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Analysis of Recent Swarm Activity Along the Hot Springs-Montosa Fault East of Socorro, New Mexico

By

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ABSTRACT

Socorro, New Mexico is located within the geologically complex, central segment of the Rio Grande rift. A mid-crustal magma body is known to exist at depth and most microearthquake activity in the Socorro area occurs in swarms.

HYPO71 solutions for swarm activity during September, 1985 and April-May, 1986 indicate focal depth activity between 7.00 and 14.00 km with peak activity between 9.00 and 9.50 km. Statistical error analysis for 41 A/A and A/B events from the April-May, 1986 swarm indicate the standard deviation error in depth determinations resulting from errors inherent in reading analog recordings is equivalent to the uncertainty in focal depth (ERZ) as determined by HYPO71.

Epicenters for the September, 1985 and April-May, 1986 swarms and a magnitude 3.4 event on August 16, 1985 are located near the Hot Springs-Montosa strike-slip fault zone. The well-constrained composite fault plane solution for the April-May, 1986 swarm very possibly indicates left-lateral, strike-slip movement along this fault. Analysis of the poorly constrained fault plane solutions for the August 16, 1985 event and for the September, 1985 swarm may provide supporting evidence for activity along the fault.

Focal mechanism analysis for a swarm of April 21, 1987, located near the Hot Springs-Montosa fault, but south of the September, 1985 and April-May, 1986 swarms, indicates normal faulting.

The strike-slip focal mechanism and a change in the orientations of the T axes near the Hot Springs-Montosa fault may combine to indicate that the geologic stress field in the Socorro area has changed.

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INTRODUCTION

New Mexico Tech operates a permanent, 11 station array of seismometers in the Socorro area of the Rio Grande rift. Three microearthquake swarms which occurred in September, 1985, April-May, 1986 and on April 21, 1987 along with a magnitude 3.4 event of August 16, 1985 are analyzed in the following report.

In locating the hypocenter of an event, the depth of focus is the least constrained parameter. A statistical analysis of how reading errors may affect depth determinations is considered for the April-May, 1986 swarm.

All swarms under study occurred near the Hot Springs -Montosa fault, a major north-south, strike-slip fault zone east of Socorro. The well constrained fault plane solution for the April-May, 1986 swarm suggests left-lateral strike-slip movement along a branch of this fault. First motions for the event on August 16, 1985 and for the swarm of September, 1985 do not constrain the type of faulting but are compatible with the solution of the April-May, 1986 swarm. Thus, these events may also have been produced by dominantly left-lateral strike-slip movements along the Hot Springs-Montosa fault zone.

THE RIO GRANDE RIFT

The Rio Grande Rift is a major continental rift trending north-south from central Colorado through New Mexico. The rift extends from Leadville, Colorado in the north to a much debated southern terminus taken here to be El Paso, Texas (Figure 1).

Rifting began between 32 and 27 m.y. ago when regional extension reactivated the southern Rocky Mountains, a major north-trending zone of weakness that had developed during late Paleozoic and late Cretaceous-early Tertiary orogenies. By 26 m.y. ago, the crust along the developing rift had sagged sufficiently to form broad, shallow basins in which mafic flows and volcanic ash beds were intercalated with alluvial fill (Chapin, 1979).

The present day Rio Grande rift separates the High Plains province to the east from the Colorado Plateau and Basin and Range provinces to the west. Figure 2 illustrates the approximate locations of the transition zones between these provinces in New Mexico.

The rift can be divided into three segments. The northern segment, extending from Alamosa to Leadville, Colorado, is characterized by a north-northwest trending, more or less continuous graben of Neogene age that

