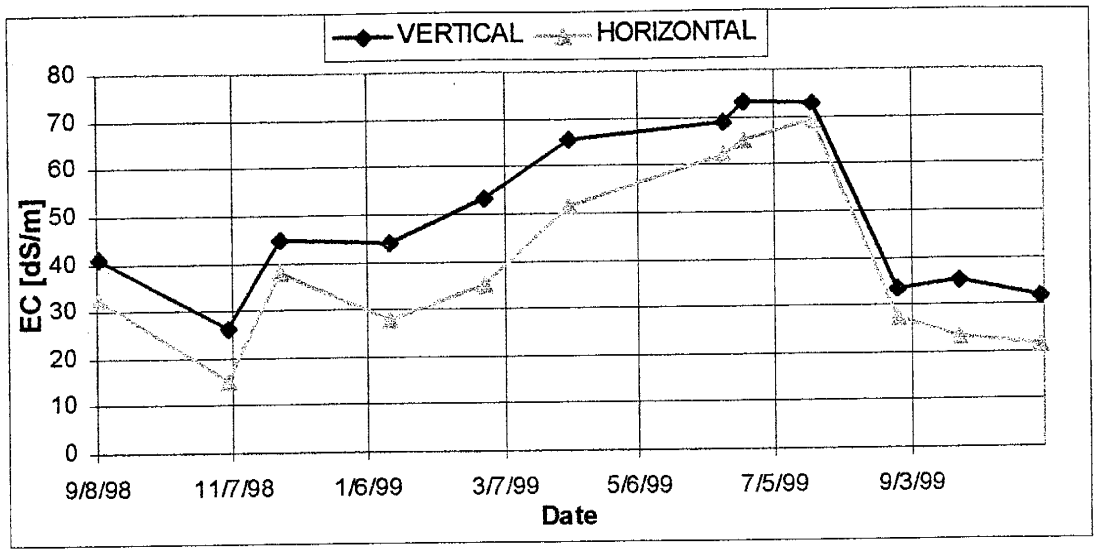


lateral groundwater flow. Cottonwood site soils are sandy, and allow salts to be flushed though more easily. Saltcedar also have a role in increasing salinity. These phreatophytes transpire relatively large quantities of water as well as accumulate saline residues in their leaves (Hem, 1967). Flooding may wash out salts in portions of the saltcedar, and deposit them in other areas where flood pools stagnate, and channels clog.

Figures 29 to 31 and Appendix B show electrical conductivity data measured with the EM-38 instrument. These data correspond to soil salinity values (MacNeill, 1992; Rhoads, 1992). Vertical readings measure overall soil salinity to a depth of 1.5m, and horizontal readings measure surface salinity. The saltcedar transects have similar seasonal soil salinity patterns. The electrical conductivity values are high; they peak during summer floods, and drop during winter (Fig. 29 & 30). The vertical and horizontal readings are close, and follow the same trends. This indicates a more saline surface. Both the central and South saltcedar transects show evidence of increased salinity as the growing season begins (Figs. 29 & 30). During flooding, electrical conductivity values are artificially high due to soil moisture (Gupta & Hanks, 1972). Flooding washes some soil salts down to the groundwater, and into the surface waters. Evidence for this can be seen in a sharp decline in soil conductivity values and a sharp increase in groundwater salinity values after flooding (Figs. 29 & 31). In November, leaf litter salts introduce a small amount of salts as seen by a small increase in electrical conductivity values. Data in Appendix B show small (less than 5m long) topographic high and closed depressions regions in which soil salinity increases dramatically near the surface after flooding has occurred. Data vary tremendously over the transect length, but generally have higher values in the central portions.

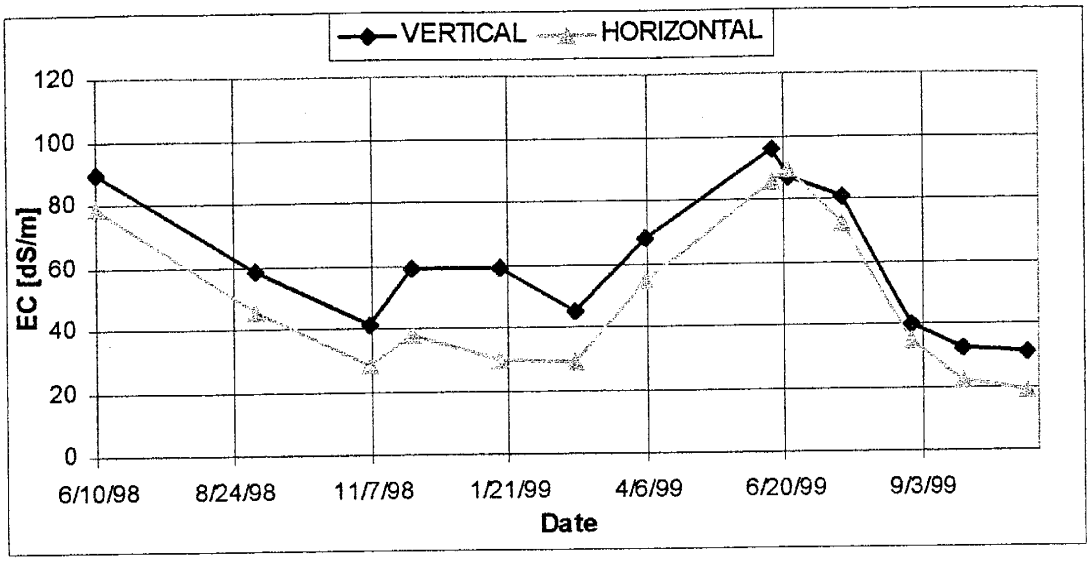
The South cottonwood transect data are more uniform along the length of the transect (Appendix B). The electrical conductivity values are generally much lower and hold constant through much of the year (Fig. 31). Soil salinity tends to be higher near the surface due to evaporation. Salinity values do not seem to follow seasonal trends. Electrical conductivity values spike in one reading in July. This is due to surfacial moisture (top 15cm) from a summer monsoon.

Figure 29: Central Saltcedar Average Electrical Conductivity Values †



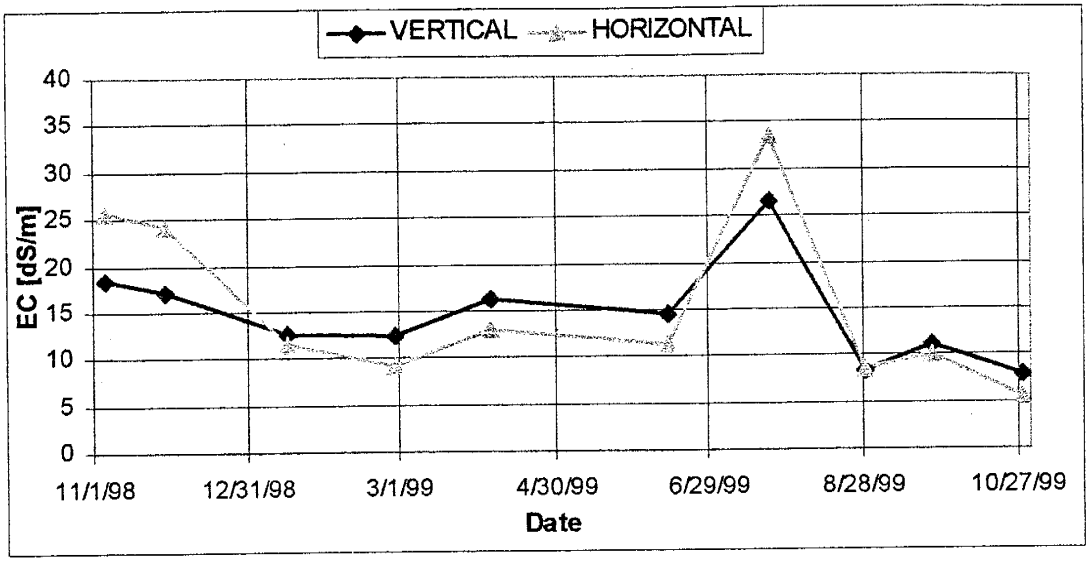
† Soil conductivity is measured using the EM-38 ground conductivity meter. These measurements correspond well with soil salinity. Data were averaged for the entire transect in order to better display results chronologically.

Figure 30: South Saltcedar Averages Electrical Conductivity Values †



† Soil conductivity is measured using the EM-38 ground conductivity meter. These measurements correspond well with soil salinity. Data were averaged for the entire transect in order to better display results chronologically.

Figure 31: South Cottonwood Average Electrical Conductivity Values †



† Soil conductivity is measured using the EM-38 ground conductivity meter. These measurements correspond well with soil salinity. Data were averaged for the entire transect in order to better display results chronologically.

In general, soil salinity in the cottonwood site is low and only slightly increased as a result of evapotranspiration as shown by an increase during late summer (Fig 29). Soil salinity in the saltcedar is high and increased substantially due to evapotranspiration from heavy soils. In the saltcedar sites, flooding removes salts from soils overall, however local accumulations of salts do occur.

4.1.5. Meteorological Measurements

Temperature data in the two meteorological stations (North and South of the field sites) matched. Wind and precipitation data varied slightly between the two because the North Bosque Weather Station was located adjacent to mixed tree stands, and the South Bosque Weather Station was located in grass and brush fields. This caused greater wind speeds and lower precipitation amounts to be measured in the southern station. Summer monsoon season is evident in the data, and only five summer storms account for more than one third of the 1999 precipitation total. Evapotranspiration rates vary tremendously from day to day, and minute to minute. The averaged measurements of evapotranspiration show a simple seasonal pattern discussed in section 4.3.1.

4.1.6. Summary of Field Measurements

Trends in the field data can be correlated to the theoretical modeling results. The higher water levels and finer soils alone may account for an increase of approximately 30% in evapotranspiration from the cottonwood site to the saltcedar site. Flooding of the saltcedar area may have doubled soil evaporation in the saltcedar increasing total evapotranspiration up to approximately 20%. Thus, physiological differences amongst plant communities are not the most important factors effecting evapotranspiration. The most important may be soil texture, stratigraphy, and flooding.

Salinity data does not appear to contribute to variations in evapotranspiration. Although soil and groundwater salinities are associated with evapotranspiration, other factors augment the data such that it is of little use in the determination of evapotranspiration differences between the cottonwood and saltcedar sites. Even so, the data show that saltcedar are responsible for increase the salinity of their environment.

4.2. VIRTUAL SOIL MODELS

The cumulative water fluxes presented are the sums of the fluxes for the last 183 days of the 986-day runs. The other 2.2 years of the model time being used as an equilibration period. The evaporative fluxes exclude any water losses from root uptake, and the transpiration fluxes are due entirely to root uptake. Evapotranspiration is then the sum of evaporation and transpiration. Groundwater discharge is evapotranspiration minus precipitation plus/minus the change in soil moisture storage. Discharge is generally positive for these simulations indicating groundwater discharge. 54 models were run using the reference evapotranspiration of 6mm. The seasonal evapotranspiration and discharge totals for each of these 54 theoretical models are shown in Table 14, and Figure 32.

21 models were run using reference evapotranspiration calculated from Bosque weather data. These models show the effects of seasonal changes during the growing season. The 183 days of modeling time covered the growing season from March 15 to September 13, 1999. A majority of the evapotranspiration that occurs during the year occurs during these 6 months (Table 15, Fig. 33).

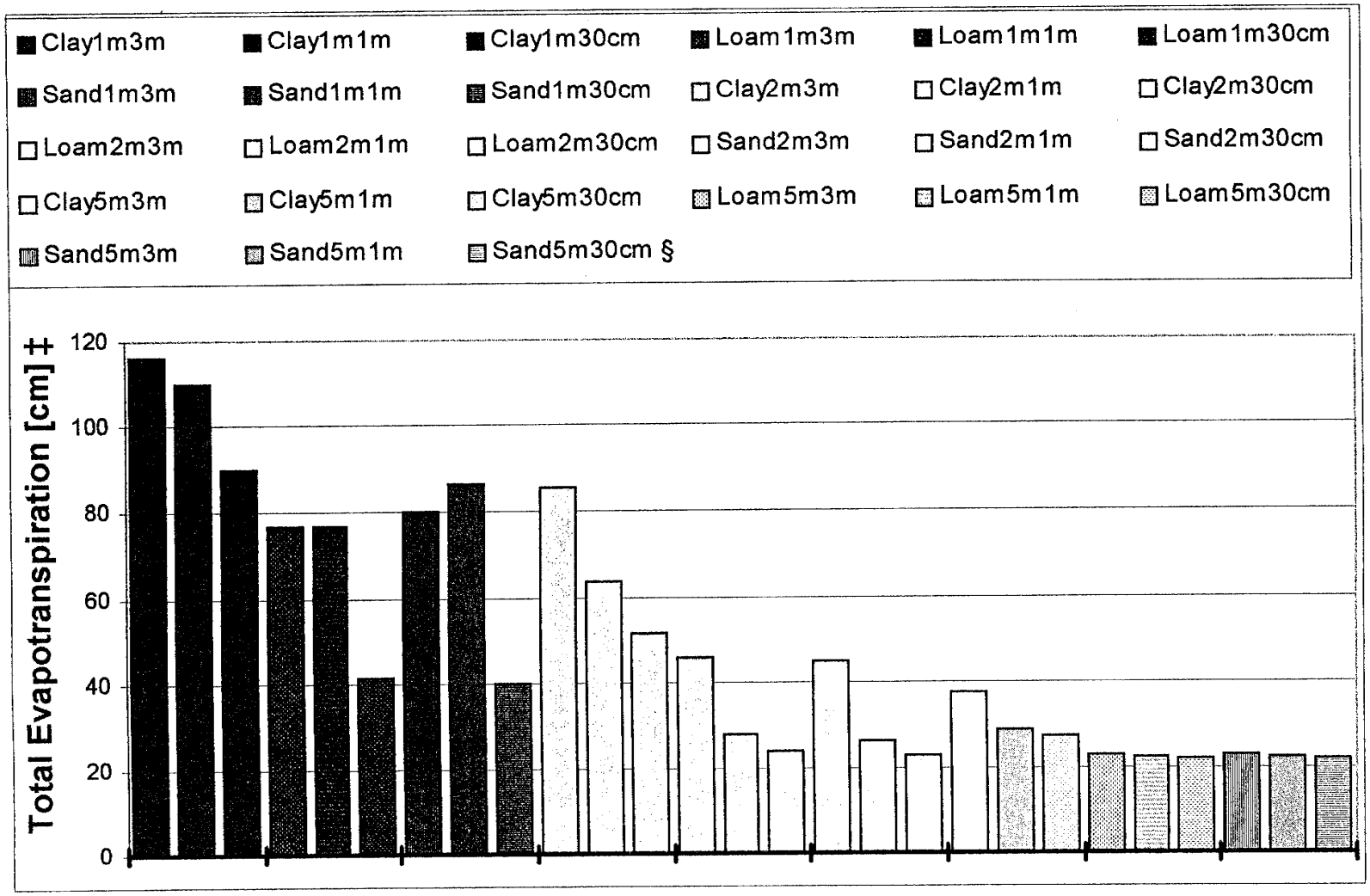
The evaporation totals range from 11.0 cm to 34.9 cm and averaged 16.3 cm. There is much less variation in evaporation than in transpiration, and evaporation is much more dependent on precipitation than transpiration is. Transpiration totals range from 2.80 cm to 105 cm and averaged 33.3 cm. The evapotranspiration totals ranged from 14.3 cm to 134 cm and averaged 49.6 cm, which is significantly higher than the 24 cm of precipitation that occurred over that period. Discharge varies from –0.07 cm to 112 cm and averaged 29.5 cm. In 92% of the modeled cases depletion of groundwater occurs, and when net recharge occurs, it is not statistically significant (less than 1% of precipitation). This is not unexpected for the shallow water tables in this arid region.

Table 14. Results of Virtual Soil Models Using Constant Reference Evapotranspiration

Model Name	Cumulative Evaporation (cm)	Cumulative Transpiration (cm)	Cumulative Evapo-transpiration (cm)	Cumulative Groundwater Discharge (cm)
Clay1mFlat	26.42	96	122.42	100
Clay1mTop	24.62	85	109.62	87
Clay1mBottom	29.02	105	134.02	112
Clay1m30cm	25.72	64	89.72	67
Clay1m1m	22.92	87	109.92	88
Clay1m3m	34.92	81	115.92	94
Clay2mFlat	18.68	55	73.68	50
Clay2mTop	18.33	47	65.33	42
Clay2mBottom	19.52	58	77.52	56
Clay2m30cm	19.53	32	51.53	29
Clay2m1m	18.53	45	63.53	41
Clay2m3m	19.27	66	85.27	62
Clay5mFlat	18.42	11	29.42	7.4
Clay5mTop	17.92	11.1	29.02	6.9
Clay5mBottom	19.32	10.1	29.42	7.5
Clay5m30cm	17.62	9.6	27.22	5.3
Clay5m1m	18.22	10.6	28.82	6.6
Clay5m3m	18.92	18.5	37.42	14.7
Loam1mFlat	15.52	62	77.52	68
Loam1mTop	14.92	90	104.92	54
Loam1mBotm	18.02	91	109.02	84
Loam1m30cm	14.22	27	41.22	19.3
Loam1m1m	15.62	61	76.62	54
Loam1m3m	16.82	60	76.82	55
Loam2mFlat	15.42	16.1	31.52	9.2
Loam2mTop	14.92	17.4	32.32	9.9
Loam2mBotm	17.72	13.9	31.62	9.8
Loam2m30cm	14.22	9.7	23.92	1.81
Loam2m1m	15.62	12.3	27.92	5.6
Loam2m3m	16.82	29	45.82	23.3
Loam5mFlat	15.42	6.8	22.22	0.08
Loam5mTop	14.82	7.4	22.22	0.08
Loam5mBotm	17.72	4	21.72	0.08
Loam5m30cm	14.22	7.7	21.92	0.08
Loam5m1m	15.62	6.6	22.22	0.08
Loam5m3m	16.82	6.2	23.02	0.873

Model Name	Cumulative Evaporation, cm	Cumulative Transpiration, cm	Cumulative Evapo-transpiration, cm	Cumulative Groundwater Discharge, cm
Sand1mFlat	14.22	76	90.22	69
Sand1mTop	18.92	70	88.92	61
Sand1mBotm	14.72	75	89.72	72
Sand1m30cm	13.62	26	39.62	17.7
Sand1m1m	14.72	72	86.72	64
Sand1m3m	16.02	64	80.02	57
Sand2mFlat	14.62	14.7	29.32	6.8
Sand2mTop	14.22	12.7	26.92	5.1
Sand2mBotm	16.52	14.9	31.42	9
Sand2m30cm	13.62	9.2	22.82	1.12
Sand2m1m	14.82	11.3	26.12	4
Sand2m3m	15.72	29	44.72	22.3
Sand5m1Flat	15.92	9.5	25.42	-0.02
Sand5m1Top	14.22	7.4	21.62	-0.07
Sand5m1Botm	16.52	5.6	22.12	-0.06
Sand5m30cm	13.62	8.3	21.92	-0.07
Sand5m1m	14.82	7.4	22.22	-0.07
Sand5m3m	15.72	6.9	22.62	0.421

Figure 32: Virtual Soil Models with Constant Reference ET Results †



† Figure 32 presents the total evapotranspiration results for virtual soil models with reference evapotranspiration set at a constant 0.6 mm/day.

‡ Total evapotranspiration results for the 180 days of the evapotranspiration season.

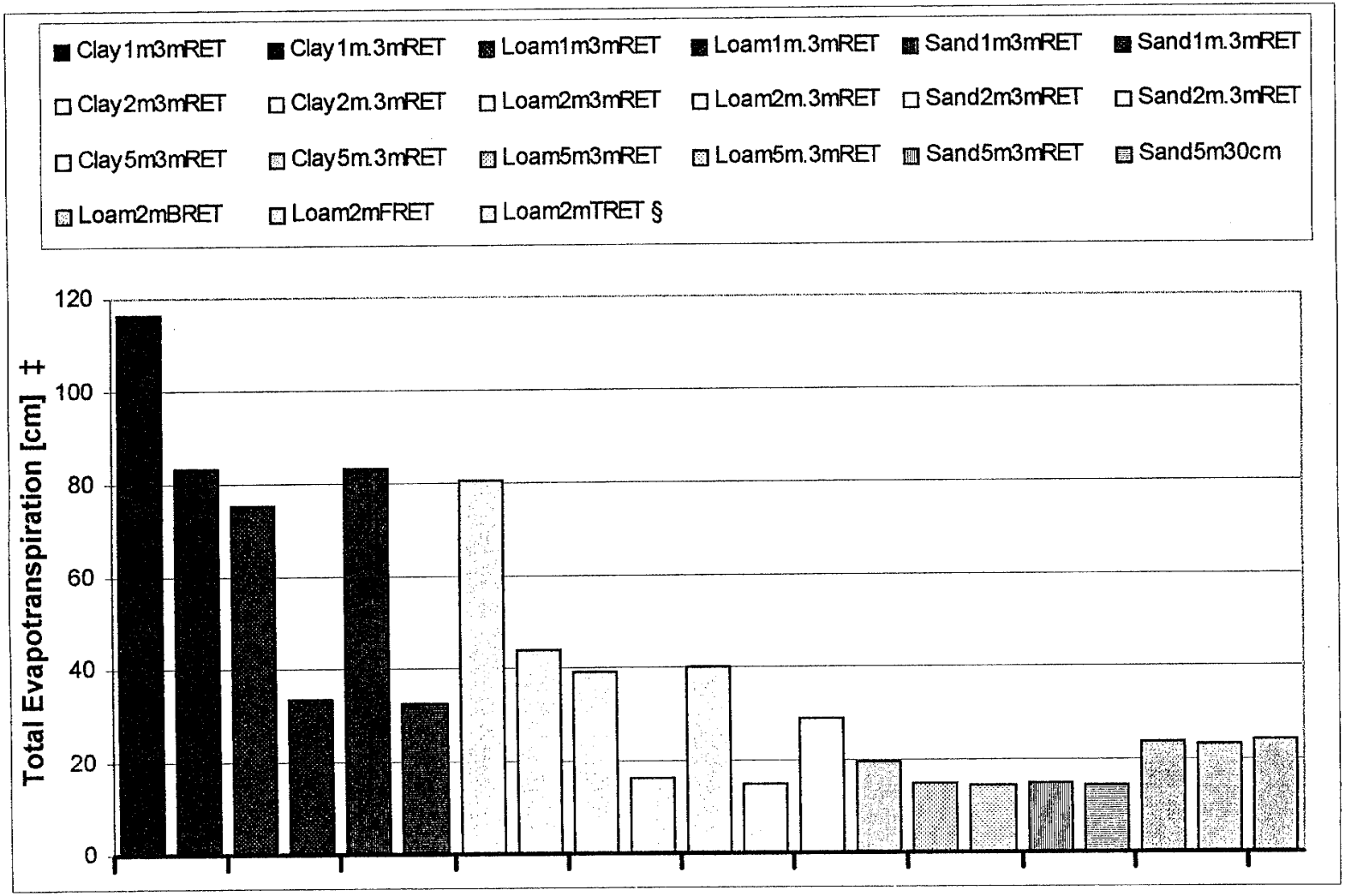
§ Each model is represented by a bar on the above graph. One meter deep, two meter deep, and five meter deep groundwater models are represented by black, gray and white bars. Clay, loam, and sand models are represented by dot, dash and line filled bars, respectively.

The name of each model describes the soil, water and rooting. The first four letters of each model title indicate the soil texture. The following number indicates the depth of groundwater (1m = 1 meter, 2m = 2 meters, 5m = 5 meter deep groundwater). The second number indicates the rooting depth (30cm = 30 centimeter, 1m = 1 meter, 3m = 3 meter deep rooting).

Table 15. Results of Virtual Soil Models

Model Name	Cumulative Evaporation, cm	Cumulative Transpiration, cm	Cumulative Evapotranspiration, cm	Cumulative Groundwater Discharge, cm
Clay1m.3mRET	20.1	63	83.10	70
Clay1m3mRET	21.3	95	116.3	104
Clay2m.3mRET	15.9	28	43.9	30
Clay2m3mRET	14.23	66	80.23	68
Clay5m.3mRET	14.23	5.4	19.63	5.4
Clay5m3mRET	13.82	15	28.82	15.9
Loam1m.3mRET	11.33	22.3	33.63	20.1
Loam1m3mRET	12.37	63	75.37	63
Loam2mFRET	11.75	11.7	23.45	9.5
Loam2mTRET	11.58	12.7	24.28	10.7
Loam2mBRET	12.74	11.2	23.94	10
Loam2m.3mRET	11.34	4.8	16.14	1.84
Loam2m3mRET	12.37	27.00	39.37	27
Loam5m.3mRET	11.39	3.01	14.40	0.09
Loam5m3mRET	12.37	2.80	15.17	0.889
Sand1m.3mRET	11.02	21.70	32.72	18.9
Sand1m3mRET	11.99	71.00	82.99	69
Sand2m.3mRET	11.34	3.60	14.94	1.12
Sand2m.3mRET	11.99	28.00	39.99	26
Sand5m30cmRET	11.06	3.26	14.32	-0.07
Sand5m3mRET	12.20	2.80	15.00	0.427

Figure 33: Virtual Soil Models with Bosque Weather Results †



† Figure 33 presents the total evapotranspiration results for virtual soil models with reference evapotranspiration calculated for each day from Bosque weather data using the Penman-Monteith Equation.

‡ Total evapotranspiration results for the 180 days of the evapotranspiration season.

§ Each model is represented by a bar on the above graph. One meter deep, two meter deep, and five meter deep groundwater models are represented by black, gray and white bars. Clay, loam, and sand models are represented by dot, dash and line filled bars, respectively. The last three models have anomalous rooting patters of Bottom Heavy, Flat and Top Heavy from left to right as described in section 3.4.1.3. The name of each model describes the soil, water and rooting. The first four letters of each model title indicate the soil texture. The following number indicates the depth of groundwater (1m = 1 meter, 2m = 2 meters, 5m = 5 meter deep groundwater). The second number indicates the rooting depth (30cm = 30 centimeter, 1m = 1 meter, 3m = 3 meter deep rooting).

Figure 32 shows a clear pattern in evapotranspiration. The trends are that evapotranspiration rises as groundwater levels shallow, soil textures fine, and rooting depths increase. Figure 33 shows a less clear pattern with the same trends. There are some differences in the results between the theoretical models with constant reference evapotranspiration, and those with reference evapotranspiration calculated from Bosque data. However, the general patterns hold. Each of the major factors affecting evapotranspiration is interrelated with others. This study has modeled these factors such that each one can be examined independently.

4.2.1. Precipitation Events

Evaporation seems to be dependent on precipitation events more than any other factor. There are only minor correlations between evaporation and other factors such as rooting and water table level. Only clay soils have significantly higher evaporation rates. This would indicate that most evaporation occurs as a result of precipitation, and not as a result of capillary rise except in very fine textured clay soils. This conclusion is supported by the fact that daily soil evaporation is close to zero except after precipitation events in all but clay soil models (Appendix A).

Transpiration is also significantly correlated to precipitation events. Transpiration response to precipitation was somewhat different. Root uptake increased sharply in response to precipitation only when transpiration is low. When the water table is close to roots, and water is available to roots, transpiration rates are steady and high. A large proportion of water taken up by roots may have come from groundwater instead of from rain. In coarse soils, which may dry rapidly precipitation is a more important limiting factor to transpiration rate.

Charts in Appendix A show how evaporative trends remain very similar in all the models. Evaporation rates vary more over time than between models. Evaporation is more dependent on weather phenomenon and surface processes than on other factors. The exceptions occur in clay soils. These fine-textured soils retain water even under tremendously dry climatic conditions

such that groundwater is still quite available for root uptake and soil evaporation under the shallow water conditions modeled here.

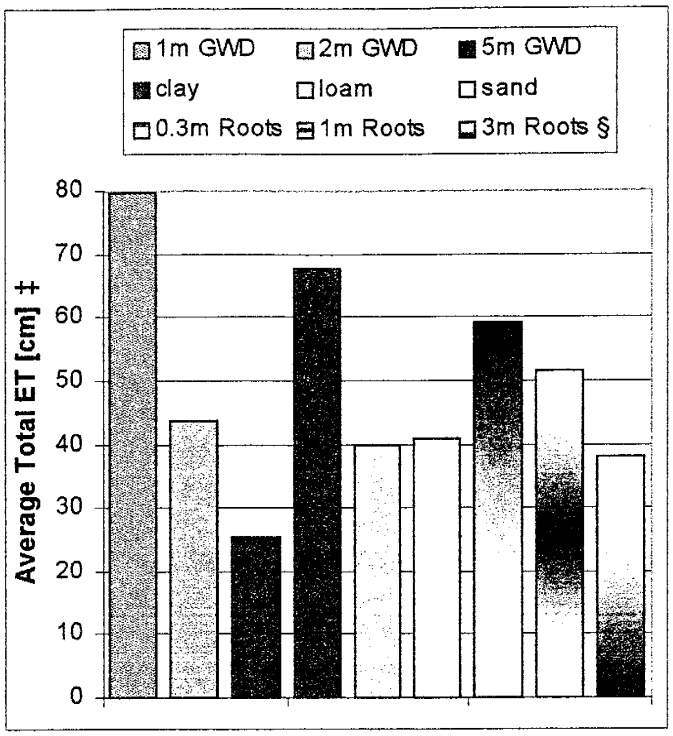
4.2.2. Groundwater Depth

Groundwater depth has a large effect on evapotranspiration (Fig. 34 & 35). Evaporation is strongly correlated to groundwater level only in clay soil models. As groundwater levels rise, capillary rise makes more water available for root uptake and evaporation. Transpiration is very strongly correlated with groundwater depth. Evaporation is only slightly correlated with groundwater level and only in fine textured soils. In models using constant reference evapotranspiration, 1 m groundwater depth produce 59% and 104% higher than 2 m and 5 m groundwater depths (Fig 34). In models using Bosque reference evapotranspiration, 1 m groundwater depth produce 71% and 120% higher than 2 m and 5 m groundwater depths (Fig. 35). Because of this, water level is the factor most affecting overall evapotranspiration given the climatic conditions. The effect of groundwater level can be seen in all soil textures and in all rooting depths and patterns.

4.2.3. Soil Texture

Evaporation is most strongly affected by soil texture (Table 14). Clay soils have high water retention and high capillary rises, thus producing a great deal more evaporation than do loam and sand soils. Clay soil models produce 52% and 50% higher evapotranspiration totals than do loam and sand soils, in models created with constant reference evapotranspiration, and 63% and 62% higher than loam and sand models created with Bosque weather data. Coarser soils retain less water and have low capillary rises. Coarser textures allow infiltration to occur rapidly and remove water from the surface, where evaporation occurs. Transpiration is higher in clay soils because coarser soils can retain less water in the rooting zone therefore transpiration is lower for coarse soils. However, sand transpiration is higher than loam transpiration. This trend is tempered by the fact that finer soils tend to have lower hydraulic conductivities. Overall evapotranspiration increases for coarse soils significantly when rooting is close to the water table.

Figure 34: Average ET for Constant Reference ET Models †

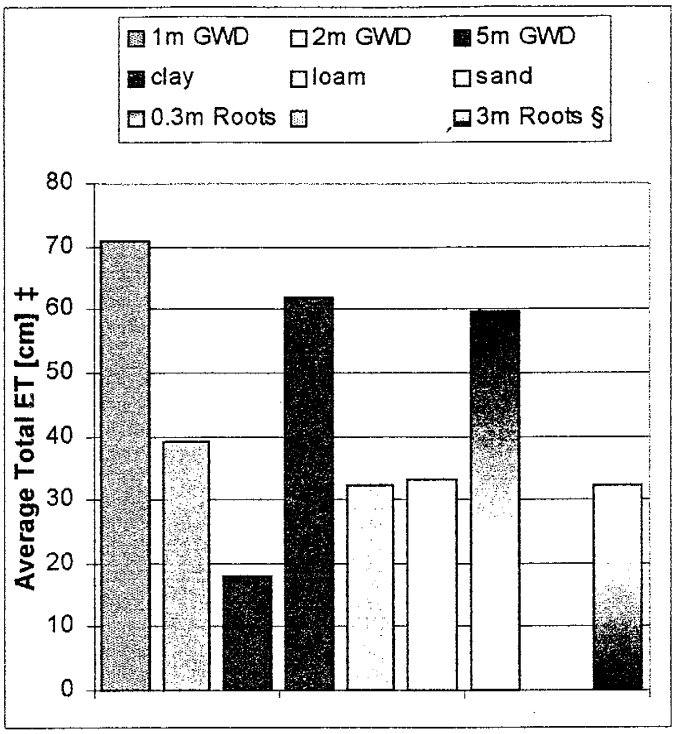


† Table 34 presents the average of the total evapotranspiration results for virtual soil models of the same category. Reference evapotranspiration is set at a constant 0.6 mm/day.

‡ Average total evapotranspiration results for the models of the same category for the 180 days of the evapotranspiration season.

§ Average total evapotranspiration values are represented by a bar on the above graph. The results are averaged for all models that contain each particular trait. For example the 1m GWL bare represents the average total evapotranspiration result of all models with constant reference evapotranspiration with 1 m groundwater depth. Groundwater depth (GWD) bars have wave pattern fills. Soil texture bars have solid colors, and rooting depth bars have graduated fills.

Figure 35: Average ET for Bosque Weather Virtual Models †



† Table 35 presents the total evapotranspiration results for virtual soil models with reference evapotranspiration calculated for each day from Bosque weather data using the Penman-Monteith Equation.

‡ Average total evapotranspiration results for the models of the same category for the 180 days of the evapotranspiration season.

§ Average total evapotranspiration results are represented by a bar on the above graph. The results are averaged for all models that contain each particular trait. For example the 1m GWL bare represents the average total evapotranspiration result of all models with constant reference evapotranspiration with 1 m groundwater depth. Groundwater depth (GWD) bars have wave pattern fills. Soil texture bars have solid colors, and rooting depth bars have graduated fills.

When roots are not close to the saturated zone in arid soils, evapotranspiration depends greatly on precipitation, and varies greatly over time.

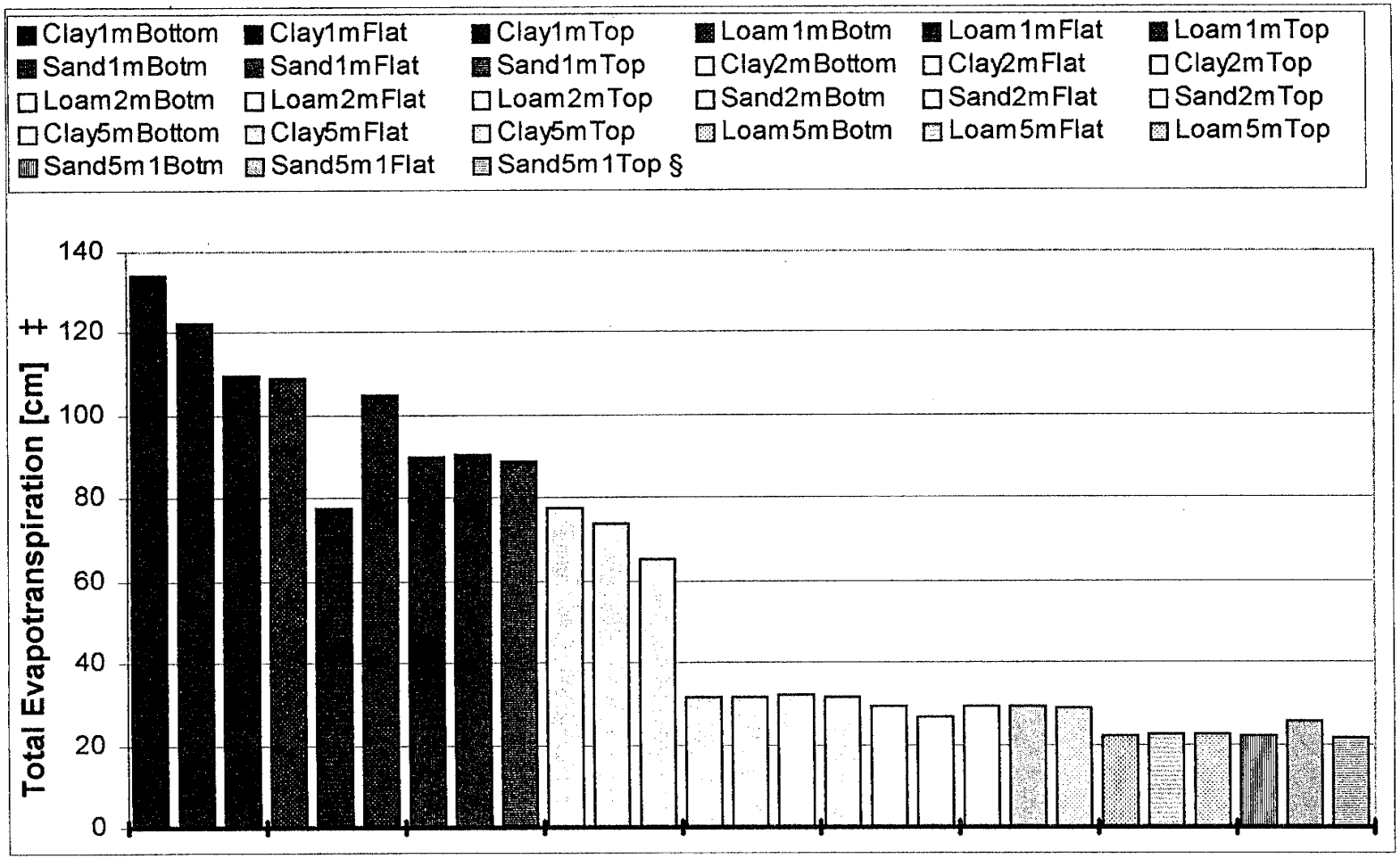
In riparian regions, stratified soils are more commonly found than are homogeneous soil profiles. Soil stratification may drastically alter fluid flow dynamics. For example, in coarse-textured soils, fine layers have two effects. Fine layers slow infiltration from above and slow drainage below them. This may cause evaporation to be limited by precipitation, and soil moisture above this layer. In fine-textured soils, coarse layers different results may occur. When the coarse layers are very dry, they impede vertical water flow, and decrease fluid resistance when moist.

4.2.4. Rooting Depth and Pattern

Evaporation is lower for shallow rooted simulations than for deep-rooted models (Table 14). This is due to shallow roots preferentially drying the surface, and limiting water available for evaporation. Transpiration was higher for deeper rooting plants because a larger region of the soil profile is available for root uptake (Table 14). Some 3 m rooting models have lower transpiration totals for shallow groundwater than do other rooting depths because they have lower root densities near the surface. Overall evapotranspiration is strongly correlated to rooting, particularly when groundwater is shallow. Of the models using constant reference evapotranspiration, 3 m rooting depth models have 14% and 44% higher than the 1 m and 0.3 m root models (Fig. 34). Of the models using Bosque reference evapotranspiration, 3 m rooting depth models have 59% higher than the 0.3 m root models (Fig. 35).

Variations in rooting pattern had an affect on evapotranspiration results. However, these variations were not consistent (Fig. 36). One rooting pattern produced higher evapotranspiration in one soil texture, and lower results in another, and the same with groundwater depth. The effects of rooting patterns on evapotranspiration are strong when the rooting depth is similar to the groundwater level, and when evapotranspiration rates are high (shallow groundwater and fine soil texture). The overall maximum difference in evapotranspiration as a result of rooting pattern is only 7.6%.

Figure 36: Rooting Pattern Effect on ET †



† Table 36 presents the average of the total evapotranspiration results for virtual soil models of the same category. Reference evapotranspiration is set at a constant 0.6 mm/day.

‡ Total evapotranspiration results for the 180 days of the evapotranspiration season.

§ Each model is represented by a bar on the above graph. One meter deep, two meter deep, and five meter deep groundwater models are represented by black, gray and white bars. Clay, loam, and sand models are represented by dot, dash and line filled bars, respectively. The last three models have anomalous rooting patters of Bottom Heavy, Flat and Top Heavy from left to right as described in section 3.4.1.3. The name of each model describes the soil, water and rooting. The first four letters of each model title indicate the soil texture. The following number indicates the depth of groundwater (1m = 1 meter, 2m = 2 meters, 5m = 5 meter deep groundwater). The last few letters indicate the rooting pattern.

4.2.5. Discharge

Net groundwater discharge is a function of evapotranspiration and precipitation. As precipitation rises, discharge decreases, and as evapotranspiration rises so does groundwater discharge. Net recharge occurs only when water levels are relatively deep, rooting is shallow (30 cm), and the soil texture is coarse. Net recharge can occur when large rain events produce infiltration large enough to compensate for evapotranspiration losses. Recharge occurs in discrete events directly after precipitation events in coarse soils, and when the water table is deeper. Shallow water tables and fine soils supply water to roots at a rate that does not exceed and water that may reach down towards the water table.

4.3. FIELD SOIL MODELS

The saltcedar model results match the seasonal trends found in the measured data very well when the data is smoothed to 10-day averages. The averaging removes noise and allows one to analyze the data more easily (Figs. 35-38). The saltcedar models match the 1999 total evapotranspiration values within 3% error. The cottonwood model matches the seasonal trends well except for a few points (Fig. 39). However, the model results underestimate the measured data by 7.7%. The error may be due to three major sources. Fractures in the upper fine soil material may increase hydraulic conductivity from that measured in the laboratory. The numerical model ignores vapor phase soil moisture transport, and the model under estimates the winter soil evaporation in all models.

4.3.1. Seasonal Trends in Measured Evapotranspiration

Evapotranspiration measured in the Bosque Refuge in 1999 (Fig. 37) shows a relatively simple yearly sinusoidal pattern. Winter evaporation remains between 0.5 mm/day and 1.0 mm/day in both the cottonwood, and saltcedar areas. Winter evaporation is higher in the saltcedar area because the surface soils contain more water. Both cottonwood and saltcedar vegetation begin to put on leaves in April as seen by an evapotranspiration increase on day 120

Figure 37: Measured Bosque 1999 Evapotranspiration

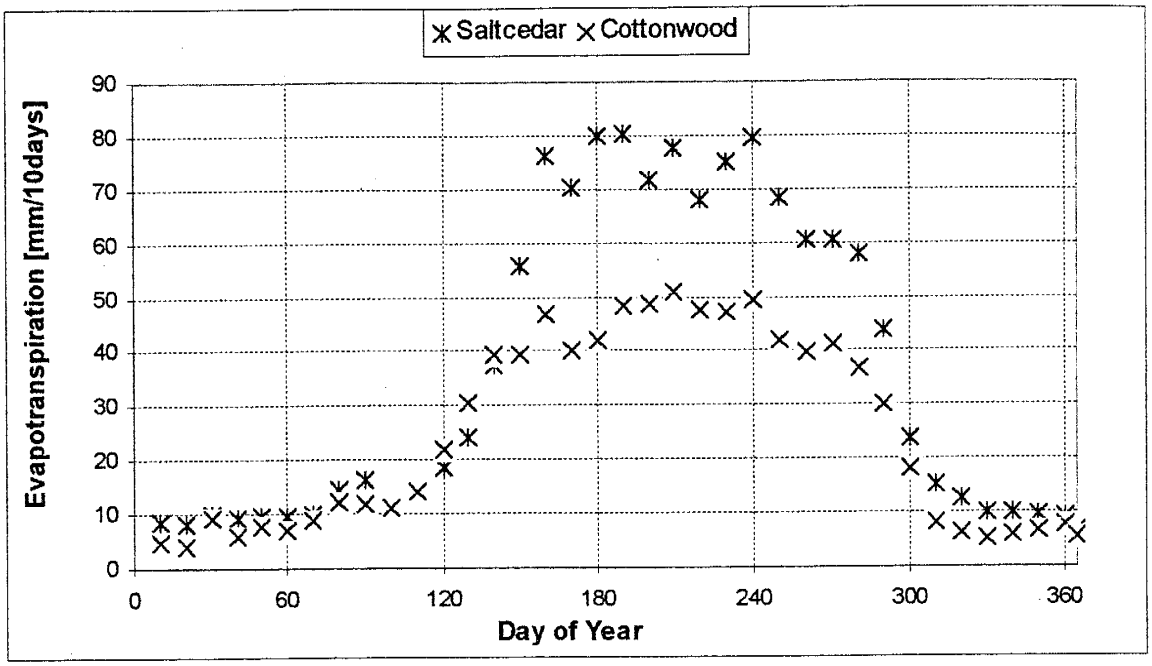
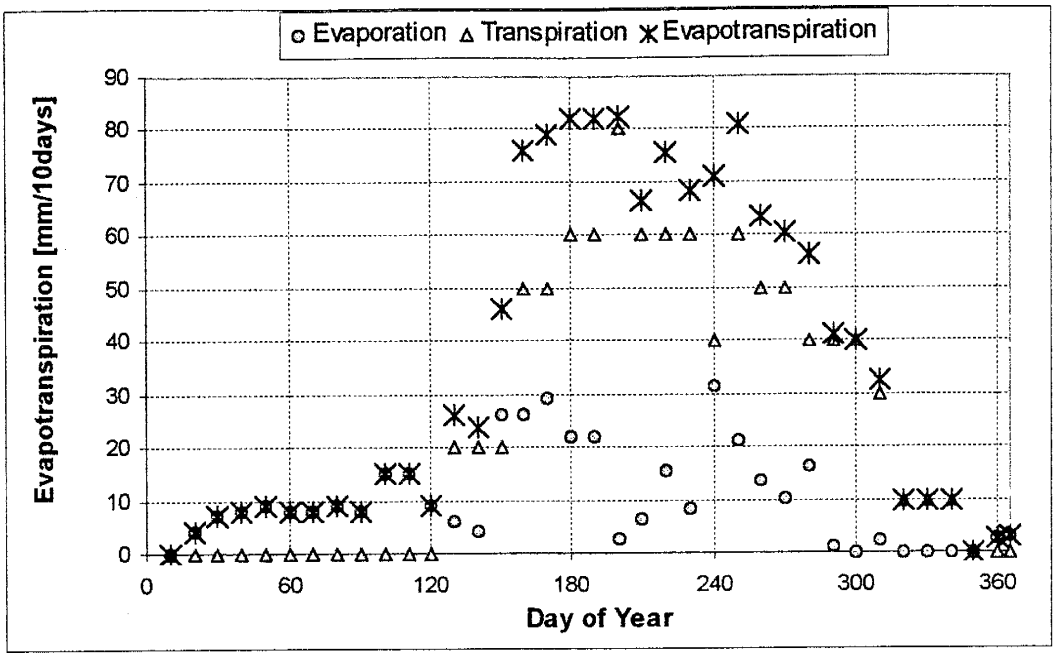


Figure 38: SSCMat 10 Day Data †



† Figure 38 displays the results of the South Saltcedar Bosque Model (SSCMat). The results correlate well with measured values in Figure 37 for the 1999 year. Daily data are summed for 10 day intervals to smooth out the results and discern a seasonal trend.

‡ Soil evaporation is represented by circles, transpiration is represented by triangles, and the sum of the two is the evapotranspiration represented by 'x' symbols.

in Figure 37. Evapotranspiration increases steeply for both vegetation communities for the next month or so.

Cottonwood stands evapotranspire at a rate of between 4 mm/day and 5 mm/day on average into the fall season (Fig. 37). Yellowing of leaves occurs in the end of September when evapotranspiration begins to fall dramatically. The daily evapotranspiration returns to approximately 0.7 mm/day by the end of October (Fig. 37). The pattern of rise and fall in evapotranspiration follows a symmetrical bell shape, with a peak in July.

Saltcedar evapotranspiration rate occurs at a much higher rate of 7 mm/day to 8 mm/day in the beginning of the growing season in April and May, when the most vigorous growth occurs (Fig. 37). This high rate of evapotranspiration continues into the flooding period, then drops slowly and continuously as the growing season continues at a rate of between 6 mm/day and 7 mm/day (Fig. 37). This produces a wedge shape in the center of the evapotranspiration curve. Were it not for flooding, evapotranspiration might have dropped considerably more after the vigorous growth in April and May. The residual moisture from flooding caused evaporation rates to be higher in fall and early winter than they were in the beginning of 1999 (Fig. 37).

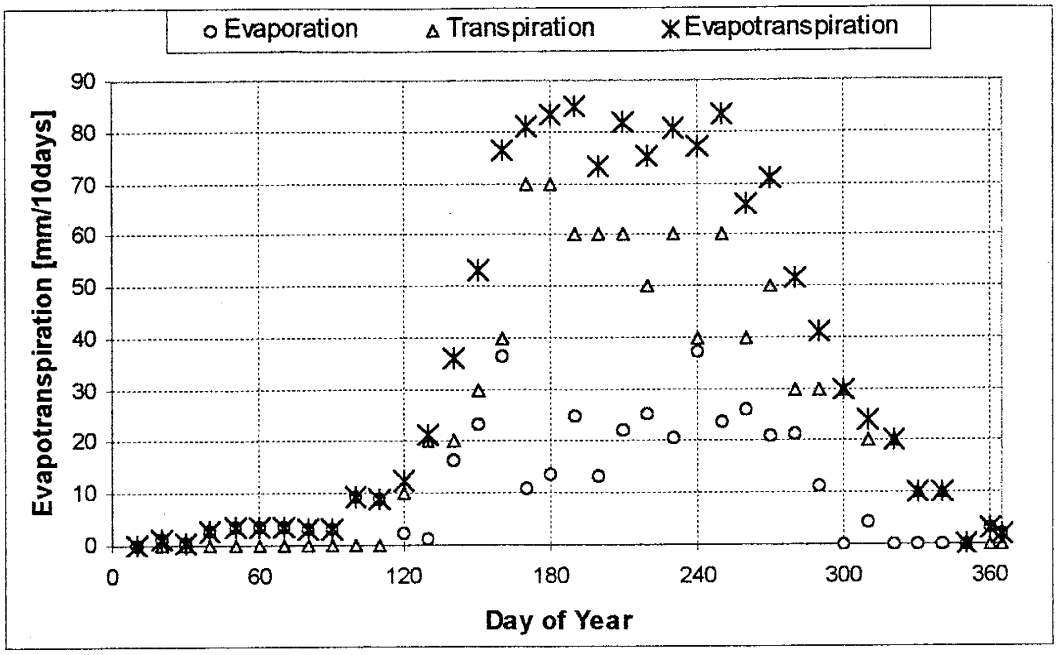
4.3.2. Seasonal Trends in Modeled Evapotranspiration

The central saltcedar model (CSCMat) underestimates winter evaporation somewhat in the beginning of the year, and overestimates fall and winter evaporation at the end of 1999 (Fig. 38). This is likely due to a lack of measured data for the 1998 flood, and small errors incurred in the extrapolation of data taken on floodwaters in 1999.

The South saltcedar model (SSCMat) matched the measured data patterns very well (Fig. 39). The errors occurred mostly during the peak evapotranspiration season, when flooding occurred (Fig. 39). Both saltcedar models match the overall measured evapotranspiration trends very well for the 10-day data. Single day data is very difficult to match considering the tremendous amount of day to day variability.

The cottonwood model (SCWMat) does not match the measured evapotranspiration data in winter for a couple of reasons (Fig. 40). The very dry soils may release water to the

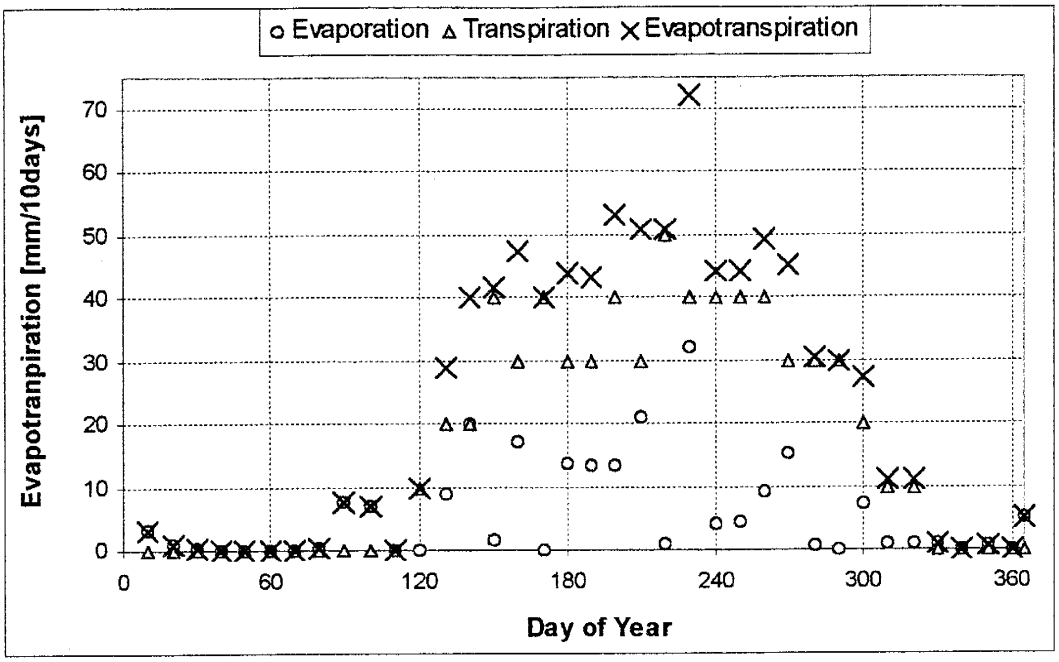
Figure 39: CSCMat 10 Day Data †



† Figure 39 displays the results of the Central Saltcedar Bosque Model (CSCMat). The results correlate well with measured values in Figure 37 for the 1999 year. Daily data are summed for 10 day intervals to smooth out the results and discern a seasonal trend.

‡ Soil evaporation is represented by circles, transpiration is represented by triangles, and the sum of the two is the evapotranspiration represented by 'x' symbols.

Figure 40: SCWMat 10 Day Data †



† Figure 40 displays the results of the South Cottonwood Bosque Model (SCWMat). The results correlate well with measured values in Figure 37 for the 1999 year. Daily data are summed for 10 day intervals to smooth out the results and discern a seasonal trend.

‡ Soil evaporation is represented by circles, transpiration is represented by triangles, and the sum of the two is the evapotranspiration represented by 'x' symbols.

atmosphere by vapor phase transport from the near surface layers. Vapor phase transport is neglected in Hydrus 1D and most other groundwater modeling programs. Also, flow across the surface layers is underestimated because sampled soil material did not contain the large soil fractures observed in the field. Another error occurred on day 230 of the SCWMat model data. Precipitation in this period produced a much greater amount of evapotranspiration in the model, than was measured. This may also be due to soil fractures, which allow for deep infiltration of water from large precipitation events. This model identifies limitations of the Hydrus 1D program, specifically Hydrus 1D cannot account for vapor phase transport, or for fracture flow.

4.3.3. Effect of Groundwater Depth

Evapotranspiration increases dramatically as groundwater levels rise in the Bosque Del Apache models (Table 16). The three series of models have similar trends (Fig. 41-43). As groundwater depth rise transpiration drops somewhat because the root zone is becoming submerged (Table 16). Evaporation rises dramatically, more than compensating for the drop in transpiration (Table 16). This trend in shown in the South saltcedar series of models where the soils have fine textures (Fig. 42). In the cottonwood model, a large bulge in root density is submerged as the water levels rise (Fig. 43). This causes transpiration to drop more dramatically. Evaporation rises more slowly in these models than in the saltcedar models when groundwater levels rise to 1 m average depth. Groundwater levels seem to be a stronger influence on evapotranspiration than soil stratigraphy or rooting patterns (Figs. 41-43).

In the saltcedar models, evapotranspiration increases 113% in the central saltcedar models and 190% in the South saltcedar models as groundwater levels rose from more than 2 m to 30 cm depth (Figs. 41 & 42). The increase to approximately 300 cm/y is due to an increase in evaporation. Transpiration actually drops as the rooting zone becomes submerged. As water levels dropped to 7 m depth, evapotranspiration dropped by 61% in the central saltcedar transect, and 71% in the South saltcedar transect. When water levels drop below 5 m, evaporation levels off and becomes entirely dependent on climate and flooding data. The variability in transpiration is largely a function of soil texture and stratigraphy.

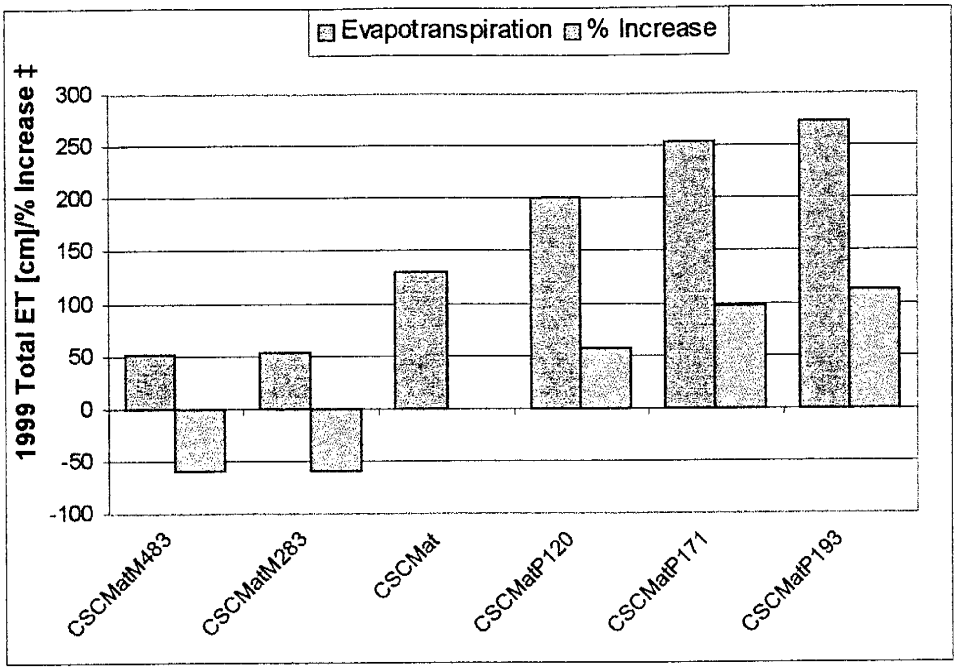
Table 16. Results of Bosque Models

Model Name	Average Depth to Water	Total ET, cm †	Percent Increase ‡	Evapora-tion, cm	Percent Increase ‡	Trans-piration, cm	Percent Increase ‡
CSCMatP193	30 cm	274.0	112	208	422	66	-26
CSCMatP171	50 cm	254.1	97.3	182	142	72	-19
CSCMatP120	1 m	201.0	56.1	90.2	126	111	24.8
CSCMatM283	5 m	52.6	-56.2	37.9	-4.78	14.7	-83.5
CSCMatM583	7 m	50.7	-60.6	37.9	-4.78	12.8	-85.6
SCWMatP246	30 cm	265.8	182	249.3	1102	16.5	-46.5
SCWMatP224	50 cm	260.3	177	233.3	1034	25	-38
SCWMatP173	1 m	77.13	-6.6	48.13	13.2	29	-34
SCWMatM226	5 m	27.34	-56.4	20.34	-1.9	7	56
SCWMatM426	7 m	29.54	-54.2	23.7	14	5.8	-57.2
SSCMatP182	30 cm	318.9	-190	245.9	570	73	-19
SSCMatP162	50 cm	306.9	-178	231.9	532	75	-17
SSCMatP112	1 m	247.9	119	163.9	346	84	-8
SSCMatM288	5 m	37.63	-91	25.53	-11.2	12.1	-86.8
SSCMatM488	7 m	37.63	91	25.53	-11.2	12.1	-86.8

† Total evaporation and transpiration fluxes calculated for the 183 day 1999 growing season for each model.

‡ Percent increase from models run with actual, measured groundwater levels. Decreases are indicated by negative percentage values.

Figure 41: Effect of Water Depth on ET in CSC †

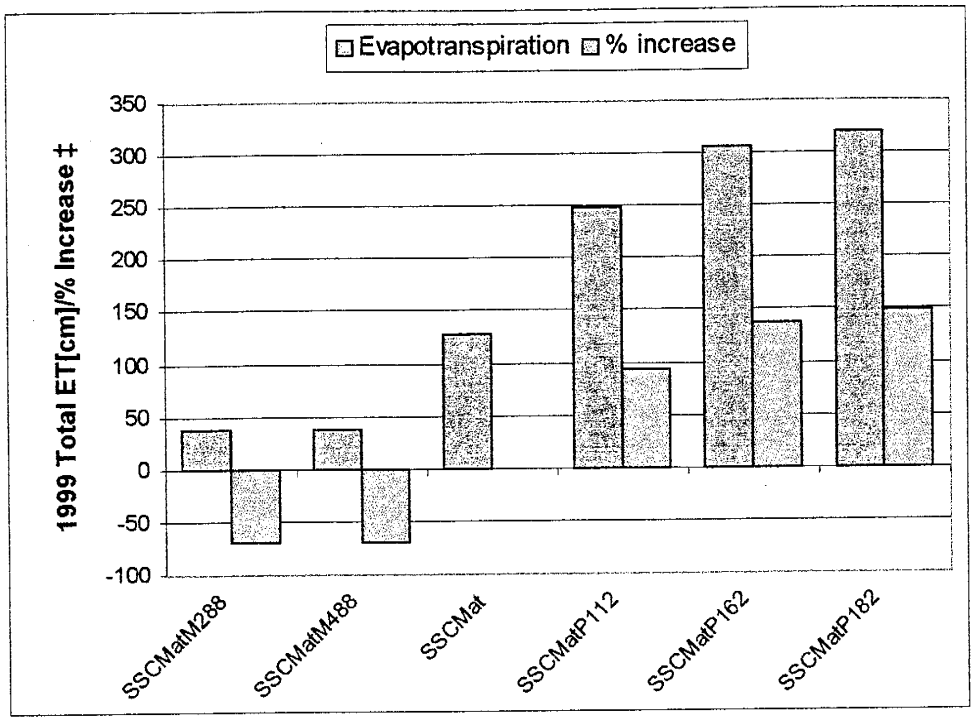


† Figure 41 displays the total 1999 evapotranspiration results of the Central Saltcedar Bosque models. The CSCMat model was created to model measured evapotranspiration. The groundwater depth in this model was then augmented to determine the effect on evapotranspiration.

‡ Total 1999 evapotranspiration is represented buy the dark gray bars. The percent increase (negative for decreases) in total evapotranspiration from the CSCMat model is represented by the spotted bars. All data are plotted on the same scale.

Key to Model Names: CSCMatM483 – average annual groundwater depth at 700 cm, CSCMatM283 – average annual groundwater depth at 500 cm, CSCMat – original model, CSCMatP120 – average annual groundwater depth at 100 cm, CSCMatP171 – average annual groundwater depth at 50 cm, and CSCMatP193 – average annual groundwater depth at 30 cm.

Figure 42: Effect of Water Depth on ET in SSC †

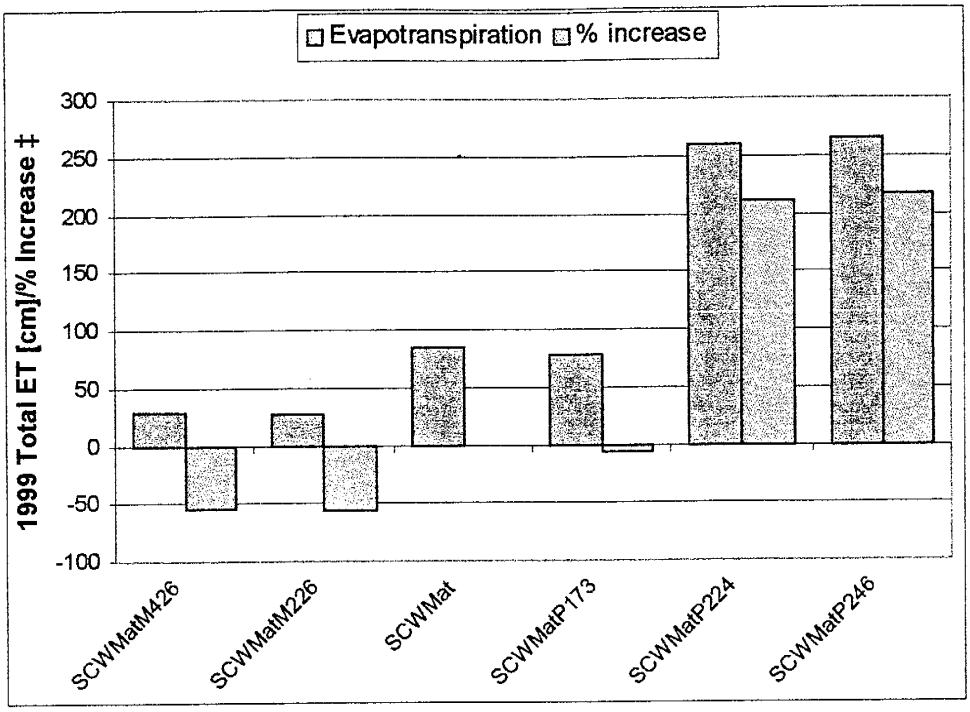


† Figure 42 displays the total 1999 evapotranspiration results of the South Saltcedar Bosque models. The SSCMat model was created to model measured evapotranspiration. The groundwater depth in this model was then augmented to determine the effect on evapotranspiration.

‡ Total 1999 evapotranspiration is represented buy the dark gray bars. The percent increase (negative for decreases) in total evapotranspiration from the SSCMat model is represented by the spotted bars. All data are plotted on the same scale.

Key to Model Names: SSCMatM488 – average annual groundwater depth at 700 cm, SSCMatM288 – average annual groundwater depth at 500 cm, SSCMat – original model, SSCMatP112 – average annual groundwater depth at 100 cm, SSCMatP162 – average annual groundwater depth at 50 cm, and SSCMatP182 – average annual groundwater depth at 30 cm.

Figure 43: Effect of Water Depth on ET in SCW †



† Figure 43 displays the total 1999 evapotranspiration results of the South Cottonwood Bosque models. The SCWMat model was created to model measured evapotranspiration. The groundwater depth in this model was then augmented to determine the effect on evapotranspiration.

‡ Total 1999 evapotranspiration is represented buy the dark gray bars. The percent increase (negative for decreases) in total evapotranspiration from the SCWMat model is represented by the spotted bars. All data are plotted on the same scale.

Key to Model Names: SCWMatM483 – average annual groundwater depth at 700 cm, SCWMatM283 – average annual groundwater depth at 500 cm, SCWMat – original model, SCWMatP120 – average annual groundwater depth at 100 cm, SCWMatP171 – average annual groundwater depth at 50 cm, and SCWMatP193 – average annual groundwater depth at 30 cm.

In the cottonwood models, evapotranspiration increases by 217% to levels comparable to those in saltcedar models as water levels rise to 30 cm depth (Fig. 43). These evapotranspiration values differ mostly due to floodwaters, introduced in the saltcedar models. Evapotraspiration decreased by 54% as water levels drop to 7 m (Fig. 43). Evaporation values depend completely on weather data, and transpiration is almost completely eliminated with water levels at this depth.

Groundwater levels are the greatest controlling factor on all of the Bosque model evapotranspiration results. When groundwater levels drop below 5 m, transpiration drops to a level that would not support vegetation with the rooting pattern observed in the field. Evaporation is very similar between various models and is largely controlled by weather and flood data rather than soil or vegetation parameters. Soil texture and rooting patterns play smaller roles in evapotranspiration at extremes in groundwater levels.

5. SUMMARY AND CONCLUSION

Although the measured data set is large and a great deal of information can be deduced from it, not all of the deductions can be related to general evapotranspiration trends. The field data show a marked difference in soil texture and stratigraphy between the saltcedar and cottonwood sites, where cottonwood soils are sandy, and saltcedar soils are finer. The field data also show that heavy soils and saltcedar vegetation cause large groundwater salinity increases. The field data show that evapotranspiration is higher in the saltcedar, yet do not show that this is due to the vegetation alone. Soil texture, soil stratigraphy, groundwater depth, and flooding help explain this difference.

The Hydrus 1 D program was able to model evapotranspiration from very different soils and vegetation communities successfully. Modeling of layered sands and fine textured soils in very dry conditions becomes difficult. Also, vapor phase transport is neglected. Overall, the Hydrus 1 D program is quite suited for modeling evapotranspiration.

The 1999 total evapotranspiration was 38% higher in the saltcedar stands than that of the cottonwood site. Vegetation species is not a major factor leading to the differences in yearly evapotranspiration when other factors are involved. According to trends observed in the theoretical modeling, the differences in soil texture alone may account for a majority of the differences in evapotranspiration. According to soil moisture data, the capillary fringe in the sands of the cottonwood site rise only approximately 50 cm, and soil moisture remains less than 10% by volume throughout the unsaturated sand profile. Whereas in the heavy saltcedar soils, the capillary rise is approximately 1 m and the unsaturated soil moisture is generally between 20% and 30% by volume. The groundwater table is 15% to 20% lower in the cottonwood area than in the saltcedar areas during the height of the growing season. Three flooding events, which occurred in the saltcedar site may have a great affect on the evapotranspiration values measured as well.

Water availability to vegetation roots and to the atmosphere is the dominant control of the evapotranspiration rate. Rooting depth and pattern were found to be the most important factors limiting transpiration in modeling. Water availability is greatly controlled by groundwater depth

and soil texture and stratigraphy. Clay soils produce high capillary rises and hold more water within reach of roots. Shallow groundwater depths allow water to flow towards the surface and toward roots faster. Results of the virtual soil models agree with measured data, showing that dense soils and shallow groundwater produce higher evapotranspiration rates.

Models in virtual soils show that evapotranspiration drains groundwater in arid riparian regions. It can be seen that climatic conditions that produce precipitation and control potential evapotranspiration have the greatest effect on evapotranspiration. Within a climatic regime (arid riparian), soil texture, groundwater level, and plant properties are the most important factors affecting evapotranspiration.

For fine textured soils, capillary rise becomes the dominant process controlling evapotranspiration. For coarse and medium textured soils, rain events, and moisture retention are more important processes limiting evapotranspiration rates. The following is a ranking of the overall importance of three factors affecting evapotranspiration obtained upon analysis of virtual soil models.

1st Groundwater Level

2nd Soil Texture

3rd Rooting Depth and Pattern

Although modeling and field measurements were thorough, vegetation adaptations and behavior were not predicted in this work. Vegetation adaptations to soil texture and stratigraphy as well as to groundwater depth cannot be analyzed without additional lysimetry work. Natural systems may not conform to some evapotranspiration rates predicted by these models, yet the trends would hold.

This research was performed in order to evaluate tends and processes that dominate evapotranspiration in arid riparian regions. This work is important because of the scarcity of fresh water in arid regions particularly in the Southwestern United States. The large amount of field data obtained by both New Mexico Institute of Mines and Technology, and New Mexico State University insure that the models produced sound results. This research also shows that the Hydrus 1 D program is a strong tool in evapotranspiration studies. Although many factors have a

large effect on evapotranspiration rate, groundwater depth was found to have the largest impact on evapotranspiration.

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IMPORTANCE OF GROUNDWATER DEPTH, SOIL TEXTURE AND ROOTING DEPTH ON ARID RIPARIAN EVAPOTRANSPIRATION

Volume II

By Behnaum Moayyad

An Independent Study Submitted to the

HYDROLOGY PROGRAM OF THE

EARTH AND ENVIRONMENTAL SCIENCE DEPARTMENT

In Partial Fulfillment of the Requirements

Of the Degree of

MASTER OF SCIENCE

NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY

July 2001

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Volume II

Appendix A.1. Weather Input Data

THEORETICAL RUNS WEATHER INFO

(986days Constant Reference ET)

	Day	P (cm)	Ref. E (cm)	h crit (cm)	Ref. T (cm)
01/01/97	**1**	0	0.234	100000	0.234
01/02/97	2	0	0.286	100000	0.286
01/03/97	3	0	0.182	100000	0.182
01/04/97	4	0	0.208	100000	0.208
01/05/97	**5**	0.3048	0.026	100000	0.026
01/06/97	6	0.1016	0.052	100000	0.052
01/07/97	7	0	0.13	100000	0.13
01/08/97	8	0	0.13	100000	0.13
01/09/97	9	0	0.208	100000	0.208
01/10/97	10	0	0.208	100000	0.208
01/11/97	11	0	0.208	100000	0.208
01/12/97	12	0	0.208	100000	0.208
01/13/97	13	0	0.104	100000	0.104
01/14/97	14	0	0.182	100000	0.182
01/15/97	15	0	0.208	100000	0.208
01/16/97	16	0	0.104	100000	0.104
01/17/97	17	0	0.182	100000	0.182
01/18/97	18	0	0.208	100000	0.208
01/19/97	19	0	0.208	100000	0.208
01/20/97	20	0	0.182	100000	0.182
01/21/97	21	0.1016	0.286	100000	0.286
01/22/97	22	0	0.208	100000	0.208
01/23/97	23	0	0.182	100000	0.182
01/24/97	24	0	0.286	100000	0.286
01/25/97	25	0	0.26	100000	0.26
01/26/97	26	0.3048	0.052	100000	0.052
01/27/97	27	0	0.234	100000	0.234
01/28/97	28	0	0.26	100000	0.26
01/29/97	29	0	0.26	100000	0.26
01/30/97	**30**	0	0.312	100000	0.312
01/31/97	31	0	0.286	100000	0.286
02/01/97	32	0	0.312	100000	0.312
02/02/97	33	0	0.312	100000	0.312
02/03/97	34	0	0.39	100000	0.39
02/04/97	35	0	0.312	100000	0.312
02/05/97	36	0	0.286	100000	0.286
02/06/97	37	0	0.26	100000	0.26
02/07/97	38	0	0.26	100000	0.26
02/08/97	39	0	0.234	100000	0.234
02/09/97	40	0	0.364	100000	0.364
02/10/97	41	0	0.364	100000	0.364
02/11/97	42	0	0.416	100000	0.416
02/12/97	43	0	0.39	100000	0.39
02/13/97	44	0	0.182	100000	0.182
02/14/97	45	0	0.364	100000	0.364
02/15/97	46	0	0.39	100000	0.39
02/16/97	47	0	0.364	100000	0.364
02/17/97	48	0	0.364	100000	0.364
02/18/97	49	0	0.312	100000	0.312
02/19/97	50	0.3048	0.286	100000	0.286
02/20/97	51	0	0.39	100000	0.39
02/21/97	52	0	0.338	100000	0.338
02/22/97	53	0	0.39	100000	0.39
02/23/97	54	0	0.416	100000	0.416
02/24/97	55	0	0.338	100000	0.338
02/25/97	56	0	0.286	100000	0.286
02/26/97	57	0	0.312	100000	0.312
02/27/97	58	0	0.312	100000	0.312
02/28/97	59	0	0.312	100000	0.312
03/01/97	60	0	0.39	100000	0.39

THEORETICAL RUNS WEATHER INFO

(986days Bosque Reference ET)

	Day	P (cm)	Ref. E (cm)	h crit (cm)	Ref. T (cm)
01/01/97	**1**	0	0.588	100000	0.234
01/02/97	2	0	0.756	100000	0.286
01/03/97	3	0.6096	0.28	100000	0.182
01/04/97	4	0.1016	0.252	100000	0.208
01/05/97	**5**	0	0.504	100000	0.026
01/06/97	6	0	0.672	100000	0.052
01/07/97	7	0	0.812	100000	0.13
01/08/97	8	0	0.812	100000	0.13
01/09/97	9	0	0.812	100000	0.208
01/10/97	10	0	0.756	100000	0.208
01/11/97	11	0	0.588	100000	0.208
01/12/97	12	0.5842	0.448	100000	0.208
01/13/97	13	0.0254	0.672	100000	0.104
01/14/97	14	0	0.756	100000	0.182
01/15/97	15	0	0.84	100000	0.208
01/16/97	16	0	0.812	100000	0.104
01/17/97	17	0	1.036	100000	0.182
01/18/97	18	0	1.008	100000	0.208
01/19/97	19	0	0.476	100000	0.208
01/20/97	20	0	0.2286	100000	0.182
01/21/97	21	0	0.588	100000	0.286
01/22/97	22	0	0.7	100000	0.208
01/23/97	23	0	0.868	100000	0.182
01/24/97	24	0	0.98	100000	0.286
01/25/97	25	0	0.784	100000	0.26
01/26/97	26	0	1.064	100000	0.052
01/27/97	27	0	0.868	100000	0.234
01/28/97	28	0	0.84	100000	0.26
01/29/97	29	0	0.98	100000	0.26
01/30/97	**30**	0	0.84	100000	0.312
01/31/97	31	0	1.008	100000	0.286
02/01/97	32	0	0.84	100000	0.312
02/02/97	33	0	0.812	100000	0.312
02/03/97	34	0	0.784	100000	0.39
02/04/97	35	0	0.812	100000	0.312
02/05/97	36	0	0.924	100000	0.286
02/06/97	37	0	1.008	100000	0.26
02/07/97	38	0	1.008	100000	0.26
02/08/97	39	0	1.232	100000	0.234
02/09/97	40	0	1.26	100000	0.364
02/10/97	41	0	0.616	100000	0.364
02/11/97	42	0	0.644	100000	0.416
02/12/97	43	0	0.98	100000	0.39
02/13/97	44	0	0.868	100000	0.182
02/14/97	45	0	0.532	100000	0.364
02/15/97	46	0	1.064	100000	0.39
02/16/97	47	0	1.008	100000	0.364
02/17/97	48	0	0.616	100000	0.364
02/18/97	49	0	0.924	100000	0.312
02/19/97	50	0	0.924	100000	0.286
02/20/97	51	0	1.064	100000	0.39
02/21/97	52	0	1.008	100000	0.338
02/22/97	53	0	0.952	100000	0.39
02/23/97	54	0	0.924	100000	0.416
02/24/97	55	0	1.036	100000	0.338
02/25/97	56	0	1.008	100000	0.286
02/26/97	57	0	1.092	100000	0.312
02/27/97	58	0	0.728	100000	0.312
02/28/97	59	0	1.036	100000	0.312
03/01/97	60	0	1.036	100000	0.39

03/02/97	61	0	0.442	100000	0.442
03/03/97	62	0	0.624	100000	0.624
03/04/97	63	0	0.572	100000	0.572
03/05/97	64	0	0.468	100000	0.468
03/06/97	65	0	0.468	100000	0.468
03/07/97	66	0	0.52	100000	0.52
03/08/97	67	0	0.52	100000	0.52
03/09/97	68	0	0.598	100000	0.598
03/10/97	69	0	0.624	100000	0.624
03/11/97	70	0	0.624	100000	0.624
03/12/97	71	0	0.598	100000	0.598
03/13/97	72	0	0.676	100000	0.676
03/14/97	73	0	0.598	100000	0.598
03/15/97	74	0	0.65	100000	0.65
03/16/97	75	0	0.676	100000	0.676
03/17/97	76	0	0.546	100000	0.546
03/18/97	77	0	0.65	100000	0.65
03/19/97	78	0	0.65	100000	0.65
03/20/97	79	0	0.676	100000	0.676
03/21/97	80	0	0.728	100000	0.728
03/22/97	81	0	0.676	100000	0.676
03/23/97	82	0	0.728	100000	0.728
03/24/97	83	0.1016	0.676	100000	0.676
03/25/97	84	0.1016	0.312	100000	0.312
03/26/97	85	0	0.494	100000	0.494
03/27/97	86	0	0.702	100000	0.702
03/28/97	87	0	0.728	100000	0.728
03/29/97	88	0	0.676	100000	0.676
03/30/97	89	0	0.624	100000	0.624
03/31/97	**90**	0	0.624	100000	0.624
04/01/97	91	0	0.572	100000	0.572
04/02/97	92	0	0.832	100000	0.832
04/03/97	93	1.0922	0.494	100000	0.494
04/04/97	94	0.4064	0.39	100000	0.39
04/05/97	95	0	0.494	100000	0.494
04/06/97	96	0	0.442	100000	0.442
04/07/97	97	0	0.546	100000	0.546
04/08/97	98	0	0.65	100000	0.65
04/09/97	99	0	0.754	100000	0.754
04/10/97	100	0	0.676	100000	0.676
04/11/97	101	1.1938	0.156	100000	0.156
04/12/97	102	0.6096	0.286	100000	0.286
04/13/97	103	0	0.494	100000	0.494
04/14/97	104	0	0.65	100000	0.65
04/15/97	105	0	0.702	100000	0.702
04/16/97	106	0	0.728	100000	0.728
04/17/97	107	0	0.676	100000	0.676
04/18/97	108	0	0.728	100000	0.728
04/19/97	109	0	0.78	100000	0.78
04/20/97	110	0	0.754	100000	0.754
04/21/97	111	0	0.754	100000	0.754
04/22/97	112	0	0.728	100000	0.728
04/23/97	113	0.2032	0.286	100000	0.286
04/24/97	114	0.4064	0.234	100000	0.234
04/25/97	115	0	0.286	100000	0.286
04/26/97	116	0	0.546	100000	0.546
04/27/97	117	0	0.676	100000	0.676
04/28/97	118	0	0.806	100000	0.806
04/29/97	119	0	0.676	100000	0.676
04/30/97	120	0	0.806	100000	0.806
05/01/97	121	0	0.702	100000	0.702
05/02/97	122	0	0.832	100000	0.832
05/03/97	123	0	0.806	100000	0.806
05/04/97	124	0	0.858	100000	0.858
05/05/97	125	0	0.78	100000	0.78
05/06/97	126	0	0.832	100000	0.832

03/02/97	61	0	1.176	100000	0.442
03/03/97	62	0	1.12	100000	0.624
03/04/97	63	0	1.064	100000	0.572
03/05/97	64	0	1.036	100000	0.468
03/06/97	65	0	1.036	100000	0.468
03/07/97	66	0	1.204	100000	0.52
03/08/97	67	0	1.064	100000	0.52
03/09/97	68	0	1.008	100000	0.598
03/10/97	69	0	1.12	100000	0.624
03/11/97	70	0.3556	0.7	100000	0.624
03/12/97	71	0.6604	0.616	100000	0.598
03/13/97	72	0	0.952	100000	0.676
03/14/97	73	0	0.7	100000	0.598
03/15/97	74	0	0.98	100000	0.65
03/16/97	75	0.0508	0.728	100000	0.676
03/17/97	76	0.0762	0.84	100000	0.546
03/18/97	77	0	0.98	100000	0.65
03/19/97	78	0	0.812	100000	0.65
03/20/97	79	0	1.12	100000	0.676
03/21/97	80	0	1.148	100000	0.728
03/22/97	81	0	1.148	100000	0.676
03/23/97	82	0	1.26	100000	0.728
03/24/97	83	0	1.008	100000	0.676
03/25/97	84	0	1.008	100000	0.312
03/26/97	85	0	1.092	100000	0.494
03/27/97	86	0	1.148	100000	0.702
03/28/97	87	0	1.064	100000	0.728
03/29/97	88	0	1.092	100000	0.676
03/30/97	89	0	1.12	100000	0.624
03/31/97	**90**	0	1.092	100000	0.624
04/01/97	91	0	0.784	100000	0.572
04/02/97	92	0	0.924	100000	0.832
04/03/97	93	0	1.008	100000	0.494
04/04/97	94	0	0.924	100000	0.39
04/05/97	95	0.3556	0.672	100000	0.494
04/06/97	96	0	0.784	100000	0.442
04/07/97	97	0	0.784	100000	0.546
04/08/97	98	0	0.896	100000	0.65
04/09/97	99	0	0.756	100000	0.754
04/10/97	100	0	1.008	100000	0.676
04/11/97	101	0	1.036	100000	0.156
04/12/97	102	0	1.092	100000	0.286
04/13/97	103	0	0.98	100000	0.494
04/14/97	104	0	0.924	100000	0.65
04/15/97	105	0	0.84	100000	0.702
04/16/97	106	0.1524	1.064	100000	0.728
04/17/97	107	0	1.232	100000	0.676
04/18/97	108	0	1.204	100000	0.728
04/19/97	109	0	1.148	100000	0.78
04/20/97	110	0	0.98	100000	0.754
04/21/97	111	0	0.924	100000	0.754
04/22/97	112	0.0254	0.924	100000	0.728
04/23/97	113	0.0508	0.84	100000	0.286
04/24/97	114	0.0508	0.7	100000	0.234
04/25/97	115	0	0.98	100000	0.286
04/26/97	116	0	0.868	100000	0.546
04/27/97	117	0.5334	0.924	100000	0.676
04/28/97	118	0	0.588	100000	0.806
04/29/97	119	0	1.008	100000	0.676
04/30/97	120	0	0.952	100000	0.806
05/01/97	121	0	0.98	100000	0.702
05/02/97	122	0	0.672	100000	0.832
05/03/97	123	0	0.56	100000	0.806
05/04/97	124	0.0254	0.812	100000	0.858
05/05/97	125	0.0254	0.616	100000	0.78
05/06/97	126	1.8034	0.84	100000	0.832

05/07/97	127	0	0.702	100000	0.702
05/08/97	128	0	0.754	100000	0.754
05/09/97	129	0	0.598	100000	0.598
05/10/97	130	0	0.702	100000	0.702
05/11/97	131	0	0.702	100000	0.702
05/12/97	132	0	0.78	100000	0.78
05/13/97	133	0	0.91	100000	0.91
05/14/97	134	0	0.884	100000	0.884
05/15/97	135	0	0.78	100000	0.78
05/16/97	136	0.508	0.754	100000	0.754
05/17/97	137	0	0.832	100000	0.832
05/18/97	138	0	0.78	100000	0.78
05/19/97	139	0.3048	0.494	100000	0.494
05/20/97	140	0	0.52	100000	0.52
05/21/97	141	0.7112	0.312	100000	0.312
05/22/97	142	0	0.676	100000	0.676
05/23/97	143	0	0.806	100000	0.806
05/24/97	144	0.6096	0.494	100000	0.494
05/25/97	145	0	0.806	100000	0.806
05/26/97	146	0	0.962	100000	0.962
05/27/97	147	0	0.806	100000	0.806
05/28/97	148	0	0.858	100000	0.858
05/29/97	149	0	0.806	100000	0.806
05/30/97	150	0	0.936	100000	0.936
05/31/97	151	0	0.91	100000	0.91
06/01/97	152	0	1.04	100000	1.04
06/02/97	153	0	0.754	100000	0.754
06/03/97	154	0	1.04	100000	1.04
06/04/97	155	0	0.884	100000	0.884
06/05/97	156	0	0.754	100000	0.754
06/06/97	157	0.8128	0.468	100000	0.468
06/07/97	158	0.8128	0.338	100000	0.338
06/08/97	159	0.508	0.78	100000	0.78
06/09/97	160	0	0.962	100000	0.962
06/10/97	161	0	1.04	100000	1.04
06/11/97	162	0	1.092	100000	1.092
06/12/97	163	0	0.728	100000	0.728
06/13/97	164	0	0.988	100000	0.988
06/14/97	165	0	0.858	100000	0.858
06/15/97	166	0	0.962	100000	0.962
06/16/97	167	0	0.91	100000	0.91
06/17/97	168	0	0.988	100000	0.988
06/18/97	169	0	1.092	100000	1.092
06/19/97	170	0	1.014	100000	1.014
06/20/97	171	0	1.092	100000	1.092
06/21/97	172	0	1.092	100000	1.092
06/22/97	173	0	1.144	100000	1.144
06/23/97	174	0	1.066	100000	1.066
06/24/97	175	0	1.066	100000	1.066
06/25/97	176	0	1.092	100000	1.092
06/26/97	177	0	0.988	100000	0.988
06/27/97	178	0	0.936	100000	0.936
06/28/97	179	0	1.014	100000	1.014
06/29/97	**180**	0	0.988	100000	0.988
06/30/97	181	0	1.196	100000	1.196
07/01/97	182	0	1.144	100000	1.144
07/02/97	183	0	1.17	100000	1.17
07/03/97	184	0	1.04	100000	1.04
07/04/97	185	0	1.066	100000	1.066
07/05/97	186	0	1.04	100000	1.04
07/06/97	187	0	0.988	100000	0.988
07/07/97	188	0	1.04	100000	1.04
07/08/97	189	0	1.04	100000	1.04
07/09/97	190	0	1.04	100000	1.04
07/10/97	191	0	0.91	100000	0.91
07/11/97	192	0.1016	0.832	100000	0.832

05/07/97	127	0.6604	0.84	100000	0.702
05/08/97	128	0.0254	0.784	100000	0.754
05/09/97	129	0.3048	0.616	100000	0.598
05/10/97	130	0	0.868	100000	0.702
05/11/97	131	0	0.952	100000	0.702
05/12/97	132	0	0.952	100000	0.78
05/13/97	133	0	0.98	100000	0.91
05/14/97	134	0	0.812	100000	0.884
05/15/97	135	0	0.924	100000	0.78
05/16/97	136	0.0508	0.868	100000	0.754
05/17/97	137	0	0.952	100000	0.832
05/18/97	138	0	0.896	100000	0.78
05/19/97	139	0.0254	0.952	100000	0.494
05/20/97	140	0	0.84	100000	0.52
05/21/97	141	0	0.756	100000	0.312
05/22/97	142	0.2794	0.504	100000	0.676
05/23/97	143	0.0762	0.476	100000	0.806
05/24/97	144	0.4826	0.588	100000	0.494
05/25/97	145	0.9906	0.588	100000	0.806
05/26/97	146	0	0.868	100000	0.962
05/27/97	147	1.0922	0.896	100000	0.806
05/28/97	148	0.0508	0.728	100000	0.858
05/29/97	149	0.3048	0.56	100000	0.806
05/30/97	150	0.1016	0.588	100000	0.936
05/31/97	151	0.0254	0.896	100000	0.91
06/01/97	152	0	1.008	100000	1.04
06/02/97	153	0.0254	0.84	100000	0.754
06/03/97	154	0	0.784	100000	1.04
06/04/97	155	0	0.98	100000	0.884
06/05/97	156	0	0.952	100000	0.754
06/06/97	157	0	0.952	100000	0.468
06/07/97	158	0.5842	0.896	100000	0.338
06/08/97	159	0.1524	0.84	100000	0.78
06/09/97	160	0	0.98	100000	0.962
06/10/97	161	0	0.896	100000	1.04
06/11/97	162	0.4572	1.008	100000	1.092
06/12/97	163	0	0.84	100000	0.728
06/13/97	164	0.0508	0.784	100000	0.988
06/14/97	165	0	0.728	100000	0.858
06/15/97	166	0.2286	0.896	100000	0.962
06/16/97	167	0.0508	0.896	100000	0.91
06/17/97	168	0	0.896	100000	0.988
06/18/97	169	0	0.812	100000	1.092
06/19/97	170	0	0.84	100000	1.014
06/20/97	171	0	0.616	100000	1.092
06/21/97	172	0	0.672	100000	1.092
06/22/97	173	2.1336	0.476	100000	1.144
06/23/97	174	0	0.812	100000	1.066
06/24/97	175	0	0.868	100000	1.066
06/25/97	176	0	0.588	100000	1.092
06/26/97	177	0	0.784	100000	0.988
06/27/97	178	0	0.868	100000	0.936
06/28/97	179	0	0.616	100000	1.014
06/29/97	**180**	0	0.588	100000	0.988
06/30/97	181	0	0.924	100000	1.196
07/01/97	182	0	0.896	100000	1.144
07/02/97	183	0.5842	0.476	100000	1.17
07/03/97	184	0.0254	0.504	100000	1.04
07/04/97	185	0.254	0.616	100000	1.066
07/05/97	186	0.127	0.616	100000	1.04
07/06/97	187	0.2794	0.28	100000	0.988
07/07/97	188	0.8382	0.616	100000	1.04
07/08/97	189	0.0254	0.532	100000	1.04
07/09/97	190	0	0.728	100000	1.04
07/10/97	191	0	0.7	100000	0.91
07/11/97	192	0	0.644	100000	0.832

07/12/97	193	0	1.04	100000	1.04
07/13/97	194	0	1.092	100000	1.092
07/14/97	195	0	1.118	100000	1.118
07/15/97	196	0	1.04	100000	1.04
07/16/97	197	0	0.988	100000	0.988
07/17/97	198	0	1.092	100000	1.092
07/18/97	199	0	1.118	100000	1.118
07/19/97	200	0.3048	0.884	100000	0.884
07/20/97	201	0	1.066	100000	1.066
07/21/97	202	0.1016	1.014	100000	1.014
07/22/97	203	0.4064	0.832	100000	0.832
07/23/97	204	0	0.832	100000	0.832
07/24/97	205	0	0.832	100000	0.832
07/25/97	206	0	0.91	100000	0.91
07/26/97	207	0	0.78	100000	0.78
07/27/97	208	0.889	0.676	100000	0.676
07/28/97	209	0.2032	0.312	100000	0.312
07/29/97	210	0.4064	0.39	100000	0.39
07/30/97	211	1.905	0.494	100000	0.494
07/31/97	212	1.905	0.442	100000	0.442
08/01/97	213	0	0.78	100000	0.78
08/02/97	214	1.0922	0.754	100000	0.754
08/03/97	215	0.508	0.728	100000	0.728
08/04/97	216	0	0.858	100000	0.858
08/05/97	217	0.8128	0.546	100000	0.546
08/06/97	218	0	0.754	100000	0.754
08/07/97	219	0	0.676	100000	0.676
08/08/97	220	0	0.754	100000	0.754
08/09/97	221	0	0.728	100000	0.728
08/10/97	222	0.1016	0.65	100000	0.65
08/11/97	223	0.1016	0.702	100000	0.702
08/12/97	224	0	0.676	100000	0.676
08/13/97	225	0	0.78	100000	0.78
08/14/97	226	0	0.754	100000	0.754
08/15/97	227	0	0.806	100000	0.806
08/16/97	228	0	0.806	100000	0.806
08/17/97	229	0.2032	0.65	100000	0.65
08/18/97	230	0	0.624	100000	0.624
08/19/97	231	0	0.78	100000	0.78
08/20/97	232	0	0.832	100000	0.832
08/21/97	233	0	0.728	100000	0.728
08/22/97	234	2.413	0.78	100000	0.78
08/23/97	235	0.9906	0.728	100000	0.728
08/24/97	236	0	0.728	100000	0.728
08/25/97	237	0	0.78	100000	0.78
08/26/97	238	0	0.754	100000	0.754
08/27/97	239	0	0.754	100000	0.754
08/28/97	240	0	0.832	100000	0.832
08/29/97	241	0	0.754	100000	0.754
08/30/97	242	0	0.754	100000	0.754
08/31/97	243	0	0.78	100000	0.78
09/01/97	244	0	0.78	100000	0.78
09/02/97	245	0	0.728	100000	0.728
09/03/97	246	0	0.65	100000	0.65
09/04/97	247	0	0.728	100000	0.728
09/05/97	248	0	0.65	100000	0.65
09/06/97	249	0	0.728	100000	0.728
09/07/97	250	0	0.702	100000	0.702
09/08/97	251	0	0.65	100000	0.65
09/09/97	252	0	0.52	100000	0.52
09/10/97	253	0	0.65	100000	0.65
09/11/97	254	0.1016	0.572	100000	0.572
09/12/97	255	0.1016	0.468	100000	0.468
09/13/97	256	0	0.598	100000	0.598
09/14/97	257	0	0.624	100000	0.624
09/15/97	258	0.1016	0.546	100000	0.546

07/12/97	193	0.127	0.532	100000	1.04
07/13/97	194	0.0254	0.672	100000	1.092
07/14/97	195	0	0.728	100000	1.118
07/15/97	196	0	0.784	100000	1.04
07/16/97	197	0	0.784	100000	0.988
07/17/97	198	0	0.924	100000	1.092
07/18/97	199	0	0.728	100000	1.118
07/19/97	200	0	0.672	100000	0.884
07/20/97	201	0	0.756	100000	1.066
07/21/97	202	0	0.756	100000	1.014
07/22/97	203	0	0.756	100000	0.832
07/23/97	204	0	0.784	100000	0.832
07/24/97	205	0	0.756	100000	0.832
07/25/97	206	0	0.756	100000	0.91
07/26/97	207	0	0.644	100000	0.78
07/27/97	208	0	0.7	100000	0.676
07/28/97	209	0	0.644	100000	0.312
07/29/97	210	0	0.728	100000	0.39
07/30/97	211	0	0.7	100000	0.494
07/31/97	212	0	0.672	100000	0.442
08/01/97	213	0	0.756	100000	0.78
08/02/97	214	0	0.728	100000	0.754
08/03/97	215	0	0.7	100000	0.728
08/04/97	216	0.1778	0.588	100000	0.858
08/05/97	217	0.5334	0.112	100000	0.546
08/06/97	218	0	0.392	100000	0.754
08/07/97	219	0	0.448	100000	0.676
08/08/97	220	0	0.504	100000	0.754
08/09/97	221	0	0.616	100000	0.728
08/10/97	222	0	0.644	100000	0.65
08/11/97	223	0	0.616	100000	0.702
08/12/97	224	0	0.588	100000	0.676
08/13/97	225	0	0.616	100000	0.78
08/14/97	226	0	0.644	100000	0.754
08/15/97	227	0	0.476	100000	0.806
08/16/97	228	0	0.616	100000	0.806
08/17/97	229	0	0.728	100000	0.65
08/18/97	230	0	0.476	100000	0.624
08/19/97	231	0	0.56	100000	0.78
08/20/97	232	0	0.7	100000	0.832
08/21/97	233	0	0.504	100000	0.728
08/22/97	234	0	0.42	100000	0.78
08/23/97	235	0	0.56	100000	0.728
08/24/97	236	0	0.588	100000	0.728
08/25/97	237	0	0.644	100000	0.78
08/26/97	238	0	0.532	100000	0.754
08/27/97	239	0	0.504	100000	0.754
08/28/97	240	0	0.504	100000	0.832
08/29/97	241	0	0.616	100000	0.754
08/30/97	242	0	0.588	100000	0.754
08/31/97	243	0	0.616	100000	0.78
09/01/97	244	0	0.56	100000	0.78
09/02/97	245	0	0.672	100000	0.728
09/03/97	246	0	0.588	100000	0.65
09/04/97	247	0	0.532	100000	0.728
09/05/97	248	0	0.532	100000	0.65
09/06/97	249	0	0.448	100000	0.728
09/07/97	250	0	0.476	100000	0.702
09/08/97	251	0	0.448	100000	0.65
09/09/97	252	0	0.476	100000	0.52
09/10/97	253	0	0.42	100000	0.65
09/11/97	254	0	0.392	100000	0.572
09/12/97	255	0	0.392	100000	0.468
09/13/97	256	0	0.364	100000	0.598
09/14/97	257	0	0.42	100000	0.624
09/15/97	258	0	0.42	100000	0.546

09/16/97	259	0	0.624	100000	0.624
09/17/97	260	0	0.65	100000	0.65
09/18/97	261	0	0.468	100000	0.468
09/19/97	262	0.4064	0.572	100000	0.572
09/20/97	263	1.4986	0.156	100000	0.156
09/21/97	264	3.4036	0.026	100000	0.026
09/22/97	265	0	0.546	100000	0.546
09/23/97	266	0.2032	0.702	100000	0.702
09/24/97	267	0	0.494	100000	0.494
09/25/97	268	0	0.494	100000	0.494
09/26/97	269	0	0.572	100000	0.572
09/27/97	**270**	0	0.598	100000	0.598
09/28/97	271	0	0.598	100000	0.598
09/29/97	272	0	0.624	100000	0.624
09/30/97	273	0	0.598	100000	0.598
10/01/97	274	0	0.624	100000	0.624
10/02/97	275	0	0.572	100000	0.572
10/03/97	276	0.1016	0.572	100000	0.572
10/04/97	277	0	0.598	100000	0.598
10/05/97	278	0	0.624	100000	0.624
10/06/97	279	0	0.624	100000	0.624
10/07/97	280	0.4064	0.468	100000	0.468
10/08/97	281	0	0.572	100000	0.572
10/09/97	282	0	0.52	100000	0.52
10/10/97	283	0	0.572	100000	0.572
10/11/97	284	0	0.65	100000	0.65
10/12/97	285	0	0.39	100000	0.39
10/13/97	286	0	0.468	100000	0.468
10/14/97	287	0	0.494	100000	0.494
10/15/97	288	0	0.52	100000	0.52
10/16/97	289	0	0.546	100000	0.546
10/17/97	290	0	0.494	100000	0.494
10/18/97	291	0	0.52	100000	0.52
10/19/97	292	0	0.52	100000	0.52
10/20/97	293	0	0.416	100000	0.416
10/21/97	294	0	0.468	100000	0.468
10/22/97	295	0.1016	0.26	100000	0.26
10/23/97	296	0	0.442	100000	0.442
10/24/97	297	0.1016	0.338	100000	0.338
10/25/97	298	0	0.208	100000	0.208
10/26/97	299	0	0.364	100000	0.364
10/27/97	300	0	0.364	100000	0.364
10/28/97	301	0	0.416	100000	0.416
10/29/97	302	0	0.39	100000	0.39
10/30/97	303	0	0.468	100000	0.468
10/31/97	304	0	0.52	100000	0.52
11/01/97	305	0	0.52	100000	0.52
11/02/97	306	0	0.468	100000	0.468
11/03/97	307	0	0.416	100000	0.416
11/04/97	308	0	0.468	100000	0.468
11/05/97	309	0	0.416	100000	0.416
11/06/97	310	0	0.39	100000	0.39
11/07/97	311	0	0.416	100000	0.416
11/08/97	312	0	0.39	100000	0.39
11/09/97	313	0.1016	0.13	100000	0.13
11/10/97	314	0	0.182	100000	0.182
11/11/97	315	0.3048	0.026	100000	0.026
11/12/97	316	0.3048	0.104	100000	0.104
11/13/97	317	0.1016	0.182	100000	0.182
11/14/97	318	0	0.182	100000	0.182
11/15/97	319	0.2032	0.156	100000	0.156
11/16/97	320	0	0.234	100000	0.234
11/17/97	321	0.1016	0.26	100000	0.26
11/18/97	322	0	0.26	100000	0.26
11/19/97	323	0	0.286	100000	0.286
11/20/97	324	0	0.312	100000	0.312

09/16/97	259	0	0.476	100000	0.624
09/17/97	260	0	0.448	100000	0.65
09/18/97	261	0	0.42	100000	0.468
09/19/97	262	0	0.336	100000	0.572
09/20/97	263	0	0.476	100000	0.156
09/21/97	264	0	0.392	100000	0.026
09/22/97	265	0.0508	0.28	100000	0.546
09/23/97	266	0	0.28	100000	0.702
09/24/97	267	0	0.28	100000	0.494
09/25/97	268	0	0.336	100000	0.494
09/26/97	269	0.0254	0.392	100000	0.572
09/27/97	**270**	0	0.224	100000	0.598
09/28/97	271	0	0.28	100000	0.598
09/29/97	272	0	0.336	100000	0.624
09/30/97	273	0	0.364	100000	0.598
10/01/97	274	0	0.336	100000	0.624
10/02/97	275	0	0.448	100000	0.572
10/03/97	276	0	0.364	100000	0.572
10/04/97	277	0	0.308	100000	0.598
10/05/97	278	0	0.364	100000	0.624
10/06/97	279	0	0.364	100000	0.624
10/07/97	280	0	0.308	100000	0.468
10/08/97	281	0	0.28	100000	0.572
10/09/97	282	0	0.14	100000	0.52
10/10/97	283	0	0.056	100000	0.572
10/11/97	284	0	0.196	100000	0.65
10/12/97	285	0	0.224	100000	0.39
10/13/97	286	0	0.308	100000	0.468
10/14/97	287	0.2032	0.056	100000	0.494
10/15/97	288	0	0.196	100000	0.52
10/16/97	289	0	0.196	100000	0.546
10/17/97	290	0	0.14	100000	0.494
10/18/97	291	0	0.252	100000	0.52
10/19/97	292	0	0.28	100000	0.52
10/20/97	293	0	0.392	100000	0.416
10/21/97	294	0	0.336	100000	0.468
10/22/97	295	0	0.308	100000	0.26
10/23/97	296	0	0.308	100000	0.442
10/24/97	297	0	0.364	100000	0.338
10/25/97	298	0	0.364	100000	0.208
10/26/97	299	0	0.336	100000	0.364
10/27/97	300	0	0.336	100000	0.364
10/28/97	301	0	0.308	100000	0.416
10/29/97	302	0	0.392	100000	0.39
10/30/97	303	0	0.392	100000	0.468
10/31/97	304	0	0.504	100000	0.52
11/01/97	305	0	0.336	100000	0.52
11/02/97	306	0	0.42	100000	0.468
11/03/97	307	0	0.392	100000	0.416
11/04/97	308	0	0.364	100000	0.468
11/05/97	309	0	0.476	100000	0.416
11/06/97	310	0	0.392	100000	0.39
11/07/97	311	0	0.476	100000	0.416
11/08/97	312	0	0.448	100000	0.39
11/09/97	313	0	0.476	100000	0.13
11/10/97	314	0	0.588	100000	0.182
11/11/97	315	0	0.42	100000	0.026
11/12/97	316	0	0.588	100000	0.104
11/13/97	317	0	0.42	100000	0.182
11/14/97	318	0	0.56	100000	0.182
11/15/97	319	0	0.504	100000	0.156
11/16/97	320	0	0.476	100000	0.234
11/17/97	321	0	0.084	100000	0.26
11/18/97	322	0	0.28	100000	0.26
11/19/97	323	0	0.392	100000	0.286
11/20/97	324	0	0.532	100000	0.312

11/21/97	325	0	0.234	100000	0.234
11/22/97	326	0	0.312	100000	0.312
11/23/97	327	0	0.286	100000	0.286
11/24/97	328	0	0.312	100000	0.312
11/25/97	329	0	0.26	100000	0.26
11/26/97	330	0	0.078	100000	0.078
11/27/97	331	0	0.104	100000	0.104
11/28/97	332	0	0.208	100000	0.208
11/29/97	333	0	0.234	100000	0.234
11/30/97	334	0	0.234	100000	0.234
12/01/97	335	0	0.182	100000	0.182
12/02/97	336	0.508	0.052	100000	0.052
12/03/97	337	0.1016	0.104	100000	0.104
12/04/97	338	0	0.182	100000	0.182
12/05/97	339	0	0.208	100000	0.208
12/06/97	340	0	0.234	100000	0.234
12/07/97	341	0	0.156	100000	0.156
12/08/97	342	0.1016	0.156	100000	0.156
12/09/97	343	0	0.312	100000	0.312
12/10/97	344	0	0.104	100000	0.104
12/11/97	345	0.7112	0.104	100000	0.104
12/12/97	346	0	0.182	100000	0.182
12/13/97	347	0	0.208	100000	0.208
12/14/97	348	0	0.208	100000	0.208
12/15/97	349	0	0.208	100000	0.208
12/16/97	350	0	0.234	100000	0.234
12/17/97	351	0.1016	0.26	100000	0.26
12/18/97	352	0	0.182	100000	0.182
12/19/97	353	0	0.234	100000	0.234
12/20/97	354	0.1016	0.026	100000	0.026
12/21/97	355	1.0922	0	100000	0
12/22/97	356	0	0.052	100000	0.052
12/23/97	357	0.4064	0.052	100000	0.052
12/24/97	358	0	0.104	100000	0.104
12/25/97	359	0.3048	0.104	100000	0.104
12/26/97	360	0	0.13	100000	0.13
12/27/97	361	0	0.13	100000	0.13
12/28/97	362	0	0.182	100000	0.182
12/29/97	363	0	0.182	100000	0.182
12/30/97	364	0	0.156	100000	0.156
12/31/97	365	0	0.234	100000	0.234
01/01/98	**366**	0	0.28	100000	0.28
01/02/98	367	0	0.084	100000	0.084
01/03/98	368	0	0.14	100000	0.14
01/04/98	369	0	0.14	100000	0.14
01/05/98	370	0	0.168	100000	0.168
01/06/98	371	0	0.224	100000	0.224
01/07/98	372	0	0.224	100000	0.224
01/08/98	373	0	0.224	100000	0.224
01/09/98	374	0	0.252	100000	0.252
01/10/98	375	0.1016	0.168	100000	0.168
01/11/98	376	0	0.196	100000	0.196
01/12/98	377	0	0.252	100000	0.252
01/13/98	378	0	0.196	100000	0.196
01/14/98	379	0	0.28	100000	0.28
01/15/98	380	0	0.224	100000	0.224
01/16/98	381	0	0.28	100000	0.28
01/17/98	382	0	0.224	100000	0.224
01/18/98	383	0	0.28	100000	0.28
01/19/98	384	0	0.196	100000	0.196
01/20/98	385	0	0.252	100000	0.252
01/21/98	386	0	0.112	100000	0.112
01/22/98	387	0	0.252	100000	0.252
01/23/98	388	0	0.308	100000	0.308
01/24/98	389	0	0.308	100000	0.308
01/25/98	390	0	0.392	100000	0.392

11/21/97	325	0	0.42	100000	0.234
11/22/97	326	0	0.448	100000	0.312
11/23/97	327	0	0.364	100000	0.286
11/24/97	328	0	0.364	100000	0.312
11/25/97	329	0	0.476	100000	0.26
11/26/97	330	0	0.448	100000	0.078
11/27/97	331	0	0.476	100000	0.104
11/28/97	332	0	0.532	100000	0.208
11/29/97	333	0	0.952	100000	0.234
11/30/97	334	0	0.504	100000	0.234
12/01/97	335	0	0.448	100000	0.182
12/02/97	336	0	0.56	100000	0.052
12/03/97	337	0	0.56	100000	0.104
12/04/97	338	0	0.644	100000	0.182
12/05/97	339	0	0.42	100000	0.208
12/06/97	340	0	0.504	100000	0.234
12/07/97	341	0	0.616	100000	0.156
12/08/97	342	0	0.7	100000	0.156
12/09/97	343	0	0.644	100000	0.312
12/10/97	344	0	0.616	100000	0.104
12/11/97	345	0	0.672	100000	0.104
12/12/97	346	0	0.56	100000	0.182
12/13/97	347	0	0.56	100000	0.208
12/14/97	348	0	0.42	100000	0.208
12/15/97	349	0	0.56	100000	0.208
12/16/97	350	0	0.616	100000	0.234
12/17/97	351	0	0.644	100000	0.26
12/18/97	352	0	0.784	100000	0.182
12/19/97	353	0	0.756	100000	0.234
12/20/97	354	0	0.756	100000	0.026
12/21/97	355	0	0.7	100000	0
12/22/97	356	0	0.7	100000	0.052
12/23/97	357	0	0.56	100000	0.052
12/24/97	358	0	0.616	100000	0.104
12/25/97	359	0	0.616	100000	0.104
12/26/97	360	0	0.756	100000	0.13
12/27/97	361	0	0.7	100000	0.13
12/28/97	362	0	0.84	100000	0.182
12/29/97	363	0	0.448	100000	0.182
12/30/97	364	0	0.532	100000	0.156
12/31/97	365	0	0.672	100000	0.234
01/01/98	**366**	0	0.588	100000	0.254
01/02/98	367	0	0.756	100000	0.0762
01/03/98	368	0.6096	0.28	100000	0.127
01/04/98	369	0.1016	0.252	100000	0.127
01/05/98	370	0	0.504	100000	0.1524
01/06/98	371	0	0.672	100000	0.2032
01/07/98	372	0	0.812	100000	0.2032
01/08/98	373	0	0.812	100000	0.2032
01/09/98	374	0	0.812	100000	0.2286
01/10/98	375	0	0.756	100000	0.1524
01/11/98	376	0	0.588	100000	0.1778
01/12/98	377	0.5842	0.448	100000	0.2286
01/13/98	378	0.0254	0.672	100000	0.1778
01/14/98	379	0	0.756	100000	0.254
01/15/98	380	0	0.84	100000	0.2032
01/16/98	381	0	0.812	100000	0.254
01/17/98	382	0	1.036	100000	0.2032
01/18/98	383	0	1.008	100000	0.254
01/19/98	384	0	0.476	100000	0.1778
01/20/98	385	0	0.2286	100000	0.2286
01/21/98	386	0	0.588	100000	0.1016
01/22/98	387	0	0.7	100000	0.2286
01/23/98	388	0	0.868	100000	0.2794
01/24/98	389	0	0.98	100000	0.2794
01/25/98	390	0	0.784	100000	0.3556

01/26/98	391	0	0.364	100000	0.364
01/27/98	392	0	0.252	100000	0.252
01/28/98	393	0	0.42	100000	0.42
01/29/98	394	0	0.336	100000	0.336
01/30/98	395	0	0.336	100000	0.336
01/31/98	396	0	0.308	100000	0.308
02/01/98	397	0	0.336	100000	0.336
02/02/98	398	0	0.336	100000	0.336
02/03/98	399	0	0.336	100000	0.336
02/04/98	400	0.6096	0.14	100000	0.14
02/05/98	401	0.1016	0.14	100000	0.14
02/06/98	402	0	0.308	100000	0.308
02/07/98	403	0	0.364	100000	0.364
02/08/98	404	0.2032	0.224	100000	0.224
02/09/98	405	0	0.252	100000	0.252
02/10/98	406	0	0.224	100000	0.224
02/11/98	407	0.1016	0.28	100000	0.28
02/12/98	408	0	0.364	100000	0.364
02/13/98	409	0	0.364	100000	0.364
02/14/98	410	0	0.392	100000	0.392
02/15/98	411	0.889	0.084	100000	0.084
02/16/98	412	0	0.252	100000	0.252
02/17/98	413	0	0.28	100000	0.28
02/18/98	414	0.2032	0.308	100000	0.308
02/19/98	415	0	0.392	100000	0.392
02/20/98	416	0	0.168	100000	0.168
02/21/98	417	0	0.364	100000	0.364
02/22/98	418	0	0.364	100000	0.364
02/23/98	419	0	0.448	100000	0.448
02/24/98	420	0	0.644	100000	0.644
02/25/98	421	0	0.448	100000	0.448
02/26/98	422	0	0.448	100000	0.448
02/27/98	423	0	0.364	100000	0.364
02/28/98	424	0	0.392	100000	0.392
03/01/98	425	0	0.448	100000	0.448
03/02/98	426	0	0.42	100000	0.42
03/03/98	427	0	0.56	100000	0.56
03/04/98	428	0	0.588	100000	0.588
03/05/98	429	0	0.504	100000	0.504
03/06/98	430	0	0.42	100000	0.42
03/07/98	431	0	0.224	100000	0.224
03/08/98	432	0	0.476	100000	0.476
03/09/98	433	0	0.504	100000	0.504
03/10/98	434	0	0.532	100000	0.532
03/11/98	435	0	0.532	100000	0.532
03/12/98	436	0	0.532	100000	0.532
03/13/98	437	0	0.56	100000	0.56
03/14/98	438	0.1016	0.392	100000	0.392
03/15/98	**439**	4.191	0.056	100000	0.056
03/16/98	440	0.1016	0.364	100000	0.364
03/17/98	441	0.4064	0.28	100000	0.28
03/18/98	442	0.1016	0.336	100000	0.336
03/19/98	443	0	0.504	100000	0.504
03/20/98	444	0	0.532	100000	0.532
03/21/98	445	0	0.644	100000	0.644
03/22/98	446	0	0.672	100000	0.672
03/23/98	447	0	0.7	100000	0.7
03/24/98	448	0	0.756	100000	0.756
03/25/98	449	0	0.812	100000	0.812
03/26/98	450	0.3048	0.448	100000	0.448
03/27/98	451	0	0.588	100000	0.588
03/28/98	452	0	0.756	100000	0.756
03/29/98	453	0.1016	0.252	100000	0.252
03/30/98	454	0.2032	0.28	100000	0.28
03/31/98	455	0	0.532	100000	0.532
04/01/98	456	0	0.756	100000	0.756

01/26/98	391	0	1.064	100000	0.3302
01/27/98	392	0	0.868	100000	0.2286
01/28/98	393	0	0.84	100000	0.381
01/29/98	394	0	0.98	100000	0.3048
01/30/98	395	0	0.84	100000	0.3048
01/31/98	396	0	1.008	100000	0.2794
02/01/98	397	0	0.84	100000	0.3048
02/02/98	398	0	0.812	100000	0.3048
02/03/98	399	0	0.784	100000	0.3048
02/04/98	400	0	0.812	100000	0.127
02/05/98	401	0	0.924	100000	0.127
02/06/98	402	0	1.008	100000	0.2794
02/07/98	403	0	1.008	100000	0.3302
02/08/98	404	0	1.232	100000	0.2032
02/09/98	405	0	1.26	100000	0.2286
02/10/98	406	0	0.616	100000	0.2032
02/11/98	407	0	0.644	100000	0.254
02/12/98	408	0	0.98	100000	0.3302
02/13/98	409	0	0.868	100000	0.3302
02/14/98	410	0	0.532	100000	0.3556
02/15/98	411	0	1.064	100000	0.0762
02/16/98	412	0	1.008	100000	0.2286
02/17/98	413	0	0.616	100000	0.254
02/18/98	414	0	0.924	100000	0.2794
02/19/98	415	0	0.924	100000	0.3556
02/20/98	416	0	1.064	100000	0.1524
02/21/98	417	0	1.008	100000	0.3302
02/22/98	418	0	0.952	100000	0.3302
02/23/98	419	0	0.924	100000	0.4064
02/24/98	420	0	1.036	100000	0.5842
02/25/98	421	0	1.008	100000	0.4064
02/26/98	422	0	1.092	100000	0.4064
02/27/98	423	0	0.728	100000	0.3302
02/28/98	424	0	1.036	100000	0.3556
03/01/98	425	0	1.036	100000	0.4064
03/02/98	426	0	1.176	100000	0.381
03/03/98	427	0	1.12	100000	0.508
03/04/98	428	0	1.064	100000	0.5334
03/05/98	429	0	1.036	100000	0.4572
03/06/98	430	0	1.036	100000	0.381
03/07/98	431	0	1.204	100000	0.2032
03/08/98	432	0	1.064	100000	0.4318
03/09/98	433	0	1.008	100000	0.4572
03/10/98	434	0	1.12	100000	0.4826
03/11/98	435	0.3556	0.7	100000	0.4826
03/12/98	436	0.6604	0.616	100000	0.4826
03/13/98	437	0	0.952	100000	0.508
03/14/98	438	0	0.7	100000	0.3556
03/15/98	**439**	0	0.98	100000	0.0508
03/16/98	440	0.0508	0.728	100000	0.3302
03/17/98	441	0.0762	0.84	100000	0.254
03/18/98	442	0	0.98	100000	0.3048
03/19/98	443	0	0.812	100000	0.4572
03/20/98	444	0	1.12	100000	0.4826
03/21/98	445	0	1.148	100000	0.5842
03/22/98	446	0	1.148	100000	0.6096
03/23/98	447	0	1.26	100000	0.635
03/24/98	448	0	1.008	100000	0.6858
03/25/98	449	0	1.008	100000	0.7366
03/26/98	450	0	1.092	100000	0.4064
03/27/98	451	0	1.148	100000	0.5334
03/28/98	452	0	1.064	100000	0.6858
03/29/98	453	0	1.092	100000	0.2286
03/30/98	454	0	1.12	100000	0.254
03/31/98	455	0	1.092	100000	0.4826
04/01/98	456	0	0.784	100000	0.6858

04/02/98	457	0	0.644	100000	0.644
04/03/98	458	0	0.672	100000	0.672
04/04/98	459	0	0.84	100000	0.84
04/05/98	460	0	0.756	100000	0.756
04/06/98	461	0	0.56	100000	0.56
04/07/98	462	0	0.588	100000	0.588
04/08/98	463	0	0.616	100000	0.616
04/09/98	464	0	0.728	100000	0.728
04/10/98	465	0	0.84	100000	0.84
04/11/98	466	0	1.008	100000	1.008
04/12/98	467	0	0.868	100000	0.868
04/13/98	468	0	0.784	100000	0.784
04/14/98	**469**	0.4064	0.84	100000	0.84
04/15/98	470	0.1016	0.42	100000	0.42
04/16/98	471	0	0.532	100000	0.532
04/17/98	472	0	0.532	100000	0.532
04/18/98	473	0	0.532	100000	0.532
04/19/98	474	0	0.7	100000	0.7
04/20/98	475	0	0.784	100000	0.784
04/21/98	476	0	0.784	100000	0.784
04/22/98	477	0	0.84	100000	0.84
04/23/98	478	0	0.784	100000	0.784
04/24/98	479	0	1.008	100000	1.008
04/25/98	480	0	0.756	100000	0.756
04/26/98	481	0.6096	0.42	100000	0.42
04/27/98	482	0	0.7	100000	0.7
04/28/98	483	0	0.756	100000	0.756
04/29/98	484	0	0.784	100000	0.784
04/30/98	485	0	0.84	100000	0.84
05/01/98	486	0	0.756	100000	0.756
05/02/98	487	0	0.924	100000	0.924
05/03/98	488	0	0.952	100000	0.952
05/04/98	489	0	0.98	100000	0.98
05/05/98	490	0	0.98	100000	0.98
05/06/98	491	0	0.896	100000	0.896
05/07/98	492	0	0.784	100000	0.784
05/08/98	493	0	0.532	100000	0.532
05/09/98	494	0	0.896	100000	0.896
05/10/98	495	0	1.008	100000	1.008
05/11/98	496	0	0.952	100000	0.952
05/12/98	497	0	0.952	100000	0.952
05/13/98	498	0	0.98	100000	0.98
05/14/98	**499**	0	0.784	100000	0.784
05/15/98	500	0	0.924	100000	0.924
05/16/98	501	0	1.008	100000	1.008
05/17/98	502	0	0.672	100000	0.672
05/18/98	503	0	0.868	100000	0.868
05/19/98	504	0	0.896	100000	0.896
05/20/98	505	0	0.644	100000	0.644
05/21/98	506	0	0.728	100000	0.728
05/22/98	507	0	1.008	100000	1.008
05/23/98	508	0	1.008	100000	1.008
05/24/98	509	0	0.98	100000	0.98
05/25/98	510	0	0.868	100000	0.868
05/26/98	511	0	0.98	100000	0.98
05/27/98	512	0	1.036	100000	1.036
05/28/98	513	0	1.064	100000	1.064
05/29/98	514	0	1.008	100000	1.008
05/30/98	515	0	1.064	100000	1.064
05/31/98	516	0	1.036	100000	1.036
06/01/98	517	0	1.12	100000	1.12
06/02/98	518	0	1.036	100000	1.036
06/03/98	519	0	1.12	100000	1.12
06/04/98	520	0	1.12	100000	1.12
06/05/98	521	0	1.008	100000	1.008
06/06/98	522	0	1.036	100000	1.036

04/02/98	457	0	0.924	100000	0.5842
04/03/98	458	0	1.008	100000	0.6096
04/04/98	459	0	0.924	100000	0.762
04/05/98	460	0.3556	0.672	100000	0.6858
04/06/98	461	0	0.784	100000	0.508
04/07/98	462	0	0.784	100000	0.5334
04/08/98	463	0	0.896	100000	0.5588
04/09/98	464	0	0.756	100000	0.6604
04/10/98	465	0	1.008	100000	0.762
04/11/98	466	0	1.036	100000	0.9144
04/12/98	467	0	1.092	100000	0.7874
04/13/98	468	0	0.98	100000	0.7112
04/14/98	**469**	0	0.924	100000	0.762
04/15/98	470	0	0.84	100000	0.381
04/16/98	471	0.1524	1.064	100000	0.4826
04/17/98	472	0	1.232	100000	0.4826
04/18/98	473	0	1.204	100000	0.4826
04/19/98	474	0	1.148	100000	0.635
04/20/98	475	0	0.98	100000	0.7112
04/21/98	476	0	0.924	100000	0.7112
04/22/98	477	0.0254	0.924	100000	0.762
04/23/98	478	0.0508	0.84	100000	0.7112
04/24/98	479	0.0508	0.7	100000	0.9144
04/25/98	480	0	0.98	100000	0.6858
04/26/98	481	0	0.868	100000	0.381
04/27/98	482	0.5334	0.924	100000	0.635
04/28/98	483	0	0.588	100000	0.6858
04/29/98	484	0	1.008	100000	0.7112
04/30/98	485	0	0.952	100000	0.762
05/01/98	486	0	0.98	100000	0.6858
05/02/98	487	0	0.672	100000	0.8382
05/03/98	488	0	0.56	100000	0.8636
05/04/98	489	0.0254	0.812	100000	0.889
05/05/98	490	0.0254	0.616	100000	0.889
05/06/98	491	1.8034	0.84	100000	0.8128
05/07/98	492	0.6604	0.84	100000	0.7112
05/08/98	493	0.0254	0.784	100000	0.4826
05/09/98	494	0.3048	0.616	100000	0.8128
05/10/98	495	0	0.868	100000	0.9144
05/11/98	496	0	0.952	100000	0.8636
05/12/98	497	0	0.952	100000	0.8636
05/13/98	498	0	0.98	100000	0.889
05/14/98	**499**	0	0.812	100000	0.7112
05/15/98	500	0	0.924	100000	0.8382
05/16/98	501	0.0508	0.868	100000	0.9144
05/17/98	502	0	0.952	100000	0.6096
05/18/98	503	0	0.896	100000	0.7874
05/19/98	504	0.0254	0.952	100000	0.8128
05/20/98	505	0	0.84	100000	0.5842
05/21/98	506	0	0.756	100000	0.6604
05/22/98	507	0.2794	0.504	100000	0.9144
05/23/98	508	0.0762	0.476	100000	0.9144
05/24/98	509	0.4826	0.588	100000	0.889
05/25/98	510	0.9906	0.588	100000	0.7874
05/26/98	511	0	0.868	100000	0.889
05/27/98	512	1.0922	0.896	100000	0.9398
05/28/98	513	0.0508	0.728	100000	0.9652
05/29/98	514	0.3048	0.56	100000	0.9144
05/30/98	515	0.1016	0.588	100000	0.9652
05/31/98	516	0.0254	0.896	100000	0.9398
06/01/98	517	0	1.008	100000	1.016
06/02/98	518	0.0254	0.84	100000	0.9398
06/03/98	519	0	0.784	100000	1.016
06/04/98	520	0	0.98	100000	1.016
06/05/98	521	0	0.952	100000	0.9144
06/06/98	522	0	0.952	100000	0.9398

06/07/98	523	0	1.176	100000	1.176
06/08/98	524	0	1.008	100000	1.008
06/09/98	525	0	0.896	100000	0.896
06/10/98	526	0.3048	0.476	100000	0.476
06/11/98	527	0	0.896	100000	0.896
06/12/98	528	0	0.98	100000	0.98
06/13/98	529	0	1.204	100000	1.204
06/14/98	**530**	0	1.12	100000	1.12
06/15/98	531	0	1.12	100000	1.12
06/16/98	532	0	1.176	100000	1.176
06/17/98	533	0	1.008	100000	1.008
06/18/98	534	0	1.092	100000	1.092
06/19/98	535	0	1.148	100000	1.148
06/20/98	536	0	1.148	100000	1.148
06/21/98	537	0	1.176	100000	1.176
06/22/98	538	0	1.176	100000	1.176
06/23/98	539	0	1.176	100000	1.176
06/24/98	540	0	1.036	100000	1.036
06/25/98	541	0	1.148	100000	1.148
06/26/98	542	0	1.204	100000	1.204
06/27/98	543	0	1.176	100000	1.176
06/28/98	544	0	1.176	100000	1.176
06/29/98	545	0	1.176	100000	1.176
06/30/98	546	0	1.148	100000	1.148
07/01/98	547	0.508	0.952	100000	0.952
07/02/98	548	2.0066	0.98	100000	0.98
07/03/98	549	0.4064	0.952	100000	0.952
07/04/98	550	0.889	0.476	100000	0.476
07/05/98	551	0	0.868	100000	0.868
07/06/98	552	0	0.756	100000	0.756
07/07/98	553	0	0.644	100000	0.644
07/08/98	554	1.2954	0.532	100000	0.532
07/09/98	555	0.3048	0.364	100000	0.364
07/10/98	556	0	0.896	100000	0.896
07/11/98	557	0	1.008	100000	1.008
07/12/98	558	0	1.036	100000	1.036
07/13/98	559	0	0.98	100000	0.98
07/14/98	**560**	0	1.008	100000	1.008
07/15/98	561	0	1.036	100000	1.036
07/16/98	562	0.3048	0.952	100000	0.952
07/17/98	563	0	0.728	100000	0.728
07/18/98	564	0	0.952	100000	0.952
07/19/98	565	0	1.008	100000	1.008
07/20/98	566	0	1.008	100000	1.008
07/21/98	567	0	1.064	100000	1.064
07/22/98	568	0.2032	0.672	100000	0.672
07/23/98	569	0	0.616	100000	0.616
07/24/98	570	5.1054	0.616	100000	0.616
07/25/98	571	0.1016	0.532	100000	0.532
07/26/98	572	0.4064	0.448	100000	0.448
07/27/98	573	0.1016	0.644	100000	0.644
07/28/98	574	0	0.644	100000	0.644
07/29/98	575	0	0.896	100000	0.896
07/30/98	576	0.4064	0.812	100000	0.812
07/31/98	577	0	0.672	100000	0.672
08/01/98	578	1.4986	0.672	100000	0.672
08/02/98	579	0	0.952	100000	0.952
08/03/98	580	0	0.896	100000	0.896
08/04/98	581	0	0.7	100000	0.7
08/05/98	582	0	0.756	100000	0.756
08/06/98	583	0	0.896	100000	0.896
08/07/98	584	0	0.952	100000	0.952
08/08/98	585	0	0.98	100000	0.98
08/09/98	586	0	0.924	100000	0.924
08/10/98	587	0	0.812	100000	0.812
08/11/98	588	0	0.672	100000	0.672

06/07/98	523	0.5842	0.896	100000	1.0668
06/08/98	524	0.1524	0.84	100000	0.9144
06/09/98	525	0	0.98	100000	0.8128
06/10/98	526	0	0.896	100000	0.4318
06/11/98	527	0.4572	1.008	100000	0.8128
06/12/98	528	0	0.84	100000	0.889
06/13/98	529	0.0508	0.784	100000	1.0922
06/14/98	**530**	0	0.728	100000	1.016
06/15/98	531	0.2286	0.896	100000	1.016
06/16/98	532	0.0508	0.896	100000	1.0668
06/17/98	533	0	0.896	100000	0.9144
06/18/98	534	0	0.812	100000	0.9906
06/19/98	535	0	0.84	100000	1.0414
06/20/98	536	0	0.616	100000	1.0414
06/21/98	537	0	0.672	100000	1.0668
06/22/98	538	2.1336	0.476	100000	1.0668
06/23/98	539	0	0.812	100000	1.0668
06/24/98	540	0	0.868	100000	0.9398
06/25/98	541	0	0.588	100000	1.0414
06/26/98	542	0	0.784	100000	1.0922
06/27/98	543	0	0.868	100000	1.0668
06/28/98	544	0	0.616	100000	1.0668
06/29/98	545	0	0.588	100000	1.0668
06/30/98	546	0	0.924	100000	1.0414
07/01/98	547	0	0.896	100000	0.8636
07/02/98	548	0.5842	0.476	100000	0.889
07/03/98	549	0.0254	0.504	100000	0.8636
07/04/98	550	0.254	0.616	100000	0.4318
07/05/98	551	0.127	0.616	100000	0.7874
07/06/98	552	0.2794	0.28	100000	0.6858
07/07/98	553	0.8382	0.616	100000	0.5842
07/08/98	554	0.0254	0.532	100000	0.4826
07/09/98	555	0	0.728	100000	0.3302
07/10/98	556	0	0.7	100000	0.8128
07/11/98	557	0	0.644	100000	0.9144
07/12/98	558	0.127	0.532	100000	0.9398
07/13/98	559	0.0254	0.672	100000	0.889
07/14/98	**560**	0	0.728	100000	0.9144
07/15/98	561	0	0.784	100000	0.9398
07/16/98	562	0	0.784	100000	0.8636
07/17/98	563	0	0.924	100000	0.6604
07/18/98	564	0	0.728	100000	0.8636
07/19/98	565	0	0.672	100000	0.9144
07/20/98	566	0	0.756	100000	0.9144
07/21/98	567	0	0.756	100000	0.9652
07/22/98	568	0	0.756	100000	0.6096
07/23/98	569	0	0.784	100000	0.5588
07/24/98	570	0	0.756	100000	0.5588
07/25/98	571	0	0.756	100000	0.4826
07/26/98	572	0	0.644	100000	0.4064
07/27/98	573	0	0.7	100000	0.5842
07/28/98	574	0	0.644	100000	0.5842
07/29/98	575	0	0.728	100000	0.8128
07/30/98	576	0	0.7	100000	0.7366
07/31/98	577	0	0.672	100000	0.6096
08/01/98	578	0	0.756	100000	0.6096
08/02/98	579	0	0.728	100000	0.8636
08/03/98	580	0	0.7	100000	0.8128
08/04/98	581	0.1778	0.588	100000	0.635
08/05/98	582	0.5334	0.112	100000	0.6858
08/06/98	583	0	0.392	100000	0.8128
08/07/98	584	0	0.448	100000	0.8636
08/08/98	585	0	0.504	100000	0.889
08/09/98	586	0	0.616	100000	0.8382
08/10/98	587	0	0.644	100000	0.7366
08/11/98	588	0	0.616	100000	0.6096

08/12/98	589	0	0.728	100000	0.728
08/13/98	590	0	0.896	100000	0.896
08/14/98	**591**	0	0.924	100000	0.924
08/15/98	592	0	0.98	100000	0.98
08/16/98	593	0	0.896	100000	0.896
08/17/98	594	0	0.98	100000	0.98
08/18/98	595	0	0.868	100000	0.868
08/19/98	596	0	0.868	100000	0.868
08/20/98	597	0	0.84	100000	0.84
08/21/98	598	0	0.644	100000	0.644
08/22/98	599	0	0.84	100000	0.84
08/23/98	600	0	0.868	100000	0.868
08/24/98	601	0	0.924	100000	0.924
08/25/98	602	0	0.784	100000	0.784
08/26/98	603	0	0.756	100000	0.756
08/27/98	604	0	0.784	100000	0.784
08/28/98	605	0	0.784	100000	0.784
08/29/98	606	0	0.784	100000	0.784
08/30/98	607	0	0.784	100000	0.784
08/31/98	608	0	0.784	100000	0.784
09/01/98	609	0	0.756	100000	0.756
09/02/98	610	0	0.784	100000	0.784
09/03/98	611	0	0.812	100000	0.812
09/04/98	612	0	0.728	100000	0.728
09/05/98	613	0	0.756	100000	0.756
09/06/98	614	0	0.784	100000	0.784
09/07/98	615	0	0.42	100000	0.42
09/08/98	616	0	0.756	100000	0.756
09/09/98	617	0	0.784	100000	0.784
09/10/98	618	0	0.756	100000	0.756
09/11/98	619	0	0.784	100000	0.784
09/12/98	620	0	0.784	100000	0.784
09/13/98	**621**	0	0.784	100000	0.784
09/14/98	622	0	0.812	100000	0.812
09/15/98	623	0.2032	0.728	100000	0.728
09/16/98	624	0	0.7	100000	0.7
09/17/98	625	0	0.728	100000	0.728
09/18/98	626	0	0.756	100000	0.756
09/19/98	627	0	0.784	100000	0.784
09/20/98	628	0	0.728	100000	0.728
09/21/98	629	0	0.784	100000	0.784
09/22/98	630	0	0.756	100000	0.756
09/23/98	631	0	0.756	100000	0.756
09/24/98	632	0	0.728	100000	0.728
09/25/98	633	0	0.812	100000	0.812
09/26/98	634	0	0.784	100000	0.784
09/27/98	635	0	0.812	100000	0.812
09/28/98	636	0	0.784	100000	0.784
09/29/98	637	0.3048	0.28	100000	0.28
09/30/98	638	1.8034	0.476	100000	0.476
10/01/98	639	0.1016	0.532	100000	0.532
10/02/98	640	0	0.672	100000	0.672
10/03/98	641	0	0.7	100000	0.7
10/04/98	642	0	0.728	100000	0.728
10/05/98	643	0	0.616	100000	0.616
10/06/98	644	0	0.56	100000	0.56
10/07/98	645	0	0.616	100000	0.616
10/08/98	646	0	0.588	100000	0.588
10/09/98	647	0	0.644	100000	0.644
10/10/98	648	0	0.672	100000	0.672
10/11/98	649	0	0.7	100000	0.7
10/12/98	650	0	0.644	100000	0.644
10/13/98	651	0	0.588	100000	0.588
10/14/98	652	0	0.644	100000	0.644
10/15/98	653	0	0.7	100000	0.7
10/16/98	654	0	0.644	100000	0.644

08/12/98	589	0	0.588	100000	0.6604
08/13/98	590	0	0.616	100000	0.8128
08/14/98	**591**	0	0.644	100000	0.8382
08/15/98	592	0	0.476	100000	0.889
08/16/98	593	0	0.616	100000	0.8128
08/17/98	594	0	0.728	100000	0.889
08/18/98	595	0	0.476	100000	0.7874
08/19/98	596	0	0.56	100000	0.7874
08/20/98	597	0	0.7	100000	0.762
08/21/98	598	0	0.504	100000	0.5842
08/22/98	599	0	0.42	100000	0.762
08/23/98	600	0	0.56	100000	0.7874
08/24/98	601	0	0.588	100000	0.8382
08/25/98	602	0	0.644	100000	0.7112
08/26/98	603	0	0.532	100000	0.6858
08/27/98	604	0	0.504	100000	0.7112
08/28/98	605	0	0.504	100000	0.7112
08/29/98	606	0	0.616	100000	0.7112
08/30/98	607	0	0.588	100000	0.7112
08/31/98	608	0	0.616	100000	0.7112
09/01/98	609	0	0.56	100000	0.6858
09/02/98	610	0	0.672	100000	0.7112
09/03/98	611	0	0.588	100000	0.7366
09/04/98	612	0	0.532	100000	0.6604
09/05/98	613	0	0.532	100000	0.6858
09/06/98	614	0	0.448	100000	0.7112
09/07/98	615	0	0.476	100000	0.381
09/08/98	616	0	0.448	100000	0.6858
09/09/98	617	0	0.476	100000	0.7112
09/10/98	618	0	0.42	100000	0.6858
09/11/98	619	0	0.392	100000	0.7112
09/12/98	620	0	0.392	100000	0.7112
09/13/98	**621**	0	0.364	100000	0.7112
09/14/98	622	0	0.42	100000	0.7366
09/15/98	623	0	0.42	100000	0.6604
09/16/98	624	0	0.476	100000	0.635
09/17/98	625	0	0.448	100000	0.6604
09/18/98	626	0	0.42	100000	0.6858
09/19/98	627	0	0.336	100000	0.7112
09/20/98	628	0	0.476	100000	0.6604
09/21/98	629	0	0.392	100000	0.7112
09/22/98	630	0.0508	0.28	100000	0.6858
09/23/98	631	0	0.28	100000	0.6858
09/24/98	632	0	0.28	100000	0.6604
09/25/98	633	0	0.336	100000	0.7366
09/26/98	634	0.0254	0.392	100000	0.7112
09/27/98	635	0	0.224	100000	0.7366
09/28/98	636	0	0.28	100000	0.7112
09/29/98	637	0	0.336	100000	0.254
09/30/98	638	0	0.364	100000	0.4318
10/01/98	639	0	0.336	100000	0.4826
10/02/98	640	0	0.448	100000	0.6096
10/03/98	641	0	0.364	100000	0.635
10/04/98	642	0	0.308	100000	0.6604
10/05/98	643	0	0.364	100000	0.5588
10/06/98	644	0	0.364	100000	0.508
10/07/98	645	0	0.308	100000	0.5588
10/08/98	646	0	0.28	100000	0.5334
10/09/98	647	0	0.14	100000	0.5842
10/10/98	648	0	0.056	100000	0.6096
10/11/98	649	0	0.196	100000	0.635
10/12/98	650	0	0.224	100000	0.5842
10/13/98	651	0	0.308	100000	0.5334
10/14/98	652	0.2032	0.056	100000	0.5842
10/15/98	653	0	0.196	100000	0.635
10/16/98	654	0	0.196	100000	0.5842

10/17/98	655	0	0.476	100000	0.476
10/18/98	656	0	0.504	100000	0.504
10/19/98	657	0.2032	0.308	100000	0.308
10/20/98	658	0.9906	0.168	100000	0.168
10/21/98	659	0	0.112	100000	0.112
10/22/98	660	0	0.14	100000	0.14
10/23/98	661	0.1016	0.336	100000	0.336
10/24/98	662	0	0.392	100000	0.392
10/25/98	663	0	0.308	100000	0.308
10/26/98	664	0.6096	0.196	100000	0.196
10/27/98	665	1.4986	0.112	100000	0.112
10/28/98	666	0	0.42	100000	0.42
10/29/98	667	0	0.42	100000	0.42
10/30/98	668	0.1016	0.168	100000	0.168
10/31/98	669	0.508	0.14	100000	0.14
11/01/98	670	0	0.224	100000	0.224
11/02/98	671	0	0.364	100000	0.364
11/03/98	672	0	0.364	100000	0.364
11/04/98	673	0	0.336	100000	0.336
11/05/98	674	0	0.252	100000	0.252
11/06/98	675	0	0.392	100000	0.392
11/07/98	676	0	0.392	100000	0.392
11/08/98	677	0	0.392	100000	0.392
11/09/98	678	0.4064	0.224	100000	0.224
11/10/98	679	0	0.308	100000	0.308
11/11/98	680	0	0.252	100000	0.252
11/12/98	681	0.1016	0.084	100000	0.084
11/13/98	682	0.1016	0.336	100000	0.336
11/14/98	683	0	0.364	100000	0.364
11/15/98	684	0	0.364	100000	0.364
11/16/98	685	0	0.392	100000	0.392
11/17/98	686	0	0.336	100000	0.336
11/18/98	687	0	0.336	100000	0.336
11/19/98	688	0	0.308	100000	0.308
11/20/98	689	0	0.252	100000	0.252
11/21/98	690	0	0.336	100000	0.336
11/22/98	691	0	0.364	100000	0.364
11/23/98	692	0	0.392	100000	0.392
11/24/98	693	0	0.392	100000	0.392
11/25/98	694	0	0.392	100000	0.392
11/26/98	695	0	0.364	100000	0.364
11/27/98	696	0	0.364	100000	0.364
11/28/98	697	0	0.28	100000	0.28
11/29/98	698	0.4064	0.168	100000	0.168
11/30/98	699	0	0.28	100000	0.28
12/01/98	700	0	0.308	100000	0.308
12/02/98	701	0.1016	0.112	100000	0.112
12/03/98	702	0	0.252	100000	0.252
12/04/98	703	0	0.28	100000	0.28
12/05/98	704	0	0.392	100000	0.392
12/06/98	705	0	0.14	100000	0.14
12/07/98	706	0.6096	0.168	100000	0.168
12/08/98	707	0	0.196	100000	0.196
12/09/98	708	0	0.14	100000	0.14
12/10/98	709	0	0.168	100000	0.168
12/11/98	710	0	0.224	100000	0.224
12/12/98	**711**	0	0.252	100000	0.252
12/13/98	712	0	0.252	100000	0.252
12/14/98	713	0	0.252	100000	0.252
12/15/98	714	0	0.28	100000	0.28
12/16/98	715	0	0.308	100000	0.308
12/17/98	716	0	0.28	100000	0.28
12/18/98	717	0	0.336	100000	0.336
12/19/98	718	0	0.168	100000	0.168
12/20/98	719	0	0.42	100000	0.42
12/21/98	720	0	0.308	100000	0.308

10/17/98	655	0	0.14	100000	0.4318
10/18/98	656	0	0.252	100000	0.4572
10/19/98	657	0	0.28	100000	0.2794
10/20/98	658	0	0.392	100000	0.1524
10/21/98	659	0	0.336	100000	0.1016
10/22/98	660	0	0.308	100000	0.127
10/23/98	661	0	0.308	100000	0.3048
10/24/98	662	0	0.364	100000	0.3556
10/25/98	663	0	0.364	100000	0.2794
10/26/98	664	0	0.336	100000	0.1778
10/27/98	665	0	0.336	100000	0.1016
10/28/98	666	0	0.308	100000	0.381
10/29/98	667	0	0.392	100000	0.381
10/30/98	668	0	0.392	100000	0.1524
10/31/98	669	0	0.504	100000	0.127
11/01/98	670	0	0.336	100000	0.2032
11/02/98	671	0	0.42	100000	0.3302
11/03/98	672	0	0.392	100000	0.3302
11/04/98	673	0	0.364	100000	0.3048
11/05/98	674	0	0.476	100000	0.2286
11/06/98	675	0	0.392	100000	0.3556
11/07/98	676	0	0.476	100000	0.3556
11/08/98	677	0	0.448	100000	0.3556
11/09/98	678	0	0.476	100000	0.2032
11/10/98	679	0	0.588	100000	0.2794
11/11/98	680	0	0.42	100000	0.2286
11/12/98	681	0	0.588	100000	0.0762
11/13/98	682	0	0.42	100000	0.3048
11/14/98	683	0	0.56	100000	0.3302
11/15/98	684	0	0.504	100000	0.3302
11/16/98	685	0	0.476	100000	0.3556
11/17/98	686	0	0.084	100000	0.3048
11/18/98	687	0	0.28	100000	0.3048
11/19/98	688	0	0.392	100000	0.2794
11/20/98	689	0	0.532	100000	0.2286
11/21/98	690	0	0.42	100000	0.3048
11/22/98	691	0	0.448	100000	0.3302
11/23/98	692	0	0.364	100000	0.3556
11/24/98	693	0	0.364	100000	0.3556
11/25/98	694	0	0.476	100000	0.3556
11/26/98	695	0	0.448	100000	0.3302
11/27/98	696	0	0.476	100000	0.3302
11/28/98	697	0	0.532	100000	0.254
11/29/98	698	0	0.952	100000	0.1524
11/30/98	699	0	0.504	100000	0.254
12/01/98	700	0	0.448	100000	0.2794
12/02/98	701	0	0.56	100000	0.1016
12/03/98	702	0	0.56	100000	0.2286
12/04/98	703	0	0.644	100000	0.254
12/05/98	704	0	0.42	100000	0.3556
12/06/98	705	0	0.504	100000	0.127
12/07/98	706	0	0.616	100000	0.1524
12/08/98	707	0	0.7	100000	0.1778
12/09/98	708	0	0.644	100000	0.127
12/10/98	709	0	0.616	100000	0.1524
12/11/98	710	0	0.672	100000	0.2032
12/12/98	**711**	0	0.56	100000	0.2286
12/13/98	712	0	0.56	100000	0.2286
12/14/98	713	0	0.42	100000	0.2286
12/15/98	714	0	0.56	100000	0.254
12/16/98	715	0	0.616	100000	0.2794
12/17/98	716	0	0.644	100000	0.254
12/18/98	717	0	0.784	100000	0.3048
12/19/98	718	0	0.756	100000	0.1524
12/20/98	719	0	0.756	100000	0.381
12/21/98	720	0	0.7	100000	0.2794

12/22/98	721	0	0.168	100000	0.168
12/23/98	722	0	0.168	100000	0.168
12/24/98	723	0	0.224	100000	0.224
12/25/98	724	0	0.252	100000	0.252
12/26/98	725	0	0.224	100000	0.224
12/27/98	726	0	0.252	100000	0.252
12/28/98	727	0	0.336	100000	0.336
12/29/98	728	0	0.308	100000	0.308
12/30/98	729	0	0.308	100000	0.308
12/31/98	730	0	0.28	100000	0.28
01/01/99	731	0	0.224	100000	0.224
01/02/99	732	0	0.252	100000	0.252
01/03/99	733	0	0.252	100000	0.252
01/04/99	734	0	0.252	100000	0.252
01/05/99	735	0	0.308	100000	0.308
01/06/99	736	0	0.308	100000	0.308
01/07/99	737	0	0.196	100000	0.196
01/08/99	738	0	0.308	100000	0.308
01/09/99	739	0	0.28	100000	0.28
01/10/99	740	0	0.308	100000	0.308
01/11/99	741	0	0.308	100000	0.308
01/12/99	742	0	0.364	100000	0.364
01/13/99	743	0	0.308	100000	0.308
01/14/99	744	0	0.308	100000	0.308
01/15/99	745	0	0.336	100000	0.336
01/16/99	746	0	0.168	100000	0.168
01/17/99	747	0	0.392	100000	0.392
01/18/99	748	0	0.364	100000	0.364
01/19/99	749	0	0.392	100000	0.392
01/20/99	750	0	0.308	100000	0.308
01/21/99	751	0.2032	0.196	100000	0.196
01/22/99	752	0	0.336	100000	0.336
01/23/99	753	0	0.336	100000	0.336
01/24/99	754	0	0.28	100000	0.28
01/25/99	755	0	0.308	100000	0.308
01/26/99	756	0	0.42	100000	0.42
01/27/99	757	0	0.308	100000	0.308
01/28/99	758	0	0.308	100000	0.308
01/29/99	759	0	0.14	100000	0.14
01/30/99	760	0	0.308	100000	0.308
01/31/99	761	0	0.364	100000	0.364
02/01/99	762	0	0.42	100000	0.42
02/02/99	763	0	0.336	100000	0.336
02/03/99	764	0	0.42	100000	0.42
02/04/99	765	0	0.224	100000	0.224
02/05/99	766	0	0.224	100000	0.224
02/06/99	767	0	0.364	100000	0.364
02/07/99	768	0	0.392	100000	0.392
02/08/99	769	0	0.42	100000	0.42
02/09/99	770	0	0.476	100000	0.476
02/10/99	771	0	0.644	100000	0.644
02/11/99	772	0	0.364	100000	0.364
02/12/99	773	0	0.392	100000	0.392
02/13/99	774	0	0.448	100000	0.448
02/14/99	775	0	0.448	100000	0.448
02/15/99	776	0	0.504	100000	0.504
02/16/99	777	0	0.336	100000	0.336
02/17/99	778	0	0.448	100000	0.448
02/18/99	779	0	0.476	100000	0.476
02/19/99	780	0	0.532	100000	0.532
02/20/99	781	0	0.448	100000	0.448
02/21/99	782	0	0.504	100000	0.504
02/22/99	783	0	0.56	100000	0.56
02/23/99	784	0	0.476	100000	0.476
02/24/99	785	0	0.532	100000	0.532
02/25/99	786	0	0.392	100000	0.392

12/22/98	721	0	0.7	100000	0.1524
12/23/98	722	0	0.56	100000	0.1524
12/24/98	723	0	0.616	100000	0.2032
12/25/98	724	0	0.616	100000	0.2286
12/26/98	725	0	0.756	100000	0.2032
12/27/98	726	0	0.7	100000	0.2286
12/28/98	727	0	0.84	100000	0.3048
12/29/98	728	0	0.448	100000	0.2794
12/30/98	729	0	0.532	100000	0.2794
12/31/98	730	0	0.672	100000	0.254
01/01/99	731	0	0.588	100000	0.392
01/02/99	732	0	0.756	100000	0.336
01/03/99	733	0.6096	0.28	100000	0.308
01/04/99	734	0.1016	0.252	100000	0.308
01/05/99	735	0	0.504	100000	0.364
01/06/99	736	0	0.672	100000	0.364
01/07/99	737	0	0.812	100000	0.336
01/08/99	738	0	0.812	100000	0.336
01/09/99	739	0	0.812	100000	0.308
01/10/99	740	0	0.756	100000	0.392
01/11/99	741	0	0.588	100000	0.392
01/12/99	742	0.5842	0.448	100000	0.504
01/13/99	743	0.0254	0.672	100000	0.336
01/14/99	744	0	0.756	100000	0.42
01/15/99	745	0	0.84	100000	0.392
01/16/99	746	0	0.812	100000	0.364
01/17/99	747	0	1.036	100000	0.476
01/18/99	748	0	1.008	100000	0.392
01/19/99	749	0	0.476	100000	0.476
01/20/99	750	0	0.2286	100000	0.448
01/21/99	751	0	0.588	100000	0.476
01/22/99	752	0	0.7	100000	0.588
01/23/99	753	0	0.868	100000	0.42
01/24/99	754	0	0.98	100000	0.588
01/25/99	755	0	0.784	100000	0.42
01/26/99	756	0	1.064	100000	0.56
01/27/99	757	0	0.868	100000	0.504
01/28/99	758	0	0.84	100000	0.476
01/29/99	759	0	0.98	100000	0.084
01/30/99	760	0	0.84	100000	0.28
01/31/99	761	0	1.008	100000	0.392
02/01/99	762	0	0.84	100000	0.532
02/02/99	763	0	0.812	100000	0.42
02/03/99	764	0	0.784	100000	0.448
02/04/99	765	0	0.812	100000	0.364
02/05/99	766	0	0.924	100000	0.364
02/06/99	767	0	1.008	100000	0.476
02/07/99	768	0	1.008	100000	0.448
02/08/99	769	0	1.232	100000	0.476
02/09/99	770	0	1.26	100000	0.532
02/10/99	771	0	0.616	100000	0.952
02/11/99	772	0	0.644	100000	0.504
02/12/99	773	0	0.98	100000	0.448
02/13/99	774	0	0.868	100000	0.56
02/14/99	775	0	0.532	100000	0.56
02/15/99	776	0	1.064	100000	0.644
02/16/99	777	0	1.008	100000	0.42
02/17/99	778	0	0.616	100000	0.504
02/18/99	779	0	0.924	100000	0.616
02/19/99	780	0	0.924	100000	0.7
02/20/99	781	0	1.064	100000	0.644
02/21/99	782	0	1.008	100000	0.616
02/22/99	783	0	0.952	100000	0.672
02/23/99	784	0	0.924	100000	0.56
02/24/99	785	0	1.036	100000	0.56
02/25/99	786	0	1.008	100000	0.42

02/26/99	787	0	0.532	100000	0.532
02/27/99	788	0	0.532	100000	0.532
02/28/99	789	0	0.588	100000	0.588
03/01/99	790	0	0.644	100000	0.644
03/02/99	791	0	0.588	100000	0.588
03/03/99	792	0	0.644	100000	0.644
03/04/99	793	0	0.644	100000	0.644
03/05/99	794	0	0.672	100000	0.672
03/06/99	795	0	0.504	100000	0.504
03/07/99	796	0	0.588	100000	0.588
03/08/99	797	0	0.56	100000	0.56
03/09/99	798	0	0.588	100000	0.588
03/10/99	799	0	0.616	100000	0.616
03/11/99	800	0	0.56	100000	0.56
03/12/99	801	0.2032	0.308	100000	0.308
03/13/99	802	0.8128	0.308	100000	0.308
03/14/99	803	0	0.56	100000	0.56
03/15/99	**804**	0	0.6	100000	0.6
03/16/99	805	0	0.6	100000	0.6
03/17/99	806	0.9906	0.6	100000	0.6
03/18/99	807	0.508	0.6	100000	0.6
03/19/99	808	0.1016	0.6	100000	0.6
03/20/99	809	0	0.6	100000	0.6
03/21/99	810	0	0.6	100000	0.6
03/22/99	811	0	0.6	100000	0.6
03/23/99	812	0	0.6	100000	0.6
03/24/99	813	0	0.6	100000	0.6
03/25/99	814	0	0.6	100000	0.6
03/26/99	815	0.4064	0.6	100000	0.6
03/27/99	816	0	0.6	100000	0.6
03/28/99	817	0	0.6	100000	0.6
03/29/99	818	0	0.6	100000	0.6
03/30/99	819	0	0.6	100000	0.6
03/31/99	820	0	0.6	100000	0.6
04/01/99	821	0	0.6	100000	0.6
04/02/99	822	0.2032	0.6	100000	0.6
04/03/99	823	0	0.6	100000	0.6
04/04/99	824	0	0.6	100000	0.6
04/05/99	825	0	0.6	100000	0.6
04/06/99	826	0	0.6	100000	0.6
04/07/99	827	0	0.6	100000	0.6
04/08/99	828	0	0.6	100000	0.6
04/09/99	829	0	0.6	100000	0.6
04/10/99	830	0	0.6	100000	0.6
04/11/99	831	0	0.6	100000	0.6
04/12/99	832	0	0.6	100000	0.6
04/13/99	833	0	0.6	100000	0.6
04/14/99	834	0	0.6	100000	0.6
04/15/99	835	0	0.6	100000	0.6
04/16/99	836	0	0.6	100000	0.6
04/17/99	837	0	0.6	100000	0.6
04/18/99	838	0	0.6	100000	0.6
04/19/99	839	0	0.6	100000	0.6
04/20/99	840	0	0.6	100000	0.6
04/21/99	841	0	0.6	100000	0.6
04/22/99	842	0	0.6	100000	0.6
04/23/99	843	0	0.6	100000	0.6
04/24/99	844	1.2954	0.6	100000	0.6
04/25/99	845	0.2032	0.6	100000	0.6
04/26/99	846	0	0.6	100000	0.6
04/27/99	847	0	0.6	100000	0.6
04/28/99	848	0	0.6	100000	0.6
04/29/99	849	0.1016	0.6	100000	0.6
04/30/99	850	0	0.6	100000	0.6
05/01/99	851	0.1016	0.6	100000	0.6
05/02/99	852	0	0.6	100000	0.6

02/26/99	787	0	1.092	100000	0.56
02/27/99	788	0	0.728	100000	0.616
02/28/99	789	0	1.036	100000	0.644
03/01/99	790	0	1.036	100000	0.784
03/02/99	791	0	1.176	100000	0.756
03/03/99	792	0	1.12	100000	0.756
03/04/99	793	0	1.064	100000	0.7
03/05/99	794	0	1.036	100000	0.7
03/06/99	795	0	1.036	100000	0.56
03/07/99	796	0	1.204	100000	0.616
03/08/99	797	0	1.064	100000	0.616
03/09/99	798	0	1.008	100000	0.756
03/10/99	799	0	1.12	100000	0.7
03/11/99	800	0.3556	0.7	100000	0.84
03/12/99	801	0.6604	0.616	100000	0.448
03/13/99	802	0	0.952	100000	0.532
03/14/99	803	0	0.7	100000	0.672
03/15/99	**804**	0	0.98	100000	0.588
03/16/99	805	0.0508	0.728	100000	0.756
03/17/99	806	0.0762	0.84	100000	0.28
03/18/99	807	0	0.98	100000	0.252
03/19/99	808	0	0.812	100000	0.504
03/20/99	809	0	1.12	100000	0.672
03/21/99	810	0	1.148	100000	0.812
03/22/99	811	0	1.148	100000	0.812
03/23/99	812	0	1.26	100000	0.812
03/24/99	813	0	1.008	100000	0.756
03/25/99	814	0	1.008	100000	0.588
03/26/99	815	0	1.092	100000	0.448
03/27/99	816	0	1.148	100000	0.672
03/28/99	817	0	1.064	100000	0.756
03/29/99	818	0	1.092	100000	0.84
03/30/99	819	0	1.12	100000	0.812
03/31/99	820	0	1.092	100000	1.036
04/01/99	821	0	0.784	100000	1.008
04/02/99	822	0	0.924	100000	0.476
04/03/99	823	0	1.008	100000	0.2286
04/04/99	824	0	0.924	100000	0.588
04/05/99	825	0.3556	0.672	100000	0.7
04/06/99	826	0	0.784	100000	0.868
04/07/99	827	0	0.784	100000	0.98
04/08/99	828	0	0.896	100000	0.784
04/09/99	829	0	0.756	100000	1.064
04/10/99	830	0	1.008	100000	0.868
04/11/99	831	0	1.036	100000	0.84
04/12/99	832	0	1.092	100000	0.98
04/13/99	833	0	0.98	100000	0.84
04/14/99	834	0	0.924	100000	1.008
04/15/99	835	0	0.84	100000	0.84
04/16/99	836	0.1524	1.064	100000	0.812
04/17/99	837	0	1.232	100000	0.784
04/18/99	838	0	1.204	100000	0.812
04/19/99	839	0	1.148	100000	0.924
04/20/99	840	0	0.98	100000	1.008
04/21/99	841	0	0.924	100000	1.008
04/22/99	842	0.0254	0.924	100000	1.232
04/23/99	843	0.0508	0.84	100000	1.26
04/24/99	844	0.0508	0.7	100000	0.616
04/25/99	845	0	0.98	100000	0.644
04/26/99	846	0	0.868	100000	0.98
04/27/99	847	0.5334	0.924	100000	0.868
04/28/99	848	0	0.588	100000	0.532
04/29/99	849	0	1.008	100000	1.064
04/30/99	850	0	0.952	100000	1.008
05/01/99	851	0	0.98	100000	0.616
05/02/99	852	0	0.672	100000	0.924

05/03/99	853	0	0.6	100000	0.6
05/04/99	854	0	0.6	100000	0.6
05/05/99	855	0	0.6	100000	0.6
05/06/99	856	0	0.6	100000	0.6
05/07/99	857	0	0.6	100000	0.6
05/08/99	858	0	0.6	100000	0.6
05/09/99	859	0	0.6	100000	0.6
05/10/99	860	0	0.6	100000	0.6
05/11/99	861	0	0.6	100000	0.6
05/12/99	862	0	0.6	100000	0.6
05/13/99	863	0	0.6	100000	0.6
05/14/99	864	0	0.6	100000	0.6
05/15/99	865	0	0.6	100000	0.6
05/16/99	866	0	0.6	100000	0.6
05/17/99	867	0	0.6	100000	0.6
05/18/99	868	0	0.6	100000	0.6
05/19/99	869	0	0.6	100000	0.6
05/20/99	870	0	0.6	100000	0.6
05/21/99	871	0	0.6	100000	0.6
05/22/99	872	0.1016	0.6	100000	0.6
05/23/99	873	0.3048	0.6	100000	0.6
05/24/99	874	1.905	0.6	100000	0.6
05/25/99	875	0.1016	0.6	100000	0.6
05/26/99	876	0	0.6	100000	0.6
05/27/99	877	0	0.6	100000	0.6
05/28/99	878	0	0.6	100000	0.6
05/29/99	879	0	0.6	100000	0.6
05/30/99	880	0	0.6	100000	0.6
05/31/99	881	0	0.6	100000	0.6
06/01/99	882	0	0.6	100000	0.6
06/02/99	883	0	0.6	100000	0.6
06/03/99	884	0	0.6	100000	0.6
06/04/99	885	0	0.6	100000	0.6
06/05/99	886	0	0.6	100000	0.6
06/06/99	887	0	0.6	100000	0.6
06/07/99	888	0	0.6	100000	0.6
06/08/99	889	0	0.6	100000	0.6
06/09/99	890	0	0.6	100000	0.6
06/10/99	891	0	0.6	100000	0.6
06/11/99	892	0	0.6	100000	0.6
06/12/99	893	0	0.6	100000	0.6
06/13/99	894	0	0.6	100000	0.6
06/14/99	895	0	0.6	100000	0.6
06/15/99	896	0.7112	0.6	100000	0.6
06/16/99	897	0.1016	0.6	100000	0.6
06/17/99	898	0	0.6	100000	0.6
06/18/99	899	0.1016	0.6	100000	0.6
06/19/99	900	0	0.6	100000	0.6
06/20/99	901	0	0.6	100000	0.6
06/21/99	902	1.7018	0.6	100000	0.6
06/22/99	903	0	0.6	100000	0.6
06/23/99	904	0	0.6	100000	0.6
06/24/99	905	0	0.6	100000	0.6
06/25/99	906	0	0.6	100000	0.6
06/26/99	907	0	0.6	100000	0.6
06/27/99	908	0	0.6	100000	0.6
06/28/99	909	0	0.6	100000	0.6
06/29/99	910	0	0.6	100000	0.6
06/30/99	911	0	0.6	100000	0.6
07/01/99	912	0	0.6	100000	0.6
07/02/99	913	0	0.6	100000	0.6
07/03/99	914	0	0.6	100000	0.6
07/04/99	915	0	0.6	100000	0.6
07/05/99	916	1.2954	0.6	100000	0.6
07/06/99	917	0	0.6	100000	0.6
07/07/99	918	0.7112	0.6	100000	0.6

05/03/99	853	0	0.56	100000	0.924
05/04/99	854	0.0254	0.812	100000	1.064
05/05/99	855	0.0254	0.616	100000	1.008
05/06/99	856	1.8034	0.84	100000	0.952
05/07/99	857	0.6604	0.84	100000	0.924
05/08/99	858	0.0254	0.784	100000	1.036
05/09/99	859	0.3048	0.616	100000	1.008
05/10/99	860	0	0.868	100000	1.092
05/11/99	861	0	0.952	100000	0.728
05/12/99	862	0	0.952	100000	1.036
05/13/99	863	0	0.98	100000	1.036
05/14/99	864	0	0.812	100000	1.176
05/15/99	865	0	0.924	100000	1.12
05/16/99	866	0.0508	0.868	100000	1.064
05/17/99	867	0	0.952	100000	1.036
05/18/99	868	0	0.896	100000	1.036
05/19/99	869	0.0254	0.952	100000	1.204
05/20/99	870	0	0.84	100000	1.064
05/21/99	871	0	0.756	100000	1.008
05/22/99	872	0.2794	0.504	100000	1.12
05/23/99	873	0.0762	0.476	100000	0.7
05/24/99	874	0.4826	0.588	100000	0.616
05/25/99	875	0.9906	0.588	100000	0.952
05/26/99	876	0	0.868	100000	0.7
05/27/99	877	1.0922	0.896	100000	0.98
05/28/99	878	0.0508	0.728	100000	0.728
05/29/99	879	0.3048	0.56	100000	0.84
05/30/99	880	0.1016	0.588	100000	0.98
05/31/99	881	0.0254	0.896	100000	0.812
06/01/99	882	0	1.008	100000	1.12
06/02/99	883	0.0254	0.84	100000	1.148
06/03/99	884	0	0.784	100000	1.148
06/04/99	885	0	0.98	100000	1.26
06/05/99	886	0	0.952	100000	1.008
06/06/99	887	0	0.952	100000	1.008
06/07/99	888	0.5842	0.896	100000	1.092
06/08/99	889	0.1524	0.84	100000	1.148
06/09/99	890	0	0.98	100000	1.064
06/10/99	891	0	0.896	100000	1.092
06/11/99	892	0.4572	1.008	100000	1.12
06/12/99	893	0	0.84	100000	1.092
06/13/99	894	0.0508	0.784	100000	0.784
06/14/99	895	0	0.728	100000	0.924
06/15/99	896	0.2286	0.896	100000	1.008
06/16/99	897	0.0508	0.896	100000	0.924
06/17/99	898	0	0.896	100000	0.672
06/18/99	899	0	0.812	100000	0.784
06/19/99	900	0	0.84	100000	0.784
06/20/99	901	0	0.616	100000	0.896
06/21/99	902	0	0.672	100000	0.756
06/22/99	903	2.1336	0.476	100000	1.008
06/23/99	904	0	0.812	100000	1.036
06/24/99	905	0	0.868	100000	1.092
06/25/99	906	0	0.588	100000	0.98
06/26/99	907	0	0.784	100000	0.924
06/27/99	908	0	0.868	100000	0.84
06/28/99	909	0	0.616	100000	1.064
06/29/99	910	0	0.588	100000	1.232
06/30/99	911	0	0.924	100000	1.204
07/01/99	912	0	0.896	100000	1.148
07/02/99	913	0.5842	0.476	100000	0.98
07/03/99	914	0.0254	0.504	100000	0.924
07/04/99	915	0.254	0.616	100000	0.924
07/05/99	916	0.127	0.616	100000	0.84
07/06/99	917	0.2794	0.28	100000	0.7
07/07/99	918	0.8382	0.616	100000	0.98

07/08/99	919	0.8128	0.6	100000	0.6
07/09/99	920	0	0.6	100000	0.6
07/10/99	921	0.1016	0.6	100000	0.6
07/11/99	922	0	0.6	100000	0.6
07/12/99	923	0	0.6	100000	0.6
07/13/99	924	0	0.6	100000	0.6
07/14/99	925	0	0.6	100000	0.6
07/15/99	926	0	0.6	100000	0.6
07/16/99	927	0	0.6	100000	0.6
07/17/99	928	0.2032	0.6	100000	0.6
07/18/99	929	2.1082	0.6	100000	0.6
07/19/99	930	0.508	0.6	100000	0.6
07/20/99	931	0.1016	0.6	100000	0.6
07/21/99	932	0	0.6	100000	0.6
07/22/99	933	0	0.6	100000	0.6
07/23/99	934	0	0.6	100000	0.6
07/24/99	935	0	0.6	100000	0.6
07/25/99	936	0	0.6	100000	0.6
07/26/99	937	0	0.6	100000	0.6
07/27/99	938	0.2032	0.6	100000	0.6
07/28/99	939	0	0.6	100000	0.6
07/29/99	940	0	0.6	100000	0.6
07/30/99	941	0	0.6	100000	0.6
07/31/99	942	0.6096	0.6	100000	0.6
08/01/99	943	0	0.6	100000	0.6
08/02/99	944	1.7018	0.6	100000	0.6
08/03/99	945	2.9972	0.6	100000	0.6
08/04/99	946	0	0.6	100000	0.6
08/05/99	947	0.1016	0.6	100000	0.6
08/06/99	948	0	0.6	100000	0.6
08/07/99	949	0	0.6	100000	0.6
08/08/99	950	0.2032	0.6	100000	0.6
08/09/99	951	0	0.6	100000	0.6
08/10/99	952	0.3048	0.6	100000	0.6
08/11/99	953	0	0.6	100000	0.6
08/12/99	954	0	0.6	100000	0.6
08/13/99	955	0	0.6	100000	0.6
08/14/99	956	0	0.6	100000	0.6
08/15/99	957	0.508	0.6	100000	0.6
08/16/99	958	0	0.6	100000	0.6
08/17/99	959	0	0.6	100000	0.6
08/18/99	960	0	0.6	100000	0.6
08/19/99	961	0	0.6	100000	0.6
08/20/99	962	0.1016	0.6	100000	0.6
08/21/99	963	0	0.6	100000	0.6
08/22/99	964	0	0.6	100000	0.6
08/23/99	965	0	0.6	100000	0.6
08/24/99	966	0	0.6	100000	0.6
08/25/99	967	0	0.6	100000	0.6
08/26/99	968	0	0.6	100000	0.6
08/27/99	969	0	0.6	100000	0.6
08/28/99	970	0	0.6	100000	0.6
08/29/99	971	0	0.6	100000	0.6
08/30/99	972	0	0.6	100000	0.6
08/31/99	973	0	0.6	100000	0.6
09/01/99	974	0.1016	0.6	100000	0.6
09/02/99	975	0.2032	0.6	100000	0.6
09/03/99	976	0	0.6	100000	0.6
09/04/99	977	0	0.6	100000	0.6
09/05/99	978	0	0.6	100000	0.6
09/06/99	979	0	0.6	100000	0.6
09/07/99	980	0	0.6	100000	0.6
09/08/99	981	0	0.6	100000	0.6
09/09/99	982	0	0.6	100000	0.6
09/10/99	983	0	0.6	100000	0.6
09/11/99	984	0	0.6	100000	0.6

07/08/99	919	0.0254	0.532	100000	0.868
07/09/99	920	0	0.728	100000	0.924
07/10/99	921	0	0.7	100000	0.588
07/11/99	922	0	0.644	100000	1.008
07/12/99	923	0.127	0.532	100000	0.952
07/13/99	924	0.0254	0.672	100000	0.98
07/14/99	925	0	0.728	100000	0.672
07/15/99	926	0	0.784	100000	0.56
07/16/99	927	0	0.784	100000	0.812
07/17/99	928	0	0.924	100000	0.616
07/18/99	929	0	0.728	100000	0.84
07/19/99	930	0	0.672	100000	0.84
07/20/99	931	0	0.756	100000	0.784
07/21/99	932	0	0.756	100000	0.616
07/22/99	933	0	0.756	100000	0.868
07/23/99	934	0	0.784	100000	0.952
07/24/99	935	0	0.756	100000	0.952
07/25/99	936	0	0.756	100000	0.98
07/26/99	937	0	0.644	100000	0.812
07/27/99	938	0	0.7	100000	0.924
07/28/99	939	0	0.644	100000	0.868
07/29/99	940	0	0.728	100000	0.952
07/30/99	941	0	0.7	100000	0.896
07/31/99	942	0	0.672	100000	0.952
08/01/99	943	0	0.756	100000	0.84
08/02/99	944	0	0.728	100000	0.756
08/03/99	945	0	0.7	100000	0.504
08/04/99	946	0.1778	0.588	100000	0.476
08/05/99	947	0.5334	0.112	100000	0.588
08/06/99	948	0	0.392	100000	0.588
08/07/99	949	0	0.448	100000	0.868
08/08/99	950	0	0.504	100000	0.896
08/09/99	951	0	0.616	100000	0.728
08/10/99	952	0	0.644	100000	0.56
08/11/99	953	0	0.616	100000	0.588
08/12/99	954	0	0.588	100000	0.896
08/13/99	955	0	0.616	100000	1.008
08/14/99	956	0	0.644	100000	0.84
08/15/99	957	0	0.476	100000	0.784
08/16/99	958	0	0.616	100000	0.98
08/17/99	959	0	0.728	100000	0.952
08/18/99	960	0	0.476	100000	0.952
08/19/99	961	0	0.56	100000	0.896
08/20/99	962	0	0.7	100000	0.84
08/21/99	963	0	0.504	100000	0.98
08/22/99	964	0	0.42	100000	0.896
08/23/99	965	0	0.56	100000	1.008
08/24/99	966	0	0.588	100000	0.84
08/25/99	967	0	0.644	100000	0.784
08/26/99	968	0	0.532	100000	0.728
08/27/99	969	0	0.504	100000	0.896
08/28/99	970	0	0.504	100000	0.896
08/29/99	971	0	0.616	100000	0.896
08/30/99	972	0	0.588	100000	0.812
08/31/99	973	0	0.616	100000	0.84
09/01/99	974	0	0.56	100000	0.616
09/02/99	975	0	0.672	100000	0.672
09/03/99	976	0	0.588	100000	0.476
09/04/99	977	0	0.532	100000	0.812
09/05/99	978	0	0.532	100000	0.868
09/06/99	979	0	0.448	100000	0.588
09/07/99	980	0	0.476	100000	0.784
09/08/99	981	0	0.448	100000	0.868
09/09/99	982	0	0.476	100000	0.616
09/10/99	983	0	0.42	100000	0.588
09/11/99	984	0	0.392	100000	0.924

09/12/99	985	0	0.6	100000	0.6		09/12/99	985	0	0.392	100000	0.896	A-16
09/13/99	986	0	0.6	100000	0.6		**09/13/99**	986	0	0.364	100000	0.476	

Appendix A.2. Clay Model Initial Conditions and Profile Discritization

INITIAL CONDITIONS AND CLAY PROFILES

CLAY1M1M			CLAY1M30CM			CLAY1M3M			CLAY1MTOP			CLAY1MBOTTOM			CLAY1MFLAT		
Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)
0	-200	0.1	0	-250	0	0	-200	0	0	-350	0.5	0	-200	0	0	-200	0
0.1	-200.5	0.125	0.1	-251	0.05	0.1	-200.3	0.01	0.1	-349.5	0.75	0.1	-200.3	0.001	0.1	-200	0.5
0.2	-201	0.15	0.2	-252	0.1	0.2	-200.5	0.02	0.2	-349	1	0.2	-200.5	0.002	0.2	-200	0.5
0.3	-201.5	0.175	0.3	-253	0.15	0.3	-200.8	0.03	0.3	-348.5	1	0.3	-200.8	0.003	0.3	-200	0.5
0.4	-202	0.2	0.4	-254	0.2	0.4	-201	0.04	0.4	-348	1	0.4	-201	0.004	0.4	-200	0.5
0.5	-202.5	0.225	0.5	-255	0.25	0.5	-201.3	0.05	0.5	-347.5	1	0.5	-201.3	0.005	0.5	-200	0.5
0.6	-203	0.25	0.6	-256	0.3	0.6	-201.5	0.06	0.6	-347	1	0.6	-201.5	0.006	0.6	-200	0.5
0.7	-203.5	0.275	0.7	-257	0.35	0.7	-201.8	0.07	0.7	-346.5	1	0.7	-201.8	0.007	0.7	-200	0.5
0.8	-204	0.3	0.8	-258	0.4	0.8	-202	0.08	0.8	-346	1	0.8	-202	0.008	0.8	-200	0.5
0.9	-204.5	0.325	0.9	-259	0.425	0.9	-202.3	0.09	0.9	-345.5	1	0.9	-202.3	0.009	0.9	-200	0.5
1	-205	0.35	1	-260	0.45	1	-202.5	0.1	1	-345	0.99	1	-202.5	0.01	1	-200	0.5
2	-210	0.4	2	-270	0.7	2	-205	0.15	2	-342.5	0.98	2	-205	0.02	2	-199	0.5
3	-215	0.45	3	-280	0.95	3	-207.5	0.2	3	-340	0.97	3	-207.5	0.03	3	-198	0.5
4	-220	0.5	4	-290	1	4	-210	0.25	4	-337.5	0.96	4	-210	0.04	4	-197	0.5
5	-225	0.55	5	-300	1	5	-212.5	0.3	5	-335	0.95	5	-212.5	0.05	5	-196	0.5
6	-230	0.6	6	-310	1	6	-215	0.35	6	-332.5	0.94	6	-215	0.06	6	-194	0.5
7	-235	0.65	7	-320	1	7	-217.5	0.4	7	-330	0.93	7	-217.5	0.07	7	-192	0.5
8	-240	0.7	8	-330	1	8	-220	0.45	8	-327.5	0.92	8	-220	0.08	8	-190	0.5
9	-245	0.75	9	-340	1	9	-222.5	0.5	9	-325	0.91	9	-222.5	0.09	9	-188	0.5
10	-250	0.8	10	-350	1	10	-225	0.55	10	-322.5	0.9	10	-225	0.1	10	-186	0.5
11	-255	0.85	11	-349	0.9	11	-227.5	0.6	11	-320	0.89	11	-227.5	0.11	11	-184	0.5
12	-260	0.9	12	-348	0.8	12	-230	0.65	12	-317.5	0.88	12	-230	0.12	12	-182	0.5
13	-265	0.95	13	-347	0.7	13	-232.5	0.675	13	-315	0.87	13	-232.5	0.13	13	-180	0.5
14	-270	1	14	-346	0.6	14	-235	0.7	14	-312.5	0.86	14	-235	0.14	14	-178	0.5
15	-275	1	15	-345	0.5	15	-237.5	0.725	15	-310	0.85	15	-237.5	0.15	15	-176	0.5
16	-280	1	16	-340	0.45	16	-240	0.75	16	-307.5	0.84	16	-240	0.16	16	-174	0.5
17	-285	1	17	-335	0.4	17	-242.5	0.775	17	-305	0.83	17	-242.5	0.17	17	-172	0.5
18	-290	1	18	-330	0.35	18	-245	0.8	18	-302.5	0.82	18	-245	0.18	18	-170	0.5
19	-295	1	19	-325	0.3	19	-247.5	0.825	19	-300	0.81	19	-247.5	0.19	19	-165	0.5
20	-300	1	20	-320	0.25	20	-250	0.85	20	-297.5	0.8	20	-250	0.2	20	-160	0.5
21	-305	1	21	-315	0.2	21	-252.5	0.875	21	-295	0.79	21	-252.5	0.21	21	-155	0.5
22	-310	1	22	-310	0.175	22	-255	0.9	22	-292.5	0.78	22	-255	0.22	22	-150	0.5
23	-315	1	23	-305	0.15	23	-260	0.92	23	-290	0.77	23	-260	0.23	23	-145	0.5
24	-320	1	24	-300	0.125	24	-265	0.94	24	-287.5	0.76	24	-265	0.24	24	-140	0.5
25	-325	1	25	-295	0.1	25	-270	0.96	25	-285	0.75	25	-270	0.25	25	-138	0.5
26	-330	1	26	-290	0.075	26	-275	0.98	26	-282.5	0.74	26	-275	0.26	26	-136	0.5
27	-335	1	27	-285	0.05	27	-280	1	27	-280	0.73	27	-280	0.27	27	-134	0.5
28	-340	1	28	-280	0.025	28	-285	1	28	-277.5	0.72	28	-285	0.28	28	-132	0.5
29	-345	1	29	-275	0.01	29	-290	1	29	-275	0.71	29	-290	0.29	29	-130	0.5
30	-350	1	30	-270	0.001	30	-295	1	30	-270	0.7	30	-295	0.3	30	-128	0.5
31	-349	0.99	31	-265	0	31	-300	1	31	-265	0.69	31	-300	0.31	31	-126	0.5
32	-348	0.98	32	-260	0	32	-305	1	32	-260	0.68	32	-305	0.32	32	-124	0.5
33	-347	0.97	33	-255	0	33	-310	1	33	-255	0.67	33	-310	0.33	33	-122	0.5
34	-346	0.96	34	-250	0	34	-312	1	34	-250	0.66	34	-312	0.34	34	-120	0.5
35	-345	0.95	35	-245	0	35	-314	1	35	-245	0.65	35	-314	0.35	35	-118	0.5
36	-344	0.94	36	-240	0	36	-316	1	36	-240	0.64	36	-316	0.36	36	-116	0.5
37	-342	0.93	37	-235	0	37	-318	1	37	-235	0.63	37	-318	0.37	37	-114	0.5
38	-340	0.92	38	-230	0	38	-320	1	38	-230	0.62	38	-320	0.38	38	-112	0.5
39	-338	0.91	39	-225	0	39	-321	1	39	-225	0.61	39	-321	0.39	39	-110	0.5
40	-336	0.9	40	-220	0	40	-322	1	40	-220	0.6	40	-322	0.4	40	-108	0.5
41	-334	0.88	41	-215	0	41	-323	1	41	-215	0.59	41	-323	0.41	41	-106	0.5
42	-332	0.86	42	-210	0	42	-324	1	42	-210	0.58	42	-324	0.42	42	-104	0.5
43	-330	0.84	43	-205	0	43	-325	1	43	-205	0.57	43	-325	0.43	43	-102	0.5
44	-325	0.82	44	-200	0	44	-325	1	44	-200	0.56	44	-325	0.44	44	-100	0.5
45	-320	0.8	45	-195	0	45	-325	1	45	-195	0.55	45	-325	0.45	45	-98	0.5
46	-315	0.78	46	-190	0	46	-325	1	46	-190	0.54	46	-325	0.46	46	-96	0.5
47	-310	0.76	47	-185	0	47	-325	1	47	-185	0.53	47	-325	0.47	47	-94	0.5
48	-305	0.74	48	-180	0	48	-325	1	48	-180	0.52	48	-325	0.48	48	-92	0.5
49	-300	0.72	49	-175	0	49	-325	1	49	-175	0.51	49	-325	0.49	49	-90	0.5
50	-290	0.7	50	-170	0	50	-325	1	50	-170	0.5	50	-325	0.5	50	-88	0.5
51	-280	0.68	51	-165	0	51	-324	0.99	51	-165	0.49	51	-324	0.51	51	-86	0.5

52	-270	0.66	52	-160	0	52	-323	0.98	52	-160	0.48	52	-323	0.52	52	-84	0.5
53	-260	0.64	53	-155	0	53	-322	0.97	53	-155	0.47	53	-322	0.53	53	-82	0.5
54	-250	0.62	54	-150	0	54	-321	0.96	54	-150	0.46	54	-321	0.54	54	-80	0.5
55	-240	0.6	55	-145	0	55	-320	0.95	55	-145	0.45	55	-320	0.55	55	-78	0.5
56	-230	0.58	56	-140	0	56	-318	0.94	56	-140	0.44	56	-318	0.56	56	-76	0.5
57	-220	0.56	57	-135	0	57	-316	0.93	57	-135	0.43	57	-316	0.57	57	-74	0.5
58	-210	0.54	58	-130	0	58	-314	0.92	58	-130	0.42	58	-314	0.58	58	-72	0.5
59	-200	0.52	59	-125	0	59	-312	0.91	59	-125	0.41	59	-312	0.59	59	-70	0.5
60	-190	0.5	60	-120	0	60	-310	0.9	60	-120	0.4	60	-310	0.6	60	-68	0.5
61	-180	0.475	61	-115	0	61	-305	0.88	61	-115	0.39	61	-305	0.61	61	-66	0.5
62	-170	0.45	62	-110	0	62	-300	0.86	62	-110	0.38	62	-300	0.62	62	-64	0.5
63	-160	0.425	63	-105	0	63	-295	0.84	63	-105	0.37	63	-295	0.63	63	-62	0.5
64	-150	0.4	64	-100	0	64	-290	0.82	64	-100	0.36	64	-290	0.64	64	-60	0.5
65	-140	0.375	65	-95	0	65	-280	0.8	65	-95	0.35	65	-280	0.65	65	-58	0.5
66	-130	0.35	66	-90	0	66	-270	0.78	66	-90	0.34	66	-270	0.66	66	-56	0.5
67	-120	0.325	67	-85	0	67	-260	0.76	67	-85	0.33	67	-260	0.67	67	-54	0.5
68	-110	0.3	68	-80	0	68	-250	0.74	68	-80	0.32	68	-250	0.68	68	-52	0.5
69	-100	0.275	69	-75	0	69	-240	0.72	69	-75	0.31	69	-240	0.69	69	-50	0.5
70	-90	0.25	70	-70	0	70	-230	0.7	70	-70	0.3	70	-230	0.7	70	-48	0.5
71	-80	0.23	71	-65	0	71	-220	0.68	71	-65	0.29	71	-220	0.71	71	-46	0.5
72	-75	0.21	72	-60	0	72	-210	0.66	72	-60	0.28	72	-210	0.72	72	-44	0.5
73	-70	0.19	73	-55	0	73	-200	0.64	73	-55	0.27	73	-200	0.73	73	-42	0.5
74	-65	0.17	74	-50	0	74	-190	0.62	74	-50	0.26	74	-190	0.74	74	-40	0.5
75	-60	0.15	75	-45	0	75	-180	0.6	75	-45	0.25	75	-180	0.75	75	-38	0.5
76	-55	0.14	76	-40	0	76	-170	0.59	76	-40	0.24	76	-170	0.76	76	-36	0.5
77	-50	0.13	77	-35	0	77	-160	0.58	77	-35	0.23	77	-160	0.77	77	-34	0.5
78	-45	0.12	78	-33	0	78	-150	0.57	78	-33	0.22	78	-150	0.78	78	-32	0.5
79	-40	0.11	79	-31	0	79	-140	0.56	79	-31	0.21	79	-140	0.79	79	-30	0.5
80	-35	0.1	80	-29	0	80	-130	0.55	80	-29	0.2	80	-130	0.8	80	-28	0.5
81	-30	0.095	81	-27	0	81	-120	0.54	81	-27	0.19	81	-120	0.81	81	-26	0.5
82	-28	0.09	82	-25	0	82	-110	0.53	82	-25	0.18	82	-110	0.82	82	-24	0.5
83	-26	0.085	83	-23	0	83	-100	0.52	83	-23	0.17	83	-100	0.83	83	-26	0.5
84	-24	0.08	84	-21	0	84	-90	0.51	84	-21	0.16	84	-90	0.84	84	-24	0.5
85	-22	0.075	85	-19	0	85	-80	0.5	85	-19	0.15	85	-80	0.85	85	-22	0.5
86	-20	0.07	86	-17	0	86	-70	0.49	86	-17	0.14	86	-70	0.86	86	-20	0.5
87	-18	0.065	87	-15	0	87	-60	0.48	87	-15	0.13	87	-60	0.87	87	-18	0.5
88	-16	0.06	88	-13	0	88	-50	0.47	88	-13	0.12	88	-50	0.88	88	-16	0.5
89	-14	0.055	89	-11	0	89	-40	0.46	89	-11	0.11	89	-40	0.89	89	-14	0.5
90	-12	0.05	90	-9	0	90	-35	0.45	90	-9	0.1	90	-35	0.9	90	-12	0.5
91	-10	0.045	91	-7	0	91	-30	0.44	91	-7	0.09	91	-30	0.91	91	-10	0.5
92	-8	0.04	92	-6	0	92	-25	0.43	92	-6	0.08	92	-25	0.92	92	-8	0.5
93	-6	0.035	93	-5	0	93	-20	0.42	93	-5	0.07	93	-20	0.93	93	-6	0.5
94	-4	0.03	94	-4	0	94	-15	0.41	94	-4	0.06	94	-15	0.94	94	-4	0.5
95	-3	0.025	95	-3	0	95	-10	0.4	95	-3	0.05	95	-10	0.95	95	-3	0.5
96	-2	0.02	96	-2	0	96	-5	0.395	96	-2	0.04	96	-5	0.96	96	-2	0.5
97	-1	0.015	97	-1	0	97	-2	0.39	97	-1	0.03	97	-2	0.97	97	-1	0.5
98	-0.5	0.01	98	-0.5	0	98	-1	0.385	98	-0.5	0.02	98	-1	0.98	98	-0.5	0.5
99	-0.1	0.005	99	-0.1	0	99	-0.2	0.38	99	-0.1	0.01	99	-0.2	0.99	99	-0.1	0.5
100	0	0	100	0	0	100	0	0.375	100	0	0.001	100	0	1	100	0	0.1
101	1	0	101	1	0	101	1	0.37	101	1	0	101	1	0.9	101	1	0.01
102	2	0	102	2	0	102	2	0.365	102	2	0	102	2	0.7	102	2	0
103	3	0	103	3	0	103	3	0.36	103	3	0	103	3	0.5	103	3	0
104	4	0	104	4	0	104	4	0.355	104	4	0	104	4	0.2	104	4	0
105	5	0	105	5	0	105	5	0.35	105	5	0	105	5	0.1	105	5	0
106	6	0	106	6	0	106	6	0.345	106	6	0	106	6	0.01	106	6	0
107	7	0	107	7	0	107	7	0.34	107	7	0	107	7	0	107	7	0
108	8	0	108	8	0	108	8	0.335	108	8	0	108	8	0	108	8	0
109	9	0	109	9	0	109	9	0.33	109	9	0	109	9	0	109	9	0
110	10	0	110	10	0	110	10	0.325	110	10	0	110	10	0	110	10	0
111	11	0	111	11	0	111	11	0.32	111	11	0	111	11	0	111	11	0
112	12	0	112	12	0	112	12	0.315	112	12	0	112	12	0	112	12	0
113	13	0	113	13	0	113	13	0.31	113	13	0	113	13	0	113	13	0
114	14	0	114	14	0	114	14	0.305	114	14	0	114	14	0	114	14	0
115	15	0	115	15	0	115	15	0.3	115	15	0	115	15	0	115	15	0
116	16	0	116	16	0	116	16	0.295	116	16	0	116	16	0	116	16	0.5
117	17	0	117	17	0	117	17	0.29	117	17	0	117	17	0	117	17	0.5

118	18	0	118	18	0	118	18	0.285	118	18	0	118	18	0	118	18	0.5	A-19
119	19	0	119	19	0	119	19	0.28	119	19	0	119	19	0	119	19	0.5	
120	20	0	120	20	0	120	20	0.275	120	20	0	120	20	0	120	20	0.5	
121	21	0	121	21	0	121	21	0.27	121	21	0	121	21	0	121	21	0.5	
122	22	0	122	22	0	122	22	0.265	122	22	0	122	22	0	122	22	0.5	
123	23	0	123	23	0	123	23	0.26	123	23	0	123	23	0	123	23	0.5	
124	24	0	124	24	0	124	24	0.255	124	24	0	124	24	0	124	24	0.5	
125	25	0	125	25	0	125	25	0.25	125	25	0	125	25	0	125	25	0.5	
126	26	0	126	26	0	126	26	0.249	126	26	0	126	26	0	126	26	0.5	
127	27	0	127	27	0	127	27	0.248	127	27	0	127	27	0	127	27	0.5	
128	28	0	128	28	0	128	28	0.247	128	28	0	128	28	0	128	28	0.5	
129	29	0	129	29	0	129	29	0.246	129	29	0	129	29	0	129	29	0.5	
130	30	0	130	30	0	130	30	0.245	130	30	0	130	30	0	130	30	0.5	
131	31	0	131	31	0	131	31	0.244	131	31	0	131	31	0	131	31	0.5	
132	32	0	132	32	0	132	32	0.243	132	32	0	132	32	0	132	32	0.5	
133	33	0	133	33	0	133	33	0.242	133	33	0	133	33	0	133	33	0.5	
134	34	0	134	34	0	134	34	0.241	134	34	0	134	34	0	134	34	0.5	
135	35	0	135	35	0	135	35	0.24	135	35	0	135	35	0	135	35	0.5	
136	36	0	136	36	0	136	36	0.239	136	36	0	136	36	0	136	36	0.5	
137	37	0	137	37	0	137	37	0.238	137	37	0	137	37	0	137	37	0.5	
138	38	0	138	38	0	138	38	0.237	138	38	0	138	38	0	138	38	0.5	
139	39	0	139	39	0	139	39	0.236	139	39	0	139	39	0	139	39	0.5	
140	40	0	140	40	0	140	40	0.235	140	40	0	140	40	0	140	40	0.5	
141	41	0	141	41	0	141	41	0.234	141	41	0	141	41	0	141	41	0.5	
142	42	0	142	42	0	142	42	0.233	142	42	0	142	42	0	142	42	0.5	
143	43	0	143	43	0	143	43	0.232	143	43	0	143	43	0	143	43	0.5	
144	44	0	144	44	0	144	44	0.231	144	44	0	144	44	0	144	44	0.5	
145	45	0	145	45	0	145	45	0.23	145	45	0	145	45	0	145	45	0.5	
146	46	0	146	46	0	146	46	0.229	146	46	0	146	46	0	146	46	0.5	
147	47	0	147	47	0	147	47	0.228	147	47	0	147	47	0	147	47	0.5	
148	48	0	148	48	0	148	48	0.227	148	48	0	148	48	0	148	48	0.5	
149	49	0	149	49	0	149	49	0.226	149	49	0	149	49	0	149	49	0.5	
150	50	0	150	50	0	150	50	0.225	150	50	0	150	50	0	150	50	0.5	
151	51	0	151	51	0	151	51	0.224	151	51	0	151	51	0	151	51	0.5	
152	52	0	152	52	0	152	52	0.223	152	52	0	152	52	0	152	52	0.5	
153	53	0	153	53	0	153	53	0.222	153	53	0	153	53	0	153	53	0.5	
154	54	0	154	54	0	154	54	0.221	154	54	0	154	54	0	154	54	0.5	
155	55	0	155	55	0	155	55	0.22	155	55	0	155	55	0	155	55	0.5	
156	56	0	156	56	0	156	56	0.219	156	56	0	156	56	0	156	56	0.5	
157	57	0	157	57	0	157	57	0.218	157	57	0	157	57	0	157	57	0.5	
158	58	0	158	58	0	158	58	0.217	158	58	0	158	58	0	158	58	0.5	
159	59	0	159	59	0	159	59	0.216	159	59	0	159	59	0	159	59	0.5	
160	60	0	160	60	0	160	60	0.215	160	60	0	160	60	0	160	60	0.5	
161	61	0	161	61	0	161	61	0.214	161	61	0	161	61	0	161	61	0.5	
162	62	0	162	62	0	162	62	0.213	162	62	0	162	62	0	162	62	0.5	
163	63	0	163	63	0	163	63	0.212	163	63	0	163	63	0	163	63	0.5	
164	64	0	164	64	0	164	64	0.211	164	64	0	164	64	0	164	64	0.5	
165	65	0	165	65	0	165	65	0.21	165	65	0	165	65	0	165	65	0.5	
166	66	0	166	66	0	166	66	0.209	166	66	0	166	66	0	166	66	0.5	
167	67	0	167	67	0	167	67	0.208	167	67	0	167	67	0	167	67	0.5	
168	68	0	168	68	0	168	68	0.207	168	68	0	168	68	0	168	68	0.5	
169	69	0	169	69	0	169	69	0.206	169	69	0	169	69	0	169	69	0.5	
170	70	0	170	70	0	170	70	0.205	170	70	0	170	70	0	170	70	0.5	
171	71	0	171	71	0	171	71	0.204	171	71	0	171	71	0	171	71	0.5	
172	72	0	172	72	0	172	72	0.203	172	72	0	172	72	0	172	72	0.5	
173	73	0	173	73	0	173	73	0.202	173	73	0	173	73	0	173	73	0.5	
174	74	0	174	74	0	174	74	0.201	174	74	0	174	74	0	174	74	0.5	
175	75	0	175	75	0	175	75	0.2	175	75	0	175	75	0	175	75	0.5	
176	76	0	176	76	0	176	76	0.199	176	76	0	176	76	0	176	76	0.5	
177	77	0	177	77	0	177	77	0.198	177	77	0	177	77	0	177	77	0.5	
178	78	0	178	78	0	178	78	0.197	178	78	0	178	78	0	178	78	0.5	
179	79	0	179	79	0	179	79	0.196	179	79	0	179	79	0	179	79	0.5	
180	80	0	180	80	0	180	80	0.195	180	80	0	180	80	0	180	80	0.5	
181	81	0	181	81	0	181	81	0.194	181	81	0	181	81	0	181	81	0.5	
182	82	0	182	82	0	182	82	0.193	182	82	0	182	82	0	182	82	0.5	
183	83	0	183	83	0	183	83	0.192	183	83	0	183	83	0	183	83	0.5	

184	84	0	184	84	0	184	84	0.191	184	84	0	184	84	0	184	84	0.5	A-20
185	85	0	185	85	0	185	85	0.19	185	85	0	185	85	0	185	85	0.5	
186	86	0	186	86	0	186	86	0.189	186	86	0	186	86	0	186	86	0.5	
187	87	0	187	87	0	187	87	0.188	187	87	0	187	87	0	187	87	0.5	
188	88	0	188	88	0	188	88	0.187	188	88	0	188	88	0	188	88	0.5	
189	89	0	189	89	0	189	89	0.186	189	89	0	189	89	0	189	89	0.5	
190	90	0	190	90	0	190	90	0.185	190	90	0	190	90	0	190	90	0.5	
191	91	0	191	91	0	191	91	0.184	191	91	0	191	91	0	191	91	0.5	
192	92	0	192	92	0	192	92	0.183	192	92	0	192	92	0	192	92	0.5	
193	93	0	193	93	0	193	93	0.182	193	93	0	193	93	0	193	93	0.5	
194	94	0	194	94	0	194	94	0.181	194	94	0	194	94	0	194	94	0.5	
195	95	0	195	95	0	195	95	0.18	195	95	0	195	95	0	195	95	0.5	
196	96	0	196	96	0	196	96	0.179	196	96	0	196	96	0	196	96	0.5	
197	97	0	197	97	0	197	97	0.178	197	97	0	197	97	0	197	97	0.5	
198	98	0	198	98	0	198	98	0.177	198	98	0	198	98	0	198	98	0.5	
199	99	0	199	99	0	199	99	0.176	199	99	0	199	99	0	199	99	0.5	
200	100	0	200	100	0	200	100	0.175	200	100	0	200	100	0	200	100	0.5	
201	101	0	201	101	0	201	101	0.174	201	101	0	201	101	0	201	101	0.5	
202	102	0	202	102	0	202	102	0.173	202	102	0	202	102	0	202	102	0.5	
203	103	0	203	103	0	203	103	0.172	203	103	0	203	103	0	203	103	0.5	
204	104	0	204	104	0	204	104	0.171	204	104	0	204	104	0	204	104	0.5	
205	105	0	205	105	0	205	105	0.17	205	105	0	205	105	0	205	105	0.5	
206	106	0	206	106	0	206	106	0.169	206	106	0	206	106	0	206	106	0.5	
207	107	0	207	107	0	207	107	0.168	207	107	0	207	107	0	207	107	0.5	
208	108	0	208	108	0	208	108	0.167	208	108	0	208	108	0	208	108	0.5	
209	109	0	209	109	0	209	109	0.166	209	109	0	209	109	0	209	109	0.5	
210	110	0	210	110	0	210	110	0.165	210	110	0	210	110	0	210	110	0.5	
211	111	0	211	111	0	211	111	0.164	211	111	0	211	111	0	211	111	0.5	
212	112	0	212	112	0	212	112	0.163	212	112	0	212	112	0	212	112	0.5	
213	113	0	213	113	0	213	113	0.162	213	113	0	213	113	0	213	113	0.5	
214	114	0	214	114	0	214	114	0.161	214	114	0	214	114	0	214	114	0.5	
215	115	0	215	115	0	215	115	0.16	215	115	0	215	115	0	215	115	0.5	
216	116	0	216	116	0	216	116	0.159	216	116	0	216	116	0	216	116	0.5	
217	117	0	217	117	0	217	117	0.158	217	117	0	217	117	0	217	117	0.5	
218	118	0	218	118	0	218	118	0.157	218	118	0	218	118	0	218	118	0.5	
219	119	0	219	119	0	219	119	0.156	219	119	0	219	119	0	219	119	0.5	
220	120	0	220	120	0	220	120	0.155	220	120	0	220	120	0	220	120	0.5	
221	121	0	221	121	0	221	121	0.154	221	121	0	221	121	0	221	121	0.5	
222	122	0	222	122	0	222	122	0.153	222	122	0	222	122	0	222	122	0.5	
223	123	0	223	123	0	223	123	0.152	223	123	0	223	123	0	223	123	0.5	
224	124	0	224	124	0	224	124	0.151	224	124	0	224	124	0	224	124	0.5	
225	125	0	225	125	0	225	125	0.15	225	125	0	225	125	0	225	125	0.5	
226	126	0	226	126	0	226	126	0.149	226	126	0	226	126	0	226	126	0.5	
227	127	0	227	127	0	227	127	0.148	227	127	0	227	127	0	227	127	0.5	
228	128	0	228	128	0	228	128	0.147	228	128	0	228	128	0	228	128	0.5	
229	129	0	229	129	0	229	129	0.146	229	129	0	229	129	0	229	129	0.5	
230	130	0	230	130	0	230	130	0.145	230	130	0	230	130	0	230	130	0.5	
231	131	0	231	131	0	231	131	0.144	231	131	0	231	131	0	231	131	0.5	
232	132	0	232	132	0	232	132	0.143	232	132	0	232	132	0	232	132	0.5	
233	133	0	233	133	0	233	133	0.142	233	133	0	233	133	0	233	133	0.5	
234	134	0	234	134	0	234	134	0.141	234	134	0	234	134	0	234	134	0.5	
235	135	0	235	135	0	235	135	0.14	235	135	0	235	135	0	235	135	0.5	
236	136	0	236	136	0	236	136	0.139	236	136	0	236	136	0	236	136	0.5	
237	137	0	237	137	0	237	137	0.138	237	137	0	237	137	0	237	137	0.5	
238	138	0	238	138	0	238	138	0.137	238	138	0	238	138	0	238	138	0.5	
239	139	0	239	139	0	239	139	0.136	239	139	0	239	139	0	239	139	0.5	
240	140	0	240	140	0	240	140	0.135	240	140	0	240	140	0	240	140	0.5	
241	141	0	241	141	0	241	141	0.134	241	141	0	241	141	0	241	141	0.5	
242	142	0	242	142	0	242	142	0.133	242	142	0	242	142	0	242	142	0.5	
243	143	0	243	143	0	243	143	0.132	243	143	0	243	143	0	243	143	0.5	
244	144	0	244	144	0	244	144	0.131	244	144	0	244	144	0	244	144	0.5	
245	145	0	245	145	0	245	145	0.13	245	145	0	245	145	0	245	145	0.5	
246	146	0	246	146	0	246	146	0.128	246	146	0	246	146	0	246	146	0.5	
247	147	0	247	147	0	247	147	0.125	247	147	0	247	147	0	247	147	0.5	
248	148	0	248	148	0	248	148	0.123	248	148	0	248	148	0	248	148	0.5	
249	149	0	249	149	0	249	149	0.12	249	149	0	249	149	0	249	149	0.5	

250	150	0	250	150	0	250	150	0.118	250	150	0	250	150	0	250	150	0.5	A-21
251	151	0	251	151	0	251	151	0.115	251	151	0	251	151	0	251	151	0.5	
252	152	0	252	152	0	252	152	0.113	252	152	0	252	152	0	252	152	0.5	
253	153	0	253	153	0	253	153	0.11	253	153	0	253	153	0	253	153	0.5	
254	154	0	254	154	0	254	154	0.108	254	154	0	254	154	0	254	154	0.5	
255	155	0	255	155	0	255	155	0.105	255	155	0	255	155	0	255	155	0.5	
260	160	0	260	160	0	260	160	0.093	260	160	0	260	160	0	260	160	0.5	
265	165	0	265	165	0	265	165	0.08	265	165	0	265	165	0	265	165	0.5	
270	170	0	270	170	0	270	170	0.068	270	170	0	270	170	0	270	170	0.5	
275	175	0	275	175	0	275	175	0.055	275	175	0	275	175	0	275	175	0.5	
280	180	0	280	180	0	280	180	0.043	280	180	0	280	180	0	280	180	0.5	
285	185	0	285	185	0	285	185	0.03	285	185	0	285	185	0	285	185	0.5	
290	190	0	290	190	0	290	190	0.018	290	190	0	290	190	0	290	190	0.5	
295	195	0	295	195	0	295	195	0.005	295	195	0	295	195	0	295	195	0.5	
300	200	0	300	200	0	300	200	0.001	300	200	0	300	200	0	300	200	0.5	
305	205	0	305	205	0	305	205	0	305	205	0	305	205	0	305	205	0	
310	210	0	310	210	0	310	210	0	310	210	0	310	210	0	310	210	0	
315	215	0	315	215	0	315	215	0	315	215	0	315	215	0	315	215	0	
320	220	0	320	220	0	320	220	0	320	220	0	320	220	0	320	220	0	
325	225	0	325	225	0	325	225	0	325	225	0	325	225	0	325	225	0	
330	230	0	330	230	0	330	230	0	330	230	0	330	230	0	330	230	0	
335	235	0	335	235	0	335	235	0	335	235	0	335	235	0	335	235	0	
340	240	0	340	240	0	340	240	0	340	240	0	340	240	0	340	240	0	
345	245	0	345	245	0	345	245	0	345	245	0	345	245	0	345	245	0	
350	250	0	350	250	0	350	250	0	350	250	0	350	250	0	350	250	0	
355	255	0	355	255	0	355	255	0	355	255	0	355	255	0	355	255	0	
360	260	0	360	260	0	360	260	0	360	260	0	360	260	0	360	260	0	
365	265	0	365	265	0	365	265	0	365	265	0	365	265	0	365	265	0	
370	270	0	370	270	0	370	270	0	370	270	0	370	270	0	370	270	0	
375	275	0	375	275	0	375	275	0	375	275	0	375	275	0	375	275	0	
380	280	0	380	280	0	380	280	0	380	280	0	380	280	0	380	280	0	
385	285	0	385	285	0	385	285	0	385	285	0	385	285	0	385	285	0	
390	290	0	390	290	0	390	290	0	390	290	0	390	290	0	390	290	0	
395	295	0	395	295	0	395	295	0	395	295	0	395	295	0	395	295	0	
400	300	0	400	300	0	400	300	0	400	300	0	400	300	0	400	300	0	
405	305	0	405	305	0	405	305	0	405	305	0	405	305	0	405	305	0	
410	310	0	410	310	0	410	310	0	410	310	0	410	310	0	410	310	0	
415	315	0	415	315	0	415	315	0	415	315	0	415	315	0	415	315	0	
420	320	0	420	320	0	420	320	0	420	320	0	420	320	0	420	320	0	
425	325	0	425	325	0	425	325	0	425	325	0	425	325	0	425	325	0	
430	330	0	430	330	0	430	330	0	430	330	0	430	330	0	430	330	0	
435	335	0	435	335	0	435	335	0	435	335	0	435	335	0	435	335	0	
440	340	0	440	340	0	440	340	0	440	340	0	440	340	0	440	340	0	
445	345	0	445	345	0	445	345	0	445	345	0	445	345	0	445	345	0	
450	350	0	450	350	0	450	350	0	450	350	0	450	350	0	450	350	0	
455	355	0	455	355	0	455	355	0	455	355	0	455	355	0	455	355	0	
460	360	0	460	360	0	460	360	0	460	360	0	460	360	0	460	360	0	
465	365	0	465	365	0	465	365	0	465	365	0	465	365	0	465	365	0	
470	370	0	470	370	0	470	370	0	470	370	0	470	370	0	470	370	0	
475	375	0	475	375	0	475	375	0	475	375	0	475	375	0	475	375	0	
480	380	0	480	380	0	480	380	0	480	380	0	480	380	0	480	380	0	
485	385	0	485	385	0	485	385	0	485	385	0	485	385	0	485	385	0	
490	390	0	490	390	0	490	390	0	490	390	0	490	390	0	490	390	0	
495	395	0	495	395	0	495	395	0	495	395	0	495	395	0	495	395	0	
500	400	0	500	400	0	500	400	0	500	400	0	500	400	0	500	400	0	
505	405	0	505	405	0	505	405	0	505	405	0	505	405	0	505	405	0	
510	410	0	510	410	0	510	410	0	510	410	0	510	410	0	510	410	0	
515	415	0	515	415	0	515	415	0	515	415	0	515	415	0	515	415	0	
520	420	0	520	420	0	520	420	0	520	420	0	520	420	0	520	420	0	
525	425	0	525	425	0	525	425	0	525	425	0	525	425	0	525	425	0	
530	430	0	530	430	0	530	430	0	530	430	0	530	430	0	530	430	0	
535	435	0	535	435	0	535	435	0	535	435	0	535	435	0	535	435	0	
540	440	0	540	440	0	540	440	0	540	440	0	540	440	0	540	440	0	
545	445	0	545	445	0	545	445	0	545	445	0	545	445	0	545	445	0	
550	450	0	550	450	0	550	450	0	550	450	0	550	450	0	550	450	0	

CLAY2M1M			CLAY2M30CM			CLAY2M3M			CLAY2MTOP			CLAY2MBOTTOM			CLAY2M1FLAT		
Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)
0	-225	0	0	-250	0	0	-300	0	0	-225	0.5	0	-225	0	0	-225	0
0.1	-225.5	0.125	0.1	-251	0.05	0.1	-300.3	0.01	0.1	-225.5	0.75	0.1	-225.5	0.001	0.1	-225.5	0.5
0.2	-226	0.15	0.2	-252	0.1	0.2	-300.5	0.02	0.2	-226	1	0.2	-226	0.002	0.2	-226	0.5
0.3	-226.5	0.175	0.3	-253	0.15	0.3	-300.8	0.03	0.3	-226.5	1	0.3	-226.5	0.003	0.3	-226.5	0.5
0.4	-227	0.2	0.4	-254	0.2	0.4	-301	0.04	0.4	-227	1	0.4	-227	0.004	0.4	-227	0.5
0.5	-227.5	0.225	0.5	-255	0.25	0.5	-301.3	0.05	0.5	-227.5	1	0.5	-227.5	0.005	0.5	-227.5	0.5
0.6	-228	0.25	0.6	-256	0.3	0.6	-301.5	0.06	0.6	-228	1	0.6	-228	0.006	0.6	-228	0.5
0.7	-228.5	0.275	0.7	-257	0.35	0.7	-301.8	0.07	0.7	-228.5	1	0.7	-228.5	0.007	0.7	-228.5	0.5
0.8	-229	0.3	0.8	-258	0.4	0.8	-302	0.08	0.8	-229	1	0.8	-229	0.008	0.8	-229	0.5
0.9	-229.5	0.325	0.9	-259	0.425	0.9	-302.3	0.09	0.9	-229.5	1	0.9	-229.5	0.009	0.9	-229.5	0.5
1	-230	0.35	1	-260	0.45	1	-302.5	0.1	1	-230	0.99	1	-230	0.01	1	-230	0.5
2	-235	0.4	2	-270	0.7	2	-305	0.15	2	-235	0.98	2	-235	0.02	2	-235	0.5
3	-240	0.45	3	-280	0.95	3	-307.5	0.2	3	-240	0.97	3	-240	0.03	3	-240	0.5
4	-245	0.5	4	-290	1	4	-310	0.25	4	-245	0.96	4	-245	0.04	4	-245	0.5
5	-250	0.55	5	-300	1	5	-312.5	0.3	5	-250	0.95	5	-250	0.05	5	-250	0.5
6	-255	0.6	6	-310	1	6	-315	0.35	6	-255	0.94	6	-255	0.06	6	-255	0.5
7	-260	0.65	7	-320	1	7	-317.5	0.4	7	-260	0.93	7	-260	0.07	7	-260	0.5
8	-265	0.7	8	-330	1	8	-320	0.45	8	-265	0.92	8	-265	0.08	8	-265	0.5
9	-270	0.75	9	-340	1	9	-322.5	0.5	9	-270	0.91	9	-270	0.09	9	-270	0.5
10	-275	0.8	10	-350	1	10	-325	0.55	10	-275	0.9	10	-275	0.1	10	-275	0.5
11	-280	0.85	11	-349.5	0.9	11	-327.5	0.6	11	-280	0.89	11	-280	0.11	11	-280	0.5
12	-285	0.9	12	-349	0.8	12	-330	0.65	12	-285	0.88	12	-285	0.12	12	-285	0.5
13	-290	0.95	13	-348	0.7	13	-332.5	0.675	13	-290	0.87	13	-290	0.13	13	-290	0.5
14	-295	1	14	-347	0.6	14	-335	0.7	14	-295	0.86	14	-295	0.14	14	-295	0.5
15	-300	1	15	-346	0.5	15	-337.5	0.725	15	-300	0.85	15	-300	0.15	15	-300	0.5
16	-305	1	16	-345	0.45	16	-340	0.75	16	-305	0.84	16	-305	0.16	16	-305	0.5
17	-310	1	17	-344	0.4	17	-342.5	0.775	17	-310	0.83	17	-310	0.17	17	-310	0.5
18	-315	1	18	-343	0.35	18	-345	0.8	18	-315	0.82	18	-315	0.18	18	-315	0.5
19	-320	1	19	-342	0.3	19	-347.5	0.825	19	-320	0.81	19	-320	0.19	19	-320	0.5
20	-325	1	20	-340	0.25	20	-350	0.85	20	-325	0.8	20	-325	0.2	20	-325	0.5
21	-330	1	21	-338	0.2	21	-352.5	0.875	21	-330	0.79	21	-330	0.21	21	-330	0.5
22	-335	1	22	-336	0.175	22	-355	0.9	22	-335	0.78	22	-335	0.22	22	-335	0.5
23	-340	1	23	-334	0.15	23	-360	0.92	23	-340	0.77	23	-340	0.23	23	-340	0.5
24	-345	1	24	-332	0.125	24	-365	0.94	24	-345	0.76	24	-345	0.24	24	-345	0.5
25	-350	1	25	-330	0.1	25	-370	0.96	25	-350	0.75	25	-350	0.25	25	-350	0.5
26	-355	1	26	-328	0.075	26	-375	0.98	26	-355	0.74	26	-355	0.26	26	-355	0.5
27	-360	1	27	-326	0.05	27	-380	1	27	-360	0.73	27	-360	0.27	27	-360	0.5
28	-365	1	28	-324	0.025	28	-385	1	28	-365	0.72	28	-365	0.28	28	-365	0.5
29	-370	1	29	-322	0.01	29	-390	1	29	-370	0.71	29	-370	0.29	29	-370	0.5
30	-375	1	30	-320	0.001	30	-395	1	30	-375	0.7	30	-375	0.3	30	-375	0.5
31	-380	0.99	31	-315	0	31	-400	1	31	-380	0.69	31	-380	0.31	31	-380	0.5
32	-382	0.98	32	-310	0	32	-405	1	32	-382	0.68	32	-382	0.32	32	-382	0.5
33	-384	0.97	33	-305	0	33	-410	1	33	-384	0.67	33	-384	0.33	33	-384	0.5
34	-386	0.96	34	-300	0	34	-415	1	34	-386	0.66	34	-386	0.34	34	-386	0.5
35	-388	0.95	35	-295	0	35	-420	1	35	-388	0.65	35	-388	0.35	35	-388	0.5
36	-390	0.94	36	-290	0	36	-425	1	36	-390	0.64	36	-390	0.36	36	-390	0.5
37	-391	0.93	37	-285	0	37	-430	1	37	-391	0.63	37	-391	0.37	37	-391	0.5
38	-392	0.92	38	-280	0	38	-435	1	38	-392	0.62	38	-392	0.38	38	-392	0.5
39	-393	0.91	39	-275	0	39	-440	1	39	-393	0.61	39	-393	0.39	39	-393	0.5
40	-394	0.9	40	-270	0	40	-445	1	40	-394	0.6	40	-394	0.4	40	-394	0.5
41	-395	0.88	41	-265	0	41	-450	1	41	-395	0.59	41	-395	0.41	41	-395	0.5
42	-396	0.86	42	-260	0	42	-455	1	42	-396	0.58	42	-396	0.42	42	-396	0.5
43	-397	0.84	43	-255	0	43	-460	1	43	-397	0.57	43	-397	0.43	43	-397	0.5
44	-398	0.82	44	-250	0	44	-465	1	44	-398	0.56	44	-398	0.44	44	-398	0.5
45	-399	0.8	45	-245	0	45	-470	1	45	-399	0.55	45	-399	0.45	45	-399	0.5
46	-400	0.78	46	-240	0	46	-475	1	46	-400	0.54	46	-400	0.46	46	-400	0.5
47	-400	0.76	47	-235	0	47	-480	1	47	-400	0.53	47	-400	0.47	47	-400	0.5
48	-399	0.74	48	-230	0	48	-485	1	48	-399	0.52	48	-399	0.48	48	-399	0.5
49	-398	0.72	49	-225	0	49	-490	1	49	-398	0.51	49	-398	0.49	49	-398	0.5
50	-397	0.7	50	-223	0	50	-495	1	50	-397	0.5	50	-397	0.5	50	-397	0.5
51	-396	0.68	51	-221	0	51	-500	0.99	51	-396	0.49	51	-396	0.51	51	-396	0.5