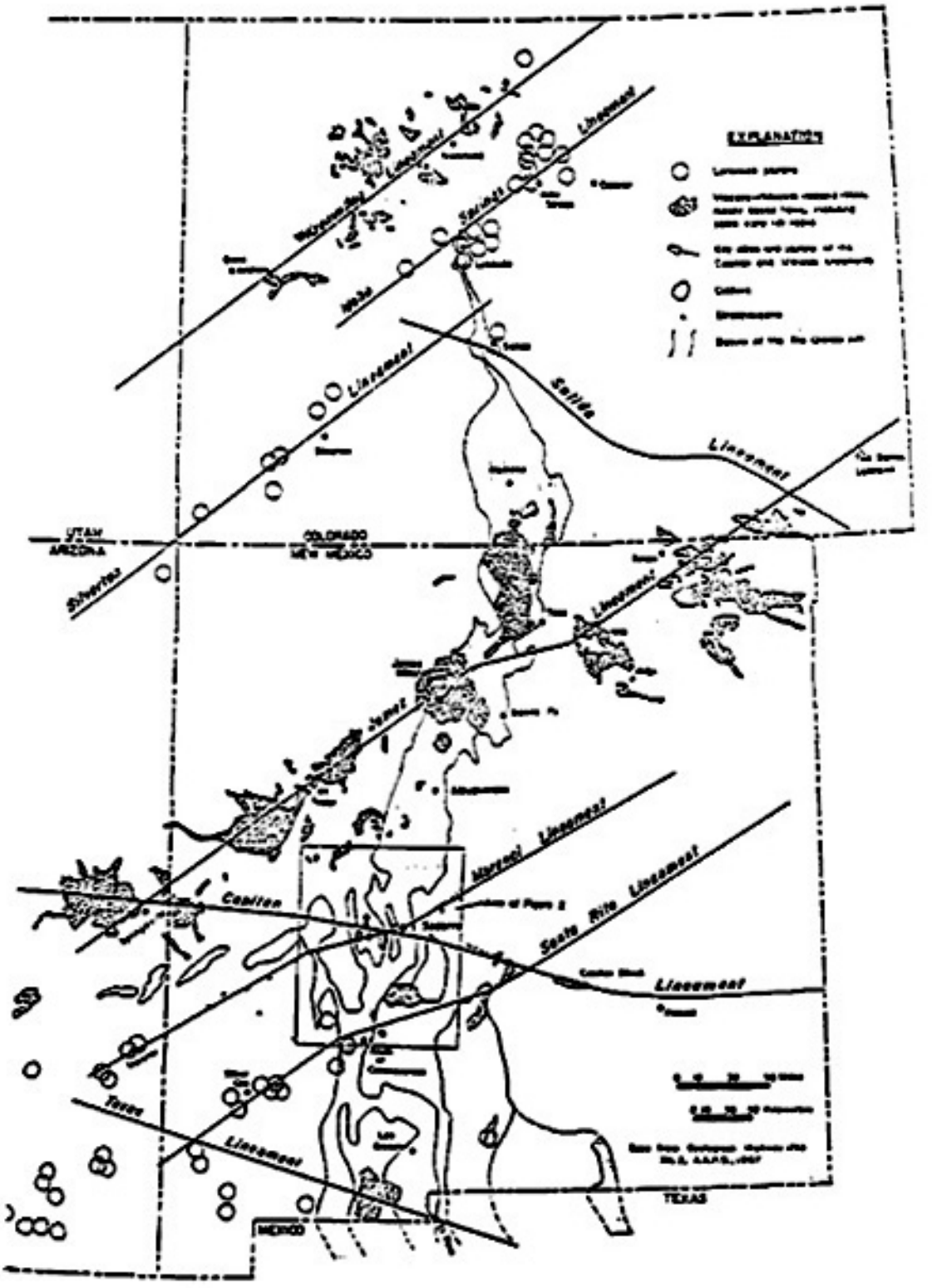


Figure 1. Generalized map of the Rio Grande rift extending from Leadville, Colorado to El Paso, Texas. Also shown are major crustal lineaments.