52	-395	0.66	52	-219	0	52	-500	0.98	52	-395	0.48	52	-395	0.52	52	-395	0.5
53	-394	0.64	53	-217	0	53	-499	0.97	53	-394	0.47	53	-394	0.53	53	-394	0.5
54	-393	0.62	54	-215	0	54	-498	0.96	54	-393	0.46	54	-393	0.54	54	-393	0.5
55	-392	0.6	55	-213	0	55	-497	0.95	55	-392	0.45	55	-392	0.55	55	-392	0.5
56	-391	0.58	56	-211	0	56	-496	0.94	56	-391	0.44	56	-391	0.56	56	-391	0.5
57	-390	0.56	57	-209	0	57	-495	0.93	57	-390	0.43	57	-390	0.57	57	-390	0.5
58	-389	0.54	58	-207	0	58	-494	0.92	58	-389	0.42	58	-389	0.58	58	-389	0.5
59	-388	0.52	59	-205	0	59	-493	0.91	59	-388	0.41	59	-388	0.59	59	-388	0.5
60	-387	0.5	60	-203	0	60	-492	0.9	60	-387	0.4	60	-387	0.6	60	-387	0.5
61	-386	0.475	61	-201	0	61	-491	0.88	61	-386	0.39	61	-386	0.61	61	-386	0.5
62	-385	0.45	62	-199	0	62	-490	0.86	62	-385	0.38	62	-385	0.62	62	-385	0.5
63	-384	0.425	63	-197	0	63	-489	0.84	63	-384	0.37	63	-384	0.63	63	-384	0.5
64	-383	0.4	64	-195	0	64	-488	0.82	64	-383	0.36	64	-383	0.64	64	-383	0.5
65	-382	0.375	65	-193	0	65	-487	0.8	65	-382	0.35	65	-382	0.65	65	-382	0.5
66	-381	0.35	66	-191	0	66	-486	0.78	66	-381	0.34	66	-381	0.66	66	-381	0.5
67	-380	0.325	67	-189	0	67	-485	0.76	67	-380	0.33	67	-380	0.67	67	-380	0.5
68	-378	0.3	68	-187	0	68	-484	0.74	68	-378	0.32	68	-378	0.68	68	-378	0.5
69	-376	0.275	69	-185	0	69	-483	0.72	69	-376	0.31	69	-376	0.69	69	-376	0.5
70	-374	0.25	70	-183	0	70	-482	0.7	70	-374	0.3	70	-374	0.7	70	-374	0.5
71	-372	0.23	71	-181	0	71	-481	0.68	71	-372	0.29	71	-372	0.71	71	-372	0.5
72	-370	0.21	72	-179	0	72	-480	0.66	72	-370	0.28	72	-370	0.72	72	-370	0.5
73	-368	0.19	73	-177	0	73	-479	0.64	73	-368	0.27	73	-368	0.73	73	-368	0.5
74	-366	0.17	74	-175	0	74	-478	0.62	74	-366	0.26	74	-366	0.74	74	-366	0.5
75	-364	0.15	75	-173	0	75	-477	0.6	75	-364	0.25	75	-364	0.75	75	-364	0.5
76	-362	0.14	76	-171	0	76	-476	0.59	76	-362	0.24	76	-362	0.76	76	-362	0.5
77	-360	0.13	77	-169	0	77	-475	0.58	77	-360	0.23	77	-360	0.77	77	-360	0.5
78	-358	0.12	78	-167	0	78	-474	0.57	78	-358	0.22	78	-358	0.78	78	-358	0.5
79	-356	0.11	79	-165	0	79	-473	0.56	79	-356	0.21	79	-356	0.79	79	-356	0.5
80	-354	0.1	80	-163	0	80	-472	0.55	80	-354	0.2	80	-354	0.8	80	-354	0.5
81	-352	0.095	81	-161	0	81	-471	0.54	81	-352	0.19	81	-352	0.81	81	-352	0.5
82	-350	0.09	82	-159	0	82	-470	0.53	82	-350	0.18	82	-350	0.82	82	-350	0.5
83	-348	0.085	83	-157	0	83	-469	0.52	83	-348	0.17	83	-348	0.83	83	-348	0.5
84	-346	0.08	84	-155	0	84	-468	0.51	84	-346	0.16	84	-346	0.84	84	-346	0.5
85	-344	0.075	85	-153	0	85	-467	0.5	85	-344	0.15	85	-344	0.85	85	-344	0.5
86	-342	0.07	86	-151	0	86	-466	0.49	86	-342	0.14	86	-342	0.86	86	-342	0.5
87	-340	0.065	87	-149	0	87	-465	0.48	87	-340	0.13	87	-340	0.87	87	-340	0.5
88	-338	0.06	88	-147	0	88	-464	0.47	88	-338	0.12	88	-338	0.88	88	-338	0.5
89	-336	0.055	89	-145	0	89	-463	0.46	89	-336	0.11	89	-336	0.89	89	-336	0.5
90	-334	0.05	90	-143	0	90	-462	0.45	90	-334	0.1	90	-334	0.9	90	-334	0.5
91	-332	0.045	91	-141	0	91	-461	0.44	91	-332	0.09	91	-332	0.91	91	-332	0.5
92	-330	0.04	92	-139	0	92	-460	0.43	92	-330	0.08	92	-330	0.92	92	-330	0.5
93	-325	0.035	93	-137	0	93	-459	0.42	93	-325	0.07	93	-325	0.93	93	-325	0.5
94	-320	0.03	94	-135	0	94	-458	0.41	94	-320	0.06	94	-320	0.94	94	-320	0.5
95	-315	0.025	95	-133	0	95	-456	0.4	95	-315	0.05	95	-315	0.95	95	-315	0.5
96	-310	0.02	96	-131	0	96	-454	0.395	96	-310	0.04	96	-310	0.96	96	-310	0.5
97	-305	0.015	97	-129	0	97	-452	0.39	97	-305	0.03	97	-305	0.97	97	-305	0.5
98	-300	0.01	98	-127	0	98	-450	0.385	98	-300	0.02	98	-300	0.98	98	-300	0.5
99	-290	0.005	99	-125	0	99	-448	0.38	99	-290	0.01	99	-290	0.99	99	-290	0.5
100	-280	0.001	100	-123	0	100	-446	0.375	100	-280	0.001	100	-280	1	100	-280	0.1
101	-270	0	101	-121	0	101	-444	0.37	101	-270	0	101	-270	0.9	101	-270	0.01
102	-260	0	102	-119	0	102	-442	0.365	102	-260	0	102	-260	0.7	102	-260	0
103	-250	0	103	-117	0	103	-440	0.36	103	-250	0	103	-250	0.5	103	-250	0
104	-240	0	104	-115	0	104	-438	0.355	104	-240	0	104	-240	0.2	104	-240	0
105	-230	0	105	-113	0	105	-436	0.35	105	-230	0	105	-230	0.1	105	-230	0
106	-220	0	106	-111	0	106	-434	0.345	106	-220	0	106	-220	0.01	106	-220	0
107	-215	0	107	-109	0	107	-432	0.34	107	-215	0	107	-215	0	107	-215	0
108	-210	0	108	-107	0	108	-430	0.335	108	-210	0	108	-210	0	108	-210	0
109	-205	0	109	-105	0	109	-428	0.33	109	-205	0	109	-205	0	109	-205	0
110	-200	0	110	-103	0	110	-426	0.325	110	-200	0	110	-200	0	110	-200	0
111	-195	0	111	-101	0	111	-424	0.32	111	-195	0	111	-195	0	111	-195	0
112	-190	0	112	-99	0	112	-422	0.315	112	-190	0	112	-190	0	112	-190	0
113	-185	0	113	-97	0	113	-420	0.31	113	-185	0	113	-185	0	113	-185	0
114	-180	0	114	-95	0	114	-418	0.305	114	-180	0	114	-180	0	114	-180	0
115	-175	0	115	-93	0	115	-416	0.3	115	-175	0	115	-175	0	115	-175	0
116	-170	0	116	-91	0	116	-414	0.295	116	-170	0	116	-170	0	116	-170	0.5
117	-165	0	117	-89	0	117	-412	0.29	117	-165	0	117	-165	0	117	-165	0.5

118	-160	0	118	-87	0	118	-410	0.285	118	-160	0	118	-160	0	118	-160	0.5	A-24
119	-155	0	119	-85	0	119	-408	0.28	119	-155	0	119	-155	0	119	-155	0.5	
120	-150	0	120	-83	0	120	-406	0.275	120	-150	0	120	-150	0	120	-150	0.5	
121	-145	0	121	-81	0	121	-404	0.27	121	-145	0	121	-145	0	121	-145	0.5	
122	-140	0	122	-79	0	122	-402	0.265	122	-140	0	122	-140	0	122	-140	0.5	
123	-135	0	123	-77	0	123	-400	0.26	123	-135	0	123	-135	0	123	-135	0.5	
124	-130	0	124	-75	0	124	-395	0.255	124	-130	0	124	-130	0	124	-130	0.5	
125	-128	0	125	-73	0	125	-390	0.25	125	-128	0	125	-128	0	125	-128	0.5	
126	-126	0	126	-72	0	126	-385	0.249	126	-126	0	126	-126	0	126	-126	0.5	
127	-124	0	127	-71	0	127	-380	0.248	127	-124	0	127	-124	0	127	-124	0.5	
128	-122	0	128	-70	0	128	-375	0.247	128	-122	0	128	-122	0	128	-122	0.5	
129	-120	0	129	-69	0	129	-370	0.246	129	-120	0	129	-120	0	129	-120	0.5	
130	-118	0	130	-68	0	130	-365	0.245	130	-118	0	130	-118	0	130	-118	0.5	
131	-116	0	131	-67	0	131	-360	0.244	131	-116	0	131	-116	0	131	-116	0.5	
132	-114	0	132	-66	0	132	-355	0.243	132	-114	0	132	-114	0	132	-114	0.5	
133	-112	0	133	-65	0	133	-345	0.242	133	-112	0	133	-112	0	133	-112	0.5	
134	-110	0	134	-64	0	134	-335	0.241	134	-110	0	134	-110	0	134	-110	0.5	
135	-108	0	135	-63	0	135	-325	0.24	135	-108	0	135	-108	0	135	-108	0.5	
136	-106	0	136	-62	0	136	-315	0.239	136	-106	0	136	-106	0	136	-106	0.5	
137	-104	0	137	-61	0	137	-305	0.238	137	-104	0	137	-104	0	137	-104	0.5	
138	-102	0	138	-60	0	138	-295	0.237	138	-102	0	138	-102	0	138	-102	0.5	
139	-100	0	139	-59	0	139	-285	0.236	139	-100	0	139	-100	0	139	-100	0.5	
140	-98	0	140	-58	0	140	-275	0.235	140	-98	0	140	-98	0	140	-98	0.5	
141	-96	0	141	-57	0	141	-265	0.234	141	-96	0	141	-96	0	141	-96	0.5	
142	-94	0	142	-56	0	142	-255	0.233	142	-94	0	142	-94	0	142	-94	0.5	
143	-92	0	143	-55	0	143	-245	0.232	143	-92	0	143	-92	0	143	-92	0.5	
144	-90	0	144	-54	0	144	-235	0.231	144	-90	0	144	-90	0	144	-90	0.5	
145	-88	0	145	-53	0	145	-225	0.23	145	-88	0	145	-88	0	145	-88	0.5	
146	-86	0	146	-52	0	146	-215	0.229	146	-86	0	146	-86	0	146	-86	0.5	
147	-84	0	147	-51	0	147	-205	0.228	147	-84	0	147	-84	0	147	-84	0.5	
148	-82	0	148	-50	0	148	-195	0.227	148	-82	0	148	-82	0	148	-82	0.5	
149	-80	0	149	-49	0	149	-185	0.226	149	-80	0	149	-80	0	149	-80	0.5	
150	-78	0	150	-48	0	150	-175	0.225	150	-78	0	150	-78	0	150	-78	0.5	
151	-76	0	151	-47	0	151	-165	0.224	151	-76	0	151	-76	0	151	-76	0.5	
152	-74	0	152	-46	0	152	-155	0.223	152	-74	0	152	-74	0	152	-74	0.5	
153	-72	0	153	-45	0	153	-145	0.222	153	-72	0	153	-72	0	153	-72	0.5	
154	-70	0	154	-44	0	154	-135	0.221	154	-70	0	154	-70	0	154	-70	0.5	
155	-68	0	155	-43	0	155	-125	0.22	155	-68	0	155	-68	0	155	-68	0.5	
156	-66	0	156	-42	0	156	-120	0.219	156	-66	0	156	-66	0	156	-66	0.5	
157	-64	0	157	-41	0	157	-115	0.218	157	-64	0	157	-64	0	157	-64	0.5	
158	-62	0	158	-40	0	158	-110	0.217	158	-62	0	158	-62	0	158	-62	0.5	
159	-60	0	159	-39	0	159	-105	0.216	159	-60	0	159	-60	0	159	-60	0.5	
160	-58	0	160	-38	0	160	-100	0.215	160	-58	0	160	-58	0	160	-58	0.5	
161	-56	0	161	-37	0	161	-95	0.214	161	-56	0	161	-56	0	161	-56	0.5	
162	-54	0	162	-36	0	162	-90	0.213	162	-54	0	162	-54	0	162	-54	0.5	
163	-52	0	163	-35	0	163	-85	0.212	163	-52	0	163	-52	0	163	-52	0.5	
164	-50	0	164	-34	0	164	-80	0.211	164	-50	0	164	-50	0	164	-50	0.5	
165	-48	0	165	-33	0	165	-75	0.21	165	-48	0	165	-48	0	165	-48	0.5	
166	-46	0	166	-32	0	166	-70	0.209	166	-46	0	166	-46	0	166	-46	0.5	
167	-44	0	167	-31	0	167	-65	0.208	167	-44	0	167	-44	0	167	-44	0.5	
168	-42	0	168	-30	0	168	-60	0.207	168	-42	0	168	-42	0	168	-42	0.5	
169	-40	0	169	-29	0	169	-55	0.206	169	-40	0	169	-40	0	169	-40	0.5	
170	-38	0	170	-28	0	170	-50	0.205	170	-38	0	170	-38	0	170	-38	0.5	
171	-36	0	171	-27	0	171	-45	0.204	171	-36	0	171	-36	0	171	-36	0.5	
172	-34	0	172	-26	0	172	-43	0.203	172	-34	0	172	-34	0	172	-34	0.5	
173	-32	0	173	-25	0	173	-41	0.202	173	-32	0	173	-32	0	173	-32	0.5	
174	-30	0	174	-24	0	174	-39	0.201	174	-30	0	174	-30	0	174	-30	0.5	
175	-28	0	175	-23	0	175	-37	0.2	175	-28	0	175	-28	0	175	-28	0.5	
176	-26	0	176	-22	0	176	-35	0.199	176	-26	0	176	-26	0	176	-26	0.5	
177	-24	0	177	-21	0	177	-33	0.198	177	-24	0	177	-24	0	177	-24	0.5	
178	-22	0	178	-20	0	178	-31	0.197	178	-22	0	178	-22	0	178	-22	0.5	
179	-20	0	179	-19	0	179	-29	0.196	179	-20	0	179	-20	0	179	-20	0.5	
180	-18	0	180	-18	0	180	-27	0.195	180	-18	0	180	-18	0	180	-18	0.5	
181	-17	0	181	-17	0	181	-25	0.194	181	-17	0	181	-17	0	181	-17	0.5	
182	-16	0	182	-16	0	182	-23	0.193	182	-16	0	182	-16	0	182	-16	0.5	
183	-15	0	183	-15	0	183	-21	0.192	183	-15	0	183	-15	0	183	-15	0.5	

184	-14	0	184	-14	0	184	-19	0.191	184	-14	0	184	-14	0	184	-14	0.5	A-25
185	-13	0	185	-13	0	185	-17	0.19	185	-13	0	185	-13	0	185	-13	0.5	
186	-12	0	186	-12	0	186	-15	0.189	186	-12	0	186	-12	0	186	-12	0.5	
187	-11	0	187	-11	0	187	-13	0.188	187	-11	0	187	-11	0	187	-11	0.5	
188	-10	0	188	-10	0	188	-11	0.187	188	-10	0	188	-10	0	188	-10	0.5	
189	-9	0	189	-9	0	189	-9	0.186	189	-9	0	189	-9	0	189	-9	0.5	
190	-8	0	190	-8	0	190	-8	0.185	190	-8	0	190	-8	0	190	-8	0.5	
191	-7	0	191	-7	0	191	-7	0.184	191	-7	0	191	-7	0.004	191	-7	0.5	
192	-6	0	192	-6	0	192	-6	0.183	192	-6	0	192	-6	0.007	192	-6	0.5	
193	-5	0	193	-5	0	193	-5	0.182	193	-5	0	193	-5	0.011	193	-5	0.5	
194	-4	0	194	-4	0	194	-4	0.181	194	-4	0	194	-4	0.014	194	-4	0.5	
195	-3	0	195	-3	0	195	-3	0.18	195	-3	0	195	-3	0.018	195	-3	0.5	
196	-2	0	196	-2	0	196	-2	0.179	196	-2	0	196	-2	0.021	196	-2	0.5	
197	-1	0	197	-1	0	197	-1	0.178	197	-1	0	197	-1	0.025	197	-1	0.5	
198	-0.5	0	198	-0.5	0	198	-0.5	0.177	198	-0.5	0	198	-0.5	0.028	198	-0.5	0.5	
199	-0.1	0	199	-0.1	0	199	-0.1	0.176	199	-0.1	0	199	-0.1	0.032	199	-0.1	0.5	
200	0	0	200	0	0	200	0	0.175	200	0	0	200	0	0.035	200	0	0.5	
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202	2	0	202	2	0	202	2	0.173	202	2	0	202	2	0.042	202	2	0.5	
203	3	0	203	3	0	203	3	0.172	203	3	0	203	3	0.046	203	3	0.5	
204	4	0	204	4	0	204	4	0.171	204	4	0	204	4	0.049	204	4	0.5	
205	5	0	205	5	0	205	5	0.17	205	5	0	205	5	0.053	205	5	0.5	
206	6	0	206	6	0	206	6	0.169	206	6	0	206	6	0.056	206	6	0.5	
207	7	0	207	7	0	207	7	0.168	207	7	0	207	7	0.06	207	7	0.5	
208	8	0	208	8	0	208	8	0.167	208	8	0	208	8	0.063	208	8	0.5	
209	9	0	209	9	0	209	9	0.166	209	9	0	209	9	0.067	209	9	0.5	
210	10	0	210	10	0	210	10	0.165	210	10	0	210	10	0.07	210	10	0.5	
211	11	0	211	11	0	211	11	0.164	211	11	0	211	11	0.074	211	11	0.5	
212	12	0	212	12	0	212	12	0.163	212	12	0	212	12	0.077	212	12	0.5	
213	13	0	213	13	0	213	13	0.162	213	13	0	213	13	0.081	213	13	0.5	
214	14	0	214	14	0	214	14	0.161	214	14	0	214	14	0.084	214	14	0.5	
215	15	0	215	15	0	215	15	0.16	215	15	0	215	15	0.088	215	15	0.5	
216	16	0	216	16	0	216	16	0.159	216	16	0	216	16	0.091	216	16	0.5	
217	17	0	217	17	0	217	17	0.158	217	17	0	217	17	0.095	217	17	0.5	
218	18	0	218	18	0	218	18	0.157	218	18	0	218	18	0.098	218	18	0.5	
219	19	0	219	19	0	219	19	0.156	219	19	0	219	19	0.102	219	19	0.5	
220	20	0	220	20	0	220	20	0.155	220	20	0	220	20	0.105	220	20	0.5	
221	21	0	221	21	0	221	21	0.154	221	21	0	221	21	0.109	221	21	0.5	
222	22	0	222	22	0	222	22	0.153	222	22	0	222	22	0.112	222	22	0.5	
223	23	0	223	23	0	223	23	0.152	223	23	0	223	23	0.116	223	23	0.5	
224	24	0	224	24	0	224	24	0.151	224	24	0	224	24	0.119	224	24	0.5	
225	25	0	225	25	0	225	25	0.15	225	25	0	225	25	0.123	225	25	0.5	
226	26	0	226	26	0	226	26	0.149	226	26	0	226	26	0.126	226	26	0.5	
227	27	0	227	27	0	227	27	0.148	227	27	0	227	27	0.13	227	27	0.5	
228	28	0	228	28	0	228	28	0.147	228	28	0	228	28	0.133	228	28	0.5	
229	29	0	229	29	0	229	29	0.146	229	29	0	229	29	0.137	229	29	0.5	
230	30	0	230	30	0	230	30	0.145	230	30	0	230	30	0.14	230	30	0.5	
231	31	0	231	31	0	231	31	0.144	231	31	0	231	31	0.144	231	31	0.5	
232	32	0	232	32	0	232	32	0.143	232	32	0	232	32	0.147	232	32	0.5	
233	33	0	233	33	0	233	33	0.142	233	33	0	233	33	0.151	233	33	0.5	
234	34	0	234	34	0	234	34	0.141	234	34	0	234	34	0.154	234	34	0.5	
235	35	0	235	35	0	235	35	0.14	235	35	0	235	35	0.158	235	35	0.5	
236	36	0	236	36	0	236	36	0.139	236	36	0	236	36	0.161	236	36	0.5	
237	37	0	237	37	0	237	37	0.138	237	37	0	237	37	0.165	237	37	0.5	
238	38	0	238	38	0	238	38	0.137	238	38	0	238	38	0.168	238	38	0.5	
239	39	0	239	39	0	239	39	0.136	239	39	0	239	39	0.172	239	39	0.5	
240	40	0	240	40	0	240	40	0.135	240	40	0	240	40	0.175	240	40	0.5	
241	41	0	241	41	0	241	41	0.134	241	41	0	241	41	0.179	241	41	0.5	
242	42	0	242	42	0	242	42	0.133	242	42	0	242	42	0.182	242	42	0.5	
243	43	0	243	43	0	243	43	0.132	243	43	0	243	43	0.186	243	43	0.5	
244	44	0	244	44	0	244	44	0.131	244	44	0	244	44	0.189	244	44	0.5	
245	45	0	245	45	0	245	45	0.13	245	45	0	245	45	0.193	245	45	0.5	
246	46	0	246	46	0	246	46	0.128	246	46	0	246	46	0.196	246	46	0.5	
247	47	0	247	47	0	247	47	0.125	247	47	0	247	47	0.2	247	47	0.5	
248	48	0	248	48	0	248	48	0.123	248	48	0	248	48	0.203	248	48	0.5	
249	49	0	249	49	0	249	49	0.12	249	49	0	249	49	0.207	249	49	0.5	

250	50	0	250	50	0	250	50	0.118	250	50	0	250	50	0.21	250	50	0.5	A-26
251	51	0	251	51	0	251	51	0.115	251	51	0	251	51	0.214	251	51	0.5	
252	52	0	252	52	0	252	52	0.113	252	52	0	252	52	0.217	252	52	0.5	
253	53	0	253	53	0	253	53	0.11	253	53	0	253	53	0.221	253	53	0.5	
254	54	0	254	54	0	254	54	0.108	254	54	0	254	54	0.224	254	54	0.5	
255	55	0	255	55	0	255	55	0.105	255	55	0	255	55	0.242	255	55	0.5	
260	60	0	260	60	0	260	60	0.093	260	60	0	260	60	0.259	260	60	0.5	
265	65	0	265	65	0	265	65	0.08	265	65	0	265	65	0.277	265	65	0.5	
270	70	0	270	70	0	270	70	0.068	270	70	0	270	70	0.294	270	70	0.5	
275	75	0	275	75	0	275	75	0.055	275	75	0	275	75	0.312	275	75	0.5	
280	80	0	280	80	0	280	80	0.043	280	80	0	280	80	1	280	80	0.5	
285	85	0	285	85	0	285	85	0.03	285	85	0	285	85	0.75	285	85	0.5	
290	90	0	290	90	0	290	90	0.018	290	90	0	290	90	0.5	290	90	0.5	
295	95	0	295	95	0	295	95	0.005	295	95	0	295	95	0.25	295	95	0.5	
300	100	0	300	100	0	300	100	0.001	300	100	0	300	100	0.01	300	100	0.5	
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315	115	0	315	115	0	315	115	0	315	115	0	315	115	0	315	115	0	
320	120	0	320	120	0	320	120	0	320	120	0	320	120	0	320	120	0	
325	125	0	325	125	0	325	125	0	325	125	0	325	125	0	325	125	0	
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370	170	0	370	170	0	370	170	0	370	170	0	370	170	0	370	170	0	
375	175	0	375	175	0	375	175	0	375	175	0	375	175	0	375	175	0	
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385	185	0	385	185	0	385	185	0	385	185	0	385	185	0	385	185	0	
390	190	0	390	190	0	390	190	0	390	190	0	390	190	0	390	190	0	
395	195	0	395	195	0	395	195	0	395	195	0	395	195	0	395	195	0	
400	200	0	400	200	0	400	200	0	400	200	0	400	200	0	400	200	0	
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410	210	0	410	210	0	410	210	0	410	210	0	410	210	0	410	210	0	
415	215	0	415	215	0	415	215	0	415	215	0	415	215	0	415	215	0	
420	220	0	420	220	0	420	220	0	420	220	0	420	220	0	420	220	0	
425	225	0	425	225	0	425	225	0	425	225	0	425	225	0	425	225	0	
430	230	0	430	230	0	430	230	0	430	230	0	430	230	0	430	230	0	
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440	240	0	440	240	0	440	240	0	440	240	0	440	240	0	440	240	0	
445	245	0	445	245	0	445	245	0	445	245	0	445	245	0	445	245	0	
450	250	0	450	250	0	450	250	0	450	250	0	450	250	0	450	250	0	
455	255	0	455	255	0	455	255	0	455	255	0	455	255	0	455	255	0	
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475	275	0	475	275	0	475	275	0	475	275	0	475	275	0	475	275	0	
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500	300	0	500	300	0	500	300	0	500	300	0	500	300	0	500	300	0	
505	305	0	505	305	0	505	305	0	505	305	0	505	305	0	505	305	0	
510	310	0	510	310	0	510	310	0	510	310	0	510	310	0	510	310	0	
515	315	0	515	315	0	515	315	0	515	315	0	515	315	0	515	315	0	
520	320	0	520	320	0	520	320	0	520	320	0	520	320	0	520	320	0	
525	325	0	525	325	0	525	325	0	525	325	0	525	325	0	525	325	0	
530	330	0	530	330	0	530	330	0	530	330	0	530	330	0	530	330	0	
535	335	0	535	335	0	535	335	0	535	335	0	535	335	0	535	335	0	
540	340	0	540	340	0	540	340	0	540	340	0	540	340	0	540	340	0	
545	345	0	545	345	0	545	345	0	545	345	0	545	345	0	545	345	0	
550	350	0	550	350	0	550	350	0	550	350	0	550	350	0	550	350	0	

CLAY5M1M			CLAY5M30CM			CLAY5M3M			CLAY5MTOP			CLAY5MBOTTOM			CLAY5MFLAT		
Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)
0	-975	0	0	-1575	0	0	-975	0	0	-1600	0.5	0	-975	0	0	-1200	0
0.1	-975.5	0.125	0.1	-1573	0.05	0.1	-975.5	0.01	0.1	-1598	0.75	0.1	-975.5	0.001	0.1	-1198	0.5
0.2	-976	0.15	0.2	-1571	0.1	0.2	-976	0.02	0.2	-1595	1	0.2	-976	0.002	0.2	-1196	0.5
0.3	-976.5	0.175	0.3	-1569	0.15	0.3	-976.5	0.03	0.3	-1593	1	0.3	-976.5	0.003	0.3	-1194	0.5
0.4	-977	0.2	0.4	-1567	0.2	0.4	-977	0.04	0.4	-1590	1	0.4	-977	0.004	0.4	-1192	0.5
0.5	-977.5	0.225	0.5	-1565	0.25	0.5	-977.5	0.05	0.5	-1588	1	0.5	-977.5	0.005	0.5	-1190	0.5
0.6	-978	0.25	0.6	-1563	0.3	0.6	-978	0.06	0.6	-1585	1	0.6	-978	0.006	0.6	-1188	0.5
0.7	-978.5	0.275	0.7	-1561	0.35	0.7	-978.5	0.07	0.7	-1583	1	0.7	-978.5	0.007	0.7	-1186	0.5
0.8	-979	0.3	0.8	-1559	0.4	0.8	-979	0.08	0.8	-1580	1	0.8	-979	0.008	0.8	-1184	0.5
0.9	-979.5	0.325	0.9	-1557	0.425	0.9	-979.5	0.09	0.9	-1578	1	0.9	-979.5	0.009	0.9	-1182	0.5
1	-980	0.35	1	-1555	0.45	1	-980	0.1	1	-1575	0.99	1	-980	0.01	1	-1180	0.5
2	-985	0.4	2	-1560	0.7	2	-985	0.15	2	-1560	0.98	2	-985	0.02	2	-1165	0.5
3	-990	0.45	3	-1570	0.95	3	-990	0.2	3	-1550	0.97	3	-990	0.03	3	-1150	0.5
4	-995	0.5	4	-1580	1	4	-995	0.25	4	-1540	0.96	4	-995	0.04	4	-1135	0.5
5	-1000	0.55	5	-1590	1	5	-1000	0.3	5	-1530	0.95	5	-1000	0.05	5	-1125	0.5
6	-1005	0.6	6	-1600	1	6	-1005	0.35	6	-1520	0.94	6	-1005	0.06	6	-1115	0.5
7	-1010	0.65	7	-1610	1	7	-1010	0.4	7	-1510	0.93	7	-1010	0.07	7	-1105	0.5
8	-1015	0.7	8	-1620	1	8	-1015	0.45	8	-1500	0.92	8	-1015	0.08	8	-1095	0.5
9	-1020	0.75	9	-1625	1	9	-1020	0.5	9	-1490	0.91	9	-1020	0.09	9	-1085	0.5
10	-1025	0.8	10	-1630	1	10	-1025	0.55	10	-1480	0.9	10	-1025	0.1	10	-1075	0.5
11	-1030	0.85	11	-1635	0.9	11	-1030	0.6	11	-1470	0.89	11	-1030	0.11	11	-1065	0.5
12	-1035	0.9	12	-1640	0.8	12	-1035	0.65	12	-1460	0.88	12	-1035	0.12	12	-1055	0.5
13	-1040	0.95	13	-1642	0.7	13	-1040	0.675	13	-1450	0.87	13	-1040	0.13	13	-1045	0.5
14	-1050	1	14	-1643	0.6	14	-1045	0.7	14	-1440	0.86	14	-1045	0.14	14	-1035	0.5
15	-1060	1	15	-1644	0.5	15	-1050	0.725	15	-1433	0.85	15	-1050	0.15	15	-1025	0.5
16	-1070	1	16	-1645	0.45	16	-1055	0.75	16	-1425	0.84	16	-1055	0.16	16	-1015	0.5
17	-1080	1	17	-1645	0.4	17	-1060	0.775	17	-1418	0.83	17	-1060	0.17	17	-1005	0.5
18	-1090	1	18	-1645	0.35	18	-1065	0.8	18	-1410	0.82	18	-1065	0.18	18	-995	0.5
19	-1100	1	19	-1645	0.3	19	-1070	0.825	19	-1403	0.81	19	-1070	0.19	19	-985	0.5
20	-1110	1	20	-1645	0.25	20	-1075	0.85	20	-1395	0.8	20	-1075	0.2	20	-977.5	0.5
21	-1120	1	21	-1645	0.2	21	-1080	0.875	21	-1388	0.79	21	-1080	0.21	21	-970	0.5
22	-1130	1	22	-1644	0.175	22	-1085	0.9	22	-1380	0.78	22	-1085	0.22	22	-962.5	0.5
23	-1140	1	23	-1643	0.15	23	-1090	0.92	23	-1373	0.77	23	-1090	0.23	23	-955	0.5
24	-1150	1	24	-1642	0.125	24	-1095	0.94	24	-1365	0.76	24	-1095	0.24	24	-947.5	0.5
25	-1160	1	25	-1640	0.1	25	-1100	0.96	25	-1358	0.75	25	-1100	0.25	25	-940	0.5
26	-1170	1	26	-1638	0.075	26	-1110	0.98	26	-1350	0.74	26	-1110	0.26	26	-932.5	0.5
27	-1180	1	27	-1636	0.05	27	-1120	1	27	-1343	0.73	27	-1120	0.27	27	-925	0.5
28	-1190	1	28	-1631	0.025	28	-1130	1	28	-1335	0.72	28	-1130	0.28	28	-917.5	0.5
29	-1200	1	29	-1626	0.01	29	-1140	1	29	-1328	0.71	29	-1140	0.29	29	-910	0.5
30	-1210	1	30	-1620	0.001	30	-1150	1	30	-1320	0.7	30	-1150	0.3	30	-902.5	0.5
31	-1215	0.99	31	-1610	0	31	-1160	1	31	-1313	0.69	31	-1160	0.31	31	-895	0.5
32	-1220	0.98	32	-1600	0	32	-1170	1	32	-1305	0.68	32	-1170	0.32	32	-887.5	0.5
33	-1225	0.97	33	-1590	0	33	-1180	1	33	-1298	0.67	33	-1180	0.33	33	-880	0.5
34	-1230	0.96	34	-1580	0	34	-1190	1	34	-1290	0.66	34	-1190	0.34	34	-872.5	0.5
35	-1235	0.95	35	-1570	0	35	-1200	1	35	-1283	0.65	35	-1200	0.35	35	-865	0.5
36	-1237	0.94	36	-1560	0	36	-1210	1	36	-1275	0.64	36	-1210	0.36	36	-857.5	0.5
37	-1239	0.93	37	-1550	0	37	-1220	1	37	-1268	0.63	37	-1220	0.37	37	-850	0.5
38	-1241	0.92	38	-1540	0	38	-1230	1	38	-1263	0.62	38	-1230	0.38	38	-842.5	0.5
39	-1243	0.91	39	-1530	0	39	-1240	1	39	-1258	0.61	39	-1240	0.39	39	-835	0.5
40	-1245	0.9	40	-1520	0	40	-1250	1	40	-1253	0.6	40	-1250	0.4	40	-830	0.5
41	-1247	0.88	41	-1510	0	41	-1260	1	41	-1248	0.59	41	-1260	0.41	41	-825	0.5
42	-1249	0.86	42	-1500	0	42	-1270	1	42	-1243	0.58	42	-1270	0.42	42	-820	0.5
43	-1251	0.84	43	-1490	0	43	-1280	1	43	-1238	0.57	43	-1280	0.43	43	-815	0.5
44	-1253	0.82	44	-1480	0	44	-1290	1	44	-1233	0.56	44	-1290	0.44	44	-810	0.5
45	-1255	0.8	45	-1470	0	45	-1300	1	45	-1228	0.55	45	-1300	0.45	45	-805	0.5
46	-1255	0.78	46	-1460	0	46	-1310	1	46	-1223	0.54	46	-1310	0.46	46	-800	0.5
47	-1255	0.76	47	-1450	0	47	-1320	1	47	-1218	0.53	47	-1320	0.47	47	-795	0.5
48	-1255	0.74	48	-1440	0	48	-1330	1	48	-1213	0.52	48	-1330	0.48	48	-790	0.5
49	-1255	0.72	49	-1430	0	49	-1340	1	49	-1208	0.51	49	-1340	0.49	49	-785	0.5
50	-1255	0.7	50	-1420	0	50	-1350	1	50	-1203	0.5	50	-1350	0.5	50	-780	0.5
51	-1255	0.68	51	-1410	0	51	-1360	0.99	51	-1198	0.49	51	-1360	0.51	51	-775	0.5

52	-1255	0.66	52	-1400	0	52	-1365	0.98	52	-1193	0.48	52	-1365	0.52	52	-770	0.5 A-28
53	-1255	0.64	53	-1390	0	53	-1370	0.97	53	-1188	0.47	53	-1370	0.53	53	-765	0.5
54	-1255	0.62	54	-1380	0	54	-1375	0.96	54	-1183	0.46	54	-1375	0.54	54	-760	0.5
55	-1255	0.6	55	-1370	0	55	-1380	0.95	55	-1178	0.45	55	-1380	0.55	55	-755	0.5
56	-1255	0.58	56	-1360	0	56	-1385	0.94	56	-1173	0.44	56	-1385	0.56	56	-750	0.5
57	-1255	0.56	57	-1350	0	57	-1387	0.93	57	-1168	0.43	57	-1387	0.57	57	-745	0.5
58	-1255	0.54	58	-1340	0	58	-1389	0.92	58	-1163	0.42	58	-1389	0.58	58	-740	0.5
59	-1255	0.52	59	-1330	0	59	-1391	0.91	59	-1158	0.41	59	-1391	0.59	59	-735	0.5
60	-1255	0.5	60	-1320	0	60	-1393	0.9	60	-1153	0.4	60	-1393	0.6	60	-730	0.5
61	-1254	0.475	61	-1310	0	61	-1395	0.88	61	-1148	0.39	61	-1395	0.61	61	-725	0.5
62	-1253	0.45	62	-1300	0	62	-1396	0.86	62	-1143	0.38	62	-1396	0.62	62	-720	0.5
63	-1252	0.425	63	-1290	0	63	-1397	0.84	63	-1138	0.37	63	-1397	0.63	63	-715	0.5
64	-1251	0.4	64	-1280	0	64	-1398	0.82	64	-1133	0.36	64	-1398	0.64	64	-710	0.5
65	-1250	0.375	65	-1270	0	65	-1399	0.8	65	-1128	0.35	65	-1399	0.65	65	-705	0.5
66	-1249	0.35	66	-1260	0	66	-1400	0.78	66	-1123	0.34	66	-1400	0.66	66	-700	0.5
67	-1248	0.325	67	-1250	0	67	-1400	0.76	67	-1118	0.33	67	-1400	0.67	67	-695	0.5
68	-1247	0.3	68	-1240	0	68	-1400	0.74	68	-1113	0.32	68	-1400	0.68	68	-690	0.5
69	-1246	0.275	69	-1230	0	69	-1400	0.72	69	-1108	0.31	69	-1400	0.69	69	-685	0.5
70	-1245	0.25	70	-1220	0	70	-1400	0.7	70	-1103	0.3	70	-1400	0.7	70	-680	0.5
71	-1244	0.23	71	-1210	0	71	-1400	0.68	71	-1098	0.29	71	-1400	0.71	71	-675	0.5
72	-1243	0.21	72	-1200	0	72	-1400	0.66	72	-1093	0.28	72	-1400	0.72	72	-670	0.5
73	-1242	0.19	73	-1190	0	73	-1400	0.64	73	-1088	0.27	73	-1400	0.73	73	-665	0.5
74	-1241	0.17	74	-1180	0	74	-1400	0.62	74	-1083	0.26	74	-1400	0.74	74	-660	0.5
75	-1240	0.15	75	-1170	0	75	-1400	0.6	75	-1078	0.25	75	-1400	0.75	75	-655	0.5
76	-1239	0.14	76	-1160	0	76	-1399	0.59	76	-1073	0.24	76	-1399	0.76	76	-650	0.5
77	-1238	0.13	77	-1150	0	77	-1398	0.58	77	-1068	0.23	77	-1398	0.77	77	-645	0.5
78	-1237	0.12	78	-1140	0	78	-1397	0.57	78	-1063	0.22	78	-1397	0.78	78	-640	0.5
79	-1236	0.11	79	-1130	0	79	-1396	0.56	79	-1058	0.21	79	-1396	0.79	79	-635	0.5
80	-1235	0.1	80	-1120	0	80	-1395	0.55	80	-1053	0.2	80	-1395	0.8	80	-630	0.5
81	-1233	0.095	81	-1110	0	81	-1394	0.54	81	-1048	0.19	81	-1394	0.81	81	-625	0.5
82	-1231	0.09	82	-1100	0	82	-1393	0.53	82	-1043	0.18	82	-1393	0.82	82	-620	0.5
83	-1229	0.085	83	-1090	0	83	-1392	0.52	83	-1038	0.17	83	-1392	0.83	83	-615	0.5
84	-1227	0.08	84	-1080	0	84	-1391	0.51	84	-1033	0.16	84	-1391	0.84	84	-610	0.5
85	-1225	0.075	85	-1070	0	85	-1390	0.5	85	-1028	0.15	85	-1390	0.85	85	-605	0.5
86	-1223	0.07	86	-1060	0	86	-1389	0.49	86	-1023	0.14	86	-1389	0.86	86	-600	0.5
87	-1221	0.065	87	-1050	0	87	-1388	0.48	87	-1018	0.13	87	-1388	0.87	87	-595	0.5
88	-1219	0.06	88	-1040	0	88	-1387	0.47	88	-1013	0.12	88	-1387	0.88	88	-590	0.5
89	-1217	0.055	89	-1030	0	89	-1386	0.46	89	-1008	0.11	89	-1386	0.89	89	-585	0.5
90	-1215	0.05	90	-1020	0	90	-1385	0.45	90	-1003	0.1	90	-1385	0.9	90	-580	0.5
91	-1213	0.045	91	-1010	0	91	-1384	0.44	91	-997.5	0.09	91	-1384	0.91	91	-575	0.5
92	-1211	0.04	92	-1000	0	92	-1383	0.43	92	-992.5	0.08	92	-1383	0.92	92	-570	0.5
93	-1209	0.035	93	-990	0	93	-1382	0.42	93	-987.5	0.07	93	-1382	0.93	93	-565	0.5
94	-1207	0.03	94	-980	0	94	-1381	0.41	94	-982.5	0.06	94	-1381	0.94	94	-560	0.5
95	-1205	0.025	95	-970	0	95	-1380	0.4	95	-977.5	0.05	95	-1380	0.95	95	-555	0.5
96	-1203	0.02	96	-960	0	96	-1379	0.395	96	-972.5	0.04	96	-1379	0.96	96	-553	0.5
97	-1201	0.015	97	-950	0	97	-1378	0.39	97	-967.5	0.03	97	-1378	0.97	97	-551	0.5
98	-1199	0.01	98	-940	0	98	-1377	0.385	98	-962.5	0.02	98	-1377	0.98	98	-549	0.5
99	-1197	0.005	99	-930	0	99	-1376	0.38	99	-957.5	0.01	99	-1376	0.99	99	-547	0.5
100	-1195	0.001	100	-920	0	100	-1375	0.375	100	-952.5	0.001	100	-1375	1	100	-545	0.1
101	-1190	0	101	-910	0	101	-1374	0.37	101	-947.5	0	101	-1374	0.9	101	-543	0.0
102	-1185	0	102	-900	0	102	-1373	0.365	102	-942.5	0	102	-1373	0.7	102	-541	0
103	-1180	0	103	-895	0	103	-1372	0.36	103	-937.5	0	103	-1372	0.5	103	-539	0
104	-1175	0	104	-890	0	104	-1371	0.355	104	-932.5	0	104	-1371	0.2	104	-537	0
105	-1170	0	105	-885	0	105	-1370	0.35	105	-927.5	0	105	-1370	0.1	105	-535	0
106	-1165	0	106	-880	0	106	-1369	0.345	106	-922.5	0	106	-1369	0.01	106	-533	0
107	-1160	0	107	-875	0	107	-1368	0.34	107	-917.5	0	107	-1368	0	107	-531	0
108	-1155	0	108	-870	0	108	-1367	0.335	108	-912.5	0	108	-1367	0	108	-529	0
109	-1150	0	109	-865	0	109	-1366	0.33	109	-907.5	0	109	-1366	0	109	-527	0
110	-1140	0	110	-860	0	110	-1365	0.325	110	-902.5	0	110	-1365	0	110	-525	0
111	-1130	0	111	-855	0	111	-1364	0.32	111	-897.5	0	111	-1364	0	111	-523	0
112	-1120	0	112	-850	0	112	-1363	0.315	112	-892.5	0	112	-1363	0	112	-521	0
113	-1110	0	113	-845	0	113	-1362	0.31	113	-887.5	0	113	-1362	0	113	-519	0
114	-1100	0	114	-840	0	114	-1361	0.305	114	-882.5	0	114	-1361	0	114	-517	0
115	-1090	0	115	-835	0	115	-1360	0.3	115	-877.5	0	115	-1360	0	115	-515	0
116	-1080	0	116	-830	0	116	-1359	0.295	116	-872.5	0	116	-1359	0	116	-513	0
117	-1070	0	117	-825	0	117	-1358	0.29	117	-867.5	0	117	-1358	0	117	-511	0

118	-1060	0	118	-820	0	118	-1357	0.285	118	-862.5	0	118	-1357	0	118	-509	0
119	-1050	0	119	-815	0	119	-1356	0.28	119	-857.5	0	119	-1356	0	119	-507	0
120	-1040	0	120	-810	0	120	-1355	0.275	120	-852.5	0	120	-1355	0	120	-505	0
121	-1030	0	121	-805	0	121	-1354	0.27	121	-847.5	0	121	-1354	0	121	-503	0
122	-1020	0	122	-800	0	122	-1353	0.265	122	-842.5	0	122	-1353	0	122	-501	0
123	-1010	0	123	-795	0	123	-1352	0.26	123	-837.5	0	123	-1352	0	123	-499	0
124	-1000	0	124	-790	0	124	-1351	0.255	124	-832.5	0	124	-1351	0	124	-497	0
125	-990	0	125	-785	0	125	-1350	0.25	125	-827.5	0	125	-1350	0	125	-495	0
126	-980	0	126	-780	0	126	-1348	0.249	126	-822.5	0	126	-1348	0	126	-493	0
127	-970	0	127	-775	0	127	-1346	0.248	127	-817.5	0	127	-1346	0	127	-491	0
128	-960	0	128	-770	0	128	-1344	0.247	128	-812.5	0	128	-1344	0	128	-489	0
129	-950	0	129	-765	0	129	-1342	0.246	129	-807.5	0	129	-1342	0	129	-487	0
130	-940	0	130	-760	0	130	-1340	0.245	130	-802.5	0	130	-1340	0	130	-485	0
131	-930	0	131	-755	0	131	-1338	0.244	131	-797.5	0	131	-1338	0	131	-483	0
132	-920	0	132	-750	0	132	-1336	0.243	132	-792.5	0	132	-1336	0	132	-481	0
133	-910	0	133	-745	0	133	-1334	0.242	133	-787.5	0	133	-1334	0	133	-479	0
134	-900	0	134	-740	0	134	-1332	0.241	134	-782.5	0	134	-1332	0	134	-477	0
135	-890	0	135	-735	0	135	-1330	0.24	135	-777.5	0	135	-1330	0	135	-475	0
136	-880	0	136	-730	0	136	-1328	0.239	136	-772.5	0	136	-1328	0	136	-473	0
137	-870	0	137	-725	0	137	-1326	0.238	137	-767.5	0	137	-1326	0	137	-471	0
138	-860	0	138	-720	0	138	-1324	0.237	138	-762.5	0	138	-1324	0	138	-469	0
139	-850	0	139	-715	0	139	-1322	0.236	139	-757.5	0	139	-1322	0	139	-467	0
140	-840	0	140	-710	0	140	-1320	0.235	140	-752.5	0	140	-1320	0	140	-465	0
141	-830	0	141	-705	0	141	-1318	0.234	141	-747.5	0	141	-1318	0	141	-463	0
142	-820	0	142	-700	0	142	-1316	0.233	142	-742.5	0	142	-1316	0	142	-461	0
143	-810	0	143	-695	0	143	-1314	0.232	143	-737.5	0	143	-1314	0	143	-459	0
144	-800	0	144	-690	0	144	-1312	0.231	144	-732.5	0	144	-1312	0	144	-457	0
145	-790	0	145	-685	0	145	-1310	0.23	145	-727.5	0	145	-1310	0	145	-455	0
146	-780	0	146	-680	0	146	-1308	0.229	146	-722.5	0	146	-1308	0	146	-453	0
147	-770	0	147	-675	0	147	-1306	0.228	147	-717.5	0	147	-1306	0	147	-451	0
148	-760	0	148	-670	0	148	-1304	0.227	148	-712.5	0	148	-1304	0	148	-449	0
149	-750	0	149	-665	0	149	-1302	0.226	149	-707.5	0	149	-1302	0	149	-447	0
150	-740	0	150	-660	0	150	-1300	0.225	150	-702.5	0	150	-1300	0	150	-445	0
151	-730	0	151	-655	0	151	-1298	0.224	151	-697.5	0	151	-1298	0	151	-443	0
152	-720	0	152	-650	0	152	-1296	0.223	152	-692.5	0	152	-1296	0	152	-441	0
153	-710	0	153	-645	0	153	-1294	0.222	153	-687.5	0	153	-1294	0	153	-439	0
154	-700	0	154	-640	0	154	-1292	0.221	154	-682.5	0	154	-1292	0	154	-437	0
155	-690	0	155	-635	0	155	-1290	0.22	155	-677.5	0	155	-1290	0	155	-435	0
156	-680	0	156	-630	0	156	-1288	0.219	156	-672.5	0	156	-1288	0	156	-433	0
157	-670	0	157	-625	0	157	-1286	0.218	157	-667.5	0	157	-1286	0	157	-431	0
158	-660	0	158	-620	0	158	-1284	0.217	158	-662.5	0	158	-1284	0	158	-429	0
159	-650	0	159	-615	0	159	-1282	0.216	159	-657.5	0	159	-1282	0	159	-427	0
160	-640	0	160	-610	0	160	-1280	0.215	160	-652.5	0	160	-1280	0	160	-425	0
161	-630	0	161	-605	0	161	-1278	0.214	161	-647.5	0	161	-1278	0	161	-423	0
162	-620	0	162	-600	0	162	-1276	0.213	162	-642.5	0	162	-1276	0	162	-421	0
163	-610	0	163	-595	0	163	-1274	0.212	163	-637.5	0	163	-1274	0	163	-419	0
164	-600	0	164	-590	0	164	-1272	0.211	164	-632.5	0	164	-1272	0	164	-417	0
165	-595	0	165	-585	0	165	-1270	0.21	165	-627.5	0	165	-1270	0	165	-415	0
166	-590	0	166	-580	0	166	-1268	0.209	166	-622.5	0	166	-1268	0	166	-413	0
167	-585	0	167	-575	0	167	-1266	0.208	167	-617.5	0	167	-1266	0	167	-411	0
168	-580	0	168	-570	0	168	-1264	0.207	168	-612.5	0	168	-1264	0	168	-409	0
169	-575	0	169	-565	0	169	-1262	0.206	169	-607.5	0	169	-1262	0	169	-407	0
170	-570	0	170	-560	0	170	-1260	0.205	170	-602.5	0	170	-1260	0	170	-405	0
171	-565	0	171	-555	0	171	-1258	0.204	171	-597.5	0	171	-1258	0	171	-403	0
172	-560	0	172	-550	0	172	-1256	0.203	172	-592.5	0	172	-1256	0	172	-401	0
173	-555	0	173	-545	0	173	-1254	0.202	173	-587.5	0	173	-1254	0	173	-399	0
174	-550	0	174	-540	0	174	-1252	0.201	174	-582.5	0	174	-1252	0	174	-397	0
175	-545	0	175	-535	0	175	-1250	0.2	175	-577.5	0	175	-1250	0	175	-395	0
176	-540	0	176	-530	0	176	-1248	0.199	176	-572.5	0	176	-1248	0	176	-393	0
177	-535	0	177	-525	0	177	-1246	0.198	177	-567.5	0	177	-1246	0	177	-391	0
178	-530	0	178	-520	0	178	-1244	0.197	178	-562.5	0	178	-1244	0	178	-389	0
179	-525	0	179	-515	0	179	-1242	0.196	179	-557.5	0	179	-1242	0	179	-387	0
180	-520	0	180	-510	0	180	-1240	0.195	180	-552.5	0	180	-1240	0	180	-385	0
181	-515	0	181	-505	0	181	-1238	0.194	181	-547.5	0	181	-1238	0	181	-383	0
182	-510	0	182	-500	0	182	-1236	0.193	182	-542.5	0	182	-1236	0	182	-381	0
183	-505	0	183	-495	0	183	-1234	0.192	183	-537.5	0	183	-1234	0	183	-379	0

184	-500	0	184	-490	0	184	-1232	0.191	184	-532.5	0	184	-1232	0	184	-377	0 A-30
185	-495	0	185	-485	0	185	-1230	0.19	185	-527.5	0	185	-1230	0	185	-375	0
186	-490	0	186	-480	0	186	-1228	0.189	186	-522.5	0	186	-1228	0	186	-373	0
187	-485	0	187	-475	0	187	-1226	0.188	187	-517.5	0	187	-1226	0	187	-371	0
188	-480	0	188	-470	0	188	-1224	0.187	188	-512.5	0	188	-1224	0	188	-369	0
189	-475	0	189	-465	0	189	-1222	0.186	189	-507.5	0	189	-1222	0	189	-367	0
190	-470	0	190	-460	0	190	-1220	0.185	190	-502.5	0	190	-1220	0	190	-365	0
191	-465	0	191	-455	0	191	-1218	0.184	191	-497.5	0	191	-1218	0.004	191	-363	0
192	-460	0	192	-450	0	192	-1216	0.183	192	-492.5	0	192	-1216	0.007	192	-361	0
193	-455	0	193	-445	0	193	-1214	0.182	193	-487.5	0	193	-1214	0.011	193	-359	0
194	-450	0	194	-440	0	194	-1212	0.181	194	-482.5	0	194	-1212	0.014	194	-357	0
195	-445	0	195	-435	0	195	-1210	0.18	195	-477.5	0	195	-1210	0.018	195	-355	0
196	-440	0	196	-430	0	196	-1205	0.179	196	-472.5	0	196	-1205	0.021	196	-353	0
197	-435	0	197	-425	0	197	-1200	0.178	197	-467.5	0	197	-1200	0.025	197	-351	0
198	-430	0	198	-420	0	198	-1195	0.177	198	-462.5	0	198	-1195	0.028	198	-349	0
199	-425	0	199	-415	0	199	-1190	0.176	199	-457.5	0	199	-1190	0.032	199	-347	0
200	-420	0	200	-410	0	200	-1185	0.175	200	-452.5	0	200	-1185	0.035	200	-345	0
201	-415	0	201	-405	0	201	-1180	0.174	201	-447.5	0	201	-1180	0.039	201	-343	0
202	-410	0	202	-400	0	202	-1175	0.173	202	-442.5	0	202	-1175	0.042	202	-341	0
203	-405	0	203	-395	0	203	-1170	0.172	203	-437.5	0	203	-1170	0.046	203	-339	0
204	-400	0	204	-390	0	204	-1165	0.171	204	-432.5	0	204	-1165	0.049	204	-337	0
205	-395	0	205	-385	0	205	-1160	0.17	205	-427.5	0	205	-1160	0.053	205	-335	0
206	-390	0	206	-380	0	206	-1155	0.169	206	-422.5	0	206	-1155	0.056	206	-333	0
207	-385	0	207	-375	0	207	-1150	0.168	207	-417.5	0	207	-1150	0.06	207	-331	0
208	-380	0	208	-370	0	208	-1145	0.167	208	-412.5	0	208	-1145	0.063	208	-329	0
209	-375	0	209	-365	0	209	-1140	0.166	209	-407.5	0	209	-1140	0.067	209	-327	0
210	-370	0	210	-360	0	210	-1135	0.165	210	-402.5	0	210	-1135	0.07	210	-325	0
211	-365	0	211	-355	0	211	-1130	0.164	211	-397.5	0	211	-1130	0.074	211	-323	0
212	-360	0	212	-350	0	212	-1125	0.163	212	-392.5	0	212	-1125	0.077	212	-321	0
213	-355	0	213	-345	0	213	-1120	0.162	213	-387.5	0	213	-1120	0.081	213	-319	0
214	-350	0	214	-340	0	214	-1115	0.161	214	-382.5	0	214	-1115	0.084	214	-317	0
215	-345	0	215	-335	0	215	-1110	0.16	215	-377.5	0	215	-1110	0.088	215	-315	0
216	-340	0	216	-330	0	216	-1105	0.159	216	-372.5	0	216	-1105	0.091	216	-313	0
217	-335	0	217	-325	0	217	-1100	0.158	217	-367.5	0	217	-1100	0.095	217	-311	0
218	-330	0	218	-320	0	218	-1095	0.157	218	-362.5	0	218	-1095	0.098	218	-309	0
219	-325	0	219	-315	0	219	-1090	0.156	219	-357.5	0	219	-1090	0.102	219	-307	0
220	-320	0	220	-310	0	220	-1085	0.155	220	-352.5	0	220	-1085	0.105	220	-305	0
221	-315	0	221	-305	0	221	-1080	0.154	221	-347.5	0	221	-1080	0.109	221	-303	0
222	-310	0	222	-300	0	222	-1075	0.153	222	-342.5	0	222	-1075	0.112	222	-301	0
223	-305	0	223	-295	0	223	-1070	0.152	223	-337.5	0	223	-1070	0.116	223	-299	0
224	-300	0	224	-290	0	224	-1065	0.151	224	-332.5	0	224	-1065	0.119	224	-297	0
225	-295	0	225	-285	0	225	-1060	0.15	225	-327.5	0	225	-1060	0.123	225	-295	0
226	-293	0	226	-280	0	226	-1055	0.149	226	-322.5	0	226	-1055	0.126	226	-293	0
227	-291	0	227	-278	0	227	-1050	0.148	227	-317.5	0	227	-1050	0.13	227	-291	0
228	-289	0	228	-276	0	228	-1045	0.147	228	-312.5	0	228	-1045	0.133	228	-289	0
229	-287	0	229	-274	0	229	-1040	0.146	229	-307.5	0	229	-1040	0.137	229	-287	0
230	-285	0	230	-272	0	230	-1035	0.145	230	-302.5	0	230	-1035	0.14	230	-285	0
231	-283	0	231	-270	0	231	-1030	0.144	231	-297.5	0	231	-1030	0.144	231	-283	0
232	-281	0	232	-268	0	232	-1025	0.143	232	-292.5	0	232	-1025	0.147	232	-281	0
233	-279	0	233	-266	0	233	-1020	0.142	233	-287.5	0	233	-1020	0.151	233	-279	0
234	-277	0	234	-264	0	234	-1015	0.141	234	-282.5	0	234	-1015	0.154	234	-277	0
235	-275	0	235	-262	0	235	-1010	0.14	235	-277.5	0	235	-1010	0.158	235	-275	0
236	-273	0	236	-260	0	236	-1005	0.139	236	-272.5	0	236	-1005	0.161	236	-273	0
237	-271	0	237	-258	0	237	-1000	0.138	237	-267.5	0	237	-1000	0.165	237	-271	0
238	-269	0	238	-256	0	238	-995	0.137	238	-262.5	0	238	-995	0.168	238	-269	0
239	-267	0	239	-254	0	239	-990	0.136	239	-257.5	0	239	-990	0.172	239	-267	0
240	-265	0	240	-252	0	240	-985	0.135	240	-252.5	0	240	-985	0.175	240	-265	0
241	-263	0	241	-250	0	241	-980	0.134	241	-247.5	0	241	-980	0.179	241	-263	0
242	-261	0	242	-248	0	242	-975	0.133	242	-245.5	0	242	-975	0.182	242	-261	0
243	-259	0	243	-246	0	243	-970	0.132	243	-243.5	0	243	-970	0.186	243	-259	0
244	-257	0	244	-244	0	244	-965	0.131	244	-241.5	0	244	-965	0.189	244	-257	0
245	-255	0	245	-242	0	245	-960	0.13	245	-239.5	0	245	-960	0.193	245	-255	0
246	-253	0	246	-240	0	246	-955	0.128	246	-237.5	0	246	-955	0.196	246	-253	0
247	-251	0	247	-238	0	247	-950	0.125	247	-235.5	0	247	-950	0.2	247	-251	0
248	-249	0	248	-236	0	248	-945	0.123	248	-233.5	0	248	-945	0.203	248	-249	0
249	-247	0	249	-234	0	249	-940	0.12	249	-232.5	0	249	-940	0.207	249	-247	0

250	-245	0	250	-233	0	250	-935	0.118	250	-231.5	0	250	-935	0.21	250	-245	0 A-31
251	-243	0	251	-232	0	251	-930	0.115	251	-230.5	0	251	-930	0.214	251	-243	0
252	-241	0	252	-231	0	252	-925	0.113	252	-229.5	0	252	-925	0.217	252	-241	0
253	-239	0	253	-230	0	253	-920	0.11	253	-228.5	0	253	-920	0.221	253	-239	0
254	-237	0	254	-229	0	254	-915	0.108	254	-227.5	0	254	-915	0.224	254	-237	0
255	-235	0	255	-224	0	255	-910	0.105	255	-222.5	0	255	-910	0.242	255	-235	0
260	-230	0	260	-219	0	260	-885	0.093	260	-217.5	0	260	-885	0.259	260	-230	0
265	-225	0	265	-214	0	265	-855	0.08	265	-212.5	0	265	-855	0.277	265	-225	0
270	-220	0	270	-209	0	270	-815	0.068	270	-207.5	0	270	-815	0.294	270	-220	0
275	-215	0	275	-204	0	275	-765	0.055	275	-202.5	0	275	-765	0.312	275	-215	0
280	-210	0	280	-199	0	280	-715	0.043	280	-197.5	0	280	-715	1	280	-210	0
285	-205	0	285	-194	0	285	-665	0.03	285	-192.5	0	285	-665	0.75	285	-205	0
290	-200	0	290	-189	0	290	-615	0.018	290	-187.5	0	290	-615	0.5	290	-200	0
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305	-185	0	305	-174	0	305	-465	0	305	-174	0	305	-465	0	305	-185	0
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315	-175	0	315	-164	0	315	-365	0	315	-164	0	315	-365	0	315	-175	0
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325	-165	0	325	-154	0	325	-275	0	325	-154	0	325	-275	0	325	-165	0
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335	-155	0	335	-144	0	335	-220	0	335	-144	0	335	-220	0	335	-155	0
340	-150	0	340	-139	0	340	-195	0	340	-139	0	340	-195	0	340	-150	0
345	-145	0	345	-134	0	345	-170	0	345	-134	0	345	-170	0	345	-145	0
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375	-115	0	375	-104	0	375	-100	0	375	-104	0	375	-100	0	375	-115	0
380	-110	0	380	-99	0	380	-95	0	380	-99	0	380	-95	0	380	-110	0
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395	-95	0	395	-84	0	395	-80	0	395	-84	0	395	-80	0	395	-95	0
400	-90	0	400	-79	0	400	-75	0	400	-79	0	400	-75	0	400	-90	0
405	-85	0	405	-74	0	405	-70	0	405	-74	0	405	-70	0	405	-85	0
410	-80	0	410	-69	0	410	-65	0	410	-69	0	410	-65	0	410	-80	0
415	-75	0	415	-64	0	415	-60	0	415	-64	0	415	-60	0	415	-75	0
420	-70	0	420	-59	0	420	-55	0	420	-59	0	420	-55	0	420	-70	0
425	-65	0	425	-54	0	425	-50	0	425	-54	0	425	-50	0	425	-65	0
430	-60	0	430	-49	0	430	-45	0	430	-49	0	430	-45	0	430	-60	0
435	-55	0	435	-44	0	435	-40	0	435	-44	0	435	-40	0	435	-55	0
440	-50	0	440	-39	0	440	-35	0	440	-39	0	440	-35	0	440	-50	0
445	-45	0	445	-34	0	445	-30	0	445	-34	0	445	-30	0	445	-45	0
450	-40	0	450	-29	0	450	-25	0	450	-29	0	450	-25	0	450	-40	0
455	-35	0	455	-24	0	455	-20	0	455	-24	0	455	-20	0	455	-35	0
460	-30	0	460	-19	0	460	-16	0	460	-19	0	460	-16	0	460	-30	0
465	-25	0	465	-14	0	465	-12	0	465	-14	0	465	-12	0	465	-25	0
470	-20	0	470	-9	0	470	-8	0	470	-9	0	470	-8	0	470	-20	0
475	-15	0	475	-4	0	475	-5	0	475	-4	0	475	-5	0	475	-15	0
480	-10	0	480	-3	0	480	-2	0	480	-3	0	480	-2	0	480	-10	0
485	-5	0	485	-2	0	485	-1	0	485	-2	0	485	-1	0	485	-5	0
490	-1	0	490	-1	0	490	-1	0	490	-1	0	490	-1	0	490	-1	0
495	-0.1	0	495	-0.1	0	495	-0.1	0	495	-0.1	0	495	-0.1	0	495	-0.1	0
500	0	0	500	0	0	500	0	0	500	0	0	500	0	0	500	0	0
505	5	0	505	5	0	505	5	0	505	5	0	505	5	0	505	5	0
510	10	0	510	10	0	510	10	0	510	10	0	510	10	0	510	10	0
515	15	0	515	15	0	515	15	0	515	15	0	515	15	0	515	15	0
520	20	0	520	20	0	520	20	0	520	20	0	520	20	0	520	20	0
525	25	0	525	25	0	525	25	0	525	25	0	525	25	0	525	25	0
530	30	0	530	30	0	530	30	0	530	30	0	530	30	0	530	30	0
535	35	0	535	35	0	535	35	0	535	35	0	535	35	0	535	35	0
540	40	0	540	40	0	540	40	0	540	40	0	540	40	0	540	40	0
545	45	0	545	45	0	545	45	0	545	45	0	545	45	0	545	45	0
550	50	0	550	50	0	550	50	0	550	50	0	550	50	0	550	50	0

Appendix A.3. Loam Model Initial Conditions and Profile Discritization

INITIAL CONDITIONS AND LOAM PROFILES

LOAM1M1M			LOAM1M30CM			LOAM1M3M			LOAM1MTOP			LOAM1MBOTTOM			LOAM1MFLAT		
Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)
0	-200	0.1	0	-250	0	0	-220	0	0	-200	0.5	0	-200	0	0	-200	0
0.1	-200.5	0.125	0.1	-251	0.05	0.1	-220.3	0.01	0.1	-200.5	0.75	0.1	-200.5	0.001	0.1	-200.5	0.5
0.2	-201	0.15	0.2	-252	0.1	0.2	-220.5	0.02	0.2	-201	1	0.2	-201	0.002	0.2	-201	0.5
0.3	-201.5	0.175	0.3	-253	0.15	0.3	-220.8	0.03	0.3	-201.5	1	0.3	-201.5	0.003	0.3	-201.5	0.5
0.4	-202	0.2	0.4	-254	0.2	0.4	-221	0.04	0.4	-202	1	0.4	-202	0.004	0.4	-202	0.5
0.5	-202.5	0.225	0.5	-255	0.25	0.5	-221.3	0.05	0.5	-202.5	1	0.5	-202.5	0.005	0.5	-202.5	0.5
0.6	-203	0.25	0.6	-256	0.3	0.6	-221.5	0.06	0.6	-203	1	0.6	-203	0.006	0.6	-203	0.5
0.7	-203.5	0.275	0.7	-257	0.35	0.7	-221.8	0.07	0.7	-203.5	1	0.7	-203.5	0.007	0.7	-203.5	0.5
0.8	-204	0.3	0.8	-258	0.4	0.8	-222	0.08	0.8	-204	1	0.8	-204	0.008	0.8	-204	0.5
0.9	-204.5	0.325	0.9	-259	0.425	0.9	-222.3	0.09	0.9	-204.5	1	0.9	-204.5	0.009	0.9	-204.5	0.5
1	-205	0.35	1	-260	0.45	1	-222.5	0.1	1	-205	0.99	1	-205	0.01	1	-205	0.5
2	-210	0.4	2	-270	0.7	2	-225	0.15	2	-210	0.98	2	-210	0.02	2	-210	0.5
3	-210	0.45	3	-280	0.95	3	-227.5	0.2	3	-210	0.97	3	-210	0.03	3	-210	0.5
4	-210	0.5	4	-290	1	4	-230	0.25	4	-210	0.96	4	-210	0.04	4	-210	0.5
5	-210	0.55	5	-300	1	5	-232.5	0.3	5	-210	0.95	5	-210	0.05	5	-210	0.5
6	-210	0.6	6	-310	1	6	-235	0.35	6	-210	0.94	6	-210	0.06	6	-210	0.5
7	-211	0.65	7	-320	1	7	-237.5	0.4	7	-211	0.93	7	-211	0.07	7	-211	0.5
8	-212	0.7	8	-330	1	8	-240	0.45	8	-212	0.92	8	-212	0.08	8	-212	0.5
9	-213	0.75	9	-340	1	9	-242.5	0.5	9	-213	0.91	9	-213	0.09	9	-213	0.5
10	-214	0.8	10	-350	1	10	-245	0.55	10	-214	0.9	10	-214	0.1	10	-214	0.5
11	-216	0.85	11	-355	0.9	11	-247.5	0.6	11	-216	0.89	11	-216	0.11	11	-216	0.5
12	-218	0.9	12	-356	0.8	12	-250	0.65	12	-218	0.88	12	-218	0.12	12	-218	0.5
13	-220	0.95	13	-355	0.7	13	-252.5	0.675	13	-220	0.87	13	-220	0.13	13	-220	0.5
14	-222	1	14	-350	0.6	14	-255	0.7	14	-222	0.86	14	-222	0.14	14	-222	0.5
15	-224	1	15	-345	0.5	15	-257.5	0.725	15	-224	0.85	15	-224	0.15	15	-224	0.5
16	-226	1	16	-340	0.45	16	-260	0.75	16	-226	0.84	16	-226	0.16	16	-226	0.5
17	-228	1	17	-335	0.4	17	-262.5	0.775	17	-228	0.83	17	-228	0.17	17	-228	0.5
18	-230	1	18	-330	0.35	18	-265	0.8	18	-230	0.82	18	-230	0.18	18	-230	0.5
19	-235	1	19	-325	0.3	19	-267.5	0.825	19	-235	0.81	19	-235	0.19	19	-235	0.5
20	-240	1	20	-320	0.25	20	-270	0.85	20	-240	0.8	20	-240	0.2	20	-240	0.5
21	-245	1	21	-315	0.2	21	-272.5	0.875	21	-245	0.79	21	-245	0.21	21	-245	0.5
22	-250	1	22	-310	0.175	22	-275	0.9	22	-250	0.78	22	-250	0.22	22	-250	0.5
23	-255	1	23	-305	0.15	23	-280	0.92	23	-255	0.77	23	-255	0.23	23	-255	0.5
24	-260	1	24	-300	0.125	24	-285	0.94	24	-260	0.76	24	-260	0.24	24	-260	0.5
25	-265	1	25	-295	0.1	25	-290	0.96	25	-265	0.75	25	-265	0.25	25	-265	0.5
26	-270	1	26	-290	0.075	26	-295	0.98	26	-270	0.74	26	-270	0.26	26	-270	0.5
27	-275	1	27	-280	0.05	27	-300	1	27	-275	0.73	27	-275	0.27	27	-275	0.5
28	-280	1	28	-270	0.025	28	-305	1	28	-280	0.72	28	-280	0.28	28	-280	0.5
29	-282	1	29	-260	0.01	29	-310	1	29	-282	0.71	29	-282	0.29	29	-282	0.5
30	-284	1	30	-250	0.001	30	-315	1	30	-284	0.7	30	-284	0.3	30	-284	0.5
31	-285	0.99	31	-240	0	31	-320	1	31	-285	0.69	31	-285	0.31	31	-285	0.5
32	-286	0.98	32	-230	0	32	-325	1	32	-286	0.68	32	-286	0.32	32	-286	0.5
33	-287	0.97	33	-220	0	33	-330	1	33	-287	0.67	33	-287	0.33	33	-287	0.5
34	-288	0.96	34	-210	0	34	-332	1	34	-288	0.66	34	-288	0.34	34	-288	0.5
35	-289	0.95	35	-200	0	35	-334	1	35	-289	0.65	35	-289	0.35	35	-289	0.5
36	-290	0.94	36	-190	0	36	-336	1	36	-290	0.64	36	-290	0.36	36	-290	0.5
37	-290	0.93	37	-180	0	37	-338	1	37	-290	0.63	37	-290	0.37	37	-290	0.5
38	-290	0.92	38	-170	0	38	-340	1	38	-290	0.62	38	-290	0.38	38	-290	0.5
39	-289	0.91	39	-160	0	39	-341	1	39	-289	0.61	39	-289	0.39	39	-289	0.5
40	-288	0.9	40	-155	0	40	-342	1	40	-288	0.6	40	-288	0.4	40	-288	0.5
41	-287	0.88	41	-150	0	41	-343	1	41	-287	0.59	41	-287	0.41	41	-287	0.5
42	-286	0.86	42	-145	0	42	-344	1	42	-286	0.58	42	-286	0.42	42	-286	0.5
43	-285	0.84	43	-140	0	43	-345	1	43	-285	0.57	43	-285	0.43	43	-285	0.5
44	-284	0.82	44	-135	0	44	-325	1	44	-284	0.56	44	-284	0.44	44	-284	0.5
45	-283	0.8	45	-130	0	45	-325	1	45	-283	0.55	45	-283	0.45	45	-283	0.5
46	-282	0.78	46	-125	0	46	-325	1	46	-282	0.54	46	-282	0.46	46	-282	0.5
47	-280	0.76	47	-120	0	47	-325	1	47	-280	0.53	47	-280	0.47	47	-280	0.5
48	-278	0.74	48	-115	0	48	-325	1	48	-278	0.52	48	-278	0.48	48	-278	0.5
49	-276	0.72	49	-110	0	49	-325	1	49	-276	0.51	49	-276	0.49	49	-276	0.5
50	-274	0.7	50	-105	0	50	-325	1	50	-274	0.5	50	-274	0.5	50	-274	0.5
51	-272	0.68	51	-100	0	51	-324	0.99	51	-272	0.49	51	-272	0.51	51	-272	0.5

52	-270	0.66	52	-95	0	52	-323	0.98	52	-270	0.48	52	-270	0.52	52	-270	0.5
53	-268	0.64	53	-90	0	53	-322	0.97	53	-268	0.47	53	-268	0.53	53	-268	0.5
54	-266	0.62	54	-85	0	54	-321	0.96	54	-266	0.46	54	-266	0.54	54	-266	0.5
55	-261	0.6	55	-80	0	55	-320	0.95	55	-261	0.45	55	-261	0.55	55	-261	0.5
56	-256	0.58	56	-75	0	56	-318	0.94	56	-256	0.44	56	-256	0.56	56	-256	0.5
57	-251	0.56	57	-70	0	57	-316	0.93	57	-251	0.43	57	-251	0.57	57	-251	0.5
58	-246	0.54	58	-65	0	58	-314	0.92	58	-246	0.42	58	-246	0.58	58	-246	0.5
59	-241	0.52	59	-60	0	59	-312	0.91	59	-241	0.41	59	-241	0.59	59	-241	0.5
60	-236	0.5	60	-58	0	60	-310	0.9	60	-236	0.4	60	-236	0.6	60	-236	0.5
61	-231	0.475	61	-56	0	61	-305	0.88	61	-231	0.39	61	-231	0.61	61	-231	0.5
62	-226	0.45	62	-54	0	62	-300	0.86	62	-226	0.38	62	-226	0.62	62	-226	0.5
63	-221	0.425	63	-52	0	63	-290	0.84	63	-221	0.37	63	-221	0.63	63	-221	0.5
64	-216	0.4	64	-50	0	64	-280	0.82	64	-216	0.36	64	-216	0.64	64	-216	0.5
65	-211	0.375	65	-48	0	65	-270	0.8	65	-211	0.35	65	-211	0.65	65	-211	0.5
66	-206	0.35	66	-46	0	66	-260	0.78	66	-206	0.34	66	-206	0.66	66	-206	0.5
67	-196	0.325	67	-44	0	67	-250	0.76	67	-196	0.33	67	-196	0.67	67	-196	0.5
68	-186	0.3	68	-42	0	68	-240	0.74	68	-186	0.32	68	-186	0.68	68	-186	0.5
69	-176	0.275	69	-40	0	69	-230	0.72	69	-176	0.31	69	-176	0.69	69	-176	0.5
70	-166	0.25	70	-38	0	70	-220	0.7	70	-166	0.3	70	-166	0.7	70	-166	0.5
71	-156	0.23	71	-36	0	71	-210	0.68	71	-156	0.29	71	-156	0.71	71	-156	0.5
72	-146	0.21	72	-34	0	72	-200	0.66	72	-146	0.28	72	-146	0.72	72	-146	0.5
73	-136	0.19	73	-32	0	73	-190	0.64	73	-136	0.27	73	-136	0.73	73	-136	0.5
74	-126	0.17	74	-30	0	74	-180	0.62	74	-126	0.26	74	-126	0.74	74	-126	0.5
75	-116	0.15	75	-28	0	75	-170	0.6	75	-116	0.25	75	-116	0.75	75	-116	0.5
76	-106	0.14	76	-26	0	76	-160	0.59	76	-106	0.24	76	-106	0.76	76	-106	0.5
77	-96	0.13	77	-24	0	77	-150	0.58	77	-96	0.23	77	-96	0.77	77	-96	0.5
78	-86	0.12	78	-22	0	78	-140	0.57	78	-86	0.22	78	-86	0.78	78	-86	0.5
79	-76	0.11	79	-20	0	79	-130	0.56	79	-76	0.21	79	-76	0.79	79	-76	0.5
80	-66	0.1	80	-18	0	80	-120	0.55	80	-66	0.2	80	-66	0.8	80	-66	0.5
81	-56	0.095	81	-17	0	81	-110	0.54	81	-56	0.19	81	-56	0.81	81	-56	0.5
82	-46	0.09	82	-16	0	82	-100	0.53	82	-46	0.18	82	-46	0.82	82	-46	0.5
83	-41	0.085	83	-15	0	83	-90	0.52	83	-41	0.17	83	-41	0.83	83	-41	0.5
84	-36	0.08	84	-14	0	84	-80	0.51	84	-36	0.16	84	-36	0.84	84	-36	0.5
85	-31	0.075	85	-13	0	85	-70	0.5	85	-31	0.15	85	-31	0.85	85	-31	0.5
86	-26	0.07	86	-12	0	86	-60	0.49	86	-26	0.14	86	-26	0.86	86	-26	0.5
87	-21	0.065	87	-11	0	87	-50	0.48	87	-21	0.13	87	-21	0.87	87	-21	0.5
88	-16	0.06	88	-10	0	88	-40	0.47	88	-16	0.12	88	-16	0.88	88	-16	0.5
89	-14	0.055	89	-9	0	89	-30	0.46	89	-14	0.11	89	-14	0.89	89	-14	0.5
90	-12	0.05	90	-8	0	90	-25	0.45	90	-12	0.1	90	-12	0.9	90	-12	0.5
91	-10	0.045	91	-7	0	91	-20	0.44	91	-10	0.09	91	-10	0.91	91	-10	0.5
92	-8	0.04	92	-6	0	92	-15	0.43	92	-8	0.08	92	-8	0.92	92	-8	0.5
93	-6	0.035	93	-5	0	93	-10	0.42	93	-6	0.07	93	-6	0.93	93	-6	0.5
94	-4	0.03	94	-4	0	94	-8	0.41	94	-4	0.06	94	-4	0.94	94	-4	0.5
95	-3	0.025	95	-3	0	95	-6	0.4	95	-3	0.05	95	-3	0.95	95	-3	0.5
96	-2	0.02	96	-2	0	96	-4	0.395	96	-2	0.04	96	-2	0.96	96	-2	0.5
97	-1	0.015	97	-1	0	97	-2	0.39	97	-1	0.03	97	-1	0.97	97	-1	0.5
98	-0.5	0.01	98	-0.5	0	98	-1	0.385	98	-0.5	0.02	98	-0.5	0.98	98	-0.5	0.5
99	-0.1	0.005	99	-0.1	0	99	-0.2	0.38	99	-0.1	0.01	99	-0.1	0.99	99	-0.1	0.5
100	0	0.001	100	0	0	100	0	0.375	100	0	0.001	100	0	1	100	0	0.1
101	1	0	101	1	0	101	1	0.37	101	1	0	101	1	0.9	101	1	0.01
102	2	0	102	2	0	102	2	0.365	102	2	0	102	2	0.7	102	2	0
103	3	0	103	3	0	103	3	0.36	103	3	0	103	3	0.5	103	3	0
104	4	0	104	4	0	104	4	0.355	104	4	0	104	4	0.2	104	4	0
105	5	0	105	5	0	105	5	0.35	105	5	0	105	5	0.1	105	5	0
106	6	0	106	6	0	106	6	0.345	106	6	0	106	6	0.01	106	6	0
107	7	0	107	7	0	107	7	0.34	107	7	0	107	7	0	107	7	0
108	8	0	108	8	0	108	8	0.335	108	8	0	108	8	0	108	8	0
109	9	0	109	9	0	109	9	0.33	109	9	0	109	9	0	109	9	0
110	10	0	110	10	0	110	10	0.325	110	10	0	110	10	0	110	10	0
111	11	0	111	11	0	111	11	0.32	111	11	0	111	11	0	111	11	0
112	12	0	112	12	0	112	12	0.315	112	12	0	112	12	0	112	12	0
113	13	0	113	13	0	113	13	0.31	113	13	0	113	13	0	113	13	0
114	14	0	114	14	0	114	14	0.305	114	14	0	114	14	0	114	14	0
115	15	0	115	15	0	115	15	0.3	115	15	0	115	15	0	115	15	0
116	16	0	116	16	0	116	16	0.295	116	16	0	116	16	0	116	16	0
117	17	0	117	17	0	117	17	0.29	117	17	0	117	17	0	117	17	0

118	18	0	118	18	0	118	18	0.285	118	18	0	118	18	0	118	18	0	A-34
119	19	0	119	19	0	119	19	0.28	119	19	0	119	19	0	119	19	0	
120	20	0	120	20	0	120	20	0.275	120	20	0	120	20	0	120	20	0	
121	21	0	121	21	0	121	21	0.27	121	21	0	121	21	0	121	21	0	
122	22	0	122	22	0	122	22	0.265	122	22	0	122	22	0	122	22	0	
123	23	0	123	23	0	123	23	0.26	123	23	0	123	23	0	123	23	0	
124	24	0	124	24	0	124	24	0.255	124	24	0	124	24	0	124	24	0	
125	25	0	125	25	0	125	25	0.25	125	25	0	125	25	0	125	25	0	
126	26	0	126	26	0	126	26	0.249	126	26	0	126	26	0	126	26	0	
127	27	0	127	27	0	127	27	0.248	127	27	0	127	27	0	127	27	0	
128	28	0	128	28	0	128	28	0.247	128	28	0	128	28	0	128	28	0	
129	29	0	129	29	0	129	29	0.246	129	29	0	129	29	0	129	29	0	
130	30	0	130	30	0	130	30	0.245	130	30	0	130	30	0	130	30	0	
131	31	0	131	31	0	131	31	0.244	131	31	0	131	31	0	131	31	0	
132	32	0	132	32	0	132	32	0.243	132	32	0	132	32	0	132	32	0	
133	33	0	133	33	0	133	33	0.242	133	33	0	133	33	0	133	33	0	
134	34	0	134	34	0	134	34	0.241	134	34	0	134	34	0	134	34	0	
135	35	0	135	35	0	135	35	0.24	135	35	0	135	35	0	135	35	0	
136	36	0	136	36	0	136	36	0.239	136	36	0	136	36	0	136	36	0	
137	37	0	137	37	0	137	37	0.238	137	37	0	137	37	0	137	37	0	
138	38	0	138	38	0	138	38	0.237	138	38	0	138	38	0	138	38	0	
139	39	0	139	39	0	139	39	0.236	139	39	0	139	39	0	139	39	0	
140	40	0	140	40	0	140	40	0.235	140	40	0	140	40	0	140	40	0	
141	41	0	141	41	0	141	41	0.234	141	41	0	141	41	0	141	41	0	
142	42	0	142	42	0	142	42	0.233	142	42	0	142	42	0	142	42	0	
143	43	0	143	43	0	143	43	0.232	143	43	0	143	43	0	143	43	0	
144	44	0	144	44	0	144	44	0.231	144	44	0	144	44	0	144	44	0	
145	45	0	145	45	0	145	45	0.23	145	45	0	145	45	0	145	45	0	
146	46	0	146	46	0	146	46	0.229	146	46	0	146	46	0	146	46	0	
147	47	0	147	47	0	147	47	0.228	147	47	0	147	47	0	147	47	0	
148	48	0	148	48	0	148	48	0.227	148	48	0	148	48	0	148	48	0	
149	49	0	149	49	0	149	49	0.226	149	49	0	149	49	0	149	49	0	
150	50	0	150	50	0	150	50	0.225	150	50	0	150	50	0	150	50	0	
151	51	0	151	51	0	151	51	0.224	151	51	0	151	51	0	151	51	0	
152	52	0	152	52	0	152	52	0.223	152	52	0	152	52	0	152	52	0	
153	53	0	153	53	0	153	53	0.222	153	53	0	153	53	0	153	53	0	
154	54	0	154	54	0	154	54	0.221	154	54	0	154	54	0	154	54	0	
155	55	0	155	55	0	155	55	0.22	155	55	0	155	55	0	155	55	0	
156	56	0	156	56	0	156	56	0.219	156	56	0	156	56	0	156	56	0	
157	57	0	157	57	0	157	57	0.218	157	57	0	157	57	0	157	57	0	
158	58	0	158	58	0	158	58	0.217	158	58	0	158	58	0	158	58	0	
159	59	0	159	59	0	159	59	0.216	159	59	0	159	59	0	159	59	0	
160	60	0	160	60	0	160	60	0.215	160	60	0	160	60	0	160	60	0	
161	61	0	161	61	0	161	61	0.214	161	61	0	161	61	0	161	61	0	
162	62	0	162	62	0	162	62	0.213	162	62	0	162	62	0	162	62	0	
163	63	0	163	63	0	163	63	0.212	163	63	0	163	63	0	163	63	0	
164	64	0	164	64	0	164	64	0.211	164	64	0	164	64	0	164	64	0	
165	65	0	165	65	0	165	65	0.21	165	65	0	165	65	0	165	65	0	
166	66	0	166	66	0	166	66	0.209	166	66	0	166	66	0	166	66	0	
167	67	0	167	67	0	167	67	0.208	167	67	0	167	67	0	167	67	0	
168	68	0	168	68	0	168	68	0.207	168	68	0	168	68	0	168	68	0	
169	69	0	169	69	0	169	69	0.206	169	69	0	169	69	0	169	69	0	
170	70	0	170	70	0	170	70	0.205	170	70	0	170	70	0	170	70	0	
171	71	0	171	71	0	171	71	0.204	171	71	0	171	71	0	171	71	0	
172	72	0	172	72	0	172	72	0.203	172	72	0	172	72	0	172	72	0	
173	73	0	173	73	0	173	73	0.202	173	73	0	173	73	0	173	73	0	
174	74	0	174	74	0	174	74	0.201	174	74	0	174	74	0	174	74	0	
175	75	0	175	75	0	175	75	0.2	175	75	0	175	75	0	175	75	0	
176	76	0	176	76	0	176	76	0.199	176	76	0	176	76	0	176	76	0	
177	77	0	177	77	0	177	77	0.198	177	77	0	177	77	0	177	77	0	
178	78	0	178	78	0	178	78	0.197	178	78	0	178	78	0	178	78	0	
179	79	0	179	79	0	179	79	0.196	179	79	0	179	79	0	179	79	0	
180	80	0	180	80	0	180	80	0.195	180	80	0	180	80	0	180	80	0	
181	81	0	181	81	0	181	81	0.194	181	81	0	181	81	0	181	81	0	
182	82	0	182	82	0	182	82	0.193	182	82	0	182	82	0	182	82	0	
183	83	0	183	83	0	183	83	0.192	183	83	0	183	83	0	183	83	0	

184	84	0	184	84	0	184	84	0.191	184	84	0	184	84	0	184	84	0	A-35
185	85	0	185	85	0	185	85	0.19	185	85	0	185	85	0	185	85	0	
186	86	0	186	86	0	186	86	0.189	186	86	0	186	86	0	186	86	0	
187	87	0	187	87	0	187	87	0.188	187	87	0	187	87	0	187	87	0	
188	88	0	188	88	0	188	88	0.187	188	88	0	188	88	0	188	88	0	
189	89	0	189	89	0	189	89	0.186	189	89	0	189	89	0	189	89	0	
190	90	0	190	90	0	190	90	0.185	190	90	0	190	90	0	190	90	0	
191	91	0	191	91	0	191	91	0.184	191	91	0	191	91	0	191	91	0	
192	92	0	192	92	0	192	92	0.183	192	92	0	192	92	0	192	92	0	
193	93	0	193	93	0	193	93	0.182	193	93	0	193	93	0	193	93	0	
194	94	0	194	94	0	194	94	0.181	194	94	0	194	94	0	194	94	0	
195	95	0	195	95	0	195	95	0.18	195	95	0	195	95	0	195	95	0	
196	96	0	196	96	0	196	96	0.179	196	96	0	196	96	0	196	96	0	
197	97	0	197	97	0	197	97	0.178	197	97	0	197	97	0	197	97	0	
198	98	0	198	98	0	198	98	0.177	198	98	0	198	98	0	198	98	0	
199	99	0	199	99	0	199	99	0.176	199	99	0	199	99	0	199	99	0	
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201	101	0	201	101	0	201	101	0.174	201	101	0	201	101	0	201	101	0	
202	102	0	202	102	0	202	102	0.173	202	102	0	202	102	0	202	102	0	
203	103	0	203	103	0	203	103	0.172	203	103	0	203	103	0	203	103	0	
204	104	0	204	104	0	204	104	0.171	204	104	0	204	104	0	204	104	0	
205	105	0	205	105	0	205	105	0.17	205	105	0	205	105	0	205	105	0	
206	106	0	206	106	0	206	106	0.169	206	106	0	206	106	0	206	106	0	
207	107	0	207	107	0	207	107	0.168	207	107	0	207	107	0	207	107	0	
208	108	0	208	108	0	208	108	0.167	208	108	0	208	108	0	208	108	0	
209	109	0	209	109	0	209	109	0.166	209	109	0	209	109	0	209	109	0	
210	110	0	210	110	0	210	110	0.165	210	110	0	210	110	0	210	110	0	
211	111	0	211	111	0	211	111	0.164	211	111	0	211	111	0	211	111	0	
212	112	0	212	112	0	212	112	0.163	212	112	0	212	112	0	212	112	0	
213	113	0	213	113	0	213	113	0.162	213	113	0	213	113	0	213	113	0	
214	114	0	214	114	0	214	114	0.161	214	114	0	214	114	0	214	114	0	
215	115	0	215	115	0	215	115	0.16	215	115	0	215	115	0	215	115	0	
216	116	0	216	116	0	216	116	0.159	216	116	0	216	116	0	216	116	0	
217	117	0	217	117	0	217	117	0.158	217	117	0	217	117	0	217	117	0	
218	118	0	218	118	0	218	118	0.157	218	118	0	218	118	0	218	118	0	
219	119	0	219	119	0	219	119	0.156	219	119	0	219	119	0	219	119	0	
220	120	0	220	120	0	220	120	0.155	220	120	0	220	120	0	220	120	0	
221	121	0	221	121	0	221	121	0.154	221	121	0	221	121	0	221	121	0	
222	122	0	222	122	0	222	122	0.153	222	122	0	222	122	0	222	122	0	
223	123	0	223	123	0	223	123	0.152	223	123	0	223	123	0	223	123	0	
224	124	0	224	124	0	224	124	0.151	224	124	0	224	124	0	224	124	0	
225	125	0	225	125	0	225	125	0.15	225	125	0	225	125	0	225	125	0	
226	126	0	226	126	0	226	126	0.149	226	126	0	226	126	0	226	126	0	
227	127	0	227	127	0	227	127	0.148	227	127	0	227	127	0	227	127	0	
228	128	0	228	128	0	228	128	0.147	228	128	0	228	128	0	228	128	0	
229	129	0	229	129	0	229	129	0.146	229	129	0	229	129	0	229	129	0	
230	130	0	230	130	0	230	130	0.145	230	130	0	230	130	0	230	130	0	
231	131	0	231	131	0	231	131	0.144	231	131	0	231	131	0	231	131	0	
232	132	0	232	132	0	232	132	0.143	232	132	0	232	132	0	232	132	0	
233	133	0	233	133	0	233	133	0.142	233	133	0	233	133	0	233	133	0	
234	134	0	234	134	0	234	134	0.141	234	134	0	234	134	0	234	134	0	
235	135	0	235	135	0	235	135	0.14	235	135	0	235	135	0	235	135	0	
236	136	0	236	136	0	236	136	0.139	236	136	0	236	136	0	236	136	0	
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238	138	0	238	138	0	238	138	0.137	238	138	0	238	138	0	238	138	0	
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240	140	0	240	140	0	240	140	0.135	240	140	0	240	140	0	240	140	0	
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242	142	0	242	142	0	242	142	0.133	242	142	0	242	142	0	242	142	0	
243	143	0	243	143	0	243	143	0.132	243	143	0	243	143	0	243	143	0	
244	144	0	244	144	0	244	144	0.131	244	144	0	244	144	0	244	144	0	
245	145	0	245	145	0	245	145	0.13	245	145	0	245	145	0	245	145	0	
246	146	0	246	146	0	246	146	0.128	246	146	0	246	146	0	246	146	0	
247	147	0	247	147	0	247	147	0.125	247	147	0	247	147	0	247	147	0	
248	148	0	248	148	0	248	148	0.123	248	148	0	248	148	0	248	148	0	
249	149	0	249	149	0	249	149	0.12	249	149	0	249	149	0	249	149	0	

250	150	0	250	150	0	250	150	0.118	250	150	0	250	150	0	250	150	0	A-36
251	151	0	251	151	0	251	151	0.115	251	151	0	251	151	0	251	151	0	
252	152	0	252	152	0	252	152	0.113	252	152	0	252	152	0	252	152	0	
253	153	0	253	153	0	253	153	0.11	253	153	0	253	153	0	253	153	0	
254	154	0	254	154	0	254	154	0.108	254	154	0	254	154	0	254	154	0	
255	155	0	255	155	0	255	155	0.105	255	155	0	255	155	0	255	155	0	
260	160	0	260	160	0	260	160	0.093	260	160	0	260	160	0	260	160	0	
265	165	0	265	165	0	265	165	0.08	265	165	0	265	165	0	265	165	0	
270	170	0	270	170	0	270	170	0.068	270	170	0	270	170	0	270	170	0	
275	175	0	275	175	0	275	175	0.055	275	175	0	275	175	0	275	175	0	
280	180	0	280	180	0	280	180	0.043	280	180	0	280	180	0	280	180	0	
285	185	0	285	185	0	285	185	0.03	285	185	0	285	185	0	285	185	0	
290	190	0	290	190	0	290	190	0.018	290	190	0	290	190	0	290	190	0	
295	195	0	295	195	0	295	195	0.005	295	195	0	295	195	0	295	195	0	
300	200	0	300	200	0	300	200	0.001	300	200	0	300	200	0	300	200	0	
305	205	0	305	205	0	305	205	0	305	205	0	305	205	0	305	205	0	
310	210	0	310	210	0	310	210	0	310	210	0	310	210	0	310	210	0	
315	215	0	315	215	0	315	215	0	315	215	0	315	215	0	315	215	0	
320	220	0	320	220	0	320	220	0	320	220	0	320	220	0	320	220	0	
325	225	0	325	225	0	325	225	0	325	225	0	325	225	0	325	225	0	
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345	245	0	345	245	0	345	245	0	345	245	0	345	245	0	345	245	0	
350	250	0	350	250	0	350	250	0	350	250	0	350	250	0	350	250	0	
355	255	0	355	255	0	355	255	0	355	255	0	355	255	0	355	255	0	
360	260	0	360	260	0	360	260	0	360	260	0	360	260	0	360	260	0	
365	265	0	365	265	0	365	265	0	365	265	0	365	265	0	365	265	0	
370	270	0	370	270	0	370	270	0	370	270	0	370	270	0	370	270	0	
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385	285	0	385	285	0	385	285	0	385	285	0	385	285	0	385	285	0	
390	290	0	390	290	0	390	290	0	390	290	0	390	290	0	390	290	0	
395	295	0	395	295	0	395	295	0	395	295	0	395	295	0	395	295	0	
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405	305	0	405	305	0	405	305	0	405	305	0	405	305	0	405	305	0	
410	310	0	410	310	0	410	310	0	410	310	0	410	310	0	410	310	0	
415	315	0	415	315	0	415	315	0	415	315	0	415	315	0	415	315	0	
420	320	0	420	320	0	420	320	0	420	320	0	420	320	0	420	320	0	
425	325	0	425	325	0	425	325	0	425	325	0	425	325	0	425	325	0	
430	330	0	430	330	0	430	330	0	430	330	0	430	330	0	430	330	0	
435	335	0	435	335	0	435	335	0	435	335	0	435	335	0	435	335	0	
440	340	0	440	340	0	440	340	0	440	340	0	440	340	0	440	340	0	
445	345	0	445	345	0	445	345	0	445	345	0	445	345	0	445	345	0	
450	350	0	450	350	0	450	350	0	450	350	0	450	350	0	450	350	0	
455	355	0	455	355	0	455	355	0	455	355	0	455	355	0	455	355	0	
460	360	0	460	360	0	460	360	0	460	360	0	460	360	0	460	360	0	
465	365	0	465	365	0	465	365	0	465	365	0	465	365	0	465	365	0	
470	370	0	470	370	0	470	370	0	470	370	0	470	370	0	470	370	0	
475	375	0	475	375	0	475	375	0	475	375	0	475	375	0	475	375	0	
480	380	0	480	380	0	480	380	0	480	380	0	480	380	0	480	380	0	
485	385	0	485	385	0	485	385	0	485	385	0	485	385	0	485	385	0	
490	390	0	490	390	0	490	390	0	490	390	0	490	390	0	490	390	0	
495	395	0	495	395	0	495	395	0	495	395	0	495	395	0	495	395	0	
500	400	0	500	400	0	500	400	0	500	400	0	500	400	0	500	400	0	
505	405	0	505	405	0	505	405	0	505	405	0	505	405	0	505	405	0	
510	410	0	510	410	0	510	410	0	510	410	0	510	410	0	510	410	0	
515	415	0	515	415	0	515	415	0	515	415	0	515	415	0	515	415	0	
520	420	0	520	420	0	520	420	0	520	420	0	520	420	0	520	420	0	
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530	430	0	530	430	0	530	430	0	530	430	0	530	430	0	530	430	0	
535	435	0	535	435	0	535	435	0	535	435	0	535	435	0	535	435	0	
540	440	0	540	440	0	540	440	0	540	440	0	540	440	0	540	440	0	
545	445	0	545	445	0	545	445	0	545	445	0	545	445	0	545	445	0	
550	450	0	550	450	0	550	450	0	550	450	0	550	450	0	550	450	0	

LOAM2M1M			LOAM2M30CM			LOAM2M3M			LOAM2MTOP			LOAM2MBOTTOM			LOAM2MFLAT		
Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)
0	-300	0.1	0	-350	0	0	-650	0	0	-300	0.5	0	-300	0.1	0	-300	0
0.1	-302	0.125	0.1	-352	0.05	0.1	-650.3	0.01	0.1	-302	0.75	0.1	-302	0.125	0.1	-302	0.5
0.2	-304	0.15	0.2	-354	0.1	0.2	-650.5	0.02	0.2	-304	1	0.2	-304	0.15	0.2	-304	0.5
0.3	-306	0.175	0.3	-356	0.15	0.3	-650.8	0.03	0.3	-306	1	0.3	-306	0.175	0.3	-306	0.5
0.4	-308	0.2	0.4	-358	0.2	0.4	-651	0.04	0.4	-308	1	0.4	-308	0.2	0.4	-308	0.5
0.5	-310	0.225	0.5	-360	0.25	0.5	-651.3	0.05	0.5	-310	1	0.5	-310	0.225	0.5	-310	0.5
0.6	-312	0.25	0.6	-362	0.3	0.6	-651.5	0.06	0.6	-312	1	0.6	-312	0.25	0.6	-312	0.5
0.7	-314	0.275	0.7	-364	0.35	0.7	-651.8	0.07	0.7	-314	1	0.7	-314	0.275	0.7	-314	0.5
0.8	-316	0.3	0.8	-366	0.4	0.8	-652	0.08	0.8	-316	1	0.8	-316	0.3	0.8	-316	0.5
0.9	-318	0.325	0.9	-368	0.425	0.9	-652.3	0.09	0.9	-318	1	0.9	-318	0.325	0.9	-318	0.5
1	-320	0.35	1	-370	0.45	1	-652.5	0.1	1	-320	0.99	1	-320	0.35	1	-320	0.5
2	-325	0.4	2	-390	0.7	2	-655	0.15	2	-325	0.98	2	-325	0.4	2	-325	0.5
3	-330	0.45	3	-410	0.95	3	-657.5	0.2	3	-330	0.97	3	-330	0.45	3	-330	0.5
4	-335	0.5	4	-430	1	4	-660	0.25	4	-335	0.96	4	-335	0.5	4	-335	0.5
5	-340	0.55	5	-450	1	5	-662.5	0.3	5	-340	0.95	5	-340	0.55	5	-340	0.5
6	-345	0.6	6	-470	1	6	-665	0.35	6	-345	0.94	6	-345	0.6	6	-345	0.5
7	-350	0.65	7	-490	1	7	-667.5	0.4	7	-350	0.93	7	-350	0.65	7	-350	0.5
8	-355	0.7	8	-510	1	8	-670	0.45	8	-355	0.92	8	-355	0.7	8	-355	0.5
9	-360	0.75	9	-530	1	9	-672.5	0.5	9	-360	0.91	9	-360	0.75	9	-360	0.5
10	-365	0.8	10	-550	1	10	-675	0.55	10	-365	0.9	10	-365	0.8	10	-365	0.5
11	-370	0.85	11	-550	0.9	11	-677.5	0.6	11	-370	0.89	11	-370	0.85	11	-370	0.5
12	-380	0.9	12	-549	0.8	12	-680	0.65	12	-380	0.88	12	-380	0.9	12	-380	0.5
13	-390	0.95	13	-548	0.7	13	-682.5	0.675	13	-390	0.87	13	-390	0.95	13	-390	0.5
14	-400	1	14	-546	0.6	14	-685	0.7	14	-400	0.86	14	-400	1	14	-400	0.5
15	-410	1	15	-544	0.5	15	-687.5	0.725	15	-410	0.85	15	-410	1	15	-410	0.5
16	-420	1	16	-542	0.45	16	-690	0.75	16	-420	0.84	16	-420	1	16	-420	0.5
17	-430	1	17	-540	0.4	17	-692.5	0.775	17	-430	0.83	17	-430	1	17	-430	0.5
18	-440	1	18	-535	0.35	18	-695	0.8	18	-440	0.82	18	-440	1	18	-440	0.5
19	-450	1	19	-530	0.3	19	-697.5	0.825	19	-450	0.81	19	-450	1	19	-450	0.5
20	-460	1	20	-525	0.25	20	-700	0.85	20	-460	0.8	20	-460	1	20	-460	0.5
21	-470	1	21	-520	0.2	21	-702.5	0.875	21	-470	0.79	21	-470	1	21	-470	0.5
22	-480	1	22	-510	0.175	22	-705	0.9	22	-480	0.78	22	-480	1	22	-480	0.5
23	-485	1	23	-500	0.15	23	-710	0.92	23	-485	0.77	23	-485	1	23	-485	0.5
24	-490	1	24	-490	0.125	24	-715	0.94	24	-490	0.76	24	-490	1	24	-490	0.5
25	-495	1	25	-475	0.1	25	-720	0.96	25	-495	0.75	25	-495	1	25	-495	0.5
26	-500	1	26	-460	0.075	26	-725	0.98	26	-500	0.74	26	-500	1	26	-500	0.5
27	-505	1	27	-445	0.05	27	-730	1	27	-505	0.73	27	-505	1	27	-505	0.5
28	-510	1	28	-430	0.025	28	-735	1	28	-510	0.72	28	-510	1	28	-510	0.5
29	-515	1	29	-415	0.01	29	-740	1	29	-515	0.71	29	-515	1	29	-515	0.5
30	-520	1	30	-400	0.001	30	-745	1	30	-520	0.7	30	-520	1	30	-520	0.5
31	-525	0.99	31	-385	0	31	-750	1	31	-525	0.69	31	-525	0.99	31	-525	0.5
32	-527	0.98	32	-370	0	32	-755	1	32	-527	0.68	32	-527	0.98	32	-527	0.5
33	-529	0.97	33	-355	0	33	-760	1	33	-529	0.67	33	-529	0.97	33	-529	0.5
34	-531	0.96	34	-340	0	34	-765	1	34	-531	0.66	34	-531	0.96	34	-531	0.5
35	-533	0.95	35	-330	0	35	-770	1	35	-533	0.65	35	-533	0.95	35	-533	0.5
36	-535	0.94	36	-320	0	36	-775	1	36	-535	0.64	36	-535	0.94	36	-535	0.5
37	-536	0.93	37	-310	0	37	-780	1	37	-536	0.63	37	-536	0.93	37	-536	0.5
38	-537	0.92	38	-300	0	38	-785	1	38	-537	0.62	38	-537	0.92	38	-537	0.5
39	-538	0.91	39	-290	0	39	-790	1	39	-538	0.61	39	-538	0.91	39	-538	0.5
40	-539	0.9	40	-280	0	40	-795	1	40	-539	0.6	40	-539	0.9	40	-539	0.5
41	-540	0.88	41	-270	0	41	-800	1	41	-540	0.59	41	-540	0.88	41	-540	0.5
42	-540	0.86	42	-260	0	42	-805	1	42	-540	0.58	42	-540	0.86	42	-540	0.5
43	-540	0.84	43	-250	0	43	-810	1	43	-540	0.57	43	-540	0.84	43	-540	0.5
44	-540	0.82	44	-240	0	44	-815	1	44	-540	0.56	44	-540	0.82	44	-540	0.5
45	-540	0.8	45	-230	0	45	-820	1	45	-540	0.55	45	-540	0.8	45	-540	0.5
46	-539	0.78	46	-220	0	46	-825	1	46	-539	0.54	46	-539	0.78	46	-539	0.5
47	-538	0.76	47	-215	0	47	-830	1	47	-538	0.53	47	-538	0.76	47	-538	0.5
48	-537	0.74	48	-210	0	48	-835	1	48	-537	0.52	48	-537	0.74	48	-537	0.5
49	-536	0.72	49	-205	0	49	-840	1	49	-536	0.51	49	-536	0.72	49	-536	0.5
50	-535	0.7	50	-200	0	50	-845	1	50	-535	0.5	50	-535	0.7	50	-535	0.5
51	-534	0.68	51	-195	0	51	-850	0.99	51	-534	0.49	51	-534	0.68	51	-534	0.5

52	-533	0.66	52	-193	0	52	-850	0.98	52	-533	0.48	52	-533	0.66	52	-533	0.5
53	-532	0.64	53	-191	0	53	-849	0.97	53	-532	0.47	53	-532	0.64	53	-532	0.5
54	-530	0.62	54	-189	0	54	-848	0.96	54	-530	0.46	54	-530	0.62	54	-530	0.5
55	-528	0.6	55	-187	0	55	-847	0.95	55	-528	0.45	55	-528	0.6	55	-528	0.5
56	-526	0.58	56	-185	0	56	-846	0.94	56	-526	0.44	56	-526	0.58	56	-526	0.5
57	-524	0.56	57	-183	0	57	-845	0.93	57	-524	0.43	57	-524	0.56	57	-524	0.5
58	-522	0.54	58	-181	0	58	-844	0.92	58	-522	0.42	58	-522	0.54	58	-522	0.5
59	-520	0.52	59	-179	0	59	-843	0.91	59	-520	0.41	59	-520	0.52	59	-520	0.5
60	-518	0.5	60	-177	0	60	-842	0.9	60	-518	0.4	60	-518	0.5	60	-518	0.5
61	-516	0.475	61	-175	0	61	-840	0.88	61	-516	0.39	61	-516	0.475	61	-516	0.5
62	-514	0.45	62	-173	0	62	-838	0.86	62	-514	0.38	62	-514	0.45	62	-514	0.5
63	-512	0.425	63	-171	0	63	-836	0.84	63	-512	0.37	63	-512	0.425	63	-512	0.5
64	-510	0.4	64	-169	0	64	-834	0.82	64	-510	0.36	64	-510	0.4	64	-510	0.5
65	-508	0.375	65	-167	0	65	-832	0.8	65	-508	0.35	65	-508	0.375	65	-508	0.5
66	-506	0.35	66	-165	0	66	-830	0.78	66	-506	0.34	66	-506	0.35	66	-506	0.5
67	-504	0.325	67	-163	0	67	-828	0.76	67	-504	0.33	67	-504	0.325	67	-504	0.5
68	-502	0.3	68	-161	0	68	-826	0.74	68	-502	0.32	68	-502	0.3	68	-502	0.5
69	-500	0.275	69	-159	0	69	-824	0.72	69	-500	0.31	69	-500	0.275	69	-500	0.5
70	-495	0.25	70	-157	0	70	-822	0.7	70	-495	0.3	70	-495	0.25	70	-495	0.5
71	-490	0.23	71	-155	0	71	-820	0.68	71	-490	0.29	71	-490	0.23	71	-490	0.5
72	-485	0.21	72	-153	0	72	-818	0.66	72	-485	0.28	72	-485	0.21	72	-485	0.5
73	-480	0.19	73	-151	0	73	-816	0.64	73	-480	0.27	73	-480	0.19	73	-480	0.5
74	-475	0.17	74	-149	0	74	-814	0.62	74	-475	0.26	74	-475	0.17	74	-475	0.5
75	-470	0.15	75	-147	0	75	-812	0.6	75	-470	0.25	75	-470	0.15	75	-470	0.5
76	-465	0.14	76	-145	0	76	-810	0.59	76	-465	0.24	76	-465	0.14	76	-465	0.5
77	-460	0.13	77	-143	0	77	-805	0.58	77	-460	0.23	77	-460	0.13	77	-460	0.5
78	-455	0.12	78	-141	0	78	-800	0.57	78	-455	0.22	78	-455	0.12	78	-455	0.5
79	-450	0.11	79	-139	0	79	-795	0.56	79	-450	0.21	79	-450	0.11	79	-450	0.5
80	-440	0.1	80	-137	0	80	-790	0.55	80	-440	0.2	80	-440	0.1	80	-440	0.5
81	-430	0.095	81	-135	0	81	-785	0.54	81	-430	0.19	81	-430	0.095	81	-430	0.5
82	-420	0.09	82	-133	0	82	-780	0.53	82	-420	0.18	82	-420	0.09	82	-420	0.5
83	-410	0.085	83	-131	0	83	-775	0.52	83	-410	0.17	83	-410	0.085	83	-410	0.5
84	-400	0.08	84	-129	0	84	-770	0.51	84	-400	0.16	84	-400	0.08	84	-400	0.5
85	-390	0.075	85	-127	0	85	-765	0.5	85	-390	0.15	85	-390	0.075	85	-390	0.5
86	-380	0.07	86	-125	0	86	-760	0.49	86	-380	0.14	86	-380	0.07	86	-380	0.5
87	-370	0.065	87	-123	0	87	-755	0.48	87	-370	0.13	87	-370	0.065	87	-370	0.5
88	-360	0.06	88	-121	0	88	-750	0.47	88	-360	0.12	88	-360	0.06	88	-360	0.5
89	-350	0.055	89	-119	0	89	-740	0.46	89	-350	0.11	89	-350	0.055	89	-350	0.5
90	-340	0.05	90	-117	0	90	-730	0.45	90	-340	0.1	90	-340	0.05	90	-340	0.5
91	-330	0.045	91	-115	0	91	-720	0.44	91	-330	0.09	91	-330	0.045	91	-330	0.5
92	-320	0.04	92	-113	0	92	-710	0.43	92	-320	0.08	92	-320	0.04	92	-320	0.5
93	-310	0.035	93	-111	0	93	-700	0.42	93	-310	0.07	93	-310	0.035	93	-310	0.5
94	-300	0.03	94	-109	0	94	-690	0.41	94	-300	0.06	94	-300	0.03	94	-300	0.5
95	-290	0.025	95	-107	0	95	-680	0.4	95	-290	0.05	95	-290	0.025	95	-290	0.5
96	-280	0.02	96	-105	0	96	-670	0.395	96	-280	0.04	96	-280	0.02	96	-280	0.5
97	-270	0.015	97	-103	0	97	-660	0.39	97	-270	0.03	97	-270	0.015	97	-270	0.5
98	-260	0.01	98	-101	0	98	-650	0.385	98	-260	0.02	98	-260	0.01	98	-260	0.5
99	-250	0.005	99	-99	0	99	-640	0.38	99	-250	0.01	99	-250	0.005	99	-250	0.5
100	-240	0.001	100	-98	0	100	-630	0.375	100	-240	0.001	100	-240	0.001	100	-240	0.1
101	-230	0	101	-97	0	101	-620	0.37	101	-230	0	101	-230	0	101	-230	0.01
102	-220	0	102	-96	0	102	-610	0.365	102	-220	0	102	-220	0	102	-220	0
103	-210	0	103	-95	0	103	-600	0.36	103	-210	0	103	-210	0	103	-210	0
104	-200	0	104	-94	0	104	-590	0.355	104	-200	0	104	-200	0	104	-200	0
105	-190	0	105	-93	0	105	-575	0.35	105	-190	0	105	-190	0	105	-190	0
106	-180	0	106	-92	0	106	-560	0.345	106	-180	0	106	-180	0	106	-180	0
107	-170	0	107	-91	0	107	-545	0.34	107	-170	0	107	-170	0	107	-170	0
108	-160	0	108	-90	0	108	-530	0.335	108	-160	0	108	-160	0	108	-160	0
109	-155	0	109	-89	0	109	-515	0.33	109	-155	0	109	-155	0	109	-155	0
110	-150	0	110	-88	0	110	-500	0.325	110	-150	0	110	-150	0	110	-150	0
111	-145	0	111	-87	0	111	-485	0.32	111	-145	0	111	-145	0	111	-145	0
112	-140	0	112	-86	0	112	-470	0.315	112	-140	0	112	-140	0	112	-140	0
113	-135	0	113	-85	0	113	-455	0.31	113	-135	0	113	-135	0	113	-135	0
114	-130	0	114	-84	0	114	-440	0.305	114	-130	0	114	-130	0	114	-130	0
115	-125	0	115	-83	0	115	-425	0.3	115	-125	0	115	-125	0	115	-125	0
116	-120	0	116	-82	0	116	-410	0.295	116	-120	0	116	-120	0	116	-120	0
117	-118	0	117	-81	0	117	-395	0.29	117	-118	0	117	-118	0	117	-118	0

118	-116	0	118	-80	0	118	-380	0.285	118	-116	0	118	-116	0	118	-116	0
119	-114	0	119	-79	0	119	-365	0.28	119	-114	0	119	-114	0	119	-114	0
120	-112	0	120	-78	0	120	-350	0.275	120	-112	0	120	-112	0	120	-112	0
121	-110	0	121	-77	0	121	-335	0.27	121	-110	0	121	-110	0	121	-110	0
122	-108	0	122	-76	0	122	-320	0.265	122	-108	0	122	-108	0	122	-108	0
123	-106	0	123	-75	0	123	-305	0.26	123	-106	0	123	-106	0	123	-106	0
124	-104	0	124	-74	0	124	-290	0.255	124	-104	0	124	-104	0	124	-104	0
125	-102	0	125	-73	0	125	-280	0.25	125	-102	0	125	-102	0	125	-102	0
126	-100	0	126	-72	0	126	-270	0.249	126	-100	0	126	-100	0	126	-100	0
127	-98	0	127	-71	0	127	-260	0.248	127	-98	0	127	-98	0	127	-98	0
128	-96	0	128	-70	0	128	-250	0.247	128	-96	0	128	-96	0	128	-96	0
129	-94	0	129	-69	0	129	-240	0.246	129	-94	0	129	-94	0	129	-94	0
130	-92	0	130	-68	0	130	-230	0.245	130	-92	0	130	-92	0	130	-92	0
131	-90	0	131	-67	0	131	-220	0.244	131	-90	0	131	-90	0	131	-90	0
132	-88	0	132	-66	0	132	-210	0.243	132	-88	0	132	-88	0	132	-88	0
133	-86	0	133	-65	0	133	-200	0.242	133	-86	0	133	-86	0	133	-86	0
134	-84	0	134	-64	0	134	-190	0.241	134	-84	0	134	-84	0	134	-84	0
135	-82	0	135	-63	0	135	-180	0.24	135	-82	0	135	-82	0	135	-82	0
136	-80	0	136	-62	0	136	-170	0.239	136	-80	0	136	-80	0	136	-80	0
137	-78	0	137	-61	0	137	-160	0.238	137	-78	0	137	-78	0	137	-78	0
138	-76	0	138	-60	0	138	-150	0.237	138	-76	0	138	-76	0	138	-76	0
139	-74	0	139	-59	0	139	-145	0.236	139	-74	0	139	-74	0	139	-74	0
140	-72	0	140	-58	0	140	-140	0.235	140	-72	0	140	-72	0	140	-72	0
141	-70	0	141	-57	0	141	-135	0.234	141	-70	0	141	-70	0	141	-70	0
142	-68	0	142	-56	0	142	-130	0.233	142	-68	0	142	-68	0	142	-68	0
143	-66	0	143	-55	0	143	-125	0.232	143	-66	0	143	-66	0	143	-66	0
144	-64	0	144	-54	0	144	-120	0.231	144	-64	0	144	-64	0	144	-64	0
145	-62	0	145	-53	0	145	-115	0.23	145	-62	0	145	-62	0	145	-62	0
146	-60	0	146	-52	0	146	-110	0.229	146	-60	0	146	-60	0	146	-60	0
147	-58	0	147	-51	0	147	-105	0.228	147	-58	0	147	-58	0	147	-58	0
148	-56	0	148	-50	0	148	-100	0.227	148	-56	0	148	-56	0	148	-56	0
149	-54	0	149	-49	0	149	-95	0.226	149	-54	0	149	-54	0	149	-54	0
150	-52	0	150	-48	0	150	-90	0.225	150	-52	0	150	-52	0	150	-52	0
151	-50	0	151	-47	0	151	-85	0.224	151	-50	0	151	-50	0	151	-50	0
152	-48	0	152	-46	0	152	-80	0.223	152	-48	0	152	-48	0	152	-48	0
153	-46	0	153	-45	0	153	-78	0.222	153	-46	0	153	-46	0	153	-46	0
154	-44	0	154	-44	0	154	-76	0.221	154	-44	0	154	-44	0	154	-44	0
155	-42	0	155	-43	0	155	-74	0.22	155	-42	0	155	-42	0	155	-42	0
156	-41	0	156	-42	0	156	-72	0.219	156	-41	0	156	-41	0	156	-41	0
157	-40	0	157	-41	0	157	-70	0.218	157	-40	0	157	-40	0	157	-40	0
158	-39	0	158	-40	0	158	-68	0.217	158	-39	0	158	-39	0	158	-39	0
159	-38	0	159	-39	0	159	-66	0.216	159	-38	0	159	-38	0	159	-38	0
160	-37	0	160	-38	0	160	-64	0.215	160	-37	0	160	-37	0	160	-37	0
161	-36	0	161	-37	0	161	-62	0.214	161	-36	0	161	-36	0	161	-36	0
162	-35	0	162	-36	0	162	-60	0.213	162	-35	0	162	-35	0	162	-35	0
163	-34	0	163	-35	0	163	-58	0.212	163	-34	0	163	-34	0	163	-34	0
164	-33	0	164	-34	0	164	-56	0.211	164	-33	0	164	-33	0	164	-33	0
165	-32	0	165	-33	0	165	-54	0.21	165	-32	0	165	-32	0	165	-32	0
166	-31	0	166	-32	0	166	-52	0.209	166	-31	0	166	-31	0	166	-31	0
167	-30	0	167	-31	0	167	-50	0.208	167	-30	0	167	-30	0	167	-30	0
168	-29	0	168	-30	0	168	-48	0.207	168	-29	0	168	-29	0	168	-29	0
169	-28	0	169	-29	0	169	-46	0.206	169	-28	0	169	-28	0	169	-28	0
170	-27	0	170	-28	0	170	-44	0.205	170	-27	0	170	-27	0	170	-27	0
171	-26	0	171	-27	0	171	-42	0.204	171	-26	0	171	-26	0	171	-26	0
172	-25	0	172	-26	0	172	-40	0.203	172	-25	0	172	-25	0	172	-25	0
173	-24	0	173	-25	0	173	-38	0.202	173	-24	0	173	-24	0	173	-24	0
174	-23	0	174	-24	0	174	-36	0.201	174	-23	0	174	-23	0	174	-23	0
175	-22	0	175	-23	0	175	-34	0.2	175	-22	0	175	-22	0	175	-22	0
176	-21	0	176	-22	0	176	-32	0.199	176	-21	0	176	-21	0	176	-21	0
177	-20	0	177	-21	0	177	-30	0.198	177	-20	0	177	-20	0	177	-20	0
178	-19	0	178	-20	0	178	-28	0.197	178	-19	0	178	-19	0	178	-19	0
179	-18	0	179	-19	0	179	-26	0.196	179	-18	0	179	-18	0	179	-18	0
180	-17	0	180	-18	0	180	-24	0.195	180	-17	0	180	-17	0	180	-17	0
181	-16	0	181	-17	0	181	-22	0.194	181	-16	0	181	-16	0	181	-16	0
182	-15	0	182	-16	0	182	-20	0.193	182	-15	0	182	-15	0	182	-15	0
183	-14	0	183	-15	0	183	-18	0.192	183	-14	0	183	-14	0	183	-14	0

184	-13	0	184	-14	0	184	-16	0.191	184	-13	0	184	-13	0	184	-13	0	A-40
185	-12	0	185	-13	0	185	-14	0.19	185	-12	0	185	-12	0	185	-12	0	
186	-11	0	186	-12	0	186	-12	0.189	186	-11	0	186	-11	0	186	-11	0	
187	-10	0	187	-11	0	187	-11	0.188	187	-10	0	187	-10	0	187	-10	0	
188	-9	0	188	-10	0	188	-10	0.187	188	-9	0	188	-9	0	188	-9	0	
189	-8	0	189	-9	0	189	-9	0.186	189	-8	0	189	-8	0	189	-8	0	
190	-7	0	190	-8	0	190	-8	0.185	190	-7	0	190	-7	0	190	-7	0	
191	-6	0	191	-7	0	191	-7	0.184	191	-6	0	191	-6	0	191	-6	0	
192	-5	0	192	-6	0	192	-6	0.183	192	-5	0	192	-5	0	192	-5	0	
193	-4	0	193	-5	0	193	-5	0.182	193	-4	0	193	-4	0	193	-4	0	
194	-3	0	194	-4	0	194	-4	0.181	194	-3	0	194	-3	0	194	-3	0	
195	-2	0	195	-3	0	195	-3	0.18	195	-2	0	195	-2	0	195	-2	0	
196	-1	0	196	-2	0	196	-2	0.179	196	-1	0	196	-1	0	196	-1	0	
197	-1	0	197	-1	0	197	-1	0.178	197	-1	0	197	-1	0	197	-1	0	
198	-0.5	0	198	-0.5	0	198	-0.5	0.177	198	-0.5	0	198	-0.5	0	198	-0.5	0	
199	-0.1	0	199	-0.1	0	199	-0.1	0.176	199	-0.1	0	199	-0.1	0	199	-0.1	0	
200	0	0	200	0	0	200	0	0.175	200	0	0	200	0	0	200	0	0	
201	1	0	201	1	0	201	1	0.174	201	1	0	201	1	0	201	1	0	
202	2	0	202	2	0	202	2	0.173	202	2	0	202	2	0	202	2	0	
203	3	0	203	3	0	203	3	0.172	203	3	0	203	3	0	203	3	0	
204	4	0	204	4	0	204	4	0.171	204	4	0	204	4	0	204	4	0	
205	5	0	205	5	0	205	5	0.17	205	5	0	205	5	0	205	5	0	
206	6	0	206	6	0	206	6	0.169	206	6	0	206	6	0	206	6	0	
207	7	0	207	7	0	207	7	0.168	207	7	0	207	7	0	207	7	0	
208	8	0	208	8	0	208	8	0.167	208	8	0	208	8	0	208	8	0	
209	9	0	209	9	0	209	9	0.166	209	9	0	209	9	0	209	9	0	
210	10	0	210	10	0	210	10	0.165	210	10	0	210	10	0	210	10	0	
211	11	0	211	11	0	211	11	0.164	211	11	0	211	11	0	211	11	0	
212	12	0	212	12	0	212	12	0.163	212	12	0	212	12	0	212	12	0	
213	13	0	213	13	0	213	13	0.162	213	13	0	213	13	0	213	13	0	
214	14	0	214	14	0	214	14	0.161	214	14	0	214	14	0	214	14	0	
215	15	0	215	15	0	215	15	0.16	215	15	0	215	15	0	215	15	0	
216	16	0	216	16	0	216	16	0.159	216	16	0	216	16	0	216	16	0	
217	17	0	217	17	0	217	17	0.158	217	17	0	217	17	0	217	17	0	
218	18	0	218	18	0	218	18	0.157	218	18	0	218	18	0	218	18	0	
219	19	0	219	19	0	219	19	0.156	219	19	0	219	19	0	219	19	0	
220	20	0	220	20	0	220	20	0.155	220	20	0	220	20	0	220	20	0	
221	21	0	221	21	0	221	21	0.154	221	21	0	221	21	0	221	21	0	
222	22	0	222	22	0	222	22	0.153	222	22	0	222	22	0	222	22	0	
223	23	0	223	23	0	223	23	0.152	223	23	0	223	23	0	223	23	0	
224	24	0	224	24	0	224	24	0.151	224	24	0	224	24	0	224	24	0	
225	25	0	225	25	0	225	25	0.15	225	25	0	225	25	0	225	25	0	
226	26	0	226	26	0	226	26	0.149	226	26	0	226	26	0	226	26	0	
227	27	0	227	27	0	227	27	0.148	227	27	0	227	27	0	227	27	0	
228	28	0	228	28	0	228	28	0.147	228	28	0	228	28	0	228	28	0	
229	29	0	229	29	0	229	29	0.146	229	29	0	229	29	0	229	29	0	
230	30	0	230	30	0	230	30	0.145	230	30	0	230	30	0	230	30	0	
231	31	0	231	31	0	231	31	0.144	231	31	0	231	31	0	231	31	0	
232	32	0	232	32	0	232	32	0.143	232	32	0	232	32	0	232	32	0	
233	33	0	233	33	0	233	33	0.142	233	33	0	233	33	0	233	33	0	
234	34	0	234	34	0	234	34	0.141	234	34	0	234	34	0	234	34	0	
235	35	0	235	35	0	235	35	0.14	235	35	0	235	35	0	235	35	0	
236	36	0	236	36	0	236	36	0.139	236	36	0	236	36	0	236	36	0	
237	37	0	237	37	0	237	37	0.138	237	37	0	237	37	0	237	37	0	
238	38	0	238	38	0	238	38	0.137	238	38	0	238	38	0	238	38	0	
239	39	0	239	39	0	239	39	0.136	239	39	0	239	39	0	239	39	0	
240	40	0	240	40	0	240	40	0.135	240	40	0	240	40	0	240	40	0	
241	41	0	241	41	0	241	41	0.134	241	41	0	241	41	0	241	41	0	
242	42	0	242	42	0	242	42	0.133	242	42	0	242	42	0	242	42	0	
243	43	0	243	43	0	243	43	0.132	243	43	0	243	43	0	243	43	0	
244	44	0	244	44	0	244	44	0.131	244	44	0	244	44	0	244	44	0	
245	45	0	245	45	0	245	45	0.13	245	45	0	245	45	0	245	45	0	
246	46	0	246	46	0	246	46	0.128	246	46	0	246	46	0	246	46	0	
247	47	0	247	47	0	247	47	0.125	247	47	0	247	47	0	247	47	0	
248	48	0	248	48	0	248	48	0.123	248	48	0	248	48	0	248	48	0	
249	49	0	249	49	0	249	49	0.12	249	49	0	249	49	0	249	49	0	

250	50	0	250	50	0	250	50	0.118	250	50	0	250	50	0	250	50	0	A-41
251	51	0	251	51	0	251	51	0.115	251	51	0	251	51	0	251	51	0	
252	52	0	252	52	0	252	52	0.113	252	52	0	252	52	0	252	52	0	
253	53	0	253	53	0	253	53	0.11	253	53	0	253	53	0	253	53	0	
254	54	0	254	54	0	254	54	0.108	254	54	0	254	54	0	254	54	0	
255	55	0	255	55	0	255	55	0.105	255	55	0	255	55	0	255	55	0	
260	60	0	260	60	0	260	60	0.093	260	60	0	260	60	0	260	60	0	
265	65	0	265	65	0	265	65	0.08	265	65	0	265	65	0	265	65	0	
270	70	0	270	70	0	270	70	0.068	270	70	0	270	70	0	270	70	0	
275	75	0	275	75	0	275	75	0.055	275	75	0	275	75	0	275	75	0	
280	80	0	280	80	0	280	80	0.043	280	80	0	280	80	0	280	80	0	
285	85	0	285	85	0	285	85	0.03	285	85	0	285	85	0	285	85	0	
290	90	0	290	90	0	290	90	0.018	290	90	0	290	90	0	290	90	0	
295	95	0	295	95	0	295	95	0.005	295	95	0	295	95	0	295	95	0	
300	100	0	300	100	0	300	100	0.001	300	100	0	300	100	0	300	100	0	
305	105	0	305	105	0	305	105	0	305	105	0	305	105	0	305	105	0	
310	110	0	310	110	0	310	110	0	310	110	0	310	110	0	310	110	0	
315	115	0	315	115	0	315	115	0	315	115	0	315	115	0	315	115	0	
320	120	0	320	120	0	320	120	0	320	120	0	320	120	0	320	120	0	
325	125	0	325	125	0	325	125	0	325	125	0	325	125	0	325	125	0	
330	130	0	330	130	0	330	130	0	330	130	0	330	130	0	330	130	0	
335	135	0	335	135	0	335	135	0	335	135	0	335	135	0	335	135	0	
340	140	0	340	140	0	340	140	0	340	140	0	340	140	0	340	140	0	
345	145	0	345	145	0	345	145	0	345	145	0	345	145	0	345	145	0	
350	150	0	350	150	0	350	150	0	350	150	0	350	150	0	350	150	0	
355	155	0	355	155	0	355	155	0	355	155	0	355	155	0	355	155	0	
360	160	0	360	160	0	360	160	0	360	160	0	360	160	0	360	160	0	
365	165	0	365	165	0	365	165	0	365	165	0	365	165	0	365	165	0	
370	170	0	370	170	0	370	170	0	370	170	0	370	170	0	370	170	0	
375	175	0	375	175	0	375	175	0	375	175	0	375	175	0	375	175	0	
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385	185	0	385	185	0	385	185	0	385	185	0	385	185	0	385	185	0	
390	190	0	390	190	0	390	190	0	390	190	0	390	190	0	390	190	0	
395	195	0	395	195	0	395	195	0	395	195	0	395	195	0	395	195	0	
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405	205	0	405	205	0	405	205	0	405	205	0	405	205	0	405	205	0	
410	210	0	410	210	0	410	210	0	410	210	0	410	210	0	410	210	0	
415	215	0	415	215	0	415	215	0	415	215	0	415	215	0	415	215	0	
420	220	0	420	220	0	420	220	0	420	220	0	420	220	0	420	220	0	
425	225	0	425	225	0	425	225	0	425	225	0	425	225	0	425	225	0	
430	230	0	430	230	0	430	230	0	430	230	0	430	230	0	430	230	0	
435	235	0	435	235	0	435	235	0	435	235	0	435	235	0	435	235	0	
440	240	0	440	240	0	440	240	0	440	240	0	440	240	0	440	240	0	
445	245	0	445	245	0	445	245	0	445	245	0	445	245	0	445	245	0	
450	250	0	450	250	0	450	250	0	450	250	0	450	250	0	450	250	0	
455	255	0	455	255	0	455	255	0	455	255	0	455	255	0	455	255	0	
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465	265	0	465	265	0	465	265	0	465	265	0	465	265	0	465	265	0	
470	270	0	470	270	0	470	270	0	470	270	0	470	270	0	470	270	0	
475	275	0	475	275	0	475	275	0	475	275	0	475	275	0	475	275	0	
480	280	0	480	280	0	480	280	0	480	280	0	480	280	0	480	280	0	
485	285	0	485	285	0	485	285	0	485	285	0	485	285	0	485	285	0	
490	290	0	490	290	0	490	290	0	490	290	0	490	290	0	490	290	0	
495	295	0	495	295	0	495	295	0	495	295	0	495	295	0	495	295	0	
500	300	0	500	300	0	500	300	0	500	300	0	500	300	0	500	300	0	
505	305	0	505	305	0	505	305	0	505	305	0	505	305	0	505	305	0	
510	310	0	510	310	0	510	310	0	510	310	0	510	310	0	510	310	0	
515	315	0	515	315	0	515	315	0	515	315	0	515	315	0	515	315	0	
520	320	0	520	320	0	520	320	0	520	320	0	520	320	0	520	320	0	
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535	335	0	535	335	0	535	335	0	535	335	0	535	335	0	535	335	0	
540	340	0	540	340	0	540	340	0	540	340	0	540	340	0	540	340	0	
545	345	0	545	345	0	545	345	0	545	345	0	545	345	0	545	345	0	
550	350	0	550	350	0	550	350	0	550	350	0	550	350	0	550	350	0	

LOAM5M1M			LOAM5M30CM			LOAM5M3M			LOAM5MTOP			LOAM5MBOTTOM			LOAM5MFLAT		
Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)
0	-500	0	0	-1575	0	0	-975	0	0	-500	0.5	0	-500	0	0	-500	0
0.1	-502	0.125	0.1	-1573	0.05	0.1	-975.5	0.01	0.1	-502	0.75	0.1	-502	0.001	0.1	-502	0.5
0.2	-504	0.15	0.2	-1571	0.1	0.2	-976	0.02	0.2	-504	1	0.2	-504	0.002	0.2	-504	0.5
0.3	-506	0.175	0.3	-1569	0.15	0.3	-976.5	0.03	0.3	-506	1	0.3	-506	0.003	0.3	-506	0.5
0.4	-508	0.2	0.4	-1567	0.2	0.4	-977	0.04	0.4	-508	1	0.4	-508	0.004	0.4	-508	0.5
0.5	-510	0.225	0.5	-1565	0.25	0.5	-977.5	0.05	0.5	-510	1	0.5	-510	0.005	0.5	-510	0.5
0.6	-512	0.25	0.6	-1563	0.3	0.6	-978	0.06	0.6	-512	1	0.6	-512	0.006	0.6	-512	0.5
0.7	-514	0.275	0.7	-1561	0.35	0.7	-978.5	0.07	0.7	-514	1	0.7	-514	0.007	0.7	-514	0.5
0.8	-516	0.3	0.8	-1559	0.4	0.8	-979	0.08	0.8	-516	1	0.8	-516	0.008	0.8	-516	0.5
0.9	-518	0.325	0.9	-1557	0.425	0.9	-979.5	0.09	0.9	-518	1	0.9	-518	0.009	0.9	-518	0.5
1	-520	0.35	1	-1555	0.45	1	-980	0.1	1	-520	0.99	1	-520	0.01	1	-520	0.5
2	-540	0.4	2	-1560	0.7	2	-985	0.15	2	-540	0.98	2	-540	0.02	2	-540	0.5
3	-560	0.45	3	-1570	0.95	3	-990	0.2	3	-560	0.97	3	-560	0.03	3	-560	0.5
4	-580	0.5	4	-1580	1	4	-995	0.25	4	-580	0.96	4	-580	0.04	4	-580	0.5
5	-600	0.55	5	-1590	1	5	-1000	0.3	5	-600	0.95	5	-600	0.05	5	-600	0.5
6	-620	0.6	6	-1600	1	6	-1005	0.35	6	-620	0.94	6	-620	0.06	6	-620	0.5
7	-640	0.65	7	-1610	1	7	-1010	0.4	7	-640	0.93	7	-640	0.07	7	-640	0.5
8	-660	0.7	8	-1620	1	8	-1015	0.45	8	-660	0.92	8	-660	0.08	8	-660	0.5
9	-680	0.75	9	-1625	1	9	-1020	0.5	9	-680	0.91	9	-680	0.09	9	-680	0.5
10	-700	0.8	10	-1630	1	10	-1025	0.55	10	-700	0.9	10	-700	0.1	10	-700	0.5
11	-720	0.85	11	-1635	0.9	11	-1030	0.6	11	-720	0.89	11	-720	0.11	11	-720	0.5
12	-740	0.9	12	-1640	0.8	12	-1035	0.65	12	-740	0.88	12	-740	0.12	12	-740	0.5
13	-760	0.95	13	-1642	0.7	13	-1040	0.675	13	-760	0.87	13	-760	0.13	13	-760	0.5
14	-780	1	14	-1643	0.6	14	-1045	0.7	14	-780	0.86	14	-780	0.14	14	-780	0.5
15	-800	1	15	-1644	0.5	15	-1050	0.725	15	-800	0.85	15	-800	0.15	15	-800	0.5
16	-820	1	16	-1645	0.45	16	-1055	0.75	16	-820	0.84	16	-820	0.16	16	-820	0.5
17	-840	1	17	-1645	0.4	17	-1060	0.775	17	-840	0.83	17	-840	0.17	17	-840	0.5
18	-860	1	18	-1645	0.35	18	-1065	0.8	18	-860	0.82	18	-860	0.18	18	-860	0.5
19	-880	1	19	-1645	0.3	19	-1070	0.825	19	-880	0.81	19	-880	0.19	19	-880	0.5
20	-900	1	20	-1645	0.25	20	-1075	0.85	20	-900	0.8	20	-900	0.2	20	-900	0.5
21	-920	1	21	-1645	0.2	21	-1080	0.875	21	-920	0.79	21	-920	0.21	21	-920	0.5
22	-940	1	22	-1644	0.175	22	-1085	0.9	22	-940	0.78	22	-940	0.22	22	-940	0.5
23	-960	1	23	-1643	0.15	23	-1090	0.92	23	-960	0.77	23	-960	0.23	23	-960	0.5
24	-980	1	24	-1642	0.125	24	-1095	0.94	24	-980	0.76	24	-980	0.24	24	-980	0.5
25	-1000	1	25	-1640	0.1	25	-1100	0.96	25	-1000	0.75	25	-1000	0.25	25	-1000	0.5
26	-1020	1	26	-1638	0.075	26	-1110	0.98	26	-1020	0.74	26	-1020	0.26	26	-1020	0.5
27	-1040	1	27	-1636	0.05	27	-1120	1	27	-1040	0.73	27	-1040	0.27	27	-1040	0.5
28	-1050	1	28	-1631	0.025	28	-1130	1	28	-1050	0.72	28	-1050	0.28	28	-1050	0.5
29	-1060	1	29	-1626	0.01	29	-1140	1	29	-1060	0.71	29	-1060	0.29	29	-1060	0.5
30	-1070	1	30	-1620	0.001	30	-1150	1	30	-1070	0.7	30	-1070	0.3	30	-1070	0.5
31	-1075	0.99	31	-1610	0	31	-1160	1	31	-1075	0.69	31	-1075	0.31	31	-1075	0.5
32	-1080	0.98	32	-1600	0	32	-1170	1	32	-1080	0.68	32	-1080	0.32	32	-1080	0.5
33	-1085	0.97	33	-1590	0	33	-1180	1	33	-1085	0.67	33	-1085	0.33	33	-1085	0.5
34	-1090	0.96	34	-1580	0	34	-1190	1	34	-1090	0.66	34	-1090	0.34	34	-1090	0.5
35	-1095	0.95	35	-1570	0	35	-1200	1	35	-1095	0.65	35	-1095	0.35	35	-1095	0.5
36	-1100	0.94	36	-1560	0	36	-1210	1	36	-1100	0.64	36	-1100	0.36	36	-1100	0.5
37	-1102	0.93	37	-1550	0	37	-1220	1	37	-1102	0.63	37	-1102	0.37	37	-1102	0.5
38	-1104	0.92	38	-1540	0	38	-1230	1	38	-1104	0.62	38	-1104	0.38	38	-1104	0.5
39	-1106	0.91	39	-1530	0	39	-1240	1	39	-1106	0.61	39	-1106	0.39	39	-1106	0.5
40	-1108	0.9	40	-1520	0	40	-1250	1	40	-1108	0.6	40	-1108	0.4	40	-1108	0.5
41	-1110	0.88	41	-1510	0	41	-1260	1	41	-1110	0.59	41	-1110	0.41	41	-1110	0.5
42	-1112	0.86	42	-1500	0	42	-1270	1	42	-1112	0.58	42	-1112	0.42	42	-1112	0.5
43	-1114	0.84	43	-1490	0	43	-1280	1	43	-1114	0.57	43	-1114	0.43	43	-1114	0.5
44	-1116	0.82	44	-1480	0	44	-1290	1	44	-1116	0.56	44	-1116	0.44	44	-1116	0.5
45	-1118	0.8	45	-1470	0	45	-1300	1	45	-1118	0.55	45	-1118	0.45	45	-1118	0.5
46	-1119	0.78	46	-1460	0	46	-1310	1	46	-1119	0.54	46	-1119	0.46	46	-1119	0.5
47	-1120	0.76	47	-1450	0	47	-1320	1	47	-1120	0.53	47	-1120	0.47	47	-1120	0.5
48	-1121	0.74	48	-1440	0	48	-1330	1	48	-1121	0.52	48	-1121	0.48	48	-1121	0.5
49	-1122	0.72	49	-1430	0	49	-1340	1	49	-1122	0.51	49	-1122	0.49	49	-1122	0.5
50	-1123	0.7	50	-1420	0	50	-1350	1	50	-1123	0.5	50	-1123	0.5	50	-1123	0.5
51	-1124	0.68	51	-1410	0	51	-1360	0.99	51	-1124	0.49	51	-1124	0.51	51	-1124	0.5

118	-930	0	118	-820	0	118	-1357	0.285	118	-930	0	118	-930	0	118	-930	A-44
119	-920	0	119	-815	0	119	-1356	0.28	119	-920	0	119	-920	0	119	-920	
120	-910	0	120	-810	0	120	-1355	0.275	120	-910	0	120	-910	0	120	-910	
121	-900	0	121	-805	0	121	-1354	0.27	121	-900	0	121	-900	0	121	-900	
122	-890	0	122	-800	0	122	-1353	0.265	122	-890	0	122	-890	0	122	-890	
123	-880	0	123	-795	0	123	-1352	0.26	123	-880	0	123	-880	0	123	-880	
124	-870	0	124	-790	0	124	-1351	0.255	124	-870	0	124	-870	0	124	-870	
125	-860	0	125	-785	0	125	-1350	0.25	125	-860	0	125	-860	0	125	-860	
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128	-830	0	128	-770	0	128	-1344	0.247	128	-830	0	128	-830	0	128	-830	
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132	-790	0	132	-750	0	132	-1336	0.243	132	-790	0	132	-790	0	132	-790	
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149	-620	0	149	-665	0	149	-1302	0.226	149	-620	0	149	-620	0	149	-620	
150	-615	0	150	-660	0	150	-1300	0.225	150	-615	0	150	-615	0	150	-615	
151	-610	0	151	-655	0	151	-1298	0.224	151	-610	0	151	-610	0	151	-610	
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157	-580	0	157	-625	0	157	-1286	0.218	157	-580	0	157	-580	0	157	-580	
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183	-450	0	183	-495	0	183	-1234	0.192	183	-450	0	183	-450	0	183	-450	

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190	-415	0	190	-460	0	190	-1220	0.185	190	-415	0	190	-415	0	190	-415	
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236	-272	0	236	-260	0	236	-1005	0.139	236	-272	0	236	-272	0	236	-272	
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243	-258	0	243	-246	0	243	-970	0.132	243	-258	0	243	-258	0	243	-258	
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245	-254	0	245	-242	0	245	-960	0.13	245	-254	0	245	-254	0	245	-254	
246	-252	0	246	-240	0	246	-955	0.128	246	-252	0	246	-252	0	246	-252	
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248	-248	0	248	-236	0	248	-945	0.123	248	-248	0	248	-248	0	248	-248	
249	-246	0	249	-234	0	249	-940	0.12	249	-246	0	249	-246	0	249	-246	

250	-244	0	250	-233	0	250	-935	0.118	250	-244	0	250	-244	0	250	-244	A-46
251	-242	0	251	-232	0	251	-930	0.115	251	-242	0	251	-242	0	251	-242	
252	-240	0	252	-231	0	252	-925	0.113	252	-240	0	252	-240	0	252	-240	
253	-238	0	253	-230	0	253	-920	0.11	253	-238	0	253	-238	0	253	-238	
254	-236	0	254	-229	0	254	-915	0.108	254	-236	0	254	-236	0	254	-236	
255	-234	0	255	-224	0	255	-910	0.105	255	-234	0	255	-234	0	255	-234	
260	-229	0	260	-219	0	260	-885	0.093	260	-229	0	260	-229	0	260	-229	
265	-224	0	265	-214	0	265	-855	0.08	265	-224	0	265	-224	0	265	-224	
270	-219	0	270	-209	0	270	-815	0.068	270	-219	0	270	-219	0	270	-219	
275	-214	0	275	-204	0	275	-765	0.055	275	-214	0	275	-214	0	275	-214	
280	-209	0	280	-199	0	280	-715	0.043	280	-209	0	280	-209	0	280	-209	
285	-204	0	285	-194	0	285	-665	0.03	285	-204	0	285	-204	0	285	-204	
290	-199	0	290	-189	0	290	-615	0.018	290	-199	0	290	-199	0	290	-199	
295	-194	0	295	-184	0	295	-565	0.005	295	-194	0	295	-194	0	295	-194	
300	-189	0	300	-179	0	300	-515	0.001	300	-189	0	300	-189	0	300	-189	
305	-184	0	305	-174	0	305	-465	0	305	-184	0	305	-184	0	305	-184	
310	-179	0	310	-169	0	310	-415	0	310	-179	0	310	-179	0	310	-179	
315	-174	0	315	-164	0	315	-365	0	315	-174	0	315	-174	0	315	-174	
320	-169	0	320	-159	0	320	-315	0	320	-169	0	320	-169	0	320	-169	
325	-164	0	325	-154	0	325	-275	0	325	-164	0	325	-164	0	325	-164	
330	-159	0	330	-149	0	330	-245	0	330	-159	0	330	-159	0	330	-159	
335	-154	0	335	-144	0	335	-220	0	335	-154	0	335	-154	0	335	-154	
340	-149	0	340	-139	0	340	-195	0	340	-149	0	340	-149	0	340	-149	
345	-144	0	345	-134	0	345	-170	0	345	-144	0	345	-144	0	345	-144	
350	-139	0	350	-129	0	350	-145	0	350	-139	0	350	-139	0	350	-139	
355	-134	0	355	-124	0	355	-135	0	355	-134	0	355	-134	0	355	-134	
360	-129	0	360	-119	0	360	-125	0	360	-129	0	360	-129	0	360	-129	
365	-124	0	365	-114	0	365	-115	0	365	-124	0	365	-124	0	365	-124	
370	-119	0	370	-109	0	370	-105	0	370	-119	0	370	-119	0	370	-119	
375	-114	0	375	-104	0	375	-100	0	375	-114	0	375	-114	0	375	-114	
380	-109	0	380	-99	0	380	-95	0	380	-109	0	380	-109	0	380	-109	
385	-104	0	385	-94	0	385	-90	0	385	-104	0	385	-104	0	385	-104	
390	-99	0	390	-89	0	390	-85	0	390	-99	0	390	-99	0	390	-99	
395	-94	0	395	-84	0	395	-80	0	395	-94	0	395	-94	0	395	-94	
400	-89	0	400	-79	0	400	-75	0	400	-89	0	400	-89	0	400	-89	
405	-84	0	405	-74	0	405	-70	0	405	-84	0	405	-84	0	405	-84	
410	-79	0	410	-69	0	410	-65	0	410	-79	0	410	-79	0	410	-79	
415	-74	0	415	-64	0	415	-60	0	415	-74	0	415	-74	0	415	-74	
420	-69	0	420	-59	0	420	-55	0	420	-69	0	420	-69	0	420	-69	
425	-64	0	425	-54	0	425	-50	0	425	-64	0	425	-64	0	425	-64	
430	-59	0	430	-49	0	430	-45	0	430	-59	0	430	-59	0	430	-59	
435	-54	0	435	-44	0	435	-40	0	435	-54	0	435	-54	0	435	-54	
440	-49	0	440	-39	0	440	-35	0	440	-49	0	440	-49	0	440	-49	
445	-44	0	445	-34	0	445	-30	0	445	-44	0	445	-44	0	445	-44	
450	-39	0	450	-29	0	450	-25	0	450	-39	0	450	-39	0	450	-39	
455	-34	0	455	-24	0	455	-20	0	455	-34	0	455	-34	0	455	-34	
460	-29	0	460	-19	0	460	-16	0	460	-29	0	460	-29	0	460	-29	
465	-24	0	465	-14	0	465	-12	0	465	-24	0	465	-24	0	465	-24	
470	-19	0	470	-9	0	470	-8	0	470	-19	0	470	-19	0	470	-19	
475	-14	0	475	-4	0	475	-5	0	475	-14	0	475	-14	0	475	-14	
480	-9	0	480	-3	0	480	-2	0	480	-9	0	480	-9	0	480	-9	
485	-4	0	485	-2	0	485	-1	0	485	-4	0	485	-4	0	485	-4	
490	-1	0	490	-1	0	490	-1	0	490	-1	0	490	-1	0	490	-1	
495	-0.1	0	495	-0.1	0	495	-0.1	0	495	-0.1	0	495	-0.1	0	495	-0.1	
500	0	0	500	0	0	500	0	0	500	0	0	500	0	0	500	0	
505	5	0	505	5	0	505	5	0	505	5	0	505	5	0	505	5	
510	10	0	510	10	0	510	10	0	510	10	0	510	10	0	510	10	
515	15	0	515	15	0	515	15	0	515	15	0	515	15	0	515	15	
520	20	0	520	20	0	520	20	0	520	20	0	520	20	0	520	20	
525	25	0	525	25	0	525	25	0	525	25	0	525	25	0	525	25	
530	30	0	530	30	0	530	30	0	530	30	0	530	30	0	530	30	
535	35	0	535	35	0	535	35	0	535	35	0	535	35	0	535	35	
540	40	0	540	40	0	540	40	0	540	40	0	540	40	0	540	40	
545	45	0	545	45	0	545	45	0	545	45	0	545	45	0	545	45	
550	50	0	550	50	0	550	50	0	550	50	0	550	50	0	550	50	

Appendix A.4. Sand Model Initial Conditions and Profile Discritization

INITIAL CONDITIONS AND SAND PROFILES

SAND1M1M			SAND1M30CM			SAND1M3M			SAND1MTOP			SAND1MBOTTOM			SAND1MFLAT		
Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)
0	-100	0.1	0	-200	0	0	-200	0	0	-100	0.5	0	-100	0	0	-100	0
0.1	-98	0.125	0.1	-199	0.05	0.1	-199	0.01	0.1	-98	0.75	0.1	-98	0.001	0.1	-98	0.5
0.2	-96	0.15	0.2	-198	0.1	0.2	-198	0.02	0.2	-96	1	0.2	-96	0.002	0.2	-96	0.5
0.3	-94	0.175	0.3	-197	0.15	0.3	-197	0.03	0.3	-94	1	0.3	-94	0.003	0.3	-94	0.5
0.4	-92	0.2	0.4	-196	0.2	0.4	-196	0.04	0.4	-92	1	0.4	-92	0.004	0.4	-92	0.5
0.5	-90	0.225	0.5	-195	0.25	0.5	-195	0.05	0.5	-90	1	0.5	-90	0.005	0.5	-90	0.5
0.6	-88	0.25	0.6	-194	0.3	0.6	-194	0.06	0.6	-88	1	0.6	-88	0.006	0.6	-88	0.5
0.7	-86	0.275	0.7	-193	0.35	0.7	-193	0.07	0.7	-86	1	0.7	-86	0.007	0.7	-86	0.5
0.8	-84	0.3	0.8	-192	0.4	0.8	-192	0.08	0.8	-84	1	0.8	-84	0.008	0.8	-84	0.5
0.9	-82	0.325	0.9	-191	0.425	0.9	-191	0.09	0.9	-82	1	0.9	-82	0.009	0.9	-82	0.5
1	-80	0.35	1	-190	0.45	1	-190	0.1	1	-80	0.99	1	-80	0.01	1	-80	0.5
2	-78	0.4	2	-195	0.7	2	-185	0.15	2	-78	0.98	2	-78	0.02	2	-78	0.5
3	-76	0.45	3	-200	0.95	3	-183	0.2	3	-76	0.97	3	-76	0.03	3	-76	0.5
4	-75	0.5	4	-205	1	4	-181	0.25	4	-75	0.96	4	-75	0.04	4	-75	0.5
5	-74	0.55	5	-210	1	5	-180	0.3	5	-74	0.95	5	-74	0.05	5	-74	0.5
6	-73	0.6	6	-215	1	6	-180	0.35	6	-73	0.94	6	-73	0.06	6	-73	0.5
7	-72	0.65	7	-220	1	7	-180	0.4	7	-72	0.93	7	-72	0.07	7	-72	0.5
8	-71	0.7	8	-225	1	8	-180	0.45	8	-71	0.92	8	-71	0.08	8	-71	0.5
9	-72	0.75	9	-230	1	9	-180	0.5	9	-72	0.91	9	-72	0.09	9	-72	0.5
10	-73	0.8	10	-235	1	10	-180	0.55	10	-73	0.9	10	-73	0.1	10	-73	0.5
11	-74	0.85	11	-240	0.9	11	-181	0.6	11	-74	0.89	11	-74	0.11	11	-74	0.5
12	-75	0.9	12	-241	0.8	12	-182	0.65	12	-75	0.88	12	-75	0.12	12	-75	0.5
13	-76	0.95	13	-240	0.7	13	-183	0.675	13	-76	0.87	13	-76	0.13	13	-76	0.5
14	-77	1	14	-235	0.6	14	-184	0.7	14	-77	0.86	14	-77	0.14	14	-77	0.5
15	-78	1	15	-230	0.5	15	-185	0.725	15	-78	0.85	15	-78	0.15	15	-78	0.5
16	-79	1	16	-225	0.45	16	-187	0.75	16	-79	0.84	16	-79	0.16	16	-79	0.5
17	-80	1	17	-215	0.4	17	-189	0.775	17	-80	0.83	17	-80	0.17	17	-80	0.5
18	-81	1	18	-205	0.35	18	-191	0.8	18	-81	0.82	18	-81	0.18	18	-81	0.5
19	-82	1	19	-195	0.3	19	-193	0.825	19	-82	0.81	19	-82	0.19	19	-82	0.5
20	-83	1	20	-185	0.25	20	-195	0.85	20	-83	0.8	20	-83	0.2	20	-83	0.5
21	-84	1	21	-175	0.2	21	-200	0.875	21	-84	0.79	21	-84	0.21	21	-84	0.5
22	-85	1	22	-165	0.175	22	-205	0.9	22	-85	0.78	22	-85	0.22	22	-85	0.5
23	-86	1	23	-155	0.15	23	-210	0.92	23	-86	0.77	23	-86	0.23	23	-86	0.5
24	-87	1	24	-145	0.125	24	-215	0.94	24	-87	0.76	24	-87	0.24	24	-87	0.5
25	-88	1	25	-135	0.1	25	-220	0.96	25	-88	0.75	25	-88	0.25	25	-88	0.5
26	-89	1	26	-125	0.075	26	-225	0.98	26	-89	0.74	26	-89	0.26	26	-89	0.5
27	-90	1	27	-115	0.05	27	-230	1	27	-90	0.73	27	-90	0.27	27	-90	0.5
28	-91	1	28	-105	0.025	28	-232	1	28	-91	0.72	28	-91	0.28	28	-91	0.5
29	-92	1	29	-95	0.01	29	-234	1	29	-92	0.71	29	-92	0.29	29	-92	0.5
30	-93	1	30	-90	0.001	30	-236	1	30	-93	0.7	30	-93	0.3	30	-93	0.5
31	-93	0.99	31	-85	0	31	-237	1	31	-93	0.69	31	-93	0.31	31	-93	0.5
32	-92	0.98	32	-80	0	32	-238	1	32	-92	0.68	32	-92	0.32	32	-92	0.5
33	-91	0.97	33	-75	0	33	-239	1	33	-91	0.67	33	-91	0.33	33	-91	0.5
34	-90	0.96	34	-70	0	34	-240	1	34	-90	0.66	34	-90	0.34	34	-90	0.5
35	-89	0.95	35	-68	0	35	-240	1	35	-89	0.65	35	-89	0.35	35	-89	0.5
36	-88	0.94	36	-66	0	36	-239	1	36	-88	0.64	36	-88	0.36	36	-88	0.5
37	-87	0.93	37	-64	0	37	-238	1	37	-87	0.63	37	-87	0.37	37	-87	0.5
38	-85	0.92	38	-62	0	38	-236	1	38	-85	0.62	38	-85	0.38	38	-85	0.5
39	-83	0.91	39	-60	0	39	-234	1	39	-83	0.61	39	-83	0.39	39	-83	0.5
40	-81	0.9	40	-58	0	40	-232	1	40	-81	0.6	40	-81	0.4	40	-81	0.5
41	-79	0.88	41	-56	0	41	-230	1	41	-79	0.59	41	-79	0.41	41	-79	0.5
42	-77	0.86	42	-54	0	42	-225	1	42	-77	0.58	42	-77	0.42	42	-77	0.5
43	-75	0.84	43	-53	0	43	-220	1	43	-75	0.57	43	-75	0.43	43	-75	0.5
44	-73	0.82	44	-52	0	44	-215	1	44	-73	0.56	44	-73	0.44	44	-73	0.5
45	-71	0.8	45	-51	0	45	-210	1	45	-71	0.55	45	-71	0.45	45	-71	0.5
46	-69	0.78	46	-50	0	46	-205	1	46	-69	0.54	46	-69	0.46	46	-69	0.5
47	-67	0.76	47	-49	0	47	-200	1	47	-67	0.53	47	-67	0.47	47	-67	0.5
48	-65	0.74	48	-48	0	48	-190	1	48	-65	0.52	48	-65	0.48	48	-65	0.5
49	-63	0.72	49	-47	0	49	-180	1	49	-63	0.51	49	-63	0.49	49	-63	0.5
50	-61	0.7	50	-46	0	50	-170	1	50	-61	0.5	50	-61	0.5	50	-61	0.5
51	-59	0.68	51	-45	0	51	-160	0.99	51	-59	0.49	51	-59	0.51	51	-59	0.5

118	18	0	118	18	0	118	18	0.285	118	18	0	118	18	0	118	18	0	A-49
119	19	0	119	19	0	119	19	0.28	119	19	0	119	19	0	119	19	0	
120	20	0	120	20	0	120	20	0.275	120	20	0	120	20	0	120	20	0	
121	21	0	121	21	0	121	21	0.27	121	21	0	121	21	0	121	21	0	
122	22	0	122	22	0	122	22	0.265	122	22	0	122	22	0	122	22	0	
123	23	0	123	23	0	123	23	0.26	123	23	0	123	23	0	123	23	0	
124	24	0	124	24	0	124	24	0.255	124	24	0	124	24	0	124	24	0	
125	25	0	125	25	0	125	25	0.25	125	25	0	125	25	0	125	25	0	
126	26	0	126	26	0	126	26	0.249	126	26	0	126	26	0	126	26	0	
127	27	0	127	27	0	127	27	0.248	127	27	0	127	27	0	127	27	0	
128	28	0	128	28	0	128	28	0.247	128	28	0	128	28	0	128	28	0	
129	29	0	129	29	0	129	29	0.246	129	29	0	129	29	0	129	29	0	
130	30	0	130	30	0	130	30	0.245	130	30	0	130	30	0	130	30	0	
131	31	0	131	31	0	131	31	0.244	131	31	0	131	31	0	131	31	0	
132	32	0	132	32	0	132	32	0.243	132	32	0	132	32	0	132	32	0	
133	33	0	133	33	0	133	33	0.242	133	33	0	133	33	0	133	33	0	
134	34	0	134	34	0	134	34	0.241	134	34	0	134	34	0	134	34	0	
135	35	0	135	35	0	135	35	0.24	135	35	0	135	35	0	135	35	0	
136	36	0	136	36	0	136	36	0.239	136	36	0	136	36	0	136	36	0	
137	37	0	137	37	0	137	37	0.238	137	37	0	137	37	0	137	37	0	
138	38	0	138	38	0	138	38	0.237	138	38	0	138	38	0	138	38	0	
139	39	0	139	39	0	139	39	0.236	139	39	0	139	39	0	139	39	0	
140	40	0	140	40	0	140	40	0.235	140	40	0	140	40	0	140	40	0	
141	41	0	141	41	0	141	41	0.234	141	41	0	141	41	0	141	41	0	
142	42	0	142	42	0	142	42	0.233	142	42	0	142	42	0	142	42	0	
143	43	0	143	43	0	143	43	0.232	143	43	0	143	43	0	143	43	0	
144	44	0	144	44	0	144	44	0.231	144	44	0	144	44	0	144	44	0	
145	45	0	145	45	0	145	45	0.23	145	45	0	145	45	0	145	45	0	
146	46	0	146	46	0	146	46	0.229	146	46	0	146	46	0	146	46	0	
147	47	0	147	47	0	147	47	0.228	147	47	0	147	47	0	147	47	0	
148	48	0	148	48	0	148	48	0.227	148	48	0	148	48	0	148	48	0	
149	49	0	149	49	0	149	49	0.226	149	49	0	149	49	0	149	49	0	
150	50	0	150	50	0	150	50	0.225	150	50	0	150	50	0	150	50	0	
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152	52	0	152	52	0	152	52	0.223	152	52	0	152	52	0	152	52	0	
153	53	0	153	53	0	153	53	0.222	153	53	0	153	53	0	153	53	0	
154	54	0	154	54	0	154	54	0.221	154	54	0	154	54	0	154	54	0	
155	55	0	155	55	0	155	55	0.22	155	55	0	155	55	0	155	55	0	
156	56	0	156	56	0	156	56	0.219	156	56	0	156	56	0	156	56	0	
157	57	0	157	57	0	157	57	0.218	157	57	0	157	57	0	157	57	0	
158	58	0	158	58	0	158	58	0.217	158	58	0	158	58	0	158	58	0	
159	59	0	159	59	0	159	59	0.216	159	59	0	159	59	0	159	59	0	
160	60	0	160	60	0	160	60	0.215	160	60	0	160	60	0	160	60	0	
161	61	0	161	61	0	161	61	0.214	161	61	0	161	61	0	161	61	0	
162	62	0	162	62	0	162	62	0.213	162	62	0	162	62	0	162	62	0	
163	63	0	163	63	0	163	63	0.212	163	63	0	163	63	0	163	63	0	
164	64	0	164	64	0	164	64	0.211	164	64	0	164	64	0	164	64	0	
165	65	0	165	65	0	165	65	0.21	165	65	0	165	65	0	165	65	0	
166	66	0	166	66	0	166	66	0.209	166	66	0	166	66	0	166	66	0	
167	67	0	167	67	0	167	67	0.208	167	67	0	167	67	0	167	67	0	
168	68	0	168	68	0	168	68	0.207	168	68	0	168	68	0	168	68	0	
169	69	0	169	69	0	169	69	0.206	169	69	0	169	69	0	169	69	0	
170	70	0	170	70	0	170	70	0.205	170	70	0	170	70	0	170	70	0	
171	71	0	171	71	0	171	71	0.204	171	71	0	171	71	0	171	71	0	
172	72	0	172	72	0	172	72	0.203	172	72	0	172	72	0	172	72	0	
173	73	0	173	73	0	173	73	0.202	173	73	0	173	73	0	173	73	0	
174	74	0	174	74	0	174	74	0.201	174	74	0	174	74	0	174	74	0	
175	75	0	175	75	0	175	75	0.2	175	75	0	175	75	0	175	75	0	
176	76	0	176	76	0	176	76	0.199	176	76	0	176	76	0	176	76	0	
177	77	0	177	77	0	177	77	0.198	177	77	0	177	77	0	177	77	0	
178	78	0	178	78	0	178	78	0.197	178	78	0	178	78	0	178	78	0	
179	79	0	179	79	0	179	79	0.196	179	79	0	179	79	0	179	79	0	
180	80	0	180	80	0	180	80	0.195	180	80	0	180	80	0	180	80	0	
181	81	0	181	81	0	181	81	0.194	181	81	0	181	81	0	181	81	0	
182	82	0	182	82	0	182	82	0.193	182	82	0	182	82	0	182	82	0	
183	83	0	183	83	0	183	83	0.192	183	83	0	183	83	0	183	83	0	

184	84	0	184	84	0	184	84	0.191	184	84	0	184	84	0	184	84	0	A-50
185	85	0	185	85	0	185	85	0.19	185	85	0	185	85	0	185	85	0	
186	86	0	186	86	0	186	86	0.189	186	86	0	186	86	0	186	86	0	
187	87	0	187	87	0	187	87	0.188	187	87	0	187	87	0	187	87	0	
188	88	0	188	88	0	188	88	0.187	188	88	0	188	88	0	188	88	0	
189	89	0	189	89	0	189	89	0.186	189	89	0	189	89	0	189	89	0	
190	90	0	190	90	0	190	90	0.185	190	90	0	190	90	0	190	90	0	
191	91	0	191	91	0	191	91	0.184	191	91	0	191	91	0	191	91	0	
192	92	0	192	92	0	192	92	0.183	192	92	0	192	92	0	192	92	0	
193	93	0	193	93	0	193	93	0.182	193	93	0	193	93	0	193	93	0	
194	94	0	194	94	0	194	94	0.181	194	94	0	194	94	0	194	94	0	
195	95	0	195	95	0	195	95	0.18	195	95	0	195	95	0	195	95	0	
196	96	0	196	96	0	196	96	0.179	196	96	0	196	96	0	196	96	0	
197	97	0	197	97	0	197	97	0.178	197	97	0	197	97	0	197	97	0	
198	98	0	198	98	0	198	98	0.177	198	98	0	198	98	0	198	98	0	
199	99	0	199	99	0	199	99	0.176	199	99	0	199	99	0	199	99	0	
200	100	0	200	100	0	200	100	0.175	200	100	0	200	100	0	200	100	0	
201	101	0	201	101	0	201	101	0.174	201	101	0	201	101	0	201	101	0	
202	102	0	202	102	0	202	102	0.173	202	102	0	202	102	0	202	102	0	
203	103	0	203	103	0	203	103	0.172	203	103	0	203	103	0	203	103	0	
204	104	0	204	104	0	204	104	0.171	204	104	0	204	104	0	204	104	0	
205	105	0	205	105	0	205	105	0.17	205	105	0	205	105	0	205	105	0	
206	106	0	206	106	0	206	106	0.169	206	106	0	206	106	0	206	106	0	
207	107	0	207	107	0	207	107	0.168	207	107	0	207	107	0	207	107	0	
208	108	0	208	108	0	208	108	0.167	208	108	0	208	108	0	208	108	0	
209	109	0	209	109	0	209	109	0.166	209	109	0	209	109	0	209	109	0	
210	110	0	210	110	0	210	110	0.165	210	110	0	210	110	0	210	110	0	
211	111	0	211	111	0	211	111	0.164	211	111	0	211	111	0	211	111	0	
212	112	0	212	112	0	212	112	0.163	212	112	0	212	112	0	212	112	0	
213	113	0	213	113	0	213	113	0.162	213	113	0	213	113	0	213	113	0	
214	114	0	214	114	0	214	114	0.161	214	114	0	214	114	0	214	114	0	
215	115	0	215	115	0	215	115	0.16	215	115	0	215	115	0	215	115	0	
216	116	0	216	116	0	216	116	0.159	216	116	0	216	116	0	216	116	0	
217	117	0	217	117	0	217	117	0.158	217	117	0	217	117	0	217	117	0	
218	118	0	218	118	0	218	118	0.157	218	118	0	218	118	0	218	118	0	
219	119	0	219	119	0	219	119	0.156	219	119	0	219	119	0	219	119	0	
220	120	0	220	120	0	220	120	0.155	220	120	0	220	120	0	220	120	0	
221	121	0	221	121	0	221	121	0.154	221	121	0	221	121	0	221	121	0	
222	122	0	222	122	0	222	122	0.153	222	122	0	222	122	0	222	122	0	
223	123	0	223	123	0	223	123	0.152	223	123	0	223	123	0	223	123	0	
224	124	0	224	124	0	224	124	0.151	224	124	0	224	124	0	224	124	0	
225	125	0	225	125	0	225	125	0.15	225	125	0	225	125	0	225	125	0	
226	126	0	226	126	0	226	126	0.149	226	126	0	226	126	0	226	126	0	
227	127	0	227	127	0	227	127	0.148	227	127	0	227	127	0	227	127	0	
228	128	0	228	128	0	228	128	0.147	228	128	0	228	128	0	228	128	0	
229	129	0	229	129	0	229	129	0.146	229	129	0	229	129	0	229	129	0	
230	130	0	230	130	0	230	130	0.145	230	130	0	230	130	0	230	130	0	
231	131	0	231	131	0	231	131	0.144	231	131	0	231	131	0	231	131	0	
232	132	0	232	132	0	232	132	0.143	232	132	0	232	132	0	232	132	0	
233	133	0	233	133	0	233	133	0.142	233	133	0	233	133	0	233	133	0	
234	134	0	234	134	0	234	134	0.141	234	134	0	234	134	0	234	134	0	
235	135	0	235	135	0	235	135	0.14	235	135	0	235	135	0	235	135	0	
236	136	0	236	136	0	236	136	0.139	236	136	0	236	136	0	236	136	0	
237	137	0	237	137	0	237	137	0.138	237	137	0	237	137	0	237	137	0	
238	138	0	238	138	0	238	138	0.137	238	138	0	238	138	0	238	138	0	
239	139	0	239	139	0	239	139	0.136	239	139	0	239	139	0	239	139	0	
240	140	0	240	140	0	240	140	0.135	240	140	0	240	140	0	240	140	0	
241	141	0	241	141	0	241	141	0.134	241	141	0	241	141	0	241	141	0	
242	142	0	242	142	0	242	142	0.133	242	142	0	242	142	0	242	142	0	
243	143	0	243	143	0	243	143	0.132	243	143	0	243	143	0	243	143	0	
244	144	0	244	144	0	244	144	0.131	244	144	0	244	144	0	244	144	0	
245	145	0	245	145	0	245	145	0.13	245	145	0	245	145	0	245	145	0	
246	146	0	246	146	0	246	146	0.128	246	146	0	246	146	0	246	146	0	
247	147	0	247	147	0	247	147	0.125	247	147	0	247	147	0	247	147	0	
248	148	0	248	148	0	248	148	0.123	248	148	0	248	148	0	248	148	0	
249	149	0	249	149	0	249	149	0.12	249	149	0	249	149	0	249	149	0	

250	150	0	250	150	0	250	150	0.118	250	150	0	250	150	0	250	150	0	A-51
251	151	0	251	151	0	251	151	0.115	251	151	0	251	151	0	251	151	0	
252	152	0	252	152	0	252	152	0.113	252	152	0	252	152	0	252	152	0	
253	153	0	253	153	0	253	153	0.11	253	153	0	253	153	0	253	153	0	
254	154	0	254	154	0	254	154	0.108	254	154	0	254	154	0	254	154	0	
255	155	0	255	155	0	255	155	0.105	255	155	0	255	155	0	255	155	0	
260	160	0	260	160	0	260	160	0.093	260	160	0	260	160	0	260	160	0	
265	165	0	265	165	0	265	165	0.08	265	165	0	265	165	0	265	165	0	
270	170	0	270	170	0	270	170	0.068	270	170	0	270	170	0	270	170	0	
275	175	0	275	175	0	275	175	0.055	275	175	0	275	175	0	275	175	0	
280	180	0	280	180	0	280	180	0.043	280	180	0	280	180	0	280	180	0	
285	185	0	285	185	0	285	185	0.03	285	185	0	285	185	0	285	185	0	
290	190	0	290	190	0	290	190	0.018	290	190	0	290	190	0	290	190	0	
295	195	0	295	195	0	295	195	0.005	295	195	0	295	195	0	295	195	0	
300	200	0	300	200	0	300	200	0.001	300	200	0	300	200	0	300	200	0	
305	205	0	305	205	0	305	205	0	305	205	0	305	205	0	305	205	0	
310	210	0	310	210	0	310	210	0	310	210	0	310	210	0	310	210	0	
315	215	0	315	215	0	315	215	0	315	215	0	315	215	0	315	215	0	
320	220	0	320	220	0	320	220	0	320	220	0	320	220	0	320	220	0	
325	225	0	325	225	0	325	225	0	325	225	0	325	225	0	325	225	0	
330	230	0	330	230	0	330	230	0	330	230	0	330	230	0	330	230	0	
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340	240	0	340	240	0	340	240	0	340	240	0	340	240	0	340	240	0	
345	245	0	345	245	0	345	245	0	345	245	0	345	245	0	345	245	0	
350	250	0	350	250	0	350	250	0	350	250	0	350	250	0	350	250	0	
355	255	0	355	255	0	355	255	0	355	255	0	355	255	0	355	255	0	
360	260	0	360	260	0	360	260	0	360	260	0	360	260	0	360	260	0	
365	265	0	365	265	0	365	265	0	365	265	0	365	265	0	365	265	0	
370	270	0	370	270	0	370	270	0	370	270	0	370	270	0	370	270	0	
375	275	0	375	275	0	375	275	0	375	275	0	375	275	0	375	275	0	
380	280	0	380	280	0	380	280	0	380	280	0	380	280	0	380	280	0	
385	285	0	385	285	0	385	285	0	385	285	0	385	285	0	385	285	0	
390	290	0	390	290	0	390	290	0	390	290	0	390	290	0	390	290	0	
395	295	0	395	295	0	395	295	0	395	295	0	395	295	0	395	295	0	
400	300	0	400	300	0	400	300	0	400	300	0	400	300	0	400	300	0	
405	305	0	405	305	0	405	305	0	405	305	0	405	305	0	405	305	0	
410	310	0	410	310	0	410	310	0	410	310	0	410	310	0	410	310	0	
415	315	0	415	315	0	415	315	0	415	315	0	415	315	0	415	315	0	
420	320	0	420	320	0	420	320	0	420	320	0	420	320	0	420	320	0	
425	325	0	425	325	0	425	325	0	425	325	0	425	325	0	425	325	0	
430	330	0	430	330	0	430	330	0	430	330	0	430	330	0	430	330	0	
435	335	0	435	335	0	435	335	0	435	335	0	435	335	0	435	335	0	
440	340	0	440	340	0	440	340	0	440	340	0	440	340	0	440	340	0	
445	345	0	445	345	0	445	345	0	445	345	0	445	345	0	445	345	0	
450	350	0	450	350	0	450	350	0	450	350	0	450	350	0	450	350	0	
455	355	0	455	355	0	455	355	0	455	355	0	455	355	0	455	355	0	
460	360	0	460	360	0	460	360	0	460	360	0	460	360	0	460	360	0	
465	365	0	465	365	0	465	365	0	465	365	0	465	365	0	465	365	0	
470	370	0	470	370	0	470	370	0	470	370	0	470	370	0	470	370	0	
475	375	0	475	375	0	475	375	0	475	375	0	475	375	0	475	375	0	
480	380	0	480	380	0	480	380	0	480	380	0	480	380	0	480	380	0	
485	385	0	485	385	0	485	385	0	485	385	0	485	385	0	485	385	0	
490	390	0	490	390	0	490	390	0	490	390	0	490	390	0	490	390	0	
495	395	0	495	395	0	495	395	0	495	395	0	495	395	0	495	395	0	
500	400	0	500	400	0	500	400	0	500	400	0	500	400	0	500	400	0	
505	405	0	505	405	0	505	405	0	505	405	0	505	405	0	505	405	0	
510	410	0	510	410	0	510	410	0	510	410	0	510	410	0	510	410	0	
515	415	0	515	415	0	515	415	0	515	415	0	515	415	0	515	415	0	
520	420	0	520	420	0	520	420	0	520	420	0	520	420	0	520	420	0	
525	425	0	525	425	0	525	425	0	525	425	0	525	425	0	525	425	0	
530	430	0	530	430	0	530	430	0	530	430	0	530	430	0	530	430	0	
535	435	0	535	435	0	535	435	0	535	435	0	535	435	0	535	435	0	
540	440	0	540	440	0	540	440	0	540	440	0	540	440	0	540	440	0	
545	445	0	545	445	0	545	445	0	545	445	0	545	445	0	545	445	0	
550	450	0	550	450	0	550	450	0	550	450	0	550	450	0	550	450	0	

SAND2M1M			SAND2M30CM			SAND2M3M			SAND2MTOP			SAND2MBOTTOM			SAND2MFLAT		
Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)
0	-180	0	0	-225	0	0	-400	0	0	-180	0.5	0	-180	0	0	-180	0
0.1	-180.2	0.125	0.1	-226	0.05	0.1	-400.2	0.01	0.1	-180.2	0.75	0.1	-180.2	0.001	0.1	-180.2	0.5
0.2	-180.4	0.15	0.2	-227	0.1	0.2	-400.4	0.02	0.2	-180.4	1	0.2	-180.4	0.002	0.2	-180.4	0.5
0.3	-180.6	0.175	0.3	-228	0.15	0.3	-400.6	0.03	0.3	-180.6	1	0.3	-180.6	0.003	0.3	-180.6	0.5
0.4	-180.8	0.2	0.4	-229	0.2	0.4	-400.8	0.04	0.4	-180.8	1	0.4	-180.8	0.004	0.4	-180.8	0.5
0.5	-181	0.225	0.5	-230	0.25	0.5	-401	0.05	0.5	-181	1	0.5	-181	0.005	0.5	-181	0.5
0.6	-181.2	0.25	0.6	-231	0.3	0.6	-401.2	0.06	0.6	-181.2	1	0.6	-181.2	0.006	0.6	-181.2	0.5
0.7	-181.4	0.275	0.7	-232	0.35	0.7	-401.4	0.07	0.7	-181.4	1	0.7	-181.4	0.007	0.7	-181.4	0.5
0.8	-181.6	0.3	0.8	-233	0.4	0.8	-401.6	0.08	0.8	-181.6	1	0.8	-181.6	0.008	0.8	-181.6	0.5
0.9	-181.8	0.325	0.9	-234	0.425	0.9	-401.8	0.09	0.9	-181.8	1	0.9	-181.8	0.009	0.9	-181.8	0.5
1	-182	0.35	1	-235	0.45	1	-402	0.1	1	-182	0.99	1	-182	0.01	1	-182	0.5
1.1	-182.2	0.355	1.1	-236	0.475	1.1	-402.2	0.105	1.1	-182.2	0.98	1.1	-182.2	0.02	1.1	-182.2	0.5
1.2	-182.4	0.36	1.2	-237	0.5	1.2	-402.4	0.11	1.2	-182.4	0.97	1.2	-182.4	0.03	1.2	-182.4	0.5
1.3	-182.6	0.365	1.3	-238	0.525	1.3	-402.6	0.115	1.3	-182.6	0.96	1.3	-182.6	0.04	1.3	-182.6	0.5
1.4	-182.8	0.37	1.4	-239	0.55	1.4	-402.8	0.12	1.4	-182.8	0.95	1.4	-182.8	0.05	1.4	-182.8	0.5
1.5	-183	0.375	1.5	-240	0.575	1.5	-403	0.125	1.5	-183	0.94	1.5	-183	0.06	1.5	-183	0.5
1.6	-183.2	0.38	1.6	-241	0.6	1.6	-403.2	0.13	1.6	-183.2	0.93	1.6	-183.2	0.07	1.6	-183.2	0.5
1.7	-183.4	0.385	1.7	-242	0.625	1.7	-403.4	0.135	1.7	-183.4	0.92	1.7	-183.4	0.08	1.7	-183.4	0.5
1.8	-183.6	0.39	1.8	-243	0.65	1.8	-403.6	0.14	1.8	-183.6	0.91	1.8	-183.6	0.09	1.8	-183.6	0.5
1.9	-183.8	0.395	1.9	-244	0.675	1.9	-403.8	0.145	1.9	-183.8	0.9	1.9	-183.8	0.1	1.9	-183.8	0.5
2	-184	0.4	2	-245	0.7	2	-404	0.15	2	-184	0.89	2	-184	0.11	2	-184	0.5
2.5	-185	0.425	2.5	-246	0.825	2.5	-404.5	0.175	2.5	-185	0.88	2.5	-185	0.12	2.5	-185	0.5
3	-186	0.45	3	-247	0.95	3	-405	0.2	3	-186	0.87	3	-186	0.13	3	-186	0.5
3.5	-187	0.475	3.5	-248	0.975	3.5	-405.5	0.225	3.5	-187	0.86	3.5	-187	0.14	3.5	-187	0.5
4	-188	0.5	4	-249	1	4	-406	0.25	4	-188	0.85	4	-188	0.15	4	-188	0.5
4.5	-189	0.525	4.5	-250	1	4.5	-406.5	0.275	4.5	-189	0.84	4.5	-189	0.16	4.5	-189	0.5
5	-190	0.55	5	-251	1	5	-407	0.3	5	-190	0.83	5	-190	0.17	5	-190	0.5
5.5	-191	0.575	5.5	-252	1	5.5	-407.5	0.325	5.5	-191	0.82	5.5	-191	0.18	5.5	-191	0.5
6	-192	0.6	6	-253	1	6	-408	0.35	6	-192	0.81	6	-192	0.19	6	-192	0.5
6.5	-193	0.625	6.5	-254	1	6.5	-408.5	0.375	6.5	-193	0.8	6.5	-193	0.2	6.5	-193	0.5
7	-194	0.65	7	-255	1	7	-409	0.4	7	-194	0.79	7	-194	0.21	7	-194	0.5
7.5	-195	0.675	7.5	-256	1	7.5	-409.5	0.425	7.5	-195	0.78	7.5	-195	0.22	7.5	-195	0.5
8	-196	0.7	8	-257	1	8	-410	0.45	8	-196	0.77	8	-196	0.23	8	-196	0.5
8.5	-197	0.725	8.5	-258	1	8.5	-410.5	0.475	8.5	-197	0.76	8.5	-197	0.24	8.5	-197	0.5
9	-198	0.75	9	-259	1	9	-411	0.5	9	-198	0.75	9	-198	0.25	9	-198	0.5
9.5	-199	0.775	9.5	-260	1	9.5	-411.5	0.525	9.5	-199	0.74	9.5	-199	0.26	9.5	-199	0.5
10	-200	0.8	10	-259.5	1	10	-412	0.55	10	-200	0.73	10	-200	0.27	10	-200	0.5
10.5	-201	0.825	10.5	-258.5	0.95	10.5	-412.5	0.575	10.5	-201	0.72	10.5	-201	0.28	10.5	-201	0.5
11	-202	0.85	11	-257.5	0.9	11	-413	0.6	11	-202	0.71	11	-202	0.29	11	-202	0.5
11.5	-204	0.875	11.5	-256.5	0.85	11.5	-413.5	0.625	11.5	-204	0.7	11.5	-204	0.3	11.5	-204	0.5
12	-206	0.9	12	-255.5	0.8	12	-414	0.65	12	-206	0.69	12	-206	0.31	12	-206	0.5
12.5	-208	0.925	12.5	-254.5	0.75	12.5	-414.5	0.663	12.5	-208	0.68	12.5	-208	0.32	12.5	-208	0.5
13	-210	0.95	13	-253.5	0.7	13	-415	0.675	13	-210	0.67	13	-210	0.33	13	-210	0.5
13.5	-212	0.975	13.5	-251	0.65	13.5	-415.5	0.688	13.5	-212	0.66	13.5	-212	0.34	13.5	-212	0.5
14	-214	1	14	-248.5	0.6	14	-416	0.7	14	-214	0.65	14	-214	0.35	14	-214	0.5
14.5	-216	1	14.5	-246	0.55	14.5	-416.5	0.713	14.5	-216	0.64	14.5	-216	0.36	14.5	-216	0.5
15	-218	1	15	-243.5	0.5	15	-417	0.725	15	-218	0.63	15	-218	0.37	15	-218	0.5
15.5	-220	1	15.5	-241	0.475	15.5	-417.5	0.738	15.5	-220	0.62	15.5	-220	0.38	15.5	-220	0.5
16	-222	1	16	-238.5	0.45	16	-418	0.75	16	-222	0.61	16	-222	0.39	16	-222	0.5
16.5	-224	1	16.5	-236	0.425	16.5	-418.5	0.763	16.5	-224	0.6	16.5	-224	0.4	16.5	-224	0.5
17	-226	1	17	-233.5	0.4	17	-419	0.775	17	-226	0.59	17	-226	0.41	17	-226	0.5
17.5	-228	1	17.5	-231	0.375	17.5	-419.5	0.788	17.5	-228	0.58	17.5	-228	0.42	17.5	-228	0.5
18	-230	1	18	-228.5	0.35	18	-420	0.8	18	-230	0.57	18	-230	0.43	18	-230	0.5
18.5	-232	1	18.5	-226	0.325	18.5	-420.5	0.813	18.5	-232	0.56	18.5	-232	0.44	18.5	-232	0.5
19	-234	1	19	-223.5	0.3	19	-421	0.825	19	-234	0.55	19	-234	0.45	19	-234	0.5
19.5	-236	1	19.5	-221	0.275	19.5	-421.5	0.838	19.5	-236	0.54	19.5	-236	0.46	19.5	-236	0.5
20	-238	1	20	-218.5	0.25	20	-422	0.85	20	-238	0.53	20	-238	0.47	20	-238	0.5
20.5	-240	1	20.5	-216	0.225	20.5	-422.5	0.863	20.5	-240	0.52	20.5	-240	0.48	20.5	-240	0.5
21	-241	1	21	-213.5	0.2	21	-423	0.875	21	-241	0.51	21	-241	0.49	21	-241	0.5
21.5	-242	1	21.5	-211	0.188	21.5	-423.5	0.888	21.5	-242	0.5	21.5	-242	0.5	21.5	-242	0.5
22	-243	1	22	-208.5	0.175	22	-424	0.9	22	-243	0.49	22	-243	0.51	22	-243	0.5

116	-73	0	116	-79	0	116	-73	0.295	116	-73	0	116	-73	0	116	-73	0
117	-72	0	117	-78	0	117	-72	0.29	117	-72	0	117	-72	0	117	-72	0
118	-71	0	118	-77	0	118	-71	0.285	118	-71	0	118	-71	0	118	-71	0
119	-70	0	119	-76	0	119	-70	0.28	119	-70	0	119	-70	0	119	-70	0
120	-69	0	120	-75	0	120	-69	0.275	120	-69	0	120	-69	0	120	-69	0
121	-68	0	121	-74	0	121	-68	0.27	121	-68	0	121	-68	0	121	-68	0
122	-67	0	122	-73	0	122	-67	0.265	122	-67	0	122	-67	0	122	-67	0
123	-66	0	123	-72	0	123	-66	0.26	123	-66	0	123	-66	0	123	-66	0
124	-65	0	124	-71	0	124	-65	0.255	124	-65	0	124	-65	0	124	-65	0
125	-64	0	125	-70	0	125	-64	0.25	125	-64	0	125	-64	0	125	-64	0
126	-63	0	126	-69	0	126	-63	0.249	126	-63	0	126	-63	0	126	-63	0
127	-62	0	127	-68	0	127	-62	0.248	127	-62	0	127	-62	0	127	-62	0
128	-61	0	128	-67	0	128	-61	0.247	128	-61	0	128	-61	0	128	-61	0
129	-60	0	129	-66	0	129	-60	0.246	129	-60	0	129	-60	0	129	-60	0
130	-59	0	130	-65	0	130	-59	0.245	130	-59	0	130	-59	0	130	-59	0
131	-58	0	131	-64	0	131	-58	0.244	131	-58	0	131	-58	0	131	-58	0
132	-57	0	132	-63	0	132	-57	0.243	132	-57	0	132	-57	0	132	-57	0
133	-56	0	133	-62	0	133	-56	0.242	133	-56	0	133	-56	0	133	-56	0
134	-55	0	134	-61	0	134	-55	0.241	134	-55	0	134	-55	0	134	-55	0
135	-54	0	135	-60	0	135	-54	0.24	135	-54	0	135	-54	0	135	-54	0
136	-53	0	136	-59	0	136	-53	0.239	136	-53	0	136	-53	0	136	-53	0
137	-52	0	137	-58	0	137	-52	0.238	137	-52	0	137	-52	0	137	-52	0
138	-51	0	138	-57	0	138	-51	0.237	138	-51	0	138	-51	0	138	-51	0
139	-50	0	139	-56	0	139	-50	0.236	139	-50	0	139	-50	0	139	-50	0
140	-49	0	140	-55	0	140	-49	0.235	140	-49	0	140	-49	0	140	-49	0
141	-48	0	141	-54	0	141	-48	0.234	141	-48	0	141	-48	0	141	-48	0
142	-47	0	142	-53	0	142	-47	0.233	142	-47	0	142	-47	0	142	-47	0
143	-46	0	143	-52	0	143	-46	0.232	143	-46	0	143	-46	0	143	-46	0
144	-45	0	144	-51	0	144	-45	0.231	144	-45	0	144	-45	0	144	-45	0
145	-44	0	145	-50	0	145	-44	0.23	145	-44	0	145	-44	0	145	-44	0
146	-43	0	146	-49	0	146	-43	0.229	146	-43	0	146	-43	0	146	-43	0
147	-42	0	147	-48	0	147	-42	0.228	147	-42	0	147	-42	0	147	-42	0
148	-41	0	148	-47	0	148	-41	0.227	148	-41	0	148	-41	0	148	-41	0
149	-40	0	149	-46	0	149	-40	0.226	149	-40	0	149	-40	0	149	-40	0
150	-39	0	150	-45	0	150	-39	0.225	150	-39	0	150	-39	0	150	-39	0
151	-38	0	151	-44	0	151	-38	0.224	151	-38	0	151	-38	0	151	-38	0
152	-37	0	152	-43	0	152	-37	0.223	152	-37	0	152	-37	0	152	-37	0
153	-36	0	153	-42	0	153	-36	0.222	153	-36	0	153	-36	0	153	-36	0
154	-35	0	154	-41	0	154	-35	0.221	154	-35	0	154	-35	0	154	-35	0
155	-34	0	155	-40	0	155	-34	0.22	155	-34	0	155	-34	0	155	-34	0
156	-33	0	156	-39	0	156	-33	0.219	156	-33	0	156	-33	0	156	-33	0
157	-32	0	157	-38	0	157	-32	0.218	157	-32	0	157	-32	0	157	-32	0
158	-31	0	158	-37	0	158	-31	0.217	158	-31	0	158	-31	0	158	-31	0
159	-30	0	159	-36	0	159	-30	0.216	159	-30	0	159	-30	0	159	-30	0
160	-29	0	160	-35	0	160	-29	0.215	160	-29	0	160	-29	0	160	-29	0
161	-28	0	161	-34	0	161	-28	0.214	161	-28	0	161	-28	0	161	-28	0
162	-27	0	162	-33	0	162	-27	0.213	162	-27	0	162	-27	0	162	-27	0
163	-26	0	163	-32	0	163	-26	0.212	163	-26	0	163	-26	0	163	-26	0
164	-25	0	164	-31	0	164	-25	0.211	164	-25	0	164	-25	0	164	-25	0
165	-24	0	165	-30	0	165	-24	0.21	165	-24	0	165	-24	0	165	-24	0
166	-23	0	166	-29	0	166	-23	0.209	166	-23	0	166	-23	0	166	-23	0
167	-22	0	167	-28	0	167	-22	0.208	167	-22	0	167	-22	0	167	-22	0
168	-21	0	168	-27	0	168	-21	0.207	168	-21	0	168	-21	0	168	-21	0
169	-20	0	169	-26	0	169	-20	0.206	169	-20	0	169	-20	0	169	-20	0
170	-19	0	170	-25	0	170	-19	0.205	170	-19	0	170	-19	0	170	-19	0
171	-18	0	171	-24	0	171	-18	0.204	171	-18	0	171	-18	0	171	-18	0
172	-17	0	172	-23	0	172	-17	0.203	172	-17	0	172	-17	0	172	-17	0
173	-16	0	173	-22	0	173	-16	0.202	173	-16	0	173	-16	0	173	-16	0
174	-15	0	174	-21	0	174	-15	0.201	174	-15	0	174	-15	0	174	-15	0
175	-14	0	175	-20	0	175	-14	0.2	175	-14	0	175	-14	0	175	-14	0
176	-13	0	176	-19	0	176	-13	0.199	176	-13	0	176	-13	0	176	-13	0
177	-12	0	177	-18	0	177	-12	0.198	177	-12	0	177	-12	0	177	-12	0
178	-11	0	178	-17	0	178	-11	0.197	178	-11	0	178	-11	0	178	-11	0
179	-10	0	179	-16	0	179	-10	0.196	179	-10	0	179	-10	0	179	-10	0
180	-9.5	0	180	-15	0	180	-9.5	0.195	180	-9.5	0	180	-9.5	0	180	-9.5	0
181	-9	0	181	-14	0	181	-9	0.194	181	-9	0	181	-9	0	181	-9	0

182	-8.5	0	182	-13	0	182	-8.5	0.193	182	-8.5	0	182	-8.5	0	182	-8.5	0	A-56
183	-8	0	183	-12	0	183	-8	0.192	183	-8	0	183	-8	0	183	-8	0	
184	-7.5	0	184	-11	0	184	-7.5	0.191	184	-7.5	0	184	-7.5	0	184	-7.5	0	
185	-7	0	185	-10	0	185	-7	0.19	185	-7	0	185	-7	0	185	-7	0	
186	-6.5	0	186	-9	0	186	-6.5	0.189	186	-6.5	0	186	-6.5	0	186	-6.5	0	
187	-6	0	187	-8	0	187	-6	0.188	187	-6	0	187	-6	0	187	-6	0	
188	-5.5	0	188	-7	0	188	-5.5	0.187	188	-5.5	0	188	-5.5	0	188	-5.5	0	
189	-5	0	189	-6	0	189	-5	0.186	189	-5	0	189	-5	0	189	-5	0	
190	-4.5	0	190	-5	0	190	-4.5	0.185	190	-4.5	0	190	-4.5	0	190	-4.5	0	
191	-4	0	191	-4	0	191	-4	0.184	191	-4	0	191	-4	0	191	-4	0	
192	-3.5	0	192	-3.5	0	192	-3.5	0.183	192	-3.5	0	192	-3.5	0	192	-3.5	0	
193	-3	0	193	-3	0	193	-3	0.182	193	-3	0	193	-3	0	193	-3	0	
194	-2.5	0	194	-2.5	0	194	-2.5	0.181	194	-2.5	0	194	-2.5	0	194	-2.5	0	
195	-2	0	195	-2	0	195	-2	0.18	195	-2	0	195	-2	0	195	-2	0	
196	-1.5	0	196	-1.5	0	196	-1.5	0.179	196	-1.5	0	196	-1.5	0	196	-1.5	0	
197	-1	0	197	-1	0	197	-1	0.178	197	-1	0	197	-1	0	197	-1	0	
198	-0.5	0	198	-0.5	0	198	-0.5	0.177	198	-0.5	0	198	-0.5	0	198	-0.5	0	
199	-0.1	0	199	-0.1	0	199	-0.1	0.176	199	-0.1	0	199	-0.1	0	199	-0.1	0	
200	0	0	200	0	0	200	0	0.175	200	0	0	200	0	0	200	0	0	
201	1	0	201	1	0	201	1	0.174	201	1	0	201	1	0	201	1	0	
202	2	0	202	2	0	202	2	0.173	202	2	0	202	2	0	202	2	0	
203	3	0	203	3	0	203	3	0.172	203	3	0	203	3	0	203	3	0	
204	4	0	204	4	0	204	4	0.171	204	4	0	204	4	0	204	4	0	
205	5	0	205	5	0	205	5	0.17	205	5	0	205	5	0	205	5	0	
206	6	0	206	6	0	206	6	0.169	206	6	0	206	6	0	206	6	0	
207	7	0	207	7	0	207	7	0.168	207	7	0	207	7	0	207	7	0	
208	8	0	208	8	0	208	8	0.167	208	8	0	208	8	0	208	8	0	
209	9	0	209	9	0	209	9	0.166	209	9	0	209	9	0	209	9	0	
210	10	0	210	10	0	210	10	0.165	210	10	0	210	10	0	210	10	0	
211	11	0	211	11	0	211	11	0.164	211	11	0	211	11	0	211	11	0	
212	12	0	212	12	0	212	12	0.163	212	12	0	212	12	0	212	12	0	
213	13	0	213	13	0	213	13	0.162	213	13	0	213	13	0	213	13	0	
214	14	0	214	14	0	214	14	0.161	214	14	0	214	14	0	214	14	0	
215	15	0	215	15	0	215	15	0.16	215	15	0	215	15	0	215	15	0	
216	16	0	216	16	0	216	16	0.159	216	16	0	216	16	0	216	16	0	
217	17	0	217	17	0	217	17	0.158	217	17	0	217	17	0	217	17	0	
218	18	0	218	18	0	218	18	0.157	218	18	0	218	18	0	218	18	0	
219	19	0	219	19	0	219	19	0.156	219	19	0	219	19	0	219	19	0	
220	20	0	220	20	0	220	20	0.155	220	20	0	220	20	0	220	20	0	
221	21	0	221	21	0	221	21	0.154	221	21	0	221	21	0	221	21	0	
222	22	0	222	22	0	222	22	0.153	222	22	0	222	22	0	222	22	0	
223	23	0	223	23	0	223	23	0.152	223	23	0	223	23	0	223	23	0	
224	24	0	224	24	0	224	24	0.151	224	24	0	224	24	0	224	24	0	
225	25	0	225	25	0	225	25	0.15	225	25	0	225	25	0	225	25	0	
226	26	0	226	26	0	226	26	0.149	226	26	0	226	26	0	226	26	0	
227	27	0	227	27	0	227	27	0.148	227	27	0	227	27	0	227	27	0	
228	28	0	228	28	0	228	28	0.147	228	28	0	228	28	0	228	28	0	
229	29	0	229	29	0	229	29	0.146	229	29	0	229	29	0	229	29	0	
230	30	0	230	30	0	230	30	0.145	230	30	0	230	30	0	230	30	0	
231	31	0	231	31	0	231	31	0.144	231	31	0	231	31	0	231	31	0	
232	32	0	232	32	0	232	32	0.143	232	32	0	232	32	0	232	32	0	
233	33	0	233	33	0	233	33	0.142	233	33	0	233	33	0	233	33	0	
234	34	0	234	34	0	234	34	0.141	234	34	0	234	34	0	234	34	0	
235	35	0	235	35	0	235	35	0.14	235	35	0	235	35	0	235	35	0	
236	36	0	236	36	0	236	36	0.139	236	36	0	236	36	0	236	36	0	
237	37	0	237	37	0	237	37	0.138	237	37	0	237	37	0	237	37	0	
238	38	0	238	38	0	238	38	0.137	238	38	0	238	38	0	238	38	0	
239	39	0	239	39	0	239	39	0.136	239	39	0	239	39	0	239	39	0	
240	40	0	240	40	0	240	40	0.135	240	40	0	240	40	0	240	40	0	
241	41	0	241	41	0	241	41	0.134	241	41	0	241	41	0	241	41	0	
242	42	0	242	42	0	242	42	0.133	242	42	0	242	42	0	242	42	0	
243	43	0	243	43	0	243	43	0.132	243	43	0	243	43	0	243	43	0	
244	44	0	244	44	0	244	44	0.131	244	44	0	244	44	0	244	44	0	
245	45	0	245	45	0	245	45	0.13	245	45	0	245	45	0	245	45	0	
246	46	0	246	46	0	246	46	0.128	246	46	0	246	46	0	246	46	0	
247	47	0	247	47	0	247	47	0.125	247	47	0	247	47	0	247	47	0	

SAND5M1M			SAND5M30CM			SAND5M3M			SAND5MTOP			SAND5MBOTTOM			SAND5MFLAT		
Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)	Z (cm)	H (cm)	R (cm)
0	-400	0	0	-600	0	0	-575	0	0	-180	0.5	0	-180	0	0	-180	0
0.1	-399.8	0.125	0.1	-601	0.05	0.1	-575.2	0.01	0.1	-180.2	0.75	0.1	-180.2	0.001	0.1	-180.2	0.5
0.2	-399.6	0.15	0.2	-602	0.1	0.2	-575.4	0.02	0.2	-180.4	1	0.2	-180.4	0.002	0.2	-180.4	0.5
0.3	-399.4	0.175	0.3	-603	0.15	0.3	-575.6	0.03	0.3	-180.6	1	0.3	-180.6	0.003	0.3	-180.6	0.5
0.4	-399.2	0.2	0.4	-604	0.2	0.4	-575.8	0.04	0.4	-180.8	1	0.4	-180.8	0.004	0.4	-180.8	0.5
0.5	-399	0.225	0.5	-605	0.25	0.5	-576	0.05	0.5	-181	1	0.5	-181	0.005	0.5	-181	0.5
0.6	-398.8	0.25	0.6	-606	0.3	0.6	-576.2	0.06	0.6	-181.2	1	0.6	-181.2	0.006	0.6	-181.2	0.5
0.7	-398.6	0.275	0.7	-607	0.35	0.7	-576.4	0.07	0.7	-181.4	1	0.7	-181.4	0.007	0.7	-181.4	0.5
0.8	-398.4	0.3	0.8	-608	0.4	0.8	-576.6	0.08	0.8	-181.6	1	0.8	-181.6	0.008	0.8	-181.6	0.5
0.9	-398.2	0.325	0.9	-609	0.425	0.9	-576.8	0.09	0.9	-181.8	1	0.9	-181.8	0.009	0.9	-181.8	0.5
1	-398	0.35	1	-610	0.45	1	-577	0.1	1	-182	0.99	1	-182	0.01	1	-182	0.5
1.1	-397.8	0.355	1.1	-611	0.475	1.1	-577.2	0.105	1.1	-182.2	0.98	1.1	-182.2	0.02	1.1	-182.2	0.5
1.2	-397.6	0.36	1.2	-612	0.5	1.2	-577.4	0.11	1.2	-182.4	0.97	1.2	-182.4	0.03	1.2	-182.4	0.5
1.3	-397.4	0.365	1.3	-613	0.525	1.3	-577.6	0.115	1.3	-182.6	0.96	1.3	-182.6	0.04	1.3	-182.6	0.5
1.4	-397.2	0.37	1.4	-614	0.55	1.4	-577.8	0.12	1.4	-182.8	0.95	1.4	-182.8	0.05	1.4	-182.8	0.5
1.5	-397	0.375	1.5	-615	0.575	1.5	-578	0.125	1.5	-183	0.94	1.5	-183	0.06	1.5	-183	0.5
1.6	-396.8	0.38	1.6	-616	0.6	1.6	-578.2	0.13	1.6	-183.2	0.93	1.6	-183.2	0.07	1.6	-183.2	0.5
1.7	-396.6	0.385	1.7	-617	0.625	1.7	-578.4	0.135	1.7	-183.4	0.92	1.7	-183.4	0.08	1.7	-183.4	0.5
1.8	-396.4	0.39	1.8	-618	0.65	1.8	-578.6	0.14	1.8	-183.6	0.91	1.8	-183.6	0.09	1.8	-183.6	0.5
1.9	-396.2	0.395	1.9	-619	0.675	1.9	-578.8	0.145	1.9	-183.8	0.9	1.9	-183.8	0.1	1.9	-183.8	0.5
2	-396	0.4	2	-620	0.7	2	-579	0.15	2	-184	0.89	2	-184	0.11	2	-184	0.5
2.5	-396.5	0.425	2.5	-621	0.825	2.5	-579.5	0.175	2.5	-185	0.88	2.5	-185	0.12	2.5	-185	0.5
3	-397	0.45	3	-622	0.95	3	-580	0.2	3	-186	0.87	3	-186	0.13	3	-186	0.5
3.5	-397.5	0.475	3.5	-623	0.975	3.5	-580.5	0.225	3.5	-187	0.86	3.5	-187	0.14	3.5	-187	0.5
4	-398	0.5	4	-624	1	4	-581	0.25	4	-188	0.85	4	-188	0.15	4	-188	0.5
4.5	-398.5	0.525	4.5	-625	1	4.5	-581.5	0.275	4.5	-189	0.84	4.5	-189	0.16	4.5	-189	0.5
5	-399	0.55	5	-626	1	5	-582	0.3	5	-190	0.83	5	-190	0.17	5	-190	0.5
5.5	-399.5	0.575	5.5	-627	1	5.5	-582.5	0.325	5.5	-191	0.82	5.5	-191	0.18	5.5	-191	0.5
6	-400	0.6	6	-628	1	6	-583	0.35	6	-192	0.81	6	-192	0.19	6	-192	0.5
6.5	-400.5	0.625	6.5	-629	1	6.5	-583.5	0.375	6.5	-193	0.8	6.5	-193	0.2	6.5	-193	0.5
7	-401	0.65	7	-630	1	7	-584	0.4	7	-194	0.79	7	-194	0.21	7	-194	0.5
7.5	-401.5	0.675	7.5	-631	1	7.5	-584.5	0.425	7.5	-195	0.78	7.5	-195	0.22	7.5	-195	0.5
8	-402	0.7	8	-632	1	8	-585	0.45	8	-196	0.77	8	-196	0.23	8	-196	0.5
8.5	-402.5	0.725	8.5	-633	1	8.5	-585.5	0.475	8.5	-197	0.76	8.5	-197	0.24	8.5	-197	0.5
9	-403	0.75	9	-634	1	9	-586	0.5	9	-198	0.75	9	-198	0.25	9	-198	0.5
9.5	-404	0.775	9.5	-635	1	9.5	-586.5	0.525	9.5	-199	0.74	9.5	-199	0.26	9.5	-199	0.5
10	-405	0.8	10	-634.5	1	10	-587	0.55	10	-200	0.73	10	-200	0.27	10	-200	0.5
10.5	-406	0.825	10.5	-633.5	0.95	10.5	-587.5	0.575	10.5	-201	0.72	10.5	-201	0.28	10.5	-201	0.5
11	-407	0.85	11	-632.5	0.9	11	-588	0.6	11	-202	0.71	11	-202	0.29	11	-202	0.5
11.5	-408	0.875	11.5	-630	0.85	11.5	-588.5	0.625	11.5	-204	0.7	11.5	-204	0.3	11.5	-204	0.5
12	-409	0.9	12	-627.5	0.8	12	-589	0.65	12	-206	0.69	12	-206	0.31	12	-206	0.5
12.5	-410	0.925	12.5	-622.5	0.75	12.5	-589.5	0.663	12.5	-208	0.68	12.5	-208	0.32	12.5	-208	0.5
13	-411	0.95	13	-617.5	0.7	13	-590	0.675	13	-210	0.67	13	-210	0.33	13	-210	0.5
13.5	-412	0.975	13.5	-612.5	0.65	13.5	-590.5	0.688	13.5	-212	0.66	13.5	-212	0.34	13.5	-212	0.5
14	-414.5	1	14	-607.5	0.6	14	-591	0.7	14	-214	0.65	14	-214	0.35	14	-214	0.5
14.5	-417	1	14.5	-602.5	0.55	14.5	-591.5	0.713	14.5	-216	0.64	14.5	-216	0.36	14.5	-216	0.5
15	-419.5	1	15	-597.5	0.5	15	-592	0.725	15	-218	0.63	15	-218	0.37	15	-218	0.5
15.5	-422	1	15.5	-592.5	0.475	15.5	-592.5	0.738	15.5	-220	0.62	15.5	-220	0.38	15.5	-220	0.5
16	-424.5	1	16	-587.5	0.45	16	-593	0.75	16	-222	0.61	16	-222	0.39	16	-222	0.5
16.5	-427	1	16.5	-582.5	0.425	16.5	-593.5	0.763	16.5	-224	0.6	16.5	-224	0.4	16.5	-224	0.5
17	-429.5	1	17	-577.5	0.4	17	-594	0.775	17	-226	0.59	17	-226	0.41	17	-226	0.5
17.5	-432	1	17.5	-572.5	0.375	17.5	-594.5	0.788	17.5	-228	0.58	17.5	-228	0.42	17.5	-228	0.5
18	-434.5	1	18	-567.5	0.35	18	-595	0.8	18	-230	0.57	18	-230	0.43	18	-230	0.5
18.5	-437	1	18.5	-562.5	0.325	18.5	-595.5	0.813	18.5	-232	0.56	18.5	-232	0.44	18.5	-232	0.5
19	-439.5	1	19	-557.5	0.3	19	-596	0.825	19	-234	0.55	19	-234	0.45	19	-234	0.5
19.5	-442	1	19.5	-552.5	0.275	19.5	-596.5	0.838	19.5	-236	0.54	19.5	-236	0.46	19.5	-236	0.5
20	-444.5	1	20	-547.5	0.25	20	-597	0.85	20	-238	0.53	20	-238	0.47	20	-238	0.5
20.5	-447	1	20.5	-542.5	0.225	20.5	-597.5	0.863	20.5	-240	0.52	20.5	-240	0.48	20.5	-240	0.5
21	-449.5	1	21	-537.5	0.2	21	-598	0.875	21	-241	0.51	21	-241	0.49	21	-241	0.5
21.5	-452	1	21.5	-532.5	0.188	21.5	-598.5	0.888	21.5	-242	0.5	21.5	-242	0.5	21.5	-242	0.5
22	-454.5	1	22	-530	0.175	22	-599	0.9	22	-243	0.49	22	-243	0.51	22	-243	0.5

22.5	-457	1	22.5	-527.5	0.163	22.5	-599.5	0.91	22.5	-244	0.48	22.5	-244	0.52	22.5	-244	0.5	A-58
23	-459.5	1	23	-525	0.15	23	-600	0.92	23	-245	0.47	23	-245	0.53	23	-245	0.5	
23.5	-462	1	23.5	-522.5	0.138	23.5	-600.5	0.93	23.5	-246	0.46	23.5	-246	0.54	23.5	-246	0.5	
24	-464.5	1	24	-520	0.125	24	-601	0.94	24	-247	0.45	24	-247	0.55	24	-247	0.5	
24.5	-467	1	24.5	-517.5	0.113	24.5	-601.5	0.95	24.5	-248	0.44	24.5	-248	0.56	24.5	-248	0.5	
25	-469.5	1	25	-515	0.1	25	-602	0.96	25	-249	0.43	25	-249	0.57	25	-249	0.5	
25.5	-472	1	25.5	-512.5	0.088	25.5	-602.5	0.97	25.5	-250	0.42	25.5	-250	0.58	25.5	-250	0.5	
26	-473	1	26	-510	0.075	26	-603	0.98	26	-251	0.41	26	-251	0.59	26	-251	0.5	
26.5	-474	1	26.5	-507.5	0.063	26.5	-603.5	0.99	26.5	-252	0.4	26.5	-252	0.6	26.5	-252	0.5	
27	-475	1	27	-505	0.05	27	-604	1	27	-253	0.39	27	-253	0.61	27	-253	0.5	
27.5	-476	1	27.5	-502.5	0.038	27.5	-604.5	1	27.5	-254	0.38	27.5	-254	0.62	27.5	-254	0.5	
28	-476.5	1	28	-500	0.025	28	-605	1	28	-255	0.37	28	-255	0.63	28	-255	0.5	
28.5	-477	1	28.5	-497.5	0.013	28.5	-605.5	1	28.5	-256	0.36	28.5	-256	0.64	28.5	-256	0.5	
29	-477.5	1	29	-495	0.01	29	-606	1	29	-257	0.35	29	-257	0.65	29	-257	0.5	
29.5	-478	1	29.5	-492.5	0.005	29.5	-606.5	1	29.5	-258	0.34	29.5	-258	0.66	29.5	-258	0.5	
30	-478.5	1	30	-490	0.001	30	-607	1	30	-259	0.33	30	-259	0.67	30	-259	0.5	
30.5	-479	0.995	30.5	-487.5	0	30.5	-607.5	1	30.5	-260	0.32	30.5	-260	0.68	30.5	-260	0.5	
31	-479	0.99	31	-485.5	0	31	-608	1	31	-259.5	0.31	31	-259.5	0.69	31	-259.5	0.5	
31.5	-479	0.985	31.5	-483.5	0	31.5	-608.5	1	31.5	-259	0.3	31.5	-259	0.7	31.5	-259	0.5	
32	-479	0.98	32	-481.5	0	32	-609	1	32	-258.5	0.29	32	-258.5	0.71	32	-258.5	0.5	
32.5	-478.5	0.975	32.5	-479.5	0	32.5	-609.5	1	32.5	-258	0.28	32.5	-258	0.72	32.5	-258	0.5	
33	-478	0.97	33	-477.5	0	33	-610	1	33	-257.5	0.27	33	-257.5	0.73	33	-257.5	0.5	
33.5	-477.5	0.965	33.5	-475.5	0	33.5	-610.5	1	33.5	-257	0.26	33.5	-257	0.74	33.5	-257	0.5	
34	-477	0.96	34	-473.5	0	34	-611	1	34	-256.5	0.25	34	-256.5	0.75	34	-256.5	0.5	
34.5	-476.5	0.955	34.5	-471.5	0	34.5	-611.5	1	34.5	-256	0.24	34.5	-256	0.76	34.5	-256	0.5	
35	-476	0.95	35	-469.5	0	35	-612	1	35	-255.5	0.23	35	-255.5	0.77	35	-255.5	0.5	
35.5	-475.5	0.945	35.5	-467.5	0	35.5	-612.5	1	35.5	-255	0.22	35.5	-255	0.78	35.5	-255	0.5	
36	-475	0.94	36	-465.5	0	36	-613	1	36	-254	0.21	36	-254	0.79	36	-254	0.5	
36.5	-474.5	0.935	36.5	-463.5	0	36.5	-613.5	1	36.5	-253	0.2	36.5	-253	0.8	36.5	-253	0.5	
37	-474	0.93	37	-461.5	0	37	-614	1	37	-252	0.19	37	-252	0.81	37	-252	0.5	
37.5	-473.5	0.925	37.5	-459.5	0	37.5	-614.5	1	37.5	-251	0.18	37.5	-251	0.82	37.5	-251	0.5	
38	-473	0.92	38	-457.5	0	38	-615	1	38	-250	0.17	38	-250	0.83	38	-250	0.5	
38.5	-472.5	0.915	38.5	-455.5	0	38.5	-615.5	1	38.5	-249	0.16	38.5	-249	0.84	38.5	-249	0.5	
39	-472	0.91	39	-453.5	0	39	-616	1	39	-248	0.15	39	-248	0.85	39	-248	0.5	
39.5	-471.5	0.905	39.5	-451.5	0	39.5	-616.5	1	39.5	-247	0.14	39.5	-247	0.86	39.5	-247	0.5	
40	-471	0.9	40	-449.5	0	40	-617	1	40	-246	0.13	40	-246	0.87	40	-246	0.5	
40.5	-470	0.89	40.5	-447.5	0	40.5	-617.5	1	40.5	-245	0.12	40.5	-245	0.88	40.5	-245	0.5	
41	-469	0.88	41	-445.5	0	41	-618	1	41	-244	0.11	41	-244	0.89	41	-244	0.5	
41.5	-468	0.87	41.5	-443.5	0	41.5	-618.5	1	41.5	-243	0.1	41.5	-243	0.9	41.5	-243	0.5	
42	-467	0.86	42	-441.5	0	42	-619	1	42	-242	0.09	42	-242	0.91	42	-242	0.5	
42.5	-466	0.85	42.5	-439.5	0	42.5	-619.5	1	42.5	-241	0.08	42.5	-241	0.92	42.5	-241	0.5	
43	-465	0.84	43	-437.5	0	43	-620	1	43	-240	0.07	43	-240	0.93	43	-240	0.5	
43.5	-464	0.83	43.5	-435.5	0	43.5	-620.5	1	43.5	-239	0.06	43.5	-239	0.94	43.5	-239	0.5	
44	-463	0.82	44	-433.5	0	44	-621	1	44	-238	0.05	44	-238	0.95	44	-238	0.5	
44.5	-462	0.81	44.5	-431.5	0	44.5	-621.5	1	44.5	-237	0.04	44.5	-237	0.96	44.5	-237	0.5	
45	-461	0.8	45	-429.5	0	45	-622	1	45	-236	0.03	45	-236	0.97	45	-236	0.5	
45.5	-460	0.79	45.5	-428.5	0	45.5	-622	1	45.5	-235	0.02	45.5	-235	0.98	45.5	-235	0.5	
46	-459	0.78	46	-427.5	0	46	-622	1	46	-234	0.01	46	-234	0.99	46	-234	0.5	
46.5	-458	0.77	46.5	-426.5	0	46.5	-622	1	46.5	-233	0.001	46.5	-233	1	46.5	-233	0.1	
47	-457	0.76	47	-425.5	0	47	-622	1	47	-232	0	47	-232	0.9	47	-232	0.01	
47.5	-456	0.75	47.5	-424.5	0	47.5	-622	1	47.5	-231	0	47.5	-231	0.7	47.5	-231	0	
48	-455	0.74	48	-423.5	0	48	-622	1	48	-230	0	48	-230	0.5	48	-230	0	
48.5	-454	0.73	48.5	-422.5	0	48.5	-622	1	48.5	-227.5	0	48.5	-227.5	0.2	48.5	-227.5	0	
49	-453	0.72	49	-421.5	0	49	-621.5	1	49	-225	0	49	-225	0.1	49	-225	0	
49.5	-452	0.71	49.5	-420.5	0	49.5	-621	1	49.5	-222.5	0	49.5	-222.5	0.01	49.5	-222.5	0	
50	-451	0.7	50	-419.5	0	50	-620.5	1	50	-220	0	50	-220	0	50	-220	0	
50.5	-450	0.69	50.5	-418.5	0	50.5	-620	0.995	50.5	-217.5	0	50.5	-217.5	0	50.5	-217.5	0	
51	-449	0.68	51	-417.5	0	51	-619	0.99	51	-215	0	51	-215	0	51	-215	0	
51.5	-448	0.67	51.5	-416.5	0	51.5	-618	0.985	51.5	-212.5	0	51.5	-212.5	0	51.5	-212.5	0	
52	-447	0.66	52	-415.5	0	52	-617	0.98	52	-210	0	52	-210	0	52	-210	0	
52.5	-446	0.65	52.5	-414.5	0	52.5	-616	0.975	52.5	-207.5	0	52.5	-207.5	0	52.5	-207.5	0	
53	-445	0.64	53	-413.5	0	53	-615	0.97	53	-205	0	53	-205	0	53	-205	0	
53.5	-444	0.63	53.5	-412.5	0	53.5	-612.5	0.965	53.5	-202.5	0	53.5	-202.5	0	53.5	-202.5	0	
54	-443	0.62	54	-411.5	0	54	-610	0.96	54	-200	0	54	-200	0	54	-200	0	
54.5	-442	0.61	54.5	-410.5	0	54.5	-607.5	0.955	54.5	-197.5	0	54.5	-197.5	0	54.5	-197.5	0	
55	-441	0.6	55	-409.5	0	55	-605	0.95	55	-195	0	55	-195	0	55	-195	0	

55.5	-440	0.59	55.5	-408.5	0	55.5	-602.5	0.945	55.5	-192.5	0	55.5	-192.5	0	55.5	-192.5	0	A-59
56	-439	0.58	56	-407.5	0	56	-600	0.94	56	-190	0	56	-190	0	56	-190	0	
56.5	-438	0.57	56.5	-406.5	0	56.5	-597.5	0.935	56.5	-187.5	0	56.5	-187.5	0	56.5	-187.5	0	
57	-437	0.56	57	-405.5	0	57	-595	0.93	57	-185	0	57	-185	0	57	-185	0	
57.5	-436	0.55	57.5	-404.5	0	57.5	-592.5	0.925	57.5	-182.5	0	57.5	-182.5	0	57.5	-182.5	0	
58	-435	0.54	58	-403.5	0	58	-590	0.92	58	-180	0	58	-180	0	58	-180	0	
58.5	-434	0.53	58.5	-402.5	0	58.5	-587.5	0.915	58.5	-177.5	0	58.5	-177.5	0	58.5	-177.5	0	
59	-433	0.52	59	-401.5	0	59	-585	0.91	59	-175	0	59	-175	0	59	-175	0	
59.5	-432	0.51	59.5	-400.5	0	59.5	-582.5	0.905	59.5	-172.5	0	59.5	-172.5	0	59.5	-172.5	0	
60	-431	0.5	60	-400	0	60	-580	0.9	60	-170	0	60	-170	0	60	-170	0	
60.5	-430	0.48	60.5	-399.5	0	60.5	-577.5	0.89	60.5	-167.5	0	60.5	-167.5	0	60.5	-167.5	0	
61	-429	0.475	61	-399	0	61	-575	0.88	61	-165	0	61	-165	0	61	-165	0	
62	-427	0.45	62	-398	0	62	-570	0.86	62	-163	0	62	-163	0	62	-163	0	
63	-425	0.425	63	-397	0	63	-565	0.84	63	-161	0	63	-161	0	63	-161	0	
64	-423	0.4	64	-396	0	64	-560	0.82	64	-159	0	64	-159	0	64	-159	0	
65	-421	0.375	65	-395	0	65	-555	0.8	65	-157	0	65	-157	0	65	-157	0	
66	-419	0.35	66	-394	0	66	-550	0.78	66	-155	0	66	-155	0	66	-155	0	
67	-417	0.325	67	-393	0	67	-545	0.76	67	-153	0	67	-153	0	67	-153	0	
68	-415	0.3	68	-392	0	68	-540	0.74	68	-151	0	68	-151	0	68	-151	0	
69	-413	0.275	69	-391	0	69	-535	0.72	69	-149	0	69	-149	0	69	-149	0	
70	-411	0.25	70	-390	0	70	-530	0.7	70	-147	0	70	-147	0	70	-147	0	
71	-410	0.23	71	-389	0	71	-525	0.68	71	-145	0	71	-145	0	71	-145	0	
72	-409	0.21	72	-388	0	72	-520	0.66	72	-143	0	72	-143	0	72	-143	0	
73	-408	0.19	73	-387	0	73	-515	0.64	73	-141	0	73	-141	0	73	-141	0	
74	-407	0.17	74	-386	0	74	-510	0.62	74	-139	0	74	-139	0	74	-139	0	
75	-406	0.15	75	-385	0	75	-505	0.6	75	-137	0	75	-137	0	75	-137	0	
76	-405	0.14	76	-384	0	76	-500	0.59	76	-135	0	76	-135	0	76	-135	0	
77	-404	0.13	77	-383	0	77	-495	0.58	77	-133	0	77	-133	0	77	-133	0	
78	-403	0.12	78	-382	0	78	-490	0.57	78	-131	0	78	-131	0	78	-131	0	
79	-402	0.11	79	-381	0	79	-485	0.56	79	-129	0	79	-129	0	79	-129	0	
80	-401	0.1	80	-380	0	80	-480	0.55	80	-127	0	80	-127	0	80	-127	0	
81	-400	0.095	81	-379	0	81	-475	0.54	81	-125	0	81	-125	0	81	-125	0	
82	-399	0.09	82	-378	0	82	-470	0.53	82	-123	0	82	-123	0	82	-123	0	
83	-398	0.085	83	-377	0	83	-465	0.52	83	-121	0	83	-121	0	83	-121	0	
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85	-396	0.075	85	-375	0	85	-455	0.5	85	-117	0	85	-117	0	85	-117	0	
86	-395	0.07	86	-374	0	86	-453	0.49	86	-115	0	86	-115	0	86	-115	0	
87	-394	0.065	87	-373	0	87	-451	0.48	87	-113	0	87	-113	0	87	-113	0	
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89	-392	0.055	89	-371	0	89	-447	0.46	89	-109	0	89	-109	0	89	-109	0	
90	-391	0.05	90	-370	0	90	-445	0.45	90	-107	0	90	-107	0	90	-107	0	
91	-390	0.045	91	-369	0	91	-443	0.44	91	-105	0	91	-105	0	91	-105	0	
92	-389	0.04	92	-368	0	92	-441	0.43	92	-103	0	92	-103	0	92	-103	0	
93	-388	0.035	93	-367	0	93	-439	0.42	93	-101	0	93	-101	0	93	-101	0	
94	-387	0.03	94	-366	0	94	-437	0.41	94	-99	0	94	-99	0	94	-99	0	
95	-386	0.025	95	-365	0	95	-435	0.4	95	-97	0	95	-97	0	95	-97	0	
96	-385	0.02	96	-364	0	96	-433	0.395	96	-95	0	96	-95	0	96	-95	0	
97	-384	0.015	97	-363	0	97	-431	0.39	97	-93	0	97	-93	0	97	-93	0	
98	-383	0.01	98	-362	0	98	-429	0.385	98	-91	0	98	-91	0	98	-91	0	
99	-382	0.005	99	-361	0	99	-427	0.38	99	-90	0	99	-90	0	99	-90	0	
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112	-369	0	112	-348	0	112	-401	0.315	112	-77	0	112	-77	0	112	-77	0	
113	-368	0	113	-347	0	113	-399	0.31	113	-76	0	113	-76	0	113	-76	0	
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117	-364	0	117	-343	0	117	-391	0.29	117	-72	0	117	-72	0	117	-72	0	
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121	-360	0	121	-339	0	121	-383	0.27	121	-68	0	121	-68	0	121	-68	0	
122	-359	0	122	-338	0	122	-381	0.265	122	-67	0	122	-67	0	122	-67	0	
123	-358	0	123	-337	0	123	-379	0.26	123	-66	0	123	-66	0	123	-66	0	
124	-357	0	124	-336	0	124	-377	0.255	124	-65	0	124	-65	0	124	-65	0	
125	-356	0	125	-335	0	125	-375	0.25	125	-64	0	125	-64	0	125	-64	0	
126	-355	0	126	-334	0	126	-373	0.249	126	-63	0	126	-63	0	126	-63	0	
127	-354	0	127	-333	0	127	-371	0.248	127	-62	0	127	-62	0	127	-62	0	
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129	-352	0	129	-331	0	129	-367	0.246	129	-60	0	129	-60	0	129	-60	0	
130	-351	0	130	-330	0	130	-365	0.245	130	-59	0	130	-59	0	130	-59	0	
131	-350	0	131	-329	0	131	-363	0.244	131	-58	0	131	-58	0	131	-58	0	
132	-349	0	132	-328	0	132	-361	0.243	132	-57	0	132	-57	0	132	-57	0	
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136	-345	0	136	-324	0	136	-357	0.239	136	-53	0	136	-53	0	136	-53	0	
137	-344	0	137	-323	0	137	-356	0.238	137	-52	0	137	-52	0	137	-52	0	
138	-343	0	138	-322	0	138	-355	0.237	138	-51	0	138	-51	0	138	-51	0	
139	-342	0	139	-321	0	139	-354	0.236	139	-50	0	139	-50	0	139	-50	0	
140	-341	0	140	-320	0	140	-353	0.235	140	-49	0	140	-49	0	140	-49	0	
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143	-338	0	143	-317	0	143	-350	0.232	143	-46	0	143	-46	0	143	-46	0	
144	-337	0	144	-316	0	144	-349	0.231	144	-45	0	144	-45	0	144	-45	0	
145	-336	0	145	-315	0	145	-348	0.23	145	-44	0	145	-44	0	145	-44	0	
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149	-332	0	149	-311	0	149	-344	0.226	149	-40	0	149	-40	0	149	-40	0	
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153	-328	0	153	-307	0	153	-340	0.222	153	-36	0	153	-36	0	153	-36	0	
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155	-326	0	155	-305	0	155	-338	0.22	155	-34	0	155	-34	0	155	-34	0	
156	-325	0	156	-304	0	156	-337	0.219	156	-33	0	156	-33	0	156	-33	0	
157	-324	0	157	-303	0	157	-336	0.218	157	-32	0	157	-32	0	157	-32	0	
158	-323	0	158	-302	0	158	-335	0.217	158	-31	0	158	-31	0	158	-31	0	
159	-322	0	159	-301	0	159	-334	0.216	159	-30	0	159	-30	0	159	-30	0	
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161	-320	0	161	-299	0	161	-332	0.214	161	-28	0	161	-28	0	161	-28	0	
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163	-318	0	163	-297	0	163	-330	0.212	163	-26	0	163	-26	0	163	-26	0	
164	-317	0	164	-296	0	164	-329	0.211	164	-25	0	164	-25	0	164	-25	0	
165	-316	0	165	-295	0	165	-328	0.21	165	-24	0	165	-24	0	165	-24	0	
166	-315	0	166	-294	0	166	-327	0.209	166	-23	0	166	-23	0	166	-23	0	
167	-314	0	167	-293	0	167	-326	0.208	167	-22	0	167	-22	0	167	-22	0	
168	-313	0	168	-292	0	168	-325	0.207	168	-21	0	168	-21	0	168	-21	0	
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178	-303	0	178	-282	0	178	-315	0.197	178	-11	0	178	-11	0	178	-11	0	
179	-302	0	179	-281	0	179	-314	0.196	179	-10	0	179	-10	0	179	-10	0	
180	-301	0	180	-280	0	180	-313	0.195	180	-9.5	0	180	-9.5	0	180	-9.5	0	
181	-300	0	181	-279	0	181	-312	0.194	181	-9	0	181	-9	0	181	-9	0	

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186	-295	0	186	-274	0	186	-307	0.189	186	-6.5	0	186	-6.5	0	186	-6.5	0	
187	-294	0	187	-273	0	187	-306	0.188	187	-6	0	187	-6	0	187	-6	0	
188	-293	0	188	-272	0	188	-305	0.187	188	-5.5	0	188	-5.5	0	188	-5.5	0	
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191	-290	0	191	-269	0	191	-302	0.184	191	-4	0	191	-4	0	191	-4	0	
192	-289	0	192	-268	0	192	-301	0.183	192	-3.5	0	192	-3.5	0	192	-3.5	0	
193	-288	0	193	-267	0	193	-300	0.182	193	-3	0	193	-3	0	193	-3	0	
194	-287	0	194	-266	0	194	-299	0.181	194	-2.5	0	194	-2.5	0	194	-2.5	0	
195	-286	0	195	-265	0	195	-298	0.18	195	-2	0	195	-2	0	195	-2	0	
196	-285	0	196	-264	0	196	-297	0.179	196	-1.5	0	196	-1.5	0	196	-1.5	0	
197	-284	0	197	-263	0	197	-296	0.178	197	-1	0	197	-1	0	197	-1	0	
198	-283	0	198	-262	0	198	-295	0.177	198	-0.5	0	198	-0.5	0	198	-0.5	0	
199	-282	0	199	-261	0	199	-294	0.176	199	-0.1	0	199	-0.1	0	199	-0.1	0	
200	-281	0	200	-260	0	200	-293	0.175	200	0	0	200	0	0	200	0	0	
201	-280	0	201	-259	0	201	-292	0.174	201	1	0	201	1	0	201	1	0	
202	-279	0	202	-258	0	202	-291	0.173	202	2	0	202	2	0	202	2	0	
203	-278	0	203	-257	0	203	-290	0.172	203	3	0	203	3	0	203	3	0	
204	-277	0	204	-256	0	204	-289	0.171	204	4	0	204	4	0	204	4	0	
205	-276	0	205	-255	0	205	-288	0.17	205	5	0	205	5	0	205	5	0	
206	-275	0	206	-254	0	206	-287	0.169	206	6	0	206	6	0	206	6	0	
207	-274	0	207	-253	0	207	-286	0.168	207	7	0	207	7	0	207	7	0	
208	-273	0	208	-252	0	208	-285	0.167	208	8	0	208	8	0	208	8	0	
209	-272	0	209	-251	0	209	-284	0.166	209	9	0	209	9	0	209	9	0	
210	-271	0	210	-250	0	210	-283	0.165	210	10	0	210	10	0	210	10	0	
211	-270	0	211	-249	0	211	-282	0.164	211	11	0	211	11	0	211	11	0	
212	-269	0	212	-248	0	212	-281	0.163	212	12	0	212	12	0	212	12	0	
213	-268	0	213	-247	0	213	-280	0.162	213	13	0	213	13	0	213	13	0	
214	-267	0	214	-246	0	214	-279	0.161	214	14	0	214	14	0	214	14	0	
215	-266	0	215	-245	0	215	-278	0.16	215	15	0	215	15	0	215	15	0	
216	-265	0	216	-244	0	216	-277	0.159	216	16	0	216	16	0	216	16	0	
217	-264	0	217	-243	0	217	-276	0.158	217	17	0	217	17	0	217	17	0	
218	-263	0	218	-242	0	218	-275	0.157	218	18	0	218	18	0	218	18	0	
219	-262	0	219	-241	0	219	-274	0.156	219	19	0	219	19	0	219	19	0	
220	-261	0	220	-240	0	220	-273	0.155	220	20	0	220	20	0	220	20	0	
221	-260	0	221	-239	0	221	-272	0.154	221	21	0	221	21	0	221	21	0	
222	-259	0	222	-238	0	222	-271	0.153	222	22	0	222	22	0	222	22	0	
223	-258	0	223	-237	0	223	-270	0.152	223	23	0	223	23	0	223	23	0	
224	-257	0	224	-236	0	224	-269	0.151	224	24	0	224	24	0	224	24	0	
225	-256	0	225	-235	0	225	-268	0.15	225	25	0	225	25	0	225	25	0	
226	-255	0	226	-234	0	226	-267	0.149	226	26	0	226	26	0	226	26	0	
227	-254	0	227	-233	0	227	-266	0.148	227	27	0	227	27	0	227	27	0	
228	-253	0	228	-232	0	228	-265	0.147	228	28	0	228	28	0	228	28	0	
229	-252	0	229	-231	0	229	-264	0.146	229	29	0	229	29	0	229	29	0	
230	-251	0	230	-230	0	230	-263	0.145	230	30	0	230	30	0	230	30	0	
231	-250	0	231	-229	0	231	-262	0.144	231	31	0	231	31	0	231	31	0	
232	-249	0	232	-228	0	232	-261	0.143	232	32	0	232	32	0	232	32	0	
233	-248	0	233	-227	0	233	-260	0.142	233	33	0	233	33	0	233	33	0	
234	-247	0	234	-226	0	234	-259	0.141	234	34	0	234	34	0	234	34	0	
235	-246	0	235	-225	0	235	-258	0.14	235	35	0	235	35	0	235	35	0	
236	-245	0	236	-224	0	236	-257	0.139	236	36	0	236	36	0	236	36	0	
237	-244	0	237	-223	0	237	-256	0.138	237	37	0	237	37	0	237	37	0	
238	-243	0	238	-222	0	238	-255	0.137	238	38	0	238	38	0	238	38	0	
239	-242	0	239	-221	0	239	-254	0.136	239	39	0	239	39	0	239	39	0	
240	-241	0	240	-220	0	240	-253	0.135	240	40	0	240	40	0	240	40	0	
241	-240	0	241	-219	0	241	-252	0.134	241	41	0	241	41	0	241	41	0	
242	-239	0	242	-218	0	242	-251	0.133	242	42	0	242	42	0	242	42	0	
243	-238	0	243	-217	0	243	-250	0.132	243	43	0	243	43	0	243	43	0	
244	-237	0	244	-216	0	244	-249	0.131	244	44	0	244	44	0	244	44	0	
245	-236	0	245	-215	0	245	-248	0.13	245	45	0	245	45	0	245	45	0	
246	-235	0	246	-214	0	246	-247	0.128	246	46	0	246	46	0	246	46	0	
247	-234	0	247	-213	0	247	-246	0.125	247	47	0	247	47	0	247	47	0	

248	-233	0	248	-212	0	248	-245	0.123	248	48	0	248	48	0	248	48	0
249	-232	0	249	-211	0	249	-244	0.12	249	49	0	249	49	0	249	49	0
250	-231	0	250	-210	0	250	-243	0.118	250	50	0	250	50	0	250	50	0
251	-230	0	251	-209	0	251	-242	0.115	251	51	0	251	51	0	251	51	0
252	-229	0	252	-208	0	252	-241	0.113	252	52	0	252	52	0	252	52	0
253	-228	0	253	-207	0	253	-240	0.11	253	53	0	253	53	0	253	53	0
254	-227	0	254	-206	0	254	-239	0.108	254	54	0	254	54	0	254	54	0
255	-226	0	255	-205	0	255	-238	0.105	255	55	0	255	55	0	255	55	0
260	-221	0	260	-200	0	260	-233	0.093	260	60	0	260	60	0	260	60	0
265	-216	0	265	-195	0	265	-228	0.08	265	65	0	265	65	0	265	65	0
270	-211	0	270	-190	0	270	-223	0.068	270	70	0	270	70	0	270	70	0
275	-206	0	275	-185	0	275	-218	0.055	275	75	0	275	75	0	275	75	0
280	-201	0	280	-180	0	280	-213	0.043	280	80	0	280	80	0	280	80	0
285	-196	0	285	-175	0	285	-208	0.03	285	85	0	285	85	0	285	85	0
290	-191	0	290	-170	0	290	-203	0.018	290	90	0	290	90	0	290	90	0
295	-186	0	295	-165	0	295	-198	0.005	295	95	0	295	95	0	295	95	0
300	-181	0	300	-160	0	300	-193	0.001	300	100	0	300	100	0	300	100	0
305	-176	0	305	-155	0	305	-188	0	305	105	0	305	105	0	305	105	0
310	-171	0	310	-150	0	310	-183	0	310	110	0	310	110	0	310	110	0
315	-166	0	315	-145	0	315	-178	0	315	115	0	315	115	0	315	115	0
320	-161	0	320	-140	0	320	-173	0	320	120	0	320	120	0	320	120	0
325	-156	0	325	-135	0	325	-168	0	325	125	0	325	125	0	325	125	0
330	-151	0	330	-130	0	330	-163	0	330	130	0	330	130	0	330	130	0
335	-146	0	335	-125	0	335	-158	0	335	135	0	335	135	0	335	135	0
340	-141	0	340	-120	0	340	-153	0	340	140	0	340	140	0	340	140	0
345	-136	0	345	-115	0	345	-148	0	345	145	0	345	145	0	345	145	0
350	-131	0	350	-110	0	350	-143	0	350	150	0	350	150	0	350	150	0
355	-126	0	355	-105	0	355	-138	0	355	155	0	355	155	0	355	155	0
360	-121	0	360	-100	0	360	-133	0	360	160	0	360	160	0	360	160	0
365	-116	0	365	-95	0	365	-128	0	365	165	0	365	165	0	365	165	0
370	-111	0	370	-90	0	370	-123	0	370	170	0	370	170	0	370	170	0
375	-106	0	375	-85	0	375	-118	0	375	175	0	375	175	0	375	175	0
380	-101	0	380	-80	0	380	-113	0	380	180	0	380	180	0	380	180	0
385	-96	0	385	-75	0	385	-108	0	385	185	0	385	185	0	385	185	0
390	-91	0	390	-70	0	390	-103	0	390	190	0	390	190	0	390	190	0
395	-86	0	395	-65	0	395	-98	0	395	195	0	395	195	0	395	195	0
400	-81	0	400	-60	0	400	-93	0	400	200	0	400	200	0	400	200	0
405	-76	0	405	-55	0	405	-88	0	405	205	0	405	205	0	405	205	0
410	-71	0	410	-50	0	410	-83	0	410	210	0	410	210	0	410	210	0
415	-66	0	415	-45	0	415	-78	0	415	215	0	415	215	0	415	215	0
420	-61	0	420	-40	0	420	-73	0	420	220	0	420	220	0	420	220	0
425	-56	0	425	-37.5	0	425	-68	0	425	225	0	425	225	0	425	225	0
430	-51	0	430	-35	0	430	-63	0	430	230	0	430	230	0	430	230	0
435	-46	0	435	-32.5	0	435	-58	0	435	235	0	435	235	0	435	235	0
440	-41	0	440	-30	0	440	-53	0	440	240	0	440	240	0	440	240	0
445	-36	0	445	-27.5	0	445	-48	0	445	245	0	445	245	0	445	245	0
450	-31	0	450	-25	0	450	-43	0	450	250	0	450	250	0	450	250	0
455	-26	0	455	-22.5	0	455	-38	0	455	255	0	455	255	0	455	255	0
460	-21	0	460	-20	0	460	-33	0	460	260	0	460	260	0	460	260	0
465	-18.5	0	465	-17.5	0	465	-28	0	465	265	0	465	265	0	465	265	0
470	-16	0	470	-15	0	470	-23	0	470	270	0	470	270	0	470	270	0
475	-13.5	0	475	-12.5	0	475	-18	0	475	275	0	475	275	0	475	275	0
480	-11	0	480	-10	0	480	-13	0	480	280	0	480	280	0	480	280	0
485	-8.5	0	485	-7.5	0	485	-8	0	485	285	0	485	285	0	485	285	0
490	-6	0	490	-5	0	490	-5	0	490	290	0	490	290	0	490	290	0
495	-2	0	495	-2	0	495	-2	0	495	295	0	495	295	0	495	295	0
500	0	0	500	0	0	500	0	0	500	300	0	500	300	0	500	300	0
505	5	0	505	5	0	505	5	0	505	305	0	505	305	0	505	305	0
510	10	0	510	10	0	510	10	0	510	310	0	510	310	0	510	310	0
515	15	0	515	15	0	515	15	0	515	315	0	515	315	0	515	315	0
520	20	0	520	20	0	520	20	0	520	320	0	520	320	0	520	320	0
525	25	0	525	25	0	525	25	0	525	325	0	525	325	0	525	325	0
530	30	0	530	30	0	530	30	0	530	330	0	530	330	0	530	330	0
535	35	0	535	35	0	535	35	0	535	335	0	535	335	0	535	335	0
540	40	0	540	40	0	540	40	0	540	340	0	540	340	0	540	340	0
545	45	0	545	45	0	545	45	0	545	345	0	545	345	0	545	345	0
550	50	0	550	50	0	550	50	0	550	350	0	550	350	0	550	350	0

Appendix A.5. Evaporation Data

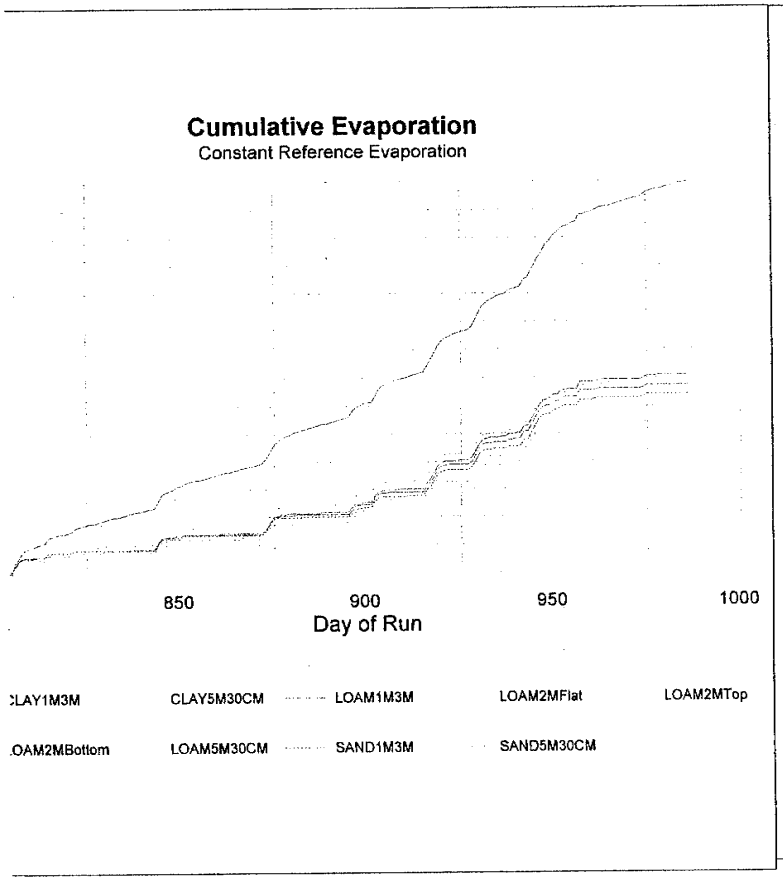
A =183day streach has constant PE=0.6cm/day
B =183day streach has real calculated PE

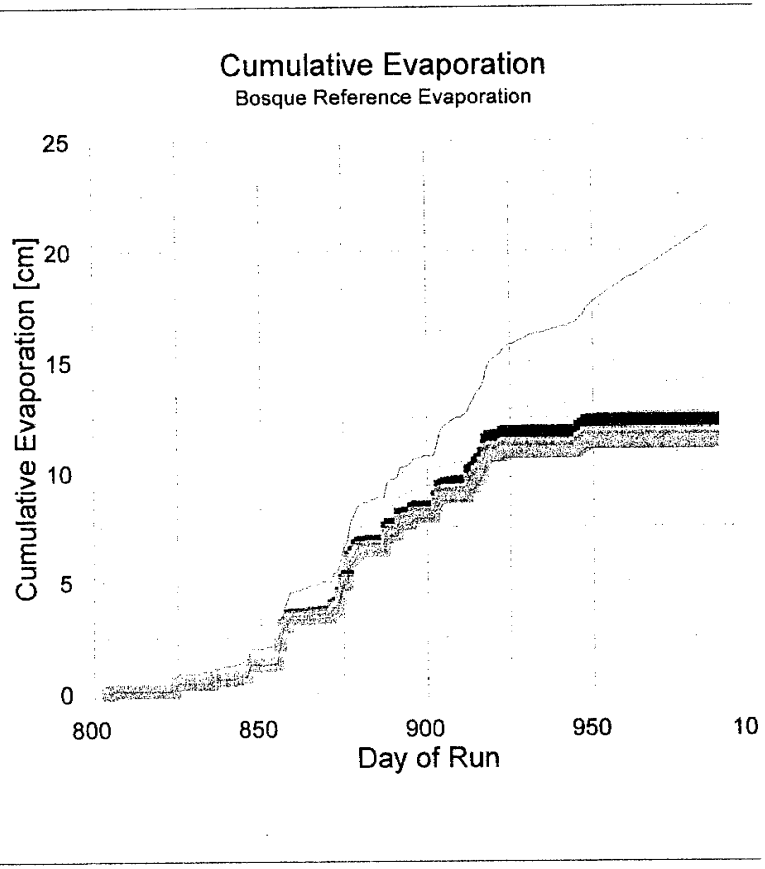
Cum Pcpt	Day	Cum Pcpt	Day	CLAY1MFlat Cum E (cm) A	CLAY1MTop Cum E (cm) A	CLAY1MBottc Cum E (cm) A	CLAY1M1M Cum E (cm) A	CLAY1M30CM Cum E (cm) A	B	CLAY1M3M Cum E (cm) A	B	CLAY2MFlat Cum E (cm) A	CLAY2MTop Cum E (cm) A	CLAY2MBottom Cum E (cm) A
0	804	0	804	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0	0.05	0.05	0.06
0	805	0.0508	805	0.2	0.2	0.3	0.1	0.2	0.1508	0.3	0.0508	0.09	0.09	0.09
0.9906	806	0.127	806	0.8906	0.7906	0.8906	0.6906	0.7906	0.327	0.8906	0.227	0.6906	0.6906	0.6906
1.4986	807	0.127	807	1.3986	1.3986	1.4986	1.2986	1.3986	0.327	1.4986	0.227	1.2886	1.2886	1.2886
1.6002	808	0.127	808	1.8002	1.6002	1.9002	1.6002	1.6002	0.327	2.0002	0.227	1.5002	1.4902	1.5202
1.6002	809	0.127	809	1.9002	1.7002	2.0002	1.7002	1.7002	0.427	2.2002	0.227	1.5402	1.5302	1.5702
1.6002	810	0.127	810	2.0002	1.8002	2.1002	1.7002	1.8002	0.427	2.3002	0.227	1.5802	1.5602	1.6002
1.6002	811	0.127	811	2.0002	1.8002	2.2002	1.8002	1.8002	0.427	2.4002	0.227	1.6002	1.5902	1.6302
1.6002	812	0.127	812	2.1002	1.9002	2.3002	1.8002	1.9002	0.527	2.6002	0.327	1.6302	1.6102	1.6602
1.6002	813	0.127	813	2.2002	1.9002	2.4002	1.9002	2.0002	0.527	2.7002	0.327	1.6502	1.6302	1.6802
1.6002	814	0.127	814	2.2002	2.0002	2.5002	1.9002	2.0002	0.527	2.8002	0.327	1.6602	1.6502	1.7002
2.0066	815	0.127	815	2.7066	2.4066	3.0066	2.3066	2.5066	0.627	3.3066	0.327	2.0866	2.0666	2.1266
2.0066	816	0.127	816	2.7066	2.5066	3.0066	2.4066	2.5066	0.627	3.4066	0.327	2.1066	2.0866	2.1366
2.0066	817	0.127	817	2.8066	2.5066	3.1066	2.4066	2.6066	0.627	3.5066	0.327	2.1166	2.0966	2.1566
2.0066	818	0.127	818	2.8066	2.6066	3.1066	2.4066	2.6066	0.627	3.6066	0.427	2.1366	2.1166	2.1666
2.0066	819	0.127	819	2.9066	2.6066	3.2066	2.5066	2.7066	0.727	3.6066	0.427	2.1466	2.1266	2.1866
2.0066	820	0.127	820	2.9066	2.6066	3.3066	2.5066	2.7066	0.727	3.7066	0.427	2.1566	2.1366	2.1966
2.0066	821	0.127	821	3.0066	2.7066	3.3066	2.5066	2.8066	0.727	3.8066	0.427	2.1766	2.1566	2.2066
2.2098	822	0.127	822	3.2098	2.9098	3.6098	2.8098	3.1098	0.827	4.1098	0.427	2.3898	2.3698	2.4198
2.2098	823	0.127	823	3.3098	3.0098	3.6098	2.8098	3.1098	0.827	4.2098	0.427	2.3998	2.3798	2.4398
2.2098	824	0.127	824	3.3098	3.0098	3.7098	2.8098	3.2098	0.827	4.3098	0.427	2.4098	2.3898	2.4498
2.2098	825	0.4826	825	3.3098	3.0098	3.7098	2.8098	3.2098	1.2826	4.4098	0.8826	2.4198	2.3998	2.4598
2.2098	826	0.4826	826	3.4098	3.1098	3.8098	2.9098	3.3098	1.2826	4.5098	0.8826	2.4298	2.4198	2.4698
2.2098	827	0.4826	827	3.4098	3.1098	3.9098	2.9098	3.3098	1.2826	4.5098	0.8826	2.4398	2.4298	2.4798
2.2098	828	0.4826	828	3.5098	3.2098	3.9098	2.9098	3.4098	1.3826	4.6098	0.8826	2.4498	2.4398	2.4898
2.2098	829	0.4826	829	3.5098	3.2098	4.0098	3.0098	3.5098	1.3826	4.7098	0.8826	2.4598	2.4498	2.4998
2.2098	830	0.4826	830	3.6098	3.3098	4.0098	3.0098	3.5098	1.4826	4.8098	0.8826	2.4698	2.4598	2.5098
2.2098	831	0.4826	831	3.6098	3.3098	4.1098	3.0098	3.6098	1.4826	4.9098	0.8826	2.4798	2.4698	2.5198
2.2098	832	0.4826	832	3.7098	3.3098	4.1098	3.1098	3.6098	1.4826	5.0098	0.8826	2.4898	2.4798	2.5298
2.2098	833	0.4826	833	3.7098	3.4098	4.2098	3.1098	3.7098	1.5826	5.0098	0.9826	2.4998	2.4898	2.5298
2.2098	834	0.4826	834	3.7098	3.4098	4.2098	3.1098	3.7098	1.5826	5.1098	0.9826	2.5098	2.4998	2.5398
2.2098	835	0.4826	835	3.8098	3.5098	4.3098	3.1098	3.8098	1.5826	5.2098	0.9826	2.5198	2.5098	2.5498
2.2098	836	0.635	836	3.8098	3.5098	4.3098	3.2098	3.9098	1.835	5.3098	1.135	2.5198	2.5198	2.5598
2.2098	837	0.635	837	3.9098	3.5098	4.4098	3.2098	3.9098	1.835	5.4098	1.135	2.5298	2.5298	2.5698
2.2098	838	0.635	838	3.9098	3.6098	4.4098	3.2098	4.0098	1.835	5.5098	1.135	2.5398	2.5398	2.5698
2.2098	839	0.635	839	4.0098	3.6098	4.5098	3.3098	4.0098	1.935	5.5098	1.235	2.5498	2.5498	2.5798
2.2098	840	0.635	840	4.0098	3.7098	4.5098	3.3098	4.1098	1.935	5.6098	1.235	2.5598	2.5598	2.5898
2.2098	841	0.635	841	4.1098	3.7098	4.6098	3.3098	4.1098	1.935	5.7098	1.235	2.5598	2.5698	2.5998
2.2098	842	0.6604	842	4.1098	3.7098	4.6098	3.3098	4.2098	2.0604	5.8098	1.2604	2.5698	2.5798	2.6098
2.2098	843	0.7112	843	4.1098	3.8098	4.7098	3.4098	4.3098	2.1112	5.9098	1.3112	2.5798	2.5798	2.6098

3.5052	844	0.762	844	4.7052	4.4052	5.3052	4.0052	4.9052	2.162	6.5052	1.362	3.1752	3.1852	3.2152	A-63
3.7084	845	0.762	845	5.3084	4.9084	5.8084	4.5084	5.3084	2.262	7.1084	1.462	3.6384	3.6284	3.6784	
3.7084	846	0.762	846	5.4084	5.0084	6.0084	4.6084	5.4084	2.262	7.3084	1.462	3.6984	3.6984	3.7484	
3.7084	847	1.2954	847	5.5084	5.1084	6.1084	4.6084	5.5084	2.7954	7.4084	1.9954	3.7384	3.7384	3.7984	
3.7084	848	1.2954	848	5.6084	5.1084	6.2084	4.7084	5.6084	2.8954	7.6084	1.9954	3.7784	3.7684	3.8284	
3.81	849	1.2954	849	5.71	5.31	6.31	4.81	5.71	2.8954	7.81	1.9954	3.9	3.89	3.96	
3.81	850	1.2954	850	5.81	5.31	6.41	4.91	5.81	2.8954	7.91	1.9954	3.92	3.91	3.98	
3.9116	851	1.2954	851	5.9116	5.5116	6.6116	5.0116	6.0116	2.9954	8.1116	1.9954	4.0416	4.0316	4.1016	
3.9116	852	1.2954	852	6.0116	5.5116	6.6116	5.1116	6.0116	2.9954	8.2116	2.0954	4.0616	4.0516	4.1216	
3.9116	853	1.2954	853	6.0116	5.6116	6.7116	5.1116	6.1116	3.0954	8.3116	2.0954	4.0816	4.0716	4.1416	
3.9116	854	1.3208	854	6.1116	5.6116	6.7116	5.1116	6.1116	3.1208	8.4116	2.1208	4.0916	4.0816	4.1516	
3.9116	855	1.3462	855	6.1116	5.7116	6.8116	5.1116	6.2116	3.1462	8.4116	2.1462	4.1116	4.1016	4.1716	
3.9116	856	3.1496	856	6.2116	5.7116	6.8116	5.2116	6.2116	4.0496	8.5116	2.9496	4.1216	4.1116	4.1816	
3.9116	857	3.81	857	6.2116	5.7116	6.9116	5.2116	6.3116	4.91	8.6116	3.81	4.1316	4.1316	4.1916	
3.9116	858	3.8354	858	6.3116	5.8116	6.9116	5.2116	6.3116	5.0354	8.7116	4.1354	4.1516	4.1416	4.2016	
3.9116	859	4.1402	859	6.3116	5.8116	7.0116	5.3116	6.4116	5.3402	8.8116	4.5402	4.1616	4.1516	4.2216	
3.9116	860	4.1402	860	6.3116	5.9116	7.1116	5.3116	6.5116	5.4402	8.9116	4.5402	4.1716	4.1616	4.2316	
3.9116	861	4.1402	861	6.4116	5.9116	7.1116	5.3116	6.5116	5.4402	9.0116	4.6402	4.1816	4.1816	4.2416	
3.9116	862	4.1402	862	6.4116	5.9116	7.2116	5.4116	6.6116	5.4402	9.1116	4.6402	4.1916	4.1916	4.2516	
3.9116	863	4.1402	863	6.5116	6.0116	7.2116	5.4116	6.6116	5.5402	9.1116	4.7402	4.2016	4.2016	4.2616	
3.9116	864	4.1402	864	6.5116	6.0116	7.3116	5.4116	6.7116	5.5402	9.2116	4.7402	4.2116	4.2116	4.2716	
3.9116	865	4.1402	865	6.6116	6.1116	7.3116	5.4116	6.7116	5.6402	9.3116	4.8402	4.2216	4.2216	4.2816	
3.9116	866	4.191	866	6.6116	6.1116	7.4116	5.5116	6.8116	5.691	9.4116	4.891	4.2316	4.2316	4.2916	
3.9116	867	4.191	867	6.7116	6.1116	7.4116	5.5116	6.9116	5.691	9.5116	4.891	4.2416	4.2416	4.3016	
3.9116	868	4.191	868	6.7116	6.2116	7.5116	5.5116	6.9116	5.791	9.6116	4.991	4.2516	4.2516	4.3116	
3.9116	869	4.2164	869	6.7116	6.2116	7.5116	5.6116	7.0116	5.8164	9.6116	5.0164	4.2616	4.2616	4.3116	
3.9116	870	4.2164	870	6.8116	6.3116	7.6116	5.6116	7.0116	5.8164	9.7116	5.0164	4.2716	4.2716	4.3216	
3.9116	871	4.2164	871	6.8116	6.3116	7.6116	5.6116	7.1116	5.9164	9.8116	5.0164	4.2816	4.2816	4.3316	
4.0132	872	4.4958	872	7.0132	6.4132	7.7132	5.7132	7.2132	6.1958	10.0132	5.3958	4.3832	4.3932	4.4432	
4.318	873	4.572	873	7.318	6.818	8.118	6.118	7.618	6.372	10.418	5.472	4.698	4.708	4.758	
6.223	874	5.0546	874	7.923	7.423	8.723	6.723	8.223	6.8546	11.023	5.9546	5.303	5.313	5.353	
6.3246	875	6.0452	875	8.5246	7.9246	9.3246	7.2246	8.7246	7.4452	11.6246	6.5452	5.7846	5.7846	5.8646	
6.3246	876	6.0452	876	8.7246	8.1246	9.5246	7.4246	8.9246	7.6452	11.9246	6.8452	5.8946	5.8846	5.9846	
6.3246	877	7.1374	877	8.8246	8.2246	9.7246	7.5246	9.0246	8.5374	12.1246	7.7374	5.9646	5.9346	6.0646	
6.3246	878	7.1882	878	8.9246	8.3246	9.8246	7.6246	9.1246	8.7882	12.3246	7.9882	6.0046	5.9746	6.1146	
6.3246	879	7.493	879	9.0246	8.4246	9.9246	7.6246	9.1246	9.093	12.4246	8.393	6.0346	6.0046	6.1546	
6.3246	880	7.5946	880	9.1246	8.4246	10.0246	7.7246	9.2246	9.2946	12.6246	8.4946	6.0646	6.0346	6.1946	
6.3246	881	7.62	881	9.1246	8.5246	10.1246	7.7246	9.2246	9.32	12.7246	8.62	6.0946	6.0546	6.2246	
6.3246	882	7.62	882	9.2246	8.5246	10.1246	7.7246	9.3246	9.42	12.8246	8.62	6.1146	6.0746	6.2446	
6.3246	883	7.6454	883	9.2246	8.6246	10.2246	7.8246	9.4246	9.4454	12.9246	8.7454	6.1346	6.0946	6.2746	
6.3246	884	7.6454	884	9.3246	8.6246	10.3246	7.8246	9.4246	9.5454	13.0246	8.7454	6.1546	6.1146	6.2946	
6.3246	885	7.6454	885	9.4246	8.7246	10.3246	7.9246	9.5246	9.5454	13.1246	8.8454	6.1746	6.1346	6.3146	
6.3246	886	7.6454	886	9.4246	8.7246	10.4246	7.9246	9.5246	9.5454	13.2246	8.8454	6.1846	6.1446	6.3246	
6.3246	887	7.6454	887	9.5246	8.8246	10.5246	7.9246	9.6246	9.6454	13.3246	8.8454	6.2046	6.1546	6.3446	
6.3246	888	8.2296	888	9.5246	8.8246	10.5246	8.0246	9.6246	10.2296	13.4246	9.5296	6.2146	6.1746	6.3646	
6.3246	889	8.382	889	9.6246	8.8246	10.6246	8.0246	9.7246	10.382	13.4246	9.682	6.2246	6.1846	6.3746	
6.3246	890	8.382	890	9.6246	8.9246	10.6246	8.0246	9.8246	10.482	13.5246	9.682	6.2446	6.2046	6.3946	
6.3246	891	8.382	891	9.6246	8.9246	10.7246	8.0246	9.8246	10.482	13.6246	9.782	6.2546	6.2146	6.4046	

6.3246	892	8.8392	892	9.7246	9.0246	10.7246	8.1246	9.9246	10.9392	13.7246	10.2392	6.2646	6.2246	6.4146
6.3246	893	8.8392	893	9.7246	9.0246	10.8246	8.1246	9.9246	11.0392	13.8246	10.2392	6.2746	6.2346	6.4246
6.3246	894	8.89	894	9.8246	9.1246	10.9246	8.1246	10.0246	11.09	13.9246	10.29	6.2846	6.2446	6.4446
6.3246	895	8.89	895	9.8246	9.1246	10.9246	8.2246	10.0246	11.19	14.0246	10.39	6.3046	6.2546	6.4546
7.0358	896	9.1186	896	10.4358	9.7358	11.5358	8.8358	10.6358	11.4186	14.6358	10.6186	6.8958	6.8558	7.0558
7.1374	897	9.1694	897	10.7374	9.9374	11.7374	9.0374	10.9374	11.4694	14.9374	10.6694	7.0774	7.0374	7.2374
7.1374	898	9.1694	898	10.7374	10.0374	11.8374	9.0374	10.9374	11.5694	15.0374	10.6694	7.0974	7.0574	7.2574
7.239	899	9.1694	899	10.939	10.139	12.039	9.139	11.139	11.5694	15.239	10.7694	7.219	7.179	7.379
7.239	900	9.1694	900	10.939	10.239	12.039	9.239	11.139	11.5694	15.339	10.7694	7.239	7.199	7.389
7.239	901	9.1694	901	11.039	10.239	12.139	9.239	11.239	11.6694	15.339	10.7694	7.249	7.209	7.399
8.9408	902	9.1694	902	11.6408	10.8408	12.7408	9.8408	11.8408	11.6694	15.9408	10.7694	7.8508	7.8108	8.0008
8.9408	903	11.303	903	12.0408	11.2408	13.2408	10.2408	12.2408	12.203	16.5408	11.303	8.2208	8.1708	8.4008
8.9408	904	11.303	904	12.2408	11.4408	13.4408	10.4408	12.4408	12.703	16.8408	11.903	8.3108	8.2508	8.5108
8.9408	905	11.303	905	12.3408	11.5408	13.5408	10.5408	12.4408	12.903	16.9408	12.103	8.3708	8.3008	8.5708
8.9408	906	11.303	906	12.4408	11.5408	13.6408	10.5408	12.5408	12.903	17.1408	12.203	8.4108	8.3408	8.6208
8.9408	907	11.303	907	12.5408	11.6408	13.7408	10.6408	12.6408	13.003	17.2408	12.303	8.4408	8.3708	8.6608
8.9408	908	11.303	908	12.5408	11.7408	13.8408	10.6408	12.6408	13.003	17.3408	12.403	8.4708	8.3908	8.6908
8.9408	909	11.303	909	12.6408	11.7408	13.9408	10.7408	12.7408	13.103	17.4408	12.503	8.4908	8.4108	8.7208
8.9408	910	11.303	910	12.6408	11.8408	13.9408	10.7408	12.7408	13.103	17.5408	12.503	8.5108	8.4308	8.7408
8.9408	911	11.303	911	12.7408	11.8408	14.0408	10.7408	12.8408	13.203	17.6408	12.603	8.5308	8.4508	8.7708
8.9408	912	11.303	912	12.7408	11.9408	14.1408	10.8408	12.9408	13.203	17.7408	12.703	8.5508	8.4708	8.7908
8.9408	913	11.8872	913	12.8408	11.9408	14.1408	10.8408	12.9408	13.6872	17.8408	13.0872	8.5708	8.4908	8.8008
8.9408	914	11.9126	914	12.8408	11.9408	14.2408	10.8408	13.0408	13.9126	17.9408	13.3126	8.5808	8.5008	8.8208
8.9408	915	12.1666	915	12.9408	12.0408	14.2408	10.9408	13.0408	14.1666	18.0408	13.6666	8.6008	8.5108	8.8408
10.2362	916	12.2936	916	13.5362	12.6362	14.9362	11.5362	13.6362	14.3936	18.6362	13.7936	9.1962	9.1162	9.4362
10.2362	917	12.573	917	13.9362	12.9362	15.3362	11.8362	14.0362	14.673	19.1362	14.073	9.4862	9.3862	9.7462
10.9474	918	13.4112	918	14.5474	13.5474	15.8474	12.4474	14.5474	15.3112	19.7474	14.7112	10.0774	9.9874	10.3474
11.7602	919	13.4366	919	15.0602	14.1602	16.4602	13.0602	15.1602	15.5366	20.3602	15.0366	10.6802	10.5802	10.9402
11.7602	920	13.4366	920	15.3602	14.4602	16.8602	13.2602	15.3602	15.5366	20.7602	15.1366	10.8902	10.7702	11.1802
11.8618	921	13.4366	921	15.6618	14.5618	17.0618	13.4618	15.5618	15.6366	21.0618	15.2366	11.0518	10.9318	11.3618
11.8618	922	13.4366	922	15.6618	14.6618	17.1618	13.5618	15.6618	15.6366	21.1618	15.3366	11.0918	10.9618	11.4118
11.8618	923	13.5636	923	15.7618	14.7618	17.2618	13.5618	15.6618	15.8636	21.3618	15.5636	11.1218	10.9918	11.4518
11.8618	924	13.589	924	15.8618	14.7618	17.3618	13.6618	15.7618	15.989	21.4618	15.689	11.1518	11.0118	11.4818
11.8618	925	13.589	925	15.8618	14.8618	17.4618	13.6618	15.8618	15.989	21.5618	15.789	11.1718	11.0418	11.5018
11.8618	926	13.589	926	15.9618	14.8618	17.5618	13.6618	15.8618	16.089	21.6618	15.789	11.1918	11.0518	11.5318
11.8618	927	13.589	927	15.9618	14.9618	17.5618	13.7618	15.9618	16.089	21.7618	15.889	11.2118	11.0718	11.5518
12.065	928	13.589	928	16.265	15.165	17.865	13.965	16.165	16.089	22.065	15.989	11.435	11.295	11.775
14.1732	929	13.589	929	16.8732	15.7732	18.4732	14.5732	16.7732	16.189	22.6732	15.989	12.0332	11.8932	12.3732
14.6812	930	13.589	930	17.4812	16.3812	19.0812	15.1812	17.3812	16.189	23.2812	16.089	12.6312	12.4912	12.9712
14.7828	931	13.589	931	17.9828	16.8828	19.5828	15.6828	17.8828	16.289	23.8828	16.189	13.0128	12.8428	13.4128
14.7828	932	13.589	932	18.1828	16.9828	19.8828	15.7828	17.9828	16.289	24.1828	16.189	13.1128	12.9228	13.5328
14.7828	933	13.589	933	18.2828	17.0828	19.9828	15.8828	18.0828	16.389	24.3828	16.289	13.1728	12.9728	13.6128
14.7828	934	13.589	934	18.3828	17.1828	20.1828	15.9828	18.0828	16.389	24.5828	16.289	13.2128	13.0028	13.6728
14.7828	935	13.589	935	18.4828	17.2828	20.2828	15.9828	18.1828	16.389	24.7828	16.289	13.2528	13.0328	13.7228
14.7828	936	13.589	936	18.5828	17.3828	20.3828	16.0828	18.2828	16.489	24.8828	16.389	13.2828	13.0628	13.7628
14.7828	937	13.589	937	18.6828	17.3828	20.4828	16.0828	18.2828	16.489	24.9828	16.389	13.3128	13.0828	13.8028
14.986	938	13.589	938	18.886	17.686	20.786	16.386	18.586	16.589	25.286	16.489	13.536	13.306	14.036
14.986	939	13.589	939	18.986	17.686	20.786	16.386	18.686	16.589	25.386	16.489	13.556	13.326	14.056

14.986	940	13.589	940	18.986	17.786	20.886	16.486	18.686	16.689	25.486	16.589	13.576	13.346	14.086	A-65
14.986	941	13.589	941	19.086	17.786	20.986	16.486	18.786	16.689	25.586	16.589	13.596	13.366	14.106	
15.5956	942	13.589	942	19.6956	18.3956	21.5956	17.0956	19.3956	16.789	26.1956	16.589	14.1956	13.9656	14.7056	
15.5956	943	13.589	943	19.7956	18.4956	21.6956	17.1956	19.4956	16.789	26.3956	16.689	14.2256	13.9956	14.7456	
17.2974	944	13.589	944	20.3974	19.0974	22.2974	17.7974	20.0974	16.889	26.9974	16.689	14.8274	14.5974	15.3474	
20.2946	945	13.589	945	20.9946	19.6946	22.8946	18.3946	20.6946	16.889	27.5946	16.789	15.4246	15.2146	15.9446	
20.2946	946	13.7668	946	21.5946	20.2946	23.4946	18.9946	21.2946	17.0668	28.1946	16.9668	16.0246	15.8146	16.5446	
20.3962	947	14.3002	947	22.1962	20.8962	24.0962	19.5962	21.7962	17.2002	28.7962	17.1002	16.4262	16.1162	17.0262	
20.3962	948	14.3002	948	22.5962	21.1962	24.5962	19.7962	21.9962	17.5002	29.3962	17.4002	16.5562	16.2162	17.1962	
20.3962	949	14.3002	949	22.7962	21.2962	24.7962	19.9962	22.1962	17.7002	29.6962	17.5002	16.6362	16.3162	17.3162	
20.5994	950	14.3002	950	23.0994	21.6994	25.1994	20.2994	22.3994	17.8002	30.1994	17.7002	16.8994	16.5194	17.5994	
20.5994	951	14.3002	951	23.2994	21.7994	25.3994	20.3994	22.4994	17.9002	30.3994	17.8002	16.9494	16.6194	17.6694	
20.9042	952	14.3002	952	23.7042	22.2042	25.9042	20.8042	22.9042	17.9002	30.8042	17.9002	17.2942	16.9242	18.0342	
20.9042	953	14.3002	953	23.8042	22.3042	26.0042	20.9042	23.0042	18.0002	31.0042	18.0002	17.3342	17.0242	18.0842	
20.9042	954	14.3002	954	23.9042	22.3042	26.1042	20.9042	23.0042	18.1002	31.1042	18.1002	17.3642	17.0242	18.1242	
20.9042	955	14.3002	955	24.0042	22.4042	26.2042	21.0042	23.1042	18.1002	31.3042	18.2002	17.3842	17.0242	18.1542	
20.9042	956	14.3002	956	24.0042	22.4042	26.3042	21.0042	23.1042	18.2002	31.4042	18.3002	17.4042	17.0242	18.1842	
21.4122	957	14.3002	957	24.6122	23.0122	26.9122	21.6122	23.7122	18.2002	32.0122	18.4002	17.9422	17.5322	18.7222	
21.4122	958	14.3002	958	24.7122	23.0122	27.0122	21.6122	23.8122	18.3002	32.1122	18.5002	17.9522	17.6322	18.7522	
21.4122	959	14.3002	959	24.7122	23.1122	27.1122	21.7122	23.8122	18.3002	32.2122	18.6002	17.9722	17.6322	18.7722	
21.4122	960	14.3002	960	24.8122	23.1122	27.2122	21.7122	23.9122	18.4002	32.3122	18.7002	17.9922	17.6322	18.7922	
21.4122	961	14.3002	961	24.8122	23.2122	27.2122	21.7122	23.9122	18.5002	32.4122	18.8002	18.0122	17.6422	18.8122	
21.5138	962	14.3002	962	25.0138	23.3138	27.4138	21.9138	24.1138	18.5002	32.6138	18.8002	18.1238	17.7538	18.9338	
21.5138	963	14.3002	963	25.0138	23.4138	27.5138	21.9138	24.1138	18.6002	32.7138	18.9002	18.1438	17.7738	18.9538	
21.5138	964	14.3002	964	25.1138	23.4138	27.5138	21.9138	24.2138	18.6002	32.8138	19.0002	18.1538	17.7838	18.9738	
21.5138	965	14.3002	965	25.1138	23.5138	27.6138	22.0138	24.2138	18.7002	32.8138	19.1002	18.1638	17.7938	18.9838	
21.5138	966	14.3002	966	25.2138	23.5138	27.6138	22.0138	24.3138	18.8002	32.9138	19.2002	18.1838	17.8138	19.0038	
21.5138	967	14.3002	967	25.2138	23.5138	27.7138	22.0138	24.4138	18.8002	33.0138	19.3002	18.1938	17.8238	19.0138	
21.5138	968	14.3002	968	25.3138	23.6138	27.8138	22.0138	24.4138	18.9002	33.1138	19.4002	18.2038	17.8338	19.0338	
21.5138	969	14.3002	969	25.3138	23.6138	27.8138	22.1138	24.5138	18.9002	33.2138	19.5002	18.2138	17.8438	19.0438	
21.5138	970	14.3002	970	25.4138	23.7138	27.9138	22.1138	24.5138	19.0002	33.3138	19.6002	18.2238	17.8538	19.0538	
21.5138	971	14.3002	971	25.4138	23.7138	27.9138	22.1138	24.6138	19.1002	33.4138	19.7002	18.2338	17.8638	19.0638	
21.5138	972	14.3002	972	25.5138	23.7138	28.0138	22.2138	24.6138	19.1002	33.5138	19.8002	18.2438	17.8838	19.0838	
21.5138	973	14.3002	973	25.5138	23.8138	28.0138	22.2138	24.7138	19.2002	33.5138	19.9002	18.2538	17.8938	19.0938	
21.6154	974	14.3002	974	25.6154	23.9154	28.2154	22.3154	24.9154	19.3002	33.7154	20.0002	18.3654	18.0054	19.2054	
21.8186	975	14.3002	975	25.9186	24.2186	28.4186	22.6186	25.1186	19.3002	34.0186	20.1002	18.5786	18.2186	19.4186	
21.8186	976	14.3002	976	25.9186	24.2186	28.5186	22.6186	25.2186	19.4002	34.1186	20.2002	18.5886	18.2286	19.4286	
21.8186	977	14.3002	977	26.0186	24.2186	28.5186	22.6186	25.2186	19.4002	34.2186	20.3002	18.5986	18.2386	19.4386	
21.8186	978	14.3002	978	26.0186	24.3186	28.6186	22.6186	25.3186	19.5002	34.3186	20.4002	18.6086	18.2486	19.4486	
21.8186	979	14.3002	979	26.1186	24.3186	28.6186	22.7186	25.3186	19.6002	34.3186	20.5002	18.6186	18.2586	19.4586	
21.8186	980	14.3002	980	26.1186	24.4186	28.7186	22.7186	25.4186	19.6002	34.4186	20.6002	18.6286	18.2686	19.4686	
21.8186	981	14.3002	981	26.1186	24.4186	28.7186	22.7186	25.5186	19.7002	34.5186	20.7002	18.6386	18.2786	19.4786	
21.8186	982	14.3002	982	26.2186	24.5186	28.8186	22.8186	25.5186	19.8002	34.6186	20.8002	18.6486	18.2886	19.4886	
21.8186	983	14.3002	983	26.2186	24.5186	28.8186	22.8186	25.6186	19.9002	34.7186	20.9002	18.6586	18.2986	19.4886	
21.8186	984	14.3002	984	26.3186	24.5186	28.9186	22.8186	25.6186	19.9002	34.8186	21.0002	18.6586	18.3086	19.4986	
21.8186	985	14.3002	985	26.3186	24.6186	28.9186	22.8186	25.7186	20.0002	34.8186	21.1002	18.6686	18.3186	19.5086	
21.8186	986	14.3002	986	26.4186	24.6186	29.0186	22.9186	25.7186	20.1002	34.9186	21.3002	18.6786	18.3286	19.5186	


Cumulative Evaporation
Constant Reference Evaporation
850
900
950
1000
Day of Run
:LAY1M3M
CLAY5M30CM
LOAM1M3M
LOAM2MFlat
LOAM2MTop
.OAM2MBottom
LOAM5M30CM
SAND1M3M
SAND5M30CM


Cumulative Evaporation
Bosque Reference Evaporation
Cumulative Evaporation [cm]
25
20
15
10
5
0
800
850
900
950
10
Day of Run

CLAY2M1M Cum E (cm)	CLAY2M30CM Cum E (cm)		CLAY2M3M Cum E (cm)		CLAY5MFlat Cum E (cm)	CLAY5MTop Cum E (cm)	CLAY5MBottc Cum E (cm)	CLAY5M1M Cum E (cm)	CLAY5M30CM Cum E (cm)		CLAY5M3M Cum E (cm)		LOAM1MFlat Cum E (cm)	LOAM1MTop Cum E (cm)	LOAM1MBottom Cum E (cm)
A	A	B	A	B	A	A	A	A	A	B	A	B	A	A	A
0.06	0.055	0	0.058	0.01	0	0	0.1	0	0.1	0.01	0.1	0	0.1	0	0.05
0.09	0.094	0.1508	0.096	0.0608	0.1	0	0.1	0.1	0.1	0.0808	0.1	0.0508	0.1	0	0.08
0.6906	0.6936	0.227	0.7006	0.147	0.6906	0.5906	0.6906	0.6906	0.6906	0.167	0.6906	0.137	0.6906	0.5906	0.6806
1.2986	1.2936	0.227	1.2986	0.157	1.2986	1.1986	1.2986	1.2986	1.2986	0.177	1.2986	0.137	1.2986	1.1986	1.2886
1.5102	1.4692	0.227	1.5202	0.157	1.5002	1.4002	1.5002	1.5002	1.5002	0.187	1.5002	0.147	1.4002	1.4002	1.5102
1.5502	1.5082	0.227	1.5702	0.167	1.5002	1.5002	1.6002	1.5002	1.5002	0.207	1.6002	0.147	1.4002	1.4002	1.5502
1.5802	1.5402	0.327	1.6102	0.177	1.5002	1.5002	1.6002	1.5002	1.5002	0.217	1.6002	0.147	1.4002	1.4002	1.5802
1.6102	1.5682	0.327	1.6402	0.177	1.6002	1.5002	1.6002	1.6002	1.6002	0.227	1.6002	0.157	1.4002	1.4002	1.6102
1.6302	1.5962	0.327	1.6652	0.187	1.6002	1.5002	1.6002	1.6002	1.6002	0.237	1.6002	0.157	1.4002	1.4002	1.6302
1.6502	1.6222	0.327	1.6872	0.187	1.6002	1.6002	1.7002	1.6002	1.6002	0.247	1.7002	0.157	1.4002	1.4002	1.6402
1.6702	1.6482	0.327	1.7072	0.197	1.6002	1.6002	1.7002	1.6002	1.6002	0.267	1.7002	0.167	1.4002	1.4002	1.6602
2.0966	2.0806	0.427	2.1316	0.197	2.0066	2.0066	2.1066	2.0066	2.0066	0.277	2.1066	0.167	1.8066	1.8066	2.0766
2.1166	2.1066	0.427	2.1486	0.207	2.0066	2.0066	2.1066	2.0066	2.1066	0.287	2.1066	0.167	1.8066	1.8066	2.0866
2.1266	2.1326	0.427	2.1646	0.217	2.1066	2.0066	2.1166	2.1066	2.1066	0.297	2.1066	0.167	1.8066	1.8066	2.0966
2.1366	2.1576	0.427	2.1796	0.217	2.1066	2.0066	2.1266	2.1066	2.1066	0.307	2.1066	0.177	1.8066	1.8066	2.1066
2.1566	2.1836	0.427	2.1936	0.227	2.1066	2.0066	2.1366	2.1066	2.1066	0.327	2.1066	0.177	1.8066	1.8066	2.1166
2.1666	2.2086	0.527	2.2076	0.227	2.1066	2.0066	2.1466	2.1066	2.1066	0.337	2.1066	0.177	1.8066	1.8066	2.1266
2.1766	2.2346	0.527	2.2206	0.237	2.1066	2.0066	2.1566	2.1066	2.1066	0.347	2.2066	0.187	1.8066	1.8066	2.1266
2.3998	2.4628	0.527	2.4358	0.237	2.3098	2.3098	2.3698	2.3098	2.3098	0.357	2.4098	0.187	2.0098	2.0098	2.3398
2.4098	2.4888	0.527	2.4478	0.247	2.3098	2.3098	2.3798	2.3098	2.4098	0.367	2.4098	0.187	2.0098	2.0098	2.3398
2.4198	2.5138	0.527	2.4598	0.247	2.3098	2.3098	2.3898	2.3098	2.4098	0.377	2.4098	0.187	2.0098	2.0098	2.3498
2.4298	2.5398	0.9826	2.4708	0.6126	2.3098	2.3098	2.3998	2.3098	2.4098	0.7526	2.4098	0.5526	2.0098	2.0098	2.3598
2.4398	2.5618	0.9826	2.4818	0.6126	2.3098	2.3098	2.4098	2.4098	2.4098	0.7626	2.4098	0.5526	2.0098	2.0098	2.3598
2.4498	2.5918	0.9826	2.4928	0.6226	2.3098	2.3098	2.4198	2.4098	2.4098	0.7726	2.4098	0.5526	2.0098	2.0098	2.3598
2.4598	2.6118	0.9826	2.5028	0.6226	2.4098	2.3098	2.4298	2.4098	2.4098	0.7826	2.4098	0.5526	2.0098	2.0098	2.3698
2.4698	2.6418	0.9826	2.5128	0.6326	2.4098	2.3098	2.4298	2.4098	2.4098	0.7926	2.4098	0.5626	2.0098	2.0098	2.3698
2.4798	2.6718	1.0826	2.5228	0.6326	2.4098	2.3098	2.4398	2.4098	2.5098	0.8026	2.4098	0.5626	2.0098	2.0098	2.3798
2.4898	2.6918	1.0826	2.5328	0.6426	2.4098	2.3098	2.4498	2.4098	2.5098	0.8126	2.4098	0.5626	2.0098	2.0098	2.3798
2.4998	2.7218	1.0826	2.5428	0.6426	2.4098	2.3098	2.4498	2.4098	2.5098	0.8326	2.4098	0.5726	2.0098	2.0098	2.3798
2.5098	2.7418	1.0826	2.5518	0.6526	2.4098	2.3098	2.4598	2.4098	2.5098	0.8426	2.4098	0.5726	2.0098	2.0098	2.3898
2.5198	2.7718	1.0826	2.5608	0.6526	2.4098	2.4098	2.4698	2.4098	2.5098	0.8526	2.5098	0.5726	2.0098	2.0098	2.3898
2.5298	2.7918	1.1826	2.5708	0.6626	2.4098	2.4098	2.4698	2.4098	2.5098	0.8626	2.5098	0.5726	2.0098	2.0098	2.3898
2.5398	2.8218	1.335	2.5788	0.815	2.4098	2.4098	2.4798	2.4098	2.5098	1.025	2.5098	0.735	2.0098	2.0098	2.3898
2.5498	2.8418	1.335	2.5878	0.825	2.4098	2.4098	2.4898	2.4098	2.5098	1.045	2.5098	0.735	2.0098	2.0098	2.3998
2.5598	2.8718	1.335	2.5968	0.825	2.4098	2.4098	2.4898	2.4098	2.6098	1.055	2.5098	0.735	2.0098	2.0098	2.3998
2.5698	2.8918	1.335	2.6058	0.835	2.4098	2.4098	2.4998	2.5098	2.6098	1.065	2.5098	0.735	2.0098	2.0098	2.3998
2.5698	2.9218	1.435	2.6138	0.835	2.4098	2.4098	2.5098	2.5098	2.6098	1.075	2.5098	0.745	2.0098	2.0098	2.3998
2.5798	2.9418	1.435	2.6228	0.845	2.4098	2.4098	2.5098	2.5098	2.6098	1.085	2.5098	0.745	2.0098	2.0098	2.3998
2.5898	2.9718	1.4604	2.6308	0.8704	2.4098	2.4098	2.5198	2.5098	2.6098	1.1204	2.5098	0.7704	2.0098	2.0098	2.4098
2.5998	3.0018	1.5112	2.6388	0.9312	2.5098	2.4098	2.5198	2.5098	2.6098	1.1912	2.5098	0.8212	2.0098	2.0098	2.4098

3.2052	3.5972	1.562	3.2352	0.982	3.1052	3.0052	3.1052	3.1052	3.2052	1.252	3.1052	0.882	2.7052	2.6052	2.9952
3.6584	4.0274	1.662	3.7084	0.992	3.5084	3.5084	3.6084	3.5084	3.6084	1.262	3.6084	0.882	3.0084	3.0084	3.4984
3.7284	4.0804	1.662	3.7794	0.992	3.6084	3.5084	3.6084	3.6084	3.7084	1.272	3.6084	0.882	3.1084	3.0084	3.5084
3.7684	4.1204	2.1954	3.8244	1.5354	3.6084	3.5084	3.7084	3.6084	3.7084	1.8154	3.7084	1.4154	3.1084	3.0084	3.5384
3.7984	4.1504	2.1954	3.8584	1.5354	3.6084	3.6084	3.7084	3.7084	3.7084	1.8254	3.7084	1.4254	3.1084	3.0084	3.5584
3.93	4.282	2.1954	3.988	1.5454	3.81	3.71	3.81	3.81	3.91	1.8354	3.81	1.4254	3.21	3.11	3.68
3.95	4.312	2.2954	4.011	1.5454	3.81	3.71	3.91	3.81	3.91	1.8554	3.81	1.4254	3.21	3.11	3.69
4.0716	4.4436	2.2954	4.1336	1.5554	3.9116	3.8116	4.0116	3.9116	4.0116	1.8654	4.0116	1.4254	3.3116	3.2116	3.8016
4.0916	4.4636	2.2954	4.1526	1.5554	3.9116	3.9116	4.0116	3.9116	4.0116	1.8754	4.0116	1.4354	3.3116	3.2116	3.8116
4.1116	4.4936	2.2954	4.1706	1.5554	3.9116	3.9116	4.0216	4.0116	4.0116	1.8854	4.0116	1.4354	3.3116	3.2116	3.8216
4.1216	4.5136	2.3208	4.1866	1.5908	3.9116	3.9116	4.0416	4.0116	4.1116	1.9208	4.0116	1.4608	3.3116	3.2116	3.8316
4.1416	4.5436	2.4462	4.2016	1.6162	3.9116	3.9116	4.0516	4.0116	4.1116	1.9562	4.0116	1.4862	3.3116	3.2116	3.8316
4.1516	4.5736	3.2496	4.2156	2.4596	4.0116	3.9116	4.0616	4.0116	4.1116	2.7996	4.0116	2.3296	3.3116	3.2116	3.8416
4.1616	4.5936	4.11	4.2296	3.3	4.0116	3.9116	4.0716	4.0116	4.1116	3.63	4.0116	3.17	3.3116	3.2116	3.8416
4.1816	4.6236	4.1354	4.2426	3.4754	4.0116	3.9116	4.0816	4.0116	4.1116	3.7154	4.1116	3.3254	3.3116	3.2116	3.8516
4.1916	4.6436	4.5402	4.2546	3.8302	4.0116	3.9116	4.1016	4.0116	4.1116	4.0502	4.1116	3.6802	3.3116	3.2116	3.8516
4.2016	4.6736	4.5402	4.2666	3.8802	4.0116	3.9116	4.1116	4.0116	4.1116	4.0802	4.1116	3.7202	3.3116	3.2116	3.8516
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4.2416	4.7736	4.6402	4.3116	3.9802	4.0116	4.0116	4.1416	4.1116	4.2116	4.1602	4.1116	3.8102	3.3116	3.2116	3.8716
4.2616	4.8036	4.6402	4.3216	4.0002	4.0116	4.0116	4.1516	4.1116	4.2116	4.1702	4.1116	3.8302	3.3116	3.2116	3.8716
4.2716	4.8236	4.691	4.3316	4.061	4.0116	4.0116	4.1616	4.1116	4.2116	4.241	4.1116	3.891	3.3116	3.2116	3.8716
4.2816	4.8536	4.791	4.3416	4.081	4.1116	4.0116	4.1716	4.1116	4.2116	4.251	4.1116	3.911	3.3116	3.2116	3.8716
4.2916	4.8736	4.791	4.3516	4.091	4.1116	4.0116	4.1716	4.1116	4.3116	4.271	4.1116	3.921	3.3116	3.2116	3.8716
4.3016	4.9036	4.8164	4.3606	4.1364	4.1116	4.0116	4.1816	4.1116	4.3116	4.3064	4.1116	3.9564	3.3116	3.2116	3.8816
4.3016	4.9236	4.8164	4.3696	4.1464	4.1116	4.0116	4.1916	4.1116	4.3116	4.3264	4.2116	3.9664	3.3116	3.2116	3.8816
4.3116	4.9536	4.8164	4.3796	4.1564	4.1116	4.0116	4.1916	4.1116	4.3116	4.3364	4.2116	3.9764	3.3116	3.2116	3.8816
4.4232	5.0752	5.1958	4.4902	4.4558	4.2132	4.1132	4.3032	4.2132	4.4132	4.6258	4.3132	4.2658	3.4132	3.3132	3.9832
4.738	5.41	5.272	4.803	4.542	4.518	4.418	4.618	4.518	4.718	4.712	4.618	4.352	3.718	3.618	4.288
5.343	6.008	5.7546	5.403	5.0346	5.123	5.023	5.223	5.123	5.323	5.2146	5.223	4.8446	4.323	4.223	4.913
5.8346	6.4496	6.3452	5.9146	5.6152	5.6246	5.5246	5.7246	5.6246	5.7246	5.7952	5.7246	5.4322	4.7246	4.6246	5.4146
5.9346	6.5266	6.5452	6.0346	5.8152	5.7246	5.6246	5.8246	5.7246	5.8246	5.9652	5.8246	5.6252	4.8246	4.6246	5.5146
5.9946	6.5736	7.4374	6.1046	6.7174	5.7246	5.6246	5.9246	5.8246	5.8246	6.8674	5.8246	6.5194	4.8246	4.7246	5.5146
6.0446	6.6106	7.5882	6.1546	6.9282	5.8246	5.7246	5.9246	5.8246	5.9246	7.0482	5.9246	6.7282	4.8246	4.7246	5.5146
6.0746	6.6426	7.993	6.1946	7.283	5.8246	5.7246	6.0246	5.9246	5.9246	7.393	5.9246	7.073	4.9246	4.7246	5.6146
6.1046	6.6716	8.0946	6.2246	7.4146	5.8246	5.7246	6.0246	5.9246	5.9246	7.5246	6.0246	7.2046	4.9246	4.7246	5.6146
6.1246	6.6966	8.12	6.2546	7.47	5.9246	5.8246	6.0246	5.9246	5.9246	7.57	6.0246	7.26	4.9246	4.7246	5.6146
6.1446	6.7266	8.22	6.2746	7.49	5.9246	5.8246	6.1246	5.9246	5.9246	7.59	6.0246	7.28	4.9246	4.7246	5.6146
6.1646	6.7566	8.2454	6.3046	7.5354	5.9246	5.8246	6.1246	5.9246	6.0246	7.6354	6.0246	7.3154	4.9246	4.7246	5.6146
6.1846	6.7766	8.2454	6.3246	7.5454	5.9246	5.8246	6.1246	6.0246	6.0246	7.6554	6.0246	7.3354	4.9246	4.7246	5.6146
6.1946	6.8066	8.2454	6.3346	7.5654	5.9246	5.8246	6.1246	6.0246	6.0246	7.6754	6.1246	7.3454	4.9246	4.7246	5.7146
6.2146	6.8366	8.2454	6.3556	7.5754	6.0246	5.8246	6.1246	6.0246	6.0246	7.6854	6.1246	7.3554	4.9246	4.7246	5.7146
6.2246	6.8566	8.3454	6.3716	7.5954	6.0246	5.9246	6.2246	6.0246	6.0246	7.7054	6.1246	7.3654	4.9246	4.7246	5.7146
6.2446	6.8866	8.9296	6.3866	8.1896	6.0246	5.9246	6.2246	6.0246	6.0246	8.2996	6.1246	7.9696	4.9246	4.7246	5.7146
6.2546	6.9066	9.082	6.4016	8.352	6.0246	5.9246	6.2246	6.0246	6.0246	8.462	6.1246	8.132	4.9246	4.7246	5.7146
6.2646	6.9366	9.082	6.4146	8.362	6.0246	5.9246	6.2246	6.0246	6.1246	8.482	6.1246	8.142	4.9246	4.7246	5.7146
6.2746	6.9566	9.082	6.4276	8.382	6.0246	5.9246	6.2246	6.1246	6.1246	8.492	6.1246	8.142	4.9246	4.7246	5.7146

6.2846	6.9866	9.6392	6.4406	8.8492	6.0246	5.9246	6.2246	6.1246	6.1246	8.9692	6.2246	8.6092	4.9246	4.7246	5.7146	A-69
6.3046	7.0166	9.6392	6.4526	8.8592	6.0246	5.9246	6.2246	6.1246	6.1246	8.9792	6.2246	8.6192	4.9246	4.7246	5.7146	
6.3146	7.0366	9.69	6.4646	8.92	6.0246	5.9246	6.2246	6.1246	6.1246	9.04	6.2246	8.68	4.9246	4.7246	5.7146	
6.3246	7.0666	9.69	6.4756	8.93	6.1246	5.9246	6.3246	6.1246	6.1246	9.05	6.2246	8.69	4.9246	4.7246	5.7146	
6.9258	7.6678	10.0186	7.0758	9.1686	6.6358	6.5358	6.8358	6.7358	6.7358	9.2986	6.8358	8.9186	5.5358	5.3358	6.3258	
7.1074	7.8694	10.0694	7.2554	9.2294	6.8374	6.7374	7.0374	6.9374	6.9374	9.3594	7.0374	8.9794	5.6374	5.4374	6.5274	
7.1274	7.9094	10.0694	7.2784	9.2394	6.8374	6.7374	7.1374	6.9374	6.9374	9.3694	7.0374	8.9894	5.6374	5.4374	6.5274	
7.239	8.041	10.0694	7.398	9.2494	7.039	6.939	7.239	7.039	7.039	9.3794	7.139	8.9994	5.739	5.539	6.629	
7.259	8.071	10.0694	7.412	9.2494	7.039	6.939	7.239	7.039	7.139	9.3994	7.139	8.9994	5.739	5.539	6.629	
7.269	8.101	10.1694	7.425	9.2594	7.039	6.939	7.239	7.039	7.139	9.4094	7.139	9.0094	5.739	5.539	6.629	
7.8708	8.6958	10.1694	8.0208	9.2694	7.6408	7.5408	7.8408	7.6408	7.7408	9.4194	7.7408	9.0094	6.3408	6.1408	7.2308	
8.2508	9.0168	10.603	8.4208	9.743	8.0408	7.8408	8.2408	8.0408	8.0408	9.893	8.1408	9.49	6.6408	6.4408	7.6308	
8.3408	9.0848	11.003	8.5208	10.263	8.0408	7.9408	8.3408	8.1408	8.0408	10.283	8.2408	9.995	6.7408	6.4408	7.7308	
8.3908	9.1278	11.103	8.5808	10.403	8.1408	8.0408	8.4408	8.1408	8.1408	10.343	8.3408	10.118	6.7408	6.4408	7.7308	
8.4308	9.1628	11.203	8.6308	10.473	8.1408	8.0408	8.4408	8.2408	8.1408	10.383	8.3408	10.188	6.7408	6.4408	7.7308	
8.4608	9.1938	11.203	8.6708	10.523	8.2408	8.0408	8.4408	8.2408	8.1408	10.403	8.3408	10.238	6.7408	6.4408	7.8308	
8.4908	9.2228	11.203	8.7008	10.563	8.2408	8.0408	8.5408	8.2408	8.1408	10.433	8.4408	10.277	6.7408	6.4408	7.8308	
8.5108	9.2498	11.303	8.7208	10.603	8.2408	8.1408	8.5408	8.2408	8.2408	10.453	8.4408	10.308	6.7408	6.4408	7.8308	
8.5308	9.2768	11.303	8.7408	10.623	8.2408	8.1408	8.5408	8.3408	8.2408	10.473	8.4408	10.335	6.7408	6.4408	7.8308	
8.5508	9.3028	11.303	8.7608	10.653	8.3408	8.1408	8.5408	8.3408	8.2408	10.493	8.4408	10.358	6.7408	6.5408	7.8308	
8.5608	9.3328	11.303	8.7808	10.673	8.3408	8.1408	8.6408	8.3408	8.2408	10.513	8.5408	10.379	6.7408	6.5408	7.8308	
8.5808	9.3528	11.7872	8.8008	11.1472	8.3408	8.1408	8.6408	8.3408	8.2408	10.9872	8.5408	10.8552	6.7408	6.5408	7.8308	
8.6008	9.3828	11.9126	8.8208	11.2726	8.3408	8.1408	8.6408	8.3408	8.3408	11.1026	8.5408	10.9716	6.7408	6.5408	7.8308	
8.6108	9.4028	12.2666	8.8308	11.5566	8.3408	8.2408	8.6408	8.3408	8.3408	11.3766	8.5408	11.2556	6.7408	6.5408	7.8308	
9.2062	10.0072	12.3936	9.4362	11.7036	8.9362	8.8362	9.2362	8.9362	8.9362	11.5336	9.1362	11.4046	7.3362	7.1362	8.5262	
9.4962	10.2522	12.673	9.7362	11.983	9.2362	9.0362	9.5362	9.2362	9.1362	11.813	9.4362	11.685	7.5362	7.3362	8.7262	
10.0974	10.8524	13.3112	10.3374	12.6012	9.8474	9.6474	10.1474	9.8474	9.7474	12.4212	10.0474	12.3002	8.1474	7.8474	9.3374	
10.7002	11.4522	13.4366	10.9302	12.7666	10.4602	10.2602	10.7602	10.4602	10.3602	12.5866	10.6602	12.4696	8.7602	8.4602	9.9502	
10.9002	11.6082	13.5366	11.1702	12.8066	10.6602	10.4602	10.9602	10.6602	10.4602	12.6166	10.8602	12.5096	8.9602	8.6602	10.1502	
11.0618	11.7548	13.5366	11.3318	12.8366	10.8618	10.5618	11.1618	10.8618	10.6618	12.6466	11.0618	12.5376	9.0618	8.7618	10.3518	
11.1018	11.7888	13.5366	11.3818	12.8566	10.8618	10.6618	11.2618	10.8618	10.6618	12.6766	11.0618	12.5596	9.0618	8.7618	10.3518	
11.1318	11.8188	13.7636	11.4118	13.0036	10.8618	10.6618	11.2618	10.8618	10.6618	12.8236	11.1618	12.7056	9.0618	8.7618	10.4518	
11.1618	11.8468	13.789	11.4418	13.049	10.9618	10.6618	11.2618	10.9618	10.6618	12.869	11.1618	12.748	9.0618	8.7618	10.4518	
11.1818	11.8728	13.789	11.4718	13.069	10.9618	10.7618	11.3618	10.9618	10.7618	12.879	11.1618	12.763	9.0618	8.7618	10.4518	
11.2018	11.8998	13.789	11.4918	13.079	10.9618	10.7618	11.3618	10.9618	10.7618	12.899	11.1618	12.777	9.0618	8.7618	10.4518	
11.2218	11.9258	13.889	11.5118	13.099	10.9618	10.7618	11.3618	10.9618	10.7618	12.919	11.2618	12.79	9.0618	8.7618	10.4518	
11.435	12.154	13.889	11.735	13.109	11.165	10.965	11.565	11.165	10.965	12.929	11.465	12.803	9.265	8.965	10.655	
12.0332	12.7562	13.889	12.3332	13.119	11.7732	11.5732	12.1732	11.7732	11.5732	12.949	12.0732	12.814	9.8732	9.5732	11.2632	
12.6412	13.3562	13.889	12.9312	13.129	12.3812	12.1812	12.7812	12.3812	12.1812	12.959	12.6812	12.826	10.4812	10.1812	11.8712	
13.0128	13.6368	13.889	13.3528	13.139	12.7828	12.4828	13.1828	12.7828	12.3828	12.969	13.0828	12.836	10.7828	10.3828	12.2728	
13.1028	13.6958	13.989	13.4628	13.159	12.8828	12.5828	13.3828	12.8828	12.4828	12.989	13.1828	12.846	10.7828	10.4828	12.3728	
13.1528	13.7378	13.989	13.5428	13.169	12.9828	12.6828	13.4828	12.8828	12.4828	12.999	13.2828	12.856	10.8828	10.4828	12.4728	
13.1928	13.7728	13.989	13.5928	13.179	12.9828	12.6828	13.4828	12.9828	12.5828	13.009	13.2828	12.866	10.8828	10.4828	12.4728	
13.2228	13.8048	13.989	13.6328	13.189	12.9828	12.6828	13.5828	12.9828	12.5828	13.029	13.2828	12.875	10.8828	10.4828	12.5728	
13.2528	13.8338	14.089	13.6628	13.199	13.0828	12.6828	13.5828	12.9828	12.5828	13.039	13.3828	12.884	10.8828	10.4828	12.5728	
13.2728	13.8618	14.089	13.6928	13.209	13.0828	12.7828	13.5828	13.0828	12.5828	13.049	13.3828	12.892	10.8828	10.4828	12.5728	
13.506	14.093	14.089	13.926	13.219	13.286	12.986	13.886	13.286	12.786	13.069	13.586	12.901	11.086	10.686	12.876	
13.516	14.12	14.089	13.946	13.229	13.286	12.986	13.886	13.286	12.886	13.079	13.686	12.909	11.086	10.686	12.876	

13.536	14.146	14.089	13.966	13.229	13.386	12.986	13.886	13.286	12.886	13.089	13.686	12.917	11.086	10.686	12.876
13.556	14.172	14.189	13.986	13.239	13.386	12.986	13.886	13.286	12.886	13.099	13.686	12.925	11.086	10.686	12.876
14.1556	14.7726	14.189	14.5856	13.249	13.9956	13.5956	14.4956	13.8956	13.4956	13.119	14.2956	12.932	11.6956	11.2956	13.4856
14.1856	14.8226	14.189	14.6256	13.259	13.9956	13.6956	14.5956	13.9956	13.4956	13.129	14.2956	12.94	11.6956	11.2956	13.4856
14.7874	15.4194	14.189	15.2274	13.269	14.5974	14.2974	15.1974	14.5974	14.0974	13.139	14.8974	12.947	12.2974	11.8974	14.0874
15.4046	16.0266	14.289	15.8246	13.279	15.1946	14.8946	15.7946	15.1946	14.6946	13.149	15.4946	12.954	12.8946	12.4946	14.6846
16.0046	16.6166	14.4668	16.4246	13.4568	15.7946	15.4946	16.3946	15.7946	15.1946	13.3468	16.0946	13.1388	13.4946	13.0946	15.2846
16.4062	16.9282	14.6002	16.8762	13.5702	16.1962	15.7962	16.7962	16.0962	15.4962	13.4602	16.5962	13.2512	13.7962	13.2962	15.7862
16.5062	17.0182	14.8002	17.0362	13.7602	16.2962	15.8962	16.9962	16.1962	15.4962	13.6402	16.6962	13.4342	13.8962	13.3962	15.8862
16.5062	17.0782	14.8002	17.1462	13.8102	16.3962	15.8962	17.0962	16.2962	15.4962	13.6902	16.7962	13.4812	13.9962	13.3962	15.9862
16.8094	17.3314	14.9002	17.4194	13.8402	16.5994	16.1994	17.3994	16.4994	15.7994	13.7202	17.0994	13.5122	14.1994	13.5994	16.2894
16.8094	17.3714	14.9002	17.4794	13.8702	16.6994	16.1994	17.4994	16.5994	15.7994	13.7402	17.0994	13.5352	14.1994	13.6994	16.3894
17.2142	17.7062	14.9002	17.8342	13.8902	17.0042	16.6042	17.8042	16.9042	16.1042	13.7702	17.5042	13.5542	14.5042	14.0042	16.6942
17.2142	17.7462	15.0002	17.8742	13.9102	17.1042	16.6042	17.9042	16.9042	16.2042	13.7902	17.5042	13.5702	14.5042	14.0042	16.7942
17.2142	17.7762	15.0002	17.9042	13.9202	17.1042	16.6042	17.9042	16.9042	16.2042	13.8102	17.5042	13.5842	14.5042	14.0042	16.7942
17.2142	17.8062	15.0002	17.9342	13.9402	17.1042	16.6042	18.0042	17.0042	16.2042	13.8202	17.6042	13.5972	14.5042	14.0042	16.7942
17.3142	17.8362	15.1002	17.9642	13.9502	17.1042	16.6042	18.0042	17.0042	16.2042	13.8402	17.6042	13.6092	14.5042	14.0042	16.8942
17.8222	18.3742	15.1002	18.5022	13.9602	17.7122	17.2122	18.5122	17.5122	16.7122	13.8602	18.1122	13.6212	15.1122	14.5122	17.4022
17.8222	18.4042	15.1002	18.5222	13.9702	17.7122	17.2122	18.6122	17.5122	16.8122	13.8702	18.1122	13.6312	15.1122	14.5122	17.4022
17.8222	18.4242	15.1002	18.5422	13.9902	17.7122	17.2122	18.6122	17.5122	16.8122	13.8902	18.2122	13.6412	15.1122	14.5122	17.4022
17.8222	18.4542	15.2002	18.5622	14.0002	17.7122	17.2122	18.6122	17.5122	16.8122	13.9002	18.2122	13.6502	15.1122	14.5122	17.5022
17.8222	18.4842	15.2002	18.5822	14.0102	17.7122	17.2122	18.6122	17.6122	16.8122	13.9202	18.2122	13.6592	15.1122	14.5122	17.5022
18.0238	18.6058	15.2002	18.6938	14.0202	17.8138	17.3138	18.7138	17.7138	16.9138	13.9302	18.3138	13.6682	15.2138	14.6138	17.6038
18.0238	18.6358	15.2002	18.7138	14.0302	17.9138	17.3138	18.8138	17.7138	16.9138	13.9402	18.3138	13.6762	15.2138	14.6138	17.6038
18.0238	18.6658	15.3002	18.7238	14.0402	17.9138	17.4138	18.8138	17.7138	17.0138	13.9602	18.3138	13.6842	15.2138	14.6138	17.6038
18.0238	18.6858	15.3002	18.7438	14.0502	17.9138	17.4138	18.8138	17.7138	17.0138	13.9702	18.4138	13.6922	15.2138	14.6138	17.6038
18.0238	18.7158	15.3002	18.7538	14.0602	17.9138	17.4138	18.8138	17.7138	17.0138	13.9802	18.4138	13.6992	15.2138	14.6138	17.6038
18.0238	18.7358	15.3002	18.7738	14.0702	17.9138	17.4138	18.8138	17.7138	17.0138	14.0002	18.4138	13.7072	15.2138	14.6138	17.6038
18.0238	18.7658	15.4002	18.7838	14.0702	17.9138	17.4138	18.8138	17.7138	17.0138	14.0102	18.4138	13.7142	15.2138	14.6138	17.6038
18.0238	18.7958	15.4002	18.7938	14.0802	17.9138	17.4138	18.8138	17.7138	17.0138	14.0202	18.4138	13.7212	15.2138	14.6138	17.7038
18.1238	18.8158	15.4002	18.8038	14.0902	17.9138	17.4138	18.9138	17.8138	17.0138	14.0402	18.4138	13.7272	15.2138	14.6138	17.7038
18.1238	18.8458	15.4002	18.8138	14.1002	18.0138	17.4138	18.9138	17.8138	17.1138	14.0502	18.4138	13.7302	15.2138	14.6138	17.7038
18.1238	18.8658	15.5002	18.8338	14.1102	18.0138	17.4138	18.9138	17.8138	17.1138	14.0602	18.4138	13.7402	15.2138	14.6138	17.7038
18.1238	18.8958	15.5002	18.8438	14.1202	18.0138	17.4138	18.9138	17.8138	17.1138	14.0802	18.4138	13.7502	15.2138	14.6138	17.7038
18.2254	19.0174	15.5002	18.9554	14.1202	18.1154	17.6154	19.0154	17.9154	17.2154	14.0902	18.6154	13.7502	15.3154	14.7154	17.8054
18.4286	19.2506	15.6002	19.1686	14.1302	18.3186	17.8186	19.2186	18.1186	17.4186	14.1002	18.8186	13.7602	15.5186	14.9186	18.0086
18.4286	19.2806	15.6002	19.1786	14.1402	18.3186	17.8186	19.2186	18.1186	17.4186	14.1102	18.8186	13.7602	15.5186	14.9186	18.0086
18.4286	19.3006	15.6002	19.1886	14.1502	18.3186	17.8186	19.2186	18.1186	17.4186	14.1302	18.8186	13.7702	15.5186	14.9186	18.0086
18.4286	19.3306	15.6002	19.1986	14.1602	18.3186	17.8186	19.2186	18.1186	17.5186	14.1402	18.8186	13.7802	15.5186	14.9186	18.0086
18.4286	19.3506	15.7002	19.2086	14.1702	18.3186	17.8186	19.3186	18.1186	17.5186	14.1502	18.8186	13.7802	15.5186	14.9186	18.0086
18.5286	19.3806	15.7002	19.2186	14.1702	18.3186	17.8186	19.3186	18.1186	17.5186	14.1702	18.8186	13.7902	15.5186	14.9186	18.0086
18.5286	19.4006	15.7002	19.2286	14.1802	18.3186	17.8186	19.3186	18.2186	17.5186	14.1802	18.8186	13.7902	15.5186	14.9186	18.0086
18.5286	19.4306	15.7002	19.2386	14.1902	18.4186	17.8186	19.3186	18.2186	17.5186	14.1902	18.8186	13.8002	15.5186	14.9186	18.0086
18.5286	19.4506	15.8002	19.2386	14.2002	18.4186	17.8186	19.3186	18.2186	17.5186	14.2002	18.8186	13.8002	15.5186	14.9186	18.0086
18.5286	19.4806	15.8002	19.2486	14.2002	18.4186	17.8186	19.3186	18.2186	17.5186	14.2202	18.8186	13.8102	15.5186	14.9186	18.0086
18.5286	19.5006	15.8002	19.2586	14.2102	18.4186	17.8186	19.3186	18.2186	17.5186	14.2302	18.8186	13.8102	15.5186	14.9186	18.0086
18.5286	19.5306	15.9002	19.2686	14.2202	18.4186	17.9186	19.3186	18.2186	17.6186	14.2402	18.9186	13.8202	15.5186	14.9186	18.0086

LOAM1M1M	LOAM1M30CM		LOAM1M3M		LOAM2MFlat		LOAM2MTop		LOAM2MBottom		LOAM2M1M	LOAM2M30CM		LOAM2M3M		LOAM5MFla	LOAM5MTo	LOAM5MBottom
Cum E (cm)	Cum E (cm)		Cum E (cm)		Cum E (cm)		Cum E (cm)		Cum E (cm)		Cum E (cm)	Cum E (cm)		Cum E (cm)		Cum E (cm)	Cum E (cm)	Cum E (cm)
A	A	B	A	B	A	B	A	B	A	B	A	A	B	A	B	A	A	A
0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0
0	0	0.0508	0.1	0.0608	0	0.0508	0	0.0508	0	0.0608	0	0	0.0508	0	0.0508	0	0	0
0.5906	0.5906	0.127	0.6906	0.137	0.5906	0.127	0.5906	0.127	0.5906	0.137	0.5906	0.5906	0.127	0.5906	0.137	0.5906	0.5906	0.5906
1.1986	1.1986	0.127	1.2986	0.137	1.1986	0.127	1.1986	0.127	1.1986	0.137	1.1986	1.1986	0.127	1.1986	0.137	1.1986	1.1986	1.1986
1.4002	1.3002	0.127	1.4002	0.137	1.3002	0.127	1.3002	0.127	1.4002	0.137	1.4002	1.3002	0.127	1.4002	0.137	1.4002	1.3002	1.4002
1.4002	1.3002	0.127	1.5002	0.137	1.3002	0.127	1.3002	0.127	1.4002	0.137	1.4002	1.3002	0.127	1.4002	0.137	1.4002	1.3002	1.5002
1.4002	1.3002	0.127	1.5002	0.137	1.3002	0.127	1.3002	0.127	1.4002	0.137	1.4002	1.3002	0.127	1.4002	0.137	1.4002	1.3002	1.5002
1.4002	1.3002	0.127	1.5002	0.137	1.3002	0.127	1.3002	0.127	1.5002	0.137	1.4002	1.3002	0.127	1.5002	0.137	1.4002	1.3002	1.5002
1.4002	1.3002	0.127	1.5002	0.137	1.4002	0.127	1.3002	0.127	1.5002	0.137	1.4002	1.3002	0.127	1.5002	0.137	1.4002	1.3002	1.5002
1.4002	1.3002	0.127	1.5002	0.137	1.4002	0.127	1.3002	0.127	1.5002	0.137	1.4002	1.3002	0.127	1.5002	0.137	1.4002	1.3002	1.5002
1.4002	1.3002	0.127	1.5002	0.137	1.4002	0.127	1.3002	0.127	1.5002	0.137	1.4002	1.3002	0.127	1.5002	0.137	1.4002	1.3002	1.5002
1.8066	1.7066	0.127	1.9066	0.137	1.8066	0.127	1.7066	0.127	1.9066	0.137	1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066
1.8066	1.7066	0.127	1.9066	0.137	1.8066	0.127	1.7066	0.127	1.9066	0.137	1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066
1.8066	1.7066	0.127	1.9066	0.137	1.8066	0.127	1.7066	0.127	1.9066	0.137	1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066
1.8066	1.7066	0.127	1.9066	0.137	1.8066	0.127	1.7066	0.127	1.9066	0.137	1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066
1.8066	1.7066	0.127	1.9066	0.137	1.8066	0.127	1.7066	0.127	1.9066	0.137	1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066
1.8066	1.7066	0.127	1.9066	0.137	1.8066	0.127	1.7066	0.127	1.9066	0.137	1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066
1.8066	1.7066	0.127	1.9066	0.137	1.8066	0.127	1.7066	0.127	1.9066	0.137	1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066
2.0098	1.9098	0.127	2.1098	0.137	2.0098	0.127	1.9098	0.127	2.1098	0.137	2.0098	1.9098	0.127	2.1098	0.137	2.0098	1.9098	2.1098
2.0098	1.9098	0.127	2.1098	0.137	2.0098	0.127	1.9098	0.127	2.1098	0.137	2.0098	1.9098	0.127	2.1098	0.137	2.0098	1.9098	2.2098
2.0098	1.9098	0.127	2.1098	0.137	2.0098	0.127	1.9098	0.127	2.1098	0.137	2.0098	1.9098	0.127	2.1098	0.137	2.0098	1.9098	2.2098
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	0.4826	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.2098
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	0.4826	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.2098
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	0.4826	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.2098
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	0.4826	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.2098
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	0.4826	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.2098
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	0.4826	2.0098	0.4826	2.1098	0.4926	2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.2098
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	0.4826	2.0098	0.4826	2.1098	0.4926	2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.2098
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	0.4826	2.0098	0.4826	2.1098	0.4926	2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.2098
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	0.4826	2.0098	0.4826	2.1098	0.4926	2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.2098
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	0.4826	2.0098	0.4826	2.1098	0.5026	2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.2098
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	0.4826	2.0098	0.4826	2.1098	0.5026	2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.2098
2.0098	1.9098	0.635	2.1098	0.645	2.0098	0.635	2.0098	0.635	2.1098	0.655	2.0098	1.9098	0.635	2.1098	0.645	2.0098	1.9098	2.2098
2.0098	1.9098	0.635	2.2098	0.645	2.0098	0.635	2.0098	0.635	2.1098	0.655	2.0098	1.9098	0.635	2.1098	0.645	2.0098	1.9098	2.2098
2.0098	1.9098	0.635	2.2098	0.645	2.0098	0.635	2.0098	0.635	2.1098	0.655	2.0098	1.9098	0.635	2.1098	0.645	2.0098	1.9098	2.2098
2.0098	1.9098	0.635	2.2098	0.645	2.0098	0.635	2.0098	0.635	2.1098	0.655	2.0098	1.9098	0.635	2.1098	0.645	2.0098	1.9098	2.2098
2.0098	1.9098	0.635	2.2098	0.645	2.0098	0.635	2.0098	0.635	2.1098	0.655	2.0098	1.9098	0.635	2.1098	0.645	2.0098	1.9098	2.2098
2.0098	1.9098	0.635	2.2098	0.645	2.0098	0.635	2.0098	0.635	2.1098	0.655	2.0098	1.9098	0.635	2.1098	0.645	2.0098	1.9098	2.2098
2.0098	1.9098	0.6604	2.2098	0.6704	2.0098	0.6604	2.0098	0.6604	2.1098	0.6804	2.0098	1.9098	0.6604	2.1098	0.6704	2.0098	1.9098	2.2098
2.0098	1.9098	0.7112	2.2098	0.7212	2.0098	0.7112	2.0098	0.7112	2.1098	0.7312	2.0098	1.9098	0.7112	2.1098	0.7212	2.0098	1.9098	2.2098

2.6052	2.5052	0.762	2.8052	0.772	2.6052	0.762	2.6052	0.762	2.7052	0.782	2.6052	2.5052	0.762	2.7052	0.772	2.6052	2.5052	2.8052
3.0084	2.9084	0.762	3.2084	0.772	3.0084	0.762	2.9084	0.762	3.2084	0.782	3.0084	2.9084	0.762	3.1084	0.772	3.0084	2.9084	3.2084
3.0084	2.9084	0.772	3.2084	0.772	3.0084	0.762	3.0084	0.762	3.2084	0.782	3.1084	2.9084	0.762	3.2084	0.772	3.0084	2.9084	3.3084
3.1084	2.9084	1.3054	3.2084	1.3054	3.0084	1.2954	3.0084	1.2954	3.3084	1.3154	3.1084	2.9084	1.2954	3.2084	1.3054	3.0084	3.0084	3.3084
3.1084	2.9084	1.3054	3.2084	1.3054	3.0084	1.2954	3.0084	1.2954	3.3084	1.3154	3.1084	2.9084	1.2954	3.2084	1.3054	3.0084	3.0084	3.3084
3.21	3.01	1.3054	3.41	1.3054	3.11	1.2954	3.11	1.2954	3.41	1.3154	3.21	3.01	1.2954	3.31	1.3054	3.11	3.11	3.41
3.21	3.01	1.3054	3.41	1.3054	3.11	1.2954	3.11	1.2954	3.41	1.3154	3.21	3.01	1.2954	3.31	1.3054	3.11	3.11	3.41
3.3116	3.1116	1.3054	3.5116	1.3054	3.2116	1.2954	3.2116	1.2954	3.5116	1.3154	3.3116	3.1116	1.2954	3.4116	1.3054	3.2116	3.2116	3.5116
3.3116	3.1116	1.3054	3.5116	1.3054	3.2116	1.2954	3.2116	1.2954	3.5116	1.3154	3.3116	3.1116	1.2954	3.4116	1.3054	3.2116	3.2116	3.5116
3.3116	3.1116	1.3054	3.5116	1.3054	3.2116	1.2954	3.2116	1.2954	3.5116	1.3154	3.3116	3.1116	1.2954	3.4116	1.3054	3.2116	3.2116	3.6116
3.3116	3.1116	1.3308	3.5116	1.3308	3.2116	1.3208	3.2116	1.3208	3.5116	1.3408	3.3116	3.1116	1.3208	3.4116	1.3308	3.2116	3.2116	3.6116
3.3116	3.1116	1.3562	3.5116	1.3562	3.2116	1.3462	3.2116	1.3462	3.5116	1.3662	3.3116	3.1116	1.3462	3.4116	1.3562	3.2116	3.2116	3.6116
3.3116	3.1116	2.1896	3.5116	2.1996	3.2116	2.1896	3.2116	2.1896	3.5116	2.1996	3.3116	3.1116	2.1896	3.4116	2.1996	3.2116	3.2116	3.6116
3.3116	3.1116	3	3.5116	3.04	3.2116	3.03	3.2116	3.02	3.5116	3.04	3.3116	3.1116	3	3.4116	3.04	3.2116	3.2116	3.6116
3.3116	3.1116	3.0454	3.5116	3.1554	3.2116	3.1154	3.2116	3.0954	3.5116	3.1654	3.3116	3.1116	3.0454	3.5116	3.1554	3.2116	3.2116	3.6116
3.3116	3.1116	3.3502	3.5116	3.5002	3.2116	3.4402	3.2116	3.4102	3.5116	3.5102	3.3116	3.1116	3.3502	3.5116	3.5002	3.2116	3.2116	3.6116
3.3116	3.1116	3.3502	3.5116	3.5202	3.2116	3.4502	3.2116	3.4102	3.5116	3.5302	3.3116	3.1116	3.3502	3.5116	3.5202	3.2116	3.2116	3.6116
3.3116	3.1116	3.3502	3.5116	3.5402	3.2116	3.4502	3.2116	3.4102	3.6116	3.5502	3.3116	3.1116	3.3502	3.5116	3.5302	3.2116	3.2116	3.6116
3.3116	3.1116	3.3602	3.5116	3.5502	3.2116	3.4602	3.2116	3.4102	3.6116	3.5702	3.3116	3.1116	3.3502	3.5116	3.5502	3.2116	3.2116	3.6116
3.3116	3.1116	3.3602	3.5116	3.5602	3.2116	3.4602	3.2116	3.4102	3.6116	3.5802	3.3116	3.1116	3.3502	3.5116	3.5502	3.2116	3.2116	3.6116
3.3116	3.1116	3.3602	3.5116	3.5602	3.2116	3.4602	3.2116	3.4102	3.6116	3.5902	3.3116	3.1116	3.3502	3.5116	3.5602	3.2116	3.2116	3.6116
3.3116	3.1116	3.3602	3.5116	3.5702	3.2116	3.4602	3.2116	3.4102	3.6116	3.5902	3.3116	3.1116	3.3502	3.5116	3.5702	3.2116	3.2116	3.6116
3.3116	3.1116	3.411	3.5116	3.621	3.2116	3.511	3.2116	3.461	3.6116	3.651	3.3116	3.1116	3.401	3.5116	3.621	3.2116	3.2116	3.6116
3.3116	3.1116	3.411	3.5116	3.631	3.2116	3.511	3.2116	3.461	3.6116	3.661	3.3116	3.1116	3.401	3.5116	3.621	3.3116	3.2116	3.6116
3.3116	3.1116	3.411	3.5116	3.631	3.2116	3.511	3.2116	3.461	3.6116	3.661	3.3116	3.1116	3.401	3.5116	3.631	3.3116	3.2116	3.6116
3.3116	3.1116	3.4364	3.5116	3.6564	3.2116	3.5364	3.2116	3.4864	3.6116	3.6964	3.3116	3.1116	3.4264	3.5116	3.6564	3.3116	3.2116	3.6116
3.3116	3.1116	3.4364	3.5116	3.6564	3.2116	3.5364	3.2116	3.4864	3.6116	3.6964	3.3116	3.1116	3.4264	3.5116	3.6564	3.3116	3.2116	3.6116
3.3116	3.1116	3.4364	3.5116	3.6564	3.2116	3.5364	3.2116	3.4864	3.6116	3.6964	3.3116	3.1116	3.4264	3.5116	3.6564	3.3116	3.2116	3.6116
3.4132	3.2132	3.7158	3.6132	3.9458	3.3132	3.8158	3.3132	3.7658	3.7132	3.9858	3.4132	3.2132	3.7058	3.6132	3.9458	3.4132	3.3132	3.7132
3.718	3.518	3.792	3.918	4.022	3.618	3.892	3.618	3.842	4.018	4.062	3.718	3.518	3.782	3.918	4.022	3.718	3.618	4.018
4.323	4.123	4.2746	4.523	4.5046	4.223	4.3746	4.223	4.3246	4.623	4.5446	4.323	4.123	4.2646	4.523	4.5046	4.223	4.123	4.623
4.7246	4.5246	4.8552	5.0246	5.0952	4.6246	4.9552	4.6246	4.9152	5.0246	5.1352	4.7246	4.5246	4.8552	4.9246	5.0952	4.7246	4.6246	5.1246
4.8246	4.5246	4.9652	5.0246	5.2552	4.7246	5.0852	4.7246	5.0352	5.1246	5.3152	4.8246	4.5246	4.9652	5.0246	5.2552	4.7246	4.6246	5.2246
4.8246	4.5246	5.8674	5.1246	6.1474	4.7246	5.9874	4.7246	5.9374	5.2246	6.2074	4.8246	4.5246	5.8574	5.0246	6.1474	4.8246	4.6246	5.2246
4.8246	4.5246	5.9782	5.1246	6.3282	4.8246	6.1382	4.7246	6.0682	5.2246	6.4082	4.9246	4.5246	5.9682	5.1246	6.3282	4.8246	4.6246	5.3246
4.9246	4.5246	6.283	5.1246	6.663	4.8246	6.453	4.7246	6.383	5.3246	6.743	4.9246	4.5246	6.283	5.1246	6.663	4.8246	4.6246	5.3246
4.9246	4.5246	6.3846	5.1246	6.7746	4.8246	6.5546	4.7246	6.4846	5.3246	6.8546	4.9246	4.5246	6.3846	5.1246	6.7746	4.8246	4.6246	5.3246
4.9246	4.5246	6.41	5.2246	6.81	4.8246	6.59	4.7246	6.51	5.3246	6.9	4.9246	4.5246	6.41	5.1246	6.81	4.8246	4.6246	5.3246
4.9246	4.5246	6.41	5.2246	6.82	4.8246	6.59	4.7246	6.51	5.3246	6.91	4.9246	4.5246	6.41	5.1246	6.82	4.8246	4.6246	5.3246
4.9246	4.5246	6.4354	5.2246	6.8554	4.8246	6.6154	4.7246	6.5354	5.3246	6.9454	4.9246	4.5246	6.4354	5.1246	6.8454	4.8246	4.6246	5.3246
4.9246	4.5246	6.4354	5.2246	6.8554	4.8246	6.6154	4.7246	6.5354	5.3246	6.9454	4.9246	4.5246	6.4354	5.1246	6.8554	4.8246	4.6246	5.4246
4.9246	4.5246	6.4354	5.2246	6.8554	4.8246	6.6154	4.7246	6.5354	5.3246	6.9554	4.9246	4.5246	6.4354	5.1246	6.8554	4.8246	4.6246	5.4246
4.9246	4.5246	6.4354	5.2246	6.8654	4.8246	6.6154	4.7246	6.5354	5.3246	6.9654	4.9246	4.5246	6.4354	5.2246	6.8654	4.8246	4.6246	5.4246
4.9246	4.5246	6.4354	5.2246	6.8654	4.8246	6.6154	4.7246	6.5354	5.3246	6.9654	4.9246	4.5246	6.4354	5.2246	6.8654	4.8246	4.6246	5.4246
4.9246	4.5246	7.0196	5.2246	7.4496	4.8246	7.1996	4.7246	7.1196	5.4246	7.5596	4.9246	4.5246	7.0196	5.2246	7.4496	4.8246	4.6246	5.4246
4.9246	4.5246	7.172	5.2246	7.602	4.8246	7.352	4.7246	7.272	5.4246	7.712	4.9246	4.5246	7.172	5.2246	7.602	4.8246	4.6246	5.4246
4.9246	4.5246	7.172	5.2246	7.602	4.8246	7.352	4.7246	7.272	5.4246	7.712	4.9246	4.5246	7.172	5.2246	7.602	4.8246	4.6246	5.4246
4.9246	4.5246	7.172	5.2246	7.602	4.8246	7.352	4.7246	7.272	5.4246	7.722	4.9246	4.5246	7.172	5.2246	7.602	4.8246	4.6246	5.4246

4.9246	4.5246	7.6292	5.2246	8.0692	4.8246	7.8092	4.7246	7.7292	5.4246	8.1792	4.9246	4.5246	7.6292	5.2246	8.0592	4.8246	4.6246	5.4246
4.9246	4.5246	7.6292	5.2246	8.0692	4.8246	7.8092	4.7246	7.7292	5.4246	8.1792	4.9246	4.5246	7.6292	5.2246	8.0692	4.8246	4.6246	5.4246
4.9246	4.5246	7.68	5.2246	8.12	4.8246	7.86	4.7246	7.78	5.4246	8.23	4.9246	4.5246	7.68	5.2246	8.12	4.8246	4.6246	5.4246
4.9246	4.5246	7.68	5.2246	8.12	4.8246	7.86	4.7246	7.78	5.4246	8.23	4.9246	4.5246	7.68	5.2246	8.12	4.8246	4.6246	5.4246
5.5358	5.1358	7.9086	5.8358	8.3486	5.4358	8.0886	5.3358	8.0186	6.0358	8.4686	5.5358	5.1358	7.9086	5.8358	8.3486	5.4358	5.2358	6.0358
5.6374	5.2374	7.9594	6.0374	8.3994	5.5374	8.1394	5.4374	8.0694	6.1374	8.5194	5.6374	5.2374	7.9594	5.9374	8.3994	5.5374	5.4374	6.2374
5.6374	5.2374	7.9594	6.0374	8.3994	5.5374	8.1394	5.4374	8.0694	6.1374	8.5194	5.6374	5.2374	7.9594	5.9374	8.3994	5.5374	5.4374	6.2374
5.739	5.439	7.9594	6.139	8.3994	5.639	8.1394	5.539	8.0694	6.339	8.5194	5.739	5.339	7.9594	6.039	8.3994	5.639	5.539	6.339
5.739	5.439	7.9594	6.139	8.3994	5.639	8.1394	5.539	8.0694	6.339	8.5194	5.739	5.339	7.9594	6.039	8.3994	5.639	5.539	6.339
5.739	5.439	7.9594	6.139	8.3994	5.639	8.1394	5.539	8.0694	6.339	8.5194	5.739	5.339	7.9594	6.039	8.3994	5.639	5.539	6.339
6.3408	5.9408	7.9594	6.7408	8.3994	6.2408	8.1394	6.1408	8.0694	6.9408	8.5194	6.3408	5.9408	7.9594	6.6408	8.3994	6.2408	6.1408	6.9408
6.6408	6.2408	8.443	7.0408	8.873	6.5408	8.613	6.4408	8.543	7.2408	9.003	6.6408	6.2408	8.433	7.0408	8.873	6.6408	6.4408	7.3408
6.7408	6.2408	8.803	7.1408	9.343	6.6408	9.063	6.5408	8.973	7.3408	9.493	6.7408	6.2408	8.803	7.1408	9.343	6.6408	6.4408	7.4408
6.7408	6.2408	8.823	7.1408	9.433	6.6408	9.133	6.5408	9.023	7.4408	9.603	6.7408	6.2408	8.823	7.1408	9.433	6.6408	6.4408	7.4408
6.7408	6.2408	8.833	7.2408	9.483	6.6408	9.163	6.5408	9.033	7.4408	9.653	6.7408	6.2408	8.823	7.1408	9.483	6.6408	6.4408	7.4408
6.7408	6.2408	8.833	7.2408	9.523	6.6408	9.173	6.5408	9.043	7.4408	9.693	6.7408	6.2408	8.823	7.1408	9.513	6.6408	6.4408	7.5408
6.7408	6.2408	8.833	7.2408	9.543	6.6408	9.183	6.5408	9.043	7.4408	9.723	6.8408	6.2408	8.823	7.1408	9.543	6.6408	6.4408	7.5408
6.7408	6.2408	8.833	7.2408	9.563	6.6408	9.183	6.5408	9.043	7.5408	9.743	6.8408	6.2408	8.823	7.2408	9.553	6.6408	6.4408	7.5408
6.7408	6.2408	8.833	7.2408	9.573	6.6408	9.183	6.5408	9.043	7.5408	9.763	6.8408	6.2408	8.823	7.2408	9.573	6.6408	6.4408	7.5408
6.7408	6.2408	8.833	7.2408	9.583	6.6408	9.193	6.5408	9.043	7.5408	9.783	6.8408	6.2408	8.823	7.2408	9.583	6.6408	6.4408	7.5408
6.7408	6.2408	8.833	7.2408	9.593	6.6408	9.193	6.5408	9.043	7.5408	9.793	6.8408	6.2408	8.823	7.2408	9.593	6.6408	6.4408	7.5408
6.7408	6.2408	9.3072	7.2408	10.0672	6.6408	9.6672	6.5408	9.5272	7.5408	10.2672	6.8408	6.2408	9.3072	7.2408	10.0672	6.6408	6.4408	7.5408
6.7408	6.2408	9.3726	7.2408	10.1626	6.6408	9.7326	6.5408	9.5826	7.5408	10.3826	6.8408	6.2408	9.3626	7.2408	10.1626	6.6408	6.4408	7.5408
6.7408	6.2408	9.6266	7.2408	10.4366	6.6408	9.9966	6.5408	9.8466	7.5408	10.6566	6.8408	6.2408	9.6166	7.2408	10.4366	6.6408	6.4408	7.6408
7.4362	6.8362	9.7536	7.8362	10.5736	7.2362	10.1236	7.1362	9.9736	8.1362	10.7936	7.4362	6.8362	9.7536	7.8362	10.5636	7.3362	7.0362	8.2362
7.6362	7.0362	10.033	8.1362	10.853	7.4362	10.403	7.3362	10.253	8.4362	11.073	7.6362	7.0362	10.033	8.1362	10.853	7.5362	7.2362	8.4362
8.2474	7.6474	10.6512	8.7474	11.4612	8.0474	11.0212	7.9474	10.8712	9.0474	11.6912	8.2474	7.6474	10.6412	8.7474	11.4612	8.1474	7.8474	9.0474
8.8602	8.2602	10.7466	9.3602	11.6066	8.6602	11.1266	8.5602	10.9666	9.6602	11.8466	8.8602	8.2602	10.7366	9.2602	11.6066	8.6602	8.4602	9.6602
8.9602	8.3602	10.7466	9.5602	11.6266	8.8602	11.1266	8.6602	10.9766	9.8602	11.8766	8.9602	8.3602	10.7366	9.4602	11.6266	8.8602	8.5602	9.8602
9.0618	8.4618	10.7466	9.6618	11.6466	8.9618	11.1366	8.7618	10.9766	10.0618	11.8866	9.1618	8.4618	10.7366	9.6618	11.6466	8.9618	8.6618	10.0618
9.1618	8.4618	10.7466	9.7618	11.6566	8.9618	11.1366	8.7618	10.9766	10.0618	11.9066	9.1618	8.4618	10.7366	9.6618	11.6466	8.9618	8.6618	10.0618
9.1618	8.4618	10.8736	9.7618	11.7836	8.9618	11.2636	8.7618	11.1036	10.0618	12.0436	9.1618	8.4618	10.8636	9.6618	11.7836	8.9618	8.6618	10.1618
9.1618	8.4618	10.899	9.7618	11.819	8.9618	11.289	8.7618	11.129	10.0618	12.079	9.1618	8.4618	10.889	9.6618	11.819	8.9618	8.6618	10.1618
9.1618	8.4618	10.899	9.7618	11.819	8.9618	11.289	8.7618	11.129	10.1618	12.079	9.1618	8.4618	10.899	9.7618	11.819	8.9618	8.6618	10.1618
9.1618	8.4618	10.899	9.7618	11.829	8.9618	11.289	8.7618	11.129	10.1618	12.089	9.1618	8.4618	10.899	9.7618	11.829	8.9618	8.6618	10.1618
9.1618	8.4618	10.899	9.7618	11.829	8.9618	11.289	8.7618	11.129	10.1618	12.089	9.1618	8.4618	10.899	9.7618	11.829	8.9618	8.6618	10.1618
9.365	8.665	10.899	9.965	11.829	9.165	11.289	8.965	11.129	10.365	12.099	9.365	8.665	10.899	9.965	11.829	9.165	8.865	10.365
9.9732	9.2732	10.899	10.5732	11.829	9.7732	11.289	9.5732	11.129	10.9732	12.099	9.9732	9.2732	10.899	10.5732	11.829	9.7732	9.4732	10.9732
10.5812	9.8812	10.899	11.1812	11.839	10.3812	11.289	10.1812	11.129	11.5812	12.109	10.5812	9.8812	10.899	11.1812	11.829	10.3812	10.0812	11.5812
10.8828	10.0828	10.899	11.5828	11.839	10.6828	11.289	10.4828	11.129	11.9828	12.109	10.8828	10.0828	10.899	11.4828	11.839	10.6828	10.3828	11.9828
10.8828	10.0828	10.899	11.6828	11.839	10.7828	11.289	10.4828	11.129	12.0828	12.119	10.9828	10.0828	10.899	11.5828	11.839	10.7828	10.3828	12.0828
10.9828	10.0828	10.899	11.6828	11.839	10.7828	11.289	10.4828	11.129	12.1828	12.119	10.9828	10.0828	10.899	11.6828	11.839	10.7828	10.3828	12.1828
10.9828	10.0828	10.899	11.7828	11.839	10.7828	11.289	10.4828	11.129	12.1828	12.119	10.9828	10.0828	10.899	11.6828	11.839	10.7828	10.4828	12.1828
10.9828	10.0828	10.899	11.7828	11.839	10.7828	11.289	10.4828	11.129	12.1828	12.119	10.9828	10.0828	10.899	11.6828	11.839	10.7828	10.4828	12.2828
10.9828	10.0828	10.899	11.7828	11.839	10.7828	11.289	10.4828	11.129	12.2828	12.129	10.9828	10.0828	10.899	11.7828	11.839	10.7828	10.4828	12.2828
10.9828	10.0828	10.899	11.7828	11.839	10.7828	11.289	10.4828	11.129	12.2828	12.129	10.9828	10.0828	10.899	11.7828	11.839	10.7828	10.4828	12.2828
11.186	10.286	10.899	11.986	11.839	10.986	11.289	10.686	11.129	12.486	12.129	11.186	10.286	10.899	11.986	11.839	10.986	10.686	12.486
11.186	10.286	10.899	11.986	11.849	10.986	11.289	10.686	11.129	12.486	12.129	11.186	10.286	10.899	11.986	11.839	10.986	10.686	12.586

11.186	10.286	10.899	12.086	11.849	10.986	11.289	10.686	11.129	12.586	12.129	11.186	10.286	10.899	11.986	11.839	10.986	10.686	12.586
11.186	10.286	10.899	12.086	11.849	10.986	11.289	10.686	11.129	12.586	12.139	11.186	10.286	10.899	11.986	11.839	10.986	10.686	12.586
11.7956	10.8956	10.899	12.6956	11.849	11.5956	11.289	11.2956	11.129	13.1956	12.139	11.7956	10.8956	10.899	12.5956	11.839	11.5956	11.1956	13.1956
11.7956	10.8956	10.899	12.6956	11.849	11.5956	11.289	11.2956	11.129	13.1956	12.139	11.7956	10.8956	10.899	12.5956	11.849	11.5956	11.2956	13.1956
12.3974	11.4974	10.899	13.2974	11.849	12.1974	11.289	11.8974	11.129	13.7974	12.139	12.3974	11.4974	10.899	13.1974	11.849	12.1974	11.7974	13.7974
12.9946	12.0946	10.899	13.8946	11.849	12.7946	11.289	12.4946	11.129	14.3946	12.139	12.9946	12.0946	10.899	13.7946	11.849	12.7946	12.3946	14.3946
13.5946	12.5946	11.0768	14.4946	12.0268	13.3946	11.4668	13.0946	11.3068	14.9946	12.3168	13.5946	12.5946	11.0768	14.3946	12.0268	13.3946	12.9946	14.9946
13.8962	12.7962	11.2102	14.8962	12.1402	13.6962	11.5802	13.3962	11.4202	15.3962	12.4302	13.8962	12.7962	11.1402	14.7962	12.1302	13.6962	13.2962	15.4962
13.9962	12.7962	11.3202	14.9962	12.2802	13.7962	11.7202	13.4962	11.5502	15.5962	12.5902	13.9962	12.7962	11.3402	14.9962	12.2802	13.7962	13.3962	15.5962
14.0962	12.7962	11.3302	15.0962	12.3102	13.8962	11.7302	13.4962	11.5702	15.6962	12.6202	14.0962	12.7962	11.3402	15.0962	12.3002	13.8962	13.3962	15.6962
14.2994	12.9994	11.3302	15.3994	12.3202	14.0994	11.7402	13.6994	11.5702	15.9994	12.6402	14.2994	12.9994	11.3402	15.2994	12.3202	14.0994	13.5994	15.9994
14.2994	12.9994	11.3302	15.3994	12.3302	14.0994	11.7402	13.6994	11.5802	15.9994	12.6602	14.2994	12.9994	11.3402	15.3994	12.3302	14.0994	13.5994	16.0994
14.6042	13.3042	11.3302	15.7042	12.3302	14.4042	11.7502	14.0042	11.5802	16.4042	12.6602	14.7042	13.3042	11.3402	15.7042	12.3302	14.5042	13.9042	16.4042
14.7042	13.3042	11.3302	15.8042	12.3402	14.4042	11.7502	14.0042	11.5802	16.4042	12.6702	14.7042	13.3042	11.3402	15.7042	12.3402	14.5042	13.9042	16.5042
14.7042	13.3042	11.3302	15.8042	12.3402	14.4042	11.7502	14.0042	11.5802	16.5042	12.6802	14.7042	13.3042	11.3402	15.8042	12.3402	14.5042	13.9042	16.5042
14.7042	13.3042	11.3302	15.8042	12.3502	14.4042	11.7502	14.0042	11.5802	16.5042	12.6802	14.7042	13.3042	11.3402	15.8042	12.3502	14.5042	13.9042	16.5042
14.7042	13.3042	11.3302	15.8042	12.3502	14.5042	11.7502	14.0042	11.5802	16.5042	12.6902	14.7042	13.3042	11.3402	15.8042	12.3502	14.5042	13.9042	16.6042
15.2122	13.8122	11.3302	16.4122	12.3502	15.0122	11.7502	14.5122	11.5802	17.1122	12.6902	15.2122	13.8122	11.3402	16.3122	12.3502	15.0122	14.4122	17.1122
15.2122	13.8122	11.3302	16.4122	12.3502	15.0122	11.7502	14.5122	11.5802	17.1122	12.7002	15.2122	13.8122	11.3402	16.3122	12.3502	15.0122	14.4122	17.1122
15.2122	13.8122	11.3302	16.4122	12.3602	15.0122	11.7502	14.5122	11.5802	17.1122	12.7002	15.2122	13.8122	11.3402	16.3122	12.3502	15.0122	14.4122	17.1122
15.2122	13.8122	11.3302	16.4122	12.3602	15.0122	11.7502	14.5122	11.5802	17.1122	12.7002	15.2122	13.8122	11.3402	16.3122	12.3602	15.0122	14.4122	17.1122
15.2122	13.8122	11.3302	16.4122	12.3602	15.0122	11.7502	14.5122	11.5802	17.1122	12.7102	15.2122	13.8122	11.3402	16.3122	12.3602	15.0122	14.4122	17.2122
15.3138	13.9138	11.3302	16.5138	12.3602	15.1138	11.7502	14.6138	11.5802	17.2138	12.7102	15.3138	13.9138	11.3402	16.5138	12.3602	15.1138	14.5138	17.3138
15.3138	13.9138	11.3302	16.5138	12.3602	15.1138	11.7502	14.6138	11.5802	17.3138	12.7102	15.3138	13.9138	11.3402	16.5138	12.3602	15.1138	14.5138	17.3138
15.3138	13.9138	11.3302	16.5138	12.3602	15.1138	11.7502	14.6138	11.5802	17.3138	12.7102	15.3138	13.9138	11.3402	16.5138	12.3602	15.1138	14.5138	17.3138
15.3138	13.9138	11.3302	16.5138	12.3602	15.1138	11.7502	14.6138	11.5802	17.3138	12.7102	15.3138	13.9138	11.3402	16.5138	12.3602	15.1138	14.5138	17.3138
15.3138	13.9138	11.3302	16.5138	12.3602	15.1138	11.7502	14.6138	11.5802	17.3138	12.7202	15.3138	13.9138	11.3402	16.5138	12.3602	15.1138	14.5138	17.3138
15.3138	13.9138	11.3302	16.5138	12.3602	15.1138	11.7502	14.6138	11.5802	17.3138	12.7202	15.3138	13.9138	11.3402	16.5138	12.3602	15.1138	14.5138	17.3138
15.3138	13.9138	11.3302	16.5138	12.3702	15.1138	11.7502	14.6138	11.5802	17.3138	12.7202	15.3138	13.9138	11.3402	16.5138	12.3602	15.1138	14.5138	17.3138
15.3138	13.9138	11.3302	16.5138	12.3702	15.1138	11.7502	14.6138	11.5802	17.3138	12.7202	15.3138	13.9138	11.3402	16.5138	12.3602	15.1138	14.5138	17.3138
15.3138	13.9138	11.3302	16.5138	12.3702	15.1138	11.7502	14.6138	11.5802	17.3138	12.7202	15.3138	13.9138	11.3402	16.5138	12.3602	15.1138	14.5138	17.3138
15.3138	13.9138	11.3302	16.5138	12.3702	15.1138	11.7502	14.6138	11.5802	17.3138	12.7202	15.3138	13.9138	11.3402	16.5138	12.3702	15.1138	14.5138	17.3138
15.3138	13.9138	11.3302	16.5138	12.3702	15.1138	11.7502	14.6138	11.5802	17.3138	12.7302	15.3138	13.9138	11.3402	16.5138	12.3702	15.1138	14.5138	17.4138
15.3138	13.9138	11.3302	16.5138	12.3702	15.1138	11.7502	14.6138	11.5802	17.3138	12.7302	15.3138	13.9138	11.3402	16.5138	12.3702	15.1138	14.5138	17.4138
15.4154	14.0154	11.3302	16.6154	12.3702	15.2154	11.7502	14.7154	11.5802	17.4154	12.7302	15.4154	14.0154	11.3402	16.6154	12.3702	15.2154	14.6154	17.5154
15.6186	14.2186	11.3302	16.8186	12.3702	15.4186	11.7502	14.9186	11.5802	17.6186	12.7302	15.6186	14.2186	11.3402	16.8186	12.3702	15.4186	14.8186	17.7186
15.6186	14.2186	11.3302	16.8186	12.3702	15.4186	11.7502	14.9186	11.5802	17.6186	12.7302	15.6186	14.2186	11.3402	16.8186	12.3702	15.4186	14.8186	17.7186
15.6186	14.2186	11.3302	16.8186	12.3702	15.4186	11.7502	14.9186	11.5802	17.6186	12.7302	15.6186	14.2186	11.3402	16.8186	12.3702	15.4186	14.8186	17.7186
15.6186	14.2186	11.3302	16.8186	12.3702	15.4186	11.7502	14.9186	11.5802	17.7186	12.7302	15.6186	14.2186	11.3402	16.8186	12.3702	15.4186	14.8186	17.7186
15.6186	14.2186	11.3302	16.8186	12.3702	15.4186	11.7502	14.9186	11.5802	17.7186	12.7302	15.6186	14.2186	11.3402	16.8186	12.3702	15.4186	14.8186	17.7186
15.6186	14.2186	11.3302	16.8186	12.3702	15.4186	11.7502	14.9186	11.5802	17.7186	12.7302	15.6186	14.2186	11.3402	16.8186	12.3702	15.4186	14.8186	17.7186
15.6186	14.2186	11.3302	16.8186	12.3702	15.4186	11.7502	14.9186	11.5802	17.7186	12.7302	15.6186	14.2186	11.3402	16.8186	12.3702	15.4186	14.8186	17.7186
15.6186	14.2186	11.3302	16.8186	12.3702	15.4186	11.7502	14.9186	11.5802	17.7186	12.7302	15.6186	14.2186	11.3402	16.8186	12.3702	15.4186	14.8186	17.7186
15.6186	14.2186	11.3302	16.8186	12.3702	15.4186	11.7502	14.9186	11.5802	17.7186	12.7302	15.6186	14.2186	11.3402	16.8186	12.3702	15.4186	14.8186	17.7186
15.6186	14.2186	11.3302	16.8186	12.3702	15.4186	11.7502	14.9186	11.5802	17.7186	12.7402	15.6186	14.2186	11.3402	16.8186	12.3702	15.4186	14.8186	17.7186
15.6186	14.2186	11.3302	16.8186	12.3702	15.4186	11.7502	14.9186	11.5802	17.7186	12.7402	15.6186	14.2186	11.3402	16.8186	12.3702	15.4186	14.8186	17.7186
15.6186	14.2186	11.3302	16.8186	12.3702	15.4186	11.7502	14.9186	11.5802	17.7186	12.7402	15.6186	14.2186	11.3402	16.8186	12.3702	15.4186	14.8186	17.7186

LOAM5M1M Cum E (cm)	LOAM5M30CM Cum E (cm)		LOAM5M3M Cum E (cm)		SAND1MFlat Cum E (cm)	SAND1MTop Cum E (cm)	SAND1MBott Cum E (cm)	SAND1M1M Cum E (cm)	SAND1M30CM Cum E (cm)		SAND1M3M Cum E (cm)		SAND2MFlat Cum E (cm)	SAND2MTop Cum E (cm)	SAND2MBottom Cum E (cm)
A	A	B	A	B	A	A	A	A	A	B	A	B	A	A	A
0	0	0	0	0	0	0	0.06	0	0	0	0	0	0	0	0
0	0	0.0508	0	0.0508	0	0	0.09	0	0	0.0508	0	0.0508	0	0	0
0.5906	0.5906	0.137	0.6906	0.127	0.5806	0.5906	0.6906	0.5906	0.5906	0.127	0.6906	0.127	0.5906	0.6906	0.6906
1.1986	1.1986	0.137	1.2986	0.127	1.1986	1.1986	1.2886	1.1986	1.1986	0.127	1.1986	0.127	1.1986	1.1986	1.1986
1.4002	1.3002	0.137	1.4002	0.137	1.3002	1.3002	1.5202	1.3002	1.3002	0.127	1.4002	0.127	1.3002	1.3002	1.4002
1.4002	1.3002	0.137	1.5002	0.137	1.3002	1.3002	1.5702	1.4002	1.3002	0.127	1.4002	0.127	1.3002	1.3002	1.4002
1.4002	1.3002	0.137	1.5002	0.137	1.4002	1.3002	1.6102	1.4002	1.3002	0.127	1.4002	0.127	1.3002	1.3002	1.5002
1.4002	1.3002	0.137	1.5002	0.137	1.4002	1.3002	1.6402	1.4002	1.3002	0.127	1.4002	0.127	1.3002	1.3002	1.5002
1.4002	1.3002	0.137	1.5002	0.137	1.4002	1.3002	1.6602	1.4002	1.3002	0.127	1.5002	0.127	1.3002	1.3002	1.5002
1.4002	1.3002	0.137	1.5002	0.137	1.4002	1.3002	1.6802	1.4002	1.3002	0.127	1.5002	0.127	1.3002	1.3002	1.5002
1.4002	1.3002	0.137	1.5002	0.137	1.4002	1.3002	1.7002	1.4002	1.3002	0.127	1.5002	0.127	1.3002	1.3002	1.5002
1.8066	1.7066	0.137	1.9066	0.137	1.8066	1.7066	2.1266	1.8066	1.7066	0.127	1.9066	0.127	1.7066	1.7066	1.9066
1.8066	1.7066	0.137	1.9066	0.137	1.8066	1.7066	2.1366	1.8066	1.7066	0.127	1.9066	0.127	1.7066	1.7066	1.9066
1.8066	1.7066	0.137	1.9066	0.137	1.8066	1.7066	2.1566	1.8066	1.7066	0.127	1.9066	0.127	1.7066	1.7066	1.9066
1.8066	1.7066	0.137	1.9066	0.137	1.8066	1.7066	2.1666	1.8066	1.7066	0.127	1.9066	0.127	1.7066	1.7066	1.9066
1.8066	1.7066	0.137	1.9066	0.137	1.8066	1.7066	2.1766	1.8066	1.7066	0.127	1.9066	0.127	1.7066	1.7066	1.9066
1.8066	1.7066	0.137	1.9066	0.137	1.8066	1.7066	2.1866	1.8066	1.7066	0.127	1.9066	0.127	1.7066	1.7066	1.9066
1.8066	1.7066	0.137	1.9066	0.137	1.8066	1.7066	2.1966	1.8066	1.7066	0.127	1.9066	0.127	1.7066	1.7066	1.9066
2.0098	1.9098	0.137	2.1098	0.137	2.0098	1.9098	2.4098	2.0098	1.9098	0.127	2.1098	0.127	1.9098	1.9098	2.1098
2.0098	1.9098	0.137	2.1098	0.137	2.0098	1.9098	2.4198	2.0098	1.9098	0.127	2.1098	0.127	1.9098	1.9098	2.1098
2.0098	1.9098	0.137	2.1098	0.137	2.0098	1.9098	2.4298	2.0098	1.9098	0.127	2.1098	0.127	1.9098	1.9098	2.1098
2.0098	1.9098	0.4926	2.1098	0.4926	2.0098	1.9098	2.4398	2.0098	1.9098	0.4826	2.1098	0.4826	1.9098	1.9098	2.1098
2.0098	1.9098	0.4926	2.1098	0.4926	2.0098	1.9098	2.4498	2.0098	1.9098	0.4826	2.1098	0.4826	1.9098	1.9098	2.1098
2.0098	1.9098	0.4926	2.1098	0.4926	2.0098	1.9098	2.4598	2.0098	1.9098	0.4826	2.1098	0.4826	1.9098	1.9098	2.1098
2.0098	1.9098	0.4926	2.1098	0.4926	2.0098	1.9098	2.4698	2.0098	1.9098	0.4826	2.1098	0.4826	1.9098	1.9098	2.1098
2.0098	1.9098	0.4926	2.1098	0.4926	2.0098	1.9098	2.4698	2.0098	1.9098	0.4826	2.1098	0.4826	1.9098	1.9098	2.1098
2.0098	1.9098	0.4926	2.1098	0.4926	2.0098	1.9098	2.4798	2.0098	1.9098	0.4826	2.1098	0.4826	1.9098	1.9098	2.1098
2.0098	1.9098	0.4926	2.1098	0.4926	2.0098	1.9098	2.4898	2.0098	1.9098	0.4826	2.1098	0.4826	1.9098	1.9098	2.1098
2.0098	1.9098	0.4926	2.1098	0.4926	2.0098	1.9098	2.4898	2.0098	1.9098	0.4826	2.1098	0.4826	1.9098	1.9098	2.1098
2.0098	1.9098	0.4926	2.1098	0.4926	2.0098	1.9098	2.4998	2.0098	1.9098	0.4826	2.1098	0.4826	1.9098	1.9098	2.1098
2.0098	1.9098	0.4926	2.1098	0.4926	2.0098	1.9098	2.4998	2.0098	1.9098	0.4826	2.1098	0.4826	1.9098	1.9098	2.1098
2.0098	1.9098	0.4926	2.1098	0.4926	2.0098	1.9098	2.5098	2.0098	1.9098	0.4826	2.1098	0.4826	1.9098	1.9098	2.1098
2.0098	1.9098	0.645	2.1098	0.645	2.0098	1.9098	2.5098	2.0098	1.9098	0.635	2.1098	0.635	1.9098	1.9098	2.1098
2.0098	1.9098	0.645	2.1098	0.645	2.0098	1.9098	2.5198	2.0098	1.9098	0.635	2.1098	0.635	1.9098	1.9098	2.1098
2.0098	1.9098	0.645	2.1098	0.645	2.0098	1.9098	2.5298	2.0098	1.9098	0.635	2.1098	0.635	1.9098	1.9098	2.1098
2.0098	1.9098	0.645	2.1098	0.645	2.0098	1.9098	2.5298	2.0098	1.9098	0.635	2.1098	0.635	1.9098	1.9098	2.1098
2.0098	1.9098	0.645	2.1098	0.645	2.0098	1.9098	2.5398	2.0098	1.9098	0.635	2.1098	0.635	1.9098	1.9098	2.1098
2.0098	1.9098	0.645	2.1098	0.645	2.0098	1.9098	2.5398	2.0098	1.9098	0.635	2.1098	0.635	1.9098	1.9098	2.1098
2.0098	1.9098	0.6704	2.1098	0.6704	2.0098	1.9098	2.5498	2.0098	1.9098	0.6604	2.1098	0.6604	1.9098	1.9098	2.1098
2.0098	1.9098	0.7212	2.1098	0.7212	2.0098	1.9098	2.5498	2.0098	1.9098	0.7112	2.1098	0.7112	1.9098	1.9098	2.1098

2.6052	2.5052	0.772	2.7052	0.772	2.6052	2.5052	3.1452	2.6052	2.5052	0.762	2.7052	0.762	2.5052	2.5052	2.7052
3.0084	2.9084	0.772	3.2084	0.772	2.9084	2.9084	3.6184	2.9084	2.8084	0.762	3.1084	0.762	2.9084	2.9084	3.1084
3.1084	2.9084	0.772	3.2084	0.772	3.0084	2.9084	3.6784	3.0084	2.8084	0.762	3.1084	0.762	2.9084	2.9084	3.2084
3.1084	2.9084	1.3054	3.2084	1.3054	3.0084	2.9084	3.7284	3.0084	2.8084	1.2954	3.1084	1.2954	2.9084	2.9084	3.2084
3.1084	2.9084	1.3054	3.2084	1.3054	3.0084	2.9084	3.7584	3.0084	2.8084	1.2954	3.1084	1.2954	2.9084	2.9084	3.2084
3.21	3.01	1.3054	3.31	1.3054	3.11	3.01	3.88	3.11	2.91	1.2954	3.21	1.2954	3.01	3.01	3.31
3.21	3.01	1.3054	3.31	1.3054	3.11	3.01	3.9	3.11	2.91	1.2954	3.31	1.2954	3.01	3.01	3.31
3.3116	3.1116	1.3054	3.5116	1.3054	3.2116	3.1116	4.0216	3.2116	3.0116	1.2954	3.4116	1.2954	3.1116	3.1116	3.4116
3.3116	3.1116	1.3054	3.5116	1.3054	3.2116	3.1116	4.0316	3.2116	3.0116	1.2954	3.4116	1.2954	3.1116	3.1116	3.4116
3.3116	3.1116	1.3054	3.5116	1.3054	3.2116	3.1116	4.0516	3.2116	3.0116	1.2954	3.4116	1.2954	3.1116	3.1116	3.4116
3.3116	3.1116	1.3308	3.5116	1.3308	3.2116	3.1116	4.0616	3.2116	3.0116	1.3208	3.4116	1.3208	3.1116	3.1116	3.4116
3.3116	3.1116	1.3562	3.5116	1.3562	3.2116	3.1116	4.0716	3.2116	3.0116	1.3462	3.4116	1.3462	3.1116	3.1116	3.4116
3.3116	3.1116	2.1896	3.5116	2.1996	3.2116	3.1116	4.0816	3.2116	3.0116	2.1896	3.4116	2.1996	3.1116	3.1116	3.4116
3.3116	3.1116	3.01	3.5116	3.04	3.2116	3.1116	4.0916	3.2116	3.0116	2.96	3.4116	3.04	3.1116	3.1116	3.5116
3.3116	3.1116	3.0454	3.5116	3.1554	3.2116	3.1116	4.1016	3.2116	3.0116	2.9854	3.4116	3.1354	3.1116	3.1116	3.5116
3.3116	3.1116	3.3502	3.5116	3.5002	3.2116	3.1116	4.1116	3.2116	3.0116	3.2902	3.4116	3.4602	3.1116	3.1116	3.5116
3.3116	3.1116	3.3602	3.5116	3.5202	3.2116	3.1116	4.1216	3.2116	3.0116	3.2902	3.4116	3.4802	3.1116	3.1116	3.5116
3.3116	3.1116	3.3602	3.5116	3.5302	3.2116	3.1116	4.1316	3.2116	3.0116	3.2902	3.4116	3.4902	3.1116	3.1116	3.5116
3.3116	3.1116	3.3602	3.5116	3.5402	3.2116	3.1116	4.1416	3.2116	3.0116	3.2902	3.4116	3.5002	3.1116	3.1116	3.5116
3.3116	3.1116	3.3602	3.5116	3.5502	3.2116	3.1116	4.1416	3.2116	3.0116	3.2902	3.4116	3.5002	3.1116	3.1116	3.5116
3.3116	3.1116	3.3602	3.5116	3.5602	3.2116	3.1116	4.1516	3.2116	3.0116	3.2902	3.4116	3.5002	3.1116	3.1116	3.5116
3.3116	3.1116	3.3602	3.5116	3.5602	3.2116	3.1116	4.1616	3.2116	3.0116	3.2902	3.4116	3.5102	3.1116	3.1116	3.5116
3.3116	3.1116	3.411	3.5116	3.621	3.2116	3.1116	4.1616	3.2116	3.0116	3.341	3.4116	3.561	3.1116	3.1116	3.5116
3.3116	3.1116	3.411	3.5116	3.621	3.2116	3.1116	4.1716	3.2116	3.0116	3.341	3.4116	3.561	3.1116	3.1116	3.5116
3.3116	3.1116	3.411	3.5116	3.631	3.2116	3.1116	4.1816	3.2116	3.0116	3.341	3.4116	3.561	3.1116	3.1116	3.5116
3.3116	3.1116	3.4364	3.5116	3.6564	3.2116	3.1116	4.1816	3.2116	3.0116	3.3664	3.4116	3.5864	3.1116	3.1116	3.5116
3.3116	3.1116	3.4364	3.5116	3.6564	3.2116	3.1116	4.1916	3.2116	3.0116	3.3664	3.4116	3.5864	3.1116	3.1116	3.5116
3.3116	3.1116	3.4364	3.5116	3.6564	3.2116	3.1116	4.1916	3.2116	3.0116	3.3664	3.4116	3.5864	3.1116	3.1116	3.5116
3.4132	3.2132	3.7158	3.6132	3.9358	3.3132	3.2132	4.3032	3.3132	3.1132	3.6458	3.5132	3.8658	3.2132	3.2132	3.6132
3.718	3.518	3.792	3.918	4.012	3.618	3.518	4.608	3.618	3.418	3.722	3.818	3.942	3.518	3.518	3.918
4.323	4.123	4.2746	4.523	4.5046	4.223	3.823	5.183	4.223	4.023	4.2046	4.423	4.4246	4.123	4.123	4.523
4.7246	4.5246	4.8552	4.9246	5.0852	4.6246	4.3246	5.6846	4.6246	4.3246	4.7952	4.8246	5.0152	4.5246	4.5246	4.9246
4.8246	4.5246	4.9652	5.0246	5.2552	4.6246	4.4246	5.8846	4.6246	4.3246	4.8752	4.9246	5.1552	4.6246	4.5246	5.0246
4.8246	4.5246	5.8674	5.1246	6.1474	4.6246	4.4246	5.9146	4.7246	4.3246	5.7774	4.9246	6.0474	4.6246	4.5246	5.0246
4.9246	4.5246	5.9782	5.1246	6.3282	4.6246	4.5246	5.9646	4.7246	4.3246	5.8682	4.9246	6.2082	4.6246	4.5246	5.0246
4.9246	4.5246	6.283	5.1246	6.653	4.6246	4.5246	6.0046	4.7246	4.3246	6.173	4.9246	6.533	4.6246	4.5246	5.1246
4.9246	4.5246	6.3846	5.1246	6.7746	4.6246	4.5246	6.0346	4.7246	4.3246	6.2746	4.9246	6.6446	4.6246	4.5246	5.1246
4.9246	4.5246	6.41	5.1246	6.81	4.6246	4.5246	6.0646	4.7246	4.3246	6.3	4.9246	6.68	4.6246	4.5246	5.1246
4.9246	4.5246	6.41	5.2246	6.82	4.6246	4.5246	6.0946	4.7246	4.3246	6.3	4.9246	6.68	4.6246	4.5246	5.1246
4.9246	4.5246	6.4354	5.2246	6.8454	4.6246	4.5246	6.1146	4.7246	4.3246	6.3254	5.0246	6.7154	4.6246	4.5246	5.1246
4.9246	4.5246	6.4354	5.2246	6.8554	4.6246	4.5246	6.1346	4.7246	4.3246	6.3254	5.0246	6.7154	4.6246	4.5246	5.1246
4.9246	4.5246	6.4354	5.2246	6.8554	4.6246	4.5246	6.1546	4.7246	4.3246	6.3254	5.0246	6.7154	4.6246	4.5246	5.1246
4.9246	4.5246	6.4354	5.2246	6.8554	4.6246	4.5246	6.1746	4.7246	4.3246	6.3254	5.0246	6.7154	4.6246	4.5246	5.1246
4.9246	4.5246	6.4354	5.2246	6.8654	4.6246	4.5246	6.1946	4.7246	4.3246	6.3254	5.0246	6.7154	4.6246	4.5246	5.1246
4.9246	4.5246	7.0196	5.2246	7.4496	4.6246	4.5246	6.2046	4.7246	4.3246	6.9096	5.0246	7.2996	4.6246	4.5246	5.1246
4.9246	4.5246	7.172	5.2246	7.602	4.6246	4.5246	6.2146	4.7246	4.3246	7.062	5.0246	7.452	4.6246	4.5246	5.1246
4.9246	4.5246	7.172	5.2246	7.602	4.6246	4.5246	6.2346	4.7246	4.3246	7.062	5.0246	7.452	4.6246	4.5246	5.1246
4.9246	4.5246	7.182	5.2246	7.602	4.6246	4.5246	6.2446	4.7246	4.3246	7.062	5.0246	7.462	4.6246	4.5246	5.1246

4.9246	4.5246	7.6392	5.2246	8.0592	4.6246	4.5246	6.2546	4.7246	4.3246	7.5192	5.0246	7.9192	4.6246	4.5246	5.1246
4.9246	4.5246	7.6392	5.2246	8.0592	4.6246	4.5246	6.2646	4.7246	4.3246	7.5192	5.0246	7.9192	4.6246	4.5246	5.1246
4.9246	4.5246	7.69	5.2246	8.11	4.6246	4.5246	6.2746	4.7246	4.3246	7.57	5.0246	7.97	4.6246	4.5246	5.1246
4.9246	4.5246	7.69	5.2246	8.12	4.6246	4.5246	6.2846	4.7246	4.3246	7.57	5.0246	7.97	4.6246	4.5246	5.1246
5.5358	5.1358	7.9186	5.8358	8.3486	5.2358	5.1358	6.8858	5.3358	4.9358	7.7986	5.6358	8.1986	5.2358	5.1358	5.7358
5.6374	5.2374	7.9694	5.9374	8.3994	5.4374	5.2374	7.0674	5.4374	5.0374	7.8494	5.7374	8.2494	5.3374	5.2374	5.9374
5.6374	5.2374	7.9694	6.0374	8.3994	5.4374	5.2374	7.0874	5.4374	5.0374	7.8494	5.7374	8.2494	5.3374	5.2374	5.9374
5.739	5.339	7.9694	6.139	8.3994	5.539	5.339	7.199	5.539	5.139	7.8494	5.839	8.2494	5.439	5.339	6.039
5.739	5.339	7.9694	6.139	8.3994	5.539	5.339	7.209	5.539	5.139	7.8494	5.839	8.2494	5.439	5.339	6.039
5.739	5.339	7.9694	6.139	8.3994	5.539	5.339	7.219	5.539	5.139	7.8494	5.839	8.2494	5.439	5.339	6.039
6.3408	5.9408	7.9694	6.7408	8.3994	6.1408	5.9408	7.8008	6.1408	5.7408	7.8494	6.4408	8.2494	6.0408	5.9408	6.6408
6.6408	6.2408	8.453	7.0408	8.873	6.3408	6.1408	8.2008	6.4408	5.9408	8.323	6.7408	8.743	6.3408	6.2408	6.9408
6.7408	6.2408	8.823	7.1408	9.343	6.4408	6.2408	8.3008	6.4408	5.9408	8.623	6.8408	9.153	6.3408	6.2408	7.0408
6.7408	6.2408	8.843	7.1408	9.433	6.4408	6.2408	8.4008	6.4408	5.9408	8.623	6.8408	9.223	6.4408	6.2408	7.0408
6.7408	6.2408	8.843	7.1408	9.483	6.4408	6.2408	8.4008	6.4408	5.9408	8.623	6.8408	9.263	6.4408	6.2408	7.1408
6.7408	6.2408	8.843	7.2408	9.513	6.4408	6.2408	8.5008	6.4408	5.9408	8.623	6.8408	9.283	6.4408	6.2408	7.1408
6.8408	6.2408	8.843	7.2408	9.543	6.4408	6.2408	8.5008	6.4408	5.9408	8.623	6.8408	9.303	6.4408	6.2408	7.1408
6.8408	6.2408	8.843	7.2408	9.553	6.4408	6.2408	8.5208	6.4408	5.9408	8.623	6.8408	9.313	6.4408	6.2408	7.1408
6.8408	6.2408	8.843	7.2408	9.573	6.4408	6.2408	8.5508	6.4408	5.9408	8.623	6.8408	9.323	6.4408	6.2408	7.1408
6.8408	6.2408	8.843	7.2408	9.583	6.4408	6.2408	8.5708	6.4408	5.9408	8.623	6.9408	9.323	6.4408	6.2408	7.1408
6.8408	6.2408	8.843	7.2408	9.593	6.4408	6.2408	8.5908	6.4408	5.9408	8.623	6.9408	9.333	6.4408	6.2408	7.1408
6.8408	6.2408	9.3172	7.2408	10.0672	6.4408	6.2408	8.6008	6.4408	5.9408	9.1072	6.9408	9.8072	6.4408	6.2408	7.1408
6.8408	6.2408	9.3826	7.2408	10.1626	6.4408	6.2408	8.6208	6.4408	5.9408	9.1326	6.9408	9.8826	6.4408	6.2408	7.1408
6.8408	6.2408	9.6366	7.2408	10.4266	6.4408	6.2408	8.6408	6.4408	5.9408	9.3866	6.9408	10.1466	6.4408	6.2408	7.2408
7.4362	6.8362	9.7636	7.8362	10.5636	7.0362	6.8362	9.1962	7.0362	6.6362	9.5136	7.5362	10.2836	7.0362	6.8362	7.8362
7.6362	7.0362	10.043	8.1362	10.843	7.2362	6.9362	9.4962	7.2362	6.7362	9.793	7.7362	10.563	7.2362	7.0362	8.0362
8.2474	7.6474	10.6612	8.7474	11.4612	7.8474	7.5474	10.1074	7.8474	7.3474	10.4312	8.3474	11.1812	7.7474	7.6474	8.6474
8.8602	8.2602	10.7566	9.3602	11.6066	8.4602	8.1602	10.7202	8.4602	7.9602	10.4566	8.9602	11.3066	8.3602	8.2602	9.2602
8.9602	8.3602	10.7566	9.5602	11.6266	8.5602	8.2602	11.0202	8.5602	7.9602	10.4566	9.0602	11.3166	8.5602	8.3602	9.4602
9.1618	8.4618	10.7566	9.6618	11.6366	8.6618	8.3618	11.1218	8.7618	8.0618	10.4566	9.2618	11.3266	8.6618	8.4618	9.5618
9.1618	8.4618	10.7566	9.6618	11.6466	8.6618	8.3618	11.2218	8.7618	8.0618	10.4566	9.2618	11.3366	8.6618	8.4618	9.6618
9.1618	8.4618	10.8836	9.7618	11.7836	8.6618	8.3618	11.2218	8.7618	8.0618	10.5836	9.2618	11.4636	8.6618	8.4618	9.6618
9.1618	8.4618	10.909	9.7618	11.819	8.6618	8.3618	11.2218	8.7618	8.0618	10.609	9.2618	11.499	8.6618	8.4618	9.6618
9.1618	8.4618	10.909	9.7618	11.819	8.6618	8.3618	11.3218	8.7618	8.0618	10.609	9.2618	11.499	8.6618	8.4618	9.6618
9.1618	8.4618	10.909	9.7618	11.819	8.6618	8.3618	11.3218	8.7618	8.0618	10.609	9.2618	11.499	8.6618	8.4618	9.6618
9.1618	8.4618	10.909	9.7618	11.829	8.6618	8.3618	11.3218	8.7618	8.0618	10.609	9.2618	11.499	8.6618	8.4618	9.6618
9.365	8.665	10.909	9.965	11.829	8.865	8.565	11.525	8.965	8.265	10.609	9.465	11.499	8.865	8.665	9.865
9.9732	9.2732	10.909	10.5732	11.829	9.4732	9.1732	12.1332	9.5732	8.8732	10.609	10.0732	11.499	9.4732	9.2732	10.4732
10.5812	9.8812	10.909	11.1812	11.829	10.0812	9.7812	12.7412	10.1812	9.4812	10.609	10.6812	11.499	10.0812	9.8812	11.0812
10.8828	10.0828	10.909	11.5828	11.829	10.2828	9.9828	13.1428	10.3828	9.5828	10.609	10.9828	11.499	10.2828	10.0828	11.4828
10.8828	10.0828	10.909	11.6828	11.839	10.3828	9.9828	13.3428	10.4828	9.5828	10.609	11.0828	11.499	10.2828	10.0828	11.4828
10.9828	10.0828	10.909	11.6828	11.839	10.3828	9.9828	13.3428	10.4828	9.5828	10.609	11.0828	11.509	10.3828	10.0828	11.5828
10.9828	10.0828	10.909	11.6828	11.839	10.3828	9.9828	13.4428	10.4828	9.5828	10.609	11.1828	11.509	10.3828	10.0828	11.5828
10.9828	10.0828	10.909	11.7828	11.839	10.3828	9.9828	13.4428	10.4828	9.5828	10.609	11.1828	11.509	10.3828	10.0828	11.5828
10.9828	10.0828	10.909	11.7828	11.839	10.3828	9.9828	13.5428	10.4828	9.5828	10.609	11.1828	11.509	10.3828	10.0828	11.6828
10.9828	10.0828	10.909	11.7828	11.839	10.3828	9.9828	13.5428	10.4828	9.5828	10.609	11.1828	11.509	10.3828	10.0828	11.6828
11.186	10.286	10.909	11.986	11.839	10.586	10.186	13.846	10.686	9.786	10.609	11.386	11.509	10.586	10.286	11.886
11.186	10.286	10.909	11.986	11.839	10.586	10.186	13.846	10.686	9.786	10.609	11.386	11.509	10.586	10.286	11.886

11.186	10.286	10.909	11.986	11.839	10.586	10.186	13.846	10.686	9.786	10.609	11.386	11.509	10.586	10.286	11.886
11.186	10.286	10.909	11.986	11.839	10.586	10.186	13.846	10.686	9.786	10.609	11.386	11.509	10.586	10.286	11.886
11.7956	10.8956	10.919	12.5956	11.839	11.1956	10.7956	14.4556	11.2956	10.3956	10.609	11.9956	11.509	11.1956	10.8956	12.4956
11.7956	10.8956	10.919	12.6956	11.839	11.1956	10.7956	14.5556	11.2956	10.3956	10.609	11.9956	11.509	11.1956	10.8956	12.4956
12.3974	11.4974	10.919	13.2974	11.839	11.7974	11.3974	15.1574	11.8974	10.9974	10.609	12.5974	11.509	11.7974	11.4974	13.0974
12.9946	12.0946	10.919	13.8946	11.839	12.3946	11.9946	15.7546	12.4946	11.5946	10.609	13.1946	11.509	12.2946	12.0946	13.6946
13.5946	12.5946	11.0968	14.4946	12.0168	12.8946	12.4946	16.3546	12.9946	12.0946	10.7868	13.7946	11.6868	12.8946	12.5946	14.2946
13.8962	12.7962	11.1902	14.8962	12.1302	13.1962	12.6962	16.6562	13.1962	12.1962	10.9202	14.0962	11.8002	13.0962	12.7962	14.5962
13.9962	12.7962	11.2902	14.9962	12.2802	13.2962	12.7962	16.8562	13.2962	12.1962	11.0202	14.1962	11.9302	13.1962	12.7962	14.6962
14.0962	12.7962	11.3902	15.0962	12.3002	13.2962	12.7962	16.9562	13.2962	12.1962	11.0202	14.2962	11.9502	13.1962	12.7962	14.7962
14.2994	12.9994	11.3902	15.2994	12.3202	13.4994	12.9994	17.1594	13.4994	12.3994	11.0202	14.5994	11.9602	13.3994	12.9994	14.9994
14.2994	12.9994	11.3902	15.3994	12.3202	13.4994	12.9994	17.2594	13.4994	12.3994	11.0202	14.5994	11.9602	13.3994	12.9994	15.0994
14.7042	13.3042	11.3902	15.7042	12.3302	13.8042	13.3042	17.5642	13.8042	12.7042	11.0202	14.9042	11.9702	13.7042	13.3042	15.4042
14.7042	13.3042	11.3902	15.8042	12.3402	13.8042	13.3042	17.6642	13.8042	12.7042	11.0202	15.0042	11.9702	13.7042	13.3042	15.4042
14.7042	13.3042	11.3902	15.8042	12.3402	13.8042	13.3042	17.6642	13.8042	12.7042	11.0202	15.0042	11.9702	13.7042	13.3042	15.4042
14.7042	13.3042	11.3902	15.8042	12.3402	13.8042	13.3042	17.7642	13.8042	12.7042	11.0202	15.0042	11.9802	13.7042	13.3042	15.5042
14.7042	13.3042	11.3902	15.8042	12.3502	13.8042	13.3042	17.7642	13.8042	12.7042	11.0202	15.0042	11.9802	13.7042	13.3042	15.5042
15.2122	13.8122	11.3902	16.3122	12.3502	14.3122	13.8122	18.2722	14.3122	13.2122	11.0202	15.5122	11.9802	14.2122	13.8122	16.0122
15.2122	13.8122	11.3902	16.3122	12.3502	14.3122	13.8122	18.2722	14.3122	13.2122	11.0202	15.5122	11.9802	14.2122	13.8122	16.0122
15.2122	13.8122	11.3902	16.4122	12.3502	14.3122	13.8122	18.3722	14.3122	13.2122	11.0202	15.5122	11.9802	14.2122	13.8122	16.0122
15.2122	13.8122	11.3902	16.4122	12.3502	14.3122	13.8122	18.3722	14.3122	13.2122	11.0202	15.5122	11.9802	14.2122	13.8122	16.0122
15.2122	13.8122	11.3902	16.4122	12.3602	14.3122	13.8122	18.3722	14.3122	13.2122	11.0202	15.6122	11.9802	14.2122	13.8122	16.0122
15.3138	13.9138	11.3902	16.5138	12.3602	14.4138	13.9138	18.4738	14.4138	13.3138	11.0202	15.7138	11.9802	14.3138	13.9138	16.1138
15.3138	13.9138	11.3902	16.5138	12.3602	14.4138	13.9138	18.4738	14.4138	13.3138	11.0202	15.7138	11.9802	14.3138	13.9138	16.1138
15.3138	13.9138	11.3902	16.5138	12.3602	14.4138	13.9138	18.4738	14.4138	13.3138	11.0202	15.7138	11.9802	14.3138	13.9138	16.2138
15.3138	13.9138	11.3902	16.5138	12.3602	14.4138	13.9138	18.5738	14.4138	13.3138	11.0202	15.7138	11.9802	14.3138	13.9138	16.2138
15.3138	13.9138	11.3902	16.5138	12.3602	14.4138	13.9138	18.5738	14.4138	13.3138	11.0202	15.7138	11.9802	14.3138	13.9138	16.2138
15.3138	13.9138	11.3902	16.5138	12.3602	14.4138	13.9138	18.5738	14.4138	13.3138	11.0202	15.7138	11.9802	14.3138	13.9138	16.2138
15.3138	13.9138	11.3902	16.5138	12.3602	14.4138	13.9138	18.5738	14.4138	13.3138	11.0202	15.7138	11.9802	14.3138	13.9138	16.2138
15.3138	13.9138	11.3902	16.5138	12.3602	14.4138	13.9138	18.5738	14.4138	13.3138	11.0202	15.7138	11.9802	14.3138	13.9138	16.2138
15.3138	13.9138	11.3902	16.5138	12.3602	14.4138	13.9138	18.5738	14.4138	13.3138	11.0202	15.7138	11.9802	14.3138	13.9138	16.2138
15.3138	13.9138	11.3902	16.5138	12.3602	14.4138	13.9138	18.5738	14.4138	13.3138	11.0202	15.7138	11.9802	14.3138	13.9138	16.2138
15.3138	13.9138	11.3902	16.5138	12.3602	14.4138	13.9138	18.5738	14.4138	13.3138	11.0202	15.7138	11.9802	14.3138	13.9138	16.2138
15.3138	13.9138	11.3902	16.5138	12.3602	14.4138	13.9138	18.5738	14.4138	13.3138	11.0202	15.7138	11.9802	14.3138	13.9138	16.2138
15.4154	14.0154	11.3902	16.6154	12.3602	14.5154	14.0154	18.6754	14.5154	13.4154	11.0202	15.8154	11.9802	14.4154	14.0154	16.3154
15.6186	14.2186	11.3902	16.8186	12.3702	14.7186	14.2186	18.9786	14.7186	13.6186	11.0202	16.0186	11.9802	14.6186	14.2186	16.5186
15.6186	14.2186	11.3902	16.8186	12.3702	14.7186	14.2186	18.9786	14.7186	13.6186	11.0202	16.0186	11.9902	14.6186	14.2186	16.5186
15.6186	14.2186	11.3902	16.8186	12.3702	14.7186	14.2186	18.9786	14.7186	13.6186	11.0202	16.0186	11.9902	14.6186	14.2186	16.5186
15.6186	14.2186	11.3902	16.8186	12.3702	14.7186	14.2186	18.9786	14.7186	13.6186	11.0202	16.0186	11.9902	14.6186	14.2186	16.5186
15.6186	14.2186	11.3902	16.8186	12.3702	14.7186	14.2186	18.9786	14.7186	13.6186	11.0202	16.0186	11.9902	14.6186	14.2186	16.5186
15.6186	14.2186	11.3902	16.8186	12.3702	14.7186	14.2186	18.9786	14.7186	13.6186	11.0202	16.0186	11.9902	14.6186	14.2186	16.5186
15.6186	14.2186	11.3902	16.8186	12.3702	14.7186	14.2186	18.9786	14.7186	13.6186	11.0202	16.0186	11.9902	14.6186	14.2186	16.5186
15.6186	14.2186	11.3902	16.8186	12.3702	14.7186	14.2186	18.9786	14.7186	13.6186	11.0202	16.0186	11.9902	14.6186	14.2186	16.5186
15.6186	14.2186	11.3902	16.8186	12.3702	14.7186	14.2186	18.9786	14.7186	13.6186	11.0202	16.0186	11.9902	14.6186	14.2186	16.5186
15.6186	14.2186	11.3902	16.8186	12.3702	14.7186	14.2186	18.9786	14.7186	13.6186	11.0202	16.0186	11.9902	14.6186	14.2186	16.5186
15.6186	14.2186	11.3902	16.8186	12.3702	14.7186	14.2186	18.9786	14.7186	13.6186	11.0202	16.0186	11.9902	14.6186	14.2186	16.5186
15.6186	14.2186	11.3902	16.8186	12.3702	14.7186	14.2186	18.9786	14.7186	13.6186	11.0202	16.0186	11.9902	14.6186	14.2186	16.5186

SAND2M1M	SAND2M30CM		SAND2M3M		SAND5MFlat	SAND5MTop	SAND5MBott	SAND5M1M	SAND5M30CM		SAND5M3M	
Cum E (cm)	Cum E (cm)		Cum E (cm)		Cum E (cm)	Cum E (cm)	Cum E (cm)	Cum E (cm)	Cum E (cm)		Cum E (cm)	
A	A	B	A	B	A	A	A	A	A	B	A	B
0	0	0	0	0.01	0	0	0.1	0.1	0	0	0	0
0	0	0.0508	0.1	0.0608	0	0	0.1	0.1	0	0.0508	0	0.0608
0.5906	0.5906	0.127	0.6906	0.137	0.5906	0.5906	0.6906	0.6906	0.5906	0.127	0.6906	0.137
1.1986	1.1986	0.127	1.2986	0.137	1.1986	1.1986	1.2986	1.2986	1.0986	0.127	1.1986	0.137
1.4002	1.3002	0.127	1.4002	0.137	1.4002	1.3002	1.4002	1.4002	1.2002	0.127	1.4002	0.137
1.4002	1.3002	0.127	1.4002	0.137	1.4002	1.3002	1.5002	1.4002	1.2002	0.127	1.4002	0.137
1.4002	1.3002	0.127	1.4002	0.137	1.4002	1.3002	1.5002	1.4002	1.2002	0.127	1.4002	0.137
1.4002	1.3002	0.127	1.5002	0.137	1.4002	1.3002	1.5002	1.4002	1.2002	0.127	1.4002	0.137
1.4002	1.3002	0.127	1.5002	0.137	1.4002	1.3002	1.5002	1.4002	1.2002	0.127	1.5002	0.137
1.4002	1.3002	0.127	1.5002	0.137	1.4002	1.3002	1.5002	1.4002	1.2002	0.127	1.5002	0.137
1.4002	1.3002	0.127	1.5002	0.137	1.4002	1.3002	1.5002	1.4002	1.2002	0.127	1.5002	0.137
1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066	1.8066	1.6066	0.127	1.9066	0.137
1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066	1.8066	1.6066	0.127	1.9066	0.137
1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066	1.8066	1.6066	0.127	1.9066	0.137
1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066	1.8066	1.6066	0.127	1.9066	0.137
1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066	1.8066	1.6066	0.127	1.9066	0.137
1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066	1.8066	1.6066	0.127	1.9066	0.137
1.8066	1.7066	0.127	1.9066	0.137	1.8066	1.7066	1.9066	1.8066	1.6066	0.127	1.9066	0.137
2.0098	1.9098	0.127	2.1098	0.137	2.0098	1.9098	2.1098	2.0098	1.8098	0.127	2.1098	0.137
2.0098	1.9098	0.127	2.1098	0.137	2.0098	1.9098	2.1098	2.0098	1.8098	0.127	2.1098	0.137
2.0098	1.9098	0.127	2.1098	0.137	2.0098	1.9098	2.1098	2.0098	1.8098	0.127	2.1098	0.137
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.1098	2.0098	1.8098	0.4826	2.1098	0.4926
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.1098	2.0098	1.8098	0.4826	2.1098	0.4926
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.1098	2.0098	1.8098	0.4826	2.1098	0.4926
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.1098	2.0098	1.8098	0.4826	2.1098	0.4926
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.1098	2.0098	1.8098	0.4826	2.1098	0.4926
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.1098	2.0098	1.8098	0.4826	2.1098	0.4926
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.1098	2.0098	1.8098	0.4826	2.1098	0.4926
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.1098	2.0098	1.8098	0.4826	2.1098	0.4926
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.1098	2.0098	1.8098	0.4826	2.1098	0.4926
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.1098	2.0098	1.8098	0.4826	2.1098	0.4926
2.0098	1.9098	0.4826	2.1098	0.4926	2.0098	1.9098	2.1098	2.0098	1.8098	0.4826	2.1098	0.4926
2.0098	1.9098	0.635	2.1098	0.645	2.0098	1.9098	2.1098	2.0098	1.8098	0.635	2.1098	0.645
2.0098	1.9098	0.635	2.1098	0.645	2.0098	1.9098	2.1098	2.0098	1.8098	0.635	2.1098	0.645
2.0098	1.9098	0.635	2.1098	0.645	2.0098	1.9098	2.1098	2.0098	1.8098	0.635	2.1098	0.645
2.0098	1.9098	0.635	2.1098	0.645	2.0098	1.9098	2.1098	2.0098	1.8098	0.635	2.1098	0.645
2.0098	1.9098	0.635	2.1098	0.645	2.0098	1.9098	2.1098	2.0098	1.8098	0.635	2.1098	0.645
2.0098	1.9098	0.635	2.1098	0.645	2.0098	1.9098	2.1098	2.0098	1.8098	0.635	2.1098	0.645
2.0098	1.9098	0.6604	2.1098	0.6704	2.0098	1.9098	2.1098	2.0098	1.8098	0.6604	2.1098	0.6704
2.0098	1.9098	0.7112	2.1098	0.7212	2.0098	1.9098	2.1098	2.0098	1.8098	0.7112	2.1098	0.7212

2.6052	2.5052	0.762	2.7052	0.772	2.6052	2.5052	2.7052	2.6052	2.5052	0.762	2.7052	0.772
3.0084	2.8084	0.762	3.1084	0.772	3.0084	2.9084	3.2084	3.0084	2.8084	0.762	3.1084	0.772
3.0084	2.8084	0.762	3.1084	0.772	3.0084	2.9084	3.2084	3.0084	2.8084	0.762	3.1084	0.772
3.0084	2.8084	1.2954	3.1084	1.3054	3.0084	2.9084	3.2084	3.0084	2.8084	1.2954	3.1084	1.3054
3.0084	2.8084	1.2954	3.1084	1.3054	3.0084	2.9084	3.2084	3.0084	2.8084	1.2954	3.1084	1.3054
3.11	2.91	1.2954	3.31	1.3054	3.11	3.01	3.31	3.11	2.91	1.2954	3.21	1.3054
3.11	2.91	1.2954	3.31	1.3054	3.11	3.01	3.31	3.11	2.91	1.2954	3.31	1.3054
3.2116	3.0116	1.2954	3.4116	1.3054	3.2116	3.1116	3.5116	3.2116	3.0116	1.2954	3.4116	1.3054
3.2116	3.0116	1.2954	3.4116	1.3054	3.2116	3.1116	3.5116	3.2116	3.0116	1.2954	3.4116	1.3054
3.2116	3.0116	1.2954	3.4116	1.3054	3.2116	3.1116	3.5116	3.2116	3.0116	1.2954	3.4116	1.3054
3.2116	3.0116	1.3208	3.4116	1.3308	3.2116	3.1116	3.5116	3.2116	3.0116	1.3208	3.4116	1.3308
3.2116	3.0116	1.3462	3.4116	1.3562	3.2116	3.1116	3.5116	3.2116	3.0116	1.3462	3.4116	1.3562
3.2116	3.0116	2.1896	3.4116	2.1996	3.2116	3.1116	3.5116	3.2116	3.0116	2.1996	3.4116	2.2096
3.2116	3.0116	2.97	3.4116	3.04	3.2116	3.1116	3.5116	3.2116	3.0116	2.97	3.4116	3.05
3.2116	3.0116	2.9954	3.4116	3.1254	3.2116	3.1116	3.5116	3.2116	3.0116	3.0054	3.4116	3.1354
3.2116	3.0116	3.3002	3.4116	3.4602	3.2116	3.1116	3.5116	3.2116	3.0116	3.3102	3.4116	3.4702
3.2116	3.0116	3.3002	3.4116	3.4802	3.2116	3.1116	3.5116	3.2116	3.0116	3.3102	3.4116	3.4902
3.2116	3.0116	3.3002	3.4116	3.4902	3.2116	3.1116	3.5116	3.2116	3.0116	3.3102	3.4116	3.5002
3.2116	3.0116	3.3002	3.4116	3.5002	3.2116	3.1116	3.5116	3.2116	3.0116	3.3102	3.4116	3.5002
3.2116	3.0116	3.3002	3.4116	3.5002	3.2116	3.1116	3.5116	3.2116	3.0116	3.3102	3.4116	3.5102
3.2116	3.0116	3.3002	3.4116	3.5002	3.2116	3.1116	3.5116	3.2116	3.0116	3.3102	3.4116	3.5102
3.2116	3.0116	3.3002	3.4116	3.5102	3.2116	3.1116	3.5116	3.2116	3.0116	3.3102	3.4116	3.5202
3.2116	3.0116	3.351	3.4116	3.561	3.2116	3.1116	3.5116	3.2116	3.0116	3.361	3.4116	3.571
3.2116	3.0116	3.351	3.4116	3.561	3.2116	3.1116	3.5116	3.2116	3.0116	3.361	3.4116	3.571
3.2116	3.0116	3.351	3.4116	3.561	3.2116	3.1116	3.5116	3.2116	3.0116	3.361	3.4116	3.571
3.2116	3.0116	3.3764	3.4116	3.5864	3.2116	3.1116	3.5116	3.2116	3.0116	3.3864	3.4116	3.5964
3.2116	3.0116	3.3764	3.4116	3.5864	3.2116	3.1116	3.5116	3.2116	3.0116	3.3864	3.4116	3.5964
3.2116	3.0116	3.3764	3.4116	3.5864	3.2116	3.1116	3.5116	3.2116	3.0116	3.3864	3.4116	3.5964
3.3132	3.1132	3.6558	3.5132	3.6658	3.3132	3.2132	3.6132	3.3132	3.1132	3.6658	3.5132	3.8758
3.618	3.418	3.732	3.818	3.942	3.618	3.518	3.918	3.618	3.418	3.742	3.818	3.952
4.223	4.023	4.2146	4.423	4.4346	4.223	4.123	4.523	4.323	4.023	4.2246	4.423	4.4346
4.6246	4.3246	4.8052	4.8246	5.0152	4.6246	4.5246	4.9246	4.7246	4.3246	4.8152	4.8246	5.0252
4.7246	4.3246	4.8952	4.9246	5.1552	4.6246	4.5246	5.0246	4.7246	4.3246	4.9052	4.9246	5.1652
4.7246	4.3246	5.7874	4.9246	6.0574	4.6246	4.5246	5.0246	4.7246	4.3246	5.7974	4.9246	6.0674
4.7246	4.3246	5.8782	4.9246	6.2182	4.7246	4.5246	5.1246	4.7246	4.3246	5.8982	4.9246	6.2282
4.7246	4.3246	6.183	4.9246	6.543	4.7246	4.5246	5.1246	4.7246	4.3246	6.203	4.9246	6.553
4.7246	4.3246	6.2846	4.9246	6.6546	4.7246	4.5246	5.1246	4.7246	4.3246	6.3046	4.9246	6.6646
4.7246	4.3246	6.31	5.0246	6.69	4.7246	4.5246	5.1246	4.7246	4.3246	6.33	4.9246	6.7
4.7246	4.3246	6.31	5.0246	6.69	4.7246	4.5246	5.1246	4.7246	4.3246	6.33	5.0246	6.7
4.7246	4.3246	6.3354	5.0246	6.7254	4.7246	4.5246	5.1246	4.7246	4.3246	6.3554	5.0246	6.7354
4.7246	4.3246	6.3354	5.0246	6.7254	4.7246	4.5246	5.1246	4.7246	4.3246	6.3554	5.0246	6.7354
4.7246	4.3246	6.3354	5.0246	6.7254	4.7246	4.5246	5.1246	4.7246	4.3246	6.3554	5.0246	6.7354
4.7246	4.3246	6.3354	5.0246	6.7254	4.7246	4.5246	5.1246	4.7246	4.3246	6.3554	5.0246	6.7354
4.7246	4.3246	6.3354	5.0246	6.7254	4.7246	4.5246	5.2246	4.7246	4.3246	6.3554	5.0246	6.7354
4.7246	4.3246	6.9196	5.0246	7.3096	4.7246	4.5246	5.2246	4.7246	4.3246	6.9396	5.0246	7.3196
4.7246	4.3246	7.072	5.0246	7.462	4.7246	4.5246	5.2246	4.7246	4.3246	7.092	5.0246	7.472
4.7246	4.3246	7.072	5.0246	7.462	4.7246	4.5246	5.2246	4.7246	4.3246	7.092	5.0246	7.472
4.7246	4.3246	7.072	5.0246	7.462	4.7246	4.5246	5.2246	4.7246	4.3246	7.092	5.0246	7.472

4.7246	4.3246	7.5292	5.0246	7.9192	4.7246	4.5246	5.2246	4.7246	4.3246	7.5492	5.0246	7.9292
4.7246	4.3246	7.5292	5.0246	7.9192	4.7246	4.5246	5.2246	4.7246	4.3246	7.5492	5.0246	7.9392
4.7246	4.3246	7.58	5.0246	7.97	4.7246	4.5246	5.2246	4.7246	4.3246	7.6	5.0246	7.99
4.7246	4.3246	7.58	5.0246	7.97	4.7246	4.5246	5.2246	4.7246	4.3246	7.6	5.0246	7.99
5.3358	4.9358	7.8086	5.6358	8.2086	5.2358	5.1358	5.8358	5.3358	4.9358	7.8286	5.6358	8.2186
5.4374	5.0374	7.8594	5.7374	8.2594	5.4374	5.2374	5.9374	5.5374	5.1374	7.8794	5.7374	8.2694
5.4374	5.0374	7.8594	5.7374	8.2594	5.4374	5.2374	5.9374	5.5374	5.1374	7.8794	5.7374	8.2694
5.539	5.139	7.8594	5.839	8.2594	5.539	5.339	6.039	5.639	5.239	7.8794	5.839	8.2694
5.539	5.139	7.8594	5.839	8.2594	5.539	5.339	6.039	5.639	5.239	7.8794	5.839	8.2694
5.539	5.139	7.8594	5.839	8.2594	5.539	5.339	6.039	5.639	5.239	7.8794	5.839	8.2694
6.1408	5.7408	7.8594	6.4408	8.2594	6.1408	5.9408	6.6408	6.2408	5.8408	7.8794	6.4408	8.2694
6.4408	6.0408	9.343	6.7408	8.723	6.4408	6.2408	7.0408	6.5408	6.0408	8.363	6.7408	8.743
6.5408	6.0408	9.153	6.8408	9.143	6.4408	6.2408	7.0408	6.5408	6.0408	8.663	6.8408	9.153
6.5408	6.0408	9.223	6.8408	9.223	6.4408	6.2408	7.1408	6.5408	6.0408	8.663	6.8408	9.233
6.5408	6.0408	9.223	6.8408	9.253	6.4408	6.2408	7.1408	6.5408	6.0408	8.663	6.8408	9.273
6.5408	6.0408	9.223	6.9408	9.283	6.4408	6.2408	7.1408	6.5408	6.0408	8.663	6.8408	9.293
6.5408	6.0408	9.223	6.9408	9.293	6.4408	6.2408	7.1408	6.5408	6.0408	8.663	6.9408	9.313
6.5408	6.0408	9.223	6.9408	9.303	6.4408	6.2408	7.1408	6.5408	6.0408	8.663	6.9408	9.323
6.5408	6.0408	9.223	6.9408	9.313	6.4408	6.2408	7.2408	6.5408	6.0408	8.663	6.9408	9.333
6.5408	6.0408	9.223	6.9408	9.323	6.4408	6.2408	7.2408	6.5408	6.0408	8.663	6.9408	9.333
6.5408	6.0408	9.223	6.9408	9.323	6.4408	6.2408	7.2408	6.5408	6.0408	8.663	6.9408	9.343
6.5408	6.0408	9.6972	6.9408	9.7972	6.4408	6.2408	7.2408	6.5408	6.0408	9.1472	6.9408	9.8172
6.5408	6.0408	9.7626	6.9408	9.8826	6.4408	6.2408	7.2408	6.5408	6.0408	9.1726	6.9408	9.9026
6.5408	6.0408	10.0166	6.9408	10.1466	6.4408	6.2408	7.2408	6.5408	6.0408	9.4266	6.9408	10.1666
7.1362	6.6362	10.1436	7.5362	10.2836	7.0362	6.8362	7.8362	7.1362	6.6362	9.5536	7.5362	10.2936
7.3362	6.7362	10.423	7.7362	10.563	7.2362	7.0362	8.0362	7.3362	6.7362	9.833	7.7362	10.573
7.9474	7.3474	11.0312	8.3474	11.1812	7.8474	7.6474	8.6474	7.9474	7.3474	10.4712	8.3474	11.1912
8.5602	7.9602	11.1166	8.9602	11.3066	8.4602	8.2602	9.2602	8.5602	7.9602	10.4966	8.9602	11.3166
8.6602	7.9602	11.1166	9.1602	11.3266	8.5602	8.3602	9.4602	8.6602	8.0602	10.4966	9.1602	11.3366
8.7618	8.0618	11.1166	9.2618	11.3266	8.6618	8.4618	9.6618	8.8618	8.1618	10.4966	9.2618	11.3466
8.7618	8.0618	11.1166	9.2618	11.3366	8.6618	8.4618	9.6618	8.8618	8.1618	10.4966	9.2618	11.3566
8.7618	8.0618	11.2436	9.2618	11.4636	8.6618	8.4618	9.6618	8.8618	8.1618	10.6236	9.2618	11.4836
8.7618	8.0618	11.269	9.2618	11.499	8.6618	8.4618	9.6618	8.8618	8.1618	10.649	9.2618	11.509
8.7618	8.0618	11.269	9.3618	11.499	8.6618	8.4618	9.6618	8.8618	8.1618	10.649	9.2618	11.509
8.7618	8.0618	11.269	9.3618	11.499	8.6618	8.4618	9.6618	8.8618	8.1618	10.649	9.3618	11.519
8.7618	8.0618	11.269	9.3618	11.499	8.6618	8.4618	9.6618	8.8618	8.1618	10.649	9.3618	11.519
8.965	8.265	11.269	9.565	11.499	8.865	8.665	9.965	9.065	8.365	10.649	9.565	11.519
9.5732	8.8732	11.269	10.1732	11.499	11.0732	9.2732	10.4732	9.6732	8.9732	10.649	10.0732	11.519
10.1812	9.4812	11.269	10.6812	11.499	11.5812	9.7812	11.0812	10.2812	9.5812	10.649	10.6812	11.519
10.4828	9.6828	11.269	11.0828	11.509	11.6828	10.0828	11.4828	10.4828	9.6828	10.649	11.0828	11.519
10.4828	9.6828	11.269	11.0828	11.509	11.6828	10.0828	11.5828	10.5828	9.6828	10.649	11.0828	11.519
10.4828	9.6828	11.269	11.1828	11.509	11.6828	10.0828	11.5828	10.5828	9.6828	10.649	11.0828	11.519
10.4828	9.6828	11.269	11.1828	11.509	11.6828	10.0828	11.6828	10.5828	9.6828	10.649	11.1828	11.519
10.4828	9.6828	11.269	11.1828	11.509	11.6828	10.0828	11.6828	10.5828	9.6828	10.649	11.1828	11.519
10.4828	9.6828	11.269	11.1828	11.509	11.6828	10.0828	11.6828	10.5828	9.6828	10.649	11.1828	11.519
10.4828	9.6828	11.269	11.1828	11.509	11.6828	10.0828	11.6828	10.5828	9.6828	10.649	11.1828	11.519
10.686	9.886	11.269	11.386	11.509	11.886	10.286	11.886	10.786	9.886	10.649	11.386	11.519
10.686	9.886	11.269	11.386	11.509	11.886	10.286	11.886	10.786	9.886	10.649	11.386	11.519

10.686	9.886	11.269	11.386	11.509	11.886	10.286	11.886	10.786	9.886	10.649	11.386	11.519
10.686	9.886	11.269	11.386	11.509	11.886	10.286	11.986	10.786	9.886	10.649	11.386	11.519
11.2956	10.4956	11.269	11.9956	11.509	12.3956	10.8956	12.4956	11.3956	10.4956	10.649	11.9956	11.519
11.2956	10.4956	11.269	11.9956	11.509	12.3956	10.8956	12.5956	11.3956	10.4956	10.649	11.9956	11.519
11.8974	11.0974	11.269	12.5974	11.509	12.7974	11.4974	13.1974	11.9974	11.0974	10.649	12.5974	11.519
12.4946	11.6946	11.269	13.1946	11.509	13.3946	12.0946	13.7946	12.5946	11.6946	10.649	13.1946	11.519
13.0946	12.0946	11.4468	13.7946	11.6868	13.9946	12.5946	14.2946	13.0946	12.0946	10.8268	13.7946	11.6968
13.2962	12.1962	11.5602	14.0962	11.8002	14.2962	12.7962	14.5962	13.2962	12.1962	10.9602	14.0962	11.8102
13.2962	12.1962	11.6702	14.0962	11.9302	14.3962	12.7962	14.6962	13.3962	12.1962	11.0602	14.0962	11.9502
13.3962	12.1962	11.6702	14.1962	11.9502	14.4962	12.7962	14.7962	13.3962	12.1962	11.0602	14.1962	11.9702
13.5994	12.3994	11.6702	14.3994	11.9602	14.6994	12.9994	15.0994	13.5994	12.3994	11.0602	14.3994	11.9802
13.5994	12.3994	11.6702	14.4994	11.9702	14.6994	12.9994	15.0994	13.5994	12.3994	11.0602	14.4994	11.9802
13.9042	12.7042	11.6702	14.8042	11.9702	15.0042	13.3042	15.4042	13.9042	12.7042	11.0602	14.8042	11.9902
13.9042	12.7042	11.6702	14.8042	11.9802	15.0042	13.3042	15.5042	13.9042	12.7042	11.0602	14.8042	11.9902
13.9042	12.7042	11.6702	14.8042	11.9802	15.0042	13.3042	15.5042	13.9042	12.7042	11.0602	14.8042	12.0002
13.9042	12.7042	11.6702	14.8042	11.9802	15.0042	13.3042	15.5042	13.9042	12.7042	11.0602	14.8042	12.0002
13.9042	12.7042	11.6702	14.8042	11.9802	15.0042	13.3042	15.5042	13.9042	12.7042	11.0602	14.8042	12.0002
14.4122	13.2122	11.6702	15.3122	11.9802	15.5122	13.8122	16.0122	14.4122	13.2122	11.0602	15.3122	12.0002
14.4122	13.2122	11.6702	15.3122	11.9902	15.5122	13.8122	16.0122	14.4122	13.2122	11.0602	15.3122	12.0002
14.4122	13.2122	11.6702	15.3122	11.9902	15.5122	13.8122	16.1122	14.4122	13.2122	11.0602	15.3122	12.0002
14.4122	13.2122	11.6702	15.3122	11.9902	15.5122	13.8122	16.1122	14.4122	13.2122	11.0602	15.3122	12.0002
14.4122	13.2122	11.6702	15.3122	11.9902	15.5122	13.8122	16.1122	14.4122	13.2122	11.0602	15.3122	12.0002
14.5138	13.3138	11.6702	15.4138	11.9902	15.6138	13.9138	16.2138	14.5138	13.3138	11.0602	15.4138	12.0002
14.5138	13.3138	11.6702	15.4138	11.9902	15.6138	13.9138	16.2138	14.5138	13.3138	11.0602	15.4138	12.0002
14.5138	13.3138	11.6702	15.4138	11.9902	15.6138	13.9138	16.2138	14.5138	13.3138	11.0602	15.4138	12.0102
14.5138	13.3138	11.6702	15.4138	11.9902	15.6138	13.9138	16.2138	14.5138	13.3138	11.0602	15.4138	12.0102
14.5138	13.3138	11.6702	15.4138	11.9902	15.6138	13.9138	16.2138	14.5138	13.3138	11.0602	15.4138	12.0102
14.5138	13.3138	11.6702	15.4138	11.9902	15.6138	13.9138	16.2138	14.5138	13.3138	11.0602	15.4138	12.0102
14.5138	13.3138	11.6702	15.4138	11.9902	15.6138	13.9138	16.2138	14.5138	13.3138	11.0602	15.4138	12.0102
14.5138	13.3138	11.6702	15.4138	11.9902	15.6138	13.9138	16.2138	14.5138	13.3138	11.0602	15.4138	12.0102
14.5138	13.3138	11.6702	15.4138	11.9902	15.6138	13.9138	16.2138	14.5138	13.3138	11.0602	15.4138	12.0102
14.5138	13.3138	11.6702	15.4138	11.9902	15.6138	13.9138	16.2138	14.5138	13.3138	11.0602	15.4138	12.0102
14.5138	13.3138	11.6702	15.4138	11.9902	15.6138	13.9138	16.2138	14.5138	13.3138	11.0602	15.4138	12.0102
14.5138	13.3138	11.6702	15.4138	11.9902	15.6138	13.9138	16.2138	14.5138	13.3138	11.0602	15.4138	12.0102
14.6154	13.4154	11.6702	15.5154	11.9902	15.7154	14.0154	16.3154	14.6154	13.4154	11.0602	15.5154	12.0102
14.8186	13.6186	11.6702	15.7186	11.9902	15.9186	14.2186	16.5186	14.8186	13.6186	11.0602	15.7186	12.0102
14.8186	13.6186	11.6702	15.7186	11.9902	15.9186	14.2186	16.5186	14.8186	13.6186	11.0602	15.7186	12.0102
14.8186	13.6186	11.6702	15.7186	11.9902	15.9186	14.2186	16.5186	14.8186	13.6186	11.0602	15.7186	12.0102
14.8186	13.6186	11.6702	15.7186	11.9902	15.9186	14.2186	16.5186	14.8186	13.6186	11.0602	15.7186	12.0102
14.8186	13.6186	11.6702	15.7186	11.9902	15.9186	14.2186	16.5186	14.8186	13.6186	11.0602	15.7186	12.0102
14.8186	13.6186	11.6702	15.7186	11.9902	15.9186	14.2186	16.5186	14.8186	13.6186	11.0602	15.7186	12.0102
14.8186	13.6186	11.6702	15.7186	11.9902	15.9186	14.2186	16.5186	14.8186	13.6186	11.0602	15.7186	12.0102
14.8186	13.6186	11.6702	15.7186	11.9902	15.9186	14.2186	16.5186	14.8186	13.6186	11.0602	15.7186	12.0102
14.8186	13.6186	11.6702	15.7186	11.9902	15.9186	14.2186	16.5186	14.8186	13.6186	11.0602	15.7186	12.0102
14.8186	13.6186	11.6702	15.7186	11.9902	15.9186	14.2186	16.5186	14.8186	13.6186	11.0602	15.7186	12.0102
14.8186	13.6186	11.6702	15.7186	11.9902	15.9186	14.2186	16.5186	14.8186	13.6186	11.0602	15.7186	12.0102
14.8186	13.6186	11.6702	15.7186	11.9902	15.9186	14.2186	16.5186	14.8186	13.6186	11.0602	15.7186	12.0102

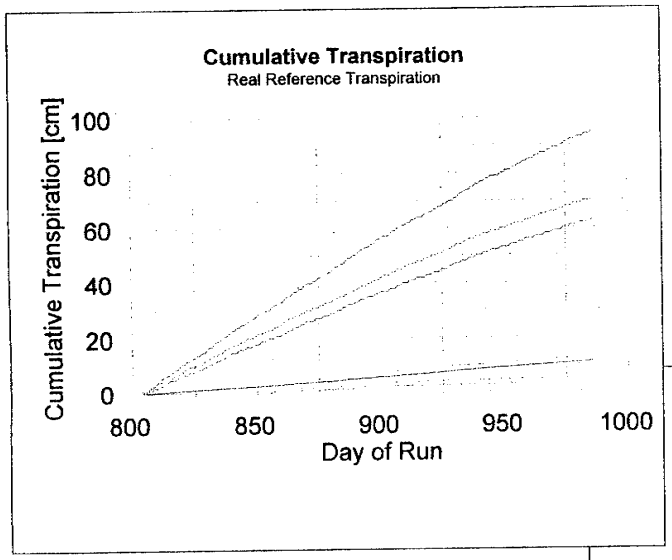
Appendix A.6. Transpiration Data

A =183day streach has constant PT=0.6cm/day

B =183day streach has real calculated PT

Day	CLAY1MFla Cum T(cm) A	CLAY1MTop Cum T(cm) A	CLAY1MBot Cum T(cm) A	CLAY1M1M Cum T(cm) A	CLAY1M30CM Cum T(cm) A	B	CLAY1M3M Cum T(cm) A	B	CLAY2MFla Cum T(cm) A	CLAY2MTop Cum T(cm) A	CLAY2MBot Cum T(cm) A	CLAY2M1M Cum T(cm) A	CLAY2M30CM Cum T(cm) A	B	CLAY2M3M Cum T(cm) A	B
804	1	0	1	0	1	0	1	0	1	1	0	0	0	0	1	0
805	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0
806	2	1	2	1	1	1	2	1	1	1	1	1	0	0	1	1
807	2	2	3	2	2	1	2	2	2	1	1	1	1	0	2	1
808	3	3	3	2	2	2	3	3	2	2	1	1	1	0	2	1
809	3	3	4	3	3	2	3	3	2	2	2	1	1	1	2	2
810	4	3	4	3	3	2	4	4	3	2	2	2	1	1	3	2
811	4	4	5	4	3	3	4	5	3	2	2	2	1	1	3	3
812	5	4	5	4	4	3	4	6	3	3	3	2	1	1	4	3
813	6	5	6	5	4	4	5	6	3	3	3	2	1	1	4	4
814	6	5	7	5	4	4	5	7	4	3	3	3	2	1	4	4
815	7	6	7	6	5	4	6	7	4	3	3	3	2	2	5	5
816	7	6	8	6	5	5	6	8	4	4	4	3	2	2	5	5
817	8	7	8	7	5	5	7	9	5	4	4	3	2	2	5	6
818	8	7	9	7	6	5	7	9	5	4	4	3	2	2	6	6
819	9	8	9	8	6	6	8	10	5	4	5	4	2	2	6	7
820	9	8	10	8	6	6	8	11	5	5	5	4	2	2	6	7
821	10	8	11	8	7	6	8	11	6	5	5	4	3	2	7	7
822	10	9	11	9	7	7	9	12	6	5	6	4	3	3	7	8
823	11	9	12	9	7	7	9	12	6	5	6	5	3	3	7	8
824	11	10	12	10	7	7	10	13	7	5	6	5	3	3	8	8
825	12	10	13	10	8	8	10	13	7	6	7	5	3	3	8	9
826	12	11	13	11	8	8	11	14	7	6	7	5	3	3	8	9
827	13	11	14	11	8	8	11	14	7	6	7	5	3	3	9	9
828	13	12	15	12	9	9	12	15	8	6	7	6	3	3	9	10
829	14	12	15	12	9	9	12	15	8	7	8	6	4	4	9	10
830	14	12	16	13	9	9	12	16	8	7	8	6	4	4	10	11
831	15	13	16	13	10	10	13	17	8	7	8	6	4	4	10	11
832	15	13	17	13	10	10	13	17	9	7	9	6	4	4	10	11
833	16	14	17	14	10	11	14	18	9	8	9	7	4	4	11	12
834	16	14	18	14	11	11	14	19	9	8	9	7	4	4	11	12
835	17	15	19	15	11	11	15	19	10	8	10	7	4	4	11	13
836	17	15	19	15	11	12	15	20	10	8	10	7	5	5	12	13
837	18	16	20	16	12	12	15	21	10	8	10	8	5	5	12	14
838	18	16	20	16	12	12	16	21	10	9	10	8	5	5	12	14
839	19	16	21	17	12	13	16	22	11	9	11	8	5	5	13	15
840	19	17	21	17	13	13	17	23	11	9	11	8	5	5	13	15
841	20	17	22	18	13	13	17	23	11	9	11	8	5	5	13	15
842	20	18	23	18	13	14	18	24	11	10	12	9	5	6	14	16

939	71	63	78	65	48	49	61	76	40	34	42	32	23	22	48	52	A-86
940	72	64	79	65	48	49	61	76	40	34	42	32	23	22	48	52	
941	72	64	79	65	48	49	62	77	40	34	43	33	23	22	49	53	
942	73	65	80	66	49	50	62	77	41	35	43	33	23	22	49	53	
943	73	65	81	66	49	50	62	78	41	35	43	33	23	22	49	53	
944	74	66	81	67	49	50	63	78	41	35	44	33	24	22	50	54	
945	74	66	82	68	50	51	63	79	42	36	44	34	24	22	50	54	
946	75	67	82	68	51	51	64	79	42	36	44	34	25	23	51	54	
947	76	67	83	69	51	51	64	79	43	37	45	35	25	23	51	54	
948	76	68	84	69	52	51	65	79	43	37	45	35	26	23	52	55	
949	77	68	84	70	52	52	65	80	44	38	46	36	26	23	52	55	
950	77	69	85	70	52	52	65	80	44	38	46	36	26	23	53	55	
951	78	69	85	71	53	52	66	81	45	38	47	37	26	23	53	55	
952	78	70	86	71	53	53	66	81	45	39	47	37	27	24	54	56	
953	79	70	87	72	53	53	67	81	45	39	48	37	27	24	54	56	
954	79	71	87	72	54	53	67	82	46	39	48	38	27	24	54	56	
955	80	71	88	73	54	54	68	82	46	40	48	38	27	24	55	57	
956	80	72	88	73	54	54	68	83	46	40	49	38	27	24	55	57	
957	81	72	89	74	55	54	69	83	47	40	49	38	27	24	56	57	
958	81	73	89	74	55	55	69	84	47	40	49	39	28	24	56	58	
959	82	73	90	75	55	55	69	84	47	41	50	39	28	25	56	58	
960	83	74	91	75	56	55	70	85	48	41	50	39	28	25	57	58	
961	83	74	91	76	56	56	70	85	48	41	50	39	28	25	57	59	
962	84	75	92	76	56	56	71	85	48	41	51	39	28	25	57	59	
963	84	75	92	77	57	56	71	86	48	42	51	40	28	25	58	59	
964	85	75	93	77	57	57	72	86	49	42	51	40	29	25	58	60	
965	85	76	93	78	57	57	72	87	49	42	52	40	29	25	59	60	
966	86	76	94	78	58	57	73	87	49	42	52	40	29	25	59	60	
967	86	77	95	79	58	58	73	87	50	42	52	41	29	26	59	61	
968	87	77	95	79	58	58	73	88	50	43	53	41	29	26	60	61	
969	87	78	96	79	59	58	74	88	50	43	53	41	29	26	60	61	
970	88	78	96	80	59	58	74	89	50	43	53	41	29	26	60	62	
971	88	79	97	80	59	59	75	89	51	43	54	41	29	26	61	62	
972	89	79	97	81	60	59	75	89	51	44	54	42	30	26	61	62	
973	89	79	98	81	60	59	76	90	51	44	54	42	30	26	61	63	
974	90	80	99	82	60	60	76	90	51	44	54	42	30	27	62	63	
975	90	80	99	82	60	60	76	91	52	44	55	42	30	27	62	63	
976	91	81	100	83	61	60	77	91	52	45	55	43	30	27	62	64	
977	91	81	100	83	61	61	77	92	52	45	55	43	30	27	63	64	
978	92	82	101	84	61	61	78	92	53	45	56	43	30	27	63	64	
979	92	82	101	84	62	61	78	92	53	45	56	43	31	27	63	65	
980	93	83	102	84	62	62	79	93	53	45	56	43	31	27	64	65	
981	93	83	103	85	62	62	79	93	53	46	57	44	31	27	64	65	
982	94	83	103	85	63	62	80	93	54	46	57	44	31	28	64	65	
983	94	84	104	86	63	62	80	94	54	46	57	44	31	28	65	66	
984	95	84	104	86	63	63	80	94	54	46	57	44	31	28	65	66	
985	95	85	105	87	64	63	81	94	54	47	58	45	31	28	65	66	
986	96	85	105	87	64	63	81	95	55	47	58	45	32	28	66	66	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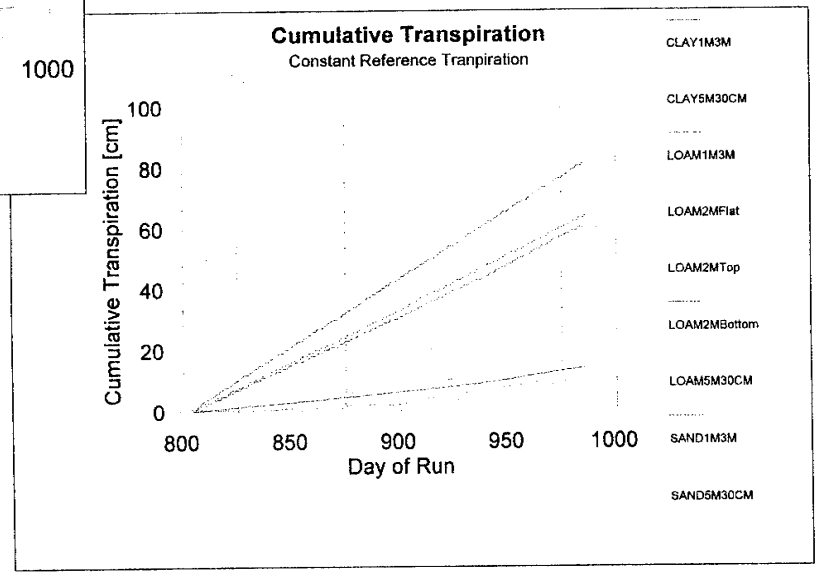
Real Reference Transpiration
Cumulative Transpiration [cm]
100
80
60
40
20
0
800
850
900
950
1000
Day of Run


Cumulative Transpiration
Constant Reference Tranpiration
Cumulative Transpiration [cm]
100
80
60
40
20
0
800
850
900
950
1000
Day of Run
CLAY1M3M
CLAY5M30CM
LOAM1M3M
LOAM2MFlat
LOAM2MTop
LOAM2MBottom
LOAM5M30CM
SAND1M3M
SAND5M30CM

CLAY5MFlat Cum T(cm) A	CLAY5MTo Cum T(cm) A	CLAY5MBotto Cum T(cm) A	CLAY5M1M Cum T(cm) A	CLAY5M30CM Cum T(cm) A	B	CLAY5M3M Cum T(cm) A	B	LOAM1MFlat Cum T(cm) A	LOAM1MTop Cum T(cm) A	LOAM1MBotto Cum T(cm) A	LOAM1M1M Cum T(cm) A	LOAM1M30CM Cum T(cm) A	B	LOAM1M3M Cum T(cm) A	B	
0.1	0	0	0.1	0	0	0.1	0.1	1	1	1	1	1	1	0.2	0	0
0.1	0.1	0.1	0.1	0	0.1	0.2	0.2	1	1	1	1	1	1	0.2	0	0
0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.3	2	2	2	2	1	1	0.4	1	1
0.3	0.2	0.2	0.2	0.3	0.1	0.4	0.4	2	2	2	2	1	1	0.5	1	1
0.3	0.3	0.2	0.3	0.3	0.1	0.5	0.5	3	2	3	2	1	1	0.6	1	1
0.4	0.3	0.2	0.3	0.3	0.1	0.6	0.6	3	3	3	3	2	2	0.7	2	2
0.4	0.4	0.3	0.3	0.4	0.2	0.7	0.7	3	3	4	3	2	2	0.9	2	2
0.5	0.4	0.3	0.4	0.4	0.2	0.8	0.8	4	3	4	3	2	3	1	2	3
0.5	0.4	0.4	0.4	0.4	0.2	0.9	0.9	4	4	5	4	2	3	1.1	3	3
0.5	0.5	0.4	0.4	0.4	0.2	1	1	5	4	5	4	2	4	1.2	3	4
0.6	0.5	0.5	0.5	0.4	0.2	1.1	1.1	5	4	6	4	2	4	1.3	3	4
0.6	0.6	0.5	0.5	0.5	0.2	1.2	1.2	6	5	6	5	2	5	1.5	4	5
0.6	0.6	0.5	0.6	0.5	0.3	1.3	1.3	6	5	7	5	2	5	1.6	4	5
0.7	0.6	0.6	0.6	0.5	0.3	1.4	1.4	6	5	7	5	2	5	1.7	4	5
0.7	0.7	0.6	0.6	0.5	0.3	1.5	1.5	7	6	8	6	3	6	1.8	5	6
0.8	0.7	0.7	0.7	0.5	0.3	1.6	1.6	7	6	8	6	3	6	1.9	5	6
0.8	0.8	0.7	0.7	0.6	0.3	1.7	1.7	8	6	9	6	3	7	2	5	7
0.8	0.8	0.7	0.7	0.6	0.4	1.8	1.8	8	7	9	6	3	7	2.1	6	7
0.9	0.8	0.8	0.8	0.6	0.4	1.9	1.9	8	7	10	7	3	7	2.2	6	7
0.9	0.9	0.8	0.8	0.6	0.4	2	2	9	7	10	7	3	8	2.3	6	8
1	0.9	0.9	0.8	0.6	0.4	2.1	2.1	9	8	11	7	3	8	2.4	7	8
1	0.9	0.9	0.9	0.6	0.4	2.2	2.1	10	8	11	8	3	8	2.5	7	8
1	1	0.9	0.9	0.7	0.4	2.3	2.2	10	8	12	8	3	9	2.6	7	9
1.1	1	1	0.9	0.7	0.5	2.4	2.3	10	8	12	8	4	9	2.7	8	9
1.1	1	1	1	0.7	0.5	2.4	2.4	11	9	13	9	4	9	2.8	8	9
1.2	1.1	1.1	1	0.7	0.5	2.5	2.4	11	9	13	9	4	10	2.9	8	10
1.2	1.1	1.1	1.1	0.7	0.5	2.6	2.5	11	9	14	9	4	10	3	9	10
1.2	1.2	1.1	1.1	0.8	0.5	2.7	2.6	12	10	14	9	4	11	3.2	9	11
1.3	1.2	1.2	1.1	0.8	0.6	2.8	2.7	12	10	15	10	4	11	3.3	9	11
1.3	1.2	1.2	1.2	0.8	0.6	2.9	2.8	13	10	15	10	4	11	3.4	10	11
1.4	1.3	1.3	1.2	0.8	0.6	3	2.9	13	11	16	10	4	12	3.5	10	12
1.4	1.3	1.3	1.2	0.8	0.6	3.1	3	13	11	16	11	4	12	3.6	10	12
1.4	1.3	1.3	1.3	0.8	0.6	3.2	3.1	14	11	17	11	4	13	3.7	11	13
1.5	1.4	1.4	1.3	0.9	0.6	3.3	3.2	14	11	17	11	5	13	3.9	11	13
1.5	1.4	1.4	1.3	0.9	0.7	3.3	3.3	14	12	18	12	5	14	4	11	14
1.6	1.4	1.5	1.4	0.9	0.7	3.4	3.4	15	12	18	12	5	14	4.1	11	14
1.6	1.5	1.5	1.4	0.9	0.7	3.5	3.5	15	12	19	12	5	15	4.2	12	15
1.6	1.5	1.5	1.4	0.9	0.7	3.6	3.6	16	13	19	12	5	15	4.3	12	15
1.7	1.6	1.6	1.5	0.9	0.7	3.7	3.7	16	13	20	13	5	15	4.4	12	15