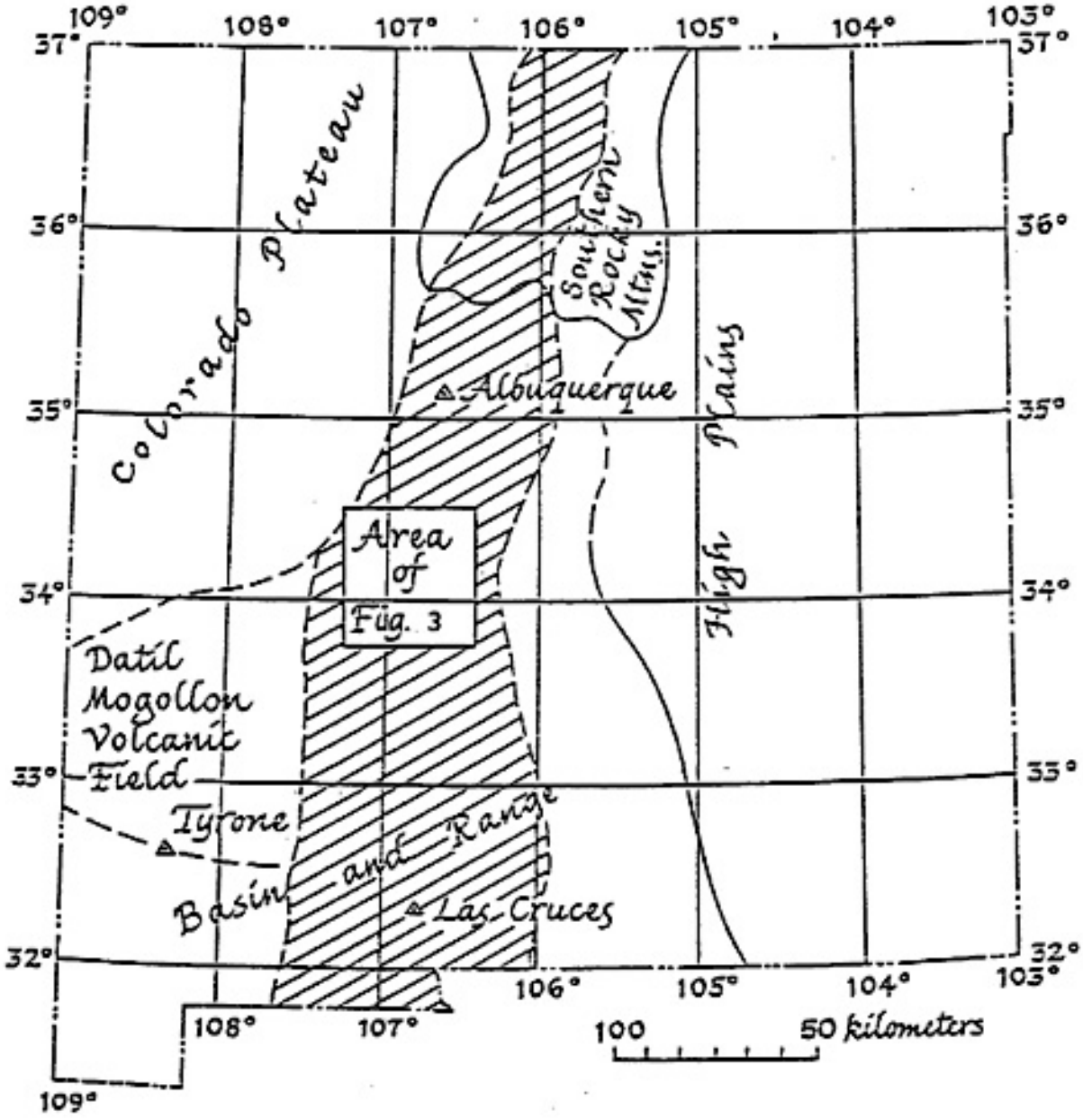


Figure 2. Physiographic provinces and the Rio Grande rift in New Mexico (after Chapin, 1971).

terminates near Leadville. The trend parallels the late Paleozoic and Laramide structural grain and exhibits a near absence of synrift volcanism in the axial basins (Chapin, 1979).

The central segment from Alamosa to Socorro, New Mexico, is characterized by a north-northeast trending series of en echelon basins separated by complex, transverse structures. These structures act as transform faults to connect the basins. Early-rift magmatism was relatively sparse within this segment, but late-rift, bimodal volcanism was voluminous (Chapin, 1979).

The southern segment, Socorro to El Paso, Texas, widens into a north-trending series of parallel grabens and horsts with a total width approximately 2.5 times that of the single basins to the north. This segment is characterized by voluminous early-rift and late-rift magmatism, 'domino'-style normal faulting and rotation of fault blocks.

Much evidence is available to indicate that rifting is continuing at the present time. Observations include fault scarps cutting alluvial fans and Pleistocene surfaces, high heat flow (Reiter et al., 1979), contemporay relative uplift (Larsen and Reilinger, 1983), seismic activity (Sanford et al., 1979), geophysical measurements indicating the existence of modern magma bodies at shallow and midcrustal depths (Sanford et al., 1973), and gravity results which indicate an anomalous mantle upwarp at the base of the crust (Decker and Smithson,1975).

The most prominent concentrations of earthquake activity along the rift are between Belen and Socorro and north of Los Alamos, New Mexico. A common characteristic of the seismicity in both areas is the occurence of shocks in swarms. Swarm activity is often associated with magmatic processes (Richter, 1958). The pattern of seismicity seen is diffuse and has been thought unrelated to major rift-boundary faults (Sanford et al., 1981).

Socorro Area of the Rio Grande Rift

Figure 3 illustrates the physiographic provinces in the Socorro area of the central part of the rift and the location of the New Mexico Tech seismograph network. A large percentage of the seismic activity in the Socorro area is roughly centered above a thin, 1,700-sq-km, sill-like, mid-crustal magma body. The magma body was detected by Sanford and others (1973) using reflected S phases from the magma body as recorded on microearthquake seismograms. The magma body has also been detected on COCORP P-wave reflection profiles (Brown et al., 1979).

Late Pliocene and Quaternary basalt flows are found from north of Albuquerque to south of Socorro. This observation in conjunction with the location of microearthquake swarms may indicate that magma is continuing to be injected into the central part of the rift (Sanford et al., 1981).