1.7	1.6	1.6	1.5	1	0.8	3.8	3.8	16	13	20	13	5	4.5	13	16	A-89
1.8	1.7	1.7	1.6	1.1	0.8	3.9	3.8	17	14	21	13	5	4.6	13	16	
1.9	1.8	1.7	1.6	1.3	0.8	4	3.9	17	14	21	14	6	4.7	13	16	
1.9	1.8	1.7	1.7	1.3	0.8	4.1	4	18	14	22	14	6	4.8	14	17	
1.9	1.8	1.8	1.7	1.4	0.8	4.2	4.1	18	15	22	14	6	4.9	14	17	
2	1.9	1.8	1.8	1.4	0.8	4.2	4.2	18	15	23	15	6	5	14	17	
2	1.9	1.9	1.8	1.4	0.9	4.3	4.2	19	15	23	15	6	5.1	15	18	
2.1	2	1.9	1.8	1.4	0.9	4.4	4.3	19	16	24	15	6	5.3	15	18	
2.1	2	1.9	1.9	1.5	0.9	4.5	4.4	20	16	24	16	7	5.4	15	18	
2.1	2	2	1.9	1.5	0.9	4.6	4.5	20	16	25	16	7	5.5	16	19	
2.2	2.1	2	1.9	1.5	0.9	4.7	4.5	20	17	25	16	7	5.5	16	19	
2.2	2.1	2.1	2	1.5	0.9	4.8	4.6	21	17	26	17	7	5.6	16	19	
2.3	2.1	2.1	2	1.5	0.9	4.8	4.7	21	17	26	17	7	5.7	16	20	
2.3	2.2	2.1	2	1.6	1.2	4.9	4.8	22	18	26	17	7	6	17	20	
2.3	2.2	2.2	2.1	1.6	1.6	5	4.9	22	18	27	18	7	6.5	17	20	
2.4	2.2	2.2	2.1	1.6	1.6	5.1	5	22	18	27	18	7	6.8	17	21	
2.4	2.3	2.3	2.1	1.6	1.6	5.2	5	23	18	28	18	7	6.9	18	21	
2.4	2.3	2.3	2.2	1.6	1.7	5.3	5.1	23	19	28	18	8	7.1	18	21	
2.5	2.3	2.3	2.2	1.6	1.7	5.4	5.2	23	19	29	19	8	7.2	18	22	
2.5	2.4	2.4	2.2	1.7	1.7	5.4	5.3	24	19	29	19	8	7.3	19	22	
2.6	2.4	2.4	2.3	1.7	1.8	5.5	5.4	24	20	30	19	8	7.3	19	23	
2.6	2.5	2.5	2.3	1.7	1.8	5.6	5.5	25	20	30	20	8	7.3	19	23	
2.6	2.5	2.5	2.3	1.7	1.8	5.7	5.6	25	20	31	20	8	7.3	20	24	
2.7	2.5	2.5	2.4	1.7	1.8	5.8	5.7	25	21	31	20	8	7.3	20	24	
2.7	2.6	2.6	2.4	1.7	1.8	5.9	5.8	26	21	32	21	8	8.3	20	24	
2.8	2.6	2.6	2.4	1.8	1.9	5.9	5.9	26	21	32	21	8	8.3	21	25	
2.8	2.6	2.7	2.5	1.8	1.9	6	6	26	21	33	21	8	8.3	21	25	
2.8	2.7	2.7	2.5	1.8	1.9	6.1	6	27	22	33	21	9	8.3	21	26	
2.9	2.7	2.7	2.5	1.8	1.9	6.2	6.1	27	22	34	22	9	8.3	21	26	
2.9	2.7	2.8	2.6	1.8	1.9	6.3	6.2	28	22	34	22	9	8.3	22	26	
3	2.8	2.8	2.6	1.9	1.9	6.4	6.2	28	23	35	22	9	8.3	22	26	
3	2.9	2.9	2.7	2.1	1.9	6.5	6.3	28	23	35	23	9	8.3	22	27	
3.2	3.1	2.9	2.9	2.5	2	6.6	6.3	29	23	36	23	10	8.3	23	27	
3.3	3.2	3	3	2.6	2.1	6.7	6.4	29	24	36	23	10	9.3	23	27	
3.3	3.3	3.1	3.1	2.7	2.2	6.8	6.5	30	24	37	24	10	9.3	23	28	
3.4	3.3	3.1	3.1	2.7	2.2	6.9	6.6	30	25	37	24	10	9.3	24	28	
3.5	3.4	3.2	3.2	2.8	2.2	7	6.7	31	25	38	25	10	9.3	24	28	
3.5	3.4	3.2	3.2	2.8	2.3	7.1	6.7	31	25	38	25	11	9.3	24	29	
3.5	3.5	3.3	3.3	2.8	2.3	7.2	6.8	31	26	39	25	11	9.3	25	29	
3.6	3.5	3.3	3.3	2.8	2.3	7.3	6.9	32	26	39	26	11	10.3	25	29	
3.6	3.5	3.3	3.3	2.8	2.3	7.4	7	32	26	39	26	11	10.3	25	30	
3.7	3.6	3.4	3.4	2.9	2.4	7.5	7.1	33	27	40	26	11	10.3	26	30	
3.7	3.6	3.4	3.4	2.9	2.4	7.5	7.2	33	27	40	27	11	10.3	26	31	
3.7	3.6	3.5	3.4	2.9	2.4	7.6	7.3	34	27	41	27	11	10.3	26	31	
3.8	3.7	3.5	3.5	2.9	2.4	7.7	7.4	34	28	41	27	11	10.3	27	32	
3.8	3.7	3.5	3.5	2.9	2.4	7.8	7.5	34	28	42	28	11	10.3	27	32	
3.9	3.7	3.6	3.5	3	2.5	7.9	7.6	35	28	42	28	12	10.3	27	32	
3.9	3.8	3.6	3.6	3	2.5	7.9	7.7	35	29	43	28	12	10.3	28	33	

3.9	3.8	3.7	3.6	3	2.5	8	7.8	35	29	43	28	12	11.3	28	33
4	3.9	3.7	3.7	3	2.5	8.1	7.9	36	29	44	29	12	11.3	28	34
4	3.9	3.7	3.7	3	2.5	8.2	7.9	36	29	44	29	12	11.3	29	34
4	3.9	3.8	3.7	3.1	2.6	8.3	8	37	30	45	29	12	11.3	29	34
4.1	4	3.8	3.8	3.1	2.6	8.4	8.1	37	30	45	30	12	11.3	29	35
4.1	4	3.9	3.8	3.1	2.6	8.4	8.2	37	30	46	30	12	11.3	30	35
4.2	4	3.9	3.8	3.1	2.6	8.5	8.3	38	31	46	30	12	11.3	30	35
4.2	4.1	3.9	3.9	3.1	2.6	8.6	8.4	38	31	47	31	13	11.3	30	36
4.2	4.1	4	3.9	3.1	2.6	8.7	8.5	39	31	47	31	13	11.3	30	36
4.3	4.2	4	3.9	3.2	2.7	8.8	8.5	39	32	48	31	13	12.3	31	37
4.3	4.2	4.1	4	3.2	2.7	8.8	8.6	39	32	48	31	13	12.3	31	37
4.4	4.3	4.1	4	3.4	2.7	8.9	8.7	40	32	49	32	13	12.3	31	37
4.5	4.5	4.2	4.2	3.8	3	9.1	8.7	40	33	49	32	13	12.3	32	37
4.6	4.6	4.2	4.3	3.8	3.5	9.2	8.9	41	33	50	32	14	13.3	32	38
4.7	4.6	4.3	4.4	3.9	3.7	9.3	9.1	41	33	50	33	14	13.3	32	38
4.7	4.7	4.3	4.4	3.9	3.7	9.4	9.2	41	34	51	33	14	13.3	33	38
4.8	4.7	4.4	4.5	3.9	3.8	9.5	9.3	42	34	51	34	14	14.3	33	39
4.8	4.8	4.4	4.5	4	3.8	9.6	9.4	42	35	51	34	14	14.3	33	39
4.9	4.8	4.5	4.5	4	3.9	9.7	9.5	43	35	52	34	15	14.3	34	40
4.9	4.8	4.5	4.6	4	3.9	9.7	9.6	43	35	52	35	15	14.3	34	40
5	4.9	4.6	4.6	4	3.9	9.8	9.7	44	36	53	35	15	14.3	34	40
5	4.9	4.6	4.7	4.1	3.9	9.9	9.8	44	36	53	35	15	14.3	35	41
5	5	4.7	4.7	4.1	4	10	9.8	44	36	54	36	15	14.3	35	41
5.1	5	4.7	4.7	4.1	4	10.1	9.9	45	36	54	36	15	14.3	35	41
5.1	5	4.7	4.8	4.1	4	10.1	9.9	45	37	55	36	15	14.3	36	42
5.2	5.1	4.8	4.8	4.3	4	10.2	10	46	37	55	37	15	14.3	36	42
5.3	5.2	4.8	4.9	4.5	4	10.3	10	46	38	56	37	16	15.3	36	42
5.3	5.3	4.9	5	4.5	4.1	10.4	10.1	46	38	56	37	16	15.3	37	42
5.4	5.4	4.9	5.1	4.7	4.1	10.5	10.2	47	38	57	38	16	15.3	37	43
5.5	5.5	5	5.2	4.7	4.1	10.7	10.2	47	39	57	38	16	15.3	37	43
5.6	5.6	5.1	5.2	4.8	4.2	10.8	10.3	48	39	58	38	16	15.3	38	43
5.6	5.6	5.1	5.3	4.8	4.2	10.9	10.4	48	39	58	39	17	15.3	38	44
5.7	5.7	5.2	5.3	4.8	4.2	10.9	10.5	49	40	59	39	17	15.3	38	44
5.7	5.7	5.2	5.4	4.8	4.2	11	10.5	49	40	59	39	17	15.3	39	44
5.8	5.7	5.3	5.4	4.9	4.2	11.1	10.6	49	40	60	40	17	16.3	39	45
5.8	5.8	5.3	5.4	4.9	4.3	11.2	10.7	50	41	60	40	17	16.3	39	45
5.8	5.8	5.4	5.5	4.9	4.3	11.3	10.8	50	41	61	40	17	16.3	40	45
5.9	5.8	5.4	5.5	4.9	4.3	11.4	10.9	51	41	61	41	17	16.3	40	46
6	6	5.5	5.6	5.2	4.3	11.5	11	51	42	62	41	18	16.3	40	46
6.2	6.3	5.5	5.8	5.7	4.3	11.6	11.1	51	42	62	41	18	16.3	41	47
6.3	6.5	5.6	6.1	6	4.4	11.8	11.1	52	43	63	42	18	16.3	41	47
6.5	6.7	5.7	6.3	6	4.4	12	11.2	52	43	63	42	19	16.3	41	47
6.6	6.8	5.8	6.4	6.1	4.4	12.1	11.3	53	43	64	43	19	16.3	42	48
6.7	6.9	5.9	6.5	6.1	4.4	12.3	11.4	53	44	64	43	19	17.3	42	48
6.8	6.9	6	6.5	6.2	4.4	12.4	11.5	54	44	65	43	19	17.3	42	48
6.9	7	6.1	6.6	6.2	4.5	12.5	11.6	54	45	65	44	19	17.3	43	49
6.9	7	6.2	6.6	6.2	4.5	12.6	11.6	55	45	66	44	19	17.3	43	49
7	7.1	6.3	6.7	6.2	4.5	12.7	11.7	55	45	66	44	20	17.3	43	49

7	7.1	6.3	6.7	6.3	4.5	12.8	11.8	56	46	66	45	20	17.3	44	50	A-92
7.1	7.1	6.4	6.8	6.3	4.5	12.9	11.9	56	46	67	45	20	17.3	44	50	
7.1	7.2	6.4	6.8	6.3	4.5	13	12	56	46	67	46	20	17.3	44	50	
7.2	7.2	6.5	6.8	6.3	4.6	13.1	12	57	47	68	46	20	17.3	45	51	
7.2	7.3	6.5	6.9	6.4	4.6	13.2	12.1	57	47	68	46	20	18.3	45	51	
7.3	7.4	6.6	6.9	6.6	4.6	13.3	12.2	58	47	69	46	20	18.3	45	51	
7.5	7.7	6.7	7.2	7.2	4.6	13.5	12.3	58	48	69	47	21	18.3	46	52	
7.8	8.1	6.9	7.7	7.7	4.6	13.8	12.4	59	48	70	47	21	18.3	46	52	
8.1	8.5	7.1	8.1	8.1	4.6	14.1	12.4	59	49	70	48	22	18.3	47	52	
8.4	8.9	7.3	8.5	8.3	4.7	14.4	12.4	60	49	71	48	23	18.3	47	52	
8.7	9.1	7.5	8.8	8.4	4.8	14.7	12.5	60	50	71	49	23	18.3	47	53	
8.9	9.3	7.8	9	8.5	4.8	14.9	12.5	61	50	72	49	23	18.3	48	53	
9.1	9.5	7.9	9.1	8.6	4.8	15.2	12.6	61	51	72	50	24	19.3	48	53	
9.3	9.6	8.1	9.3	8.7	4.8	15.4	12.7	62	51	73	50	24	19.3	48	53	
9.4	9.7	8.3	9.3	8.7	4.8	15.5	12.8	62	52	73	51	24	19.3	49	54	
9.5	9.8	8.4	9.4	8.8	4.9	15.7	12.8	63	52	74	51	24	19.3	49	54	
9.6	9.9	8.5	9.5	8.8	4.9	15.9	12.9	63	53	74	52	24	19.3	50	54	
9.7	10	8.6	9.5	8.9	4.9	16	13	64	53	75	52	24	19.3	50	55	
9.8	10	8.7	9.6	8.9	4.9	16.1	13	64	54	75	53	24	19.3	50	55	
9.8	10.1	8.8	9.6	8.9	4.9	16.2	13.1	65	54	76	53	24	19.3	51	55	
9.9	10.1	8.9	9.6	9	5	16.3	13.2	65	54	77	53	25	19.3	51	56	
9.9	10.1	8.9	9.7	9	5	16.4	13.3	66	55	77	54	25	19.3	51	56	
10	10.2	9	9.7	9	5	16.5	13.3	66	55	78	54	25	20.3	52	56	
10	10.2	9.1	9.8	9.1	5	16.6	13.4	67	55	78	54	25	20.3	52	56	
10.1	10.3	9.1	9.8	9.1	5	16.7	13.5	67	56	79	55	25	20.3	53	57	
10.1	10.3	9.2	9.8	9.1	5	16.7	13.5	68	56	79	55	25	20.3	53	57	
10.2	10.3	9.2	9.9	9.2	5.1	16.8	13.6	68	56	80	55	25	20.3	53	57	
10.2	10.4	9.2	9.9	9.2	5.1	16.9	13.7	68	56	80	55	25	20.3	54	57	
10.3	10.4	9.3	9.9	9.2	5.1	17	13.7	69	57	81	56	25	20.3	54	58	
10.3	10.5	9.3	10	9.2	5.1	17.1	13.8	69	57	81	56	26	20.3	54	58	
10.3	10.5	9.4	10	9.3	5.1	17.2	13.9	69	57	82	56	26	20.3	55	58	
10.4	10.5	9.4	10	9.3	5.1	17.2	13.9	70	58	82	57	26	20.3	55	59	
10.4	10.6	9.5	10.1	9.3	5.2	17.3	14	70	58	83	57	26	21.3	56	59	
10.5	10.6	9.5	10.1	9.3	5.2	17.4	14.1	71	58	83	57	26	21.3	56	59	
10.5	10.6	9.5	10.2	9.3	5.2	17.5	14.2	71	59	84	58	26	21.3	56	59	
10.5	10.7	9.6	10.2	9.4	5.2	17.6	14.2	71	59	84	58	26	21.3	57	60	
10.6	10.7	9.6	10.2	9.4	5.2	17.6	14.3	72	59	85	58	26	21.3	57	60	
10.6	10.7	9.7	10.3	9.4	5.2	17.7	14.4	72	59	85	58	26	21.3	57	60	
10.7	10.8	9.7	10.3	9.4	5.3	17.8	14.5	72	60	86	59	26	21.3	58	61	
10.7	10.8	9.8	10.3	9.5	5.3	17.9	14.5	73	60	86	59	27	21.3	58	61	
10.7	10.9	9.8	10.4	9.5	5.3	18	14.6	73	60	87	59	27	21.3	58	61	
10.8	10.9	9.8	10.4	9.5	5.3	18	14.7	74	61	87	60	27	22.3	59	61	
10.8	10.9	9.9	10.4	9.5	5.3	18.1	14.7	74	61	88	60	27	22.3	59	62	
10.9	11	9.9	10.5	9.5	5.3	18.2	14.8	74	61	88	60	27	22.3	59	62	
10.9	11	10	10.5	9.6	5.4	18.3	14.8	75	61	89	60	27	22.3	60	62	
10.9	11	10	10.5	9.6	5.4	18.4	14.9	75	62	89	61	27	22.3	60	62	
11	11.1	10	10.6	9.6	5.4	18.5	14.9	75	62	90	61	27	22.3	60	62	
11	11.1	10.1	10.6	9.6	5.4	18.5	15	76	62	90	61	27	22.3	60	63	

LOAM2MFlat		LOAM2MTop		LOAM2MBottom		LOAM2M1M	LOAM2M30CM		LOAM2M3M		LOAM5MFl	LOAM5MTo	LOAM5MBo	LOAM5M1M	LOAM5M30CM		LOAM5M3M	
Cum T(cm)		Cum T(cm)		Cum T(cm)		Cum T(cm)	Cum T(cm)		Cum T(cm)		Cum T(cm)	Cum T(cm)	Cum T(cm)	Cum T(cm)	Cum T(cm)		Cum T(cm)	
A	B	A	B	A	B	A	A	B	A	B	A	A	A	A	A	B	A	B
0.1	0	0.2	0.1	0.1	0	0.1	0.2	0.1	0	0	0.1	0.1	0	0	0.1	0	0	0
0.2	0.1	0.3	0.1	0.2	0.1	0.1	0.2	0.1	0	0	0.1	0.2	0	0.1	0.1	0	0	0
0.3	0.1	0.4	0.2	0.2	0.1	0.2	0.3	0.1	0	0	0.1	0.2	0	0.1	0.2	0	0	0
0.4	0.2	0.5	0.3	0.3	0.2	0.3	0.4	0.1	0	0	0.2	0.3	0	0.1	0.3	0	0	0
0.5	0.2	0.7	0.3	0.3	0.2	0.4	0.5	0.1	0	0	0.2	0.4	0	0.2	0.4	0	0.1	0
0.6	0.3	0.8	0.4	0.4	0.3	0.4	0.6	0.1	1	1	0.3	0.4	0	0.2	0.4	0	0.1	0
0.7	0.4	0.9	0.5	0.5	0.4	0.5	0.6	0.1	1	1	0.3	0.5	0	0.3	0.4	0	0.1	0
0.8	0.4	1	0.5	0.5	0.4	0.6	0.6	0.1	1	1	0.4	0.5	0	0.3	0.4	0	0.1	0
0.9	0.5	1.1	0.6	0.6	0.5	0.7	0.6	0.1	1	1	0.4	0.6	0	0.3	0.4	0	0.2	0.1
1	0.6	1.2	0.7	0.7	0.6	0.7	0.6	0.2	1	1	0.4	0.6	0	0.4	0.4	0	0.2	0.1
1	0.6	1.2	0.7	0.7	0.6	0.8	0.6	0.2	1	2	0.5	0.6	0	0.4	0.4	0	0.2	0.1
1.1	0.7	1.3	0.8	0.8	0.7	0.8	0.6	0.2	1	2	0.5	0.6	0	0.4	0.4	0	0.2	0.1
1.2	0.7	1.4	0.9	0.8	0.7	0.9	0.7	0.2	2	2	0.5	0.6	0	0.4	0.4	0	0.2	0.1
1.3	0.8	1.4	0.9	0.9	0.8	1	0.7	0.2	2	2	0.5	0.6	0.1	0.5	0.4	0	0.3	0.1
1.3	0.8	1.5	1	1	0.8	1	0.7	0.2	2	2	0.5	0.6	0.1	0.5	0.4	0	0.3	0.1
1.4	0.9	1.5	1.1	1	0.9	1	0.7	0.2	2	3	0.5	0.6	0.1	0.5	0.4	0	0.3	0.1
1.4	1	1.6	1.1	1.1	1	1.1	0.7	0.2	2	3	0.5	0.6	0.1	0.5	0.4	0	0.3	0.1
1.5	1	1.7	1.2	1.2	1	1.1	0.7	0.2	2	3	0.5	0.6	0.1	0.5	0.4	0	0.3	0.1
1.5	1	1.7	1.2	1.2	1.1	1.2	0.7	0.2	3	3	0.5	0.6	0.1	0.5	0.4	0	0.4	0.1
1.6	1.1	1.8	1.3	1.3	1.1	1.2	0.7	0.3	3	3	0.5	0.6	0.1	0.5	0.4	0	0.4	0.1
1.6	1.1	1.8	1.4	1.3	1.2	1.2	0.7	0.3	3	3	0.5	0.6	0.1	0.5	0.4	0	0.4	0.1
1.7	1.2	1.9	1.4	1.4	1.2	1.3	0.7	0.3	3	4	0.5	0.6	0.1	0.5	0.4	0	0.4	0.1
1.8	1.2	2	1.5	1.5	1.3	1.3	0.8	0.3	3	4	0.5	0.6	0.1	0.5	0.4	0	0.4	0.1
1.8	1.3	2	1.5	1.5	1.3	1.3	0.8	0.3	3	4	0.5	0.6	0.1	0.5	0.4	0	0.4	0.2
1.9	1.3	2.1	1.6	1.6	1.4	1.4	0.8	0.3	3	4	0.5	0.6	0.1	0.5	0.4	0	0.4	0.2
1.9	1.4	2.1	1.6	1.7	1.4	1.4	0.8	0.3	4	4	0.5	0.6	0.1	0.5	0.4	0	0.5	0.2
2	1.4	2.2	1.7	1.7	1.5	1.4	0.8	0.3	4	4	0.5	0.6	0.2	0.5	0.4	0.01	0.5	0.2
2	1.5	2.2	1.7	1.8	1.5	1.5	0.8	0.3	4	5	0.5	0.6	0.2	0.5	0.4	0.01	0.5	0.2
2.1	1.5	2.3	1.8	1.8	1.6	1.5	0.8	0.3	4	5	0.5	0.6	0.2	0.5	0.4	0.01	0.5	0.2
2.1	1.6	2.4	1.9	1.9	1.7	1.5	0.8	0.4	4	5	0.5	0.6	0.2	0.5	0.4	0.01	0.5	0.2
2.2	1.6	2.4	1.9	2	1.7	1.6	0.8	0.4	4	5	0.5	0.6	0.2	0.5	0.4	0.01	0.5	0.2
2.2	1.7	2.5	2	2	1.8	1.6	0.9	0.4	4	5	0.5	0.6	0.2	0.5	0.4	0.01	0.5	0.2
2.3	1.8	2.5	2	2.1	1.8	1.6	0.9	0.4	5	5	0.5	0.6	0.2	0.5	0.4	0.01	0.5	0.2
2.3	1.8	2.6	2.1	2.1	1.9	1.7	0.9	0.4	5	6	0.5	0.6	0.2	0.5	0.4	0.01	0.5	0.2
2.4	1.9	2.6	2.2	2.2	2	1.7	0.9	0.4	5	6	0.5	0.6	0.2	0.5	0.4	0.01	0.5	0.2
2.4	1.9	2.7	2.3	2.3	2	1.7	0.9	0.4	5	6	0.5	0.6	0.2	0.5	0.4	0.01	0.6	0.2
2.5	2	2.8	2.3	2.3	2.1	1.8	0.9	0.4	5	6	0.5	0.6	0.2	0.5	0.4	0.01	0.6	0.2
2.5	2	2.8	2.4	2.4	2.1	1.8	0.9	0.4	5	6	0.5	0.6	0.2	0.5	0.4	0.01	0.6	0.2
2.6	2.1	2.9	2.4	2.4	2.2	1.8	0.9	0.5	5	7	0.5	0.6	0.2	0.5	0.4	0.01	0.6	0.2

6.3	5.6	6.9	6.2	5.5	5.2	4.6	2.9	2.1	13	14	1.8	2	0.7	1.8	1.9	1.22	1.7	1.2	A-95
6.4	5.7	7	6.3	5.6	5.3	4.6	2.9	2.2	13	15	1.8	2	0.7	1.8	1.9	1.22	1.7	1.2	
6.4	5.7	7.1	6.4	5.7	5.4	4.7	2.9	2.2	13	15	1.8	2	0.8	1.8	1.9	1.22	1.7	1.2	
6.5	5.8	7.1	6.4	5.7	5.4	4.7	3	2.2	13	15	1.9	2	0.8	1.8	1.9	1.22	1.7	1.2	
6.5	5.8	7.2	6.5	5.8	5.5	4.7	3	2.2	13	15	1.9	2	0.8	1.8	1.9	1.22	1.7	1.2	
6.6	5.9	7.2	6.5	5.9	5.5	4.8	3	2.2	13	15	1.9	2	0.8	1.8	2	1.22	1.8	1.3	
6.7	5.9	7.3	6.6	6	5.6	4.8	3	2.2	13	15	1.9	2	0.8	1.8	2	1.22	1.8	1.3	
6.7	6	7.4	6.7	6	5.7	4.9	3.1	2.2	14	16	1.9	2.1	0.8	1.8	2	1.22	1.8	1.3	
6.8	6	7.4	6.7	6.1	5.7	4.9	3.1	2.2	14	16	1.9	2.1	0.9	1.8	2	1.22	1.8	1.3	
6.8	6.1	7.5	6.8	6.2	5.8	4.9	3.1	2.2	14	16	1.9	2.1	0.9	1.8	2	1.22	1.8	1.3	
6.9	6.1	7.6	6.8	6.2	5.8	5	3.1	2.2	14	16	1.9	2.1	0.9	1.8	2	1.22	1.9	1.3	
7	6.2	7.7	6.9	6.3	5.9	5	3.2	2.2	14	16	1.9	2.1	0.9	1.8	2.1	1.22	1.9	1.3	
7.1	6.2	7.8	7	6.4	5.9	5.1	3.5	2.4	14	16	2	2.2	0.9	1.9	2.4	1.37	1.9	1.3	
7.2	6.4	8	7.2	6.4	6	5.2	3.8	2.9	14	16	2.1	2.4	0.9	2	2.7	1.88	1.9	1.4	
7.3	6.6	8.2	7.5	6.5	6.1	5.3	3.9	3.4	15	17	2.1	2.5	0.9	2	2.8	2.31	2	1.4	
7.4	6.7	8.3	7.7	6.6	6.2	5.4	4	3.5	15	17	2.2	2.6	1	2.1	2.8	2.41	2	1.5	
7.6	6.8	8.5	7.9	6.6	6.2	5.5	4	3.6	15	17	2.3	2.7	1	2.2	2.8	2.51	2	1.5	
7.7	7	8.6	8.2	6.7	6.3	5.6	4	3.6	15	17	2.3	2.7	1	2.2	2.8	2.51	2.1	1.6	
7.8	7.1	8.7	8.3	6.8	6.4	5.7	4	3.6	15	17	2.4	2.8	1	2.3	2.8	2.51	2.1	1.6	
7.9	7.2	8.8	8.4	6.8	6.4	5.8	4	3.6	15	18	2.4	2.8	1	2.3	2.8	2.51	2.1	1.7	
8	7.4	8.8	8.5	6.9	6.5	5.8	4	3.6	15	18	2.5	2.8	1	2.4	2.8	2.51	2.2	1.7	
8.1	7.6	8.9	8.5	7	6.6	5.9	4	3.6	16	18	2.5	2.8	1	2.4	2.8	2.51	2.2	1.8	
8.1	7.6	9	8.6	7	6.7	6	4	3.6	16	18	2.6	2.8	1.1	2.4	2.8	2.51	2.2	1.8	
8.2	7.7	9	8.6	7.1	6.7	6	4	3.7	16	18	2.6	2.8	1.1	2.5	2.8	2.51	2.3	1.8	
8.3	7.8	9.1	8.7	7.2	6.8	6.1	4.1	3.7	16	18	2.6	2.8	1.1	2.5	2.8	2.51	2.3	1.9	
8.4	7.9	9.2	8.8	7.3	6.9	6.1	4.2	3.7	16	19	2.6	2.9	1.1	2.5	2.9	2.51	2.3	1.9	
8.5	7.9	9.3	8.8	7.3	6.9	6.2	4.4	3.7	16	19	2.7	3	1.1	2.5	3.1	2.51	2.3	1.9	
8.6	8	9.4	8.9	7.4	7	6.3	4.5	3.7	17	19	2.7	3.1	1.2	2.6	3.3	2.61	2.4	2	
8.7	8.1	9.6	8.9	7.5	7	6.3	4.6	3.8	17	19	2.8	3.1	1.2	2.6	3.4	2.61	2.4	2	
8.8	8.2	9.7	9	7.5	7.1	6.4	4.8	3.9	17	19	2.8	3.2	1.2	2.7	3.5	2.71	2.4	2	
8.9	8.2	9.9	9.1	7.6	7.2	6.5	4.8	3.9	17	19	2.9	3.3	1.2	2.7	3.5	2.71	2.5	2.1	
9	8.3	10	9.2	7.7	7.3	6.6	4.9	3.9	17	19	2.9	3.4	1.2	2.8	3.6	2.71	2.5	2.1	
9.1	8.4	10.1	9.2	7.8	7.3	6.7	4.9	3.9	17	19	3	3.4	1.2	2.8	3.6	2.71	2.5	2.1	
9.2	8.4	10.2	9.3	7.8	7.4	6.7	4.9	3.9	17	20	3	3.5	1.3	2.9	3.6	2.71	2.6	2.1	
9.3	8.5	10.3	9.3	7.9	7.5	6.8	4.9	3.9	18	20	3.1	3.5	1.3	2.9	3.6	2.71	2.6	2.2	
9.4	8.6	10.3	9.4	8	7.6	6.9	4.9	3.9	18	20	3.1	3.5	1.3	3	3.6	2.71	2.6	2.2	
9.4	8.6	10.4	9.5	8	7.7	6.9	4.9	4	18	20	3.1	3.5	1.3	3	3.6	2.71	2.6	2.2	
9.5	8.7	10.4	9.5	8.1	7.8	7	4.9	4	18	20	3.2	3.5	1.3	3	3.6	2.71	2.7	2.3	
9.6	8.7	10.6	9.6	8.2	7.8	7.1	5.1	4	18	20	3.2	3.6	1.3	3	3.7	2.71	2.7	2.3	
9.7	8.8	10.7	9.7	8.3	7.9	7.2	5.5	4	18	21	3.3	3.7	1.4	3.1	4.1	2.71	2.7	2.3	
9.9	8.8	11	9.7	8.3	8	7.3	5.9	4	19	21	3.4	3.9	1.4	3.2	4.5	2.71	2.8	2.3	
10	8.9	11.2	9.8	8.4	8.1	7.4	6.1	4	19	21	3.5	4	1.4	3.3	4.8	2.71	2.8	2.3	
10.1	9	11.4	9.8	8.5	8.1	7.6	6.3	4	19	21	3.6	4.2	1.4	3.4	4.8	2.71	2.9	2.3	
10.3	9	11.6	9.9	8.6	8.2	7.7	6.3	4	19	21	3.6	4.3	1.5	3.5	4.9	2.71	3	2.4	
10.4	9.1	11.8	10	8.6	8.3	7.8	6.3	4	19	21	3.7	4.4	1.5	3.6	4.9	2.71	3	2.4	
10.6	9.1	11.9	10	8.7	8.4	7.9	6.3	4.1	19	22	3.8	4.5	1.5	3.7	4.9	2.71	3.1	2.4	
10.7	9.2	12	10.1	8.8	8.4	8.1	6.3	4.1	20	22	3.9	4.6	1.5	3.8	4.9	2.71	3.1	2.4	
10.8	9.2	12.1	10.1	8.9	8.5	8.2	6.3	4.1	20	22	4	4.7	1.6	3.9	4.9	2.71	3.2	2.4	

10.9	9.3	12.2	10.2	9	8.5	8.3	6.3	4.1	20	22	4.1	4.7	1.6	4	4.9	2.71	3.2	2.4
11.1	9.3	12.3	10.2	9.1	8.6	8.3	6.3	4.1	20	22	4.1	4.7	1.6	4	4.9	2.71	3.3	2.4
11.2	9.4	12.3	10.3	9.1	8.7	8.4	6.3	4.1	20	22	4.2	4.7	1.7	4	4.9	2.71	3.3	2.4
11.3	9.4	12.4	10.3	9.2	8.7	8.5	6.4	4.1	20	22	4.2	4.7	1.7	4.1	4.9	2.71	3.4	2.4
11.4	9.5	12.4	10.4	9.3	8.8	8.5	6.4	4.1	21	23	4.3	4.7	1.7	4.1	4.9	2.71	3.4	2.5
11.5	9.5	12.5	10.5	9.4	8.9	8.6	6.5	4.1	21	23	4.3	4.8	1.8	4.1	5	2.71	3.5	2.5
11.6	9.6	12.7	10.5	9.5	8.9	8.7	6.9	4.1	21	23	4.4	4.9	1.8	4.2	5.4	2.71	3.5	2.5
11.8	9.6	13	10.6	9.6	9	8.9	7.5	4.1	21	23	4.5	5.1	1.8	4.4	5.9	2.71	3.6	2.5
11.9	9.6	13.3	10.6	9.7	9	9.1	8	4.2	21	23	4.7	5.4	1.9	4.6	6.5	2.71	3.7	2.5
12.1	9.7	13.6	10.6	9.8	9	9.4	8.6	4.3	22	23	4.8	5.6	1.9	4.8	7	2.81	3.8	2.5
12.3	9.7	13.9	10.7	9.9	9.1	9.6	9	4.4	22	23	5	5.8	2	5	7.5	2.91	3.9	2.5
12.5	9.8	14.2	10.8	10	9.2	9.8	9.2	4.4	22	23	5.1	6.1	2.1	5.2	7.6	2.91	4	2.5
12.7	9.9	14.5	10.9	10.1	9.2	10.1	9.3	4.5	22	23	5.3	6.3	2.1	5.4	7.7	3.01	4.1	2.5
12.9	10	14.8	11	10.2	9.3	10.3	9.3	4.5	23	24	5.4	6.5	2.2	5.6	7.7	3.01	4.2	2.5
13.1	10.1	15.1	11.1	10.4	9.4	10.5	9.3	4.5	23	24	5.6	6.8	2.2	5.8	7.7	3.01	4.4	2.6
13.3	10.1	15.3	11.1	10.5	9.4	10.7	9.4	4.5	23	24	5.7	6.9	2.3	6	7.7	3.01	4.5	2.6
13.5	10.2	15.5	11.2	10.6	9.5	10.9	9.4	4.5	23	24	5.8	7.1	2.4	6.1	7.7	3.01	4.6	2.6
13.7	10.3	15.7	11.2	10.7	9.5	11.1	9.4	4.5	23	24	6	7.2	2.4	6.2	7.7	3.01	4.7	2.6
13.9	10.3	15.8	11.3	10.8	9.6	11.2	9.4	4.5	24	24	6.1	7.3	2.5	6.3	7.7	3.01	4.8	2.6
14.1	10.4	15.9	11.3	11	9.7	11.3	9.4	4.5	24	24	6.2	7.3	2.6	6.4	7.7	3.01	4.9	2.6
14.2	10.4	15.9	11.4	11.1	9.7	11.4	9.4	4.5	24	24	6.4	7.3	2.6	6.5	7.7	3.01	5	2.6
14.4	10.5	16	11.4	11.2	9.8	11.5	9.4	4.5	24	25	6.5	7.4	2.7	6.5	7.7	3.01	5.1	2.6
14.5	10.5	16	11.5	11.3	9.8	11.5	9.4	4.6	25	25	6.6	7.4	2.8	6.6	7.7	3.01	5.2	2.7
14.7	10.6	16.1	11.6	11.4	9.9	11.6	9.4	4.6	25	25	6.6	7.4	2.8	6.6	7.7	3.01	5.3	2.7
14.8	10.6	16.1	11.6	11.5	10	11.6	9.4	4.6	25	25	6.7	7.4	2.9	6.6	7.7	3.01	5.4	2.7
14.9	10.7	16.2	11.6	11.7	10	11.7	9.5	4.6	25	25	6.7	7.4	3	6.6	7.7	3.01	5.5	2.7
15	10.7	16.2	11.7	11.8	10.1	11.7	9.5	4.6	25	25	6.8	7.4	3	6.6	7.7	3.01	5.5	2.7
15	10.8	16.3	11.7	11.9	10.1	11.7	9.5	4.6	26	25	6.8	7.4	3.1	6.6	7.7	3.01	5.6	2.7
15.1	10.8	16.4	11.8	12	10.2	11.8	9.5	4.6	26	25	6.8	7.4	3.2	6.6	7.7	3.01	5.7	2.7
15.1	10.9	16.4	11.8	12.1	10.2	11.8	9.5	4.6	26	25	6.8	7.4	3.2	6.6	7.7	3.01	5.7	2.7
15.2	10.9	16.5	11.9	12.2	10.3	11.8	9.5	4.6	26	26	6.8	7.4	3.3	6.6	7.7	3.01	5.8	2.7
15.2	10.9	16.5	11.9	12.3	10.4	11.9	9.5	4.6	26	26	6.8	7.4	3.3	6.6	7.7	3.01	5.8	2.7
15.3	11	16.6	12	12.4	10.4	11.9	9.5	4.7	26	26	6.8	7.4	3.4	6.6	7.7	3.01	5.9	2.7
15.3	11	16.6	12	12.6	10.5	11.9	9.5	4.7	27	26	6.8	7.4	3.4	6.6	7.7	3.01	5.9	2.7
15.4	11.1	16.7	12.1	12.7	10.5	11.9	9.5	4.7	27	26	6.8	7.4	3.5	6.6	7.7	3.01	6	2.8
15.4	11.2	16.7	12.1	12.8	10.6	12	9.6	4.7	27	26	6.8	7.4	3.5	6.6	7.7	3.01	6	2.8
15.5	11.2	16.8	12.2	12.9	10.7	12	9.6	4.7	27	26	6.8	7.4	3.6	6.6	7.7	3.01	6	2.8
15.5	11.3	16.8	12.3	13	10.7	12	9.6	4.7	27	26	6.8	7.4	3.6	6.6	7.7	3.01	6.1	2.8
15.6	11.3	16.9	12.3	13.1	10.8	12.1	9.6	4.7	27	27	6.8	7.4	3.7	6.6	7.7	3.01	6.1	2.8
15.7	11.4	17	12.4	13.2	10.8	12.1	9.6	4.7	28	27	6.8	7.4	3.7	6.6	7.7	3.01	6.1	2.8
15.7	11.4	17	12.4	13.2	10.9	12.1	9.6	4.7	28	27	6.8	7.4	3.8	6.6	7.7	3.01	6.1	2.8
15.8	11.4	17.1	12.4	13.3	10.9	12.2	9.6	4.7	28	27	6.8	7.4	3.8	6.6	7.7	3.01	6.1	2.8
15.8	11.5	17.1	12.5	13.4	11	12.2	9.6	4.7	28	27	6.8	7.4	3.8	6.6	7.7	3.01	6.1	2.8
15.9	11.5	17.2	12.5	13.5	11	12.2	9.6	4.8	28	27	6.8	7.4	3.9	6.6	7.7	3.01	6.2	2.8
15.9	11.6	17.2	12.6	13.6	11.1	12.3	9.6	4.8	28	27	6.8	7.4	3.9	6.6	7.7	3.01	6.2	2.8
16	11.6	17.3	12.6	13.7	11.1	12.3	9.7	4.8	28	27	6.8	7.4	3.9	6.6	7.7	3.01	6.2	2.8
16	11.6	17.3	12.6	13.8	11.2	12.3	9.7	4.8	28	27	6.8	7.4	4	6.6	7.7	3.01	6.2	2.8
16.1	11.7	17.4	12.7	13.9	11.2	12.3	9.7	4.8	29	27	6.8	7.4	4	6.6	7.7	3.01	6.2	2.8

SAND1MFlat Cum T(cm) A	SAND1MTop Cum T(cm) A	SAND1MBott Cum T(cm) A	SAND1M1M Cum T(cm) A	SAND1M30CM Cum T(cm) A	B	SAND1M3M Cum T(cm) A	B	SAND2MFlat Cum T(cm) A	SAND2MTop Cum T(cm) A	SAND2MBot Cum T(cm) A	SAND2M1M Cum T(cm) A	SAND2M30CM Cum T(cm) A	B	SAND2M3M Cum T(cm) A	B
0	0	0	1	0	0.1	1	1	0.1	0.2	0	0.1	0.1	0	0	0
1	1	0	1	0	0.2	1	1	0.2	0.3	0.1	0.1	0.1	0	0	0
1	1	1	2	0	0.3	1	1	0.3	0.4	0.1	0.2	0.2	0	1	0
2	2	1	2	0	0.4	2	2	0.4	0.5	0.2	0.3	0.3	0	1	0
2	2	2	3	1	0.5	2	2	0.5	0.6	0.3	0.4	0.4	0	1	0
2	2	2	3	1	0.7	2	3	0.6	0.7	0.3	0.5	0.4	0	1	1
3	3	2	3	1	0.8	3	3	0.7	0.8	0.4	0.5	0.4	0	1	1
3	3	3	4	1	0.9	3	4	0.8	0.8	0.5	0.6	0.4	0.1	1	1
4	4	3	4	1	1	3	5	0.9	0.9	0.5	0.7	0.4	0.1	2	1
4	4	4	5	1	1.1	4	5	1	0.9	0.6	0.7	0.5	0.1	2	2
5	4	4	5	1	1.2	4	5	1	0.9	0.7	0.8	0.5	0.1	2	2
5	5	4	5	1	1.3	4	6	1.1	1	0.7	0.8	0.5	0.1	2	2
5	5	5	6	1	1.5	5	6	1.1	1	0.8	0.8	0.5	0.1	2	2
6	5	5	6	1	1.6	5	7	1.1	1	0.9	0.9	0.5	0.1	2	2
6	6	6	6	2	1.7	5	7	1.2	1	0.9	0.9	0.5	0.1	2	2
6	6	6	7	2	1.8	6	8	1.2	1.1	1	0.9	0.5	0.1	3	3
7	6	6	7	2	1.9	6	8	1.3	1.1	1	0.9	0.5	0.1	3	3
7	7	7	7	2	2	6	9	1.3	1.1	1.1	0.9	0.5	0.1	3	3
8	7	7	8	2	2.1	7	9	1.3	1.1	1.2	1	0.5	0.1	3	3
8	7	8	8	2	2.2	7	10	1.4	1.2	1.2	1	0.5	0.1	3	3
8	8	8	8	2	2.3	7	10	1.4	1.2	1.3	1	0.5	0.1	3	4
9	8	9	9	2	2.4	8	10	1.5	1.2	1.4	1	0.5	0.1	3	4
9	8	9	9	2	2.5	8	11	1.5	1.3	1.4	1.1	0.5	0.1	4	4
10	9	9	10	2	2.6	8	11	1.5	1.3	1.5	1.1	0.5	0.1	4	4
10	9	10	10	3	2.7	9	11	1.6	1.3	1.5	1.1	0.5	0.1	4	4
10	9	10	10	3	2.8	9	12	1.6	1.3	1.6	1.1	0.5	0.1	4	4
11	10	11	11	3	2.9	9	12	1.7	1.4	1.7	1.2	0.5	0.2	4	4
11	10	11	11	3	3	10	13	1.7	1.4	1.7	1.2	0.6	0.2	4	5
11	10	11	11	3	3.1	10	13	1.7	1.4	1.8	1.2	0.6	0.2	4	5
12	11	12	12	3	3.2	10	14	1.8	1.4	1.8	1.2	0.6	0.2	4	5
12	11	12	12	3	3.3	11	14	1.8	1.5	1.9	1.2	0.6	0.2	5	5
13	11	13	12	3	3.4	11	15	1.9	1.5	2	1.3	0.6	0.2	5	5
13	12	13	13	3	3.6	11	15	1.9	1.5	2	1.3	0.6	0.2	5	5
13	12	13	13	3	3.7	12	16	1.9	1.6	2.1	1.3	0.6	0.2	5	6
14	12	14	13	4	3.8	12	16	2	1.6	2.1	1.3	0.6	0.2	5	6
14	13	14	14	4	3.9	12	17	2	1.6	2.2	1.4	0.6	0.2	5	6
15	13	15	14	4	4	13	17	2.1	1.6	2.2	1.4	0.6	0.2	5	6
15	13	15	14	4	4.1	13	18	2.1	1.7	2.3	1.4	0.6	0.2	5	6
15	14	16	15	4	4.2	13	18	2.1	1.7	2.4	1.4	0.6	0.2	6	7

16	14	16	15	4	4.3	14	18	2.2	1.7	2.4	1.4	0.6	0.2	6	7	A-98
16	14	16	15	4	4.4	14	19	2.2	1.8	2.5	1.5	0.8	0.2	6	7	
16	15	17	16	5	4.5	14	19	2.3	1.9	2.5	1.6	1	0.2	6	7	
17	15	17	16	5	4.6	15	20	2.4	2.1	2.6	1.7	1.2	0.2	6	7	
17	16	18	17	5	4.7	15	20	2.5	2.2	2.7	1.8	1.2	0.2	6	7	
18	16	18	17	5	4.8	15	20	2.7	2.3	2.7	1.8	1.2	0.3	6	7	
18	16	18	18	5	4.9	16	21	2.8	2.4	2.8	1.9	1.2	0.3	7	8	
19	17	19	18	5	5	16	21	2.8	2.4	2.8	2	1.2	0.3	7	8	
19	17	19	18	5	5.1	16	22	2.9	2.4	2.9	2	1.2	0.3	7	8	
20	17	20	19	5	5.2	17	22	3	2.5	3	2.1	1.2	0.3	7	8	
20	18	20	19	6	5.3	17	22	3	2.5	3	2.1	1.2	0.3	7	8	
20	18	20	19	6	5.4	17	23	3.1	2.5	3.1	2.1	1.2	0.3	7	8	
21	18	21	20	6	5.5	18	23	3.1	2.5	3.2	2.2	1.2	0.3	7	8	
21	19	21	20	6	5.9	18	23	3.2	2.6	3.2	2.2	1.2	0.5	8	9	
21	19	22	20	6	6.4	18	24	3.2	2.6	3.3	2.2	1.2	1	8	9	
22	19	22	21	6	6.7	19	24	3.2	2.6	3.4	2.2	1.3	1.1	8	9	
22	20	22	21	6	6.7	19	25	3.3	2.7	3.4	2.3	1.3	1.1	8	9	
23	20	23	22	6	6.9	19	25	3.3	2.7	3.5	2.3	1.3	1.2	8	9	
23	20	23	22	6	7	20	26	3.4	2.7	3.5	2.3	1.3	1.2	8	10	
23	21	24	22	6	7.1	20	26	3.4	2.7	3.6	2.3	1.3	1.2	8	10	
24	21	24	23	7	7.2	20	27	3.4	2.8	3.7	2.3	1.3	1.2	9	10	
24	21	25	23	7	7.3	21	27	3.5	2.8	3.7	2.4	1.3	1.2	9	10	
24	22	25	23	7	7.4	21	28	3.5	2.8	3.8	2.4	1.3	1.2	9	11	
25	22	25	24	7	7.5	21	28	3.6	2.8	3.8	2.4	1.3	1.2	9	11	
25	22	26	24	7	7.6	22	28	3.6	2.9	3.9	2.4	1.3	1.2	9	11	
26	23	26	24	7	7.7	22	29	3.6	2.9	4	2.5	1.3	1.2	9	11	
26	23	27	25	7	7.9	22	29	3.7	2.9	4	2.5	1.3	1.2	9	11	
26	23	27	25	7	7.9	23	30	3.7	2.9	4.1	2.5	1.3	1.2	9	11	
27	24	27	25	7	8	23	30	3.7	3	4.1	2.5	1.3	1.2	10	12	
27	24	28	26	7	8.1	23	30	3.8	3	4.2	2.5	1.3	1.2	10	12	
28	24	28	26	8	8.2	24	31	3.8	3	4.3	2.6	1.3	1.2	10	12	
28	25	29	26	8	8.3	24	31	3.9	3.1	4.3	2.6	1.6	1.2	10	12	
28	25	29	27	8	8.5	24	31	4	3.3	4.4	2.8	2	1.3	10	12	
29	26	29	27	9	8.8	25	32	4.2	3.5	4.5	2.9	2.4	1.5	10	12	
29	27	30	28	9	9	25	32	4.3	3.7	4.5	3.1	2.4	1.6	10	12	
30	27	30	28	9	9.2	25	33	4.5	3.9	4.6	3.2	2.4	1.7	11	13	
30	28	31	29	9	9.3	26	33	4.6	4.1	4.7	3.3	2.4	1.7	11	13	
31	28	31	29	9	9.4	26	33	4.8	4.2	4.8	3.5	2.4	1.7	11	13	
31	29	32	30	9	9.5	26	34	4.9	4.2	4.8	3.6	2.4	1.7	11	13	
32	29	32	30	10	9.6	27	34	5	4.2	4.9	3.6	2.5	1.7	11	13	
32	30	32	30	10	9.7	27	35	5.1	4.3	5	3.7	2.5	1.7	12	13	
33	30	33	31	10	9.8	28	35	5.2	4.3	5.1	3.7	2.5	1.7	12	14	
33	31	33	31	10	9.9	28	35	5.2	4.3	5.2	3.7	2.5	1.8	12	14	
33	31	34	32	10	10.1	28	36	5.3	4.4	5.2	3.8	2.5	1.8	12	14	
34	32	34	32	10	10.2	29	36	5.3	4.4	5.3	3.8	2.5	1.8	12	14	
34	32	34	32	10	10.3	29	37	5.3	4.4	5.4	3.8	2.5	1.8	12	14	
35	32	35	33	10	10.4	29	37	5.4	4.4	5.5	3.8	2.5	1.8	13	15	
35	33	35	33	10	10.5	30	38	5.4	4.5	5.5	3.8	2.5	1.8	13	15	

35	33	36	33	10	10.6	30	38	5.5	4.5	5.6	3.9	2.5	1.8	13	15	A-99
36	33	36	34	11	10.7	30	39	5.5	4.5	5.7	3.9	2.5	1.8	13	15	
36	34	36	34	11	10.7	31	39	5.5	4.5	5.8	3.9	2.5	1.8	13	15	
36	34	37	34	11	10.7	31	39	5.6	4.6	5.8	3.9	2.5	1.8	13	15	
37	34	37	35	11	10.7	31	40	5.6	4.6	5.9	3.9	2.5	1.8	13	16	
37	35	38	35	11	10.7	32	40	5.7	4.6	6	4	2.5	1.8	13	16	
38	35	38	35	11	11.7	32	41	5.7	4.7	6	4	2.6	1.8	14	16	
38	35	38	36	11	11.7	32	41	5.8	4.7	6.1	4	2.6	1.8	14	16	
38	36	39	36	11	11.7	33	41	5.8	4.8	6.2	4.1	2.6	1.8	14	16	
39	36	39	37	11	11.7	33	42	5.9	4.8	6.2	4.1	2.6	1.8	14	16	
39	36	40	37	11	11.7	33	42	5.9	4.8	6.3	4.1	2.6	1.8	14	16	
40	37	40	37	12	11.7	34	43	6	4.9	6.4	4.2	2.8	1.8	14	17	
40	37	41	38	12	11.7	34	43	6.1	5.1	6.4	4.3	3.2	1.9	14	17	
41	38	41	38	13	12.7	34	43	6.3	5.3	6.5	4.4	3.5	2.3	15	17	
41	38	41	39	13	13.7	35	44	6.4	5.5	6.6	4.6	3.5	2.6	15	17	
41	39	42	39	13	13.7	35	44	6.5	5.6	6.7	4.7	3.5	2.6	15	17	
42	39	42	40	13	13.7	35	45	6.6	5.8	6.7	4.8	3.6	2.6	15	18	
42	40	43	40	13	13.7	36	45	6.8	5.8	6.8	4.9	3.6	2.6	15	18	
43	40	43	40	13	13.7	36	45	6.9	5.9	6.9	5	3.6	2.7	15	18	
43	40	43	41	13	13.7	37	46	7	5.9	7	5	3.6	2.7	16	18	
44	41	44	41	13	13.7	37	46	7.1	5.9	7	5.1	3.6	2.7	16	18	
44	41	44	41	13	13.7	37	47	7.1	5.9	7.1	5.1	3.6	2.7	16	19	
45	41	45	42	14	13.7	38	47	7.2	6	7.2	5.2	3.6	2.7	16	19	
45	42	45	42	14	14.7	38	47	7.2	6	7.3	5.2	3.6	2.7	16	19	
45	42	45	43	14	14.7	38	48	7.2	6	7.3	5.2	3.6	2.8	16	19	
46	42	46	43	14	14.7	39	48	7.3	6.1	7.4	5.2	3.7	2.8	17	19	
46	43	46	43	14	14.7	39	48	7.4	6.2	7.5	5.3	4	2.8	17	19	
47	43	47	44	15	14.7	39	49	7.5	6.4	7.6	5.4	4.2	2.8	17	20	
47	44	47	44	15	14.7	40	49	7.6	6.5	7.6	5.5	4.3	2.9	17	20	
47	44	47	45	15	14.7	40	49	7.7	6.6	7.7	5.6	4.4	2.9	17	20	
48	44	48	45	15	14.7	40	50	7.8	6.8	7.8	5.7	4.4	3	17	20	
48	45	48	45	15	15.7	41	50	7.9	6.9	7.9	5.8	4.4	3	17	20	
49	45	49	46	15	15.7	41	50	8.1	6.9	7.9	5.9	4.4	3	18	20	
49	46	49	46	15	15.7	41	51	8.1	7	8	5.9	4.5	3	18	20	
50	46	50	47	16	15.7	42	51	8.2	7	8.1	6	4.5	3	18	21	
50	46	50	47	16	15.7	42	52	8.3	7	8.2	6.1	4.5	3	18	21	
51	47	50	47	16	15.7	43	52	8.4	7.1	8.3	6.1	4.5	3	18	21	
51	47	51	48	16	15.7	43	52	8.4	7.1	8.3	6.1	4.5	3	18	21	
51	47	51	48	16	15.7	43	53	8.5	7.2	8.4	6.2	4.7	3	19	21	
52	48	52	49	17	15.7	44	53	8.7	7.4	8.5	6.3	5.2	3	19	21	
52	48	52	49	17	16.7	44	54	8.8	7.6	8.6	6.5	5.7	3	19	22	
53	49	52	50	18	16.7	44	54	9	7.9	8.7	6.7	5.9	3	19	22	
53	50	53	50	18	16.7	45	54	9.1	8.1	8.8	6.9	5.9	3	19	22	
54	50	53	51	18	16.7	45	55	9.3	8.3	8.9	7.1	5.9	3	20	22	
54	50	54	51	18	16.7	45	55	9.5	8.5	9	7.2	5.9	3	20	22	
55	51	54	52	18	16.7	46	56	9.6	8.6	9.1	7.3	5.9	3	20	22	
55	51	54	52	18	16.7	46	56	9.8	8.6	9.2	7.4	5.9	3	20	22	
56	52	55	52	18	16.7	47	56	9.9	8.6	9.3	7.5	5.9	3	20	23	

56	52	55	53	18	16.7	47	57	10	8.7	9.4	7.5	5.9	3.1	21	23	A-100
57	52	56	53	18	16.7	47	57	10.1	8.7	9.5	7.6	5.9	3.1	21	23	
57	53	56	53	19	17.7	48	57	10.1	8.7	9.6	7.6	5.9	3.1	21	23	
57	53	57	54	19	17.7	48	58	10.2	8.7	9.7	7.6	5.9	3.1	21	23	
58	53	57	54	19	17.7	48	58	10.2	8.8	9.8	7.6	5.9	3.1	21	23	
58	54	57	55	19	17.7	49	58	10.3	8.9	9.9	7.7	6.1	3.1	21	23	
59	54	58	55	20	17.7	49	59	10.5	9.1	10	7.9	6.6	3.1	22	24	
59	55	58	56	20	17.7	49	59	10.7	9.4	10.1	8.2	7.2	3.1	22	24	
60	55	59	56	21	17.7	50	59	10.9	9.8	10.2	8.5	7.8	3.1	22	24	
60	56	59	57	21	17.7	50	59	11.2	10.1	10.4	8.8	8.3	3.3	22	24	
61	56	59	57	22	18.7	51	60	11.4	10.5	10.6	9.2	8.5	3.4	23	24	
61	57	60	58	22	18.7	51	60	11.7	10.9	10.7	9.5	8.6	3.4	23	24	
62	58	60	59	22	18.7	51	60	12	11.2	10.9	9.9	8.7	3.4	23	24	
62	58	61	59	22	18.7	52	61	12.2	11.5	11.1	10.2	8.7	3.4	24	24	
63	59	61	60	22	18.7	52	61	12.5	11.7	11.3	10.4	8.8	3.4	24	24	
63	59	61	60	22	18.7	52	61	12.7	11.9	11.4	10.5	8.8	3.4	24	25	
64	60	62	61	23	18.7	53	62	13	11.9	11.6	10.6	8.9	3.4	25	25	
64	60	62	61	23	18.7	53	62	13.2	12	11.8	10.6	8.9	3.4	25	25	
65	60	63	62	23	18.7	53	62	13.4	12	11.9	10.7	8.9	3.4	25	25	
65	61	63	62	23	18.7	54	62	13.5	12	12.1	10.7	8.9	3.4	25	25	
66	61	63	62	23	19.7	54	63	13.6	12	12.3	10.7	8.9	3.5	26	25	
66	61	64	63	23	19.7	55	63	13.6	12.1	12.4	10.8	8.9	3.5	26	25	
66	62	64	63	23	19.7	55	63	13.7	12.1	12.6	10.8	9	3.5	26	25	
67	62	65	63	23	19.7	55	64	13.7	12.1	12.7	10.8	9	3.5	26	26	
67	62	65	64	23	19.7	56	64	13.8	12.1	12.9	10.8	9	3.5	26	26	
68	63	66	64	23	19.7	56	64	13.8	12.2	13	10.8	9	3.5	27	26	
68	63	66	64	24	19.7	56	65	13.8	12.2	13.1	10.9	9	3.5	27	26	
68	63	66	65	24	19.7	57	65	13.9	12.2	13.3	10.9	9	3.5	27	26	
69	64	67	65	24	19.7	57	65	13.9	12.3	13.4	10.9	9	3.5	27	26	
69	64	67	65	24	19.7	57	66	14	12.3	13.5	10.9	9	3.5	27	26	
70	64	68	66	24	20.7	58	66	14	12.3	13.6	10.9	9	3.5	27	26	
70	65	68	66	24	20.7	58	66	14	12.3	13.7	11	9.1	3.5	27	26	
70	65	68	67	24	20.7	59	66	14.1	12.4	13.8	11	9.1	3.5	27	27	
71	65	69	67	24	20.7	59	67	14.1	12.4	13.9	11	9.1	3.5	28	27	
71	66	69	67	24	20.7	59	67	14.2	12.4	14	11	9.1	3.5	28	27	
72	66	70	68	24	20.7	60	67	14.2	12.4	14	11.1	9.1	3.5	28	27	
72	66	70	68	25	20.7	60	68	14.2	12.5	14.1	11.1	9.1	3.5	28	27	
72	67	70	68	25	20.7	60	68	14.3	12.5	14.2	11.1	9.1	3.5	28	27	
73	67	71	69	25	20.7	61	68	14.3	12.5	14.3	11.1	9.1	3.5	28	27	
73	67	71	69	25	20.7	61	69	14.4	12.5	14.4	11.1	9.1	3.6	28	27	
73	68	72	69	25	21.7	61	69	14.4	12.6	14.4	11.2	9.1	3.6	29	28	
74	68	72	70	25	21.7	62	69	14.4	12.6	14.5	11.2	9.1	3.6	29	28	
74	68	72	70	25	21.7	62	69	14.5	12.6	14.6	11.2	9.1	3.6	29	28	
75	69	73	70	25	21.7	62	70	14.5	12.6	14.6	11.2	9.1	3.6	29	28	
75	69	73	71	25	21.7	63	70	14.6	12.7	14.7	11.2	9.1	3.6	29	28	
75	69	74	71	25	21.7	63	70	14.6	12.7	14.8	11.3	9.2	3.6	29	28	
76	70	74	71	26	21.7	63	70	14.6	12.7	14.8	11.3	9.2	3.6	29	28	
76	70	75	72	26	21.7	64	71	14.7	12.7	14.9	11.3	9.2	3.6	29	28	

SAND5MFlat	SAND5MTop	SAND5MBottor	SAND5M1M	SAND5M30CM		SAND5M3M	
Cum T(cm)	Cum T(cm)	Cum T(cm)	Cum T(cm)	Cum T(cm)		Cum T(cm)	
A	A	A	A	A	B	A	B
0.1	0.1	0	0.1	0.1	0	0	0.1
0.1	0.2	0.1	0.1	0.1	0	0	0.1
0.2	0.3	0.1	0.2	0.2	0	0.1	0.1
0.3	0.3	0.1	0.2	0.3	0.01	0.1	0.1
0.3	0.4	0.1	0.3	0.4	0.01	0.1	0.1
0.4	0.5	0.1	0.3	0.4	0.01	0.1	0.1
0.5	0.5	0.1	0.4	0.4	0.01	0.2	0.1
0.5	0.6	0.1	0.4	0.4	0.01	0.2	0.1
0.6	0.6	0.1	0.5	0.4	0.01	0.2	0.1
0.6	0.6	0.1	0.5	0.4	0.01	0.3	0.1
0.7	0.6	0.2	0.5	0.4	0.01	0.3	0.1
0.7	0.6	0.2	0.5	0.4	0.01	0.3	0.1
0.7	0.6	0.2	0.5	0.4	0.01	0.3	0.1
0.7	0.6	0.2	0.5	0.4	0.01	0.4	0.1
0.7	0.6	0.2	0.5	0.4	0.01	0.4	0.1
0.7	0.6	0.2	0.5	0.4	0.01	0.4	0.1
0.7	0.6	0.2	0.5	0.4	0.01	0.4	0.1
0.7	0.6	0.2	0.5	0.4	0.01	0.4	0.1
0.7	0.6	0.3	0.5	0.4	0.01	0.4	0.1
0.7	0.6	0.3	0.5	0.4	0.01	0.5	0.1
0.7	0.6	0.3	0.5	0.4	0.01	0.5	0.1
0.7	0.6	0.3	0.5	0.4	0.01	0.5	0.1
0.7	0.6	0.3	0.5	0.4	0.01	0.5	0.1
0.7	0.6	0.3	0.5	0.4	0.01	0.5	0.1
0.7	0.6	0.3	0.5	0.4	0.01	0.5	0.1
0.7	0.6	0.3	0.5	0.4	0.01	0.5	0.1
0.7	0.6	0.3	0.5	0.4	0.01	0.5	0.1
0.7	0.6	0.4	0.5	0.4	0.01	0.5	0.2
0.7	0.6	0.4	0.5	0.4	0.01	0.5	0.2
0.7	0.6	0.4	0.5	0.4	0.01	0.5	0.2
0.7	0.6	0.4	0.5	0.4	0.02	0.5	0.2
0.7	0.6	0.4	0.5	0.4	0.02	0.5	0.2
0.7	0.6	0.4	0.5	0.4	0.02	0.5	0.2
0.7	0.6	0.4	0.5	0.4	0.02	0.5	0.2
0.7	0.6	0.4	0.5	0.4	0.02	0.6	0.2
0.7	0.6	0.4	0.5	0.4	0.02	0.6	0.2
0.7	0.6	0.4	0.5	0.4	0.02	0.6	0.2
0.7	0.6	0.4	0.5	0.4	0.02	0.6	0.2
0.7	0.6	0.4	0.5	0.5	0.02	0.6	0.2

0.7	0.6	0.4	0.5	0.5	0.02	0.6	0.2
0.7	0.6	0.4	0.6	0.6	0.02	0.6	0.2
0.8	0.7	0.4	0.6	0.9	0.02	0.6	0.2
0.9	0.9	0.5	0.7	1	0.02	0.6	0.2
0.9	1	0.5	0.8	1	0.02	0.7	0.2
1	1	0.5	0.8	1	0.02	0.7	0.2
1.1	1.1	0.5	0.9	1	0.02	0.7	0.2
1.1	1.1	0.5	0.9	1	0.02	0.7	0.2
1.2	1.1	0.5	1	1	0.02	0.8	0.2
1.2	1.1	0.5	1	1	0.02	0.8	0.2
1.2	1.1	0.5	1	1	0.02	0.8	0.2
1.2	1.1	0.6	1	1	0.02	0.8	0.2
1.2	1.1	0.6	1	1	0.02	0.9	0.2
1.2	1.1	0.6	1	1	0.25	0.9	0.2
1.2	1.1	0.6	1	1	0.7	0.9	0.3
1.2	1.1	0.6	1	1	0.84	0.9	0.3
1.2	1.1	0.6	1	1	0.85	0.9	0.4
1.2	1.1	0.6	1	1	0.85	1	0.4
1.2	1.1	0.6	1	1	0.85	1	0.5
1.2	1.1	0.7	1	1	0.85	1	0.6
1.2	1.1	0.7	1	1	0.85	1	0.6
1.2	1.1	0.7	1	1	0.85	1	0.7
1.2	1.1	0.7	1	1	0.85	1	0.7
1.2	1.1	0.7	1	1	0.85	1	0.7
1.2	1.1	0.7	1	1	0.85	1	0.8
1.2	1.1	0.7	1	1	0.85	1	0.8
1.2	1.1	0.7	1	1	0.85	1	0.8
1.2	1.1	0.7	1	1	0.85	1	0.8
1.2	1.1	0.7	1	1	0.85	1	0.8
1.2	1.1	0.8	1	1	0.85	1	0.9
1.3	1.2	0.8	1.1	1.2	0.85	1.1	0.9
1.3	1.3	0.8	1.2	1.7	0.93	1.1	0.9
1.5	1.5	0.8	1.3	2	1.13	1.2	0.9
1.6	1.7	0.8	1.4	2.1	1.21	1.2	0.9
1.7	1.9	0.9	1.6	2.1	1.26	1.3	0.9
1.8	2	0.9	1.7	2.1	1.26	1.3	0.9
1.9	2.1	0.9	1.8	2.1	1.26	1.4	1
2	2.1	0.9	1.8	2.1	1.36	1.4	1
2	2.1	1	1.9	2.1	1.36	1.5	1
2.1	2.1	1	1.9	2.1	1.36	1.5	1.1
2.1	2.1	1	1.9	2.1	1.36	1.6	1.1
2.1	2.1	1	1.9	2.1	1.36	1.6	1.1
2.2	2.1	1.1	1.9	2.1	1.36	1.7	1.1
2.2	2.1	1.1	1.9	2.1	1.36	1.7	1.1
2.2	2.1	1.1	1.9	2.1	1.36	1.7	1.2
2.2	2.1	1.1	1.9	2.1	1.36	1.8	1.2
2.2	2.1	1.2	1.9	2.1	1.36	1.8	1.2

2.2	2.1	1.2	1.9	2.1	1.36	1.8	1.2
2.2	2.1	1.2	1.9	2.1	1.36	1.8	1.2
2.2	2.1	1.2	1.9	2.1	1.36	1.8	1.2
2.2	2.1	1.3	1.9	2.1	1.36	1.9	1.2
2.2	2.1	1.3	1.9	2.1	1.36	1.9	1.2
2.2	2.1	1.3	1.9	2.1	1.36	1.9	1.2
2.2	2.1	1.3	1.9	2.1	1.36	1.9	1.2
2.2	2.2	1.3	2	2.2	1.36	1.9	1.2
2.2	2.2	1.4	2	2.2	1.36	1.9	1.2
2.2	2.2	1.4	2	2.2	1.36	1.9	1.2
2.2	2.2	1.4	2	2.2	1.36	1.9	1.2
2.3	2.2	1.4	2	2.4	1.36	1.9	1.3
2.4	2.4	1.4	2.1	2.8	1.56	2	1.3
2.5	2.6	1.4	2.2	3	2.16	2	1.3
2.5	2.7	1.5	2.3	3	2.66	2.1	1.4
2.6	2.9	1.5	2.5	3	2.66	2.1	1.5
2.7	3	1.5	2.5	3.1	2.66	2.2	1.6
2.8	3	1.5	2.6	3.1	2.66	2.2	1.7
2.9	3	1.6	2.7	3.1	2.66	2.3	1.8
2.9	3	1.6	2.7	3.1	2.66	2.3	1.8
3	3	1.6	2.7	3.1	2.66	2.3	1.9
3	3	1.6	2.7	3.1	2.66	2.4	2
3	3	1.7	2.7	3.1	2.66	2.4	2
3	3	1.7	2.7	3.1	2.76	2.5	2.1
3	3	1.7	2.7	3.1	2.76	2.5	2.1
3	3.1	1.7	2.8	3.2	2.76	2.5	2.2
3.1	3.2	1.8	2.8	3.5	2.76	2.6	2.2
3.2	3.3	1.8	2.9	3.6	2.76	2.6	2.2
3.2	3.4	1.8	3	3.7	2.86	2.6	2.2
3.3	3.5	1.8	3	3.8	2.96	2.7	2.2
3.4	3.6	1.9	3.1	3.9	2.96	2.7	2.3
3.5	3.7	1.9	3.2	3.9	2.96	2.7	2.3
3.5	3.7	1.9	3.2	3.9	2.96	2.8	2.3
3.6	3.7	1.9	3.3	3.9	2.96	2.8	2.3
3.6	3.7	2	3.3	3.9	2.96	2.9	2.3
3.7	3.7	2	3.4	3.9	2.96	2.9	2.4
3.7	3.7	2	3.4	3.9	2.96	2.9	2.4
3.7	3.7	2	3.4	3.9	2.96	3	2.4
3.7	3.8	2.1	3.5	4.1	2.96	3	2.4
3.7	4	2.1	3.6	4.6	2.96	3.1	2.4
3.7	4.2	2.1	3.7	5.1	2.96	3.1	2.4
3.7	4.4	2.2	3.9	5.2	2.96	3.2	2.4
3.7	4.6	2.2	4.1	5.2	2.96	3.3	2.5
3.7	4.8	2.3	4.2	5.2	2.96	3.4	2.5
3.7	5	2.3	4.4	5.2	2.96	3.5	2.5
3.7	5	2.4	4.5	5.2	2.96	3.6	2.5
3.7	5	2.4	4.5	5.2	2.96	3.6	2.5
3.7	5	2.5	4.6	5.2	2.96	3.7	2.5

3.7	5	2.5	4.6	5.2	2.96	3.8	2.5
3.7	5	2.6	4.6	5.2	2.96	3.9	2.5
3.7	5	2.6	4.6	5.2	2.96	3.9	2.5
3.7	5	2.7	4.6	5.2	2.96	4	2.5
3.7	5	2.7	4.6	5.2	2.96	4	2.5
3.9	5.1	2.8	4.6	5.4	2.96	4.1	2.5
4.1	5.3	2.8	4.8	5.9	2.96	4.1	2.5
4.4	5.6	2.9	5.1	6.5	2.96	4.3	2.5
4.8	5.9	3	5.4	7.1	2.96	4.4	2.5
5.1	6.3	3.1	5.7	7.6	3.06	4.6	2.5
5.5	6.6	3.2	6	7.8	3.16	4.8	2.5
5.8	7	3.3	6.4	7.9	3.26	4.9	2.5
6.2	7.3	3.4	6.7	8	3.26	5.1	2.6
6.6	7.6	3.6	6.9	8	3.26	5.3	2.6
7	7.8	3.7	7.1	8.1	3.26	5.5	2.6
7.3	7.9	3.8	7.3	8.1	3.26	5.6	2.6
7.7	7.9	3.9	7.3	8.1	3.26	5.8	2.6
8	7.9	4.1	7.3	8.1	3.26	6	2.7
8.4	7.9	4.2	7.4	8.2	3.26	6.1	2.7
8.7	7.9	4.3	7.4	8.2	3.26	6.2	2.7
8.9	7.9	4.4	7.4	8.2	3.26	6.4	2.7
9.2	7.9	4.5	7.4	8.2	3.26	6.5	2.7
9.3	7.9	4.6	7.4	8.2	3.26	6.5	2.7
9.4	7.9	4.7	7.4	8.2	3.26	6.6	2.7
9.4	7.9	4.8	7.4	8.2	3.26	6.6	2.7
9.4	7.9	4.9	7.4	8.2	3.26	6.7	2.7
9.4	7.9	5	7.4	8.2	3.26	6.7	2.7
9.4	7.9	5	7.4	8.2	3.26	6.7	2.8
9.4	7.9	5.1	7.4	8.2	3.26	6.7	2.8
9.5	7.9	5.2	7.4	8.2	3.26	6.8	2.8
9.5	7.9	5.2	7.4	8.2	3.26	6.8	2.8
9.5	7.9	5.3	7.4	8.2	3.26	6.8	2.8
9.5	7.9	5.3	7.4	8.2	3.26	6.8	2.8
9.5	7.9	5.3	7.4	8.2	3.26	6.8	2.8
9.5	7.9	5.4	7.4	8.2	3.26	6.8	2.8
9.5	7.9	5.4	7.4	8.2	3.26	6.8	2.8
9.5	7.9	5.4	7.4	8.3	3.26	6.8	2.8
9.5	7.9	5.5	7.4	8.3	3.26	6.8	2.8
9.5	7.9	5.5	7.4	8.3	3.26	6.8	2.8
9.5	7.9	5.5	7.4	8.3	3.26	6.8	2.8
9.5	7.9	5.5	7.4	8.3	3.26	6.8	2.8
9.5	7.9	5.6	7.4	8.3	3.26	6.8	2.8
9.5	7.9	5.6	7.4	8.3	3.26	6.8	2.8
9.5	7.9	5.6	7.4	8.3	3.26	6.8	2.8
9.5	7.9	5.6	7.4	8.3	3.26	6.9	2.8
9.5	7.9	5.6	7.4	8.3	3.26	6.9	2.8
9.5	7.9	5.6	7.4	8.3	3.26	6.9	2.8
9.5	7.9	5.6	7.4	8.3	3.26	6.9	2.8

Appendix A.7. Groundwater Discharge Data

A =183day streach has constant PET=0.6cm/day
B =183day streach has real calculated PET

Day	CLAY1MFlat Cum D (cm) A	CLAY1MTop Cum D (cm) A	CLAY1MBott Cum D (cm) A	CLAY1M1M Cum D (cm) A	CLAY1M30CM Cum D (cm) A	B	CLAY1M3M Cum D (cm) A	B	CLAY2MFlat Cum D (cm) A	CLAY2MTop Cum D (cm) A	CLAY2MBott Cum D (cm) A	CLAY2M1M Cum D (cm) A	CLAY2M30CM Cum D (cm) A	B	CLAY2M3M Cum D (cm) A	B
804	1	0	1	0	0	1	1	0	0	0	1	0	0	0	1	0
805	1	1	1	1	0	1	1	1	0	0	1	0	0	0	1	1
806	2	1	2	1	1	1	2	2	1	1	1	0	0	0	1	1
807	2	2	3	2	1	2	2	2	1	1	1	0	0	1	2	1
808	3	2	3	2	2	2	3	3	1	1	2	1	1	1	2	2
809	3	3	4	3	2	2	3	3	1	1	2	1	1	1	2	2
810	4	3	4	3	2	3	4	4	2	1	2	1	1	1	3	3
811	4	4	5	4	3	3	4	5	2	2	3	1	1	1	3	3
812	5	4	6	4	3	4	5	5	2	2	3	2	1	1	3	3
813	6	5	6	5	3	4	5	6	2	2	3	2	1	2	4	4
814	6	5	7	5	4	4	6	7	3	2	4	2	2	2	4	4
815	7	6	7	6	4	5	6	7	3	3	4	2	2	2	4	5
816	7	6	8	6	5	5	7	8	3	3	4	2	2	2	5	5
817	8	7	9	7	5	6	7	8	4	3	4	3	2	2	5	6
818	8	7	9	7	5	6	8	9	4	3	5	3	2	2	5	6
819	9	8	10	8	6	6	8	10	4	4	5	3	2	3	6	6
820	9	8	10	8	6	7	9	10	4	4	5	3	3	3	6	7
821	10	9	11	9	6	7	9	11	5	4	6	4	3	3	6	7
822	10	9	12	9	7	7	10	12	5	4	6	4	3	3	7	8
823	11	10	12	10	7	8	11	12	5	4	6	4	3	3	7	8
824	12	10	13	10	8	8	11	13	5	5	7	4	3	3	7	9
825	12	10	14	11	8	9	12	13	6	5	7	4	3	4	8	9
826	13	11	14	11	8	9	12	14	6	5	7	5	4	4	8	9
827	13	11	15	12	9	9	13	15	6	5	8	5	4	4	8	10
828	14	12	15	12	9	10	13	15	7	6	8	5	4	4	9	10
829	14	12	16	13	9	10	14	16	7	6	8	5	4	4	9	11
830	15	13	17	13	10	11	14	16	7	6	8	6	4	4	9	11
831	15	13	17	13	10	11	15	17	7	6	9	6	4	5	10	11
832	16	14	18	14	11	11	15	18	8	7	9	6	5	5	10	12
833	17	14	18	14	11	12	16	18	8	7	9	6	5	5	10	12
834	17	15	19	15	11	12	16	19	8	7	10	6	5	5	11	13
835	18	15	20	15	12	12	17	20	8	7	10	7	5	5	11	13
836	18	16	20	16	12	13	17	20	9	7	10	7	5	5	11	13
837	19	16	21	16	12	13	18	21	9	8	11	7	5	6	12	14
838	19	17	22	17	13	14	18	21	9	8	11	7	6	6	12	14
839	20	17	22	17	13	14	19	22	10	8	11	8	6	6	12	15
840	20	18	23	18	14	14	19	23	10	8	11	8	6	6	13	15
841	21	18	23	18	14	15	20	23	10	9	12	8	6	6	13	15
842	21	19	24	19	14	15	20	24	10	9	12	8	6	6	13	16

843	22	19	25	19	15	16	21	25	11	9	12	9	6	7	14	16	A-106
844	23	20	25	20	15	16	21	25	11	9	13	9	7	7	14	17	
845	23	20	26	20	15	16	22	26	11	10	13	9	7	7	14	17	
846	24	21	26	21	16	17	23	26	12	10	13	9	7	7	15	18	
847	24	21	27	21	16	17	23	27	12	10	14	9	7	7	15	18	
848	25	22	28	22	17	17	24	28	12	10	14	10	7	7	16	18	
849	25	22	28	22	17	18	24	28	12	10	14	10	7	8	16	19	
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851	26	23	30	23	18	19	25	29	13	11	15	10	8	8	17	20	
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853	28	24	31	24	18	19	26	31	13	11	15	11	8	8	17	20	
854	28	25	31	25	19	20	27	31	14	12	16	11	8	8	18	21	
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921	65	57	73	57	44	45	61	69	32	27	36	26	19	19	40	46	
922	65	57	73	58	44	46	62	70	33	27	36	26	19	20	41	46	
923	66	58	74	58	45	46	62	71	33	28	37	27	19	20	41	47	
924	66	58	74	59	45	46	63	71	33	28	37	27	20	20	41	47	
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935	72	64	81	64	49	50	68	77	36	31	40	29	21	22	45	51	
936	73	64	82	64	49	51	69	78	36	31	41	29	22	22	45	52	
937	74	65	82	65	50	51	69	78	37	31	41	30	22	22	46	52	
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949	80	70	89	70	53	56	75	85	40	34	45	32	24	24	50	56	
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959	85	74	95	75	57	59	80	90	43	36	48	35	25	26	53	60	
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963	87	76	98	77	58	61	82	92	44	37	49	36	26	26	55	61	
964	88	77	98	77	59	61	82	93	44	37	49	36	26	26	55	61	
965	88	77	99	78	59	62	83	93	44	37	49	36	26	27	55	62	
966	89	78	99	78	60	62	83	94	45	38	50	36	26	27	56	62	
967	89	78	100	79	60	62	84	94	45	38	50	36	26	27	56	62	
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971	91	80	102	81	61	64	86	96	46	39	51	37	27	28	57	64	
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980	96	85	108	85	65	67	90	101	49	41	54	39	28	29	60	67	
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985	99	87	111	87	67	69	93	103	50	42	55	40	29	30	62	68	
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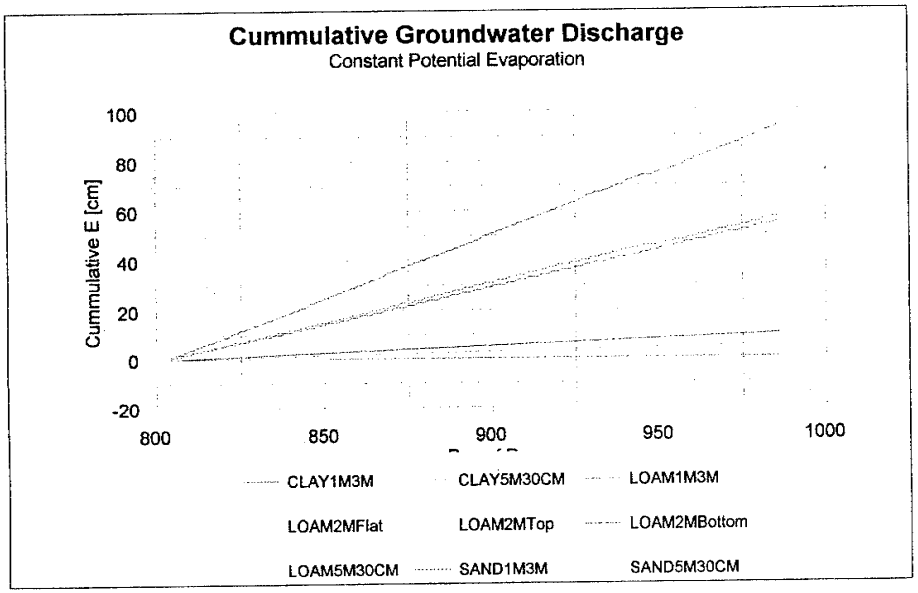

Cummulative Groundwater Discharge
Constant Potential Evaporation
Cummulative E [cm]
100
80
60
40
20
0
-20
800
850
900
950
1000
CLAY1M3M
CLAY5M30CM
LOAM1M3M
LOAM2MFlat
LOAM2MTop
LOAM2MBottom
LOAM5M30CM
SAND1M3M
SAND5M30CM

CLAY5MFlat Cum D (cm) A	CLAY5MTop Cum D (cm) A	CLAY5MBott Cum D (cm) A	CLAY5M1M Cum D (cm) A	CLAY5M30CM Cum D (cm) A	B	CLAY5M3M Cum D (cm) A	B	LOAM1MFlat Cum D (cm) A	LOAM1MTop Cum D (cm) A	LOAM1MBot Cum D (cm) A	LOAM1M1M Cum D (cm) A	LOAM1M30CM Cum D (cm) A	B	LOAM1M3M Cum D (cm) A	B
0.1	0	0	0	0	0	0.1	0.1	0	0	0	0	0.1	0.1	1	0
0.1	0	0.1	0.1	0.1	0.1	0.1	0.2	1	1	0	1	0.2	0.2	1	0
0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	1	1	1	1	0.3	0.3	1	1
0.2	0.1	0.2	0.1	0.1	0.1	0.3	0.4	1	1	1	1	0.4	0.4	2	1
0.2	0.2	0.2	0.2	0.1	0.1	0.4	0.4	2	2	2	2	0.5	0.6	2	1
0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.5	2	2	2	2	0.6	0.7	2	2
0.3	0.2	0.3	0.2	0.2	0.2	0.5	0.6	3	2	3	2	0.7	0.8	2	2
0.3	0.3	0.3	0.3	0.2	0.2	0.6	0.7	3	2	3	2	0.8	0.9	3	3
0.4	0.3	0.4	0.3	0.3	0.3	0.7	0.8	3	3	3	3	0.9	1	3	3
0.4	0.3	0.4	0.3	0.3	0.3	0.7	0.9	4	3	4	3	1	1.1	3	3
0.5	0.4	0.5	0.4	0.3	0.3	0.8	1	4	3	4	3	1.1	1.2	4	4
0.5	0.4	0.5	0.4	0.3	0.3	0.9	1.1	4	4	5	4	1.2	1.3	4	4
0.5	0.5	0.5	0.5	0.4	0.4	1	1.2	5	4	5	4	1.3	1.4	4	5
0.6	0.5	0.6	0.5	0.4	0.4	1.1	1.2	5	4	6	4	1.4	1.5	4	5
0.6	0.5	0.6	0.5	0.4	0.4	1.1	1.3	5	4	6	4	1.5	1.7	5	6
0.7	0.6	0.7	0.6	0.5	0.5	1.2	1.4	6	5	7	5	1.6	1.8	5	6
0.7	0.6	0.7	0.6	0.5	0.5	1.3	1.5	6	5	7	5	1.7	1.9	5	6
0.7	0.6	0.7	0.6	0.5	0.5	1.4	1.6	7	5	8	5	1.8	2	6	7
0.8	0.7	0.8	0.7	0.5	0.6	1.4	1.7	7	6	8	6	1.9	2.1	6	7
0.8	0.7	0.8	0.7	0.6	0.6	1.5	1.8	7	6	8	6	2	2.2	6	8
0.9	0.7	0.9	0.7	0.6	0.6	1.6	1.9	8	6	9	6	2.1	2.3	6	8
0.9	0.8	0.9	0.8	0.6	0.6	1.7	2	8	7	9	6	2.3	2.4	7	8
0.9	0.8	0.9	0.8	0.7	0.7	1.8	2.1	8	7	10	7	2.4	2.6	7	9
1	0.9	1	0.8	0.7	0.7	1.8	2.1	9	7	10	7	2.5	2.7	7	9
1	0.9	1	0.9	0.7	0.7	1.9	2.2	9	7	11	7	2.6	2.8	8	10
1.1	0.9	1.1	0.9	0.8	0.8	2	2.3	9	8	11	8	2.7	2.9	8	10
1.1	1	1.1	1	0.8	0.8	2.1	2.4	10	8	12	8	2.8	3	8	10
1.1	1	1.1	1	0.8	0.8	2.1	2.5	10	8	12	8	2.9	3.1	9	11
1.2	1	1.2	1	0.8	0.8	2.2	2.6	11	9	13	9	3	3.2	9	11
1.2	1.1	1.2	1.1	0.9	0.9	2.3	2.7	11	9	13	9	3.1	3.3	9	11
1.3	1.1	1.3	1.1	0.9	0.9	2.4	2.8	11	9	13	9	3.2	3.4	9	12
1.3	1.2	1.3	1.1	0.9	0.9	2.5	2.9	12	9	14	9	3.3	3.5	10	12
1.3	1.2	1.4	1.2	1	1	2.5	3	12	10	14	10	3.4	3.7	10	13
1.4	1.2	1.4	1.2	1	1	2.6	3	12	10	15	10	3.5	3.8	10	13
1.4	1.3	1.4	1.2	1	1	2.7	3.1	13	10	15	10	3.6	3.9	11	13
1.5	1.3	1.5	1.3	1	1.1	2.8	3.2	13	11	16	11	3.7	4	11	14
1.5	1.3	1.5	1.3	1.1	1.1	2.9	3.3	14	11	16	11	3.8	4.1	11	14
1.5	1.4	1.6	1.4	1.1	1.1	2.9	3.4	14	11	17	11	3.9	4.2	12	15
1.6	1.4	1.6	1.4	1.1	1.1	3	3.5	14	12	17	11	4	4.3	12	15

1.6	1.5	1.6	1.4	1.2	1.2	3.1	3.6	15	12	18	12	4.1	4.4	12	15
1.7	1.5	1.7	1.5	1.2	1.2	3.2	3.7	15	12	18	12	4.2	4.5	12	16
1.7	1.5	1.7	1.5	1.2	1.2	3.3	3.8	15	12	18	12	4.3	4.7	13	16
1.7	1.6	1.8	1.5	1.2	1.3	3.3	3.9	16	13	19	13	4.4	4.8	13	17
1.8	1.6	1.8	1.6	1.3	1.3	3.4	3.9	16	13	19	13	4.6	4.9	13	17
1.8	1.6	1.8	1.6	1.3	1.3	3.5	4	17	13	20	13	4.7	5	14	17
1.9	1.7	1.9	1.6	1.3	1.3	3.6	4.1	17	14	20	14	4.8	5.1	14	18
1.9	1.7	1.9	1.7	1.4	1.4	3.7	4.2	17	14	21	14	4.9	5.2	14	18
1.9	1.8	2	1.7	1.4	1.4	3.7	4.3	18	14	21	14	5	5.3	15	19
2	1.8	2	1.7	1.4	1.4	3.8	4.4	18	15	22	14	5.1	5.4	15	19
2	1.8	2.1	1.8	1.5	1.5	3.9	4.5	18	15	22	15	5.2	5.5	15	19
2.1	1.9	2.1	1.8	1.5	1.5	4	4.6	19	15	23	15	5.3	5.7	15	20
2.1	1.9	2.1	1.9	1.5	1.5	4.1	4.7	19	15	23	15	5.4	5.8	16	20
2.1	1.9	2.2	1.9	1.5	1.6	4.1	4.8	20	16	24	16	5.5	5.9	16	20
2.2	2	2.2	1.9	1.6	1.6	4.2	4.8	20	16	24	16	5.6	6	16	21
2.2	2	2.3	2	1.6	1.6	4.3	4.9	20	16	24	16	5.7	6.1	17	21
2.3	2.1	2.3	2	1.6	1.6	4.4	5	21	17	25	17	5.8	6.2	17	21
2.3	2.1	2.3	2	1.7	1.7	4.5	5.1	21	17	25	17	5.9	6.3	17	22
2.3	2.1	2.4	2.1	1.7	1.7	4.5	5.2	21	17	26	17	6	6.4	18	22
2.4	2.2	2.4	2.1	1.7	1.7	4.6	5.3	22	17	26	17	6.1	6.5	18	22
2.4	2.2	2.5	2.1	1.7	1.8	4.7	5.4	22	18	27	18	6.2	6.6	18	23
2.5	2.2	2.5	2.2	1.8	1.8	4.8	5.5	23	18	27	18	6.3	6.8	18	23
2.5	2.3	2.5	2.2	1.8	1.8	4.9	5.6	23	18	28	18	6.4	6.9	19	24
2.6	2.3	2.6	2.3	1.8	1.8	4.9	5.6	23	19	28	19	6.5	7	19	24
2.6	2.4	2.6	2.3	1.9	1.9	5	5.7	24	19	29	19	6.6	7.1	19	24
2.6	2.4	2.7	2.3	1.9	1.9	5.1	5.8	24	19	29	19	6.7	7.2	20	25
2.7	2.4	2.7	2.4	1.9	1.9	5.2	5.9	24	20	30	19	6.9	7.3	20	25
2.7	2.5	2.8	2.4	1.9	2	5.3	6	25	20	30	20	7	7.4	20	25
2.8	2.5	2.8	2.4	2	2	5.3	6.1	25	20	31	20	7.1	7.5	21	26
2.8	2.5	2.8	2.5	2	2	5.4	6.2	25	20	31	20	7.2	7.6	21	26
2.8	2.6	2.9	2.5	2	2.1	5.5	6.3	26	21	31	21	7.3	7.7	21	27
2.9	2.6	2.9	2.5	2.1	2.1	5.6	6.4	26	21	32	21	7.4	7.8	21	27
2.9	2.7	3	2.6	2.1	2.1	5.7	6.4	27	21	32	21	7.5	8	22	27
3	2.7	3	2.6	2.1	2.1	5.7	6.5	27	22	33	22	7.6	8.1	22	28
3	2.7	3	2.7	2.2	2.2	5.8	6.6	27	22	33	22	7.7	8.2	22	28
3	2.8	3.1	2.7	2.2	2.2	5.9	6.7	28	22	34	22	7.8	8.3	23	28
3.1	2.8	3.1	2.7	2.2	2.2	6	6.8	28	23	34	22	7.9	8.4	23	29
3.1	2.8	3.2	2.8	2.2	2.3	6.1	6.9	28	23	35	23	8	8.5	23	29
3.2	2.9	3.2	2.8	2.3	2.3	6.1	7	29	23	35	23	8.1	8.6	24	29
3.2	2.9	3.2	2.8	2.3	2.3	6.2	7.1	29	23	36	23	8.2	8.7	24	30
3.2	3	3.3	2.9	2.3	2.4	6.3	7.1	30	24	36	24	8.3	8.8	24	30
3.3	3	3.3	2.9	2.4	2.4	6.4	7.2	30	24	37	24	8.4	8.9	24	30
3.3	3	3.4	3	2.4	2.4	6.5	7.3	30	24	37	24	8.5	9	25	31
3.4	3.1	3.4	3	2.4	2.4	6.5	7.4	31	25	37	25	8.6	9.1	25	31
3.4	3.1	3.5	3	2.4	2.5	6.6	7.5	31	25	38	25	8.7	9.3	25	31
3.4	3.1	3.5	3.1	2.5	2.5	6.7	7.6	31	25	38	25	8.8	9.4	26	32
3.5	3.2	3.5	3.1	2.5	2.5	6.8	7.7	32	26	39	25	8.9	9.5	26	32
3.5	3.2	3.6	3.1	2.5	2.6	6.9	7.8	32	26	39	26	9.1	9.6	26	33

3.6	3.3	3.6	3.2	2.6	2.6	7	7.8	33	26	40	26	9.2	9.7	27	33	A-112
3.6	3.3	3.7	3.2	2.6	2.6	7	7.9	33	26	40	26	9.3	9.8	27	33	
3.6	3.3	3.7	3.2	2.6	2.6	7.1	8	33	27	41	27	9.4	9.9	27	34	
3.7	3.4	3.7	3.3	2.7	2.7	7.2	8.1	34	27	41	27	9.5	10	27	34	
3.7	3.4	3.8	3.3	2.7	2.7	7.3	8.2	34	27	42	27	9.6	10.1	28	34	
3.8	3.4	3.8	3.4	2.7	2.7	7.4	8.3	34	28	42	27	9.7	10.2	28	35	
3.8	3.5	3.9	3.4	2.7	2.8	7.4	8.4	35	28	43	28	9.8	10.3	28	35	
3.8	3.5	3.9	3.4	2.8	2.8	7.5	8.5	35	28	43	28	9.9	10.4	29	36	
3.9	3.6	3.9	3.5	2.8	2.8	7.6	8.5	36	28	43	28	10	10.6	29	36	
3.9	3.6	4	3.5	2.8	2.9	7.7	8.6	36	29	44	29	10.1	10.7	29	36	
4	3.6	4	3.5	2.9	2.9	7.8	8.7	36	29	44	29	10.2	10.8	30	37	
4	3.7	4.1	3.6	2.9	2.9	7.8	8.8	37	29	45	29	10.3	10.9	30	37	
4.1	3.7	4.1	3.6	2.9	2.9	7.9	8.9	37	30	45	30	10.4	11	30	37	
4.1	3.8	4.2	3.6	2.9	3	8	9	37	30	46	30	10.5	11.1	30	38	
4.1	3.8	4.2	3.7	3	3	8.1	9.1	38	30	46	30	10.6	11.2	31	38	
4.2	3.8	4.2	3.7	3	3	8.2	9.2	38	31	47	30	10.7	11.3	31	38	
4.2	3.9	4.3	3.8	3	3.1	8.2	9.2	39	31	47	31	10.8	11.4	31	39	
4.3	3.9	4.3	3.8	3.1	3.1	8.3	9.3	39	31	48	31	10.9	11.5	32	39	
4.3	3.9	4.4	3.8	3.1	3.1	8.4	9.4	39	31	48	31	11	11.7	32	39	
4.3	4	4.4	3.9	3.1	3.1	8.5	9.5	40	32	49	32	11.1	11.8	32	40	
4.4	4	4.4	3.9	3.2	3.2	8.6	9.6	40	32	49	32	11.3	11.9	33	40	
4.4	4.1	4.5	3.9	3.2	3.2	8.7	9.7	40	32	50	32	11.4	12	33	40	
4.5	4.1	4.5	4	3.2	3.2	8.7	9.8	41	33	50	32	11.5	12.1	33	41	
4.5	4.1	4.6	4	3.2	3.3	8.8	9.9	41	33	50	33	11.6	12.2	33	41	
4.5	4.2	4.6	4	3.3	3.3	8.9	9.9	42	33	51	33	11.7	12.3	34	41	
4.6	4.2	4.7	4.1	3.3	3.3	9	10	42	34	51	33	11.8	12.4	34	42	
4.6	4.2	4.7	4.1	3.3	3.4	9.1	10.1	42	34	52	34	11.9	12.5	34	42	
4.7	4.3	4.7	4.2	3.4	3.4	9.1	10.2	43	34	52	34	12	12.6	35	42	
4.7	4.3	4.8	4.2	3.4	3.4	9.2	10.3	43	34	53	34	12.1	12.7	35	43	
4.7	4.4	4.8	4.2	3.4	3.4	9.3	10.4	43	35	53	35	12.2	12.8	35	43	
4.8	4.4	4.9	4.3	3.4	3.5	9.4	10.5	44	35	54	35	12.3	12.9	36	43	
4.8	4.4	4.9	4.3	3.5	3.5	9.5	10.5	44	35	54	35	12.4	13	36	44	
4.9	4.5	4.9	4.3	3.5	3.5	9.5	10.6	44	36	55	35	12.5	13.2	36	44	
4.9	4.5	5	4.4	3.5	3.6	9.6	10.7	45	36	55	36	12.6	13.3	36	44	
4.9	4.5	5	4.4	3.6	3.6	9.7	10.8	45	36	56	36	12.7	13.4	37	45	
5	4.6	5.1	4.4	3.6	3.6	9.8	10.9	46	36	56	36	12.8	13.5	37	45	
5	4.6	5.1	4.5	3.6	3.7	9.9	11	46	37	56	37	12.9	13.6	37	45	
5.1	4.7	5.1	4.5	3.6	3.7	9.9	11.1	46	37	57	37	13	13.7	38	46	
5.1	4.7	5.2	4.6	3.7	3.7	10	11.1	47	37	57	37	13.1	13.8	38	46	
5.2	4.7	5.2	4.6	3.7	3.7	10.1	11.2	47	38	58	38	13.2	13.9	38	46	
5.2	4.8	5.3	4.6	3.7	3.8	10.2	11.3	47	38	58	38	13.3	14	39	47	
5.2	4.8	5.3	4.7	3.8	3.8	10.3	11.4	48	38	59	38	13.5	14.1	39	47	
5.3	4.8	5.4	4.7	3.8	3.8	10.4	11.5	48	39	59	38	13.6	14.1	39	47	
5.3	4.9	5.4	4.7	3.8	3.9	10.4	11.6	49	39	60	39	13.7	14.1	39	48	
5.4	4.9	5.4	4.8	3.9	3.9	10.5	11.7	49	39	60	39	13.8	14.1	40	48	
5.4	5	5.5	4.8	3.9	3.9	10.6	11.7	49	39	61	39	13.9	14.1	40	48	
5.4	5	5.5	4.9	3.9	3.9	10.7	11.8	50	40	61	40	14	15.1	40	49	
5.5	5	5.6	4.9	3.9	4	10.8	11.9	50	40	62	40	14.1	15.1	41	49	

5.5	5.1	5.6	4.9	4	4	10.8	12	50	40	62	40	14.2	15.1	41	49	A-113
5.6	5.1	5.6	5	4	4	10.9	12.1	51	41	62	40	14.3	15.1	41	50	
5.6	5.2	5.7	5	4	4.1	11	12.2	51	41	63	41	14.4	15.1	42	50	
5.6	5.2	5.7	5	4.1	4.1	11.1	12.2	52	41	63	41	14.5	15.1	42	50	
5.7	5.2	5.8	5.1	4.1	4.1	11.2	12.3	52	42	64	41	14.6	15.1	42	51	
5.7	5.3	5.8	5.1	4.1	4.2	11.2	12.4	52	42	64	42	14.7	15.1	42	51	
5.8	5.3	5.8	5.1	4.1	4.2	11.3	12.5	53	42	65	42	14.8	15.1	43	51	
5.8	5.3	5.9	5.2	4.2	4.2	11.4	12.6	53	42	65	42	14.9	16.1	43	52	
5.8	5.4	5.9	5.2	4.2	4.2	11.5	12.7	53	43	66	43	15	16.1	43	52	
5.9	5.4	6	5.3	4.2	4.3	11.6	12.8	54	43	66	43	15.1	16.1	44	52	
5.9	5.5	6	5.3	4.3	4.3	11.6	12.8	54	43	67	43	15.2	16.1	44	52	
6	5.5	6.1	5.3	4.3	4.3	11.7	12.9	55	44	67	43	15.3	16.1	44	53	
6	5.5	6.1	5.4	4.3	4.4	11.8	13	55	44	68	44	15.4	16.1	45	53	
6	5.6	6.1	5.4	4.4	4.4	11.9	13.1	55	44	68	44	15.5	16.1	45	53	
6.1	5.6	6.2	5.4	4.4	4.4	12	13.2	56	45	69	44	15.6	16.1	45	54	
6.1	5.6	6.2	5.5	4.4	4.4	12.1	13.3	56	45	69	45	15.7	16.1	45	54	
6.2	5.7	6.3	5.5	4.4	4.5	12.1	13.3	56	45	69	45	15.9	16.1	46	54	
6.2	5.7	6.3	5.5	4.5	4.5	12.2	13.4	57	45	70	45	16	17.1	46	55	
6.2	5.8	6.3	5.6	4.5	4.5	12.3	13.5	57	46	70	46	16.1	17.1	46	55	
6.3	5.8	6.4	5.6	4.5	4.6	12.4	13.6	58	46	71	46	16.2	17.1	47	55	
6.3	5.8	6.4	5.7	4.6	4.6	12.5	13.7	58	46	71	46	16.3	17.1	47	55	
6.4	5.9	6.5	5.7	4.6	4.6	12.5	13.8	58	47	72	46	16.4	17.1	47	56	
6.4	5.9	6.5	5.7	4.6	4.7	12.6	13.8	59	47	72	47	16.5	17.1	48	56	
6.5	5.9	6.6	5.8	4.6	4.7	12.7	13.9	59	47	73	47	16.6	17.1	48	56	
6.5	6	6.6	5.8	4.7	4.7	12.8	14	59	47	73	47	16.7	17.1	48	57	
6.5	6	6.6	5.8	4.7	4.7	12.9	14.1	60	48	74	48	16.8	17.1	48	57	
6.6	6.1	6.7	5.9	4.7	4.8	12.9	14.2	60	48	74	48	16.9	18.1	49	57	
6.6	6.1	6.7	5.9	4.8	4.8	13	14.3	61	48	75	48	17	18.1	49	57	
6.7	6.1	6.8	5.9	4.8	4.8	13.1	14.3	61	49	75	48	17.1	18.1	49	58	
6.7	6.2	6.8	6	4.8	4.9	13.2	14.4	61	49	75	49	17.2	18.1	50	58	
6.7	6.2	6.8	6	4.8	4.9	13.3	14.5	62	49	76	49	17.3	18.1	50	58	
6.8	6.2	6.9	6.1	4.9	4.9	13.4	14.6	62	50	76	49	17.4	18.1	50	59	
6.8	6.3	6.9	6.1	4.9	4.9	13.4	14.7	62	50	77	50	17.5	18.1	51	59	
6.9	6.3	7	6.1	4.9	5	13.5	14.8	63	50	77	50	17.6	18.1	51	59	
6.9	6.4	7	6.2	5	5	13.6	14.8	63	50	78	50	17.7	18.1	51	60	
6.9	6.4	7	6.2	5	5	13.7	14.9	64	51	78	51	17.8	18.1	51	60	
7	6.4	7.1	6.2	5	5.1	13.8	15	64	51	79	51	17.9	19.1	52	60	
7	6.5	7.1	6.3	5.1	5.1	13.8	15.1	64	51	79	51	18	19.1	52	60	
7.1	6.5	7.2	6.3	5.1	5.1	13.9	15.2	65	52	80	51	18.1	19.1	52	61	
7.1	6.5	7.2	6.4	5.1	5.2	14	15.2	65	52	80	52	18.2	19.1	53	61	
7.1	6.6	7.3	6.4	5.1	5.2	14.1	15.3	65	52	80	52	18.3	19.1	53	61	
7.2	6.6	7.3	6.4	5.2	5.2	14.2	15.4	66	53	81	52	18.3	19.1	53	62	
7.2	6.7	7.3	6.5	5.2	5.2	14.2	15.5	66	53	81	53	18.3	19.1	54	62	
7.3	6.7	7.4	6.5	5.2	5.3	14.3	15.6	66	53	82	53	18.3	19.1	54	62	
7.3	6.7	7.4	6.5	5.3	5.3	14.4	15.7	67	53	82	53	18.3	19.1	54	62	
7.3	6.8	7.5	6.6	5.3	5.3	14.5	15.7	67	54	83	54	19.3	19.1	54	63	
7.4	6.8	7.5	6.6	5.3	5.4	14.6	15.8	68	54	83	54	19.3	20.1	55	63	
7.4	6.9	7.5	6.6	5.3	5.4	14.7	15.9	68	54	84	54	19.3	20.1	55	63	

LOAM2MFlat		LOAM2MTop		LOAM2MBottom		LOAM2M1M	LOAM2M30CM		LOAM2M3M		LOAM5MFlat	LOAM5MTop	LOAM5MBot	LOAM5M1M	LOAM5M30CM	
Cum D (cm)		Cum D (cm)		Cum D (cm)		Cum D (cm)	Cum D (cm)		Cum D (cm)		Cum D (cm)	Cum D (cm)	Cumm E (cm)	Cum D (cm)	Cum D (cm)	
A	B	A	B	A	B	A	A	B	A	B	A	A	A	A	A	B
0.1	0	0	0.1	0	0.1	0	0.01	0.01	0.1	0	0	0	0	0	0	0
0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.02	0.02	0.2	0	0	0	0	0	0	0
0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.03	0.03	0.3	0	0	0	0	0	0	0
0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.04	0.04	0.4	1	0	0	0	0	0	0
0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.05	0.05	0.6	1	0	0	0	0	0	0
0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.06	0.06	0.7	1	0	0	0	0	0	0
0.3	0.4	0.3	0.5	0.4	0.4	0.2	0.07	0.07	0.8	1	0	0	0	0	0	0
0.4	0.4	0.4	0.5	0.4	0.5	0.2	0.08	0.08	0.9	1	0	0	0	0	0	0.01
0.4	0.5	0.4	0.6	0.5	0.5	0.3	0.08	0.09	1	1	0	0	0	0	0	0.01
0.5	0.5	0.5	0.6	0.5	0.6	0.3	0.09	0.1	1.1	2	0	0	0	0	0	0.01
0.5	0.6	0.5	0.7	0.6	0.6	0.3	0.1	0.11	1.3	2	0	0	0	0	0	0.01
0.6	0.6	0.6	0.8	0.6	0.7	0.4	0.11	0.12	1.4	2	0	0	0	0	0	0.01
0.6	0.7	0.6	0.8	0.7	0.7	0.4	0.12	0.13	1.5	2	0	0	0	0	0	0.01
0.7	0.7	0.7	0.9	0.7	0.8	0.4	0.13	0.14	1.6	2	0	0	0	0	0	0.01
0.7	0.8	0.7	0.9	0.8	0.8	0.4	0.14	0.15	1.8	2	0	0	0	0	0	0.01
0.8	0.8	0.8	1	0.8	0.9	0.5	0.15	0.16	1.9	3	0	0	0	0	0	0.01
0.8	0.9	0.9	1	0.9	1	0.5	0.16	0.17	2	3	0	0	0	0	0	0.01
0.9	0.9	0.9	1.1	0.9	1	0.5	0.17	0.18	2.1	3	0	0.01	0	0	0	0.01
0.9	1	1	1.2	1	1.1	0.6	0.18	0.19	2.2	3	0	0.01	0	0	0	0.01
1	1	1	1.2	1.1	1.1	0.6	0.19	0.2	2.3	3	0.01	0.01	0	0.01	0	0.01
1	1.1	1.1	1.3	1.1	1.2	0.6	0.2	0.21	2.3	4	0.01	0.01	0.01	0.01	0	0.01
1.1	1.1	1.1	1.3	1.2	1.2	0.6	0.21	0.22	2.3	4	0.01	0.01	0.01	0.01	0	0.01
1.1	1.2	1.2	1.4	1.2	1.3	0.7	0.22	0.23	2.3	4	0.01	0.01	0.01	0.01	0.01	0.01
1.2	1.3	1.2	1.5	1.3	1.3	0.7	0.23	0.24	3.3	4	0.01	0.01	0.01	0.01	0.01	0.01
1.2	1.3	1.3	1.5	1.3	1.4	0.7	0.24	0.25	3.3	4	0.01	0.01	0.01	0.01	0.01	0.01
1.3	1.4	1.3	1.6	1.4	1.5	0.8	0.25	0.26	3.3	4	0.01	0.01	0.01	0.01	0.01	0.01
1.3	1.4	1.4	1.7	1.4	1.5	0.8	0.26	0.27	3.3	5	0.01	0.01	0.01	0.01	0.01	0.01
1.4	1.5	1.4	1.7	1.5	1.6	0.8	0.27	0.28	3.3	5	0.01	0.01	0.01	0.01	0.01	0.01
1.4	1.5	1.5	1.8	1.5	1.6	0.9	0.28	0.29	3.3	5	0.01	0.01	0.01	0.01	0.01	0.02
1.5	1.6	1.5	1.8	1.6	1.7	0.9	0.29	0.3	3.3	5	0.01	0.01	0.01	0.01	0.01	0.02
1.5	1.6	1.6	1.9	1.6	1.7	0.9	0.3	0.31	3.3	5	0.01	0.01	0.01	0.01	0.01	0.02
1.6	1.7	1.7	2	1.7	1.8	0.9	0.31	0.32	4.3	5	0.01	0.01	0.01	0.01	0.01	0.02
1.6	1.7	1.7	2	1.8	1.8	1	0.32	0.33	4.3	6	0.01	0.01	0.01	0.01	0.01	0.02
1.7	1.8	1.8	2.1	1.8	1.9	1	0.33	0.34	4.3	6	0.01	0.01	0.01	0.01	0.01	0.02
1.7	1.8	1.8	2.1	1.9	2	1	0.34	0.35	4.3	6	0.01	0.01	0.01	0.01	0.01	0.02
1.8	1.9	1.9	2.2	1.9	2	1.1	0.35	0.36	4.3	6	0.01	0.01	0.01	0.01	0.01	0.02
1.8	1.9	1.9	2.3	2	2.1	1.1	0.36	0.37	4.3	6	0.01	0.01	0.01	0.01	0.01	0.02
1.9	2	2	2.3	2	2.1	1.1	0.37	0.38	4.3	6	0.01	0.01	0.01	0.01	0.01	0.02
1.9	2	2	2.4	2.1	2.2	1.2	0.38	0.39	4.3	7	0.01	0.01	0.01	0.01	0.01	0.02

2	2.1	2.1	2.4	2.1	2.2	1.2	0.39	0.4	5.3	7	0.01	0.02	0.01	0.01	0.01	0.02	A-115
2	2.2	2.1	2.5	2.2	2.3	1.2	0.4	0.41	5.3	7	0.01	0.02	0.01	0.01	0.01	0.02	
2.1	2.2	2.2	2.6	2.2	2.3	1.2	0.41	0.42	5.3	7	0.02	0.02	0.01	0.02	0.01	0.02	
2.1	2.3	2.2	2.6	2.3	2.4	1.3	0.42	0.43	5.3	7	0.02	0.02	0.02	0.02	0.01	0.02	
2.2	2.3	2.3	2.7	2.3	2.5	1.3	0.43	0.44	5.3	7	0.02	0.02	0.02	0.02	0.01	0.02	
2.2	2.4	2.4	2.7	2.4	2.5	1.3	0.44	0.45	5.3	8	0.02	0.02	0.02	0.02	0.02	0.02	
2.3	2.4	2.4	2.8	2.5	2.6	1.4	0.45	0.46	5.3	8	0.02	0.02	0.02	0.02	0.02	0.02	
2.3	2.5	2.5	2.9	2.5	2.6	1.4	0.46	0.47	5.3	8	0.02	0.02	0.02	0.02	0.02	0.02	
2.4	2.5	2.5	2.9	2.6	2.7	1.4	0.47	0.48	6.3	8	0.02	0.02	0.02	0.02	0.02	0.02	
2.4	2.6	2.6	3	2.6	2.7	1.5	0.47	0.49	6.3	8	0.02	0.02	0.02	0.02	0.02	0.02	
2.5	2.6	2.6	3	2.7	2.8	1.5	0.48	0.5	6.3	8	0.02	0.02	0.02	0.02	0.02	0.02	
2.5	2.7	2.7	3.1	2.7	2.8	1.5	0.49	0.51	6.3	9	0.02	0.02	0.02	0.02	0.02	0.03	
2.6	2.7	2.7	3.2	2.8	2.9	1.5	0.5	0.52	6.3	9	0.02	0.02	0.02	0.02	0.02	0.03	
2.6	2.8	2.8	3.2	2.8	3	1.6	0.51	0.53	6.3	9	0.02	0.02	0.02	0.02	0.02	0.03	
2.7	2.8	2.8	3.3	2.9	3	1.6	0.52	0.54	6.3	9	0.02	0.02	0.02	0.02	0.02	0.03	
2.7	2.9	2.9	3.3	2.9	3.1	1.6	0.53	0.55	6.3	9	0.02	0.02	0.02	0.02	0.02	0.03	
2.8	2.9	2.9	3.4	3	3.1	1.7	0.54	0.56	7.3	9	0.02	0.02	0.02	0.02	0.02	0.03	
2.8	3	3	3.5	3	3.2	1.7	0.55	0.57	7.3	9	0.02	0.02	0.02	0.02	0.02	0.03	
2.9	3.1	3.1	3.5	3.1	3.2	1.7	0.56	0.58	7.3	10	0.02	0.02	0.02	0.02	0.02	0.03	
2.9	3.1	3.1	3.6	3.2	3.3	1.8	0.57	0.59	7.3	10	0.02	0.02	0.02	0.02	0.02	0.03	
3	3.2	3.2	3.6	3.2	3.3	1.8	0.58	0.6	7.3	10	0.02	0.02	0.02	0.02	0.02	0.03	
3.1	3.2	3.2	3.7	3.3	3.4	1.8	0.59	0.61	7.3	10	0.02	0.02	0.02	0.02	0.02	0.03	
3.1	3.3	3.3	3.7	3.3	3.5	1.8	0.6	0.62	7.3	10	0.02	0.03	0.02	0.02	0.02	0.03	
3.2	3.3	3.3	3.8	3.4	3.5	1.9	0.61	0.63	7.3	10	0.02	0.03	0.02	0.02	0.02	0.03	
3.2	3.4	3.4	3.9	3.4	3.6	1.9	0.62	0.64	8.3	11	0.03	0.03	0.02	0.03	0.02	0.03	
3.3	3.4	3.4	3.9	3.5	3.6	1.9	0.63	0.65	8.3	11	0.03	0.03	0.03	0.03	0.02	0.03	
3.3	3.5	3.5	4	3.5	3.7	2	0.64	0.66	8.3	11	0.03	0.03	0.03	0.03	0.02	0.03	
3.4	3.5	3.5	4	3.6	3.7	2	0.65	0.67	8.3	11	0.03	0.03	0.03	0.03	0.03	0.03	
3.4	3.6	3.6	4.1	3.6	3.8	2	0.66	0.68	8.3	11	0.03	0.03	0.03	0.03	0.03	0.03	
3.5	3.6	3.7	4.2	3.7	3.8	2.1	0.67	0.69	8.3	11	0.03	0.03	0.03	0.03	0.03	0.03	
3.5	3.7	3.7	4.2	3.7	3.9	2.1	0.68	0.7	8.3	12	0.03	0.03	0.03	0.03	0.03	0.03	
3.6	3.7	3.8	4.3	3.8	3.9	2.1	0.69	0.71	8.3	12	0.03	0.03	0.03	0.03	0.03	0.03	
3.6	3.8	3.8	4.3	3.9	4	2.2	0.7	0.72	9.3	12	0.03	0.03	0.03	0.03	0.03	0.03	
3.7	3.8	3.9	4.4	3.9	4.1	2.2	0.71	0.73	9.3	12	0.03	0.03	0.03	0.03	0.03	0.04	
3.7	3.9	3.9	4.5	4	4.1	2.2	0.72	0.74	9.3	12	0.03	0.03	0.03	0.03	0.03	0.04	
3.8	3.9	4	4.5	4	4.2	2.2	0.73	0.75	9.3	12	0.03	0.03	0.03	0.03	0.03	0.04	
3.8	4	4	4.6	4.1	4.2	2.3	0.74	0.76	9.3	12	0.03	0.03	0.03	0.03	0.03	0.04	
3.9	4.1	4.1	4.6	4.1	4.3	2.3	0.75	0.77	9.3	13	0.03	0.03	0.03	0.03	0.03	0.04	
3.9	4.1	4.1	4.7	4.2	4.3	2.3	0.76	0.78	9.3	13	0.03	0.03	0.03	0.03	0.03	0.04	
4	4.2	4.2	4.7	4.2	4.4	2.4	0.77	0.79	9.3	13	0.03	0.03	0.03	0.03	0.03	0.04	
4	4.2	4.3	4.8	4.3	4.4	2.4	0.78	0.8	10.3	13	0.03	0.03	0.03	0.03	0.03	0.04	
4.1	4.3	4.3	4.9	4.3	4.5	2.4	0.79	0.81	10.3	13	0.03	0.03	0.03	0.03	0.03	0.04	
4.1	4.3	4.4	4.9	4.4	4.6	2.5	0.8	0.82	10.3	13	0.03	0.03	0.03	0.03	0.03	0.04	
4.2	4.4	4.4	5	4.4	4.6	2.5	0.81	0.83	10.3	13	0.03	0.03	0.03	0.03	0.03	0.04	
4.2	4.4	4.5	5	4.5	4.7	2.5	0.82	0.84	10.3	14	0.03	0.04	0.03	0.03	0.03	0.04	
4.3	4.5	4.5	5.1	4.6	4.7	2.5	0.83	0.85	10.3	14	0.03	0.04	0.03	0.03	0.03	0.04	
4.3	4.5	4.6	5.2	4.6	4.8	2.6	0.84	0.86	10.3	14	0.04	0.04	0.03	0.04	0.03	0.04	
4.4	4.6	4.6	5.2	4.7	4.8	2.6	0.85	0.87	10.3	14	0.04	0.04	0.04	0.04	0.03	0.04	

4.4	4.6	4.7	5.3	4.7	4.9	2.6	0.86	0.88	11.3	14	0.04	0.04	0.04	0.04	0.04	0.04	A-116
4.5	4.7	4.7	5.3	4.8	4.9	2.7	0.87	0.89	11.3	14	0.04	0.04	0.04	0.04	0.04	0.04	
4.5	4.7	4.8	5.4	4.8	5	2.7	0.88	0.9	11.3	15	0.04	0.04	0.04	0.04	0.04	0.04	
4.6	4.8	4.9	5.4	4.9	5	2.7	0.89	0.91	11.3	15	0.04	0.04	0.04	0.04	0.04	0.04	
4.6	4.8	4.9	5.5	4.9	5.1	2.8	0.9	0.92	11.3	15	0.04	0.04	0.04	0.04	0.04	0.04	
4.7	4.9	5	5.6	5	5.2	2.8	0.91	0.93	11.3	15	0.04	0.04	0.04	0.04	0.04	0.05	
4.7	4.9	5	5.6	5	5.2	2.8	0.92	0.94	11.3	15	0.04	0.04	0.04	0.04	0.04	0.05	
4.8	5	5.1	5.7	5.1	5.3	2.9	0.93	0.96	11.3	15	0.04	0.04	0.04	0.04	0.04	0.05	
4.8	5	5.1	5.7	5.1	5.3	2.9	0.94	0.97	12.3	16	0.04	0.04	0.04	0.04	0.04	0.05	
4.9	5.1	5.2	5.8	5.2	5.4	2.9	0.95	0.98	12.3	16	0.04	0.04	0.04	0.04	0.04	0.05	
4.9	5.1	5.2	5.9	5.3	5.4	2.9	0.96	0.99	12.3	16	0.04	0.04	0.04	0.04	0.04	0.05	
5	5.2	5.3	5.9	5.3	5.5	3	0.97	1	12.3	16	0.04	0.04	0.04	0.04	0.04	0.05	
5	5.3	5.3	6	5.4	5.5	3	0.98	1.01	12.3	16	0.04	0.04	0.04	0.04	0.04	0.05	
5.1	5.3	5.4	6	5.4	5.6	3	0.99	1.02	12.3	16	0.04	0.04	0.04	0.04	0.04	0.05	
5.1	5.4	5.5	6.1	5.5	5.6	3.1	1	1.03	12.3	16	0.04	0.04	0.04	0.04	0.04	0.05	
5.2	5.4	5.5	6.1	5.5	5.7	3.1	1.01	1.04	12.3	17	0.04	0.04	0.04	0.04	0.04	0.05	
5.2	5.5	5.6	6.2	5.6	5.8	3.1	1.02	1.05	13.3	17	0.04	0.04	0.04	0.04	0.04	0.05	
5.3	5.5	5.6	6.3	5.6	5.8	3.2	1.03	1.06	13.3	17	0.04	0.05	0.04	0.04	0.04	0.05	
5.3	5.6	5.7	6.3	5.7	5.9	3.2	1.04	1.07	13.3	17	0.04	0.05	0.04	0.04	0.04	0.05	
5.4	5.6	5.7	6.4	5.7	5.9	3.2	1.05	1.08	13.3	17	0.05	0.05	0.04	0.05	0.04	0.05	
5.4	5.7	5.8	6.4	5.8	6	3.3	1.06	1.09	13.3	17	0.05	0.05	0.05	0.05	0.05	0.05	
5.5	5.7	5.8	6.5	5.8	6	3.3	1.07	1.1	13.3	18	0.05	0.05	0.05	0.05	0.05	0.05	
5.5	5.8	5.9	6.6	5.9	6.1	3.3	1.08	1.11	13.3	18	0.05	0.05	0.05	0.05	0.05	0.05	
5.6	5.8	6	6.6	6	6.1	3.3	1.09	1.12	13.3	18	0.05	0.05	0.05	0.05	0.05	0.05	
5.6	5.9	6	6.7	6	6.2	3.4	1.1	1.13	14.3	18	0.05	0.05	0.05	0.05	0.05	0.05	
5.7	5.9	6.1	6.7	6.1	6.3	3.4	1.11	1.14	14.3	18	0.05	0.05	0.05	0.05	0.05	0.06	
5.7	6	6.1	6.8	6.1	6.3	3.4	1.12	1.15	14.3	18	0.05	0.05	0.05	0.05	0.05	0.06	
5.8	6	6.2	6.8	6.2	6.4	3.5	1.13	1.16	14.3	18	0.05	0.05	0.05	0.05	0.05	0.06	
5.8	6.1	6.2	6.9	6.2	6.4	3.5	1.14	1.17	14.3	18	0.05	0.05	0.05	0.05	0.05	0.06	
5.9	6.1	6.3	7	6.3	6.5	3.5	1.15	1.18	14.3	19	0.05	0.05	0.05	0.05	0.05	0.06	
5.9	6.2	6.3	7	6.3	6.5	3.6	1.16	1.19	14.3	19	0.05	0.05	0.05	0.05	0.05	0.06	
6	6.2	6.4	7.1	6.4	6.6	3.6	1.17	1.2	14.3	19	0.05	0.05	0.05	0.05	0.05	0.06	
6	6.3	6.4	7.1	6.4	6.6	3.6	1.18	1.21	15.3	19	0.05	0.05	0.05	0.05	0.05	0.06	
6.1	6.3	6.5	7.2	6.5	6.7	3.7	1.19	1.22	15.3	19	0.05	0.05	0.05	0.05	0.05	0.06	
6.1	6.4	6.6	7.2	6.5	6.7	3.7	1.2	1.23	15.3	19	0.05	0.05	0.05	0.05	0.05	0.06	
6.2	6.5	6.6	7.3	6.6	6.8	3.7	1.21	1.24	15.3	19	0.05	0.05	0.05	0.05	0.05	0.06	
6.2	6.5	6.7	7.4	6.7	6.9	3.7	1.22	1.25	15.3	20	0.05	0.05	0.05	0.05	0.05	0.06	
6.3	6.6	6.7	7.4	6.7	6.9	3.8	1.23	1.26	15.3	20	0.05	0.06	0.05	0.05	0.05	0.06	
6.3	6.6	6.8	7.5	6.8	7	3.8	1.24	1.27	15.3	20	0.05	0.06	0.05	0.05	0.05	0.06	
6.4	6.7	6.8	7.5	6.8	7	3.8	1.25	1.28	15.3	20	0.05	0.06	0.05	0.05	0.05	0.06	
6.4	6.7	6.9	7.6	6.9	7.1	3.9	1.26	1.29	16.3	20	0.06	0.06	0.06	0.06	0.05	0.06	
6.5	6.8	6.9	7.6	6.9	7.1	3.9	1.27	1.3	16.3	20	0.06	0.06	0.06	0.06	0.06	0.06	
6.5	6.8	7	7.7	7	7.2	3.9	1.28	1.31	16.3	20	0.06	0.06	0.06	0.06	0.06	0.06	
6.6	6.9	7	7.8	7	7.2	4	1.29	1.32	16.3	21	0.06	0.06	0.06	0.06	0.06	0.06	
6.6	6.9	7.1	7.8	7.1	7.3	4	1.3	1.33	16.3	21	0.06	0.06	0.06	0.06	0.06	0.06	
6.7	7	7.2	7.9	7.1	7.3	4	1.31	1.34	16.3	21	0.06	0.06	0.06	0.06	0.06	0.07	
6.7	7	7.2	7.9	7.2	7.4	4.1	1.32	1.35	16.3	21	0.06	0.06	0.06	0.06	0.06	0.07	
6.8	7.1	7.3	8	7.3	7.5	4.1	1.33	1.36	16.3	21	0.06	0.06	0.06	0.06	0.06	0.07	

6.8	7.1	7.3	8	7.3	7.5	4.1	1.34	1.37	17.3	21	0.06	0.06	0.06	0.06	0.06	0.07	A-117
6.9	7.2	7.4	8.1	7.4	7.6	4.1	1.35	1.38	17.3	21	0.06	0.06	0.06	0.06	0.06	0.07	
6.9	7.2	7.4	8.2	7.4	7.6	4.2	1.36	1.39	17.3	22	0.06	0.06	0.06	0.06	0.06	0.07	
7	7.3	7.5	8.2	7.5	7.7	4.2	1.37	1.4	17.3	22	0.06	0.06	0.06	0.06	0.06	0.07	
7	7.3	7.5	8.3	7.5	7.7	4.2	1.38	1.41	17.3	22	0.06	0.06	0.06	0.06	0.06	0.07	
7.1	7.4	7.6	8.3	7.6	7.8	4.3	1.39	1.42	17.3	22	0.06	0.06	0.06	0.06	0.06	0.07	
7.1	7.4	7.6	8.4	7.6	7.8	4.3	1.4	1.43	17.3	22	0.06	0.06	0.06	0.06	0.06	0.07	
7.2	7.5	7.7	8.4	7.7	7.9	4.3	1.41	1.44	18.3	22	0.06	0.06	0.06	0.06	0.06	0.07	
7.2	7.5	7.8	8.5	7.7	7.9	4.4	1.42	1.45	18.3	22	0.06	0.06	0.06	0.06	0.06	0.07	
7.3	7.6	7.8	8.6	7.8	8	4.4	1.43	1.46	18.3	23	0.06	0.06	0.06	0.06	0.06	0.07	
7.3	7.6	7.9	8.6	7.8	8	4.4	1.44	1.47	18.3	23	0.06	0.07	0.06	0.06	0.06	0.07	
7.4	7.7	7.9	8.7	7.9	8.1	4.5	1.45	1.48	18.3	23	0.06	0.07	0.06	0.06	0.06	0.07	
7.5	7.7	8	8.7	8	8.2	4.5	1.46	1.49	18.3	23	0.06	0.07	0.07	0.06	0.06	0.07	
7.5	7.8	8	8.8	8	8.2	4.5	1.47	1.5	18.3	23	0.07	0.07	0.07	0.07	0.07	0.07	
7.6	7.8	8.1	8.8	8.1	8.3	4.5	1.48	1.51	18.3	23	0.07	0.07	0.07	0.07	0.07	0.07	
7.6	7.9	8.1	8.9	8.1	8.3	4.6	1.49	1.52	19.3	23	0.07	0.07	0.07	0.07	0.07	0.07	
7.7	7.9	8.2	8.9	8.2	8.4	4.6	1.5	1.53	19.3	23	0.07	0.07	0.07	0.07	0.07	0.07	
7.7	8	8.2	9	8.2	8.4	4.6	1.51	1.54	19.3	24	0.07	0.07	0.07	0.07	0.07	0.07	
7.8	8	8.3	9.1	8.3	8.5	4.7	1.52	1.55	19.3	24	0.07	0.07	0.07	0.07	0.07	0.08	
7.8	8.1	8.4	9.1	8.3	8.5	4.7	1.53	1.56	19.3	24	0.07	0.07	0.07	0.07	0.07	0.08	
7.9	8.2	8.4	9.2	8.4	8.6	4.7	1.54	1.57	19.3	24	0.07	0.07	0.07	0.07	0.07	0.08	
7.9	8.2	8.5	9.2	8.4	8.6	4.8	1.55	1.58	19.3	24	0.07	0.07	0.07	0.07	0.07	0.08	
8	8.3	8.5	9.3	8.5	8.7	4.8	1.56	1.59	19.3	24	0.07	0.07	0.07	0.07	0.07	0.08	
8	8.3	8.6	9.3	8.5	8.8	4.8	1.57	1.6	20.3	24	0.07	0.07	0.07	0.07	0.07	0.08	
8.1	8.4	8.6	9.4	8.6	8.8	4.9	1.58	1.61	20.3	24	0.07	0.07	0.07	0.07	0.07	0.08	
8.1	8.4	8.7	9.5	8.7	8.9	4.9	1.59	1.62	20.3	25	0.07	0.07	0.07	0.07	0.07	0.08	
8.2	8.5	8.7	9.5	8.7	8.9	4.9	1.6	1.63	20.3	25	0.07	0.07	0.07	0.07	0.07	0.08	
8.2	8.5	8.8	9.6	8.8	9	4.9	1.61	1.64	20.3	25	0.07	0.07	0.07	0.07	0.07	0.08	
8.3	8.6	8.8	9.6	8.8	9	5	1.62	1.65	20.3	25	0.07	0.07	0.07	0.07	0.07	0.08	
8.3	8.6	8.9	9.7	8.9	9.1	5	1.63	1.66	20.3	25	0.07	0.07	0.07	0.07	0.07	0.08	
8.4	8.7	9	9.7	8.9	9.1	5	1.64	1.67	20.3	25	0.07	0.08	0.07	0.07	0.07	0.08	
8.4	8.7	9	9.8	9	9.2	5.1	1.65	1.68	21.3	25	0.07	0.08	0.07	0.07	0.07	0.08	
8.5	8.8	9.1	9.8	9	9.2	5.1	1.66	1.69	21.3	25	0.07	0.08	0.07	0.07	0.07	0.08	
8.5	8.8	9.1	9.9	9.1	9.3	5.1	1.67	1.7	21.3	26	0.07	0.08	0.08	0.08	0.08	0.08	
8.6	8.9	9.2	9.9	9.1	9.3	5.2	1.68	1.71	21.3	26	0.08	0.08	0.08	0.08	0.08	0.08	
8.6	8.9	9.2	10	9.2	9.4	5.2	1.69	1.72	21.3	26	0.08	0.08	0.08	0.08	0.08	0.08	
8.7	9	9.3	10.1	9.2	9.5	5.2	1.7	1.73	21.3	26	0.08	0.08	0.08	0.08	0.08	0.08	
8.7	9	9.3	10.1	9.3	9.5	5.3	1.71	1.74	21.3	26	0.08	0.08	0.08	0.08	0.08	0.08	
8.8	9.1	9.4	10.2	9.4	9.6	5.3	1.72	1.75	21.3	26	0.08	0.08	0.08	0.08	0.08	0.09	
8.8	9.1	9.5	10.2	9.4	9.6	5.3	1.73	1.76	22.3	26	0.08	0.08	0.08	0.08	0.08	0.09	
8.9	9.2	9.5	10.3	9.5	9.7	5.3	1.74	1.77	22.3	26	0.08	0.08	0.08	0.08	0.08	0.09	
8.9	9.2	9.6	10.3	9.5	9.7	5.4	1.75	1.78	22.3	27	0.08	0.08	0.08	0.08	0.08	0.09	
9	9.3	9.6	10.4	9.6	9.8	5.4	1.76	1.79	22.3	27	0.08	0.08	0.08	0.08	0.08	0.09	
9	9.3	9.7	10.4	9.6	9.8	5.4	1.77	1.8	22.3	27	0.08	0.08	0.08	0.08	0.08	0.09	
9.1	9.4	9.7	10.5	9.7	9.9	5.5	1.78	1.81	22.3	27	0.08	0.08	0.08	0.08	0.08	0.09	
9.1	9.4	9.8	10.5	9.7	9.9	5.5	1.79	1.82	22.3	27	0.08	0.08	0.08	0.08	0.08	0.09	
9.2	9.5	9.8	10.6	9.8	10	5.5	1.8	1.83	22.3	27	0.08	0.08	0.08	0.08	0.08	0.09	
9.2	9.5	9.9	10.7	9.8	10	5.6	1.81	1.84	23.3	27	0.08	0.08	0.08	0.08	0.08	0.09	

LOAM5M3M		SAND1MFlat	SAND1MTop	SAND1MBotl	SAND1M1M	SAND1M30CM		SAND1M3M		SAND2MFlat	SAND2MTop	SAND2MBotl	SAND2M1M	SAND2M30CM	
Cum D (cm)		Cum D (cm)	Cum D (cm)	Cum D (cm)	Cum D (cm)	Cum D (cm)		Cum D (cm)		Cum D (cm)	Cum D (cm)	Cum D (cm)	Cum D (cm)	Cum D (cm)	
A	B	A	A	A	A	A	B	A	B	A	A	A	A	A	B
0.01	0.01	0	1	1	1	0.1	0.1	0	0	0.1	0	0.1	0	0	0
0.01	0.01	1	1	1	1	0.2	0.2	1	1	0.1	0.1	0.1	0	0.01	0.01
0.02	0.02	1	1	1	1	0.3	0.3	1	1	0.2	0.1	0.2	0	0.01	0.02
0.02	0.02	1	1	2	2	0.4	0.4	1	1	0.2	0.1	0.2	0	0.02	0.02
0.03	0.03	2	2	2	2	0.5	0.5	2	2	0.2	0.2	0.3	0	0.03	0.03
0.03	0.03	2	2	3	2	0.6	0.6	2	2	0.3	0.2	0.3	0.1	0.03	0.03
0.04	0.04	3	2	3	3	0.7	0.7	2	3	0.3	0.2	0.4	0.1	0.04	0.04
0.04	0.04	3	3	3	3	0.8	0.8	3	3	0.3	0.2	0.4	0.1	0.04	0.05
0.05	0.05	3	3	4	3	0.9	1	3	4	0.4	0.3	0.5	0.1	0.05	0.05
0.05	0.05	4	3	4	4	1	1.1	3	4	0.4	0.3	0.5	0.1	0.06	0.06
0.06	0.06	4	4	5	4	1.1	1.2	4	5	0.5	0.3	0.6	0.2	0.06	0.07
0.06	0.06	4	4	5	4	1.2	1.3	4	5	0.5	0.3	0.6	0.2	0.07	0.07
0.07	0.07	5	4	5	5	1.3	1.4	4	6	0.5	0.4	0.7	0.2	0.08	0.08
0.07	0.07	5	5	6	5	1.4	1.5	5	6	0.6	0.4	0.7	0.2	0.08	0.08
0.08	0.08	6	5	6	6	1.5	1.6	5	7	0.6	0.4	0.8	0.2	0.09	0.09
0.08	0.08	6	5	7	6	1.6	1.7	5	7	0.6	0.5	0.8	0.3	0.09	0.1
0.09	0.09	6	6	7	6	1.7	1.8	6	8	0.7	0.5	0.9	0.3	0.1	0.1
0.09	0.09	7	6	7	7	1.8	1.9	6	8	0.7	0.5	0.9	0.3	0.11	0.11
0.1	0.1	7	6	8	7	1.9	2.1	6	8	0.7	0.5	1	0.3	0.11	0.11
0.1	0.1	7	7	8	7	2	2.2	7	9	0.8	0.6	1	0.3	0.12	0.12
0.11	0.11	8	7	9	8	2.1	2.3	7	9	0.8	0.6	1	0.3	0.12	0.13
0.11	0.11	8	7	9	8	2.2	2.4	7	10	0.9	0.6	1.1	0.4	0.13	0.13
0.11	0.12	9	8	9	8	2.3	2.5	7	10	0.9	0.7	1.1	0.4	0.14	0.14
0.12	0.12	9	8	10	9	2.4	2.6	8	11	0.9	0.7	1.2	0.4	0.14	0.15
0.12	0.12	9	8	10	9	2.5	2.7	8	11	1	0.7	1.2	0.4	0.15	0.15
0.13	0.13	10	9	11	9	2.6	2.8	8	11	1	0.7	1.3	0.4	0.16	0.16
0.13	0.134	10	9	11	10	2.7	2.9	9	12	1	0.8	1.3	0.5	0.16	0.16
0.14	0.139	11	9	11	10	2.8	3	9	12	1.1	0.8	1.4	0.5	0.17	0.17
0.14	0.144	11	10	12	10	2.9	3.1	9	13	1.1	0.8	1.4	0.5	0.17	0.18
0.15	0.149	11	10	12	11	3	3.2	10	13	1.2	0.8	1.5	0.5	0.18	0.18
0.15	0.154	12	10	13	11	3.1	3.3	10	14	1.2	0.9	1.5	0.5	0.19	0.19
0.16	0.159	12	11	13	11	3.2	3.4	10	14	1.2	0.9	1.6	0.5	0.19	0.19
0.16	0.163	12	11	14	12	3.3	3.5	11	14	1.3	0.9	1.6	0.6	0.2	0.2
0.17	0.168	13	11	14	12	3.4	3.6	11	15	1.3	1	1.7	0.6	0.2	0.21
0.17	0.173	13	12	14	13	3.5	3.7	11	15	1.3	1	1.7	0.6	0.21	0.21
0.18	0.178	14	12	15	13	3.6	3.8	12	16	1.4	1	1.8	0.6	0.22	0.22
0.18	0.183	14	13	15	13	3.7	4	12	16	1.4	1	1.8	0.6	0.22	0.23
0.19	0.187	14	13	16	14	3.8	4.1	12	17	1.5	1.1	1.9	0.7	0.23	0.23
0.19	0.192	15	13	16	14	3.9	4.2	13	17	1.5	1.1	1.9	0.7	0.24	0.24

0.2	0.197	15	14	16	14	4	4.3	13	18	1.5	1.1	2	0.7	0.24	0.24	A-119
0.2	0.202	15	14	17	15	4.1	4.4	13	18	1.6	1.1	2	0.7	0.25	0.25	
0.21	0.207	16	14	17	15	4.2	4.5	14	19	1.6	1.2	2.1	0.7	0.25	0.26	
0.21	0.211	16	15	18	15	4.3	4.6	14	19	1.6	1.2	2.1	0.7	0.26	0.26	
0.215	0.216	17	15	18	16	4.4	4.7	14	19	1.7	1.2	2.2	0.8	0.27	0.27	
0.22	0.221	17	15	18	16	4.5	4.8	15	20	1.7	1.3	2.2	0.8	0.27	0.27	
0.224	0.226	17	16	19	16	4.6	4.9	15	20	1.7	1.3	2.3	0.8	0.28	0.28	
0.229	0.231	18	16	19	17	4.7	5	15	21	1.8	1.3	2.3	0.8	0.28	0.29	
0.234	0.236	18	16	20	17	4.8	5.1	15	21	1.8	1.3	2.4	0.8	0.29	0.29	
0.239	0.24	19	17	20	17	4.8	5.2	16	21	1.9	1.4	2.4	0.9	0.3	0.3	
0.243	0.245	19	17	21	18	4.9	5.3	16	22	1.9	1.4	2.5	0.9	0.3	0.31	
0.248	0.25	19	17	21	18	5	5.4	16	22	1.9	1.4	2.5	0.9	0.31	0.31	
0.253	0.255	20	18	21	18	5.1	5.5	17	23	2	1.5	2.6	0.9	0.32	0.32	
0.258	0.26	20	18	22	19	5.2	5.6	17	23	2	1.5	2.6	0.9	0.32	0.32	
0.262	0.264	20	18	22	19	5.3	5.7	17	23	2	1.5	2.7	1	0.33	0.33	
0.267	0.269	21	19	23	20	5.4	5.9	18	24	2.1	1.5	2.7	1	0.33	0.34	
0.272	0.274	21	19	23	20	5.5	6	18	24	2.1	1.6	2.8	1	0.34	0.34	
0.277	0.279	22	19	23	20	5.6	6.1	18	24	2.2	1.6	2.8	1	0.35	0.35	
0.281	0.284	22	20	24	21	5.7	6.2	19	25	2.2	1.6	2.9	1	0.35	0.35	
0.286	0.289	22	20	24	21	5.8	6.3	19	25	2.2	1.6	2.9	1.1	0.36	0.36	
0.291	0.293	23	20	25	21	5.9	6.4	19	26	2.3	1.7	3	1.1	0.36	0.37	
0.296	0.298	23	21	25	22	6	6.5	20	26	2.3	1.7	3	1.1	0.37	0.37	
0.3	0.303	24	21	25	22	6.1	6.6	20	27	2.3	1.7	3.1	1.1	0.38	0.38	
0.305	0.308	24	21	26	22	6.2	6.7	20	27	2.4	1.8	3.1	1.2	0.38	0.39	
0.31	0.313	24	22	26	23	6.3	6.8	21	27	2.4	1.8	3.2	1.2	0.39	0.39	
0.315	0.317	25	22	27	23	6.4	6.9	21	28	2.4	1.8	3.2	1.2	0.4	0.4	
0.319	0.322	25	22	27	23	6.5	7	21	28	2.5	1.8	3.3	1.2	0.4	0.4	
0.324	0.327	25	23	27	24	6.6	7.1	22	29	2.5	1.9	3.3	1.2	0.41	0.41	
0.329	0.332	26	23	28	24	6.7	7.2	22	29	2.6	1.9	3.4	1.3	0.41	0.42	
0.334	0.337	26	23	28	24	6.8	7.3	22	29	2.6	1.9	3.4	1.3	0.42	0.42	
0.338	0.341	27	24	29	25	6.9	7.4	23	30	2.6	2	3.5	1.3	0.43	0.43	
0.343	0.346	27	26	29	25	7	7.5	23	30	2.7	2	3.5	1.3	0.43	0.43	
0.348	0.351	27	25	30	26	7.1	7.6	23	30	2.7	2	3.6	1.4	0.44	0.44	
0.353	0.356	28	25	30	26	7.2	7.7	23	31	2.7	2	3.6	1.4	0.44	0.45	
0.357	0.361	28	25	30	26	7.3	7.8	24	31	2.8	2.1	3.7	1.4	0.45	0.45	
0.362	0.365	28	25	31	27	7.4	7.9	24	32	2.8	2.1	3.7	1.4	0.46	0.46	
0.367	0.37	29	25	31	27	7.5	8	24	32	2.9	2.1	3.8	1.5	0.46	0.47	
0.372	0.375	29	26	32	27	7.6	8.1	25	32	2.9	2.1	3.8	1.5	0.47	0.47	
0.376	0.38	30	26	32	28	7.7	8.2	25	33	2.9	2.2	3.9	1.5	0.48	0.48	
0.381	0.385	30	26	32	28	7.8	8.3	25	33	3	2.2	3.9	1.5	0.48	0.48	
0.386	0.389	30	26	33	28	7.9	8.5	26	33	3	2.2	4	1.5	0.49	0.49	
0.391	0.394	31	27	33	29	8	8.6	26	34	3	2.3	4	1.6	0.49	0.5	
0.395	0.399	31	27	33	29	8.1	8.7	26	34	3.1	2.3	4.1	1.6	0.5	0.5	
0.4	0.404	32	27	34	29	8.2	8.8	27	35	3.1	2.3	4.1	1.6	0.51	0.51	
0.405	0.409	32	28	34	30	8.3	8.9	27	35	3.1	2.3	4.2	1.6	0.51	0.51	
0.41	0.413	32	28	35	30	8.4	9	27	36	3.2	2.4	4.2	1.7	0.52	0.52	
0.414	0.418	33	28	35	30	8.5	9.1	28	36	3.2	2.4	4.2	1.7	0.52	0.53	
0.419	0.423	33	29	35	31	8.6	9.2	28	36	3.3	2.4	4.3	1.7	0.53	0.53	

0.424	0.428	33	29	36	31	8.7	9.3	28	37	3.3	2.5	4.3	1.7	0.54	0.54	A-120
0.428	0.433	34	29	36	31	8.8	9.4	29	37	3.3	2.5	4.4	1.8	0.54	0.54	
0.433	0.437	34	30	37	32	8.9	9.5	29	38	3.4	2.5	4.4	1.8	0.55	0.55	
0.438	0.442	35	30	37	32	9	9.6	29	38	3.4	2.5	4.5	1.8	0.56	0.56	
0.443	0.447	35	30	38	33	9.1	9.7	30	38	3.4	2.6	4.5	1.8	0.56	0.56	
0.447	0.452	35	31	38	33	9.2	9.8	30	39	3.5	2.6	4.6	1.9	0.57	0.57	
0.452	0.457	36	31	38	33	9.3	9.9	30	39	3.5	2.6	4.6	1.9	0.57	0.58	
0.457	0.461	36	31	39	34	9.4	10	31	40	3.6	2.6	4.7	1.9	0.58	0.58	
0.462	0.466	36	32	39	34	9.5	10.1	31	40	3.6	2.7	4.7	1.9	0.59	0.59	
0.466	0.471	37	32	40	34	9.6	10.2	31	41	3.6	2.7	4.8	1.9	0.59	0.59	
0.471	0.476	37	32	40	35	9.7	10.3	31	41	3.7	2.7	4.8	2	0.6	0.6	
0.476	0.481	38	33	40	35	9.8	10.4	32	41	3.7	2.8	4.9	2	0.6	0.61	
0.481	0.485	38	33	41	35	9.9	10.5	32	42	3.7	2.8	4.9	2	0.61	0.61	
0.485	0.49	38	33	41	36	10	10.6	32	42	3.8	2.8	5	2	0.62	0.62	
0.49	0.495	39	34	42	36	10.1	10.8	33	42	3.8	2.8	5	2.1	0.62	0.62	
0.495	0.5	39	34	42	36	10.2	10.9	33	43	3.9	2.9	5.1	2.1	0.63	0.63	
0.499	0.505	40	34	42	37	10.3	11	33	43	3.9	2.9	5.1	2.1	0.64	0.64	
0.504	0.509	40	35	43	37	10.4	11.1	34	43	3.9	2.9	5.2	2.1	0.64	0.64	
0.509	0.514	40	35	43	37	10.5	11.2	34	44	4	2.9	5.2	2.2	0.65	0.65	
0.514	0.519	41	35	44	38	10.6	11.3	34	44	4	3	5.3	2.2	0.65	0.66	
0.518	0.524	41	36	44	38	10.7	11.4	35	45	4	3	5.3	2.2	0.66	0.66	
0.523	0.528	41	36	44	38	10.8	11.5	35	45	4.1	3	5.4	2.2	0.67	0.67	
0.528	0.533	42	36	45	39	10.9	11.6	35	45	4.1	3.1	5.4	2.3	0.67	0.67	
0.533	0.538	42	37	45	39	11	11.7	36	46	4.1	3.1	5.5	2.3	0.68	0.68	
0.537	0.543	43	37	46	40	11.1	11.8	36	46	4.2	3.1	5.5	2.3	0.68	0.69	
0.542	0.548	43	37	46	40	11.2	11.9	36	46	4.2	3.1	5.6	2.3	0.69	0.69	
0.547	0.552	43	38	46	40	11.2	12	37	47	4.3	3.2	5.6	2.4	0.7	0.7	
0.551	0.557	44	38	47	41	11.3	12.1	37	47	4.3	3.2	5.7	2.4	0.7	0.7	
0.556	0.562	44	38	47	41	11.4	12.2	37	47	4.3	3.2	5.7	2.4	0.71	0.71	
0.561	0.567	44	39	48	41	11.5	12.3	38	47	4.4	3.3	5.8	2.4	0.72	0.72	
0.566	0.572	45	39	48	42	11.6	12.4	38	48	4.4	3.3	5.8	2.5	0.72	0.72	
0.57	0.577	45	39	48	42	11.7	12.5	38	48	4.4	3.3	5.9	2.5	0.73	0.73	
0.575	0.581	46	40	49	42	11.8	12.6	38	48	4.5	3.3	5.9	2.5	0.73	0.74	
0.58	0.586	46	40	49	43	11.9	12.7	39	49	4.5	3.4	6	2.5	0.74	0.74	
0.584	0.591	46	40	50	43	12	12.8	39	49	4.6	3.4	6	2.6	0.75	0.75	
0.589	0.596	47	41	50	43	12.1	12.9	39	50	4.6	3.4	6.1	2.6	0.75	0.75	
0.594	0.601	47	41	50	44	12.2	13	40	50	4.6	3.4	6.1	2.6	0.76	0.76	
0.599	0.606	48	41	51	44	12.3	13.1	40	50	4.7	3.5	6.2	2.6	0.76	0.77	
0.603	0.61	48	42	51	44	12.4	13.2	40	51	4.7	3.5	6.2	2.7	0.77	0.77	
0.608	0.615	48	42	52	45	12.5	13.3	41	51	4.7	3.5	6.3	2.7	0.78	0.78	
0.613	0.62	49	42	52	45	12.6	13.4	41	51	4.8	3.6	6.3	2.7	0.78	0.78	
0.618	0.625	49	43	52	45	12.7	13.5	41	52	4.8	3.6	6.4	2.7	0.79	0.79	
0.622	0.63	49	43	53	46	12.8	13.6	42	52	4.8	3.6	6.4	2.8	0.8	0.8	
0.627	0.635	50	43	53	46	12.9	13.7	42	53	4.9	3.6	6.5	2.8	0.8	0.8	
0.632	0.639	50	44	53	47	13	13.8	42	53	4.9	3.7	6.5	2.8	0.81	0.81	
0.636	0.644	51	44	54	47	13.1	13.9	43	53	5	3.7	6.6	2.8	0.81	0.82	
0.641	0.649	51	44	54	47	13.2	14	43	54	5	3.7	6.6	2.8	0.82	0.82	
0.646	0.654	51	45	54	48	13.3	14.1	43	54	5	3.8	6.7	2.9	0.83	0.83	

0.651	0.659	52	45	55	48	13.4	14.2	44	54	5.1	3.8	6.7	2.9	0.83	0.83	A-121
0.655	0.664	52	45	55	48	13.5	14.3	44	55	5.1	3.8	6.8	2.9	0.84	0.84	
0.66	0.668	52	46	56	49	13.6	14.4	44	55	5.1	3.8	6.8	2.9	0.84	0.85	
0.665	0.673	53	46	56	49	13.7	14.5	45	55	5.2	3.9	6.9	3	0.85	0.85	
0.67	0.678	53	46	56	49	13.8	14.6	45	56	5.2	3.9	6.9	3	0.86	0.86	
0.674	0.683	54	47	57	50	13.9	14.8	45	56	5.3	3.9	7	3	0.86	0.86	
0.679	0.688	54	47	57	50	14	14.9	45	56	5.3	3.9	7	3	0.87	0.87	
0.684	0.693	54	47	57	50	14.1	15	46	57	5.3	4	7.1	3.1	0.88	0.88	
0.688	0.697	55	48	57	51	14.1	15.1	46	57	5.4	4	7.1	3.1	0.88	0.88	
0.693	0.702	55	48	57	51	14.1	15.2	46	57	5.4	4	7.2	3.1	0.89	0.89	
0.698	0.707	55	48	57	51	14.2	15.3	46	58	5.4	4.1	7.2	3.1	0.89	0.9	
0.703	0.712	56	49	58	52	14.2	15.4	46	58	5.5	4.1	7.3	3.2	0.9	0.9	
0.707	0.717	56	49	58	52	14.3	15.5	46	58	5.5	4.1	7.3	3.2	0.91	0.91	
0.712	0.722	56	49	58	52	14.4	15.6	47	59	5.5	4.1	7.4	3.2	0.91	0.91	
0.717	0.726	57	50	59	53	14.4	15.7	47	59	5.6	4.2	7.4	3.2	0.92	0.92	
0.721	0.731	57	50	59	53	14.5	15.8	47	59	5.6	4.2	7.4	3.3	0.92	0.93	
0.726	0.736	57	50	59	53	14.6	15.9	48	59	5.7	4.2	7.5	3.3	0.93	0.93	
0.731	0.741	58	51	60	54	14.7	16	48	60	5.7	4.2	7.5	3.3	0.94	0.94	
0.736	0.746	58	51	60	54	14.8	16.1	48	60	5.7	4.3	7.6	3.3	0.94	0.94	
0.74	0.751	58	51	61	54	14.9	16.1	48	60	5.8	4.3	7.6	3.4	0.95	0.95	
0.745	0.756	59	52	61	55	15	16.2	49	61	5.8	4.3	7.7	3.4	0.96	0.96	
0.75	0.76	59	52	61	55	15.1	16.3	49	61	5.8	4.4	7.7	3.4	0.96	0.96	
0.755	0.765	59	52	62	56	15.2	16.4	49	61	5.9	4.4	7.8	3.4	0.97	0.97	
0.759	0.77	60	53	62	56	15.3	16.5	50	62	5.9	4.4	7.8	3.5	0.97	0.98	
0.764	0.775	60	53	63	56	15.4	16.6	50	62	6	4.4	7.9	3.5	0.98	0.98	
0.769	0.78	61	53	63	57	15.5	16.7	50	62	6	4.5	7.9	3.5	0.99	0.99	
0.773	0.785	61	54	63	57	15.6	16.8	51	63	6	4.5	8	3.5	0.99	0.99	
0.778	0.789	61	54	64	57	15.7	16.9	51	63	6.1	4.5	8	3.6	1	1	
0.783	0.794	62	54	64	58	15.8	17	51	63	6.1	4.6	8.1	3.6	1	1.01	
0.788	0.799	62	55	65	58	15.9	17.1	52	64	6.1	4.6	8.1	3.6	1.01	1.01	
0.792	0.804	62	55	65	58	16	17.2	52	64	6.2	4.6	8.2	3.6	1.02	1.02	
0.797	0.809	63	55	65	59	16.1	17.3	52	64	6.2	4.6	8.2	3.7	1.02	1.02	
0.802	0.814	63	56	66	59	16.2	17.4	53	64	6.3	4.7	8.3	3.7	1.03	1.03	
0.806	0.818	64	56	66	59	16.3	17.5	53	65	6.3	4.7	8.3	3.7	1.04	1.04	
0.811	0.823	64	56	67	60	16.4	17.6	53	65	6.3	4.7	8.4	3.7	1.04	1.04	
0.816	0.828	64	57	67	60	16.5	17.7	53	65	6.4	4.7	8.4	3.7	1.05	1.05	
0.821	0.833	65	57	67	60	16.6	17.8	54	66	6.4	4.8	8.5	3.8	1.05	1.06	
0.825	0.838	65	57	68	61	16.7	17.9	54	66	6.4	4.8	8.5	3.8	1.06	1.06	
0.83	0.843	66	58	68	61	16.8	18	54	66	6.5	4.8	8.6	3.8	1.07	1.07	
0.835	0.848	66	58	69	61	16.9	18.1	55	67	6.5	4.9	8.6	3.8	1.07	1.07	
0.84	0.853	66	58	69	62	17	18.2	55	67	6.5	4.9	8.7	3.9	1.08	1.08	
0.844	0.857	67	59	69	62	17.1	18.3	55	67	6.6	4.9	8.7	3.9	1.08	1.09	
0.849	0.862	67	59	70	63	17.2	18.4	56	67	6.6	4.9	8.8	3.9	1.09	1.09	
0.854	0.867	67	59	70	63	17.3	18.5	56	68	6.7	5	8.8	3.9	1.1	1.1	
0.858	0.872	68	60	71	63	17.4	18.6	56	68	6.7	5	8.9	4	1.1	1.1	
0.863	0.877	68	60	71	64	17.5	18.7	57	68	6.7	5	8.9	4	1.11	1.11	
0.868	0.882	69	60	72	64	17.6	18.8	57	68	6.8	5.1	9	4	1.12	1.12	
0.873	0.887	69	61	72	64	17.7	18.9	57	69	6.8	5.1	9	4	1.12	1.12	

SAND2M3M Cum D (cm)		SAND5MFlat Cum D (cm)	SAND5MTop Cum D (cm)	SAND5MBott Cum D (cm)	SAND5M1M Cum D (cm)	SAND5M30CM Cum D (cm)		SAND5M3M Cum D (cm)	
A	B	A	A	A	A	A	B	A	B
0.1	0	0	0	0	0	0	0	0	0.002
0.2	0	0	0	0	0	0	0	0	0.005
0.4	0	0	0	0	0	0	0	0.01	0.007
0.5	0	0	0	0	0	0	0	0.01	0.009
0.6	0	0	0	0	0	0	0	0.01	0.012
0.7	1	0	0	0	0	0	0	0.01	0.014
0.8	1	0	0	0	0	0	0	0.02	0.016
1	1	0	0	0	-0.01	0	0	0.02	0.018
1.1	1	0	0	0	-0.01	0	-0.01	0.02	0.021
1.2	1	0	0	0	-0.01	0	-0.01	0.02	0.023
1.3	1	0	0	0	-0.01	0	-0.01	0.02	0.025
1.4	2	0	0	0	-0.01	0	-0.01	0.03	0.028
1.6	2	0	0	0	-0.01	0	-0.01	0.03	0.03
1.7	2	0	0	0	-0.01	0	-0.01	0.03	0.032
1.8	2	0	0	0	-0.01	0	-0.01	0.03	0.035
1.9	2	0	0	0	-0.01	0	-0.01	0.04	0.037
2	3	0	0	0	-0.01	0	-0.01	0.04	0.039
2.2	3	0	0	0	-0.01	0	-0.01	0.04	0.042
2.3	3	0	0	0	-0.01	0	-0.01	0.043	0.044
2.4	3	0	0	0	-0.01	0	-0.01	0.045	0.046
2.5	3	0	0	0	-0.01	0	-0.01	0.047	0.048
2.6	3	0	0	0	-0.01	0	-0.01	0.05	0.051
2.8	4	0	0	0	-0.01	-0.01	-0.01	0.052	0.053
2.9	4	0	0	0	-0.01	-0.01	-0.01	0.054	0.055
3	4	0	-0.01	0	-0.01	-0.01	-0.01	0.057	0.058
3.1	4	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.059	0.06
3.3	4	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.061	0.062
3.4	4	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.064	0.065
3.5	5	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.066	0.067
3.6	5	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.068	0.069
3.8	5	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.07	0.072
3.9	5	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.073	0.074
4	5	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.075	0.076
4.1	5	0	-0.01	-0.01	-0.02	-0.01	-0.01	0.077	0.078
4.2	6	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.08	0.081
4.4	6	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.082	0.083
4.5	6	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.084	0.085
4.6	6	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.087	0.088
4.7	6	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.089	0.09

4.9	6	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.091	0.092
5	7	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.094	0.095
5.1	7	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.096	0.097
5.2	7	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.098	0.099
5.4	7	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.1	0.102
5.5	7	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.103	0.104
5.6	7	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.105	0.106
5.7	8	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.107	0.108
5.8	8	0	-0.01	-0.01	-0.02	-0.01	-0.02	0.11	0.111
6	8	0	-0.01	-0.01	-0.02	-0.02	-0.02	0.112	0.113
6.1	8	0	-0.01	-0.01	-0.02	-0.02	-0.02	0.114	0.115
6.2	8	0	-0.02	-0.01	-0.02	-0.02	-0.02	0.117	0.118
6.3	8	0	-0.02	-0.02	-0.02	-0.02	-0.02	0.119	0.12
6.5	9	0	-0.02	-0.02	-0.02	-0.02	-0.02	0.121	0.122
6.6	9	0	-0.02	-0.02	-0.02	-0.02	-0.02	0.124	0.125
6.7	9	0	-0.02	-0.02	-0.02	-0.02	-0.02	0.126	0.127
6.8	9	0	-0.02	-0.02	-0.02	-0.02	-0.02	0.128	0.129
7	9	0	-0.02	-0.02	-0.02	-0.02	-0.02	0.13	0.132
7.1	9	0	-0.02	-0.02	-0.02	-0.02	-0.02	0.133	0.134
7.2	9	0	-0.02	-0.02	-0.02	-0.02	-0.02	0.135	0.136
7.3	10	0	-0.02	-0.02	-0.03	-0.02	-0.02	0.137	0.138
7.4	10	0	-0.02	-0.02	-0.03	-0.02	-0.03	0.14	0.141
7.6	10	0	-0.02	-0.02	-0.03	-0.02	-0.03	0.142	0.143
7.7	10	-0.1	-0.02	-0.02	-0.03	-0.02	-0.03	0.144	0.145
7.8	10	-0.1	-0.02	-0.02	-0.03	-0.02	-0.03	0.146	0.148
7.9	10	-0.1	-0.02	-0.02	-0.03	-0.02	-0.03	0.149	0.15
8.1	11	-0.1	-0.02	-0.02	-0.03	-0.02	-0.03	0.151	0.152
8.2	11	-0.1	-0.02	-0.02	-0.03	-0.02	-0.03	0.153	0.155
8.3	11	-0.1	-0.02	-0.02	-0.03	-0.02	-0.03	0.156	0.157
8.4	11	-0.1	-0.02	-0.02	-0.03	-0.02	-0.03	0.158	0.159
8.6	11	-0.1	-0.02	-0.02	-0.03	-0.02	-0.03	0.16	0.162
8.7	11	-0.1	-0.02	-0.02	-0.03	-0.02	-0.03	0.162	0.164
8.8	11	-0.1	-0.02	-0.02	-0.03	-0.02	-0.03	0.165	0.166
8.9	12	-0.1	-0.02	-0.02	-0.03	-0.02	-0.03	0.167	0.168
9	12	-0.1	-0.02	-0.02	-0.03	-0.02	-0.03	0.169	0.171
9.2	12	-0.1	-0.02	-0.02	-0.03	-0.03	-0.03	0.172	0.173
9.3	12	-0.1	-0.02	-0.02	-0.03	-0.03	-0.03	0.174	0.175
9.4	12	-0.1	-0.03	-0.02	-0.03	-0.03	-0.03	0.176	0.178
9.5	12	-0.1	-0.03	-0.03	-0.03	-0.03	-0.03	0.179	0.18
9.7	12	-0.1	-0.03	-0.03	-0.03	-0.03	-0.03	0.181	0.182
9.8	13	-0.1	-0.03	-0.03	-0.03	-0.03	-0.03	0.183	0.185
9.9	13	-0.1	-0.03	-0.03	-0.03	-0.03	-0.03	0.185	0.187
10	13	-0.1	-0.03	-0.03	-0.03	-0.03	-0.03	0.188	0.189
10.2	13	-0.1	-0.03	-0.03	-0.03	-0.03	-0.03	0.19	0.192
10.3	13	-0.1	-0.03	-0.03	-0.03	-0.03	-0.03	0.192	0.194
10.4	13	-0.1	-0.03	-0.03	-0.03	-0.03	-0.03	0.195	0.196
10.5	14	-0.1	-0.03	-0.03	-0.04	-0.03	-0.03	0.197	0.198
10.6	14	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.199	0.201

10.8	14	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.202	0.203
10.9	14	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.204	0.205
11	14	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.206	0.208
11.1	14	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.209	0.21
11.3	15	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.211	0.212
11.3	15	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.213	0.215
11.3	15	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.215	0.217
11.3	15	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.218	0.219
11.3	15	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.22	0.222
12.3	15	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.222	0.224
12.3	16	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.225	0.226
12.3	16	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.227	0.228
12.3	16	-0.1	-0.03	-0.03	-0.04	-0.03	-0.04	0.229	0.231
12.3	16	-0.1	-0.03	-0.03	-0.04	-0.04	-0.04	0.232	0.233
12.3	16	-0.1	-0.03	-0.03	-0.04	-0.04	-0.04	0.234	0.235
12.3	16	-0.1	-0.04	-0.03	-0.04	-0.04	-0.04	0.236	0.238
12.3	16	-0.1	-0.04	-0.04	-0.04	-0.04	-0.04	0.238	0.24
13.3	17	-0.1	-0.04	-0.04	-0.04	-0.04	-0.04	0.241	0.242
13.3	17	-0.1	-0.04	-0.04	-0.04	-0.04	-0.04	0.243	0.245
13.3	17	-0.1	-0.04	-0.04	-0.04	-0.04	-0.04	0.245	0.247
13.3	17	-0.1	-0.04	-0.04	-0.04	-0.04	-0.04	0.248	0.249
13.3	17	-0.1	-0.04	-0.04	-0.04	-0.04	-0.04	0.25	0.252
13.3	17	-0.1	-0.04	-0.04	-0.04	-0.04	-0.04	0.252	0.254
13.3	17	-0.1	-0.04	-0.04	-0.04	-0.04	-0.04	0.255	0.256
13.3	17	-0.1	-0.04	-0.04	-0.05	-0.04	-0.04	0.257	0.258
14.3	18	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.259	0.261
14.3	18	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.262	0.263
14.3	18	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.264	0.265
14.3	18	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.266	0.268
14.3	18	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.268	0.27
14.3	18	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.271	0.272
14.3	18	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.273	0.275
14.3	18	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.275	0.277
15.3	19	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.278	0.279
15.3	19	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.28	0.282
15.3	19	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.282	0.284
15.3	19	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.285	0.286
15.3	19	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.287	0.288
15.3	19	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.289	0.291
15.3	19	-0.1	-0.04	-0.04	-0.05	-0.04	-0.05	0.292	0.293
15.3	20	-0.1	-0.04	-0.04	-0.05	-0.05	-0.05	0.294	0.295
16.3	20	-0.1	-0.05	-0.04	-0.05	-0.05	-0.05	0.296	0.298
16.3	20	-0.1	-0.05	-0.05	-0.05	-0.05	-0.05	0.298	0.3
16.3	20	-0.1	-0.05	-0.05	-0.05	-0.05	-0.05	0.301	0.302
16.3	20	-0.1	-0.05	-0.05	-0.05	-0.05	-0.05	0.303	0.305
16.3	20	-0.1	-0.05	-0.05	-0.05	-0.05	-0.05	0.305	0.307
16.3	20	-0.1	-0.05	-0.05	-0.05	-0.05	-0.05	0.308	0.309
16.3	21	-0.1	-0.05	-0.05	-0.05	-0.05	-0.05	0.31	0.312

16.3	21	-0.1	-0.05	-0.05	-0.05	-0.05	-0.05	0.312	0.314
16.3	21	-0.1	-0.05	-0.05	-0.05	-0.05	-0.05	0.315	0.316
17.3	21	-0.1	-0.05	-0.05	-0.06	-0.05	-0.05	0.317	0.318
17.3	21	-0.1	-0.05	-0.05	-0.06	-0.05	-0.06	0.319	0.321
17.3	21	-0.1	-0.05	-0.05	-0.06	-0.05	-0.06	0.322	0.323
17.3	21	-0.1	-0.05	-0.05	-0.06	-0.05	-0.06	0.324	0.325
17.3	22	-0.1	-0.05	-0.05	-0.06	-0.05	-0.06	0.326	0.328
17.3	22	-0.1	-0.05	-0.05	-0.06	-0.05	-0.06	0.328	0.33
17.3	22	-0.1	-0.05	-0.05	-0.06	-0.05	-0.06	0.331	0.332
17.3	22	-0.2	-0.05	-0.05	-0.06	-0.05	-0.06	0.333	0.335
18.3	22	-0.2	-0.05	-0.05	-0.06	-0.05	-0.06	0.335	0.337
18.3	22	-0.2	-0.05	-0.05	-0.06	-0.05	-0.06	0.338	0.339
18.3	22	-0.2	-0.05	-0.05	-0.06	-0.05	-0.06	0.34	0.341
18.3	22	-0.2	-0.05	-0.05	-0.06	-0.05	-0.06	0.342	0.344
18.3	23	-0.2	-0.05	-0.05	-0.06	-0.05	-0.06	0.345	0.346
18.3	23	-0.2	-0.05	-0.05	-0.06	-0.05	-0.06	0.347	0.348
18.3	23	-0.2	-0.05	-0.05	-0.06	-0.05	-0.06	0.349	0.351
18.3	23	-0.2	-0.05	-0.05	-0.06	-0.05	-0.06	0.352	0.353
19.3	23	-0.2	-0.05	-0.05	-0.06	-0.06	-0.06	0.354	0.355
19.3	23	-0.2	-0.06	-0.05	-0.06	-0.06	-0.06	0.356	0.358
19.3	23	-0.2	-0.06	-0.06	-0.06	-0.06	-0.06	0.358	0.36
19.3	23	-0.2	-0.06	-0.06	-0.06	-0.06	-0.06	0.361	0.362
19.3	24	-0.2	-0.06	-0.06	-0.06	-0.06	-0.06	0.363	0.365
19.3	24	-0.2	-0.06	-0.06	-0.06	-0.06	-0.06	0.365	0.367
19.3	24	-0.2	-0.06	-0.06	-0.06	-0.06	-0.06	0.368	0.369
19.3	24	-0.2	-0.06	-0.06	-0.06	-0.06	-0.06	0.37	0.371
20.3	24	-0.2	-0.06	-0.06	-0.06	-0.06	-0.06	0.372	0.374
20.3	24	-0.2	-0.06	-0.06	-0.06	-0.06	-0.06	0.375	0.376
20.3	24	-0.2	-0.06	-0.06	-0.07	-0.06	-0.06	0.377	0.378
20.3	24	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.379	0.381
20.3	24	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.382	0.383
20.3	25	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.384	0.385
20.3	25	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.386	0.388
20.3	25	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.388	0.39
21.3	25	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.391	0.392
21.3	25	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.393	0.395
21.3	25	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.395	0.397
21.3	25	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.398	0.399
21.3	25	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.4	0.401
21.3	26	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.402	0.404
21.3	26	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.405	0.406
21.3	26	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.407	0.408
22.3	26	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.409	0.411
22.3	26	-0.2	-0.06	-0.06	-0.07	-0.06	-0.07	0.412	0.413
22.3	26	-0.2	-0.06	-0.06	-0.07	-0.07	-0.07	0.414	0.415
22.3	26	-0.2	-0.07	-0.06	-0.07	-0.07	-0.07	0.416	0.418
22.3	26	-0.2	-0.07	-0.06	-0.07	-0.07	-0.07	0.418	0.42
22.3	26	-0.2	-0.07	-0.06	-0.07	-0.07	-0.07	0.421	0.422

Appendix A.7. Total Evapotranpiration Flux Data

TOTAL FLUXES

(1) = 548 Day ET Totals/no equilibrium
(2) = 183 Day ET Totals/365 Day Equilibrium
(3) = 175 Day ET Totals/442 Day Equilibrium
(4) = 183 Day Total/730 Day Equilibrium
(5) = 183 Day ET Totals/803 Day Equilibrium
(6) = 183 Day ET Totals (using real PET)/803 Day Equilibrium

	Cumulative Evaporation[cm]						Cumulative Transpiration[cm]						Cumulative Evapotranspiration[cm]						Cumulative Discharge[cm]					
CLAY	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
1mFlat					26.4186						96						122.419						100	
1mTop					24.6186						85						109.619						87	
1mBotm					29.0186						105						134.019						112	
1m30cm	67.0426	24.5282	15.23	25.7186	25.7186	20.1002	177	60	19.18	63	64	63	244.043	84.5282	34.41	88.7186	89.7186	83.1	195	64	11.55	68	67	70
1m1m	58.5326	20.2182	16.27	22.9186	22.9186		247	85	33.39	88	87		305.533	105.218	49.66	110.919	109.919		254	83	26.23	88	88	
1m3m	85.4426	31.6282	16.95	34.9186	34.9186	21.3002	239	79	41.09	80	81	95	324.443	110.628	58.04	114.919	115.919	116.3	274	88	33.55	94	94	104
2mFlat					18.6786						55						73.6786						50	
2mTop					18.3286						47						65.3286						42	
2mBotm					19.5186						58						77.5186						56	
2m30cm	41.6326	16.0932	15.24	19.5286	19.5306	15.9002	90	31.9	11.67	32	32	28	131.633	47.9932	26.91	51.5286	51.5306	43.9	80.4	25.8	3.347	30	29	30
2m1m	35.2426	14.1082	16.27	18.5086	18.5286		135	47.4	14.36	45	45		170.243	61.5082	30.63	63.5086	63.5286		118	39.4	6.568	41	41	
2m3m	37.8426	14.9682	17.00	19.2686	19.2686	14.2302	197	68	29.73	65	66	66	234.843	82.9682	46.73	84.2686	85.2686	80.23	183	61	20.34	63	62	68
5mFlat					18.4186						11						29.4186						7.4	
5mTop					17.9186						11.1						29.0186						6.9	
5mBotm					19.3186						10.1						29.4186						7.5	
5m30cm	33.6426	13.6482	15.11	17.5186	17.6186	14.2302	29.8	12.2	8.297	9.6	9.6	5.4	63.4426	25.8482	23.41	27.1186	27.2186	19.63	13.6	4.93	-0.004	5.3	5.3	5.4
5m1m	32.2426	12.9582	16.27	18.2186	18.2186		39.5	15.5	8.56	10.6	10.6		71.7426	28.4582	24.83	28.8186	28.8186		18.6	6.7	0.167	6.6	6.6	
5m3m	34.0426	13.6282	16.90	18.8186	18.9186	13.8202	65.9	23.4	14.59	18.6	18.5	15	99.9426	37.0282	31.49	37.4186	37.4186	28.82	43.8	14.8	1.715	14.7	14.7	15.9
LOAM																								
1mFlat					15.5186						62						77.5186						68	
1mTop					14.9186						90						104.919						54	
1mBotm					18.0086						91						109.009						84	
1m30cm	24.6426	10.7282	11.32		14.2186	11.3302	79.2	29.2	27.91		27	22.3	103.843	39.9282	39.23		41.2186	33.63	55.8	17.8	17.4		19.3	20.1
1m1m	27.9426	11.9282	12.66		15.6186		184	64	61.04		61		211.943	75.9282	73.70		76.6186		164	54	52.24		54	
1m3m	31.0426	13.4582	14.03		16.8186	12.3702	179	60	56.95		60	63	210.043	73.4582	70.98		76.8186	75.37	166	52	51.24		55	63
2mFlat					15.4186	11.7502					16.1	11.7					31.5186	23.45					9.2	9.5
2mTop					14.9186	11.5802					17.4	12.7					32.3186	24.28					9.9	10.7
2mBotm					17.7186	12.7402					13.9	11.2					31.6186	23.94					9.8	10
2m30cm	24.3426	10.5282	11.16		14.2186	11.3402	30.6	13.1	13.22		9.7	4.8	54.9426	23.6282	24.38		23.9186	16.14	4.61	1.82	1.42		1.81	1.84
2m1m	27.8426	11.9282	12.47		15.6186		41	16	15.72		12.3		68.8426	27.9282	28.19		27.9186		17.3	5.6	6.029		5.6	
2m3m	30.2426	12.9182	13.51		16.8186	12.3702	91.1	32.6	31.38		29	27	121.343	45.5182	44.89		45.8186	39.37	72.1	23	23.25		23.3	27
5mFlat					15.4186						6.8						22.2186						0.08	
5mTop					14.8186						7.4						22.2186						0.08	
5mBotm					17.7186						4						21.7186						0.08	
5m30cm	24.2426	10.5282	11.11		14.2186	11.3902	24.5	11.3	11.3		7.7	3.01	48.7426	21.8282	22.41		21.9186	14.4	-4.82	-0.01	-1.57		0.08	0.09
5m1m	27.7426	11.9282	12.44		15.6186		24.3	10.4	11.1		6.6		52.0426	22.3282	23.54		22.2186		-2.51	0.02	-0.8		0.08	
5m3m	30.2426	12.9782	13.49		16.8186	12.3702	28.3	10	14.04		6.2	2.8	58.5426	22.9782	27.53		23.0186	15.17	-2.38	0.88	-0.64		0.873	0.889

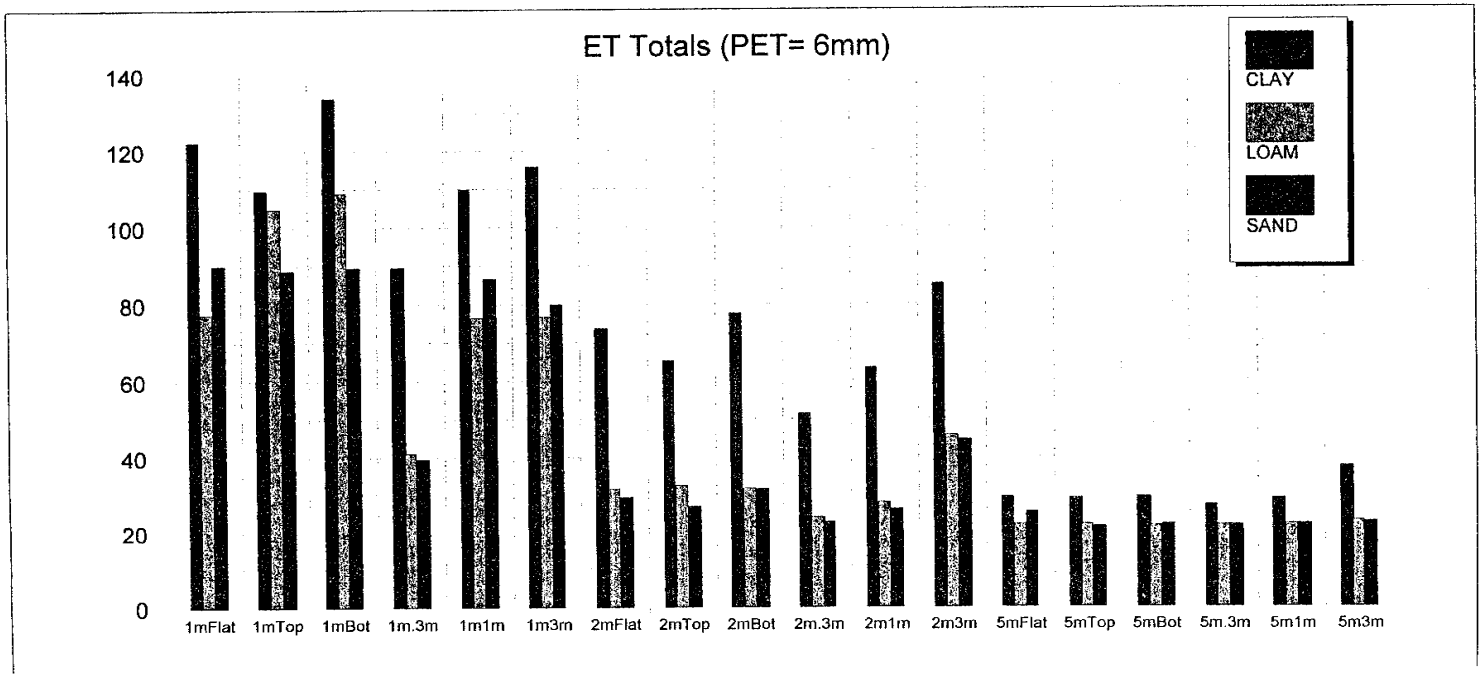
SAND																					A-127	
1mFlat				14.2186					76					90.2186					69	
1mTop				18.9186					70					88.9186					61	
1mBotm				14.7186					75					89.7186					72	
1m30cm	22.9426	9.9282	10.38	13.6186	11.0202	72.2	26.2	25.37	26	21.7	95.1426	36.1282	35.75	39.6186	32.72	44.7	13.8	12.99	17.7	18.9
1m1m	25.4426	10.8282	11.51	14.7186		210	71	69.11	72		235.443	81.8282	80.62	86.7186		182	60	57.4	64	
1m3m	28.5426	11.7182	12.25	16.0186	11.9902	184	60	58.48	64	71	212.543	71.7182	70.73	80.0186	82.99	165	51	48.13	57	69
2mFlat				14.6186					14.7					29.3186					6.8	
2mTop				14.2186					12.7					26.9186					5.1	
2mBotm				16.5186					14.9					31.4186					9	
2m30cm	22.7426	9.8282	10.19	13.6186	11.3402	26.8	11.5	11.8	9.2	3.6	49.5426	21.3282	21.99	22.8186	14.94	-1.24	0.09	-0.43	1.12	1.12
2m1m	25.7426	10.7282	11.32	14.8186		38.5	15.4	16.29	11.3		64.2426	26.1282	27.61	26.1186		8.42	4.13	3.393	4	
2m3m	27.0426	11.4282	11.96	15.7186	11.9902	94.6	33.5	33.98	29	28	121.643	44.9282	45.94	44.7186	39.99	65	22.5	21.15	22.3	26
5mFlat				15.9186					9.5					25.4186					-0.02	
5mTop				14.2186					7.4					21.6186					-0.07	
5mBotm				16.5186					5.6					22.1186					-0.06	
5m30cm	22.7426	9.7282	10.32	13.6186	11.0602	24	10.6	10.636	8.3	3.26	46.7426	20.3282	20.95	21.9186	14.32	-7.95	-0.14	-1.53	-0.07	-0.07
5m1m	25.2426	10.7282	11.29	14.8186		26.5	11.5	12.22	7.4		51.7426	22.2282	23.51	22.2186		-5.01	-0.08	-0.69	-0.07	
5m3m	27.0426	11.4282	11.98	15.7186	12.202	32.5	11.3	16.97	6.9	2.8	59.5426	22.7282	28.95	22.6186	15.002	-1.55	0.42	-0.16	0.421	0.427

TOTAL FLUXES

(5) = 183 Day ET Totals/803 Day Equilibrium
(6) = 183 Day ET Totals (using real PET)/803 Day Equilibrium

	Cumulative Evaporation [cm]		Cumulative Transpiration [cm]		Cumulative Evapotranspiration [cm]		Cummulative Discharge[cm]	
CLAY	(5)	(6)	(5)	(6)	(5)	(6)	(5)	(6)
1mFlat	26.4186		96		122.42		100	
1mTop	24.6186		85		109.62		87	
1mBot	29.0186		105		134.02		112	
1m.3m	25.7186	20.1002	64	63	89.72	83.10	67	70
1m1m	22.9186		87		109.92		88	
1m3m	34.9186	21.3002	81	95	115.92	116.3002	94	104
2mFlat	18.6786		55		73.68		50	
2mTop	18.3286		47		65.33		42	
2mBot	19.5186		58		77.52		56	
2m.3m	19.5306	15.9002	32	28	51.53	43.9002	29	30
2m1m	18.5286		45		63.53		41	
2m3m	19.2686	14.2302	66	66	85.27	80.2302	62	68
5mFlat	18.4186		11		29.42		7.4	
5mTop	17.9186		11.1		29.02		6.9	
5mBot	19.3186		10.1		29.42		7.5	
5m.3m	17.6186	14.2302	9.6	5.4	27.22	19.6302	5.3	5.4
5m1m	18.2186		10.6		28.82		6.6	
5m3m	18.9186	13.8202	18.5	15	37.42	28.8202	14.7	15.9
LOAM								
1mFlat	15.5186		62		77.52		68	
1mTop	14.9186		90		104.92		54	
1mBot	18.0086		91		109.01		84	
1m.3m	14.2186	11.3302	27	22.3	41.22	33.63	19.3	20.1
1m1m	15.6186		61		76.62		54	
1m3m	16.8186	12.37	60	63	76.82	75.37	55	63
2mFlat	15.4186	11.75	16.1	11.7	31.52	23.45	9.2	9.5
2mTop	14.9186	11.58	17.4	12.7	32.32	24.28	9.9	10.7
2mBot	17.7186	12.74	13.9	11.2	31.62	23.94	9.8	10
2m.3m	14.2186	11.34	9.7	4.8	23.92	16.14	1.81	1.84
2m1m	15.6186		12.3		27.92		5.6	
2m3m	16.8186	12.37	29	27.00	45.82	39.37	23.3	27
5mFlat	15.4186		6.8		22.22		0.08	
5mTop	14.8186		7.4		22.22		0.08	
5mBot	17.7186		4		21.72		0.08	
5m.3m	14.2186	11.39	7.7	3.01	21.92	14.40	0.08	0.09
5m1m	15.6186		6.6		22.22		0.08	
5m3m	16.8186	12.37	6.2	2.80	23.02	15.17	0.873	0.889

SAND	Cumulative Evaporation [cm]		Cumulative Transpiration [cm]		Cumulative Evapotranspiration [cm]		Cummulative Discharge[cm]	
1mFlat	14.2186		76		90.22		69	
1mTop	18.9186		70		88.92		61	
1mBot	14.7186		75		89.72		72	
1m.3m	13.6186	11.02	26	21.70	39.62	32.72	17.7	18.9
1m1m	14.7186		72		86.72		64	
1m3m	16.0186	11.99	64	71.00	80.02	82.99	57	69
2mFlat	14.6186		14.7		29.32		6.8	
2mTop	14.2186		12.7		26.92		5.1	
2mBot	16.5186		14.9		31.42		9	
2m.3m	13.6186	11.34	9.2	3.60	22.82	14.94	1.12	1.12
2m1m	14.8186		11.3		26.12		4	
2m3m	15.7186	11.99	29	28.00	44.72	39.99	22.3	26
5mFlat	15.9186		9.5		25.42		-0.02	
5mTop	14.2186		7.4		21.62		-0.07	
5mBot	16.5186		5.6		22.12		-0.06	
5m.3m	13.6186	11.06	8.3	3.26	21.92	14.32	-0.07	-0.07
5m1m	14.8186		7.4		22.22		-0.07	
5m3m	15.7186	12.20	6.9	2.80	22.62	15.00	0.421	0.427

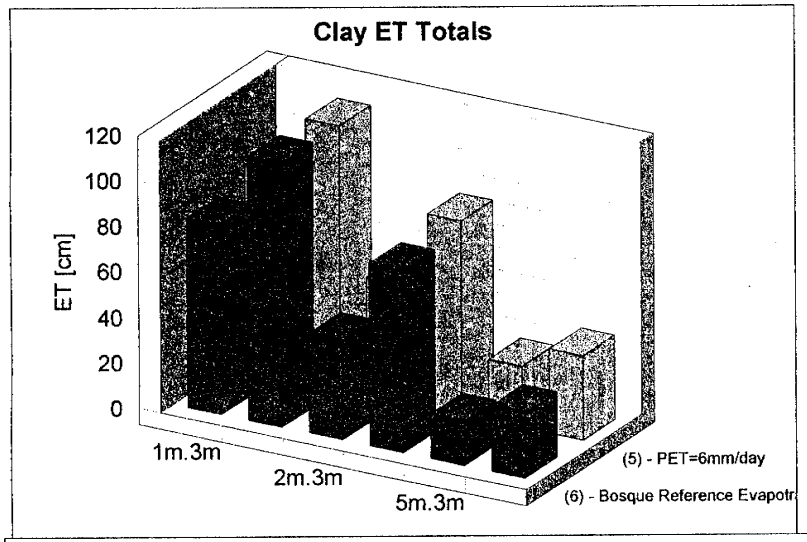


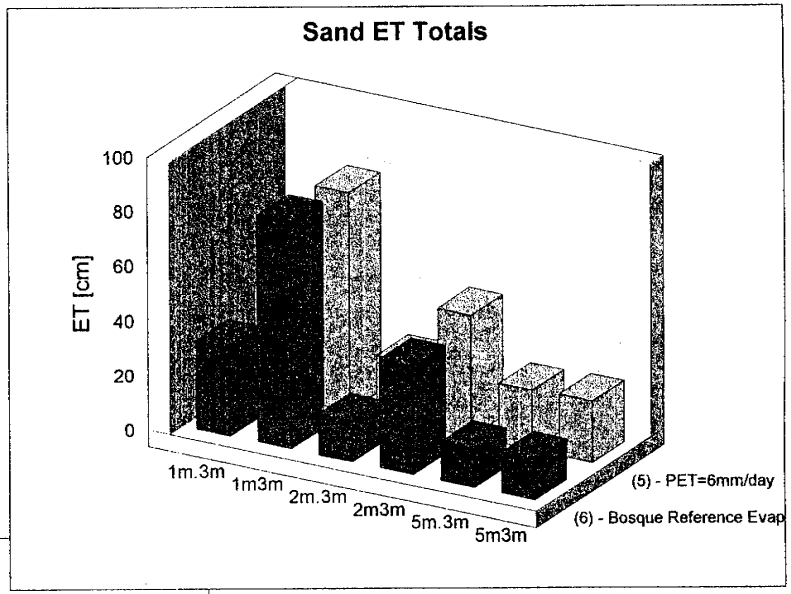
TOTAL FLUXES

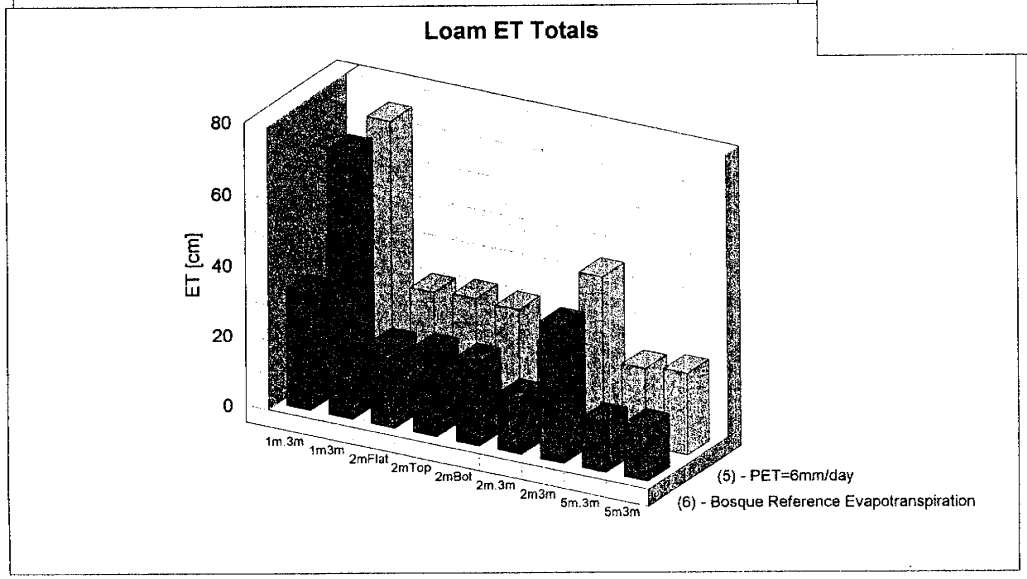
(5) - PET=6mm/day

(6) - Bosque Reference Evapotranspiration

	Cumulative Evap. [cm]		Cumulative Transp. [cm]		Cumulative ET [cm]		Cumulative Discharge[cm]	
CLAY	(5)	(6)	(5)	(6)	(5)	(6)	(5)	(6)
1m.3m	25.7186	20.1002	64	63	89.72	83.10	67	70
1m3m	34.9186	21.3002	81	95	115.92	116.3002	94	104
2m.3m	19.5306	15.9002	32	28	51.53	43.9002	29	30
2m3m	19.2686	14.2302	66	66	85.27	80.2302	62	68
5m.3m	17.6186	14.2302	9.6	5.4	27.22	19.6302	5.3	5.4
5m3m	18.9186	13.8202	18.5	15	37.42	28.8202	14.7	15.9
LOAM								
1m.3m	14.2186	11.3302	27	22.3	41.22	33.63	19.3	20.1
1m3m	16.8186	12.37	60	63	76.82	75.37	55	63
2mFlat	15.4186	11.75	16.1	11.7	31.52	23.45	9.2	9.5
2mTop	14.9186	11.58	17.4	12.7	32.32	24.28	9.9	10.7
2mBot	17.7186	12.74	13.9	11.2	31.62	23.94	9.8	10
2m.3m	14.2186	11.34	9.7	4.8	23.92	16.14	1.81	1.84
2m3m	16.8186	12.37	29	27.00	45.82	39.37	23.3	27
5m.3m	14.2186	11.39	7.7	3.01	21.92	14.40	0.08	0.09
5m3m	16.8186	12.37	6.2	2.80	23.02	15.17	0.873	0.889
SAND								
1m.3m	13.6186	11.02	26	21.70	39.62	32.72	17.7	18.9
1m3m	16.0186	11.99	64	71.00	80.02	82.99	57	69
2m.3m	13.6186	11.34	9.2	3.60	22.82	14.94	1.12	1.12
2m3m	15.7186	11.99	29	28.00	44.72	39.99	22.3	26
5m.3m	13.6186	11.06	8.3	3.26	21.92	14.32	-0.07	-0.07
5m3m	15.7186	12.20	6.9	2.80	22.62	15.00	0.421	0.427


Clay ET Totals
ET [cm]
120
100
80
60
40
20
0
1m.3m
2m.3m
5m.3m
(5) - PET=6mm/day
(6) - Bosque Reference Evapotr


Sand ET Totals
ET [cm]
100
80
60
40
20
0
1m.3m
1m3m
2m.3m
2m3m
5m.3m
5m3m
(5) - PET=6mm/day
(6) - Bosque Reference Evap


Loam ET Totals
ET [cm]
80
60
40
20
0
1m.3m
1m3m
2mFlat
2mTop
2mBot
2m.3m
2m3m
5m.3m
5m3m
(5) - PET=6mm/day
(6) - Bosque Reference Evapotranspiration

IMPORTANCE OF GROUNDWATER DEPTH, SOIL TEXTURE AND ROOTING DEPTH ON ARID RIPARIAN EVAPOTRANSPIRATION

Volume II

By Behnaum Moayyad

An Independent Study Submitted to the

HYDROLOGY PROGRAM OF THE

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In Partial Fulfillment of the Requirements

Of the Degree of

MASTER OF SCIENCE

NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY

July 2001

Appendix B.1. Measured Evapotranspiration

DOY	PRECIP mm/day	Saltcedar mm/day	Cottonwood mm/day	ETR_PM63 mm/day	Kc(SC)	Kc(CW)
1	0	0.78	0.56			
2	0	0.82	0.29			
3	0	0.94	0.76			
4	0	0.95	0.55			
5	0	1.07	0.41			
6	0	1.06	0.53			
7	0	0.69	0.30			
8	0	0.63	0.20			
9	0	0.68	0.64			
10	0	0.91	0.66			
11	0	0.81	0.47			
12	0	0.83	0.32			
13	0	0.67	0.24			
14	0	0.79	0.63			
15	0	1.16	0.56			
16	0	0.69	0.33			
17	0	1.01	0.46			
18	0	0.56	0.16			
19	0	0.85	0.41			
20	0	0.84	0.55			
21	0	1.82	1.51			
22	0	1.08	1.24			
23	0	0.86	0.63			
24	0	0.83	0.33			
25	0	0.62	0.18			
26	0	1.02	0.58			
27	0	0.73	0.79			
28	0	1.24	1.41			
29	0	0.49	0.63			
30	0	1.26	1.96			
31	0	1.41	1.45			
32	0	1.15	1.03			
33	0	0.90	0.10			
34	0	1.08	0.43			
35	0	0.72	0.39			
36	0	0.40	0.29			
37	0	0.88	0.88			
38	0	0.83	0.49			
39	0	0.89	0.51			
40	0	1.08	0.39			
41	0	1.20	1.18			
42	0	1.05	1.50			
43	0	0.91	1.18			
44	0	1.08	0.53			
45	0	1.02	0.27			
46	0	1.34	1.33			
47	0	0.41	0.03			
48	0	0.82	0.65			
49	0	1.00	0.85			
50	0	0.81	0.41			
51	0	0.98	1.31			
52	0	0.83	0.81			
53	0	1.10	1.30			
54	0	0.97	0.51			
55	0	1.01	0.69			
56	0	0.85	0.18			
57	0	0.99	0.71			
58	0	0.90	0.32			
59	0	1.05	0.49			
60	0	1.11	0.60			
61	0	0.77	0.86			

62	0	0.88	0.84			
63	0	1.08	0.84			
64	0	1.23	0.90			
65	0	1.08	0.93			
66	0	0.94	0.99			
67	0	1.02	0.70			
68	0	1.04	1.00			
69	0	0.84	0.72			
70	0	1.07	1.01			
71	0	0.73	0.78			
72	0	1.35	1.16			
73	0	1.07	1.05			
74	0	0.90	0.40			
75	0	1.27	0.90			
76	6.096	1.34	1.74			
77	1.016	2.11	2.58			
78	0	1.72	1.14			
79	0	2.15	1.30			
80	0	1.87	1.30			
81	0	1.73	1.35			
82	0	1.37	0.72			
83	0	1.21	0.93			
84	0	1.07	0.67			
85	5.842	1.54	1.16			
86	0.254	3.01	2.37			
87	0	1.55	1.45			
88	0	1.84	0.87			
89	0	1.22	0.62			
90	0	1.72	1.67			
91	0	1.04	1.14			
92	0	1.07	1.18			
93	0	1.33	0.75			
94	0	0.69	0.57			
95	0	0.91	0.45	6.38	0.14	0.07
96	0	1.06	1.01	7.84	0.13	0.13
97	0	1.30	1.19	9.09	0.14	0.13
98	0	0.84	1.57	7.22	0.12	0.22
99	0	2.05	1.96	9.88	0.21	0.20
100	0	0.79	1.43	7.68	0.10	0.19
101	0	0.88	1.19	7.61	0.12	0.16
102	0	1.23	1.43	9.03	0.14	0.16
103	0	1.30	1.48	7.60	0.17	0.19
104	0	2.26	2.31	9.08	0.25	0.25
105	0	1.03	0.80	7.78	0.13	0.10
106	0	1.27	1.49	7.33	0.17	0.20
107	0	1.52	2.14	7.13	0.21	0.30
108	0	0.95	0.73	7.43	0.13	0.10
109	0	1.58	1.30	8.44	0.19	0.15
110	0	1.35	1.30	9.36	0.14	0.14
111	0	1.64	1.71	9.06	0.18	0.19
112	0	1.96	2.53	11.48	0.17	0.22
113	0	1.92	2.44	11.41	0.17	0.21
114	0	1.51	2.26	5.68	0.27	0.40
115	0	1.74	1.73	5.76	0.30	0.30
116	0	2.26	2.14	9.04	0.25	0.24
117	0	1.69	2.13	7.80	0.22	0.27
118	0	1.06	1.73	4.95	0.21	0.35
119	0	2.32	2.75	9.85	0.24	0.28
120	0	2.55	2.55	9.23	0.28	0.28
121	0	1.63	2.21	5.72	0.28	0.39
122	0	2.23	2.07	8.43	0.26	0.25
123	0	2.20	3.07	8.48	0.26	0.36
124	0	2.77	3.04	9.70	0.29	0.31
125	0	2.67	3.21	9.17	0.29	0.35
126	0	2.17	3.20	8.72	0.25	0.37
127	0	2.16	2.58	8.30	0.26	0.31
128	0	2.45	3.61	9.56	0.26	0.38

129	0	2.71	3.60	9.32	0.29	0.39
130	0	3.06	3.84	9.80	0.31	0.39
131	0	2.17	2.79	6.54	0.33	0.43
132	0	3.32	4.27	9.40	0.35	0.45
133	0	3.25	3.93	9.41	0.35	0.42
134	0	3.64	4.03	10.69	0.34	0.38
135	0	3.85	4.18	10.31	0.37	0.41
136	0	3.90	4.03	9.75	0.40	0.41
137	0	3.82	3.77	9.28	0.41	0.41
138	0	3.95	3.60	9.51	0.42	0.38
139	0	4.75	4.77	11.14	0.43	0.43
140	0	4.96	4.05	9.68	0.51	0.42
141	0	4.97	3.64	9.29	0.53	0.39
142	0	5.86	4.24	10.06	0.58	0.42
143	3.556	4.81	3.96	6.30	0.76	0.63
144	6.604	5.53	5.62	5.47	1.01	1.03
145	0	6.91	5.37	8.58	0.81	0.63
146	0	4.97	3.33	6.49	0.77	0.51
147	0	5.57	3.04	8.73	0.64	0.35
148	0.508	5.24	3.17	6.65	0.79	0.48
149	0.762	5.51	3.01	7.78	0.71	0.39
150	0	6.45	4.09	8.89	0.73	0.46
151	0	5.79	4.23	7.44	0.78	0.57
152	0	7.78	4.88	10.19	0.76	0.48
153	0	7.52	4.64	10.46	0.72	0.44
154	0	7.89	5.39	10.53	0.75	0.51
155	0	8.76	5.67	11.81	0.74	0.48
156	0	7.15	3.80	9.26	0.77	0.41
157	0	7.22	4.39	9.25	0.78	0.47
158	0	8.00	5.03	10.11	0.79	0.50
159	0	8.22	4.59	10.64	0.77	0.43
160	0	8.06	4.13	9.67	0.83	0.43
161	0	8.30	4.70	10.01	0.83	0.47
162	0	8.43	4.84	10.10	0.83	0.48
163	0	7.41	4.13	10.06	0.74	0.41
164	0	6.36	3.59	7.02	0.90	0.51
165	0	7.08	3.62	8.51	0.83	0.43
166	0	7.35	3.74	9.19	0.80	0.41
167	0	7.94	4.50	8.42	0.94	0.53
168	3.556	5.07	3.53	6.12	0.83	0.58
169	0	5.87	3.83	7.01	0.84	0.55
170	0	6.34	3.51	7.03	0.90	0.50
171	0	6.86	3.70	8.02	0.85	0.46
172	0	6.27	3.22	6.82	0.92	0.47
173	0	8.42	4.18	9.16	0.92	0.46
174	0	8.11	4.43	9.35	0.87	0.47
175	0	8.44	4.10	9.88	0.85	0.42
176	0	8.42	4.45	8.77	0.96	0.51
177	0	8.24	4.06	8.37	0.98	0.48
178	0	7.24	4.04	7.66	0.94	0.53
179	1.524	8.64	4.46	9.83	0.88	0.45
180	0	9.33	5.30	11.06	0.84	0.48
181	0	9.29	4.15	11.00	0.84	0.38
182	0	9.17	4.70	10.61	0.86	0.44
183	0	7.91	4.91	8.99	0.88	0.55
184	0	8.70	4.62	8.50	1.02	0.54
185	0.254	9.35	5.57	8.48	1.10	0.66
186	0.508	5.80	4.12	7.30	0.79	0.56
187	0.508	5.85	4.91	6.22	0.94	0.79
188	0	8.35	4.88	8.87	0.94	0.55
189	0	7.94	5.60	7.84	1.01	0.71
190	5.334	8.02	5.01	8.36	0.96	0.60
191	0	6.06	4.72	5.08	1.19	0.93
192	0	8.43	5.24	9.09	0.93	0.58
193	0	8.61	5.10	8.75	0.98	0.58
194	0	8.48	5.12	8.86	0.96	0.58
195	0	5.92	3.69	6.08	0.97	0.61

Appendix B.2. Daily Groundwater Level Data

Datalogger data: Data in units of cm below surface.

CCW=central saltcedar transect CSC=central cottonwood transect NCW=North cottonwood transect NSC=North saltcedar transect

Well:	CCW	CCW	CCW								
Date	shallow	mid	deep	CSC0	CSC2T	CSC3	NCW0	NCW1	NCW3T	NSC1	NSC3	NSC4
9/8/98				-244	-286.59	-370		-281	-243			
9/9/98				-245	-285.99	-373						
9/10/98	-304.91	-303		-246	-287.73	-376				-246.5	-333	
9/11/98	-304.89	-304		-243	-290.89	-378						
9/12/98	-305.83	-304		-241.3	-291.44	-376.8						
9/13/98	-306.28	-305		-239.6	-292.93	-375.6						
9/14/98	-306.05	-305		-237.9	-294.43	-374.4						
9/15/98	-304.61	-303		-236.2	-294.6	-373.2		-267	-223			
9/16/98	-301.71	-297		-234.5	-291.6	-372						
9/17/98	-295.48	-295.2		-232.8	-285.4	-370.8						
9/18/98	-293.31	-293.4		-231.1	-282.88	-369.6						
9/19/98	-292.03	-291.6		-229.4	-280.91	-368.4						
9/20/98	-293.23	-289.5		-228	-279.1	-367.2		-260	-213.5			
9/21/98	-290.23	-288.5		-227	-276.79	-362						
9/22/98	-289.7	-288		-226	-275.42	-362.2		-258	-194			
9/23/98	-289.41	-288		-224	-275.02	-362.4						
9/24/98	-289.33	-288		-224	-276.01	-362.2						
9/25/98	-289.34	-288		-223	-277.89	-362						
9/26/98	-288.84	-286		-222.3	-279.46	-361						
9/27/98	-288.12	-284		-221.6	-280.88	-360						
9/28/98	-287.16	-282		-220.9	-282.04	-359						
9/29/98	-285.84	-281	-285.94	-220.2	-282.59	-358						
9/30/98	-284.68	-280	-284.97	-219.5	-281.67	-357						
10/1/98	-283.08	-279	-283.21	-218.8	-275.85	-356						
10/2/98	-281.52	-278	-281.91	-218.1	-272.86	-355						
10/3/98	-280.71	-277	-280.94	-218	-271.07	-355		-241	-190			
10/4/98	-281.14	-277	-281.2	-217	-268.81	-354.4						
10/5/98	-280.49	-277	-280.48	-216	-266.47	-353.8						
10/6/98	-279.53	-276	-279.53	-215.5	-264.68	-353.2						
10/7/98	-278.8	-275	-278.86	-214.5	-263.85	-352.6						
10/8/98	-278.48	-275	-278.61	-213.5	-263.2	-352						
10/9/98	-279.22	-276	-279.44	-213	-263.25	-351.4						
10/10/98	-280.55	-275	-280.78	-212	-263.74	-350.8						
10/11/98	-281.68	-274	-281.98	-211	-265.52	-350.2						
10/12/98	-281.98	-274	-282.34	-210	-265.89	-349.6						
10/13/98	-281.75	-274	-282.41	-209.5	-266.3	-349						
10/14/98	-280.54	-273	-281.75	-208.5	-266	-348.4						
10/15/98	-278.39	-271	-279.89	-207.5	-265.51	-347.8						
10/16/98	-277.34	-270	-278.55	-206.5	-267.06	-347.2						
10/17/98	-277.01	-267	-278.13	-205.5	-269.71	-346.6						
10/18/98	-276.07	-267	-277.82	-204.5	-270.82	-346						
10/19/98	-275.88	-266	-278.03	-204	-272.73	-345.4						
10/20/98	-275.01	-266	-277.22	-204	-272.37	-344.8						
10/21/98	-266	-266	-278.11	-203	-270.33	-344.2						
10/22/98	-269.76	-266	-284.6	-202	-267.75	-343.6						
10/23/98	-265.44	-266	-273.17	-202	-264.68	-343						
10/24/98	-263.98	-266	-271.74	-201	-262.23	-342.4						
10/25/98	-262.69	-266	-270.4	-200	-259.73	-341.8						
10/26/98	-261.45	-266	-269.32	-199	-258.13	-341.2						
10/27/98	-259.86	-266	-268.28	-198	-256.76	-340.6						
10/28/98	-257.61	-266	-267	-197	-254.84	-340						
10/29/98	-255.6	-266	-265.82	-196	-253.84	-339.4						
10/30/98	-254.96	-266.09	-265.51	-195	-251.64	-338.8						
10/31/98	-258.93	-265.67	-266.6	-194	-248.77	-338.2						
11/1/98	-263.14	-264.78	-267.64	-194	-253	-338		-232	-187	-227	-325	
11/2/98	-262.31	-263.86	-267.9	-192	-255.34	-337.6						
11/3/98	-262.13	-263.76	-269.98	-190	-254.75	-337.2						
11/4/98	-262.2	-263.87	-271.77	-188	-254.32	-336.8						
11/5/98	-262.21	-263.88	-270.92	-186	-253.53	-336.4						
11/6/98	-262.24	-263.8	-270.01	-184	-252.43	-336						
11/7/98	-262.27	-264.01	-271.34	-182	-250.95	-335.6						

11/8/98	-261.92	-263.6	-267.41	-180	-248.8	-335.2				
11/9/98	-261.67	-262.93	-265.29	-178	-247.34	-334.8				
11/10/98	-261.81	-263.72	-270.79	-176	-247.34	-334.4				
11/11/98	-262.03	-263.9	-265.7	-174	-246.81	-334				
11/12/98	-262.28	-264.13	-263.22	-172	-245.87	-333.6				
11/13/98	-262.38	-264.28	-263.53	-170	-244.25	-334.2				
11/14/98	-262.4	-264.27	-263.35	-168	-243.16	-334.8				
11/15/98	-262.49	-264.31	-263.32	-166	-242.19	-335.4				
11/16/98	-262.68	-264.47	-263.58	-164	-241.35	-336				
11/17/98	-262.81	-264.56	-263.51	-162	-240.4	-336.6				
11/18/98	-262.78	-264.52	-263.88	-160	-239.29	-337.2				
11/19/98	-262.62	-264.51	-263.74	-158	-238.22	-337.8				
11/20/98	-262.32	-264.38	-263.59	-156	-237.23	-338.4				
11/21/98	-262.03	-264.09	-262.76	-154	-236.63	-339				
11/22/98	-261.65	-263.43	-263.13	-152	-236.21	-339.6				
11/23/98	-261.17	-262.91	-264.93	-151	-236.21	-340	-248	-208	-210	-328
11/24/98	-260.94	-262.56	-260.89	-152	-235.24	-339.7				
11/25/98	-260.86	-262.84	-260.46	-153	-234.71	-339.4				
11/26/98	-260.71	-262.78	-258.56	-154	-233.77	-339.1				
11/27/98	-260.53	-262.57	-256.93	-155	-232.95	-338.8				
11/28/98	-260.28	-262	-256.41	-156	-232.08	-338.5				
11/29/98	-260.27	-261.95	-257.77	-157	-231.34	-338.2				
11/30/98	-260.17	-262.51	-259.34	-158	-229.65	-337.8				
12/1/98	-259.97	-262.25	-257.88	-159	-231.13	-337.4				
12/2/98	-260.41	-262.06	-255.01	-160	-231.4	-337				
12/3/98	-259.95	-261.62	-253.99	-161	-230.11	-336.6				
12/4/98	-259.1	-261.31	-253.84	-162	-228.91	-336.2				
12/5/98	-258.95	-261.09	-252.89	-163	-229.99	-335.8				
12/6/98	-258.93	-261.13	-253.1	-164	-229.81	-335.4				
12/7/98	-259.3	-261.8	-254.32	-165	-230.81	-335.2				
12/8/98	-259.6	-261.98	-252.98	-166	-232.15	-335				
12/9/98	-259.42	-261.66	-251.42	-167	-233.36	-334.8				
12/10/98	-259.95	-262.54	-255.13	-168	-235.41	-334.6				
12/11/98	-260.24	-262.59	-253.37	-169	-235.78	-334.7				
12/12/98	-260.5	-262.84	-253.72	-170	-236.9	-334.8				
12/13/98	-260.91	-263.28	-254.93	-171	-238.08	-334.9				
12/14/98	-261.37	-263.57	-252.75	-172	-238.96	-335				
12/15/98	-261.9	-264.1	-254.19	-173	-240.42	-335.1				
12/16/98	-262.23	-264.56	-255.72	-174	-242.06	-335.2				
12/17/98	-262.25	-264.5	-254.17	-176	-242.84	-335			-203	-327
12/18/98	-261.99	-263.92	-255.54	-175.25	-242.59	-334.8	-233	-181		
12/19/98	-262.32	-264.19	-261.95	-174.5	-242.11	-334.6				
12/20/98	-262.23	-264.1	-258.25	-173.75	-240.42	-334.4				
12/21/98	-262.36	-264.38	-259.01	-173	-239.77	-334.3				
12/22/98	-262.49	-264.5	-258.22	-172.25	-240.52	-334.1				
12/23/98	-262.57	-264.51	-258.72	-171.5	-240.72	-333.9				
12/24/98	-262.97	-265.17	-258.68	-170.75	-240.92	-333.7				
12/25/98	-263.15	-265.3	-258.75	-170	-241.12	-333.5				
12/26/98	-263.09	-265.09	-258.88	-169.25	-241.39	-333.3				
12/27/98	-263.13	-265.15	-263.04	-168.5	-241.09	-333.1				
12/28/98	-263.23	-265.29	-265.24	-167.75	-240.79	-332.9				
12/29/98	-263.26	-265.36	-262.24	-167	-240.49	-332.7				
12/30/98	-263.05	-265.03	-261.69	-166.25	-240.19	-332.5				
12/31/98	-262.99	-265.01	-260.94	-165.5	-239.89	-332.3				
1/1/99	-262.69	-264.59	-262.17	-164.75	-239.59	-332.1				
1/2/99	-262.76	-264.85	-262.13	-164	-239.29	-332				
1/3/99	-262.74	-264.88	-262.52	-163.25	-240	-331.8				
1/4/99	-262.7	-264.81	-261.97	-162.5	-239.7	-331.6				
1/5/99	-262.63	-264.59	-261.44	-161.75	-239.4	-331.4				
1/6/99	-262.55	-264.51	-261.02	-161	-239.1	-331.2				
1/7/99	-262.01	-263.94	-259.22	-160.25	-238.8	-331				
1/8/99	-261.2	-263.17	-260.78	-159.5	-238.5	-330.8				
1/9/99	-260.47	-262.67	-261.69	-158.75	-238.2	-330.7				
1/10/99	-259.64	-261.91	-259.67	-158	-237.9	-330.5				
1/11/99	-258.9	-261	-255.59	-157.25	-237.6	-330.4				
1/12/99	-258.25	-260.21	-253.14	-156.5	-237.3	-330.3				
1/13/99	-258.1	-260.37	-259.1	-155.75	-237	-330.2				

1/14/99	-258.05	-260.22	-259.08	-155	-236.7	-330.1
1/15/99	-257.73	-259.66	-253.42	-154.25	-236.4	-330
1/16/99	-257.35	-259.27	-252.41	-153.5	-236.1	-329.9
1/17/99	-256.93	-259.06	-254.5	-152.75	-236	-329.8
1/18/99	-256.52	-258.72	-255.06	-152	-235.7	-329.7
1/19/99	-256.12	-258.28	-251.41	-151.25	-235.4	-329.5
1/20/99	-255.7	-257.77	-249.46	-150.5	-235.1	-329.3
1/21/99	-255.24	-257.23	-249.25	-149.75	-235	-329.1
1/22/99	-255.29	-257.73	-254.62	-149	-234.7	-328.9
1/23/99	-255.61	-257.97	-253.18	-148.25	-234.4	-328.7
1/24/99	-256.27	-258.49	-251.11	-147.5	-234.1	-328.5
1/25/99	-256.85	-258.96	-250.64	-146.75	-233.8	-328.3
1/26/99	-256.96	-259	-252.24	-146	-233.5	-328.1
1/27/99	-257.16	-259.28	-252.1	-145.25	-233.2	-327.9
1/28/99	-257.31	-259.45	-251.59	-144.5	-232.9	-327.7
1/29/99	-257.62	-259.93	-253.54	-143.75	-232.6	-327.5
1/30/99	-257.82	-258	-255	-143	-232.3	-327.3
1/31/99	-258.47	-256.61	-260.91	-141	-232	-327
2/1/99	-258.46	-256.62	-257.55	-139	-230	-326
2/2/99	-258.47	-256.62	-258.23	-137	-227	-325
2/3/99	-258.33	-256.47	-257.58	-135	-224	-324
2/4/99	-258.78	-256.95	-257.29	-133	-220	-323
2/5/99	-259.07	-257.23	-257.7	-131.87	-218.36	-322.14
2/6/99	-259.17	-257.31	-257.03	-131.69	-217.13	-321.85
2/7/99	-258.91	-257.04	-254.54	-130.02	-214.04	-320.88
2/8/99	-258.59	-256.71	-253.68	-127.7	-211.86	-320.26
2/9/99	-258.35	-256.44	-254.13	-121.43	-209.92	-319.51
2/10/99	-257.67	-255.73	-250.35	-118.45	-210.23	-318.04
2/11/99	-258.21	-256.32	-258.68	-119.04	-207.4	-319.04
2/12/99	-258.24	-256.31	-255.13	-112.89	-205.27	-317.9
2/13/99	-258.13	-256.19	-252.46	-108.08	-204.2	-316.61
2/14/99	-258.16	-256.22	-249.84	-106.65	-203.74	-315.68
2/15/99	-258.38	-256.44	-250.48	-106.24	-202.83	-315.55
2/16/99	-258.84	-256.91	-255.46	-104.75	-201.68	-315.62
2/17/99	-258.77	-256.81	-252.78	-103.24	-201.03	-314.97
2/18/99	-258.79	-256.83	-255.11	-102.32	-201.13	-314.81
2/19/99	-258.78	-256.76	-256.21	-102.64	-205	-314.51
2/20/99	-259.34	-257.3	-262.6	-109.53	-205.18	-315
2/21/99	-259.7	-257.67	-261.09	-112.34	-206.48	-315.5
2/22/99	-259.96	-257.95	-260.14	-111.04	-206.31	-316
2/23/99	-260.46	-258.45	-262.97	-110.2	-205.73	-316.2
2/24/99	-260.7	-258.69	-260.94	-110.76	-204.79	-316.1
2/25/99	-260.67	-258.64	-259.22	-109.14	-203.79	-316
2/26/99	-261.77	-261.59	-263.09	-107.29	-204.2	-315.9
2/27/99	-259.13	-258.61	-262.35	-107.07	-203.82	-315.8
2/28/99	-258.87	-258.36	-260.07	-106.65	-201.18	-315.7
3/1/99	-258.31	-257.78	-256.02	-102.87	-202.23	-315.6
3/2/99	-257.13	-256.51	-256.68	-108.34	-200.71	-315.5
3/3/99	-255.17	-254.56	-254.55	-107.31	-200.34	-315.4
3/4/99	-254.29	-253.64	-253.44	-107.75	-202.47	-315.3
3/5/99	-253.67	-252.99	-256.62	-113.97	-205.53	-315.6
3/6/99	-252.94	-252.25	-257.05	-118.69	-207.65	-315.9
3/7/99	-252.27	-251.6	-252.12	-121.49	-210.34	-316.4
3/8/99	-252.02	-251.39	-256.9	-122.79	-209.06	-317.4
3/9/99	-251.94	-251.38	-253.69	-118.3	-209.72	-318.4
3/10/99	-252.51	-251.99	-253.11	-118.46	-210.7	-319.4
3/11/99	-252.46	-251.93	-251.37	-121.58	-216.66	-318.4
3/12/99	-253.04	-252.53	-254.03	-129.27	-218.46	-317.4
3/13/99	-253.71	-253.2	-258.26	-129.16	-216.66	-316.4
3/14/99	-254.2	-253.69	-256.67	-124.52	-212.84	-315.4
3/15/99	-254.41	-253.87	-253.55	-119.26	-207.16	-314.4
3/16/99	-254.37	-253.84	-253.64	-110.46	-208.45	-313.4
3/17/99	-254.95	-254.29	-259.51	-117.59	-209.9	-312.4
3/18/99	-254.88	-253.87	-262.26	-122.63	-212.28	-311.4
3/19/99	-253.15	-252.49	-260.07	-124.08	-204.99	-310.4
3/20/99	-251.79	-251.1	-258.32	-111.13	-198.03	-309.4
3/21/99	-250.8	-250.17	-255.53	-101.8	-197.69	-308.4

-208.42	-150.83		-316.78
-210.64	-151.13	-188	-317.13
-215.66	-155.59		-320.01
-216.85	-157.67		-319.52
-219.04	-167.64		-325.39
-223.31	-176.15		-327.81
-226.01	-177.47	-186.56	-323.72
-226.61	-172.87	-186.96	-319.02
-224.95	-168.37	-187.01	-314.52
-223.72	-165.64	-187.36	-311.79
-222.25	-161.92	-187.81	-308.07
-220.33	-161.73	-186.41	-307.88
-225.49	-170.34	-188.94	-316.49
-227.76	-176.63	-188.56	-320.03
-229.53	-182.8	-187.44	-319.41
-230.51	-185.82	-186.83	-319.97
-232.49	-185.49	-187.96	-318.08
-231.62	-177.9	-189.9	-307.55
-230.14	-178.43	-190.15	-307.58
-233.41	-186.41	-190.53	-314.15
-234.64	-189.99	-189.76	-307.27
-238.07	-193.93	-190.79	-307.24
-239.24	-196.3	-189.67	-307.05
-240.18	-198.34	-190.03	-306.9
-242.36	-200.71	-191.04	-307.07
-242.91	-199.14	-190.93	-307.16
-240.83	-192.47	-190.26	-307.06
-237.63	-185.63	-190.68	-306.82
-235.41	-180.15	-192.23	-308.83
-232.18	-171.87	-192.79	-311.05
-228.07	-161.26	-191.66	-310.49
-224.38	-159.41	-192.48	-308.01
-220.7	-157.42	-193.01	-305.52
-218.9	-155.72	-192.94	-305.28
-217.93	-156.47	-194.52	-303.89
-216.51	-151.07	-196.21	-303.46
-214.37	-144.82	-196.92	-304.9
-213.64	-143.65	-199.76	-306.2
-213.4	-141.47	-201.33	-308.89
-215.24	-145.84	-202.75	-311.53
-216.16	-146.9	-203.48	-312.39
-218.25	-150.57	-205.69	-314.11
-219.47	-151.32	-208.34	-314.39
-220.05	-153.97	-210.1	-314.73
-220.88	-158.02	-210.56	-314.18
-221.78	-161.91	-209.39	-314.1
-224.85	-165.57	-208.21	-314.36
-224.58	-162.1	-209.96	-312.96
-221.05	-156.7	-210.83	-311.11
-217	-146.67	-209.63	-310.01
-212.94	-139.67	-205.46	-308.7

3/22/99	-250.12	-249.42	-254.83	-104.99	-201.7	-307.4		-212.24	-141.1	-202.15	-307.73		
3/23/99	-249.61	-248.91	-256.28	-112.69	-206.91	-308.4		-213.53	-145.45	-201.48	-308		
3/24/99	-250.01	-249.42	-259.04	-117.25	-211.98	-310.4		-217.12	-149.71	-203.69	-310.83		
3/25/99	-250.55	-250.04	-260.32	-124.92	-216.28	-315.4		-217.95	-147.62	-206.11	-312.53		
3/26/99	-250.58	-250.02	-256.22	-132.18	-214.97	-319.95		-216.72	-145.91	-208.96	-311.8		
3/27/99	-249.66	-249.02	-256.88	-129.25	-216	-319.6		-215.07	-146.27	-210.79	-309.45		
3/28/99	-249.21	-248.53	-260.58	-129.83	-216.23	-319.35		-219.51	-160.64	-212.51	-307.49		
3/29/99	-249.05	-248.41	-260.71	-124.08	-214.24	-318.49		-224.01	-170.09	-213.81	-308.21		
3/30/99	-250.32	-249.84	-255.97	-110.8	-210.02	-318.59		-224.68	-168.09	-213.4	-311.75		
3/31/99	-253.57	-254.13	-258.76	-116.47	-211.26	-319.9		-222.6	-161.11	-212.67	-313.35		
4/1/99	-253.37	-252.23	-257.42	-123.77	-215.01	-322.25		-222.53	-163.7	-213.84	-314.02		
4/2/99	-254.39	-253.26	-257.56	-129.39	-218.85	-324.85		-223.54	-167.34	-215.69	-314.87		
4/3/99	-254.81	-253.67	-254.99	-127.66	-218.53	-324.03		-223.53	-165.13	-217.31	-313.82		
4/4/99	-254.62	-253.42	-253.6	-123.18	-216.04	-322.31		-220.31	-158.36	-218.22	-313.4		
4/5/99	-254.36	-253.13	-253.99	-118.51	-214.37	-321.88		-219.06	-158.9	-219.05	-314.23		
4/6/99	-253.71	-252.53	-251.8	-107.1	-208.43	-317.65		-218.05	-155.47	-216.84	-316.85		
4/7/99	-253.33	-252.17	-250.1	-111.03	-207.93	-317		-217.27	-156.7	-213.61	-316.41		
4/8/99	-254.31	-253.21	-250.97	-116.09	-210.99	-319.84		-221.52	-166.72	-212.71	-317.76		
4/9/99	-255.45	-254.44	-246.69	-121.14	-213.29	-322.12		-221.99	-168.51	-212.42	-319.36		
4/10/99	-257.28	-256.19	-252.71	-131.12	-219.12	-326.24		-225.03	-165.15	-215.79	-320.74		
4/11/99	-258.55	-257.44	-253.38	-135.54	-222.57	-328.48		-221.95	-152.89	-218.3	-321.56		
4/12/99	-258.53	-257.37	-252.13	-135.98	-223.18	-328.11		-216.43	-137.42	-219.62	-320.78		
4/13/99	-258.06	-256.89	-248.45	-134.62	-223.24	-328.46		-211.14	-126.87	-220.38	-321		
4/14/99	-257.3	-256.13	-250.29	-133.06	-222.52	-328.19		-206.99	-115.12	-221.43	-320.97		
4/15/99	-255.68	-257.46	-254.34	-137.73	-224.86	-329.4		-203.93	-115.13	-222.56	-321.13		
4/16/99	-253.73	-252.54	-256.48	-136.7	-224.48	-328.8		-203.33	-122.5	-223.45	-321.07		
4/17/99	-252.86	-251.66	-255.57	-139.95	-225.22	-328.39		-209.88	-147.81	-226.02	-320.69		
4/18/99	-252.58	-251.37	-254.46	-141.5	-225.41	-326.85		-215.32	-161.28	-225.15	-318.98		
4/19/99	-252.97	-251.73	-250.48	-141.61	-225.17	-326.1		-219.13	-172.94	-224.84	-318.43		
4/20/99	-254.72	-253.59	-249.11	-143.32	-226.96	-328.44		-221.31	-181.26	-225.35	-321.11		
4/21/99	-258.06	-256.91	-249.31	-145.82	-229.56	-330.88		-227.92	-187.68	-226.12	-322.99		
4/22/99	-260.49	-259.34	-252.31	-151.39	-231.99	-332.71		-233.75	-193.89	-228.01	-323.67		
4/23/99	-263.11	-261.95	-259.02	-174.6	-239.74	-337.54		-238.67	-200.05	-230.74	-325.16		
4/24/99	-265.34	-264.19	-259.75	-190.42	-247.76	-342.51		-242.17	-204.57	-232.16	-326.93	-320	
4/25/99	-267.28	-266.12	-260.57	-202.07	-254.12	-346.46	-276	-245.02	-208.41	-233.68	-328.23		
4/26/99	-268.65	-267.52	-260.44	-210.86	-259.06	-348.72		-246.26	-211.76	-235.27	-327.58		
4/27/99	-269.98	-268.74	-262.37	-217.54	-263.26	-350.84		-248.76	-215.69	-237.15	-327.57		
4/28/99	-271.01	-269.74	-261.27	-138.9	-240.81	-340.86		-248.29	-218.46	-237.92	-327.16		
4/29/99	-272.08	-270.81	-263.37	-118.27	-225.76	-331.69			-221.45	-236.27	-327.57		
4/30/99	-273.42	-272.19	-266.15	-111.29	-221.44	-328.46			-224.66	-233.48	-327.84	-326	
5/1/99	-274.11	-274.5	-270.2	-107.51	-215.93	-324.97	-273.34	-259	-229	-229.18			
5/2/99	-275.24	-277.5	-273.49	-108.36	-214.74	-323.89	-272.82		-232.39	-225.24			
5/3/99	-276.61	-278.52	-269.93	-106.14	-213.35	-323.3	-274.19		-234.96	-221.72			
5/4/99	-277.79	-280.28	-271.22	-96.614	-211.71	-324.95	-278.87		-237.72	-218.79			
5/5/99	-279.39	-282.1	-273.79	-86.491	-207.66	-323.11	-279.4		-240.94	-211.74			
5/6/99	-281.26	-283.48	-273.85	-84.426	-204.84	-320.37	-278.66		-243.37	-202.97			
5/7/99	-282.66	-284.74	-273.67	-81.277	-202.72	-319.24	-278.97		-245.43	-195.67			
5/8/99	-283.92	-286.01	-273.05	-81.144	-201.53	-318.15	-277.94		-247.23	-190.47			
5/9/99	-285.26	-287.22	-272.49	-81.987	-201.24	-317.62	-278.01		-249.09	-187.8			
5/10/99	-286.5	-288.51	-274.11	-83.657	-202.02	-318.11	-278.05		-250.73	-187.82			
5/11/99	-287.77	-289.65	-277.08	-86.319	-203.17	-319.12	-280.01		-252.87	-188.45			
5/12/99	-288.96	-291.11	-277.78	-87.632	-205.22	-321.44	-281.62		-253.87	-189.34			
5/13/99	-290.4	-294.84	-276.96	-82.183	-203.62	-320.49	-282.44		-256.22	-186.47			
5/14/99	-291.82	-293.61	-278.82	-79.421	-202	-318.86	-278.73		-259.24	-182.57			
5/15/99	-293	-294.56	-280.49	-80.035	-202.27	-318.88	-280.05		-260.32	-181.17			
5/16/99	-294.03	-295.71	-281.61	-78.827	-202.17	-319.18	-279.99		-261.28	-179.7			
5/17/99	-295.17	-296.66	-285.46	-77.58	-201.62	-318.68	-278.83		-262.01	-178.28			
5/18/99	-296.12	-297.22	-284.05	-76.354	-200.64	-317.42	-276.97		-261.66	-176.43			
5/19/99	-296.69	-297.82	-282.07	-70.112	-198.69	-316.2	-276.96		-260.86	-161.54	-319	-318	
5/20/99	-297.33	-298.63	-285.2	-64.239	-184.51	-299	-277.32		-261.76	-118.4			
5/21/99	-298.2	-299.15	-286.8	-62.484	-170.97	-283	-276.26		-262.27	-121.44			
5/22/99	-298.73	-299.43	-290.44	-61.647	-173.93	-267	-276.71		-257.9	-133.79			
5/23/99	-299.05	-299.28	-293.54	-59.964	-170.83	-251	-275.3		-252.79	-131.47			
5/24/99	-298.94	-296.79	-292.76	-57.215	-166.09	-230	-271.25		-248.55	-121.73			
5/25/99	-296.85	-294.95	-292.2	-49.602	-136.49	-207.64	-272	-265	-246.28	-68.701			
5/26/99	-294.79	-293.26	-289.83	-44.044	-74.266	-136.17	-269.02		-245.37	-35.074	-270	-297	
5/27/99	-293.19	-290.94	-287.48	-49.705	-69.802	-147.5	-269.55		-245.04	-54.727		-300.83	

5/28/99	-290.97	-289.58	-286.13	-50.389	-80	-204.04	-270.67		-245.6	-86.844		-301.95
5/29/99	-289.54	-288.7	-284.85	-43.657	-94.566	-172.6	-270.36		-246.36	-57.781		-299.99
5/30/99	-288.56	-288.17	-280.9	-37.24	-54.686	-117.55	-270.51		-248.27	-39.793		-296.69
5/31/99	-288.08	-287.95	-278.88	-26.33	-57.9	-136.52	-270.29		-250.22	-47.296		-293.15
6/1/99	-287.89	-288.57	-278.95	-21.646	-72.309	-168.18	-271.36		-252.88	-63.942		-294.04
6/2/99	-288.5	-290.22	-278.38	-21.714	-80.589	-187.37	-273.38		-255.31	-76.123		-296.92
6/3/99	-290.18	-292.6	-280.11	-23.355	-94.649	-207.46	-276.04		-257.69	-87.058		-300.63
6/4/99	-292.51	-294.95	-279.86	-24.657	-102.41	-221.25	-278.55		-259.79	-92.111		-303.88
6/5/99	-294.9	-296.53	-284.44	-33.663	-115.59	-229	-280.33		-261.92	-95.524		-306.27
6/6/99	-296.41	-297.9	-287.16	-36.996	-127.67	-233.39	-279.64		-263.71	-101.42		-306.61
6/7/99	-297.79	-298.62	-285.74	-43.923	-138.28	-233.39	-279.29		-264.38	-105.3		-307.33
6/8/99	-298.56	-299.81	-284.9	-52.676	-151.16	-350	-281.48		-265.42	-110.99		-309.9
6/9/99	-299.72	-300.9	-286.97	-62.406	-161.76	-280	-283.66		-267.35	-118.16		-312.62
6/10/99	-300.74	-301.98	-287.28	-70.572	-171.33	-290	-285.59		-268.6	-124.23		-315.34
6/11/99	-301.76	-303.06	-288.48	-74.85	-179.06	-300	-285.96		-270.5	-128.95		-316.74
6/12/99	-302.89	-304.04	-291.05	-80.62	-185.19	-305	-286.55	-281	-272.74	-132.65	-293	-316.91
6/13/99	-303.88	-306.94	-294.82	-86.577	-189.88	-307	-286.27	-283	-274.57	-135.2		-316.44
6/14/99	-304.72	-306.09	-299.72	-87.363	-192.9	-313	-286.43	-286	-275.36	-136.19	-303	-316.91
6/15/99	-305.16	-307.76	-302.69	-83.817	-194.26	-310	-287.64		-275.94	-136.19		-318.79
6/16/99	-305.7	-308.35	-303.21	-78.807	-194.28	-307	-284.6		-276.74	-136.36		-315.92
6/17/99	-306.23	-308.02	-300.98	-79.834	-191.59	-307	-281.59		-277.5	-135.39	-301	-313.13
6/18/99	-305.92	-306.71	-297.78	-71.865	-187.32	-300	-280.89	-278	-277.87	-134.62		-310.38
6/19/99	-305	-305.66	-299.62	-67.636	-172.65	-280	-278.83		-277.75	-94.422		-307.9
6/20/99	-304.34	-305.28	-298.14	-63.652	-167.65	-264	-276.6		-277.74	-107.91		-305.12
6/21/99	-303.93	-304.52	-297.98	-61.459	-172.38	-275.5	-278.36	-280	-277.9	-116.23	-291	-303.61
6/22/99	-303.2	-305	-302.64	-64.828	-176.9	-283.94	-277.9		-277.98	-121.89	-295	-306.84
6/23/99	-303.62	-304.6	-305.65	-70	-180.57	-290.06	-278.73	-280	-277.9	-128	-296	-306.7
6/24/99	-304.54	-303.73	-307.73	-76.988	-189.75	-292	-278.39		-273.96	-134.35		-304.13
6/25/99	-304.4	-304.19	-305.96	-82.333	-193.28	-290.48	-281.12		-271.32	-136.07		-307.14
6/26/99	-304.79	-305.06	-304.76	-86.922	-197.14	-294.75	-281.01		-269.53	-140.16		-307.8
6/27/99	-305.68	-305.46	-304.94	-93.126	-200.51	-298.73	-281.89		-267.91	-143.63		-309.83
6/28/99	-306.03	-305.09	-304.24	-95.058	-202.96	-301.68	-281.03		-263.16	-145.73		-309.86
6/29/99	-305.7	-303.83	-301.82	-95.307	-204.96	-303.66	-284.83		-257.4	-146.77		-313.89
6/30/99	-304.33	-302.32	-299.86	-95.628	-206.47	-306.39	-286.47		-253.16	-147.5		-316.06
7/1/99	-302.79	-299.77	-298.46	-99.189	-207.94	-308.77	-287.33		-249.91	-149.75		-317.88
7/2/99	-300.31	-297.07	-296.16	-101.25	-209.17	-310.09	-288.46		-247.92	-150.34		-319.73
7/3/99	-297.63	-294.31	-295.25	-100.76	-209.58	-311.1	-287.49		-247.2	-153.44		-320.06
7/4/99	-294.84	-291.17	-292.49	-107.89	-210.81	-311.18	-284.25		-246.72	-157.45		-317.4
7/5/99	-291.8	-288.09	-288.8	-110.34	-210.61	-311.12	-283.33		-246.04	-158.39		-317.06
7/6/99	-288.65	-285.17	-285.6	-107.69	-208.79	-309.97	-281.99		-245.18	-156.87		-315.79
7/7/99	-285.71	-282.45	-282.73	-101.78	-206.76	-309.03	-278.85		-245.01	-154.41		-312.52
7/8/99	-283.11	-280.7	-280.13	-106.37	-207.63	-305.85	-277.82		-245.17	-155.95		-311.54
7/9/99	-281.24	-279.77	-279.85	-107.95	-208.68	-305.33	-279.5		-245.71	-157.04		-313.26
7/10/99	-280.24	-278.99	-280.59	-104.78	-208	-306.73	-277.35		-246.11	-156.73		-311.15
7/11/99	-279.42	-277.89	-278.36	-106.62	-205.83	-306.31	-273.37		-246.03	-155.09		-306.83
7/12/99	-278.43	-276.9	-277.08	-117.92	-210.18	-302.35	-272.42		-247.03	-160.14		-306.02
7/13/99	-277.39	-276.12	-274.88	-113.69	-209.11	-303.81	-274.42		-248.32	-156.14		-308.22
7/14/99	-276.62	-275.64	-273.89	-131.13	-214.95	-304.11	-276.89		-250.12	-162.25		-310.32
7/15/99	-276.12	-276.09	-273.86	-132.01	-216.74	-307.65	-279.63		-252.05	-163.15		-311.99
7/16/99	-276.46	-279.11	-275.9	-126.59	-216.53	-310.26	-281.82		-254.61	-162.72		-313.88
7/17/99	-279.39	-281.49	-279.45	-129.31	-216.84	-311.91	-280.8		-256.57	-165.11		-313.76
7/18/99	-281.64	-280.82	-280.41	-124.44	-214.04	-312.25	-272.02		-255.02	-162.68		-304.42
7/19/99	-281.37	-275.75	-277.31	-100.41	-203.71	-308.51	-267.17		-249.65	-152.44		-298.62
7/20/99	-276.58	-272.86	-274.09	-106.07	-201.4	-299.42	-270.48		-246.04	-149.99		-302.23
7/21/99	-273.64	-271.4	-272.33	-107.21	-201.61	-298.26	-270.93		-246.65	-149.33		-303.46
7/22/99	-271.95	-270.73	-271.76	-105.23	-199.34	-299.12	-267.22		-247.81	-148.1		-299.78
7/23/99	-271.49	-271.88	-272.18	-113.83	-202.83	-298.67	-267.09	-262	-249.48	-150.88	-300	-301.25
7/24/99	-272.46	-274.42	-276.94	-119.01	-206.23	-300.48	-267.77		-251.68	-154.48		-300.56
7/25/99	-275.26	-277.37	-280.15	-127.86	-210.72	-303.19	-270.19		-254.13	-160.03		-302.21
7/26/99	-278.2	-280.02	-283.41	-137.13	-215.56	-306.78	-270.69		-256.6	-168.49		-302.59
7/27/99	-280.87	-282.32	-286.82	-138.86	-217.96	-310.01	-275		-258.76	-172.54		-306.72
7/28/99	-283.12	-285.11	-289.43	-139.77	-220.01	-313.05	-278.45		-261.08	-175.9		-310.37
7/29/99	-285.88	-287.56	-289.59	-139.28	-220.98	-315.82	-281.14		-262.99	-178.13		-312.71
7/30/99	-288.35	-289.93	-290.28	-158.5	-228.79	-317.5	-281.93		-265.05	-187.06		-313.83
7/31/99	-290.68	-291.95	-291	-165.41	-232.55	-321.79	-282.5		-267.23	-192.45		-314.79
8/1/99	-292.76	-293.03	-292.58	-149.91	-228.02	-324.32	-277.2		-268.64	-194.88		-309.9
8/2/99	-293.89	-294.23	-294.59	-145.39	-227.86	-321.07	-283.23		-269.62	-197.4		-315.72

8/3/99	-294.93	-295.49	-294.55	-126.93	-224.13	-322.73	-281.81		-270.48	-197.99		-314.87
8/4/99	-296.17	-295.23	-293.23	-93.224	-209.56	-320.34	-276.58		-270.24	-178.75		-309.4
8/5/99	-296.03	-294.61	-292.18	-72.084	-178.14	-310.37	-274.12		-269.36	-117.99		-304.21
8/6/99	-295.43	-294.2	-293.68	-52.479	-107.04	-293.99	-273.21		-268.48	-87.307		-301.28
8/7/99	-295.03	-294.43	-293.95	-62.593	-107.71	-250.43	-275.05		-268.1	-94.115		-301.98
8/8/99	-295.29	-295.64	-293.52	-69.802	-144.47	-220.46	-276.93		-269.36	-109.01		-303.96
8/9/99	-296.5	-296.27	-292.9	-75.102	-158.11	-248.04	-276.12		-269.9	-117.46		-303.18
8/10/99	-297.17	-295.61	-292.11	-71.184	-161.82	-262.86	-272.67		-269.81	-115.6		-299.85
8/11/99	-296.56	-294.93	-293.06	-54.212	-125.17	-267.61	-270.5		-269.81	-82.927		-296.56
8/12/99	-295.82	-293.83	-292.78	-55.623	-98.413	-250.04	-266.75		-269.44	-75.317		-289.99
8/13/99	-294.81	-294.67	-293.07	-60.842	-133.24	-214.03	-271.26		-270.17	-95.25		-293.86
8/14/99	-295.6	-295.98	-292.26	-67.017	-149	-239.89	-273.24		-271.13	-105.6		-295.3
8/15/99	-296.92	-296.74	-293.72	-72.624	-160.08	-257.29	-272.73		-272.33	-112.6		-295.28
8/16/99	-297.7	-296.77	-295.27	-75.046	-166.61	-269.18	-271.2		-272.9	-115.42		-293.97
8/17/99	-297.77	-297.51	-294.36	-79.361	-171.63	-276.45	-272.92		-273.48	-118.13		-295.61
8/18/99	-298.47	-298.75	-293.25	-83.512	-176.66	-281.88	-276.93		-274.45	-121.85		-299.85
8/19/99	-299.59	-299.57	-295.36	-84.703	-180.04	-288.11	-276.05		-275.06	-124.74		-299.73
8/20/99	-300.47	-299.94	-296.81	-88.04	-183.41	-291.58	-277.29		-275.71	-128.12		-301.54
8/21/99	-300.92	-300.43	-296.19	-89.865	-186.3	-294.53	-278.41		-275.88	-129.94		-302.41
8/22/99	-301.37	-300.82	-297.58	-92.315	-188.63	-296.96	-276		-276.54	-132.34		-300.85
8/23/99	-301.8	-300.39	-298.94	-94.095	-190.31	-298.42	-274.3		-276.52	-133.83		-299.3
8/24/99	-301.35	-300.6	-300.31	-97.404	-192.67	-299.38	-274.13		-277.05	-134.89		-299.26
8/25/99	-301.48	-301.17	-300.33	-99.513	-194.28	-302	-278.39		-277.51	-135.96		-302.7
8/26/99	-302.09	-301.87	-300.66	-99.764	-195.38	-304	-279.41		-277.77	-137.37		-304.31
8/27/99	-302.74	-302.32	-302.55	-102	-198	-306	-280.96		-278.01	-140.97	-299	-305.32
8/28/99	-303.5	-303	-305.3	-98.492	-198.31	-310	-280		-279	-140.11		-304.56
8/29/99	-303.99	-304	-306.72	-97.432	-197.1	-312	-277.42	-280	-280	-140.13		-301.88
8/30/99	-304.53	-304.8	-308.85	-101.47	-199.07	-310.96	-277.43		-280	-142.37		-302.22
8/31/99	-304.19	-304.6	-309.09	-101.52	-199.56	-310.94	-277.87		-280	-142.86		-302.5
9/1/99	-304.41	-304	-309.27	-105.54	-200.94	-311.42	-276.75		-280	-145.46		-301.76
9/2/99	-304.64	-303	-307.86	-110.88	-203.46	-311.96	-277.73		-280	-148.21		-302.84
9/3/99	-304.63	-302.77	-306.07	-106.65	-202.81	-313.81	-276.87		-280	-147.41		-302.27
9/4/99	-304.73	-301.66	-303.82	-104.74	-200.92	-313.57	-272.9		-280	-146.4		-298.46
9/5/99	-303.88	-300.93	-303.69	-95.819	-197.98	-310.99	-271.03		-280	-143.84		-296.64
9/6/99	-303.22	-300.47	-303.06	-100.62	-197.77	-308.73	-272.77		-280	-144.02		-298
9/7/99	-302.25	-301.32	-303.34	-106.65	-201.75	-308.7	-274.62		-280	-148.54		-299.92
9/8/99	-302.43	-302.29	-304.74	-110.37	-204.81	-311.9	-275.57		-280	-152.58		-301.35
9/9/99	-303.38	-303.08	-304.51	-110.84	-205.42	-314.44	-277.84		-280	-152.28		-303.31
9/10/99	-304.12	-303.61	-305.09	-112.54	-206.12	-315.55	-279.35		-280	-154.26		-304.4
9/11/99	-304.65	-304.19	-306.31	-113.84	-207.48	-316.25	-281.53		-280	-156.17		-306.68
9/12/99	-305.25	-305.13	-308.34	-116.36	-209.55	-317.84	-282.27		-280	-158.29		-308.47
9/13/99	-306.16	-305.24	-308.91	-115.53	-208.5	-319.85	-280.17		-279	-157.63		-306.77
9/14/99	-306.27	-305.12	-307.88	-114.09	-206.85	-318.63	-281.09		-279	-155.83		-307.43
9/15/99	-306.15	-304.95	-307.47	-112.11	-206.65	-318.46	-280.13		-278	-155.75		-306.81
9/16/99	-305.99	-305.29	-308.38	-108.71	-205.64	-318.25	-281.49		-278	-154.19		-308.18
9/17/99	-306.31	-304.72	-308.72	-105.27	-203.78	-317.84	-278.63		-277	-152.53		-305.62
9/18/99	-305.77	-302.69	-304.84	-105.62	-201.61	-316.25	-274.45		-276.41	-150.46		-301.38
9/19/99	-303.72	-300.72	-303.91	-106.42	-200.32	-313.28	-270.87		-275.21	-151.72		-297.72
9/20/99	-301.85	-299.19	-302.77	-106.37	-199.98	-310.7	-270.06		-273.99	-151.53		-297.11
9/21/99	-300.31	-299.14	-303.96	-105.8	-200.15	-310.05	-272.48		-273.98	-151.28		-299.54
9/22/99	-300.18	-299.73	-303.04	-105.54	-200.72	-310.96	-274.16		-273.87	-151.3		-300.92
9/23/99	-300.77	-299.99	-301.91	-105.87	-201.01	-312.12	-274.81		-273.12	-151.47		-301.35
9/24/99	-301.03	-299.05	-302.03	-101.75	-198.66	-312.44	-271.26	-274	-268.9	-148.51		-298.33
9/25/99	-299.76	-299.15	-301.3	-101.84	-198.89	-310.25	-273.65		-265.01	-147.45	-301	-294.93
9/26/99	-299.13	-299.5	-299.68	-106.27	-200.81	-310.26	-273.83		-262.07	-149.68		-303.38
9/27/99	-299.49	-299.14	-301.88	-110.24	-202.77	-309.94	-273.28		-260.17	-152.95		-303.13
9/28/99	-299.13	-299.54	-305.7	-113.71	-206	-311.06	-276.24		-258.58	-156.68		-307.13
9/29/99	-299.46	-299.75	-305.83	-119.75	-208.81	-314.53	-277.83		-257.14	-159.43		-308.83
9/30/99	-299.61	-299.79	-301.94	-124.56	-211.1	-316.57	-278.13		-255.54	-161.33		-308.81
10/1/99	-299.64	-299.38	-300.16	-124.81	-211.62	-317.82	-277.68		-254.7	-162		-308.57
10/2/99	-299.28	-300.07	-299.91	-125.76	-213.36	-318.11	-280.94		-252.73	-163.48		-312.59
10/3/99	-299.91	-298.24	-300.65	-128.55	-213.66	-320.4	-278.11		-248.02	-164.94		-310.55
10/4/99	-298.18	-294.37	-298.72	-132.76	-214.01	-319.75	-273.76		-244.62	-167.89		-306.22
10/5/99	-294.4	-290.95	-294.93	-134.44	-213.93	-317.56	-272.69		-242.23	-169.43		-305.37
10/6/99	-290.98	-288.96	-290.02	-139.12	-216.16	-316.36	-274.01		-240.11	-172.22		-306.62
10/7/99	-288.95	-287.7	-290.39	-142.28	-218.19	-317.9	-276.14		-239.45	-174.63		-309.59
10/8/99	-287.63	-286.64	-291.91	-141	-219.1	-320.14	-279.37		-239.15	-175.34		-313.86

10/9/99	-286.52	-285.58	-290.2	-139.39	-218.82	-322.02	-280.04		-238.48	-174.9		-314.55
10/10/99	-285.47	-284.52	-289.13	-137.93	-218.18	-322.34	-279.48		-238.02	-174.76		-314.38
10/11/99	-284.37	-283.4	-288.1	-136.98	-217.23	-322.12	-277.3		-237.48	-175.44		-312.26
10/12/99	-283.27	-282.26	-285.94	-135.41	-216.42	-320.79	-277.85		-236.85	-174.86		-312.99
10/13/99	-282.13	-281.01	-284.92	-136.31	-216.1	-320.2	-277.85		-236.15	-175.84		-313.26
10/14/99	-280.88	-279.5	-282.83	-136.96	-215.91	-319.67	-276.94		-235.18	-176.64		-311.98
10/15/99	-279.37	-278.43	-281.92	-137.89	-216.01	-318.95	-277.69	-265	-235.06	-177.58		-312.57
10/16/99	-278.14	-277.84	-280.09	-141.06	-217.5	-318.82	-277.83		-235.12	-179.39	-321	-314.3
10/17/99	-277.21	-275.97	-279.49	-140.95	-216.99	-320.11	-275.54		-235.36	-179.88		-311.96
10/18/99	-275.34	-273.4	-274.49	-137.45	-213.01	-319.48	-272.04		-235.2	-178.24		-307.56
10/19/99	-272.79	-270.9	-272.25	-128.4	-208.91	-315.07	-269.9		-235.66	-173.07		-305.41
10/20/99	-270.28	-268.56	-269.09	-117.25	-202.98	-311.58	-271.27		-234.65	-165.89		-306.81
10/21/99	-267.97	-266.78	-267.48	-114.71	-200.56	-308.39	-271.83		-234.43	-163.05		-307.51
10/22/99	-266.12	-265.15	-266.43	-114.02	-199.34	-307.36	-271.54		-234.41	-161.38		-307.15
10/23/99	-264.47	-263.51	-264.8	-113.98	-198.37	-306.4	-271.02		-234.33	-160.55		-306.59
10/24/99	-262.85	-261.85	-263.13	-115.67	-198.4	-305.45	-272.09		-234.4	-160.49		-307.67
10/25/99	-261.15	-260.35	-261.08	-120.47	-200.42	-305.5	-274.12		-234	-162.08		-310.09
10/26/99	-259.63	-259.32	-259.99	-123.07	-202.59	-307.26	-278.24		-233.7	-163.36		-314.21
10/27/99	-258.55	-258.76	-261.05	-130.05	-206.22	-309.97	-279.57		-233.81	-167.35		-316.1
10/28/99	-257.86		258	-129.68	-222.87	-313	-279		-232	-169.22		-315
10/29/99	-256.42		-253.49	-134.06	-225.94	-316.05	-280.76	-271	229	-173.3		-316.17
10/30/99	-255.23		-250.86	-136.84	-227.63	-317.82	-278.72		-227.07	-177.64	-314	-315.56
10/31/99	-253.19		-248.95	-137.33	-226.53	-318.42	-272.41		-225.34	-178.69		-308.69
11/1/99	-251.31		-247.13	-139.2	-225.73	-315.72	-266.96		-222.93	-180.32		-302.64
11/2/99	-248.83		-245.18	-123.47	-215.38	-312.25	-266.29		-220.08	-173.06		-301.72
11/3/99	-245.76		-242.55	-110.85	-208.56	-307.28	-272.27		-218.03	-164.32		-308.79
11/4/99	-243.18		-243.12	-109.83	-208	-306.27	-273.77		-216.61	-161.88		-310.52
11/5/99	-241.37		-242.07	-109.53	-207.75	-306.16	-273.38		-215.13	-160.17		-310.33
11/6/99	-239.9		-239.66	-110.65	-207.43	-305.97	-271.68		-213.59	-159.33		-308.48
11/7/99	-238.19		-240.08	-109.02	-206.17	-304.22	-271.38		-212.34	-158.57		-308.18
11/8/99	-236.53		-237.61	-107.97	-205.52	-303.31	-272.36		-211.3	-158.73		-309.03
11/9/99	-234.94		-233.7	-108.04	-206	-303.06	-273.92		-210.57	-158.69		-311.34
11/10/99	-233.74		-234.33	-109	-206.51	-303.97	-273.9		-209.93	-158.76		-311.51
11/11/99	-232.71		-236.59	-110.45	-207.1	-304.01	-273.92		-209.24	-161		-311.58
11/12/99	-231.71		-235.67	-113.89	-209.25	-303.75	-274.11		-209.53	-164.52		-311.79
11/13/99	-230.86		-231.69	-114.48	-210.16	-304.61	-274.42		-211.01	-166.51		-312.11
11/14/99	-230.72		-234.42	-114.13	-210.55	-305.84	-274.88		-212.39	-168.46		-312.62
11/15/99	-231.52		-236.39	-113.11	-210.07	-306.98	-275.04		-212.79	-168.94		-312.65
11/16/99	-231.82		-234.3	-113.51	-210.12	-307.02	-275.2		-212.52	-166.97		-312.77
11/17/99	-231.4		-233.74	-113.4	-209.9	-306.73	-275.23		-211.84	-164.32		-312.75
11/18/99	-230.81		-235.77	-113.55	-210.08	-306.4	-274.84		-212.02	-163.39		-312.79
11/19/99	-230.6		-237.08	-110.71	-208.48	-306.62	-273.18		-212.65	-162.57		-310.93
11/20/99	-231.09		-234.59	-108.38	-205.83	-306.25	-270.73		-211.57	-160.9		-306.84
11/21/99	-230.77		-236.01	-110.05	-207.79	-303.28	-273.9		-211.78	-161.4		-310.71
11/22/99	-232.47		-239.05	-112.34	-210.26	-305.52	-274.75		-213.35	-163.43		-312.4
11/23/99	-235.23		-242.9	-112.4	-211	-308.19	-275.53		-214.27	-164.15		-312.84
11/24/99	-237.4		-242.06	-111.06	-210.24	-309.6	-275.63		-214.48	-164.41		-312.88
11/25/99	-238.46		-241.57	-109.58	-209.4	-309.42	-276.07		-214.21	-166.22		-312.73
11/26/99	-239.04		-242.08	-108.74	-208.93	-309.23	-276.18		-214.06	-167.88		-313.1
11/27/99	-239.3		-244.89	-110.48	-210.07	-309.12	-276.25		-214.4	-171.97		-313.7
11/28/99	-239.46		-246.53	-112.13	-211.28	-309.67	-276.36		-214.61	-174.04		-314.19
11/29/99	-239.54		-248.48	-112.19	-211.3	-310.44	-276.37		-214.39	-175.67		-314.47
11/30/99	-239.24		-247.11	-112.87	-211.27	-310.42	-276.3		-213.41	-177.24		-314.24
12/1/99	-238.11		-243.94	-113.95	-211.19	-309.66	-275.85		-211.55	-178.39		-313.66
12/2/99	-236.33		-242.61	-116.76	-212.4	-308.43	-275.73		-211.23	-181.02		-314.19
12/3/99	-235.27		-240.11	-115.65	-211.67	-308.03	-276.04		-210.9	-181.88		-314.88
12/4/99	-234.69		-241.69	-111.65	-210.41	-307.68	-276.42		-213.01	-180.74		-315.79
12/5/99	-235.42		-241.31	-109.62	-208.92	-309.18	-276.5		-213	-179.22		-315.27
12/6/99	-235.14		-239.35	-108.21	-207.65	-308.23	-276.44		-212.21	-180.07		-314.75
12/7/99	-234.49		-238.14	-108.82	-207.59	-307.09	-276.41		-211.21	-180.99		-314.72
12/8/99	-234.04		-234.21	-109.29	-207.94	-306.36	-276.4		-210.89	-182.03		-315.58
12/9/99	-234.11		-239.96	-111.98	-210.21	-306.6	-276.75		-212.55	-184.76		-315.88
12/10/99	-235.01		-237.15	-115.43	-212.02	-308.45	-276.76		-210.63	-185.88		-315.23
12/11/99	-234.72		-238.74	-115.22	-212.37	-308.61	-276.81		-210.14	-187.15		-316.4
12/12/99	-235.24		-241.53	-115.19	-213.08	-309.52	-277.09		-211.25	-188.69		-317.01
12/13/99	-236.04		-237.75	-113.89	-212.21	-310.97	-277.18		-209.9	-189.64		-316.09
12/14/99	-235.55		-239.07	-114.16	-212.7	-310.53	-277.18		-210.53	-191.46		-317.5

12/15/99	-235.93		-239.74	-114.87	-213.37	-311.24	-277.57	-251	-211.32	-192.08		-317.46
12/16/99	-236.28		-236.53	-114.72	-212.98	-311.88	-277.68		-209.57	-193.39		-317.48
12/17/99	-235.64		-236.5	-115.66	-213.52	-311.24	-277.82		-210	-195.45		-318.02
12/18/99	-235.15		-234.67	-114.64	-212.66	-311.38	-277.86		-209.4	-196.62		-317.23
12/19/99	-234.33	-234.02	-231.1	-116.75	-213.42	-310.68	-276.18		-209.87	-192.34	-318	-316.9
12/20/99	-233.52	-233.61	-224.72	-119.7	-211.49	-310.1	-275.11		-210.61	-193.38		-317
12/21/99		-233.08	-224.87	-118.82	-210.85	-303.28	-274.99		-210.45	-186.44		-316.92
12/22/99		-232.93	-225.66	-118.09	-210.42	-302.89	-274.86		-210.69	-182.62		-316.71
12/23/99		-232.8	-227.25	-118.35	-210.57	-302.76	-275		-210.75	-179.36		-316.63
12/24/99		-232.4	-228.13	-118.1	-210.28	-302.79	-275.08		-210.45	-178.36		-316.45
12/25/99		-232.17	-227.75	-117.47	-209.8	-302.46	-274.86		-210.25	-178.05		-316.29
12/26/99		-232.1	-227.09	-115.64	-208.7	-302.14	-274.67		-210.33	-176.34		-316.07
12/27/99		-231.99	-227.24	-116.43	-209.1	-301.75	-274.7		-209.78	-175.52		-316.11
12/28/99		-231.85	-229.54	-116.47	-209.09	-301.77	-274.68		-209.06	-175.97		-315.91
12/29/99		-231.42	-229.61	-115.69	-208.34	-301.71	-274.49		-207.43	-176.42		-315.67
12/30/99		-231.62	-227.91	-115.91	-208.67	-300.98	-274.52		-207.96	-176.93		-316.03
12/31/99		-231.76	-226.72	-115.94	-208.7	-301.43	-274.55		-207.46	-175.98		-315.7
1/1/00		-231.77	-228.37	-116.15		-301.47	-274.49		-207.86	-176.68		-315.71
1/2/00		-232.57	-227.77	-116.16		-301.36	-274.77		-209.07	-178.27		-315.99
1/3/00		-234.63	-229.01	-115.73		-302.23	-275.17		-212.18	-178.5		-316.86
1/4/00		-237.04	-232.07	-117.21		-303.87	-275.68		-213.48	-179.02		-316.58
1/5/00		-238.18	-232.23	-119.76		-304.9	-275.8		-212.3	-179.77		-316.45
1/6/00		-239.7	-237.49	-121.29		-305.15	-276.1		-214.67	-182.26		-317.26
1/7/00		-240.52	-238.23	-119.75		-306.49	-276.33		-214.77	-181.87		-317.01
1/8/00		-240.62	-233.47	-121.01		-306.64	-276.37		-213	-184.58		-316.92
1/9/00		-240.82	-231.92	-124.11		-306.73	-276.54		-213.63	-187.95		-317.6
1/10/00		-240.91	-232.06	-124.87		-307.61	-276.75		-213.03	-189.96		-317.91
1/11/00		-240.84	-231.71	-122.29		-308.25	-276.67		-212.2	-190.06		-317.95
1/12/00		-240.93	-231.17	-120.85		-308.03	-276.34		-212.4	-189.04		-317.99
1/13/00		-241.39	-231.65	-120.53		-307.85	-276.32		-214.38	-188.82		-318.07
1/14/00		-241.35	-229.72	-120.13		-308.25	-276.14		-213.82	-188.36		-317.58
1/15/00		-241.01	-229.13	-119.49		-307.97	-275.85		-212.65	-185.82		-317.4
1/16/00		-240.89	-231.3	-119.48		-307.35	-275.66		-212.3	-184.91		-317.21
1/17/00		-240.86	-235.49	-119.2		-307.25	-275.5		-211.53	-184.8		-317.14
1/18/00		-240.79	-240.06	-116.82		-307.25	-275.25		-211.34	-181.08		-316.69
1/19/00		-240.25	-242.3	-116.58		-306.78	-274.99		-211.13	-178.46		-316.4
1/20/00		-239.72	-244.73	-116.64		-306.2	-274.96		-211.54	-176.72		-316.21
1/21/00		-238.81	-243.57	-115.91		-305.91	-274.75		-209.58	-175.66		-315.92
1/22/00		-238.1	-245.74	-115.52		-305.33	-274.57		-210	-174.9		-316.07
1/23/00		-237.52	-247.27	-114.96		-305.2	-274.46		-210.68	-174.33		-316.05
1/24/00		-236.68	-247.16	-114.5		-305.07	-274.34		-209.61	-173.57		-315.52
1/25/00		-236.04	-247.19	-112.95		-304.49	-274.19		-208.83	-172.79		-315.34
1/26/00		-235.17	-245.21	-112.2		-303.93	-273.98		-207.32	-172.8		-315
1/27/00		-235.38	-245.13	-111.07		-303.18	-274.1		-209.87	-173.08		-315.79
1/28/00		-236.41	-246.72	-110.9		-303.5	-273.96		-210.74	-172.98		-315.46
1/29/00		-238.13	-245.95	-110.04		-303.98	-274.14		-211.3	-172.69		-315.36
1/30/00		-238.8	-243.81	-111.87		-304.47	-274.15		-210.71	-173.27		-315.19
1/31/00		-238.82	-245.12	-116.39		-304.56	-274.12		-210.09	-174.02		-315.27
2/1/00		-239.16	-246.84	-116.72		-305.24	-274.17		-211.22	-175.17		-315.89
2/2/00		-239.2	-247.53	-116.6		-306.31	-274.4		-211.32	-175.34		-315.84
2/3/00		-238.72	-245.77	-116.85		-306.78	-274.18		-210.12	-173.93		-315.39
2/4/00		-238.61	-243.88	-122.16		-306.18	-274.2		-210.06	-175.44		-315.88
2/5/00		-238.48	-244.21	-122.18		-307.25	-274.46		-210.2	-176.67		-315.93
2/6/00		-238.66	-245.19	-120.78		-307.65	-274.47		-211.29	-178.16		-316.32
2/7/00		-239.09	-245.33	-119.61		-307.81	-274.51		-211.64	-179.32		-316.61
2/8/00		-238.86	-245.69	-118.11		-308.27	-274.52		-211	-178.59		-316.07
2/9/00		-238.16	-243.88	-118.92		-307.56	-274.02		-209.08	-177.43		-315.15
2/10/00		-238.04	-244.08	-116.6		-306.57	-273.88		-209.27	-177.55		-315.51
2/11/00		-238.22	-245.73	-113.43		-306.34	-273.83		-209.6	-176.07		-315.75
2/12/00		-238.07	-246.12	-111.7		-305.82	-273.6		-209.44	-174.06		-314.91
2/13/00		-238.41	-248.33	-112.17		-304.9	-273.72		-209.82	-173.57		-315.41
2/14/00		-238.96	-250.14	-113.52		-304.94	-273.87		-210.37	-174.17		-315.62
2/15/00		-239.1	-250.24	-112.43		-305.7	-273.94	-251	-210.76	-174.82		-315.64
2/16/00		-239.02	-249.37	-111.83		-305.77	-273.97		-210.73	-175.52		-315.22
2/17/00		-238.53	-247.31	-111.19		-305.44	-274		-209.41	-176.13		-314.89
2/18/00		-239.59	-249.94	-108.82		-304.72	-274.46		-211.57	-176.46		-316.43
2/19/00		-240.33	-250.9	-109.31		-305.51	-274.78		-212.56	-176.13		-316.39

2/20/00	-240.58	-251.09	-109.72	-305.38	-274.82	-211.8	-176.04	-316.05				B-15
2/21/00	-240.72	-250.67	-109.52	-305.16	-274.84	-210.79	-175.77	-315.99				
2/22/00	-241.04	-250.38	-109.68	-305.3	-274.85	-210.72	-176.22	-316.54				
2/23/00	-241.32	-249.98	-109.52	-305.7	-274.88	-211.22	-175.87	-316.11				
2/24/00	-241.24	-247.45	-109.65	-305.79	-274.78	-210.26	-174.28	-315.44				
2/25/00	-242	-249.44	-107.99	-305.53	-274.98	-211.42	-174.1	-316.75				
2/26/00	-242.6	-249.34	-108.14	-306.09	-275.17	-212.17	-174.59	-316.84				
2/27/00	-242.36	-246.7	-108.97	-306.54	-275.21	-211.49	-174.86	-316.21				
2/28/00	-241.62	-245.65	-108.88	-306.37	-274.98	-210.3	-175.03	-315.67				
2/29/00	-242.44	-243.75	-109.3	-305.89	-274.3	-211.04	-175	-303	-317.4			
3/1/00	-241.97	-243.47	-112.79	-307.27	-273.14	-210.44	-174.52	-317.04				
3/2/00	-240	-241.79	-117.45	-307.65	-266.48	-210.39	-177.52	-309.79				
3/3/00	-238.05	-239.6	-120.08	-305.11	-270.33	-209.27	-180.76	-314.25				
3/4/00	-236.54	-237.65	-114.7	-307.15	-271.53	-207.68	-180.41	-315.7				
3/5/00	-235.4	-236.12	-117.75	-306.64	-271.53	-206.65	-182.06	-316.08				
3/6/00	-234.87	-235.68	-119.6	-306.85	-270.42	-207.22	-184.14	-315.14				
3/7/00	-233.02	-233.9	-122.07	-307.18	-262.55	-207.3	-185.75	-306.35				
3/8/00	-232.51	-233.76	-123.45	-303.11	-265.27	-208.47	-186.51	-308.72				
3/9/00	-231.46	-233.07	-121.6	-304.09	-265.39	-206.4	-186.4	-309.75				
3/10/00	-227.46	-229.6	-124.32	-303.89	-263.14	-204.87	-187.55	-307.53				
3/11/00	-223.49	-225.68	-128.02	-299.98	-266.91	-202.52	-189.12	-311.91				
3/12/00	-217.86	-220	-122.89	-299.55	-267.78	-199.67	-188.81	-313.07				
3/13/00	-207.89	-209.74	-126.46	-297.66	-267.45	-197.38	-190.64	-313.48				
3/14/00	-191.14	-192.48	-127.48	-297.46	-266.65	-194.75	-191.81	-312.83				
3/15/00	-175.63	-176.97	-130.55	-296.73	-267.26	-192.27	-192.73	-313.69				
3/16/00	-158.72	-160.43	-131.03	-296.75	-268.23	-190.11	-193.86	-316.03				
3/17/00	-133.5	-135.41	-133.24	-297.24	-268.84	-186.85	-194.97	-316.05				
3/18/00	-98.08	-100.24	-135.92	-296.84	-270.52	-183.93	-196.73	-319.25				
3/19/00	-51.41	-55.759	-137.17	-298.18	-270.14	-179.72	-198.35	-318.19				
3/20/00	-28.243	-34.336	-125.09	-297.62	-268.44	-174.27	-195.42	-316.48				
3/21/00	-15.5	-22.036	-113.71	-294.64	-266.5	-171.18	-191.49	-316.59				
3/22/00	-7.17	-14.334	-100.73	-291.91	-258.73	-163.6	-185.65	-306.85				
3/23/00	-23.3	-29.489	-98.649	-286.13	-257.46	-159.65	-178.41	-306.39				
3/24/00	-22.1	-28.814	-98.28	-281.72	-256.86	-158.8	-173.99	-306.73				
3/25/00	-14.83	-21.4	-97.239	-280.77	-255.95	-155.75	-171.02	-306.23				
3/26/00	-11.223	-17.098	-101.04	-279.88	-254.09	-151.72	-170.1	-304.33				
3/27/00	-8.402	-12.977	-97.384	-279	-253.54	-147.62	-168.45	-303.92				
3/28/00	-10.883	-15.133	-105.13	-277.74	-254.06	-144.95	-174.16	-305.41				
3/29/00	-7.062	-12.612	-109.61	-279.43	-254.06	-142.93	-181.49	-307.06				
3/30/00	-3.09	-8.0059	-108.33	-281.7	-251.91	-137.94	-186.69	-304.59				
3/31/00	-2.4319	-7.6444	-105.71	-280.46	-251.08	-134.01	-188.28	-305.17				
4/1/00	-1.7812	-7.8935	-106.12	-279.76	-249.92	-130.18	-190.16	-304.78				
4/2/00	-0.9	-7.3854	-105.44	-279.49	-248.54	-127.08	-190.32	-303.78				
4/3/00	-4.01	-10.059	-91.158	-278.93	-245.29	-125.51	-183.71	-301.06				
4/4/00	-23.97	-29.033	-101.32	-275.9	-244.87	-134.76	-180.36	-299.99				
4/5/00	-26.266	-31.697	-104.82	-276.31	-248.59	-139.76	-180.57	-302.83				
4/6/00	-8.8511	-15.617	-109.56	-278.73	-249.08	-135.69	-182.12	-303.98				
4/7/00	-4.0316	-11.308	-115.89	-279.63	-249.7	-125.82	-184.42	-306.73				
4/8/00	-4.4	-11.971	-121.77	-282.5	-248.42	-122.64	-187.38	-306.21				
4/9/00	-5.16	-12.901	-122.94	-284.38	-248.15	-122.28	-188.36	-305.56				
4/10/00	-5.2154	-13.368	-122.73	-284.7	-249.27	-121.49	-189.37	-307.92				
4/11/00	-11.21	-20.092	-123.24	-285.96	-251.85	-127.53	-190.87	-311.22				
4/12/00	-18.031	-27.492	-118.76	-288.47	-251.59	-135.21	-190.27	-309.2				
4/13/00	-16.9	-27.41	-123.75	-287.16	-253.73	-137.18	-191.52	-310.16				
4/14/00	-17.654	-28.367	-126.78	-288.04	-256.07	-137.08	-192.98	-311.98				
4/15/00	-32.32	-42.34	-126.12	-289.88	-256.83	-143.28	-194.26	-313.91				
4/16/00	-31.176	-40.54	-126.11	-291.49	-253.23	-147.74	-195.09	-309.12				
4/17/00	-19.169	-27.728	-127.8	-289.49	-252.72	-144.77	-195.62	-307.75				
4/18/00	-17.7	-25.616	-124.48	-288.47	-255.67	-142.49	-195.26	-311.07				
4/19/00	-19.817	-14.392	-122.71	-289.5	-254.13	-143.97	-195.28	-310.53				
4/20/00	-42.604	-31.926	-119.67	-288.7	-256.38	-150.57	-194.79	-312.21				
4/21/00	-53.25	-42.612	-119.67	-289.87	-258.15	-154.26	-194.31	-312.87				
4/22/00	-28.088	-23.707	-120.41	-290.35	-259.43	-152.93	-195.2	-313.92				
4/23/00	-15.4	-15.26	-117.09	-290.85	-257.73	-148.4	-194.32	-313.01				
4/24/00	-3.58	-5.9363	-114.9	-289.16	-251.42	-133.87	-192.66	-307.24				
4/25/00	-2.0933	-5.9442	-111.09	-285.3	-250.25	-122.51	-188.96	-307.85				
4/26/00	-2.9107	-7.7932	-115.66	-284.44	-249.39	-121.93	-189.47	-307.97				

4/27/00	-1.785	-8.0852	-121.51	-285.6	-251.63		-119.04	-192.09		-311.32		B-16
4/28/00	-2.2	-9.79	-123.51	-288.85	-249.83		-113.71	-194.36		-309.56		
4/29/00	-18.582	-26.666	-126.31	-289.53	-252.22		-127.42	-196.09		-312.15		
4/30/00	-48.87	-55.444	-126.62	-292.27	-255.72		-140.91	-197.48		-314.58		
5/1/00	-79.142	-84.903	-126.41	-294.4	-255.84		-150.52	-198.21		-312.69		
5/2/00	-98.88	-104.49	-127.33	-294.96	-258.59		-158.3	-198.73		-313.79		
5/3/00	-111.15	-117.2	-130.77	-296.68	-262.14		-164.09	-200.12		-317.01		
5/4/00	-109.51	-115.39	-130.7	-299.39	-263.26		-168.13	-201.58		-317.67		
5/5/00	-104.18	-109.23	-128.67	-300.16	-264.55		-171.06	-202.17		-318.02		
5/6/00	-98.876	-102.96	-127.2	-299.93	-265.68		-173.42	-202.58		-318.8		
5/7/00	-104.1	-107.45	-129.47	-299.87	-266.71		-176.37	-203.8		-319.25		
5/8/00	-107.31	-110.09	-128.52	-301.02	-265.74		-178.76	-205.42		-317.56		
5/9/00	-119.1	-121.66	-124.5	-300.78	-266.29		-183.01	-205.94		-317.98		
5/10/00	-129.39	-131.19	-120.96	-301.45	-266.42		-185.69	-205.05		-317.31		
5/11/00	-141.72	-142.73	-122.71	-301.24	-267.18		-189.32	-205.1		-317.99		
5/12/00	-154.51	-155.86	-130.64	-302.52	-268.22		-194.77	-208.01		-319.22		
5/13/00	-166.04	-166.67	-127.94	-306.17	-269.35		-198.97	-209.66		-319.4		
5/14/00	-175.85	-175.76	-123	-309.72	-269.73		-202.61	-208.59		-319.4		
5/15/00	-182.31	-182.13	-120.85	-310.76	-266.67	-244	-205.2	-207.7	-325	-317.18		
5/16/00												

Datalogger data: SCW=South cottonwood transect SSC= South saltcedar transect

Well:

Date	SCW1	SCW2T	SCW3	SSC00	SSC0	SSC1	SSC3T	SSC5	SSC6
9/8/98		-301.8	-269.91			-275.92	-285.68	-325	
9/9/98		-302.2	-269.99			-273.77	-285.06		
9/10/98		-302.54	-271.97			-275.47	-286.81		
9/11/98		-303.41	-272.24			-276.85	-288.06	-328	
9/12/98		-304.63	-273.08			-278.23	-289.89		
9/13/98		-305.35	-273.43			-279.28	-290.89		
9/14/98		-305.6	-274.39			-280.46	-291.94		
9/15/98	-317	-306.64	-276.08			-280.58	-292.42		
9/16/98		-300.1	-267.68			-276.53	-289.64		
9/17/98		-296.53	-262.14			-272.4	-286.58		
9/18/98		-294.56	-258.38			-270.18	-284.78		
9/19/98		-293.33	-256.81			-268.51	-283.27		
9/20/98		-292.55	-257.85			-266.95	-281.25		
9/21/98		-291.41	-257.56			-266.63	-278.86		
9/22/98	-301	-291.25	-259.26			-265.7	-278.45	-320	
9/23/98		-291.03	-256.23			-265.4	-277.92		
9/24/98		-291.26	-254.45			-266.04	-278.47		
9/25/98		-291.75	-254.57			-267.23	-279	-323	
9/26/98		-291.46	-255.02			-269.04	-279		
9/27/98		-290.74	-252.94			-271.1	-280.24		
9/28/98		-289.76	-248.88			-272.4	-281.09		
9/29/98	-300.09	-288.54	-244.66			-272.87	-281.19		
9/30/98	-300.2	-287.61	-246.71			-270.34	-279.41		
10/1/98	-297.32	-285.5	-247.23			-264.92	-275.64		
10/2/98	-295.15	-284.08	-244.85			-261.33	-275.34		
10/3/98	-294.53	-283.39	-249.94			-260.85	-274.73	-315	
10/4/98	-293.51	-282.92	-252.01			-260.95	-271.97		
10/5/98	-292.49	-282.03	-250.17			-255.97	-270.29		
10/6/98	-291.32	-281.22	-260.84			-253.14	-269.33		
10/7/98	-290.84	-280.73	-270.79			-250.53	-267.54		
10/8/98	-290.12	-280.69	-280.77			-242.1	-268.46		
10/9/98	-291.09	-280.3	-290.12			-244.82	-264.99		
10/10/98	-292.45	-279.58	-298.69			-243.81	-264.38		
10/11/98	-294.81	-280.82	-308.95			-243.85	-264.24		
10/12/98	-294.79	-281.04	-304.64			-244.1	-264.12		
10/13/98	-294.73	-281	-295.01			-244.1	-264.19		
10/14/98	-293.46	-279.9	-279.55			-244.33	-264.07		
10/15/98	-291.25	-277.68	-263.31			-244.31	-264.02		
10/16/98	-291.03	-276.15	-252.55			-244.75	-264.34		
10/17/98	-292.02	-275.72	-250.26			-245.65	-264.63		
10/18/98	-291.87	-275.49	-249.37			-246.11	-264.87		
10/19/98	-292.81	-275.86	-251.91			-247.82	-265.62		
10/20/98	-291.31	-274.74	-267.56			-247.12	-264.96		
10/21/98	-288.92	-272.98	-288.01			-245.44	-263.73		
10/22/98	-287.11	-271.37	-301.65			-243.51	-261.88		
10/23/98	-285	-269.87	-296.04			-240.73	-259.26		
10/24/98	-283.49	-268.46	-287.44			-238.45	-256.65		
10/25/98	-281.65	-267.21	-275.57			-236.92	-254.22		
10/26/98	-280.98	-266.22	-260.85			-236.09	-251.83		
10/27/98	-281.11	-265.28	-250.47			-235.18	-250.59		
10/28/98	-279.67	-264.04	-249.5			-234.29	-248.02		
10/29/98	-278.5	-263.02	-244.11			-231.29	-246.26		
10/30/98	-277.72	-262.26	-233.61			-230.67	-244.19		
10/31/98	-277.67	-261.47	-228.41			-231.04	-242.09		
11/1/98	-277.01	-260.75	-228			-229.67	-240.74	-283	
11/2/98	-275.06	-262.35	-229.39			-228.51	-237.71		
11/3/98	-276.43	-262.52	-228.58			-227.12	-236.95		
11/4/98	-277.77	-262.82	-228.25			-226.23	-236.47		
11/5/98	-277.89	-263.01	-227.28			-225.14	-235.81		
11/6/98	-277.77	-263.14	-226.79			-223.36	-234.73		
11/7/98	-278.89	-263.13	-227.95			-221.86	-233.82		
11/8/98	-277.73	-262.77	-226.02			-220.52	-232.8		

11/9/98	-277.2	-262.37	-226.71	-220.51	-232.38	
11/10/98	-278.75	-262.86	-227.71	-221.45	-233.45	
11/11/98	-278.81	-263.36	-226.08	-220.81	-233.25	
11/12/98	-279.52	-263.57	-226.4	-219.95	-232.69	
11/13/98	-279.66	-263.68	-226.44	-218.82	-231.93	
11/14/98	-279.7	-263.7	-226.11	-218.45	-231.77	
11/15/98	-279.43	-263.88	-226.18	-217.92	-231.52	
11/16/98	-279.93	-264.11	-226.29	-217.35	-231.18	
11/17/98	-279.77	-264.31	-226.57	-216.99	-230.99	
11/18/98	-279.93	-264.15	-226.72	-216.81	-230.84	
11/19/98	-280.01	-263.77	-226.74	-216.83	-230.95	
11/20/98	-279.51	-263.28	-225.74	-216.66	-230.67	
11/21/98	-279.03	-263.09	-224.91	-216.07	-230.42	
11/22/98	-279.48	-262.64	-225.1	-215.67	-230.17	
11/23/98	-278.22	-261.98	-226.36	-215.85	-230.4	-284
11/24/98	-277.71	-261.7	-224.82	-215.19	-229.94	
11/25/98	-278.32	-261.58	-225.4	-214.75	-229.78	
11/26/98	-278.02	-261.39	-224.6	-213.93	-229.26	
11/27/98	-277.76	-261.17	-224.05	-213.39	-228.81	
11/28/98	-276.78	-260.87	-223.61	-212.87	-228.25	
11/29/98	-277.01	-260.61	-224	-212.69	-228	
11/30/98	-277.97	-260.77	-224.95	-213.11	-228.44	
12/1/98	-277.41	-260.6	-223.19	-212.13	-227.57	
12/2/98	-276.55	-260.27	-223.52	-211.37	-226.85	
12/3/98	-276.24	-260.02	-223.34	-210.78	-226.61	
12/4/98	-276.94	-259.97	-222.83	-210.36	-226.23	
12/5/98	-276.45	-259.89	-222.73	-209.59	-225.65	
12/6/98	-276.93	-260.05	-223.07	-209.35	-225.47	
12/7/98	-277.61	-260.75	-225.23	-210.05	-226.18	
12/8/98	-277.58	-261.38	-224.48	-210.31	-226.5	
12/9/98	-277.24	-261.36	-225.05	-210.19	-226.33	
12/10/98	-278.35	-261.89	-226.13	-211.94	-227.7	
12/11/98	-278.52	-262.37	-225.47	-212.11	-227.97	
12/12/98	-279.01	-262.81	-226.02	-212.54	-228.54	
12/13/98	-279.49	-263.18	-226.42	-213.14	-229.13	
12/14/98	-279.96	-263.73	-226.49	-213.62	-229.53	
12/15/98	-280.82	-264.2	-227.25	-214.3	-230.2	
12/16/98	-281.28	-264.6	-227.62	-214.98	-230.86	
12/17/98	-280.34	-264.52	-227.19	-215.04	-230.81	
12/18/98	-280.08	-264.13	-232.98	-214.29	-229.95	-285
12/19/98	-281.06	-264.25	-228.3	-214.73	-230	
12/20/98	-280.92	-264.13	-226.84	-214.47	-229.78	
12/21/98	-281.17	-264.27	-228.07	-214.83	-230.19	
12/22/98	-280.91	-264.4	-227.3	-214.78	-229.9	
12/23/98	-281.33	-264.51	-227.42	-214.32	-230.15	
12/24/98	-281.78	-265	-228.75	-214.46	-230.62	
12/25/98	-281.92	-265.28	-228.04	-213.55	-230.32	
12/26/98	-281.65	-265.33	-227.76	-212.34	-229.7	
12/27/98	-282.07	-265.45	-228.17	-212.31	-229.92	
12/28/98	-282.14	-265.62	-228.13	-212.75	-230.51	
12/29/98	-282.29	-265.71	-228.28	-212.33	-230.52	
12/30/98	-281.66	-265.62	-228.07	-211.53	-230.06	
12/31/98	-281.5	-265.55	-228.44	-211	-229.89	
1/1/99	-280.79	-265.27	-228.45	-210.34	-229.36	
1/2/99	-282.36	-265.6	-228.49	-210.76	-229.84	
1/3/99	-282.61	-265.67	-228.62	-210.45	-229.9	
1/4/99	-282.73	-265.86	-228.76	-210.01	-229.75	
1/5/99	-282.78	-265.95	-228.15	-209.34	-229.47	
1/6/99	-282.87	-265.95	-227.77	-209.19	-229.53	
1/7/99	-281.48	-265.48	-227.04	-208.74	-229.23	
1/8/99	-281.33	-264.72	-226.77	-208.44	-229.13	
1/9/99	-281.55	-264	-226.73	-208.57	-229.3	
1/10/99	-280.83	-263.29	-224.56	-208.01	-228.94	
1/11/99	-279.78	-262.54	-223.11	-207.65	-228.55	
1/12/99	-277.84	-261.88	-223	-207.35	-228.14	
1/13/99	-280.27	-262.08	-224.2	-207.53	-228.63	
1/14/99	-280.31	-262.1	-223.13	-206	-228.38	

1/15/99		-261.92	-222.39		-204.7	-227.43	
1/16/99		-261.3	-222.06		-204.1	-226.92	
1/17/99		-260.73	-222.25		-203.88	-226.72	
1/18/99		-260.29	-221.77		-203.49	-226.14	
1/19/99		-259.82	-220.63		-202.72	-225.43	
1/20/99		-259.31	-220.28		-201.93	-224.72	
1/21/99		-258.83	-219.68		-201.18	-223.92	
1/22/99		-259.03	-221.59		-201.96	-224.73	
1/23/99		-259.55	-220.87		-202.01	-224.56	
1/24/99		-260.14	-221.43		-202.14	-224.56	
1/25/99		-260.68	-221.98		-202.5	-224.88	
1/26/99		-260.82	-222.93		-202.24	-224.8	
1/27/99		-261.13	-222.65		-202.45	-225.11	
1/28/99		-261.31	-223.36		-202.13	-225.05	
1/29/99		-261.6	-223.49		-202.75	-225.54	
1/30/99	-277.46	-261.81	-225.83		-202.48	-225.39	
1/31/99	-277.4	-261.71	-227.97	-173	-201.73	-224.81	-287
2/1/99	-277.28	-261.6	-228.18		-201.18	-224.84	
2/2/99	-277.02	-261.53	-228.38		-200.12	-224.1	
2/3/99	-276.77	-261.41	-228.21		-199.37	-223.5	
2/4/99	-277.08	-261.72	-229		-199.44	-223.6	
2/5/99	-277.23	-261.79	-228.99	-169.37	-199.49	-225.28	-288.52
2/6/99	-277.05	-261.68	-228.8	-169.03		-226.38	-288.25
2/7/99	-276.55	-261.26	-228.14	-169.17		-225.96	-288.19
2/8/99	-276.15	-260.83	-227.65	-170.23		-226.1	-288.31
2/9/99	-275.85	-260.43	-227.39	-170.33		-225.93	-288.4
2/10/99	-275.21	-259.75	-226.27	-169.41		-225.05	-286.59
2/11/99	-275.71	-260.28	-227.54	-170.53		-225.91	-288.53
2/12/99	-275.45	-260.29	-227.12	-168.64		-224.91	-287.63
2/13/99	-275.38	-260.24	-226.82	-166.98		-223.99	-286.84
2/14/99	-275.5	-262.88	-226.66	-165.44		-223.21	-285.41
2/15/99	-275.67	-260.45	-226.86	-164.41		-222.98	-285.1
2/16/99	-276.04	-260.85	-227.51	-164.46		-223.15	-286.89
2/17/99	-275.9	-260.78	-227.28	-163.57		-222.82	-286.37
2/18/99	-275.82	-260.6	-227.28	-163.11		-222.54	-286.97
2/19/99	-275.76	-260.57	-227.19	-162.57		-222.01	-286.73
2/20/99	-276.3		-228.2				-287.52
2/21/99	-276.71		-228.97				-286.87
2/22/99	-276.99		-229.12				-286.67
2/23/99	-277.41		-229.87				-287.6
2/24/99	-277.59		-229.85				-287.74
2/25/99	-277.45		-229.5	-162.49	-192		-287.33
2/26/99	-277.16	-261	-231	-162.62			-286.62
2/27/99	-276.85		-229.16	-163.53			-288
2/28/99	-276.59		-228.96	-163.6			-287.75
3/1/99	-276.05	-262.08	-228.33	-161.51			-286.92
3/2/99	-273.83	-260.71	-227.57	-162.52			-285.06
3/3/99	-271.46	-258.81	-226.09	-162.47			-282.31
3/4/99	-271.02	-258.02	-224.92	-161.74			-281.38
3/5/99	-269.86	-257.19	-224.6	-164.57			-281.4
3/6/99	-269.1	-256.42	-223.7	-168			-280.75
3/7/99	-269.15	-255.82	-222.38	-169.73			-280.36
3/8/99	-269.05	-255.45	-221.93	-172.66			-282.86
3/9/99	-269.66	-255.35	-221.12	-172.12			-283.57
3/10/99	-270.65	-255.65	-220.61	-171.97			-284.96
3/11/99	-270.39	-255.22	-219.95	-172.45			-284.16
3/12/99	-271.13	-255.61	-220.15	-175.84			-28.266
3/13/99	-271.27	-256.08	-221.05	-178.05			-287.51
3/14/99	-271.77	-256.82	-221.93	-177.68			-287.53
3/15/99	-271.72	-257.1	-222.46	-175.43			-286.41
3/16/99	-271.63	-257.14	-222.6	-171.13			-284.97
3/17/99	-272.3	-257.66	-223.32	-171.47			-286.91
3/18/99	-271.37	-257.04	-222.89	-173.43			-287.29
3/19/99	-269.04	-255.11	-221.1	-174.34			-284.79
3/20/99	-267.88	-253.91	-219.76	-170.43			-282.8
3/21/99	-266.83	-252.82	-218.46	-164.85			-280.33
3/22/99	-266.13	-252.06	-217.62	-162.73			-278.97

3/23/99	-265.97	-251.54	-217.17		-164.09			-279.01	
3/24/99	-267.4	-252.14	-217.28		-166.55			-281.25	
3/25/99	-268.19	-252.52	-217.24		-169.39			-282.51	
3/26/99	-267.96	-252.33	-215.76	-120	-172.51	-198		-281.31	
3/27/99	-266.38	-251.19	-215.12		-180.23		-220.2	-281.27	
3/28/99	-265.53	-251.61	-216.81		-181.19		-220.3	-280.93	
3/29/99	-265.71	-251.72	-217.12		-180.45		-219.47	-280.38	
3/30/99	-268.27	-253.42	-217.97		-175.65		-228.03	-280.63	
3/31/99	-273.82	-254.76	-220.85	-120	-174.86	-198	-218.99	-280.69	
4/1/99	-271.14	-255.75	-220.15		-177.35		-220.53	-283.95	
4/2/99	-272.33	-256.95	-221.36		-180.89		-223.07	-285.34	
4/3/99	-272.03	-257.29	-222.26		-181.61		-223.42	-285.42	
4/4/99	-271.77	-257.34	-222.43		-180.06		-222.06	-284.36	
4/5/99	-270.99	-257.08	-222.84		-179.33		-221.43	-283.5	
4/6/99	-270.66	-256.49	-222		-174.3		-218.38	-282.49	
4/7/99	-270.38	-256.07	-221.52		-172.48		-216.96	-281.54	
4/8/99	-272.05	-257.41	-222.71		-173.79		-218.18	-282.84	
4/9/99	-273.76	-258.93	-223.5		-175.07		-219.55	-283.25	
4/10/99	-275.59	-260.72	-225.57		-180.37		-223.41	-287.02	
4/11/99	-276.77	-261.89	-226.8		-184.33		-226.21	-289.25	
4/12/99	-276.17	-261.75	-226.96		-186.04		-227.2	-289.46	
4/13/99	-276.33	-261.64	-226.6		-186.91		-227.71	-288.9	
4/14/99	-276.45	-261.46	-226.24		-186.93		-228.02	-289.78	
4/15/99	-275.43	-260.03	-223.94		-189.56		-229.48	-291.32	
4/16/99	-273.71	-257.96	-221.21		-190.14		-229.6	-291.21	
4/17/99	-272.37	-256.89	-220.64		-191.67		-230	-290.38	
4/18/99	-270.79	-256.19	-221.02		-192.79		-229.48	-288.47	
4/19/99	-270.19	-256.21	-221.69		-193.38		-229.04	-287.21	
4/20/99	-272.44	-258.25	-223.37		-194.48		-230.08	-287.9	
4/21/99	-275.8	-261.55	-226.06		-196.87		-232.54	-289.66	
4/22/99	-277.77	-263.93	-229.3		-200.5		-234.71	-291.24	
4/23/99	-280.3	-266.48	-233.1		-208.18		-239.3	-295.11	-372
4/24/99	-282.35	-268.8	-235.6		-215.35		-243.77	-297.77	
4/25/99	-284.11	-270.77	-237.79		-221.13		-247.55	-299.99	
4/26/99	-284.64	-272.18	-239.78		-226.37		-250.59	-300.9	
4/27/99	-285.37	-273.53	-241.88		-231.17		-253.3	-301.99	
4/28/99	-285.28	-274.48	-243.41		-209.88		-245.24	-300.61	
4/29/99	-286.07	-275.63	-245.17		-194.54		-236.86	-298.03	
4/30/99	-287.38	-276.9	-247.1	-130	-189.65	-209	-232.67	-296.5	-365.1
5/1/99	-287	-277.41	-249.44				-227.91	-294.06	-364.17
5/2/99	-289.25	-279.14	-250.09				-226.12	-293.01	-364.11
5/3/99	-290.04	-280.15	-251.35				-224.72	-291.56	-365.59
5/4/99	-292.46	-282.05	-253.33				-224.27	-292.98	-370.48
5/5/99	-294.07	-283.95	-255.66				-221.66	-295.09	-369.7
5/6/99	-294.64	-285.26	-257.53				-217.88	-293.39	-367.71
5/7/99	-295.44	-286.52	-259.1				-214.13	-291.76	-367.29
5/8/99	-296.15	-287.82	-260.92				-211.62	-289.84	-365.43
5/9/99	-296.78	-288.96	-262.57				-210.82	-288.28	-364.63
5/10/99	-297.75	-290.21	-264.35				-211.43	-287.91	-364.33
5/11/99	-298.78	-291.35	-266.02				-213.08	-288.81	-366.11
5/12/99	-300.11	-292.99	-267.69				-216.13	-291.26	-368.35
5/13/99	-301.16	-294.48	-270.19				-216.97	-291.77	-367.62
5/14/99	-301.78	-295.33	-270.92				-216.25	-291.12	-365.23
5/15/99	-302.4	-296.23	-272.28				-216.41	-291.05	-366.12
5/16/99	-303.29	-297.37	-273.64				-216.87	-291.79	-366.42
5/17/99	-303.65	-298.19	-274.75				-216.93	-291.74	-365.1
5/18/99	-303.5	-298.59	-275.53	-112.62			-216.11	-290.47	-363.3
5/19/99	-303.99	-299.22	-276.27	-103.97	-151	-190	-218.54	-288.42	-363.23
5/20/99	-304.74	-300.08	-277.33	-79.387			-199.46	-276.62	-360.46
5/21/99	-304.45	-300.33	-278.04	-75.157			-188.07	-270.03	-356.76
5/22/99	-304.48	-300.54	-278.45	-66.604			-185.37	-267.27	-355.94
5/23/99	-304.11	-300.25	-278.23	-63.44			-179.82	-262.27	-354.26
5/24/99	-301.3	-297.57	-275.33	-58.497			-169.9	-251.84	-349.68
5/25/99	-302.95	-298.35	-275.35	-46.464			-137.33	-231.25	-345.07
5/26/99	-297.5	-294.69	-272.14	-37.701	-56	-90	-90.098	-202.57	-338.15
5/27/99	-294.91	-291.78	-268.58	-40.505			-96.576	-200.66	-335.34
5/28/99	-294.16	-290.28	-266.46	-43.102			-115.62	-210.53	-338.97

5/29/99	-293.2	-289.44	-265.59	-43.611			-83.128	-195.09	-335.15
5/30/99	-291.92	-288.8	-265.74	-40.401			-64.159	-180.16	-329.99
5/31/99	-290.68	-288.29	-266.29	-37.482			-58.68	-174.15	-325.4
6/1/99	-291.12	-289.05	-267.61	-36.264			-60.657	-175.19	-325.07
6/2/99	-293.01	-290.98	-269.68	-36.606			-66.454	-179.1	-327.58
6/3/99	-295.68	-293.62	-272.3	-39.329			-77.215	-187.76	-332.38
6/4/99	-297.8	-295.53	-273.84	-40.469			-81.313	-192.94	-336.19
6/5/99	-299.17	-296.83	-275.15	-41.596			-86.421	-199.07	-338.67
6/6/99	-300.56	-298.6	-277.24	-42.488			-88.837	-203.41	-339.22
6/7/99	-301.33	-299.7	-278.46	-43.818			-103.89	-209.58	-340.21
6/8/99	-303.24	-301.38	-279.71	-45.717			-122.42	-220.83	-344.5
6/9/99	-304.84	-302.74	-280.94	-48.122	-97	-125	-140.99	-233.69	-349.24
6/10/99	-306.34	-304.03	-282.16	-50.744			-156.91	-245.07	-354.95
6/11/99	-307.51	-305.27	-283.32	-53.6			-169.69	-254.51	-358.95
6/12/99	-308.36	-306.27	-284.52	-61.021	-128	-165	-179.83	-263.04	-355.73
6/13/99	-309.1	-306.57	-285.43	-59.024	-129	-169	-191.72	-269.28	-352.77
6/14/99	-312.74	-306.08	-285.58	-67.05	-134	-176	-199.01	-273.56	-355.26
6/15/99	-310.66	-306.61	-286.12	-105.09			-201.59	-276.97	-357.11
6/16/99	-310.67	-307.22	-286.91	-111.58			-203.05	-279.3	-355.54
6/17/99	-309.27	-306.82	-287.24	-112.86	-138	-179	-205.5	-281.07	-353.06
6/18/99	-307.81	-307.69	-288.09	-110.33			-202	-277.05	-350.24
6/19/99	-307.28	-305.86	-288.26	-102.15			-191.13	-266.94	-348.08
6/20/99	-306.18	-305.23	-288.11	-100.35	-130	-151	-186.86	-263.48	-350.1
6/21/99	-307.95	-304.34	-287.83	-97.692			-187.96	-261.92	-351.21
6/22/99	-306.05	-304.83	-288.05	-94.083	-127	-162	-189.41	-265.39	-354.2
6/23/99	-308	-305.65	-289.2	-95.7	-131	-166	-195	-267.4	-355.51
6/24/99	-309.96	-307.49	-290.18	-97.127			-203.99	-269.85	-355.29
6/25/99	-311.17	-308.14	-290.58	-99.018			-207.21	-272.82	-358.96
6/26/99	-312.34	-309.08	-291.32	-101.88			-211.61	-276.13	-360.27
6/27/99	-312.88	-309.54	-291.76	-105.35			-215.05	-278.89	-361.6
6/28/99	-312.74	-309.26	-290.72	-108.71			-217.88	-280.48	-361.74
6/29/99	-313.1	-308.04	-287.21	-111.71			-220.14	-282.12	-365.72
6/30/99	-312.93	-306.37	-283.26	-114.06			-222.21	-284.11	-368.89
7/1/99	-310.32	-302.72	-278.38	-116.17			-224.21	-286.62	-370.46
7/2/99	-306.86	-298.3	-273.03	-118.21			-226.04	-289.07	-372.47
7/3/99	-303.07	-294.05	-268.28	-120.1			-227.97	-291.1	-372.44
7/4/99	-298.82	-289.69	-263.63	-122.18			-229.37	-291.76	-369.92
7/5/99	-294.85	-285.38	-259.22	-124.26			-229.38	-291.56	-369.06
7/6/99	-291.5	-281.43	-254.87	-125.86			-228.71	-290.75	-367.04
7/7/99	-288.31	-278.26	-251.62	-126.8			-227.7	-287.84	-362.22
7/8/99	-287.32	-277.18	-250.57	-127.55			-227.41	-286	-360.1
7/9/99	-287.89	-277.51	-250.89	-128.36			-227.69	-285.85	-361.39
7/10/99	-287.84	-277.28	-250.59	-129			-227.51	-286.22	-360.13
7/11/99	-285.88	-276.09	-249.83	-128.38			-225.54	-283.45	-356.07
7/12/99	-284.43	-274.82	-248.74	-129.4			-227.64	-282.72	-355.08
7/13/99	-283.61	-273.76	-247.56	-130.23			-227.86	-283.66	-357.55
7/14/99	-283.44	-273.14	-246.97	-131.55			-229.96	-285.4	-360.09
7/15/99	-285.15	-274.51	-248.31	-133.6			-230.47	-287.52	-362.73
7/16/99	-289.27	-278.98	-252.78	-134.83			-231.85	-289.7	-364.75
7/17/99	-291.11	-281.42	-256.59	-135.98			-232.33	-290.15	-363.74
7/18/99	-289.1	-280.76	-256.75	-136.2			-229.93	-286.92	-355.95
7/19/99	-282.78	-274.3	-249.57	-134.19			-223.37	-280.82	-349.55
7/20/99	-280.54	-270.71	-244.5	-127.19			-219.57	-279.92	-353.63
7/21/99	-279.43	-269.4	-243.85	-122.93			-218.28	-280.12	-354.44
7/22/99	-278.5	-269.31	-245.11	-120.61	-151	-184	-217.7	-278.39	-350.74
7/23/99	-279.87	-271.98	-248.35	-120.01			-220.13	-277.53	-351.22
7/24/99	-283.08	-276.1	-252.08	-122.26			-223.57	-278.71	-352.37
7/25/99	-286.36	-279.55	-255.63	-125.86			-227.28	-280.62	-354.6
7/26/99	-288.74	-282.36	-258.69	-132.27			-231.02	-282.7	-354.84
7/27/99	-291.44	-284.91	-261.33	-136.9			-233.42	-285.01	-358.66
7/28/99	-294.53	-287.8	-264.23	-139.64			-235.72	-287.97	-361.78
7/29/99	-297.28	-290.58	-266.71	-141.24			-237.11	-289.68	-364.41
7/30/99	-299.69	-293.23	-269.23	-144.17			-241.45	-290.95	-365.42
7/31/99	-301.61	-295.54	-272.22	-148.34			-244.28	-292.97	-365.9
8/1/99	-301.47	-296.66	-274.86	-151.53			-244.16	-292.81	-360.6
8/2/99	-303.28	-298.11	-276.75	-152.23			-245.65	-294.36	-366.03
8/3/99	-304.36	-299.39	-278.21	-150.28			-243.25	-294.86	-365.32

8/4/99	-302.63	-298.96	-278.67	-132.05			-232.79	-290.29	-359.46
8/5/99	-301.36	-298.35	-278.67	-76.479			-191.71	-268.61	-353.62
8/6/99	-300.59	-297.83	-278.73	-31.329			-140.7	-252.46	-348.33
8/7/99	-300.87	-298.06	-279.07	-55.628			-140.71	-252.88	-347.66
8/8/99	-302.39	-299.31	-280.02	-68.975			-160.9	-258.17	-349.65
8/9/99	-302.5	-299.69	-280.43	-76.827			-170.77	-259.24	-345.6
8/10/99	-301.29	-299.1	-280.43	-77.688			-172.44	-253.61	-337.59
8/11/99	-299.92	-298.36	-280.54	-44.696			-143.34	-237.25	-330.63
8/12/99	-297.88	-297.08	-280.18	-44.053			-121.69	-222.03	-324.22
8/13/99	-299.22	-297.97	-280.74	-53.008			-142.22	-228.07	-325.29
8/14/99	-301.07	-298.26	-281.43	-63.136			-154.96	-233.01	-328.7
8/15/99	-302.26	-298.82	-282.51	-78.567			-166.29	-239.51	-330.28
8/16/99	-301.41	-298.92	-283.1	-87.11			-174.42	-244.27	-329.69
8/17/99	-301.8	-299.55	-283.55	-91.793			-179.69	-248.33	-331.8
8/18/99	-301.59	-300.81	-283.86	-97.232			-184.95	-252.66	-336.64
8/19/99	-303.28	-301.9	-284.66	-100.97			-189.76	-256.3	-337.49
8/20/99	-304	-301.63	-285.08	-105.3			-193.58	-259.47	-339.12
8/21/99	-302.12	-302.38	-285	-110.8			-198.07	-261.59	-341.07
8/22/99	-302.44	-302.78	-285.38	-115.21			-202.11	-264.42	-340.35
8/23/99	-302.57	-302.36	-285.33	-117.77			-205.2	-266.41	-339.04
8/24/99	-302.16	-302.35	-285.56	-119.77			-207.79	-268.2	-339.22
8/25/99	-301.7	-303.13	-286.11	-123.05			-210.17	-270.13	-342.77
8/26/99	-302.44	-303.93	-286.56	-125.3			-212.31	-272.24	-344.64
8/27/99	-304.6	-304.43	-287.75	-129.3	-147	-185	-212.86	-275	-345.5
8/28/99	-304.69	-305	-288.29	-128.91			-216.77	-278.97	
8/29/99	-303.5	-305	-288.49	-130.21			-215.53	-277.41	
8/30/99	-303.72	-306	-289.12	-131.67			-217.03	-278.16	
8/31/99	-304.1	-306	-289.33	-133.13			-217.75	-278.34	
9/1/99	-304.05	-307	-289.69	-133.91			-219.1	-278.95	
9/2/99	-304.34	-308	-289.77	-134.98			-221.05	-279.81	
9/3/99	-304.31	-309.13	-289.85	-136.82			-221.49	-280.16	
9/4/99	-302.52	-307.81	-289.39	-137.92			-221.18	-278.66	
9/5/99	-301.47	-306.22	-289.12	-138.85			-220.14	-277.84	
9/6/99	-301.35	-304.64	-288.54	-138.94			-218.64	-277.61	
9/7/99	-302.82	-305.29	-288.83	-139.35			-221.16	-278.37	
9/8/99	-303.85	-306.45	-289.84	-140.46			-223.78	-280.17	
9/9/99	-304.82	-307.14	-290.36	-141.81			-224.8	-281.46	
9/10/99	-305.24	-307.89	-290.15	-143.04			-225.23	-281.98	
9/11/99	-306.41	-308.67	-290.61	-144			-226.51	-283.32	
9/12/99	-307.65	-309.76	-292.02	-145.11			-228.44	-285.36	
9/13/99	-307.06	-309.47	-292.74	-145.99			-228.38	-285.96	
9/14/99	-306.78	-308.54	-291.7	-146.27			-226.97	-285.55	
9/15/99	-306.52	-307.85	-291.48	-146.25			-226.37	-285.82	
9/16/99	-307.27	-308.1	-291.82	-145.96			-226.63	-286.8	
9/17/99	-308.3	-308.05	-291.92	-145.16			-224.8	-286.48	
9/18/99	-308.39	-305.47	-289.55	-143.53			-223.01	-283.4	
9/19/99	-309.45	-304.69	-287.99	-143.06			-222.12	-281.57	
9/20/99	-307.96	-303.55	-287.4	-142.71			-221.67	-280.43	
9/21/99	-309.07	-303.42	-287.56	-142.64			-221.82	-281.18	
9/22/99	-308.8	-302.78	-287.58	-142			-222.61	-282.3	
9/23/99	-306.48	-302.68	-287.05	-142			-223.07	-282.96	
9/24/99	-306.62	-304.01	-286.48	-141.75			-221.61	-281.87	
9/25/99	-307.12	-306.24	-287.13	-140.11	-157	-191	-220.63	-282.62	-383
9/26/99	-308.11	-306.37	-287.15	-139.51			-221.3	-283.65	
9/27/99	-307.78	-306.1	-286.89	-141.89			-223.17	-284.57	
9/28/99	-309.75	-306.87	-287.24	-145.57			-226.09	-287.28	
9/29/99	-309.89	-306.5	-287.01	-149.4			-227.75	-288.72	
9/30/99	-310.12	-305.48	-286.53	-151.93			-229.06	-289.15	
10/1/99	-310.29	-304.93	-286.03	-153.55			-230.05	-289.06	
10/2/99	-311.24	-305.63	-285.89	-155.6			-231.77	-290.91	
10/3/99	-310.45	-301.59	-281.25	-157.1			-232.99	-291.81	
10/4/99	-307.56	-295.87	-275.64	-159.32			-233.67	-291.42	
10/5/99	-303.35	-291.63	-270.83	-161.23			-233.66	-290.09	
10/6/99	-296.08	-288.65	-267.97	-163.74			-234.98	-289.78	
10/7/99	-297.54	-287.45	-266.04	-166.43			-236.6	-290.94	
10/8/99	-301.07	-287.29	-263.93	-168.86			-237.85	-293.61	
10/9/99	-298.89	-284.87	-261.23	-169.87			-238.37	-294.83	

10/10/99	-295.9	-284.66	-259.98	-169.64			-238.56	-295.34	
10/11/99	-296.52	-284.04	-259.39	-169.84			-238.43	-295.16	
10/12/99	-295.51	-282.2	-258	-169.87			-238.15	-294.63	
10/13/99	-294.41	-280.6	-255.88	-169.15			-237.92	-294.16	
10/14/99	-290.84	-277.71	-253.07	-169.31			-237.68	-292.63	
10/15/99	-287.9	-275.97	-250.11	-170.41			-237.36	-291.18	
10/16/99	-285.79	-274.48	-247.17	-170.17	-185	-213	-237.76	-292.2	-371
10/17/99	-283.48	-271.83	-244.32	-168.37			-236.5	-291.5	
10/18/99	-280.21	-268.55	-241.01	-168.86			-233.11	-287.7	
10/19/99	-277.53	-265.65	-238.33	-166.47			-229.87	-284.67	
10/20/99	-273.94	-263.09	-235.54	-158.1			-225.37	-282.46	
10/21/99	-271.75	-261.23	-233.21	-152.1			-222.73	-280.99	
10/22/99	-270.86	-259.48	-231.02	-148.47			-220.95	-279.62	
10/23/99	-269.32	-257.44	-228.42	-147.17			-219.7	-278.4	
10/24/99	-267.58	-255.42	-225.87	-146.33			-218.78	-277.47	
10/25/99	-266.58	-253.67	-223.47	-146.69			-218.88	-277.47	
10/26/99	-266.33	-252.3	-221.3	-147.27			-219.62	-278.5	
10/27/99	-266.92	-249.76	-219.65	-149.66			-221.34	-279.95	
10/28/99	-266.1	-249.06	-218.2	-150.72			-222.85	-279.9	
10/29/99	-265.47	-241.47	-217.48	-151.25			-224.03	-280.5	
10/30/99	-264.66	-238.67	-212.69	-154.87	-171	-200	-225.18	-281.37	-341
10/31/99	-261.85	-235.94	-210.03	-156.59			-224.11	-277.95	
11/1/99	-259.33	-232.91	-206.48	-157.88			-223.09	-275.5	
11/2/99	-256.06	-230.17	-204.27	-152.7			-219.89	-273.05	
11/3/99	-254.65	-228.2	-201.75	-140.76			-216.15	-272.39	
11/4/99	-253.8	-226.75	-199.71	-136.19			-214.7	-272.17	
11/5/99	-253.09	-225.88	-198.66	-135.71			-214.28	-272.45	
11/6/99	-251.14	-225.41	-199.68	-135.76			-213.55	-271.58	
11/7/99	-249.45	-223.56	-197.67	-134.66			-212.45	-270.47	
11/8/99	-248.22	-221.99	-195.76	-133.99			-211.65	-269.56	
11/9/99	-247.83	-220.98	-194.13	-133.36			-211.65	-270.7	
11/10/99	-247.13	-219.96	-192.8	-134.03			-211.64	-271.39	
11/11/99	-246	-218.7	-191.4	-133.73			-211.48	-271.29	
11/12/99	-245.02	-217.98	-190.93	-133.54			-211.42	-271.18	
11/13/99	-244.98	-218.6	-192.23	-134.01			-211.8	-271.4	
11/14/99	-246.61	-220.29	-193.97	-134.99			-212.55	-272.28	
11/15/99	-246.48	-220.36	-194.24	-134.66			-212.59	-272.63	
11/16/99	-245.67	-219.53	-193.4	-134.21			-212.63	-272.65	
11/17/99	-246.14	-219.26	-192.39	-133.67			-212.51	-272.73	
11/18/99	-246.69	-219.47	-192.25	-134.2			-212.68	-273.27	
11/19/99	-249.49	-221.5	-193.52	-135.38			-212.65	-273.41	
11/20/99	-246.02	-220.32	-194.63	-132.34			-210.72	-270.36	
11/21/99	-244.15	-221.08	-198.01	-131.92			-210.86	-270.53	
11/22/99	-246.2	-223.89	-201.58	-134.09			-212.63	-273.02	
11/23/99	-248.03	-226.09	-204.14	-135.31			-213.78	-274.89	
11/24/99	-246.03	-225.69	-205.35	-132.74			-213.27	-275.15	
11/25/99	-246.95	-226.55	-206.14	-131.28			-213.14	-275.18	
11/26/99	-246.4	-226.33	-206.26	-130.44			-213.04	-275.25	
11/27/99	-246.17	-226.22	-206.26	-131.84			-213.35	-275.6	
11/28/99	-248.06	-227.17	-206.29	-133.85			-213.6	-275.76	
11/29/99	-249.16	-227.44	-205.73	-133.4			-213.13	-275.38	
11/30/99	-248.3	-226.25	-204.21	-131.31			-212.3	-274.39	
12/1/99	-243.25	-222.86	-202.46	-130.37			-211.13	-272.68	
12/2/99	-241.99	-221.53	-201.07	-130.58			-210.93	-272.36	
12/3/99	-246.9	-223.6	-200.29	-132.03			-210.97	-272.34	
12/4/99	-253.21	-227.25	-201.29	-131.36			-211.06	-274.07	
12/5/99	-249.85	-225.42	-200.98	-129.06			-210.3	-273.81	
12/6/99	-247.1	-223.53	-199.95	-125.8			-209.49	-273.22	
12/7/99	-246.28	-222.8	-199.32	-124.1			-209.2	-272.81	
12/8/99	-247.85	-223.65	-199.44	-124.96			-209.56	-273.43	
12/9/99	-251.9	-226.41	-200.92	-127.33			-210.46	-274.88	
12/10/99	-245.91	-223.19	-200.46	-128.43			-210.96	-274.38	
12/11/99	-247.63	-224.39	-201.15	-131.3			-212.02	-275.14	
12/12/99	-249.76	-225.89	-202.02	-134.29			-213.31	-276.77	
12/13/99	-246.25	-223.78	-201.31	-133.32			-213.19	-276.56	
12/14/99	-249.66	-225.8	-201.94	-134.86			-213.77	-277.29	
12/15/99	-249.19	-225.76	-202.32	-135.93			-214.26	-277.98	

12/16/99	-246.15	-223.57	-200.99	-134.01			-214.11	-277.79	
12/17/99	-246.47	-223.2	-199.93	-134.86			-214.67	-277.97	
12/18/99	-245.35	-221.95	-198.55	-135.9			-214.41	-277.55	
12/19/99	-245.16	-227.06	-198.88	-136.67	-151	-184	-211.71	-276.93	-356
12/20/99	-245.55	-226.52	-198.42	-138.76			-211.09	-276.91	
12/21/99	-244.98	-225.83	-197.62	-138.45			-210.79	-276.5	
12/22/99	-244.7	-225.53	-197.5	-137.05			-210.61	-275.64	
12/23/99	-244.54	-225.32	-197.24	-136.81			-210.36	-275.68	
12/24/99	-244.2	-224.9	-196.6	-136.74			-209.96	-275.45	
12/25/99	-243.91	-224.66	-196.27	-136.26			-209.85	-275.56	
12/26/99	-243.66	-224.54	-196.21	-136.45			-209.01	-274.89	
12/27/99	-243.5	-224.37	-195.95	-136.95			-209.32	-274.93	
12/28/99	-243.39	-224.29	-195.82	-137.01			-209.29	-274.83	
12/29/99	-242.89	-223.92	-195.27	-135.69			-208.67	-274.41	
12/30/99	-243.26	-224.18	-195.67	-137.05			-208.89	-274.54	
12/31/99	-243.3	-224.38	-196.04	-136.37			-208.74	-274.46	
1/1/00	-243.83	-224.59	-196.32	-134.95			-208.39	-274.29	
1/2/00	-244.79	-225.81	-197.89	-135.1			-208.58	-274.62	
1/3/00	-248.16	-228.47	-201.25	-134.85			-209.55	-275.4	
1/4/00	-249.58	-231.5	-204.96	-135.39			-210.33	-276.23	
1/5/00	-250.32	-232.86	-206.3	-134.76			-210.35	-276.35	
1/6/00	-252.04	-234.37	-208.11	-135.24			-211.64	-277.34	
1/7/00	-251.95	-235.13	-208.97	-135.81			-211.72	-277.73	
1/8/00	-252.1	-235.25	-209	-133.9			-211.53	-277.66	
1/9/00	-252.93	-235.5	-209.19	-134.7			-212.23	-277.94	
1/10/00	-252.95	-235.63	-209.2	-136.05			-212.7	-278.34	
1/11/00	-252.76	-235.55	-209.08	-135.17			-212.31	-278.37	
1/12/00	-253.3	-235.74	-209.45	-133.97			-212.02	-278.17	
1/13/00	-255.12	-236.3	-210.27	-134.2			-212.39	-278.36	
1/14/00	-253.05	-236.37	-210.29	-133.95			-211.86	-278.11	
1/15/00	-249.26	-236.09	-209.83	-132.98			-211.32	-277.79	
1/16/00	-248.55	-235.92	-209.71	-132.55			-211.15	-277.68	
1/17/00	-251.62	-235.96	-209.81	-132.54			-210.93	-277.57	
1/18/00	-252.67	-235.93	-209.76	-132.18			-210.54	-277.36	
1/19/00	-252.75	-235.19	-208.92	-130.83			-209.95	-276.91	
1/20/00	-252.38	-234.47	-208.09	-130.2			-209.6	-276.49	
1/21/00	-251.17	-233.33	-206.68	-129.95			-209.25	-275.95	
1/22/00	-251.94	-232.5	-205.58	-130.91			-209.2	-275.68	
1/23/00	-250.97	-231.73	-204.84	-131.27			-209.15	-275.48	
1/24/00	-248.65	-230.8	-203.62	-130.62			-208.4	-274.95	
1/25/00	-248.35	-230.06	-202.74	-129.52			-207.68	-274.42	
1/26/00	-247.23	-229.18	-201.64	-127.82			-206.82	-273.8	
1/27/00	-250.63	-229.46	-202.17	-128.49			-206.84	-273.88	
1/28/00	-249.7	-231.3	-204.68	-127.77			-206.47	-273.78	
1/29/00	-252.58	-233.79	-207.58	-126.23			-206.37	-274.09	
1/30/00	-253.71	-234.55	-208.24	-124.93			-206.28	-274.26	
1/31/00	-254.52	-234.43	-207.99	-124.09			-206.17	-274.36	
2/1/00	-258.13	-234.69	-208.44	-124.04			-206.59	-274.7	
2/2/00	-259.27	-234.69	-208.39	-123.83			-206.73	-274.85	
2/3/00	-255	-234.15	-207.58	-122.91			-206.23	-274.48	
2/4/00	-254.14	-234.02	-207.42	-124.99			-207.12	-274.75	
2/5/00	-253.53	-233.91	-207.17	-127.38			-207.77	-275.1	
2/6/00	-255.41	-234.14	-207.48	-128.59			-208.24	-275.38	
2/7/00	-256.32	-234.58	-208.19	-128.71			-208.45	-275.61	
2/8/00	-253.94	-234.34	-207.77	-128.35			-208.01	-275.38	
2/9/00	-253.85	-233.59	-206.88	-126.94			-207.22	-274.76	
2/10/00	-256.13	-233.49	-206.89	-126.25			-207.05	-274.56	
2/11/00	-255.44	-233.67	-207.23	-125.62			-206.64	-274.48	
2/12/00	-252.71	-233.56	-207.17	-124.24			-205.9	-274.05	
2/13/00	-253.4	-234.03	-207.74	-123.73			-205.76	-274.02	
2/14/00	-253.25	-234.65	-208.52	-124.81			-206.45	-274.26	
2/15/00	-252.47	-234.72	-208.62	-126.19			-206.61	-274.38	
2/16/00	-253.74	-234.62	-208.49	-125.32			-205.82	-274.17	
2/17/00	-251.31	-234.14	-207.76	-122.77			-204.85	-273.67	
2/18/00	-257.41	-235.35	-209.37	-121.16			-204.99	-274.14	
2/19/00	-257.46	-236.21	-210.42	-120.05			-204.96	-274.32	
2/20/00	-251.89	-236.56	-210.62	-120.19			-204.97	-274.44	

2/21/00	-249.77	-236.86	-210.89	-120.36			-205.08	-274.59		
2/22/00	-253.07	-237.25	-211.43	-120.62			-205.31	-274.89		
2/23/00	-251.54	-237.65	-211.93	-120.82			-205.49	-275.11		
2/24/00	-250.02	-237.75	-211.98	-120.1			-205.26	-275.06		
2/25/00	-253.16	-238.48	-212.83	-120.76			-205.82	-275.68		
2/26/00	-256.97	-239.09	-213.67	-120.94			-206.32	-276.12		
2/27/00	-252.67	-238.88	-213.17	-121.33			-206.41	-276.1		
2/28/00	-250.38	-238.11	-212.19	-121.22			-206.03	-275.86		
2/29/00	-259.5	-238.99	-213.31	121	-141	-179	-207.5	-278	-357	
3/1/00		-238.89	-212.28	-121.09			-208.79	-276.32		
3/2/00		-236.33	-210.26	-124.46			-208.68	-273.82		
3/3/00		-234.01	-207.23	-129.16			-209.76	-273.95		
3/4/00		-231.97	-204.11	-130.04			-209.78	-274.8		
3/5/00		-230.39	-202.26	-131.26			-210.33	-274.96		
3/6/00		-229.64	-201.51	-133.86			-211.35	-275.31		
3/7/00		-227.7	-200.76	-135.63			-210.5	-271.89		
3/8/00		-227.55	-201.62	-138.38			-210.77	-271.31		
3/9/00		-225.98	-196.97	-138.83			-211.25	-272.97		
3/10/00		-219.68	-188.33	-139.31			-210.56	-271.47		
3/11/00		-213.74	-180.11	-141.87			-211.7	-272.83		
3/12/00		-204.56	-160.41	-142.54			-211.49	-273.46		
3/13/00		-186.64	-123.24	-143.68			-212.44	-273.69		
3/14/00		-162.18	-95.408	-146.68			-212.94	-273.4		
3/15/00		-141.92	-75.517	-149.25			-214	-273.75		
3/16/00		-108.64	-47.806	-152.5			-215.7	-275.07		
3/17/00		-65.7	-27.516	-155.26			-216.97	-276.08		
3/18/00		-35.905	-15.89	-158.16			-219.11	-278.11		
3/19/00		-21.859	-8.7697	-159.77			-220.44	-279.29		
3/20/00		-18.024	-6.8698	-158.43			-218.84	-278.93		
3/21/00		-12.678	-3.347	-153.08			-216.78	-278.39		
3/22/00		-8.5046	-0.7501	-139.61			-210.23	-273.45		
3/23/00		-19.567	-8.5821	-132.25			-205.96	-270.32		
3/24/00		-17.613	-7.1896	-127.76			-204.02	-269.37		
3/25/00		-13.683	-4.5834	-124.83			-202.7	-268.68		
3/26/00		-11.393	-3.1156	-123.31			-202	-267.82		
3/27/00		-9.8186	-2.0484	-121.8			-200.6	-266.98		
3/28/00		-11.252	-2.9835	-123.28			-201.85	-267.15		
3/29/00		-8.4257	-0.9531	-129.48			-204.88	-268.83		
3/30/00		-5.4368	1.1864	-133.36			-205.28	-268.59		
3/31/00		-4.8421	1.7275	-133.87			-204.62	-268.24		
4/1/00		-4.3439	2.1997	-134.75			-204.68	-268.23		
4/2/00		-3.8995	2.7791	-135.17			-204.24	-267.8		
4/3/00		-6.5842	0.3197	-124.61			-201	-266.48		
4/4/00		-19.951	-8.9478	-122.18			-201	-265.33		
4/5/00		-19.062	-7.5221	-126.25			-202.58	-265.87		
4/6/00		-9.001	-0.6466	-130.72			-204.61	-266.68		
4/7/00		-5.9589	1.5016	-135.87			-207.11	-268.84		
4/8/00		-6.3536	1.1204	-141.08			-209.61	-270.57		
4/9/00		-6.8827	0.9513	-143.05			-210.45	-271.03		
4/10/00		-7.0697	0.8718	-145.93			-211.75	-272.27		
4/11/00		-11.77	-2.5498	-149.35			-213.94	-274.48		
4/12/00		-16.847	-5.6861	-149.68			-213.47	-274.36		
4/13/00		-15.816	-4.7127	-149.3			-214.02	-274.3		
4/14/00		-16.404	-5.0528	-149.84			-215.58	-275.72		
4/15/00		-25.269	-10.956	-153.48			-217.14	-276.9		
4/16/00		-23.351	-9.3359	-155.2			-217.04	-275.32		
4/17/00		-16.824	-5.0757	-156.21			-216.49	-273.71		
4/18/00		-16.436	-4.7727	-155.87			-216.77	-275.03		
4/19/00		-17.622	-5.688	-155.93			-216.71	-275.17		
4/20/00		-31.625	-14.207	-155.45			-216.51	-275.56		
4/21/00		-36.313	-15.823	-152.78			-216.04	-275.86		
4/22/00		-22.432	-7.8858	-151.32			-216.91	-276.57		
4/23/00		-14.34	-2.8487	-152.24			-216.76	-276.46		
4/24/00		-6.3747	2.0656	-151.67			-215.19	-273.82		
4/25/00		-5.8761	2.3509	-148.9			-213.74	-273.38		
4/26/00		-6.3229	2.0125	-147.97			-214.67	-273.99		
4/27/00		-5.3375	2.8875	-149.34			-217.25	-276.29		

4/28/00	-5.8026	2.3907	-151.59			-219.01	-277.02	
4/29/00	-18.27	-6.2665	-154.44			-220.75	-278.16	
4/30/00	-38.655	-17.457	-157.95			-222.19	-279.16	
5/1/00	-71.202	-34.016	-158.87			-222.53	-278.73	
5/2/00	-96.957	-54	-158.05			-222.89	-278.87	
5/3/00	-105.35	-55.038	-159.16			-224.99	-280.62	
5/4/00	-90.804	-37.507	-161.13			-226.55	-281.69	
5/5/00	-79.135	-28.08	-162.2			-227.13	-282.05	
5/6/00	-72.435	-24.815	-162.71			-227.85	-282.52	
5/7/00	-79.344	-30.334	-163.17			-229.36	-283.27	
5/8/00	-83.854	-34.404	-164.39			-230.7	-283.22	
5/9/00	-108.22	-60.571	-166.28			-231.2	-283.59	
5/10/00	-120.32	-73.485	-164.16			-231.07	-283.38	
5/11/00	-133.74	-94.402	-163.72			-231.62	-283.68	
5/12/00	-148.52	-112.92	-167.41			-233.88	-284.51	
5/13/00	-162.09	-127.47	-168.93			-235.28	-285.65	
5/14/00	-173.41	-138.23	-167.14			-235.11	-286.2	
5/15/00	-180.28	-144.3	-166.58	-188	-214	-232.87	-285.02	-354
5/16/00								

Data for wells without Waterlogger sensors

Well: Date	CSC1	SB1	SB2	NCW2	NSC2	SCW0	SSC2	SSC4
9/8/98	-245.5			-255			-285	-272
9/10/98					-304			
9/11/98	-252							-274
9/15/99				-235				
9/20/98	-238			-231				
9/22/99				-222			-281	-268
9/25/98	-234							-268
10/3/98	-230			-206			-276	-262.5
11/1/98	-207			-203	-284		-235	-231
11/23/98	-186			-222	-276		-224	-231
12/18/98	-186			-196	-275		-221	-227
1/31/99	-164			-168	-265		-216	-225
2/5/99	-156				-263		-217	-223
2/19/99	-139	-255	-253		-365			
2/25/99				-201			-218	-220
2/27/99		-256	-258		-264			
3/26/99	-157						-213	-219
3/31/99		-245	-244	-184			-214	-219
4/15/99				-142				
4/22/99								
4/23/99						-306		-231
4/30/99	-154				-291		-232	
5/1/99		-246	-248	-236		-304		
5/13/99						-310		-220
5/19/99	-127				-260		-205	-104
5/26/99		-235	-237	-201	-157	-300	-93	
5/27/99	-55							-151
6/9/99	-101						-118	-193
6/12/99	-121			-270	-221		-181	-201
6/13/99	-126	-258	-262	-273		-313	-185	-205
6/14/99	-127	-260	-261	-274	-228	-312	-193	-211
6/17/99	-125				-223		-196	
6/18/99		-252	-252	-264		-303		-197
6/20/99	-116			-275	-211	-296	-177	-192
6/22/99	-115	-243	-244		-219		-178	-198
6/23/99	-117			-277	-221	-352	-184	-215
7/22/99	-129	-240	-241	-250	-236	-287	-202	-209
8/27/99	-126	-258	-259	-274	-228	-300	-203	-218
9/25/99	-126	-255	-257	-268	-237	-297	-209	-232
10/16/99	-154	-267	-269	-247	-259	-303	-230	-220
10/30/99	-145	-261	-262	-241	-252	-300	-200	-210
12/19/99	-132	-249	-251	-226	-261	-296	-202	-209
2/29/99	-140	-243	-246	-227	-255	-298	-198	-225
5/15/00	-158	-240	-242	-221	-280	-274	-230	

Appendix B.3 Neutron Probe Data

Appendix B.3.1. Water content calibration

Average Calibration curve - excluded Factory and SSC2T-jelle calibrations
constant: 0.350726
intercept: 0.032282
Average Calibration comes from a regression though the averaged volumetric water content points from the following other calibration curves in the Bosque sites: wells CSC2T, SSC3T, NCW3T & SCW2T

FACTORY CALIBRATION (from only 2 data points)

Standard count	11098	
count	ratio	vol% H2O
18864	1.699766	0.365
309	0.027843	0

Regression Output:

Constant	-0.006078
Std Err of Y Est	n/a
R Squared	1
No. of Observations	2
Degrees of Freedom	0
X Coefficient(s)	0.218312
Std Err of Coef.	n/a

Well CSC2T calibration; All data points used

Regression Output:

Constant	-0.046199
Std Err of Y Est	0.03956
R Squared	0.844298
No. of Observations	12
Degrees of Freedom	10
X Coefficient(s)	0.313315
Std Err of Coef.	0.042548

Well SSC2T calibration; All data points used
(obtained by Jelle Beekma)

Regression Output:

Constant	-0.063672
Std Err of Y Est	0.038622
R Squared	0.860573
No. of Observations	12
Degrees of Freedom	10
X Coefficient(s)	0.395397
Std Err of Coef.	0.050328

Well SSC2T calibration; All data points used
(obtained by Behnaum Moayyad)

Regression Output:

Constant	-0.025715
Std Err of Y Est	0.019147
R Squared	0.941279
No. of Observations	8
Degrees of Freedom	6
X Coefficient(s)	0.360703
Std Err of Coef.	0.03678

Well NCW3T calibration; All data points used

Regression Output:

Constant	-0.034014
Std Err of Y Est	0.058902
R Squared	0.6086
No. of Observations	10
Degrees of Freedom	8
X Coefficient(s)	0.306152
Std Err of Coef.	0.086803

Well NCW3T calibration; no topsoil data used

Regression Output:

Constant	-0.047908
Std Err of Y Est	0.040343
R Squared	0.792218
No. of Observations	9
Degrees of Freedom	7
X Coefficient(s)	0.307149
Std Err of Coef.	0.059454

SCW2T Well Calibration all points

Regression Output:

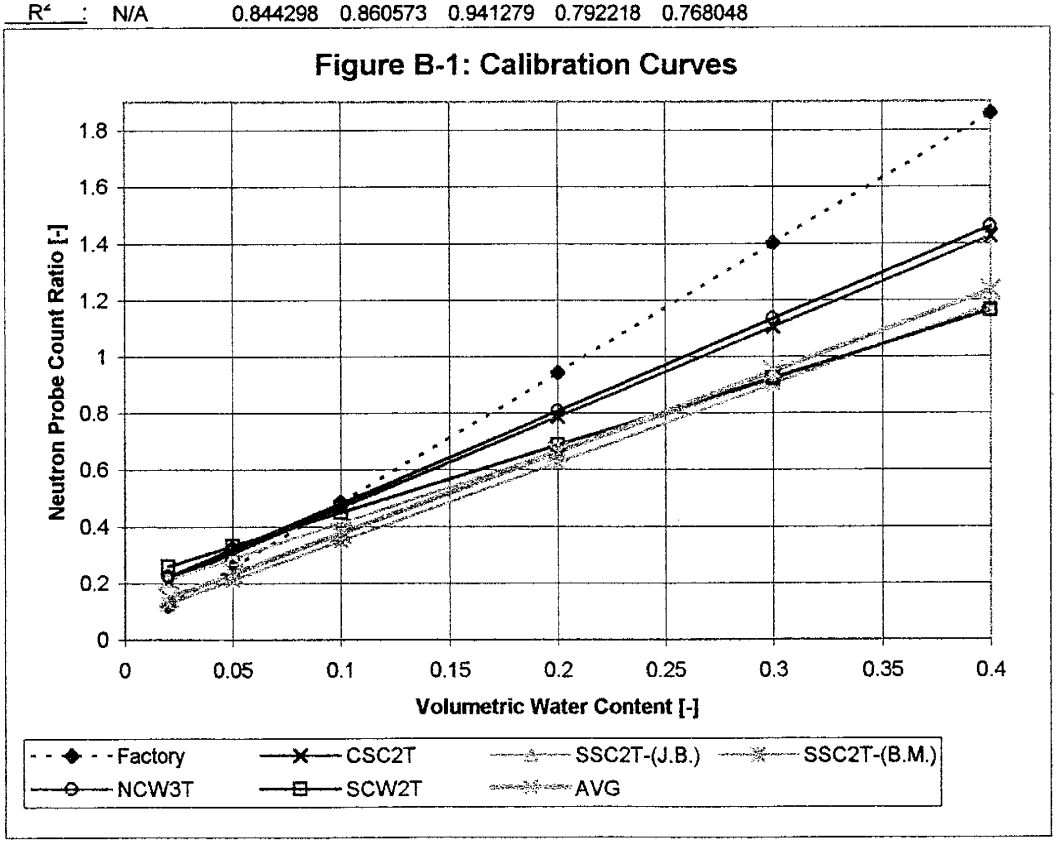
Constant	-0.089315
Std Err of Y Est	0.052898
R Squared	0.768048
No. of Observations	13
Degrees of Freedom	11
X Coefficient(s)	0.421736
Std Err of Coef.	0.069879

Los Alomos Labs Calibrations (Abeele 1978) for different access holes done on crushed tuff with Troxler Electronic Model 1255SN8835 probe
Theta = a + b(Ratio)

Casing	Hole Diameter (r	Diameter (inches)	a .	b .	r squared
Aluminum	0.051	2	-0.03	0.42	0.997
Aluminum	0.063	2&1/2	-0.03	0.444	0.995
Aluminum	0.076	3	-0.034	0.475	0.996
Uncased	0.051	2	-0.026	0.422	0.993
Uncased	0.06	2&1/2	-0.027	0.435	0.993
Uncased	0.063	2&1/3	-0.028	0.444	0.992
Uncased	0.076	3	-0.029	0.468	0.993
Uncased	0.102	4	-0.032	0.527	0.988
PVC	0.06	2&1/3	-0.053	0.686	0.994
PVC	0.113	4&1/2	-0.131	1.597	0.981
Iron	0.076	3	-0.045	0.648	0.991
Iron	0.102	4	-0.058	0.762	0.981

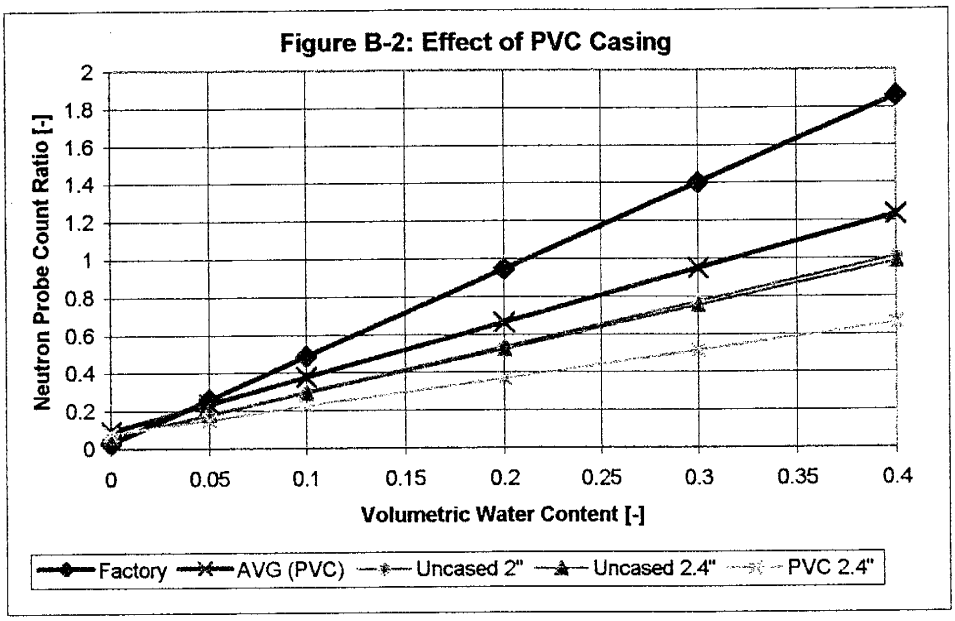
	COUNT RATIOS						Average excludes Factory & SSC2T-jelle calibrations
Theta	Factory	CSC2T	SSC2T-(J.I	SSC2T-(B.	NCW3T	SCW2T	AVG
0.02	0.119455	0.211286	0.21112	0.126725	0.221098	0.259191	0.149068
0.05	0.256873	0.307036	0.286883	0.209896	0.31877	0.330325	0.234605
0.1	0.485904	0.46662	0.413155	0.348514	0.481557	0.448883	0.377166
0.2	0.943965	0.785787	0.665699	0.62575	0.807132	0.685998	0.662289
0.3	1.402026	1.104955	0.918244	0.902987	1.132706	0.923113	0.947412
0.4	1.860087	1.424123	1.170788	1.180223	1.458281	1.160228	1.232535
R^2 :	N/A	0.844298	0.860573	0.941279	0.792218	0.768048	

Figure B-1: Calibration Curves



For 2 inch pipes

Theta	Sand Factory	Our Calibration AVG (PVC	Los Alamos Access Hole Calibrations (crushed Tuff) 2 inch Uncased 2'	2&1/3 inch Uncased 2.	2&1/3 inch PVC 2.4"
0	0.027843	0.092043	0.061611	0.062069	0.077259
0.05	0.256873	0.234605	0.180095	0.177011	0.150146
0.1	0.485904	0.377166	0.298578	0.291954	0.223032
0.2	0.943965	0.662289	0.535545	0.521839	0.368805
0.3	1.402026	0.947412	0.772512	0.751724	0.514577
0.4	1.860087	1.232535	1.009479	0.981609	0.66035



PVC Effect on Calibration Curve Theta=m*Ratio + b	Slope	Intercept	Difference in slope abslolute	%	Difference in intercept abslolute	%
Factory curve (2" Aluminum)	0.218	-0.00608				
Bosque AVG (2" PVC)	0.351	-0.0323	0.133	61.009	-0.02622	431.25
Los Alamos (2.4" Uncased)	0.435	-0.027				
Los Alamos (2.4" PVC)	0.686	-0.053	0.251	57.701	-0.026	96.296
*note: In the Los Alamos study calibrations for similar diameter holes are very similar						

Factory	0.218	61	-0.00608	Factory-Bosque
Bosque PVC	0.351	57.7	-0.0323	Los Alamos
Los Alamos	0.435		-0.027	
Los Alamos PVC	0.686		-0.053	

Appendix B.3.2. Soil moisture data

Well CSC2T Data

Theta = volumetric water content [-] AVG = average soil moisture

depth [cm]	9/11/98 Theta	9/25/98 Theta	11/1/98 Theta	11/29/98 Theta	12/17/98 Theta	2/19/99 Theta	3/26/99 Theta	5/19/99 Theta	6/9/99 Theta
-12	0.03541	0.03674	0.13697	0.05675	0.06509	0.08385	0.06245	0.05059	0.22471
-27	0.05254	0.05172	0.06842	0.05068	0.05095	0.06353	0.05418	0.05481	0.27477
-42	0.0542	0.05407	0.05372	0.05665	0.04855	0.05644	0.05276	0.05361	0.29093
-57	0.05619	0.05447	0.05226	0.06713	0.0564	0.04891	0.05799	0.06091	0.32487
-72	0.06268	0.06181	0.06143	0.07255	0.0682	0.05952	0.07149	0.07068	0.35007
-87	0.07264	0.06884	0.07015	0.09283	0.07215	0.07146	0.07501	0.08799	0.36296
-102	0.07895	0.07421	0.07328	0.11708	0.11356	0.11263	0.12061	0.1869	0.36994
-117	0.13042	0.122	0.11314	0.11766	0.12082	0.12377	0.13695	0.23166	0.36334
-125	0.14172	0.13498	0.12268	0.22365	0.15896	0.17297	0.24049	0.25459	0.38457
-147		0.16837	0.15999	0.29606	0.24263	0.26958	0.31078		
-170	0.23525	0.23356	0.2283	0.33333	0.29568				
-220	0.3099	0.30819	0.28663		0.32988				
-270	0.29909	0.30788	0.31956						
AvgProfile Moisture	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG
Top 25cm:	0.04458	0.04477	0.10025	0.0535	0.05752	0.07296	0.05802	0.05285	0.25153
Top 72cm:	0.0534	0.0529	0.07386	0.0617	0.05844	0.06272	0.06053	0.05914	0.29904
72cm to saturated:	0.24299	0.23538	0.22956	0.24646	0.24808	0.18343	0.21958	0.21845	0.4219
Profile to WL:	0.1878	0.18659	0.18753	0.16788	0.18572	0.12374	0.14125	0.12628	0.34933

depth [cm]	6/13/99 Theta	6/17/99 Theta	6/20/99 Theta	7/22/99 Theta	8/28/99 Theta	9/25/99 Theta	10/16/99 Theta	10/30/99 Theta	12/19/99 Theta
-12	0.19521	0.17483	0.17242	0.12973	0.17363	0.14047	0.12135	0.12222	0.12198
-27	0.22599	0.20483	0.19543	0.13615	0.19362	0.14272	0.12094	0.12424	0.12715
-42	0.23298	0.21762	0.2026	0.13691	0.20232	0.14399	0.1244	0.12209	0.1279
-57	0.26748	0.24816	0.23651	0.15984	0.23232	0.20272	0.14222	0.14262	0.15135
-72	0.26748	0.29031	0.28643	0.19356	0.2729	0.24653	0.17623	0.18017	0.18551
-87	0.3059	0.33171	0.32568	0.23433	0.31362	0.30571	0.21603	0.21212	0.22418
-102	0.34128	0.34271	0.34617	0.29919	0.34331	0.31339	0.278	0.28571	0.2834
-117	0.3478	0.33443	0.33577	0.30758	0.32885	0.3112	0.30002	0.2975	0.30602
-125	0.36269	0.35106	0.35555	0.32047	0.34957	0.33053	0.30533	0.3072	0.32224
-147				0.38128	0.38899	0.38507	0.38044	0.3834	0.38306
AvgProfile Moisture	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG
Top 25cm:	0.2117	0.1909	0.18475	0.13317	0.18434	0.14168	0.12113	0.1233	0.12475
Top 72cm:	0.24231	0.23176	0.223	0.15394	0.21909	0.17869	0.13937	0.14063	0.14534
72cm to saturated:	0.38621	0.38707	0.38842	0.35044	0.38829	0.37206	0.33704	0.33899	0.34616
Profile to WL:	0.30177	0.29621	0.29176	0.25331	0.30424	0.27639	0.23939	0.241	0.24697

Well SCW2T Data

depth [cm]	9/11/98 Theta	9/15/98 Theta	9/25/98 Theta	10/9/98 Theta	11/1/98 Theta	11/29/98 Theta	12/18/98 Theta	1/30/99 Theta	2/26/99 Theta	3/31 Theta
-20	0.13359	0.13394	0.1294	0.11911	0.20975	0.14574	0.17045	0.1635	0.16497	0.147
-35	0.14451	0.14117	0.14127	0.13886	0.17125	0.17178	0.10014	0.09677	0.09517	0.159
-50	0.08702	0.08519	0.08673	0.08151	0.10593	0.10637	0.05827	0.05676	0.0588	0.095
-65	0.06536	0.06716	0.06129	0.06173	0.0609	0.06264	0.048	0.04827	0.04787	0.067
-80	0.06074	0.05868	0.05424	0.05187	0.0508					
-95	0.05788	0.05692	0.0519	0.04923	0.0464	0.05085	0.0504	0.05086	0.0548	0.049
-103	0.05788	0.05468	0.05121	0.05255	0.05134					
-125			0.05014	0.04821	0.05385	0.05177	0.06189	0.06253	0.06197	0.053
-145	0.06829	0.06671	0.05895	0.05858	0.06811	0.05981	0.24742	0.25224	0.26155	0.216
-170			0.1836	0.18683	0.285	0.23736	0.1294	0.13486	0.13885	0.152
-195	0.11732	0.11426	0.10738	0.10878	0.12582	0.13122	0.20268	0.20445	0.21203	0.249
-216			0.12551	0.13941	0.21032	0.19622				
-245	0.18307	0.17278	0.19338	0.2262						
-270										
AvgProfile Moisture	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG
Top 35cm:	0.13827	0.13704	0.13449	0.12758	0.19325	0.1569	0.14032	0.1349	0.13506	0.152
35 to 125cm:	0.06659	0.06554	0.05917	0.05718	0.06173	0.06622	0.0554	0.05543	0.0565	0.065
125cm to saturated:	0.1268	0.12158	0.13688	0.14752	0.1778	0.16122	0.18929	0.19325	0.20004	0.205
Profile to WL:	0.09891	0.0961	0.09386	0.0974	0.12417	0.12166	0.12157	0.12259	0.12587	0.135

depth [cm]	5/13/99 Theta	5/25/99 Theta	6/13/99 Theta	6/18/99 Theta	7/23/99 Theta	8/29/99 Theta	9/24/99 Theta	10/15/99 Theta	10/29/99 Theta	##### Theta
-20	0.14576	0.15773	0.1398	0.13949	0.157	0.14704	0.13742	0.13993	0.14062	0.132
-35	0.08498	0.11174	0.08179	0.08321	0.09462	0.08502	0.08003	0.08067	0.08039	0.079
-50	0.06192	0.07165	0.05875	0.05792	0.06112	0.05548	0.04712	0.05659	0.05756	0.045
-65	0.04958	0.05376	0.04791	0.04665	0.04861	0.04572	0.04137	0.04678	0.04518	0.041
-80		0.0471	0.04443	0.0439	0.04775	0.04499	0.04383	0.04517	0.04383	0.042
-95	0.04705	0.04723	0.04657	0.04558	0.04493	0.0451	0.04414	0.04419	0.04442	0.042
-103		0.05125	0.05001	0.04823	0.04879	0.04938	0.04996	0.05091	0.04777	0.047
-125	0.05848	0.06259	0.0542	0.05853	0.05741	0.05631	0.05826	0.05992	0.05607	0.07
-145	0.20197	0.30508	0.2151	0.21381	0.22723	0.21316	0.21558	0.21888	0.22037	0.272
-170	0.12475	0.11888	0.10956	0.11073	0.10911	0.10627	0.10499	0.10656	0.13969	0.25
-195	0.14081	0.13922	0.12156	0.11956	0.16284	0.11679	0.11998	0.14059	0.25725	
-216	0.24392									
-245			0.22198	0.24976	0.23491	0.16606	0.16279	0.21145		
-270			0.34865	0.34047			0.26618	0.33873		
AvgProfile Moisture	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG
Top 35cm:	0.11971	0.13802	0.11494	0.11537	0.13027	0.12046	0.11283	0.11453	0.11481	0.109
35 to 125cm:	0.0547	0.07587	0.06802	0.06842	0.06999	0.06721	0.0646	0.0689	0.06687	0.067
125cm to saturated:	0.17659	0.17934	0.20288	0.20658	0.18122	0.14728	0.17217	0.20259	0.20472	0.26
Profile to WL:	0.12071	0.11182	0.13132	0.1333	0.11626	0.09945	0.11514	0.1314	0.11325	0.115

Well SSC3T Data

Depth [cm]	9/11/98 Theta	9/25/98 Theta	10/8/98 Theta	11/1/98 Theta	11/29/98 Theta	12/18/98 Theta	1/31/99 Theta	2/25/99 Theta	3/26/99 Theta	##### Theta
-17	0.06845	0.05722	0.05668	0.14989	0.08192	0.08176	0.09034	0.08336	0.08013	0.073
-32	0.09638	0.08183	0.07802	0.08345	0.08053	0.08278	0.08051	0.08459	0.07996	0.076
-47	0.09522	0.08361	0.0802	0.07689	0.08338	0.08425	0.07742	0.08113	0.08442	0.082
-62	0.10958	0.10225	0.09577	0.08024	0.1394	0.14498	0.09931	0.1448	0.15275	0.148
-77	0.20947	0.19933	0.19845	0.13591	0.24283	0.25239	0.20803	0.25333	0.25607	0.262
-92	0.25107	0.25049	0.25225	0.24023	0.25071	0.25464	0.26184	0.27132	0.27253	0.28
-100	0.24932	0.24912	0.24915	0.24759	0.25917	0.26052	0.25766	0.28103	0.28355	0.286
-125		0.24861	0.23935	0.2504	0.23998	0.25027	0.28625	0.26188	0.25674	0.261
-150	0.14318	0.13734	0.13318	0.21495	0.16623	0.18241	0.19321	0.2014	0.20208	0.198
-175		0.13484	0.13557	0.12892	0.23356	0.24337	0.20619	0.25347	0.25685	0.251
-200	0.26243	0.24905	0.24839	0.20064	0.29956			0.32593	0.31263	
-225		0.27479	0.27113	0.27895						
-250	0.27496	0.27982								
	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG
AvgProfile Moisture	0.08154	0.06876	0.06668	0.11874	0.08127	0.08224	0.08573	0.08394	0.08005	0.075
Top 32cm:	0.08722	0.07676	0.07333	0.08963	0.09056	0.09263	0.08118	0.0926	0.09353	0.089
Top 62cm:	0.22935	0.22262	0.21131	0.21147	0.23884	0.23532	0.23231	0.26221	0.26018	0.249
62cm to saturated:	0.18056	0.18736	0.1743	0.18056	0.19451	0.18663	0.18083	0.2113	0.21012	0.194
Profile to WL:										

Depth [cm]	6/9/99 Theta	6/13/99 Theta	6/17/99 Theta	6/20/99 Theta	7/22/99 Theta	8/28/99 Theta	9/25/99 Theta	10/16/99 Theta	10/30/99 Theta	##### Theta
-17	0.34245	0.30966	0.28716	0.24006	0.17576	0.26286	0.21372	0.17675	0.17352	0.159
-32	0.35246	0.32927	0.30976	0.27312	0.18423	0.2885	0.24032	0.19202	0.1875	0.176
-47	0.36209	0.34698	0.32795	0.29886	0.20483	0.31116	0.34072	0.30956	0.31149	0.291
-62	0.38274	0.37348	0.36836	0.32259	0.32057	0.36213	0.41042	0.40481	0.40247	0.395
-77	0.42267	0.42405	0.4193	0.36125	0.41064	0.41985	0.39355	0.39534	0.40367	0.395
-92	0.41713	0.41962	0.41366	0.41028	0.40934	0.41346	0.39348	0.37901	0.38648	0.383
-100	0.41259	0.40779	0.40295	0.41415	0.39138	0.39788	0.29565	0.28273	0.28785	0.305
-125		0.31692	0.30313	0.40254	0.27684	0.30947	0.29977	0.27005	0.28327	0.293
-150		0.35418	0.33711	0.29811	0.29366	0.32257	0.34463	0.31967	0.32819	0.333
-175					0.33428	0.33838	0.41188	0.36404	0.37628	
AvgProfile Moisture	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG
Top 32cm:	0.34714	0.31885	0.29776	0.25556	0.17973	0.27488	0.22619	0.18391	0.18007	0.167
Top 62cm:	0.33728	0.3189	0.30361	0.26676	0.20854	0.28781	0.28468	0.25635	0.25448	0.242
62cm to saturated:	0.41836	0.37153	0.3605	0.36821	0.33673	0.35348	0.35909	0.33381	0.34379	0.338
Profile to WL:	0.38179	0.35803	0.34464	0.33268	0.29533	0.33622	0.33762	0.31041	0.31612	0.302

Appendix B.4. Salinity Data

Groundwater Salinity (Total Dissolved Solids) Data — Data in units of parts per million

CCW=central saltcedar transect — CSC=central cottonwood transect — NCW=North cottonwood transect

NSC=North saltcedar transect — SCW=South cottonwood transect — SSC= South saltcedar transect

Well:					CCW	CCW	CCW				
Date	NCW0	NCW1	NCW2	NCW3T	shallow	mid	deep	SCW0	SCW1	SCW2T	SCW3
9/21/98		1018.6	719.32	737.64	830.6	891	2096.8		909.3	1004.3	881.5
10/3/98		689.46	587.67	546.95	629.74	696.24	1750.8		742.39	755.96	612.1
10/30/98		670.46	582.24	651.46	762.06	716.6	1777.9		759.35	1003.6	761.39
11/23/98		689.46	652.82	723.39	841.4	744.42	1818.6		801.43	777	683.35
12/18/98		803.46	834.68	965.65	898.46	874.04	1791.5		1093.2	1045.7	926.3
1/30/99		823.82	767.5	1026.7	936.4	843.5	1642.2		1027.4	1035.5	876.07
2/26/99		785.14	658.24	755.28	821.1	848.25	1513.3		990.76	997.5	788.53
3/31/99		886.93	597.17	635.85	846.89	894.39	1479.4		990.76	1004.3	831.96
5/1/99	834.68	654.85	578.17	603.28	812.96	839.43	1370.8	1005.7	874.04	941.22	770.89
5/25/99	806.86	690.14	546.27	549.67	896.43	820.43	1340.9	920.86	861.14	912.7	737.64
6/13/99	654.85	534.74	505.56	484.52	817.7	759.35	1245.2	810.25	830.6	836.04	646.03
6/14/99	667.74	543.56	515.74	483.16	793.9	729.5	1220.8	760.71	838.75	819.75	648.74
6/18/99	540.84	481.8	455.34	426.84	660.95	657.56		659.6	747.14	736.28	527.27
6/21/99	559.85	470.27	442.45	396.98	629.06	614.81	1072.2	435.66	760.03	712.53	580.88
7/23/99	804.14	601.92	614.81	597.85	876.07	886.93	1364	1065.4	1059.3	1038.3	825.86
8/29/99	918.15	618.2	627.71	616.17	858.4	870.64	1254.7	1084.4	1131.9	1100	950.04
9/25/99	934.43	609.38	614.81	605.31				1218.8	1167.9	1133.3	1128.5
10/29/99	920.18	641.28	618.88	601.24	815	850.96	1136.7	1157	1014.5	1072.2	806.18

SB=South Bosque weather station

Date	NSC0	NSC1	NSC2	NSC3	CSC0	CSC1	CSC2T	CSC3	RIVER	SB1	SB2
9/21/98		1018.6	719.32	737.64	500.13	716.6	1249.3	1349.1	416.66		
10/3/98		689.46	587.67	546.95	416.66	515.74	782.43	1079.7	597.17		
11/1/98		670.46	582.24	651.46	418.7	476.38	608.7	820.43	407.16		
11/23/98		689.46	652.81	723.39	441.77	399.02	616.17	755.96	335.91		
12/17/98		803.46	834.68	965.65	567.99	517.77	848.93	863.18	471.63		
1/31/99		823.82	767.5	1026.7	527.95	508.95	1060.7	641.96	386.8		
2/19/99		785.14	658.24	755.28	512.34	521.16	829.93	658.92	375.94	2924.8	1913.7
4/5/99		886.93	597.17	635.85	479.09	838.75	503.52	630.42	400.37	2789	1845.8
4/30/99	834.68	654.85	578.17	603.28	406.48	813.64	532.7	481.81	432.27	2361.5	1269
5/19/99					436.34	815			373.23		
5/27/99	806.86	690.14	546.27	549.67	407.16	651.46		470.27	272.8	2191.9	1052.5
6/12/99	654.85	534.74	505.56	484.52	367.8	576.81	422.09	347.44	230.05	1906.9	1255.4
6/14/99	667.74	543.56	515.74	483.16	375.94	605.31	1255.4	348.12	252.44	1832.2	1341.6
6/17/99					339.98	561.88	1133.3	414.62	234.12	1479.3	920.18
6/20/99	540.84	481.81	455.34	426.84	327.76	836.04	1192.3	429.55	199.51		
6/22/99	559.85	470.27	442.45	396.98	287.05	837.39	536.77	415.98	220.55	1737.2	809.57
7/22/99	804.14	601.92	614.81	597.85	373.91	1380.3	1574.4	715.24	446.52	2870.5	1459
8/27/99	918.15	618.2	627.71	616.17	675.89	1126.5	1321.2	758.67	272.8	2700.8	1292.7
9/25/99	934.43	609.38	614.81	605.31	335.91	1037.6	1832.2	734.25	313.51	1575	1243.9
10/30/99	920.18	641.28	618.88	601.24	323.01	595.13	1818.6	931.72	386.8	2266.5	1233

Date	SSC00	SSC0	SSC1	SSC2	SSC3T	SSC4	SSC5	SSC6
9/21/98			827.21	1319.2	1927.2	1146.8	788.53	
10/3/98			675.89	1112.9	1125.1	1026.7	669.78	
11/1/98			583.6	1350.4	761.39	1003.6	646.03	
11/23/98			523.2	881.5	823.14	1070.8	659.6	
12/17/98			604.63	1045	1181.4	1287.3	1010.4	
1/31/99		727.46	628.38	736.96	1034.2	774.28	1202.5	
2/19/99		834	681.99	872	897.79	952.08	1253.4	
4/5/99	462.13	926.29	848.93	799.39	960.9	888.29	1124.4	
4/30/99	445.16	840.79	844.86	844.86	902.54	902.54	931.04	712.53
5/19/99	429.55	448.55	918.82	926.97	880.14	1029.4	1012.5	741.71
5/27/99	421.41	424.8	950.04	739	743.07	466.88		649.42
6/12/99	371.19	392.91	1044.4	1079	694.21	405.12	323.69	604.63
6/14/99	380.69	407.16	1355.2	1102.7	707.1	421.41	436.34	601.24
6/17/99	357.62	380.69	1214	1043.7	1716.9	658.92	471.63	515.74
6/20/99	346.09	384.77	1125.1	1110.9	2470.1	538.13	552.38	471.63
6/22/99	452.63	675.89	985.33	1124.4	2422.6	456.02	526.59	414.62
7/22/99	477.73	441.77	1615.1	1662.6	1757.6	627.71	719.99	848.25
8/27/99	432.27	428.88	1587.9	977.18	1492.9	652.81	595.13	717.28
9/25/99	415.3	506.91	1506.5	1023.3	1334.1	631.78	544.92	689.46
10/30/99	407.16	443.8	1547.2	1326.7	1178.7	819.75	532.02	678.6

Soil Electrical Conductivity Data

Temperature Correction: $EC_{25degC} = F_T * EC_T$ $F_T = 0.4470 + 1.4034*\exp(-T/26.815)$

Units: dS/m V=vertical measuren H=horizontal measurements

Central Saltcedar Transect D= Distance along transect from West to East

DATE	9/9/98		11/29/98		1/16/99		2/26/99		4/5/99		6/13/99		6/22/99		7/22/99		8/28/99		9/25/99		10/30/99	
D [m]	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H
0	15.7	15.7	17.6	28.6	11	5.33	23.5	11.7			15	13.4	33.7	27.6	29.7	19.5	17.5	12.7	9.11	6.49	14.6	9.58
5	22.9	18.4	17.1	12.3	26.4	15.2	23.7	16.9	27.2	18.8	26.2	30.9	26.2	28.9	25.5	22.8	11.3	10.5	10.1	6.84	11.4	7.84
10	21.5	22	11.3	20.3	18.2	9.14	14.1	4.44	21.8	21.6	28.7	25.5	31.2	30.3	16.2	22.4	14.5	11.5	10.3	5.69	13.6	8.05
15	19.1	14.8	11.9	11.4	25	24.9	10.9	4.23	36.1	37.5	50	47	42.5	44.1	18.5	18.8	17.2	19.4	13.1	10.8	12.3	8.38
20	13.4	11.1	24.7	15.3	11.9	4.95	8.45	5.04	16.3	15.9	16.2	21.5	28.7	23.4	24.5	28.6	12.4	10.7	9.01	6.49	11.5	7.62
25	13.1	11.9	18.8	23.5	9.99	0.95			17.9	18.6	17.5	16.1	21.2	19.3	20	17.3	11.2	11.2	11.2	8.8	11.3	8.16
30	32.5	21.6																				
35			IRON BLOCKADE								IRON BLOCKADE				IRON BLOCKADE							
40	34	29.2																				
45	24.8	22.3			22.6	11.8	22.9	13.7			28.7	25.5	26.2	30.3	33.2	30.8	20.5	27	15.8	9.33	18.6	10.7
50	12.2	12.9	8.48	13.8	9.67	0.57	10.4	2.22	15	13.3	13.7	13.4	27.5	26.2	26.6	25.6	19.7	15.4	14	7.73	13.3	7.84
55	15.7	13.9	10.3	10.9	9.03	0.19			16.2	19.8	12.5	10.8	18.7	22.1	20.5	21.9	14.4	10.9	9.01	7.02	11.9	7.84
60	15.1	15.9	11.5	10.7	11.6	0.38	9.6	4.64	16.5	15.1	15	13.4	20	27.6	18.2	21.8	22.4	12	10.8	8.26	26.8	7.29
65	18.7	19.7							18	18.8	20	21.5	27.5	30.3	25.5	29	15.6	15.5	12	11	14.1	10.3
70	15.7	14.5	11.8	12.3	10.6	4.19	10.4	6.65			23.7	22.8	36.2	35.8	30.7	34.9	17.2	15.7	15.6	11.9	16.2	11.9
75	17	16.4	14.1	12.9	12.9	6.28	10.4	6.65	22.5	21.6	28.7	24.2	32.5	40	31.5	35.9	16.2	15.4	11.8	9.24	12.9	9.9
80	15.7	14.5	11	13.1	12.1	6.09	10.8	7.86	19.4	19.2	13.7	12.1	18.3	28.9	18.8	28.5	15.7	14.4	12.6	8.42	14	8.27
85	16	13.6	8.93	12.4	12.4	3.81	10.1	5.24			16.2	14.8	22	33.1	21.3	26.9	21.3	16.2	15.8	9.87	18.9	8.16
90	18.8	15.7	18.6	13.3	11.6	3.81	19.7	8.47	30	18.1	18.7	20.2	32.9	40	22.7	19.3	15.5	14.9	13.7	10.5	14.8	9.79
95	20.8	17.5			19.3	2.86	12.3	7.46	21.4	16.3	27.5	22.8	25.6	26.9	25.6	35.3	15.3	12	14.8	10.4	14.2	8.57
100	18.1	16.1	14.4	11.1	14	4.95	13.1	6.05	22	15.7	19.5	13.4	25	20.2	31.7	37.1	16.3	15.9	16.4	10.5	17.3	11.7
105	17.1	12.4	13.7	14.6	14.5	6.28					17.1	15.7	20.3	21.5	23.5	24.2	15.2	18	15.8	10.8	16.9	10.7
110	15.5	11.9	19.1	15.8	16.8	6.28	15.2	5.85	27	21.6	24.4	21	33.4	25.5	33.8	34.2	19.9	16.8	18	13.5	17.6	12.9
115	18.8	15.2	21.4	17	18.2	8.95	18	10.3			26.8	24.9	34.6	39	38.2	40.4	18.5	15.7	17.5	11.8	16.9	10.7
120	20.7	17.3	21.3	18.9	20.5	10.7	18.4	14.1	28.6	23.4	29.3	31.5	35.7	43	36.7	26.5	18.2	14.5	16.5	11.4	19.9	12.9
125	22.3	17.3	23.5	22.5	20.3	11.8	17.7	12.1	29.1	23.6	28.1	22.3	32.6	21	36.9	26	19.1	15	20.6	13.1	18.6	11.9
130	27.1	19.8																				
135	21.5	15.7			19.3	6.47	17.9	9.68														
140	26.9	20.6																				
145	24.9	19.8	38.8	37.8	24.2	12			40.6	28												
150	23.3	21	51.1	44.8	29.2	17.3	38.6	24.8	49.5	35.3	45.1	42	47.7	43.3	38.6	31.5	24.7	18.6	25	14.9	21.9	15.4
155	50.3	39.9	53.7	45.3	46.9	30.1	59.3	46	74.2	64.1	90.3	86.5	101	87	96.9	88.1	39.2	31.7	38.4	26.3	38.5	23.2
160	39.9	40.1	45.8	42.2	60.9	36.7	75.7	53.3	88.3	70.4	80.5	68.2	88.5	92.1	91.4	84.3	33.3	25.3	41.2	27.3	37.8	23.4
165	51.9	38.6	50.9	38.3	57.1	37.5			78	59.3	68.3	59	76.8	75.5	71.7	52.8	37.6	27.6	35.6	23.5	24.5	18.3
170	58.5	41.5	65.8	57.4	62	44.4	71.9	50.2	75.7	59.9	84.2	65.6	104	81.9	78.8	63.1	31	24.3	29.2	18.1	27.4	17.8
175	55.2	43.1	54.5	50.5			62.1	40	84.9	73.1	65.9	60.3	93.1	74.9	101	93.8	37	28	41.4	25.3	29.1	16.5
180	49.2	37.6			53.8	32.7	58	38.1			115	122	101	111	139	119	44.6	37.5	54.6	33.5	42	31.8
185	53.8	37.7	71	49	70.9	50.1	68.6	39	93.7	72.9	106	119	73.3	53.7	74.7	108	41	32.1	38.8	25.8	35.1	24.9
190	47	34.2			66.6	42.3	79.3	55	87.9	68.8	79.3	58.9	79.2	60	76.5	75.9	28.7	23.8	30.5	20.4	32.2	18.7
195	42	28.3	43.5	31.7	47.1	29.7	69.4	45	64.9	46.8	59.8	48.6	64	45.1	67	54	29.8	26.2	34.7	21.2	28.5	17.2

Centrar Saltcedar Transect D= Distance along transect from West to East

DATE	9/9/98		11/29/98		1/16/99		2/26/99		4/5/99		6/13/99		6/22/99		7/22/99		8/28/99		9/25/99		10/30/99	
D [m]	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H
200	36.2	25.6	33.9	45.3	39.2	23.4	42.4	24.1	55.9	39.6	41.5	33.3	50.1	39	48.5	41.3	26	20.7	29.6	19	26.8	17.6
205	44.8	34.5					52.7	35.1			65.9	44.8	65.2	57.3	51.9	58.3	38.4	31.3	46.6	33.2	44	31.1
210	45.9	46.1	52.4	40.7	47.1	30.5	56	41.4			84.2	71.7	74.5	72	64.4	92	43.7	35.2	46.8	32	41.8	31.6
215	46.2	38.5	52.7	40	46.6	34.5	66.7	47.3	71.4	62.4	106	98.5	100	87	105	100	48.1	43.4	49	39.5	43.2	30.4
220	53.4	48.8					55.3	28.5					93.3	84.6	94	89.5	38.5	40.2	36.6	25.9	46.4	36.2
225	43.5	46.1	39	40	50.9	36.7	65.2	37.6	79.1	63.1	80.5	80.6	77.4	63.1	70.9	55	30.8	23.4	29.8	23	31.7	20.8
230	25	25.2			45.3	30.3					64.6	56.2	62.6	56	60.6	57.3	30.4	22.1	28	22.8	34.8	23.4
235	33.9	25.8	44.7	28.8			51.1	29.4	83.8	59.9	80.5	77.4	63.7	71	62.5	71	27.1	24.6	26.9	20	30	18.5
240	32.1	26.2	36.2	21.8	43.5	29.1	62.7	40	81.6	62.1	81.7	88.7	89.9	87.3	66.8	65.7	27.4	26.3	28.6	20.6	27.4	19.9
245	29.9	23					52.1	30.3			64.6	53.7	67.1	66.4	60.9	53.8	26.3	18.7	27.4	17	28.2	18.9
250	29.5	21.5	32.3	20.8	35.3	23.4	55.1	33.4	62.9	51.1	57.3	42.5	55.8	51.2	38.9	55.6	29.5	23.4	28.2	20.8	25.4	16.2
255	31.6	24.6			41.3	26.5			62.1	47.2	65.9	43.7	63.7	50.1	46	52.9	32.4	33.4	31.6	26.1	25.6	17.8
260	32.2	23.7	37.5	25	40.3	27.6	58.3	34.3	62.9	49.7	68.3	52.5	61.5	51.2	46.4	52.7	30.7	29.5	33.3	27.7	27.5	19.1
265	34	27.3			54.3	35.4					65.9	47.6	68.3	45.5	51.8	52.5	34.6	28.1	37.5	25	28.7	19.9
270	33.2	25.3	39.1	26.7	48.7	31.4	55.3	28.7	61.8	59.6	59.8	54.9	63.7	42.1	55.6	52.2	33.2	23.6	28.5	23.1	28.5	18.2
275	34	23.7	41.2	27.1	52.5	32			47.4	30	57.3	41.5	50.1	51.2	48.6	47.1	31.4	23.9	28	20.9	27.2	15.5
280	27.2	21.5					34.8	20.6			59.8	48.8	54.6	41.2	46	45.8	25.9	22.7	28.5	19.9	23	13.2
285	26.3	21			36.4	30.6			49.1	28.8	45.1	41.5	46.7	35.6	46.7	42.9	26.4	25.4	29.2	19	21.2	13.7
290	25.6	16.4	39	22.5	36.6	15.8	36.9	11.5			48.8	36.6	47.8	38.9	44.5	36.3	26.8	19.4	28.3	17.4	13.9	11.9

Soil Electrical Conductivity Data

Temperature Correction: $EC_{25degC} = F_T * EC_T$ $F_T = 0.4470 + 1.4034*\exp(-T/26.815)$

Units: dS/m V=vertical measurements H=horizontal measurements

South Saltcedar Transect D= Distance along transect from West to East

DATE	9/5/98		11/29/98		1/16/99		2/26/99		4/5/99		6/13/99		6/22/99		7/22/99		8/28/99		9/25/99		10/30/99	
D [m]	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H
0	16	15.4	7.3	13.6	10.5	3.25	11.2	10.7	14.5	13.2	35.7	53.8	42.6	62.2	19.4	28.7	15.1	19.4	7.2	5.37	6	2.89
5	18.4	25.5	7.72	13.3	9.44	4.87	10.9	9.29			38.1	55.1	42.6	59.8	21.2	27.1	15.3	19.6	7.4	5.47	6.25	4.9
10	20.7	21.8			10.5	5.37	10.5	10.4	15.6	12.7	39.3	57.7	50.1	55	24.3	30.5	15.8	19.2	7.7	6.81	6.5	6.01
15	20.7	22.6	8.82	11.8	8	7.87	11.6	8.58	13.1	13.8	45.3	68.2	49	60	24.2	33.3	13.5	18.4	8.89	8.06	7.62	5.56
20	25	24.6			8.26	7	8.49	9.89	11.7	12.3	38.1	53.8	53.3	76.2	26.2	35.7	19.1	21.7	10.6	7.68	8.87	7.9
25	29.2	29.4	19.2	14.7	15.1	7.37	14.2	10.1	16.5	12.3	42.9	56.4	77.3	78.7	29.9	31.5	17.9	18.4	12.7	11.8	9.74	6.45
30	14.5	26.6							12.6	17	47.7	64.3	72.9	71.2	38.1	38.5	20	24.7	12.5	11.9	11.6	7.68
35	37.2	30.3	12.4	17.4	12.2	8.62	7.87	1.19	18.9	16.8	28.6	64.3	44.6	68.7	35.6	38.9	20.4	22.1	10.6	9.41	9.62	7.68
40	27.2	28.5			14.2	8.49	16	11.9			40.5	53.8	49	67.5	37.1	42.7	19.5	22.4	10.7	9.98	11.1	8.46
45	31.4	32.4							19.6	16	56	40.6	60.9	79.9	37.4	45.3	17	19.9	11.7	9.79	11.5	8.68
50	32.9	28.4			14.2	8.74	16.2	11.3	15.4	12.7	62	64.3	58.8	82.4	32.6	46.4	22.7	22.8	13.9	10.7	13.6	8.57
55	35	32.2	16.7	14.8	14.9	11.2					65.5	81.3	68.6	89.9	41.8	48	21.8	27.6	15.2	13.1	14.9	10.6
60	36.1	35.6			18.6	11.2	16.9	14.5	26.1	22.8	62	61.6	68.6	88.7	43.2	45.8	23.3	26.9	16.4	18.9	14	10.5
65	36.3	34.3							22.5	20.8	53.6	65.6	67.9	84.9	37.3	53.9	26.6	30.2	14.5	13.3	15.1	10.9
70	38.8	40.6			20.5	11.9	20.7	16.7	25.1	21.4	53.6	66.9	69	84.9	45.7	53.4	29.1	32.4	18.2	17.6	15.4	11.9
75	39.9	37.9	16	16.8							64.3	61.6	67.9	96.2	51.4	58.2	27.9	31.6	17.1	15.7	15.5	11.8
80	40.1	44.4			19	11.9	20.6	14.9	29.5	25.2	65.5	81.3	66.8	83.7	42.8	55	23.4	28.4	15.9	15.6	17.1	12.1
85	29.2	29.9									62	76.1	56.9	74.9	36.6	53.1	21.7	28.4	13.1	13	13.3	11.3
90	30.5	32.9	19.4	21.2	17	9.99	16.9	16.3	21.1	20.8	63.1	85.2	63.7	67.5	40.7	57.5	26.4	27.5	29.3	19.3	12.7	10.4
95	50.9	36.1			28.8	20.4					52.4	72.1	81.9	76.2	42.4	53.5	25.2	29.1	31.5	19	24.4	15.6
100	60.5	58.2					50.2	21.3	55.1	31.9	113	102	154	88.3	67.1	77.7	34.1	32.7	32.5	24.7	24.3	17.2
105	60.2	67.9	22.3	18.4	32.9	25.9	32.6	24.4	40.1	39.6	89.4	93.1	104	88.3	71.7	78.6	36.5	35.4	30	25	22.6	16.4
110	59.2	67.8	14.5	15.9	32.1	22.2	31	22.2					FLOODED		90.8	97.6	39.4	35.6	30.8	27.3	23.8	17.9
115	70	73.3	35.8	34.4	37.2	23.6	35.6	27.6	46.1	42.5	110	102	FLOODED		90.2	91.2	44.4	47.1	31.9	25.5	28.5	18.7
120	69.6	63.5	42.6	34.9	33.4	21.9	32.8	25.4			102	107	FLOODED		89.4	83.9	44.9	46.3	33.8	26.2	29.2	20
125	66.6	66			23.7	13.1			47.4	42.1	92.9	85.7	90.8	85.7	54	56	36.5	38.4	29.7	23.2	25.2	16.4
130	44.8	40.2	36.8	25.2	20.8	11.1	22.4	20.2			63.1	66.5	65.2	80.6	49.2	50.5	27.1	24.5	26.9	16.7	26.1	16.3
135	38.6	34.9			26.6	14.5	21	17.3	30.6	31.7	69.1	64	67.5	81.9	50.9	57.1	29.6	24.8	19.1	14.3	20.1	13.3
140	28.6	25	21.1	26.1	27.9	16.2	19.7	16.8			56	62.7	57	69.1	49.4	56.6	26.7	24.1	19.1	13.7	18	12
145	32	26.5	18.6	26.6	32.3	16.5	18.5	18.7	31.1	32.8	62	57.6	58.2	62.7	50.8	55.6	28.8	28.8	19.4	12.5	18.5	12.2
150	30.3	22.1	28.4	22.4	55.3	28.5							69.9	75.5	48.9	51.7	26.3	30.3	20.9	16.7	20.2	12.3
155	31.1	26	29.4	22.1	100	50	26.4	20.7	39.4	31.8	60.8	60.1	62.9	65.6	52.1	52.3	32.1	23.1	24.8	19.3	21.9	14.6
160	35.2	27.1	39.8	27.3	74.1	36.5					69.1	76.8	73.9	83.9	57	55.5	34.3	29.2	26.3	17.8	25.3	16.4
165	35.7	27.1	104	61.7	66.3	38.5	28.5	21.5	38.6	39.4	67.9	75.5	83.4	83.9	54	52.8	34.5	32.6	28.8	16.6	26.9	17.9
170	50.3	34	81	54.4	54.5	27					64.3	67.8	78.6	89.2	55.6	57.6	35.9	32.9	24.2	19.2	28.8	16
175	83.8	54.6			66.2	32.4	52.3	32.7	67.9	56.5	78.6	71.7	91.7	90.5	53.5	59.1	44.5	37.8	45.6	26.9	37.8	19.9
180	111	71																				
185	60.3	39.4																				
190	50.6	34.5																				
195	55.9	37.9																				
200	65.5	44.5	60.1	36	65.8	32.1	98.1	55.1	126	88.1	111	90.9	144	122	72.3	55.1	47.1	46	39.7	26	41	27.8

DATE 9/5/98 11/29/98 1/16/99 2/26/99 4/5/99 6/13/99 6/22/99 7/22/99 8/28/99 9/25/99 10/30/99

D [m]	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H
205	65.5	44.5	60.1	36	58.7	30.7	72.4	42.1	119	80	178	139	181	159	149	137	65.1	52.8	62.4	38.5	67.9	37.2
210	68.1	42.6	73.3	45.6	57.8	26.4	56.6	32.7			151	125	154	146	180	129	55.3	46.8	40.2	26.8	37.9	22.2
215	63.7	41.7			58.6	28.1	55.1	30.7	80	69.7	104	84.5	94.1	95.7	82.7	72.4	54.1	42.7	34.6	24.3	34	23.1
220	53.3	33.8	68.8	42.6					87.6	71.6	106	85.7	94.1	93.1	86.3	72.8	51.5	37.7	31.8	19.4	32.7	16.9
225	64.9	42	61.2	36	80.1	41.8	41.7	37.4	84.7	74.2	102	79.3	89.4	76.1	85.5	59	39.5	31.8	29.9	18.6	33.3	18.3
230	74.8	63.5	77.3	45.2	98.5	51	65.8	37.6	87.2	72.3	110	89.6	107	87	95.8	76.6	41.9	32.2	38.6	24.8	37.1	22
235	81.8	55.2	99.8	56	94	49	66.1	36.8			110	88.3	107	81.9	105	80.9	43.4	30.2	40.6	23.8	40.1	21.4
240	71	45.9	90.5	49.4							120	94.7	117	84.5	113	84.8	46.4	30.7	40.2	22.9	42.5	22.3
245	76.1	48.1	110	64.4	91.3	45.3	53.9	36.2	84.7	64.4	108	89.6	101	80.6	109	77	46.4	37.4	39.7	22.2	39.4	21.9
250	87.9	57.7			126	39.3	59.8	29.9	84.6	58.5	104	84.5	96.6	78.7	112	79.7	42.2	34.3	36.1	21.6	36.8	20.9
255	77	53.1	125	51.6			62.8	34.8	88.8	67.7	110	86.2	107	81.2	106	82.1	49.8	37.5	41	23.2	41	22.8
260	68	45.2			94.9	50.9	80.2	39.6			118	97.4	126	98.7	188	99.2	55	37.6	50.5	28.7	48.4	25.3
265	78.9	61.8	86	51.4	80.6	45.2	95.7	51.6	111	87.2	127	107	114	89.9	144	88.6	57.4	38.1	49.6	26.9	47	24.4
270	68.7	56.1			81	41	100	53.9	107	78.5	123	91.2	126	94.9	109	83.4	46.8	31.2	41.8	22.9	44	21.9
275	64.3	41	85.9	41.4	69.6	34.6	97	49.5	115	88.1	113	104	119	93.9	120	87.5	56.6	39.7	44.3	26.2	50.7	26
280	61.2	39.3			59.5	29.4	103	55.9	122	87.3	136	107	121	90.3	132	94.2	57.3	42.2	51.8	28	54.8	29.2
285	55.1	35					103	55.8	129	76.8	149	156	158	161	140	125	63.4	48.8	58.4	36.7	54.9	30.6
290	65.4	42.3	68.9	40.9	57	29.8	91.3	50.8	115	82.2	131	111	135	150	117	108	52.6	38.9	53.1	31.1	51.3	31.7
295	60.3	46.8			73.4	38.4	96.4	54.1	108	75.6	122	82.4	148	104	109	72.3	45.7	31	46.8	25.6	38	20.1
300	64.4	37.1	61.7	37.6	61	32.9	77.2	40.7	99	69.4	117	84.9	105	75.6	102	70.9	49.1	31.2	43.2	24.3	33.6	18.2
305	59.4	39.7			64.1	31.7	59.7	30.6	73	49.3	122	87.4	101	76.8	95.1	65.4	37.9	28.2	35.8	21.3	33	18.9
310	61	59.5	60.6	33.3			57	30.6	73.6	54.2	80.5	79.3	66	71.5	83	61	47.4	26.8	35.2	18.9	34.7	19.8
315	57.3	39.5			52.7	26	61.6	34.2	80.8	60.8	95.1	78.1	81.9	79.8	84.2	62.6	39.8	31.9	32.5	20.1	36.8	19.3
320	52.2	34.7			47.8	24.8	68	38.5			112	76.8	102	76.3	83.3	59	43.2	31.8	37.7	21.7	39.5	22.7
325	52.7	37.3	46.3	26.7	46	23.5	67.3	35.7	89.7	64.6	106	74.4	83.1	60.8	87.2	65.3	41.5	27.7	37.7	22.1	37.2	21
330	51.7	70.6			53.4	27.5	70	37.8	77.4	55.4	86.6	87.8	81.9	78.6	88.6	64.2	41.3	29.6	34.6	21.1	37.9	22.4
335	50.6	37.1					50.1	26	70.1	46.8	93.9	91.5	99	69.1	86.9	60.9	33.4	24.5	28.3	16.4	28.7	14.8
340	47.5	28.4			39	20.5	48.9	25.9	64.8	48.4	120	79.3	110	71.5	78.1	85.5	41.3	40.5	34.1	28.6	32.4	17
345	50.2	35.6	39.7	22.9			57.5	30.2	59.5	39.5	79.3	58.5	86.5	78	62.5	47.7	33.8	23.2	25.7	15.4	25.3	13.3
350	42.1	30.5			34.7	17.8	40.2	23.2	52.1	40.8	78.1	104	83.1	88.5	49.3	60.5	29.3	28.1	23.9	15.9	24.2	15.5
355	31.6	21.5	36.7	15.6	34.4	18.8	39.7	14.5	54.1	36.2	53.7	44.1	56.9	44.2	55.5	38.9	26.4	18	22.1	14.2	24.4	13.7
360	27.1	19			30.5	18	42.7	23.7	53.7	44.6	70.7	63.1	62.6	74.5	60.4	52.3	24.6	22.2	23.3	16.2	24.4	13.7
365	23.6	14.5	33.9	18.6	43.8	24.7	40.8	22.2			72	62	69.4	71	62.8	59.6	28.6	27.5	27.2	16.7	23.7	14
370	25.9	19			40.7	23.2	52.1	29	54.1	42	63.4	79.8	56.9	55.9	59.3	63.9	30.4	25.7	26.9	17.7	24.3	15.9
375	23	17.9	34.2	18.6	39.7	23.6	46.4	26.4	45	46	54.9	41.7	53.5	73.3	57	61.2	29.1	23.7	26.3	20.1	25	15.5
380	23.8	16.9	38.9	22.8	39.8	24	43.8	25.2	58.5	45	68.3	51.2	59.2	51.2	62.3	51.3	25.8	25.9	18.8	14.8	26.5	15.6
385	28	19.4			52	38.2	40	23.2	52.7	42.7	58.5	50	60.3	47.7	68.9	61.9	26.8	23.7	20.9	16.8	26.6	14.1
390	27.7	19.4	37.8	21.8	41	29.9	46.2	34			53.7	42.9	53.5	46.6	67	49.4	27.2	19.5	19.6	13.3	25.1	15.2
395	28.8	21.2	49.3	30.2	19.5	27.9	50.4	31	73.6	67	61	51.2	61.5	48.9	56.7	47.8	22.4	19.6	20	14.4	22	12.3
400	28	23.9					45.1	27.6	62.6	53.7	43.9	40.5	45.5	40.7	47.2	45.4	26.9	24.6	22	14.6	20.5	11.7
405	35.8	26.7	38	22.9	35.6	21.2	32	23.1	46.9	39.9	52.4	51.2	54.6	53.6	57.3	47	24.7	22.3	25.1	19.2	21.5	11.7
410	33.6	24.7	37.6	24.5									53.5	52.4	57.7	51.9	25	21	24.6	20.1	22.6	13.2
415													52.3	60.5	53.3	52.3	24.7	20	21.4	17.5	19.6	13.4
420													38.7	50.1	44.1	53.2	23.8	23	21	16.5	14.5	13.2

Soil Electrical Conductivity Data

Temperature Correction: $EC_{25degC} = F_T * EC_T$ $F_T = 0.4470 + 1.4034*\exp(-T/26.815)$

Units: dS/m V=vertical measurements H=horizontal measurements

South Cottonwood Transect D= Distance along transect from East to West

DATE	11/29/98		1/16/99		2/27/99		4/5/99		6/13/99		7/22/99		8/28/99		9/25/99		10/30/99	
D [m]	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H	V	H
0							14.1	5.75	22.6	8.06	25.9	35.8	8.76	7.2	14.1	8.96	23.9	5.9
5							10.2	1.37	9.53	2.69	16.3	29.9	7.17	3.42	10.5	5.51	9	2.8
10	11.9	10.6	10.4	4.87	12.1	5.73	11.5	8.49	14.3	9.41	25.7	44	9.22	14	11.9	10.7	7.6	5.8
15			10.7	5.62	9.99	3.42			16.7	13.4	31.6	45.2	8.88	8.54	11.6	11.3	7.4	5.6
20	15.6	15.1	13.4	7.99	9.62	4.27	14.3	9.12	15.5	14.8	29.5	32.4	9.9	10	12.4	11.2	8.2	6
25	12.9	13.6	10.7	6.5	9.74	5.12	14.3	8.12	15.5	14.8	33	40.9	7.28	8.17	11.6	10.7	7.2	6
30					8.99	6.46	11.8	10.7	14.3	10.8	27.3	32.2	8.99	5.61	10.2	9.92	6.6	4.6
35	11.3	9.02	9.72	4.25	7.74	1.83	11	5.75	11.9	10.8	24.3	25.3	5.92	9.39	11.1	10.9	7.1	5.3
40	12.8	15	11.3	6.87	11.4	7.32			15.5	13.4	26.2	30.6	7.51	10.9	11.5	11.6	7	4.8
45			10.5	9.99	10.2	10.1	14.8	7.62	14.3	12.1	28.7	28.5	8.19	6.95	11.8	10.5	6.9	5.4
50	14.3	14.5	11.6	7.87	10.7	10.9	13.6	9.37	14.3	14.8	26.8	40.9	7.4	7.56	10.7	8.68	7.4	4.8
55	15.6	17.4	4.86	3.12	7.99	4.27	5.76	7.87	8.34	12.1	17.5	37.2	5.01	9.39	9.85	8.82	5.7	3
60	18.9	33.2	14.7	12	11.2	5.37			14.3	6.72	22.6	33.7	7.4	8.78	9.98	9.51	7.6	6
65	14.6	28.6			11.6	12.6	16.4	12.5	18.3	16.1	30.1	40.1	8.19	5.49	11.8	12.1	7.8	5.7
70	9.23	22.6			11	5.96			14.6	12.1	26.9	39.4	10.6	8.9	11.6	11.6	7.7	5.8
75	15.3	32	12.7	8.74	9.09	7.15	13.6	10.1	12.2	10.8	25.4	34	9.9	7.81	10.9	10.6	7.3	6
80			9.31	9.62	9.21	7.15	12.9	10.6	13.7	8.06	21.6	32	6.64	7.93	10.5	9.14	7.2	5.4
85	18.6	31.1							9.99	8.06	17	15.4	6.17	7.68	9.87	8.74	7.4	4.2
90	16.4	23.8	10.6	13.2	8.96	12.2	12.9	14.2	12.5	14.8	20.7	34.4	6.17	9.27	10.2	10.6	7.6	6.7
95					16	15.8	18.5	16.3	20	18.8	31.1	42.4	9.66	12.7	11.7	12	8.5	6.6
100	19.8	23.3	17.7	15.9	14.6	7.86			15	12.1	21.1	36.2	7.45	8.05	11.5	9.81	7.6	5.4
105			13.6	9.27	13.8	8.38	17.9	10.7	15	10.8	29.9	38.3	8.73	8.05	11.2	9.54	8.1	5
110	15.5	19.4	12.9	9.88	14.1	10.4	19.8	11.2	16.2	12.1	29.8	37.5	8.88	7.68	11.1	9.51	8.5	4.9
115	23.5	20.9	12.9	14.5	13.3	9.43	18.1	22.7	15	9.41	31.1	35.7	8.76	7.44	11.5	9.51	7.6	5.7
120	18.3	19.4	11.3	12.1	13.4	8.15	16.5	8.66	15	8.06	36.7	24.5	7.97	8.9	11.9	8.54	8.8	5.4
125			11.8	9.27					17.5	13.4	28.3	27.5	7.74	7.2	11.4	9.23	8.3	4.4
130	14.5	16.6	12.9	5.98	11.3	3.61	18.3	10.2	18.7	14.8	36.1	34.2	8.31	8.66	11.1	9.23	7.9	5.8
135	15.4	16.1	14.2	11.7			17.9	22.2	17.5	13.4	28.5	29.5	9.22	8.78	11.1	10.7	7.8	5.5
140					9.72	5.01			12.5	8.06	26.3	29.5	8.42	7.2	11	9.65	8.2	5.6
145	18.3	15.4	11.5	5.85	10.9	3.96	13.7	5.98	15	9.41	25.7	27.1	7.28	7.93	9.72	8.68	6.5	4.5
150			10.2	9.15	8.45	5.82	13.2	8.54	12.5	12.1	19.7	21.7	6.37	7.44	8.06	8.82	6.4	4.2
155	15.2	14.7	10.6	8.78	9.85	5.24	16.1	8.42	23.7	16.1	30.6	31.6	8.08	8.29	10.5	9.51	7.2	4.7

Appendix B.6. Soil Stratigraphies

Bosque Samples 27.1=39.73 Correction for O

27.0=39.75 Correction for HD

Y=1.11125D+32.313

CSC 2T					SCW 2T				
Depth	Sample#	18O corr	D corr	% Water	Depth	Sample#	18O corr	D corr	% Water
5	19	-8.9	-85.4	19.8	5	48	-2.9	-68	12.45
20	20	-8.5	-79.1	20.17	5	49			
40	21	-11.1	-92.6	17.85	25	50			
60	22	-10.9	-92.2	20.34	25	51			
60	22 dupl	-10.9		20.34	50	52	-7.6	-69.3	4.57
80	23	-10.7	-86.9	24	50	53	-8		3.93
100	24	-10.6	-87.7	25.33	75	54			
100	24 dupl	-10.7		25.33	75	54			
120	25	-10.3	-88.1	21.53	100	56			
140	26	-10.6	-90.8	24.58	100	57			
160	27	-10.5	-93	25.92	125	58		-82.2	2.54
160	27 dupl	-10.5		25.92	125	59			
180	28	-10.5	-87.7	25.27	150	60	-8.5		1.95
180	28 dupl	-10.6		25.27	175	62			
200	29	-11	-92.4	25.43	175	62			
200	29 dupl		-92.3	25.43	200	64	-7	-84.4	3.97
210	5 water	-10.5	-80.5	44.72	200	64			
210	5water	-10.5		44.72	225	66			
210	6 water	-10.7	-168.9	53.06	225	67			
					250	68	-10.2	-87.3	12.1
					275	69			
					300	70	-9.7	-87.2	18.04
					300	70		-88.4	18.04

CSC		SCW		SSC		SB		H2O	
18O corr	D corr	18O corr	D corr	18O corr	D corr	18O corr	D corr	18O corr	D corr
-8.9	-85.4	-2.9	-68	-8.9	-78.5	3.49	-54.5	-10.95	-89.5
-8.5	-79.1	-7.6	-69.3	-8.35	-79.2	-4.69	-72.8	-11	-90.3
-11.1	-92.6	-8.5	-83.3	-10.6	-91.7	-6.65	-72.3	-10.9	-86.55
-10.9	-92.2	-7	-84.4	-9.4	-86	-9	-85.45	-9.65	-85.25
-10.7	-86.9	-10.2	-87.3	-10.95	-89.5	-9.4	-83.85	-10.9	-87.8
-10.65	-87.7	-9.7	-87.8			-8.7	-84.45	-10.3	-86.43
-10.3	-88.1	-10.9	-87.8			-10.6	-92	-10.95	-88.5
-10.6	-90.8					-10.1	-91		
-10.5	-93					-9.65	-85.25		
-10.55	-87.7								
-11	-92.35								
-11	-90.3								

SSC 3T Depth	Sample#	18O corr	D corr	% Water	SB Depth	Sample#	18O corr	D corr	% Water
water	1water				5 #30	30	10.7	-126.1	5.05
water	2water				5 #31	31	10.9		4.13
5	1				25 #31	31		-33.1	2.7
10	2				25 #32	32	3.49	-54.5	2.81
20	3				50 #34	34	-4.69	-72.8	4.14
30	4	-8.9	-78.5	22	50 #34	34		-67.5	4.14
30	4	-8.9		22	50 #35	35		-66	4.3
40	5				75 #36	36	-6.7	-74	14.2
50	6				75 #37	37	-6.6	-70.6	13.74
60	7 *	-8.4	-79.2	24.46	100 #38	38	-9	-87	27.35
60	7 *	-8.3		24.46	100 #38 d	38	-9		27.35
70	8				100 #39	39	-8.9	-83.9	26.49
90	9				125 #40	40	-9.4	-83.1	19.06
110	10				125 #40 d	40		-84.6	19.06
130	11				150 #42	42	-9.1	-90.3	7.17
140	12				150 #43	43	-8.4	-78.6	6.66
150	13	-10.6	-91.7	24.21	225 #46	46	-10.6	-92	24.19
170	14				250 #47	47	-10.1	-91	21.95
190	15								
210	16								
230	17								
250	18	-9.4	-84.9	27.02					
250	18		-87	27.02					

* Possible hydrocarbon contamintaion

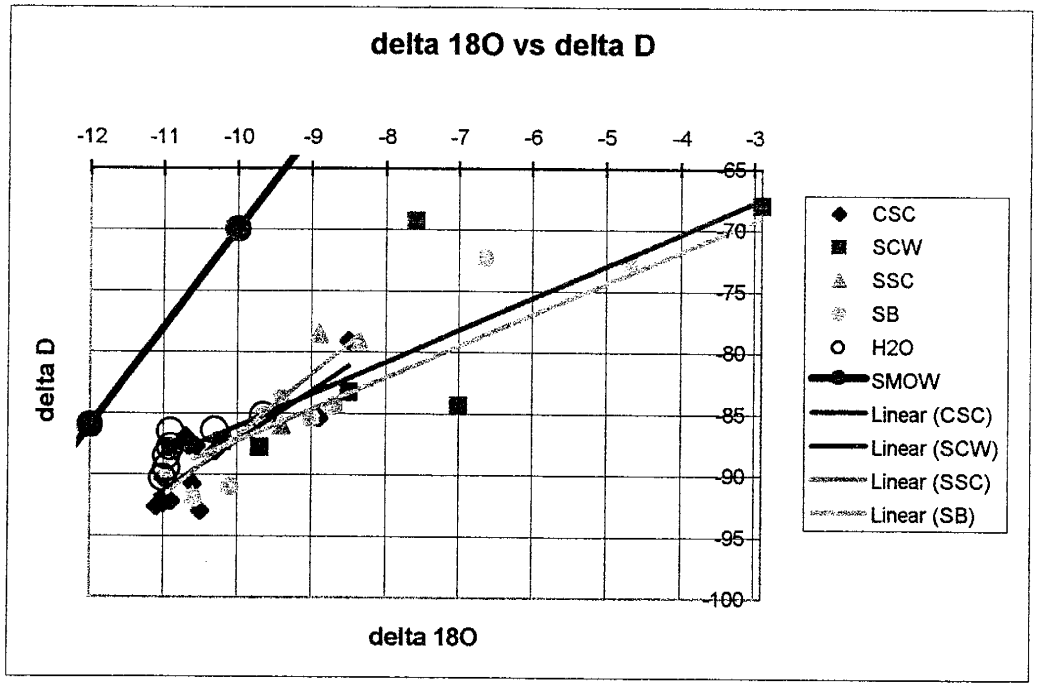
	SMOW 18 O	D
R/SSC	0	10
CSC	-5	-30
CAN	-8	-54
SB	-10	-70
SCW	-12	-86
?	-13	-94
CAN	-20	-150

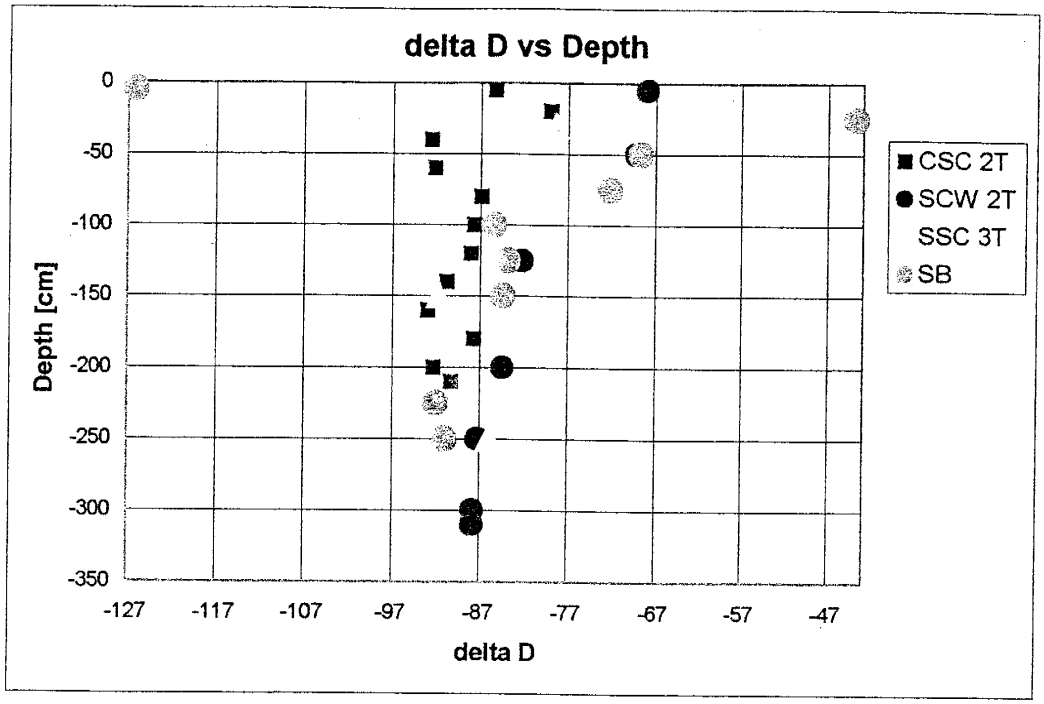
Waters **Plants** Correction for O

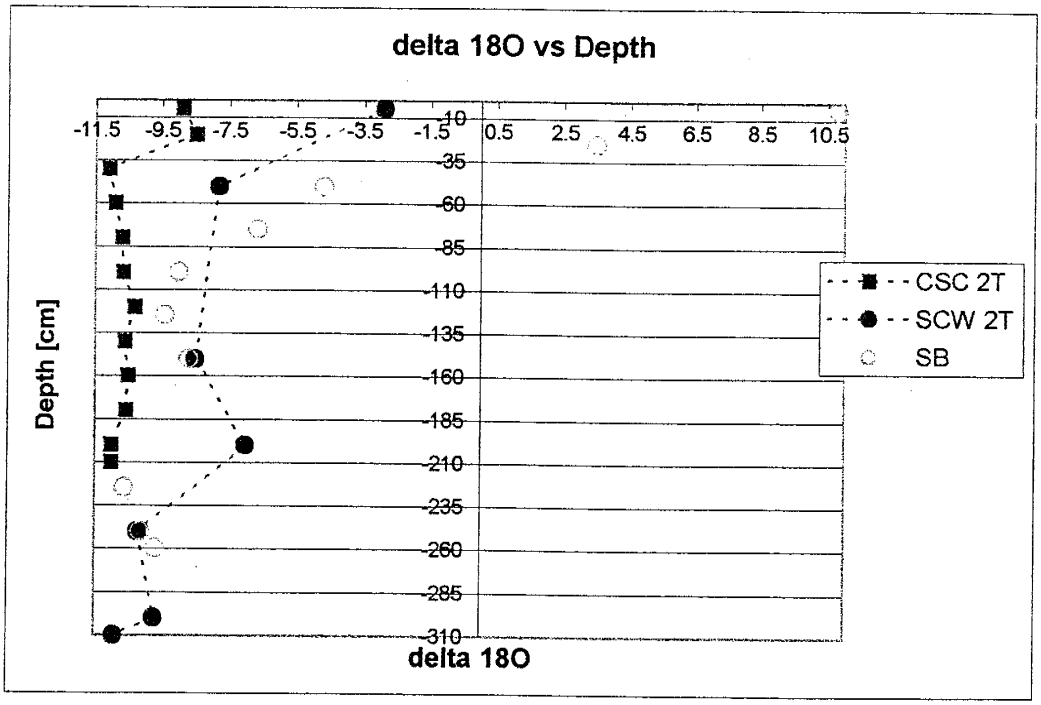
27.0=39.75 Correction for D

Y=1.1125D+32.313

Waters Sample #	18O corr	D corr	Plants Sample ID	18O corr	D corr	% Water	Species
SSC River #3W	-10.9	-106.2	CSC 2T #3L	7.6	-30.3	72.62	SC
SSC River #4W	-11	-89.5	CSC 2T #4L	6.8	-31.9	69.82	SC
CSC 2T #7W	-11	-88.8	CSC 2T #12L	4.2	-54.6	72.49	SC
CSC 2T #8W	-11	-91.8	SCW 2T #7L	14.7		59.19	CW
SB Canal #9W	-10.9	-86.5	SCW 2T #8L	-126.25		69.14	CW
SB canal #9W d		-86	SCW 2T #9L	14.2		68.63	willow
SB Canal #10W	-10.9	-156.8	SCW 2T #10L	12.9		67.13	willow
SB2 Well #11	-9.7	-83.8	SCW 2T #13	6.2		66.29	CW week later
SB2 Well #12	-9.6	-86.7	SCW 2T #14	6.1		64.83	willow week later
SCW 2T Well #13W	-10.3	-83.8	SSC				SC
SCW 2T Well #14W	-10.3	-87.7	SSC 3T #11L	-127.45		78.63	SC
SCW 2T Well #14Wd		-87.8	SB #5L	13		72.58	short herbs
SCW 2T Canal #15W	-10.9	-87.8	SB #6L	11.2		77.09	short herbs
SCW 2T Land #16	-11	-89.2					




delta D vs Depth
0
-50
-100
-150
-200
-250
-300
-350
Depth [cm]
-127
-117
-107
-97
-87
-77
-67
-57
-47
delta D
CSC 2T
SCW 2T
SSC 3T
SB


delta 18O vs Depth
-11.5
-9.5
-7.5
-5.5
-3.5
-1.5
0.5
2.5
4.5
6.5
8.5
10.5
10
35
60
85
110
135
160
185
210
235
260
285
310
Depth [cm]
delta 18O
CSC 2T
SCW 2T
SB

Appendix C.1. Bosque Model Input Data

SOUTH COTTONWOOD PROFILE

depth, cm	R	Material	Layer
0	0	1	1
0.1	0	1	1
0.2	0	1	1
0.3	0	1	1
0.4	0	1	1
0.5	0.1	1	1
0.6	0.15	1	1
0.7	0.2	1	1
0.8	0.25	1	1
0.9	0.3	1	1
1	0.35	1	1
1.2	0.4	1	1
1.4	0.4275	1	1
1.6	0.4275	1	1
1.8	0.4275	1	1
2	0.4275	1	1
2.25	0.4275	1	1
2.5	0.4275	1	1
2.75	0.4275	1	1
3	0.4275	1	1
3.25	0.4275	1	1
3.5	0.4275	1	1
3.75	0.4275	1	1
4	0.4275	1	1
4.25	0.4275	1	1
4.5	0.4275	1	1
4.75	0.4275	1	1
5	0.4275	2	2
5.25	0.4275	2	2
5.5	0.4275	2	2
5.75	0.4275	2	2
6	0.4275	2	2
6.25	0.4275	2	2
6.5	0.4275	2	2
6.75	0.4275	2	2
7	0.4275	2	2
7.25	0.43	2	2
7.5	0.435	2	2
7.75	0.44	2	2
8	0.445	2	2
8.5	0.45	2	2
9	0.455	2	2
9.5	0.5	2	2
10	0.55	2	2
10.5	0.6	2	2
11	0.65	2	2
11.5	0.7	2	2
12	0.75	2	2
12.5	0.8	2	2
13	0.85	2	2
13.5	0.9	2	2
14	0.95	2	2

R= root density function

SCW Overall Statigraphy

composite texture 4/11/99

Depth Inerval (cm)		Texture	Material
0	5	Silt	1
0	30	SiCL	2
30	60	v.f. LS	3
60	100	v.f. S	4
100	245	f. S	5
245	400	LS	6

v.f. = very fine, S = sand, LS = laomy sand,
SiCL = Silty Clay Loam

SCW Material Hydraulic Properties

Material	Qr	Qs	Alpha	n	Ks	l
1	0.034	0.46	0.016	2.17	25	0.5
2	0.07	0.44	0.0114	1.97	15.67	0.5
3	0.035	0.37	0.022	2.85	125	0.5
4	0.025	0.36	0.025	3.5	860	0.5
5	0.03	0.37	0.025	3.2	272.4	0.5
6	0.035	0.38	0.02	3	150	0.5

Qr = residual volumetric water content,
Qs = saturated volumetric water content
Alpha, n & l = van Genuchten paramenters
Ks = saturated hydraulic conductivity

14.5	1	2	2
15	1	2	2
15.5	1	2	2
16	1	2	2
16.5	1	2	2
17	0.98	2	2
17.5	0.95	2	2
18	0.9	2	2
18.5	0.85	2	2
19	0.8	2	2
19.5	0.75	2	2
20	0.7	2	2
20.5	0.65	2	2
21	0.6	2	2
21.5	0.55	2	2
22	0.5	2	2
22.5	0.45	2	2
23	0.4	2	2
23.5	0.35	2	2
24	0.35	2	2
24.5	0.35	2	2
25	0.35	2	2
25.25	0.36	2	2
25.5	0.37	2	2
25.8	0.38	2	2
25.9	0.39	2	2
26	0.4	3	3
26.1	0.41	3	3
26.2	0.42	3	3
26.5	0.43	3	3
27	0.44	3	3
27.5	0.46	3	3
28	0.48	3	3
28.5	0.5	3	3
29	0.52	3	3
29.5	0.54	3	3
30	0.56	3	3
30.5	0.58	3	3
31	0.6	3	3
31.5	0.6	3	3
32	0.6	3	3
32.5	0.6	3	3
33	0.6	3	3
33.5	0.6	3	3
34	0.6	3	3
34.5	0.6	3	3
35	0.6	3	3
35.5	0.6	3	3
36	0.6	3	3
36.5	0.6	3	3
37	0.6	3	3
37.5	0.59	3	3
38	0.58	3	3
38.5	0.57	3	3
39	0.56	3	3
39.5	0.55	3	3
40	0.54	3	3
40.5	0.52	3	3
41	0.51	3	3

41.5	0.5	3	3
42	0.49	3	3
42.5	0.48	3	3
43	0.47	3	3
43.5	0.46	3	3
44	0.45	3	3
44.5	0.43	3	3
45	0.41	3	3
45.5	0.4	3	3
46	0.38	3	3
46.5	0.36	3	3
47	0.34	3	3
47.5	0.32	3	3
48	0.3	3	3
48.5	0.28	3	3
49	0.27	3	3
49.5	0.26	3	3
50	0.25	3	3
50.5	0.24	3	3
51	0.23	3	3
51.5	0.22	3	3
52	0.21	3	3
52.5	0.2	3	3
53	0.19	3	3
53.5	0.18	3	3
54	0.17	3	3
54.5	0.16	3	3
55	0.15	3	3
55.5	0.15	3	3
56	0.15	3	3
56.5	0.15	3	3
57	0.15	3	3
57.5	0.15	3	3
58	0.15	3	3
58.5	0.15	3	3
59	0.15	3	3
59.5	0.15	3	3
59.8	0.15	3	3
59.9	0.15	3	3
60	0.15	3	3
60.1	0.15	4	4
60.2	0.15	4	4
60.5	0.15	4	4
61	0.15	4	4
61.5	0.15	4	4
62	0.15	4	4
62.5	0.15	4	4
63	0.15	4	4
63.5	0.15	4	4
64	0.15	4	4
64.5	0.15	4	4
65	0.15	4	4
65.5	0.15	4	4
66	0.15	4	4
66.5	0.15	4	4
67	0.15	4	4
67.5	0.15	4	4
68	0.15	4	4
68.5	0.15	4	4

69	0.15	4	4
69.5	0.15	4	4
70	0.15	4	4
70.5	0.15	4	4
71	0.15	4	4
71.5	0.15	4	4
72	0.15	4	4
72.5	0.15	4	4
73	0.15	4	4
73.5	0.15	4	4
74	0.15	4	4
74.5	0.15	4	4
75	0.15	4	4
75.5	0.14	4	4
76	0.13	4	4
76.5	0.12	4	4
77	0.11	4	4
77.5	0.1	4	4
78	0.1	4	4
78.5	0.1	4	4
79	0.1	4	4
79.5	0.1	4	4
80	0.1	4	4
81	0.1	4	4
82	0.1	4	4
83	0.1	4	4
84	0.1	4	4
85	0.1	4	4
86	0.1	4	4
87	0.1	4	4
88	0.1	4	4
89	0.1	4	4
90	0.1	4	4
91	0.1	4	4
92	0.1	4	4
93	0.1	4	4
94	0.1	4	4
95	0.1	4	4
96	0.1	4	4
97	0.1	4	4
98	0.1	4	4
99	0.1	4	4
99.5	0.1	4	4
99.8	0.1	4	4
99.9	0.1	4	4
100	0.1	5	5
100.1	0.1	5	5
100.2	0.1	5	5
100.5	0.1	5	5
101	0.1	5	5
102	0.1	5	5
103	0.1	5	5
104	0.1	5	5
105	0.1	5	5
106	0.1	5	5
107	0.1	5	5
108	0.1	5	5
109	0.09	5	5
110	0.08	5	5

111	0.07	5	5
112	0.06	5	5
113	0.05	5	5
114	0.05	5	5
115	0.05	5	5
116	0.05	5	5
117	0.05	5	5
118	0.05	5	5
119	0.05	5	5
120	0.05	5	5
121	0.05	5	5
122	0.05	5	5
123	0.06	5	5
124	0.07	5	5
125	0.08	5	5
126	0.09	5	5
127	0.1	5	5
128	0.12	5	5
129	0.14	5	5
130	0.16	5	5
131	0.18	5	5
132	0.2	5	5
133	0.22	5	5
134	0.24	5	5
135	0.26	5	5
136	0.28	5	5
137	0.3	5	5
138	0.32	5	5
139	0.34	5	5
140	0.36	5	5
141	0.38	5	5
142	0.4	5	5
143	0.42	5	5
144	0.44	5	5
145	0.46	5	5
146	0.48	5	5
147	0.5	5	5
148	0.52	5	5
149	0.54	5	5
150	0.56	5	5
151	0.58	5	5
152	0.6	5	5
153	0.62	5	5
154	0.64	5	5
155	0.66	5	5
156	0.68	5	5
157	0.7	5	5
158	0.72	5	5
159	0.74	5	5
160	0.75	5	5
161	0.75	5	5
162	0.75	5	5
163	0.75	5	5
164	0.75	5	5
165	0.75	5	5
166	0.75	5	5
167	0.75	5	5
168	0.75	5	5
169	0.75	5	5

170	0.75	5	5
171	0.75	5	5
172	0.75	5	5
173	0.75	5	5
174	0.75	5	5
175	0.75	5	5
176	0.74	5	5
177	0.73	5	5
178	0.72	5	5
179	0.71	5	5
180	0.7	5	5
181	0.69	5	5
182	0.68	5	5
183	0.67	5	5
184	0.66	5	5
185	0.65	5	5
186	0.64	5	5
187	0.63	5	5
188	0.62	5	5
189	0.61	5	5
190	0.6	5	5
191	0.59	5	5
192	0.58	5	5
193	0.57	5	5
194	0.56	5	5
195	0.55	5	5
196	0.54	5	5
197	0.53	5	5
198	0.52	5	5
199	0.51	5	5
200	0.5	5	5
201	0.5	5	5
202	0.5	5	5
203	0.5	5	5
204	0.5	5	5
205	0.5	5	5
206	0.5	5	5
207	0.5	5	5
208	0.5	5	5
209	0.5	5	5
210	0.5	5	5
211	0.5	5	5
212	0.5	5	5
213	0.5	5	5
214	0.5	5	5
215	0.5	5	5
216	0.5	5	5
217	0.5	5	5
218	0.5	5	5
219	0.5	5	5
220	0.5	5	5
221	0.5	5	5
222	0.5	5	5
223	0.5	5	5
224	0.49	5	5
225	0.48	5	5
226	0.47	5	5
227	0.46	5	5
228	0.45	5	5

229	0.44	5	5
230	0.43	5	5
231	0.42	5	5
232	0.41	5	5
233	0.4	5	5
234	0.38	5	5
235	0.36	5	5
236	0.34	5	5
237	0.32	5	5
238	0.3	5	5
239	0.28	5	5
240	0.26	5	5
241	0.24	5	5
242	0.22	5	5
243	0.2	5	5
244	0.19	5	5
244.5	0.185	5	5
245	0.18	6	6
245.5	0.175	6	6
246	0.17	6	6
247	0.16	6	6
248	0.15	6	6
249	0.14	6	6
250	0.13	6	6
251	0.12	6	6
252	0.11	6	6
253	0.1	6	6
254	0.09	6	6
255	0.08	6	6
256	0.07	6	6
257	0.06	6	6
258	0.05	6	6
259	0.04	6	6
260	0.03	6	6
261	0.02	6	6
262	0.01	6	6
263	0	6	6
264	0	6	6
265	0	6	6
266	0	6	6
267	0	6	6
268	0	6	6
269	0	6	6
270	0	6	6
271	0	6	6
272	0	6	6
273	0	6	6
274	0	6	6
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278	0	6	6
279	0	6	6
280	0	6	6
281	0	6	6
282	0	6	6
283	0	6	6
284	0	6	6
285	0	6	6

286	0	6	6
287	0	6	6
288	0	6	6
289	0	6	6
290	0	6	6
291	0	6	6
292	0	6	6
293	0	6	6
294	0	6	6
295	0	6	6
296	0	6	6
297	0	6	6
298	0	6	6
299	0	6	6
300	0	6	6
301	0	6	6
302	0	6	6
303	0	6	6
304	0	6	6
305	0	6	6
306	0	6	6
307	0	6	6
308	0	6	6
309	0	6	6
310	0	6	6
311	0	6	6
312	0	6	6
313	0	6	6
314	0	6	6
315	0	6	6
316	0	6	6
317	0	6	6
318	0	6	6
319	0	6	6
320	0	6	6
321	0	6	6
322	0	6	6
323	0	6	6
324	0	6	6
325	0	6	6
326	0	6	6
327	0	6	6
328	0	6	6
329	0	6	6
330	0	6	6
331	0	6	6
332	0	6	6
333	0	6	6
334	0	6	6
335	0	6	6
336	0	6	6
337	0	6	6
338	0	6	6
339	0	6	6
340	0	6	6
341	0	6	6
342	0	6	6
343	0	6	6
344	0	6	6

345	0	6	6
346	0	6	6
347	0	6	6
348	0	6	6
349	0	6	6
350	0	6	6
351	0	6	6
352	0	6	6
353	0	6	6
354	0	6	6
355	0	6	6
356	0	6	6
357	0	6	6
358	0	6	6
359	0	6	6
360	0	6	6

Appendix C.2. Bosque Model Input Data

CENTRAL SALTCEDAR PROFILE

depth, cm	R	Material	Layer
0	0	1	1
0.1	0	1	1
0.2	0	1	1
0.3	0	1	1
0.4	0	1	1
0.5	0	1	1
0.6	0.25	1	1
0.7	0.3	1	1
0.8	0.4	1	1
0.9	0.45	1	1
1	0.5	1	1
1.2	0.6	1	1
1.6	0.7	1	1
2	0.8	1	1
3	0.9	1	1
4	0.91071	1	1
5	0.85714	1	1
6	0.80357	1	1
7	0.75	1	1
8	0.69643	1	1
9	0.73438	1	1
10	0.77232	1	1
11	0.81027	1	1
12	0.84822	1	1
13	0.88616	1	1
14	0.92411	1	1
15	0.96205	1	1
16	1	1	1
17	0.9375	1	1
18	0.875	1	1
19	0.8125	1	1
20	0.75	1	1
21	0.6875	1	1
22	0.625	1	1
23	0.5625	1	1
24	0.5	1	1
25	0.50446	1	1
26	0.50893	1	1
27	0.51339	1	1
28	0.51786	1	1
29	0.52232	1	1
30	0.52679	1	1
31	0.53125	1	1
32	0.53571	1	1
33	0.54241	1	1
34	0.54911	1	1
35	0.5558	1	1
36	0.5625	1	1
37	0.5692	1	1
38	0.57589	1	1
39	0.58259	1	1

R= root density function

CSC Overall Statigraphy

composite texture 4/11/99

Depth Inerval, cm		Texture	Material
0	60	SiL	1
60	80	SCL	2
80	160	SL	3
160	200	v.f. S	4
200	300	SCL	2
300	380	LS	5

v.f. = very fine, S = sand, LS = laomy sand,
SCL = Sandy Clay Loam, SL = sandy loam, SiL = silty loam

CSC Material Hydraulic Properties

Material	Qr	Qs	Alpha	n	Ks	l
1	0.059	0.3885	0.0057	2.9667	2.98	0.5
2	0.06	0.39	0.0075	2.35	1	0.5
3	0.0445	0.3806	0.0073	2.738	1.317	0.5
4	0.03	0.4055	0.0123	3.1994	172.4	0.5
5	0.045	0.36	0.0115	2.775	150	0.5

Qr = residual volumetric water content,
Qs = saturated volumetric water content
Alpha, n & l = van Genuchten paramenters
Ks = saturated hydraulic conductivity

40	0.58929	1	1
41	0.58036	1	1
42	0.57143	1	1
43	0.5625	1	1
44	0.55357	1	1
45	0.54464	1	1
46	0.53571	1	1
47	0.52679	1	1
48	0.51786	1	1
49	0.47991	1	1
50	0.44196	1	1
51	0.40402	1	1
52	0.36607	1	1
53	0.32813	1	1
54	0.29018	1	1
55	0.25223	1	1
56	0.21429	1	1
57	0.21205	1	1
58	0.20982	1	1
58.5	0.20871	1	1
59	0.20759	1	1
59.5	0.20647	2	2
60	0.20536	2	2
61	0.20313	2	2
62	0.20089	2	2
63	0.19866	2	2
64	0.19643	2	2
65	0.21429	2	2
66	0.23214	2	2
67	0.25	2	2
68	0.26786	2	2
69	0.28572	2	2
70	0.30357	2	2
71	0.32143	2	2
72	0.33929	2	2
73	0.33036	2	2
74	0.32143	2	2
75	0.3125	2	2
76	0.30357	2	2
77	0.29464	2	2
78	0.28571	2	2
79	0.27679	2	2
79.5	0.27232	2	2
80	0.26786	3	3
80.5	0.27121	3	3
81	0.27455	3	3
82	0.28125	3	3
83	0.28795	3	3
84	0.29464	3	3
85	0.30134	3	3
86	0.30804	3	3
87	0.31473	3	3
88	0.32143	3	3
89	0.36607	3	3
90	0.41072	3	3
91	0.45536	3	3
92	0.5	3	3
93	0.54464	3	3
94	0.58929	3	3

95	0.63393	3	3
96	0.67857	3	3
97	0.67098	3	3
98	0.66338	3	3
99	0.65578	3	3
100	0.64819	3	3
101	0.64059	3	3
102	0.63299	3	3
103	0.6254	3	3
104	0.6178	3	3
105	0.6102	3	3
106	0.60261	3	3
107	0.59501	3	3
108	0.58742	3	3
109	0.57982	3	3
110	0.57222	3	3
111	0.56463	3	3
112	0.55703	3	3
113	0.54943	3	3
114	0.54184	3	3
115	0.53424	3	3
116	0.52664	3	3
117	0.51905	3	3
118	0.51145	3	3
119	0.50386	3	3
120	0.49626	3	3
121	0.48866	3	3
122	0.48107	3	3
123	0.47347	3	3
124	0.46587	3	3
125	0.45828	3	3
126	0.45068	3	3
127	0.44308	3	3
128	0.43549	3	3
129	0.42789	3	3
130	0.4203	3	3
131	0.4127	3	3
132	0.4051	3	3
133	0.39751	3	3
134	0.38991	3	3
135	0.38231	3	3
136	0.37472	3	3
137	0.36712	3	3
138	0.35952	3	3
139	0.35193	3	3
140	0.34433	3	3
141	0.33674	3	3
142	0.32914	3	3
143	0.32154	3	3
144	0.31395	3	3
145	0.30635	3	3
146	0.29875	3	3
147	0.29116	3	3
148	0.28356	3	3
149	0.27596	3	3
150	0.26837	3	3
151	0.26077	3	3
152	0.25318	3	3
153	0.24558	3	3

154	0.23798	3	3
155	0.23039	3	3
156	0.22279	3	3
157	0.21519	3	3
158	0.2076	3	3
158.5	0.2038	3	3
159	0.2	3	3
160.5	0.2	4	4
160	0.2	4	4
161	0.21	4	4
162	0.22	4	4
163	0.23	4	4
164	0.24	4	4
165	0.25	4	4
166	0.26	4	4
167	0.27	4	4
168	0.28	4	4
169	0.29	4	4
170	0.3	4	4
171	0.3	4	4
172	0.295	4	4
173	0.29	4	4
174	0.285	4	4
175	0.28	4	4
176	0.275	4	4
177	0.27	4	4
178	0.265	4	4
179	0.26	4	4
180	0.255	4	4
181	0.25	4	4
182	0.245	4	4
183	0.24	4	4
184	0.235	4	4
185	0.23	4	4
186	0.225	4	4
187	0.22	4	4
188	0.215	4	4
189	0.21	4	4
190	0.205	4	4
191	0.2	4	4
192	0.195	4	4
193	0.19	4	4
194	0.185	4	4
195	0.18	4	4
196	0.175	4	4
197	0.17	4	4
198	0.165	4	4
199	0.16	4	4
199.5	0.1575	4	4
200	0.155	2	5
200.5	0.1525	2	5
201	0.1475	2	5
202	0.1425	2	5
203	0.1375	2	5
204	0.1325	2	5
205	0.1275	2	5
206	0.1225	2	5
207	0.1175	2	5
208	0.1125	2	5

209	0.1075	2	5
210	0.1025	2	5
211	0.0975	2	5
212	0.0925	2	5
213	0.0875	2	5
214	0.0825	2	5
215	0.0775	2	5
216	0.0725	2	5
217	0.0675	2	5
218	0.0625	2	5
219	0.0585	2	5
220	0.0555	2	5
221	0.0535	2	5
222	0.0525	2	5
223	0.0515	2	5
224	0.0505	2	5
225	0.0495	2	5
226	0.0485	2	5
227	0.0475	2	5
228	0.0465	2	5
229	0.0455	2	5
230	0.0445	2	5
231	0.0435	2	5
232	0.0425	2	5
233	0.0415	2	5
234	0.0405	2	5
235	0.0395	2	5
236	0.0385	2	5
237	0.0375	2	5
238	0.0365	2	5
239	0.0355	2	5
240	0.0345	2	5
241	0.0335	2	5
242	0.0325	2	5
243	0.0315	2	5
244	0.0305	2	5
245	0.0295	2	5
246	0.0285	2	5
247	0.0275	2	5
248	0.0265	2	5
249	0.0255	2	5
250	0.0245	2	5
251	0.0235	2	5
252	0.0225	2	5
253	0.0215	2	5
254	0.0205	2	5
255	0.0195	2	5
256	0.0185	2	5
257	0.0175	2	5
258	0.0165	2	5
259	0.0155	2	5
260	0.0145	2	5
261	0.0135	2	5
262	0.0125	2	5
263	0.0115	2	5
264	0.0105	2	5
265	0.01	2	5
266	0.01	2	5
267	0.01	2	5