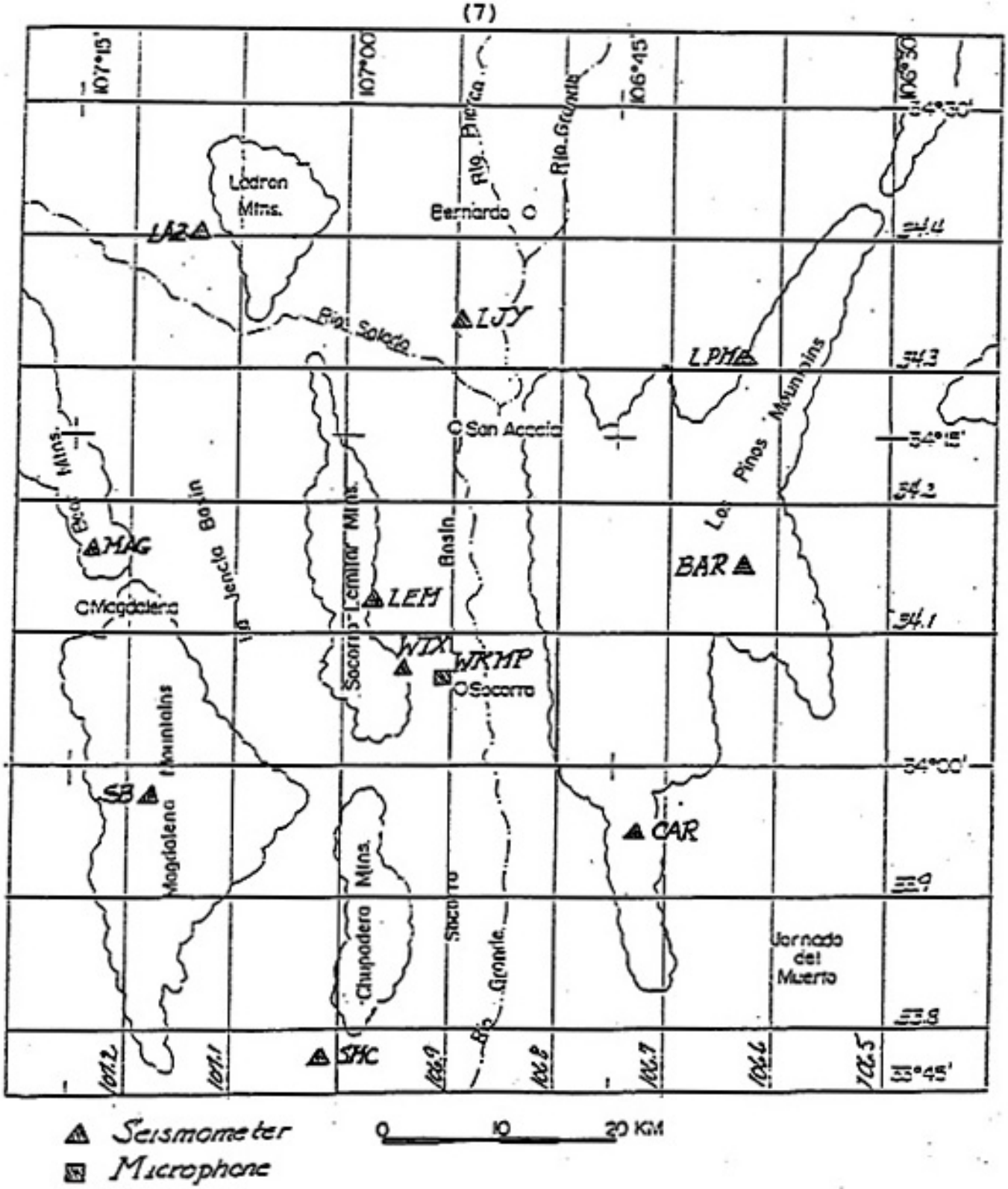


Figure 3. Location of NMT seismograph network and physiographic provinces in the Socorro area of the Rio Grande rift. Not shown is station MLM, located at latitude 34.81 and longitude 107.15 .

Leveling surveys were conducted in the Socorro area at various times from 1912 to 1980. Interpretation of these data by Larsen and Reilinger (1983) indicate zones of relative uplift and subsidence in the Socorro area. Magmatic injection into the Socorro magma body can account for the uplift observed. A 30 km wide zone of relative subsidence south of Socorro, however, indicates the magmatic processes are more complex than simple inflation (Larsen and Reilinger, 1983). The location of the swarm activity near Socorro that is analyzed here is shown in Figure 4. The magma body and areas of relative uplift and subsidence are seen in Figure 5.