268	0.01	2	5
269	0.01	2	5
270	0.01	2	5
271	0.007	2	5
272	0.004	2	5
273	0.001	2	5
274	0	2	5
275	0	2	5
276	0	2	5
277	0	2	5
278	0	2	5
279	0	2	5
280	0	2	5
281	0	2	5
282	0	2	5
283	0	2	5
284	0	2	5
285	0	2	5
286	0	2	5
287	0	2	5
288	0	2	5
289	0	2	5
290	0	2	5
291	0	2	5
292	0	2	5
293	0	2	5
294	0	2	5
295	0	2	5
296	0	2	5
297	0	2	5
298	0	2	5
299	0	2	5
299.5	0	3	5
300	0	5	6
300.5	0	5	6
301	0	5	6
302	0	5	6
303	0	5	6
304	0	5	6
305	0	5	6
306	0	5	6
307	0	5	6
308	0	5	6
309	0	5	6
310	0	5	7
311	0	5	7
312	0	5	7
313	0	5	7
314	0	5	7
315	0	5	7
316	0	5	7
317	0	5	7
318	0	5	7
319	0	5	7
320	0	5	7
321	0	5	7
322	0	5	7
323	0	5	7
324	0	5	7

325	0	5	7
326	0	5	7
327	0	5	7
328	0	5	7
329	0	5	7
330	0	5	7
331	0	5	7
332	0	5	7
333	0	5	7
334	0	5	7
335	0	5	7
336	0	5	7
337	0	5	7
338	0	5	7
339	0	5	7
340	0	5	7
341	0	5	7
342	0	5	7
343	0	5	7
344	0	5	7
345	0	5	7
346	0	5	7
347	0	5	7
348	0	5	7
349	0	5	7
350	0	5	7

SOUTH SALTCEDAR PROFILE

depth, cm	R	Material	Layer
0	0	1	1
0.1	0.1	1	1
0.2	0.2	1	1
0.3	0.3	1	1
0.4	0.4	1	1
0.5	0.5	1	1
0.6	0.6	1	1
0.7	0.7	1	1
0.8	0.8	1	1
0.9	0.9	1	1
1	1	1	1
1.2	1	1	1
1.6	1	1	1
2	1	1	1
3	1	1	1
4	1	1	1
5	0.967	1	1
6	0.933	1	1
7	0.9	1	1
8	0.867	1	1
9	0.831	1	1
10	0.795	1	1
11	0.759	1	1
12	0.723	1	1
13	0.687	1	1
14	0.651	1	1
15	0.615	1	1
16	0.579	1	1
17	0.583	1	1
18	0.588	1	1
19	0.592	1	1
20	0.597	1	1
21	0.601	1	1
22	0.605	1	1
23	0.61	1	1
24	0.614	1	1
24.5	0.609	1	1
25	0.604	2	2
25.5	0.599	2	2
26	0.594	2	2
27	0.584	2	2
28	0.574	2	2
29	0.564	2	2
30	0.554	2	2
31	0.544	2	2
32	0.534	2	2
33	0.521	2	2
34	0.507	2	2
35	0.494	2	2
36	0.48	2	2
37	0.467	2	2
38	0.453	2	2

R= root density function

SSC Overall Statigraphy

composite horizon

Depth Interval, cm		Texture	Material
0	25	SiCL	1
25	70	SL	2
70	120	SCL	3
120	215	SL	2
215	250	Clay	4
250	290	f. S	5
290	350	SiCL	1
350	400	S	6

f. = fine, S = sand, SL = sandy loam, SiCL = silty clay loam
SCL = Sandy Clay Loam, SiL = silty loam, C = clay

SSC Material Hydraulic Properties

Material	Qr	Qs	Alpha	n	Ks	l
1	0.059	0.39	0.0057	2.967	5.298	0.5
2	0.0213	0.4542	0.0082	3.116	71.17	0.5
3	0.0445	0.38	0.0073	2.738	1.317	0.5
4	0.05	0.4	0.0057	2.6	0.5	0.5
5	0.03	0.4055	0.0123	3.199	172.4	0.5
6	0.03	0.38	0.0138	3.816	350	0.5

Qr = residual volumetric water content,
Qs = saturated volumetric water content
Alpha, n & l = van Genuchten paramenters
Ks = saturated hydraulic conductivity

39	0.44	2	2
40	0.426	2	2
41	0.429	2	2
42	0.431	2	2
43	0.433	2	2
44	0.435	2	2
45	0.437	2	2
46	0.439	2	2
47	0.441	2	2
48	0.443	2	2
49	0.425	2	2
50	0.408	2	2
51	0.39	2	2
52	0.372	2	2
53	0.355	2	2
54	0.337	2	2
55	0.32	2	2
56	0.302	2	2
57	0.309	2	2
58	0.317	2	2
59	0.325	2	2
60	0.332	2	2
61	0.34	2	2
62	0.348	2	2
63	0.355	2	2
64	0.363	2	2
65	0.368	2	2
66	0.372	2	2
67	0.377	2	2
68	0.382	2	2
69	0.387	2	2
69.5	0.389	2	2
70	0.392	3	3
70.5	0.394	3	3
71	0.397	3	3
72	0.402	3	3
73	0.388	3	3
74	0.374	3	3
75	0.36	3	3
76	0.346	3	3
77	0.332	3	3
78	0.318	3	3
79	0.305	3	3
80	0.291	3	3
81	0.283	3	3
82	0.276	3	3
83	0.269	3	3
84	0.261	3	3
85	0.254	3	3
86	0.246	3	3
87	0.239	3	3
88	0.232	3	3
89	0.216	3	3
90	0.201	3	3
91	0.186	3	3
92	0.171	3	3
93	0.156	3	3
94	0.141	3	3
95	0.126	3	3

96	0.111	3	3
97	0.126	3	3
98	0.141	3	3
99	0.156	3	3
100	0.171	3	3
101	0.186	3	3
102	0.201	3	3
103	0.216	3	3
104	0.232	3	3
105	0.227	3	3
106	0.223	3	3
107	0.219	3	3
108	0.215	3	3
109	0.211	3	3
110	0.207	3	3
111	0.203	3	3
112	0.199	3	3
113	0.204	3	3
114	0.208	3	3
115	0.212	3	3
116	0.217	3	3
117	0.221	3	3
118	0.225	3	3
119	0.229	3	3
119.5	0.232	3	3
120	0.234	2	4
120.5	0.247	2	4
121	0.26	2	4
122	0.286	2	4
123	0.312	2	4
124	0.338	2	4
125	0.365	2	4
126	0.391	2	4
127	0.417	2	4
128	0.443	2	4
129	0.442	2	4
130	0.442	2	4
131	0.441	2	4
132	0.44	2	4
133	0.44	2	4
134	0.439	2	4
135	0.438	2	4
136	0.438	2	4
137	0.426	2	4
138	0.414	2	4
139	0.402	2	4
140	0.39	2	4
141	0.379	2	4
142	0.367	2	4
143	0.355	2	4
144	0.343	2	4
145	0.347	2	4
146	0.35	2	4
147	0.353	2	4
148	0.356	2	4
149	0.359	2	4
150	0.362	2	4
151	0.365	2	4
152	0.368	2	4

153	0.366	2	4
154	0.363	2	4
155	0.36	2	4
156	0.358	2	4
157	0.355	2	4
158	0.352	2	4
159	0.35	2	4
160	0.347	2	4
161	0.344	2	4
162	0.342	2	4
163	0.339	2	4
164	0.336	2	4
165	0.334	2	4
166	0.331	2	4
167	0.328	2	4
168	0.326	2	4
169	0.323	2	4
170	0.32	2	4
171	0.317	2	4
172	0.315	2	4
173	0.312	2	4
174	0.309	2	4
175	0.307	2	4
176	0.304	2	4
177	0.301	2	4
178	0.299	2	4
179	0.296	2	4
180	0.293	2	4
181	0.291	2	4
182	0.288	2	4
183	0.285	2	4
184	0.283	2	4
185	0.28	2	4
186	0.277	2	4
187	0.275	2	4
188	0.272	2	4
189	0.269	2	4
190	0.267	2	4
191	0.258	2	4
192	0.25	2	4
193	0.242	2	4
194	0.233	2	4
195	0.225	2	4
196	0.223	2	4
197	0.221	2	4
198	0.219	2	4
199	0.216	2	4
200	0.214	2	4
201	0.212	2	4
202	0.21	2	4
203	0.208	2	4
204	0.206	2	4
205	0.204	2	4
206	0.201	2	4
207	0.199	2	4
208	0.197	2	4
209	0.195	2	4
210	0.193	2	4
211	0.191	2	4

212	0.189	2	4
213	0.186	2	4
214	0.184	2	4
214.5	0.183	2	4
215	0.182	4	5
215.5	0.181	4	5
216	0.18	4	5
217	0.16	4	5
218	0.156	4	5
219	0.152	4	5
220	0.148	4	5
221	0.144	4	5
222	0.14	4	5
223	0.136	4	5
224	0.132	4	5
225	0.128	4	5
226	0.124	4	5
227	0.12	4	5
228	0.116	4	5
229	0.112	4	5
230	0.108	4	5
231	0.104	4	5
232	0.1	4	5
233	0.096	4	5
234	0.092	4	5
235	0.088	4	5
236	0.084	4	5
237	0.08	4	5
238	0.076	4	5
239	0.072	4	5
240	0.068	4	5
241	0.064	4	5
242	0.06	4	5
243	0.056	4	5
244	0.052	4	5
245	0.048	4	5
246	0.044	4	5
247	0.04	4	5
248	0.036	4	5
249	0.032	4	5
249.5	0.03	4	5
250	0.028	4	5
250.5	0.026	5	6
251	0.024	5	6
252	0.02	5	6
253	0.016	5	6
254	0.012	5	6
255	0.008	5	6
256	0.004	5	6
257	0	5	6
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289.5	0	5	6
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349.5	0	6	8
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350.5	0	6	8
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397	0	6	8
398	0	6	8
399	0	6	8
400	0	6	8

BOSQUE MODELS WEATHER INPUT

Day	Precipitation [cm]	Potential Evaporation [cm]	hCrit	Reference Transpiration [cm] Saltcedar	Cottonwood	
1	0	0.588	100000	0	0	
2	0	0.756	100000	0	0	
3	0.6096	0.28	100000	0	0	hCrit = maximum negative
4	0.1016	0.252	100000	0	0	soil water pressure at surface
5	0	0.504	100000	0	0	
6	0	0.672	100000	0	0	
7	0	0.812	100000	0	0	
8	0	0.812	100000	0	0	
9	0	0.812	100000	0	0	
10	0	0.756	100000	0	0	
11	0	0.588	100000	0	0	
12	0.5842	0.448	100000	0	0	
13	0.0254	0.672	100000	0	0	
14	0	0.756	100000	0	0	
15	0	0.84	100000	0	0	
16	0	0.812	100000	0	0	
17	0	1.036	100000	0	0	
18	0	1.008	100000	0	0	
19	0	0.476	100000	0	0	
20	0	0.2286	100000	0	0	
21	0	0.588	100000	0	0	
22	0	0.7	100000	0	0	
23	0	0.868	100000	0.12414	0.062	
24	0	0.98	100000	0.13205	0.12	
25	0	0.784	100000	0.11236	0.1027	
26	0	1.064	100000	0.12349	0.2313	
27	0	0.868	100000	0.18013	0.1722	
28	0	0.84	100000	0.08659	0.1569	
29	0	0.98	100000	0.11324	0.1527	
30	0	0.84	100000	0.11402	0.133	
31	0	1.008	100000	0.17232	0.1964	
32	0	0.84	100000	0.20876	0.2133	
33	0	0.812	100000	0.10786	0.083	
34	0	0.784	100000	0.13531	0.1593	
35	0	0.812	100000	0.17341	0.2436	
36	0	0.924	100000	0.11871	0.0912	
37	0	1.008	100000	0.18895	0.1555	
38	0	1.008	100000	0.14583	0.1398	
39	0	1.232	100000	0.22332	0.2325	
40	0	1.26	100000	0.21523	0.2779	
41	0	0.616	100000	0.10368	0.1319	
42	0	0.644	100000	0.17166	0.256	
43	0	0.98	100000	0.29678	0.294	
44	0	0.868	100000	0.21691	0.2055	
45	0	0.532	100000	0.11503	0.1456	
46	0	1.064	100000	0.22736	0.3711	
47	0	1.008	100000	0.23737	0.2809	
48	0	0.616	100000	0.16989	0.1699	
49	0	0.924	100000	0.26259	0.357	
50	0	0.924	100000	0.24443	0.227	
51	0	1.064	100000	0.27653	0.3856	
52	0	1.008	100000	0.28818	0.3158	

53	0	0.952	100000	0.2775	0.333
54	0	0.924	100000	0.22999	0.3391
55	0	1.036	100000	0.2702	0.3219
56	0	1.008	100000	0.25776	0.3807
57	0	1.092	100000	0.318	0.4219
58	0	0.728	100000	0.22716	0.2851
59	0	1.036	100000	0.34378	0.4425
60	0	1.036	100000	0.36651	0.4713
61	0	1.176	100000	0.40651	0.4911
62	0	1.12	100000	0.38093	0.4227
63	0	1.064	100000	0.39681	0.4311
64	0	1.036	100000	0.41456	0.428
65	0	1.036	100000	0.4259	0.4211
66	0	1.204	100000	0.49997	0.4553
67	0	1.064	100000	0.45344	0.4554
68	0	1.008	100000	0.51715	0.4223
69	0	1.12	100000	0.59904	0.4385
70	0.3556	0.7	100000	0.4078	0.295
71	0.6604	0.616	100000	0.47058	0.3876
72	0	0.952	100000	0.96235	0.9791
73	0	0.7	100000	0.56392	0.4382
74	0	0.98	100000	0.7508	0.5023
75	0.0508	0.728	100000	0.4644	0.2532
76	0.0762	0.84	100000	0.66137	0.4003
77	0	0.98	100000	0.69411	0.3791
78	0	0.812	100000	0.589	0.3735
79	0	1.12	100000	0.87162	0.6362
80	0	1.148	100000	0.87661	0.5496
81	0	1.148	100000	0.82493	0.509
82	0	1.26	100000	0.94465	0.6446
83	0	1.008	100000	0.74749	0.4844
84	0	1.008	100000	0.77799	0.4134
85	0	1.092	100000	0.85201	0.5184
86	0	1.148	100000	0.90919	0.5718
87	0	1.064	100000	0.82143	0.4586
88	0	1.092	100000	0.90955	0.4665
89	0	1.12	100000	0.92878	0.5255
90	0	1.092	100000	0.91124	0.5229
91	0	0.784	100000	0.57793	0.3216
92	0	0.924	100000	0.83616	0.4728
93	0	1.008	100000	0.83845	0.429
94	0	0.924	100000	0.73844	0.3764
95	0.3556	0.672	100000	0.63307	0.359
96	0	0.784	100000	0.64892	0.4515
97	0	0.784	100000	0.65657	0.4283
98	0	0.896	100000	0.80765	0.4475
99	0	0.756	100000	0.64617	0.3484
100	0	1.008	100000	0.92684	0.476
101	0	1.036	100000	0.95227	0.4729
102	0	1.092	100000	0.94735	0.5172
103	0	0.98	100000	0.83708	0.4069
104	0	0.924	100000	0.88718	0.4686
105	0	0.84	100000	0.82658	0.4071
106	0.1524	1.064	100000	1.00477	0.5611
107	0	1.232	100000	1.08283	0.5591
108	0	1.204	100000	1.01589	0.5768
109	0	1.148	100000	0.96956	0.4328
110	0	0.98	100000	0.84742	0.434
111	0	0.924	100000	0.81311	0.5047

171	0	0.616	100000	0.57878	0.3721
172	0	0.672	100000	0.74392	0.4456
173	2.1336	0.476	100000	0.49058	0.31
174	0	0.812	100000	1.19731	0.6617
175	0	0.868	100000	0.8747	0.4721
176	0	0.588	100000	0.57833	0.3197
177	0	0.784	100000	0.76184	0.4617
178	0	0.868	100000	0.87409	0.4652
179	0	0.616	100000	0.57921	0.3538
180	0	0.588	100000	0.725	0.3313
181	0	0.924	100000	0.98942	0.5655
182	0	0.896	100000	0.83585	0.5356
183	0.5842	0.476	100000	0.4185	0.2465
184	0.0254	0.504	100000	0.58588	0.4134
185	0.254	0.616	100000	0.65277	0.5004
186	0.127	0.616	100000	0.6713	0.5004
187	0.2794	0.28	100000	0.33524	0.2355
188	0.8382	0.616	100000	0.77374	0.7838
189	0.0254	0.532	100000	0.57152	0.4275
190	0	0.728	100000	0.8198	0.6347
191	0	0.7	100000	0.67996	0.4994
192	0	0.644	100000	0.6159	0.39
193	0.127	0.532	100000	0.56347	0.3492
194	0.0254	0.672	100000	0.70648	0.4246
195	0	0.728	100000	0.71191	0.519
196	0	0.784	100000	0.75588	0.5058
197	0	0.784	100000	0.74656	0.5076
198	0	0.924	100000	0.87884	0.5478
199	0	0.728	100000	0.57579	0.3815
200	0	0.672	100000	0.56972	0.3478
201	0	0.756	100000	0.64707	0.4038
202	0	0.756	100000	0.66303	0.4038
203	0	0.756	100000	0.67461	0.4281
204	0	0.784	100000	0.65836	0.4622
205	0	0.756	100000	0.59389	0.3895
206	0	0.756	100000	0.62148	0.3805
207	0	0.644	100000	0.62837	0.3688
208	0	0.7	100000	0.62701	0.3998
209	0	0.644	100000	0.44264	0.3156
210	0	0.728	100000	0.55682	0.4062
211	0	0.7	100000	0.50621	0.3482
212	0	0.672	100000	0.52695	0.3193
213	0	0.756	100000	0.57739	0.3637
214	0	0.728	100000	0.44493	0.3164
215	0	0.7	100000	0.49635	0.3129
216	0.1778	0.588	100000	0.43157	0.2987
217	0.5334	0.112	100000	0.10005	0.0617
218	0	0.392	100000	1.0578	1.0306
219	0	0.448	100000	0.39315	0.3677
220	0	0.504	100000	0.37939	0.322
221	0	0.616	100000	0.37831	0.3852
222	0	0.644	100000	0.34403	0.2976
223	0	0.616	100000	0.28049	0.2396
224	0	0.588	100000	0.21043	0.1399
225	0	0.616	100000	0.23105	0.1314
226	0	0.644	100000	0.20863	0.0744
227	0	0.476	100000	0.16025	0.0981
228	0	0.616	100000	0.21209	0.1294
229	0	0.728	100000	0.22724	0.1436

230	0	0.476	100000	0.15233	0.1084
231	0	0.56	100000	0.14502	0.0514
232	0	0.7	100000	0.22717	0.1102
233	0	0.504	100000	0.16174	0.1022
234	0	0.42	100000	0.10978	0.0703
235	0	0.56	100000	0.1488	0.0584
236	0	0.588	100000	0.18273	0.0792
237	0	0.644	100000	0.17279	0.081
238	0	0.532	100000	0.1414	0.0758
239	0	0.504	100000	0.13151	0.0575
240	0	0.504	100000	0.12523	0.0432
241	0	0.616	100000	0.17068	0.051
242	0	0.588	100000	0.13175	0.0957
243	0	0.616	100000	0.17134	0.0936
244	0	0.56	100000	0.14299	0.0713
245	0	0.672	100000	0.17344	0.0756
246	0	0.588	100000	0.13621	0.0764
247	0	0.532	100000	0.11304	0.0756
248	0	0.532	100000	0.1486	0.0761
249	0	0.448	100000	0.12891	0.0295
250	0	0.476	100000	0.12289	0.052
251	0	0.448	100000	0.08928	0.0346
252	0	0.476	100000	0.13887	0.0722
253	0	0.42	100000	0.09475	0.0559
254	0	0.392	100000	0	0
255	0	0.392	100000	0	0
256	0	0.364	100000	0	0
257	0	0.42	100000	0	0
258	0	0.42	100000	0	0
259	0	0.476	100000	0	0
260	0	0.448	100000	0	0
261	0	0.42	100000	0	0
262	0	0.336	100000	0	0
263	0	0.476	100000	0	0
264	0	0.392	100000	0	0
265	0.0508	0.28	100000	0	0
266	0	0.28	100000	0	0
267	0	0.28	100000	0	0
268	0	0.336	100000	0	0
269	0.0254	0.392	100000	0	0
270	0	0.224	100000	0	0
271	0	0.28	100000	0	0
272	0	0.336	100000	0	0
273	0	0.364	100000	0	0
274	0	0.336	100000	0	0
275	0	0.448	100000	0	0
276	0	0.364	100000	0	0
277	0	0.308	100000	0	0
278	0	0.364	100000	0	0
279	0	0.364	100000	0	0
280	0	0.308	100000	0	0
281	0	0.28	100000	0	0
282	0	0.14	100000	0	0
283	0	0.056	100000	0	0
284	0	0.196	100000	0	0
285	0	0.224	100000	0	0
286	0	0.308	100000	0	0
287	0.2032	0.056	100000	0	0
288	0	0.196	100000	0	0

289	0	0.196	100000	0	0
290	0	0.14	100000	0	0
291	0	0.252	100000	0	0
292	0	0.28	100000	0	0
293	0	0.392	100000	0	0
294	0	0.336	100000	0	0
295	0	0.308	100000	0	0
296	0	0.308	100000	0	0
297	0	0.364	100000	0	0
298	0	0.364	100000	0	0
299	0	0.336	100000	0	0
300	0	0.336	100000	0	0
301	0	0.308	100000	0	0
302	0	0.392	100000	0	0
303	0	0.392	100000	0	0
304	0	0.504	100000	0	0
305	0	0.336	100000	0	0
306	0	0.42	100000	0	0
307	0	0.392	100000	0	0
308	0	0.364	100000	0	0
309	0	0.476	100000	0	0
310	0	0.392	100000	0	0
311	0	0.476	100000	0	0
312	0	0.448	100000	0	0
313	0	0.476	100000	0	0
314	0	0.588	100000	0	0
315	0	0.42	100000	0	0
316	0	0.588	100000	0	0
317	0	0.42	100000	0	0
318	0	0.56	100000	0	0
319	0	0.504	100000	0	0
320	0	0.476	100000	0	0
321	0	0.084	100000	0	0
322	0	0.28	100000	0	0
323	0	0.392	100000	0	0
324	0	0.532	100000	0	0
325	0	0.42	100000	0	0
326	0	0.448	100000	0	0
327	0	0.364	100000	0	0
328	0	0.364	100000	0	0
329	0	0.476	100000	0	0
330	0	0.448	100000	0	0
331	0	0.476	100000	0	0
332	0	0.532	100000	0	0
333	0	0.952	100000	0	0
334	0	0.504	100000	0	0
335	0	0.448	100000	0	0
336	0	0.56	100000	0	0
337	0	0.56	100000	0	0
338	0	0.644	100000	0	0
339	0	0.42	100000	0	0
340	0	0.504	100000	0	0
341	0	0.616	100000	0	0
342	0	0.7	100000	0	0
343	0	0.644	100000	0	0
344	0	0.616	100000	0	0
345	0	0.672	100000	0	0
346	0	0.56	100000	0	0
347	0	0.56	100000	0	0

348	0	0.42	100000	0	0
349	0	0.56	100000	0	0
350	0	0.616	100000	0	0
351	0	0.644	100000	0	0
352	0	0.784	100000	0	0
353	0	0.756	100000	0	0
354	0	0.756	100000	0	0
355	0	0.7	100000	0	0
356	0	0.7	100000	0	0
357	0	0.56	100000	0	0
358	0	0.616	100000	0	0
359	0	0.616	100000	0	0
360	0	0.756	100000	0	0
361	0	0.7	100000	0	0
362	0	0.84	100000	0	0
363	0	0.448	100000	0	0
364	0	0.532	100000	0	0
365	0	0.672	100000	0	0
366	0	0.588	100000	0	0
367	0	0.756	100000	0	0
368	0.6096	0.28	100000	0	0
369	0.1016	0.252	100000	0	0
370	0	0.504	100000	0	0
371	0	0.672	100000	0	0
372	0	0.812	100000	0	0
373	0	0.812	100000	0	0
374	0	0.812	100000	0	0
375	0	0.756	100000	0	0
376	0	0.588	100000	0	0
377	0.5842	0.448	100000	0	0
378	0.0254	0.672	100000	0	0
379	0	0.756	100000	0	0
380	0	0.84	100000	0	0
381	0	0.812	100000	0	0
382	0	1.036	100000	0	0
383	0	1.008	100000	0	0
384	0	0.476	100000	0	0
385	0	0.2286	100000	0	0
386	0	0.588	100000	0	0
387	0	0.7	100000	0	0
388	0	0.868	100000	0.12414	0.0619
389	0	0.98	100000	0.13205	0.1261
390	0	0.784	100000	0.11236	0.1027
391	0	1.064	100000	0.12349	0.2313
392	0	0.868	100000	0.18013	0.1722
393	0	0.84	100000	0.08659	0.1569
394	0	0.98	100000	0.11324	0.1527
395	0	0.84	100000	0.11402	0.133
396	0	1.008	100000	0.17232	0.1964
397	0	0.84	100000	0.20876	0.2133
398	0	0.812	100000	0.10786	0.083
399	0	0.784	100000	0.13531	0.1593
400	0	0.812	100000	0.17341	0.2436
401	0	0.924	100000	0.11871	0.0912
402	0	1.008	100000	0.18895	0.1555
403	0	1.008	100000	0.14583	0.1398
404	0	1.232	100000	0.22332	0.2325
405	0	1.26	100000	0.21523	0.2779
406	0	0.616	100000	0.10368	0.1319

407	0	0.644	100000	0.17166	0.256
408	0	0.98	100000	0.29678	0.294
409	0	0.868	100000	0.21691	0.2055
410	0	0.532	100000	0.11503	0.1456
411	0	1.064	100000	0.22736	0.3711
412	0	1.008	100000	0.23737	0.2809
413	0	0.616	100000	0.16989	0.1699
414	0	0.924	100000	0.26259	0.357
415	0	0.924	100000	0.24443	0.227
416	0	1.064	100000	0.27653	0.3856
417	0	1.008	100000	0.28818	0.3158
418	0	0.952	100000	0.2775	0.333
419	0	0.924	100000	0.22999	0.3391
420	0	1.036	100000	0.2702	0.3219
421	0	1.008	100000	0.25776	0.3807
422	0	1.092	100000	0.318	0.4219
423	0	0.728	100000	0.22716	0.2851
424	0	1.036	100000	0.34378	0.4425
425	0	1.036	100000	0.36651	0.4713
426	0	1.176	100000	0.40651	0.4911
427	0	1.12	100000	0.38093	0.4227
428	0	1.064	100000	0.39681	0.4311
429	0	1.036	100000	0.41456	0.428
430	0	1.036	100000	0.4259	0.4211
431	0	1.204	100000	0.49997	0.4553
432	0	1.064	100000	0.45344	0.4554
433	0	1.008	100000	0.51715	0.4223
434	0	1.12	100000	0.59904	0.4385
435	0.3556	0.7	100000	0.4078	0.295
436	0.6604	0.616	100000	0.47058	0.3876
437	0	0.952	100000	0.96235	0.9791
438	0	0.7	100000	0.56392	0.4382
439	0	0.98	100000	0.7508	0.5023
440	0.0508	0.728	100000	0.4644	0.2532
441	0.0762	0.84	100000	0.66137	0.4003
442	0	0.98	100000	0.69411	0.3791
443	0	0.812	100000	0.589	0.3735
444	0	1.12	100000	0.87162	0.6362
445	0	1.148	100000	0.87661	0.5496
446	0	1.148	100000	0.82493	0.509
447	0	1.26	100000	0.94465	0.6446
448	0	1.008	100000	0.74749	0.4844
449	0	1.008	100000	0.77799	0.4134
450	0	1.092	100000	0.85201	0.5184
451	0	1.148	100000	0.90919	0.5718
452	0	1.064	100000	0.82143	0.4586
453	0	1.092	100000	0.90955	0.4665
454	0	1.12	100000	0.92878	0.5255
455	0	1.092	100000	0.91124	0.5229
456	0	0.784	100000	0.57793	0.3216
457	0	0.924	100000	0.83616	0.4728
458	0	1.008	100000	0.83845	0.429
459	0	0.924	100000	0.73844	0.3764
460	0.3556	0.672	100000	0.63307	0.359
461	0	0.784	100000	0.64892	0.4515
462	0	0.784	100000	0.65657	0.4283
463	0	0.896	100000	0.80765	0.4475
464	0	0.756	100000	0.64617	0.3484
465	0	1.008	100000	0.92684	0.476

466	0	1.036	100000	0.95227	0.4729
467	0	1.092	100000	0.94735	0.5172
468	0	0.98	100000	0.83708	0.4069
469	0	0.924	100000	0.88718	0.4686
470	0	0.84	100000	0.82658	0.4071
471	0.1524	1.064	100000	1.00477	0.5611
472	0	1.232	100000	1.08283	0.5591
473	0	1.204	100000	1.01589	0.5768
474	0	1.148	100000	0.96956	0.4328
475	0	0.98	100000	0.84742	0.434
476	0	0.924	100000	0.81311	0.5047
477	0.0254	0.924	100000	0.94579	0.502
478	0.0508	0.84	100000	0.92654	0.552
479	0.0508	0.7	100000	0.55574	0.3949
480	0	0.98	100000	0.92174	0.7734
481	0	0.868	100000	0.81733	0.4773
482	0.5334	0.924	100000	0.93501	0.6594
483	0	0.588	100000	0.56451	0.3524
484	0	1.008	100000	1.20263	0.9357
485	0	0.952	100000	0.88251	0.549
486	0	0.98	100000	0.96517	0.5713
487	0	0.672	100000	0.64369	0.3883
488	0	0.56	100000	0.54577	0.3405
489	0.0254	0.812	100000	0.76144	0.5466
490	0.0254	0.616	100000	0.59533	0.3366
491	1.8034	0.84	100000	0.90405	0.7849
492	0.6604	0.84	100000	0.88856	0.6421
493	0.0254	0.784	100000	0.85041	0.6556
494	0.3048	0.616	100000	0.668	0.5029
495	0	0.868	100000	1.02853	0.7011
496	0	0.952	100000	0.73154	0.553
497	0	0.952	100000	0.96031	0.5825
498	0	0.98	100000	1.03329	0.6605
499	0	0.812	100000	0.7861	0.5318
500	0	0.924	100000	0.87375	0.5848
501	0.0508	0.868	100000	0.81927	0.5106
502	0	0.952	100000	0.99288	0.5963
503	0	0.896	100000	0.85635	0.5146
504	0.0254	0.952	100000	0.989	0.6561
505	0	0.84	100000	0.83278	0.5219
506	0	0.756	100000	0.70674	0.4493
507	0.2794	0.504	100000	0.47559	0.282
508	0.0762	0.476	100000	0.44288	0.4177
509	0.4826	0.588	100000	0.631	0.5134
510	0.9906	0.588	100000	0.63755	0.4479
511	0	0.868	100000	0.96945	0.748
512	1.0922	0.896	100000	0.88936	0.6293
513	0.0508	0.728	100000	0.78582	0.5372
514	0.3048	0.56	100000	0.5864	0.4438
515	0.1016	0.588	100000	0.68404	0.5331
516	0.0254	0.896	100000	1.04223	0.699
517	0	1.008	100000	0.9927	0.6614
518	0.0254	0.84	100000	0.76594	0.4668
519	0	0.784	100000	0.83316	0.5027
520	0	0.98	100000	1.08702	0.609
521	0	0.952	100000	0.90246	0.5311
522	0	0.952	100000	0.91963	0.5144
523	0.5842	0.896	100000	0.78599	0.462
524	0.1524	0.84	100000	0.8329	0.5185

525	0	0.98	100000	1.0358	0.7778
526	0	0.896	100000	0.86035	0.5405
527	0.4572	1.008	100000	0.90755	0.4821
528	0	0.84	100000	0.85694	0.5008
529	0.0508	0.784	100000	0.79668	0.5806
530	0	0.728	100000	0.72293	0.3965
531	0.2286	0.896	100000	0.89256	0.5217
532	0.0508	0.896	100000	0.9128	0.4339
533	0	0.896	100000	0.9842	0.7383
534	0	0.812	100000	0.83395	0.6071
535	0	0.84	100000	0.80083	0.5699
536	0	0.616	100000	0.57878	0.3721
537	0	0.672	100000	0.74392	0.4456
538	2.1336	0.476	100000	0.49058	0.31
539	0	0.812	100000	1.19731	0.6617
540	0	0.868	100000	0.8747	0.4721
541	0	0.588	100000	0.57833	0.3197
542	0	0.784	100000	0.76184	0.4617
543	0	0.868	100000	0.87409	0.4652
544	0	0.616	100000	0.57921	0.3538
545	0	0.588	100000	0.725	0.3313
546	0	0.924	100000	0.98942	0.5655
547	0	0.896	100000	0.83585	0.5356
548	0.5842	0.476	100000	0.4185	0.2465
549	0.0254	0.504	100000	0.58588	0.4134
550	0.254	0.616	100000	0.65277	0.5004
551	0.127	0.616	100000	0.6713	0.5004
552	0.2794	0.28	100000	0.33524	0.2355
553	0.8382	0.616	100000	0.77374	0.7838
554	0.0254	0.532	100000	0.57152	0.4275
555	0	0.728	100000	0.8198	0.6347
556	0	0.7	100000	0.67996	0.4994
557	0	0.644	100000	0.6159	0.39
558	0.127	0.532	100000	0.56347	0.3492
559	0.0254	0.672	100000	0.70648	0.4246
560	0	0.728	100000	0.71191	0.519
561	0	0.784	100000	0.75588	0.5058
562	0	0.784	100000	0.74656	0.5076
563	0	0.924	100000	0.87884	0.5478
564	0	0.728	100000	0.57579	0.3815
565	0	0.672	100000	0.56972	0.3478
566	0	0.756	100000	0.64707	0.4038
567	0	0.756	100000	0.66303	0.4038
568	0	0.756	100000	0.67461	0.4281
569	0	0.784	100000	0.65836	0.4622
570	0	0.756	100000	0.59389	0.3895
571	0	0.756	100000	0.62148	0.3805
572	0	0.644	100000	0.62837	0.3688
573	0	0.7	100000	0.62701	0.3998
574	0	0.644	100000	0.44264	0.3156
575	0	0.728	100000	0.55682	0.4062
576	0	0.7	100000	0.50621	0.3482
577	0	0.672	100000	0.52695	0.3193
578	0	0.756	100000	0.57739	0.3637
579	0	0.728	100000	0.44493	0.3164
580	0	0.7	100000	0.49635	0.3129
581	0.1778	0.588	100000	0.43157	0.2987
582	0.5334	0.112	100000	0.10005	0.0617
583	0	0.392	100000	1.0578	1.0306

584	0	0.448	100000	0.39315	0.3677
585	0	0.504	100000	0.37939	0.322
586	0	0.616	100000	0.37831	0.3852
587	0	0.644	100000	0.34403	0.2976
588	0	0.616	100000	0.28049	0.2396
589	0	0.588	100000	0.21043	0.1399
590	0	0.616	100000	0.23105	0.1314
591	0	0.644	100000	0.20863	0.0744
592	0	0.476	100000	0.16025	0.0981
593	0	0.616	100000	0.21209	0.1294
594	0	0.728	100000	0.22724	0.1436
595	0	0.476	100000	0.15233	0.1084
596	0	0.56	100000	0.14502	0.0514
597	0	0.7	100000	0.22717	0.1102
598	0	0.504	100000	0.16174	0.1022
599	0	0.42	100000	0.10978	0.0703
600	0	0.56	100000	0.1488	0.0584
601	0	0.588	100000	0.18273	0.0792
602	0	0.644	100000	0.17279	0.081
603	0	0.532	100000	0.1414	0.0758
604	0	0.504	100000	0.13151	0.0575
605	0	0.504	100000	0.12523	0.0432
606	0	0.616	100000	0.17068	0.051
607	0	0.588	100000	0.13175	0.0957
608	0	0.616	100000	0.17134	0.0936
609	0	0.56	100000	0.14299	0.0713
610	0	0.672	100000	0.17344	0.0756
611	0	0.588	100000	0.13621	0.0764
612	0	0.532	100000	0.11304	0.0756
613	0	0.532	100000	0.1486	0.0761
614	0	0.448	100000	0.12891	0.0295
615	0	0.476	100000	0.12289	0.052
616	0	0.448	100000	0.08928	0.0346
617	0	0.476	100000	0.13887	0.0722
618	0	0.42	100000	0.09475	0.0559
619	0	0.392	100000	0	0
620	0	0.392	100000	0	0
621	0	0.364	100000	0	0
622	0	0.42	100000	0	0
623	0	0.42	100000	0	0
624	0	0.476	100000	0	0
625	0	0.448	100000	0	0
626	0	0.42	100000	0	0
627	0	0.336	100000	0	0
628	0	0.476	100000	0	0
629	0	0.392	100000	0	0
630	0.0508	0.28	100000	0	0
631	0	0.28	100000	0	0
632	0	0.28	100000	0	0
633	0	0.336	100000	0	0
634	0.0254	0.392	100000	0	0
635	0	0.224	100000	0	0
636	0	0.28	100000	0	0
637	0	0.336	100000	0	0
638	0	0.364	100000	0	0
639	0	0.336	100000	0	0
640	0	0.448	100000	0	0
641	0	0.364	100000	0	0
642	0	0.308	100000	0	0

643	0	0.364	100000	0	0	C-36
644	0	0.364	100000	0	0	
645	0	0.308	100000	0	0	
646	0	0.28	100000	0	0	
647	0	0.14	100000	0	0	
648	0	0.056	100000	0	0	
649	0	0.196	100000	0	0	
650	0	0.224	100000	0	0	
651	0	0.308	100000	0	0	
652	0.2032	0.056	100000	0	0	
653	0	0.196	100000	0	0	
654	0	0.196	100000	0	0	
655	0	0.14	100000	0	0	
656	0	0.252	100000	0	0	
657	0	0.28	100000	0	0	
658	0	0.392	100000	0	0	
659	0	0.336	100000	0	0	
660	0	0.308	100000	0	0	
661	0	0.308	100000	0	0	
662	0	0.364	100000	0	0	
663	0	0.364	100000	0	0	
664	0	0.336	100000	0	0	
665	0	0.336	100000	0	0	
666	0	0.308	100000	0	0	
667	0	0.392	100000	0	0	
668	0	0.392	100000	0	0	
669	0	0.504	100000	0	0	
670	0	0.336	100000	0	0	
671	0	0.42	100000	0	0	
672	0	0.392	100000	0	0	
673	0	0.364	100000	0	0	
674	0	0.476	100000	0	0	
675	0	0.392	100000	0	0	
676	0	0.476	100000	0	0	
677	0	0.448	100000	0	0	
678	0	0.476	100000	0	0	
679	0	0.588	100000	0	0	
680	0	0.42	100000	0	0	
681	0	0.588	100000	0	0	
682	0	0.42	100000	0	0	
683	0	0.56	100000	0	0	
684	0	0.504	100000	0	0	
685	0	0.476	100000	0	0	
686	0	0.084	100000	0	0	
687	0	0.28	100000	0	0	
688	0	0.392	100000	0	0	
689	0	0.532	100000	0	0	
690	0	0.42	100000	0	0	
691	0	0.448	100000	0	0	
692	0	0.364	100000	0	0	
693	0	0.364	100000	0	0	
694	0	0.476	100000	0	0	
695	0	0.448	100000	0	0	
696	0	0.476	100000	0	0	
697	0	0.532	100000	0	0	
698	0	0.952	100000	0	0	
699	0	0.504	100000	0	0	
700	0	0.448	100000	0	0	
701	0	0.56	100000	0	0	

702	0	0.56	100000	0	0
703	0	0.644	100000	0	0
704	0	0.42	100000	0	0
705	0	0.504	100000	0	0
706	0	0.616	100000	0	0
707	0	0.7	100000	0	0
708	0	0.644	100000	0	0
709	0	0.616	100000	0	0
710	0	0.672	100000	0	0
711	0	0.56	100000	0	0
712	0	0.56	100000	0	0
713	0	0.42	100000	0	0
714	0	0.56	100000	0	0
715	0	0.616	100000	0	0
716	0	0.644	100000	0	0
717	0	0.784	100000	0	0
718	0	0.756	100000	0	0
719	0	0.756	100000	0	0
720	0	0.7	100000	0	0
721	0	0.7	100000	0	0
722	0	0.56	100000	0	0
723	0	0.616	100000	0	0
724	0	0.616	100000	0	0
725	0	0.756	100000	0	0
726	0	0.7	100000	0	0
727	0	0.84	100000	0	0
728	0	0.448	100000	0	0
729	0	0.532	100000	0	0
730	0	0.672	100000	0	0
731	0	0.588	100000	0	0
732	0	0.756	100000	0	0
733	0.6096	0.28	100000	0	0
734	0.1016	0.252	100000	0	0
735	0	0.504	100000	0	0
736	0	0.672	100000	0	0
737	0	0.812	100000	0	0
738	0	0.812	100000	0	0
739	0	0.812	100000	0	0
740	0	0.756	100000	0	0
741	0	0.588	100000	0	0
742	0.5842	0.448	100000	0	0
743	0.0254	0.672	100000	0	0
744	0	0.756	100000	0	0
745	0	0.84	100000	0	0
746	0	0.812	100000	0	0
747	0	1.036	100000	0	0
748	0	1.008	100000	0	0
749	0	0.476	100000	0	0
750	0	0.2286	100000	0	0
751	0	0.588	100000	0	0
752	0	0.7	100000	0	0
753	0	0.868	100000	0.12414	0.0619
754	0	0.98	100000	0.13205	0.1261
755	0	0.784	100000	0.11236	0.1027
756	0	1.064	100000	0.12349	0.2313
757	0	0.868	100000	0.18013	0.1722
758	0	0.84	100000	0.08659	0.1569
759	0	0.98	100000	0.11324	0.1527
760	0	0.84	100000	0.11402	0.133

761	0	1.008	100000	0.17232	0.1964
762	0	0.84	100000	0.20876	0.2133
763	0	0.812	100000	0.10786	0.083
764	0	0.784	100000	0.13531	0.1593
765	0	0.812	100000	0.17341	0.2436
766	0	0.924	100000	0.11871	0.0912
767	0	1.008	100000	0.18895	0.1555
768	0	1.008	100000	0.14583	0.1398
769	0	1.232	100000	0.22332	0.2325
770	0	1.26	100000	0.21523	0.2779
771	0	0.616	100000	0.10368	0.29
772	0	0.644	100000	0.17166	0.262
773	0	0.98	100000	0.29678	0.294
774	0	0.868	100000	0.21691	0.276
775	0	0.532	100000	0.11503	0.267
776	0	1.064	100000	0.22736	0.3728
777	0	1.008	100000	0.23737	0.2945
778	0	0.616	100000	0.16989	0.2991
779	0	0.924	100000	0.26259	0.3573
780	0	0.924	100000	0.24443	0.2711
781	0	1.064	100000	0.27653	0.386
782	0	1.008	100000	0.28818	0.3765
783	3.4	0.952	100000	0.2775	0.3987
784	0	0.924	100000	0.22999	0.394
785	0	1.036	100000	0.2702	0.3289
786	0	1.008	100000	0.25776	0.3875
787	0	1.092	100000	0.318	0.4892
788	0	0.728	100000	0.22716	0.2863
789	0	1.036	100000	0.34378	0.455
790	0	1.036	100000	0.36651	0.476
791	0	1.176	100000	0.40651	0.493
792	0	1.12	100000	0.38093	0.477
793	0	1.064	100000	0.39681	0.47
794	0	1.036	100000	0.41456	0.4971
795	0	1.036	100000	0.4259	0.4211
796	2.5	1.204	100000	0.49997	0.5531
797	0.6	1.064	100000	0.45344	0.5545
798	0	1.008	100000	0.51715	0.452
799	0	1.12	100000	0.59904	0.4887
800	2.6	0.7	100000	0.4078	0.299
801	0	0.616	100000	0.47058	0.569
802	0	0.952	100000	0.96235	0.979
803	0	0.7	100000	0.56392	0.4883
804	0	0.98	100000	0.7508	0.5023
805	0	0.728	100000	0.4644	0.532
806	0	0.84	100000	0.66137	0.425
807	0	0.98	100000	0.69411	0.397
808	2	0.812	100000	0.589	0.386
809	0	1.12	100000	0.87162	0.6693
810	0	1.148	100000	0.87661	0.5964
811	0	1.148	100000	0.82493	0.598
812	3	1.26	100000	0.94465	0.687
813	0	1.008	100000	0.74749	0.4844
814	0	1.008	100000	0.77799	0.469
815	0	1.092	100000	0.85201	0.587
816	0	1.148	100000	0.90919	0.587
817	0	1.064	100000	0.82143	0.4899
818	0	1.092	100000	0.90955	0.479
819	0	1.12	100000	0.92878	0.559

820	0	1.092	100000	0.91124	0.5872
821	0	0.784	100000	0.57793	0.3574
822	0	0.924	100000	0.83616	0.4784
823	0	1.008	100000	0.83845	0.4909
824	2.4	0.924	100000	0.73844	0.393
825	0.8	0.672	100000	0.63307	0.3895
826	0	0.784	100000	0.64892	0.488
827	0	0.784	100000	0.65657	0.483
828	0	0.896	100000	0.80765	0.4753
829	0	0.756	100000	0.64617	0.3844
830	0	1.008	100000	0.92684	0.49
831	0	1.036	100000	0.95227	0.4799
832	0	1.092	100000	0.94735	0.5754
833	0	0.98	100000	0.83708	0.487
834	0	0.924	100000	0.88718	0.4864
835	0	0.84	100000	0.82658	0.4712
836	0.1524	1.064	100000	1.00477	0.57
837	0	1.232	100000	1.08283	0.5988
838	0	1.204	100000	1.01589	0.5768
839	0	1.148	100000	0.96956	0.4328
840	0	0.98	100000	0.84742	0.434
841	0	0.924	100000	0.81311	0.5047
842	0.0254	0.924	100000	0.94579	0.502
843	0.0508	0.84	100000	0.92654	0.552
844	0.0508	0.7	100000	0.55574	0.3949
845	0	0.98	100000	0.92174	0.7734
846	0	0.868	100000	0.81733	0.4773
847	0.5334	0.924	100000	0.93501	0.6594
848	0	0.588	100000	0.56451	0.3524
849	0	1.008	100000	1.20263	0.9357
850	0	0.952	100000	0.88251	0.549
851	0	0.98	100000	0.96517	0.5713
852	0	0.672	100000	0.64369	0.3883
853	0	0.56	100000	0.54577	0.3405
854	0.0254	0.812	100000	0.76144	0.5466
855	0.0254	0.616	100000	0.59533	0.3366
856	2.8034	0.84	100000	0.90405	0.7849
857	0	0.84	100000	0.88856	0.6421
858	0	0.784	100000	0.85041	0.6556
859	0	0.616	100000	0.668	0.5029
860	0	0.868	100000	1.02853	0.7011
861	0.77	0.952	100000	0.73154	0.553
862	0	0.952	100000	0.96031	0.5825
863	0	0.98	100000	1.03329	0.6605
864	0	0.812	100000	0.7861	0.5318
865	0	0.924	100000	0.87375	0.5848
866	0.0508	0.868	100000	0.81927	0.5106
867	0	0.952	100000	0.99288	0.5963
868	0	0.896	100000	0.85635	0.5146
869	0.0254	0.952	100000	0.989	0.6561
870	0	0.84	100000	0.83278	0.5219
871	0	0.756	100000	0.70674	0.4493
872	0.2794	0.504	100000	0.47559	0.282
873	0.0762	0.476	100000	0.44288	0.4177
874	0.4826	0.588	100000	0.631	0.5134
875	0.9906	0.588	100000	0.63755	0.4479
876	0	0.868	100000	0.96945	0.748
877	1.0922	0.896	100000	0.88936	0.6293
878	0.0508	0.728	100000	0.78582	0.5372

879	2.048	0.56	100000	0.5864	0.4438
880	0.1016	0.588	100000	0.68404	0.5331
881	1.44	0.896	100000	1.04223	0.699
882	0	1.008	100000	0.9927	0.6614
883	0.0254	0.84	100000	0.76594	0.4668
884	0	0.784	100000	0.83316	0.5027
885	0	0.98	100000	1.08702	0.609
886	0	0.952	100000	0.90246	0.5311
887	0	0.952	100000	0.91963	0.5144
888	0.5842	0.896	100000	0.78599	0.462
889	0.1524	0.84	100000	0.8329	0.5185
890	0	0.98	100000	1.0358	0.7778
891	0	0.896	100000	0.86035	0.5405
892	1.67	1.008	100000	0.90755	0.4821
893	0	0.84	100000	0.85694	0.5008
894	0.0508	0.784	100000	0.79668	0.5806
895	0	0.728	100000	0.72293	0.3965
896	0	0.896	100000	0.89256	0.5217
897	0.0508	0.896	100000	0.9128	0.4339
898	0	0.896	100000	0.9842	0.7383
899	0	0.812	100000	0.83395	0.6071
900	0	0.84	100000	0.80083	0.5699
901	0	0.616	100000	0.57878	0.3721
902	0	0.672	100000	0.74392	0.4456
903	2.1336	0.476	100000	0.49058	0.31
904	0	0.812	100000	1.19731	0.6617
905	0	0.868	100000	0.8747	0.4721
906	0	0.588	100000	0.57833	0.3197
907	0	0.784	100000	0.76184	0.4617
908	0	0.868	100000	0.87409	0.4652
909	0	0.616	100000	0.57921	0.3538
910	0	0.588	100000	0.725	0.3313
911	0	0.924	100000	0.98942	0.5655
912	0	0.896	100000	0.83585	0.5356
913	0.5842	0.476	100000	0.4185	0.2465
914	0	0.504	100000	0.58588	0.4134
915	0	0.616	100000	0.65277	0.5004
916	0.127	0.616	100000	0.6713	0.5004
917	0.2794	0.28	100000	0.33524	0.2355
918	0.8382	0.616	100000	0.77374	0.7838
919	0	0.532	100000	0.57152	0.4275
920	0	0.728	100000	0.8198	0.6347
921	0	0.7	100000	0.67996	0.4994
922	0	0.644	100000	0.6159	0.39
923	0.127	0.532	100000	0.56347	0.3492
924	0	0.672	100000	0.70648	0.4246
925	0	0.728	100000	0.71191	0.519
926	0	0.784	100000	0.75588	0.5058
927	0	0.784	100000	0.74656	0.5076
928	0	0.924	100000	0.87884	0.5478
929	0	0.728	100000	0.57579	0.3815
930	0	0.672	100000	0.56972	0.3478
931	0	0.756	100000	0.64707	0.4038
932	0	0.756	100000	0.66303	0.4038
933	0	0.756	100000	0.67461	0.4281
934	0	0.784	100000	0.65836	0.4622
935	0	0.756	100000	0.59389	0.3895
936	0	0.756	100000	0.62148	0.3805
937	0	0.644	100000	0.62837	0.3688

938	0	0.7	100000	0.62701	0.3998
939	0	0.644	100000	0.44264	0.3156
940	0	0.728	100000	0.55682	0.4062
941	0	0.7	100000	0.50621	0.3482
942	0	0.672	100000	0.52695	0.3193
943	0	0.756	100000	0.57739	0.3637
944	0	0.728	100000	0.44493	0.3164
945	0	0.7	100000	0.49635	0.3129
946	0	0.588	100000	0.43157	0.2987
947	0.5334	0.112	100000	0.10005	0.0617
948	0	0.392	100000	1.0578	1.0306
949	0	0.448	100000	0.39315	0.3677
950	0	0.504	100000	0.37939	0.322
951	0	0.616	100000	0.37831	0.3852
952	0	0.644	100000	0.34403	0.2976
953	0	0.616	100000	0.28049	0.2396
954	0	0.588	100000	0.21043	0.1399
955	0	0.616	100000	0.23105	0.1314
956	0	0.644	100000	0.20863	0.0744
957	0	0.476	100000	0.16025	0.0981
958	0	0.616	100000	0.21209	0.1294
959	0	0.728	100000	0.22724	0.1436
960	0	0.476	100000	0.15233	0.1084
961	0	0.56	100000	0.14502	0.0514
962	0	0.7	100000	0.22717	0.1102
963	0	0.504	100000	0.16174	0.1022
964	0	0.42	100000	0.10978	0.0703
965	0	0.56	100000	0.1488	0.0584
966	0	0.588	100000	0.18273	0.0792
967	0	0.644	100000	0.17279	0.081
968	0	0.532	100000	0.1414	0.0758
969	0	0.504	100000	0.13151	0.0575
970	0	0.504	100000	0.12523	0.0432
971	0	0.616	100000	0.17068	0.051
972	0	0.588	100000	0.13175	0.0957
973	0	0.616	100000	0.17134	0.0936
974	0	0.56	100000	0.14299	0.0713
975	0	0.672	100000	0.17344	0.0756
976	0	0.588	100000	0.13621	0.0764
977	0	0.532	100000	0.11304	0.0756
978	0	0.532	100000	0.1486	0.0761
979	0	0.448	100000	0.12891	0.0295
980	0	0.476	100000	0.12289	0.052
981	0	0.448	100000	0.08928	0.0346
982	0	0.476	100000	0.13887	0.0722
983	0	0.42	100000	0.09475	0.0559
984	0	0.392	100000	0	0
985	0	0.392	100000	0	0
986	0	0.364	100000	0	0
987	0	0.42	100000	0	0
988	0	0.42	100000	0	0
989	0	0.476	100000	0	0
990	0	0.448	100000	0	0
991	0	0.42	100000	0	0
992	0	0.336	100000	0	0
993	0	0.476	100000	0	0
994	0	0.392	100000	0	0
995	0.08	0.28	100000	0	0
996	0	0.28	100000	0	0

997	0	0.28	100000	0	0
998	0	0.336	100000	0	0
999	0.178	0.392	100000	0	0
1000	0	0.224	100000	0	0
1001	0	0.28	100000	0	0
1002	0	0.336	100000	0	0
1003	0	0.364	100000	0	0
1004	0	0.336	100000	0	0
1005	0	0.448	100000	0	0
1006	0	0.364	100000	0	0
1007	0	0.308	100000	0	0
1008	0	0.364	100000	0	0
1009	0	0.364	100000	0	0
1010	0	0.308	100000	0	0
1011	0	0.28	100000	0	0
1012	0	0.14	100000	0	0
1013	0	0.056	100000	0	0
1014	0	0.196	100000	0	0
1015	0	0.224	100000	0	0
1016	0	0.308	100000	0	0
1017	0.2032	0.056	100000	0	0
1018	0	0.196	100000	0	0
1019	0	0.196	100000	0	0
1020	0	0.14	100000	0	0
1021	0	0.252	100000	0	0
1022	0	0.28	100000	0	0

Appendix C.5. Central Saltcedar Models Results

Key:
CumP = Cummulative Precipitation, sum(vTop) = gross cummulative surface flux, Daily E = daily evaporation,
10 day E = sum of previous 10 "Daily E" values, sum(vRoot) = cumulative root uptake, Daily T = daily transpiration
10 day T = sum of previous 10 "Daily T" values, Cumm Dis = cumulative net groundwater discharge,
10day ET = sum of "10day E" and 10day T' values ***NOTE: OUTPUT RESULTS DAYS 657-1022 = 1999 days 1-365**

CSCMat ET=128.79 [89T,39.79E] ERROR= -2.83%

Time [day]	CumP'c [cm]	sum(vTop [L]	Cum E [cm]	Daily E [mm/day]	10day E [mm/10d]	sum(vRoc [L]	Daily T [mm]	10day T [mm/10d]	sum(vBot [L]	Cum Dis [cm]	10day ET [mm/10d]
1	0	-0.0216	-0.0216	-0.0216		0	0		0.832	0.832	
2	0	0.0484	0.0484	0.7		0	0		1.37	1.37	
3	0.61	0.0712	0.6808	6.324		0	0		1.88	1.2704	
4	0.711	0.0877	0.7989	1.181		0	0		2.38	1.6688	
5	0.711	0.101	0.8122	0.133		0	0		2.87	2.1588	
6	0.711	0.113	0.8242	0.12		0	0		3.35	2.6388	
7	0.711	0.124	0.8352	0.11		0	0		3.82	3.1088	
8	0.711	0.134	0.8452	0.1		0	0		4.29	3.5788	
9	0.711	0.143	0.8542	0.09		0	0		4.75	4.0388	
10	0.711	0.152	0.8632	0.09	8.8264	0	0	0	5.2	4.4888	8.8264
11	0.711	0.16	0.8712	0.08		0	0		5.66	4.9488	
12	1.295	0.0235	1.3189	4.477		0	0		6.08	4.7846	
13	1.321	0.113	1.4338	1.149		0	0		6.49	5.1692	
14	1.321	0.133	1.4538	0.2		0	0		6.89	5.5692	
15	1.321	0.146	1.4668	0.13		0	0		7.3	5.9792	
16	1.321	0.157	1.4778	0.11		0	0		7.68	6.3592	
17	1.321	0.167	1.4878	0.1		0	0		8.05	6.7292	
18	1.321	0.175	1.4958	0.08		0	0		8.39	7.0692	
19	1.321	0.183	1.5038	0.08		0	0		8.71	7.3892	
20	1.321	0.191	1.5118	0.08	6.486	0	0	0	9	7.6792	6.486
21	1.321	0.198	1.5188	0.07		0	0		9.26	7.9392	
22	1.321	0.204	1.5248	0.06		0	0		9.51	8.1892	
23	1.321	0.21	1.5308	0.06		0.122	1.22		9.74	8.4192	
24	1.321	0.215	1.5358	0.05		0.253	1.31		9.95	8.6292	
25	1.321	0.219	1.5398	0.04		0.363	1.1		10.2	8.8792	
26	1.321	0.223	1.5438	0.04		0.485	1.22		10.3	8.9792	
27	1.321	0.225	1.5458	0.02		0.663	1.78		10.5	9.1792	
28	1.321	0.228	1.5488	0.03		0.748	0.85		10.7	9.3792	
29	1.321	0.229	1.5498	0.01		0.86	1.12		10.8	9.4792	
30	1.321	0.231	1.5518	0.02	0.4	0.973	1.13	9.73	11	9.6792	10.13
31	1.321	0.232	1.5528	0.01		1.14	1.67		11.2	9.8792	
32	1.321	0.233	1.5538	0.01		1.35	2.1		11.3	9.9792	
33	1.321	0.234	1.5548	0.01		1.45	1		11.5	10.1792	
34	1.321	0.235	1.5558	0.01		1.59	1.4		11.7	10.3792	
35	1.321	0.235	1.5558	0		1.76	1.7		11.9	10.5792	
36	1.321	0.235	1.5558	0		1.88	1.2		12	10.6792	
37	1.321	0.235	1.5558	0		2.06	1.8		12.2	10.8792	
38	1.321	0.236	1.5568	0.01		2.2	1.4		12.4	11.0792	
39	1.321	0.236	1.5568	0		2.42	2.2		12.5	11.1792	
40	1.321	0.236	1.5568	0	0.05	2.64	2.2	16.67	12.7	11.3792	16.72
41	1.321	0.236	1.5568	0		2.74	1		12.9	11.5792	
42	1.321	0.236	1.5568	0		2.9	1.6		13.1	11.7792	
43	1.321	0.236	1.5568	0		3.17	2.7		13.2	11.8792	
44	1.321	0.236	1.5568	0		3.37	2		13.4	12.0792	
45	1.321	0.236	1.5568	0		3.48	1.1		13.6	12.2792	
46	1.321	0.236	1.5568	0		3.67	1.9		13.8	12.4792	
47	1.321	0.236	1.5568	0		3.87	2		13.9	12.5792	
48	1.321	0.236	1.5568	0		4.01	1.4		14.1	12.7792	
49	1.321	0.236	1.5568	0		4.22	2.1		14.3	12.9792	
50	1.321	0.236	1.5568	0	0	4.42	2	17.8	14.5	13.1792	17.8
51	1.321	0.236	1.5568	0		4.63	2.1		14.7	13.3792	
52	1.321	0.236	1.5568	0		4.86	2.3		14.9	13.5792	
53	1.321	0.236	1.5568	0		5.08	2.2		15.1	13.7792	
54	1.321	0.236	1.5568	0		5.26	1.8		15.3	13.9792	
55	1.321	0.236	1.5568	0		5.46	2		15.5	14.1792	

56	1.321	0.236	1.5568	0		5.65	1.9		15.6	14.2792	
57	1.321	0.236	1.5568	0		5.88	2.3		15.8	14.4792	
58	1.321	0.236	1.5568	0		6.03	1.5		16.1	14.7792	
59	1.321	0.236	1.5568	0		6.26	2.3		16.3	14.9792	
60	1.321	0.236	1.5568	0	0	6.49	2.3	20.7	16.5	15.1792	20.7
61	1.321	0.236	1.5568	0		6.75	2.6		16.7	15.3792	
62	1.321	0.236	1.5568	0		6.98	2.3		16.9	15.5792	
63	1.321	0.236	1.5568	0		7.23	2.5		17.1	15.7792	
64	1.321	0.236	1.5568	0		7.48	2.5		17.3	15.9792	
65	1.321	0.236	1.5568	0		7.74	2.6		17.5	16.1792	
66	1.321	0.236	1.5568	0		8.05	3.1		17.7	16.3792	
67	1.321	0.236	1.5568	0		8.32	2.7		18	16.6792	
68	1.321	0.236	1.5568	0		8.63	3.1		18.2	16.8792	
69	1.321	0.236	1.5568	0		8.99	3.6		18.4	17.0792	
70	1.676	0.236	1.9124	3.556	3.556	9.23	2.4	27.4	18.7	17.0236	30.956
71	2.337	0.191	2.5278	6.154		9.51	2.8		18.9	16.5632	
72	2.337	0.21	2.5468	0.19		10.1	5.9		19.2	16.8632	
73	2.337	0.212	2.5488	0.02		10.4	3		19.4	17.0632	
74	2.337	0.212	2.5488	0		10.9	5		19.7	17.3632	
75	2.388	0.212	2.5996	0.508		11.1	2		20	17.6124	
76	2.464	0.212	2.6758	0.762		11.5	4		20.4	17.9362	
77	2.464	0.212	2.6758	0		11.9	4		20.8	18.3362	
78	2.464	0.212	2.6758	0		12.3	4		21.2	18.7362	
79	2.464	0.212	2.6758	0		12.8	5		21.6	19.1362	
80	2.464	0.212	2.6758	0	7.634	13.3	5	40.7	22	19.5362	48.334
81	2.464	0.212	2.6758	0		13.7	4		22.5	20.0362	
82	2.464	0.212	2.6758	0		14.3	6		23	20.5362	
83	2.464	0.212	2.6758	0		14.7	4		23.4	20.9362	
84	2.464	0.212	2.6758	0		15.2	5		23.9	21.4362	
85	2.464	0.212	2.6758	0		15.6	4		24.4	21.9362	
86	2.464	0.212	2.6758	0		16.1	5		24.9	22.4362	
87	2.464	0.212	2.6758	0		16.6	5		25.4	22.9362	
88	2.464	0.212	2.6758	0		17.1	5		26	23.5362	
89	2.464	0.212	2.6758	0		17.6	5		26.5	24.0362	
90	2.464	0.212	2.6758	0	0	18.1	5	48	27	24.5362	48
91	2.464	0.212	2.6758	0		18.5	4		27.5	25.0362	
92	2.464	0.212	2.6758	0		18.9	4		28	25.5362	
93	2.464	0.212	2.6758	0		19.4	5		28.4	25.9362	
94	2.464	0.212	2.6758	0		19.8	4		28.8	26.3362	
95	2.819	0.212	3.0314	3.556		20.1	3		29.3	26.4806	
96	2.819	0.212	3.0314	0		20.5	4		29.7	26.8806	
97	2.819	0.212	3.0314	0		20.8	3		30.1	27.2806	
98	2.819	0.212	3.0314	0		21.3	5		30.6	27.7806	
99	2.819	0.212	3.0314	0		21.6	3		31	28.1806	
100	2.819	0.212	3.0314	0	3.556	22.1	5	40	31.4	28.5806	43.556
101	2.819	0.212	3.0314	0		22.6	5		31.9	29.0806	
102	2.819	0.212	3.0314	0		23.1	5		32.4	29.5806	
103	2.819	0.212	3.0314	0		23.5	4		32.8	29.9806	
104	2.819	0.212	3.0314	0		24	5		33.3	30.4806	
105	2.819	0.212	3.0314	0		24.4	4		33.7	30.8806	
106	2.972	0.212	3.1838	1.524		24.9	5		34.1	31.1282	
107	2.972	0.212	3.1838	0		25.4	5		34.5	31.5282	
108	2.972	0.212	3.1838	0		25.9	5		34.9	31.9282	
109	2.972	0.212	3.1838	0		26.4	5		35.2	32.2282	
110	2.972	0.212	3.1838	0	1.524	26.8	4	47	35.6	32.6282	48.524
111	2.972	0.212	3.1838	0		27.2	4		36	33.0282	
112	2.997	0.212	3.2092	0.254		27.7	5		36.3	33.3028	
113	3.048	0.212	3.26	0.508		28.1	4		36.5	33.452	
114	3.099	0.212	3.3108	0.508		28.4	3		36.8	33.7012	
115	3.099	0.212	3.3108	0		28.8	4		37.2	34.1012	
116	3.099	0.212	3.3108	0		29.2	4		37.6	34.5012	
117	3.632	0.212	3.8442	5.334		29.6	4		38	34.3678	
118	3.632	0.212	3.8442	0		29.9	3		38.4	34.7678	
119	3.632	0.212	3.8442	0		30.5	6		38.8	35.1678	
120	3.632	0.212	3.8442	0	6.604	30.9	4	41	39.3	35.6678	47.604
121	3.632	0.212	3.8442	0		31.4	5		39.8	36.1678	
122	3.632	0.212	3.8442	0		31.7	3		40.3	36.6678	

123	3.632	0.212	3.8442	0		31.9	2		40.8	37.1678	
124	3.658	0.212	3.8696	0.254		32.3	4		41.2	37.5424	
125	3.683	0.212	3.895	0.254		32.6	3		41.5	37.817	
126	5.486	-0.751	4.7354	8.404		33	4		41.8	36.3136	
127	6.147	-0.571	5.5758	8.404		33.6	6		42.1	35.9532	
128	6.172	-0.486	5.6862	1.104		34.1	5		42.5	36.3278	
129	6.477	-0.464	6.013	3.268		34.5	4		42.8	36.323	
130	6.477	-0.455	6.022	0.09	21.778	35.1	6	42	43.1	36.623	63.778
131	6.477	-0.452	6.025	0.03		35.5	4		43.5	37.023	
132	6.477	-0.451	6.026	0.01		36.1	6		43.9	37.423	
133	6.477	-0.451	6.026	0		36.6	5		44.2	37.723	
134	6.477	-0.451	6.026	0		37	4		44.5	38.023	
135	6.477	-0.45	6.027	0.01		37.4	4		44.8	38.323	
136	6.528	-0.45	6.0778	0.508		37.8	4		45.2	38.6722	
137	6.528	-0.45	6.0778	0		38.3	5		45.5	38.9722	
138	6.528	-0.45	6.0778	0		38.7	4		45.9	39.3722	
139	6.553	-0.45	6.1032	0.254		39.2	5		46.4	39.8468	
140	6.553	-0.45	6.1032	0	0.812	39.5	3	44	46.8	40.2468	44.812
141	6.553	-0.45	6.1032	0		39.9	4		47.2	40.6468	
142	6.833	-0.45	6.3826	2.794		40.1	2		47.4	40.5674	
143	6.909	-0.45	6.4588	0.762		40.3	2		47.7	40.7912	
144	7.391	-0.45	6.9414	4.826		40.6	3		48	40.6086	
145	8.382	-0.853	7.529	5.876		40.9	3		48.2	39.818	
146	8.382	-0.709	7.673	1.44		41.5	6		48.5	40.118	
147	9.474	-0.905	8.5692	8.962		42	5		48.8	39.3258	
148	9.525	-0.804	8.721	1.518		42.4	4		49	39.475	
149	9.83	-0.793	9.0368	3.158		42.7	3		49.3	39.4702	
150	9.931	-0.79	9.1414	1.046	30.382	43.1	4	36	49.5	39.5686	66.382
151	9.957	-0.788	9.1688	0.274		43.6	5		49.8	39.8432	
152	9.957	-0.788	9.1688	0		44.1	5		50.1	40.1432	
153	9.982	-0.788	9.1942	0.254		44.5	4		50.3	40.3178	
154	9.982	-0.787	9.1952	0.01		44.9	4		50.5	40.5178	
155	9.982	-0.787	9.1952	0		45.4	5		50.7	40.7178	
156	9.982	-0.787	9.1952	0		45.9	5		50.7	40.7178	
157	9.982	-0.787	9.1952	0		46.3	4		50.7	40.7178	
158	10.57	-0.787	9.7794	5.842		46.7	4		50.7	40.1336	
159	10.72	-0.787	9.9318	1.524		47.1	4		50.6	39.8812	
160	10.72	-0.787	9.9318	0	7.904	47.6	5	45	50.9	40.1812	52.904
161	10.72	-0.787	9.9318	0		48	4		51.3	40.5812	
162	11.18	-0.787	10.389	4.572		48.4	4		51.7	40.524	
163	11.18	-0.787	10.389	0		48.8	4		52.3	41.124	
164	11.23	-0.787	10.4398	0.508		49.2	4		52.8	41.5732	
165	11.23	-0.787	10.4398	0		49.5	3		53.3	42.0732	
166	11.46	-0.787	10.6684	2.286		50	5		53.8	42.3446	
167	11.51	-0.787	10.7192	0.508		50.4	4		54.4	42.8938	
168	11.51	-0.787	10.7192	0		50.8	4		55	43.4938	
169	11.51	-0.787	10.7192	0		51.2	4		55.6	44.0938	
170	11.51	-0.787	10.7192	0	7.874	51.6	4	40	56.2	44.6938	47.874
171	11.51	-0.787	10.7192	0		51.8	2		56.8	45.2938	
172	11.51	-0.787	10.7192	0		52.2	4		57.4	45.8938	
173	13.64	-2.44	11.1998	4.806		52.4	2		57.9	44.2602	
174	13.64	-1.96	11.6798	4.8		53.1	7		58.4	44.7602	
175	13.64	-1.88	11.7598	0.8		53.7	6		58.9	45.2602	
176	13.64	-1.85	11.7898	0.3		54	3		59.4	45.7602	
177	13.64	-1.83	11.8098	0.2		54.5	5		60	46.3602	
178	13.64	-1.82	11.8198	0.1		55	5		60.5	46.8602	
179	13.64	-1.82	11.8198	0		55.4	4		61	47.3602	
180	13.64	-1.82	11.8198	0	11.006	55.8	4	42	61.5	47.8602	53.006
181	13.64	-1.82	11.8198	0		56.3	5		62	48.3602	
182	13.64	-1.82	11.8198	0		56.7	4		62.7	49.0602	
183	14.22	-1.93	12.294	4.742		56.9	2		63.6	49.376	
184	14.25	-1.89	12.3594	0.654		57.2	3		64.3	50.0506	
185	14.5	-1.88	12.6234	2.64		57.5	3		65.1	50.5966	
186	14.63	-1.88	12.7504	1.27		57.8	3		65.9	51.2696	
187	14.91	-1.88	13.0298	2.794		57.9	1		67	52.0902	
188	15.75	-2.1	13.648	6.182		58.3	4		68.8	53.052	
189	15.77	-2.02	13.7534	1.054		58.5	2		70.4	54.6266	

190	15.77	-2.02	13.7534	0	19.336	58.8	3	30	71.7	55.9266	49.336	C-46
191	15.77	-2.01	13.7634	0.1		59.1	3		72.8	57.0266		
192	15.77	-2.01	13.7634	0		59.3	2		74.1	58.3266		
193	15.9	-2.01	13.8904	1.27		59.4	1		75.4	59.4996		
194	15.93	-2.01	13.9157	0.2534		59.7	3		76.4	60.4743		
195	15.93	-2.01	13.9157	0		59.9	2		77.4	61.4743		
196	15.93	-2.01	13.9157	0		60.1	2		78.2	62.2743		
197	15.93	-2.01	13.9157	0		60.4	3		79	63.0743		
198	15.93	-2.01	13.9157	0		60.7	3		79.6	63.6743		
199	15.93	-2.01	13.9157	0		60.9	2		80.1	64.1743		
200	15.93	-2.01	13.9157	0	1.6234	61.1	2	23	80.6	64.6743	24.6234	
201	15.93	-2.01	13.9157	0		61.4	3		81	65.0743		
202	15.93	-2.01	13.9157	0		61.7	3		81.2	65.2743		
203	15.93	-2.01	13.9157	0		61.9	2		81.5	65.5743		
204	15.93	-2.01	13.9157	0		62.2	3		81.7	65.7743		
205	15.93	-2.01	13.9157	0		62.5	3		81.8	65.8743		
206	15.93	-2.01	13.9157	0		62.8	3		81.9	65.9743		
207	15.93	-2.01	13.9157	0		63.1	3		82.1	66.1743		
208	15.93	-2.01	13.9157	0		63.4	3		82.2	66.2743		
209	15.93	-2.01	13.9157	0		63.7	3		82.4	66.4743		
210	15.93	-2.01	13.9157	0	0	63.9	2	28	82.6	66.6743	28	
211	15.93	-2.01	13.9157	0		64.2	3		82.9	66.9743		
212	15.93	-2.01	13.9157	0		64.5	3		83.3	67.3743		
213	15.93	-2.01	13.9157	0		64.8	3		83.8	67.8743		
214	15.93	-2.01	13.9157	0		65	2		84.2	68.2743		
215	15.93	-2.01	13.9157	0		65.2	2		84.5	68.5743		
216	16.1	-2.01	14.0935	1.778		65.4	2		84.8	68.6965		
217	16.64	-2.43	14.2069	1.134		65.5	1		85	68.3631		
218	16.64	-2.29	14.3469	1.4		66.1	6		85.2	68.5631		
219	16.64	-2.27	14.3669	0.2		66.4	3		85.3	68.6631		
220	16.64	-2.27	14.3669	0	4.512	66.6	2	27	85.4	68.7631	31.512	
221	16.64	-2.26	14.3769	0.1		66.8	2		85.5	68.8631		
222	16.64	-2.26	14.3769	0		67	2		85.7	69.0631		
223	16.64	-2.26	14.3769	0		67.2	2		85.8	69.1631		
224	16.64	-2.26	14.3769	0		67.4	2		85.9	69.2631		
225	16.64	-2.26	14.3769	0		67.5	1		85.9	69.2631		
226	16.64	-2.26	14.3769	0		67.6	1		86	69.3631		
227	16.64	-2.26	14.3769	0		67.7	1		86.1	69.4631		
228	16.64	-2.26	14.3769	0		67.9	2		86.2	69.5631		
229	16.64	-2.26	14.3769	0		68	1		86.4	69.7631		
230	16.64	-2.26	14.3769	0	0.1	68.1	1	15	86.5	69.8631	15.1	
231	16.64	-2.26	14.3769	0		68.2	1		86.7	70.0631		
232	16.64	-2.26	14.3769	0		68.3	1		86.8	70.1631		
233	16.64	-2.26	14.3769	0		68.4	1		87	70.3631		
234	16.64	-2.26	14.3769	0		68.5	1		87.1	70.4631		
235	16.64	-2.26	14.3769	0		68.6	1		87.3	70.6631		
236	16.64	-2.26	14.3769	0		68.7	1		87.4	70.7631		
237	16.64	-2.26	14.3769	0		68.8	1		87.4	70.7631		
238	16.64	-2.26	14.3769	0		68.9	1		87.5	70.8631		
239	16.64	-2.26	14.3769	0		68.9	0		87.6	70.9631		
240	16.64	-2.26	14.3769	0	0	69	1	9	87.6	70.9631	9	
241	16.64	-2.26	14.3769	0		69.1	1		87.7	71.0631		
242	16.64	-2.26	14.3769	0		69.2	1		88	71.3631		
243	16.64	-2.26	14.3769	0		69.3	1		88.2	71.5631		
244	16.64	-2.26	14.3769	0		69.4	1		88.4	71.7631		
245	16.64	-2.26	14.3769	0		69.5	1		88.7	72.0631		
246	16.64	-2.26	14.3769	0		69.6	1		88.9	72.2631		
247	16.64	-2.26	14.3769	0		69.7	1		89	72.3631		
248	16.64	-2.26	14.3769	0		69.8	1		89.1	72.4631		
249	16.64	-2.26	14.3769	0		69.9	1		89.2	72.5631		
250	16.64	-2.26	14.3769	0	0	69.9	0	9	89.2	72.5631	9	
251	16.64	-2.26	14.3769	0		70	1		89.2	72.5631		
252	16.64	-2.26	14.3769	0		70.1	1		89.3	72.6631		
253	16.64	-2.26	14.3769	0		70.2	1		89.2	72.5631		
254	16.64	-2.26	14.3769	0		70.2	0		89.1	72.4631		
255	16.64	-2.26	14.3769	0		70.2	0		89.1	72.4631		
256	16.64	-2.26	14.3769	0		70.2	0		89.1	72.4631		

257	16.64	-2.26	14.3769	0		70.2	0		89.1	72.4631	
258	16.64	-2.26	14.3769	0		70.2	0		89.3	72.6631	
259	16.64	-2.26	14.3769	0		70.2	0		89.9	73.2631	
260	16.64	-2.26	14.3769	0	0	70.2	0	3	91.3	74.6631	3
261	16.64	-2.26	14.3769	0		70.2	0		92.4	75.7631	
262	16.64	-2.26	14.3769	0		70.2	0		93	76.3631	
263	16.64	-2.26	14.3769	0		70.2	0		93.4	76.7631	
264	16.64	-2.26	14.3769	0		70.2	0		93.7	77.0631	
265	16.69	-2.26	14.4277	0.508		70.2	0		94	77.3123	
266	16.69	-2.26	14.4277	0		70.2	0		94.3	77.6123	
267	16.69	-2.26	14.4277	0		70.2	0		94.5	77.8123	
268	16.69	-2.26	14.4277	0		70.2	0		94.7	78.0123	
269	16.71	-2.26	14.4531	0.254		70.2	0		94.9	78.1869	
270	16.71	-2.26	14.4531	0	0.762	70.2	0	0	95	78.2869	0.762
271	16.71	-2.26	14.4531	0		70.2	0		95.1	78.3869	
272	16.71	-2.26	14.4531	0		70.2	0		95.2	78.4869	
273	16.71	-2.26	14.4531	0		70.2	0		95.2	78.4869	
274	16.71	-2.26	14.4531	0		70.2	0		95.2	78.4869	
275	16.71	-2.26	14.4531	0		70.2	0		95.2	78.4869	
276	16.71	-2.26	14.4531	0		70.2	0		95.1	78.3869	
277	16.71	-2.26	14.4531	0		70.2	0		95	78.2869	
278	16.71	-2.26	14.4531	0		70.2	0		94.9	78.1869	
279	16.71	-2.26	14.4531	0		70.2	0		94.8	78.0869	
280	16.71	-2.26	14.4531	0	0	70.2	0	0	94.6	77.8869	0
281	16.71	-2.26	14.4531	0		70.2	0		94.5	77.7869	
282	16.71	-2.26	14.4531	0		70.2	0		94.3	77.5869	
283	16.71	-2.26	14.4531	0		70.2	0		94	77.2869	
284	16.71	-2.26	14.4531	0		70.2	0		93.8	77.0869	
285	16.71	-2.26	14.4531	0		70.2	0		93.5	76.7869	
286	16.71	-2.26	14.4531	0		70.2	0		93.2	76.4869	
287	16.92	-2.41	14.5063	0.532		70.2	0		92.8	75.8837	
288	16.92	-2.35	14.5663	0.6		70.2	0		92.5	75.5837	
289	16.92	-2.34	14.5763	0.1		70.2	0		92	75.0837	
290	16.92	-2.34	14.5763	0	1.232	70.2	0	0	91.6	74.6837	1.232
291	16.92	-2.33	14.5863	0.1		70.2	0		91.2	74.2837	
292	16.92	-2.33	14.5863	0		70.2	0		90.8	73.8837	
293	16.92	-2.33	14.5863	0		70.2	0		90.3	73.3837	
294	16.92	-2.33	14.5863	0		70.2	0		89.8	72.8837	
295	16.92	-2.32	14.5963	0.1		70.2	0		89.3	72.3837	
296	16.92	-2.32	14.5963	0		70.2	0		88.8	71.8837	
297	16.92	-2.32	14.5963	0		70.2	0		88.4	71.4837	
298	16.92	-2.32	14.5963	0		70.2	0		88	71.0837	
299	16.92	-2.32	14.5963	0		70.2	0		87.5	70.5837	
300	16.92	-2.32	14.5963	0	0.2	70.2	0	0	87.1	70.1837	0.2
301	16.92	-2.32	14.5963	0		70.2	0		86.8	69.8837	
302	16.92	-2.31	14.6063	0.1		70.2	0		86.5	69.5837	
303	16.92	-2.31	14.6063	0		70.2	0		86.3	69.3837	
304	16.92	-2.3	14.6163	0.1		70.2	0		86.1	69.1837	
305	16.92	-2.28	14.6363	0.2		70.2	0		86	69.0837	
306	16.92	-2.26	14.6563	0.2		70.2	0		85.8	68.8837	
307	16.92	-2.24	14.6763	0.2		70.2	0		85.7	68.7837	
308	16.92	-2.21	14.7063	0.3		70.2	0		85.6	68.6837	
309	16.92	-2.19	14.7263	0.2		70.2	0		85.5	68.5837	
310	16.92	-2.16	14.7563	0.3	1.6	70.2	0	0	85.4	68.4837	1.6
311	16.92	-2.13	14.7863	0.3		70.2	0		85.2	68.2837	
312	16.92	-2.1	14.8163	0.3		70.2	0		85.1	68.1837	
313	16.92	-2.07	14.8463	0.3		70.2	0		84.9	67.9837	
314	16.92	-2.04	14.8763	0.3		70.2	0		84.8	67.8837	
315	16.92	-2	14.9163	0.4		70.2	0		84.7	67.7837	
316	16.92	-1.97	14.9463	0.3		70.2	0		84.6	67.6837	
317	16.92	-1.94	14.9763	0.3		70.2	0		84.6	67.6837	
318	16.92	-1.9	15.0163	0.4		70.2	0		84.6	67.6837	
319	16.92	-1.87	15.0463	0.3		70.2	0		84.6	67.6837	
320	16.92	-1.83	15.0863	0.4	3.3	70.2	0	0	84.7	67.7837	3.3
321	16.92	-1.8	15.1163	0.3		70.2	0		84.7	67.7837	
322	16.92	-1.76	15.1563	0.4		70.2	0		84.8	67.8837	
323	16.92	-1.72	15.1963	0.4		70.2	0		84.8	67.8837	

324	16.92	-1.69	15.2263	0.3		70.2	0		84.9	67.9837	
325	16.92	-1.65	15.2663	0.4		70.2	0		84.9	67.9837	
326	16.92	-1.62	15.2963	0.3		70.2	0		84.9	67.9837	
327	16.92	-1.58	15.3363	0.4		70.2	0		85	68.0837	
328	16.92	-1.54	15.3763	0.4		70.2	0		85	68.0837	
329	16.92	-1.51	15.4063	0.3		70.2	0		85	68.0837	
330	16.92	-1.47	15.4463	0.4	3.6	70.2	0	0	85	68.0837	3.6
331	16.92	-1.44	15.4763	0.3		70.2	0		85	68.0837	
332	16.92	-1.4	15.5163	0.4		70.2	0		85	68.0837	
333	16.92	-1.37	15.5463	0.3		70.2	0		84.9	67.9837	
334	16.92	-1.33	15.5863	0.4		70.2	0		84.9	67.9837	
335	16.92	-1.29	15.6263	0.4		70.2	0		84.8	67.8837	
336	16.92	-1.26	15.6563	0.3		70.2	0		84.8	67.8837	
337	16.92	-1.22	15.6963	0.4		70.2	0		84.8	67.8837	
338	16.92	-1.19	15.7263	0.3		70.2	0		84.9	67.9837	
339	16.92	-1.15	15.7663	0.4		70.2	0		84.9	67.9837	
340	16.92	-1.12	15.7963	0.3	3.5	70.2	0	0	85	68.0837	3.5
341	16.92	-1.09	15.8263	0.3		70.2	0		85.1	68.1837	
342	16.92	-1.05	15.8663	0.4		70.2	0		85.2	68.2837	
343	16.92	-1.02	15.8963	0.3		70.2	0		85.4	68.4837	
344	16.92	-0.984	15.9323	0.36		70.2	0		85.5	68.5837	
345	16.92	-0.95	15.9663	0.34		70.2	0		85.7	68.7837	
346	16.92	-0.916	16.0003	0.34		70.2	0		85.8	68.8837	
347	16.92	-0.883	16.0333	0.33		70.2	0		85.9	68.9837	
348	16.92	-0.85	16.0663	0.33		70.2	0		86	69.0837	
349	16.92	-0.817	16.0993	0.33		70.2	0		86.1	69.1837	
350	16.92	-0.784	16.1323	0.33	3.36	70.2	0	0	86.2	69.2837	3.36
351	16.92	-0.751	16.1653	0.33		70.2	0		86.3	69.3837	
352	16.92	-0.719	16.1973	0.32		70.2	0		86.4	69.4837	
353	16.92	-0.686	16.2303	0.33		70.2	0		86.5	69.5837	
354	16.92	-0.654	16.2623	0.32		70.2	0		86.7	69.7837	
355	16.92	-0.622	16.2943	0.32		70.2	0		86.8	69.8837	
356	16.92	-0.591	16.3253	0.31		70.2	0		86.9	69.9837	
357	16.92	-0.559	16.3573	0.32		70.2	0		87.1	70.1837	
358	16.92	-0.528	16.3883	0.31		70.2	0		87.2	70.2837	
359	16.92	-0.496	16.4203	0.32		70.2	0		87.4	70.4837	
360	16.92	-0.465	16.4513	0.31	3.19	70.2	0	0	87.5	70.5837	3.19
361	16.92	-0.434	16.4823	0.31		70.2	0		87.7	70.7837	
362	16.92	-0.404	16.5123	0.3		70.2	0		87.9	70.9837	
363	16.92	-0.373	16.5433	0.31		70.2	0		88	71.0837	
364	16.92	-0.343	16.5733	0.3		70.2	0		88.2	71.2837	
365	16.92	-0.312	16.6043	0.31		70.2	0		88.4	71.4837	
366	16.92	-0.282	16.6343	0.3		70.2	0		88.6	71.6837	
367	16.92	-0.252	16.6643	0.3		70.2	0		88.8	71.8837	
368	17.53	-0.582	16.9439	2.796		70.2	0		88.9	71.3741	
369	17.63	-0.431	17.1965	2.526		70.2	0		89.1	71.4725	
370	17.63	-0.326	17.3015	1.05	8.502	70.2	0	0	89.3	71.6725	8.502
371	17.63	-0.269	17.3585	0.57		70.2	0		89.4	71.7725	
372	17.63	-0.222	17.4055	0.47		70.2	0		89.6	71.9725	
373	17.63	-0.181	17.4465	0.41		70.2	0		89.8	72.1725	
374	17.63	-0.143	17.4845	0.38		70.2	0		90	72.3725	
375	17.63	-0.106	17.5215	0.37		70.2	0		90.2	72.5725	
376	17.63	-0.0717	17.5558	0.343		70.2	0		90.4	72.7725	
377	18.21	-0.208	18.0037	4.479		70.2	0		90.5	72.2883	
378	18.24	-0.0669	18.1702	1.665		70.2	0		90.7	72.4629	
379	18.24	-0.0185	18.2186	0.484		70.2	0		90.8	72.5629	
380	18.24	0.0217	18.2588	0.402	9.573	70.2	0	0	91	72.7629	9.573
381	18.24	0.0579	18.295	0.362		70.2	0		91.2	72.9629	
382	18.24	0.0922	18.3293	0.343		70.2	0		91.3	73.0629	
383	18.24	0.125	18.3621	0.328		70.2	0		91.5	73.2629	
384	18.24	0.158	18.3951	0.33		70.2	0		91.6	73.3629	
385	18.24	0.189	18.4261	0.31		70.2	0		91.7	73.4629	
386	18.24	0.221	18.4581	0.32		70.2	0		91.7	73.4629	
387	18.24	0.251	18.4881	0.3		70.2	0		91.8	73.5629	
388	18.24	0.28	18.5171	0.29		70.3	1		91.8	73.5629	
389	18.24	0.307	18.5441	0.27		70.4	1		91.9	73.6629	
390	18.24	0.332	18.5691	0.25	3.103	70.5	1	3	91.9	73.6629	6.103

391	18.24	0.355	18.5921	0.23		70.6	1		91.9	73.6629		C-49
392	18.24	0.376	18.6131	0.21		70.8	2		91.9	73.6629		
393	18.24	0.396	18.6331	0.2		70.9	1		91.9	73.6629		
394	18.24	0.415	18.6521	0.19		71	1		91.9	73.6629		
395	18.24	0.433	18.6701	0.18		71.1	1		92	73.7629		
396	18.24	0.45	18.6871	0.17		71.3	2		92	73.7629		
397	18.24	0.465	18.7021	0.15		71.5	2		92.1	73.8629		
398	18.24	0.479	18.7161	0.14		71.6	1		92.1	73.8629		
399	18.24	0.492	18.7291	0.13		71.7	1		92.2	73.9629		
400	18.24	0.505	18.7421	0.13	1.73	71.9	2	14	92.2	73.9629	15.73	
401	18.24	0.517	18.7541	0.12		72	1		92.3	74.0629		
402	18.24	0.528	18.7651	0.11		72.2	2		92.3	74.0629		
403	18.24	0.538	18.7751	0.1		72.4	2		92.4	74.1629		
404	18.24	0.547	18.7841	0.09		72.6	2		92.4	74.1629		
405	18.24	0.555	18.7921	0.08		72.8	2		92.5	74.2629		
406	18.24	0.563	18.8001	0.08		72.9	1		92.6	74.3629		
407	18.24	0.57	18.8071	0.07		73.1	2		92.7	74.4629		
408	18.24	0.576	18.8131	0.06		73.4	3		92.8	74.5629		
409	18.24	0.581	18.8181	0.05		73.6	2		92.9	74.6629		
410	18.24	0.585	18.8221	0.04	0.8	73.7	1	18	92.9	74.6629	18.8	
411	18.24	0.589	18.8261	0.04		73.9	2		93	74.7629		
412	18.24	0.592	18.8291	0.03		74.1	2		93.1	74.8629		
413	18.24	0.595	18.8321	0.03		74.3	2		93.2	74.9629		
414	18.24	0.597	18.8341	0.02		74.6	3		93.3	75.0629		
415	18.24	0.599	18.8361	0.02		74.8	2		93.4	75.1629		
416	18.24	0.6	18.8371	0.01		75.1	3		93.5	75.2629		
417	18.24	0.601	18.8381	0.01		75.4	3		93.7	75.4629		
418	18.24	0.601	18.8381	0		75.6	2		93.8	75.5629		
419	18.24	0.602	18.8391	0.01		75.9	3		93.9	75.6629		
420	18.24	0.602	18.8391	0	0.17	76.1	2	24	94	75.7629	24.17	
421	18.24	0.602	18.8391	0		76.4	3		94.2	75.9629		
422	18.24	0.602	18.8391	0		76.7	3		94.3	76.0629		
423	18.24	0.602	18.8391	0		76.9	2		94.5	76.2629		
424	18.24	0.602	18.8391	0		77.3	4		94.6	76.3629		
425	18.24	0.602	18.8391	0		77.7	4		94.8	76.5629		
426	18.24	0.602	18.8391	0		78.1	4		94.9	76.6629		
427	18.24	0.602	18.8391	0		78.5	4		95.1	76.8629		
428	18.24	0.602	18.8391	0		78.9	4		95.2	76.9629		
429	18.24	0.602	18.8391	0		79.3	4		95.4	77.1629		
430	18.24	0.602	18.8391	0	0	79.6	3	35	95.6	77.3629	35	
431	18.24	0.602	18.8391	0		80	4		95.7	77.4629		
432	18.24	0.602	18.8391	0		80.4	4		95.9	77.6629		
433	18.24	0.602	18.8391	0		80.8	4		96.1	77.8629		
434	18.24	0.602	18.8391	0		81.3	5		96.3	78.0629		
435	18.59	0.602	19.1947	3.556		81.7	4		96.5	77.9073		
436	19.25	0.558	19.8111	6.164		82.1	4		96.7	77.4469		
437	19.25	0.577	19.8301	0.19		82.8	7		96.9	77.6469		
438	19.25	0.578	19.8311	0.01		83.3	5		97.1	77.8469		
439	19.25	0.578	19.8311	0		83.9	6		97.4	78.1469		
440	19.3	0.578	19.8819	0.508	10.428	84.2	3	46	97.7	78.3961	56.428	
441	19.38	0.578	19.9581	0.762		84.7	5		98	78.6199		
442	19.38	0.578	19.9581	0		85.3	6		98.4	79.0199		
443	19.38	0.578	19.9581	0		85.8	5		98.8	79.4199		
444	19.38	0.578	19.9581	0		86.5	7		99.2	79.8199		
445	19.38	0.578	19.9581	0		87.2	7		99.6	80.2199		
446	19.38	0.578	19.9581	0		87.8	6		100	80.6199		
447	19.38	0.578	19.9581	0		88.5	7		101	81.6199		
448	19.38	0.578	19.9581	0		89	5		101	81.6199		
449	19.38	0.578	19.9581	0		89.5	5		102	82.6199		
450	19.38	0.578	19.9581	0	0.762	90.1	6	59	102	82.6199	59.762	
451	19.38	0.578	19.9581	0		90.6	5		103	83.6199		
452	19.38	0.578	19.9581	0		91.2	6		103	83.6199		
453	19.38	0.578	19.9581	0		91.7	5		103	83.6199		
454	19.38	0.578	19.9581	0		92.3	6		104	84.6199		
455	19.38	0.578	19.9581	0		92.9	6		105	85.6199		
456	19.38	0.578	19.9581	0		93.2	3		105	85.6199		
457	19.38	0.578	19.9581	0		93.7	5		105	85.6199		

458	19.38	0.578	19.9581	0		94.3	6		106	86.6199	
459	19.38	0.578	19.9581	0		94.7	4		106	86.6199	
460	19.74	0.578	20.3137	3.556	3.556	95.1	4	50	107	87.2643	53.556
461	19.74	0.578	20.3137	0		95.5	4		107	87.2643	
462	19.74	0.578	20.3137	0		95.9	4		108	88.2643	
463	19.74	0.578	20.3137	0		96.4	5		108	88.2643	
464	19.74	0.578	20.3137	0		96.7	3		108	88.2643	
465	19.74	0.578	20.3137	0		97.3	6		109	89.2643	
466	19.74	0.578	20.3137	0		97.8	5		109	89.2643	
467	19.74	0.578	20.3137	0		98.4	6		110	90.2643	
468	19.74	0.578	20.3137	0		98.9	5		110	90.2643	
469	19.74	0.578	20.3137	0		99.4	5		111	91.2643	
470	19.74	0.578	20.3137	0	0	99.9	5	48	111	91.2643	48
471	19.89	0.578	20.4661	1.524		100	1		112	92.1119	
472	19.89	0.578	20.4661	0		101	10		112	92.1119	
473	19.89	0.578	20.4661	0		102	10		112	92.1119	
474	19.89	0.578	20.4661	0		102	0		113	93.1119	
475	19.89	0.578	20.4661	0		103	10		113	93.1119	
476	19.89	0.578	20.4661	0		103	0		113	93.1119	
477	19.91	0.578	20.4915	0.254		104	10		114	94.0865	
478	19.96	0.578	20.5423	0.508		104	0		114	94.0357	
479	20.02	0.578	20.5931	0.508		105	10		114	93.9849	
480	20.02	0.578	20.5931	0	2.794	105	0	51	115	94.9849	53.794
481	20.02	0.578	20.5931	0		106	10		115	94.9849	
482	20.55	0.578	21.1265	5.334		106	0		115	94.4515	
483	20.55	0.578	21.1265	0		106	0		116	95.4515	
484	20.55	0.578	21.1265	0		107	10		116	95.4515	
485	20.55	0.578	21.1265	0		107	0		117	96.4515	
486	20.55	0.578	21.1265	0		108	10		117	96.4515	
487	20.55	0.578	21.1265	0		108	0		118	97.4515	
488	20.55	0.578	21.1265	0		109	10		118	97.4515	
489	20.57	0.578	21.1519	0.254		109	0		118	97.4261	
490	20.6	0.578	21.1773	0.254	5.842	109	0	40	119	98.4007	45.842
491	22.4	-0.384	22.0187	8.414		110	10		119	96.5973	
492	23.06	-0.204	22.8591	8.404		110	0		119	95.9369	
493	23.09	-0.12	22.9685	1.094		111	10		120	96.9115	
494	23.39	-0.0973	23.296	3.275		111	0		120	96.6067	
495	23.39	-0.0885	23.3048	0.088		112	10		120	96.6067	
496	23.39	-0.0856	23.3077	0.029		112	0		121	97.6067	
497	23.39	-0.0845	23.3088	0.011		113	10		121	97.6067	
498	23.39	-0.0841	23.3092	0.004		113	0		121	97.6067	
499	23.39	-0.084	23.3093	0.001		114	10		122	98.6067	
500	23.39	-0.0839	23.3094	0.001	21.321	114	0	50	122	98.6067	71.321
501	23.44	-0.0838	23.3603	0.509		114	0		122	98.5559	
502	23.44	-0.0838	23.3603	0		115	10		123	99.5559	
503	23.44	-0.0837	23.3604	0.001		115	0		123	99.5559	
504	23.47	-0.0837	23.3858	0.254		116	10		124	100.53	
505	23.47	-0.0837	23.3858	0		116	0		124	100.53	
506	23.47	-0.0837	23.3858	0		117	10		125	101.53	
507	23.75	-0.0837	23.6652	2.794		117	0		125	101.251	
508	23.83	-0.0837	23.7414	0.762		117	0		125	101.175	
509	24.31	-0.0837	24.224	4.826		118	10		125	100.692	
510	25.3	-0.486	24.8123	5.883	15.029	118	0	40	126	100.702	55.029
511	25.3	-0.342	24.9563	1.44		118	0		126	100.702	
512	26.39	-0.538	25.8525	8.962		119	10		126	99.6095	
513	26.44	-0.438	26.0033	1.508		119	0		126	99.5587	
514	26.75	-0.427	26.3191	3.158		120	10		127	100.254	
515	26.85	-0.423	26.4247	1.056		120	0		127	100.152	
516	26.87	-0.421	26.4521	0.274		121	10		127	100.127	
517	26.87	-0.421	26.4521	0		121	0		127	100.127	
518	26.9	-0.421	26.4775	0.254		121	0		128	101.101	
519	26.9	-0.421	26.4775	0		122	10		128	101.101	
520	26.9	-0.421	26.4775	0	16.652	122	0	40	128	101.101	56.652
521	26.9	-0.421	26.4775	0		123	10		128	101.101	
522	26.9	-0.421	26.4775	0		123	0		128	101.101	
523	27.48	-0.421	27.0617	5.842		124	10		128	100.517	
524	27.64	-0.421	27.2141	1.524		124	0		128	100.365	

525	27.64	-0.421	27.2141	0		124	0		128	100.365		
526	27.64	-0.421	27.2141	0		125	10		129	101.365		
527	28.09	-0.421	27.6713	4.572		125	0		129	100.908		
528	28.09	-0.421	27.6713	0		126	10		130	101.908		
529	28.14	-0.421	27.7221	0.508		126	0		130	101.857		
530	28.14	-0.421	27.7221	0	12.446	127	10	50	131	102.857	62.446	
531	28.37	-0.421	27.9507	2.286		127	0		131	102.628		
532	28.42	-0.421	28.0015	0.508		127	0		132	103.577		
533	28.42	-0.421	28.0015	0		128	10		132	103.577		
534	28.42	-0.421	28.0015	0		128	0		133	104.577		
535	28.42	-0.421	28.0015	0		129	10		134	105.577		
536	28.42	-0.421	28.0015	0		129	0		134	105.577		
537	28.42	-0.421	28.0015	0		129	0		135	106.577		
538	30.56	-2.08	28.4761	4.746		129	0		135	104.444		
539	30.56	-1.59	28.9661	4.9		130	10		136	105.444		
540	30.56	-1.51	29.0461	0.8	13.24	131	10	40	136	105.444	53.24	
541	30.56	-1.48	29.0761	0.3		131	0		137	106.444		
542	30.56	-1.46	29.0961	0.2		132	10		137	106.444		
543	30.56	-1.46	29.0961	0		132	0		138	107.444		
544	30.56	-1.45	29.1061	0.1		132	0		138	107.444		
545	30.56	-1.45	29.1061	0		133	10		139	108.444		
546	30.56	-1.45	29.1061	0		133	0		140	109.444		
547	30.56	-1.45	29.1061	0		134	10		140	109.444		
548	31.14	-1.56	29.5803	4.742		134	0		141	109.86		
549	31.17	-1.52	29.6457	0.654		134	0		142	110.834		
550	31.42	-1.52	29.8997	2.54	8.536	135	10	40	143	111.58	48.536	
551	31.55	-1.51	30.0367	1.37		135	0		143	111.453		
552	31.83	-1.51	30.3161	2.794		135	0		145	113.174		
553	32.66	-1.74	30.9243	6.082		135	0		146	113.336		
554	32.69	-1.66	31.0297	1.054		136	10		148	115.31		
555	32.69	-1.65	31.0397	0.1		136	0		149	116.31		
556	32.69	-1.65	31.0397	0		136	0		150	117.31		
557	32.69	-1.64	31.0497	0.1		136	0		152	119.31		
558	32.82	-1.64	31.1767	1.27		137	10		153	120.183		
559	32.84	-1.64	31.2021	0.254		137	0		154	121.158		
560	32.84	-1.64	31.2021	0	13.024	137	0	20	155	122.158	33.024	
561	32.84	-1.64	31.2021	0		137	0		156	123.158		
562	32.84	-1.64	31.2021	0		137	0		156	123.158		
563	32.84	-1.64	31.2021	0		138	10		157	124.158		
564	32.84	-1.64	31.2021	0		138	0		157	124.158		
565	32.84	-1.64	31.2021	0		138	0		158	125.158		
566	32.84	-1.64	31.2021	0		138	0		158	125.158		
567	32.84	-1.64	31.2021	0		139	10		159	126.158		
568	32.84	-1.64	31.2021	0		139	0		159	126.158		
569	32.84	-1.64	31.2021	0		139	0		159	126.158		
570	32.84	-1.64	31.2021	0	0	140	10	30	159	126.158	30	
571	32.84	-1.64	31.2021	0		140	0		159	126.158		
572	32.84	-1.64	31.2021	0		140	0		159	126.158		
573	32.84	-1.64	31.2021	0		140	0		160	127.158		
574	32.84	-1.64	31.2021	0		141	10		160	127.158		
575	32.84	-1.64	31.2021	0		141	0		160	127.158		
576	32.84	-1.64	31.2021	0		141	0		160	127.158		
577	32.84	-1.64	31.2021	0		142	10		161	128.158		
578	32.84	-1.64	31.2021	0		142	0		161	128.158		
579	32.84	-1.64	31.2021	0		142	0		162	129.158		
580	32.84	-1.64	31.2021	0	0	142	0	20	162	129.158	20	
581	33.02	-1.64	31.3799	1.778		143	10		162	128.98		
582	33.55	-2.07	31.4833	1.034		143	0		162	128.447		
583	33.55	-1.92	31.6333	1.5		143	0		163	129.447		
584	33.55	-1.91	31.6433	0.1		143	0		163	129.447		
585	33.55	-1.9	31.6533	0.1		144	10		163	129.447		
586	33.55	-1.9	31.6533	0		144	0		163	129.447		
587	33.55	-1.89	31.6633	0.1		144	0		163	129.447		
588	33.55	-1.89	31.6633	0		144	0		163	129.447		
589	33.55	-1.89	31.6633	0		144	0		163	129.447		
590	33.55	-1.89	31.6633	0	4.612	145	10	30	163	129.447	34.612	
591	33.55	-1.89	31.6633	0		145	0		163	129.447		

592	33.55	-1.89	31.6633	0		145	0		164	130.447	
593	33.55	-1.89	31.6633	0		145	0		164	130.447	
594	33.55	-1.89	31.6633	0		145	0		164	130.447	
595	33.55	-1.89	31.6633	0		145	0		164	130.447	
596	33.55	-1.89	31.6633	0		145	0		164	130.447	
597	33.55	-1.89	31.6633	0		145	0		164	130.447	
598	33.55	-1.89	31.6633	0		145	0		164	130.447	
599	33.55	-1.89	31.6633	0		145	0		164	130.447	
600	33.55	-1.89	31.6633	0	0	146	10	10	165	131.447	10
601	33.55	-1.89	31.6633	0		146	0		165	131.447	
602	33.55	-1.89	31.6633	0		146	0		165	131.447	
603	33.55	-1.89	31.6633	0		146	0		165	131.447	
604	33.55	-1.89	31.6633	0		146	0		165	131.447	
605	33.55	-1.89	31.6633	0		146	0		165	131.447	
606	33.55	-1.89	31.6633	0		146	0		165	131.447	
607	33.55	-1.89	31.6633	0		146	0		165	131.447	
608	33.55	-1.89	31.6633	0		146	0		166	132.447	
609	33.55	-1.89	31.6633	0		146	0		166	132.447	
610	33.55	-1.89	31.6633	0	0	147	10	10	166	132.447	10
611	33.55	-1.89	31.6633	0		147	0		166	132.447	
612	33.55	-1.89	31.6633	0		147	0		166	132.447	
613	33.55	-1.89	31.6633	0		147	0		167	133.447	
614	33.55	-1.89	31.6633	0		147	0		167	133.447	
615	33.55	-1.89	31.6633	0		147	0		167	133.447	
616	33.55	-1.89	31.6633	0		147	0		167	133.447	
617	33.55	-1.89	31.6633	0		147	0		167	133.447	
618	33.55	-1.89	31.6633	0		147	0		167	133.447	
619	33.55	-1.89	31.6633	0		147	0		167	133.447	
620	33.55	-1.89	31.6633	0	0	147	0	0	167	133.447	0
621	33.55	-1.89	31.6633	0		147	0		166	132.447	
622	33.55	-1.89	31.6633	0		147	0		167	133.447	
623	33.55	-1.89	31.6633	0		147	0		167	133.447	
624	33.55	-1.89	31.6633	0		147	0		167	133.447	
625	33.55	-1.89	31.6633	0		147	0		169	135.447	
626	33.55	-1.89	31.6633	0		147	0		170	136.447	
627	33.55	-1.89	31.6633	0		147	0		170	136.447	
628	33.55	-1.89	31.6633	0		147	0		171	137.447	
629	33.55	-1.89	31.6633	0		147	0		171	137.447	
630	33.6	-1.89	31.7141	0.508	0.508	147	0	0	172	138.396	0.508
631	33.6	-1.89	31.7141	0		147	0		172	138.396	
632	33.6	-1.89	31.7141	0		147	0		172	138.396	
633	33.6	-1.89	31.7141	0		147	0		172	138.396	
634	33.63	-1.89	31.7395	0.254		147	0		172	138.37	
635	33.63	-1.89	31.7395	0		147	0		173	139.37	
636	33.63	-1.89	31.7395	0		147	0		173	139.37	
637	33.63	-1.89	31.7395	0		147	0		173	139.37	
638	33.63	-1.89	31.7395	0		147	0		173	139.37	
639	33.63	-1.89	31.7395	0		147	0		173	139.37	
640	33.63	-1.89	31.7395	0	0.254	147	0	0	173	139.37	0.254
641	33.63	-1.89	31.7395	0		147	0		173	139.37	
642	33.63	-1.89	31.7395	0		147	0		173	139.37	
643	33.63	-1.89	31.7395	0		147	0		172	138.37	
644	33.63	-1.89	31.7395	0		147	0		172	138.37	
645	33.63	-1.89	31.7395	0		147	0		172	138.37	
646	33.63	-1.89	31.7395	0		147	0		172	138.37	
647	33.63	-1.89	31.7395	0		147	0		172	138.37	
648	33.63	-1.89	31.7395	0		147	0		172	138.37	
649	33.63	-1.89	31.7395	0		147	0		171	137.37	
650	33.63	-1.89	31.7395	0	0	147	0	0	171	137.37	0
651	33.63	-1.89	31.7395	0		147	0		171	137.37	
652	33.83	-2.04	31.7927	0.532		147	0		170	136.167	
653	33.83	-1.98	31.8527	0.6		147	0		170	136.167	
654	33.83	-1.97	31.8627	0.1		147	0		170	136.167	
655	33.83	-1.97	31.8627	0		147	0		169	135.167	
656	33.83	-1.97	31.8627	0		147	0		169	135.167	
657	33.83	-1.96	31.8727	0.1		147	0		168	134.167	
658	33.83	-1.96	31.8727	0		147	0		168	134.167	

659	33.83	-1.96	31.8727	0		147	0		167	133.167		C-53
660	33.83	-1.96	31.8727	0	1.332	147	0	0	167	133.167	1.332	
661	33.83	-1.96	31.8727	0		147	0		166	132.167		
662	33.83	-1.96	31.8727	0		147	0		166	132.167		
663	33.83	-1.95	31.8827	0.1		147	0		165	131.167		
664	33.83	-1.95	31.8827	0		147	0		165	131.167		
665	33.83	-1.95	31.8827	0		147	0		165	131.167		
666	33.83	-1.95	31.8827	0		147	0		164	130.167		
667	33.83	-1.95	31.8827	0		147	0		164	130.167		
668	33.83	-1.94	31.8927	0.1		147	0		164	130.167		
669	33.83	-1.92	31.9127	0.2		147	0		164	130.167		
670	33.83	-1.91	31.9227	0.1	0.5	147	0	0	163	129.167	0.5	
671	33.83	-1.89	31.9427	0.2		147	0		163	129.167		
672	33.83	-1.86	31.9727	0.3		147	0		163	129.167		
673	33.83	-1.84	31.9927	0.2		147	0		163	129.167		
674	33.83	-1.81	32.0227	0.3		147	0		163	129.167		
675	33.83	-1.78	32.0527	0.3		147	0		163	129.167		
676	33.83	-1.75	32.0827	0.3		147	0		163	129.167		
677	33.83	-1.72	32.1127	0.3		147	0		163	129.167		
678	33.83	-1.69	32.1427	0.3		147	0		162	128.167		
679	33.83	-1.66	32.1727	0.3		147	0		162	128.167		
680	33.83	-1.62	32.2127	0.4	2.9	147	0	0	162	128.167	2.9	
681	33.83	-1.59	32.2427	0.3		147	0		162	128.167		
682	33.83	-1.56	32.2727	0.3		147	0		162	128.167		
683	33.83	-1.52	32.3127	0.4		147	0		162	128.167		
684	33.83	-1.49	32.3427	0.3		147	0		162	128.167		
685	33.83	-1.45	32.3827	0.4		147	0		162	128.167		
686	33.83	-1.41	32.4227	0.4		147	0		162	128.167		
687	33.83	-1.38	32.4527	0.3		147	0		162	128.167		
688	33.83	-1.34	32.4927	0.4		147	0		162	128.167		
689	33.83	-1.31	32.5227	0.3		147	0		162	128.167		
690	33.83	-1.27	32.5627	0.4	3.5	147	0	0	162	128.167	3.5	
691	33.83	-1.23	32.6027	0.4		147	0		162	128.167		
692	33.83	-1.2	32.6327	0.3		147	0		162	128.167		
693	33.83	-1.16	32.6727	0.4		147	0		162	128.167		
694	33.83	-1.12	32.7127	0.4		147	0		162	128.167		
695	33.83	-1.09	32.7427	0.3		147	0		162	128.167		
696	33.83	-1.05	32.7827	0.4		147	0		162	128.167		
697	33.83	-1.02	32.8127	0.3		147	0		162	128.167		
698	33.83	-0.98	32.8527	0.4		147	0		162	128.167		
699	33.83	-0.945	32.8877	0.35		147	0		162	128.167		
700	33.83	-0.909	32.9237	0.36	3.61	147	0	0	162	128.167	3.61	
701	33.83	-0.874	32.9587	0.35		147	0		162	128.167		
702	33.83	-0.839	32.9937	0.35		147	0		162	128.167		
703	33.83	-0.804	33.0287	0.35		147	0		162	128.167		
704	33.83	-0.769	33.0637	0.35		147	0		162	128.167		
705	33.83	-0.734	33.0987	0.35		147	0		163	129.167		
706	33.83	-0.699	33.1337	0.35		147	0		163	129.167		
707	33.83	-0.665	33.1677	0.34		147	0		163	129.167		
708	33.83	-0.631	33.2017	0.34		147	0		163	129.167		
709	33.83	-0.597	33.2357	0.34		147	0		163	129.167		
710	33.83	-0.563	33.2697	0.34	3.46	147	0	0	163	129.167	3.46	
711	33.83	-0.529	33.3037	0.34		147	0		163	129.167		
712	33.83	-0.496	33.3367	0.33		147	0		163	129.167		
713	33.83	-0.462	33.3707	0.34		147	0		164	130.167		
714	33.83	-0.429	33.4037	0.33		147	0		164	130.167		
715	33.83	-0.396	33.4367	0.33		147	0		164	130.167		
716	33.83	-0.364	33.4687	0.32		147	0		164	130.167		
717	33.83	-0.331	33.5017	0.33		147	0		164	130.167		
718	33.83	-0.298	33.5347	0.33		147	0		164	130.167		
719	33.83	-0.266	33.5667	0.32		147	0		164	130.167		
720	33.83	-0.234	33.5987	0.32	3.29	147	0	0	164	130.167	3.29	
721	33.83	-0.202	33.6307	0.32		147	0		164	130.167		
722	33.83	-0.171	33.6617	0.31		147	0		165	131.167		
723	33.83	-0.139	33.6937	0.32		147	0		165	131.167		
724	33.83	-0.108	33.7247	0.31		147	0		165	131.167		
725	33.83	-0.0765	33.7562	0.315		147	0		165	131.167		

726	33.83	-0.0455	33.7872	0.31		147	0		165	131.167	
727	33.83	-0.0146	33.8181	0.309		147	0		165	131.167	
728	33.83	0.016	33.8487	0.306		147	0		166	132.167	
729	33.83	0.0465	33.8792	0.305		147	0		166	132.167	
730	33.83	0.0769	33.9096	0.304	3.109	147	0	0	166	132.167	3.109
731	33.83	0.107	33.9397	0.301		147	0		166	132.167	
732	33.83	0.137	33.9697	0.3		147	0		166	132.167	
733	34.44	-0.193	34.2493	2.796		147	0		166	131.558	
734	34.54	-0.0421	34.5018	2.525		147	0		167	132.456	
735	34.54	0.0635	34.6074	1.056		147	0		167	132.456	
736	34.54	0.12	34.6639	0.565		147	0		167	132.456	
737	34.54	0.167	34.7109	0.47		147	0		167	132.456	
738	34.54	0.209	34.7529	0.42		147	0		167	132.456	
739	34.54	0.247	34.7909	0.38		147	0		167	132.456	
740	34.54	0.283	34.8269	0.36	9.173	147	0	0	168	133.456	9.173
741	34.54	0.318	34.8619	0.35		147	0		168	133.456	
742	35.13	0.182	35.3101	4.482		147	0		168	132.872	
743	35.15	0.323	35.4765	1.664		147	0		168	132.846	
744	35.15	0.372	35.5255	0.49		147	0		168	132.846	
745	35.15	0.412	35.5655	0.4		147	0		169	133.846	
746	35.15	0.448	35.6015	0.36		147	0		169	133.846	
747	35.15	0.482	35.6355	0.34		147	0		169	133.846	
748	35.15	0.516	35.6695	0.34		147	0		169	133.846	
749	35.15	0.548	35.7015	0.32		147	0		169	133.846	
750	35.15	0.58	35.7335	0.32	9.066	147	0	0	169	133.846	9.066
751	35.15	0.611	35.7645	0.31		147	0		169	133.846	
752	35.15	0.642	35.7955	0.31		147	0		169	133.846	
753	35.15	0.671	35.8245	0.29		147	0		169	133.846	
754	35.15	0.698	35.8515	0.27		147	0		169	133.846	
755	35.15	0.722	35.8755	0.24		148	10		169	133.846	
756	35.15	0.746	35.8995	0.24		148	0		169	133.846	
757	35.15	0.767	35.9205	0.21		148	0		169	133.846	
758	35.15	0.787	35.9405	0.2		148	0		169	133.846	
759	35.15	0.806	35.9595	0.19		148	0		169	133.846	
760	35.15	0.824	35.9775	0.18	2.44	148	0	10	169	133.846	12.44
761	35.15	0.841	35.9945	0.17		148	0		170	134.846	
762	35.15	0.856	36.0095	0.15		149	10		170	134.846	
763	35.15	0.87	36.0235	0.14		149	0		170	134.846	
764	35.15	0.883	36.0365	0.13		149	0		170	134.846	
765	35.15	0.896	36.0495	0.13		149	0		170	134.846	
766	35.15	0.908	36.0615	0.12		149	0		170	134.846	
767	35.15	0.919	36.0725	0.11		149	0		170	134.846	
768	35.15	0.929	36.0825	0.1		149	0		170	134.846	
769	35.15	0.938	36.0915	0.09		150	10		170	134.846	
770	35.15	0.946	36.0995	0.08	1.22	150	0	20	170	134.846	21.22
771	37.29	-0.577	36.7165	6.17		150	0		170	132.706	
772	37.29	-0.0328	37.2607	5.442		150	0		170	132.706	
773	37.29	0.127	37.4205	1.598		150	0		170	132.706	
774	37.29	0.212	37.5055	0.85		151	10		170	132.706	
775	37.29	0.27	37.5635	0.58		151	0		170	132.706	
776	37.29	0.315	37.6085	0.45		151	0		171	133.706	
777	37.29	0.35	37.6435	0.35		151	0		171	133.706	
778	37.29	0.379	37.6725	0.29		151	0		171	133.706	
779	37.29	0.402	37.6955	0.23		152	10		171	133.706	
780	37.29	0.421	37.7145	0.19	16.15	152	0	20	171	133.706	36.15
781	37.29	0.436	37.7295	0.15		152	0		171	133.706	
782	37.29	0.448	37.7415	0.12		152	0		171	133.706	
783	37.29	0.458	37.7515	0.1		153	10		171	133.706	
784	37.29	0.466	37.7595	0.08		153	0		171	133.706	
785	40.69	-1.9	38.7935	10.34		153	0		172	131.306	
786	40.69	-1.1	39.5935	8		153	0		172	131.306	
787	40.69	-0.889	39.8045	2.11		154	10		172	131.306	
788	40.69	-0.773	39.9205	1.16		154	0		172	131.306	
789	40.69	-0.699	39.9945	0.74		154	0		172	131.306	
790	40.69	-0.647	40.0465	0.52	23.32	155	10	30	172	131.306	53.32
791	40.69	-0.61	40.0835	0.37		155	0		172	131.306	
792	40.69	-0.582	40.1115	0.28		155	0		173	132.306	

793	40.69	-0.563	40.1305	0.19		156	10		173	132.306	
794	45.69	-4.53	41.1635	10.33		156	0		173	127.306	
795	45.69	-3.5	42.1935	10.3		157	10		173	127.306	
796	45.69	-3.09	42.6035	4.1		157	0		173	127.306	
797	45.69	-2.9	42.7935	1.9		158	10		173	127.306	
798	45.69	-2.78	42.9135	1.2		158	0		174	128.306	
799	45.69	-2.71	42.9835	0.7		159	10		174	128.306	
800	48.03	-4.35	43.6835	7	36.37	159	0	40	174	125.966	76.37
801	48.03	-3.74	44.2935	6.1		160	10		174	125.966	
802	48.03	-3.52	44.5135	2.2		160	0		174	125.966	
803	48.03	-3.42	44.6135	1		161	10		175	126.966	
804	48.03	-3.36	44.6735	0.6		162	10		175	126.966	
805	48.03	-3.32	44.7135	0.4		162	0		175	126.966	
806	48.03	-3.29	44.7435	0.3		163	10		175	126.966	
807	48.03	-3.28	44.7535	0.1		164	10		176	127.966	
808	48.03	-3.27	44.7635	0.1		164	0		176	127.966	
809	48.03	-3.26	44.7735	0.1		165	10		177	128.966	
810	48.03	-3.26	44.7735	0	10.9	166	10	70	177	128.966	80.9
811	49.59	-3.67	45.9235	11.5		167	10		177	127.406	
812	49.59	-3.51	46.0835	1.6		168	10		178	128.406	
813	49.59	-3.49	46.1035	0.2		168	0		178	128.406	
814	49.59	-3.48	46.1135	0.1		169	10		179	129.406	
815	49.59	-3.48	46.1135	0		170	10		179	129.406	
816	49.59	-3.48	46.1135	0		171	10		180	130.406	
817	49.59	-3.48	46.1135	0		171	0		180	130.406	
818	49.59	-3.48	46.1135	0		172	10		181	131.406	
819	49.59	-3.48	46.1135	0		173	10		181	131.406	
820	49.59	-3.48	46.1135	0	13.4	173	0	70	182	132.406	83.4
821	49.59	-3.48	46.1135	0		174	10		182	132.406	
822	49.59	-3.48	46.1135	0		174	0		182	132.406	
823	49.59	-3.48	46.1135	0		175	10		183	133.406	
824	49.59	-3.48	46.1135	0		175	0		183	133.406	
825	52.39	-5.61	46.7835	6.7		176	10		184	131.606	
826	52.39	-5.02	47.3735	5.9		176	0		184	131.606	
827	52.39	-4.9	47.4935	1.2		177	10		185	132.606	
828	53.5	-5.1	48.3975	9.04		177	0		185	131.502	
829	53.5	-4.93	48.5675	1.7		178	10		185	131.502	
830	53.5	-4.9	48.5975	0.3	24.84	179	10	60	186	132.502	84.84
831	53.5	-4.89	48.6075	0.1		179	0		186	132.502	
832	53.5	-4.89	48.6075	0		180	10		187	133.502	
833	53.5	-4.89	48.6075	0		181	10		187	133.502	
834	53.5	-4.89	48.6075	0		181	0		188	134.502	
835	53.5	-4.89	48.6075	0		182	10		188	134.502	
836	55.22	-5.54	49.6775	10.7		182	0		188	132.782	
837	55.22	-5.31	49.9075	2.3		183	10		189	133.782	
838	55.22	-5.29	49.9275	0.2		184	10		189	133.782	
839	55.22	-5.29	49.9275	0		184	0		190	134.782	
840	55.22	-5.29	49.9275	0	13.3	185	10	60	190	134.782	73.3
841	55.22	-5.29	49.9275	0		185	0		190	134.782	
842	55.24	-5.29	49.9529	0.254		186	10		190	134.757	
843	55.29	-5.29	50.0037	0.508		187	10		191	135.706	
844	55.34	-5.29	50.0545	0.508		187	0		191	135.655	
845	55.34	-5.29	50.0545	0		187	0		191	135.655	
846	58.34	-7.42	50.9245	8.7		188	10		192	133.655	
847	58.88	-7.02	51.8579	9.334		189	10		192	133.122	
848	58.88	-6.83	52.0479	1.9		189	0		193	134.122	
849	58.88	-6.77	52.1079	0.6		190	10		193	134.122	
850	58.88	-6.75	52.1279	0.2	22.004	191	10	60	193	134.122	82.004
851	58.88	-6.74	52.1379	0.1		191	0		194	135.122	
852	58.88	-6.73	52.1479	0.1		192	10		194	135.122	
853	58.88	-6.73	52.1479	0		192	0		195	136.122	
854	58.9	-6.73	52.1733	0.254		193	10		195	136.097	
855	58.93	-6.73	52.1987	0.254		193	0		196	137.071	
856	62.13	-9.09	53.0421	8.434		194	10		196	133.868	
857	62.79	-8.92	53.8725	8.304		194	0		196	133.207	
858	62.82	-8.58	54.2379	3.654		195	10		197	134.182	
859	63.12	-8.49	54.6327	3.948		195	0		197	133.877	

860	63.12	-8.46	54.6627	0.3	25.348	196	10	50	197	133.877	75.348 C-56
861	63.12	-8.44	54.6827	0.2		197	10		198	134.877	
862	63.12	-8.43	54.6927	0.1		197	0		198	134.877	
863	63.12	-8.43	54.6927	0		198	10		198	134.877	
864	63.12	-8.43	54.6927	0		198	0		199	135.877	
865	63.12	-8.43	54.6927	0		199	10		199	135.877	
866	65.63	-10.1	55.5307	8.38		200	10		199	133.369	
867	65.63	-9.56	56.0707	5.4		200	0		200	134.369	
868	65.63	-9.48	56.1507	0.8		201	10		200	134.369	
869	66.17	-9.45	56.7207	5.7		201	0		200	133.829	
870	66.17	-9.44	56.7307	0.1	20.68	202	10	60	201	134.829	80.68
871	66.17	-9.44	56.7307	0		202	0		201	134.829	
872	66.45	-9.43	57.0201	2.894		203	10		202	135.55	
873	66.53	-9.43	57.0963	0.762		203	0		202	135.474	
874	67.01	-9.43	57.5789	4.826		203	0		202	134.991	
875	68	-9.83	58.1695	5.906		204	10		202	134	
876	68	-9.69	58.3095	1.4		204	0		203	135	
877	69.09	-9.88	59.2117	9.022		205	10		203	133.908	
878	69.14	-9.78	59.3625	1.508		205	0		203	133.857	
879	71.45	-11.5	59.9473	5.848		206	10		203	131.553	
880	71.55	-11.1	60.4489	5.016	37.182	206	0	40	204	132.451	77.182
881	71.57	-10.9	60.6743	2.254		207	10		204	132.426	
882	71.57	-10.9	60.6743	0		207	0		204	132.426	
883	72.2	-10.9	61.2997	6.254		208	10		204	131.8	
884	72.2	-10.9	61.2997	0		208	0		205	132.8	
885	72.2	-10.9	61.2997	0		209	10		205	132.8	
886	72.2	-10.9	61.2997	0		210	10		205	132.8	
887	72.2	-10.9	61.2997	0		210	0		205	132.8	
888	72.78	-10.9	61.8839	5.842		211	10		205	132.216	
889	73.81	-11.1	62.7079	8.24		211	0		205	131.192	
890	73.81	-11	62.8079	1	23.59	212	10	60	205	131.192	83.59
891	73.81	-11	62.8079	0		212	0		205	131.192	
892	74.27	-11	63.2651	4.572		213	10		206	131.735	
893	74.27	-11	63.2651	0		213	0		206	131.735	
894	74.32	-11	63.3159	0.508		213	0		207	132.684	
895	74.32	-11	63.3159	0		214	10		207	132.684	
896	76.24	-12	64.2379	9.22		214	0		208	131.762	
897	77.19	-12.1	65.0887	8.508		215	10		209	131.811	
898	77.19	-11.9	65.2887	2		215	0		209	131.811	
899	77.19	-11.8	65.3887	1		216	10		210	132.811	
900	77.19	-11.8	65.3887	0	25.808	216	0	40	210	132.811	65.808
901	77.19	-11.8	65.3887	0		217	10		211	133.811	
902	77.19	-11.8	65.3887	0		217	0		211	133.811	
903	79.32	-13.5	65.8223	4.336		217	0		212	132.678	
904	79.32	-12.9	66.4223	6		218	10		213	133.678	
905	80.37	-13.1	67.2723	8.5		219	10		213	132.628	
906	80.37	-12.9	67.4723	2		219	0		214	133.628	
907	80.37	-12.9	67.4723	0		219	0		214	133.628	
908	80.37	-12.9	67.4723	0		220	10		215	134.628	
909	80.37	-12.9	67.4723	0		220	0		215	134.628	
910	80.37	-12.9	67.4723	0	20.836	221	10	50	216	135.628	70.836
911	80.37	-12.9	67.4723	0		221	0		216	135.628	
912	80.37	-12.9	67.4723	0		222	10		217	136.628	
913	81.66	-13.7	67.9563	4.84		222	0		218	136.344	
914	81.68	-13.4	68.2817	3.254		222	0		218	136.318	
915	81.71	-13.4	68.3071	0.254		223	10		219	137.293	
916	81.98	-13.4	68.5771	2.7		223	0		220	138.023	
917	82.26	-13.4	68.8565	2.794		223	0		221	138.743	
918	83.09	-13.6	69.4947	6.382		224	10		223	139.905	
919	83.12	-13.5	69.6201	1.254		224	0		225	141.88	
920	83.12	-13.5	69.6201	0	21.478	224	0	30	226	142.88	51.478
921	83.12	-13.5	69.6201	0		224	0		227	143.88	
922	83.12	-13.5	69.6201	0		225	10		228	144.88	
923	84.39	-14.2	70.1901	5.7		225	0		229	144.61	
924	84.64	-14	70.6441	4.54		225	0		231	146.356	
925	84.64	-13.9	70.7441	1		225	0		231	146.356	
926	84.64	-13.9	70.7441	0		226	10		232	147.356	

927	84.64	-13.9	70.7441	0		226	0		233	148.356	
928	84.64	-13.9	70.7441	0		227	10		234	149.356	
929	84.64	-13.9	70.7441	0		227	0		234	149.356	
930	84.64	-13.9	70.7441	0	11.24	227	0	30	235	150.356	41.24
931	84.64	-13.9	70.7441	0		227	0		235	150.356	
932	84.64	-13.9	70.7441	0		228	10		235	150.356	
933	84.64	-13.9	70.7441	0		228	0		236	151.356	
934	84.64	-13.9	70.7441	0		228	0		236	151.356	
935	84.64	-13.9	70.7441	0		228	0		236	151.356	
936	84.64	-13.9	70.7441	0		229	10		236	151.356	
937	84.64	-13.9	70.7441	0		229	0		236	151.356	
938	84.64	-13.9	70.7441	0		229	0		236	151.356	
939	84.64	-13.9	70.7441	0		229	0		236	151.356	
940	84.64	-13.9	70.7441	0	0	230	10	30	237	152.356	30
941	84.64	-13.9	70.7441	0		230	0		237	152.356	
942	84.64	-13.9	70.7441	0		230	0		237	152.356	
943	84.64	-13.9	70.7441	0		231	10		238	153.356	
944	84.64	-13.9	70.7441	0		231	0		238	153.356	
945	84.64	-13.9	70.7441	0		231	0		239	154.356	
946	84.82	-13.9	70.9219	1.778		231	0		239	154.178	
947	85.36	-14.3	71.0553	1.334		231	0		239	153.645	
948	85.36	-14.2	71.1553	1		232	10		239	153.645	
949	85.36	-14.2	71.1553	0		232	0		239	153.645	
950	85.36	-14.2	71.1553	0	4.112	232	0	20	240	154.645	24.112
951	85.36	-14.2	71.1553	0		233	10		240	154.645	
952	85.36	-14.2	71.1553	0		233	0		240	154.645	
953	85.36	-14.2	71.1553	0		233	0		240	154.645	
954	85.36	-14.2	71.1553	0		233	0		240	154.645	
955	85.36	-14.2	71.1553	0		233	0		240	154.645	
956	85.36	-14.2	71.1553	0		233	0		240	154.645	
957	85.36	-14.2	71.1553	0		233	0		240	154.645	
958	85.36	-14.2	71.1553	0		234	10		240	154.645	
959	85.36	-14.2	71.1553	0		234	0		240	154.645	
960	85.36	-14.2	71.1553	0	0	234	0	20	241	155.645	20
961	85.36	-14.2	71.1553	0		234	0		241	155.645	
962	85.36	-14.2	71.1553	0		234	0		241	155.645	
963	85.36	-14.2	71.1553	0		234	0		241	155.645	
964	85.36	-14.2	71.1553	0		234	0		241	155.645	
965	85.36	-14.2	71.1553	0		234	0		241	155.645	
966	85.36	-14.2	71.1553	0		234	0		241	155.645	
967	85.36	-14.2	71.1553	0		234	0		241	155.645	
968	85.36	-14.2	71.1553	0		235	10		242	156.645	
969	85.36	-14.2	71.1553	0		235	0		242	156.645	
970	85.36	-14.2	71.1553	0	0	235	0	10	242	156.645	10
971	85.36	-14.2	71.1553	0		235	0		242	156.645	
972	85.36	-14.2	71.1553	0		235	0		242	156.645	
973	85.36	-14.2	71.1553	0		235	0		242	156.645	
974	85.36	-14.2	71.1553	0		235	0		243	157.645	
975	85.36	-14.2	71.1553	0		235	0		243	157.645	
976	85.36	-14.2	71.1553	0		235	0		243	157.645	
977	85.36	-14.2	71.1553	0		235	0		243	157.645	
978	85.36	-14.2	71.1553	0		236	10		243	157.645	
979	85.36	-14.2	71.1553	0		236	0		243	157.645	
980	85.36	-14.2	71.1553	0	0	236	0	10	243	157.645	10
981	85.36	-14.2	71.1553	0		236	0		243	157.645	
982	85.36	-14.2	71.1553	0		236	0		243	157.645	
983	85.36	-14.2	71.1553	0		236	0		243	157.645	
984	85.36	-14.2	71.1553	0		236	0		243	157.645	
985	85.36	-14.2	71.1553	0		236	0		243	157.645	
986	85.36	-14.2	71.1553	0		236	0		243	157.645	
987	85.36	-14.2	71.1553	0		236	0		243	157.645	
988	85.36	-14.2	71.1553	0		236	0		243	157.645	
989	85.36	-14.2	71.1553	0		236	0		244	158.645	
990	85.36	-14.2	71.1553	0	0	236	0	0	245	159.645	0
991	85.36	-14.2	71.1553	0		236	0		247	161.645	
992	85.36	-14.2	71.1553	0		236	0		247	161.645	
993	85.36	-14.2	71.1553	0		236	0		247	161.645	

994	85.36	-14.2	71.1553	0		236	0		247	161.645		C-58
995	85.41	-14.2	71.2061	0.508		236	0		247	161.594		
996	85.41	-14.2	71.2061	0		236	0		247	161.594		
997	85.41	-14.2	71.2061	0		236	0		247	161.594		
998	85.41	-14.2	71.2061	0		236	0		247	161.594		
999	85.66	-14.2	71.4601	2.54		236	0		247	161.34		
1000	85.66	-14.2	71.4601	0	3.048	236	0	0	247	161.34	3.048	
1001	85.66	-14.2	71.4601	0		236	0		247	161.34		
1002	85.66	-14.2	71.4601	0		236	0		247	161.34		
1003	85.66	-14.2	71.4601	0		236	0		247	161.34		
1004	85.66	-14.2	71.4601	0		236	0		247	161.34		
1005	85.66	-14.2	71.4601	0		236	0		247	161.34		
1006	85.66	-14.2	71.4601	0		236	0		247	161.34		
1007	85.66	-14.2	71.4601	0		236	0		247	161.34		
1008	85.66	-14.2	71.4601	0		236	0		247	161.34		
1009	85.66	-14.2	71.4601	0		236	0		247	161.34		
1010	85.66	-14.2	71.4601	0	0	236	0	0	247	161.34	0	
1011	85.66	-14.2	71.4601	0		236	0		247	161.34		
1012	85.66	-14.2	71.4601	0		236	0		248	162.34		
1013	85.66	-14.2	71.4601	0		236	0		248	162.34		
1014	85.66	-14.2	71.4601	0		236	0		248	162.34		
1015	85.66	-14.2	71.4601	0		236	0		248	162.34		
1016	85.66	-14.2	71.4601	0		236	0		248	162.34		
1017	85.86	-14.3	71.5633	1.032		236	0		248	162.137		
1018	85.86	-14.2	71.6633	1		236	0		248	162.137		
1019	85.86	-14.2	71.6633	0		236	0		248	162.137		
1020	85.86	-14.2	71.6633	0	2.032	236	0	0	248	162.137	2.032	
1021	85.86	-14.2	71.6633	0		236	0		248	162.137		
1022	85.86	-14.2	71.6633	0		236	0		248	162.137		

end

CSCMatP193-Daily Data

Time	CumP'c	sum(vTop	Cumm E	Daily E	10day E	sum(vRoc	Daily T	10day T	sum(vBot)	Cumm Dis	10day ET
[day]	[cm]	[L]	[cm]	[mm/day]	[mm/10d]	[L]	[mm]	[mm/10d]	[L]	[cm]	[mm/10d]
650	33.63	284	317.63	0	20	135	0	0	420	386.37	20
651	33.63	285	318.63	10		135	0		420	386.37	
652	33.83	285	318.833	2.032		135	0		420	386.167	
653	33.83	285	318.833	0		135	0		420	386.167	
654	33.83	285	318.833	0		135	0		420	386.167	
655	33.83	285	318.833	0		135	0		420	386.167	
656	33.83	285	318.833	0		135	0		421	387.167	
657	33.83	286	319.833	10		135	0		421	387.167	
658	33.83	286	319.833	0		135	0		421	387.167	
659	33.83	286	319.833	0		135	0		421	387.167	
660	33.83	287	320.833	10	32.032	135	0	0	421	387.167	32.032
661	33.83	287	320.833	0		135	0		421	387.167	
662	33.83	287	320.833	0		135	0		421	387.167	
663	33.83	288	321.833	10		135	0		421	387.167	
664	33.83	288	321.833	0		135	0		421	387.167	
665	33.83	288	321.833	0		135	0		421	387.167	
666	33.83	289	322.833	10		135	0		422	388.167	
667	33.83	289	322.833	0		135	0		422	388.167	
668	33.83	290	323.833	10		135	0		422	388.167	
669	33.83	290	323.833	0		135	0		422	388.167	
670	33.83	290	323.833	0	30	135	0	0	423	389.167	30
671	33.83	291	324.833	10		135	0		423	389.167	
672	33.83	291	324.833	0		135	0		423	389.167	
673	33.83	292	325.833	10		135	0		423	389.167	
674	33.83	292	325.833	0		135	0		424	390.167	
675	33.83	292	325.833	0		135	0		424	390.167	
676	33.83	293	326.833	10		135	0		424	390.167	
677	33.83	293	326.833	0		135	0		425	391.167	
678	33.83	294	327.833	10		135	0		425	391.167	

813	49.59	361	410.594	0		146	0		500	450.406	
814	49.59	362	411.594	10		146	0		501	451.406	
815	49.59	362	411.594	0		147	10		502	452.406	
816	49.59	363	412.594	10		147	0		503	453.406	
817	49.59	363	412.594	0		148	10		504	454.406	
818	49.59	363	412.594	0		148	0		504	454.406	
819	49.59	364	413.594	10		149	10		505	455.406	
820	49.59	364	413.594	0	55.6	149	0	40	506	456.406	95.6
821	49.59	364	413.594	0		149	0		507	457.406	
822	49.59	365	414.594	10		150	10		508	458.406	
823	49.59	365	414.594	0		150	0		509	459.406	
824	49.59	366	415.594	10		151	10		509	459.406	
825	52.39	364	416.394	8		151	0		510	457.606	
826	52.39	364	416.394	0		151	0		511	458.606	
827	52.39	365	417.394	10		152	10		512	459.606	
828	53.5	365	418.498	11.04		152	0		512	458.502	
829	53.5	366	419.498	10		152	0		513	459.502	
830	53.5	367	420.498	10	69.04	153	10	40	514	460.502	109.04
831	53.5	367	420.498	0		153	0		515	461.502	
832	53.5	368	421.498	10		154	10		516	462.502	
833	53.5	369	422.498	10		154	0		516	462.502	
834	53.5	369	422.498	0		155	10		517	463.502	
835	53.5	370	423.498	10		155	0		518	464.502	
836	55.22	369	424.218	7.2		155	0		519	463.782	
837	55.22	370	425.218	10		156	10		520	464.782	
838	55.22	371	426.218	10		156	0		520	464.782	
839	55.22	371	426.218	0		157	10		521	465.782	
840	55.22	371	426.218	0	57.2	157	0	40	522	466.782	97.2
841	55.22	372	427.218	10		158	10		523	467.782	
842	55.24	372	427.243	0.254		158	0		523	467.757	
843	55.29	373	428.294	10.508		159	10		524	468.706	
844	55.34	373	428.345	0.508		159	0		525	469.655	
845	55.34	373	428.345	0		160	10		526	470.655	
846	58.34	371	429.345	10		160	0		527	468.655	
847	58.88	372	430.878	15.334		160	0		527	468.122	
848	58.88	372	430.878	0		161	10		528	469.122	
849	58.88	373	431.878	10		161	0		529	470.122	
850	58.88	374	432.878	10	66.604	162	10	50	530	471.122	116.604
851	58.88	375	433.878	10		162	0		530	471.122	
852	58.88	375	433.878	0		163	10		531	472.122	
853	58.88	376	434.878	10		163	0		532	473.122	
854	58.9	376	434.903	0.254		163	0		533	474.097	
855	58.93	377	435.929	10.254		163	0		534	475.071	
856	62.13	374	436.132	2.034		164	10		534	471.868	
857	62.79	374	436.793	6.604		164	0		535	472.207	
858	62.82	375	437.818	10.254		165	10		536	473.182	
859	63.12	375	438.123	3.048		165	0		536	472.877	
860	63.12	376	439.123	10	62.448	166	10	40	537	473.877	102.448
861	63.12	377	440.123	10		166	0		538	474.877	
862	63.12	378	441.123	10		166	0		539	475.877	
863	63.12	379	442.123	10		167	10		539	475.877	
864	63.12	379	442.123	0		167	0		540	476.877	
865	63.12	380	443.123	10		168	10		541	477.877	
866	65.63	378	443.631	5.08		168	0		542	476.369	
867	65.63	379	444.631	10		169	10		542	476.369	
868	65.63	380	445.631	10		169	0		543	477.369	
869	66.17	380	446.171	5.4		170	10		544	477.829	
870	66.17	381	447.171	10	80.48	170	0	40	545	478.829	120.48
871	66.17	382	448.171	10		170	0		545	478.829	
872	66.45	382	448.45	2.794		171	10		546	479.55	
873	66.53	382	448.526	0.762		171	0		547	480.474	
874	67.01	382	449.009	4.826		171	0		547	479.991	
875	68	382	450	9.906		172	10		548	480	
876	68	383	451	10		172	0		549	481	
877	69.09	383	452.092	10.922		173	10		550	480.908	
878	69.14	383	452.143	0.508		173	0		550	480.857	
879	71.45	381	452.447	3.048		173	0		551	479.553	

880	71.55	382	453.549	11.016	63.782	174	10	40	552	480.451	103.782 C-62
881	71.57	383	454.574	10.254		174	0		552	480.426	
882	71.57	384	455.574	10		175	10		553	481.426	
883	72.2	384	456.2	6.254		175	0		554	481.8	
884	72.2	385	457.2	10		175	0		554	481.8	
885	72.2	385	457.2	0		176	10		555	482.8	
886	72.2	386	458.2	10		177	10		555	482.8	
887	72.2	386	458.2	0		177	0		556	483.8	
888	72.78	387	459.784	15.842		178	10		556	483.216	
889	73.81	387	460.808	10.24		178	0		557	483.192	
890	73.81	387	460.808	0	72.59	179	10	50	558	484.192	122.59
891	73.81	388	461.808	10		179	0		558	484.192	
892	74.27	388	462.265	4.572		180	10		559	484.735	
893	74.27	388	462.265	0		180	0		560	485.735	
894	74.32	388	462.316	0.508		181	10		561	486.684	
895	74.32	389	463.316	10		181	0		561	486.684	
896	76.24	388	464.238	9.22		181	0		562	485.762	
897	77.19	388	465.189	9.508		182	10		563	485.811	
898	77.19	388	465.189	0		182	0		564	486.811	
899	77.19	389	466.189	10		183	10		565	487.811	
900	77.19	389	466.189	0	53.808	183	0	40	566	488.811	93.808
901	77.19	390	467.189	10		183	0		566	488.811	
902	77.19	390	467.189	0		184	10		567	489.811	
903	79.32	389	468.322	11.336		184	0		568	488.678	
904	79.32	389	468.322	0		185	10		569	489.678	
905	80.37	389	469.372	10.5		185	0		570	489.628	
906	80.37	390	470.372	10		185	0		570	489.628	
907	80.37	391	471.372	10		186	10		571	490.628	
908	80.37	391	471.372	0		186	0		572	491.628	
909	80.37	392	472.372	10		186	0		573	492.628	
910	80.37	393	473.372	10	71.836	187	10	40	574	493.628	111.836
911	80.37	393	473.372	0		187	0		574	493.628	
912	80.37	394	474.372	10		188	10		575	494.628	
913	81.66	393	474.656	2.84		188	0		576	494.344	
914	81.68	393	474.682	0.254		188	0		577	495.318	
915	81.71	394	475.707	10.254		189	10		578	496.293	
916	81.98	394	475.977	2.7		189	0		579	497.023	
917	82.26	394	476.257	2.794		189	0		579	496.743	
918	83.09	394	477.095	8.382		189	0		580	496.905	
919	83.12	395	478.12	10.254		190	10		581	497.88	
920	83.12	395	478.12	0	47.478	190	0	30	582	498.88	77.478
921	83.12	396	479.12	10		190	0		583	499.88	
922	83.12	397	480.12	10		191	10		583	499.88	
923	84.39	396	480.39	2.7		191	0		584	499.61	
924	84.64	396	480.644	2.54		191	0		585	500.356	
925	84.64	397	481.644	10		192	10		586	501.356	
926	84.64	398	482.644	10		192	0		587	502.356	
927	84.64	399	483.644	10		192	0		587	502.356	
928	84.64	400	484.644	10		193	10		588	503.356	
929	84.64	400	484.644	0		193	0		589	504.356	
930	84.64	401	485.644	10	75.24	193	0	30	590	505.356	105.24
931	84.64	402	486.644	10		194	10		590	505.356	
932	84.64	403	487.644	10		194	0		591	506.356	
933	84.64	403	487.644	0		194	0		592	507.356	
934	84.64	404	488.644	10		195	10		593	508.356	
935	84.64	405	489.644	10		195	0		594	509.356	
936	84.64	405	489.644	0		195	0		595	510.356	
937	84.64	406	490.644	10		195	0		595	510.356	
938	84.64	407	491.644	10		196	10		596	511.356	
939	84.64	407	491.644	0		196	0		597	512.356	
940	84.64	408	492.644	10	70	196	0	30	598	513.356	100
941	84.64	408	492.644	0		196	0		599	514.356	
942	84.64	409	493.644	10		197	10		600	515.356	
943	84.64	409	493.644	0		197	0		600	515.356	
944	84.64	410	494.644	10		197	0		601	516.356	
945	84.64	411	495.644	10		197	0		602	517.356	
946	84.82	411	495.822	1.778		198	10		603	518.178	

947	85.36	411	496.355	5.334		198	0		604	518.645		
948	85.36	411	496.355	0		198	0		605	519.645		
949	85.36	411	496.355	0		198	0		605	519.645		
950	85.36	412	497.355	10	47.112	199	10	30	606	520.645	77.112	
951	85.36	413	498.355	10		199	0		607	521.645		
952	85.36	413	498.355	0		199	0		608	522.645		
953	85.36	414	499.355	10		199	0		608	522.645		
954	85.36	414	499.355	0		199	0		609	523.645		
955	85.36	415	500.355	10		199	0		610	524.645		
956	85.36	416	501.355	10		199	0		611	525.645		
957	85.36	416	501.355	0		199	0		611	525.645		
958	85.36	417	502.355	10		200	10		612	526.645		
959	85.36	417	502.355	0		200	0		613	527.645		
960	85.36	418	503.355	10	60	200	0	10	614	528.645	70	
961	85.36	419	504.355	10		200	0		614	528.645		
962	85.36	419	504.355	0		200	0		615	529.645		
963	85.36	420	505.355	10		200	0		616	530.645		
964	85.36	420	505.355	0		200	0		616	530.645		
965	85.36	421	506.355	10		200	0		617	531.645		
966	85.36	421	506.355	0		200	0		618	532.645		
967	85.36	422	507.355	10		200	0		619	533.645		
968	85.36	422	507.355	0		200	0		619	533.645		
969	85.36	423	508.355	10		200	0		620	534.645		
970	85.36	423	508.355	0	50	201	10	10	621	535.645	60	
971	85.36	424	509.355	10		201	0		621	535.645		
972	85.36	425	510.355	10		201	0		622	536.645		
973	85.36	425	510.355	0		201	0		623	537.645		
974	85.36	426	511.355	10		201	0		623	537.645		
975	85.36	427	512.355	10		201	0		624	538.645		
976	85.36	427	512.355	0		201	0		625	539.645		
977	85.36	428	513.355	10		201	0		626	540.645		
978	85.36	428	513.355	0		201	0		626	540.645		
979	85.36	429	514.355	10		201	0		627	541.645		
980	85.36	429	514.355	0	60	201	0	0	628	542.645	60	
981	85.36	430	515.355	10		201	0		628	542.645		
982	85.36	430	515.355	0		201	0		629	543.645		
983	85.36	430	515.355	0		201	0		629	543.645		
984	85.36	431	516.355	10		201	0		630	544.645		
985	85.36	431	516.355	0		201	0		630	544.645		
986	85.36	432	517.355	10		201	0		631	545.645		
987	85.36	432	517.355	0		201	0		632	546.645		
988	85.36	432	517.355	0		201	0		632	546.645		
989	85.36	433	518.355	10		201	0		633	547.645		
990	85.36	433	518.355	0	40	201	0	0	634	548.645	40	
991	85.36	434	519.355	10		201	0		634	548.645		
992	85.36	434	519.355	0		201	0		635	549.645		
993	85.36	435	520.355	10		201	0		636	550.645		
994	85.36	435	520.355	0		201	0		636	550.645		
995	85.41	435	520.406	0.508		201	0		637	551.594		
996	85.41	436	521.406	10		201	0		637	551.594		
997	85.41	436	521.406	0		201	0		638	552.594		
998	85.41	436	521.406	0		201	0		638	552.594		
999	85.66	436	521.66	2.54		201	0		638	552.34		
1000	85.66	436	521.66	0	33.048	201	0	0	639	553.34	33.048	
1001	85.66	437	522.66	10		201	0		639	553.34		
1002	85.66	437	522.66	0		201	0		639	553.34		
1003	85.66	437	522.66	0		201	0		640	554.34		
1004	85.66	438	523.66	10		201	0		640	554.34		
1005	85.66	438	523.66	0		201	0		640	554.34		
1006	85.66	439	524.66	10		201	0		641	555.34		
1007	85.66	439	524.66	0		201	0		641	555.34		
1008	85.66	439	524.66	0		201	0		641	555.34		
1009	85.66	440	525.66	10		201	0		642	556.34		
1010	85.66	440	525.66	0	40	201	0	0	642	556.34	40	
1011	85.66	440	525.66	0		201	0		643	557.34		
1012	85.66	440	525.66	0		201	0		643	557.34		
1013	85.66	440	525.66	0		201	0		643	557.34		

1014	85.66	441	526.66	10		201	0		643	557.34		C-64
1015	85.66	441	526.66	0		201	0		643	557.34		
1016	85.66	441	526.66	0		201	0		644	558.34		
1017	85.86	441	526.863	2.032		201	0		644	558.137		
1018	85.86	441	526.863	0		201	0		644	558.137		
1019	85.86	441	526.863	0		201	0		644	558.137		
1020	85.86	442	527.863	10	22.032	201	0	0	644	558.137	22.032	
1021	85.86	442	527.863	0		201	0		644	558.137		
1022	85.86	442	527.863	0		201	0		645	559.137		

end

CSCMatP171-Daily Data

Time [day]	CumP'c [cm]	sum(vTop [L]	Cumm E [cm]	Daily E [mm/day]	10day E [mm/10d]	sum(vRoc [L]	Daily T [mm]	10day T [mm/10d]	sum(vBot) [L]	Cumm Dis [cm]	10day ET [mm/10d]
650	33.63	236	269.63	0	30	146	0	0	382	348.37	30
651	33.63	236	269.63	0		146	0		382	348.37	
652	33.83	236	269.833	2.032		146	0		382	348.167	
653	33.83	236	269.833	0		146	0		382	348.167	
654	33.83	236	269.833	0		146	0		383	349.167	
655	33.83	236	269.833	0		146	0		383	349.167	
656	33.83	237	270.833	10		146	0		383	349.167	
657	33.83	237	270.833	0		146	0		383	349.167	
658	33.83	237	270.833	0		146	0		383	349.167	
659	33.83	238	271.833	10		146	0		383	349.167	
660	33.83	238	271.833	0	22.032	146	0	0	383	349.167	22.032
661	33.83	238	271.833	0		146	0		383	349.167	
662	33.83	239	272.833	10		146	0		383	349.167	
663	33.83	239	272.833	0		146	0		383	349.167	
664	33.83	239	272.833	0		146	0		383	349.167	
665	33.83	240	273.833	10		146	0		383	349.167	
666	33.83	240	273.833	0		146	0		383	349.167	
667	33.83	240	273.833	0		146	0		383	349.167	
668	33.83	241	274.833	10		146	0		383	349.167	
669	33.83	241	274.833	0		146	0		384	350.167	
670	33.83	242	275.833	10	40	146	0	0	384	350.167	40
671	33.83	242	275.833	0		146	0		384	350.167	
672	33.83	243	276.833	10		146	0		384	350.167	
673	33.83	243	276.833	0		146	0		385	351.167	
674	33.83	243	276.833	0		146	0		385	351.167	
675	33.83	244	277.833	10		146	0		385	351.167	
676	33.83	244	277.833	0		146	0		385	351.167	
677	33.83	245	278.833	10		146	0		385	351.167	
678	33.83	245	278.833	0		146	0		386	352.167	
679	33.83	246	279.833	10		146	0		386	352.167	
680	33.83	246	279.833	0	40	146	0	0	386	352.167	40
681	33.83	247	280.833	10		146	0		386	352.167	
682	33.83	247	280.833	0		146	0		387	353.167	
683	33.83	248	281.833	10		146	0		387	353.167	
684	33.83	248	281.833	0		146	0		387	353.167	
685	33.83	249	282.833	10		146	0		388	354.167	
686	33.83	249	282.833	0		146	0		388	354.167	
687	33.83	249	282.833	0		146	0		389	355.167	
688	33.83	249	282.833	0		146	0		389	355.167	
689	33.83	250	283.833	10		146	0		389	355.167	
690	33.83	250	283.833	0	40	146	0	0	390	356.167	40
691	33.83	251	284.833	10		146	0		390	356.167	
692	33.83	251	284.833	0		146	0		390	356.167	
693	33.83	252	285.833	10		146	0		391	357.167	
694	33.83	252	285.833	0		146	0		391	357.167	
695	33.83	253	286.833	10		146	0		391	357.167	
696	33.83	253	286.833	0		146	0		392	358.167	
697	33.83	254	287.833	10		146	0		392	358.167	

698	33.83	254	287.833	0		146	0		392	358.167		
699	33.83	255	288.833	10		146	0		393	359.167		
700	33.83	255	288.833	0	50	146	0	0	393	359.167	50	
701	33.83	255	288.833	0		146	0		393	359.167		
702	33.83	256	289.833	10		146	0		394	360.167		
703	33.83	256	289.833	0		146	0		394	360.167		
704	33.83	257	290.833	10		146	0		395	361.167		
705	33.83	257	290.833	0		146	0		395	361.167		
706	33.83	257	290.833	0		146	0		395	361.167		
707	33.83	258	291.833	10		146	0		396	362.167		
708	33.83	258	291.833	0		146	0		396	362.167		
709	33.83	259	292.833	10		146	0		397	363.167		
710	33.83	259	292.833	0	40	146	0	0	397	363.167	40	
711	33.83	259	292.833	0		146	0		398	364.167		
712	33.83	260	293.833	10		146	0		398	364.167		
713	33.83	260	293.833	0		146	0		398	364.167		
714	33.83	261	294.833	10		146	0		399	365.167		
715	33.83	261	294.833	0		146	0		399	365.167		
716	33.83	261	294.833	0		146	0		400	366.167		
717	33.83	262	295.833	10		146	0		400	366.167		
718	33.83	262	295.833	0		146	0		401	367.167		
719	33.83	263	296.833	10		146	0		401	367.167		
720	33.83	263	296.833	0	40	146	0	0	401	367.167	40	
721	33.83	264	297.833	10		146	0		402	368.167		
722	33.83	264	297.833	0		146	0		402	368.167		
723	33.83	264	297.833	0		146	0		403	369.167		
724	33.83	265	298.833	10		146	0		403	369.167		
725	33.83	265	298.833	0		146	0		404	370.167		
726	33.83	266	299.833	10		146	0		404	370.167		
727	33.83	266	299.833	0		146	0		405	371.167		
728	33.83	267	300.833	10		146	0		405	371.167		
729	33.83	267	300.833	0		146	0		406	372.167		
730	33.83	268	301.833	10	50	146	0	0	406	372.167	50	
731	33.83	268	301.833	0		146	0		407	373.167		
732	33.83	268	301.833	0		146	0		407	373.167		
733	34.44	268	302.442	6.096		146	0		408	373.558		
734	34.54	268	302.544	1.016		146	0		408	373.456		
735	34.54	269	303.544	10		146	0		409	374.456		
736	34.54	269	303.544	0		146	0		409	374.456		
737	34.54	270	304.544	10		146	0		410	375.456		
738	34.54	271	305.544	10		146	0		410	375.456		
739	34.54	271	305.544	0		146	0		411	376.456		
740	34.54	272	306.544	10	47.112	146	0	0	411	376.456	47.112	
741	34.54	273	307.544	10		146	0		412	377.456		
742	35.13	272	307.128	-4.158		146	0		412	376.872		
743	35.15	273	308.154	10.254		146	0		413	377.846		
744	35.15	274	309.154	10		146	0		413	377.846		
745	35.15	274	309.154	0		146	0		414	378.846		
746	35.15	275	310.154	10		146	0		415	379.846		
747	35.15	276	311.154	10		146	0		415	379.846		
748	35.15	276	311.154	0		146	0		416	380.846		
749	35.15	277	312.154	10		146	0		416	380.846		
750	35.15	277	312.154	0	56.096	146	0	0	417	381.846	56.096	
751	35.15	277	312.154	0		146	0		417	381.846		
752	35.15	278	313.154	10		146	0		418	382.846		
753	35.15	279	314.154	10		146	0		418	382.846		
754	35.15	279	314.154	0		146	0		419	383.846		
755	35.15	280	315.154	10		146	0		419	383.846		
756	35.15	280	315.154	0		147	10		420	384.846		
757	35.15	281	316.154	10		147	0		420	384.846		
758	35.15	281	316.154	0		147	0		420	384.846		
759	35.15	282	317.154	10		147	0		421	385.846		
760	35.15	282	317.154	0	50	147	0	10	421	385.846	60	
761	35.15	283	318.154	10		147	0		422	386.846		
762	35.15	283	318.154	0		147	0		422	386.846		
763	35.15	283	318.154	0		147	0		423	387.846		
764	35.15	284	319.154	10		147	0		423	387.846		

765	35.15	284	319.154	0		147	0		424	388.846	
766	35.15	285	320.154	10		147	0		424	388.846	
767	35.15	285	320.154	0		147	0		425	389.846	
768	35.15	286	321.154	10		148	10		425	389.846	
769	35.15	286	321.154	0		148	0		426	390.846	
770	35.15	286	321.154	0	40	148	0	10	426	390.846	50
771	37.29	285	322.294	11.4		148	0		427	389.706	
772	37.29	286	323.294	10		148	0		427	389.706	
773	37.29	287	324.294	10		148	0		428	390.706	
774	37.29	287	324.294	0		148	0		428	390.706	
775	37.29	288	325.294	10		148	0		429	391.706	
776	37.29	288	325.294	0		149	10		429	391.706	
777	37.29	289	326.294	10		149	0		430	392.706	
778	37.29	289	326.294	0		149	0		430	392.706	
779	37.29	290	327.294	10		149	0		431	393.706	
780	37.29	290	327.294	0	61.4	149	0	10	431	393.706	71.4
781	37.29	290	327.294	0		149	0		432	394.706	
782	37.29	291	328.294	10		149	0		432	394.706	
783	37.29	291	328.294	0		150	10		433	395.706	
784	37.29	292	329.294	10		150	0		433	395.706	
785	40.69	289	329.694	4		150	0		434	393.306	
786	40.69	290	330.694	10		150	0		435	394.306	
787	40.69	291	331.694	10		150	0		435	394.306	
788	40.69	292	332.694	10		150	0		436	395.306	
789	40.69	293	333.694	10		151	10		436	395.306	
790	40.69	293	333.694	0	64	151	0	20	437	396.306	84
791	40.69	294	334.694	10		151	0		437	396.306	
792	40.69	294	334.694	0		151	0		438	397.306	
793	40.69	294	334.694	0		151	0		438	397.306	
794	45.69	290	335.694	10		152	10		439	393.306	
795	45.69	291	336.694	10		152	0		439	393.306	
796	45.69	293	338.694	20		152	0		440	394.306	
797	45.69	294	339.694	10		152	0		440	394.306	
798	45.69	294	339.694	0		153	10		441	395.306	
799	45.69	295	340.694	10		153	0		441	395.306	
800	48.03	293	341.034	3.4	73.4	153	0	20	442	393.966	93.4
801	48.03	294	342.034	10		154	10		442	393.966	
802	48.03	295	343.034	10		154	0		443	394.966	
803	48.03	296	344.034	10		154	0		443	394.966	
804	48.03	296	344.034	0		155	10		444	395.966	
805	48.03	297	345.034	10		155	0		444	395.966	
806	48.03	297	345.034	0		156	10		445	396.966	
807	48.03	298	346.034	10		156	0		446	397.966	
808	48.03	298	346.034	0		156	0		446	397.966	
809	48.03	298	346.034	0		157	10		447	398.966	
810	48.03	299	347.034	10	60	157	0	40	448	399.966	100
811	49.59	298	347.594	5.6		158	10		448	398.406	
812	49.59	299	348.594	10		158	0		449	399.406	
813	49.59	299	348.594	0		159	10		450	400.406	
814	49.59	300	349.594	10		159	0		450	400.406	
815	49.59	300	349.594	0		160	10		451	401.406	
816	49.59	300	349.594	0		160	0		452	402.406	
817	49.59	300	349.594	0		160	0		453	403.406	
818	49.59	301	350.594	10		161	10		453	403.406	
819	49.59	301	350.594	0		161	0		454	404.406	
820	49.59	301	350.594	0	35.6	162	10	50	455	405.406	85.6
821	49.59	301	350.594	0		162	0		456	406.406	
822	49.59	302	351.594	10		163	10		456	406.406	
823	49.59	302	351.594	0		163	0		457	407.406	
824	49.59	302	351.594	0		164	10		458	408.406	
825	52.39	300	352.394	8		164	0		458	405.606	
826	52.39	301	353.394	10		164	0		459	406.606	
827	52.39	302	354.394	10		165	10		460	407.606	
828	53.5	301	354.498	1.04		165	0		460	406.502	
829	53.5	302	355.498	10		165	0		461	407.502	
830	53.5	303	356.498	10	59.04	166	10	40	462	408.502	99.04
831	53.5	303	356.498	0		166	0		463	409.502	

832	53.5	304	357.498	10		167	10		463	409.502	
833	53.5	304	357.498	0		167	0		464	410.502	
834	53.5	304	357.498	0		168	10		465	411.502	
835	53.5	305	358.498	10		168	0		465	411.502	
836	55.22	304	359.218	7.2		169	10		466	410.782	
837	55.22	305	360.218	10		169	0		467	411.782	
838	55.22	305	360.218	0		170	10		468	412.782	
839	55.22	306	361.218	10		170	0		468	412.782	
840	55.22	306	361.218	0	47.2	171	10	50	469	413.782	97.2
841	55.22	306	361.218	0		171	0		470	414.782	
842	55.24	307	362.243	10.254		172	10		470	414.757	
843	55.29	307	362.294	0.508		172	0		471	415.706	
844	55.34	307	362.345	0.508		173	10		472	416.655	
845	55.34	307	362.345	0		173	0		472	416.655	
846	58.34	305	363.345	10		174	10		473	414.655	
847	58.88	306	364.878	15.334		174	0		474	415.122	
848	58.88	306	364.878	0		175	10		474	415.122	
849	58.88	307	365.878	10		175	0		475	416.122	
850	58.88	307	365.878	0	46.604	176	10	50	476	417.122	96.604
851	58.88	308	366.878	10		176	0		476	417.122	
852	58.88	308	366.878	0		177	10		477	418.122	
853	58.88	309	367.878	10		177	0		478	419.122	
854	58.9	309	367.903	0.254		177	0		479	420.097	
855	58.93	309	367.929	0.254		178	10		479	420.071	
856	62.13	307	369.132	12.034		178	0		480	417.868	
857	62.79	307	369.793	6.604		179	10		481	418.207	
858	62.82	308	370.818	10.254		179	0		481	418.182	
859	63.12	308	371.123	3.048		179	0		482	418.877	
860	63.12	309	372.123	10	62.448	180	10	40	482	418.877	102.448
861	63.12	310	373.123	10		180	0		483	419.877	
862	63.12	310	373.123	0		181	10		484	420.877	
863	63.12	311	374.123	10		181	0		484	420.877	
864	63.12	311	374.123	0		182	10		485	421.877	
865	63.12	311	374.123	0		182	0		486	422.877	
866	65.63	310	375.631	15.08		183	10		486	420.369	
867	65.63	311	376.631	10		183	0		487	421.369	
868	65.63	311	376.631	0		184	10		488	422.369	
869	66.17	312	378.171	15.4		184	0		488	421.829	
870	66.17	312	378.171	0	60.48	185	10	50	489	422.829	110.48
871	66.17	312	378.171	0		185	0		490	423.829	
872	66.45	313	379.45	12.794		186	10		490	423.55	
873	66.53	313	379.526	0.762		186	0		491	424.474	
874	67.01	313	380.009	4.826		186	0		492	424.991	
875	68	313	381	9.906		186	0		492	424	
876	68	313	381	0		187	10		493	425	
877	69.09	313	382.092	10.922		188	10		493	423.908	
878	69.14	314	383.143	10.508		188	0		494	424.857	
879	71.45	312	383.447	3.048		188	0		495	423.553	
880	71.55	313	384.549	11.016	63.782	189	10	40	495	423.451	103.782
881	71.57	314	385.574	10.254		189	0		496	424.426	
882	71.57	314	385.574	0		190	10		496	424.426	
883	72.2	314	386.2	6.254		190	0		497	424.8	
884	72.2	315	387.2	10		191	10		498	425.8	
885	72.2	315	387.2	0		192	10		498	425.8	
886	72.2	315	387.2	0		192	0		499	426.8	
887	72.2	316	388.2	10		193	10		499	426.8	
888	72.78	316	388.784	5.842		193	0		500	427.216	
889	73.81	316	389.808	10.24		194	10		500	426.192	
890	73.81	316	389.808	0	52.59	194	0	50	501	427.192	102.59
891	73.81	316	389.808	0		195	10		501	427.192	
892	74.27	317	391.265	14.572		196	10		502	427.735	
893	74.27	317	391.265	0		196	0		503	428.735	
894	74.32	317	391.316	0.508		197	10		504	429.684	
895	74.32	317	391.316	0		197	0		504	429.684	
896	76.24	316	392.238	9.22		198	10		505	428.762	
897	77.19	316	393.189	9.508		198	0		506	428.811	
898	77.19	317	394.189	10		199	10		506	428.811	

899	77.19	317	394.189	0		199	0		507	429.811		C-68
900	77.19	317	394.189	0	43.808	199	0	50	508	430.811	93.808	
901	77.19	317	394.189	0		200	10		509	431.811		
902	77.19	318	395.189	10		200	0		509	431.811		
903	79.32	316	395.322	1.336		200	0		510	430.678		
904	79.32	317	396.322	10		201	10		511	431.678		
905	80.37	317	397.372	10.5		202	10		512	431.628		
906	80.37	317	397.372	0		202	0		512	431.628		
907	80.37	318	398.372	10		202	0		513	432.628		
908	80.37	318	398.372	0		203	10		514	433.628		
909	80.37	319	399.372	10		203	0		514	433.628		
910	80.37	319	399.372	0	51.836	203	0	40	515	434.628	91.836	
911	80.37	319	399.372	0		204	10		516	435.628		
912	80.37	320	400.372	10		204	0		517	436.628		
913	81.66	319	400.656	2.84		205	10		518	436.344		
914	81.68	319	400.682	0.254		205	0		519	437.318		
915	81.71	320	401.707	10.254		205	0		519	437.293		
916	81.98	320	401.977	2.7		206	10		520	438.023		
917	82.26	320	402.257	2.794		206	0		521	438.743		
918	83.09	320	403.095	8.382		206	0		522	438.905		
919	83.12	321	404.12	10.254		206	0		523	439.88		
920	83.12	321	404.12	0	47.478	207	10	40	524	440.88	87.478	
921	83.12	322	405.12	10		207	0		524	440.88		
922	83.12	323	406.12	10		207	0		525	441.88		
923	84.39	322	406.39	2.7		208	10		526	441.61		
924	84.64	322	406.644	2.54		208	0		527	442.356		
925	84.64	323	407.644	10		208	0		528	443.356		
926	84.64	324	408.644	10		209	10		528	443.356		
927	84.64	325	409.644	10		209	0		529	444.356		
928	84.64	326	410.644	10		209	0		530	445.356		
929	84.64	326	410.644	0		210	10		531	446.356		
930	84.64	327	411.644	10	75.24	210	0	30	532	447.356	105.24	
931	84.64	328	412.644	10		210	0		532	447.356		
932	84.64	328	412.644	0		211	10		533	448.356		
933	84.64	329	413.644	10		211	0		534	449.356		
934	84.64	330	414.644	10		211	0		535	450.356		
935	84.64	330	414.644	0		212	10		536	451.356		
936	84.64	331	415.644	10		212	0		536	451.356		
937	84.64	331	415.644	0		212	0		537	452.356		
938	84.64	332	416.644	10		213	10		538	453.356		
939	84.64	332	416.644	0		213	0		539	454.356		
940	84.64	333	417.644	10	60	213	0	30	539	454.356	90	
941	84.64	333	417.644	0		213	0		540	455.356		
942	84.64	334	418.644	10		214	10		541	456.356		
943	84.64	334	418.644	0		214	0		542	457.356		
944	84.64	335	419.644	10		214	0		543	458.356		
945	84.64	335	419.644	0		214	0		543	458.356		
946	84.82	336	420.822	11.778		215	10		544	459.178		
947	85.36	335	420.355	-4.666		215	0		545	459.645		
948	85.36	336	421.355	10		215	0		546	460.645		
949	85.36	336	421.355	0		215	0		546	460.645		
950	85.36	337	422.355	10	47.112	216	10	30	547	461.645	77.112	
951	85.36	337	422.355	0		216	0		548	462.645		
952	85.36	338	423.355	10		216	0		548	462.645		
953	85.36	338	423.355	0		216	0		549	463.645		
954	85.36	339	424.355	10		216	0		550	464.645		
955	85.36	340	425.355	10		216	0		550	464.645		
956	85.36	340	425.355	0		216	0		551	465.645		
957	85.36	341	426.355	10		216	0		552	466.645		
958	85.36	341	426.355	0		217	10		552	466.645		
959	85.36	342	427.355	10		217	0		553	467.645		
960	85.36	343	428.355	10	60	217	0	10	553	467.645	70	
961	85.36	343	428.355	0		217	0		554	468.645		
962	85.36	344	429.355	10		217	0		555	469.645		
963	85.36	344	429.355	0		217	0		555	469.645		
964	85.36	345	430.355	10		217	0		556	470.645		
965	85.36	345	430.355	0		217	0		557	471.645		

966	85.36	346	431.355	10		217	0		557	471.645	
967	85.36	347	432.355	10		217	0		558	472.645	
968	85.36	347	432.355	0		217	0		558	472.645	
969	85.36	348	433.355	10		217	0		559	473.645	
970	85.36	348	433.355	0	50	218	10	10	560	474.645	60
971	85.36	349	434.355	10		218	0		560	474.645	
972	85.36	349	434.355	0		218	0		561	475.645	
973	85.36	350	435.355	10		218	0		562	476.645	
974	85.36	351	436.355	10		218	0		562	476.645	
975	85.36	351	436.355	0		218	0		563	477.645	
976	85.36	352	437.355	10		218	0		564	478.645	
977	85.36	352	437.355	0		218	0		564	478.645	
978	85.36	353	438.355	10		218	0		565	479.645	
979	85.36	353	438.355	0		218	0		565	479.645	
980	85.36	354	439.355	10	60	218	0	0	566	480.645	60
981	85.36	354	439.355	0		218	0		567	481.645	
982	85.36	355	440.355	10		218	0		567	481.645	
983	85.36	355	440.355	0		218	0		568	482.645	
984	85.36	355	440.355	0		218	0		568	482.645	
985	85.36	356	441.355	10		218	0		569	483.645	
986	85.36	356	441.355	0		218	0		569	483.645	
987	85.36	357	442.355	10		218	0		570	484.645	
988	85.36	357	442.355	0		218	0		570	484.645	
989	85.36	358	443.355	10		218	0		571	485.645	
990	85.36	358	443.355	0	40	218	0	0	572	486.645	40
991	85.36	358	443.355	0		218	0		573	487.645	
992	85.36	359	444.355	10		218	0		574	488.645	
993	85.36	359	444.355	0		218	0		575	489.645	
994	85.36	360	445.355	10		218	0		575	489.645	
995	85.41	360	445.406	0.508		218	0		576	490.594	
996	85.41	360	445.406	0		218	0		576	490.594	
997	85.41	360	445.406	0		218	0		577	491.594	
998	85.41	361	446.406	10		218	0		577	491.594	
999	85.66	361	446.66	2.54		218	0		578	492.34	
1000	85.66	361	446.66	0	33.048	218	0	0	578	492.34	33.048
1001	85.66	361	446.66	0		218	0		579	493.34	
1002	85.66	362	447.66	10		218	0		579	493.34	
1003	85.66	362	447.66	0		218	0		580	494.34	
1004	85.66	362	447.66	0		218	0		580	494.34	
1005	85.66	363	448.66	10		218	0		581	495.34	
1006	85.66	363	448.66	0		218	0		581	495.34	
1007	85.66	364	449.66	10		218	0		581	495.34	
1008	85.66	364	449.66	0		218	0		582	496.34	
1009	85.66	364	449.66	0		218	0		582	496.34	
1010	85.66	365	450.66	10	40	218	0	0	583	497.34	40
1011	85.66	365	450.66	0		218	0		583	497.34	
1012	85.66	365	450.66	0		218	0		583	497.34	
1013	85.66	365	450.66	0		218	0		584	498.34	
1014	85.66	365	450.66	0		218	0		584	498.34	
1015	85.66	365	450.66	0		218	0		584	498.34	
1016	85.66	366	451.66	10		218	0		585	499.34	
1017	85.86	366	451.863	2.032		218	0		585	499.137	
1018	85.86	366	451.863	0		218	0		585	499.137	
1019	85.86	366	451.863	0		218	0		586	500.137	
1020	85.86	366	451.863	0	12.032	218	0	0	586	500.137	12.032
1021	85.86	366	451.863	0		218	0		586	500.137	
1022	85.86	367	452.863	10		218	0		586	500.137	

end

CSCMatP120-Daily Data

Time [day]	CumP'c [cm]	sum(vTop [L]	Cumm E [cm]	Daily E [mm/day]	10day E [mm/10d]	sum(vRoc [L]	Daily T [mm]	10day T [mm/10d]	sum(vBot [L]	Cumm Dis [cm]	10day ET [mm/10d]
650	33.63	112	145.63	0	30	178	0	0	285	251.37	30
651	33.63	112	145.63	0		178	0		285	251.37	
652	33.83	112	145.833	2.032		178	0		285	251.167	
653	33.83	112	145.833	0		178	0		285	251.167	
654	33.83	113	146.833	10		178	0		285	251.167	
655	33.83	113	146.833	0		178	0		285	251.167	
656	33.83	113	146.833	0		178	0		285	251.167	
657	33.83	113	146.833	0		178	0		285	251.167	
658	33.83	114	147.833	10		178	0		285	251.167	
659	33.83	114	147.833	0		178	0		285	251.167	
660	33.83	114	147.833	0	22.032	178	0	0	285	251.167	22.032
661	33.83	115	148.833	10		178	0		285	251.167	
662	33.83	115	148.833	0		178	0		285	251.167	
663	33.83	115	148.833	0		178	0		285	251.167	
664	33.83	116	149.833	10		178	0		285	251.167	
665	33.83	116	149.833	0		178	0		285	251.167	
666	33.83	116	149.833	0		178	0		285	251.167	
667	33.83	117	150.833	10		178	0		285	251.167	
668	33.83	117	150.833	0		178	0		285	251.167	
669	33.83	118	151.833	10		178	0		285	251.167	
670	33.83	118	151.833	0	40	178	0	0	285	251.167	40
671	33.83	118	151.833	0		178	0		285	251.167	
672	33.83	119	152.833	10		178	0		286	252.167	
673	33.83	119	152.833	0		178	0		286	252.167	
674	33.83	119	152.833	0		178	0		286	252.167	
675	33.83	120	153.833	10		178	0		286	252.167	
676	33.83	120	153.833	0		178	0		286	252.167	
677	33.83	120	153.833	0		178	0		286	252.167	
678	33.83	120	153.833	0		178	0		286	252.167	
679	33.83	121	154.833	10		178	0		286	252.167	
680	33.83	121	154.833	0	30	178	0	0	287	253.167	30
681	33.83	121	154.833	0		178	0		287	253.167	
682	33.83	121	154.833	0		178	0		287	253.167	
683	33.83	122	155.833	10		178	0		287	253.167	
684	33.83	122	155.833	0		178	0		287	253.167	
685	33.83	122	155.833	0		178	0		288	254.167	
686	33.83	122	155.833	0		178	0		288	254.167	
687	33.83	122	155.833	0		178	0		288	254.167	
688	33.83	123	156.833	10		178	0		288	254.167	
689	33.83	123	156.833	0		178	0		288	254.167	
690	33.83	123	156.833	0	20	178	0	0	289	255.167	20
691	33.83	123	156.833	0		178	0		289	255.167	
692	33.83	123	156.833	0		178	0		289	255.167	
693	33.83	124	157.833	10		178	0		289	255.167	
694	33.83	124	157.833	0		178	0		289	255.167	
695	33.83	124	157.833	0		178	0		290	256.167	
696	33.83	124	157.833	0		178	0		290	256.167	
697	33.83	124	157.833	0		178	0		290	256.167	
698	33.83	125	158.833	10		178	0		290	256.167	
699	33.83	125	158.833	0		178	0		290	256.167	
700	33.83	125	158.833	0	20	178	0	0	290	256.167	20
701	33.83	125	158.833	0		178	0		291	257.167	
702	33.83	125	158.833	0		178	0		291	257.167	
703	33.83	126	159.833	10		178	0		291	257.167	
704	33.83	126	159.833	0		178	0		291	257.167	
705	33.83	126	159.833	0		178	0		291	257.167	
706	33.83	126	159.833	0		178	0		292	258.167	
707	33.83	126	159.833	0		178	0		292	258.167	
708	33.83	127	160.833	10		178	0		292	258.167	
709	33.83	127	160.833	0		178	0		292	258.167	
710	33.83	127	160.833	0	20	178	0	0	293	259.167	20
711	33.83	127	160.833	0		178	0		293	259.167	
712	33.83	127	160.833	0		178	0		293	259.167	
713	33.83	128	161.833	10		178	0		294	260.167	

714	33.83	128	161.833	0		178	0		294	260.167	
715	33.83	128	161.833	0		178	0		294	260.167	
716	33.83	128	161.833	0		178	0		294	260.167	
717	33.83	128	161.833	0		178	0		294	260.167	
718	33.83	129	162.833	10		178	0		295	261.167	
719	33.83	129	162.833	0		178	0		295	261.167	
720	33.83	129	162.833	0	20	178	0	0	295	261.167	20
721	33.83	129	162.833	0		178	0		296	262.167	
722	33.83	129	162.833	0		178	0		296	262.167	
723	33.83	130	163.833	10		178	0		296	262.167	
724	33.83	130	163.833	0		178	0		296	262.167	
725	33.83	130	163.833	0		178	0		297	263.167	
726	33.83	130	163.833	0		178	0		297	263.167	
727	33.83	130	163.833	0		178	0		297	263.167	
728	33.83	131	164.833	10		178	0		298	264.167	
729	33.83	131	164.833	0		178	0		298	264.167	
730	33.83	131	164.833	0	20	178	0	0	298	264.167	20
731	33.83	131	164.833	0		178	0		299	265.167	
732	33.83	132	165.833	10		178	0		299	265.167	
733	34.44	131	165.442	-3.904		178	0		299	264.558	
734	34.54	131	165.544	1.016		178	0		299	264.456	
735	34.54	132	166.544	10		178	0		300	265.456	
736	34.54	132	166.544	0		178	0		300	265.456	
737	34.54	133	167.544	10		178	0		300	265.456	
738	34.54	133	167.544	0		178	0		301	266.456	
739	34.54	133	167.544	0		178	0		301	266.456	
740	34.54	133	167.544	0	27.112	178	0	0	301	266.456	27.112
741	34.54	134	168.544	10		178	0		302	267.456	
742	35.13	134	169.128	5.842		178	0		302	266.872	
743	35.15	134	169.154	0.254		178	0		302	266.846	
744	35.15	134	169.154	0		178	0		303	267.846	
745	35.15	135	170.154	10		178	0		303	267.846	
746	35.15	135	170.154	0		178	0		303	267.846	
747	35.15	135	170.154	0		178	0		304	268.846	
748	35.15	136	171.154	10		178	0		304	268.846	
749	35.15	136	171.154	0		178	0		304	268.846	
750	35.15	136	171.154	0	36.096	178	0	0	305	269.846	36.096
751	35.15	137	172.154	10		178	0		305	269.846	
752	35.15	137	172.154	0		178	0		305	269.846	
753	35.15	137	172.154	0		178	0		305	269.846	
754	35.15	138	173.154	10		178	0		306	270.846	
755	35.15	138	173.154	0		178	0		306	270.846	
756	35.15	138	173.154	0		179	10		306	270.846	
757	35.15	138	173.154	0		179	0		307	271.846	
758	35.15	139	174.154	10		179	0		307	271.846	
759	35.15	139	174.154	0		179	0		307	271.846	
760	35.15	139	174.154	0	30	179	0	10	307	271.846	40
761	35.15	139	174.154	0		179	0		308	272.846	
762	35.15	140	175.154	10		179	0		308	272.846	
763	35.15	140	175.154	0		179	0		308	272.846	
764	35.15	140	175.154	0		179	0		309	273.846	
765	35.15	140	175.154	0		179	0		309	273.846	
766	35.15	141	176.154	10		180	10		309	273.846	
767	35.15	141	176.154	0		180	0		309	273.846	
768	35.15	141	176.154	0		180	0		310	274.846	
769	35.15	141	176.154	0		180	0		310	274.846	
770	35.15	142	177.154	10	30	180	0	10	310	274.846	40
771	37.29	140	177.294	1.4		180	0		311	273.706	
772	37.29	141	178.294	10		180	0		311	273.706	
773	37.29	141	178.294	0		181	10		311	273.706	
774	37.29	142	179.294	10		181	0		312	274.706	
775	37.29	142	179.294	0		181	0		312	274.706	
776	37.29	142	179.294	0		181	0		312	274.706	
777	37.29	142	179.294	0		181	0		313	275.706	
778	37.29	143	180.294	10		181	0		313	275.706	
779	37.29	143	180.294	0		181	0		313	275.706	
780	37.29	143	180.294	0	31.4	182	10	20	314	276.706	51.4

781	37.29	143	180.294	0		182	0		314	276.706	
782	37.29	144	181.294	10		182	0		314	276.706	
783	37.29	144	181.294	0		182	0		315	277.706	
784	37.29	144	181.294	0		182	0		315	277.706	
785	40.69	142	182.694	14		183	10		315	274.306	
786	40.69	143	183.694	10		183	0		316	275.306	
787	40.69	143	183.694	0		183	0		316	275.306	
788	40.69	144	184.694	10		183	0		316	275.306	
789	40.69	144	184.694	0		183	0		317	276.306	
790	40.69	144	184.694	0	44	184	10	20	317	276.306	64
791	40.69	144	184.694	0		184	0		317	276.306	
792	40.69	145	185.694	10		184	0		318	277.306	
793	40.69	145	185.694	0		185	10		318	277.306	
794	45.69	141	186.694	10		185	0		318	272.306	
795	45.69	142	187.694	10		185	0		319	273.306	
796	45.69	143	188.694	10		186	10		319	273.306	
797	45.69	143	188.694	0		186	0		320	274.306	
798	45.69	144	189.694	10		186	0		320	274.306	
799	45.69	144	189.694	0		187	10		320	274.306	
800	48.03	142	190.034	3.4	53.4	187	0	30	321	272.966	83.4
801	48.03	143	191.034	10		187	0		321	272.966	
802	48.03	144	192.034	10		188	10		321	272.966	
803	48.03	144	192.034	0		188	0		322	273.966	
804	48.03	144	192.034	0		189	10		322	273.966	
805	48.03	145	193.034	10		189	0		323	274.966	
806	48.03	145	193.034	0		190	10		323	274.966	
807	48.03	145	193.034	0		190	0		324	275.966	
808	48.03	145	193.034	0		191	10		324	275.966	
809	48.03	145	193.034	0		191	0		325	276.966	
810	48.03	145	193.034	0	30	192	10	50	325	276.966	80
811	49.59	145	194.594	15.6		193	10		326	276.406	
812	49.59	145	194.594	0		193	0		326	276.406	
813	49.59	145	194.594	0		194	10		327	277.406	
814	49.59	146	195.594	10		194	0		327	277.406	
815	49.59	146	195.594	0		195	10		328	278.406	
816	49.59	146	195.594	0		195	0		328	278.406	
817	49.59	146	195.594	0		196	10		329	279.406	
818	49.59	146	195.594	0		197	10		330	280.406	
819	49.59	146	195.594	0		197	0		330	280.406	
820	49.59	146	195.594	0	25.6	198	10	60	331	281.406	85.6
821	49.59	146	195.594	0		198	0		331	281.406	
822	49.59	146	195.594	0		199	10		332	282.406	
823	49.59	146	195.594	0		199	0		332	282.406	
824	49.59	146	195.594	0		200	10		333	283.406	
825	52.39	144	196.394	8		200	0		333	280.606	
826	52.39	145	197.394	10		201	10		334	281.606	
827	52.39	145	197.394	0		201	0		335	282.606	
828	53.5	145	198.498	11.04		202	10		335	281.502	
829	53.5	145	198.498	0		202	0		336	282.502	
830	53.5	145	198.498	0	29.04	203	10	50	336	282.502	79.04
831	53.5	145	198.498	0		204	10		337	283.502	
832	53.5	145	198.498	0		204	0		337	283.502	
833	53.5	146	199.498	10		205	10		338	284.502	
834	53.5	146	199.498	0		205	0		339	285.502	
835	53.5	146	199.498	0		206	10		339	285.502	
836	55.22	145	200.218	7.2		207	10		340	284.782	
837	55.22	145	200.218	0		207	0		340	284.782	
838	55.22	146	201.218	10		208	10		341	285.782	
839	55.22	146	201.218	0		209	10		341	285.782	
840	55.22	146	201.218	0	27.2	209	0	60	342	286.782	87.2
841	55.22	146	201.218	0		210	10		342	286.782	
842	55.24	146	201.243	0.254		211	10		343	287.757	
843	55.29	146	201.294	0.508		211	0		343	287.706	
844	55.34	146	201.345	0.508		212	10		344	288.655	
845	55.34	146	201.345	0		212	0		344	288.655	
846	58.34	144	202.345	10		213	10		345	286.655	
847	58.88	144	202.878	5.334		214	10		346	287.122	

848	58.88	144	202.878	0		214	0		346	287.122	
849	58.88	145	203.878	10		215	10		347	288.122	
850	58.88	145	203.878	0	26.604	215	0	60	347	288.122	86.604
851	58.88	145	203.878	0		216	10		348	289.122	
852	58.88	145	203.878	0		217	10		348	289.122	
853	58.88	145	203.878	0		217	0		349	290.122	
854	58.9	145	203.903	0.254		217	0		350	291.097	
855	58.93	145	203.929	0.254		218	10		350	291.071	
856	62.13	143	205.132	12.034		219	10		351	288.868	
857	62.79	143	205.793	6.604		219	0		351	288.207	
858	62.82	144	206.818	10.254		220	10		352	289.182	
859	63.12	144	207.123	3.048		220	0		352	288.877	
860	63.12	144	207.123	0	32.448	221	10	60	353	289.877	92.448
861	63.12	144	207.123	0		222	10		353	289.877	
862	63.12	144	207.123	0		222	0		354	290.877	
863	63.12	144	207.123	0		223	10		354	290.877	
864	63.12	144	207.123	0		223	0		355	291.877	
865	63.12	144	207.123	0		224	10		355	291.877	
866	65.63	143	208.631	15.08		225	10		356	290.369	
867	65.63	143	208.631	0		225	0		356	290.369	
868	65.63	144	209.631	10		226	10		357	291.369	
869	66.17	144	210.171	5.4		227	10		357	290.829	
870	66.17	144	210.171	0	30.48	227	0	60	358	291.829	90.48
871	66.17	144	210.171	0		228	10		358	291.829	
872	66.45	144	210.45	2.794		228	0		359	292.55	
873	66.53	144	210.526	0.762		228	0		359	292.474	
874	67.01	144	211.009	4.826		229	10		360	292.991	
875	68	144	212	9.906		229	0		360	292	
876	68	144	212	0		230	10		361	293	
877	69.09	144	213.092	10.922		231	10		361	291.908	
878	69.14	144	213.143	0.508		231	0		362	292.857	
879	71.45	142	213.447	3.048		232	10		362	290.553	
880	71.55	143	214.549	11.016	43.782	232	0	50	363	291.451	93.782
881	71.57	143	214.574	0.254		233	10		363	291.426	
882	71.57	143	214.574	0		234	10		364	292.426	
883	72.2	143	215.2	6.254		234	0		364	291.8	
884	72.2	144	216.2	10		235	10		365	292.8	
885	72.2	144	216.2	0		236	10		365	292.8	
886	72.2	144	216.2	0		236	0		365	292.8	
887	72.2	144	216.2	0		237	10		366	293.8	
888	72.78	144	216.784	5.842		238	10		366	293.216	
889	73.81	144	217.808	10.24		238	0		366	292.192	
890	73.81	144	217.808	0	32.59	239	10	70	367	293.192	102.59
891	73.81	144	217.808	0		240	10		367	293.192	
892	74.27	144	218.265	4.572		241	10		368	293.735	
893	74.27	144	218.265	0		241	0		369	294.735	
894	74.32	144	218.316	0.508		242	10		369	294.684	
895	74.32	144	218.316	0		242	0		370	295.684	
896	76.24	143	219.238	9.22		243	10		371	294.762	
897	77.19	143	220.189	9.508		244	10		371	293.811	
898	77.19	143	220.189	0		244	0		372	294.811	
899	77.19	143	220.189	0		245	10		372	294.811	
900	77.19	143	220.189	0	23.808	246	10	70	373	295.811	93.808
901	77.19	143	220.189	0		246	0		374	296.811	
902	77.19	143	220.189	0		247	10		374	296.811	
903	79.32	141	220.322	1.336		247	0		375	295.678	
904	79.32	142	221.322	10		248	10		375	295.678	
905	80.37	142	222.372	10.5		248	0		376	295.628	
906	80.37	142	222.372	0		249	10		377	296.628	
907	80.37	142	222.372	0		249	0		377	296.628	
908	80.37	142	222.372	0		250	10		378	297.628	
909	80.37	142	222.372	0		250	0		378	297.628	
910	80.37	142	222.372	0	21.836	251	10	50	379	298.628	71.836
911	80.37	142	222.372	0		251	0		380	299.628	
912	80.37	142	222.372	0		252	10		380	299.628	
913	81.66	141	222.656	2.84		252	0		381	299.344	
914	81.68	142	223.682	10.254		253	10		382	300.318	

915	81.71	142	223.707	0.254		253	0		382	300.293		C-74
916	81.98	142	223.977	2.7		253	0		383	301.023		
917	82.26	142	224.257	2.794		254	10		384	301.743		
918	83.09	142	225.095	8.382		254	0		385	301.905		
919	83.12	142	225.12	0.254		254	0		386	302.88		
920	83.12	142	225.12	0	27.478	255	10	40	387	303.88	67.478	
921	83.12	142	225.12	0		255	0		388	304.88		
922	83.12	142	225.12	0		255	0		389	305.88		
923	84.39	141	225.39	2.7		256	10		390	305.61		
924	84.64	142	226.644	12.54		256	0		390	305.356		
925	84.64	142	226.644	0		256	0		391	306.356		
926	84.64	143	227.644	10		257	10		392	307.356		
927	84.64	143	227.644	0		257	0		393	308.356		
928	84.64	143	227.644	0		258	10		394	309.356		
929	84.64	144	228.644	10		258	0		395	310.356		
930	84.64	144	228.644	0	35.24	258	0	30	396	311.356	65.24	
931	84.64	145	229.644	10		258	0		396	311.356		
932	84.64	145	229.644	0		259	10		397	312.356		
933	84.64	146	230.644	10		259	0		397	312.356		
934	84.64	146	230.644	0		260	10		398	313.356		
935	84.64	146	230.644	0		260	0		398	313.356		
936	84.64	147	231.644	10		260	0		399	314.356		
937	84.64	147	231.644	0		261	10		399	314.356		
938	84.64	147	231.644	0		261	0		400	315.356		
939	84.64	148	232.644	10		261	0		400	315.356		
940	84.64	148	232.644	0	40	262	10	40	401	316.356	80	
941	84.64	148	232.644	0		262	0		402	317.356		
942	84.64	149	233.644	10		262	0		402	317.356		
943	84.64	149	233.644	0		263	10		403	318.356		
944	84.64	149	233.644	0		263	0		403	318.356		
945	84.64	150	234.644	10		263	0		404	319.356		
946	84.82	150	234.822	1.778		263	0		405	320.178		
947	85.36	149	234.355	-4.666		264	10		405	319.645		
948	85.36	150	235.355	10		264	0		406	320.645		
949	85.36	150	235.355	0		264	0		406	320.645		
950	85.36	151	236.355	10	37.112	265	10	30	407	321.645	67.112	
951	85.36	151	236.355	0		265	0		407	321.645		
952	85.36	151	236.355	0		265	0		408	322.645		
953	85.36	152	237.355	10		265	0		408	322.645		
954	85.36	152	237.355	0		265	0		408	322.645		
955	85.36	152	237.355	0		266	10		409	323.645		
956	85.36	153	238.355	10		266	0		409	323.645		
957	85.36	153	238.355	0		266	0		410	324.645		
958	85.36	153	238.355	0		266	0		410	324.645		
959	85.36	154	239.355	10		266	0		410	324.645		
960	85.36	154	239.355	0	30	266	0	10	411	325.645	40	
961	85.36	154	239.355	0		266	0		411	325.645		
962	85.36	154	239.355	0		266	0		412	326.645		
963	85.36	155	240.355	10		267	10		412	326.645		
964	85.36	155	240.355	0		267	0		413	327.645		
965	85.36	155	240.355	0		267	0		413	327.645		
966	85.36	156	241.355	10		267	0		413	327.645		
967	85.36	156	241.355	0		267	0		414	328.645		
968	85.36	156	241.355	0		267	0		414	328.645		
969	85.36	157	242.355	10		267	0		415	329.645		
970	85.36	157	242.355	0	30	267	0	10	415	329.645	40	
971	85.36	157	242.355	0		267	0		415	329.645		
972	85.36	158	243.355	10		267	0		416	330.645		
973	85.36	158	243.355	0		268	10		416	330.645		
974	85.36	158	243.355	0		268	0		417	331.645		
975	85.36	159	244.355	10		268	0		417	331.645		
976	85.36	159	244.355	0		268	0		418	332.645		
977	85.36	159	244.355	0		268	0		418	332.645		
978	85.36	160	245.355	10		268	0		419	333.645		
979	85.36	160	245.355	0		268	0		419	333.645		
980	85.36	160	245.355	0	30	268	0	10	419	333.645	40	
981	85.36	161	246.355	10		268	0		420	334.645		

982	85.36	161	246.355	0		268	0		420	334.645		C-75
983	85.36	161	246.355	0		268	0		420	334.645		
984	85.36	162	247.355	10		268	0		421	335.645		
985	85.36	162	247.355	0		268	0		421	335.645		
986	85.36	162	247.355	0		268	0		421	335.645		
987	85.36	163	248.355	10		268	0		422	336.645		
988	85.36	163	248.355	0		268	0		422	336.645		
989	85.36	163	248.355	0		268	0		423	337.645		
990	85.36	164	249.355	10	40	268	0	0	424	338.645	40	
991	85.36	164	249.355	0		268	0		425	339.645		
992	85.36	164	249.355	0		268	0		425	339.645		
993	85.36	165	250.355	10		268	0		426	340.645		
994	85.36	165	250.355	0		268	0		426	340.645		
995	85.41	165	250.406	0.508		268	0		427	341.594		
996	85.41	166	251.406	10		268	0		427	341.594		
997	85.41	166	251.406	0		268	0		427	341.594		
998	85.41	166	251.406	0		268	0		428	342.594		
999	85.66	166	251.66	2.54		268	0		428	342.34		
1000	85.66	167	252.66	10	33.048	268	0	0	429	343.34	33.048	
1001	85.66	167	252.66	0		268	0		429	343.34		
1002	85.66	167	252.66	0		268	0		429	343.34		
1003	85.66	168	253.66	10		268	0		430	344.34		
1004	85.66	168	253.66	0		268	0		430	344.34		
1005	85.66	168	253.66	0		268	0		430	344.34		
1006	85.66	169	254.66	10		268	0		431	345.34		
1007	85.66	169	254.66	0		268	0		431	345.34		
1008	85.66	169	254.66	0		268	0		431	345.34		
1009	85.66	170	255.66	10		268	0		432	346.34		
1010	85.66	170	255.66	0	30	268	0	0	432	346.34	30	
1011	85.66	170	255.66	0		268	0		432	346.34		
1012	85.66	170	255.66	0		268	0		433	347.34		
1013	85.66	170	255.66	0		268	0		433	347.34		
1014	85.66	171	256.66	10		268	0		434	348.34		
1015	85.66	171	256.66	0		268	0		434	348.34		
1016	85.66	171	256.66	0		268	0		434	348.34		
1017	85.86	171	256.863	2.032		268	0		435	349.137		
1018	85.86	171	256.863	0		268	0		435	349.137		
1019	85.86	171	256.863	0		268	0		435	349.137		
1020	85.86	172	257.863	10	22.032	268	0	0	436	350.137	22.032	
1021	85.86	172	257.863	0		268	0		436	350.137		
1022	85.86	172	257.863	0		268	0		436	350.137		

end

CSCMatM283-Daily Data

Time	CumP'1	sum(vTop	Cumm E	Daily E	10day E	sum(vRoc	Daily T	10day T	sum(vBot)	Cumm Dis	10day ET
[day]	[cm]	[L]	[cm]	[mm/day]	[mm/10d]	[L]	[mm]	[mm/10d]	[L]	[cm]	[mm/10d]
650	33.63	-0.145	33.4846	0	0	40.1	0	0	-141	-174.63	0
651	33.63	-0.145	33.4846	0		40.1	0		-141	-174.63	
652	33.83	-0.292	33.4846	0		40.1	0		-142	-174.63	
653	33.83	-0.235	33.5408	0.562		40.1	0		-143	-175.833	
654	33.83	-0.226	33.5978	0.57		40.1	0		-144	-176.833	
655	33.83	-0.221	33.6068	0.09		40.1	0		-144	-177.833	
656	33.83	-0.218	33.6118	0.05		40.1	0		-145	-177.833	
657	33.83	-0.216	33.6148	0.03		40.1	0		-146	-178.833	
658	33.83	-0.214	33.6168	0.02		40.1	0		-147	-179.833	
659	33.83	-0.212	33.6188	0.02		40.1	0		-147	-180.833	
660	33.83	-0.211	33.6208	0.02	1.362	40.1	0	0	-147	-180.833	1.362
661	33.83	-0.21	33.6218	0.01		40.1	0		-147	-180.833	
662	33.83	-0.209	33.6228	0.01		40.1	0		-147	-180.833	
663	33.83	-0.208	33.6238	0.01		40.1	0		-147	-180.833	
664	33.83	-0.207	33.6248	0.01		40.1	0		-147	-180.833	
665	33.83	-0.206	33.6258	0.01		40.1	0		-147	-180.833	

666	33.83	-0.205	33.6268	0.01		40.1	0		-147	-180.833		
667	33.83	-0.205	33.6278	0.01		40.1	0		-147	-180.833		
668	33.83	-0.204	33.6278	0		40.1	0		-147	-180.833		
669	33.83	-0.203	33.6288	0.01		40.1	0		-147	-180.833		
670	33.83	-0.203	33.6298	0.01	0.09	40.1	0	0	-147	-180.833	0.09	
671	33.83	-0.203	33.6298	0		40.1	0		-147	-180.833		
672	33.83	-0.202	33.6298	0		40.1	0		-146	-180.833		
673	33.83	-0.202	33.6308	0.01		40.1	0		-146	-179.833		
674	33.83	-0.201	33.6308	0		40.1	0		-146	-179.833		
675	33.83	-0.201	33.6318	0.01		40.1	0		-146	-179.833		
676	33.83	-0.2	33.6318	0		40.1	0		-146	-179.833		
677	33.83	-0.2	33.6328	0.01		40.1	0		-146	-179.833		
678	33.83	-0.2	33.6328	0		40.1	0		-145	-179.833		
679	33.83	-0.199	33.6328	0		40.1	0		-145	-178.833		
680	33.83	-0.199	33.6338	0.01	0.04	40.1	0	0	-145	-178.833	0.04	
681	33.83	-0.199	33.6338	0		40.1	0		-145	-178.833		
682	33.83	-0.199	33.6338	0		40.1	0		-146	-178.833		
683	33.83	-0.198	33.6338	0		40.1	0		-146	-179.833		
684	33.83	-0.198	33.6348	0.01		40.1	0		-146	-179.833		
685	33.83	-0.198	33.6348	0		40.1	0		-146	-179.833		
686	33.83	-0.198	33.6348	0		40.1	0		-146	-179.833		
687	33.83	-0.197	33.6348	0		40.1	0		-146	-179.833		
688	33.83	-0.197	33.6358	0.01		40.1	0		-146	-179.833		
689	33.83	-0.197	33.6358	0		40.1	0		-146	-179.833		
690	33.83	-0.197	33.6358	0	0.02	40.1	0	0	-145	-179.833	0.02	
691	33.83	-0.196	33.6358	0		40.1	0		-145	-178.833		
692	33.83	-0.196	33.6368	0.01		40.1	0		-145	-178.833		
693	33.83	-0.196	33.6368	0		40.1	0		-146	-178.833		
694	33.83	-0.196	33.6368	0		40.1	0		-146	-179.833		
695	33.83	-0.196	33.6368	0		40.1	0		-146	-179.833		
696	33.83	-0.195	33.6368	0		40.1	0		-146	-179.833		
697	33.83	-0.195	33.6378	0.01		40.1	0		-146	-179.833		
698	33.83	-0.195	33.6378	0		40.1	0		-146	-179.833		
699	33.83	-0.195	33.6378	0		40.1	0		-146	-179.833		
700	33.83	-0.195	33.6378	0	0.02	40.1	0	0	-146	-179.833	0.02	
701	33.83	-0.195	33.6378	0		40.1	0		-145	-179.833		
702	33.83	-0.194	33.6378	0		40.1	0		-145	-178.833		
703	33.83	-0.194	33.6388	0.01		40.1	0		-145	-178.833		
704	33.83	-0.194	33.6388	0		40.1	0		-145	-178.833		
705	33.83	-0.194	33.6388	0		40.1	0		-145	-178.833		
706	33.83	-0.194	33.6388	0		40.1	0		-145	-178.833		
707	33.83	-0.194	33.6388	0		40.1	0		-145	-178.833		
708	33.83	-0.193	33.6388	0		40.1	0		-144	-178.833		
709	33.83	-0.193	33.6398	0.01		40.1	0		-144	-177.833		
710	33.83	-0.193	33.6398	0	0.02	40.1	0	0	-144	-177.833	0.02	
711	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833		
712	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833		
713	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833		
714	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833		
715	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833		
716	33.83	-0.192	33.6398	0		40.1	0		-144	-177.833		
717	33.83	-0.192	33.6408	0.01		40.1	0		-144	-177.833		
718	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833		
719	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833		
720	33.83	-0.192	33.6408	0	0.01	40.1	0	0	-144	-177.833	0.01	
721	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833		
722	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833		
723	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833		
724	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833		
725	33.83	-0.191	33.6408	0		40.1	0		-144	-177.833		
726	33.83	-0.191	33.6418	0.01		40.1	0		-144	-177.833		
727	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833		
728	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833		
729	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833		
730	33.83	-0.191	33.6418	0	0.01	40.1	0	0	-144	-177.833	0.01	
731	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833		
732	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833		

733	34.44	-0.52	33.6418	0		40.1	0		-144	-177.833	
734	34.54	-0.406	33.9224	2.806		40.1	0		-144	-178.442	
735	34.54	-0.38	34.138	2.156		40.1	0		-144	-178.544	
736	34.54	-0.366	34.164	0.26		40.1	0		-144	-178.544	
737	34.54	-0.356	34.178	0.14		40.1	0		-144	-178.544	
738	34.54	-0.349	34.188	0.1		40.1	0		-144	-178.544	
739	34.54	-0.344	34.195	0.07		40.1	0		-144	-178.544	
740	34.54	-0.339	34.2	0.05	5.582	40.1	0	0	-144	-178.544	5.582
741	34.54	-0.335	34.205	0.05		40.1	0		-144	-178.544	
742	35.13	-0.471	34.209	0.04		40.1	0		-144	-178.544	
743	35.15	-0.394	34.6572	4.482		40.1	0		-144	-179.128	
744	35.15	-0.38	34.7596	1.024		40.1	0		-144	-179.154	
745	35.15	-0.371	34.7736	0.14		40.1	0		-144	-179.154	
746	35.15	-0.365	34.7826	0.09		40.1	0		-146	-179.154	
747	35.15	-0.36	34.7886	0.06		40.1	0		-144	-181.154	
748	35.15	-0.356	34.7936	0.05		40.1	0		-144	-179.154	
749	35.15	-0.352	34.7976	0.04		40.1	0		-145	-179.154	
750	35.15	-0.349	34.8016	0.04	6.016	40.1	0	0	-145	-180.154	6.016
751	35.15	-0.346	34.8046	0.03		40.1	0		-145	-180.154	
752	35.15	-0.344	34.8076	0.03		40.1	0		-145	-180.154	
753	35.15	-0.342	34.8096	0.02		40.1	0		-144	-180.154	
754	35.15	-0.34	34.8116	0.02		40.1	0		-143	-179.154	
755	35.15	-0.34	34.8136	0.02		40.1	0		-144	-178.154	
756	35.15	-0.339	34.8136	0		40.1	0		-144	-179.154	
757	35.15	-0.339	34.8146	0.01		40.2	0		-145	-179.154	
758	35.15	-0.339	34.8146	0		40.2	1		-146	-180.154	
759	35.15	-0.339	34.8146	0		40.2	0		-146	-181.154	
760	35.15	-0.339	34.8146	0	0.13	40.2	0	1	-146	-181.154	1.13
761	35.15	-0.339	34.8146	0		40.2	0		-147	-181.154	
762	35.15	-0.339	34.8146	0		40.3	0		-147	-182.154	
763	35.15	-0.339	34.8146	0		40.3	1		-147	-182.154	
764	35.15	-0.339	34.8146	0		40.3	0		-147	-182.154	
765	35.15	-0.339	34.8146	0		40.3	0		-147	-182.154	
766	35.15	-0.339	34.8146	0		40.3	0		-147	-182.154	
767	35.15	-0.339	34.8146	0		40.3	0		-147	-182.154	
768	35.15	-0.339	34.8146	0		40.3	0		-148	-182.154	
769	35.15	-0.339	34.8146	0		40.3	0		-149	-183.154	
770	35.15	-0.339	34.8146	0	0	40.3	0	1	-150	-184.154	1
771	35.15	-0.339	34.8146	0		40.3	0		-152	-185.154	
772	35.15	-0.339	34.8146	0		40.3	0		-153	-187.154	
773	35.15	-0.339	34.8146	0		40.3	0		-154	-188.154	
774	35.15	-0.339	34.8146	0		40.3	0		-155	-189.154	
775	35.15	-0.339	34.8146	0		40.3	0		-152	-190.154	
776	35.15	-0.339	34.8146	0		40.3	0		-150	-187.154	
777	35.15	-0.339	34.8146	0		40.3	0		-149	-185.154	
778	35.15	-0.339	34.8146	0		40.3	0		-147	-184.154	
779	35.15	-0.339	34.8146	0		40.3	0		-146	-182.154	
780	35.15	-0.339	34.8146	0	0	40.3	0	0	-146	-181.154	0
781	35.15	-0.339	34.8146	0		40.3	0		-146	-181.154	
782	35.15	-0.339	34.8146	0		40.3	0		-145	-181.154	
783	38.55	-2.77	34.8146	0		40.3	0		-144	-180.154	
784	38.55	-2.08	35.7836	9.69		40.4	0		-143	-182.554	
785	38.55	-1.93	36.4736	6.9		40.4	1		-142	-181.554	
786	38.55	-1.85	36.6236	1.5		40.5	0		-141	-180.554	
787	38.55	-1.81	36.7036	0.8		40.6	1		-142	-179.554	
788	38.55	-1.79	36.7436	0.4		40.7	1		-142	-180.554	
789	38.55	-1.77	36.7636	0.2		40.8	1		-143	-180.554	
790	38.55	-1.76	36.7836	0.2	19.69	40.9	1	5	-143	-181.554	24.69
791	38.55	-1.75	36.7936	0.1		41	1		-143	-181.554	
792	38.55	-1.75	36.8036	0.1		41.1	1		-143	-181.554	
793	38.55	-1.75	36.8036	0		41.2	1		-143	-181.554	
794	38.55	-1.75	36.8036	0		41.3	1		-143	-181.554	
795	38.55	-1.75	36.8036	0		41.4	1		-143	-181.554	
796	41.05	-3.04	36.8036	0		41.6	1		-144	-181.554	
797	41.65	-2.67	38.0136	12.1		41.7	2		-140	-185.054	
798	41.65	-2.59	38.9836	9.7		41.8	1		-135	-181.654	
799	41.65	-2.56	39.0636	0.8		41.9	1		-133	-176.654	

800	44.25	-4.46	39.0936	0.3	23.1	42	1	11	-132	-174.654	34.1	C-78
801	44.25	-3.89	39.7936	7		42.1	1		-129	-176.254		
802	44.25	-3.74	40.3636	5.7		42.4	1		-119	-173.254		
803	44.25	-3.69	40.5136	1.5		42.5	3		-104	-163.254		
804	44.25	-3.67	40.5636	0.5		42.7	1		-104	-148.254		
805	44.25	-3.66	40.5836	0.2		42.9	2		-109	-148.254		
806	44.25	-3.65	40.5936	0.1		43	2		-100	-153.254		
807	44.25	-3.65	40.6036	0.1		43.2	1		-94	-144.254		
808	46.25	-4.84	40.6036	0		43.4	2		-91.5	-138.254		
809	46.25	-4.42	41.4136	8.1		43.6	2		-91.4	-137.754		
810	46.25	-4.37	41.8336	4.2	27.4	43.8	2	17	-92.8	-137.654	44.4	
811	46.25	-4.35	41.8836	0.5		44	2		-95.7	-139.054		
812	49.25	-6.09	41.9036	0.2		44.2	2		-97	-141.954		
813	49.25	-5.51	43.1636	12.6		44.3	2		-98.6	-146.254		
814	49.25	-5.41	43.7436	5.8		44.5	1		-99.4	-147.854		
815	49.25	-5.38	43.8436	1		44.7	2		-104	-148.654		
816	49.25	-5.37	43.8736	0.3		44.9	2		-109	-153.254		
817	49.25	-5.37	43.8836	0.1		45.1	2		-115	-158.254		
818	49.25	-5.37	43.8836	0		45.3	2		-120	-164.254		
819	49.25	-5.37	43.8836	0		45.4	2		-124	-169.254		
820	49.25	-5.37	43.8836	0	20.5	45.5	1	18	-127	-173.254	38.5	
821	49.25	-5.37	43.8836	0		45.6	1		-131	-176.254		
822	49.25	-5.37	43.8836	0		45.6	1		-134	-180.254		
823	49.25	-5.37	43.8836	0		45.6	0		-135	-183.254		
824	51.65	-6.85	43.8836	0		45.7	0		-136	-184.254		
825	52.45	-6.97	44.8036	9.2		45.8	1		-137	-187.654		
826	52.45	-6.67	45.4836	6.8		45.9	1		-136	-189.454		
827	52.45	-6.61	45.7836	3		46.1	1		-133	-188.454		
828	52.45	-6.59	45.8436	0.6		46.2	2		-132	-185.454		
829	52.45	-6.59	45.8636	0.2		46.4	1		-132	-184.454		
830	52.45	-6.59	45.8636	0	19.8	46.6	2	10	-132	-184.454	29.8	
831	52.45	-6.59	45.8636	0		46.7	2		-134	-184.454		
832	52.45	-6.59	45.8636	0		46.8	1		-137	-186.454		
833	52.45	-6.59	45.8636	0		46.9	1		-138	-189.454		
834	52.45	-6.59	45.8636	0		46.9	1		-139	-190.454		
835	52.45	-6.59	45.8636	0		46.9	0		-140	-191.454		
836	52.61	-6.59	45.8636	0		46.9	0		-141	-192.454		
837	52.61	-6.59	46.016	1.524		46.9	0		-142	-193.606		
838	52.61	-6.59	46.016	0		46.9	0		-143	-194.606		
839	52.61	-6.59	46.016	0		46.9	0		-144	-195.606		
840	52.61	-6.59	46.016	0	1.524	47	0	5	-144	-196.606	6.524	
841	52.61	-6.59	46.016	0		47	1		-145	-196.606		
842	52.63	-6.59	46.016	0		47	0		-146	-197.606		
843	52.68	-6.59	46.0414	0.254		47	0		-146	-198.631		
844	52.73	-6.59	46.0922	0.508		47	0		-146	-198.682		
845	52.73	-6.59	46.143	0.508		47	0		-145	-198.733		
846	52.73	-6.59	46.143	0		47	0		-145	-197.733		
847	53.27	-6.59	46.143	0		47	0		-145	-197.733		
848	53.27	-6.59	46.6764	5.334		47	0		-145	-198.266		
849	53.27	-6.59	46.6764	0		47	0		-145	-198.266		
850	53.27	-6.59	46.6764	0	6.604	47	0	1	-146	-198.266	7.604	
851	53.27	-6.59	46.6764	0		47	0		-146	-199.266		
852	53.27	-6.59	46.6764	0		47	0		-146	-199.266		
853	53.27	-6.59	46.6764	0		47	0		-146	-199.266		
854	53.29	-6.59	46.6764	0		47	0		-147	-199.266		
855	53.32	-6.59	46.7018	0.254		47	0		-147	-200.292		
856	56.12	-8.55	46.7272	0.254		47.1	0		-146	-200.317		
857	56.12	-8.01	47.5706	8.434		47.3	1		-145	-202.121		
858	56.12	-7.92	48.1106	5.4		47.5	2		-143	-201.121		
859	56.12	-7.89	48.2006	0.9		47.6	2		-143	-199.121		
860	56.12	-7.88	48.2306	0.3	15.542	47.8	1	6	-143	-199.121	21.542	
861	56.89	-7.88	48.2406	0.1		48	2		-143	-199.121		
862	56.89	-7.88	49.0106	7.7		48.2	2		-144	-199.891		
863	56.89	-7.88	49.0106	0		48.3	2		-146	-200.891		
864	56.89	-7.88	49.0106	0		48.4	1		-147	-202.891		
865	56.89	-7.88	49.0106	0		48.4	1		-148	-203.891		
866	56.94	-7.88	49.0106	0		48.4	0		-148	-204.891		

867	56.94	-7.88	49.0614	0.508		48.4	0		-149	-204.941	
868	56.94	-7.88	49.0614	0		48.4	0		-150	-205.941	
869	56.97	-7.88	49.0614	0		48.4	0		-151	-206.941	
870	56.97	-7.88	49.0868	0.254	8.562	48.4	0	8	-151	-207.967	16.562
871	56.97	-7.88	49.0868	0		48.4	0		-152	-207.967	
872	57.25	-7.88	49.0868	0		48.4	0		-151	-208.967	
873	57.32	-7.88	49.3662	2.794		48.4	0		-148	-208.246	
874	57.81	-7.88	49.4424	0.762		48.4	0		-142	-205.322	
875	58.8	-8.28	49.925	4.826		48.5	0		-120	-199.805	
876	58.8	-8.15	50.5156	5.906		48.6	1		-119	-178.796	
877	59.89	-8.35	50.6456	1.3		48.6	1		-124	-177.796	
878	59.94	-8.26	51.5378	8.922		48.7	0		-127	-183.888	
879	61.99	-9.75	51.6786	1.408		48.8	1		-127	-186.939	
880	62.09	-9.34	52.2366	5.58	31.498	48.9	1	4	-119	-188.987	35.498
881	63.13	-9.88	52.7482	5.116		49.1	1		-113	-181.088	
882	63.13	-9.58	53.2482	5		49.3	2		-118	-176.128	
883	63.15	-9.54	53.5482	3		49.4	2		-121	-181.128	
884	63.15	-9.53	53.6136	0.654		49.6	1		-125	-184.154	
885	63.15	-9.53	53.6236	0.1		49.8	2		-127	-188.154	
886	63.15	-9.53	53.6236	0		50	2		-129	-190.154	
887	63.15	-9.53	53.6236	0		50.1	2		-131	-192.154	
888	63.74	-9.53	53.6236	0		50.1	1		-133	-194.154	
889	63.89	-9.53	54.2078	5.842		50.1	0		-134	-196.738	
890	63.89	-9.53	54.3602	1.524	21.236	50.1	0	13	-135	-197.89	34.236
891	63.89	-9.53	54.3602	0		50.1	0		-137	-198.89	
892	65.56	-10.2	54.3602	0		50.2	0		-138	-200.89	
893	65.56	-9.97	55.3602	10		50.3	1		-139	-203.56	
894	65.61	-9.96	55.5902	2.3		50.4	1		-139	-204.56	
895	65.61	-9.96	55.651	0.608		50.5	1		-140	-204.611	
896	65.61	-9.96	55.651	0		50.6	1		-141	-205.611	
897	65.66	-9.96	55.651	0		50.6	1		-142	-206.611	
898	65.66	-9.96	55.7018	0.508		50.6	0		-142	-207.662	
899	65.66	-9.96	55.7018	0		50.6	0		-142	-207.662	
900	65.66	-9.96	55.7018	0	13.416	50.6	0	5	-142	-207.662	18.416
901	65.66	-9.96	55.7018	0		50.6	0		-143	-207.662	
902	65.66	-9.96	55.7018	0		50.6	0		-143	-208.662	
903	67.8	-11.6	55.7018	0		50.6	0		-144	-208.662	
904	67.8	-11.1	56.1954	4.936		50.9	0		-144	-211.795	
905	67.8	-11.1	56.6954	5		51	3		-143	-211.795	
906	67.8	-11.1	56.6954	0		51.1	1		-143	-210.795	
907	67.8	-11.1	56.6954	0		51.3	1		-144	-210.795	
908	67.8	-11.1	56.6954	0		51.4	2		-144	-211.795	
909	67.8	-11.1	56.6954	0		51.5	1		-145	-211.795	
910	67.8	-11.1	56.6954	0	9.936	51.6	1	9	-145	-212.795	18.936
911	67.8	-11.1	56.6954	0		51.7	1		-145	-212.795	
912	67.8	-11.1	56.6954	0		51.7	1		-146	-212.795	
913	68.38	-11.2	56.6954	0		51.7	0		-146	-213.795	
914	68.38	-11.1	57.1796	4.842		51.8	0		-146	-214.38	
915	68.38	-11.1	57.2796	1		51.8	1		-146	-214.38	
916	68.51	-11.1	57.2796	0		51.8	0		-146	-214.38	
917	68.79	-11.1	57.4066	1.27		51.8	0		-145	-214.507	
918	69.62	-11.3	57.686	2.794		51.8	0		-145	-213.786	
919	69.62	-11.3	58.3242	6.382		51.9	0		-144	-214.624	
920	69.62	-11.3	58.3242	0	16.288	51.9	1	4	-144	-213.624	20.288
921	69.62	-11.3	58.3242	0		52	0		-144	-213.624	
922	69.62	-11.3	58.3242	0		52	1		-144	-213.624	
923	69.75	-11.3	58.3242	0		52	0		-145	-213.624	
924	69.75	-11.3	58.4512	1.27		52	0		-144	-214.751	
925	69.75	-11.3	58.4512	0		52	0		-144	-213.751	
926	69.75	-11.3	58.4512	0		52	0		-144	-213.751	
927	69.75	-11.3	58.4512	0		52	0		-145	-213.751	
928	69.75	-11.3	58.4512	0		52	0		-146	-214.751	
929	69.75	-11.3	58.4512	0		52	0		-146	-215.751	
930	69.75	-11.3	58.4512	0	1.27	52	0	1	-147	-215.751	2.27
931	69.75	-11.3	58.4512	0		52	0		-147	-216.751	
932	69.75	-11.3	58.4512	0		52	0		-147	-216.751	
933	69.75	-11.3	58.4512	0		52	0		-148	-216.751	

934	69.75	-11.3	58.4512	0		52	0		-148	-217.751		C-80
935	69.75	-11.3	58.4512	0		52	0		-148	-217.751		
936	69.75	-11.3	58.4512	0		52	0		-149	-217.751		
937	69.75	-11.3	58.4512	0		52	0		-149	-218.751		
938	69.75	-11.3	58.4512	0		52	0		-149	-218.751		
939	69.75	-11.3	58.4512	0		52	0		-150	-218.751		
940	69.75	-11.3	58.4512	0	0	52	0	0	-150	-219.751	0	
941	69.75	-11.3	58.4512	0		52	0		-150	-219.751		
942	69.75	-11.3	58.4512	0		52	0		-150	-219.751		
943	69.75	-11.3	58.4512	0		52	0		-150	-219.751		
944	69.75	-11.3	58.4512	0		52	0		-150	-219.751		
945	69.75	-11.3	58.4512	0		52	0		-150	-219.751		
946	69.75	-11.3	58.4512	0		52	0		-150	-219.751		
947	70.28	-11.7	58.4512	0		52	0		-149	-219.751		
948	70.28	-11.6	58.5846	1.334		52.1	0		-148	-219.285		
949	70.28	-11.5	58.6846	1		52.1	1		-147	-218.285		
950	70.28	-11.5	58.7846	1	3.334	52.2	0	1	-146	-217.285	4.334	
951	70.28	-11.5	58.7846	0		52.2	1		-145	-216.285		
952	70.28	-11.5	58.7846	0		52.2	0		-144	-215.285		
953	70.28	-11.5	58.7846	0		52.2	0		-144	-214.285		
954	70.28	-11.5	58.7846	0		52.2	0		-144	-214.285		
955	70.28	-11.5	58.7846	0		52.2	0		-144	-214.285		
956	70.28	-11.5	58.7846	0		52.2	0		-144	-214.285		
957	70.28	-11.5	58.7846	0		52.2	0		-144	-214.285		
958	70.28	-11.5	58.7846	0		52.2	0		-145	-214.285		
959	70.28	-11.5	58.7846	0		52.2	0		-145	-215.285		
960	70.28	-11.5	58.7846	0	0	52.2	0	1	-146	-215.285	1	
961	70.28	-11.5	58.7846	0		52.2	0		-145	-216.285		
962	70.28	-11.5	58.7846	0		52.2	0		-145	-215.285		
963	70.28	-11.5	58.7846	0		52.2	0		-144	-215.285		
964	70.28	-11.5	58.7846	0		52.2	0		-143	-214.285		
965	70.28	-11.5	58.7846	0		52.2	0		-142	-213.285		
966	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285		
967	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285		
968	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285		
969	70.28	-11.5	58.7846	0		52.2	0		-141	-212.285		
970	70.28	-11.5	58.7846	0	0	52.2	0	0	-141	-211.285	0	
971	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285		
972	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285		
973	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285		
974	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285		
975	70.28	-11.5	58.7846	0		52.2	0		-142	-211.285		
976	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285		
977	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285		
978	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285		
979	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285		
980	70.28	-11.5	58.7846	0	0	52.2	0	0	-142	-212.285	0	
981	70.28	-11.5	58.7846	0		52.2	0		-141	-212.285		
982	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285		
983	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285		
984	70.28	-11.5	58.7846	0		52.2	0		-142	-211.285		
985	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285		
986	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285		
987	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285		
988	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285		
989	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285		
990	70.28	-11.5	58.7846	0	0	52.2	0	0	-142	-212.285	0	
991	70.28	-11.5	58.7846	0		52.2	0		-141	-212.285		
992	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285		
993	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285		
994	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285		
995	70.36	-11.5	58.7846	0		52.2	0		-141	-211.285		
996	70.36	-11.5	58.8646	0.8		52.2	0		-141	-211.365		
997	70.36	-11.5	58.8646	0		52.2	0		-141	-211.365		
998	70.36	-11.5	58.8646	0		52.2	0		-140	-211.365		
999	70.54	-11.5	58.8646	0		52.2	0		-141	-210.365		
1000	70.54	-11.5	59.0426	1.78	2.58	52.2	0	0	-141	-211.543	2.58	

1001	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543		C-81
1002	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543		
1003	70.54	-11.5	59.0426	0		52.2	0		-142	-211.543		
1004	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543		
1005	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543		
1006	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543		
1007	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543		
1008	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543		
1009	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543		
1010	70.54	-11.5	59.0426	0	0	52.2	0	0	-141	-212.543	0	
1011	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543		
1012	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543		
1013	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543		
1014	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543		
1015	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543		
1016	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543		
1017	70.75	-11.7	59.0426	0		52.2	0		-140	-211.543		
1018	70.75	-11.6	59.0458	0.032		52.2	0		-141	-210.746		
1019	70.75	-11.6	59.1458	1		52.2	0		-141	-211.746		
1020	70.75	-11.6	59.1458	0	1.032	52.2	0	0	-140	-211.746	1.032	
1021	70.75	-11.6	59.1458	0		52.2	0		-140	-210.746		
1022	70.75	-11.6	59.1458	0		52.2	0		-140	-210.746		

end

CSCMatM483-Daily Data

Time [day]	CumP'1 [cm]	sum(vTop [L]	Cumm E [cm]	Daily E [mm/day]	10day E [mm/10d]	sum(vRoc [L]	Daily T [mm]	10day T [mm/10d]	sum(vBot [L]	Cumm Dis [cm]	10day ET [mm/10d]
650	33.63	-0.145	33.4846	0	0	40.1	0	0	-141	-174.63	0
651	33.63	-0.145	33.4846	0		40.1	0		-141	-174.63	
652	33.83	-0.292	33.4846	0		40.1	0		-142	-174.63	
653	33.83	-0.235	33.5408	0.562		40.1	0		-143	-175.833	
654	33.83	-0.226	33.5978	0.57		40.1	0		-144	-176.833	
655	33.83	-0.221	33.6068	0.09		40.1	0		-144	-177.833	
656	33.83	-0.218	33.6118	0.05		40.1	0		-145	-177.833	
657	33.83	-0.216	33.6148	0.03		40.1	0		-146	-178.833	
658	33.83	-0.214	33.6168	0.02		40.1	0		-147	-179.833	
659	33.83	-0.212	33.6188	0.02		40.1	0		-147	-180.833	
660	33.83	-0.211	33.6208	0.02	1.362	40.1	0	0	-147	-180.833	1.362
661	33.83	-0.21	33.6218	0.01		40.1	0		-147	-180.833	
662	33.83	-0.209	33.6228	0.01		40.1	0		-147	-180.833	
663	33.83	-0.208	33.6238	0.01		40.1	0		-147	-180.833	
664	33.83	-0.207	33.6248	0.01		40.1	0		-147	-180.833	
665	33.83	-0.206	33.6258	0.01		40.1	0		-147	-180.833	
666	33.83	-0.205	33.6268	0.01		40.1	0		-147	-180.833	
667	33.83	-0.205	33.6278	0.01		40.1	0		-147	-180.833	
668	33.83	-0.204	33.6278	0		40.1	0		-147	-180.833	
669	33.83	-0.203	33.6288	0.01		40.1	0		-147	-180.833	
670	33.83	-0.203	33.6298	0.01	0.09	40.1	0	0	-147	-180.833	0.09
671	33.83	-0.203	33.6298	0		40.1	0		-147	-180.833	
672	33.83	-0.202	33.6298	0		40.1	0		-146	-180.833	
673	33.83	-0.202	33.6308	0.01		40.1	0		-146	-179.833	
674	33.83	-0.201	33.6308	0		40.1	0		-146	-179.833	
675	33.83	-0.201	33.6318	0.01		40.1	0		-146	-179.833	
676	33.83	-0.2	33.6318	0		40.1	0		-146	-179.833	
677	33.83	-0.2	33.6328	0.01		40.1	0		-146	-179.833	
678	33.83	-0.2	33.6328	0		40.1	0		-145	-179.833	
679	33.83	-0.199	33.6328	0		40.1	0		-145	-178.833	
680	33.83	-0.199	33.6338	0.01	0.04	40.1	0	0	-145	-178.833	0.04
681	33.83	-0.199	33.6338	0		40.1	0		-145	-178.833	
682	33.83	-0.199	33.6338	0		40.1	0		-146	-178.833	
683	33.83	-0.198	33.6338	0		40.1	0		-146	-179.833	

684	33.83	-0.198	33.6348	0.01		40.1	0		-146	-179.833	
685	33.83	-0.198	33.6348	0		40.1	0		-146	-179.833	
686	33.83	-0.198	33.6348	0		40.1	0		-146	-179.833	
687	33.83	-0.197	33.6348	0		40.1	0		-146	-179.833	
688	33.83	-0.197	33.6358	0.01		40.1	0		-146	-179.833	
689	33.83	-0.197	33.6358	0		40.1	0		-146	-179.833	
690	33.83	-0.197	33.6358	0	0.02	40.1	0	0	-145	-179.833	0.02
691	33.83	-0.196	33.6358	0		40.1	0		-145	-178.833	
692	33.83	-0.196	33.6368	0.01		40.1	0		-145	-178.833	
693	33.83	-0.196	33.6368	0		40.1	0		-146	-178.833	
694	33.83	-0.196	33.6368	0		40.1	0		-146	-179.833	
695	33.83	-0.196	33.6368	0		40.1	0		-146	-179.833	
696	33.83	-0.195	33.6368	0		40.1	0		-146	-179.833	
697	33.83	-0.195	33.6378	0.01		40.1	0		-146	-179.833	
698	33.83	-0.195	33.6378	0		40.1	0		-146	-179.833	
699	33.83	-0.195	33.6378	0		40.1	0		-146	-179.833	
700	33.83	-0.195	33.6378	0	0.02	40.1	0	0	-146	-179.833	0.02
701	33.83	-0.195	33.6378	0		40.1	0		-145	-179.833	
702	33.83	-0.194	33.6378	0		40.1	0		-145	-178.833	
703	33.83	-0.194	33.6388	0.01		40.1	0		-145	-178.833	
704	33.83	-0.194	33.6388	0		40.1	0		-145	-178.833	
705	33.83	-0.194	33.6388	0		40.1	0		-145	-178.833	
706	33.83	-0.194	33.6388	0		40.1	0		-145	-178.833	
707	33.83	-0.194	33.6388	0		40.1	0		-145	-178.833	
708	33.83	-0.193	33.6388	0		40.1	0		-144	-178.833	
709	33.83	-0.193	33.6398	0.01		40.1	0		-144	-177.833	
710	33.83	-0.193	33.6398	0	0.02	40.1	0	0	-144	-177.833	0.02
711	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833	
712	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833	
713	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833	
714	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833	
715	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833	
716	33.83	-0.192	33.6398	0		40.1	0		-144	-177.833	
717	33.83	-0.192	33.6408	0.01		40.1	0		-144	-177.833	
718	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833	
719	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833	
720	33.83	-0.192	33.6408	0	0.01	40.1	0	0	-144	-177.833	0.01
721	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833	
722	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833	
723	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833	
724	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833	
725	33.83	-0.191	33.6408	0		40.1	0		-144	-177.833	
726	33.83	-0.191	33.6418	0.01		40.1	0		-144	-177.833	
727	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833	
728	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833	
729	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833	
730	33.83	-0.191	33.6418	0	0.01	40.1	0	0	-144	-177.833	0.01
731	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833	
732	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833	
733	34.44	-0.52	33.6418	0		40.1	0		-144	-177.833	
734	34.54	-0.406	33.9224	2.806		40.1	0		-144	-178.442	
735	34.54	-0.38	34.138	2.156		40.1	0		-144	-178.544	
736	34.54	-0.366	34.164	0.26		40.1	0		-144	-178.544	
737	34.54	-0.356	34.178	0.14		40.1	0		-144	-178.544	
738	34.54	-0.349	34.188	0.1		40.1	0		-144	-178.544	
739	34.54	-0.344	34.195	0.07		40.1	0		-144	-178.544	
740	34.54	-0.339	34.2	0.05	5.582	40.1	0	0	-144	-178.544	5.582
741	34.54	-0.335	34.205	0.05		40.1	0		-144	-178.544	
742	35.13	-0.471	34.209	0.04		40.1	0		-144	-178.544	
743	35.15	-0.394	34.6572	4.482		40.1	0		-144	-179.128	
744	35.15	-0.38	34.7596	1.024		40.1	0		-144	-179.154	
745	35.15	-0.371	34.7736	0.14		40.1	0		-144	-179.154	
746	35.15	-0.365	34.7826	0.09		40.1	0		-146	-179.154	
747	35.15	-0.36	34.7886	0.06		40.1	0		-144	-181.154	
748	35.15	-0.356	34.7936	0.05		40.1	0		-144	-179.154	
749	35.15	-0.352	34.7976	0.04		40.1	0		-145	-179.154	
750	35.15	-0.349	34.8016	0.04	6.016	40.1	0	0	-145	-180.154	6.016

885	63.15	-9.53	53.6236	0.1		49.8	2		-127	-188.154	
886	63.15	-9.53	53.6236	0		50	2		-129	-190.154	
887	63.15	-9.53	53.6236	0		50.1	2		-131	-192.154	
888	63.74	-9.53	53.6236	0		50.1	1		-133	-194.154	
889	63.89	-9.53	54.2078	5.842		50.1	0		-134	-196.738	
890	63.89	-9.53	54.3602	1.524	21.236	50.1	0	13	-135	-197.89	34.236
891	63.89	-9.53	54.3602	0		50.1	0		-137	-198.89	
892	65.56	-10.2	54.3602	0		50.2	0		-138	-200.89	
893	65.56	-9.97	55.3602	10		50.3	1		-139	-203.56	
894	65.61	-9.96	55.5902	2.3		50.4	1		-139	-204.56	
895	65.61	-9.96	55.651	0.608		50.5	1		-140	-204.611	
896	65.61	-9.96	55.651	0		50.6	1		-141	-205.611	
897	65.66	-9.96	55.651	0		50.6	1		-142	-206.611	
898	65.66	-9.96	55.7018	0.508		50.6	0		-142	-207.662	
899	65.66	-9.96	55.7018	0		50.6	0		-142	-207.662	
900	65.66	-9.96	55.7018	0	13.416	50.6	0	5	-142	-207.662	18.416
901	65.66	-9.96	55.7018	0		50.6	0		-143	-207.662	
902	65.66	-9.96	55.7018	0		50.6	0		-143	-208.662	
903	67.8	-11.6	55.7018	0		50.6	0		-144	-208.662	
904	67.8	-11.1	56.1954	4.936		50.9	0		-144	-211.795	
905	67.8	-11.1	56.6954	5		51	3		-143	-211.795	
906	67.8	-11.1	56.6954	0		51.1	1		-143	-210.795	
907	67.8	-11.1	56.6954	0		51.3	1		-144	-210.795	
908	67.8	-11.1	56.6954	0		51.4	2		-144	-211.795	
909	67.8	-11.1	56.6954	0		51.5	1		-145	-211.795	
910	67.8	-11.1	56.6954	0	9.936	51.6	1	9	-145	-212.795	18.936
911	67.8	-11.1	56.6954	0		51.7	1		-145	-212.795	
912	67.8	-11.1	56.6954	0		51.7	1		-146	-212.795	
913	68.38	-11.2	56.6954	0		51.7	0		-146	-213.795	
914	68.38	-11.1	57.1796	4.842		51.8	0		-146	-214.38	
915	68.38	-11.1	57.2796	1		51.8	1		-146	-214.38	
916	68.51	-11.1	57.2796	0		51.8	0		-146	-214.38	
917	68.79	-11.1	57.4066	1.27		51.8	0		-145	-214.507	
918	69.62	-11.3	57.686	2.794		51.8	0		-145	-213.786	
919	69.62	-11.3	58.3242	6.382		51.9	0		-144	-214.624	
920	69.62	-11.3	58.3242	0	16.288	51.9	1	4	-144	-213.624	20.288
921	69.62	-11.3	58.3242	0		52	0		-144	-213.624	
922	69.62	-11.3	58.3242	0		52	1		-144	-213.624	
923	69.75	-11.3	58.3242	0		52	0		-145	-213.624	
924	69.75	-11.3	58.4512	1.27		52	0		-144	-214.751	
925	69.75	-11.3	58.4512	0		52	0		-144	-213.751	
926	69.75	-11.3	58.4512	0		52	0		-144	-213.751	
927	69.75	-11.3	58.4512	0		52	0		-145	-213.751	
928	69.75	-11.3	58.4512	0		52	0		-146	-214.751	
929	69.75	-11.3	58.4512	0		52	0		-146	-215.751	
930	69.75	-11.3	58.4512	0	1.27	52	0	1	-147	-215.751	2.27
931	69.75	-11.3	58.4512	0		52	0		-147	-216.751	
932	69.75	-11.3	58.4512	0		52	0		-147	-216.751	
933	69.75	-11.3	58.4512	0		52	0		-148	-216.751	
934	69.75	-11.3	58.4512	0		52	0		-148	-217.751	
935	69.75	-11.3	58.4512	0		52	0		-148	-217.751	
936	69.75	-11.3	58.4512	0		52	0		-149	-217.751	
937	69.75	-11.3	58.4512	0		52	0		-149	-218.751	
938	69.75	-11.3	58.4512	0		52	0		-149	-218.751	
939	69.75	-11.3	58.4512	0		52	0		-150	-218.751	
940	69.75	-11.3	58.4512	0	0	52	0	0	-150	-219.751	0
941	69.75	-11.3	58.4512	0		52	0		-150	-219.751	
942	69.75	-11.3	58.4512	0		52	0		-150	-219.751	
943	69.75	-11.3	58.4512	0		52	0		-150	-219.751	
944	69.75	-11.3	58.4512	0		52	0		-150	-219.751	
945	69.75	-11.3	58.4512	0		52	0		-150	-219.751	
946	69.75	-11.3	58.4512	0		52	0		-150	-219.751	
947	70.28	-11.7	58.4512	0		52	0		-149	-219.751	
948	70.28	-11.6	58.5846	1.334		52.1	0		-148	-219.285	
949	70.28	-11.5	58.6846	1		52.1	1		-147	-218.285	
950	70.28	-11.5	58.7846	1	3.334	52.2	0	1	-146	-217.285	4.334
951	70.28	-11.5	58.7846	0		52.2	1		-145	-216.285	

1001	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	C-81
1002	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1003	70.54	-11.5	59.0426	0		52.2	0		-142	-211.543	
1004	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543	
1005	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543	
1006	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543	
1007	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543	
1008	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543	
1009	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543	
1010	70.54	-11.5	59.0426	0	0	52.2	0	0	-141	-212.543	0
1011	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1012	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1013	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1014	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1015	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1016	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1017	70.75	-11.7	59.0426	0		52.2	0		-140	-211.543	
1018	70.75	-11.6	59.0458	0.032		52.2	0		-141	-210.746	
1019	70.75	-11.6	59.1458	1		52.2	0		-141	-211.746	
1020	70.75	-11.6	59.1458	0	1.032	52.2	0	0	-140	-211.746	1.032
1021	70.75	-11.6	59.1458	0		52.2	0		-140	-210.746	
1022	70.75	-11.6	59.1458	0		52.2	0		-140	-210.746	

end

CSCMatM483-Daily Data

Time	CumP'1	sum(vTop	Cumm E	Daily E	10day E	sum(vRoc	Daily T	10day T	sum(vBot	Cumm Dis	10day ET
[day]	[cm]	[L]	[cm]	[mm/day]	[mm/10d]	[L]	[mm]	[mm/10d]	[L]	[cm]	[mm/10d]
650	33.63	-0.145	33.4846	0	0	40.1	0	0	-141	-174.63	0
651	33.63	-0.145	33.4846	0		40.1	0		-141	-174.63	
652	33.83	-0.292	33.4846	0		40.1	0		-142	-174.63	
653	33.83	-0.235	33.5408	0.562		40.1	0		-143	-175.833	
654	33.83	-0.226	33.5978	0.57		40.1	0		-144	-176.833	
655	33.83	-0.221	33.6068	0.09		40.1	0		-144	-177.833	
656	33.83	-0.218	33.6118	0.05		40.1	0		-145	-177.833	
657	33.83	-0.216	33.6148	0.03		40.1	0		-146	-178.833	
658	33.83	-0.214	33.6168	0.02		40.1	0		-147	-179.833	
659	33.83	-0.212	33.6188	0.02		40.1	0		-147	-180.833	
660	33.83	-0.211	33.6208	0.02	1.362	40.1	0	0	-147	-180.833	1.362
661	33.83	-0.21	33.6218	0.01		40.1	0		-147	-180.833	
662	33.83	-0.209	33.6228	0.01		40.1	0		-147	-180.833	
663	33.83	-0.208	33.6238	0.01		40.1	0		-147	-180.833	
664	33.83	-0.207	33.6248	0.01		40.1	0		-147	-180.833	
665	33.83	-0.206	33.6258	0.01		40.1	0		-147	-180.833	
666	33.83	-0.205	33.6268	0.01		40.1	0		-147	-180.833	
667	33.83	-0.205	33.6278	0.01		40.1	0		-147	-180.833	
668	33.83	-0.204	33.6278	0		40.1	0		-147	-180.833	
669	33.83	-0.203	33.6288	0.01		40.1	0		-147	-180.833	
670	33.83	-0.203	33.6298	0.01	0.09	40.1	0	0	-147	-180.833	0.09
671	33.83	-0.203	33.6298	0		40.1	0		-147	-180.833	
672	33.83	-0.202	33.6298	0		40.1	0		-146	-180.833	
673	33.83	-0.202	33.6308	0.01		40.1	0		-146	-179.833	
674	33.83	-0.201	33.6308	0		40.1	0		-146	-179.833	
675	33.83	-0.201	33.6318	0.01		40.1	0		-146	-179.833	
676	33.83	-0.2	33.6318	0		40.1	0		-146	-179.833	
677	33.83	-0.2	33.6328	0.01		40.1	0		-146	-179.833	
678	33.83	-0.2	33.6328	0		40.1	0		-145	-179.833	
679	33.83	-0.199	33.6328	0		40.1	0		-145	-178.833	
680	33.83	-0.199	33.6338	0.01	0.04	40.1	0	0	-145	-178.833	0.04
681	33.83	-0.199	33.6338	0		40.1	0		-145	-178.833	
682	33.83	-0.199	33.6338	0		40.1	0		-146	-178.833	
683	33.83	-0.198	33.6338	0		40.1	0		-146	-179.833	

684	33.83	-0.198	33.6348	0.01		40.1	0		-146	-179.833	
685	33.83	-0.198	33.6348	0		40.1	0		-146	-179.833	
686	33.83	-0.198	33.6348	0		40.1	0		-146	-179.833	
687	33.83	-0.197	33.6348	0		40.1	0		-146	-179.833	
688	33.83	-0.197	33.6358	0.01		40.1	0		-146	-179.833	
689	33.83	-0.197	33.6358	0		40.1	0		-146	-179.833	
690	33.83	-0.197	33.6358	0	0.02	40.1	0	0	-145	-179.833	0.02
691	33.83	-0.196	33.6358	0		40.1	0		-145	-178.833	
692	33.83	-0.196	33.6368	0.01		40.1	0		-145	-178.833	
693	33.83	-0.196	33.6368	0		40.1	0		-146	-178.833	
694	33.83	-0.196	33.6368	0		40.1	0		-146	-179.833	
695	33.83	-0.196	33.6368	0		40.1	0		-146	-179.833	
696	33.83	-0.195	33.6368	0		40.1	0		-146	-179.833	
697	33.83	-0.195	33.6378	0.01		40.1	0		-146	-179.833	
698	33.83	-0.195	33.6378	0		40.1	0		-146	-179.833	
699	33.83	-0.195	33.6378	0		40.1	0		-146	-179.833	
700	33.83	-0.195	33.6378	0	0.02	40.1	0	0	-146	-179.833	0.02
701	33.83	-0.195	33.6378	0		40.1	0		-145	-179.833	
702	33.83	-0.194	33.6378	0		40.1	0		-145	-178.833	
703	33.83	-0.194	33.6388	0.01		40.1	0		-145	-178.833	
704	33.83	-0.194	33.6388	0		40.1	0		-145	-178.833	
705	33.83	-0.194	33.6388	0		40.1	0		-145	-178.833	
706	33.83	-0.194	33.6388	0		40.1	0		-145	-178.833	
707	33.83	-0.194	33.6388	0		40.1	0		-145	-178.833	
708	33.83	-0.193	33.6388	0		40.1	0		-144	-178.833	
709	33.83	-0.193	33.6398	0.01		40.1	0		-144	-177.833	
710	33.83	-0.193	33.6398	0	0.02	40.1	0	0	-144	-177.833	0.02
711	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833	
712	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833	
713	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833	
714	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833	
715	33.83	-0.193	33.6398	0		40.1	0		-144	-177.833	
716	33.83	-0.192	33.6398	0		40.1	0		-144	-177.833	
717	33.83	-0.192	33.6408	0.01		40.1	0		-144	-177.833	
718	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833	
719	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833	
720	33.83	-0.192	33.6408	0	0.01	40.1	0	0	-144	-177.833	0.01
721	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833	
722	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833	
723	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833	
724	33.83	-0.192	33.6408	0		40.1	0		-144	-177.833	
725	33.83	-0.191	33.6408	0		40.1	0		-144	-177.833	
726	33.83	-0.191	33.6418	0.01		40.1	0		-144	-177.833	
727	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833	
728	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833	
729	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833	
730	33.83	-0.191	33.6418	0	0.01	40.1	0	0	-144	-177.833	0.01
731	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833	
732	33.83	-0.191	33.6418	0		40.1	0		-144	-177.833	
733	34.44	-0.52	33.6418	0		40.1	0		-144	-177.833	
734	34.54	-0.406	33.9224	2.806		40.1	0		-144	-178.442	
735	34.54	-0.38	34.138	2.156		40.1	0		-144	-178.544	
736	34.54	-0.366	34.164	0.26		40.1	0		-144	-178.544	
737	34.54	-0.356	34.178	0.14		40.1	0		-144	-178.544	
738	34.54	-0.349	34.188	0.1		40.1	0		-144	-178.544	
739	34.54	-0.344	34.195	0.07		40.1	0		-144	-178.544	
740	34.54	-0.339	34.2	0.05	5.582	40.1	0	0	-144	-178.544	5.582
741	34.54	-0.335	34.205	0.05		40.1	0		-144	-178.544	
742	35.13	-0.471	34.209	0.04		40.1	0		-144	-178.544	
743	35.15	-0.394	34.6572	4.482		40.1	0		-144	-179.128	
744	35.15	-0.38	34.7596	1.024		40.1	0		-144	-179.154	
745	35.15	-0.371	34.7736	0.14		40.1	0		-144	-179.154	
746	35.15	-0.365	34.7826	0.09		40.1	0		-146	-179.154	
747	35.15	-0.36	34.7886	0.06		40.1	0		-144	-181.154	
748	35.15	-0.356	34.7936	0.05		40.1	0		-144	-179.154	
749	35.15	-0.352	34.7976	0.04		40.1	0		-145	-179.154	
750	35.15	-0.349	34.8016	0.04	6.016	40.1	0	0	-145	-180.154	6.016

751	35.15	-0.346	34.8046	0.03		40.1	0		-145	-180.154	
752	35.15	-0.344	34.8076	0.03		40.1	0		-145	-180.154	
753	35.15	-0.342	34.8096	0.02		40.1	0		-144	-180.154	
754	35.15	-0.34	34.8116	0.02		40.1	0		-143	-179.154	
755	35.15	-0.34	34.8136	0.02		40.1	0		-144	-178.154	
756	35.15	-0.339	34.8136	0		40.1	0		-144	-179.154	
757	35.15	-0.339	34.8146	0.01		40.2	0		-145	-179.154	
758	35.15	-0.339	34.8146	0		40.2	1		-146	-180.154	
759	35.15	-0.339	34.8146	0		40.2	0		-146	-181.154	
760	35.15	-0.339	34.8146	0	0.13	40.2	0	1	-146	-181.154	1.13
761	35.15	-0.339	34.8146	0		40.2	0		-147	-181.154	
762	35.15	-0.339	34.8146	0		40.3	0		-147	-182.154	
763	35.15	-0.339	34.8146	0		40.3	1		-147	-182.154	
764	35.15	-0.339	34.8146	0		40.3	0		-147	-182.154	
765	35.15	-0.339	34.8146	0		40.3	0		-147	-182.154	
766	35.15	-0.339	34.8146	0		40.3	0		-147	-182.154	
767	35.15	-0.339	34.8146	0		40.3	0		-147	-182.154	
768	35.15	-0.339	34.8146	0		40.3	0		-148	-182.154	
769	35.15	-0.339	34.8146	0		40.3	0		-149	-183.154	
770	35.15	-0.339	34.8146	0	0	40.3	0	1	-150	-184.154	1
771	35.15	-0.339	34.8146	0		40.3	0		-152	-185.154	
772	35.15	-0.339	34.8146	0		40.3	0		-153	-187.154	
773	35.15	-0.339	34.8146	0		40.3	0		-154	-188.154	
774	35.15	-0.339	34.8146	0		40.3	0		-155	-189.154	
775	35.15	-0.339	34.8146	0		40.3	0		-152	-190.154	
776	35.15	-0.339	34.8146	0		40.3	0		-150	-187.154	
777	35.15	-0.339	34.8146	0		40.3	0		-149	-185.154	
778	35.15	-0.339	34.8146	0		40.3	0		-147	-184.154	
779	35.15	-0.339	34.8146	0		40.3	0		-146	-182.154	
780	35.15	-0.339	34.8146	0	0	40.3	0	0	-146	-181.154	0
781	35.15	-0.339	34.8146	0		40.3	0		-146	-181.154	
782	35.15	-0.339	34.8146	0		40.3	0		-145	-181.154	
783	38.55	-2.77	34.8146	0		40.3	0		-144	-180.154	
784	38.55	-2.08	35.7836	9.69		40.4	0		-143	-182.554	
785	38.55	-1.93	36.4736	6.9		40.4	1		-142	-181.554	
786	38.55	-1.85	36.6236	1.5		40.5	0		-141	-180.554	
787	38.55	-1.81	36.7036	0.8		40.6	1		-142	-179.554	
788	38.55	-1.79	36.7436	0.4		40.7	1		-142	-180.554	
789	38.55	-1.77	36.7636	0.2		40.8	1		-143	-180.554	
790	38.55	-1.76	36.7836	0.2	19.69	40.9	1	5	-143	-181.554	24.69
791	38.55	-1.75	36.7936	0.1		41	1		-143	-181.554	
792	38.55	-1.75	36.8036	0.1		41.1	1		-143	-181.554	
793	38.55	-1.75	36.8036	0		41.2	1		-143	-181.554	
794	38.55	-1.75	36.8036	0		41.3	1		-143	-181.554	
795	38.55	-1.75	36.8036	0		41.4	1		-143	-181.554	
796	41.05	-3.04	36.8036	0		41.6	1		-144	-181.554	
797	41.65	-2.67	38.0136	12.1		41.7	2		-140	-185.054	
798	41.65	-2.59	38.9836	9.7		41.8	1		-135	-181.654	
799	41.65	-2.56	39.0636	0.8		41.9	1		-133	-176.654	
800	44.25	-4.46	39.0936	0.3	23.1	42	1	11	-132	-174.654	34.1
801	44.25	-3.89	39.7936	7		42.1	1		-129	-176.254	
802	44.25	-3.74	40.3636	5.7		42.4	1		-119	-173.254	
803	44.25	-3.69	40.5136	1.5		42.5	3		-104	-163.254	
804	44.25	-3.67	40.5636	0.5		42.7	1		-104	-148.254	
805	44.25	-3.66	40.5836	0.2		42.9	2		-109	-148.254	
806	44.25	-3.65	40.5936	0.1		43	2		-100	-153.254	
807	44.25	-3.65	40.6036	0.1		43.2	1		-94	-144.254	
808	46.25	-4.84	40.6036	0		43.4	2		-91.5	-138.254	
809	46.25	-4.42	41.4136	8.1		43.6	2		-91.4	-137.754	
810	46.25	-4.37	41.8336	4.2	27.4	43.8	2	17	-92.8	-137.654	44.4
811	46.25	-4.35	41.8836	0.5		44	2		-95.7	-139.054	
812	49.25	-6.09	41.9036	0.2		44.2	2		-97	-141.954	
813	49.25	-5.51	43.1636	12.6		44.3	2		-98.6	-146.254	
814	49.25	-5.41	43.7436	5.8		44.5	1		-99.4	-147.854	
815	49.25	-5.38	43.8436	1		44.7	2		-104	-148.654	
816	49.25	-5.37	43.8736	0.3		44.9	2		-109	-153.254	
817	49.25	-5.37	43.8836	0.1		45.1	2		-115	-158.254	

818	49.25	-5.37	43.8836	0		45.3	2		-120	-164.254	
819	49.25	-5.37	43.8836	0		45.4	2		-124	-169.254	
820	49.25	-5.37	43.8836	0	20.5	45.5	1	18	-127	-173.254	38.5
821	49.25	-5.37	43.8836	0		45.6	1		-131	-176.254	
822	49.25	-5.37	43.8836	0		45.6	1		-134	-180.254	
823	49.25	-5.37	43.8836	0		45.6	0		-135	-183.254	
824	51.65	-6.85	43.8836	0		45.7	0		-136	-184.254	
825	52.45	-6.97	44.8036	9.2		45.8	1		-137	-187.654	
826	52.45	-6.67	45.4836	6.8		45.9	1		-136	-189.454	
827	52.45	-6.61	45.7836	3		46.1	1		-133	-188.454	
828	52.45	-6.59	45.8436	0.6		46.2	2		-132	-185.454	
829	52.45	-6.59	45.8636	0.2		46.4	1		-132	-184.454	
830	52.45	-6.59	45.8636	0	19.8	46.6	2	10	-132	-184.454	29.8
831	52.45	-6.59	45.8636	0		46.7	2		-134	-184.454	
832	52.45	-6.59	45.8636	0		46.8	1		-137	-186.454	
833	52.45	-6.59	45.8636	0		46.9	1		-138	-189.454	
834	52.45	-6.59	45.8636	0		46.9	1		-139	-190.454	
835	52.45	-6.59	45.8636	0		46.9	0		-140	-191.454	
836	52.61	-6.59	45.8636	0		46.9	0		-141	-192.454	
837	52.61	-6.59	46.016	1.524		46.9	0		-142	-193.606	
838	52.61	-6.59	46.016	0		46.9	0		-143	-194.606	
839	52.61	-6.59	46.016	0		46.9	0		-144	-195.606	
840	52.61	-6.59	46.016	0	1.524	47	0	5	-144	-196.606	6.524
841	52.61	-6.59	46.016	0		47	1		-145	-196.606	
842	52.63	-6.59	46.016	0		47	0		-146	-197.606	
843	52.68	-6.59	46.0414	0.254		47	0		-146	-198.631	
844	52.73	-6.59	46.0922	0.508		47	0		-146	-198.682	
845	52.73	-6.59	46.143	0.508		47	0		-145	-198.733	
846	52.73	-6.59	46.143	0		47	0		-145	-197.733	
847	53.27	-6.59	46.143	0		47	0		-145	-197.733	
848	53.27	-6.59	46.6764	5.334		47	0		-145	-198.266	
849	53.27	-6.59	46.6764	0		47	0		-145	-198.266	
850	53.27	-6.59	46.6764	0	6.604	47	0	1	-146	-198.266	7.604
851	53.27	-6.59	46.6764	0		47	0		-146	-199.266	
852	53.27	-6.59	46.6764	0		47	0		-146	-199.266	
853	53.27	-6.59	46.6764	0		47	0		-146	-199.266	
854	53.29	-6.59	46.6764	0		47	0		-147	-199.266	
855	53.32	-6.59	46.7018	0.254		47	0		-147	-200.292	
856	56.12	-8.55	46.7272	0.254		47.1	0		-146	-200.317	
857	56.12	-8.01	47.5706	8.434		47.3	1		-145	-202.121	
858	56.12	-7.92	48.1106	5.4		47.5	2		-143	-201.121	
859	56.12	-7.89	48.2006	0.9		47.6	2		-143	-199.121	
860	56.12	-7.88	48.2306	0.3	15.542	47.8	1	6	-143	-199.121	21.542
861	56.89	-7.88	48.2406	0.1		48	2		-143	-199.121	
862	56.89	-7.88	49.0106	7.7		48.2	2		-144	-199.891	
863	56.89	-7.88	49.0106	0		48.3	2		-146	-200.891	
864	56.89	-7.88	49.0106	0		48.4	1		-147	-202.891	
865	56.89	-7.88	49.0106	0		48.4	1		-148	-203.891	
866	56.94	-7.88	49.0106	0		48.4	0		-148	-204.891	
867	56.94	-7.88	49.0614	0.508		48.4	0		-149	-204.941	
868	56.94	-7.88	49.0614	0		48.4	0		-150	-205.941	
869	56.97	-7.88	49.0614	0		48.4	0		-151	-206.941	
870	56.97	-7.88	49.0868	0.254	8.562	48.4	0	8	-151	-207.967	16.562
871	56.97	-7.88	49.0868	0		48.4	0		-152	-207.967	
872	57.25	-7.88	49.0868	0		48.4	0		-151	-208.967	
873	57.32	-7.88	49.3662	2.794		48.4	0		-148	-208.246	
874	57.81	-7.88	49.4424	0.762		48.4	0		-142	-205.322	
875	58.8	-8.28	49.925	4.826		48.5	0		-120	-199.805	
876	58.8	-8.15	50.5156	5.906		48.6	1		-119	-178.796	
877	59.89	-8.35	50.6456	1.3		48.6	1		-124	-177.796	
878	59.94	-8.26	51.5378	8.922		48.7	0		-127	-183.888	
879	61.99	-9.75	51.6786	1.408		48.8	1		-127	-186.939	
880	62.09	-9.34	52.2366	5.58	31.498	48.9	1	4	-119	-188.987	35.498
881	63.13	-9.88	52.7482	5.116		49.1	1		-113	-181.088	
882	63.13	-9.58	53.2482	5		49.3	2		-118	-176.128	
883	63.15	-9.54	53.5482	3		49.4	2		-121	-181.128	
884	63.15	-9.53	53.6136	0.654		49.6	1		-125	-184.154	

885	63.15	-9.53	53.6236	0.1		49.8	2		-127	-188.154	
886	63.15	-9.53	53.6236	0		50	2		-129	-190.154	
887	63.15	-9.53	53.6236	0		50.1	2		-131	-192.154	
888	63.74	-9.53	53.6236	0		50.1	1		-133	-194.154	
889	63.89	-9.53	54.2078	5.842		50.1	0		-134	-196.738	
890	63.89	-9.53	54.3602	1.524	21.236	50.1	0	13	-135	-197.89	34.236
891	63.89	-9.53	54.3602	0		50.1	0		-137	-198.89	
892	65.56	-10.2	54.3602	0		50.2	0		-138	-200.89	
893	65.56	-9.97	55.3602	10		50.3	1		-139	-203.56	
894	65.61	-9.96	55.5902	2.3		50.4	1		-139	-204.56	
895	65.61	-9.96	55.651	0.608		50.5	1		-140	-204.611	
896	65.61	-9.96	55.651	0		50.6	1		-141	-205.611	
897	65.66	-9.96	55.651	0		50.6	1		-142	-206.611	
898	65.66	-9.96	55.7018	0.508		50.6	0		-142	-207.662	
899	65.66	-9.96	55.7018	0		50.6	0		-142	-207.662	
900	65.66	-9.96	55.7018	0	13.416	50.6	0	5	-142	-207.662	18.416
901	65.66	-9.96	55.7018	0		50.6	0		-143	-207.662	
902	65.66	-9.96	55.7018	0		50.6	0		-143	-208.662	
903	67.8	-11.6	55.7018	0		50.6	0		-144	-208.662	
904	67.8	-11.1	56.1954	4.936		50.9	0		-144	-211.795	
905	67.8	-11.1	56.6954	5		51	3		-143	-211.795	
906	67.8	-11.1	56.6954	0		51.1	1		-143	-210.795	
907	67.8	-11.1	56.6954	0		51.3	1		-144	-210.795	
908	67.8	-11.1	56.6954	0		51.4	2		-144	-211.795	
909	67.8	-11.1	56.6954	0		51.5	1		-145	-211.795	
910	67.8	-11.1	56.6954	0	9.936	51.6	1	9	-145	-212.795	18.936
911	67.8	-11.1	56.6954	0		51.7	1		-145	-212.795	
912	67.8	-11.1	56.6954	0		51.7	1		-146	-212.795	
913	68.38	-11.2	56.6954	0		51.7	0		-146	-213.795	
914	68.38	-11.1	57.1796	4.842		51.8	0		-146	-214.38	
915	68.38	-11.1	57.2796	1		51.8	1		-146	-214.38	
916	68.51	-11.1	57.2796	0		51.8	0		-146	-214.38	
917	68.79	-11.1	57.4066	1.27		51.8	0		-145	-214.507	
918	69.62	-11.3	57.686	2.794		51.8	0		-145	-213.786	
919	69.62	-11.3	58.3242	6.382		51.9	0		-144	-214.624	
920	69.62	-11.3	58.3242	0	16.288	51.9	1	4	-144	-213.624	20.288
921	69.62	-11.3	58.3242	0		52	0		-144	-213.624	
922	69.62	-11.3	58.3242	0		52	1		-144	-213.624	
923	69.75	-11.3	58.3242	0		52	0		-145	-213.624	
924	69.75	-11.3	58.4512	1.27		52	0		-144	-214.751	
925	69.75	-11.3	58.4512	0		52	0		-144	-213.751	
926	69.75	-11.3	58.4512	0		52	0		-144	-213.751	
927	69.75	-11.3	58.4512	0		52	0		-145	-213.751	
928	69.75	-11.3	58.4512	0		52	0		-146	-214.751	
929	69.75	-11.3	58.4512	0		52	0		-146	-215.751	
930	69.75	-11.3	58.4512	0	1.27	52	0	1	-147	-215.751	2.27
931	69.75	-11.3	58.4512	0		52	0		-147	-216.751	
932	69.75	-11.3	58.4512	0		52	0		-147	-216.751	
933	69.75	-11.3	58.4512	0		52	0		-148	-216.751	
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935	69.75	-11.3	58.4512	0		52	0		-148	-217.751	
936	69.75	-11.3	58.4512	0		52	0		-149	-217.751	
937	69.75	-11.3	58.4512	0		52	0		-149	-218.751	
938	69.75	-11.3	58.4512	0		52	0		-149	-218.751	
939	69.75	-11.3	58.4512	0		52	0		-150	-218.751	
940	69.75	-11.3	58.4512	0	0	52	0	0	-150	-219.751	0
941	69.75	-11.3	58.4512	0		52	0		-150	-219.751	
942	69.75	-11.3	58.4512	0		52	0		-150	-219.751	
943	69.75	-11.3	58.4512	0		52	0		-150	-219.751	
944	69.75	-11.3	58.4512	0		52	0		-150	-219.751	
945	69.75	-11.3	58.4512	0		52	0		-150	-219.751	
946	69.75	-11.3	58.4512	0		52	0		-150	-219.751	
947	70.28	-11.7	58.4512	0		52	0		-149	-219.751	
948	70.28	-11.6	58.5846	1.334		52.1	0		-148	-219.285	
949	70.28	-11.5	58.6846	1		52.1	1		-147	-218.285	
950	70.28	-11.5	58.7846	1	3.334	52.2	0	1	-146	-217.285	4.334
951	70.28	-11.5	58.7846	0		52.2	1		-145	-216.285	

952	70.28	-11.5	58.7846	0		52.2	0		-144	-215.285	
953	70.28	-11.5	58.7846	0		52.2	0		-144	-214.285	
954	70.28	-11.5	58.7846	0		52.2	0		-144	-214.285	
955	70.28	-11.5	58.7846	0		52.2	0		-144	-214.285	
956	70.28	-11.5	58.7846	0		52.2	0		-144	-214.285	
957	70.28	-11.5	58.7846	0		52.2	0		-144	-214.285	
958	70.28	-11.5	58.7846	0		52.2	0		-145	-214.285	
959	70.28	-11.5	58.7846	0		52.2	0		-145	-215.285	
960	70.28	-11.5	58.7846	0	0	52.2	0	1	-146	-215.285	1
961	70.28	-11.5	58.7846	0		52.2	0		-145	-216.285	
962	70.28	-11.5	58.7846	0		52.2	0		-145	-215.285	
963	70.28	-11.5	58.7846	0		52.2	0		-144	-215.285	
964	70.28	-11.5	58.7846	0		52.2	0		-143	-214.285	
965	70.28	-11.5	58.7846	0		52.2	0		-142	-213.285	
966	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285	
967	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285	
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969	70.28	-11.5	58.7846	0		52.2	0		-141	-212.285	
970	70.28	-11.5	58.7846	0	0	52.2	0	0	-141	-211.285	0
971	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285	
972	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285	
973	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285	
974	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285	
975	70.28	-11.5	58.7846	0		52.2	0		-142	-211.285	
976	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285	
977	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285	
978	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285	
979	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285	
980	70.28	-11.5	58.7846	0	0	52.2	0	0	-142	-212.285	0
981	70.28	-11.5	58.7846	0		52.2	0		-141	-212.285	
982	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285	
983	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285	
984	70.28	-11.5	58.7846	0		52.2	0		-142	-211.285	
985	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285	
986	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285	
987	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285	
988	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285	
989	70.28	-11.5	58.7846	0		52.2	0		-142	-212.285	
990	70.28	-11.5	58.7846	0	0	52.2	0	0	-142	-212.285	0
991	70.28	-11.5	58.7846	0		52.2	0		-141	-212.285	
992	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285	
993	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285	
994	70.28	-11.5	58.7846	0		52.2	0		-141	-211.285	
995	70.36	-11.5	58.7846	0		52.2	0		-141	-211.285	
996	70.36	-11.5	58.8646	0.8		52.2	0		-141	-211.365	
997	70.36	-11.5	58.8646	0		52.2	0		-141	-211.365	
998	70.36	-11.5	58.8646	0		52.2	0		-140	-211.365	
999	70.54	-11.5	58.8646	0		52.2	0		-141	-210.365	
1000	70.54	-11.5	59.0426	1.78	2.58	52.2	0	0	-141	-211.543	2.58
1001	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1002	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1003	70.54	-11.5	59.0426	0		52.2	0		-142	-211.543	
1004	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543	
1005	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543	
1006	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543	
1007	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543	
1008	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543	
1009	70.54	-11.5	59.0426	0		52.2	0		-142	-212.543	
1010	70.54	-11.5	59.0426	0	0	52.2	0	0	-141	-212.543	0
1011	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1012	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1013	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1014	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1015	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1016	70.54	-11.5	59.0426	0		52.2	0		-141	-211.543	
1017	70.75	-11.7	59.0426	0		52.2	0		-140	-211.543	
1018	70.75	-11.6	59.0458	0.032		52.2	0		-141	-210.746	

1019	70.75	-11.6	59.1458	1		52.2	0		-141	-211.746	
1020	70.75	-11.6	59.1458	0	1.032	52.2	0	0	-140	-211.746	1.032
1021	70.75	-11.6	59.1458	0		52.2	0		-140	-210.746	
1022	70.75	-11.6	59.1458	0		52.2	0		-140	-210.746	

end

Appendix C.6. South Saltcedar Models Results

Key:
CumP = Cummulative Precipitation, sum(vTop) = gross cummulative surface flux, Daily E = daily evaporation,
10 day E = sum of previous 10 "Daily E" values, sum(vRoot) = cumulative root uptake, Daily T = daily transpiration
10 day T = sum of previous 10 "Daily T" values, Cumm Dis = cumulative net groundwater discharge,
10day ET = sum of "10day E" and 10day T' values ***NOTE: OUTPUT RESULTS DAYS 657-1022 = 1999 days 1-365**

		SCSMat			ET=128.713 [92T,36.713E]			ERROR= -2.89%			
Time [day]	CumP' [cm]	sum(vTop) [L]	Cumm E [cm]	Daily E [mm/day]	10day E [mm/10d]	sum(vRoc [L]	Daily T [mm]	10day T [mm/10d]	sum(vBot) [L]	Cumm Dis [cm]	10day ET [mm/10d]
1	0	0.361	0.361	3.61		0	0		0.409	0.409	
2	0	0.638	0.361	0		0	0		0.775	0.409	
3	0.61	0.308	0.638	2.77		0	0		1.12	0.775	
4	0.711	0.459	0.9176	2.796		0	0		1.43	0.5104	
5	0.711	0.963	1.1702	2.526		0	0		1.73	0.7188	
6	0.711	1.34	1.6742	5.04		0	0		2.01	1.0188	
7	0.711	1.63	2.0512	3.77		0	0		2.27	1.2988	
8	0.711	1.88	2.3412	2.9		0	0		2.51	1.5588	
9	0.711	2.11	2.5912	2.5		0	0		2.74	1.7988	
10	0.711	2.33	2.8212	2.3	28.212	0	0	0	2.95	2.0288	28.212
11	0.711	2.53	3.0412	2.2		0	0		3.16	2.2388	
12	1.295	2.39	3.2412	2		0	0		3.35	2.4488	
13	1.321	2.78	3.6854	4.442		0	0		3.53	2.0546	
14	1.321	2.99	4.1008	4.154		0	0		3.7	2.2092	
15	1.321	3.17	4.3108	2.1		0	0		3.88	2.3792	
16	1.321	3.34	4.4908	1.8		0	0		3.95	2.5592	
17	1.321	3.5	4.6608	1.7		0	0		4.12	2.6292	
18	1.321	3.65	4.8208	1.6		0	0		4.27	2.7992	
19	1.321	3.8	4.9708	1.5		0	0		4.38	2.9492	
20	1.321	3.94	5.1208	1.5	22.996	0	0	0	4.49	3.0592	22.996
21	1.321	4.08	5.2608	1.4		0	0		4.61	3.1692	
22	1.321	4.21	5.4008	1.4		0	0		4.73	3.2892	
23	1.321	4.34	5.5308	1.3		0.116	0		4.89	3.4092	
24	1.321	4.45	5.6608	1.3		0.24	1.16		5.06	3.5692	
25	1.321	4.56	5.7708	1.1		0.345	1.24		5.21	3.7392	
26	1.321	4.67	5.8808	1.1		0.46	1.05		5.35	3.8892	
27	1.321	4.77	5.9908	1.1		0.629	1.15		5.44	4.0292	
28	1.321	4.86	6.0908	1		0.71	1.69		5.5	4.1192	
29	1.321	4.96	6.1808	0.9		0.816	0.81		5.56	4.1792	
30	1.321	5.05	6.2808	1	11.6	0.923	1.06	8.16	5.61	4.2392	19.76
31	1.321	5.13	6.3708	0.9		1.09	1.07		5.67	4.2892	
32	1.321	5.21	6.4508	0.8		1.28	1.67		5.72	4.3492	
33	1.321	5.29	6.5308	0.8		1.38	1.9		5.77	4.3992	
34	1.321	5.36	6.6108	0.8		1.51	1		5.83	4.4492	
35	1.321	5.43	6.6808	0.7		1.67	1.3		5.89	4.5092	
36	1.321	5.5	6.7508	0.7		1.79	1.6		5.96	4.5692	
37	1.321	5.57	6.8208	0.7		1.97	1.2		6.02	4.6392	
38	1.321	5.63	6.8908	0.7		2.1	1.8		6.07	4.6992	
39	1.321	5.69	6.9508	0.6		2.32	1.3		6.09	4.7492	
40	1.321	5.75	7.0108	0.6	7.3	2.52	2.2	15.04	6.07	4.7692	22.34
41	1.321	5.8	7.0708	0.6		2.62	2		6.01	4.7492	
42	1.321	5.85	7.1208	0.5		2.78	1		5.91	4.6892	
43	1.321	5.9	7.1708	0.5		3.07	1.6		5.8	4.5892	
44	1.321	5.95	7.2208	0.5		3.28	2.9		5.68	4.4792	
45	1.321	5.99	7.2708	0.5		3.39	2.1		5.67	4.3592	
46	1.321	6.03	7.3108	0.4		3.61	1.1		5.76	4.3492	
47	1.321	6.07	7.3508	0.4		3.84	2.2		5.89	4.4392	
48	1.321	6.11	7.3908	0.4		4	2.3		6.08	4.5692	
49	1.321	6.14	7.4308	0.4		4.25	1.6		6.3	4.7592	
50	1.321	6.17	7.4608	0.3	4.5	4.49	2.5	19.3	6.52	4.9792	23.8
51	1.321	6.2	7.4908	0.3		4.75	2.4		6.75	5.1992	
52	1.321	6.22	7.5208	0.3		5.03	2.6		7	5.4292	
53	1.321	6.25	7.5408	0.2		5.3	2.8		7.3	5.6792	

54	1.321	6.27	7.5708	0.3		5.52	2.7		7.63	5.9792		C-83
55	1.321	6.28	7.5908	0.2		5.78	2.2		7.97	6.3092		
56	1.321	6.3	7.6008	0.1		6.02	2.6		8.32	6.6492		
57	1.321	6.31	7.6208	0.2		6.33	2.4		8.65	6.9992		
58	1.321	6.33	7.6308	0.1		6.54	3.1		8.96	7.3292		
59	1.321	6.34	7.6508	0.2		6.87	2.1		9.23	7.6392		
60	1.321	6.34	7.6608	0.1	2	7.22	3.3	26.2	9.48	7.9092	28.2	
61	1.321	6.35	7.6608	0		7.6	3.5		9.74	8.1592		
62	1.321	6.35	7.6708	0.1		7.97	3.8		10	8.4192		
63	1.321	6.35	7.6708	0		8.34	3.7		10.3	8.6792		
64	1.321	6.35	7.6708	0		8.74	3.7		10.5	8.9792		
65	1.321	6.35	7.6708	0		9.14	4		10.8	9.1792		
66	1.321	6.35	7.6708	0		9.61	4		11	9.4792		
67	1.321	6.35	7.6708	0		10	4.7		11.4	9.6792		
68	1.321	6.35	7.6708	0		10.5	3.9		12	10.0792		
69	1.321	6.35	7.6708	0		11	5		12.6	10.6792		
70	1.676	6.35	7.6708	0	0.1	11.4	5	41.3	13.2	11.2792	41.4	
71	2.337	6.31	8.0264	3.556		11.8	4		14	11.5236		
72	2.337	6.32	8.6468	6.204		12.6	4		15.1	11.6632		
73	2.337	6.32	8.6568	0.1		13	8		16.6	12.7632		
74	2.337	6.32	8.6568	0		13.6	4		18	14.2632		
75	2.388	6.32	8.6568	0		13.9	6		19.1	15.6632		
76	2.464	6.32	8.7076	0.508		14.4	3		20.5	16.7124		
77	2.464	6.32	8.7838	0.762		14.8	5		22	18.0362		
78	2.464	6.32	8.7838	0		15.1	4		23.4	19.5362		
79	2.464	6.32	8.7838	0		15.5	3		24.6	20.9362		
80	2.464	6.32	8.7838	0	11.13	15.8	4	45	25.6	22.1362	56.13	
81	2.464	6.32	8.7838	0		16.1	3		26.5	23.1362		
82	2.464	6.32	8.7838	0		16.5	3		27.4	24.0362		
83	2.464	6.32	8.7838	0		16.7	4		28.2	24.9362		
84	2.464	6.32	8.7838	0		17	2		28.9	25.7362		
85	2.464	6.32	8.7838	0		17.3	3		29.6	26.4362		
86	2.464	6.32	8.7838	0		17.7	3		30	27.1362		
87	2.464	6.32	8.7838	0		18.2	4		30.4	27.5362		
88	2.464	6.32	8.7838	0		18.7	5		30.6	27.9362		
89	2.464	6.32	8.7838	0		19.2	5		30.7	28.1362		
90	2.464	6.32	8.7838	0	0	19.8	5	37	30.8	28.2362	37	
91	2.464	6.32	8.7838	0		20.2	6		30.8	28.3362		
92	2.464	6.32	8.7838	0		20.7	4		30.8	28.3362		
93	2.464	6.32	8.7838	0		21.4	5		30.8	28.3362		
94	2.464	6.32	8.7838	0		21.9	7		30.9	28.3362		
95	2.819	6.32	8.7838	0		22.4	5		30.9	28.4362		
96	2.819	6.32	9.1394	3.556		22.9	5		31	28.0806		
97	2.819	6.32	9.1394	0		23.4	5		31.3	28.1806		
98	2.819	6.32	9.1394	0		24.1	5		31.6	28.4806		
99	2.819	6.32	9.1394	0		24.6	7		31.9	28.7806		
100	2.819	6.32	9.1394	0	3.556	25.3	5	54	32.2	29.0806	57.556	
101	2.819	6.32	9.1394	0		26.1	7		32.5	29.3806		
102	2.819	6.32	9.1394	0		26.8	8		32.6	29.6806		
103	2.819	6.32	9.1394	0		27.5	7		32.8	29.7806		
104	2.819	6.32	9.1394	0		28.2	7		32.9	29.9806		
105	2.819	6.32	9.1394	0		28.9	7		33	30.0806		
106	2.972	6.32	9.1394	0		29.7	7		33.1	30.1806		
107	2.972	6.32	9.2918	1.524		30.6	8		33.2	30.1282		
108	2.972	6.32	9.2918	0		31.4	9		33.4	30.2282		
109	2.972	6.32	9.2918	0		32.1	8		33.5	30.4282		
110	2.972	6.32	9.2918	0	1.524	32.8	7	75	33.6	30.5282	76.524	
111	2.972	6.32	9.2918	0		33.4	7		33.7	30.6282		
112	2.997	6.32	9.2918	0		34.1	6		33.8	30.7282		
113	3.048	6.32	9.3172	0.254		34.8	7		34	30.8028		
114	3.099	6.32	9.368	0.508		35.2	7		34.1	30.952		
115	3.099	6.32	9.4188	0.508		35.8	4		34.3	31.0012		
116	3.099	6.32	9.4188	0		36.4	6		34.5	31.2012		
117	3.632	6.32	9.4188	0		37	6		34.7	31.4012		
118	3.632	6.32	9.9522	5.334		37.4	6		35	31.0678		

119	3.632	6.32	9.9522	0		38.2	4		35.2	31.3678		C-84
120	3.632	6.32	9.9522	0	6.604	38.8	8	61	35.5	31.5678	67.604	
121	3.632	6.32	9.9522	0		39.5	6		35.7	31.8678		
122	3.632	6.32	9.9522	0		39.9	7		36	32.0678		
123	3.632	6.32	9.9522	0		40.2	4		36.2	32.3678		
124	3.658	6.32	9.9522	0		40.7	3		36.4	32.5678		
125	3.683	6.32	9.9776	0.254		41.1	5		36.7	32.7424		
126	5.486	5.36	10.003	0.254		41.7	4		36.9	33.017		
127	6.147	5.54	10.846	8.434		42.4	6		37.3	31.4136		
128	6.172	5.6	11.687	8.404		43.1	7		37.7	31.1532		
129	6.477	5.61	11.772	0.854		43.6	7		38.1	31.5278		
130	6.477	5.62	12.087	3.148	21.348	44.3	5	54	38.5	31.623	75.348	
131	6.477	5.62	12.097	0.1		44.9	7		38.9	32.023		
132	6.477	5.62	12.097	0		45.5	6		39.3	32.423		
133	6.477	5.62	12.097	0		46.1	6		39.6	32.823		
134	6.477	5.62	12.097	0		46.5	6		39.9	33.123		
135	6.477	5.62	12.097	0		47.1	4		40.2	33.423		
136	6.528	5.62	12.097	0		47.5	6		40.4	33.723		
137	6.528	5.62	12.148	0.508		48.1	4		40.7	33.8722		
138	6.528	5.62	12.148	0		48.6	6		40.9	34.1722		
139	6.553	5.62	12.148	0		49.1	5		41.1	34.3722		
140	6.553	5.62	12.173	0.254	0.862	49.6	5	55	41.3	34.5468	55.862	
141	6.553	5.62	12.173	0		50	5		41.5	34.7468		
142	6.833	5.62	12.173	0		50.3	4		41.7	34.9468		
143	6.909	5.62	12.453	2.794		50.5	3		42	34.8674		
144	7.391	5.62	12.529	0.762		50.9	2		42.9	35.0912		
145	8.382	5.21	13.011	4.826		51.3	4		44.2	35.5086		
146	8.382	5.35	13.592	5.806		51.9	4		45.6	35.818		
147	9.474	5.15	13.732	1.4		52.4	6		46.6	37.218		
148	9.525	5.24	14.624	8.922		52.9	5		47.6	37.1258		
149	9.83	5.24	14.765	1.408		53.3	5		48.4	38.075		
150	9.931	5.24	15.07	3.048	28.966	53.7	4	42	49.6	38.5702	70.966	
151	9.957	5.24	15.171	1.016		54.2	4		51	39.6686		
152	9.957	5.24	15.197	0.254		54.7	5		52.1	41.0432		
153	9.982	5.24	15.197	0		55.1	5		53	42.1432		
154	9.982	5.24	15.222	0.254		55.5	4		53.7	43.0178		
155	9.982	5.24	15.222	0		56	4		54.3	43.7178		
156	9.982	5.24	15.222	0		56.5	5		54.9	44.3178		
157	9.982	5.24	15.222	0		56.9	5		55.4	44.9178		
158	10.57	5.24	15.222	0		57.3	4		55.9	45.4178		
159	10.72	5.24	15.806	5.842		57.7	4		56.3	45.3336		
160	10.72	5.24	15.959	1.524	8.89	58.2	4	44	56.7	45.5812	52.89	
161	10.72	5.24	15.959	0		58.6	5		57	45.9812		
162	11.18	5.24	15.959	0		59.1	4		57.3	46.2812		
163	11.18	5.24	16.416	4.572		59.5	5		57.6	46.124		
164	11.23	5.24	16.416	0		59.9	4		57.9	46.424		
165	11.23	5.24	16.467	0.508		60.3	4		58.1	46.6732		
166	11.46	5.24	16.467	0		60.8	4		58.4	46.8732		
167	11.51	5.24	16.695	2.286		61.3	5		58.6	46.9446		
168	11.51	5.24	16.746	0.508		61.8	5		58.9	47.0938		
169	11.51	5.24	16.746	0		62.2	5		59.2	47.3938		
170	11.51	5.24	16.746	0	7.874	62.7	4	45	59.4	47.6938	52.874	
171	11.51	5.24	16.746	0		63	5		59.7	47.8938		
172	11.51	5.24	16.746	0		63.4	3		59.9	48.1938		
173	13.64	3.59	16.746	0		63.7	4		60.2	48.3938		
174	13.64	4.06	17.23	4.836		64.6	3		60.4	46.5602		
175	13.64	4.12	17.7	4.7		65.3	9		60.7	46.7602		
176	13.64	4.14	17.76	0.6		65.7	7		61	47.0602		
177	13.64	4.15	17.78	0.2		66.3	4		61.3	47.3602		
178	13.64	4.15	17.79	0.1		66.9	6		61.6	47.6602		
179	13.64	4.15	17.79	0		67.3	6		61.8	47.9602		
180	13.64	4.15	17.79	0	10.436	67.9	4	51	62.1	48.1602	61.436	
181	13.64	4.15	17.79	0		68.5	6		62.3	48.4602		
182	13.64	4.15	17.79	0		69	6		62.6	48.6602		
183	14.22	4.04	17.79	0		69.2	5		62.8	48.9602		

184	14.25	4.08	18.264	4.742		69.6	2		63.1	48.576		C-85
185	14.5	4.08	18.329	0.654		70	4		63.4	48.8506		
186	14.63	4.08	18.583	2.54		70.4	4		63.7	48.8966		
187	14.91	4.08	18.71	1.27		70.6	4		64	49.0696		
188	15.75	3.86	18.99	2.794		71	2		64.3	49.0902		
189	15.77	3.93	19.608	6.182		71.4	4		64.6	48.552		
190	15.77	3.93	19.703	0.954	19.136	71.9	4	41	65	48.8266	60.136	
191	15.77	3.93	19.703	0		72.3	5		65.3	49.2266		
192	15.77	3.93	19.703	0		72.7	4		65.7	49.5266		
193	15.9	3.93	19.703	0		73	4		66	49.9266		
194	15.93	3.93	19.83	1.27		73.4	3		66.3	50.0996		
195	15.93	3.93	19.856	0.254		73.8	4		66.7	50.3742		
196	15.93	3.93	19.856	0		74.3	4		67.1	50.7742		
197	15.93	3.93	19.856	0		74.7	5		67.4	51.1742		
198	15.93	3.93	19.856	0		75.2	4		67.7	51.4742		
199	15.93	3.93	19.856	0		75.5	5		68	51.7742		
200	15.93	3.93	19.856	0	1.524	75.8	3	41	68.3	52.0742	42.524	
201	15.93	3.93	19.856	0		76.2	3		68.5	52.3742		
202	15.93	3.93	19.856	0		76.6	4		68.8	52.5742		
203	15.93	3.93	19.856	0		77	4		69	52.8742		
204	15.93	3.93	19.856	0		77.3	4		69.3	53.0742		
205	15.93	3.93	19.856	0		77.7	3		69.5	53.3742		
206	15.93	3.93	19.856	0		78	4		69.8	53.5742		
207	15.93	3.93	19.856	0		78.4	3		70	53.8742		
208	15.93	3.93	19.856	0		78.7	4		70.2	54.0742		
209	15.93	3.93	19.856	0		79	3		70.4	54.2742		
210	15.93	3.93	19.856	0	0	79.3	3	35	70.7	54.4742	35	
211	15.93	3.93	19.856	0		79.6	3		70.9	54.7742		
212	15.93	3.93	19.856	0		79.9	3		71.1	54.9742		
213	15.93	3.93	19.856	0		80.2	3		71.4	55.1742		
214	15.93	3.93	19.856	0		80.5	3		71.6	55.4742		
215	15.93	3.93	19.856	0		80.8	3		71.9	55.6742		
216	16.1	3.93	19.856	0		81	3		72.1	55.9742		
217	16.64	3.51	20.034	1.778		81.1	2		72.4	55.9964		
218	16.64	3.65	20.147	1.134		81.8	1		72.7	55.763		
219	16.64	3.66	20.287	1.4		82.1	7		73	56.063		
220	16.64	3.66	20.297	0.1	4.412	82.3	3	31	73.4	56.363	35.412	
221	16.64	3.66	20.297	0		82.6	2		73.8	56.763		
222	16.64	3.66	20.297	0		82.8	3		74.2	57.163		
223	16.64	3.66	20.297	0		83	2		74.6	57.563		
224	16.64	3.66	20.297	0		83.1	2		75	57.963		
225	16.64	3.66	20.297	0		83.2	1		75.5	58.363		
226	16.64	3.66	20.297	0		83.4	1		75.8	58.863		
227	16.64	3.66	20.297	0		83.4	2		76.2	59.163		
228	16.64	3.66	20.297	0		83.6	0		76.5	59.563		
229	16.64	3.66	20.297	0		83.7	2		76.8	59.863		
230	16.64	3.66	20.297	0	0	83.8	1	16	77.1	60.163	16	
231	16.64	3.66	20.297	0		83.9	1		77.4	60.463		
232	16.64	3.66	20.297	0		84	1		77.7	60.763		
233	16.64	3.66	20.297	0		84.1	1		78	61.063		
234	16.64	3.66	20.297	0		84.2	1		78.4	61.363		
235	16.64	3.66	20.297	0		84.3	1		78.8	61.763		
236	16.64	3.66	20.297	0		84.4	1		79.1	62.163		
237	16.64	3.66	20.297	0		84.5	1		79.5	62.463		
238	16.64	3.66	20.297	0		84.6	1		79.8	62.863		
239	16.64	3.66	20.297	0		84.6	1		80.2	63.163		
240	16.64	3.66	20.297	0	0	84.7	0	9	80.5	63.563	9	
241	16.64	3.66	20.297	0		84.8	1		80.9	63.863		
242	16.64	3.66	20.297	0		84.9	1		81.2	64.263		
243	16.64	3.66	20.297	0		85	1		81.5	64.563		
244	16.64	3.66	20.297	0		85.1	1		81.8	64.863		
245	16.64	3.66	20.297	0		85.2	1		82.1	65.163		
246	16.64	3.66	20.297	0		85.3	1		82.4	65.463		
247	16.64	3.66	20.297	0		85.4	1		82.7	65.763		
248	16.64	3.66	20.297	0		85.5	1		82.9	66.063		

249	16.64	3.66	20.297	0		85.6	1		83.2	66.263		C-86
250	16.64	3.66	20.297	0	0	85.6	1	10	83.4	66.563	10	
251	16.64	3.66	20.297	0		85.7	0		83.7	66.763		
252	16.64	3.66	20.297	0		85.8	1		84	67.063		
253	16.64	3.66	20.297	0		85.8	1		84.2	67.363		
254	16.64	3.66	20.297	0		85.8	0		84.4	67.563		
255	16.64	3.66	20.297	0		85.8	0		84.6	67.763		
256	16.64	3.66	20.297	0		85.8	0		84.8	67.963		
257	16.64	3.66	20.297	0		85.8	0		85.1	68.163		
258	16.64	3.66	20.297	0		85.8	0		85.2	68.463		
259	16.64	3.66	20.297	0		85.8	0		85.4	68.563		
260	16.64	3.66	20.297	0	0	85.8	0	2	85.6	68.763	2	
261	16.64	3.66	20.297	0		85.8	0		85.8	68.963		
262	16.64	3.66	20.297	0		85.8	0		86	69.163		
263	16.64	3.66	20.297	0		85.8	0		86.2	69.363		
264	16.64	3.66	20.297	0		85.8	0		86.4	69.563		
265	16.69	3.66	20.297	0		85.8	0		86.6	69.763		
266	16.69	3.66	20.348	0.508		85.8	0		86.8	69.9122		
267	16.69	3.66	20.348	0		85.8	0		87	70.1122		
268	16.69	3.66	20.348	0		85.8	0		87.2	70.3122		
269	16.71	3.66	20.348	0		85.8	0		87.4	70.5122		
270	16.71	3.66	20.373	0.254	0.762	85.8	0	0	87.5	70.6868	0.762	
271	16.71	3.66	20.373	0		85.8	0		87.7	70.7868		
272	16.71	3.66	20.373	0		85.8	0		87.8	70.9868		
273	16.71	3.66	20.373	0		85.8	0		88	71.0868		
274	16.71	3.66	20.373	0		85.8	0		88.1	71.2868		
275	16.71	3.66	20.373	0		85.8	0		88.2	71.3868		
276	16.71	3.66	20.373	0		85.8	0		88.3	71.4868		
277	16.71	3.66	20.373	0		85.8	0		88.5	71.5868		
278	16.71	3.66	20.373	0		85.8	0		88.6	71.7868		
279	16.71	3.66	20.373	0		85.8	0		88.7	71.8868		
280	16.71	3.66	20.373	0	0	85.8	0	0	88.9	71.9868	0	
281	16.71	3.66	20.373	0		85.8	0		89	72.1868		
282	16.71	3.66	20.373	0		85.8	0		89.2	72.2868		
283	16.71	3.66	20.373	0		85.8	0		89.3	72.4868		
284	16.71	3.66	20.373	0		85.8	0		89.5	72.5868		
285	16.71	3.66	20.373	0		85.8	0		89.6	72.7868		
286	16.71	3.66	20.373	0		85.8	0		89.8	72.8868		
287	16.92	3.51	20.373	0		85.8	0		89.9	73.0868		
288	16.92	3.63	20.426	0.532		85.8	0		89.9	72.9836		
289	16.92	3.68	20.546	1.2		85.8	0		90	72.9836		
290	16.92	3.73	20.596	0.5	2.232	85.8	0	0	90	73.0836	2.232	
291	16.92	3.78	20.646	0.5		85.8	0		90	73.0836		
292	16.92	3.83	20.696	0.5		85.8	0		90	73.0836		
293	16.92	3.88	20.746	0.5		85.8	0		89.9	73.0836		
294	16.92	3.94	20.796	0.5		85.8	0		89.9	72.9836		
295	16.92	4	20.856	0.6		85.8	0		89.9	72.9836		
296	16.92	4.06	20.916	0.6		85.8	0		89.9	72.9836		
297	16.92	4.12	20.976	0.6		85.8	0		89.9	72.9836		
298	16.92	4.19	21.036	0.6		85.8	0		89.9	72.9836		
299	16.92	4.26	21.106	0.7		85.8	0		89.9	72.9836		
300	16.92	4.33	21.176	0.7	5.8	85.8	0	0	89.9	72.9836	5.8	
301	16.92	4.4	21.246	0.7		85.8	0		90	72.9836		
302	16.92	4.48	21.316	0.7		85.8	0		90	73.0836		
303	16.92	4.55	21.396	0.8		85.8	0		90	73.0836		
304	16.92	4.63	21.466	0.7		85.8	0		90.1	73.0836		
305	16.92	4.71	21.546	0.8		85.8	0		90.1	73.1836		
306	16.92	4.78	21.626	0.8		85.8	0		90.2	73.1836		
307	16.92	4.86	21.696	0.7		85.8	0		90.2	73.2836		
308	16.92	4.94	21.776	0.8		85.8	0		90.3	73.2836		
309	16.92	5.02	21.856	0.8		85.8	0		90.4	73.3836		
310	16.92	5.11	21.936	0.8	7.6	85.8	0	0	90.5	73.4836	7.6	
311	16.92	5.19	22.026	0.9		85.8	0		90.5	73.5836		
312	16.92	5.27	22.106	0.8		85.8	0		90.6	73.5836		
313	16.92	5.35	22.186	0.8		85.8	0		90.7	73.6836		

314	16.92	5.43	22.266	0.8		85.8	0		90.8	73.7836		C-87
315	16.92	5.52	22.346	0.8		85.8	0		90.9	73.8836		
316	16.92	5.6	22.436	0.9		85.8	0		91	73.9836		
317	16.92	5.68	22.516	0.8		85.8	0		91.1	74.0836		
318	16.92	5.77	22.596	0.8		85.8	0		91.2	74.1836		
319	16.92	5.85	22.686	0.9		85.8	0		91.3	74.2836		
320	16.92	5.93	22.766	0.8	8.3	85.8	0	0	91.4	74.3836	8.3	
321	16.92	6.02	22.846	0.8		85.8	0		91.5	74.4836		
322	16.92	6.1	22.936	0.9		85.8	0		91.6	74.5836		
323	16.92	6.18	23.016	0.8		85.8	0		91.6	74.6836		
324	16.92	6.27	23.096	0.8		85.8	0		91.7	74.6836		
325	16.92	6.35	23.186	0.9		85.8	0		91.8	74.7836		
326	16.92	6.43	23.266	0.8		85.8	0		91.9	74.8836		
327	16.92	6.52	23.346	0.8		85.8	0		92	74.9836		
328	16.92	6.6	23.436	0.9		85.8	0		92.1	75.0836		
329	16.92	6.68	23.516	0.8		85.8	0		92.2	75.1836		
330	16.92	6.77	23.596	0.8	8.3	85.8	0	0	92.3	75.2836	8.3	
331	16.92	6.85	23.686	0.9		85.8	0		92.3	75.3836		
332	16.92	6.94	23.766	0.8		85.8	0		92.4	75.3836		
333	16.92	7.02	23.856	0.9		85.8	0		92.5	75.4836		
334	16.92	7.1	23.936	0.8		85.8	0		92.6	75.5836		
335	16.92	7.19	24.016	0.8		85.8	0		92.7	75.6836		
336	16.92	7.27	24.106	0.9		85.8	0		92.8	75.7836		
337	16.92	7.35	24.186	0.8		85.8	0		92.9	75.8836		
338	16.92	7.44	24.266	0.8		85.8	0		93	75.9836		
339	16.92	7.52	24.356	0.9		85.8	0		93.1	76.0836		
340	16.92	7.61	24.436	0.8	8.4	85.8	0	0	93.2	76.1836	8.4	
341	16.92	7.69	24.526	0.9		85.8	0		93.3	76.2836		
342	16.92	7.77	24.606	0.8		85.8	0		93.4	76.3836		
343	16.92	7.86	24.686	0.8		85.8	0		93.6	76.4836		
344	16.92	7.94	24.776	0.9		85.8	0		93.7	76.6836		
345	16.92	8.03	24.856	0.8		85.8	0		93.9	76.7836		
346	16.92	8.11	24.946	0.9		85.8	0		94	76.9836		
347	16.92	8.19	25.026	0.8		85.8	0		94.2	77.0836		
348	16.92	8.28	25.106	0.8		85.8	0		94.3	77.2836		
349	16.92	8.36	25.196	0.9		85.8	0		94.4	77.3836		
350	16.92	8.45	25.276	0.8	8.4	85.8	0	0	94.6	77.4836	8.4	
351	16.92	8.53	25.366	0.9		85.8	0		94.7	77.6836		
352	16.92	8.62	25.446	0.8		85.8	0		94.8	77.7836		
353	16.92	8.7	25.536	0.9		85.8	0		94.9	77.8836		
354	16.92	8.79	25.616	0.8		85.8	0		95	77.9836		
355	16.92	8.87	25.706	0.9		85.8	0		95.2	78.0836		
356	16.92	8.96	25.786	0.8		85.8	0		95.3	78.2836		
357	16.92	9.04	25.876	0.9		85.8	0		95.4	78.3836		
358	16.92	9.13	25.956	0.8		85.8	0		95.5	78.4836		
359	16.92	9.21	26.046	0.9		85.8	0		95.6	78.5836		
360	16.92	9.3	26.126	0.8	8.5	85.8	0	0	95.7	78.6836	8.5	
361	16.92	9.39	26.216	0.9		85.8	0		95.8	78.7836		
362	16.92	9.47	26.306	0.9		85.8	0		95.9	78.8836		
363	16.92	9.56	26.386	0.8		85.8	0		96	78.9836		
364	16.92	9.65	26.476	0.9		85.8	0		96.1	79.0836		
365	16.92	9.73	26.566	0.9		85.8	0		96.2	79.1836		
366	16.92	9.82	26.646	0.8		85.8	0		96.3	79.2836		
367	16.92	9.91	26.736	0.9		85.8	0		96.4	79.3836		
368	17.53	9.58	26.826	0.9		85.8	0		96.5	79.4836		
369	17.63	9.73	27.106	2.796		85.8	0		96.6	78.974		
370	17.63	9.97	27.358	2.516	12.312	85.8	0	0	96.7	78.9724	12.312	
371	17.63	10.1	27.598	2.4		85.8	0		96.8	79.0724		
372	17.63	10.2	27.728	1.3		85.8	0		96.9	79.1724		
373	17.63	10.3	27.828	1		85.8	0		97	79.2724		
374	17.63	10.4	27.928	1		85.8	0		97.1	79.3724		
375	17.63	10.5	28.028	1		85.8	0		97.2	79.4724		
376	17.63	10.6	28.128	1		85.8	0		97.3	79.5724		
377	18.21	10.5	28.228	1		85.8	0		97.4	79.6724		
378	18.24	10.7	28.712	4.842		85.8	0		97.4	79.1882		

379	18.24	10.8	28.937	2.254		85.8	0		97.5	79.1628		C-88
380	18.24	10.9	29.037	1	16.796	85.8	0	0	97.6	79.2628	16.796	
381	18.24	11	29.137	1		85.8	0		97.6	79.3628		
382	18.24	11.1	29.237	1		85.8	0		97.8	79.3628		
383	18.24	11.2	29.337	1		85.8	0		97.9	79.5628		
384	18.24	11.3	29.437	1		85.8	0		97.9	79.6628		
385	18.24	11.4	29.537	1		85.8	0		98	79.6628		
386	18.24	11.5	29.637	1		85.8	0		98.1	79.7628		
387	18.24	11.6	29.737	1		85.8	0		98.2	79.8628		
388	18.24	11.7	29.837	1		86	0		98.3	79.9628		
389	18.24	11.8	29.937	1		86.1	2		98.4	80.0628		
390	18.24	11.9	30.037	1	10	86.2	1	3	98.6	80.1628	13	
391	18.24	12	30.137	1		86.3	1		98.7	80.3628		
392	18.24	12	30.237	1		86.5	1		98.7	80.4628		
393	18.24	12.1	30.237	0		86.5	2		98.8	80.4628		
394	18.24	12.2	30.337	1		86.7	0		98.8	80.5628		
395	18.24	12.3	30.437	1		86.8	2		98.9	80.5628		
396	18.24	12.3	30.537	1		86.9	1		98.9	80.6628		
397	18.24	12.4	30.537	0		87.1	1		98.9	80.6628		
398	18.24	12.5	30.637	1		87.2	2		99	80.6628		
399	18.24	12.5	30.737	1		87.3	1		99	80.7628		
400	18.24	12.6	30.737	0	7	87.5	1	12	99.1	80.7628	19	
401	18.24	12.6	30.837	1		87.6	2		99.2	80.8628		
402	18.24	12.7	30.837	0		87.8	1		99.2	80.9628		
403	18.24	12.7	30.937	1		87.9	2		99.3	80.9628		
404	18.24	12.8	30.937	0		88.2	1		99.3	81.0628		
405	18.24	12.8	31.037	1		88.4	3		99.2	81.0628		
406	18.24	12.9	31.037	0		88.5	2		99.2	80.9628		
407	18.24	12.9	31.137	1		88.6	1		99.1	80.9628		
408	18.24	13	31.137	0		88.9	1		99	80.8628		
409	18.24	13	31.237	1		89.1	3		98.8	80.7628		
410	18.24	13	31.237	0	5	89.2	2	18	98.8	80.5628	23	
411	18.24	13.1	31.237	0		89.4	1		98.9	80.5628		
412	18.24	13.1	31.337	1		89.7	2		99	80.6628		
413	18.24	13.1	31.337	0		89.8	3		99.2	80.7628		
414	18.24	13.2	31.337	0		90.1	1		99.4	80.9628		
415	18.24	13.2	31.437	1		90.3	3		99.7	81.1628		
416	18.24	13.2	31.437	0		90.6	2		99.9	81.4628		
417	18.24	13.3	31.437	0		90.9	3		100	81.6628		
418	18.24	13.3	31.537	1		91.1	3		100	81.7628		
419	18.24	13.3	31.537	0		91.4	2		101	81.7628		
420	18.24	13.3	31.537	0	3	91.6	3	23	101	82.7628	26	
421	18.24	13.3	31.537	0		91.9	2		101	82.7628		
422	18.24	13.3	31.537	0		92.2	3		102	82.7628		
423	18.24	13.3	31.537	0		92.4	3		102	83.7628		
424	18.24	13.3	31.537	0		92.7	2		102	83.7628		
425	18.24	13.4	31.537	0		93.1	3		103	83.7628		
426	18.24	13.4	31.637	1		93.4	4		103	84.7628		
427	18.24	13.4	31.637	0		93.8	3		103	84.7628		
428	18.24	13.4	31.637	0		94.2	4		103	84.7628		
429	18.24	13.4	31.637	0		94.6	4		104	84.7628		
430	18.24	13.4	31.637	0	1	95	4	32	104	85.7628	33	
431	18.24	13.4	31.637	0		95.4	4		104	85.7628		
432	18.24	13.4	31.637	0		95.9	4		105	85.7628		
433	18.24	13.4	31.637	0		96.3	5		105	86.7628		
434	18.24	13.4	31.637	0		96.8	4		106	86.7628		
435	18.59	13.4	31.637	0		97.2	5		106	87.7628		
436	19.25	13.3	31.993	3.556		97.6	4		107	87.4072		
437	19.25	13.3	32.553	5.604		98.4	4		108	87.7468		
438	19.25	13.3	32.553	0		98.9	8		110	88.7468		
439	19.25	13.3	32.553	0		99.4	5		111	90.7468		
440	19.3	13.3	32.553	0	9.16	99.7	5	48	112	91.7468	57.16	
441	19.38	13.3	32.604	0.508		100	3		114	92.696		
442	19.38	13.3	32.68	0.762		101	3		115	94.6198		
443	19.38	13.3	32.68	0		101	10		117	95.6198		

444	19.38	13.3	32.68	0		101	0		118	97.6198	
445	19.38	13.3	32.68	0		102	0		119	98.6198	
446	19.38	13.3	32.68	0		102	10		120	99.6198	
447	19.38	13.3	32.68	0		102	0		121	100.6198	
448	19.38	13.3	32.68	0		102	0		121	101.6198	
449	19.38	13.3	32.68	0		103	0		122	101.6198	
450	19.38	13.3	32.68	0	1.27	103	10	36	123	102.6198	37.27
451	19.38	13.3	32.68	0		104	0		123	103.6198	
452	19.38	13.3	32.68	0		104	10		124	103.6198	
453	19.38	13.3	32.68	0		104	0		124	104.6198	
454	19.38	13.3	32.68	0		105	0		124	104.6198	
455	19.38	13.3	32.68	0		106	10		124	104.6198	
456	19.38	13.3	32.68	0		106	10		124	104.6198	
457	19.38	13.3	32.68	0		107	0		124	104.6198	
458	19.38	13.3	32.68	0		107	10		124	104.6198	
459	19.38	13.3	32.68	0		108	0		124	104.6198	
460	19.74	13.3	32.68	0	0	108	10	50	124	104.6198	50
461	19.74	13.3	33.036	3.556		109	0		124	104.2642	
462	19.74	13.3	33.036	0		109	10		124	104.2642	
463	19.74	13.3	33.036	0		110	0		125	104.2642	
464	19.74	13.3	33.036	0		110	10		125	105.2642	
465	19.74	13.3	33.036	0		111	0		125	105.2642	
466	19.74	13.3	33.036	0		112	10		126	105.2642	
467	19.74	13.3	33.036	0		113	10		126	106.2642	
468	19.74	13.3	33.036	0		113	10		126	106.2642	
469	19.74	13.3	33.036	0		114	0		126	106.2642	
470	19.74	13.3	33.036	0	3.556	115	10	60	126	106.2642	63.556
471	19.89	13.3	33.036	0		115	10		126	106.2642	
472	19.89	13.3	33.188	1.524		116	0		126	106.1118	
473	19.89	13.3	33.188	0		117	10		126	106.1118	
474	19.89	13.3	33.188	0		118	10		127	106.1118	
475	19.89	13.3	33.188	0		119	10		127	107.1118	
476	19.89	13.3	33.188	0		119	10		127	107.1118	
477	19.91	13.3	33.188	0		120	0		127	107.1118	
478	19.96	13.3	33.214	0.254		121	10		127	107.0864	
479	20.02	13.3	33.264	0.508		121	10		127	107.0356	
480	20.02	13.3	33.315	0.508	2.794	122	0	70	127	106.9848	72.794
481	20.02	13.3	33.315	0		122	10		128	106.9848	
482	20.55	13.3	33.315	0		123	0		128	107.9848	
483	20.55	13.3	33.849	5.334		123	10		128	107.4514	
484	20.55	13.3	33.849	0		124	0		128	107.4514	
485	20.55	13.3	33.849	0		125	10		129	107.4514	
486	20.55	13.3	33.849	0		125	10		129	108.4514	
487	20.55	13.3	33.849	0		126	0		129	108.4514	
488	20.55	13.3	33.849	0		126	10		129	108.4514	
489	20.57	13.3	33.849	0		126	0		130	108.4514	
490	20.6	13.3	33.874	0.254	5.588	127	0	50	130	109.426	55.588
491	22.4	12.4	33.899	0.254		128	10		130	109.4006	
492	23.06	12.5	34.803	9.034		128	10		130	107.5972	
493	23.09	12.6	35.563	7.604		129	0		131	106.9368	
494	23.39	12.6	35.689	1.254		129	10		131	107.9114	
495	23.39	12.6	35.993	3.048		130	0		132	107.6066	
496	23.39	12.6	35.993	0		131	10		132	108.6066	
497	23.39	12.6	35.993	0		131	10		132	108.6066	
498	23.39	12.6	35.993	0		132	0		133	108.6066	
499	23.39	12.6	35.993	0		132	10		133	109.6066	
500	23.39	12.6	35.993	0	21.194	133	0	60	133	109.6066	81.194
501	23.44	12.6	35.993	0		133	10		134	109.6066	
502	23.44	12.6	36.044	0.508		134	0		134	110.5558	
503	23.44	12.6	36.044	0		134	10		134	110.5558	
504	23.47	12.6	36.044	0		135	0		134	110.5558	
505	23.47	12.6	36.07	0.254		135	10		134	110.5304	
506	23.47	12.6	36.07	0		136	0		135	110.5304	
507	23.75	12.6	36.07	0		136	10		135	111.5304	
508	23.83	12.6	36.349	2.794		136	0		135	111.251	

509	24.31	12.6	36.425	0.762		137	0		136	111.1748		C-90
510	25.3	12.2	36.908	4.826	9.144	137	10	50	137	111.6922	59.144	
511	25.3	12.4	37.498	5.906		138	0		139	111.7016		
512	26.39	12.2	37.698	2		138	10		140	113.7016		
513	26.44	12.2	38.591	8.922		139	0		141	113.6094		
514	26.75	12.2	38.641	0.508		139	10		142	114.5586		
515	26.85	12.2	38.946	3.048		139	0		143	115.2538		
516	26.87	12.2	39.048	1.016		140	0		144	116.1522		
517	26.87	12.2	39.073	0.254		140	10		145	117.1268		
518	26.9	12.2	39.073	0		141	0		146	118.1268		
519	26.9	12.2	39.099	0.254		141	10		147	119.1014		
520	26.9	12.2	39.099	0	21.908	142	0	40	147	120.1014	61.908	
521	26.9	12.2	39.099	0		142	10		148	120.1014		
522	26.9	12.2	39.099	0		143	0		149	121.1014		
523	27.48	12.2	39.099	0		143	10		149	122.1014		
524	27.64	12.2	39.683	5.842		143	0		149	121.5172		
525	27.64	12.2	39.835	1.524		144	0		150	121.3648		
526	27.64	12.2	39.835	0		144	10		150	122.3648		
527	28.09	12.2	39.835	0		145	0		150	122.3648		
528	28.09	12.2	40.292	4.572		145	10		151	121.9076		
529	28.14	12.2	40.292	0		146	0		151	122.9076		
530	28.14	12.2	40.343	0.508	12.446	146	10	50	151	122.8568	62.446	
531	28.37	12.2	40.343	0		147	0		152	122.8568		
532	28.42	12.2	40.572	2.286		147	10		152	123.6282		
533	28.42	12.2	40.623	0.508		148	0		152	123.5774		
534	28.42	12.2	40.623	0		148	10		152	123.5774		
535	28.42	12.2	40.623	0		148	0		153	123.5774		
536	28.42	12.2	40.623	0		149	0		153	124.5774		
537	28.42	12.2	40.623	0		149	10		153	124.5774		
538	30.56	10.6	40.623	0		149	0		153	124.5774		
539	30.56	11.1	41.156	5.336		150	0		154	122.4438		
540	30.56	11.1	41.656	5	13.13	151	10	40	154	123.4438	53.13	
541	30.56	11.1	41.656	0		151	10		154	123.4438		
542	30.56	11.2	41.656	0		152	0		154	123.4438		
543	30.56	11.2	41.756	1		153	10		155	123.4438		
544	30.56	11.2	41.756	0		153	10		155	124.4438		
545	30.56	11.2	41.756	0		154	0		155	124.4438		
546	30.56	11.2	41.756	0		154	10		155	124.4438		
547	30.56	11.2	41.756	0		155	0		156	124.4438		
548	31.14	11	41.756	0		155	10		156	125.4438		
549	31.17	11.1	42.14	3.842		155	0		156	124.8596		
550	31.42	11.1	42.266	1.254	6.096	156	0	50	157	124.8342	56.096	
551	31.55	11.1	42.52	2.54		156	10		157	125.5802		
552	31.83	11.1	42.647	1.27		156	0		157	125.4532		
553	32.66	10.9	42.926	2.794		157	0		157	125.1738		
554	32.69	10.9	43.564	6.382		157	10		158	124.3356		
555	32.69	10.9	43.59	0.254		158	0		158	125.3102		
556	32.69	10.9	43.59	0		158	10		158	125.3102		
557	32.69	10.9	43.59	0		158	0		159	125.3102		
558	32.82	10.9	43.59	0		159	0		159	126.3102		
559	32.84	10.9	43.717	1.27		159	10		159	126.1832		
560	32.84	10.9	43.742	0.254	14.764	160	0	40	160	126.1578	54.764	
561	32.84	10.9	43.742	0		160	10		160	127.1578		
562	32.84	10.9	43.742	0		160	0		161	127.1578		
563	32.84	10.9	43.742	0		161	0		161	128.1578		
564	32.84	10.9	43.742	0		161	10		161	128.1578		
565	32.84	10.9	43.742	0		162	0		161	128.1578		
566	32.84	10.9	43.742	0		162	10		162	128.1578		
567	32.84	10.9	43.742	0		162	0		162	129.1578		
568	32.84	10.9	43.742	0		163	0		162	129.1578		
569	32.84	10.9	43.742	0		163	10		162	129.1578		
570	32.84	10.9	43.742	0	0	163	0	40	163	129.1578	40	
571	32.84	10.9	43.742	0		164	0		163	130.1578		
572	32.84	10.9	43.742	0		164	10		163	130.1578		
573	32.84	10.9	43.742	0		165	0		163	130.1578		

574	32.84	10.9	43.742	0		165	10		164	130.1578		C-91
575	32.84	10.9	43.742	0		165	0		164	131.1578		
576	32.84	10.9	43.742	0		165	0		164	131.1578		
577	32.84	10.9	43.742	0		166	0		164	131.1578		
578	32.84	10.9	43.742	0		166	10		165	131.1578		
579	32.84	10.9	43.742	0		166	0		165	132.1578		
580	32.84	10.9	43.742	0	0	167	0	30	165	132.1578	30	
581	33.02	10.9	43.742	0		167	10		165	132.1578		
582	33.55	10.5	43.92	1.778		167	0		165	131.98		
583	33.55	10.7	44.053	1.334		168	0		166	131.4466		
584	33.55	10.7	44.253	2		168	10		166	132.4466		
585	33.55	10.7	44.253	0		168	0		167	132.4466		
586	33.55	10.7	44.253	0		168	0		167	133.4466		
587	33.55	10.7	44.253	0		169	0		167	133.4466		
588	33.55	10.7	44.253	0		169	10		168	133.4466		
589	33.55	10.7	44.253	0		169	0		168	134.4466		
590	33.55	10.7	44.253	0	5.112	169	0	30	169	134.4466	35.112	
591	33.55	10.7	44.253	0		169	0		169	135.4466		
592	33.55	10.7	44.253	0		169	0		169	135.4466		
593	33.55	10.7	44.253	0		169	0		170	135.4466		
594	33.55	10.7	44.253	0		169	0		170	136.4466		
595	33.55	10.7	44.253	0		170	0		170	136.4466		
596	33.55	10.7	44.253	0		170	10		171	136.4466		
597	33.55	10.7	44.253	0		170	0		171	137.4466		
598	33.55	10.7	44.253	0		170	0		171	137.4466		
599	33.55	10.7	44.253	0		170	0		172	137.4466		
600	33.55	10.7	44.253	0	0	170	0	10	172	138.4466	10	
601	33.55	10.7	44.253	0		170	0		172	138.4466		
602	33.55	10.7	44.253	0		170	0		173	138.4466		
603	33.55	10.7	44.253	0		170	0		173	139.4466		
604	33.55	10.7	44.253	0		170	0		173	139.4466		
605	33.55	10.7	44.253	0		171	0		174	139.4466		
606	33.55	10.7	44.253	0		171	10		174	140.4466		
607	33.55	10.7	44.253	0		171	0		174	140.4466		
608	33.55	10.7	44.253	0		171	0		175	140.4466		
609	33.55	10.7	44.253	0		171	0		175	141.4466		
610	33.55	10.7	44.253	0	0	171	0	10	175	141.4466	10	
611	33.55	10.7	44.253	0		171	0		176	141.4466		
612	33.55	10.7	44.253	0		171	0		176	142.4466		
613	33.55	10.7	44.253	0		171	0		176	142.4466		
614	33.55	10.7	44.253	0		171	0		176	142.4466		
615	33.55	10.7	44.253	0		171	0		177	142.4466		
616	33.55	10.7	44.253	0		171	0		177	143.4466		
617	33.55	10.7	44.253	0		172	0		177	143.4466		
618	33.55	10.7	44.253	0		172	10		177	143.4466		
619	33.55	10.7	44.253	0		172	0		178	143.4466		
620	33.55	10.7	44.253	0	0	172	0	10	178	144.4466	10	
621	33.55	10.7	44.253	0		172	0		178	144.4466		
622	33.55	10.7	44.253	0		172	0		178	144.4466		
623	33.55	10.7	44.253	0		172	0		178	144.4466		
624	33.55	10.7	44.253	0		172	0		179	144.4466		
625	33.55	10.7	44.253	0		172	0		179	145.4466		
626	33.55	10.7	44.253	0		172	0		179	145.4466		
627	33.55	10.7	44.253	0		172	0		179	145.4466		
628	33.55	10.7	44.253	0		172	0		179	145.4466		
629	33.55	10.7	44.253	0		172	0		180	145.4466		
630	33.6	10.7	44.253	0	0	172	0	0	180	146.4466	0	
631	33.6	10.7	44.304	0.508		172	0		180	146.3958		
632	33.6	10.7	44.304	0		172	0		180	146.3958		
633	33.6	10.7	44.304	0		172	0		180	146.3958		
634	33.63	10.7	44.304	0		172	0		181	146.3958		
635	33.63	10.7	44.33	0.254		172	0		181	147.3704		
636	33.63	10.7	44.33	0		172	0		181	147.3704		
637	33.63	10.7	44.33	0		172	0		181	147.3704		
638	33.63	10.7	44.33	0		172	0		181	147.3704		

639	33.63	10.7	44.33	0		172	0		181	147.3704		C-92
640	33.63	10.7	44.33	0	0.762	172	0	0	181	147.3704	0.762	
641	33.63	10.7	44.33	0		172	0		181	147.3704		
642	33.63	10.7	44.33	0		172	0		182	147.3704		
643	33.63	10.7	44.33	0		172	0		182	148.3704		
644	33.63	10.7	44.33	0		172	0		182	148.3704		
645	33.63	10.7	44.33	0		172	0		182	148.3704		
646	33.63	10.7	44.33	0		172	0		182	148.3704		
647	33.63	10.7	44.33	0		172	0		182	148.3704		
648	33.63	10.7	44.33	0		172	0		182	148.3704		
649	33.63	10.7	44.33	0		172	0		183	148.3704		
650	33.63	10.7	44.33	0	0	172	0	0	183	149.3704	0	
651	33.63	10.7	44.33	0		172	0		183	149.3704		
652	33.83	10.5	44.33	0		172	0		183	149.3704		
653	33.83	10.6	44.333	0.032		172	0		183	149.1672		
654	33.83	10.7	44.433	1		172	0		183	149.1672		
655	33.83	10.7	44.533	1		172	0		183	149.1672		
656	33.83	10.8	44.533	0		172	0		183	149.1672		
657	33.83	10.8	44.633	1		172	0		183	149.1672		
658	33.83	10.9	44.633	0		172	0		183	149.1672		
659	33.83	10.9	44.733	1		172	0		183	149.1672		
660	33.83	11	44.733	0	4.032	172	0	0	183	149.1672	4.032	
661	33.83	11.1	44.833	1		172	0		183	149.1672		
662	33.83	11.1	44.933	1		172	0		183	149.1672		
663	33.83	11.2	44.933	0		172	0		183	149.1672		
664	33.83	11.3	45.033	1		172	0		183	149.1672		
665	33.83	11.3	45.133	1		172	0		183	149.1672		
666	33.83	11.4	45.133	0		172	0		183	149.1672		
667	33.83	11.5	45.233	1		172	0		183	149.1672		
668	33.83	11.6	45.333	1		172	0		183	149.1672		
669	33.83	11.6	45.433	1		172	0		183	149.1672		
670	33.83	11.7	45.433	0	7	172	0	0	183	149.1672	7	
671	33.83	11.8	45.533	1		172	0		183	149.1672		
672	33.83	11.9	45.633	1		172	0		183	149.1672		
673	33.83	11.9	45.733	1		172	0		183	149.1672		
674	33.83	12	45.733	0		172	0		184	149.1672		
675	33.83	12.1	45.833	1		172	0		184	150.1672		
676	33.83	12.2	45.933	1		172	0		184	150.1672		
677	33.83	12.3	46.033	1		172	0		184	150.1672		
678	33.83	12.4	46.133	1		172	0		184	150.1672		
679	33.83	12.4	46.233	1		172	0		184	150.1672		
680	33.83	12.5	46.233	0	8	172	0	0	184	150.1672	8	
681	33.83	12.6	46.333	1		172	0		184	150.1672		
682	33.83	12.7	46.433	1		172	0		184	150.1672		
683	33.83	12.8	46.533	1		172	0		184	150.1672		
684	33.83	12.9	46.633	1		172	0		184	150.1672		
685	33.83	12.9	46.733	1		172	0		185	150.1672		
686	33.83	13	46.733	0		172	0		185	151.1672		
687	33.83	13.1	46.833	1		172	0		185	151.1672		
688	33.83	13.2	46.933	1		172	0		185	151.1672		
689	33.83	13.3	47.033	1		172	0		185	151.1672		
690	33.83	13.4	47.133	1	9	172	0	0	185	151.1672	9	
691	33.83	13.4	47.233	1		172	0		185	151.1672		
692	33.83	13.5	47.233	0		172	0		185	151.1672		
693	33.83	13.6	47.333	1		172	0		185	151.1672		
694	33.83	13.7	47.433	1		172	0		185	151.1672		
695	33.83	13.8	47.533	1		172	0		185	151.1672		
696	33.83	13.9	47.633	1		172	0		185	151.1672		
697	33.83	13.9	47.733	1		172	0		186	151.1672		
698	33.83	14	47.733	0		172	0		186	152.1672		
699	33.83	14.1	47.833	1		172	0		186	152.1672		
700	33.83	14.2	47.933	1	8	172	0	0	186	152.1672	8	
701	33.83	14.3	48.033	1		172	0		186	152.1672		
702	33.83	14.4	48.133	1		172	0		186	152.1672		
703	33.83	14.4	48.233	1		172	0		186	152.1672		

704	33.83	14.5	48.233	0		172	0		186	152.1672	
705	33.83	14.6	48.333	1		172	0		186	152.1672	
706	33.83	14.7	48.433	1		172	0		186	152.1672	
707	33.83	14.8	48.533	1		172	0		187	152.1672	
708	33.83	14.9	48.633	1		172	0		187	153.1672	
709	33.83	14.9	48.733	1		172	0		187	153.1672	
710	33.83	15	48.733	0	8	172	0	0	187	153.1672	8
711	33.83	15.1	48.833	1		172	0		187	153.1672	
712	33.83	15.2	48.933	1		172	0		187	153.1672	
713	33.83	15.3	49.033	1		172	0		187	153.1672	
714	33.83	15.4	49.133	1		172	0		188	153.1672	
715	33.83	15.5	49.233	1		172	0		188	154.1672	
716	33.83	15.5	49.333	1		172	0		188	154.1672	
717	33.83	15.6	49.333	0		172	0		188	154.1672	
718	33.83	15.7	49.433	1		172	0		188	154.1672	
719	33.83	15.8	49.533	1		172	0		188	154.1672	
720	33.83	15.9	49.633	1	9	172	0	0	188	154.1672	9
721	33.83	16	49.733	1		172	0		188	154.1672	
722	33.83	16	49.833	1		172	0		189	154.1672	
723	33.83	16.1	49.833	0		172	0		189	155.1672	
724	33.83	16.2	49.933	1		172	0		189	155.1672	
725	33.83	16.3	50.033	1		172	0		189	155.1672	
726	33.83	16.4	50.133	1		172	0		189	155.1672	
727	33.83	16.5	50.233	1		172	0		189	155.1672	
728	33.83	16.6	50.333	1		172	0		189	155.1672	
729	33.83	16.6	50.433	1		172	0		189	155.1672	
730	33.83	16.7	50.433	0	8	172	0	0	189	155.1672	8
731	33.83	16.8	50.533	1		172	0		189	155.1672	
732	33.83	16.9	50.633	1		172	0		190	155.1672	
733	34.44	16.6	50.733	1		172	0		190	156.1672	
734	34.54	16.7	51.042	3.096		172	0		190	155.5576	
735	34.54	17	51.244	2.016		172	0		190	155.456	
736	34.54	17.1	51.544	3		172	0		190	155.456	
737	34.54	17.2	51.644	1		172	0		190	155.456	
738	34.54	17.3	51.744	1		172	0		190	155.456	
739	34.54	17.4	51.844	1		172	0		190	155.456	
740	34.54	17.5	51.944	1	15.112	172	0	0	190	155.456	15.112
741	34.54	17.6	52.044	1		172	0		190	155.456	
742	35.13	17.5	52.144	1		172	0		191	155.456	
743	35.15	17.7	52.628	4.842		172	0		191	155.8718	
744	35.15	17.8	52.854	2.254		172	0		191	155.8464	
745	35.15	18	52.954	1		172	0		191	155.8464	
746	35.15	18.1	53.154	2		172	0		191	155.8464	
747	35.15	18.2	53.254	1		172	0		191	155.8464	
748	35.15	18.3	53.354	1		172	0		191	155.8464	
749	35.15	18.3	53.454	1		172	0		191	155.8464	
750	35.15	18.4	53.454	0	15.096	172	0	0	191	155.8464	15.096
751	35.15	18.5	53.554	1		172	0		191	155.8464	
752	35.15	18.6	53.654	1		172	0		191	155.8464	
753	35.15	18.7	53.754	1		172	0		191	155.8464	
754	35.15	18.8	53.854	1		172	0		192	155.8464	
755	35.15	18.9	53.954	1		172	0		192	156.8464	
756	35.15	19	54.054	1		172	0		192	156.8464	
757	35.15	19	54.154	1		172	0		192	156.8464	
758	35.15	19.1	54.154	0		172	0		192	156.8464	
759	35.15	19.2	54.254	1		172	0		192	156.8464	
760	35.15	19.3	54.354	1	9	173	0	0	192	156.8464	9
761	35.15	19.3	54.454	1		173	10		192	156.8464	
762	35.15	19.4	54.454	0		173	0		192	156.8464	
763	35.15	19.5	54.554	1		173	0		192	156.8464	
764	35.15	19.5	54.654	1		173	0		192	156.8464	
765	35.15	19.6	54.654	0		173	0		192	156.8464	
766	35.15	19.6	54.754	1		173	0		192	156.8464	
767	35.15	19.7	54.754	0		174	0		192	156.8464	
768	35.15	19.7	54.854	1		174	10		192	156.8464	

964	70.28	10.5	80.785	0		263	0		265	193.7154		C-96
965	70.28	10.5	80.785	0		263	0		265	194.7154		
966	70.28	10.5	80.785	0		263	0		265	194.7154		
967	70.28	10.5	80.785	0		263	0		266	194.7154		
968	70.28	10.5	80.785	0		263	0		266	195.7154		
969	70.28	10.5	80.785	0		263	0		266	195.7154		
970	70.28	10.5	80.785	0	0	263	0	10	267	195.7154	10	
971	70.28	10.5	80.785	0		263	0		267	196.7154		
972	70.28	10.5	80.785	0		263	0		267	196.7154		
973	70.28	10.5	80.785	0		264	0		268	196.7154		
974	70.28	10.5	80.785	0		264	10		268	197.7154		
975	70.28	10.5	80.785	0		264	0		268	197.7154		
976	70.28	10.5	80.785	0		264	0		269	197.7154		
977	70.28	10.5	80.785	0		264	0		269	198.7154		
978	70.28	10.5	80.785	0		264	0		269	198.7154		
979	70.28	10.5	80.785	0		264	0		269	198.7154		
980	70.28	10.5	80.785	0	0	264	0	10	270	198.7154	10	
981	70.28	10.5	80.785	0		264	0		270	199.7154		
982	70.28	10.5	80.785	0		264	0		270	199.7154		
983	70.28	10.5	80.785	0		264	0		270	199.7154		
984	70.28	10.5	80.785	0		264	0		271	199.7154		
985	70.28	10.5	80.785	0		264	0		271	200.7154		
986	70.28	10.5	80.785	0		264	0		271	200.7154		
987	70.28	10.5	80.785	0		264	0		271	200.7154		
988	70.28	10.5	80.785	0		264	0		271	200.7154		
989	70.28	10.5	80.785	0		264	0		272	200.7154		
990	70.28	10.5	80.785	0	0	264	0	0	272	201.7154	0	
991	70.28	10.5	80.785	0		264	0		272	201.7154		
992	70.28	10.5	80.785	0		264	0		272	201.7154		
993	70.28	10.5	80.785	0		264	0		272	201.7154		
994	70.28	10.5	80.785	0		264	0		273	201.7154		
995	70.36	10.5	80.785	0		264	0		273	202.7154		
996	70.36	10.5	80.865	0.8		264	0		273	202.6354		
997	70.36	10.5	80.865	0		264	0		273	202.6354		
998	70.36	10.5	80.865	0		264	0		273	202.6354		
999	70.54	10.5	80.865	0		264	0		273	202.6354		
1000	70.54	10.5	81.043	1.78	2.58	264	0	0	274	202.4574	2.58	
1001	70.54	10.5	81.043	0		264	0		274	203.4574		
1002	70.54	10.5	81.043	0		264	0		274	203.4574		
1003	70.54	10.5	81.043	0		264	0		274	203.4574		
1004	70.54	10.5	81.043	0		264	0		274	203.4574		
1005	70.54	10.5	81.043	0		264	0		274	203.4574		
1006	70.54	10.5	81.043	0		264	0		274	203.4574		
1007	70.54	10.5	81.043	0		264	0		275	203.4574		
1008	70.54	10.5	81.043	0		264	0		275	204.4574		
1009	70.54	10.5	81.043	0		264	0		275	204.4574		
1010	70.54	10.5	81.043	0	0	264	0	0	275	204.4574	0	
1011	70.54	10.5	81.043	0		264	0		275	204.4574		
1012	70.54	10.5	81.043	0		264	0		275	204.4574		
1013	70.54	10.5	81.043	0		264	0		275	204.4574		
1014	70.54	10.5	81.043	0		264	0		276	204.4574		
1015	70.54	10.5	81.043	0		264	0		276	205.4574		
1016	70.54	10.5	81.043	0		264	0		276	205.4574		
1017	70.75	10.4	81.043	0		264	0		276	205.4574		
1018	70.75	10.5	81.146	1.032		264	0		276	205.2542		
1019	70.75	10.5	81.246	1		264	0		276	205.2542		
1020	70.75	10.6	81.246	0	3.032	264	0	0	277	205.2542	3.032	
1021	70.75	10.6	81.346	1		264	0		277	206.2542		
1022	70.75	10.7	81.346	0		264	0		277	206.2542		

end

SCSMatP112 **ET=247.913 [84T,164E] Increase= 119.2 [92.6%]**

Time [day]	CumP' [cm]	sum(vTop) [L]	Cumm E [cm]	Daily E [mm/day]	10day E [mm/10d]	sum(vRoc [L]	Daily T [mm]	10day T [mm/10d]	sum(vBot) [L]	Cumm Dis [cm]	10day ET [mm/10d]
650	33.63	213	246.63	10	30	169	0	0	404	370.3704	30
651	33.63	213	246.63	0		169	0		405	370.3704	
652	33.83	213	246.63	0		169	0		405	371.3704	
653	33.83	213	246.83	2.032		169	0		406	371.1672	
654	33.83	213	246.83	0		169	0		406	372.1672	
655	33.83	213	246.83	0		169	0		406	372.1672	
656	33.83	214	246.83	0		169	0		407	372.1672	
657	33.83	214	247.83	10		169	0		407	373.1672	
658	33.83	214	247.83	0		169	0		407	373.1672	
659	33.83	215	247.83	0		169	0		408	373.1672	
660	33.83	215	248.83	10	22.032	169	0	0	408	374.1672	22.032
661	33.83	215	248.83	0		169	0		408	374.1672	
662	33.83	216	248.83	0		169	0		408	374.1672	
663	33.83	216	249.83	10		169	0		409	374.1672	
664	33.83	216	249.83	0		169	0		409	375.1672	
665	33.83	217	249.83	0		169	0		409	375.1672	
666	33.83	217	250.83	10		169	0		410	375.1672	
667	33.83	217	250.83	0		169	0		410	376.1672	
668	33.83	218	250.83	0		169	0		410	376.1672	
669	33.83	218	251.83	10		169	0		411	376.1672	
670	33.83	219	251.83	0	30	169	0	0	411	377.1672	30
671	33.83	219	252.83	10		169	0		411	377.1672	
672	33.83	219	252.83	0		169	0		412	377.1672	
673	33.83	220	252.83	0		169	0		412	378.1672	
674	33.83	220	253.83	10		169	0		412	378.1672	
675	33.83	221	253.83	0		169	0		413	378.1672	
676	33.83	221	254.83	10		169	0		413	379.1672	
677	33.83	222	254.83	0		169	0		413	379.1672	
678	33.83	222	255.83	10		169	0		414	379.1672	
679	33.83	223	255.83	0		169	0		414	380.1672	
680	33.83	223	256.83	10	50	169	0	0	415	380.1672	50
681	33.83	224	256.83	0		169	0		415	381.1672	
682	33.83	224	257.83	10		169	0		415	381.1672	
683	33.83	225	257.83	0		169	0		416	381.1672	
684	33.83	225	258.83	10		169	0		416	382.1672	
685	33.83	226	258.83	0		169	0		416	382.1672	
686	33.83	226	259.83	10		169	0		417	382.1672	
687	33.83	226	259.83	0		169	0		417	383.1672	
688	33.83	226	259.83	0		169	0		418	383.1672	
689	33.83	227	259.83	0		169	0		418	384.1672	
690	33.83	227	260.83	10	40	169	0	0	418	384.1672	40
691	33.83	228	260.83	0		169	0		419	384.1672	
692	33.83	228	261.83	10		169	0		419	385.1672	
693	33.83	229	261.83	0		169	0		420	385.1672	
694	33.83	229	262.83	10		169	0		420	386.1672	
695	33.83	229	262.83	0		169	0		420	386.1672	
696	33.83	230	262.83	0		169	0		421	386.1672	
697	33.83	230	263.83	10		169	0		421	387.1672	
698	33.83	231	263.83	0		169	0		421	387.1672	
699	33.83	232	264.83	10		169	0		422	387.1672	
700	33.83	232	265.83	10	50	169	0	0	422	388.1672	50
701	33.83	233	265.83	0		169	0		423	388.1672	
702	33.83	233	266.83	10		169	0		423	389.1672	
703	33.83	234	266.83	0		169	0		424	389.1672	
704	33.83	235	267.83	10		169	0		424	390.1672	
705	33.83	235	268.83	10		169	0		424	390.1672	
706	33.83	236	268.83	0		169	0		425	390.1672	
707	33.83	236	269.83	10		169	0		425	391.1672	
708	33.83	237	269.83	0		169	0		426	391.1672	
709	33.83	238	270.83	10		169	0		426	392.1672	
710	33.83	238	271.83	10	60	169	0	0	427	392.1672	60
711	33.83	239	271.83	0		169	0		427	393.1672	

842	52.63	302	353.61	0		197	0		511	458.394	
843	52.68	302	354.63	10.254		197	10		512	458.3686	
844	52.73	302	354.68	0.508		198	0		513	459.3178	
845	52.73	302	354.73	0.508		198	10		513	460.267	
846	52.73	302	354.73	0		199	0		514	460.267	
847	53.27	303	354.73	0		200	10		514	461.267	
848	53.27	303	356.27	15.334		200	10		515	460.7336	
849	53.27	303	356.27	0		201	0		515	461.7336	
850	53.27	303	356.27	0	26.604	201	10	60	516	461.7336	86.604
851	53.27	303	356.27	0		202	0		517	462.7336	
852	53.27	303	356.27	0		202	10		517	463.7336	
853	53.27	303	356.27	0		203	0		518	463.7336	
854	53.29	303	356.27	0		203	10		518	464.7336	
855	53.32	304	356.29	0.254		204	0		519	464.7082	
856	56.12	302	357.32	10.254		204	10		519	465.6828	
857	56.12	302	358.12	8.034		205	0		520	462.8794	
858	56.12	303	358.12	0		206	10		521	463.8794	
859	56.12	303	359.12	10		206	10		521	464.8794	
860	56.12	303	359.12	0	28.542	207	0	50	522	464.8794	78.542
861	56.89	303	359.12	0		207	10		523	465.8794	
862	56.89	304	359.89	7.7		208	0		523	466.1094	
863	56.89	304	360.89	10		209	10		524	466.1094	
864	56.89	304	360.89	0		209	10		525	467.1094	
865	56.89	304	360.89	0		210	0		525	468.1094	
866	56.94	304	360.89	0		210	10		526	468.1094	
867	56.94	304	360.94	0.508		211	0		526	469.0586	
868	56.94	304	360.94	0		212	10		527	469.0586	
869	56.97	304	360.94	0		212	10		527	470.0586	
870	56.97	304	360.97	0.254	18.462	213	0	60	528	470.0332	78.462
871	56.97	304	360.97	0		213	10		528	471.0332	
872	57.25	304	360.97	0		214	0		529	471.0332	
873	57.32	304	361.25	2.794		214	10		529	471.7538	
874	57.81	305	361.32	0.762		215	0		530	471.6776	
875	58.8	304	362.81	14.826		215	10		531	472.195	
876	58.8	305	362.8	-0.094		216	0		533	472.2044	
877	59.89	304	363.8	10		216	10		534	474.2044	
878	59.94	305	363.89	0.922		216	0		535	474.1122	
879	61.99	303	364.94	10.508		217	0		536	475.0614	
880	62.09	304	364.99	0.48	40.198	217	10	50	537	474.0134	90.198
881	63.13	303	366.09	11.016		218	0		538	474.9118	
882	63.13	304	366.13	0.4		218	10		539	474.8718	
883	63.15	304	367.13	10		219	0		540	475.8718	
884	63.15	305	367.15	0.254		219	10		541	476.8464	
885	63.15	305	368.15	10		220	0		542	477.8464	
886	63.15	306	368.15	0		220	10		543	478.8464	
887	63.15	306	369.15	10		221	0		543	479.8464	
888	63.74	306	369.15	0		221	10		544	479.8464	
889	63.89	307	369.74	5.842		222	0		545	480.2622	
890	63.89	307	370.89	11.524	59.036	223	10	50	546	481.1098	109.036
891	63.89	308	370.89	0		223	10		546	482.1098	
892	65.56	307	371.89	10		224	0		547	482.1098	
893	65.56	308	372.56	6.7		224	10		548	481.4398	
894	65.61	308	373.56	10		225	0		548	482.4398	
895	65.61	309	373.61	0.508		225	10		549	482.389	
896	65.61	309	374.61	10		226	0		550	483.389	
897	65.66	309	374.61	0		226	10		550	484.389	
898	65.66	310	374.66	0.508		227	0		551	484.3382	
899	65.66	310	375.66	10		227	10		551	485.3382	
900	65.66	310	375.66	0	47.716	228	0	50	552	485.3382	97.716
901	65.66	310	375.66	0		228	10		553	486.3382	
902	65.66	311	375.66	0		229	0		553	487.3382	
903	67.8	309	376.66	10		229	10		554	487.3382	
904	67.8	310	376.8	1.336		230	0		554	486.2046	
905	67.8	310	377.8	10		230	10		555	486.2046	
906	67.8	311	377.8	0		231	0		556	487.2046	

907	67.8	311	378.8	10		231	10		556	488.2046	
908	67.8	311	378.8	0		232	0		557	488.2046	
909	67.8	311	378.8	0		232	10		557	489.2046	
910	67.8	312	378.8	0	31.336	233	0	50	558	489.2046	81.336
911	67.8	312	379.8	10		233	10		558	490.2046	
912	67.8	312	379.8	0		234	0		559	490.2046	
913	68.38	312	379.8	0		234	10		560	491.2046	
914	68.38	312	380.38	5.842		235	0		560	491.6204	
915	68.38	313	380.38	0		235	10		561	491.6204	
916	68.51	313	381.38	10		236	0		561	492.6204	
917	68.79	313	381.51	1.27		236	10		562	492.4934	
918	69.62	313	381.79	2.794		236	0		562	493.214	
919	69.62	313	382.62	8.382		237	0		563	492.3758	
920	69.62	313	382.62	0	38.288	237	10	50	564	493.3758	88.288
921	69.62	313	382.62	0		238	0		564	494.3758	
922	69.62	314	382.62	0		238	10		565	494.3758	
923	69.75	314	383.62	10		239	0		565	495.3758	
924	69.75	314	383.75	1.27		239	10		566	495.2488	
925	69.75	314	383.75	0		239	0		567	496.2488	
926	69.75	314	383.75	0		240	0		567	497.2488	
927	69.75	315	383.75	0		240	10		568	497.2488	
928	69.75	315	384.75	10		241	0		568	498.2488	
929	69.75	315	384.75	0		241	10		569	498.2488	
930	69.75	315	384.75	0	21.27	242	0	40	570	499.2488	61.27
931	69.75	315	384.75	0		242	10		570	500.2488	
932	69.75	315	384.75	0		243	0		571	500.2488	
933	69.75	316	384.75	0		243	10		571	501.2488	
934	69.75	316	385.75	10		244	0		572	501.2488	
935	69.75	316	385.75	0		244	10		572	502.2488	
936	69.75	316	385.75	0		245	0		573	502.2488	
937	69.75	316	385.75	0		245	10		573	503.2488	
938	69.75	316	385.75	0		245	0		574	503.2488	
939	69.75	317	385.75	0		246	0		574	504.2488	
940	69.75	317	386.75	10	20	246	10	50	575	504.2488	70
941	69.75	317	386.75	0		246	0		575	505.2488	
942	69.75	317	386.75	0		247	0		576	505.2488	
943	69.75	317	386.75	0		247	10		576	506.2488	
944	69.75	317	386.75	0		248	0		577	506.2488	
945	69.75	317	386.75	0		248	10		577	507.2488	
946	69.75	318	386.75	0		248	0		578	507.2488	
947	70.28	317	387.75	10		248	0		578	508.2488	
948	70.28	318	387.28	-4.666		249	0		579	507.7154	
949	70.28	318	388.28	10		249	10		579	508.7154	
950	70.28	318	388.28	0	15.334	250	0	30	580	508.7154	45.334
951	70.28	318	388.28	0		250	10		581	509.7154	
952	70.28	319	388.28	0		250	0		581	510.7154	
953	70.28	319	389.28	10		250	0		582	510.7154	
954	70.28	319	389.28	0		250	0		583	511.7154	
955	70.28	319	389.28	0		251	0		583	512.7154	
956	70.28	319	389.28	0		251	10		584	512.7154	
957	70.28	320	389.28	0		251	0		584	513.7154	
958	70.28	320	390.28	10		251	0		585	513.7154	
959	70.28	320	390.28	0		251	0		585	514.7154	
960	70.28	321	390.28	0	20	251	0	20	586	514.7154	40
961	70.28	321	391.28	10		251	0		586	515.7154	
962	70.28	321	391.28	0		251	0		587	515.7154	
963	70.28	322	391.28	0		252	0		588	516.7154	
964	70.28	322	392.28	10		252	10		588	517.7154	
965	70.28	322	392.28	0		252	0		589	517.7154	
966	70.28	323	392.28	0		252	0		589	518.7154	
967	70.28	323	393.28	10		252	0		590	518.7154	
968	70.28	323	393.28	0		252	0		591	519.7154	
969	70.28	324	393.28	0		252	0		591	520.7154	
970	70.28	324	394.28	10	40	252	0	10	592	520.7154	50
971	70.28	325	394.28	0		252	0		593	521.7154	

972	70.28	325	395.28	10		252	0		593	522.7154		C-102
973	70.28	326	395.28	0		252	0		594	522.7154		
974	70.28	326	396.28	10		253	0		595	523.7154		
975	70.28	326	396.28	0		253	10		595	524.7154		
976	70.28	327	396.28	0		253	0		596	524.7154		
977	70.28	327	397.28	10		253	0		596	525.7154		
978	70.28	328	397.28	0		253	0		597	525.7154		
979	70.28	328	398.28	10		253	0		598	526.7154		
980	70.28	329	398.28	0	40	253	0	10	598	527.7154	50	
981	70.28	329	399.28	10		253	0		599	527.7154		
982	70.28	330	399.28	0		253	0		599	528.7154		
983	70.28	330	400.28	10		253	0		600	528.7154		
984	70.28	330	400.28	0		253	0		601	529.7154		
985	70.28	331	400.28	0		253	0		601	530.7154		
986	70.28	331	401.28	10		253	0		602	530.7154		
987	70.28	332	401.28	0		253	0		602	531.7154		
988	70.28	332	402.28	10		253	0		603	531.7154		
989	70.28	333	402.28	0		253	0		604	532.7154		
990	70.28	333	403.28	10	50	253	0	0	604	533.7154	50	
991	70.28	333	403.28	0		253	0		605	533.7154		
992	70.28	334	403.28	0		253	0		605	534.7154		
993	70.28	334	404.28	10		253	0		606	534.7154		
994	70.28	335	404.28	0		253	0		606	535.7154		
995	70.36	335	405.28	10		253	0		607	535.7154		
996	70.36	335	405.36	0.8		253	0		608	536.6354		
997	70.36	335	405.36	0		253	0		608	537.6354		
998	70.36	336	405.36	0		253	0		609	537.6354		
999	70.54	336	406.36	10		253	0		609	538.6354		
1000	70.54	336	406.54	1.78	32.58	253	0	0	610	538.4574	32.58	
1001	70.54	336	406.54	0		253	0		610	539.4574		
1002	70.54	337	406.54	0		253	0		611	539.4574		
1003	70.54	337	407.54	10		253	0		611	540.4574		
1004	70.54	337	407.54	0		253	0		612	540.4574		
1005	70.54	338	407.54	0		253	0		612	541.4574		
1006	70.54	338	408.54	10		253	0		613	541.4574		
1007	70.54	339	408.54	0		253	0		613	542.4574		
1008	70.54	339	409.54	10		253	0		614	542.4574		
1009	70.54	339	409.54	0		253	0		614	543.4574		
1010	70.54	340	409.54	0	30	253	0	0	615	543.4574	30	
1011	70.54	340	410.54	10		253	0		616	544.4574		
1012	70.54	340	410.54	0		253	0		616	545.4574		
1013	70.54	340	410.54	0		253	0		617	545.4574		
1014	70.54	340	410.54	0		253	0		617	546.4574		
1015	70.54	341	410.54	0		253	0		618	546.4574		
1016	70.54	341	411.54	10		253	0		618	547.4574		
1017	70.75	341	411.54	0		253	0		619	547.4574		
1018	70.75	341	411.75	2.032		253	0		619	548.2542		
1019	70.75	341	411.75	0		253	0		619	548.2542		
1020	70.75	341	411.75	0	22.032	253	0	0	620	548.2542	22.032	
1021	70.75	341	411.75	0		253	0		620	549.2542		
1022	70.75	342	411.75	0		253	0		621	549.2542		

end

SCSMatP162 **ET=306.92 [75T,232E] Increase= 178.2 [138.5%]**

Time	CumP'	sum(vTop)	Cumm E	Daily E	10day E	sum(vRoc	Daily T	10day T	sum(vBot)	Cumm Dis	10day ET
[day]	[cm]	[L]	[cm]	[mm/day]	[mm/10d]	[L]	[mm]	[mm/10d]	[L]	[cm]	[mm/10d]
650	33.63	349	382.63	10	30	151	0	0	533	499.3704	30
651	33.63	349	382.63	0		151	0		534	499.3704	
652	33.83	349	382.63	0		151	0		534	500.3704	
653	33.83	349	382.83	2.032		151	0		534	500.1672	

654	33.83	349	382.83	0		151	0		534	500.1672	C-103
655	33.83	350	382.83	0		151	0		534	500.1672	
656	33.83	350	383.83	10		151	0		535	500.1672	
657	33.83	350	383.83	0		151	0		535	501.1672	
658	33.83	351	383.83	0		151	0		535	501.1672	
659	33.83	351	384.83	10		151	0		535	501.1672	
660	33.83	351	384.83	0	22.032	151	0	0	535	501.1672	22.032
661	33.83	351	384.83	0		151	0		536	501.1672	
662	33.83	352	384.83	0		151	0		536	502.1672	
663	33.83	352	385.83	10		151	0		536	502.1672	
664	33.83	353	385.83	0		151	0		536	502.1672	
665	33.83	353	386.83	10		151	0		537	502.1672	
666	33.83	353	386.83	0		151	0		537	503.1672	
667	33.83	354	386.83	0		151	0		537	503.1672	
668	33.83	354	387.83	10		151	0		537	503.1672	
669	33.83	354	387.83	0		151	0		538	503.1672	
670	33.83	355	387.83	0	30	151	0	0	538	504.1672	30
671	33.83	355	388.83	10		151	0		538	504.1672	
672	33.83	356	388.83	0		151	0		539	504.1672	
673	33.83	356	389.83	10		151	0		539	505.1672	
674	33.83	356	389.83	0		151	0		539	505.1672	
675	33.83	357	389.83	0		151	0		540	505.1672	
676	33.83	357	390.83	10		151	0		540	506.1672	
677	33.83	358	390.83	0		151	0		541	506.1672	
678	33.83	358	391.83	10		151	0		541	507.1672	
679	33.83	359	391.83	0		151	0		541	507.1672	
680	33.83	359	392.83	10	50	151	0	0	542	507.1672	50
681	33.83	360	392.83	0		151	0		542	508.1672	
682	33.83	360	393.83	10		151	0		543	508.1672	
683	33.83	361	393.83	0		151	0		543	509.1672	
684	33.83	361	394.83	10		151	0		544	509.1672	
685	33.83	362	394.83	0		151	0		544	510.1672	
686	33.83	362	395.83	10		151	0		544	510.1672	
687	33.83	362	395.83	0		151	0		545	510.1672	
688	33.83	363	395.83	0		151	0		545	511.1672	
689	33.83	363	396.83	10		151	0		546	511.1672	
690	33.83	363	396.83	0	40	151	0	0	546	512.1672	40
691	33.83	364	396.83	0		151	0		546	512.1672	
692	33.83	364	397.83	10		151	0		547	512.1672	
693	33.83	365	397.83	0		151	0		547	513.1672	
694	33.83	365	398.83	10		151	0		548	513.1672	
695	33.83	366	398.83	0		151	0		548	514.1672	
696	33.83	366	399.83	10		151	0		549	514.1672	
697	33.83	367	399.83	0		151	0		549	515.1672	
698	33.83	368	400.83	10		151	0		549	515.1672	
699	33.83	368	401.83	10		151	0		550	515.1672	
700	33.83	368	401.83	0	50	151	0	0	550	516.1672	50
701	33.83	369	401.83	0		151	0		551	516.1672	
702	33.83	370	402.83	10		151	0		551	517.1672	
703	33.83	370	403.83	10		151	0		552	517.1672	
704	33.83	371	403.83	0		151	0		552	518.1672	
705	33.83	371	404.83	10		151	0		553	518.1672	
706	33.83	372	404.83	0		151	0		553	519.1672	
707	33.83	373	405.83	10		151	0		554	519.1672	
708	33.83	373	406.83	10		151	0		554	520.1672	
709	33.83	374	406.83	0		151	0		555	520.1672	
710	33.83	374	407.83	10	60	151	0	0	555	521.1672	60
711	33.83	375	407.83	0		151	0		556	521.1672	
712	33.83	376	408.83	10		151	0		557	522.1672	
713	33.83	376	409.83	10		151	0		557	523.1672	
714	33.83	377	409.83	0		151	0		558	523.1672	
715	33.83	377	410.83	10		151	0		558	524.1672	
716	33.83	378	410.83	0		151	0		559	524.1672	
717	33.83	379	411.83	10		151	0		559	525.1672	
718	33.83	379	412.83	10		151	0		560	525.1672	

719	33.83	380	412.83	0		151	0		561	526.1672	
720	33.83	381	413.83	10	60	151	0	0	561	527.1672	60
721	33.83	381	414.83	10		151	0		562	527.1672	
722	33.83	382	414.83	0		151	0		562	528.1672	
723	33.83	383	415.83	10		151	0		563	528.1672	
724	33.83	383	416.83	10		151	0		563	529.1672	
725	33.83	384	416.83	0		151	0		564	529.1672	
726	33.83	385	417.83	10		151	0		565	530.1672	
727	33.83	386	418.83	10		151	0		565	531.1672	
728	33.83	386	419.83	10		151	0		566	531.1672	
729	33.83	387	419.83	0		151	0		567	532.1672	
730	33.83	387	420.83	10	70	151	0	0	567	533.1672	70
731	33.83	388	420.83	0		151	0		568	533.1672	
732	33.83	389	421.83	10		151	0		568	534.1672	
733	34.44	388	422.83	10		151	0		569	534.1672	
734	34.54	388	422.44	-3.904		151	0		569	534.5576	
735	34.54	389	422.54	1.016		151	0		570	534.456	
736	34.54	390	423.54	10		151	0		571	535.456	
737	34.54	390	424.54	10		151	0		571	536.456	
738	34.54	391	424.54	0		151	0		572	536.456	
739	34.54	392	425.54	10		151	0		572	537.456	
740	34.54	393	426.54	10	57.112	151	0	0	573	537.456	57.112
741	34.54	393	427.54	10		151	0		573	538.456	
742	35.13	393	427.54	0		151	0		574	538.456	
743	35.15	394	428.13	5.842		151	0		575	538.8718	
744	35.15	395	429.15	10.254		151	0		575	539.8464	
745	35.15	395	430.15	10		151	0		576	539.8464	
746	35.15	396	430.15	0		151	0		576	540.8464	
747	35.15	397	431.15	10		151	0		577	540.8464	
748	35.15	398	432.15	10		151	0		578	541.8464	
749	35.15	399	433.15	10		151	0		578	542.8464	
750	35.15	399	434.15	10	76.096	151	0	0	579	542.8464	76.096
751	35.15	400	434.15	0		151	0		579	543.8464	
752	35.15	400	435.15	10		151	0		580	543.8464	
753	35.15	401	435.15	0		151	0		581	544.8464	
754	35.15	402	436.15	10		151	0		581	545.8464	
755	35.15	403	437.15	10		151	0		582	545.8464	
756	35.15	404	438.15	10		151	0		583	546.8464	
757	35.15	405	439.15	10		151	0		583	547.8464	
758	35.15	406	440.15	10		151	0		584	547.8464	
759	35.15	407	441.15	10		151	0		584	548.8464	
760	35.15	408	442.15	10	80	151	0	0	585	548.8464	80
761	35.15	409	443.15	10		151	0		586	549.8464	
762	35.15	409	444.15	10		151	0		586	550.8464	
763	35.15	410	444.15	0		151	0		587	550.8464	
764	35.15	411	445.15	10		151	0		588	551.8464	
765	35.15	412	446.15	10		152	0		588	552.8464	
766	35.15	413	447.15	10		152	10		589	552.8464	
767	35.15	414	448.15	10		152	0		590	553.8464	
768	35.15	415	449.15	10		152	0		590	554.8464	
769	35.15	416	450.15	10		152	0		591	554.8464	
770	35.15	417	451.15	10	90	152	0	10	592	555.8464	100
771	35.15	418	452.15	10		152	0		592	556.8464	
772	35.15	418	453.15	10		152	0		593	556.8464	
773	35.15	419	453.15	0		152	0		593	557.8464	
774	35.15	420	454.15	10		152	0		594	557.8464	
775	35.15	421	455.15	10		153	0		595	558.8464	
776	35.15	422	456.15	10		153	10		595	559.8464	
777	35.15	423	457.15	10		153	0		596	559.8464	
778	35.15	424	458.15	10		153	0		597	560.8464	
779	35.15	424	459.15	10		153	0		598	561.8464	
780	35.15	425	459.15	0	80	153	0	10	599	562.8464	90
781	35.15	426	460.15	10		153	0		599	563.8464	
782	35.15	427	461.15	10		154	0		600	563.8464	
783	38.55	425	462.15	10		154	10		601	564.8464	

784	38.55	426	463.55	14		154	0		602	562.4464	
785	38.55	427	464.55	10		154	0		603	563.4464	
786	38.55	428	465.55	10		154	0		604	564.4464	
787	38.55	429	466.55	10		154	0		605	565.4464	
788	38.55	429	467.55	10		154	0		605	566.4464	
789	38.55	430	467.55	0		155	0		606	566.4464	
790	38.55	432	468.55	10	94	155	10	20	607	567.4464	114
791	38.55	433	470.55	20		155	0		608	568.4464	
792	38.55	433	471.55	10		155	0		609	569.4464	
793	38.55	434	471.55	0		155	0		610	570.4464	
794	38.55	435	472.55	10		156	0		611	571.4464	
795	38.55	436	473.55	10		156	10		611	572.4464	
796	41.05	435	474.55	10		156	0		612	572.4464	
797	41.65	435	476.05	15		157	0		613	570.9464	
798	41.65	436	476.65	6		157	10		614	571.3464	
799	41.65	437	477.65	10		157	0		616	572.3464	
800	44.25	435	478.65	10	101	157	0	20	617	574.3464	121
801	44.25	436	479.25	6		158	0		618	572.7464	
802	44.25	437	480.25	10		158	10		619	573.7464	
803	44.25	438	481.25	10		158	0		620	574.7464	
804	44.25	439	482.25	10		159	0		621	575.7464	
805	44.25	439	483.25	10		159	10		623	576.7464	
806	44.25	440	483.25	0		159	0		624	578.7464	
807	44.25	441	484.25	10		160	0		625	579.7464	
808	46.25	440	485.25	10		160	10		626	580.7464	
809	46.25	441	486.25	10		161	0		628	579.7464	
810	46.25	442	487.25	10	86	161	10	40	629	581.7464	126
811	46.25	443	488.25	10		162	0		630	582.7464	
812	49.25	442	489.25	10		162	10		631	583.7464	
813	49.25	443	491.25	20		162	0		632	581.7464	
814	49.25	444	492.25	10		163	0		633	582.7464	
815	49.25	445	493.25	10		163	10		635	583.7464	
816	49.25	446	494.25	10		164	0		636	585.7464	
817	49.25	447	495.25	10		164	10		637	586.7464	
818	49.25	448	496.25	10		165	0		638	587.7464	
819	49.25	449	497.25	10		165	10		639	588.7464	
820	49.25	450	498.25	10	110	166	0	40	640	589.7464	150
821	49.25	451	499.25	10		166	10		641	590.7464	
822	49.25	452	500.25	10		167	0		642	591.7464	
823	49.25	453	501.25	10		167	10		643	592.7464	
824	51.65	451	502.25	10		167	0		644	593.7464	
825	52.45	451	502.65	4		168	0		645	592.3464	
826	52.45	452	503.45	8		168	10		646	592.5464	
827	52.45	453	504.45	10		169	0		647	593.5464	
828	52.45	454	505.45	10		169	10		648	594.5464	
829	52.45	455	506.45	10		169	0		649	595.5464	
830	52.45	456	507.45	10	92	170	0	40	650	596.5464	132
831	52.45	457	508.45	10		170	10		651	597.5464	
832	52.45	458	509.45	10		171	0		652	598.5464	
833	52.45	459	510.45	10		171	10		653	599.5464	
834	52.45	460	511.45	10		172	0		653	600.5464	
835	52.45	460	512.45	10		172	10		654	600.5464	
836	52.61	461	512.45	0		173	0		655	601.5464	
837	52.61	462	513.61	11.524		173	10		656	602.394	
838	52.61	463	514.61	10		174	0		657	603.394	
839	52.61	464	515.61	10		175	10		658	604.394	
840	52.61	465	516.61	10	91.524	175	10	60	659	605.394	151.524
841	52.61	465	517.61	10		176	0		659	606.394	
842	52.63	466	517.61	0		176	10		660	606.394	
843	52.68	466	518.63	10.254		177	0		661	607.3686	
844	52.73	467	518.68	0.508		177	10		662	608.3178	
845	52.73	467	519.73	10.508		178	0		663	609.267	
846	52.73	468	519.73	0		178	10		663	610.267	
847	53.27	468	520.73	10		179	0		664	610.267	
848	53.27	469	521.27	5.334		179	10		665	610.7336	

849	53.27	469	522.27	10		180	0		666	611.7336	
850	53.27	470	522.27	0	56.604	180	10	50	667	612.7336	106.604
851	53.27	470	523.27	10		181	0		668	613.7336	
852	53.27	470	523.27	0		181	10		668	614.7336	
853	53.27	471	523.27	0		181	0		669	614.7336	
854	53.29	471	524.27	10		182	0		670	615.7336	
855	53.32	472	524.29	0.254		182	10		671	616.7082	
856	56.12	470	525.32	10.254		183	0		672	617.6828	
857	56.12	471	526.12	8.034		183	10		673	615.8794	
858	56.12	471	527.12	10		184	0		674	616.8794	
859	56.12	472	527.12	0		184	10		674	617.8794	
860	56.12	473	528.12	10	58.542	185	0	40	675	617.8794	98.542
861	56.89	473	529.12	10		185	10		676	618.8794	
862	56.89	473	529.89	7.7		186	0		677	619.1094	
863	56.89	474	529.89	0		186	10		678	620.1094	
864	56.89	474	530.89	10		187	0		679	621.1094	
865	56.89	475	530.89	0		187	10		680	622.1094	
866	56.94	475	531.89	10		188	0		680	623.1094	
867	56.94	476	531.94	0.508		188	10		681	623.0586	
868	56.94	476	532.94	10		189	0		682	624.0586	
869	56.97	477	532.94	0		189	10		683	625.0586	
870	56.97	477	533.97	10.254	58.462	190	0	50	683	626.0332	108.462
871	56.97	477	533.97	0		190	10		684	626.0332	
872	57.25	478	533.97	0		191	0		685	627.0332	
873	57.32	478	535.25	12.794		191	10		686	627.7538	
874	57.81	478	535.32	0.762		191	0		687	628.6776	
875	58.8	478	535.81	4.826		192	0		688	629.195	
876	58.8	479	536.8	9.906		192	10		689	629.2044	
877	59.89	478	537.8	10		193	0		691	630.2044	
878	59.94	479	537.89	0.922		193	10		692	631.1122	
879	61.99	478	538.94	10.508		193	0		693	632.0614	
880	62.09	478	539.99	10.48	60.198	194	0	40	694	631.0134	100.198
881	63.13	477	540.09	1.016		194	10		696	631.9118	
882	63.13	478	540.13	0.4		195	0		697	632.8718	
883	63.15	479	541.13	10		195	10		698	633.8718	
884	63.15	480	542.15	10.254		196	0		699	634.8464	
885	63.15	481	543.15	10		196	10		700	635.8464	
886	63.15	482	544.15	10		197	0		702	636.8464	
887	63.15	483	545.15	10		197	10		703	638.8464	
888	63.74	483	546.15	10		198	0		704	639.8464	
889	63.89	484	546.74	5.842		198	10		705	640.2622	
890	63.89	485	547.89	11.524	79.036	199	0	50	706	641.1098	129.036
891	63.89	486	548.89	10		199	10		707	642.1098	
892	65.56	485	549.89	10		200	0		708	643.1098	
893	65.56	486	550.56	6.7		200	10		708	642.4398	
894	65.61	487	551.56	10		201	0		709	642.4398	
895	65.61	487	552.61	10.508		201	10		710	643.389	
896	65.61	488	552.61	0		202	0		711	644.389	
897	65.66	489	553.61	10		202	10		712	645.389	
898	65.66	490	554.66	10.508		203	0		713	646.3382	
899	65.66	491	555.66	10		203	10		714	647.3382	
900	65.66	492	556.66	10	87.716	204	0	50	715	648.3382	137.716
901	65.66	492	557.66	10		204	10		716	649.3382	
902	65.66	493	557.66	0		204	0		716	650.3382	
903	67.8	491	558.66	10		205	0		717	650.3382	
904	67.8	492	558.8	1.336		205	10		718	649.2046	
905	67.8	493	559.8	10		206	0		719	650.2046	
906	67.8	494	560.8	10		206	10		720	651.2046	
907	67.8	494	561.8	10		207	0		721	652.2046	
908	67.8	495	561.8	0		207	10		722	653.2046	
909	67.8	496	562.8	10		208	0		722	654.2046	
910	67.8	496	563.8	10	71.336	208	10	50	723	654.2046	121.336
911	67.8	497	563.8	0		209	0		724	655.2046	
912	67.8	498	564.8	10		209	10		725	656.2046	
913	68.38	497	565.8	10		209	0		726	657.2046	

914	68.38	498	565.38	-4.158		210	0		726	657.6204	
915	68.38	499	566.38	10		210	10		727	657.6204	
916	68.51	499	567.38	10		210	0		728	658.6204	
917	68.79	499	567.51	1.27		211	0		729	659.4934	
918	69.62	499	567.79	2.794		211	10		730	660.214	
919	69.62	499	568.62	8.382		211	0		731	660.3758	
920	69.62	500	568.62	0	48.288	212	0	30	732	661.3758	78.288
921	69.62	501	569.62	10		212	10		732	662.3758	
922	69.62	501	570.62	10		213	0		733	662.3758	
923	69.75	502	570.62	0		213	10		734	663.3758	
924	69.75	503	571.75	11.27		213	0		735	664.2488	
925	69.75	503	572.75	10		214	0		736	665.2488	
926	69.75	504	572.75	0		214	10		737	666.2488	
927	69.75	505	573.75	10		215	0		738	667.2488	
928	69.75	505	574.75	10		215	10		738	668.2488	
929	69.75	506	574.75	0		215	0		739	668.2488	
930	69.75	506	575.75	10	71.27	216	0	40	740	669.2488	111.27
931	69.75	507	575.75	0		216	10		741	670.2488	
932	69.75	507	576.75	10		217	0		742	671.2488	
933	69.75	508	576.75	0		217	10		742	672.2488	
934	69.75	508	577.75	10		217	0		743	672.2488	
935	69.75	509	577.75	0		218	0		744	673.2488	
936	69.75	509	578.75	10		218	10		745	674.2488	
937	69.75	510	578.75	0		218	0		745	675.2488	
938	69.75	510	579.75	10		219	0		746	675.2488	
939	69.75	511	579.75	0		219	10		747	676.2488	
940	69.75	511	580.75	10	50	219	0	40	748	677.2488	90
941	69.75	512	580.75	0		220	0		749	678.2488	
942	69.75	512	581.75	10		220	10		749	679.2488	
943	69.75	513	581.75	0		220	0		750	679.2488	
944	69.75	513	582.75	10		221	0		751	680.2488	
945	69.75	514	582.75	0		221	10		752	681.2488	
946	69.75	514	583.75	10		221	0		752	682.2488	
947	70.28	514	583.75	0		221	0		753	682.2488	
948	70.28	514	584.28	5.334		222	0		754	682.7154	
949	70.28	515	584.28	0		222	10		755	683.7154	
950	70.28	515	585.28	10	45.334	222	0	30	756	684.7154	75.334
951	70.28	516	585.28	0		222	0		757	685.7154	
952	70.28	516	586.28	10		223	0		757	686.7154	
953	70.28	517	586.28	0		223	10		758	686.7154	
954	70.28	518	587.28	10		223	0		759	687.7154	
955	70.28	518	588.28	10		223	0		760	688.7154	
956	70.28	519	588.28	0		223	0		761	689.7154	
957	70.28	519	589.28	10		223	0		762	690.7154	
958	70.28	520	589.28	0		223	0		763	691.7154	
959	70.28	521	590.28	10		224	0		763	692.7154	
960	70.28	521	591.28	10	60	224	10	20	764	692.7154	80
961	70.28	522	591.28	0		224	0		765	693.7154	
962	70.28	522	592.28	10		224	0		766	694.7154	
963	70.28	523	592.28	0		224	0		767	695.7154	
964	70.28	523	593.28	10		224	0		768	696.7154	
965	70.28	524	593.28	0		224	0		769	697.7154	
966	70.28	524	594.28	10		224	0		769	698.7154	
967	70.28	525	594.28	0		224	0		770	698.7154	
968	70.28	526	595.28	10		224	0		771	699.7154	
969	70.28	526	596.28	10		224	0		772	700.7154	
970	70.28	527	596.28	0	50	225	0	0	773	701.7154	50
971	70.28	527	597.28	10		225	10		774	702.7154	
972	70.28	528	597.28	0		225	0		775	703.7154	
973	70.28	528	598.28	10		225	0		776	704.7154	
974	70.28	529	598.28	0		225	0		777	705.7154	
975	70.28	530	599.28	10		225	0		777	706.7154	
976	70.28	530	600.28	10		225	0		778	706.7154	
977	70.28	531	600.28	0		225	0		779	707.7154	
978	70.28	531	601.28	10		225	0		780	708.7154	

979	70.28	532	601.28	0		225	0		781	709.7154	
980	70.28	532	602.28	10	60	225	0	10	782	710.7154	70
981	70.28	533	602.28	0		225	0		783	711.7154	
982	70.28	533	603.28	10		225	0		783	712.7154	
983	70.28	534	603.28	0		226	0		784	712.7154	
984	70.28	534	604.28	10		226	10		785	713.7154	
985	70.28	534	604.28	0		226	0		786	714.7154	
986	70.28	535	604.28	0		226	0		787	715.7154	
987	70.28	535	605.28	10		226	0		787	716.7154	
988	70.28	536	605.28	0		226	0		788	716.7154	
989	70.28	536	606.28	10		226	0		789	717.7154	
990	70.28	537	606.28	0	40	226	0	10	790	718.7154	50
991	70.28	537	607.28	10		226	0		790	719.7154	
992	70.28	537	607.28	0		226	0		791	719.7154	
993	70.28	538	607.28	0		226	0		792	720.7154	
994	70.28	538	608.28	10		226	0		793	721.7154	
995	70.36	538	608.28	0		226	0		793	722.7154	
996	70.36	539	608.36	0.8		226	0		794	722.6354	
997	70.36	539	609.36	10		226	0		795	723.6354	
998	70.36	539	609.36	0		226	0		795	724.6354	
999	70.54	539	609.36	0		226	0		796	724.6354	
1000	70.54	540	609.54	1.78	32.58	226	0	0	797	725.4574	32.58
1001	70.54	540	610.54	10		226	0		797	726.4574	
1002	70.54	540	610.54	0		226	0		798	726.4574	
1003	70.54	541	610.54	0		226	0		798	727.4574	
1004	70.54	541	611.54	10		226	0		799	727.4574	
1005	70.54	541	611.54	0		226	0		799	728.4574	
1006	70.54	542	611.54	0		226	0		800	728.4574	
1007	70.54	542	612.54	10		226	0		800	729.4574	
1008	70.54	542	612.54	0		226	0		801	729.4574	
1009	70.54	543	612.54	0		226	0		801	730.4574	
1010	70.54	543	613.54	10	40	226	0	0	802	730.4574	40
1011	70.54	543	613.54	0		226	0		802	731.4574	
1012	70.54	544	613.54	0		226	0		803	731.4574	
1013	70.54	544	614.54	10		226	0		803	732.4574	
1014	70.54	544	614.54	0		226	0		803	732.4574	
1015	70.54	544	614.54	0		226	0		804	732.4574	
1016	70.54	544	614.54	0		226	0		804	733.4574	
1017	70.75	544	614.54	0		226	0		804	733.4574	
1018	70.75	544	614.75	2.032		226	0		805	733.2542	
1019	70.75	545	614.75	0		226	0		805	734.2542	
1020	70.75	545	615.75	10	22.032	226	0	0	805	734.2542	22.032
1021	70.75	545	615.75	0		226	0		805	734.2542	
1022	70.75	545	615.75	0		226	0		806	734.2542	

end

SCSMatP182 **ET=318.92 [73T,246E] Increase= 190.2 [147.8%]**

Time	CumP	sum(vTop)	Cumm E	Daily E	10day E	sum(vRoc	Daily T	10day T	sum(vBot)	Cumm Dis	10day ET
[day]	[cm]	[L]	[cm]	[mm/day]	[mm/10d]	[L]	[mm]	[mm/10d]	[L]	[cm]	[mm/10d]
650	33.63	391	424.63	0	30	147	0	0	573	539.3704	30
651	33.63	392	424.63	0		147	0		573	539.3704	
652	33.83	391	425.63	10		147	0		574	539.3704	
653	33.83	392	424.83	-7.968		147	0		574	540.1672	
654	33.83	392	425.83	10		147	0		574	540.1672	
655	33.83	392	425.83	0		147	0		574	540.1672	
656	33.83	392	425.83	0		147	0		574	540.1672	
657	33.83	392	425.83	0		147	0		574	540.1672	
658	33.83	393	425.83	0		147	0		574	540.1672	
659	33.83	393	426.83	10		147	0		575	540.1672	
660	33.83	393	426.83	0	22.032	147	0	0	575	541.1672	22.032
661	33.83	394	426.83	0		147	0		575	541.1672	

662	33.83	394	427.83	10		147	0		576	541.1672	
663	33.83	394	427.83	0		147	0		576	542.1672	
664	33.83	395	427.83	0		147	0		576	542.1672	
665	33.83	395	428.83	10		147	0		576	542.1672	
666	33.83	395	428.83	0		147	0		577	542.1672	
667	33.83	396	428.83	0		147	0		577	543.1672	
668	33.83	396	429.83	10		147	0		577	543.1672	
669	33.83	397	429.83	0		147	0		578	543.1672	
670	33.83	397	430.83	10	40	147	0	0	578	544.1672	40
671	33.83	398	430.83	0		147	0		579	544.1672	
672	33.83	398	431.83	10		147	0		579	545.1672	
673	33.83	398	431.83	0		147	0		579	545.1672	
674	33.83	399	431.83	0		147	0		580	545.1672	
675	33.83	399	432.83	10		147	0		580	546.1672	
676	33.83	400	432.83	0		147	0		580	546.1672	
677	33.83	400	433.83	10		147	0		581	546.1672	
678	33.83	401	433.83	0		147	0		581	547.1672	
679	33.83	401	434.83	10		147	0		582	547.1672	
680	33.83	402	434.83	0	40	147	0	0	582	548.1672	40
681	33.83	402	435.83	10		147	0		583	548.1672	
682	33.83	403	435.83	0		147	0		583	549.1672	
683	33.83	403	436.83	10		147	0		584	549.1672	
684	33.83	404	436.83	0		147	0		584	550.1672	
685	33.83	404	437.83	10		147	0		585	550.1672	
686	33.83	404	437.83	0		147	0		585	551.1672	
687	33.83	404	437.83	0		147	0		585	551.1672	
688	33.83	405	437.83	0		147	0		586	551.1672	
689	33.83	405	438.83	10		147	0		586	552.1672	
690	33.83	406	438.83	0	40	147	0	0	587	552.1672	40
691	33.83	406	439.83	10		147	0		587	553.1672	
692	33.83	407	439.83	0		147	0		588	553.1672	
693	33.83	407	440.83	10		147	0		588	554.1672	
694	33.83	407	440.83	0		147	0		588	554.1672	
695	33.83	408	440.83	0		147	0		589	554.1672	
696	33.83	408	441.83	10		147	0		589	555.1672	
697	33.83	409	441.83	0		147	0		590	555.1672	
698	33.83	410	442.83	10		147	0		590	556.1672	
699	33.83	410	443.83	10		147	0		591	556.1672	
700	33.83	411	443.83	0	50	147	0	0	591	557.1672	50
701	33.83	411	444.83	10		147	0		592	557.1672	
702	33.83	412	444.83	0		147	0		592	558.1672	
703	33.83	413	445.83	10		147	0		593	558.1672	
704	33.83	413	446.83	10		147	0		593	559.1672	
705	33.83	413	446.83	0		147	0		594	559.1672	
706	33.83	414	446.83	0		147	0		594	560.1672	
707	33.83	415	447.83	10		147	0		595	560.1672	
708	33.83	415	448.83	10		147	0		595	561.1672	
709	33.83	416	448.83	0		147	0		596	561.1672	
710	33.83	417	449.83	10	60	147	0	0	596	562.1672	60
711	33.83	417	450.83	10		147	0		597	562.1672	
712	33.83	418	450.83	0		147	0		598	563.1672	
713	33.83	418	451.83	10		147	0		598	564.1672	
714	33.83	419	451.83	0		147	0		599	564.1672	
715	33.83	419	452.83	10		147	0		599	565.1672	
716	33.83	420	452.83	0		147	0		600	565.1672	
717	33.83	421	453.83	10		147	0		601	566.1672	
718	33.83	422	454.83	10		147	0		601	567.1672	
719	33.83	422	455.83	10		147	0		602	567.1672	
720	33.83	423	455.83	0	60	147	0	0	602	568.1672	60
721	33.83	424	456.83	10		147	0		603	568.1672	
722	33.83	424	457.83	10		147	0		604	569.1672	
723	33.83	425	457.83	0		147	0		604	570.1672	
724	33.83	426	458.83	10		147	0		605	570.1672	
725	33.83	426	459.83	10		147	0		606	571.1672	
726	33.83	427	459.83	0		147	0		606	572.1672	

727	33.83	428	460.83	10		147	0		607	572.1672	
728	33.83	428	461.83	10		147	0		607	573.1672	
729	33.83	429	461.83	0		147	0		608	573.1672	
730	33.83	430	462.83	10	70	147	0	0	609	574.1672	70
731	33.83	430	463.83	10		147	0		609	575.1672	
732	33.83	431	463.83	0		147	0		610	575.1672	
733	34.44	431	464.83	10		147	0		611	576.1672	
734	34.54	431	465.44	6.096		147	0		611	576.5576	
735	34.54	431	465.54	1.016		147	0		612	576.456	
736	34.54	432	465.54	0		147	0		612	577.456	
737	34.54	433	466.54	10		147	0		613	577.456	
738	34.54	433	467.54	10		147	0		613	578.456	
739	34.54	434	467.54	0		147	0		614	578.456	
740	34.54	435	468.54	10	57.112	147	0	0	614	579.456	57.112
741	34.54	436	469.54	10		147	0		615	579.456	
742	35.13	436	470.54	10		147	0		616	580.456	
743	35.15	436	471.13	5.842		147	0		616	580.8718	
744	35.15	437	471.15	0.254		147	0		617	580.8464	
745	35.15	438	472.15	10		147	0		617	581.8464	
746	35.15	439	473.15	10		147	0		618	581.8464	
747	35.15	440	474.15	10		147	0		619	582.8464	
748	35.15	441	475.15	10		147	0		619	583.8464	
749	35.15	441	476.15	10		147	0		620	583.8464	
750	35.15	441	476.15	0	76.096	147	0	0	620	584.8464	76.096
751	35.15	442	476.15	0		147	0		621	584.8464	
752	35.15	443	477.15	10		147	0		622	585.8464	
753	35.15	443	478.15	10		148	0		622	586.8464	
754	35.15	444	478.15	0		148	10		623	586.8464	
755	35.15	445	479.15	10		148	0		624	587.8464	
756	35.15	446	480.15	10		148	0		624	588.8464	
757	35.15	447	481.15	10		148	0		625	588.8464	
758	35.15	448	482.15	10		148	0		626	589.8464	
759	35.15	449	483.15	10		148	0		626	590.8464	
760	35.15	450	484.15	10	80	148	0	10	627	590.8464	90
761	35.15	451	485.15	10		148	0		628	591.8464	
762	35.15	452	486.15	10		148	0		629	592.8464	
763	35.15	452	487.15	10		148	0		629	593.8464	
764	35.15	453	487.15	0		148	0		630	593.8464	
765	35.15	454	488.15	10		148	0		631	594.8464	
766	35.15	455	489.15	10		148	0		631	595.8464	
767	35.15	456	490.15	10		149	0		632	595.8464	
768	35.15	457	491.15	10		149	10		633	596.8464	
769	35.15	458	492.15	10		149	0		634	597.8464	
770	35.15	460	493.15	10	90	149	0	10	634	598.8464	100
771	35.15	460	495.15	20		149	0		635	598.8464	
772	35.15	461	495.15	0		149	0		636	599.8464	
773	35.15	462	496.15	10		149	0		636	600.8464	
774	35.15	463	497.15	10		149	0		637	600.8464	
775	35.15	463	498.15	10		149	0		638	601.8464	
776	35.15	464	498.15	0		150	0		638	602.8464	
777	35.15	465	499.15	10		150	10		639	602.8464	
778	35.15	466	500.15	10		150	0		640	603.8464	
779	35.15	467	501.15	10		150	0		641	604.8464	
780	35.15	468	502.15	10	90	150	0	10	642	605.8464	100
781	35.15	469	503.15	10		150	0		643	606.8464	
782	35.15	470	504.15	10		150	0		644	607.8464	
783	38.55	467	505.15	10		150	0		645	608.8464	
784	38.55	468	505.55	4		151	0		645	606.4464	
785	38.55	469	506.55	10		151	10		646	606.4464	
786	38.55	470	507.55	10		151	0		647	607.4464	
787	38.55	471	508.55	10		151	0		648	608.4464	
788	38.55	472	509.55	10		151	0		649	609.4464	
789	38.55	473	510.55	10		151	0		650	610.4464	
790	38.55	474	511.55	10	94	152	0	10	651	611.4464	104
791	38.55	475	512.55	10		152	10		652	612.4464	

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792	38.55	476	513.55	10		152	0		653	613.4464	
793	38.55	478	514.55	10		152	0		654	614.4464	
794	38.55	479	516.55	20		152	0		655	615.4464	
795	38.55	480	517.55	10		153	0		656	616.4464	
796	41.05	478	518.55	10		153	10		657	617.4464	
797	41.65	479	519.05	5		153	0		658	615.9464	
798	41.65	480	520.65	16		154	0		659	616.3464	
799	41.65	481	521.65	10		154	10		660	617.3464	
800	44.25	479	522.65	10	111	154	0	30	661	618.3464	141
801	44.25	480	523.25	6		154	0		662	616.7464	
802	44.25	481	524.25	10		155	0		663	617.7464	
803	44.25	481	525.25	10		155	10		664	618.7464	
804	44.25	482	525.25	0		156	0		666	619.7464	
805	44.25	483	526.25	10		156	10		667	621.7464	
806	44.25	484	527.25	10		156	0		668	622.7464	
807	44.25	485	528.25	10		156	0		669	623.7464	
808	46.25	484	529.25	10		157	0		670	624.7464	
809	46.25	485	530.25	10		157	10		671	623.7464	
810	46.25	486	531.25	10	86	158	0	30	672	624.7464	116
811	46.25	487	532.25	10		158	10		673	625.7464	
812	49.25	485	533.25	10		159	0		674	626.7464	
813	49.25	486	534.25	10		159	10		675	624.7464	
814	49.25	487	535.25	10		159	0		676	625.7464	
815	49.25	488	536.25	10		160	0		677	626.7464	
816	49.25	490	537.25	10		160	10		679	627.7464	
817	49.25	491	539.25	20		161	0		680	629.7464	
818	49.25	492	540.25	10		161	10		681	630.7464	
819	49.25	493	541.25	10		162	0		682	631.7464	
820	49.25	494	542.25	10	110	162	10	50	683	632.7464	160
821	49.25	495	543.25	10		163	0		684	633.7464	
822	49.25	496	544.25	10		163	10		685	634.7464	
823	49.25	497	545.25	10		164	0		686	635.7464	
824	51.65	495	546.25	10		164	10		687	636.7464	
825	52.45	495	546.65	4		164	0		688	635.3464	
826	52.45	496	547.45	8		165	0		689	635.5464	
827	52.45	497	548.45	10		165	10		690	636.5464	
828	52.45	497	549.45	10		165	0		691	637.5464	
829	52.45	498	549.45	0		166	0		692	638.5464	
830	52.45	499	550.45	10	82	166	10	40	693	639.5464	122
831	52.45	500	551.45	10		167	0		694	640.5464	
832	52.45	501	552.45	10		167	10		695	641.5464	
833	52.45	502	553.45	10		168	0		696	642.5464	
834	52.45	503	554.45	10		168	10		697	643.5464	
835	52.45	504	555.45	10		169	0		698	644.5464	
836	52.61	505	556.45	10		169	10		699	645.5464	
837	52.61	506	557.61	11.524		170	0		700	646.394	
838	52.61	507	558.61	10		170	10		701	647.394	
839	52.61	509	559.61	10		171	0		702	648.394	
840	52.61	510	561.61	20	111.524	171	10	50	703	649.394	161.524
841	52.61	511	562.61	10		172	0		704	650.394	
842	52.63	511	563.61	10		172	10		704	651.394	
843	52.68	512	563.63	0.254		173	0		705	651.3686	
844	52.73	513	564.68	10.508		173	10		706	652.3178	
845	52.73	514	565.73	10.508		174	0		707	653.267	
846	52.73	515	566.73	10		174	10		708	654.267	
847	53.27	515	567.73	10		175	0		709	655.267	
848	53.27	516	568.27	5.334		175	10		710	655.7336	
849	53.27	516	569.27	10		176	0		711	656.7336	
850	53.27	517	569.27	0	76.604	176	10	50	712	657.7336	126.604
851	53.27	518	570.27	10		177	0		713	658.7336	
852	53.27	518	571.27	10		177	10		714	659.7336	
853	53.27	519	571.27	0		177	0		715	660.7336	
854	53.29	519	572.27	10		178	0		716	661.7336	
855	53.32	520	572.29	0.254		178	10		717	662.7082	
856	56.12	518	573.32	10.254		179	0		718	663.6828	

857	56.12	519	574.12	8.034		179	10		719	661.8794	C-111
858	56.12	520	575.12	10		180	0		720	662.8794	
859	56.12	520	576.12	10		180	10		721	663.8794	
860	56.12	521	576.12	0	68.542	181	0	40	722	664.8794	108.542
861	56.89	521	577.12	10		181	10		723	665.8794	
862	56.89	522	577.89	7.7		182	0		724	666.1094	
863	56.89	523	578.89	10		182	10		725	667.1094	
864	56.89	524	579.89	10		183	0		726	668.1094	
865	56.89	524	580.89	10		183	10		727	669.1094	
866	56.94	525	580.89	0		184	0		727	670.1094	
867	56.94	526	581.94	10.508		184	10		728	670.0586	
868	56.94	526	582.94	10		185	0		729	671.0586	
869	56.97	527	582.94	0		185	10		730	672.0586	
870	56.97	527	583.97	10.254	78.462	186	0	50	731	673.0332	128.462
871	56.97	528	583.97	0		186	10		732	674.0332	
872	57.25	528	584.97	10		186	0		733	675.0332	
873	57.32	528	585.25	2.794		187	0		734	675.7538	
874	57.81	529	585.32	0.762		187	10		735	676.6776	
875	58.8	528	586.81	14.826		187	0		736	677.195	
876	58.8	529	586.8	-0.094		188	0		737	677.2044	
877	59.89	529	587.8	10		188	10		739	678.2044	
878	59.94	530	588.89	10.922		189	0		740	679.1122	
879	61.99	528	589.94	10.508		189	10		741	680.0614	
880	62.09	529	589.99	0.48	60.198	189	0	40	742	679.0134	100.198
881	63.13	528	591.09	11.016		190	0		744	679.9118	
882	63.13	529	591.13	0.4		191	10		745	680.8718	
883	63.15	530	592.13	10		191	10		746	681.8718	
884	63.15	531	593.15	10.254		191	0		747	682.8464	
885	63.15	532	594.15	10		192	0		748	683.8464	
886	63.15	533	595.15	10		193	10		750	684.8464	
887	63.15	533	596.15	10		193	10		751	686.8464	
888	63.74	534	596.15	0		193	0		752	687.8464	
889	63.89	534	597.74	15.842		194	0		753	688.2622	
890	63.89	535	597.89	1.524	79.036	194	10	50	754	689.1098	129.036
891	63.89	536	598.89	10		195	0		755	690.1098	
892	65.56	536	599.89	10		195	10		756	691.1098	
893	65.56	537	601.56	16.7		196	0		757	690.4398	
894	65.61	537	602.56	10		196	10		758	691.4398	
895	65.61	538	602.61	0.508		197	0		759	692.389	
896	65.61	539	603.61	10		197	10		760	693.389	
897	65.66	540	604.61	10		198	0		761	694.389	
898	65.66	541	605.66	10.508		198	10		762	695.3382	
899	65.66	541	606.66	10		199	0		763	696.3382	
900	65.66	542	606.66	0	87.716	199	10	50	764	697.3382	137.716
901	65.66	543	607.66	10		200	0		765	698.3382	
902	65.66	544	608.66	10		200	10		766	699.3382	
903	67.8	542	609.66	10		200	0		767	700.3382	
904	67.8	543	609.8	1.336		201	0		768	699.2046	
905	67.8	544	610.8	10		201	10		769	700.2046	
906	67.8	544	611.8	10		202	0		770	701.2046	
907	67.8	545	611.8	0		202	10		771	702.2046	
908	67.8	546	612.8	10		203	0		772	703.2046	
909	67.8	546	613.8	10		203	10		773	704.2046	
910	67.8	547	613.8	0	71.336	203	0	40	774	705.2046	111.336
911	67.8	548	614.8	10		204	0		774	706.2046	
912	67.8	549	615.8	10		204	10		775	706.2046	
913	68.38	549	616.8	10		205	0		776	707.2046	
914	68.38	549	617.38	5.842		205	10		777	707.6204	
915	68.38	550	617.38	0		205	0		778	708.6204	
916	68.51	550	618.38	10		206	0		779	709.6204	
917	68.79	550	618.51	1.27		206	10		780	710.4934	
918	69.62	550	618.79	2.794		206	0		781	711.214	
919	69.62	551	619.62	8.382		207	0		782	711.3758	
920	69.62	551	620.62	10	68.288	207	10	40	783	712.3758	108.288
921	69.62	552	620.62	0		207	0		784	713.3758	

922	69.62	553	621.62	10		208	0		784	714.3758	
923	69.75	553	622.62	10		208	10		785	714.3758	
924	69.75	554	622.75	1.27		208	0		786	715.2488	
925	69.75	555	623.75	10		209	0		787	716.2488	
926	69.75	555	624.75	10		209	10		788	717.2488	
927	69.75	556	624.75	0		210	0		789	718.2488	
928	69.75	557	625.75	10		210	10		790	719.2488	
929	69.75	558	626.75	10		211	0		791	720.2488	
930	69.75	558	627.75	10	71.27	211	10	40	792	721.2488	111.27
931	69.75	559	627.75	0		211	0		793	722.2488	
932	69.75	560	628.75	10		212	0		794	723.2488	
933	69.75	561	629.75	10		212	10		794	724.2488	
934	69.75	561	630.75	10		212	0		795	724.2488	
935	69.75	562	630.75	0		213	0		796	725.2488	
936	69.75	563	631.75	10		213	10		797	726.2488	
937	69.75	564	632.75	10		213	0		798	727.2488	
938	69.75	564	633.75	10		214	0		799	728.2488	
939	69.75	565	633.75	0		214	10		800	729.2488	
940	69.75	566	634.75	10	70	214	0	30	801	730.2488	100
941	69.75	566	635.75	10		215	0		801	731.2488	
942	69.75	567	635.75	0		215	10		802	731.2488	
943	69.75	568	636.75	10		215	0		803	732.2488	
944	69.75	569	637.75	10		215	0		804	733.2488	
945	69.75	569	638.75	10		216	0		805	734.2488	
946	69.75	570	638.75	0		216	10		806	735.2488	
947	70.28	569	639.75	10		216	0		807	736.2488	
948	70.28	570	639.28	-4.666		217	0		808	736.7154	
949	70.28	570	640.28	10		217	10		808	737.7154	
950	70.28	571	640.28	0	55.334	217	0	30	809	737.7154	85.334
951	70.28	571	641.28	10		217	0		810	738.7154	
952	70.28	572	641.28	0		218	0		811	739.7154	
953	70.28	573	642.28	10		218	10		812	740.7154	
954	70.28	573	643.28	10		218	0		813	741.7154	
955	70.28	574	643.28	0		218	0		814	742.7154	
956	70.28	575	644.28	10		218	0		815	743.7154	
957	70.28	575	645.28	10		218	0		816	744.7154	
958	70.28	576	645.28	0		218	0		817	745.7154	
959	70.28	576	646.28	10		218	0		818	746.7154	
960	70.28	577	646.28	0	60	218	0	10	819	747.7154	70
961	70.28	577	647.28	10		219	0		820	748.7154	
962	70.28	578	647.28	0		219	10		821	749.7154	
963	70.28	579	648.28	10		219	0		822	750.7154	
964	70.28	579	649.28	10		219	0		823	751.7154	
965	70.28	580	649.28	0		219	0		824	752.7154	
966	70.28	580	650.28	10		219	0		825	753.7154	
967	70.28	581	650.28	0		219	0		826	754.7154	
968	70.28	581	651.28	10		219	0		827	755.7154	
969	70.28	582	651.28	0		219	0		827	756.7154	
970	70.28	582	652.28	10	60	219	0	10	828	756.7154	70
971	70.28	583	652.28	0		219	0		829	757.7154	
972	70.28	584	653.28	10		219	0		830	758.7154	
973	70.28	584	654.28	10		220	0		831	759.7154	
974	70.28	585	654.28	0		220	10		832	760.7154	
975	70.28	585	655.28	10		220	0		833	761.7154	
976	70.28	586	655.28	0		220	0		834	762.7154	
977	70.28	586	656.28	10		220	0		835	763.7154	
978	70.28	587	656.28	0		220	0		836	764.7154	
979	70.28	587	657.28	10		220	0		836	765.7154	
980	70.28	588	657.28	0	50	220	0	10	837	765.7154	60
981	70.28	588	658.28	10		220	0		838	766.7154	
982	70.28	589	658.28	0		220	0		839	767.7154	
983	70.28	589	659.28	10		220	0		840	768.7154	
984	70.28	590	659.28	0		220	0		841	769.7154	
985	70.28	590	660.28	10		220	0		841	770.7154	
986	70.28	590	660.28	0		220	0		842	770.7154	

987	70.28	591	660.28	0		220	0		843	771.7154	
988	70.28	591	661.28	10		220	0		844	772.7154	
989	70.28	592	661.28	0		220	0		844	773.7154	
990	70.28	592	662.28	10	50	220	0	0	845	773.7154	50
991	70.28	593	662.28	0		220	0		846	774.7154	
992	70.28	593	663.28	10		220	0		846	775.7154	
993	70.28	593	663.28	0		220	0		847	775.7154	
994	70.28	594	663.28	0		220	0		848	776.7154	
995	70.36	594	664.28	10		220	0		848	777.7154	
996	70.36	594	664.36	0.8		220	0		849	777.6354	
997	70.36	595	664.36	0		220	0		849	778.6354	
998	70.36	595	665.36	10		220	0		850	778.6354	
999	70.54	595	665.36	0		220	0		850	779.6354	
1000	70.54	595	665.54	1.78	32.58	220	0	0	851	779.4574	32.58
1001	70.54	596	665.54	0		220	0		851	780.4574	
1002	70.54	596	666.54	10		220	0		851	780.4574	
1003	70.54	596	666.54	0		220	0		852	780.4574	
1004	70.54	597	666.54	0		220	0		852	781.4574	
1005	70.54	597	667.54	10		220	0		852	781.4574	
1006	70.54	597	667.54	0		220	0		853	781.4574	
1007	70.54	598	667.54	0		220	0		853	782.4574	
1008	70.54	598	668.54	10		220	0		853	782.4574	
1009	70.54	599	668.54	0		220	0		854	782.4574	
1010	70.54	599	669.54	10	40	220	0	0	854	783.4574	40
1011	70.54	599	669.54	0		220	0		855	783.4574	
1012	70.54	599	669.54	0		220	0		855	784.4574	
1013	70.54	599	669.54	0		220	0		855	784.4574	
1014	70.54	599	669.54	0		220	0		855	784.4574	
1015	70.54	600	669.54	0		220	0		855	784.4574	
1016	70.54	600	670.54	10		220	0		856	784.4574	
1017	70.75	600	670.54	0		220	0		856	785.4574	
1018	70.75	600	670.75	2.032		220	0		856	785.2542	
1019	70.75	600	670.75	0		220	0		856	785.2542	
1020	70.75	600	670.75	0	22.032	220	0	0	856	785.2542	22.032
1021	70.75	601	670.75	0		220	0		856	785.2542	
1022	70.75	601	671.75	10		220	0		857	785.2542	

end

SCSMatM288 **ET=37.6371 [12.1T,25.5E] Increase= -91.082 [-70.8%]**

Time	CumP"	sum(vTop)	Cumm E	Daily E	10day E	sum(vRoc	Daily T	10day T	sum(vBot)	Cumm Dis	10day ET
[day]	[cm]	[L]	[cm]	[mm/day]	[mm/10d]	[L]	[mm]	[mm/10d]	[L]	[cm]	[mm/10d]
650	33.63	-0.145	33.485	0	0	40.1	0	0	-141	-174.63	0
651	33.63	-0.145	33.485	0		40.1	0		-141	-174.63	
652	33.83	-0.292	33.485	0		40.1	0		-142	-174.63	
653	33.83	-0.235	33.541	0.562		40.1	0		-143	-175.833	
654	33.83	-0.226	33.598	0.57		40.1	0		-144	-176.833	
655	33.83	-0.221	33.607	0.09		40.1	0		-144	-177.833	
656	33.83	-0.218	33.612	0.05		40.1	0		-145	-177.833	
657	33.83	-0.216	33.615	0.03		40.1	0		-146	-178.833	
658	33.83	-0.214	33.617	0.02		40.1	0		-147	-179.833	
659	33.83	-0.212	33.619	0.02		40.1	0		-147	-180.833	
660	33.83	-0.211	33.621	0.02	1.362	40.1	0	0	-147	-180.833	1.362
661	33.83	-0.21	33.622	0.01		40.1	0		-147	-180.833	
662	33.83	-0.209	33.623	0.01		40.1	0		-147	-180.833	
663	33.83	-0.208	33.624	0.01		40.1	0		-147	-180.833	
664	33.83	-0.207	33.625	0.01		40.1	0		-147	-180.833	
665	33.83	-0.206	33.626	0.01		40.1	0		-147	-180.833	
666	33.83	-0.205	33.627	0.01		40.1	0		-147	-180.833	
667	33.83	-0.205	33.628	0.01		40.1	0		-147	-180.833	
668	33.83	-0.204	33.628	0		40.1	0		-147	-180.833	

669	33.83	-0.203	33.629	0.01		40.1	0		-147	-180.833		C-114
670	33.83	-0.203	33.63	0.01	0.09	40.1	0	0	-147	-180.833	0.09	
671	33.83	-0.203	33.63	0		40.1	0		-147	-180.833		
672	33.83	-0.202	33.63	0		40.1	0		-146	-180.833		
673	33.83	-0.202	33.631	0.01		40.1	0		-146	-179.833		
674	33.83	-0.201	33.631	0		40.1	0		-146	-179.833		
675	33.83	-0.201	33.632	0.01		40.1	0		-146	-179.833		
676	33.83	-0.2	33.632	0		40.1	0		-146	-179.833		
677	33.83	-0.2	33.633	0.01		40.1	0		-146	-179.833		
678	33.83	-0.2	33.633	0		40.1	0		-145	-179.833		
679	33.83	-0.199	33.633	0		40.1	0		-145	-178.833		
680	33.83	-0.199	33.634	0.01	0.04	40.1	0	0	-145	-178.833	0.04	
681	33.83	-0.199	33.634	0		40.1	0		-145	-178.833		
682	33.83	-0.199	33.634	0		40.1	0		-146	-178.833		
683	33.83	-0.198	33.634	0		40.1	0		-146	-179.833		
684	33.83	-0.198	33.635	0.01		40.1	0		-146	-179.833		
685	33.83	-0.198	33.635	0		40.1	0		-146	-179.833		
686	33.83	-0.198	33.635	0		40.1	0		-146	-179.833		
687	33.83	-0.197	33.635	0		40.1	0		-146	-179.833		
688	33.83	-0.197	33.636	0.01		40.1	0		-146	-179.833		
689	33.83	-0.197	33.636	0		40.1	0		-146	-179.833		
690	33.83	-0.197	33.636	0	0.02	40.1	0	0	-145	-179.833	0.02	
691	33.83	-0.196	33.636	0		40.1	0		-145	-178.833		
692	33.83	-0.196	33.637	0.01		40.1	0		-145	-178.833		
693	33.83	-0.196	33.637	0		40.1	0		-146	-178.833		
694	33.83	-0.196	33.637	0		40.1	0		-146	-179.833		
695	33.83	-0.196	33.637	0		40.1	0		-146	-179.833		
696	33.83	-0.195	33.637	0		40.1	0		-146	-179.833		
697	33.83	-0.195	33.638	0.01		40.1	0		-146	-179.833		
698	33.83	-0.195	33.638	0		40.1	0		-146	-179.833		
699	33.83	-0.195	33.638	0		40.1	0		-146	-179.833		
700	33.83	-0.195	33.638	0	0.02	40.1	0	0	-146	-179.833	0.02	
701	33.83	-0.195	33.638	0		40.1	0		-145	-179.833		
702	33.83	-0.194	33.638	0		40.1	0		-145	-178.833		
703	33.83	-0.194	33.639	0.01		40.1	0		-145	-178.833		
704	33.83	-0.194	33.639	0		40.1	0		-145	-178.833		
705	33.83	-0.194	33.639	0		40.1	0		-145	-178.833		
706	33.83	-0.194	33.639	0		40.1	0		-145	-178.833		
707	33.83	-0.194	33.639	0		40.1	0		-145	-178.833		
708	33.83	-0.193	33.639	0		40.1	0		-144	-178.833		
709	33.83	-0.193	33.64	0.01		40.1	0		-144	-177.833		
710	33.83	-0.193	33.64	0	0.02	40.1	0	0	-144	-177.833	0.02	
711	33.83	-0.193	33.64	0		40.1	0		-144	-177.833		
712	33.83	-0.193	33.64	0		40.1	0		-144	-177.833		
713	33.83	-0.193	33.64	0		40.1	0		-144	-177.833		
714	33.83	-0.193	33.64	0		40.1	0		-144	-177.833		
715	33.83	-0.193	33.64	0		40.1	0		-144	-177.833		
716	33.83	-0.192	33.64	0		40.1	0		-144	-177.833		
717	33.83	-0.192	33.641	0.01		40.1	0		-144	-177.833		
718	33.83	-0.192	33.641	0		40.1	0		-144	-177.833		
719	33.83	-0.192	33.641	0		40.1	0		-144	-177.833		
720	33.83	-0.192	33.641	0	0.01	40.1	0	0	-144	-177.833	0.01	
721	33.83	-0.192	33.641	0		40.1	0		-144	-177.833		
722	33.83	-0.192	33.641	0		40.1	0		-144	-177.833		
723	33.83	-0.192	33.641	0		40.1	0		-144	-177.833		
724	33.83	-0.192	33.641	0		40.1	0		-144	-177.833		
725	33.83	-0.191	33.641	0		40.1	0		-144	-177.833		
726	33.83	-0.191	33.642	0.01		40.1	0		-144	-177.833		
727	33.83	-0.191	33.642	0		40.1	0		-144	-177.833		
728	33.83	-0.191	33.642	0		40.1	0		-144	-177.833		
729	33.83	-0.191	33.642	0		40.1	0		-144	-177.833		
730	33.83	-0.191	33.642	0	0.01	40.1	0	0	-144	-177.833	0.01	
731	33.83	-0.191	33.642	0		40.1	0		-144	-177.833		
732	33.83	-0.191	33.642	0		40.1	0		-144	-177.833		
733	34.44	-0.52	33.642	0		40.1	0		-144	-177.833		

734	34.54	-0.406	33.922	2.806		40.1	0		-144	-178.442	C-115
735	34.54	-0.38	34.138	2.156		40.1	0		-144	-178.544	
736	34.54	-0.366	34.164	0.26		40.1	0		-144	-178.544	
737	34.54	-0.356	34.178	0.14		40.1	0		-144	-178.544	
738	34.54	-0.349	34.188	0.1		40.1	0		-144	-178.544	
739	34.54	-0.344	34.195	0.07		40.1	0		-144	-178.544	
740	34.54	-0.339	34.2	0.05	5.582	40.1	0	0	-144	-178.544	5.582
741	34.54	-0.335	34.205	0.05		40.1	0		-144	-178.544	
742	35.13	-0.471	34.209	0.04		40.1	0		-144	-178.544	
743	35.15	-0.394	34.657	4.482		40.1	0		-144	-179.128	
744	35.15	-0.38	34.76	1.024		40.1	0		-144	-179.154	
745	35.15	-0.371	34.774	0.14		40.1	0		-144	-179.154	
746	35.15	-0.365	34.783	0.09		40.1	0		-146	-179.154	
747	35.15	-0.36	34.789	0.06		40.1	0		-144	-181.154	
748	35.15	-0.356	34.794	0.05		40.1	0		-144	-179.154	
749	35.15	-0.352	34.798	0.04		40.1	0		-145	-179.154	
750	35.15	-0.349	34.802	0.04	6.016	40.1	0	0	-145	-180.154	6.016
751	35.15	-0.346	34.805	0.03		40.1	0		-145	-180.154	
752	35.15	-0.344	34.808	0.03		40.1	0		-145	-180.154	
753	35.15	-0.342	34.81	0.02		40.1	0		-144	-180.154	
754	35.15	-0.34	34.812	0.02		40.1	0		-143	-179.154	
755	35.15	-0.34	34.814	0.02		40.1	0		-144	-178.154	
756	35.15	-0.339	34.814	0		40.1	0		-144	-179.154	
757	35.15	-0.339	34.815	0.01		40.2	0		-145	-179.154	
758	35.15	-0.339	34.815	0		40.2	1		-146	-180.154	
759	35.15	-0.339	34.815	0		40.2	0		-146	-181.154	
760	35.15	-0.339	34.815	0	0.13	40.2	0	1	-146	-181.154	1.13
761	35.15	-0.339	34.815	0		40.2	0		-147	-181.154	
762	35.15	-0.339	34.815	0		40.3	0		-147	-182.154	
763	35.15	-0.339	34.815	0		40.3	1		-147	-182.154	
764	35.15	-0.339	34.815	0		40.3	0		-147	-182.154	
765	35.15	-0.339	34.815	0		40.3	0		-147	-182.154	
766	35.15	-0.339	34.815	0		40.3	0		-147	-182.154	
767	35.15	-0.339	34.815	0		40.3	0		-147	-182.154	
768	35.15	-0.339	34.815	0		40.3	0		-148	-182.154	
769	35.15	-0.339	34.815	0		40.3	0		-149	-183.154	
770	35.15	-0.339	34.815	0	0	40.3	0	1	-150	-184.154	1
771	35.15	-0.339	34.815	0		40.3	0		-152	-185.154	
772	35.15	-0.339	34.815	0		40.3	0		-153	-187.154	
773	35.15	-0.339	34.815	0		40.3	0		-154	-188.154	
774	35.15	-0.339	34.815	0		40.3	0		-155	-189.154	
775	35.15	-0.339	34.815	0		40.3	0		-152	-190.154	
776	35.15	-0.339	34.815	0		40.3	0		-150	-187.154	
777	35.15	-0.339	34.815	0		40.3	0		-149	-185.154	
778	35.15	-0.339	34.815	0		40.3	0		-147	-184.154	
779	35.15	-0.339	34.815	0		40.3	0		-146	-182.154	
780	35.15	-0.339	34.815	0	0	40.3	0	0	-146	-181.154	0
781	35.15	-0.339	34.815	0		40.3	0		-146	-181.154	
782	35.15	-0.339	34.815	0		40.3	0		-145	-181.154	
783	38.55	-2.77	34.815	0		40.3	0		-144	-180.154	
784	38.55	-2.08	35.784	9.69		40.4	0		-143	-182.554	
785	38.55	-1.93	36.474	6.9		40.4	1		-142	-181.554	
786	38.55	-1.85	36.624	1.5		40.5	0		-141	-180.554	
787	38.55	-1.81	36.704	0.8		40.6	1		-142	-179.554	
788	38.55	-1.79	36.744	0.4		40.7	1		-142	-180.554	
789	38.55	-1.77	36.764	0.2		40.8	1		-143	-180.554	
790	38.55	-1.76	36.784	0.2	19.69	40.9	1	5	-143	-181.554	24.69
791	38.55	-1.75	36.794	0.1		41	1		-143	-181.554	
792	38.55	-1.75	36.804	0.1		41.1	1		-143	-181.554	
793	38.55	-1.75	36.804	0		41.2	1		-143	-181.554	
794	38.55	-1.75	36.804	0		41.3	1		-143	-181.554	
795	38.55	-1.75	36.804	0		41.4	1		-143	-181.554	
796	41.05	-3.04	36.804	0		41.6	1		-144	-181.554	
797	41.65	-2.67	38.014	12.1		41.7	2		-140	-185.054	
798	41.65	-2.59	38.984	9.7		41.8	1		-135	-181.654	

994	70.28	-11.5	58.785	0		52.2	0		-141	-211.285		
995	70.36	-11.5	58.785	0		52.2	0		-141	-211.285		
996	70.36	-11.5	58.865	0.8		52.2	0		-141	-211.365		
997	70.36	-11.5	58.865	0		52.2	0		-141	-211.365		
998	70.36	-11.5	58.865	0		52.2	0		-140	-211.365		
999	70.54	-11.5	58.865	0		52.2	0		-141	-210.365		
1000	70.54	-11.5	59.043	1.78	2.58	52.2	0	0	-141	-211.543	2.58	
1001	70.54	-11.5	59.043	0		52.2	0		-141	-211.543		
1002	70.54	-11.5	59.043	0		52.2	0		-141	-211.543		
1003	70.54	-11.5	59.043	0		52.2	0		-142	-211.543		
1004	70.54	-11.5	59.043	0		52.2	0		-142	-212.543		
1005	70.54	-11.5	59.043	0		52.2	0		-142	-212.543		
1006	70.54	-11.5	59.043	0		52.2	0		-142	-212.543		
1007	70.54	-11.5	59.043	0		52.2	0		-142	-212.543		
1008	70.54	-11.5	59.043	0		52.2	0		-142	-212.543		
1009	70.54	-11.5	59.043	0		52.2	0		-142	-212.543		
1010	70.54	-11.5	59.043	0	0	52.2	0	0	-141	-212.543	0	
1011	70.54	-11.5	59.043	0		52.2	0		-141	-211.543		
1012	70.54	-11.5	59.043	0		52.2	0		-141	-211.543		
1013	70.54	-11.5	59.043	0		52.2	0		-141	-211.543		
1014	70.54	-11.5	59.043	0		52.2	0		-141	-211.543		
1015	70.54	-11.5	59.043	0		52.2	0		-141	-211.543		
1016	70.54	-11.5	59.043	0		52.2	0		-141	-211.543		
1017	70.75	-11.7	59.043	0		52.2	0		-140	-211.543		
1018	70.75	-11.6	59.046	0.032		52.2	0		-141	-210.746		
1019	70.75	-11.6	59.146	1		52.2	0		-141	-211.746		
1020	70.75	-11.6	59.146	0	1.032	52.2	0	0	-140	-211.746	1.032	
1021	70.75	-11.6	59.146	0		52.2	0		-140	-210.746		
1022	70.75	-11.6	59.146	0		52.2	0		-140	-210.746		

end

SCSMatM488 **ET=37.6371 [12.1T,25.5E] Increase= -91.082 [-70.8%]**

Time	CumP	sum(vTop)	Cumm E	Daily E	10day E	sum(vRoc	Daily T	10day T	sum(vBot)	Cumm Dis	10day ET
[day]	[cm]	[L]	[cm]	[mm/day]	[mm/10d]	[L]	[mm]	[mm/10d]	[L]	[cm]	[mm/10d]
650	33.63	-0.145	33.485	0	0	40.1	0	0	-141	-174.63	0
651	33.63	-0.145	33.485	0		40.1	0		-141	-174.63	
652	33.83	-0.292	33.485	0		40.1	0		-142	-174.63	
653	33.83	-0.235	33.541	0.562		40.1	0		-143	-175.833	
654	33.83	-0.226	33.598	0.57		40.1	0		-144	-176.833	
655	33.83	-0.221	33.607	0.09		40.1	0		-144	-177.833	
656	33.83	-0.218	33.612	0.05		40.1	0		-145	-177.833	
657	33.83	-0.216	33.615	0.03		40.1	0		-146	-178.833	
658	33.83	-0.214	33.617	0.02		40.1	0		-147	-179.833	
659	33.83	-0.212	33.619	0.02		40.1	0		-147	-180.833	
660	33.83	-0.211	33.621	0.02	1.362	40.1	0	0	-147	-180.833	1.362
661	33.83	-0.21	33.622	0.01		40.1	0		-147	-180.833	
662	33.83	-0.209	33.623	0.01		40.1	0		-147	-180.833	
663	33.83	-0.208	33.624	0.01		40.1	0		-147	-180.833	
664	33.83	-0.207	33.625	0.01		40.1	0		-147	-180.833	
665	33.83	-0.206	33.626	0.01		40.1	0		-147	-180.833	
666	33.83	-0.205	33.627	0.01		40.1	0		-147	-180.833	
667	33.83	-0.205	33.628	0.01		40.1	0		-147	-180.833	
668	33.83	-0.204	33.628	0		40.1	0		-147	-180.833	
669	33.83	-0.203	33.629	0.01		40.1	0		-147	-180.833	
670	33.83	-0.203	33.63	0.01	0.09	40.1	0	0	-147	-180.833	0.09
671	33.83	-0.203	33.63	0		40.1	0		-147	-180.833	
672	33.83	-0.202	33.63	0		40.1	0		-146	-180.833	
673	33.83	-0.202	33.631	0.01		40.1	0		-146	-179.833	
674	33.83	-0.201	33.631	0		40.1	0		-146	-179.833	
675	33.83	-0.201	33.632	0.01		40.1	0		-146	-179.833	

676	33.83	-0.2	33.632	0		40.1	0		-146	-179.833	
677	33.83	-0.2	33.633	0.01		40.1	0		-146	-179.833	
678	33.83	-0.2	33.633	0		40.1	0		-145	-179.833	
679	33.83	-0.199	33.633	0		40.1	0		-145	-178.833	
680	33.83	-0.199	33.634	0.01	0.04	40.1	0	0	-145	-178.833	0.04
681	33.83	-0.199	33.634	0		40.1	0		-145	-178.833	
682	33.83	-0.199	33.634	0		40.1	0		-146	-178.833	
683	33.83	-0.198	33.634	0		40.1	0		-146	-179.833	
684	33.83	-0.198	33.635	0.01		40.1	0		-146	-179.833	
685	33.83	-0.198	33.635	0		40.1	0		-146	-179.833	
686	33.83	-0.198	33.635	0		40.1	0		-146	-179.833	
687	33.83	-0.197	33.635	0		40.1	0		-146	-179.833	
688	33.83	-0.197	33.636	0.01		40.1	0		-146	-179.833	
689	33.83	-0.197	33.636	0		40.1	0		-146	-179.833	
690	33.83	-0.197	33.636	0	0.02	40.1	0	0	-145	-179.833	0.02
691	33.83	-0.196	33.636	0		40.1	0		-145	-178.833	
692	33.83	-0.196	33.637	0.01		40.1	0		-145	-178.833	
693	33.83	-0.196	33.637	0		40.1	0		-146	-178.833	
694	33.83	-0.196	33.637	0		40.1	0		-146	-179.833	
695	33.83	-0.196	33.637	0		40.1	0		-146	-179.833	
696	33.83	-0.195	33.637	0		40.1	0		-146	-179.833	
697	33.83	-0.195	33.638	0.01		40.1	0		-146	-179.833	
698	33.83	-0.195	33.638	0		40.1	0		-146	-179.833	
699	33.83	-0.195	33.638	0		40.1	0		-146	-179.833	
700	33.83	-0.195	33.638	0	0.02	40.1	0	0	-146	-179.833	0.02
701	33.83	-0.195	33.638	0		40.1	0		-145	-179.833	
702	33.83	-0.194	33.638	0		40.1	0		-145	-178.833	
703	33.83	-0.194	33.639	0.01		40.1	0		-145	-178.833	
704	33.83	-0.194	33.639	0		40.1	0		-145	-178.833	
705	33.83	-0.194	33.639	0		40.1	0		-145	-178.833	
706	33.83	-0.194	33.639	0		40.1	0		-145	-178.833	
707	33.83	-0.194	33.639	0		40.1	0		-145	-178.833	
708	33.83	-0.193	33.639	0		40.1	0		-144	-178.833	
709	33.83	-0.193	33.64	0.01		40.1	0		-144	-177.833	
710	33.83	-0.193	33.64	0	0.02	40.1	0	0	-144	-177.833	0.02
711	33.83	-0.193	33.64	0		40.1	0		-144	-177.833	
712	33.83	-0.193	33.64	0		40.1	0		-144	-177.833	
713	33.83	-0.193	33.64	0		40.1	0		-144	-177.833	
714	33.83	-0.193	33.64	0		40.1	0		-144	-177.833	
715	33.83	-0.193	33.64	0		40.1	0		-144	-177.833	
716	33.83	-0.192	33.64	0		40.1	0		-144	-177.833	
717	33.83	-0.192	33.641	0.01		40.1	0		-144	-177.833	
718	33.83	-0.192	33.641	0		40.1	0		-144	-177.833	
719	33.83	-0.192	33.641	0		40.1	0		-144	-177.833	
720	33.83	-0.192	33.641	0	0.01	40.1	0	0	-144	-177.833	0.01
721	33.83	-0.192	33.641	0		40.1	0		-144	-177.833	
722	33.83	-0.192	33.641	0		40.1	0		-144	-177.833	
723	33.83	-0.192	33.641	0		40.1	0		-144	-177.833	
724	33.83	-0.192	33.641	0		40.1	0		-144	-177.833	
725	33.83	-0.191	33.641	0		40.1	0		-144	-177.833	
726	33.83	-0.191	33.642	0.01		40.1	0		-144	-177.833	
727	33.83	-0.191	33.642	0		40.1	0		-144	-177.833	
728	33.83	-0.191	33.642	0		40.1	0		-144	-177.833	
729	33.83	-0.191	33.642	0		40.1	0		-144	-177.833	
730	33.83	-0.191	33.642	0	0.01	40.1	0	0	-144	-177.833	0.01
731	33.83	-0.191	33.642	0		40.1	0		-144	-177.833	
732	33.83	-0.191	33.642	0		40.1	0		-144	-177.833	
733	34.44	-0.52	33.642	0		40.1	0		-144	-177.833	
734	34.54	-0.406	33.922	2.806		40.1	0		-144	-178.442	
735	34.54	-0.38	34.138	2.156		40.1	0		-144	-178.544	
736	34.54	-0.366	34.164	0.26		40.1	0		-144	-178.544	
737	34.54	-0.356	34.178	0.14		40.1	0		-144	-178.544	
738	34.54	-0.349	34.188	0.1		40.1	0		-144	-178.544	
739	34.54	-0.344	34.195	0.07		40.1	0		-144	-178.544	
740	34.54	-0.339	34.2	0.05	5.582	40.1	0	0	-144	-178.544	5.582

741	34.54	-0.335	34.205	0.05		40.1	0		-144	-178.544	C-121
742	35.13	-0.471	34.209	0.04		40.1	0		-144	-178.544	
743	35.15	-0.394	34.657	4.482		40.1	0		-144	-179.128	
744	35.15	-0.38	34.76	1.024		40.1	0		-144	-179.154	
745	35.15	-0.371	34.774	0.14		40.1	0		-144	-179.154	
746	35.15	-0.365	34.783	0.09		40.1	0		-146	-179.154	
747	35.15	-0.36	34.789	0.06		40.1	0		-144	-181.154	
748	35.15	-0.356	34.794	0.05		40.1	0		-144	-179.154	
749	35.15	-0.352	34.798	0.04		40.1	0		-145	-179.154	
750	35.15	-0.349	34.802	0.04	6.016	40.1	0	0	-145	-180.154	6.016
751	35.15	-0.346	34.805	0.03		40.1	0		-145	-180.154	
752	35.15	-0.344	34.808	0.03		40.1	0		-145	-180.154	
753	35.15	-0.342	34.81	0.02		40.1	0		-144	-180.154	
754	35.15	-0.34	34.812	0.02		40.1	0		-143	-179.154	
755	35.15	-0.34	34.814	0.02		40.1	0		-144	-178.154	
756	35.15	-0.339	34.814	0		40.1	0		-144	-179.154	
757	35.15	-0.339	34.815	0.01		40.2	0		-145	-179.154	
758	35.15	-0.339	34.815	0		40.2	1		-146	-180.154	
759	35.15	-0.339	34.815	0		40.2	0		-146	-181.154	
760	35.15	-0.339	34.815	0	0.13	40.2	0	1	-146	-181.154	1.13
761	35.15	-0.339	34.815	0		40.2	0		-147	-181.154	
762	35.15	-0.339	34.815	0		40.3	0		-147	-182.154	
763	35.15	-0.339	34.815	0		40.3	1		-147	-182.154	
764	35.15	-0.339	34.815	0		40.3	0		-147	-182.154	
765	35.15	-0.339	34.815	0		40.3	0		-147	-182.154	
766	35.15	-0.339	34.815	0		40.3	0		-147	-182.154	
767	35.15	-0.339	34.815	0		40.3	0		-147	-182.154	
768	35.15	-0.339	34.815	0		40.3	0		-148	-182.154	
769	35.15	-0.339	34.815	0		40.3	0		-149	-183.154	
770	35.15	-0.339	34.815	0	0	40.3	0	1	-150	-184.154	1
771	35.15	-0.339	34.815	0		40.3	0		-152	-185.154	
772	35.15	-0.339	34.815	0		40.3	0		-153	-187.154	
773	35.15	-0.339	34.815	0		40.3	0		-154	-188.154	
774	35.15	-0.339	34.815	0		40.3	0		-155	-189.154	
775	35.15	-0.339	34.815	0		40.3	0		-152	-190.154	
776	35.15	-0.339	34.815	0		40.3	0		-150	-187.154	
777	35.15	-0.339	34.815	0		40.3	0		-149	-185.154	
778	35.15	-0.339	34.815	0		40.3	0		-147	-184.154	
779	35.15	-0.339	34.815	0		40.3	0		-146	-182.154	
780	35.15	-0.339	34.815	0	0	40.3	0	0	-146	-181.154	0
781	35.15	-0.339	34.815	0		40.3	0		-146	-181.154	
782	35.15	-0.339	34.815	0		40.3	0		-145	-181.154	
783	38.55	-2.77	34.815	0		40.3	0		-144	-180.154	
784	38.55	-2.08	35.784	9.69		40.4	0		-143	-182.554	
785	38.55	-1.93	36.474	6.9		40.4	1		-142	-181.554	
786	38.55	-1.85	36.624	1.5		40.5	0		-141	-180.554	
787	38.55	-1.81	36.704	0.8		40.6	1		-142	-179.554	
788	38.55	-1.79	36.744	0.4		40.7	1		-142	-180.554	
789	38.55	-1.77	36.764	0.2		40.8	1		-143	-180.554	
790	38.55	-1.76	36.784	0.2	19.69	40.9	1	5	-143	-181.554	24.69
791	38.55	-1.75	36.794	0.1		41	1		-143	-181.554	
792	38.55	-1.75	36.804	0.1		41.1	1		-143	-181.554	
793	38.55	-1.75	36.804	0		41.2	1		-143	-181.554	
794	38.55	-1.75	36.804	0		41.3	1		-143	-181.554	
795	38.55	-1.75	36.804	0		41.4	1		-143	-181.554	
796	41.05	-3.04	36.804	0		41.6	1		-144	-181.554	
797	41.65	-2.67	38.014	12.1		41.7	2		-140	-185.054	
798	41.65	-2.59	38.984	9.7		41.8	1		-135	-181.654	
799	41.65	-2.56	39.064	0.8		41.9	1		-133	-176.654	
800	44.25	-4.46	39.094	0.3	23.1	42	1	11	-132	-174.654	34.1
801	44.25	-3.89	39.794	7		42.1	1		-129	-176.254	
802	44.25	-3.74	40.364	5.7		42.4	1		-119	-173.254	
803	44.25	-3.69	40.514	1.5		42.5	3		-104	-163.254	
804	44.25	-3.67	40.564	0.5		42.7	1		-104	-148.254	
805	44.25	-3.66	40.584	0.2		42.9	2		-109	-148.254	