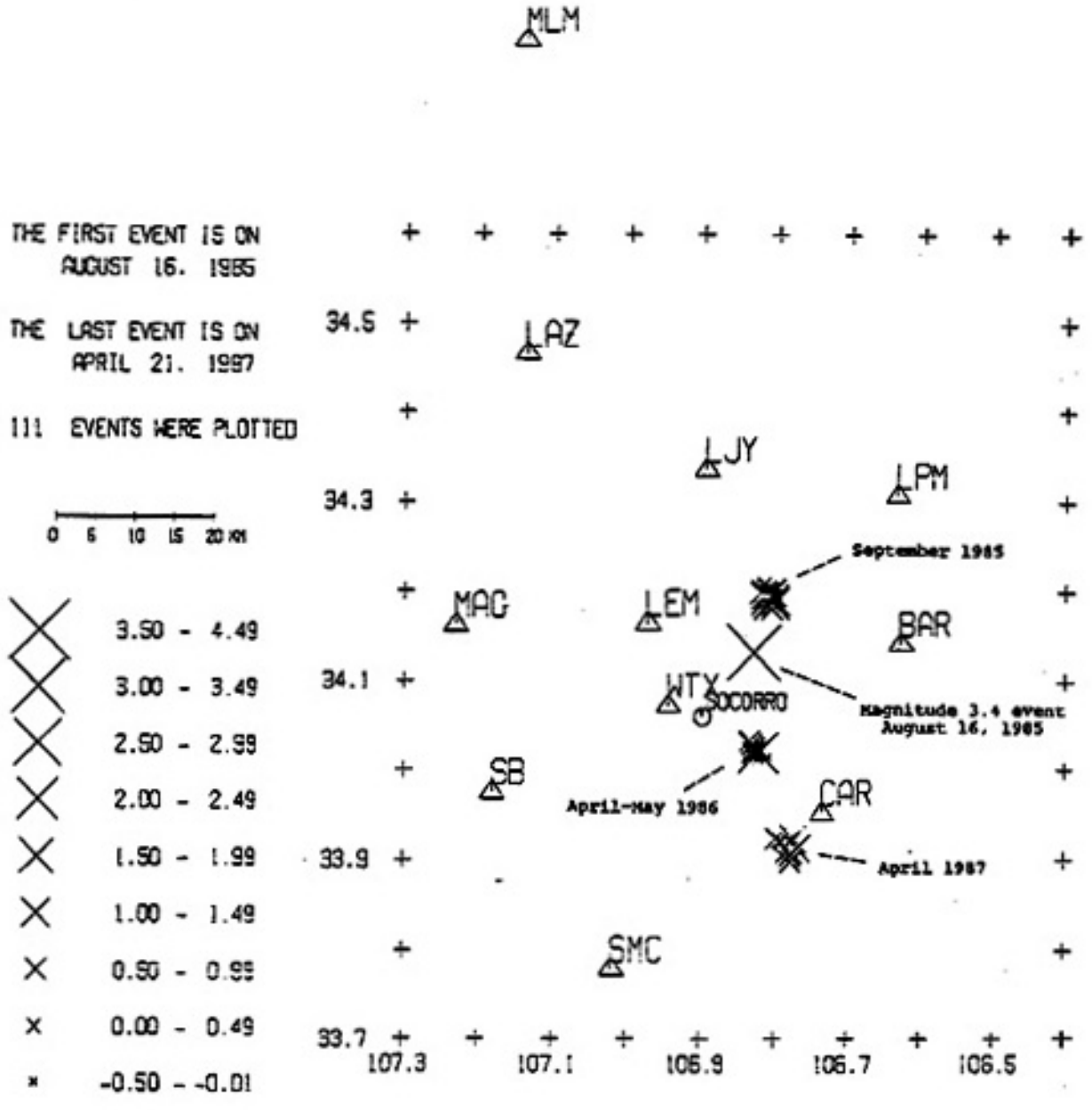


Figure 4. Location of microearthquake activity analyzed in this report.