806	44.25	-3.65	40.594	0.1		43	2		-100	-153.254		C-122
807	44.25	-3.65	40.604	0.1		43.2	1		-94	-144.254		
808	46.25	-4.84	40.604	0		43.4	2		-91.5	-138.254		
809	46.25	-4.42	41.414	8.1		43.6	2		-91.4	-137.754		
810	46.25	-4.37	41.834	4.2	27.4	43.8	2	17	-92.8	-137.654	44.4	
811	46.25	-4.35	41.884	0.5		44	2		-95.7	-139.054		
812	49.25	-6.09	41.904	0.2		44.2	2		-97	-141.954		
813	49.25	-5.51	43.164	12.6		44.3	2		-98.6	-146.254		
814	49.25	-5.41	43.744	5.8		44.5	1		-99.4	-147.854		
815	49.25	-5.38	43.844	1		44.7	2		-104	-148.654		
816	49.25	-5.37	43.874	0.3		44.9	2		-109	-153.254		
817	49.25	-5.37	43.884	0.1		45.1	2		-115	-158.254		
818	49.25	-5.37	43.884	0		45.3	2		-120	-164.254		
819	49.25	-5.37	43.884	0		45.4	2		-124	-169.254		
820	49.25	-5.37	43.884	0	20.5	45.5	1	18	-127	-173.254	38.5	
821	49.25	-5.37	43.884	0		45.6	1		-131	-176.254		
822	49.25	-5.37	43.884	0		45.6	1		-134	-180.254		
823	49.25	-5.37	43.884	0		45.6	0		-135	-183.254		
824	51.65	-6.85	43.884	0		45.7	0		-136	-184.254		
825	52.45	-6.97	44.804	9.2		45.8	1		-137	-187.654		
826	52.45	-6.67	45.484	6.8		45.9	1		-136	-189.454		
827	52.45	-6.61	45.784	3		46.1	1		-133	-188.454		
828	52.45	-6.59	45.844	0.6		46.2	2		-132	-185.454		
829	52.45	-6.59	45.864	0.2		46.4	1		-132	-184.454		
830	52.45	-6.59	45.864	0	19.8	46.6	2	10	-132	-184.454	29.8	
831	52.45	-6.59	45.864	0		46.7	2		-134	-184.454		
832	52.45	-6.59	45.864	0		46.8	1		-137	-186.454		
833	52.45	-6.59	45.864	0		46.9	1		-138	-189.454		
834	52.45	-6.59	45.864	0		46.9	1		-139	-190.454		
835	52.45	-6.59	45.864	0		46.9	0		-140	-191.454		
836	52.61	-6.59	45.864	0		46.9	0		-141	-192.454		
837	52.61	-6.59	46.016	1.524		46.9	0		-142	-193.606		
838	52.61	-6.59	46.016	0		46.9	0		-143	-194.606		
839	52.61	-6.59	46.016	0		46.9	0		-144	-195.606		
840	52.61	-6.59	46.016	0	1.524	47	0	5	-144	-196.606	6.524	
841	52.61	-6.59	46.016	0		47	1		-145	-196.606		
842	52.63	-6.59	46.016	0		47	0		-146	-197.606		
843	52.68	-6.59	46.041	0.254		47	0		-146	-198.631		
844	52.73	-6.59	46.092	0.508		47	0		-146	-198.682		
845	52.73	-6.59	46.143	0.508		47	0		-145	-198.733		
846	52.73	-6.59	46.143	0		47	0		-145	-197.733		
847	53.27	-6.59	46.143	0		47	0		-145	-197.733		
848	53.27	-6.59	46.676	5.334		47	0		-145	-198.266		
849	53.27	-6.59	46.676	0		47	0		-145	-198.266		
850	53.27	-6.59	46.676	0	6.604	47	0	1	-146	-198.266	7.604	
851	53.27	-6.59	46.676	0		47	0		-146	-199.266		
852	53.27	-6.59	46.676	0		47	0		-146	-199.266		
853	53.27	-6.59	46.676	0		47	0		-146	-199.266		
854	53.29	-6.59	46.676	0		47	0		-147	-199.266		
855	53.32	-6.59	46.702	0.254		47	0		-147	-200.292		
856	56.12	-8.55	46.727	0.254		47.1	0		-146	-200.317		
857	56.12	-8.01	47.571	8.434		47.3	1		-145	-202.121		
858	56.12	-7.92	48.111	5.4		47.5	2		-143	-201.121		
859	56.12	-7.89	48.201	0.9		47.6	2		-143	-199.121		
860	56.12	-7.88	48.231	0.3	15.542	47.8	1	6	-143	-199.121	21.542	
861	56.89	-7.88	48.241	0.1		48	2		-143	-199.121		
862	56.89	-7.88	49.011	7.7		48.2	2		-144	-199.891		
863	56.89	-7.88	49.011	0		48.3	2		-146	-200.891		
864	56.89	-7.88	49.011	0		48.4	1		-147	-202.891		
865	56.89	-7.88	49.011	0		48.4	1		-148	-203.891		
866	56.94	-7.88	49.011	0		48.4	0		-148	-204.891		
867	56.94	-7.88	49.061	0.508		48.4	0		-149	-204.941		
868	56.94	-7.88	49.061	0		48.4	0		-150	-205.941		
869	56.97	-7.88	49.061	0		48.4	0		-151	-206.941		
870	56.97	-7.88	49.087	0.254	8.562	48.4	0	8	-151	-207.967	16.562	

871	56.97	-7.88	49.087	0		48.4	0		-152	-207.967	
872	57.25	-7.88	49.087	0		48.4	0		-151	-208.967	
873	57.32	-7.88	49.366	2.794		48.4	0		-148	-208.246	
874	57.81	-7.88	49.442	0.762		48.4	0		-142	-205.322	
875	58.8	-8.28	49.925	4.826		48.5	0		-120	-199.805	
876	58.8	-8.15	50.516	5.906		48.6	1		-119	-178.796	
877	59.89	-8.35	50.646	1.3		48.6	1		-124	-177.796	
878	59.94	-8.26	51.538	8.922		48.7	0		-127	-183.888	
879	61.99	-9.75	51.679	1.408		48.8	1		-127	-186.939	
880	62.09	-9.34	52.237	5.58	31.498	48.9	1	4	-119	-188.987	35.498
881	63.13	-9.88	52.748	5.116		49.1	1		-113	-181.088	
882	63.13	-9.58	53.248	5		49.3	2		-118	-176.128	
883	63.15	-9.54	53.548	3		49.4	2		-121	-181.128	
884	63.15	-9.53	53.614	0.654		49.6	1		-125	-184.154	
885	63.15	-9.53	53.624	0.1		49.8	2		-127	-188.154	
886	63.15	-9.53	53.624	0		50	2		-129	-190.154	
887	63.15	-9.53	53.624	0		50.1	2		-131	-192.154	
888	63.74	-9.53	53.624	0		50.1	1		-133	-194.154	
889	63.89	-9.53	54.208	5.842		50.1	0		-134	-196.738	
890	63.89	-9.53	54.36	1.524	21.236	50.1	0	13	-135	-197.89	34.236
891	63.89	-9.53	54.36	0		50.1	0		-137	-198.89	
892	65.56	-10.2	54.36	0		50.2	0		-138	-200.89	
893	65.56	-9.97	55.36	10		50.3	1		-139	-203.56	
894	65.61	-9.96	55.59	2.3		50.4	1		-139	-204.56	
895	65.61	-9.96	55.651	0.608		50.5	1		-140	-204.611	
896	65.61	-9.96	55.651	0		50.6	1		-141	-205.611	
897	65.66	-9.96	55.651	0		50.6	1		-142	-206.611	
898	65.66	-9.96	55.702	0.508		50.6	0		-142	-207.662	
899	65.66	-9.96	55.702	0		50.6	0		-142	-207.662	
900	65.66	-9.96	55.702	0	13.416	50.6	0	5	-142	-207.662	18.416
901	65.66	-9.96	55.702	0		50.6	0		-143	-207.662	
902	65.66	-9.96	55.702	0		50.6	0		-143	-208.662	
903	67.8	-11.6	55.702	0		50.6	0		-144	-208.662	
904	67.8	-11.1	56.195	4.936		50.9	0		-144	-211.795	
905	67.8	-11.1	56.695	5		51	3		-143	-211.795	
906	67.8	-11.1	56.695	0		51.1	1		-143	-210.795	
907	67.8	-11.1	56.695	0		51.3	1		-144	-210.795	
908	67.8	-11.1	56.695	0		51.4	2		-144	-211.795	
909	67.8	-11.1	56.695	0		51.5	1		-145	-211.795	
910	67.8	-11.1	56.695	0	9.936	51.6	1	9	-145	-212.795	18.936
911	67.8	-11.1	56.695	0		51.7	1		-145	-212.795	
912	67.8	-11.1	56.695	0		51.7	1		-146	-212.795	
913	68.38	-11.2	56.695	0		51.7	0		-146	-213.795	
914	68.38	-11.1	57.18	4.842		51.8	0		-146	-214.38	
915	68.38	-11.1	57.28	1		51.8	1		-146	-214.38	
916	68.51	-11.1	57.28	0		51.8	0		-146	-214.38	
917	68.79	-11.1	57.407	1.27		51.8	0		-145	-214.507	
918	69.62	-11.3	57.686	2.794		51.8	0		-145	-213.786	
919	69.62	-11.3	58.324	6.382		51.9	0		-144	-214.624	
920	69.62	-11.3	58.324	0	16.288	51.9	1	4	-144	-213.624	20.288
921	69.62	-11.3	58.324	0		52	0		-144	-213.624	
922	69.62	-11.3	58.324	0		52	1		-144	-213.624	
923	69.75	-11.3	58.324	0		52	0		-145	-213.624	
924	69.75	-11.3	58.451	1.27		52	0		-144	-214.751	
925	69.75	-11.3	58.451	0		52	0		-144	-213.751	
926	69.75	-11.3	58.451	0		52	0		-144	-213.751	
927	69.75	-11.3	58.451	0		52	0		-145	-213.751	
928	69.75	-11.3	58.451	0		52	0		-146	-214.751	
929	69.75	-11.3	58.451	0		52	0		-146	-215.751	
930	69.75	-11.3	58.451	0	1.27	52	0	1	-147	-215.751	2.27
931	69.75	-11.3	58.451	0		52	0		-147	-216.751	
932	69.75	-11.3	58.451	0		52	0		-147	-216.751	
933	69.75	-11.3	58.451	0		52	0		-148	-216.751	
934	69.75	-11.3	58.451	0		52	0		-148	-217.751	
935	69.75	-11.3	58.451	0		52	0		-148	-217.751	

936	69.75	-11.3	58.451	0		52	0		-149	-217.751	C-124
937	69.75	-11.3	58.451	0		52	0		-149	-218.751	
938	69.75	-11.3	58.451	0		52	0		-149	-218.751	
939	69.75	-11.3	58.451	0		52	0		-150	-218.751	
940	69.75	-11.3	58.451	0	0	52	0	0	-150	-219.751	0
941	69.75	-11.3	58.451	0		52	0		-150	-219.751	
942	69.75	-11.3	58.451	0		52	0		-150	-219.751	
943	69.75	-11.3	58.451	0		52	0		-150	-219.751	
944	69.75	-11.3	58.451	0		52	0		-150	-219.751	
945	69.75	-11.3	58.451	0		52	0		-150	-219.751	
946	69.75	-11.3	58.451	0		52	0		-150	-219.751	
947	70.28	-11.7	58.451	0		52	0		-149	-219.751	
948	70.28	-11.6	58.585	1.334		52.1	0		-148	-219.285	
949	70.28	-11.5	58.685	1		52.1	1		-147	-218.285	
950	70.28	-11.5	58.785	1	3.334	52.2	0	1	-146	-217.285	4.334
951	70.28	-11.5	58.785	0		52.2	1		-145	-216.285	
952	70.28	-11.5	58.785	0		52.2	0		-144	-215.285	
953	70.28	-11.5	58.785	0		52.2	0		-144	-214.285	
954	70.28	-11.5	58.785	0		52.2	0		-144	-214.285	
955	70.28	-11.5	58.785	0		52.2	0		-144	-214.285	
956	70.28	-11.5	58.785	0		52.2	0		-144	-214.285	
957	70.28	-11.5	58.785	0		52.2	0		-144	-214.285	
958	70.28	-11.5	58.785	0		52.2	0		-145	-214.285	
959	70.28	-11.5	58.785	0		52.2	0		-145	-215.285	
960	70.28	-11.5	58.785	0	0	52.2	0	1	-146	-215.285	1
961	70.28	-11.5	58.785	0		52.2	0		-145	-216.285	
962	70.28	-11.5	58.785	0		52.2	0		-145	-215.285	
963	70.28	-11.5	58.785	0		52.2	0		-144	-215.285	
964	70.28	-11.5	58.785	0		52.2	0		-143	-214.285	
965	70.28	-11.5	58.785	0		52.2	0		-142	-213.285	
966	70.28	-11.5	58.785	0		52.2	0		-142	-212.285	
967	70.28	-11.5	58.785	0		52.2	0		-142	-212.285	
968	70.28	-11.5	58.785	0		52.2	0		-142	-212.285	
969	70.28	-11.5	58.785	0		52.2	0		-141	-212.285	
970	70.28	-11.5	58.785	0	0	52.2	0	0	-141	-211.285	0
971	70.28	-11.5	58.785	0		52.2	0		-141	-211.285	
972	70.28	-11.5	58.785	0		52.2	0		-141	-211.285	
973	70.28	-11.5	58.785	0		52.2	0		-141	-211.285	
974	70.28	-11.5	58.785	0		52.2	0		-141	-211.285	
975	70.28	-11.5	58.785	0		52.2	0		-142	-211.285	
976	70.28	-11.5	58.785	0		52.2	0		-142	-212.285	
977	70.28	-11.5	58.785	0		52.2	0		-142	-212.285	
978	70.28	-11.5	58.785	0		52.2	0		-142	-212.285	
979	70.28	-11.5	58.785	0		52.2	0		-142	-212.285	
980	70.28	-11.5	58.785	0	0	52.2	0	0	-142	-212.285	0
981	70.28	-11.5	58.785	0		52.2	0		-141	-212.285	
982	70.28	-11.5	58.785	0		52.2	0		-141	-211.285	
983	70.28	-11.5	58.785	0		52.2	0		-141	-211.285	
984	70.28	-11.5	58.785	0		52.2	0		-142	-211.285	
985	70.28	-11.5	58.785	0		52.2	0		-142	-212.285	
986	70.28	-11.5	58.785	0		52.2	0		-142	-212.285	
987	70.28	-11.5	58.785	0		52.2	0		-142	-212.285	
988	70.28	-11.5	58.785	0		52.2	0		-142	-212.285	
989	70.28	-11.5	58.785	0		52.2	0		-142	-212.285	
990	70.28	-11.5	58.785	0	0	52.2	0	0	-142	-212.285	0
991	70.28	-11.5	58.785	0		52.2	0		-141	-212.285	
992	70.28	-11.5	58.785	0		52.2	0		-141	-211.285	
993	70.28	-11.5	58.785	0		52.2	0		-141	-211.285	
994	70.28	-11.5	58.785	0		52.2	0		-141	-211.285	
995	70.36	-11.5	58.785	0		52.2	0		-141	-211.285	
996	70.36	-11.5	58.865	0.8		52.2	0		-141	-211.365	
997	70.36	-11.5	58.865	0		52.2	0		-141	-211.365	
998	70.36	-11.5	58.865	0		52.2	0		-140	-211.365	
999	70.54	-11.5	58.865	0		52.2	0		-141	-210.365	
1000	70.54	-11.5	59.043	1.78	2.58	52.2	0	0	-141	-211.543	2.58

1001	70.54	-11.5	59.043	0		52.2	0		-141	-211.543	C-125
1002	70.54	-11.5	59.043	0		52.2	0		-141	-211.543	
1003	70.54	-11.5	59.043	0		52.2	0		-142	-211.543	
1004	70.54	-11.5	59.043	0		52.2	0		-142	-212.543	
1005	70.54	-11.5	59.043	0		52.2	0		-142	-212.543	
1006	70.54	-11.5	59.043	0		52.2	0		-142	-212.543	
1007	70.54	-11.5	59.043	0		52.2	0		-142	-212.543	
1008	70.54	-11.5	59.043	0		52.2	0		-142	-212.543	
1009	70.54	-11.5	59.043	0		52.2	0		-142	-212.543	
1010	70.54	-11.5	59.043	0	0	52.2	0	0	-141	-212.543	0
1011	70.54	-11.5	59.043	0		52.2	0		-141	-211.543	
1012	70.54	-11.5	59.043	0		52.2	0		-141	-211.543	
1013	70.54	-11.5	59.043	0		52.2	0		-141	-211.543	
1014	70.54	-11.5	59.043	0		52.2	0		-141	-211.543	
1015	70.54	-11.5	59.043	0		52.2	0		-141	-211.543	
1016	70.54	-11.5	59.043	0		52.2	0		-141	-211.543	
1017	70.75	-11.7	59.043	0		52.2	0		-140	-211.543	
1018	70.75	-11.6	59.046	0.032		52.2	0		-141	-210.746	
1019	70.75	-11.6	59.146	1		52.2	0		-141	-211.746	
1020	70.75	-11.6	59.146	0	1.032	52.2	0	0	-140	-211.746	1.032
1021	70.75	-11.6	59.146	0		52.2	0		-140	-210.746	
1022	70.75	-11.6	59.146	0		52.2	0		-140	-210.746	

end

Appendix C.7. South Cottonwood Models Results

Key:
CumP = Cummulative Precipitation, sum(vTop) = gross cummulative surface flux, Daily E = daily evaporation,
10 day E = sum of previous 10 "Daily E" values, sum(vRoot) = cumulative root uptake, Daily T = daily transpiration
10 day T = sum of previous 10 "Daily T" values, Cumm Dis = cumulative net groundwater discharge,
10day ET = sum of "10day E" and 10day T' values ***NOTE: OUTPUT RESULTS DAYS 657-1022 = 1999 days 1-365**

		SCWmat		ET=83.7364 [63T,20.7E], ERROR= -7.675%							
Time [day]	CumP(Cr [cm]	sum(vTop) [L]	Cumm E [cm]	Daily E [mm/day]	10day E [mm/10d]	sum(vRoot [L]	Daily T [mm]	10day T [mm/10d]	sum(vBot) [L]	Cum Dis [cm]	10day ET [mm/10d]
1	0.6604	-0.0724	-0.0724	-0.724		0.0452	0			9.41	9.41	
2	0.8636	0.48	0.588	6.604		0.0888	0.452			10.2	8.7496	
3	0.8636	0.76	1.3436	7.556		0.132	0.436			10.2	9.3364	
4	0.8636	1.01	1.6236	2.8		0.176	0.432			10.4	9.3364	
5	0.8636	1.33	1.8736	2.5		0.219	0.44			11	9.5364	
6	0.8636	1.47	2.1936	3.2		0.304	0.43			11.4	10.1364	
7	0.8636	1.58	2.3336	1.4		0.388	0.85			11.8	10.5364	
8	0.8636	1.67	2.4436	1.1		0.473	0.84			12.1	10.9364	
9	0.8636	1.74	2.5336	0.9		0.556	0.85			12.3	11.2364	
10	0.8636	1.8	2.6036	0.7	26.036	0.64	0.83	5.56		12.3	11.4364	31.596
11	0.8636	1.86	2.6636	0.6		0.725	0.84			12.2	11.4364	
12	1.5494	1.62	2.7236	0.6		0.809	0.85			12.3	11.3364	
13	1.5494	1.88	3.1694	4.458		0.893	0.84			12.7	10.7506	
14	1.5494	1.96	3.4294	2.6		0.976	0.84			12.6	11.1506	
15	1.5494	2.01	3.5094	0.8		1.06	0.83			12.7	11.0506	
16	1.5494	2.05	3.5594	0.5		1.14	0.84			12.3	11.1506	
17	1.5494	2.09	3.5994	0.4		1.23	0.8			11.9	10.7506	
18	1.5494	2.12	3.6394	0.4		1.32	0.9			11.7	10.3506	
19	1.5494	2.14	3.6694	0.3		1.4	0.9			11.4	10.1506	
20	1.5494	2.17	3.6894	0.2	10.858	1.49	0.8	8.44		11.3	9.8506	19.298
21	1.5494	2.19	3.7194	0.3		1.57	0.9			11.3	9.7506	
22	1.5494	2.21	3.7394	0.2		1.66	0.8			11.4	9.7506	
23	1.5494	2.23	3.7594	0.2		1.75	0.9			11.6	9.8506	
24	1.5494	2.25	3.7794	0.2		1.85	0.9			11.8	10.0506	
25	1.5494	2.27	3.7994	0.2		1.94	1			11.5	10.2506	
26	1.5494	2.29	3.8194	0.2		2.14	0.9			11.2	9.9506	
27	1.5494	2.3	3.8394	0.2		2.29	2			10.8	9.6506	
28	1.5494	2.31	3.8494	0.1		2.43	1.5			10.5	9.2506	
29	1.5494	2.33	3.8594	0.1		2.57	1.4			10.5	8.9506	
30	1.5494	2.34	3.8794	0.2	1.9	2.68	1.4	11.7		10.6	8.9506	13.6
31	1.5494	2.35	3.8894	0.1		2.86	1.1			10.7	9.0506	
32	1.5494	2.36	3.8994	0.1		3.05	1.8			11.2	9.1506	
33	1.5494	2.37	3.9094	0.1		3.12	1.9			11.8	9.6506	
34	1.5494	2.38	3.9194	0.1		3.26	0.7			12.3	10.2506	
35	1.5494	2.39	3.9294	0.1		3.46	1.4			12.6	10.7506	
36	1.5494	2.39	3.9394	0.1		3.54	2			12.7	11.0506	
37	1.5494	2.4	3.9394	0		3.68	0.8			12.3	11.1506	
38	1.5494	2.41	3.9494	0.1		3.8	1.4			11.5	10.7506	
39	1.5494	2.41	3.9594	0.1		4.01	1.2			10.9	9.9506	
40	1.5494	2.42	3.9594	0	0.8	4.26	2.1	14.4		10.3	9.3506	15.2
41	1.5494	2.42	3.9694	0.1		4.38	2.5			9.65	8.7506	
42	1.5494	2.43	3.9694	0		4.62	1.2			9.15	8.1006	
43	1.5494	2.43	3.9794	0.1		4.89	2.4			8.84	7.6006	
44	1.5494	2.43	3.9794	0		5.08	2.7			8.53	7.2906	
45	1.5494	2.44	3.9794	0		5.22	1.9			8.31	6.9806	
46	1.5494	2.44	3.9894	0.1		5.57	1.4			8.11	6.7606	
47	1.5494	2.45	3.9894	0		5.84	3.5			7.89	6.5606	
48	1.5494	2.45	3.9994	0.1		6	2.7			7.81	6.3406	
49	1.5494	2.45	3.9994	0		6.34	1.6			7.49	6.2606	
50	1.5494	2.45	3.9994	0	0.4	6.56	3.4	23.3		7.3	5.9406	23.7
51	1.5494	2.45	3.9994	0		6.93	2.2			6.95	5.7506	
52	1.5494	2.46	3.9994	0		7.23	3.7			6.57	5.4006	
53	1.5494	2.46	4.0094	0.1		7.56	3			6.34	5.0206	

54	1.5494	2.46	4.0094	0		7.89	3.3		6.13	4.7906		
55	1.5494	2.46	4.0094	0		8.2	3.3		5.91	4.5806		
56	1.5494	2.46	4.0094	0		8.57	3.1		5.76	4.3606		C-127
57	1.5494	2.46	4.0094	0		8.98	3.7		5.6	4.2106		
58	1.5494	2.46	4.0094	0		9.25	4.1		5.44	4.0506		
59	1.5494	2.47	4.0094	0		9.68	2.7		5.17	3.8906		
60	1.5494	2.47	4.0194	0.1	0.2	10.1	4.3	33.4	4.96	3.6206	33.6	
61	1.5494	2.47	4.0194	0		10.6	4.2		4.94	3.4106		
62	1.5494	2.47	4.0194	0		11	5		4.9	3.3906		
63	1.5494	2.47	4.0194	0		11.4	4		4.81	3.3506		
64	1.5494	2.47	4.0194	0		11.8	4		4.79	3.2606		
65	1.5494	2.47	4.0194	0		12.2	4		4.88	3.2406		
66	1.5494	2.47	4.0194	0		12.6	4		4.94	3.3306		
67	1.5494	2.47	4.0194	0		13	4		4.93	3.3906		
68	1.5494	2.47	4.0194	0		13.4	4		5.08	3.3806		
69	1.5494	2.47	4.0194	0		13.8	4		5.26	3.5306		
70	1.5494	2.47	4.0194	0	0	14	4	41.2	5.53	3.7106	41.2	
71	1.5494	2.47	4.0194	0		14.4	2		6.44	3.9806		
72	1.5494	2.47	4.0194	0		15.2	4		6.68	4.8906		
73	1.5494	2.47	4.0194	0		15.5	8		7.99	5.1306		
74	1.5748	2.47	4.0194	0		16	3		9.17	6.4406		
75	1.5748	2.47	4.0448	0.254		16.2	5		9.93	7.5952		
76	1.5748	2.47	4.0448	0		16.5	2		10.5	8.3552		
77	1.5748	2.47	4.0448	0		16.8	3		11	8.9252		
78	1.5748	2.47	4.0448	0		17.1	3		11.4	9.4252		
79	1.5748	2.47	4.0448	0		17.6	3		11.6	9.8252		
80	1.5748	2.47	4.0448	0	0.254	18.1	5	38	11.4	10.0252	38.254	
81	1.5748	2.48	4.0448	0		18.5	5		11	9.8252		
82	1.5748	2.48	4.0548	0.1		19	4		10.8	9.4252		
83	1.5748	2.48	4.0548	0		19.4	5		10.7	9.2252		
84	1.5748	2.48	4.0548	0		19.7	4		10.5	9.1252		
85	1.5748	2.48	4.0548	0		20.1	3		10.4	8.9252		
86	1.5748	2.48	4.0548	0		20.5	4		10.2	8.8252		
87	1.5748	2.48	4.0548	0		20.9	4		10.1	8.6252		
88	1.5748	2.48	4.0548	0		21.3	4		9.99	8.5252		
89	1.5748	2.48	4.0548	0		21.6	4		9.9	8.4152		
90	1.5748	2.48	4.0548	0	0.1	22	3	40	9.88	8.3252	40.1	
91	1.5748	2.48	4.0548	0		22.3	4		9.99	8.3052		
92	1.5748	2.48	4.0548	0		22.6	3		10.3	8.4152		
93	1.5748	2.48	4.0548	0		22.9	3		10.4	8.7252		
94	1.6764	2.48	4.0548	0		23.2	3		10.5	8.8252		
95	1.8034	2.48	4.1564	1.016		23.5	3		10.8	8.8236		
96	1.8034	2.48	4.2834	1.27		23.8	3		10.8	8.9966		
97	1.8034	2.48	4.2834	0		24.1	3		11.5	8.9966		
98	1.8034	2.48	4.2834	0		24.5	3		12	9.6966		
99	1.8034	2.48	4.2834	0		24.7	4		12.5	10.1966		
100	1.8034	2.48	4.2834	0	2.286	25.1	2	31	12.6	10.6966	33.286	
101	1.8034	2.48	4.2834	0		25.4	4		12.7	10.7966		
102	1.8034	2.48	4.2834	0		25.8	3		12.5	10.8966		
103	1.8034	2.48	4.2834	0		26.1	4		12.5	10.6966		
104	1.8034	2.48	4.2834	0		26.4	3		12.5	10.6966		
105	1.8034	2.48	4.2834	0		26.7	3		12.6	10.6966		
106	1.8034	2.48	4.2834	0		27.1	3		12.9	10.7966		
107	1.8034	2.48	4.2834	0		27.5	4		13.5	11.0966		
108	1.8034	2.48	4.2834	0		27.9	4		14.3	11.6966		
109	1.8034	2.48	4.2834	0		28.2	4		15.6	12.4966		
110	1.8034	2.48	4.2834	0	0	28.5	3	35	17.1	13.7966	35	
111	1.8288	2.48	4.2834	0		28.8	3		18.7	15.2966		
112	2.0828	2.48	4.3088	0.254		29.2	3		20.4	16.8712		
113	2.1844	2.48	4.5628	2.54		29.5	4		22.1	18.3172		
114	2.1844	2.48	4.6644	1.016		29.8	3		23.7	19.9156		
115	2.1844	2.48	4.6644	0		30.2	3		25.1	21.5156		
116	2.2352	2.48	4.6644	0		30.5	4		26	22.9156		
117	2.9972	2.48	4.7152	0.508		31	3		26.5	23.7648		
118	3.0226	2.48	5.4772	7.62		31.2	5		27	23.5028		

119	3.0226	2.48	5.5026	0.254		31.8	2		27.8	23.9774		
120	3.0226	2.48	5.5026	0	12.192	32.1	6	36	28.6	24.7774	48.192	
121	3.0226	2.48	5.5026	0		32.5	3		29.4	25.5774		
122	3.0226	2.48	5.5026	0		32.7	4		30	26.3774		C-128
123	3.0226	2.48	5.5026	0		32.9	2		29.9	26.9774		
124	3.0226	2.48	5.5026	0		33.2	2		29.1	26.8774		
125	8.8138	-2.69	5.5026	0		33.5	3		28.7	26.0774		
126	8.8138	-1.85	6.1238	6.212		34.1	3		29.1	19.8862		
127	8.8138	-1.31	6.9638	8.4		34.6	6		31.2	20.2862		
128	8.8138	-1.16	7.5038	5.4		35.1	5		32.7	22.3862		
129	8.8138	-1.08	7.6538	1.5		35.4	5		33.6	23.8862		
130	8.8138	-1.02	7.7338	0.8	22.312	36	3	36	34.1	24.7862	58.312	
131	8.8138	-0.988	7.7938	0.6		36.4	6		33.8	25.2862		
132	8.8138	-0.961	7.8258	0.32		36.8	4		33.1	24.9862		
133	8.8138	-0.94	7.8528	0.27		37.3	4		32.5	24.2862		
134	8.8138	-0.924	7.8738	0.21		37.7	5		32	23.6862		
135	8.8138	-0.912	7.8898	0.16		38.2	4		31.6	23.1862		
136	8.8138	-0.902	7.9018	0.12		38.6	5		31	22.7862		
137	8.8138	-0.894	7.9118	0.1		39.1	4		30.5	22.1862		
138	8.8138	-0.888	7.9198	0.08		39.5	5		30	21.6862		
139	8.8138	-0.883	7.9258	0.06		40	4		29.7	21.1862		
140	8.8138	-0.879	7.9308	0.05	1.97	40.4	5	46	29.6	20.8862	47.97	
141	8.8138	-0.875	7.9348	0.04		40.8	4		29.4	20.7862		
142	10.82	-2.38	7.9388	0.04		41	4		29.2	20.5862		
143	11.328	-2.41	8.4404	5.016		41.4	2		29.5	18.3796		
144	15.037	-5.53	8.9184	4.78		41.8	4		29.9	18.1716		
145	16.84	-6.75	9.5068	5.884		42.2	4		30.3	14.8632		
146	16.84	-5.88	10.0902	5.834		42.8	4		30.6	13.4598		
147	20.244	-8.39	10.9602	8.7		43.3	6		30.6	13.7598		
148	20.244	-7.66	11.8538	8.936		43.8	5		30.8	10.3562		
149	20.244	-7.1	12.5838	7.3		44.2	5		31.3	10.5562		
150	20.244	-6.51	13.1438	5.6	52.13	44.6	4	42	31.8	11.0562	94.13	
151	20.244	-6.05	13.7338	5.9		45.3	4		32.5	11.5562		
152	20.244	-5.85	14.1938	4.6		45.9	7		32.7	12.2562		
153	20.244	-5.72	14.3938	2		46.3	6		32.9	12.4562		
154	20.244	-5.63	14.5238	1.3		46.7	4		33.1	12.6562		
155	20.244	-5.55	14.6138	0.9		47.3	4		33.4	12.8562		
156	20.244	-5.49	14.6938	0.8		47.8	6		33.5	13.1562		
157	20.244	-5.45	14.7538	0.6		48.2	5		33.5	13.2562		
158	20.498	-5.41	14.7938	0.4		48.6	4		33.5	13.2562		
159	20.549	-5.38	15.0878	2.94		49.1	4		33.8	13.0022		
160	20.549	-5.35	15.1686	0.808	20.248	49.8	5	49	34	13.2514	69.248	
161	20.549	-5.33	15.1986	0.3		50.3	7		34.2	13.4514		
162	20.599	-5.32	15.2186	0.2		50.7	5		34.6	13.6514		
163	20.599	-5.3	15.2794	0.608		51.2	4		34.9	14.0006		
164	20.599	-5.29	15.2994	0.2		51.7	5		35	14.3006		
165	20.599	-5.28	15.3094	0.1		52	5		35.1	14.4006		
166	20.828	-5.27	15.3194	0.1		52.5	3		35.2	14.5006		
167	21.488	-5.27	15.558	2.386		52.9	5		35.4	14.372		
168	21.488	-5.26	16.2184	6.604		53.5	4		35.7	13.9116		
169	21.488	-5.26	16.2284	0.1		54.1	6		35.8	14.2116		
170	21.488	-5.25	16.2284	0	10.598	54.6	6	50	36.1	14.3116	60.598	
171	21.488	-5.25	16.2384	0.1		54.9	5		36.1	14.6116		
172	21.514	-5.25	16.2384	0		55.3	3		36.1	14.6116		
173	21.565	-5.24	16.2638	0.254		55.6	4		36	14.5862		
174	21.565	-5.24	16.3246	0.608		56.1	3		36.6	14.4354		
175	21.565	-5.24	16.3246	0		56.6	5		37.3	15.0354		
176	21.565	-5.24	16.3246	0		56.8	5		38	15.7354		
177	21.565	-5.24	16.3246	0		57.2	2		38.1	16.4354		
178	21.565	-5.24	16.3246	0		57.6	4		38.1	16.5354		
179	21.565	-5.23	16.3246	0		57.9	4		38.2	16.5354		
180	21.565	-5.23	16.3346	0.1	1.062	58.2	3	38	38.2	16.6354	39.062	
181	21.565	-5.23	16.3346	0		58.7	3		38.2	16.6354		
182	21.565	-5.23	16.3346	0		59.1	5		38.2	16.6354		
183	22.428	-5.62	16.3346	0		59.3	4		38.5	16.6354		

184	22.809	-5.5	16.8082	4.736		59.7	2		38.9	16.0718		
185	22.987	-5.42	17.3092	5.01		60.1	4		39.4	16.0908		
186	23.165	-5.39	17.567	2.578		60.4	4		39.6	16.413		
187	23.419	-5.38	17.7748	2.078		60.6	3		39.8	16.4352		
188	23.444	-5.36	18.0388	2.64		61.2	2		40.8	16.3812		C-129
189	23.444	-5.36	18.0842	0.454		61.5	6		41.4	17.3558		
190	23.444	-5.35	18.0842	0	17.496	61.9	3	36	42	17.9558	53.496	
191	23.444	-5.35	18.0942	0.1		62.3	4		42.4	18.5558		
192	23.444	-5.34	18.0942	0		62.6	4		42.9	18.9558		
193	23.495	-5.34	18.1042	0.1		62.8	3		43.2	19.4558		
194	23.495	-5.34	18.155	0.508		63.1	2		43.2	19.705		
195	23.495	-5.34	18.155	0		63.5	3		42.9	19.705		
196	23.495	-5.33	18.155	0		63.9	4		43.1	19.405		
197	23.495	-5.33	18.165	0.1		64.2	4		43.4	19.605		
198	23.495	-5.33	18.165	0		64.6	3		43.5	19.905		
199	23.495	-5.33	18.165	0		64.9	4		43.8	20.005		
200	23.495	-5.33	18.165	0	0.808	65.1	3	34	44.4	20.305	34.808	
201	23.495	-5.33	18.165	0		65.4	2		44.8	20.905		
202	23.495	-5.33	18.165	0		65.7	3		44.9	21.305		
203	23.495	-5.33	18.165	0		65.9	3		46.1	21.405		
204	23.495	-5.33	18.165	0		66.3	2		48	22.605		
205	23.495	-5.33	18.165	0		66.5	4		49.6	24.505		
206	23.495	-5.33	18.165	0		66.8	2		50.9	26.105		
207	23.495	-5.33	18.165	0		67	3		51.6	27.405		
208	23.495	-5.33	18.165	0		67.3	2		52.1	28.105		
209	23.495	-5.32	18.165	0		67.5	3		53.1	28.605		
210	23.495	-5.32	18.175	0.1	0.1	67.8	2	26	53.5	29.605	26.1	
211	23.495	-5.32	18.175	0		68	3		54	30.005		
212	23.495	-5.32	18.175	0		68.2	2		54.8	30.505		
213	23.495	-5.32	18.175	0		68.4	2		55.6	31.305		
214	23.495	-5.32	18.175	0		68.7	2		56.6	32.105		
215	23.495	-5.32	18.175	0		68.9	3		57.5	33.105		
216	23.571	-5.32	18.175	0		69	2		58.2	34.005		
217	24.613	-6.25	18.2512	0.762		69.1	1		59.2	34.6288		
218	24.613	-5.87	18.3626	1.114		69.7	1		60.5	34.5874		
219	24.613	-5.76	18.7426	3.8		70	6		61.8	35.8874		
220	24.613	-5.71	18.8526	1.1	6.776	70.2	3	25	62.9	37.1874	31.776	
221	24.613	-5.69	18.9026	0.5		70.4	2		63.8	38.2874		
222	24.613	-5.67	18.9226	0.2		70.6	2		64.6	39.1874		
223	24.613	-5.66	18.9426	0.2		70.7	2		65.5	39.9874		
224	24.613	-5.65	18.9526	0.1		70.8	1		66.3	40.8874		
225	24.613	-5.64	18.9626	0.1		70.8	1		67	41.6874		
226	24.613	-5.63	18.9726	0.1		70.9	0		67.6	42.3874		
227	24.613	-5.62	18.9826	0.1		70.9	1		68.4	42.9874		
228	24.613	-5.62	18.9926	0.1		71	0		68.8	43.7874		
229	24.613	-5.61	18.9926	0		71.1	1		70.9	44.1874		
230	24.613	-5.61	19.0026	0.1	1.5	71.1	1	11	72	46.2874	12.5	
231	24.613	-5.61	19.0026	0		71.2	0		72.9	47.3874		
232	24.613	-5.6	19.0026	0		71.2	1		73.8	48.2874		
233	24.613	-5.6	19.0126	0.1		71.3	0		74.7	49.1874		
234	24.613	-5.6	19.0126	0		71.3	1		75.3	50.0874		
235	24.613	-5.6	19.0126	0		71.3	0		75.8	50.6874		
236	24.613	-5.59	19.0126	0		71.3	0		76.1	51.1874		
237	24.613	-5.59	19.0226	0.1		71.4	0		76.2	51.4874		
238	24.613	-5.59	19.0226	0		71.4	1		76.8	51.5874		
239	24.613	-5.59	19.0226	0		71.4	0		77.2	52.1874		
240	24.663	-5.59	19.0226	0	0.2	71.4	0	3	77.5	52.5874	3.2	
241	24.663	-5.59	19.0734	0.508		71.5	0		77.9	52.8366		
242	24.663	-5.58	19.0734	0		71.5	1		78.2	53.2366		
243	24.663	-5.58	19.0834	0.1		71.5	0		78.5	53.5366		
244	24.714	-5.58	19.0834	0		71.5	0		78.4	53.8366		
245	24.714	-5.58	19.1342	0.508		71.6	0		78	53.6858		
246	24.714	-5.58	19.1342	0		71.6	1		78	53.2858		
247	24.714	-5.58	19.1342	0		71.6	0		78.2	53.2858		
248	24.714	-5.58	19.1342	0		71.7	0		78.3	53.4858		

249	24.714	-5.58	19.1342	0		71.7	1		78.3	53.5858		
250	24.714	-5.57	19.1342	0	1.116	71.7	0	3	77.8	53.5858	4.116	
251	24.714	-5.57	19.1442	0.1		71.7	0		78.1	53.0858		
252	24.714	-5.57	19.1442	0		71.7	0		77.9	53.3858		
253	24.714	-5.57	19.1442	0		71.7	0		77.2	53.1858		
254	24.714	-5.57	19.1442	0		71.7	0		76.6	52.4858		C-130
255	24.714	-5.57	19.1442	0		71.7	0		76.7	51.8858		
256	24.714	-5.57	19.1442	0		71.7	0		76.4	51.9858		
257	24.714	-5.57	19.1442	0		71.7	0		76.5	51.6858		
258	24.714	-5.57	19.1442	0		71.7	0		76.5	51.7858		
259	24.714	-5.57	19.1442	0		71.7	0		76.3	51.7858		
260	24.714	-5.57	19.1442	0	0.1	71.7	0	0	76.2	51.5858	0.1	
261	24.714	-5.57	19.1442	0		71.7	0		76.5	51.4858		
262	24.714	-5.57	19.1442	0		71.7	0		77.3	51.7858		
263	24.714	-5.56	19.1442	0		71.7	0		77.8	52.5858		
264	24.714	-5.56	19.1542	0.1		71.7	0		77.3	53.0858		
265	24.714	-5.56	19.1542	0		71.7	0		76.3	52.5858		
266	24.714	-5.56	19.1542	0		71.7	0		76.7	51.5858		
267	24.714	-5.56	19.1542	0		71.7	0		77.2	51.9858		
268	24.714	-5.56	19.1542	0		71.7	0		77.4	52.4858		
269	24.714	-5.56	19.1542	0		71.7	0		77.3	52.6858		
270	24.714	-5.56	19.1542	0	0.1	71.7	0	0	76.5	52.5858	0.1	
271	24.714	-5.56	19.1542	0		71.7	0		77.3	51.7858		
272	24.714	-5.56	19.1542	0		71.7	0		77	52.5858		
273	24.714	-5.56	19.1542	0		71.7	0		76.7	52.2858		
274	24.714	-5.56	19.1542	0		71.7	0		77.1	51.9858		
275	24.714	-5.56	19.1542	0		71.7	0		76.7	52.3858		
276	24.714	-5.56	19.1542	0		71.7	0		76.7	51.9858		
277	24.714	-5.56	19.1542	0		71.7	0		76.3	51.9858		
278	24.714	-5.56	19.1542	0		71.7	0		76.1	51.5858		
279	24.714	-5.56	19.1542	0		71.7	0		75.5	51.3858		
280	24.714	-5.56	19.1542	0	0	71.7	0	0	75	50.7858	0	
281	24.714	-5.55	19.1542	0		71.7	0		74.4	50.2858		
282	24.714	-5.55	19.1642	0.1		71.7	0		74.1	49.6858		
283	24.892	-5.68	19.1642	0		71.7	0		73.3	49.3858		
284	24.892	-5.62	19.212	0.478		71.7	0		72.2	48.408		
285	24.892	-5.61	19.272	0.6		71.7	0		71.3	47.308		
286	25.197	-5.61	19.282	0.1		71.7	0		70.4	46.408		
287	25.222	-5.6	19.5868	3.048		71.7	0		69.5	45.2032		
288	25.222	-5.6	19.6222	0.354		71.7	0		69.1	44.2778		
289	25.222	-5.59	19.6222	0		71.7	0		67.5	43.8778		
290	25.222	-5.59	19.6322	0.1	4.78	71.7	0	0	66.3	42.2778	4.78	
291	25.222	-5.59	19.6322	0		71.7	0		65.8	41.0778		
292	25.222	-5.59	19.6322	0		71.7	0		65.2	40.5778		
293	25.222	-5.58	19.6322	0		71.7	0		65	39.9778		
294	25.222	-5.58	19.6422	0.1		71.7	0		64.9	39.7778		
295	25.222	-5.58	19.6422	0		71.7	0		64.8	39.6778		
296	25.222	-5.58	19.6422	0		71.7	0		64.7	39.5778		
297	25.222	-5.58	19.6422	0		71.7	0		64.7	39.4778		
298	25.222	-5.58	19.6422	0		71.7	0		64.7	39.4778		
299	25.222	-5.57	19.6422	0		71.7	0		64.8	39.4778		
300	25.222	-5.57	19.6522	0.1	0.2	71.7	0	0	65	39.5778	0.2	
301	25.222	-5.57	19.6522	0		71.7	0		65.2	39.7778		
302	25.222	-5.57	19.6522	0		71.7	0		65.4	39.9778		
303	25.222	-5.57	19.6522	0		71.7	0		65.6	40.1778		
304	25.222	-5.57	19.6522	0		71.7	0		65.8	40.3778		
305	25.222	-5.57	19.6522	0		71.7	0		65.8	40.5778		
306	25.222	-5.57	19.6522	0		71.7	0		65.8	40.5778		
307	25.222	-5.57	19.6522	0		71.7	0		65.9	40.5778		
308	25.222	-5.56	19.6522	0		71.7	0		66	40.6778		
309	25.222	-5.56	19.6622	0.1		71.7	0		66.2	40.7778		
310	25.222	-5.56	19.6622	0	0.1	71.7	0	0	66.3	40.9778	0.1	
311	25.222	-5.56	19.6622	0		71.7	0		66.5	41.0778		
312	25.222	-5.56	19.6622	0		71.7	0		66.6	41.2778		
313	25.248	-5.56	19.6622	0		71.7	0		66.8	41.3778		

314	25.248	-5.56	19.6876	0.254		71.7	0		66.8	41.5524	
315	25.248	-5.56	19.6876	0		71.7	0		66.6	41.5524	
316	25.248	-5.56	19.6876	0		71.7	0		66.5	41.3524	
317	25.248	-5.56	19.6876	0		71.7	0		66.3	41.2524	
318	25.248	-5.56	19.6876	0		71.7	0		66.3	41.0524	
319	25.248	-5.56	19.6876	0		71.7	0		66.2	41.0524	
320	25.248	-5.56	19.6876	0	0.254	71.7	0	0	66.1	40.9524	0.254 C-131
321	25.248	-5.56	19.6876	0		71.7	0		66	40.8524	
322	25.248	-5.55	19.6876	0		71.7	0		65.9	40.7524	
323	25.248	-5.55	19.6976	0.1		71.7	0		66	40.6524	
324	25.248	-5.55	19.6976	0		71.7	0		66	40.7524	
325	25.248	-5.55	19.6976	0		71.7	0		66	40.7524	
326	25.248	-5.55	19.6976	0		71.7	0		66	40.7524	
327	25.248	-5.55	19.6976	0		71.7	0		66	40.7524	
328	25.248	-5.55	19.6976	0		71.7	0		65.9	40.7524	
329	25.248	-5.55	19.6976	0		71.7	0		66	40.6524	
330	25.248	-5.55	19.6976	0	0.1	71.7	0	0	66.1	40.7524	0.1
331	25.248	-5.55	19.6976	0		71.7	0		66.2	40.8524	
332	25.248	-5.55	19.6976	0		71.7	0		66.3	40.9524	
333	25.248	-5.55	19.6976	0		71.7	0		66.5	41.0524	
334	25.248	-5.55	19.6976	0		71.7	0		66.4	41.2524	
335	25.248	-5.55	19.6976	0		71.7	0		66.4	41.1524	
336	25.248	-5.55	19.6976	0		71.7	0		66.4	41.1524	
337	25.248	-5.55	19.6976	0		71.7	0		65.7	41.1524	
338	25.248	-5.55	19.6976	0		71.7	0		66.3	40.4524	
339	25.248	-5.55	19.6976	0		71.7	0		66.2	41.0524	
340	25.248	-5.55	19.6976	0	0	71.7	0	0	66.2	40.9524	0
341	25.248	-5.55	19.6976	0		71.7	0		66.3	40.9524	
342	25.248	-5.54	19.6976	0		71.7	0		66.3	41.0524	
343	25.248	-5.54	19.7076	0.1		71.7	0		66.2	41.0524	
344	25.248	-5.54	19.7076	0		71.7	0		66.2	40.9524	
345	25.248	-5.54	19.7076	0		71.7	0		66.2	40.9524	
346	25.248	-5.54	19.7076	0		71.7	0		66.2	40.9524	
347	25.248	-5.54	19.7076	0		71.7	0		66.2	40.9524	
348	25.248	-5.54	19.7076	0		71.7	0		66.2	40.9524	
349	25.248	-5.54	19.7076	0		71.7	0		66.2	40.9524	
350	25.248	-5.54	19.7076	0	0.1	71.7	0	0	66.2	40.9524	0.1
351	25.248	-5.54	19.7076	0		71.7	0		65.9	40.9524	
352	25.248	-5.54	19.7076	0		71.7	0		65.9	40.6524	
353	25.248	-5.54	19.7076	0		71.7	0		66.2	40.6524	
354	25.248	-5.54	19.7076	0		71.7	0		66.7	40.9524	
355	25.248	-5.54	19.7076	0		71.7	0		67	41.4524	
356	25.248	-5.54	19.7076	0		71.7	0		67.2	41.7524	
357	25.248	-5.54	19.7076	0		71.7	0		67.5	41.9524	
358	25.248	-5.54	19.7076	0		71.7	0		67.7	42.2524	
359	25.248	-5.54	19.7076	0		71.7	0		67.8	42.4524	
360	25.248	-5.54	19.7076	0	0	71.7	0	0	67.9	42.5524	0
361	25.248	-5.54	19.7076	0		71.7	0		67.8	42.6524	
362	25.248	-5.54	19.7076	0		71.7	0		67.9	42.5524	
363	25.248	-5.54	19.7076	0		71.7	0		67.8	42.6524	
364	25.273	-5.54	19.7076	0		71.7	0		67.7	42.5524	
365	25.273	-5.54	19.733	0.254		71.7	0		67.5	42.427	
366	25.273	-5.54	19.733	0		71.7	0		67.4	42.227	
367	25.273	-5.54	19.733	0		71.7	0		67.4	42.127	
368	25.933	-5.92	19.733	0		71.7	0		67.2	42.127	
369	26.137	-5.87	20.0134	2.804		71.7	0		67.4	41.2666	
370	26.137	-5.75	20.2666	2.532	5.59	71.7	0	0	67.9	41.2634	5.59
371	26.137	-5.71	20.3866	1.2		71.7	0		68.2	41.7634	
372	26.137	-5.69	20.4266	0.4		71.7	0		68.6	42.0634	
373	26.137	-5.67	20.4466	0.2		71.7	0		68.8	42.4634	
374	26.137	-5.66	20.4666	0.2		71.7	0		69	42.6634	
375	26.137	-5.65	20.4766	0.1		71.7	0		68.9	42.8634	
376	26.137	-5.64	20.4866	0.1		71.7	0		68.8	42.7634	
377	26.822	-5.88	20.4966	0.1		71.7	0		68.8	42.6634	
378	26.822	-5.74	20.9424	4.458		71.7	0		69.1	41.9776	

379	26.822	-5.7	21.0824	1.4		71.7	0		69.1	42.2776		
380	26.822	-5.68	21.1224	0.4	8.558	71.7	0	0	69	42.2776	8.558	
381	26.822	-5.67	21.1424	0.2		71.7	0		68.6	42.1776		
382	26.822	-5.66	21.1524	0.1		71.7	0		68.2	41.7776		
383	26.822	-5.65	21.1624	0.1		71.7	0		67.9	41.3776		
384	26.822	-5.64	21.1724	0.1		71.7	0		67.5	41.0776		
385	26.822	-5.63	21.1824	0.1		71.7	0		67.4	40.6776		
386	26.822	-5.63	21.1924	0.1		71.7	0		67.3	40.5776		C-132
387	26.822	-5.62	21.1924	0		71.7	0		67.4	40.4776		
388	26.822	-5.62	21.2024	0.1		71.8	0		67.6	40.5776		
389	26.822	-5.61	21.2024	0		71.8	1		67.7	40.7776		
390	26.822	-5.61	21.2124	0.1	0.9	71.9	0	1	67.5	40.8776	1.9	
391	26.822	-5.61	21.2124	0		72	1		67.1	40.6776		
392	26.822	-5.61	21.2124	0		72.1	1		66.7	40.2776		
393	26.822	-5.6	21.2124	0		72.2	1		66.4	39.8776		
394	26.822	-5.6	21.2224	0.1		72.3	1		66.5	39.5776		
395	26.822	-5.6	21.2224	0		72.4	1		66.6	39.6776		
396	26.822	-5.6	21.2224	0		72.5	1		66.7	39.7776		
397	26.822	-5.6	21.2224	0		72.6	1		67.2	39.8776		
398	26.822	-5.6	21.2224	0		72.7	1		67.8	40.3776		
399	26.822	-5.59	21.2224	0		72.8	1		68.2	40.9776		
400	26.822	-5.59	21.2324	0.1	0.2	72.9	1	10	68.6	41.3776	10.2	
401	26.822	-5.59	21.2324	0		73	1		68.7	41.7776		
402	26.822	-5.59	21.2324	0		73	1		68.3	41.8776		
403	26.822	-5.59	21.2324	0		73.1	0		67.4	41.4776		
404	26.822	-5.59	21.2324	0		73.3	1		66.8	40.5776		
405	26.822	-5.59	21.2324	0		73.4	2		66.2	39.9776		
406	26.822	-5.59	21.2324	0		73.5	1		65.6	39.3776		
407	26.822	-5.59	21.2324	0		73.7	1		65.1	38.7776		
408	26.822	-5.59	21.2324	0		73.9	2		64.8	38.2776		
409	26.822	-5.59	21.2324	0		74	2		64.5	37.9776		
410	26.822	-5.58	21.2324	0	0	74.1	1	12	64.3	37.6776	12	
411	26.822	-5.58	21.2424	0.1		74.3	1		64.1	37.4776		
412	26.822	-5.58	21.2424	0		74.5	2		63.8	37.2776		
413	26.822	-5.58	21.2424	0		74.6	2		63.8	36.9776		
414	26.822	-5.58	21.2424	0		74.8	1		63.5	36.9776		
415	26.822	-5.58	21.2424	0		75	2		63.3	36.6776		
416	26.822	-5.58	21.2424	0		75.2	2		62.9	36.4776		
417	26.822	-5.58	21.2424	0		75.5	2		62.5	36.0776		
418	26.822	-5.58	21.2424	0		75.7	3		62.3	35.6776		
419	26.822	-5.58	21.2424	0		75.9	2		62.1	35.4776		
420	26.822	-5.58	21.2424	0	0.1	76.1	2	19	61.9	35.2776	19.1	
421	26.822	-5.58	21.2424	0		76.4	2		61.7	35.0776		
422	26.822	-5.58	21.2424	0		76.7	3		61.6	34.8776		
423	26.822	-5.58	21.2424	0		76.8	3		61.4	34.7776		
424	26.822	-5.58	21.2424	0		77.1	1		61.1	34.5776		
425	26.822	-5.58	21.2424	0		77.5	3		60.9	34.2776		
426	26.822	-5.58	21.2424	0		77.8	4		60.9	34.0776		
427	26.822	-5.58	21.2424	0		78.1	3		60.9	34.0776		
428	26.822	-5.58	21.2424	0		78.4	3		60.8	34.0776		
429	26.822	-5.58	21.2424	0		78.6	3		60.8	33.9776		
430	26.822	-5.58	21.2424	0	0	78.9	2	27	60.8	33.9776	27	
431	26.822	-5.58	21.2424	0		79.2	3		60.9	33.9776		
432	26.822	-5.58	21.2424	0		79.5	3		60.9	34.0776		
433	26.822	-5.58	21.2424	0		79.8	3		61	34.0776		
434	26.822	-5.58	21.2424	0		80.1	3		61.2	34.1776		
435	26.822	-5.58	21.2424	0		80.3	3		61.5	34.3776		
436	26.822	-5.58	21.2424	0		80.6	2		62.4	34.6776		
437	26.822	-5.58	21.2424	0		81.2	3		62.6	35.5776		
438	26.822	-5.58	21.2424	0		81.5	6		64	35.7776		
439	26.848	-5.58	21.2424	0		81.8	3		65.1	37.1776		
440	26.848	-5.58	21.2678	0.254	0.254	82	3	32	65.9	38.2522	32.254	
441	26.848	-5.58	21.2678	0		82.3	2		66.5	39.0522		
442	26.848	-5.58	21.2678	0		82.5	3		67	39.6522		
443	26.848	-5.58	21.2678	0		82.8	2		67.4	40.1522		

444	26.848	-5.58	21.2678	0		83.2	3		67.6	40.5522	
445	26.848	-5.58	21.2678	0		83.5	4		67.4	40.7522	
446	26.848	-5.58	21.2678	0		83.9	3		67	40.5522	
447	26.848	-5.58	21.2678	0		84.3	4		66.8	40.1522	
448	26.848	-5.58	21.2678	0		84.6	4		66.7	39.9522	
449	26.848	-5.58	21.2678	0		84.9	3		66.4	39.8522	
450	26.848	-5.58	21.2678	0	0	85.2	3	31	66.4	39.5522	31
451	26.848	-5.58	21.2678	0		85.6	3		66.2	39.5522	
452	26.848	-5.58	21.2678	0		85.9	4		66.1	39.3522	C-133
453	26.848	-5.58	21.2678	0		86.2	3		66	39.2522	
454	26.848	-5.58	21.2678	0		86.6	3		65.9	39.1522	
455	26.848	-5.58	21.2678	0		86.9	4		65.8	39.0522	
456	26.848	-5.58	21.2678	0		87.1	3		66	38.9522	
457	26.848	-5.58	21.2678	0		87.4	2		66.3	39.1522	
458	26.848	-5.58	21.2678	0		87.7	3		66.4	39.4522	
459	26.949	-5.58	21.2678	0		88	3		66.5	39.5522	
460	27.076	-5.58	21.3694	1.016	1.016	88.2	3	31	66.8	39.5506	32.016
461	27.076	-5.58	21.4964	1.27		88.5	2		66.8	39.7236	
462	27.076	-5.58	21.4964	0		88.8	3		67.5	39.7236	
463	27.076	-5.58	21.4964	0		89.1	3		67.9	40.4236	
464	27.076	-5.58	21.4964	0		89.3	3		68.4	40.8236	
465	27.076	-5.58	21.4964	0		89.6	2		68.6	41.3236	
466	27.076	-5.58	21.4964	0		89.9	3		68.7	41.5236	
467	27.076	-5.58	21.4964	0		90.3	3		68.5	41.6236	
468	27.076	-5.58	21.4964	0		90.5	4		68.5	41.4236	
469	27.076	-5.58	21.4964	0		90.8	2		68.5	41.4236	
470	27.076	-5.58	21.4964	0	1.27	91.1	3	28	68.6	41.4236	29.27
471	27.076	-5.58	21.4964	0		91.5	3		68.9	41.5236	
472	27.076	-5.58	21.4964	0		91.8	4		69.5	41.8236	
473	27.076	-5.58	21.4964	0		92.2	3		70.3	42.4236	
474	27.076	-5.58	21.4964	0		92.5	4		71.5	43.2236	
475	27.076	-5.58	21.4964	0		92.8	3		73.1	44.4236	
476	27.102	-5.58	21.4964	0		93.1	3		74.7	46.0236	
477	27.356	-5.58	21.5218	0.254		93.4	3		76.3	47.5982	
478	27.457	-5.58	21.7758	2.54		93.8	3		78	48.9442	
479	27.457	-5.58	21.8774	1.016		94	4		79.6	50.5426	
480	27.457	-5.58	21.8774	0	3.81	94.5	2	32	81.1	52.1426	35.81
481	27.508	-5.58	21.8774	0		94.8	5		82	53.6426	
482	28.27	-5.58	21.9282	0.508		95.2	3		82.5	54.4918	
483	28.296	-5.58	22.6902	7.62		95.4	4		82.9	54.2298	
484	28.296	-5.58	22.7156	0.254		95.9	2		83.8	54.6044	
485	28.296	-5.58	22.7156	0		96.3	5		84.6	55.5044	
486	28.296	-5.58	22.7156	0		96.6	4		85.4	56.3044	
487	28.296	-5.58	22.7156	0		96.8	3		85.9	57.1044	
488	28.296	-5.58	22.7156	0		97	2		85.9	57.6044	
489	28.296	-5.58	22.7156	0		97.4	2		85.1	57.6044	
490	34.087	-10.8	22.7156	0	8.382	97.6	4	34	84.6	56.8044	42.382
491	34.087	-9.91	23.2868	5.712		98.2	2		85.1	50.5132	
492	34.087	-9.37	24.1768	8.9		98.7	6		87.1	51.0132	
493	34.087	-9.22	24.7168	5.4		99.2	5		88.7	53.0132	
494	34.087	-9.14	24.8668	1.5		99.5	5		89.5	54.6132	
495	34.087	-9.09	24.9468	0.8		100	3		90.1	55.4132	
496	34.087	-9.05	24.9968	0.5		100	5		89.8	56.0132	
497	34.087	-9.02	25.0368	0.4		101	0		89.1	55.7132	
498	34.087	-9	25.0668	0.3		101	10		88.5	55.0132	
499	34.087	-8.99	25.0868	0.2		102	0		88	54.4132	
500	34.087	-8.97	25.0968	0.1	23.812	102	10	46	87.5	53.9132	69.812
501	34.087	-8.96	25.1168	0.2		103	0		87	53.4132	
502	34.087	-8.96	25.1268	0.1		103	10		86.5	52.9132	
503	34.087	-8.95	25.1268	0		104	0		86	52.4132	
504	34.087	-8.95	25.1368	0.1		104	10		85.6	51.9132	
505	34.087	-8.94	25.1368	0		105	0		85.5	51.5132	
506	34.087	-8.94	25.1468	0.1		105	10		85.4	51.4132	
507	36.093	-10.4	25.1468	0		105	0		85.2	51.3132	
508	36.601	-10.5	25.6934	5.466		105	0		85.5	49.1066	

509	40.31	-13.6	26.1014	4.08		106	0		85.9	48.8986		
510	42.113	-14.8	26.7098	6.084	16.13	106	10	40	86.3	45.5902	56.13	
511	42.113	-13.9	27.3132	6.034		107	0		86.6	44.1868		
512	45.517	-16.4	28.2132	9		107	10		86.6	44.4868		
513	45.517	-15.7	29.1168	9.036		108	0		86.8	41.0832		
514	45.517	-15.2	29.8168	7		108	10		87.2	41.2832		
515	45.517	-14.6	30.3168	5		109	0		87.7	41.6832		
516	45.517	-14.1	30.9168	6		109	10		88.4	42.1832		
517	45.517	-13.9	31.4168	5		110	0		88.6	42.8832		
518	45.517	-13.8	31.6168	2		110	10		88.9	43.0832		C-134
519	45.517	-13.7	31.7168	1		111	0		89	43.3832		
520	45.517	-13.6	31.8168	1	51.07	111	10	50	89.3	43.4832	101.07	
521	45.517	-13.6	31.9168	1		112	0		89.5	43.7832		
522	45.517	-13.5	31.9168	0		112	10		89.5	43.9832		
523	45.771	-13.5	32.0168	1		113	0		89.5	43.9832		
524	45.822	-13.4	32.2708	2.54		113	10		89.8	43.7292		
525	45.822	-13.4	32.4216	1.508		114	0		89.9	43.9784		
526	45.822	-13.4	32.4216	0		114	10		90.2	44.0784		
527	45.872	-13.4	32.4216	0		115	0		90.6	44.3784		
528	45.872	-13.4	32.4724	0.508		115	10		90.9	44.7276		
529	45.872	-13.4	32.4724	0		116	0		91	45.0276		
530	45.872	-13.3	32.4724	0	6.556	116	10	50	91.1	45.1276	56.556	
531	46.101	-13.3	32.5724	1		117	0		91.2	45.2276		
532	46.761	-13.3	32.801	2.286		117	10		91.3	45.099		
533	46.761	-13.3	33.4614	6.604		118	0		91.6	44.5386		
534	46.761	-13.3	33.4614	0		118	10		91.7	44.8386		
535	46.761	-13.3	33.4614	0		119	0		92	44.9386		
536	46.761	-13.3	33.4614	0		119	10		92	45.2386		
537	46.787	-13.3	33.4614	0		119	0		92	45.2386		
538	46.838	-13.3	33.4868	0.254		120	0		92	45.2132		
539	46.838	-13.3	33.5376	0.508		120	10		92.5	45.1624		
540	46.838	-13.3	33.5376	0	10.652	121	0	40	93.2	45.6624	50.652	
541	46.838	-13.3	33.5376	0		121	10		93.9	46.3624		
542	46.838	-13.3	33.5376	0		121	0		94.4	47.0624		
543	46.838	-13.3	33.5376	0		122	0		95.3	47.5624		
544	46.838	-13.3	33.5376	0		122	10		95.5	48.4624		
545	46.838	-13.3	33.5376	0		122	0		95.7	48.6624		
546	46.838	-13.3	33.5376	0		123	0		95.8	48.8624		
547	46.838	-13.3	33.5376	0		123	10		95.7	48.9624		
548	47.701	-13.7	33.5376	0		123	0		95.8	48.8624		
549	48.082	-13.6	34.0012	4.636		124	0		95.9	48.0988		
550	48.26	-13.5	34.4822	4.81	9.446	124	10	40	95.9	47.8178	49.446	
551	48.438	-13.5	34.76	2.778		124	0		97.8	47.64		
552	48.692	-13.4	34.9378	1.778		125	0		99.2	49.3622		
553	48.717	-13.4	35.2918	3.54		125	10		100	50.5082		
554	48.717	-13.4	35.3172	0.254		126	0		101	51.2828		
555	48.717	-13.4	35.3172	0		126	10		102	52.2828		
556	48.717	-13.4	35.3172	0		126	0		102	53.2828		
557	48.717	-13.4	35.3172	0		127	0		103	53.2828		
558	48.768	-13.4	35.3172	0		127	10		103	54.2828		
559	48.768	-13.4	35.368	0.508		127	0		103	54.232		
560	48.768	-13.4	35.368	0	8.858	128	0	30	104	54.232	38.858	
561	48.768	-13.4	35.368	0		128	10		104	55.232		
562	48.768	-13.4	35.368	0		128	0		105	55.232		
563	48.768	-13.4	35.368	0		129	0		105	56.232		
564	48.768	-13.4	35.368	0		129	10		106	56.232		
565	48.768	-13.4	35.368	0		129	0		106	57.232		
566	48.768	-13.4	35.368	0		130	0		107	57.232		
567	48.768	-13.4	35.368	0		130	10		108	58.232		
568	48.768	-13.4	35.368	0		130	0		109	59.232		
569	48.768	-13.4	35.368	0		130	0		109	60.232		
570	48.768	-13.4	35.368	0	0	131	0	30	110	60.232	30	
571	48.768	-13.4	35.368	0		131	10		110	61.232		
572	48.768	-13.4	35.368	0		131	0		111	61.232		
573	48.768	-13.4	35.368	0		131	0		111	62.232		

574	48.768	-13.4	35.368	0		132	0		111	62.232		
575	48.768	-13.4	35.368	0		132	10		112	62.232		
576	48.768	-13.4	35.368	0		132	0		112	63.232		
577	48.768	-13.4	35.368	0		132	0		112	63.232		
578	48.768	-13.4	35.368	0		133	0		112	63.232		
579	48.768	-13.4	35.368	0		133	10		113	63.232		
580	48.768	-13.4	35.368	0	0	133	0	30	114	64.232	30	
581	48.844	-13.4	35.368	0		133	0		114	65.232		
582	49.886	-14.3	35.4442	0.762		133	0		115	65.1558		
583	49.886	-13.9	35.5856	1.414		134	0		115	65.1144		
584	49.886	-13.8	35.9856	4		134	10		115	65.1144		C-135
585	49.886	-13.8	36.0856	1		134	0		116	65.1144		
586	49.886	-13.8	36.0856	0		135	0		117	66.1144		
587	49.886	-13.7	36.0856	0		135	10		117	67.1144		
588	49.886	-13.7	36.1856	1		135	0		118	67.1144		
589	49.886	-13.7	36.1856	0		135	0		119	68.1144		
590	49.886	-13.7	36.1856	0	8.176	135	0	20	119	69.1144	28.176	
591	49.886	-13.7	36.1856	0		135	0		120	69.1144		
592	49.886	-13.7	36.1856	0		135	0		120	70.1144		
593	49.886	-13.7	36.1856	0		135	0		120	70.1144		
594	49.886	-13.7	36.1856	0		136	0		121	70.1144		
595	49.886	-13.7	36.1856	0		136	10		121	71.1144		
596	49.886	-13.7	36.1856	0		136	0		122	71.1144		
597	49.886	-13.7	36.1856	0		136	0		122	72.1144		
598	49.886	-13.7	36.1856	0		136	0		122	72.1144		
599	49.886	-13.7	36.1856	0		136	0		122	72.1144		
600	49.886	-13.7	36.1856	0	0	136	0	10	121	72.1144	10	
601	49.886	-13.7	36.1856	0		136	0		121	71.1144		
602	49.886	-13.7	36.1856	0		136	0		121	71.1144		
603	49.886	-13.7	36.1856	0		136	0		122	71.1144		
604	49.886	-13.7	36.1856	0		136	0		122	72.1144		
605	49.936	-13.7	36.1856	0		136	0		122	72.1144		
606	49.936	-13.7	36.2364	0.508		136	0		122	72.0636		
607	49.936	-13.7	36.2364	0		136	0		122	72.0636		
608	49.936	-13.7	36.2364	0		136	0		122	72.0636		
609	49.987	-13.6	36.2364	0		136	0		122	72.0636		
610	49.987	-13.6	36.3872	1.508	2.016	136	0	0	122	72.0128	2.016	
611	49.987	-13.6	36.3872	0		136	0		122	72.0128		
612	49.987	-13.6	36.3872	0		136	0		122	72.0128		
613	49.987	-13.6	36.3872	0		136	0		122	72.0128		
614	49.987	-13.6	36.3872	0		136	0		122	72.0128		
615	49.987	-13.6	36.3872	0		136	0		122	72.0128		
616	49.987	-13.6	36.3872	0		136	0		122	72.0128		
617	49.987	-13.6	36.3872	0		136	0		122	72.0128		
618	49.987	-13.6	36.3872	0		137	0		122	72.0128		
619	49.987	-13.6	36.3872	0		137	10		122	72.0128		
620	49.987	-13.6	36.3872	0	0	137	0	10	122	72.0128	10	
621	49.987	-13.6	36.3872	0		137	0		123	72.0128		
622	49.987	-13.6	36.3872	0		137	0		123	73.0128		
623	49.987	-13.6	36.3872	0		137	0		123	73.0128		
624	49.987	-13.6	36.3872	0		137	0		123	73.0128		
625	49.987	-13.6	36.3872	0		137	0		123	73.0128		
626	49.987	-13.6	36.3872	0		137	0		123	73.0128		
627	49.987	-13.6	36.3872	0		137	0		123	73.0128		
628	49.987	-13.6	36.3872	0		137	0		123	73.0128		
629	49.987	-13.6	36.3872	0		137	0		123	73.0128		
630	49.987	-13.6	36.3872	0	0	137	0	0	123	73.0128	0	
631	49.987	-13.6	36.3872	0		137	0		123	73.0128		
632	49.987	-13.6	36.3872	0		137	0		123	73.0128		
633	49.987	-13.6	36.3872	0		137	0		123	73.0128		
634	49.987	-13.6	36.3872	0		137	0		123	73.0128		
635	49.987	-13.6	36.3872	0		137	0		123	73.0128		
636	49.987	-13.6	36.3872	0		137	0		123	73.0128		
637	49.987	-13.6	36.3872	0		137	0		122	73.0128		
638	49.987	-13.6	36.3872	0		137	0		122	72.0128		

639	49.987	-13.6	36.3872	0		137	0		122	72.0128		
640	49.987	-13.6	36.3872	0	0	137	0	0	122	72.0128	0	
641	49.987	-13.6	36.3872	0		137	0		122	72.0128		
642	49.987	-13.6	36.3872	0		137	0		122	72.0128		
643	49.987	-13.6	36.3872	0		137	0		122	72.0128		
644	49.987	-13.6	36.3872	0		137	0		122	72.0128		
645	49.987	-13.6	36.3872	0		137	0		122	72.0128		
646	49.987	-13.6	36.3872	0		137	0		122	72.0128		
647	49.987	-13.6	36.3872	0		137	0		122	72.0128		
648	50.165	-13.7	36.3872	0		137	0		122	72.0128		
649	50.165	-13.7	36.465	0.778		137	0		122	71.835		
650	50.165	-13.7	36.465	0	0.778	137	0	0	122	71.835	0.778	C-136
651	50.47	-13.7	36.465	0		137	0		121	71.835		
652	50.495	-13.7	36.7698	3.048		137	0		121	70.5302		
653	50.495	-13.7	36.7952	0.254		137	0		121	70.5048		
654	50.495	-13.7	36.7952	0		137	0		121	70.5048		
655	50.495	-13.7	36.7952	0		137	0		121	70.5048		
656	50.495	-13.7	36.7952	0		137	0		121	70.5048		
657	50.495	-13.7	36.7952	0		137	0		121	70.5048		
658	50.495	-13.7	36.7952	0		137	0		121	70.5048		
659	50.495	-13.7	36.7952	0		137	0		121	70.5048		
660	50.495	-13.7	36.7952	0	3.302	137	0	0	121	70.5048	3.302	
661	50.495	-13.7	36.7952	0		137	0		121	70.5048		
662	50.495	-13.6	36.7952	0		137	0		121	70.5048		
663	50.495	-13.6	36.8952	1		137	0		121	70.5048		
664	50.495	-13.6	36.8952	0		137	0		121	70.5048		
665	50.495	-13.6	36.8952	0		137	0		122	70.5048		
666	50.495	-13.6	36.8952	0		137	0		122	71.5048		
667	50.495	-13.6	36.8952	0		137	0		122	71.5048		
668	50.495	-13.6	36.8952	0		137	0		122	71.5048		
669	50.495	-13.6	36.8952	0		137	0		122	71.5048		
670	50.495	-13.6	36.8952	0	1	137	0	0	122	71.5048	1	
671	50.495	-13.6	36.8952	0		137	0		122	71.5048		
672	50.495	-13.6	36.8952	0		137	0		122	71.5048		
673	50.495	-13.6	36.8952	0		137	0		123	71.5048		
674	50.495	-13.6	36.8952	0		137	0		123	72.5048		
675	50.495	-13.6	36.8952	0		137	0		123	72.5048		
676	50.495	-13.6	36.8952	0		137	0		123	72.5048		
677	50.495	-13.6	36.8952	0		137	0		123	72.5048		
678	50.521	-13.6	36.8952	0		137	0		123	72.5048		
679	50.521	-13.6	36.9206	0.254		137	0		123	72.4794		
680	50.521	-13.6	36.9206	0	0.254	137	0	0	123	72.4794	0.254	
681	50.521	-13.6	36.9206	0		137	0		123	72.4794		
682	50.521	-13.6	36.9206	0		137	0		123	72.4794		
683	50.521	-13.6	36.9206	0		137	0		123	72.4794		
684	50.521	-13.6	36.9206	0		137	0		123	72.4794		
685	50.521	-13.6	36.9206	0		137	0		123	72.4794		
686	50.521	-13.6	36.9206	0		137	0		123	72.4794		
687	50.521	-13.6	36.9206	0		137	0		123	72.4794		
688	50.521	-13.6	36.9206	0		137	0		123	72.4794		
689	50.521	-13.6	36.9206	0		137	0		123	72.4794		
690	50.521	-13.6	36.9206	0	0	137	0	0	123	72.4794	0	
691	50.521	-13.6	36.9206	0		137	0		123	72.4794		
692	50.521	-13.6	36.9206	0		137	0		123	72.4794		
693	50.521	-13.6	36.9206	0		137	0		123	72.4794		
694	50.521	-13.6	36.9206	0		137	0		123	72.4794		
695	50.521	-13.6	36.9206	0		137	0		123	72.4794		
696	50.521	-13.6	36.9206	0		137	0		123	72.4794		
697	50.521	-13.6	36.9206	0		137	0		123	72.4794		
698	50.521	-13.6	36.9206	0		137	0		123	72.4794		
699	50.521	-13.6	36.9206	0		137	0		123	72.4794		
700	50.521	-13.6	36.9206	0	0	137	0	0	123	72.4794	0	
701	50.521	-13.6	36.9206	0		137	0		123	72.4794		
702	50.521	-13.6	36.9206	0		137	0		122	72.4794		
703	50.521	-13.6	36.9206	0		137	0		123	71.4794		

704	50.521	-13.6	36.9206	0		137	0		123	72.4794	
705	50.521	-13.6	36.9206	0		137	0		123	72.4794	
706	50.521	-13.6	36.9206	0		137	0		123	72.4794	
707	50.521	-13.6	36.9206	0		137	0		123	72.4794	
708	50.521	-13.6	36.9206	0		137	0		123	72.4794	
709	50.521	-13.6	36.9206	0		137	0		123	72.4794	
710	50.521	-13.6	36.9206	0	0	137	0	0	123	72.4794	0
711	50.521	-13.6	36.9206	0		137	0		123	72.4794	
712	50.521	-13.6	36.9206	0		137	0		123	72.4794	
713	50.521	-13.6	36.9206	0		137	0		123	72.4794	
714	50.521	-13.6	36.9206	0		137	0		123	72.4794	
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716	50.521	-13.6	36.9206	0		137	0		123	72.4794	C-137
717	50.521	-13.6	36.9206	0		137	0		122	72.4794	
718	50.521	-13.6	36.9206	0		137	0		123	71.4794	
719	50.521	-13.6	36.9206	0		137	0		123	72.4794	
720	50.521	-13.6	36.9206	0	0	137	0	0	124	72.4794	0
721	50.521	-13.6	36.9206	0		137	0		124	73.4794	
722	50.521	-13.6	36.9206	0		137	0		124	73.4794	
723	50.521	-13.6	36.9206	0		137	0		124	73.4794	
724	50.521	-13.6	36.9206	0		137	0		124	73.4794	
725	50.521	-13.6	36.9206	0		137	0		124	73.4794	
726	50.521	-13.6	36.9206	0		137	0		124	73.4794	
727	50.521	-13.6	36.9206	0		137	0		125	73.4794	
728	50.521	-13.6	36.9206	0		137	0		124	74.4794	
729	50.546	-13.6	36.9206	0		137	0		124	73.4794	
730	50.546	-13.6	36.946	0.254	0.254	137	0	0	124	73.454	0.254
731	50.546	-13.6	36.946	0		137	0		124	73.454	
732	50.546	-13.6	36.946	0		137	0		124	73.454	
733	51.206	-14	36.946	0		137	0		124	73.454	
734	51.41	-13.9	37.2064	2.604		137	0		124	72.7936	
735	51.41	-13.8	37.5096	3.032		137	0		124	72.5904	
736	51.41	-13.8	37.6096	1		137	0		125	72.5904	
737	51.41	-13.8	37.6096	0		137	0		125	73.5904	
738	51.41	-13.8	37.6096	0		137	0		125	73.5904	
739	51.41	-13.7	37.6096	0		137	0		126	73.5904	
740	51.41	-13.7	37.7096	1	7.636	137	0	0	125	74.5904	7.636
741	51.41	-13.7	37.7096	0		137	0		125	73.5904	
742	52.095	-14	37.7096	0		137	0		125	73.5904	
743	52.095	-13.8	38.0954	3.858		137	0		126	72.9046	
744	52.095	-13.8	38.2954	2		137	0		126	73.9046	
745	52.095	-13.8	38.2954	0		137	0		126	73.9046	
746	52.095	-13.7	38.2954	0		137	0		125	73.9046	
747	52.095	-13.7	38.3954	1		137	0		125	72.9046	
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749	52.095	-13.7	38.3954	0		137	0		124	71.9046	
750	52.095	-13.7	38.3954	0	6.858	137	0	0	124	71.9046	6.858
751	52.095	-13.7	38.3954	0		137	0		124	71.9046	
752	52.095	-13.7	38.3954	0		137	0		124	71.9046	
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754	52.095	-13.7	38.3954	0		137	0		124	71.9046	
755	52.095	-13.7	38.3954	0		137	0		124	71.9046	
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757	52.095	-13.7	38.3954	0		137	0		123	71.9046	
758	52.095	-13.7	38.3954	0		137	0		123	70.9046	
759	52.095	-13.7	38.3954	0		137	0		123	70.9046	
760	52.095	-13.7	38.3954	0	0	137	0	0	123	70.9046	0
761	52.095	-13.7	38.3954	0		137	0		123	70.9046	
762	52.095	-13.7	38.3954	0		137	0		124	70.9046	
763	52.095	-13.7	38.3954	0		137	0		124	71.9046	
764	52.095	-13.7	38.3954	0		138	0		125	71.9046	
765	52.095	-13.7	38.3954	0		138	10		125	72.9046	
766	52.095	-13.7	38.3954	0		138	0		125	72.9046	
767	52.095	-13.7	38.3954	0		138	0		125	72.9046	
768	52.095	-13.7	38.3954	0		138	0		124	72.9046	

769	52.095	-13.7	38.3954	0		138	0		123	71.9046			
770	52.095	-13.7	38.3954	0	0	138	0	10	123	70.9046	10		
771	52.095	-13.7	38.3954	0		138	0		122	70.9046			
772	53.095	-14	38.3954	0		139	0		122	69.9046			
773	53.095	-13.9	39.0954	7		139	10		121	68.9046			
774	53.095	-13.8	39.1954	1		139	0		121	67.9046			
775	53.095	-13.8	39.2954	1		139	0		121	67.9046			
776	53.095	-13.8	39.2954	0		139	0		121	67.9046			
777	53.095	-13.8	39.2954	0		140	0		121	67.9046			
778	53.095	-13.8	39.2954	0		140	10		121	67.9046			
779	53.095	-13.8	39.2954	0		140	0		120	67.9046			
780	53.095	-13.8	39.2954	0	9	140	0	20	120	66.9046	29		
781	53.095	-13.8	39.2954	0		140	0		120	66.9046			
782	53.095	-13.8	39.2954	0		141	0		119	66.9046		C-138	
783	53.095	-13.8	39.2954	0		141	10		119	65.9046			
784	54.095	-13.8	39.2954	0		141	0		119	65.9046			
785	54.095	-13.8	40.2954	10		141	0		119	64.9046			
786	54.095	-13.8	40.2954	0		142	0		119	64.9046			
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788	55.095	-13.8	41.2954	10		142	0		118	63.9046			
789	55.095	-13.8	41.2954	0		142	0		118	62.9046			
790	55.095	-13.8	41.2954	0	20	143	0	20	118	62.9046	40		
791	55.095	-13.8	41.2954	0		143	10		118	62.9046			
792	55.095	-13.8	41.2954	0		143	0		118	62.9046			
793	55.095	-13.8	41.2954	0		144	0		118	62.9046			
794	55.095	-13.8	41.2954	0		144	10		118	62.9046			
795	55.095	-13.8	41.2954	0		144	0		118	62.9046			
796	55.095	-13.8	41.2954	0		145	0		118	62.9046			
797	55.095	-13.8	41.2954	0		145	10		118	62.9046			
798	55.095	-13.8	41.2954	0		145	0		118	62.9046			
799	55.251	-13.8	41.2954	0		146	0		119	62.9046			
800	55.911	-13.8	41.451	1.556	1.556	146	10	40	119	63.749	41.556		
801	55.911	-13.8	42.1114	6.604		146	0		120	63.0886			
802	55.911	-13.8	42.1114	0		147	0		120	64.0886			
803	55.911	-13.8	42.1114	0		147	10		121	64.0886			
804	56.165	-13.8	42.1114	0		148	0		123	65.0886			
805	56.216	-13.8	42.3654	2.54		148	10		123	66.8346			
806	56.978	-13.8	42.4162	0.508		148	0		124	66.7838			
807	56.978	-13.8	43.1782	7.62		148	0		125	67.0218			
808	56.978	-13.8	43.1782	0		149	0		125	68.0218			
809	56.978	-13.8	43.1782	0		149	10		125	68.0218			
810	56.978	-13.8	43.1782	0	17.272	150	0	30	125	68.0218	47.272		
811	56.978	-13.8	43.1782	0		150	10		125	68.0218			
812	56.978	-13.8	43.1782	0		150	0		125	68.0218			
813	56.978	-13.8	43.1782	0		151	0		124	68.0218			
814	56.978	-13.8	43.1782	0		151	10		124	67.0218			
815	56.978	-13.8	43.1782	0		151	0		124	67.0218			
816	56.978	-13.8	43.1782	0		152	0		124	67.0218			
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818	56.978	-13.8	43.1782	0		152	0		124	67.0218			
819	56.978	-13.8	43.1782	0		153	0		124	67.0218			
820	56.978	-13.8	43.1782	0	0	153	10	40	124	67.0218	40		
821	56.978	-13.8	43.1782	0		153	0		124	67.0218			
822	56.978	-13.8	43.1782	0		154	0		124	67.0218			
823	56.978	-13.8	43.1782	0		154	10		124	67.0218			
824	57.994	-13.9	43.1782	0		154	0		125	67.0218			
825	58.35	-13.8	44.0942	9.16		155	0		125	67.0058			
826	58.35	-13.8	44.5498	4.556		155	10		125	66.6502			
827	58.35	-13.8	44.5498	0		155	0		126	66.6502			
828	58.35	-13.8	44.5498	0		156	0		126	67.6502			
829	58.35	-13.8	44.5498	0		156	10		127	67.6502			
830	58.35	-13.8	44.5498	0	13.716	156	0	30	127	68.6502	43.716		
831	58.35	-13.8	44.5498	0		156	0		127	68.6502			
832	58.35	-13.8	44.5498	0		157	0		127	68.6502			
833	58.35	-13.8	44.5498	0		157	10		127	68.6502			

834	58.35	-13.8	44.5498	0		157	0		127	68.6502	
835	58.35	-13.8	44.5498	0		158	0		127	68.6502	
836	59.874	-14.2	44.5498	0		158	10		127	68.6502	
837	59.874	-14	45.6738	11.24		158	0		128	67.1262	
838	59.874	-14	45.8738	2		159	0		129	68.1262	
839	59.874	-14	45.8738	0		159	10		130	69.1262	
840	59.874	-14	45.8738	0	13.24	159	0	30	131	70.1262	43.24
841	59.899	-13.9	45.8738	0		160	0		133	71.1262	
842	60.153	-13.9	45.9992	1.254		160	10		135	73.1008	
843	60.255	-13.9	46.2532	2.54		160	0		136	74.8468	
844	60.255	-13.9	46.3548	1.016		161	0		138	75.7452	
845	60.255	-13.9	46.3548	0		161	10		139	77.7452	
846	60.306	-13.9	46.3548	0		161	0		140	78.7452	
847	61.068	-13.9	46.4056	0.508		162	0		141	79.6944	
848	61.093	-13.9	47.1676	7.62		162	10		141	79.9324	C-139
849	61.093	-13.9	47.193	0.254		163	0		142	79.907	
850	61.093	-13.9	47.193	0	13.192	163	10	40	143	80.907	53.192
851	61.093	-13.9	47.193	0		163	0		144	81.907	
852	61.093	-13.9	47.193	0		163	0		144	82.907	
853	61.093	-13.9	47.193	0		164	0		144	82.907	
854	61.093	-13.9	47.193	0		164	10		143	82.907	
855	65.884	-18.1	47.193	0		164	0		143	81.907	
856	65.884	-17.2	47.7842	5.912		165	0		143	77.1158	
857	65.884	-16.8	48.6842	9		165	10		145	77.1158	
858	65.884	-16.7	49.0842	4		166	0		147	79.1158	
859	65.884	-16.6	49.1842	1		166	10		148	81.1158	
860	65.884	-16.6	49.2842	1	20.912	167	0	30	148	82.1158	50.912
861	65.884	-16.5	49.2842	0		167	10		148	82.1158	
862	65.884	-16.5	49.3842	1		167	0		147	82.1158	
863	65.884	-16.5	49.3842	0		168	0		147	81.1158	
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865	65.884	-16.5	49.3842	0		169	0		146	80.1158	
866	65.884	-16.5	49.3842	0		169	10		145	80.1158	
867	65.884	-16.5	49.3842	0		170	0		145	79.1158	
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869	65.884	-16.5	49.3842	0		171	0		144	78.1158	
870	65.884	-16.5	49.3842	0	1	171	10	50	144	78.1158	51
871	65.884	-16.5	49.3842	0		171	0		144	78.1158	
872	67.891	-18	49.3842	0		172	0		144	78.1158	
873	67.891	-17.5	49.8908	5.066		172	10		144	76.1092	
874	71.599	-20.6	50.3908	5		172	0		144	76.1092	
875	71.599	-20	50.9992	6.084		173	0		145	72.4008	
876	71.599	-19.4	51.5992	6		173	10		145	73.4008	
877	71.599	-19.2	52.1992	6		174	0		145	73.4008	
878	71.599	-19.1	52.3992	2		174	10		145	73.4008	
879	71.599	-19	52.4992	1		175	0		146	73.4008	
880	71.599	-19	52.5992	1	32.15	175	10	40	146	74.4008	72.15
881	71.599	-19	52.5992	0		176	0		147	74.4008	
882	71.599	-18.9	52.5992	0		176	10		147	75.4008	
883	71.599	-18.9	52.6992	1		176	0		147	75.4008	
884	71.599	-18.9	52.6992	0		177	0		147	75.4008	
885	71.599	-18.9	52.6992	0		177	10		148	75.4008	
886	71.599	-18.9	52.6992	0		178	0		148	76.4008	
887	71.599	-18.9	52.6992	0		178	10		148	76.4008	
888	71.853	-18.9	52.6992	0		179	0		148	76.4008	
889	71.904	-18.9	52.9532	2.54		179	10		148	76.1468	
890	71.904	-18.9	53.004	0.508	4.048	180	0	40	148	76.096	44.048
891	71.904	-18.9	53.004	0		180	10		149	76.096	
892	71.955	-18.9	53.004	0		180	0		149	77.096	
893	71.955	-18.9	53.0548	0.508		181	0		149	77.0452	
894	71.955	-18.9	53.0548	0		181	10		149	77.0452	
895	71.955	-18.9	53.0548	0		182	0		149	77.0452	
896	72.183	-18.9	53.0548	0		182	10		150	77.0452	
897	72.234	-18.9	53.2834	2.286		182	0		150	77.8166	
898	72.234	-18.8	53.3342	0.508		183	0		150	77.7658	

899	72.234	-18.8	53.4342	1		183	10		150	77.7658		
900	72.234	-18.8	53.4342	0	4.302	184	0	40	150	77.7658	44.302	
901	72.234	-18.8	53.4342	0		184	10		150	77.7658		
902	72.26	-18.8	53.4342	0		184	0		150	77.7658		
903	73.352	-19.5	53.4596	0.254		185	0		150	77.7404		
904	73.352	-19.1	53.8518	3.922		185	10		151	76.6482		
905	73.352	-19.1	54.2518	4		186	0		152	77.6482		
906	73.352	-19.1	54.2518	0		186	10		152	78.6482		
907	73.352	-19	54.2518	0		186	0		152	78.6482		
908	73.352	-19	54.3518	1		186	0		152	78.6482		
909	73.352	-19	54.3518	0		187	0		152	78.6482		
910	73.352	-19	54.3518	0	9.176	187	10	40	152	78.6482	49.176	
911	73.352	-19	54.3518	0		187	0		153	78.6482		
912	73.352	-19	54.3518	0		188	0		153	79.6482		
913	74.215	-19.4	54.3518	0		188	10		153	79.6482		
914	74.596	-19.3	54.8154	4.636		188	0		153	78.7846		C-140
915	74.774	-19.2	55.2964	4.81		189	0		154	78.4036		
916	74.952	-19.1	55.5742	2.778		189	10		154	79.2258		
917	74.952	-19.1	55.852	2.778		189	0		154	79.048		
918	74.977	-19.1	55.852	0		190	0		155	79.048		
919	74.977	-19.1	55.8774	0.254		190	10		156	80.0226		
920	74.977	-19.1	55.8774	0	15.256	190	0	30	156	81.0226	45.256	
921	74.977	-19.1	55.8774	0		191	0		157	81.0226		
922	74.977	-19.1	55.8774	0		191	10		157	82.0226		
923	75.028	-19.1	55.8774	0		191	0		158	82.0226		
924	75.028	-19.1	55.9282	0.508		192	0		157	82.9718		
925	75.028	-19.1	55.9282	0		192	10		157	81.9718		
926	75.028	-19.1	55.9282	0		192	0		157	81.9718		
927	75.028	-19.1	55.9282	0		193	0		158	81.9718		
928	75.028	-19.1	55.9282	0		193	10		158	82.9718		
929	75.028	-19.1	55.9282	0		193	0		158	82.9718		
930	75.028	-19.1	55.9282	0	0.508	193	0	30	159	82.9718	30.508	
931	75.028	-19.1	55.9282	0		194	0		159	83.9718		
932	75.028	-19.1	55.9282	0		194	10		159	83.9718		
933	75.028	-19.1	55.9282	0		194	0		160	83.9718		
934	75.028	-19.1	55.9282	0		195	0		162	84.9718		
935	75.028	-19.1	55.9282	0		195	10		164	86.9718		
936	75.028	-19.1	55.9282	0		195	0		165	88.9718		
937	75.028	-19.1	55.9282	0		195	0		166	89.9718		
938	75.028	-19.1	55.9282	0		195	0		166	90.9718		
939	75.028	-19.1	55.9282	0		196	0		167	90.9718		
940	75.028	-19.1	55.9282	0	0	196	10	30	168	91.9718	30	
941	75.028	-19.1	55.9282	0		196	0		168	92.9718		
942	75.028	-19.1	55.9282	0		196	0		169	92.9718		
943	75.028	-19.1	55.9282	0		197	0		170	93.9718		
944	75.028	-19.1	55.9282	0		197	10		171	94.9718		
945	75.028	-19.1	55.9282	0		197	0		172	95.9718		
946	75.104	-19.1	55.9282	0		197	0		173	96.9718		
947	76.146	-20	56.0044	0.762		197	0		173	97.8956		
948	76.146	-19.6	56.1458	1.414		198	0		175	96.8542		
949	76.146	-19.5	56.5458	4		198	10		176	98.8542		
950	76.146	-19.5	56.6458	1	7.176	198	0	20	177	99.8542	27.176	
951	76.146	-19.4	56.6458	0		199	0		178	100.8542		
952	76.146	-19.4	56.7458	1		199	10		179	101.8542		
953	76.146	-19.4	56.7458	0		199	0		180	102.8542		
954	76.146	-19.4	56.7458	0		199	0		181	103.8542		
955	76.146	-19.4	56.7458	0		199	0		181	104.8542		
956	76.146	-19.4	56.7458	0		199	0		182	104.8542		
957	76.146	-19.4	56.7458	0		199	0		183	105.8542		
958	76.146	-19.4	56.7458	0		199	0		183	106.8542		
959	76.146	-19.4	56.7458	0		199	0		185	106.8542		
960	76.146	-19.3	56.7458	0	1	199	0	10	186	108.8542	11	
961	76.146	-19.3	56.8458	1		199	0		187	109.8542		
962	76.146	-19.3	56.8458	0		199	0		188	110.8542		
963	76.146	-19.3	56.8458	0		199	0		189	111.8542		

964	76.146	-19.3	56.8458	0		199	0		190	112.8542	
965	76.146	-19.3	56.8458	0		199	0		190	113.8542	
966	76.146	-19.3	56.8458	0		199	0		190	113.8542	
967	76.146	-19.3	56.8458	0		199	0		191	113.8542	
968	76.146	-19.3	56.8458	0		199	0		191	114.8542	
969	76.146	-19.3	56.8458	0		200	0		192	114.8542	
970	76.197	-19.3	56.8458	0	1	200	10	10	192	115.8542	11
971	76.197	-19.3	56.8966	0.508		200	0		192	115.8034	
972	76.197	-19.3	56.8966	0		200	0		193	115.8034	
973	76.197	-19.3	56.8966	0		200	0		193	116.8034	
974	76.247	-19.3	56.8966	0		200	0		193	116.8034	
975	76.247	-19.3	56.9474	0.508		200	0		192	116.7526	
976	76.247	-19.3	56.9474	0		200	0		192	115.7526	
977	76.247	-19.3	56.9474	0		200	0		192	115.7526	
978	76.247	-19.3	56.9474	0		200	0		193	115.7526	
979	76.247	-19.3	56.9474	0		200	0		193	116.7526	
980	76.247	-19.3	56.9474	0	1.016	200	0	0	192	116.7526	1.016 C-141
981	76.247	-19.3	56.9474	0		200	0		192	115.7526	
982	76.247	-19.3	56.9474	0		200	0		192	115.7526	
983	76.247	-19.3	56.9474	0		200	0		192	115.7526	
984	76.247	-19.3	56.9474	0		200	0		191	115.7526	
985	76.247	-19.3	56.9474	0		200	0		191	114.7526	
986	76.247	-19.3	56.9474	0		200	0		191	114.7526	
987	76.247	-19.3	56.9474	0		200	0		191	114.7526	
988	76.247	-19.3	56.9474	0		200	0		191	114.7526	
989	76.247	-19.3	56.9474	0		200	0		191	114.7526	
990	76.247	-19.3	56.9474	0	0	200	0	0	190	114.7526	0
991	76.247	-19.3	56.9474	0		200	0		191	113.7526	
992	76.247	-19.3	56.9474	0		200	0		192	114.7526	
993	76.247	-19.3	56.9474	0		200	0		192	115.7526	
994	76.247	-19.3	56.9474	0		200	0		192	115.7526	
995	76.298	-19.3	56.9474	0		200	0		191	115.7526	
996	76.298	-19.3	56.9982	0.508		200	0		191	114.7018	
997	76.298	-19.3	56.9982	0		200	0		192	114.7018	
998	76.298	-19.3	56.9982	0		200	0		192	115.7018	
999	76.324	-19.3	56.9982	0		200	0		192	115.7018	
1000	76.324	-19.3	57.0236	0.254	0.762	200	0	0	191	115.6764	0.762
1001	76.324	-19.3	57.0236	0		200	0		192	114.6764	
1002	76.324	-19.3	57.0236	0		200	0		191	115.6764	
1003	76.324	-19.3	57.0236	0		200	0		191	114.6764	
1004	76.324	-19.3	57.0236	0		200	0		191	114.6764	
1005	76.324	-19.3	57.0236	0		200	0		191	114.6764	
1006	76.324	-19.3	57.0236	0		200	0		191	114.6764	
1007	76.324	-19.3	57.0236	0		200	0		191	114.6764	
1008	76.324	-19.3	57.0236	0		200	0		192	114.6764	
1009	76.324	-19.3	57.0236	0		200	0		192	115.6764	
1010	76.324	-19.3	57.0236	0	0	200	0	0	191	115.6764	0
1011	76.324	-19.3	57.0236	0		200	0		191	114.6764	
1012	76.324	-19.3	57.0236	0		200	0		191	114.6764	
1013	76.501	-19.4	57.0236	0		200	0		191	114.6764	
1014	76.501	-19.4	57.1014	0.778		200	0		191	114.4986	
1015	76.501	-19.4	57.1014	0		200	0		191	114.4986	
1016	76.806	-19.4	57.1014	0		200	0		191	114.4986	
1017	76.832	-19.3	57.4062	3.048		200	0		191	114.1938	
1018	76.832	-19.3	57.5316	1.254		200	0		191	114.1684	
1019	76.832	-19.3	57.5316	0		200	0		191	114.1684	
1020	76.832	-19.3	57.5316	0	5.08	200	0	0	191	114.1684	5.08
1021	76.832	-19.3	57.5316	0		200	0		191	114.1684	
1022	76.832	-19.3	57.5316	0		200	0		191	114.1684	

end

SCWMATP173 **ET=77.13 [29T,48.13E] Increase= -6.61 [-7.89%]**

Time [day]	CumP(C [cm]	sum(vTop [L]	Cumm E [cm]	Daily E [mm/day]	10day E [mm/10d	sum(vRoc [L]	Daily T [mm]	10day T [mm/10d	sum(vBot) [L]	Cum Disch [cm]	10day ET [mm/10d]
650	50.165	63.1	113.265	0	0.778	59	0	0	160	109.835	0.778
651	50.47	63.1	113.265	0		59	0		160	109.835	
652	50.495	63.2	113.57	3.048		59	0		160	109.5302	
653	50.495	63.2	113.695	1.254		59	0		161	109.5048	
654	50.495	63.2	113.695	0		59	0		161	110.5048	
655	50.495	63.2	113.695	0		59	0		161	110.5048	
656	50.495	63.2	113.695	0		59	0		162	110.5048	
657	50.495	63.2	113.695	0		59	0		162	111.5048	
658	50.495	63.2	113.695	0		59	0		162	111.5048	
659	50.495	63.2	113.695	0		59	0		162	111.5048	
660	50.495	63.2	113.695	0	4.302	59	0	0	163	111.5048	4.302
661	50.495	63.2	113.695	0		59	0		163	112.5048	
662	50.495	63.2	113.695	0		59	0		163	112.5048	
663	50.495	63.2	113.695	0		59	0		164	112.5048	
664	50.495	63.2	113.695	0		59	0		164	113.5048	
665	50.495	63.2	113.695	0		59	0		164	113.5048	
666	50.495	63.2	113.695	0		59	0		165	113.5048	
667	50.495	63.2	113.695	0		59	0		165	114.5048	
668	50.495	63.2	113.695	0		59	0		165	114.5048	
669	50.495	63.2	113.695	0		59	0		166	114.5048	
670	50.495	63.2	113.695	0	0	59	0	0	166	115.5048	0
671	50.495	63.2	113.695	0		59	0		166	115.5048	
672	50.495	63.2	113.695	0		59	0		166	115.5048	
673	50.495	63.2	113.695	0		59	0		166	115.5048	
674	50.495	63.2	113.695	0		59	0		166	115.5048	
675	50.495	63.2	113.695	0		59	0		166	115.5048	
676	50.495	63.2	113.695	0		59	0		166	115.5048	
677	50.495	63.2	113.695	0		59	0		167	115.5048	
678	50.521	63.2	113.695	0		59	0		167	116.5048	
679	50.521	63.2	113.721	0.254		59	0		167	116.4794	
680	50.521	63.2	113.721	0	0.254	59	0	0	167	116.4794	0.254
681	50.521	63.2	113.721	0		59	0		167	116.4794	
682	50.521	63.2	113.721	0		59	0		167	116.4794	
683	50.521	63.2	113.721	0		59	0		167	116.4794	
684	50.521	63.2	113.721	0		59	0		167	116.4794	
685	50.521	63.2	113.721	0		59	0		167	116.4794	
686	50.521	63.2	113.721	0		59	0		167	116.4794	
687	50.521	63.2	113.721	0		59	0		168	116.4794	
688	50.521	63.2	113.721	0		59	0		168	117.4794	
689	50.521	63.2	113.721	0		59	0		168	117.4794	
690	50.521	63.2	113.721	0	0	59	0	0	168	117.4794	0
691	50.521	63.2	113.721	0		59	0		168	117.4794	
692	50.521	63.2	113.721	0		59	0		169	117.4794	
693	50.521	63.2	113.721	0		59	0		169	118.4794	
694	50.521	63.2	113.721	0		59	0		169	118.4794	
695	50.521	63.2	113.721	0		59	0		169	118.4794	
696	50.521	63.2	113.721	0		59	0		169	118.4794	
697	50.521	63.3	113.721	0		59	0		170	118.4794	
698	50.521	63.4	113.821	1		59	0		170	119.4794	
699	50.521	63.5	113.921	1		59	0		170	119.4794	
700	50.521	63.6	114.021	1	3	59	0	0	170	119.4794	3
701	50.521	63.8	114.121	1		59	0		170	119.4794	
702	50.521	63.9	114.321	2		59	0		171	119.4794	
703	50.521	64.1	114.421	1		59	0		171	120.4794	
704	50.521	64.3	114.621	2		59	0		171	120.4794	
705	50.521	64.5	114.821	2		59	0		171	120.4794	
706	50.521	64.7	115.021	2		59	0		171	120.4794	
707	50.521	64.9	115.221	2		59	0		171	120.4794	
708	50.521	65.1	115.421	2		59	0		172	120.4794	

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709	50.521	65.2	115.621	2		59	0		172	121.4794		
710	50.521	65.4	115.721	1	17	59	0	0	172	121.4794	17	
711	50.521	65.6	115.921	2		59	0		172	121.4794		
712	50.521	65.8	116.121	2		59	0		172	121.4794		
713	50.521	65.9	116.321	2		59	0		172	121.4794		
714	50.521	66.1	116.421	1		59	0		172	121.4794		
715	50.521	66.2	116.621	2		59	0		172	121.4794		
716	50.521	66.4	116.721	1		59	0		172	121.4794		
717	50.521	66.5	116.921	2		59	0		172	121.4794		
718	50.521	66.6	117.021	1		59	0		172	121.4794		
719	50.521	66.7	117.121	1		59	0		172	121.4794		
720	50.521	66.8	117.221	1	15	59	0	0	172	121.4794	15	
721	50.521	67	117.321	1		59	0		173	121.4794		
722	50.521	67.1	117.521	2		59	0		173	122.4794		
723	50.521	67.2	117.621	1		59	0		173	122.4794		
724	50.521	67.3	117.721	1		59	0		173	122.4794		
725	50.521	67.4	117.821	1		59	0		173	122.4794		
726	50.521	67.5	117.921	1		59	0		173	122.4794		
727	50.521	67.6	118.021	1		59	0		173	122.4794		C-143
728	50.521	67.7	118.121	1		59	0		173	122.4794		
729	50.546	67.8	118.221	1		59	0		173	122.4794		
730	50.546	67.9	118.346	1.254	11.254	59	0	0	173	122.454	11.254	
731	50.546	68	118.446	1		59	0		173	122.454		
732	50.546	68.1	118.546	1		59	0		173	122.454		
733	51.206	67.7	118.646	1		59	0		173	122.454		
734	51.41	67.8	118.906	2.604		59	0		173	121.7936		
735	51.41	68.2	119.21	3.032		59	0		174	121.5904		
736	51.41	68.4	119.61	4		59	0		174	122.5904		
737	51.41	68.5	119.81	2		59	0		174	122.5904		
738	51.41	68.6	119.91	1		59	0		174	122.5904		
739	51.41	68.7	120.01	1		59	0		174	122.5904		
740	51.41	68.8	120.11	1	17.636	59	0	0	175	122.5904	17.636	
741	51.41	68.9	120.21	1		59	0		175	123.5904		
742	52.095	68.6	120.31	1		59	0		175	123.5904		
743	52.095	69	120.695	3.858		59	0		175	122.9046		
744	52.095	69.1	121.095	4		59	0		175	122.9046		
745	52.095	69.3	121.195	1		59	0		175	122.9046		
746	52.095	69.4	121.395	2		59	0		176	122.9046		
747	52.095	69.5	121.495	1		59	0		176	123.9046		
748	52.095	69.7	121.595	1		59	0		176	123.9046		
749	52.095	69.8	121.795	2		59	0		177	123.9046		
750	52.095	70	121.895	1	17.858	59	0	0	177	124.9046	17.858	
751	52.095	70.1	122.095	2		59	0		177	124.9046		
752	52.095	70.3	122.195	1		59	0		177	124.9046		
753	52.095	70.5	122.395	2		59	0		178	124.9046		
754	52.095	70.7	122.595	2		59.1	0		178	125.9046		
755	52.095	70.9	122.795	2		59.1	1		178	125.9046		
756	52.095	71.1	122.995	2		59.2	0		178	125.9046		
757	52.095	71.3	123.195	2		59.2	1		178	125.9046		
758	52.095	71.5	123.395	2		59.3	0		178	125.9046		
759	52.095	71.6	123.595	2		59.3	1		178	125.9046		
760	52.095	71.8	123.695	1	18	59.4	0	3	179	125.9046	21	
761	52.095	71.9	123.895	2		59.4	1		179	126.9046		
762	52.095	72.1	123.995	1		59.5	0		179	126.9046		
763	52.095	72.2	124.195	2		59.5	1		179	126.9046		
764	52.095	72.3	124.295	1		59.6	0		179	126.9046		
765	52.095	72.5	124.395	1		59.7	1		179	126.9046		
766	52.095	72.6	124.595	2		59.7	1		180	126.9046		
767	52.095	72.7	124.695	1		59.8	0		180	127.9046		
768	52.095	72.9	124.795	1		59.8	1		180	127.9046		
769	52.095	73	124.995	2		59.9	0		180	127.9046		
770	52.095	73.1	125.095	1	14	60	1	6	181	127.9046	20	
771	52.095	73.2	125.195	1		60.1	1		181	128.9046		
772	53.095	72.9	125.295	1		60.2	1		181	128.9046		
773	53.095	73.4	125.995	7		60.2	1		181	127.9046		

774	53.095	73.6	126.495	5		60.3	0		182	127.9046	
775	53.095	73.7	126.695	2		60.4	1		181	128.9046	
776	53.095	73.9	126.795	1		60.6	1		182	127.9046	
777	53.095	74	126.995	2		60.7	2		182	128.9046	
778	53.095	74.1	127.095	1		60.7	1		182	128.9046	
779	53.095	74.3	127.195	1		60.9	0		183	128.9046	
780	53.095	74.4	127.395	2	23	61	2	10	183	129.9046	33
781	53.095	74.5	127.495	1		61.1	1		183	129.9046	
782	53.095	74.6	127.595	1		61.2	1		183	129.9046	
783	53.095	74.7	127.695	1		61.3	1		183	129.9046	
784	54.095	74.7	127.795	1		61.5	1		184	129.9046	
785	54.095	74.9	128.795	10		61.6	2		184	129.9046	
786	54.095	75	128.995	2		61.7	1		184	129.9046	
787	55.095	75.1	129.095	1		61.9	1		184	129.9046	
788	55.095	75.3	130.195	11		62	2		185	128.9046	
789	55.095	75.4	130.395	2		62.1	1		185	129.9046	
790	55.095	75.5	130.495	1	31	62.3	1	12	185	129.9046	43
791	55.095	75.6	130.595	1		62.4	2		185	129.9046	
792	55.095	75.7	130.695	1		62.6	1		186	129.9046	
793	55.095	75.7	130.795	1		62.7	2		186	130.9046	C-144
794	55.095	75.8	130.795	0		62.9	1		187	130.9046	
795	55.095	75.9	130.895	1		63	2		187	131.9046	
796	55.095	76	130.995	1		63.2	1		188	131.9046	
797	55.095	76.2	131.095	1		63.4	2		188	132.9046	
798	55.095	76.4	131.295	2		63.6	2		189	132.9046	
799	55.251	76.6	131.495	2		63.7	2		189	133.9046	
800	55.911	76.7	131.851	3.556	13.556	63.8	1	16	190	133.749	29.556
801	55.911	77.1	132.611	7.604		64	1		190	134.0886	
802	55.911	77.4	133.011	4		64.3	2		190	134.0886	
803	55.911	77.6	133.311	3		64.5	3		191	134.0886	
804	56.165	77.9	133.511	2		64.6	2		191	135.0886	
805	56.216	78.1	134.065	5.54		64.8	1		191	134.8346	
806	56.978	78.2	134.316	2.508		65	2		192	134.7838	
807	56.978	78.5	135.178	8.62		65.1	2		192	135.0218	
808	56.978	78.7	135.478	3		65.2	1		193	135.0218	
809	56.978	78.9	135.678	2		65.4	1		194	136.0218	
810	56.978	79.2	135.878	2	40.272	65.6	2	17	194	137.0218	57.272
811	56.978	79.5	136.178	3		65.8	2		195	137.0218	
812	56.978	79.8	136.478	3		66	2		196	138.0218	
813	56.978	80.2	136.778	3		66.2	2		196	139.0218	
814	56.978	80.7	137.178	4		66.3	2		197	139.0218	
815	56.978	81.1	137.678	5		66.5	1		197	140.0218	
816	56.978	81.5	138.078	4		66.7	2		198	140.0218	
817	56.978	82	138.478	4		66.9	2		199	141.0218	
818	56.978	82.5	138.978	5		67	2		200	142.0218	
819	56.978	82.9	139.478	5		67.2	1		200	143.0218	
820	56.978	83.4	139.878	4	40	67.4	2	18	200	143.0218	58
821	56.978	83.7	140.378	5		67.5	2		200	143.0218	
822	56.978	84.1	140.678	3		67.7	1		201	143.0218	
823	56.978	84.4	141.078	4		67.8	2		201	144.0218	
824	57.994	84.3	141.378	3		68	1		201	144.0218	
825	58.35	84.6	142.294	9.16		68.1	2		202	143.0058	
826	58.35	85	142.95	6.556		68.3	1		202	143.6502	
827	58.35	85.3	143.35	4		68.4	2		203	143.6502	
828	58.35	85.5	143.65	3		68.6	1		203	144.6502	
829	58.35	85.7	143.85	2		68.7	2		203	144.6502	
830	58.35	86	144.05	2	41.716	68.9	1	15	203	144.6502	56.716
831	58.35	86.2	144.35	3		69	2		203	144.6502	
832	58.35	86.3	144.55	2		69.2	1		203	144.6502	
833	58.35	86.5	144.65	1		69.4	2		203	144.6502	
834	58.35	86.6	144.85	2		69.5	2		204	144.6502	
835	58.35	86.7	144.95	1		69.7	1		204	145.6502	
836	59.874	86.3	145.05	1		69.9	2		205	145.6502	
837	59.874	86.8	146.174	11.24		70.1	2		205	145.1262	
838	59.874	87	146.674	5		70.3	2		206	145.1262	

839	59.874	87.1	146.874	2		70.4	2		206	146.1262		
840	59.874	87.2	146.974	1	29.24	70.5	1	17	206	146.1262	46.24	
841	59.899	87.4	147.074	1		70.7	1		206	146.1262		
842	60.153	87.6	147.299	2.254		70.9	2		206	146.1008		
843	60.255	87.8	147.753	4.54		71.1	2		205	145.8468		
844	60.255	87.9	148.055	3.016		71.2	2		205	144.7452		
845	60.255	88	148.155	1		71.4	1		205	144.7452		
846	60.306	88.1	148.255	1		71.6	2		205	144.7452		
847	61.068	88.2	148.406	1.508		71.8	2		204	144.6944		
848	61.093	88.3	149.268	8.62		72	2		204	142.9324		
849	61.093	88.3	149.393	1.254		72.3	2		204	142.907		
850	61.093	88.4	149.393	0	24.192	72.5	3	19	204	142.907	43.192	
851	61.093	88.4	149.493	1		72.7	2		204	142.907		
852	61.093	88.5	149.493	0		72.8	2		204	142.907		
853	61.093	88.5	149.593	1		72.9	1		203	142.907		
854	61.093	88.5	149.593	0		73.1	1		203	141.907		
855	65.884	84.3	149.593	0		73.2	2		203	141.907		
856	65.884	85.2	150.184	5.912		73.5	1		202	137.1158		
857	65.884	86	151.084	9		73.8	3		202	136.1158		
858	65.884	86.4	151.884	8		74	3		202	136.1158		
859	65.884	86.6	152.284	4		74.2	2		202	136.1158		C-145
860	65.884	86.8	152.484	2	30.912	74.4	2	19	201	136.1158	49.912	
861	65.884	86.9	152.684	2		74.6	2		201	135.1158		
862	65.884	86.9	152.784	1		74.8	2		201	135.1158		
863	65.884	87	152.784	0		75.1	2		200	135.1158		
864	65.884	87.1	152.884	1		75.2	3		200	134.1158		
865	65.884	87.1	152.984	1		75.5	1		200	134.1158		
866	65.884	87.1	152.984	0		75.6	3		200	134.1158		
867	65.884	87.2	152.984	0		75.8	1		200	134.1158		
868	65.884	87.2	153.084	1		76	2		200	134.1158		
869	65.884	87.2	153.084	0		76.3	2		199	134.1158		
870	65.884	87.2	153.084	0	6	76.5	3	21	199	133.1158	27	
871	65.884	87.3	153.084	0		76.6	2		199	133.1158		
872	67.891	85.8	153.184	1		76.7	1		199	133.1158		
873	67.891	86.2	153.691	5.066		76.9	1		199	131.1092		
874	71.599	83.1	154.091	4		77.1	2		200	131.1092		
875	71.599	83.7	154.699	6.084		77.2	2		200	128.4008		
876	71.599	84.5	155.299	6		77.5	1		201	128.4008		
877	71.599	84.9	156.099	8		77.7	3		201	129.4008		
878	71.599	85	156.499	4		77.9	2		202	129.4008		
879	71.599	85.2	156.599	1		78.1	2		202	130.4008		
880	71.599	85.3	156.799	2	37.15	78.3	2	18	202	130.4008	55.15	
881	71.599	85.3	156.899	1		78.5	2		203	130.4008		
882	71.599	85.4	156.899	0		78.7	2		203	131.4008		
883	71.599	85.4	156.999	1		78.9	2		202	131.4008		
884	71.599	85.5	156.999	0		79.1	2		202	130.4008		
885	71.599	85.5	157.099	1		79.3	2		201	130.4008		
886	71.599	85.5	157.099	0		79.5	2		201	129.4008		
887	71.599	85.5	157.099	0		79.7	2		201	129.4008		
888	71.853	85.6	157.099	0		79.8	2		200	129.4008		
889	71.904	85.6	157.453	3.54		80	1		200	128.1468		
890	71.904	85.6	157.504	0.508	7.048	80.3	2	19	200	128.096	26.048	
891	71.904	85.6	157.504	0		80.4	3		199	128.096		
892	71.955	85.6	157.504	0		80.6	1		199	127.096		
893	71.955	85.6	157.555	0.508		80.8	2		199	127.0452		
894	71.955	85.6	157.555	0		81	2		199	127.0452		
895	71.955	85.6	157.555	0		81.1	2		199	127.0452		
896	72.183	85.6	157.555	0		81.3	1		199	127.0452		
897	72.234	85.6	157.783	2.286		81.4	2		199	126.8166		
898	72.234	85.6	157.834	0.508		81.6	1		199	126.7658		
899	72.234	85.6	157.834	0		81.8	2		199	126.7658		
900	72.234	85.6	157.834	0	3.302	82	2	18	199	126.7658	21.302	
901	72.234	85.6	157.834	0		82.1	2		199	126.7658		
902	72.26	85.6	157.834	0		82.2	1		200	126.7658		
903	73.352	85	157.86	0.254		82.3	1		200	127.7404		

904	73.352	85.3	158.352	4.922		82.5	1		199	126.6482		
905	73.352	85.4	158.652	3		82.7	2		199	125.6482		
906	73.352	85.4	158.752	1		82.8	2		199	125.6482		
907	73.352	85.4	158.752	0		82.9	1		199	125.6482		
908	73.352	85.4	158.752	0		83	1		199	125.6482		
909	73.352	85.4	158.752	0		83.1	1		199	125.6482		
910	73.352	85.4	158.752	0	9.176	83.2	1	13	199	125.6482	22.176	
911	73.352	85.4	158.752	0		83.4	1		199	125.6482		
912	73.352	85.4	158.752	0		83.5	2		200	125.6482		
913	74.215	85.1	158.752	0		83.6	1		201	126.6482		
914	74.596	85.2	159.315	5.636		83.7	1		202	126.7846		
915	74.774	85.3	159.796	4.81		83.8	1		204	127.4036		
916	74.952	85.3	160.074	2.778		83.9	1		205	129.2258		
917	74.952	85.3	160.252	1.778		84	1		206	130.048		
918	74.977	85.3	160.252	0		84.2	1		207	131.048		
919	74.977	85.4	160.277	0.254		84.2	2		208	132.0226		
920	74.977	85.4	160.377	1	16.256	84.4	0	11	208	133.0226	27.256	
921	74.977	85.4	160.377	0		84.5	2		208	133.0226		
922	74.977	85.4	160.377	0		84.6	1		209	133.0226		
923	75.028	85.4	160.377	0		84.7	1		209	134.0226		
924	75.028	85.4	160.428	0.508		84.7	1		210	133.9718		
925	75.028	85.4	160.428	0		84.9	0		210	134.9718		C-146
926	75.028	85.4	160.428	0		85	2		210	134.9718		
927	75.028	85.4	160.428	0		85.1	1		209	134.9718		
928	75.028	85.4	160.428	0		85.2	1		209	133.9718		
929	75.028	85.4	160.428	0		85.3	1		209	133.9718		
930	75.028	85.4	160.428	0	0.508	85.4	1	11	210	133.9718	11.508	
931	75.028	85.4	160.428	0		85.5	1		211	134.9718		
932	75.028	85.4	160.428	0		85.5	1		212	135.9718		
933	75.028	85.4	160.428	0		85.6	0		212	136.9718		
934	75.028	85.4	160.428	0		85.7	1		212	136.9718		
935	75.028	85.4	160.428	0		85.8	1		211	136.9718		
936	75.028	85.4	160.428	0		85.9	1		210	135.9718		
937	75.028	85.4	160.428	0		86	1		210	134.9718		
938	75.028	85.4	160.428	0		86.1	1		209	134.9718		
939	75.028	85.4	160.428	0		86.2	1		208	133.9718		
940	75.028	85.4	160.428	0	0	86.2	1	9	208	132.9718	9	
941	75.028	85.4	160.428	0		86.3	0		207	132.9718		
942	75.028	85.4	160.428	0		86.4	1		207	131.9718		
943	75.028	85.4	160.428	0		86.5	1		206	131.9718		
944	75.028	85.4	160.428	0		86.6	1		206	130.9718		
945	75.028	85.4	160.428	0		86.6	1		206	130.9718		
946	75.104	85.4	160.428	0		86.7	0		206	130.9718		
947	76.146	84.4	160.504	0.762		86.7	1		206	130.8956		
948	76.146	84.8	160.546	0.414		87	0		206	129.8542		
949	76.146	84.9	160.946	4		87.1	3		206	129.8542		
950	76.146	85	161.046	1	6.176	87.1	1	9	206	129.8542	15.176	
951	76.146	85	161.146	1		87.2	0		205	129.8542		
952	76.146	85	161.146	0		87.3	1		206	128.8542		
953	76.146	85	161.146	0		87.4	1		206	129.8542		
954	76.146	85	161.146	0		87.4	1		206	129.8542		
955	76.146	85	161.146	0		87.4	0		206	129.8542		
956	76.146	85	161.146	0		87.4	0		206	129.8542		
957	76.146	85	161.146	0		87.5	0		206	129.8542		
958	76.146	85	161.146	0		87.5	1		206	129.8542		
959	76.146	85	161.146	0		87.5	0		206	129.8542		
960	76.146	85	161.146	0	1	87.6	0	4	205	129.8542	5	
961	76.146	85	161.146	0		87.6	1		205	128.8542		
962	76.146	85	161.146	0		87.6	0		205	128.8542		
963	76.146	85	161.146	0		87.6	0		205	128.8542		
964	76.146	85	161.146	0		87.7	0		205	128.8542		
965	76.146	85	161.146	0		87.7	1		205	128.8542		
966	76.146	85	161.146	0		87.7	0		205	128.8542		
967	76.146	85	161.146	0		87.7	0		205	128.8542		
968	76.146	85	161.146	0		87.7	0		205	128.8542		

969	76.146	85	161.146	0		87.7	0		204	128.8542		
970	76.197	85	161.146	0	0	87.8	0	2	204	127.8542	2	
971	76.197	85	161.197	0.508		87.8	1		204	127.8034		
972	76.197	85	161.197	0		87.8	0		204	127.8034		
973	76.197	85	161.197	0		87.8	0		204	127.8034		
974	76.247	85	161.197	0		87.8	0		204	127.8034		
975	76.247	85	161.247	0.508		87.9	0		204	127.7526		
976	76.247	85	161.247	0		87.9	1		203	127.7526		
977	76.247	85	161.247	0		87.9	0		204	126.7526		
978	76.247	85	161.247	0		87.9	0		204	127.7526		
979	76.247	85	161.247	0		87.9	0		204	127.7526		
980	76.247	85	161.247	0	1.016	87.9	0	2	204	127.7526	3.016	
981	76.247	85	161.247	0		87.9	0		204	127.7526		
982	76.247	85	161.247	0		88	0		204	127.7526		
983	76.247	85	161.247	0		88	1		204	127.7526		
984	76.247	85	161.247	0		88	0		203	127.7526		
985	76.247	85	161.247	0		88	0		203	126.7526		
986	76.247	85	161.247	0		88	0		203	126.7526		
987	76.247	85	161.247	0		88	0		203	126.7526		
988	76.247	85	161.247	0		88	0		203	126.7526		
989	76.247	85	161.247	0		88	0		203	126.7526		
990	76.247	85	161.247	0	0	88	0	1	203	126.7526	1	
991	76.247	85	161.247	0		88	0		204	126.7526		C-147
992	76.247	85	161.247	0		88	0		204	127.7526		
993	76.247	85	161.247	0		88	0		205	127.7526		
994	76.247	85	161.247	0		88	0		205	128.7526		
995	76.298	85	161.247	0		88	0		205	128.7526		
996	76.298	85	161.298	0.508		88	0		205	128.7018		
997	76.298	85	161.298	0		88	0		205	128.7018		
998	76.298	85	161.298	0		88	0		204	128.7018		
999	76.324	85	161.298	0		88	0		204	127.7018		
1000	76.324	85	161.324	0.254	0.762	88	0	0	204	127.6764	0.762	
1001	76.324	85	161.324	0		88	0		204	127.6764		
1002	76.324	85	161.324	0		88	0		204	127.6764		
1003	76.324	85	161.324	0		88	0		204	127.6764		
1004	76.324	85	161.324	0		88	0		204	127.6764		
1005	76.324	85	161.324	0		88	0		204	127.6764		
1006	76.324	85	161.324	0		88	0		205	127.6764		
1007	76.324	85	161.324	0		88	0		206	128.6764		
1008	76.324	85	161.324	0		88	0		207	129.6764		
1009	76.324	85	161.324	0		88	0		208	130.6764		
1010	76.324	85	161.324	0	0	88	0	0	209	131.6764	0	
1011	76.324	85	161.324	0		88	0		209	132.6764		
1012	76.324	85	161.324	0		88	0		210	132.6764		
1013	76.501	84.9	161.324	0		88	0		210	133.6764		
1014	76.501	85	161.401	0.778		88	0		210	133.4986		
1015	76.501	85	161.501	1		88	0		210	133.4986		
1016	76.806	85	161.501	0		88	0		211	133.4986		
1017	76.832	85	161.806	3.048		88	0		212	134.1938		
1018	76.832	85	161.832	0.254		88	0		212	135.1684		
1019	76.832	85	161.832	0		88	0		213	135.1684		
1020	76.832	85	161.832	0	5.08	88	0	0	213	136.1684	5.08	
1021	76.832	85	161.832	0		88	0		214	136.1684		
1022	76.832	85	161.832	0		88	0		215	137.1684		

end

SCWMATP224 **ET=260.33 [25T,235E] Increase = 210.9 [210%]**

Time	CumP(C	sum(vTop	Cumm E	Daily E	10day E	sum(vRoc	Daily T	10day T	sum(vBot)	Cum Disch	10day ET
[day]	[cm]	[L]	[cm]	[mm/day]	[mm/10d]	[L]	[mm]	[mm/10d]	[L]	[cm]	[mm/10d]
650	50.165	383	433.165	0	31.778	48.5	0	0	490	439.835	31.778

651	50.47	383	433.165	0		48.5	0		491	439.835		
652	50.495	383	433.47	3.048		48.5	0		491	440.5302		
653	50.495	384	433.495	0.254		48.5	0		491	440.5048		
654	50.495	384	434.495	10		48.5	0		491	440.5048		
655	50.495	384	434.495	0		48.5	0		492	440.5048		
656	50.495	384	434.495	0		48.5	0		492	441.5048		
657	50.495	384	434.495	0		48.5	0		492	441.5048		
658	50.495	385	434.495	0		48.5	0		493	441.5048		
659	50.495	385	435.495	10		48.5	0		493	442.5048		
660	50.495	385	435.495	0	23.302	48.5	0	0	493	442.5048	23.302	
661	50.495	386	435.495	0		48.5	0		494	442.5048		
662	50.495	386	436.495	10		48.5	0		494	443.5048		
663	50.495	387	436.495	0		48.5	0		495	443.5048		
664	50.495	387	437.495	10		48.5	0		495	444.5048		
665	50.495	387	437.495	0		48.5	0		496	444.5048		
666	50.495	388	437.495	0		48.5	0		496	445.5048		
667	50.495	388	438.495	10		48.5	0		496	445.5048		
668	50.495	388	438.495	0		48.5	0		497	445.5048		
669	50.495	389	438.495	0		48.5	0		497	446.5048		
670	50.495	389	439.495	10	40	48.5	0	0	498	446.5048	40	
671	50.495	390	439.495	0		48.5	0		498	447.5048		
672	50.495	390	440.495	10		48.5	0		498	447.5048		
673	50.495	390	440.495	0		48.5	0		499	447.5048		
674	50.495	391	440.495	0		48.5	0		499	448.5048		C-148
675	50.495	391	441.495	10		48.5	0		500	448.5048		
676	50.495	392	441.495	0		48.5	0		500	449.5048		
677	50.495	392	442.495	10		48.5	0		501	449.5048		
678	50.521	393	442.495	0		48.5	0		501	450.5048		
679	50.521	393	443.521	10.254		48.5	0		502	450.4794		
680	50.521	394	443.521	0	40.254	48.5	0	0	502	451.4794	40.254	
681	50.521	394	444.521	10		48.5	0		503	451.4794		
682	50.521	395	444.521	0		48.5	0		503	452.4794		
683	50.521	395	445.521	10		48.5	0		504	452.4794		
684	50.521	396	445.521	0		48.5	0		504	453.4794		
685	50.521	396	446.521	10		48.5	0		505	453.4794		
686	50.521	396	446.521	0		48.5	0		505	454.4794		
687	50.521	396	446.521	0		48.5	0		505	454.4794		
688	50.521	397	446.521	0		48.5	0		505	454.4794		
689	50.521	397	447.521	10		48.5	0		506	454.4794		
690	50.521	398	447.521	0	40	48.5	0	0	506	455.4794	40	
691	50.521	398	448.521	10		48.5	0		507	455.4794		
692	50.521	399	448.521	0		48.5	0		507	456.4794		
693	50.521	399	449.521	10		48.5	0		508	456.4794		
694	50.521	399	449.521	0		48.5	0		508	457.4794		
695	50.521	400	449.521	0		48.5	0		509	457.4794		
696	50.521	400	450.521	10		48.5	0		509	458.4794		
697	50.521	401	450.521	0		48.5	0		510	458.4794		
698	50.521	402	451.521	10		48.5	0		511	459.4794		
699	50.521	402	452.521	10		48.5	0		511	460.4794		
700	50.521	403	452.521	0	50	48.5	0	0	512	460.4794	50	
701	50.521	403	453.521	10		48.5	0		512	461.4794		
702	50.521	404	453.521	0		48.5	0		513	461.4794		
703	50.521	405	454.521	10		48.5	0		513	462.4794		
704	50.521	405	455.521	10		48.5	0		514	462.4794		
705	50.521	406	455.521	0		48.5	0		514	463.4794		
706	50.521	406	456.521	10		48.5	0		515	463.4794		
707	50.521	407	456.521	0		48.5	0		516	464.4794		
708	50.521	407	457.521	10		48.5	0		516	465.4794		
709	50.521	408	457.521	0		48.5	0		517	465.4794		
710	50.521	409	458.521	10	60	48.5	0	0	518	466.4794	60	
711	50.521	409	459.521	10		48.5	0		518	467.4794		
712	50.521	410	459.521	0		48.5	0		519	467.4794		
713	50.521	410	460.521	10		48.5	0		519	468.4794		
714	50.521	411	460.521	0		48.5	0		520	468.4794		
715	50.521	411	461.521	10		48.5	0		520	469.4794		

716	50.521	412	461.521	0		48.5	0		521	469.4794		
717	50.521	413	462.521	10		48.5	0		522	470.4794		
718	50.521	414	463.521	10		48.5	0		522	471.4794		
719	50.521	414	464.521	10		48.5	0		523	471.4794		
720	50.521	415	464.521	0	60	48.5	0	0	524	472.4794	60	
721	50.521	416	465.521	10		48.5	0		525	473.4794		
722	50.521	416	466.521	10		48.5	0		525	474.4794		
723	50.521	417	466.521	0		48.5	0		526	474.4794		
724	50.521	418	467.521	10		48.5	0		526	475.4794		
725	50.521	418	468.521	10		48.5	0		527	475.4794		
726	50.521	419	468.521	0		48.5	0		528	476.4794		
727	50.521	420	469.521	10		48.5	0		529	477.4794		
728	50.521	420	470.521	10		48.5	0		529	478.4794		
729	50.546	421	470.521	0		48.5	0		530	478.4794		
730	50.546	422	471.546	10.254	70.254	48.5	0	0	530	479.454	70.254	
731	50.546	422	472.546	10		48.5	0		531	479.454		
732	50.546	423	472.546	0		48.5	0		532	480.454		
733	51.206	422	473.546	10		48.5	0		532	481.454		
734	51.41	423	473.206	-3.396		48.5	0		532	480.7936		
735	51.41	423	474.41	12.032		48.5	0		532	480.5904		
736	51.41	424	474.41	0		48.5	0		533	480.5904		
737	51.41	425	475.41	10		48.5	0		533	481.5904		
738	51.41	425	476.41	10		48.5	0		534	481.5904		
739	51.41	426	476.41	0		48.5	0		535	482.5904		
740	51.41	427	477.41	10	58.636	48.5	0	0	536	483.5904	58.636	C-149
741	51.41	427	478.41	10		48.5	0		537	484.5904		
742	52.095	427	478.41	0		48.5	0		537	485.5904		
743	52.095	428	479.095	6.858		48.5	0		537	484.9046		
744	52.095	429	480.095	10		48.5	0		538	484.9046		
745	52.095	430	481.095	10		48.5	0		539	485.9046		
746	52.095	430	482.095	10		48.5	0		540	486.9046		
747	52.095	431	482.095	0		48.5	0		541	487.9046		
748	52.095	432	483.095	10		48.5	0		542	488.9046		
749	52.095	433	484.095	10		48.5	0		542	489.9046		
750	52.095	433	485.095	10	76.858	48.5	0	0	542	489.9046	76.858	
751	52.095	434	485.095	0		48.5	0		543	489.9046		
752	52.095	434	486.095	10		48.5	0		544	490.9046		
753	52.095	435	486.095	0		48.5	0		545	491.9046		
754	52.095	436	487.095	10		48.5	0		546	492.9046		
755	52.095	437	488.095	10		48.5	0		546	493.9046		
756	52.095	438	489.095	10		48.6	0		547	493.9046		
757	52.095	439	490.095	10		48.6	1		548	494.9046		
758	52.095	440	491.095	10		48.7	0		549	495.9046		
759	52.095	441	492.095	10		48.7	1		550	496.9046		
760	52.095	442	493.095	10	80	48.7	0	2	551	497.9046	82	
761	52.095	443	494.095	10		48.8	0		552	498.9046		
762	52.095	443	495.095	10		48.8	1		553	499.9046		
763	52.095	444	495.095	0		48.8	0		554	500.9046		
764	52.095	445	496.095	10		48.9	0		555	501.9046		
765	52.095	446	497.095	10		48.9	1		556	502.9046		
766	52.095	447	498.095	10		49	0		557	503.9046		
767	52.095	448	499.095	10		49	1		558	504.9046		
768	52.095	449	500.095	10		49	0		559	505.9046		
769	52.095	450	501.095	10		49.1	0		560	506.9046		
770	52.095	451	502.095	10	90	49.1	1	4	561	507.9046	94	
771	52.095	452	503.095	10		49.2	0		562	508.9046		
772	53.095	452	504.095	10		49.3	1		562	509.9046		
773	53.095	453	505.095	10		49.3	1		563	508.9046		
774	53.095	453	506.095	10		49.4	0		564	509.9046		
775	53.095	454	506.095	0		49.4	1		564	510.9046		
776	53.095	455	507.095	10		49.5	0		565	510.9046		
777	53.095	455	508.095	10		49.6	1		566	511.9046		
778	53.095	456	508.095	0		49.6	1		567	512.9046		
779	53.095	457	509.095	10		49.7	0		568	513.9046		
780	53.095	458	510.095	10	80	49.8	1	6	569	514.9046	86	

781	53.095	459	511.095	10		49.9	1		570	515.9046	
782	53.095	460	512.095	10		50	1		571	516.9046	
783	53.095	461	513.095	10		50	1		572	517.9046	
784	54.095	461	514.095	10		50.1	0		572	518.9046	
785	54.095	462	515.095	10		50.2	1		573	517.9046	
786	54.095	463	516.095	10		50.3	1		574	518.9046	
787	55.095	463	517.095	10		50.4	1		574	519.9046	
788	55.095	464	518.095	10		50.5	1		575	518.9046	
789	55.095	465	519.095	10		50.6	1		576	519.9046	
790	55.095	466	520.095	10	100	50.7	1	9	577	520.9046	109
791	55.095	467	521.095	10		50.8	1		579	521.9046	
792	55.095	468	522.095	10		50.9	1		580	523.9046	
793	55.095	469	523.095	10		51	1		581	524.9046	
794	55.095	470	524.095	10		51.1	1		582	525.9046	
795	55.095	471	525.095	10		51.2	1		584	526.9046	
796	55.095	472	526.095	10		51.3	1		585	528.9046	
797	55.095	473	527.095	10		51.4	1		586	529.9046	
798	55.095	474	528.095	10		51.5	1		587	530.9046	
799	55.251	475	529.095	10		51.5	1		588	531.9046	
800	55.911	475	530.251	11.556	101.556	51.6	0	9	589	532.749	110.56
801	55.911	476	530.911	6.604		51.7	1		589	533.0886	
802	55.911	477	531.911	10		51.9	1		590	533.0886	
803	55.911	478	532.911	10		52	2		591	534.0886	
804	56.165	478	533.911	10		52.1	1		592	535.0886	
805	56.216	479	534.165	2.54		52.2	1		593	535.8346	
806	56.978	479	535.216	10.508		52.3	1		593	536.7838	C-150
807	56.978	480	535.978	7.62		52.4	1		594	536.0218	
808	56.978	481	536.978	10		52.4	1		595	537.0218	
809	56.978	482	537.978	10		52.6	0		596	538.0218	
810	56.978	483	538.978	10	87.272	52.7	2	11	597	539.0218	98.272
811	56.978	484	539.978	10		52.8	1		599	540.0218	
812	56.978	486	540.978	10		52.9	1		600	542.0218	
813	56.978	487	542.978	20		53	1		601	543.0218	
814	56.978	488	543.978	10		53	1		602	544.0218	
815	56.978	489	544.978	10		53.1	0		604	545.0218	
816	56.978	490	545.978	10		53.2	1		605	547.0218	
817	56.978	491	546.978	10		53.3	1		606	548.0218	
818	56.978	492	547.978	10		53.4	1		607	549.0218	
819	56.978	493	548.978	10		53.5	1		608	550.0218	
820	56.978	494	549.978	10	110	53.6	1	9	609	551.0218	119
821	56.978	495	550.978	10		53.7	1		610	552.0218	
822	56.978	496	551.978	10		53.8	1		611	553.0218	
823	56.978	497	552.978	10		53.9	1		612	554.0218	
824	57.994	497	553.978	10		53.9	1		613	555.0218	
825	58.35	497	554.994	10.16		54	0		613	555.0058	
826	58.35	498	555.35	3.556		54.1	1		614	554.6502	
827	58.35	499	556.35	10		54.2	1		615	555.6502	
828	58.35	500	557.35	10		54.3	1		616	556.6502	
829	58.35	500	558.35	10		54.4	1		616	557.6502	
830	58.35	501	558.35	0	83.716	54.5	1	9	617	557.6502	92.716
831	58.35	502	559.35	10		54.6	1		619	558.6502	
832	58.35	504	560.35	10		54.7	1		620	560.6502	
833	58.35	505	562.35	20		54.8	1		621	561.6502	
834	58.35	505	563.35	10		54.9	1		622	562.6502	
835	58.35	506	563.35	0		55	1		623	563.6502	
836	59.874	506	564.35	10		55.2	1		623	564.6502	
837	59.874	507	565.874	15.24		55.3	2		624	563.1262	
838	59.874	508	566.874	10		55.4	1		625	564.1262	
839	59.874	509	567.874	10		55.5	1		627	565.1262	
840	59.874	510	568.874	10	105.24	55.6	1	11	628	567.1262	116.24
841	59.899	511	569.874	10		55.7	1		629	568.1262	
842	60.153	512	570.899	10.254		55.8	1		629	569.1008	
843	60.255	513	572.153	12.54		55.9	1		630	568.8468	
844	60.255	513	573.255	11.016		56	1		631	569.7452	
845	60.255	514	573.255	0		56.2	1		632	570.7452	

846	60.306	515	574.255	10		56.4	2		633	571.7452		
847	61.068	515	575.306	10.508		56.6	2		633	572.6944		
848	61.093	516	576.068	7.62		56.7	2		633	571.9324		
849	61.093	517	577.093	10.254		56.9	1		634	571.907		
850	61.093	518	578.093	10	92.192	57.1	2	14	635	572.907	106.19	
851	61.093	519	579.093	10		57.2	2		637	573.907		
852	61.093	520	580.093	10		57.4	1		637	575.907		
853	61.093	520	581.093	10		57.4	2		638	575.907		
854	61.093	521	581.093	0		57.6	0		639	576.907		
855	65.884	517	582.093	10		57.7	2		636	577.907		
856	65.884	518	582.884	7.912		57.9	1		635	570.1158		
857	65.884	518	583.884	10		58.1	2		636	569.1158		
858	65.884	519	583.884	0		58.3	2		637	570.1158		
859	65.884	520	584.884	10		58.5	2		637	571.1158		
860	65.884	521	585.884	10	77.912	58.7	2	16	638	571.1158	93.912	
861	65.884	522	586.884	10		58.9	2		639	572.1158		
862	65.884	523	587.884	10		59	2		640	573.1158		
863	65.884	524	588.884	10		59.2	1		640	574.1158		
864	65.884	524	589.884	10		59.4	2		641	574.1158		
865	65.884	525	589.884	0		59.6	2		642	575.1158		
866	65.884	526	590.884	10		59.8	2		643	576.1158		
867	65.884	527	591.884	10		59.9	2		644	577.1158		
868	65.884	528	592.884	10		60.1	1		644	578.1158		
869	65.884	529	593.884	10		60.3	2		645	578.1158		
870	65.884	529	594.884	10	90	60.5	2	18	646	579.1158	108	
871	65.884	530	594.884	0		60.6	2		646	580.1158		
872	67.891	528	595.884	10		60.7	1		647	580.1158		C-151
873	67.891	529	595.891	0.066		60.9	1		647	579.1092		
874	71.599	526	596.891	10		61	2		647	579.1092		
875	71.599	526	597.599	7.084		61.2	1		645	575.4008		
876	71.599	527	597.599	0		61.4	2		646	573.4008		
877	71.599	528	598.599	10		61.6	2		648	574.4008		
878	71.599	528	599.599	10		61.7	2		649	576.4008		
879	71.599	529	599.599	0		61.9	1		650	577.4008		
880	71.599	529	600.599	10	57.15	62	2	16	651	578.4008	73.15	
881	71.599	530	600.599	0		62.3	1		652	579.4008		
882	71.599	531	601.599	10		62.5	3		653	580.4008		
883	71.599	532	602.599	10		62.6	2		653	581.4008		
884	71.599	533	603.599	10		62.8	1		654	581.4008		
885	71.599	534	604.599	10		62.9	2		655	582.4008		
886	71.599	535	605.599	10		63.1	1		655	583.4008		
887	71.599	536	606.599	10		63.3	2		656	583.4008		
888	71.853	536	607.599	10		63.4	2		656	584.4008		
889	71.904	537	607.853	2.54		63.6	1		657	584.1468		
890	71.904	538	608.904	10.508	83.048	63.8	2	17	657	585.096	100.05	
891	71.904	538	609.904	10		64	2		658	585.096		
892	71.955	539	609.904	0		64.2	2		658	586.096		
893	71.955	539	610.955	10.508		64.3	2		658	586.0452		
894	71.955	540	610.955	0		64.5	1		659	586.0452		
895	71.955	540	611.955	10		64.7	2		659	587.0452		
896	72.183	540	611.955	0		64.8	2		660	587.0452		
897	72.234	540	612.183	2.286		65	1		660	587.8166		
898	72.234	541	612.234	0.508		65.2	2		660	587.7658		
899	72.234	541	613.234	10		65.4	2		661	587.7658		
900	72.234	541	613.234	0	43.302	65.6	2	18	661	588.7658	61.302	
901	72.234	541	613.234	0		65.7	2		662	588.7658		
902	72.26	542	613.234	0		65.9	1		663	589.7658		
903	73.352	541	614.26	10.254		66	2		663	590.7404		
904	73.352	542	614.352	0.922		66.2	1		663	589.6482		
905	73.352	543	615.352	10		66.3	2		664	589.6482		
906	73.352	543	616.352	10		66.4	1		664	590.6482		
907	73.352	543	616.352	0		66.6	1		664	590.6482		
908	73.352	544	616.352	0		66.7	2		664	590.6482		
909	73.352	544	617.352	10		66.8	1		664	590.6482		
910	73.352	544	617.352	0	41.176	67	1	14	665	590.6482	55.176	

911	73.352	544	617.352	0		67.1	2		666	591.6482		
912	73.352	544	617.352	0		67.3	1		667	592.6482		
913	74.215	544	617.352	0		67.4	2		668	593.6482		
914	74.596	544	618.215	8.636		67.5	1		670	593.7846		
915	74.774	545	618.596	3.81		67.7	1		671	595.4036		
916	74.952	545	619.774	11.778		67.8	2		673	596.2258		
917	74.952	545	619.952	1.778		67.9	1		674	598.048		
918	74.977	546	619.952	0		68.1	1		675	599.048		
919	74.977	546	620.977	10.254		68.2	2		676	600.0226		
920	74.977	547	620.977	0	36.256	68.4	1	14	676	601.0226	50.256	
921	74.977	548	621.977	10		68.6	2		677	601.0226		
922	74.977	548	622.977	10		68.7	2		678	602.0226		
923	75.028	549	622.977	0		68.8	1		679	603.0226		
924	75.028	550	624.028	10.508		68.9	1		680	603.9718		
925	75.028	550	625.028	10		69	1		681	604.9718		
926	75.028	551	625.028	0		69.2	1		681	605.9718		
927	75.028	552	626.028	10		69.3	2		682	605.9718		
928	75.028	553	627.028	10		69.5	1		683	606.9718		
929	75.028	554	628.028	10		69.6	2		684	607.9718		
930	75.028	554	629.028	10	80.508	69.7	1	14	685	608.9718	94.508	
931	75.028	555	629.028	0		69.8	1		686	609.9718		
932	75.028	556	630.028	10		69.9	1		687	610.9718		
933	75.028	557	631.028	10		70	1		688	611.9718		
934	75.028	557	632.028	10		70.1	1		689	612.9718		
935	75.028	558	632.028	0		70.3	1		689	613.9718		
936	75.028	559	633.028	10		70.4	2		690	613.9718		
937	75.028	559	634.028	10		70.5	1		690	614.9718		
938	75.028	560	634.028	0		70.6	1		691	614.9718		C-152
939	75.028	561	635.028	10		70.7	1		691	615.9718		
940	75.028	562	636.028	10	70	70.8	1	11	692	615.9718	81	
941	75.028	562	637.028	10		70.9	1		692	616.9718		
942	75.028	563	637.028	0		71	1		692	616.9718		
943	75.028	564	638.028	10		71.1	1		693	616.9718		
944	75.028	564	639.028	10		71.2	1		693	617.9718		
945	75.028	565	639.028	0		71.3	1		694	617.9718		
946	75.104	566	640.028	10		71.4	1		694	618.9718		
947	76.146	565	641.104	10.762		71.4	1		695	618.8956		
948	76.146	565	641.146	0.414		71.8	0		695	618.8542		
949	76.146	565	641.146	0		71.9	4		695	618.8542		
950	76.146	566	641.146	0	51.176	72	1	12	696	618.8542	63.176	
951	76.146	567	642.146	10		72.1	1		696	619.8542		
952	76.146	567	643.146	10		72.2	1		697	619.8542		
953	76.146	568	643.146	0		72.3	1		698	620.8542		
954	76.146	568	644.146	10		72.3	1		698	621.8542		
955	76.146	569	644.146	0		72.4	0		699	621.8542		
956	76.146	570	645.146	10		72.4	1		700	622.8542		
957	76.146	570	646.146	10		72.4	0		700	623.8542		
958	76.146	571	646.146	0		72.5	0		701	623.8542		
959	76.146	572	647.146	10		72.5	1		701	624.8542		
960	76.146	572	648.146	10	70	72.5	0	6	702	624.8542	76	
961	76.146	573	648.146	0		72.6	0		702	625.8542		
962	76.146	573	649.146	10		72.6	1		703	625.8542		
963	76.146	574	649.146	0		72.6	0		703	626.8542		
964	76.146	574	650.146	10		72.7	0		703	626.8542		
965	76.146	575	650.146	0		72.7	1		704	626.8542		
966	76.146	575	651.146	10		72.7	0		705	627.8542		
967	76.146	576	651.146	0		72.7	0		705	628.8542		
968	76.146	577	652.146	10		72.7	0		705	628.8542		
969	76.146	577	653.146	10		72.8	0		706	628.8542		
970	76.197	577	653.146	0	50	72.8	1	3	706	629.8542	53	
971	76.197	578	653.197	0.508		72.8	0		706	629.8034		
972	76.197	579	654.197	10		72.8	0		707	629.8034		
973	76.197	579	655.197	10		72.9	0		707	630.8034		
974	76.247	579	655.197	0		72.9	1		707	630.8034		
975	76.247	580	655.247	0.508		72.9	0		707	630.7526		

976	76.247	580	656.247	10		72.9	0		708	630.7526	
977	76.247	580	656.247	0		73	0		708	631.7526	
978	76.247	581	656.247	0		73	1		709	631.7526	
979	76.247	581	657.247	10		73	0		709	632.7526	
980	76.247	581	657.247	0	41.016	73	0	2	710	632.7526	43.016
981	76.247	582	657.247	0		73	0		710	633.7526	
982	76.247	582	658.247	10		73	0		710	633.7526	
983	76.247	582	658.247	0		73	0		710	633.7526	
984	76.247	583	658.247	0		73	0		710	633.7526	
985	76.247	583	659.247	10		73	0		711	633.7526	
986	76.247	583	659.247	0		73	0		711	634.7526	
987	76.247	584	659.247	0		73	0		711	634.7526	
988	76.247	584	660.247	10		73	0		712	634.7526	
989	76.247	584	660.247	0		73	0		712	635.7526	
990	76.247	584	660.247	0	30	73	0	0	712	635.7526	30
991	76.247	585	660.247	0		73	0		713	635.7526	
992	76.247	585	661.247	10		73	0		713	636.7526	
993	76.247	585	661.247	0		73	0		714	636.7526	
994	76.247	586	661.247	0		73	0		715	637.7526	
995	76.298	586	662.247	10		73	0		715	638.7526	
996	76.298	586	662.298	0.508		73	0		716	638.7018	
997	76.298	587	662.298	0		73	0		716	639.7018	
998	76.298	587	663.298	10		73	0		716	639.7018	
999	76.324	587	663.298	0		73	0		716	639.7018	
1000	76.324	587	663.324	0.254	30.762	73	0	0	717	639.6764	30.762
1001	76.324	588	663.324	0		73	0		717	640.6764	
1002	76.324	588	664.324	10		73	0		717	640.6764	
1003	76.324	588	664.324	0		73	0		718	640.6764	
1004	76.324	589	664.324	0		73	0		718	641.6764	C-153
1005	76.324	589	665.324	10		73	0		719	641.6764	
1006	76.324	590	665.324	0		73	0		720	642.6764	
1007	76.324	590	666.324	10		73	0		721	643.6764	
1008	76.324	590	666.324	0		73	0		723	644.6764	
1009	76.324	591	666.324	0		73	0		724	646.6764	
1010	76.324	591	667.324	10	40	73	0	0	724	647.6764	40
1011	76.324	591	667.324	0		73	0		725	647.6764	
1012	76.324	591	667.324	0		73	0		725	648.6764	
1013	76.501	591	667.324	0		73	0		725	648.6764	
1014	76.501	591	667.501	1.778		73	0		725	648.4986	
1015	76.501	592	667.501	0		73	0		726	648.4986	
1016	76.806	592	668.501	10		73	0		726	649.4986	
1017	76.832	592	668.806	3.048		73	0		726	649.1938	
1018	76.832	592	668.832	0.254		73	0		727	649.1684	
1019	76.832	592	668.832	0		73	0		727	650.1684	
1020	76.832	592	668.832	0	25.08	73	0	0	727	650.1684	25.08
1021	76.832	593	668.832	0		73	0		728	650.1684	
1022	76.832	593	669.832	10		73	0		728	651.1684	

end

SCWMATP224 **ET=265.837 [16.5T,249E], Increase = 182.1 [217.5%]**

Time [day]	CumP(C [cm]	sum(vTop [L]	Cumm E [cm]	Daily E [mm/day]	10day E [mm/10d	sum(vRoc [L]	Daily T [mm]	10day T [mm/10d	sum(vBot) [L]	Cum Disch [cm]	10day ET [mm/10d]
650	50.165	410	460.165	0	31.778	32.9	0	0	505	454.835	31.778
651	50.47	410	460.165	0		32.9	0		505	454.835	
652	50.495	410	460.47	3.048		32.9	0		505	454.5302	
653	50.495	410	460.495	0.254		32.9	0		505	454.5048	
654	50.495	410	460.495	0		32.9	0		505	454.5048	
655	50.495	410	460.495	0		32.9	0		506	454.5048	
656	50.495	411	460.495	0		32.9	0		506	455.5048	

657	50.495	411	461.495	10		32.9	0		506	455.5048		
658	50.495	411	461.495	0		32.9	0		507	455.5048		
659	50.495	412	461.495	0		32.9	0		507	456.5048		
660	50.495	412	462.495	10	23.302	32.9	0	0	507	456.5048	23.302	
661	50.495	412	462.495	0		32.9	0		508	456.5048		
662	50.495	413	462.495	0		32.9	0		508	457.5048		
663	50.495	413	463.495	10		32.9	0		508	457.5048		
664	50.495	413	463.495	0		32.9	0		509	457.5048		
665	50.495	414	463.495	0		32.9	0		509	458.5048		
666	50.495	414	464.495	10		32.9	0		510	458.5048		
667	50.495	414	464.495	0		32.9	0		510	459.5048		
668	50.495	415	464.495	0		32.9	0		510	459.5048		
669	50.495	415	465.495	10		32.9	0		511	459.5048		
670	50.495	416	465.495	0	30	32.9	0	0	511	460.5048	30	
671	50.495	416	466.495	10		32.9	0		512	460.5048		
672	50.495	417	466.495	0		32.9	0		512	461.5048		
673	50.495	417	467.495	10		32.9	0		512	461.5048		
674	50.495	417	467.495	0		32.9	0		513	461.5048		
675	50.495	418	467.495	0		32.9	0		513	462.5048		
676	50.495	418	468.495	10		32.9	0		514	462.5048		
677	50.495	419	468.495	0		32.9	0		514	463.5048		
678	50.521	419	469.495	10		32.9	0		515	463.5048		
679	50.521	420	469.521	0.254		32.9	0		515	464.4794		
680	50.521	420	470.521	10	50.254	32.9	0	0	516	464.4794	50.254	
681	50.521	421	470.521	0		32.9	0		516	465.4794		
682	50.521	421	471.521	10		32.9	0		517	465.4794		
683	50.521	422	471.521	0		32.9	0		517	466.4794		
684	50.521	422	472.521	10		32.9	0		518	466.4794		
685	50.521	423	472.521	0		32.9	0		518	467.4794		
686	50.521	423	473.521	10		32.9	0		518	467.4794		C-154
687	50.521	423	473.521	0		32.9	0		519	467.4794		
688	50.521	423	473.521	0		32.9	0		519	468.4794		
689	50.521	424	473.521	0		32.9	0		520	468.4794		
690	50.521	424	474.521	10	40	32.9	0	0	520	469.4794	40	
691	50.521	425	474.521	0		32.9	0		521	469.4794		
692	50.521	425	475.521	10		32.9	0		521	470.4794		
693	50.521	426	475.521	0		32.9	0		521	470.4794		
694	50.521	426	476.521	10		32.9	0		522	470.4794		
695	50.521	426	476.521	0		32.9	0		522	471.4794		
696	50.521	427	476.521	0		32.9	0		523	471.4794		
697	50.521	427	477.521	10		32.9	0		523	472.4794		
698	50.521	428	477.521	0		32.9	0		524	472.4794		
699	50.521	429	478.521	10		32.9	0		525	473.4794		
700	50.521	429	479.521	10	50	32.9	0	0	525	474.4794	50	
701	50.521	430	479.521	0		32.9	0		526	474.4794		
702	50.521	431	480.521	10		32.9	0		526	475.4794		
703	50.521	431	481.521	10		32.9	0		527	475.4794		
704	50.521	432	481.521	0		32.9	0		528	476.4794		
705	50.521	432	482.521	10		32.9	0		528	477.4794		
706	50.521	433	482.521	0		32.9	0		529	477.4794		
707	50.521	433	483.521	10		32.9	0		529	478.4794		
708	50.521	434	483.521	0		32.9	0		530	478.4794		
709	50.521	435	484.521	10		32.9	0		531	479.4794		
710	50.521	435	485.521	10	60	32.9	0	0	531	480.4794	60	
711	50.521	436	485.521	0		32.9	0		532	480.4794		
712	50.521	436	486.521	10		32.9	0		532	481.4794		
713	50.521	437	486.521	0		32.9	0		533	481.4794		
714	50.521	437	487.521	10		32.9	0		533	482.4794		
715	50.521	438	487.521	0		32.9	0		534	482.4794		
716	50.521	439	488.521	10		32.9	0		535	483.4794		
717	50.521	439	489.521	10		32.9	0		536	484.4794		
718	50.521	440	489.521	0		32.9	0		536	485.4794		
719	50.521	441	490.521	10		32.9	0		537	485.4794		
720	50.521	442	491.521	10	60	32.9	0	0	538	486.4794	60	
721	50.521	442	492.521	10		32.9	0		539	487.4794		

852	61.093	546	606.093	10		36.2	1		647	584.907		
853	61.093	547	607.093	10		36.3	1		648	585.907		
854	61.093	547	608.093	10		36.4	1		648	586.907		
855	65.884	543	608.093	0		36.5	1		645	586.907		
856	65.884	544	608.884	7.912		36.7	1		645	579.1158		
857	65.884	545	609.884	10		36.8	2		646	579.1158		
858	65.884	546	610.884	10		37	1		647	580.1158		
859	65.884	546	611.884	10		37.1	2		648	581.1158		
860	65.884	547	611.884	0	67.912	37.3	1	12	649	582.1158	79.912	
861	65.884	548	612.884	10		37.4	2		650	583.1158		
862	65.884	549	613.884	10		37.6	1		651	584.1158		
863	65.884	550	614.884	10		37.8	2		652	585.1158		
864	65.884	551	615.884	10		37.9	2		653	586.1158		
865	65.884	552	616.884	10		38.1	1		654	587.1158		
866	65.884	553	617.884	10		38.2	2		655	588.1158		
867	65.884	554	618.884	10		38.4	1		656	589.1158		
868	65.884	555	619.884	10		38.5	2		657	590.1158		
869	65.884	556	620.884	10		38.7	1		658	591.1158		
870	65.884	556	621.884	10	100	38.9	2	16	659	592.1158	116	
871	65.884	557	621.884	0		39	2		659	593.1158		
872	67.891	556	622.884	10		39.1	1		659	593.1158		
873	67.891	556	623.891	10.066		39.2	1		659	591.1092		
874	71.599	553	623.891	0		39.3	1		657	591.1092		
875	71.599	554	624.599	7.084		39.5	1		657	585.4008		
876	71.599	554	625.599	10		39.7	2		658	585.4008		
877	71.599	555	625.599	0		39.8	2		659	586.4008		
878	71.599	556	626.599	10		40	1		660	587.4008		
879	71.599	556	627.599	10		40.1	2		661	588.4008		
880	71.599	557	627.599	0	57.15	40.2	1	14	661	589.4008	71.15	
881	71.599	558	628.599	10		40.4	1		662	589.4008		
882	71.599	559	629.599	10		40.6	2		663	590.4008		
883	71.599	559	630.599	10		40.7	2		664	591.4008		
884	71.599	560	630.599	0		40.8	1		665	592.4008		C-157
885	71.599	561	631.599	10		41	1		666	593.4008		
886	71.599	562	632.599	10		41.1	2		667	594.4008		
887	71.599	563	633.599	10		41.3	1		668	595.4008		
888	71.853	564	634.599	10		41.4	2		669	596.4008		
889	71.904	565	635.853	12.54		41.6	1		669	597.1468		
890	71.904	566	636.904	10.508	93.048	41.8	2	15	670	597.096	108.05	
891	71.904	566	637.904	10		42	2		671	598.096		
892	71.955	567	637.904	0		42.1	2		672	599.096		
893	71.955	568	638.955	10.508		42.2	1		673	600.0452		
894	71.955	569	639.955	10		42.4	1		674	601.0452		
895	71.955	570	640.955	10		42.5	2		675	602.0452		
896	72.183	570	641.955	10		42.7	1		676	603.0452		
897	72.234	571	642.183	2.286		42.8	2		677	603.8166		
898	72.234	572	643.234	10.508		43	1		678	604.7658		
899	72.234	573	644.234	10		43.2	2		679	605.7658		
900	72.234	574	645.234	10	83.302	43.4	2	16	680	606.7658	99.302	
901	72.234	574	646.234	10		43.5	2		681	607.7658		
902	72.26	575	646.234	0		43.6	1		682	608.7658		
903	73.352	574	647.26	10.254		43.7	1		682	609.7404		
904	73.352	575	647.352	0.922		43.9	1		682	608.6482		
905	73.352	576	648.352	10		44.1	2		683	608.6482		
906	73.352	577	649.352	10		44.1	2		684	609.6482		
907	73.352	577	650.352	10		44.3	0		684	610.6482		
908	73.352	578	650.352	0		44.4	2		685	610.6482		
909	73.352	579	651.352	10		44.5	1		686	611.6482		
910	73.352	580	652.352	10	71.176	44.6	1	13	687	612.6482	84.176	
911	73.352	580	653.352	10		44.8	1		688	613.6482		
912	73.352	581	653.352	0		45	2		690	614.6482		
913	74.215	581	654.352	10		45	2		690	616.6482		
914	74.596	581	655.215	8.636		45.1	0		691	615.7846		
915	74.774	582	655.596	3.81		45.3	1		691	616.4036		
916	74.952	582	656.774	11.778		45.4	2		692	616.2258		

917	74.952	582	656.952	1.778		45.4	1		693	617.048			
918	74.977	583	656.952	0		45.6	0		694	618.048			
919	74.977	583	657.977	10.254		45.7	2		694	619.0226			
920	74.977	584	657.977	0	56.256	45.8	1	12	695	619.0226	68.256		
921	74.977	585	658.977	10		45.9	1		696	620.0226			
922	74.977	585	659.977	10		45.9	1		697	621.0226			
923	75.028	586	659.977	0		46	0		697	622.0226			
924	75.028	587	661.028	10.508		46.1	1		698	621.9718			
925	75.028	587	662.028	10		46.2	1		699	622.9718			
926	75.028	588	662.028	0		46.2	1		700	623.9718			
927	75.028	589	663.028	10		46.3	0		700	624.9718			
928	75.028	590	664.028	10		46.5	1		701	624.9718			
929	75.028	591	665.028	10		46.5	2		702	625.9718			
930	75.028	591	666.028	10	80.508	46.6	0	8	703	626.9718	88.508		
931	75.028	592	666.028	0		46.7	1		704	627.9718			
932	75.028	593	667.028	10		46.7	1		705	628.9718			
933	75.028	594	668.028	10		46.8	0		706	629.9718			
934	75.028	594	669.028	10		46.9	1		707	630.9718			
935	75.028	595	669.028	0		46.9	1		707	631.9718			
936	75.028	596	670.028	10		47	0		708	631.9718			
937	75.028	596	671.028	10		47.1	1		709	632.9718			
938	75.028	597	671.028	0		47.2	1		709	633.9718			
939	75.028	598	672.028	10		47.2	1		710	633.9718			
940	75.028	599	673.028	10	70	47.4	0	7	711	634.9718	77		
941	75.028	599	674.028	10		47.4	2		711	635.9718			
942	75.028	600	674.028	0		47.5	0		712	635.9718			
943	75.028	601	675.028	10		47.6	1		713	636.9718			
944	75.028	601	676.028	10		47.7	1		713	637.9718			
945	75.028	602	676.028	0		47.8	1		714	637.9718			
946	75.104	603	677.028	10		47.9	1		715	638.9718			
947	76.146	602	678.104	10.762		47.9	1		714	639.8956			
948	76.146	602	678.146	0.414		48.2	0		715	637.8542			
949	76.146	602	678.146	0		48.3	3		715	638.8542			
950	76.146	603	678.146	0	51.176	48.4	1	11	716	638.8542	62.176	C-158	
951	76.146	604	679.146	10		48.5	1		716	639.8542			
952	76.146	604	680.146	10		48.6	1		717	639.8542			
953	76.146	605	680.146	0		48.7	1		718	640.8542			
954	76.146	605	681.146	10		48.7	1		719	641.8542			
955	76.146	606	681.146	0		48.7	0		719	642.8542			
956	76.146	607	682.146	10		48.8	0		720	642.8542			
957	76.146	607	683.146	10		48.8	1		720	643.8542			
958	76.146	608	683.146	0		48.8	0		721	643.8542			
959	76.146	609	684.146	10		48.9	0		722	644.8542			
960	76.146	609	685.146	10	70	48.9	1	6	722	645.8542	76		
961	76.146	610	685.146	0		48.9	0		722	645.8542			
962	76.146	610	686.146	10		48.9	0		723	645.8542			
963	76.146	611	686.146	0		49	0		724	646.8542			
964	76.146	611	687.146	10		49	1		724	647.8542			
965	76.146	612	687.146	0		49	0		725	647.8542			
966	76.146	612	688.146	10		49	0		725	648.8542			
967	76.146	613	688.146	0		49.1	0		726	648.8542			
968	76.146	614	689.146	10		49.1	1		726	649.8542			
969	76.146	614	690.146	10		49.1	0		727	649.8542			
970	76.197	614	690.146	0	50	49.1	0	2	727	650.8542	52		
971	76.197	615	690.197	0.508		49.1	0		728	650.8034			
972	76.197	616	691.197	10		49.2	0		728	651.8034			
973	76.197	616	692.197	10		49.2	1		729	651.8034			
974	76.247	617	692.197	0		49.2	0		729	652.8034			
975	76.247	617	693.247	10.508		49.2	0		730	652.7526			
976	76.247	618	693.247	0		49.2	0		730	653.7526			
977	76.247	619	694.247	10		49.3	0		731	653.7526			
978	76.247	619	695.247	10		49.3	1		732	654.7526			
979	76.247	620	695.247	0		49.3	0		733	655.7526			
980	76.247	620	696.247	10	61.016	49.3	0	2	733	656.7526	63.016		
981	76.247	620	696.247	0		49.3	0		733	656.7526			

982	76.247	621	696.247	0		49.3	0		734	656.7526		
983	76.247	621	697.247	10		49.4	0		734	657.7526		
984	76.247	622	697.247	0		49.4	1		735	657.7526		
985	76.247	622	698.247	10		49.4	0		735	658.7526		
986	76.247	623	698.247	0		49.4	0		735	658.7526		
987	76.247	623	699.247	10		49.4	0		736	658.7526		
988	76.247	623	699.247	0		49.4	0		736	659.7526		
989	76.247	624	699.247	0		49.4	0		737	659.7526		
990	76.247	624	700.247	10	40	49.4	0	1	737	660.7526	41	
991	76.247	625	700.247	0		49.4	0		738	660.7526		
992	76.247	625	701.247	10		49.4	0		738	661.7526		
993	76.247	626	701.247	0		49.4	0		739	661.7526		
994	76.247	626	702.247	10		49.4	0		739	662.7526		
995	76.298	626	702.247	0		49.4	0		740	662.7526		
996	76.298	626	702.298	0.508		49.4	0		740	663.7018		
997	76.298	627	702.298	0		49.4	0		740	663.7018		
998	76.298	627	703.298	10		49.4	0		740	663.7018		
999	76.324	627	703.298	0		49.4	0		741	663.7018		
1000	76.324	628	703.324	0.254	30.762	49.4	0	0	741	664.6764	30.762	
1001	76.324	628	704.324	10		49.4	0		741	664.6764		
1002	76.324	628	704.324	0		49.4	0		741	664.6764		
1003	76.324	629	704.324	0		49.4	0		742	664.6764		
1004	76.324	629	705.324	10		49.4	0		742	665.6764		
1005	76.324	629	705.324	0		49.4	0		743	665.6764		
1006	76.324	630	705.324	0		49.4	0		743	666.6764		
1007	76.324	630	706.324	10		49.4	0		744	666.6764		
1008	76.324	630	706.324	0		49.4	0		745	667.6764		
1009	76.324	631	706.324	0		49.4	0		746	668.6764		
1010	76.324	631	707.324	10	40	49.4	0	0	746	669.6764	40	
1011	76.324	631	707.324	0		49.4	0		746	669.6764		
1012	76.324	632	707.324	0		49.4	0		747	669.6764		
1013	76.501	631	708.324	10		49.4	0		746	670.6764		
1014	76.501	632	707.501	-8.222		49.4	0		747	669.4986		
1015	76.501	632	708.501	10		49.4	0		747	670.4986		
1016	76.806	632	708.501	0		49.4	0		747	670.4986		C-159
1017	76.832	632	708.806	3.048		49.4	0		747	670.1938		
1018	76.832	632	708.832	0.254		49.4	0		747	670.1684		
1019	76.832	632	708.832	0		49.4	0		748	670.1684		
1020	76.832	632	708.832	0	25.08	49.4	0	0	748	671.1684	25.08	
1021	76.832	633	708.832	0		49.4	0		748	671.1684		
1022	76.832	633	709.832	10		49.4	0		749	671.1684		

end

SCWMATM226 **ET=27.337 [7T,20.3E], Increase = -56.4 [-67.4%]**

Time	CumP(C	sum(vTop	Cumm E	Daily E	10day E	sum(vRoc	Daily T	10day T	sum(vBot)	Cum Disct	10day ET
[day]	[cm]	[L]	[cm]	[mm/day]	[mm/10d	[L]	[mm]	[mm/10d	[L]	[cm]	[mm/10d]
650	50.165	-16.6	33.565	1	1.778	27.8	0	0	-34.9	-84.965	1.778
651	50.47	-16.6	33.565	0		27.8	0		-35	-85.065	
652	50.495	-16.6	33.8698	3.048		27.8	0		-35	-85.4698	
653	50.495	-16.6	33.8952	0.254		27.8	0		-35.1	-85.4952	
654	50.495	-16.6	33.8952	0		27.8	0		-35.1	-85.5952	
655	50.495	-16.6	33.8952	0		27.8	0		-35.1	-85.5952	
656	50.495	-16.6	33.8952	0		27.8	0		-35.1	-85.5952	
657	50.495	-16.6	33.8952	0		27.8	0		-35.1	-85.5952	
658	50.495	-16.6	33.8952	0		27.8	0		-35	-85.5952	
659	50.495	-16.6	33.8952	0		27.8	0		-35.1	-85.4952	
660	50.495	-16.6	33.8952	0	3.302	27.8	0	0	-35.1	-85.5952	3.302
661	50.495	-16.6	33.8952	0		27.8	0		-35.2	-85.5952	
662	50.495	-16.6	33.8952	0		27.8	0		-35.2	-85.6952	

793	55.095	-16.7	38.3954	0		28.8	0		-44.1	-98.8954	
794	55.095	-16.7	38.3954	0		28.8	1		-44.4	-99.1954	
795	55.095	-16.7	38.3954	0		28.8	0		-44.6	-99.4954	
796	55.095	-16.7	38.3954	0		28.8	0		-44.8	-99.6954	
797	55.095	-16.7	38.3954	0		28.8	0		-45.1	-99.8954	
798	55.095	-16.7	38.3954	0		28.8	0		-45.2	-100.195	
799	55.251	-16.7	38.3954	0		28.9	0		-45.3	-100.295	
800	55.911	-16.7	38.551	1.556	1.556	28.9	1	2	-45.3	-100.551	3.556
801	55.911	-16.7	39.2114	6.604		28.9	0		-44.7	-101.211	
802	55.911	-16.7	39.2114	0		28.9	0		-44.8	-100.611	
803	55.911	-16.7	39.2114	0		28.9	0		-44	-100.711	
804	56.165	-16.7	39.2114	0		28.9	0		-43.2	-99.9114	
805	56.216	-16.7	39.4654	2.54		28.9	0		-42.7	-99.3654	
806	56.978	-16.7	39.5162	0.508		28.9	0		-42.4	-98.9162	
807	56.978	-16.7	40.2782	7.62		28.9	0		-42.2	-99.3782	
808	56.978	-16.7	40.2782	0		29	0		-42	-99.1782	
809	56.978	-16.7	40.2782	0		29	1		-42.2	-98.9782	
810	56.978	-16.7	40.2782	0	17.272	29	0	1	-42.6	-99.1782	18.272
811	56.978	-16.7	40.2782	0		29	0		-43.3	-99.5782	
812	56.978	-16.7	40.2782	0		29	0		-43.8	-100.278	
813	56.978	-16.7	40.2782	0		29	0		-44.2	-100.778	
814	56.978	-16.7	40.2782	0		29	0		-44.7	-101.178	
815	56.978	-16.7	40.2782	0		29	0		-45.1	-101.678	
816	56.978	-16.7	40.2782	0		29	0		-45.6	-102.078	
817	56.978	-16.7	40.2782	0		29	0		-46	-102.578	
818	56.978	-16.7	40.2782	0		29	0		-46.4	-102.978	
819	56.978	-16.7	40.2782	0		29	0		-46.8	-103.378	
820	56.978	-16.7	40.2782	0	0	29	0	0	-47.1	-103.778	0
821	56.978	-16.7	40.2782	0		29	0		-47.3	-104.078	
822	56.978	-16.7	40.2782	0		29	0		-47.2	-104.278	
823	56.978	-16.7	40.2782	0		29.1	0		-47.4	-104.178	
824	57.994	-16.8	40.2782	0		29.1	1		-47.6	-104.378	
825	58.35	-16.8	41.1942	9.16		29.1	0		-47.5	-105.594	
826	58.35	-16.8	41.5498	3.556		29.1	0		-47.7	-105.85	
827	58.35	-16.8	41.5498	0		29.1	0		-47.4	-106.05	
828	58.35	-16.8	41.5498	0		29.1	0		-47.2	-105.75	
829	58.35	-16.8	41.5498	0		29.1	0		-47	-105.55	
830	58.35	-16.8	41.5498	0	12.716	29.1	0	1	-47.1	-105.35	13.716 C-162
831	58.35	-16.8	41.5498	0		29.1	0		-47.3	-105.45	
832	58.35	-16.8	41.5498	0		29.1	0		-47.7	-105.65	
833	58.35	-16.8	41.5498	0		29.1	0		-48	-106.05	
834	58.35	-16.8	41.5498	0		29.1	0		-48.2	-106.35	
835	58.35	-16.8	41.5498	0		29.1	0		-48.4	-106.55	
836	59.874	-17.2	41.5498	0		29.1	0		-48.4	-106.75	
837	59.874	-16.9	42.6738	11.24		29.1	0		-48.1	-108.274	
838	59.874	-16.9	42.9738	3		29.2	0		-47.7	-107.974	
839	59.874	-16.9	42.9738	0		29.2	1		-46.8	-107.574	
840	59.874	-16.9	42.9738	0	14.24	29.2	0	1	-45.6	-106.674	15.24
841	59.899	-16.9	42.9738	0		29.2	0		-44.4	-105.474	
842	60.153	-16.9	42.9992	0.254		29.2	0		-43.2	-104.299	
843	60.255	-16.9	43.2532	2.54		29.2	0		-41.9	-103.353	
844	60.255	-16.9	43.3548	1.016		29.2	0		-40.8	-102.155	
845	60.255	-16.9	43.3548	0		29.2	0		-39.7	-101.055	
846	60.306	-16.9	43.3548	0		29.2	0		-39.3	-99.9548	
847	61.068	-16.9	43.4056	0.508		29.2	0		-39.2	-99.6056	
848	61.093	-16.9	44.1676	7.62		29.2	0		-39	-100.268	
849	61.093	-16.9	44.193	0.254		29.2	0		-38.7	-100.093	
850	61.093	-16.9	44.193	0	12.192	29.3	0	0	-38.3	-99.793	12.192
851	61.093	-16.9	44.193	0		29.3	1		-37.9	-99.393	
852	61.093	-16.9	44.193	0		29.3	0		-37.7	-98.993	
853	61.093	-16.9	44.193	0		29.3	0		-37.9	-98.793	
854	61.093	-16.9	44.193	0		29.3	0		-38.9	-98.993	
855	65.884	-21.1	44.193	0		29.3	0		-39.6	-99.993	
856	65.884	-20.2	44.7842	5.912		29.4	0		-39.6	-105.484	
857	65.884	-19.9	45.6842	9		29.5	1		-38.1	-105.484	

858	65.884	-19.8	45.9842	3		29.5	1		-37.1	-103.984		
859	65.884	-19.8	46.0842	1		29.6	0		-36.6	-102.984		
860	65.884	-19.8	46.0842	0	18.912	29.7	1	4	-36.4	-102.484	22.912	
861	65.884	-19.7	46.0842	0		29.8	1		-36.9	-102.284		
862	65.884	-19.7	46.1842	1		29.8	1		-37.9	-102.784		
863	65.884	-19.7	46.1842	0		29.9	0		-38.8	-103.784		
864	65.884	-19.7	46.1842	0		30	1		-39.7	-104.684		
865	65.884	-19.7	46.1842	0		30.1	1		-40.4	-105.584		
866	65.884	-19.7	46.1842	0		30.1	1		-41.2	-106.284		
867	65.884	-19.7	46.1842	0		30.2	0		-42	-107.084		
868	65.884	-19.7	46.1842	0		30.3	1		-42.8	-107.884		
869	65.884	-19.7	46.1842	0		30.4	1		-43.5	-108.684		
870	65.884	-19.7	46.1842	0	1	30.4	1	8	-43.9	-109.384	9	
871	65.884	-19.7	46.1842	0		30.5	0		-44.4	-109.784		
872	67.891	-21.2	46.1842	0		30.5	1		-44.8	-110.284		
873	67.891	-20.7	46.6908	5.066		30.6	0		-44.8	-112.691		
874	71.599	-23.8	47.1908	5		30.7	1		-44.7	-112.691		
875	71.599	-23.2	47.7992	6.084		30.7	1		-44.6	-116.299		
876	71.599	-22.6	48.3992	6		30.8	0		-44.7	-116.199		
877	71.599	-22.5	48.9992	6		30.9	1		-45	-116.299		
878	71.599	-22.4	49.0992	1		31	1		-45.2	-116.599		
879	71.599	-22.3	49.1992	1		31.1	1		-45.1	-116.799		
880	71.599	-22.3	49.2992	1	31.15	31.1	1	7	-44.9	-116.699	38.15	
881	71.599	-22.2	49.2992	0		31.2	0		-44.6	-116.499		
882	71.599	-22.2	49.3992	1		31.3	1		-44.8	-116.199		
883	71.599	-22.1	49.3992	0		31.4	1		-44.9	-116.399		
884	71.599	-22.1	49.4992	1		31.5	1		-45	-116.499		
885	71.599	-22.1	49.4992	0		31.6	1		-45.1	-116.599		
886	71.599	-22.1	49.4992	0		31.7	1		-45.3	-116.699		
887	71.599	-22.1	49.4992	0		31.7	1		-45.6	-116.899		
888	71.853	-22.1	49.4992	0		31.8	0		-45.9	-117.199		
889	71.904	-22.1	49.7532	2.54		31.9	1		-45.9	-117.753		
890	71.904	-22.1	49.804	0.508	5.048	32	1	8	-46.1	-117.804	13.048	
891	71.904	-22	49.804	0		32.1	1		-46.2	-118.004		
892	71.955	-22	49.904	1		32.1	1		-46.2	-118.104		
893	71.955	-22	49.9548	0.508		32.2	0		-46.2	-118.155		
894	71.955	-22	49.9548	0		32.3	1		-46.4	-118.155		
895	71.955	-22	49.9548	0		32.3	1		-46.6	-118.355		
896	72.183	-22	49.9548	0		32.4	0		-46.8	-118.555		C-163
897	72.234	-22	50.1834	2.286		32.5	1		-47	-118.983		
898	72.234	-22	50.2342	0.508		32.6	1		-47	-119.234		
899	72.234	-22	50.2342	0		32.6	1		-47.3	-119.234		
900	72.234	-22	50.2342	0	4.302	32.7	0	7	-47.3	-119.534	11.302	
901	72.234	-22	50.2342	0		32.8	1		-47.6	-119.534		
902	72.26	-22	50.2342	0		32.8	1		-47.9	-119.834		
903	73.352	-22.6	50.2596	0.254		32.9	0		-48.2	-120.16		
904	73.352	-22.3	50.7518	4.922		33	1		-47.9	-121.552		
905	73.352	-22.2	51.0518	3		33	1		-47.5	-121.252		
906	73.352	-22.2	51.1518	1		33.1	0		-47.1	-120.852		
907	73.352	-22.2	51.1518	0		33.1	1		-47.2	-120.452		
908	73.352	-22.2	51.1518	0		33.2	0		-47.5	-120.552		
909	73.352	-22.2	51.1518	0		33.2	1		-47.7	-120.852		
910	73.352	-22.2	51.1518	0	9.176	33.3	0	6	-47.9	-121.052	15.176	
911	73.352	-22.2	51.1518	0		33.3	1		-48.2	-121.252		
912	73.352	-22.2	51.1518	0		33.4	0		-48.5	-121.552		
913	74.215	-22.6	51.1518	0		33.4	1		-48.4	-121.852		
914	74.596	-22.4	51.6154	4.636		33.5	0		-48.2	-122.615		
915	74.774	-22.3	52.1964	5.81		33.5	1		-48.1	-122.796		
916	74.952	-22.3	52.4742	2.778		33.6	0		-48.1	-122.874		
917	74.952	-22.3	52.652	1.778		33.6	1		-48.1	-123.052		
918	74.977	-22.3	52.652	0		33.7	0		-47.5	-123.052		
919	74.977	-22.2	52.6774	0.254		33.8	1		-47.2	-122.477		
920	74.977	-22.2	52.7774	1	16.256	33.8	1	6	-46.9	-122.177	22.256	
921	74.977	-22.2	52.7774	0		33.9	0		-46.8	-121.877		
922	74.977	-22.2	52.7774	0		33.9	1		-46.7	-121.777		

923	75.028	-22.2	52.7774	0		33.9	0		-46.6	-121.677		
924	75.028	-22.2	52.8282	0.508		34	0		-46.9	-121.628		
925	75.028	-22.2	52.8282	0		34	1		-47.4	-121.928		
926	75.028	-22.2	52.8282	0		34.1	0		-47.5	-122.428		
927	75.028	-22.2	52.8282	0		34.1	1		-47.5	-122.528		
928	75.028	-22.2	52.8282	0		34.2	0		-47.7	-122.528		
929	75.028	-22.2	52.8282	0		34.2	1		-47.6	-122.728		
930	75.028	-22.2	52.8282	0	0.508	34.2	0	4	-47.4	-122.628	4.508	
931	75.028	-22.2	52.8282	0		34.3	0		-47.3	-122.428		
932	75.028	-22.2	52.8282	0		34.3	1		-47.4	-122.328		
933	75.028	-22.2	52.8282	0		34.3	0		-46.4	-122.428		
934	75.028	-22.2	52.8282	0		34.3	0		-45	-121.428		
935	75.028	-22.2	52.8282	0		34.4	0		-43.7	-120.028		
936	75.028	-22.2	52.8282	0		34.4	1		-42.8	-118.728		
937	75.028	-22.2	52.8282	0		34.4	0		-42.3	-117.828		
938	75.028	-22.2	52.8282	0		34.4	0		-42.1	-117.328		
939	75.028	-22.2	52.8282	0		34.5	0		-41.5	-117.128		
940	75.028	-22.2	52.8282	0	0	34.5	1	3	-41.3	-116.528	3	
941	75.028	-22.2	52.8282	0		34.5	0		-41.1	-116.328		
942	75.028	-22.2	52.8282	0		34.5	0		-40.5	-116.128		
943	75.028	-22.2	52.8282	0		34.5	0		-40.1	-115.528		
944	75.028	-22.2	52.8282	0		34.5	0		-39.3	-115.128		
945	75.028	-22.2	52.8282	0		34.6	0		-38.7	-114.328		
946	75.104	-22.2	52.8282	0		34.6	1		-38.2	-113.728		
947	76.146	-23.2	52.9044	0.762		34.6	0		-37.4	-113.304		
948	76.146	-22.8	52.9458	0.414		34.6	0		-36.5	-113.546		
949	76.146	-22.7	53.3458	4		34.7	0		-35.6	-112.646		
950	76.146	-22.7	53.4458	1	6.176	34.7	1	2	-34.8	-111.746	8.176	
951	76.146	-22.6	53.4458	0		34.7	0		-34.2	-110.946		
952	76.146	-22.6	53.5458	1		34.7	0		-33.6	-110.346		
953	76.146	-22.6	53.5458	0		34.7	0		-32.9	-109.746		
954	76.146	-22.6	53.5458	0		34.7	0		-32.3	-109.046		
955	76.146	-22.6	53.5458	0		34.7	0		-31.7	-108.446		
956	76.146	-22.6	53.5458	0		34.7	0		-31.2	-107.846		
957	76.146	-22.6	53.5458	0		34.8	0		-30.5	-107.346		
958	76.146	-22.6	53.5458	0		34.8	1		-30.1	-106.646		
959	76.146	-22.6	53.5458	0		34.8	0		-28.3	-106.246		
960	76.146	-22.6	53.5458	0	1	34.8	0	1	-27.3	-104.446	2	
961	76.146	-22.6	53.5458	0		34.8	0		-26.3	-103.446		
962	76.146	-22.6	53.5458	0		34.8	0		-25.4	-102.446		C-164
963	76.146	-22.6	53.5458	0		34.8	0		-24.5	-101.546		
964	76.146	-22.6	53.5458	0		34.8	0		-23.8	-100.646		
965	76.146	-22.6	53.5458	0		34.8	0		-23.2	-99.9458		
966	76.146	-22.6	53.5458	0		34.8	0		-22.8	-99.3458		
967	76.146	-22.6	53.5458	0		34.8	0		-22.5	-98.9458		
968	76.146	-22.6	53.5458	0		34.8	0		-22	-98.6458		
969	76.146	-22.6	53.5458	0		34.8	0		-21.4	-98.1458		
970	76.197	-22.6	53.5458	0	0	34.8	0	0	-21	-97.5458	0	
971	76.197	-22.6	53.5966	0.508		34.8	0		-20.7	-97.1966		
972	76.197	-22.6	53.5966	0		34.8	0		-20.2	-96.8966		
973	76.197	-22.6	53.5966	0		34.8	0		-19.9	-96.3966		
974	76.247	-22.6	53.5966	0		34.8	0		-19.9	-96.0966		
975	76.247	-22.6	53.6474	0.508		34.8	0		-20.2	-96.1474		
976	76.247	-22.6	53.6474	0		34.8	0		-20.3	-96.4474		
977	76.247	-22.6	53.6474	0		34.8	0		-20	-96.5474		
978	76.247	-22.6	53.6474	0		34.8	0		-19.9	-96.2474		
979	76.247	-22.6	53.6474	0		34.8	0		-19.9	-96.1474		
980	76.247	-22.6	53.6474	0	1.016	34.8	0	0	-20.3	-96.1474	1.016	
981	76.247	-22.6	53.6474	0		34.8	0		-20.1	-96.5474		
982	76.247	-22.6	53.6474	0		34.8	0		-20.2	-96.3474		
983	76.247	-22.6	53.6474	0		34.8	0		-20.8	-96.4474		
984	76.247	-22.6	53.6474	0		34.8	0		-21.4	-97.0474		
985	76.247	-22.6	53.6474	0		34.8	0		-21.4	-97.6474		
986	76.247	-22.6	53.6474	0		34.8	0		-21.6	-97.6474		
987	76.247	-22.6	53.6474	0		34.8	0		-21.6	-97.8474		

988	76.247	-22.6	53.6474	0		34.8	0		-21.6	-97.8474	
989	76.247	-22.6	53.6474	0		34.8	0		-21.8	-97.8474	
990	76.247	-22.6	53.6474	0	0	34.8	0	0	-21.9	-98.0474	0
991	76.247	-22.6	53.6474	0		34.8	0		-21.6	-98.1474	
992	76.247	-22.6	53.6474	0		34.8	0		-20.8	-97.8474	
993	76.247	-22.6	53.6474	0		34.8	0		-20.4	-97.0474	
994	76.247	-22.6	53.6474	0		34.8	0		-20.7	-96.6474	
995	76.298	-22.6	53.6474	0		34.8	0		-21.6	-96.9474	
996	76.298	-22.6	53.6982	0.508		34.8	0		-21.3	-97.8982	
997	76.298	-22.6	53.6982	0		34.8	0		-20.8	-97.5982	
998	76.298	-22.6	53.6982	0		34.8	0		-20.6	-97.0982	
999	76.324	-22.6	53.6982	0		34.8	0		-20.7	-96.8982	
1000	76.324	-22.6	53.7236	0.254	0.762	34.8	0	0	-21.3	-97.0236	0.762
1001	76.324	-22.6	53.7236	0		34.8	0		-20.7	-97.6236	
1002	76.324	-22.6	53.7236	0		34.8	0		-20.9	-97.0236	
1003	76.324	-22.6	53.7236	0		34.8	0		-21.2	-97.2236	
1004	76.324	-22.6	53.7236	0		34.8	0		-20.8	-97.5236	
1005	76.324	-22.6	53.7236	0		34.8	0		-21.2	-97.1236	
1006	76.324	-22.6	53.7236	0		34.8	0		-21.2	-97.5236	
1007	76.324	-22.6	53.7236	0		34.8	0		-20.7	-97.5236	
1008	76.324	-22.6	53.7236	0		34.8	0		-20.6	-97.0236	
1009	76.324	-22.6	53.7236	0		34.8	0		-20.2	-96.9236	
1010	76.324	-22.6	53.7236	0	0	34.8	0	0	-21.3	-96.5236	0
1011	76.324	-22.6	53.7236	0		34.8	0		-21.3	-97.6236	
1012	76.324	-22.6	53.7236	0		34.8	0		-21.2	-97.6236	
1013	76.501	-22.7	53.7236	0		34.8	0		-21.1	-97.5236	
1014	76.501	-22.7	53.8014	0.778		34.8	0		-21	-97.6014	
1015	76.501	-22.6	53.8014	0		34.8	0		-20.9	-97.5014	
1016	76.806	-22.6	53.9014	1		34.8	0		-20.8	-97.4014	
1017	76.832	-22.6	54.2062	3.048		34.8	0		-20.8	-97.6062	
1018	76.832	-22.6	54.2316	0.254		34.8	0		-20.7	-97.6316	
1019	76.832	-22.6	54.2316	0		34.8	0		-20.7	-97.5316	
1020	76.832	-22.6	54.2316	0	5.08	34.8	0	0	-20.6	-97.5316	5.08
1021	76.832	-22.6	54.2316	0		34.8	0		-20.6	-97.4316	
1022	76.832	-22.6	54.2316	0		34.8	0		-20.7	-97.4316	

end

SCWMATM426 ET=29.54 [5.8T,23.7E], Increase = -54.2 [-64.7%]

Time [day]	CumP(C [cm]	sum(vTop [L]	Cumm E [cm]	Daily E [mm/day]	10day E [mm/10d	sum(vRoc [L]	Daily T [mm]	10day T [mm/10d	sum(vBot) [L]	Cum Disch [cm]	10day ET [mm/10d]
650	50.165	-13.7	36.465	0	0.778	28.3	0	0	-137	-187.165	0.778
651	50.47	-13.7	36.465	0		28.3	0		-137	-187.165	
652	50.495	-13.7	36.7698	3.048		28.3	0		-137	-187.47	
653	50.495	-13.7	36.7952	0.254		28.3	0		-137	-187.495	
654	50.495	-13.7	36.7952	0		28.3	0		-137	-187.495	
655	50.495	-13.7	36.7952	0		28.3	0		-137	-187.495	
656	50.495	-13.7	36.7952	0		28.3	0		-137	-187.495	
657	50.495	-13.7	36.7952	0		28.3	0		-137	-187.495	
658	50.495	-13.7	36.7952	0		28.3	0		-137	-187.495	
659	50.495	-13.7	36.7952	0		28.3	0		-137	-187.495	
660	50.495	-13.7	36.7952	0	3.302	28.3	0	0	-137	-187.495	3.302
661	50.495	-13.7	36.7952	0		28.3	0		-137	-187.495	
662	50.495	-13.6	36.7952	0		28.3	0		-137	-187.495	
663	50.495	-13.6	36.8952	1		28.3	0		-137	-187.495	
664	50.495	-13.6	36.8952	0		28.3	0		-137	-187.495	
665	50.495	-13.6	36.8952	0		28.3	0		-137	-187.495	
666	50.495	-13.6	36.8952	0		28.3	0		-137	-187.495	
667	50.495	-13.6	36.8952	0		28.3	0		-137	-187.495	
668	50.495	-13.6	36.8952	0		28.3	0		-136	-187.495	
669	50.495	-13.6	36.8952	0		28.3	0		-136	-186.495	

735	51.41	-13.8	37.4096	2.032		28.3	0		-134	-186.41	
736	51.41	-13.8	37.6096	2		28.3	0		-134	-185.41	
737	51.41	-13.8	37.6096	0		28.3	0		-134	-185.41	
738	51.41	-13.8	37.6096	0		28.3	0		-133	-185.41	
739	51.41	-13.7	37.6096	0		28.3	0		-133	-184.41	
740	51.41	-13.7	37.7096	1	7.636	28.3	0	0	-133	-184.41	7.636
741	51.41	-13.7	37.7096	0		28.3	0		-133	-184.41	
742	52.095	-14	37.7096	0		28.3	0		-133	-184.41	
743	52.095	-13.8	38.0954	3.858		28.3	0		-133	-185.095	
744	52.095	-13.8	38.2954	2		28.3	0		-133	-185.095	
745	52.095	-13.8	38.2954	0		28.3	0		-133	-185.095	
746	52.095	-13.7	38.2954	0		28.3	0		-133	-185.095	
747	52.095	-13.7	38.3954	1		28.3	0		-134	-185.095	
748	52.095	-13.7	38.3954	0		28.3	0		-134	-186.095	
749	52.095	-13.7	38.3954	0		28.3	0		-134	-186.095	
750	52.095	-13.7	38.3954	0	6.858	28.3	0	0	-135	-186.095	6.858
751	52.095	-13.7	38.3954	0		28.3	0		-135	-187.095	
752	52.095	-13.7	38.3954	0		28.3	0		-135	-187.095	
753	52.095	-13.7	38.3954	0		28.3	0		-134	-187.095	
754	52.095	-13.7	38.3954	0		28.3	0		-134	-186.095	
755	52.095	-13.7	38.3954	0		28.3	0		-135	-186.095	
756	52.095	-13.7	38.3954	0		28.3	0		-135	-187.095	
757	52.095	-13.7	38.3954	0		28.3	0		-135	-187.095	
758	52.095	-13.7	38.3954	0		28.3	0		-136	-187.095	
759	52.095	-13.7	38.3954	0		28.3	0		-136	-188.095	
760	52.095	-13.7	38.3954	0	0	28.3	0	0	-136	-188.095	0
761	52.095	-13.7	38.3954	0		28.4	0		-136	-188.095	
762	52.095	-13.7	38.3954	0		28.4	1		-136	-188.095	
763	52.095	-13.7	38.3954	0		28.4	0		-135	-188.095	
764	52.095	-13.7	38.3954	0		28.4	0		-135	-187.095	
765	52.095	-13.7	38.3954	0		28.4	0		-134	-187.095	
766	52.095	-13.7	38.3954	0		28.4	0		-134	-186.095	
767	52.095	-13.7	38.3954	0		28.4	0		-135	-186.095	
768	52.095	-13.7	38.3954	0		28.4	0		-136	-187.095	
769	52.095	-13.7	38.3954	0		28.4	0		-136	-188.095	
770	52.095	-13.7	38.3954	0	0	28.4	0	1	-137	-188.095	1
771	52.095	-13.7	38.3954	0		28.4	0		-138	-189.095	
772	53.095	-14	38.3954	0		28.4	0		-138	-190.095	
773	53.095	-13.9	39.0954	7		28.4	0		-139	-191.095	
774	53.095	-13.8	39.1954	1		28.5	0		-139	-192.095	
775	53.095	-13.8	39.2954	1		28.5	1		-140	-192.095	
776	53.095	-13.8	39.2954	0		28.5	0		-140	-193.095	
777	53.095	-13.8	39.2954	0		28.5	0		-140	-193.095	C-167
778	53.095	-13.8	39.2954	0		28.5	0		-141	-193.095	
779	53.095	-13.8	39.2954	0		28.5	0		-141	-194.095	
780	53.095	-13.8	39.2954	0	9	28.5	0	1	-141	-194.095	10
781	53.095	-13.8	39.2954	0		28.5	0		-142	-194.095	
782	53.095	-13.8	39.2954	0		28.6	0		-142	-195.095	
783	53.095	-13.8	39.2954	0		28.6	1		-143	-195.095	
784	54.095	-13.8	39.2954	0		28.6	0		-143	-196.095	
785	54.095	-13.8	40.2954	10		28.6	0		-144	-197.095	
786	54.095	-13.8	40.2954	0		28.6	0		-144	-198.095	
787	55.095	-13.8	40.2954	0		28.6	0		-144	-198.095	
788	55.095	-13.8	41.2954	10		28.6	0		-145	-199.095	
789	55.095	-13.8	41.2954	0		28.6	0		-145	-200.095	
790	55.095	-13.8	41.2954	0	20	28.6	0	1	-146	-200.095	21
791	55.095	-13.8	41.2954	0		28.7	0		-146	-201.095	
792	55.095	-13.8	41.2954	0		28.7	1		-146	-201.095	
793	55.095	-13.8	41.2954	0		28.7	0		-147	-201.095	
794	55.095	-13.8	41.2954	0		28.7	0		-147	-202.095	
795	55.095	-13.8	41.2954	0		28.7	0		-147	-202.095	
796	55.095	-13.8	41.2954	0		28.7	0		-147	-202.095	
797	55.095	-13.8	41.2954	0		28.7	0		-148	-202.095	
798	55.095	-13.8	41.2954	0		28.7	0		-148	-203.095	
799	55.251	-13.8	41.2954	0		28.7	0		-148	-203.095	

800	55.911	-13.8	41.451	1.556	1.556	28.7	0	1	-148	-203.251	2.556
801	55.911	-13.8	42.1114	6.604		28.7	0		-147	-203.911	
802	55.911	-13.8	42.1114	0		28.7	0		-147	-202.911	
803	55.911	-13.8	42.1114	0		28.7	0		-147	-202.911	
804	56.165	-13.8	42.1114	0		28.7	0		-146	-202.911	
805	56.216	-13.8	42.3654	2.54		28.7	0		-145	-202.165	
806	56.978	-13.8	42.4162	0.508		28.7	0		-145	-201.216	
807	56.978	-13.8	43.1782	7.62		28.7	0		-145	-201.978	
808	56.978	-13.8	43.1782	0		28.7	0		-145	-201.978	
809	56.978	-13.8	43.1782	0		28.8	0		-145	-201.978	
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811	56.978	-13.8	43.1782	0		28.8	0		-146	-201.978	
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818	56.978	-13.8	43.1782	0		28.8	0		-149	-205.978	
819	56.978	-13.8	43.1782	0		28.8	0		-149	-205.978	
820	56.978	-13.8	43.1782	0	0	28.8	0	0	-150	-205.978	0
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822	56.978	-13.8	43.1782	0		28.8	0		-150	-206.978	
823	56.978	-13.8	43.1782	0		28.8	0		-150	-206.978	
824	57.994	-13.9	43.1782	0		28.8	0		-150	-206.978	
825	58.35	-13.8	44.0942	9.16		28.8	0		-150	-207.994	
826	58.35	-13.8	44.5498	4.556		28.8	0		-150	-208.35	
827	58.35	-13.8	44.5498	0		28.8	0		-150	-208.35	
828	58.35	-13.8	44.5498	0		28.8	0		-150	-208.35	
829	58.35	-13.8	44.5498	0		28.8	0		-150	-208.35	
830	58.35	-13.8	44.5498	0	13.716	28.8	0	0	-150	-208.35	13.716
831	58.35	-13.8	44.5498	0		28.8	0		-150	-208.35	
832	58.35	-13.8	44.5498	0		28.8	0		-150	-208.35	
833	58.35	-13.8	44.5498	0		28.8	0		-151	-208.35	
834	58.35	-13.8	44.5498	0		28.8	0		-151	-209.35	
835	58.35	-13.8	44.5498	0		28.8	0		-151	-209.35	
836	59.874	-14.3	44.5498	0		28.8	0		-151	-209.35	
837	59.874	-14	45.5738	10.24		28.8	0		-151	-210.874	
838	59.874	-14	45.8738	3		28.8	0		-150	-210.874	
839	59.874	-14	45.8738	0		28.8	0		-149	-209.874	
840	59.874	-14	45.8738	0	13.24	28.8	0	0	-148	-208.874	13.24
841	59.899	-13.9	45.8738	0		28.9	0		-147	-207.874	
842	60.153	-13.9	45.9992	1.254		28.9	1		-146	-206.899	
843	60.255	-13.9	46.2532	2.54		28.9	0		-145	-206.153	C-168
844	60.255	-13.9	46.3548	1.016		28.9	0		-143	-205.255	
845	60.255	-13.9	46.3548	0		28.9	0		-142	-203.255	
846	60.306	-13.9	46.3548	0		28.9	0		-142	-202.255	
847	61.068	-13.9	46.4056	0.508		28.9	0		-142	-202.306	
848	61.093	-13.9	47.1676	7.62		28.9	0		-142	-203.068	
849	61.093	-13.9	47.193	0.254		28.9	0		-141	-203.093	
850	61.093	-13.9	47.193	0	13.192	28.9	0	1	-141	-202.093	14.192
851	61.093	-13.9	47.193	0		28.9	0		-141	-202.093	
852	61.093	-13.9	47.193	0		28.9	0		-140	-202.093	
853	61.093	-13.9	47.193	0		28.9	0		-141	-201.093	
854	61.093	-13.9	47.193	0		28.9	0		-142	-202.093	
855	65.884	-18.1	47.193	0		28.9	0		-142	-203.093	
856	65.884	-17.2	47.7842	5.912		29	0		-142	-207.884	
857	65.884	-16.8	48.6842	9		29.1	1		-141	-207.884	
858	65.884	-16.7	49.0842	4		29.2	1		-140	-206.884	
859	65.884	-16.6	49.1842	1		29.3	1		-139	-205.884	
860	65.884	-16.6	49.2842	1	20.912	29.4	1	4	-139	-204.884	24.912
861	65.884	-16.5	49.2842	0		29.4	1		-140	-204.884	
862	65.884	-16.5	49.3842	1		29.5	0		-141	-205.884	
863	65.884	-16.5	49.3842	0		29.6	1		-142	-206.884	
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865	65.884	-16.5	49.3842	0		29.7	1		-143	-207.884	
866	65.884	-16.5	49.3842	0		29.8	0		-144	-208.884	
867	65.884	-16.5	49.3842	0		29.9	1		-145	-209.884	
868	65.884	-16.5	49.3842	0		30	1		-146	-210.884	
869	65.884	-16.5	49.3842	0		30	1		-146	-211.884	
870	65.884	-16.5	49.3842	0	1	30.1	0	7	-147	-211.884	8
871	65.884	-16.5	49.3842	0		30.2	1		-147	-212.884	
872	67.891	-18	49.3842	0		30.2	1		-148	-212.884	
873	67.891	-17.5	49.8908	5.066		30.3	0		-148	-215.891	
874	71.599	-20.6	50.3908	5		30.3	1		-148	-215.891	
875	71.599	-20	50.9992	6.084		30.4	0		-147	-219.599	
876	71.599	-19.4	51.5992	6		30.5	1		-148	-218.599	
877	71.599	-19.2	52.1992	6		30.6	1		-148	-219.599	
878	71.599	-19.1	52.3992	2		30.7	1		-148	-219.599	
879	71.599	-19	52.4992	1		30.8	1		-148	-219.599	
880	71.599	-19	52.5992	1	32.15	30.8	1	8	-148	-219.599	40.15
881	71.599	-19	52.5992	0		30.9	0		-147	-219.599	
882	71.599	-18.9	52.5992	0		31	1		-148	-218.599	
883	71.599	-18.9	52.6992	1		31.1	1		-148	-219.599	
884	71.599	-18.9	52.6992	0		31.2	1		-148	-219.599	
885	71.599	-18.9	52.6992	0		31.3	1		-148	-219.599	
886	71.599	-18.9	52.6992	0		31.4	1		-148	-219.599	
887	71.599	-18.9	52.6992	0		31.4	1		-148	-219.599	
888	71.853	-18.9	52.6992	0		31.5	0		-149	-219.599	
889	71.904	-18.9	52.9532	2.54		31.6	1		-149	-220.853	
890	71.904	-18.9	53.004	0.508	4.048	31.7	1	8	-149	-220.904	12.048
891	71.904	-18.9	53.004	0		31.8	1		-149	-220.904	
892	71.955	-18.9	53.004	0		31.8	1		-149	-220.904	
893	71.955	-18.9	53.0548	0.508		31.9	0		-149	-220.955	
894	71.955	-18.9	53.0548	0		32	1		-149	-220.955	
895	71.955	-18.9	53.0548	0		32	1		-150	-220.955	
896	72.183	-18.9	53.0548	0		32.1	0		-150	-221.955	
897	72.234	-18.9	53.2834	2.286		32.2	1		-150	-222.183	
898	72.234	-18.8	53.3342	0.508		32.3	1		-150	-222.234	
899	72.234	-18.8	53.4342	1		32.3	1		-150	-222.234	
900	72.234	-18.8	53.4342	0	4.302	32.4	0	7	-150	-222.234	11.302
901	72.234	-18.8	53.4342	0		32.5	1		-150	-222.234	
902	72.26	-18.8	53.4342	0		32.5	1		-151	-222.234	
903	73.352	-19.5	53.4596	0.254		32.6	0		-151	-223.26	
904	73.352	-19.1	53.8518	3.922		32.6	1		-151	-224.352	
905	73.352	-19.1	54.2518	4		32.7	0		-150	-224.352	
906	73.352	-19.1	54.2518	0		32.7	1		-150	-223.352	
907	73.352	-19	54.2518	0		32.8	0		-150	-223.352	
908	73.352	-19	54.3518	1		32.9	1		-150	-223.352	
909	73.352	-19	54.3518	0		32.9	1		-151	-223.352	C-169
910	73.352	-19	54.3518	0	9.176	32.9	0	6	-151	-224.352	15.176
911	73.352	-19	54.3518	0		33	0		-151	-224.352	
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913	74.215	-19.4	54.3518	0		33.1	1		-151	-224.352	
914	74.596	-19.3	54.8154	4.636		33.1	0		-151	-225.215	
915	74.774	-19.2	55.2964	4.81		33.2	0		-151	-225.596	
916	74.952	-19.1	55.5742	2.778		33.2	1		-151	-225.774	
917	74.952	-19.1	55.852	2.778		33.3	0		-151	-225.952	
918	74.977	-19.1	55.852	0		33.3	1		-150	-225.952	
919	74.977	-19.1	55.8774	0.254		33.4	0		-150	-224.977	
920	74.977	-19.1	55.8774	0	15.256	33.4	1	5	-150	-224.977	20.256
921	74.977	-19.1	55.8774	0		33.5	0		-150	-224.977	
922	74.977	-19.1	55.8774	0		33.5	1		-150	-224.977	
923	75.028	-19.1	55.8774	0		33.5	0		-150	-224.977	
924	75.028	-19.1	55.9282	0.508		33.5	0		-150	-225.028	
925	75.028	-19.1	55.9282	0		33.6	0		-150	-225.028	
926	75.028	-19.1	55.9282	0		33.6	1		-151	-225.028	
927	75.028	-19.1	55.9282	0		33.6	0		-150	-226.028	
928	75.028	-19.1	55.9282	0		33.7	0		-151	-225.028	
929	75.028	-19.1	55.9282	0		33.7	1		-151	-226.028	

930	75.028	-19.1	55.9282	0	0.508	33.7	0	3	-150	-226.028	3.508
931	75.028	-19.1	55.9282	0		33.7	0		-150	-225.028	
932	75.028	-19.1	55.9282	0		33.7	0		-150	-225.028	
933	75.028	-19.1	55.9282	0		33.8	0		-149	-225.028	
934	75.028	-19.1	55.9282	0		33.8	1		-148	-224.028	
935	75.028	-19.1	55.9282	0		33.8	0		-147	-223.028	
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939	75.028	-19.1	55.9282	0		33.8	0		-144	-220.028	
940	75.028	-19.1	55.9282	0	0	33.9	0	1	-144	-219.028	1
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943	75.028	-19.1	55.9282	0		33.9	0		-143	-219.028	
944	75.028	-19.1	55.9282	0		33.9	0		-142	-218.028	
945	75.028	-19.1	55.9282	0		33.9	0		-142	-217.028	
946	75.104	-19.1	55.9282	0		33.9	0		-141	-217.028	
947	76.146	-20	56.0044	0.762		33.9	0		-140	-216.104	
948	76.146	-19.6	56.1458	1.414		34	0		-140	-216.146	
949	76.146	-19.5	56.5458	4		34	1		-139	-216.146	
950	76.146	-19.5	56.6458	1	7.176	34	0	2	-138	-215.146	9.176
951	76.146	-19.4	56.6458	0		34	0		-137	-214.146	
952	76.146	-19.4	56.7458	1		34	0		-137	-213.146	
953	76.146	-19.4	56.7458	0		34	0		-136	-213.146	
954	76.146	-19.4	56.7458	0		34	0		-135	-212.146	
955	76.146	-19.4	56.7458	0		34	0		-135	-211.146	
956	76.146	-19.4	56.7458	0		34	0		-134	-211.146	
957	76.146	-19.4	56.7458	0		34	0		-134	-210.146	
958	76.146	-19.4	56.7458	0		34	0		-133	-210.146	
959	76.146	-19.4	56.7458	0		34.1	0		-131	-209.146	
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961	76.146	-19.3	56.8458	1		34.1	0		-129	-206.146	
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963	76.146	-19.3	56.8458	0		34.1	0		-128	-205.146	
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968	76.146	-19.3	56.8458	0		34.1	0		-125	-202.146	
969	76.146	-19.3	56.8458	0		34.1	0		-125	-201.146	
970	76.197	-19.3	56.8458	0	1	34.1	0	0	-124	-201.146	1
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973	76.197	-19.3	56.8966	0		34.1	0		-123	-199.197	
974	76.247	-19.3	56.8966	0		34.1	0		-123	-199.197	
975	76.247	-19.3	56.9474	0.508		34.1	0		-123	-199.247	C-170
976	76.247	-19.3	56.9474	0		34.1	0		-124	-199.247	
977	76.247	-19.3	56.9474	0		34.1	0		-123	-200.247	
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979	76.247	-19.3	56.9474	0		34.1	0		-123	-199.247	
980	76.247	-19.3	56.9474	0	1.016	34.1	0	0	-124	-199.247	1.016
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984	76.247	-19.3	56.9474	0		34.1	0		-125	-200.247	
985	76.247	-19.3	56.9474	0		34.1	0		-125	-201.247	
986	76.247	-19.3	56.9474	0		34.1	0		-125	-201.247	
987	76.247	-19.3	56.9474	0		34.1	0		-125	-201.247	
988	76.247	-19.3	56.9474	0		34.1	0		-125	-201.247	
989	76.247	-19.3	56.9474	0		34.1	0		-125	-201.247	
990	76.247	-19.3	56.9474	0	0	34.1	0	0	-125	-201.247	0
991	76.247	-19.3	56.9474	0		34.1	0		-125	-201.247	
992	76.247	-19.3	56.9474	0		34.1	0		-124	-201.247	
993	76.247	-19.3	56.9474	0		34.1	0		-124	-200.247	
994	76.247	-19.3	56.9474	0		34.1	0		-124	-200.247	

995	76.298	-19.3	56.9474	0		34.1	0		-125	-200.247	
996	76.298	-19.3	56.9982	0.508		34.1	0		-125	-201.298	
997	76.298	-19.3	56.9982	0		34.1	0		-124	-201.298	
998	76.298	-19.3	56.9982	0		34.1	0		-124	-200.298	
999	76.324	-19.3	56.9982	0		34.1	0		-124	-200.298	
1000	76.324	-19.3	57.0236	0.254	0.762	34.1	0	0	-125	-200.324	0.762
1001	76.324	-19.3	57.0236	0		34.1	0		-124	-201.324	
1002	76.324	-19.3	57.0236	0		34.1	0		-124	-200.324	
1003	76.324	-19.3	57.0236	0		34.1	0		-125	-200.324	
1004	76.324	-19.3	57.0236	0		34.1	0		-124	-201.324	
1005	76.324	-19.3	57.0236	0		34.1	0		-125	-200.324	
1006	76.324	-19.3	57.0236	0		34.1	0		-125	-201.324	
1007	76.324	-19.3	57.0236	0		34.1	0		-124	-201.324	
1008	76.324	-19.3	57.0236	0		34.1	0		-124	-200.324	
1009	76.324	-19.3	57.0236	0		34.1	0		-124	-200.324	
1010	76.324	-19.3	57.0236	0	0	34.1	0	0	-125	-200.324	0
1011	76.324	-19.3	57.0236	0		34.1	0		-125	-201.324	
1012	76.324	-19.3	57.0236	0		34.1	0		-125	-201.324	
1013	76.501	-19.4	57.0236	0		34.1	0		-125	-201.324	
1014	76.501	-19.4	57.1014	0.778		34.1	0		-125	-201.501	
1015	76.501	-19.4	57.1014	0		34.1	0		-124	-201.501	
1016	76.806	-19.4	57.1014	0		34.1	0		-124	-200.501	
1017	76.832	-19.3	57.4062	3.048		34.1	0		-124	-200.806	
1018	76.832	-19.3	57.5316	1.254		34.1	0		-124	-200.832	
1019	76.832	-19.3	57.5316	0		34.1	0		-124	-200.832	
1020	76.832	-19.3	57.5316	0	5.08	34.1	0	0	-124	-200.832	5.08
1021	76.832	-19.3	57.5316	0		34.1	0		-124	-200.832	
1022	76.832	-19.3	57.5316	0		34.1	0		-124	-200.832	

end