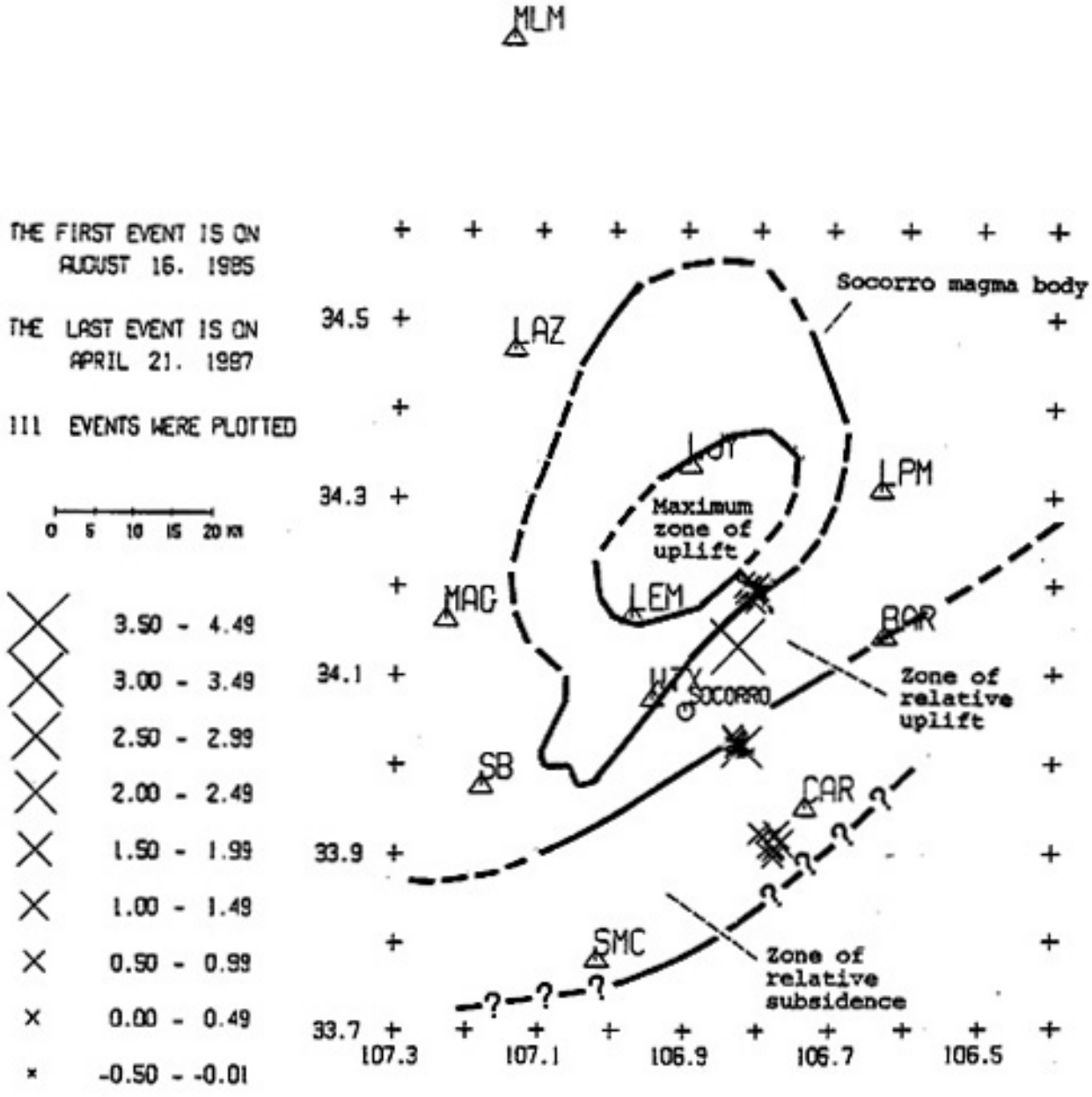


Figure 5. Outline of midcrustal magma body and contours showing pattern of relative uplift and subsidence as determined by leveling observations. Dashed lines where uncertain. (After Larsen and Reilinger, 1983).

LOCATION PROCEDURE

The microearthquakes analyzed in this study were recorded by a permanent, 11 station array of high-gain, short period seismographs operated by New Mexico Tech and the U.S.G.S. All stations have vertical component seismometers (Teledyne Geotech Models JM or 18300) with natural frequencies of approximately 1 Hz. The signals are telemetered to New Mexico Tech and analog recordings are made on hot-wire helical drums rotating at 1 mm/second.

Table 1 is a representative list of some of the seismograph stations in the array with system magnifications at specified frequencies and attenuations. For a more detailed presentation of the system response, see Ake (1981).

For one of the swarms, April-May, 1986, the observatory data was augmented by data from three portable instruments for a few days midway through the swarm. All three portable instruments were located within one focal depth of the swarm activity (Figure 6).

Microearthquake hypocenter locations (Appendix 1) were determined by use of the revised HYPO71 computerized location program of Lee and Lahr (1975). The crustal model used in this program was a homogeneous, isotropic half-space

Table 1. Magnifications for Sampling of Stations in the NMT Network.

STATION	FREQUENCY (hz)	APPROXIMATE MAGNIFICATION	BASE ATTENUATION (db)
BAR	10	800,000	12
CAR	10	750,000	24
LPM	10	800,000	24
SB	10	300,000	30
SMC	10	850,000	18
WTX	10	400,000	18
LAZ	1	53,000	36

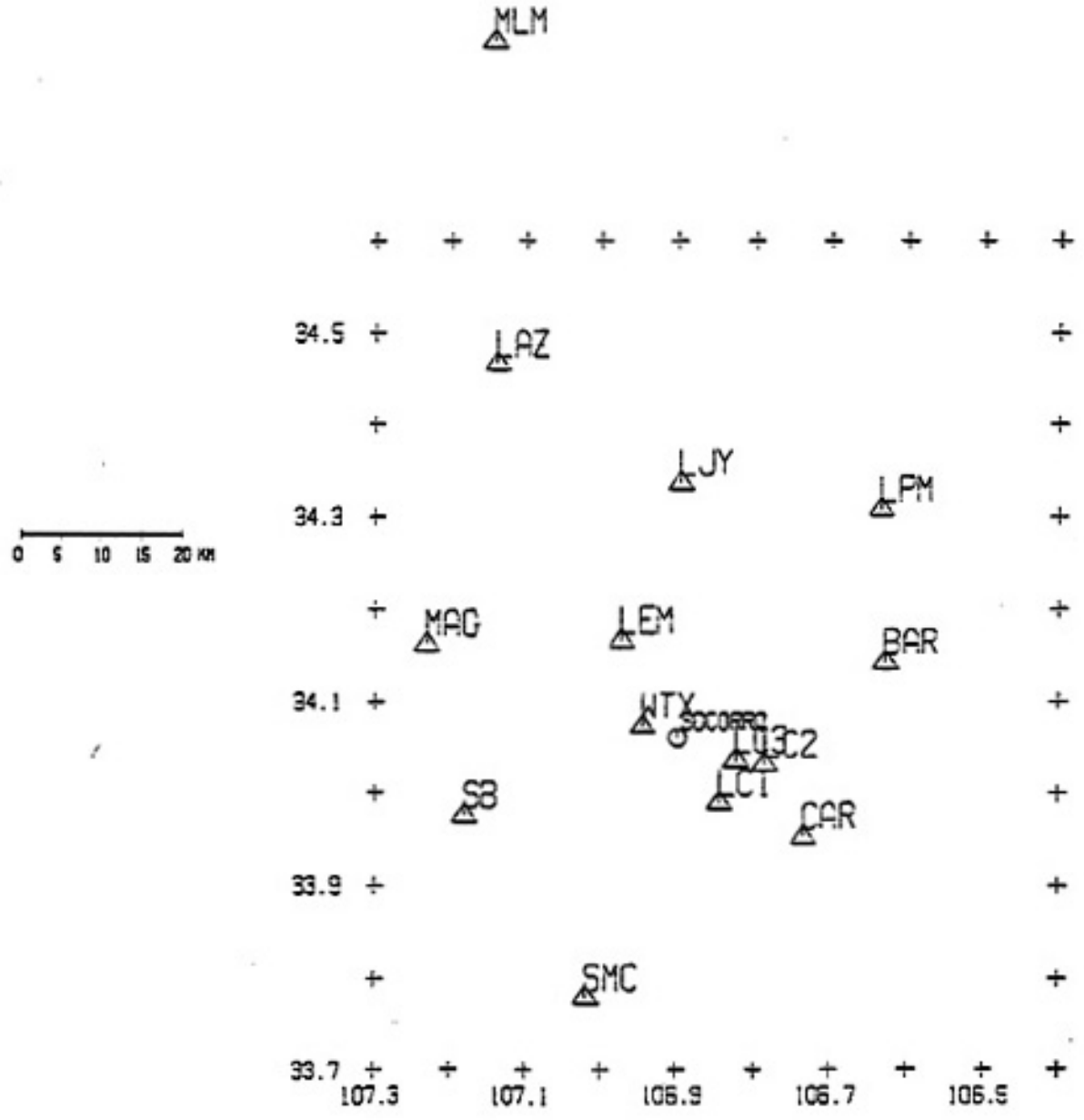


Figure 6. Location of portable seismograph stations LC1, LC2, and LC3, that were in operation from April 29 to May 1, 1986.

with P-wave velocity of 5.85 km/second and an S-wave velocity of 3.38 km/second. Poisson's ratio was assumed to be 0.25. Station corrections, which account for a variable surface low-velocity layer, were input into the location program. Station corrections determined for each swarm are listed in Appendix 2. Depth determinations from HYPO71 were relative to a surface which has an elevation that is an average of the elevations of the recording stations used in the location.

Magnitude (M_τ) determinations were made using a duration based magnitude scale expressed by

$$M_\tau = 2.79 \log \tau - 3.63$$

where τ is the recorded signal duration. The magnitude for a given earthquake is the average of magnitude estimates made at various stations recording the event. The high-magnification, vertical component instruments used in recording these earthquakes frequently have amplitude saturation at even modest magnitudes (Ake, 1983). For this reason an amplitude-based magnitude scale was not used.

The HYPO71 program determines a solution by successive iterations from a trial hypocenter and origin time. Adjustments in kilometers for the latitude, longitude and focal depth from multiple regression analysis are calculated each iteration. The final solution is output with uncertainties in the depth and epicentral location in

kilometers and a root mean square (RMS) error of time residuals in seconds.

The RMS error is calculated as

$$RMS = \sqrt{\Sigma Ri^2 / NO}$$

where Ri is the time residual for the ith station and NO is the number of station readings used in locating the earthquake. The error in epicentral location, ERH, is calculated by

$$ERH = \sqrt{SDX^2 + SDY^2}$$

where SDX and SDY are the standard errors in latitude and longitude. ERZ is the standard error in focal depth. Statistical interpretation of these standard errors involves assumptions which may not be met in earthquake locations. Consequently, these standard errors may not represent actual error limits (Lee and Lahr, 1975).

Each solution is assigned a quality rating factor, Q, which indicates the general reliability of the solution as follows:

Q	EPICENTER	DEPTH
A	excellent	good
B	good	fair
C	fair	poor
D	poor	poor

The quality factor Q, is an average of the RMS, ERH, and ERZ errors (QS) and the station distribution (QD). The information which determines the rating of QS and QD is outlined in Table 2.

Table 2. Summary of criteria used to determine solution quality.

QS	RMS (sec)	ERH (km)	ERZ (km)
A	< 0.15	< 1.0	< 2.0
B	< 0.30	< 2.5	< 5.0
C	< 0.50	< 5.0	
D	others		

QD	NO	GAP	DMIN
A	> 6	< 90	< DEPTH or 5 km
B	> 6	< 135	< 2 x DEPTH or 10 km
C	> 6	< 180	< 50 km
D	others		

where

RMS	Root mean square error in seconds
ERH	Error in epicentral location in km
ERZ	Standard error in focal depth in km
NO	Number of station readings used in locating the event
GAP	Largest azimuthal separation in degrees between stations
DMIN	Epicentral distance in km to the nearest station

DEPTH ANALYSIS

All depth analyses herein utilize only the higher quality A/A or A/B events from the swarms of September, 1985 and April-May, 1986. A total of 34 events from the September, 1985 swarm and 41 events from the April-May, 1986 swarm were studied. Figures 7 and 8 are graphs of the number of events versus depth of focus for the higher quality solutions from each swarm.

In the September, 1985 swarm, 85% of the events occurred between depths of 9.0 and 12.0 km. In the April-May, 1986 swarm, 76% of the events occurred between 8.0 and 11.0 km. Neither swarm had activity at depths shallower than 7.0 km nor greater than 14.0 km for higher quality solutions based upon recordings by the permanent NMT network only.

The depth at which activity decreases differs somewhat between the two swarms. In the September, 1985 swarm, located above the periphery of the Socorro magma body (Figure 5), there is a sharp drop in activity from 11 events between 11.0 and 12.0 km to zero events between 12.0 and 13.5 km. One event was recorded at a depth of 13.6 km.

In the April-May, 1986 swarm, located approximately 20 km south of the September, 1985 swarm and 15 km east of the

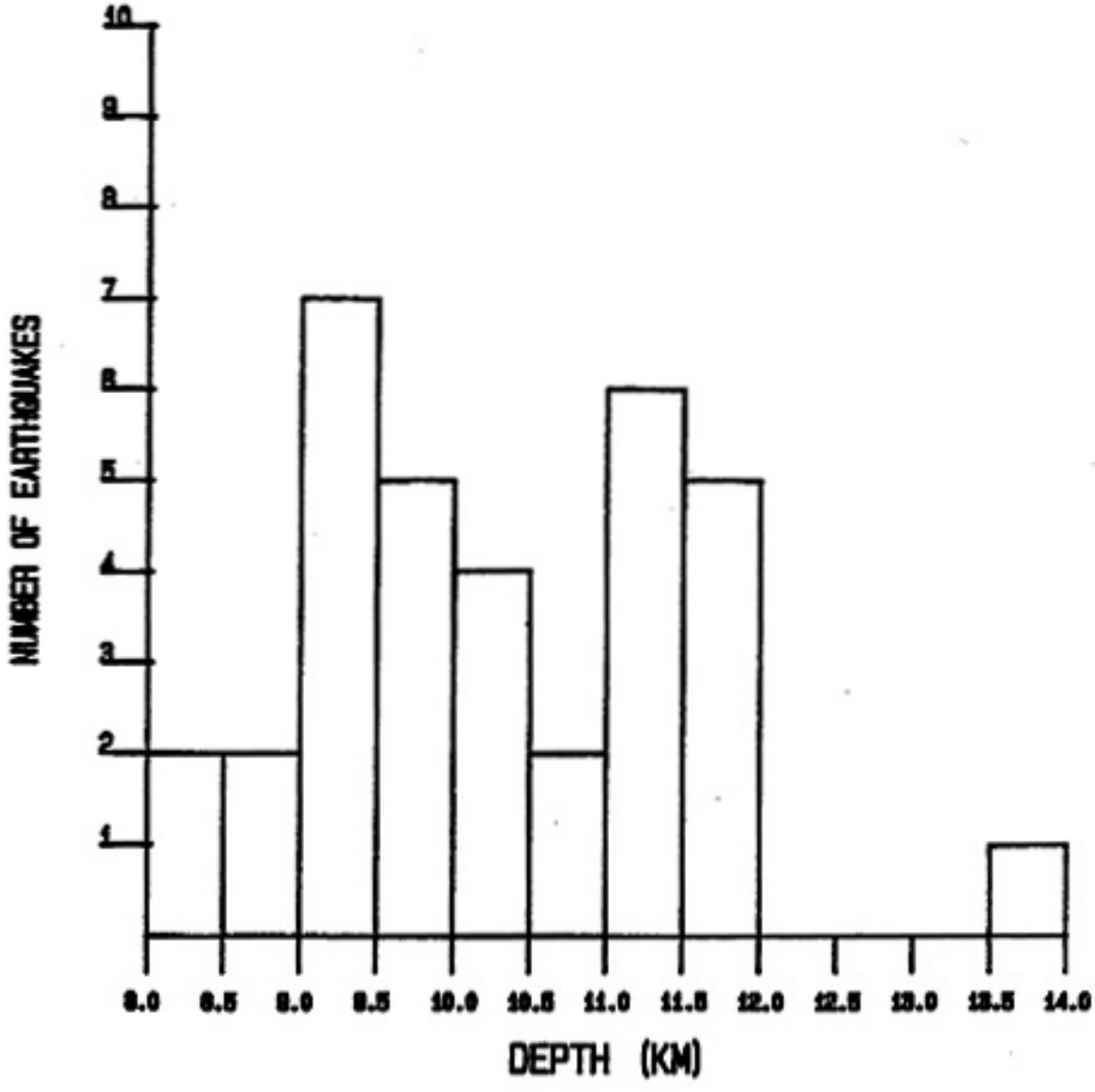


Figure 7. Distribution of focal depths for 34 A/B quality solutions for the September, 1985 swarm activity.

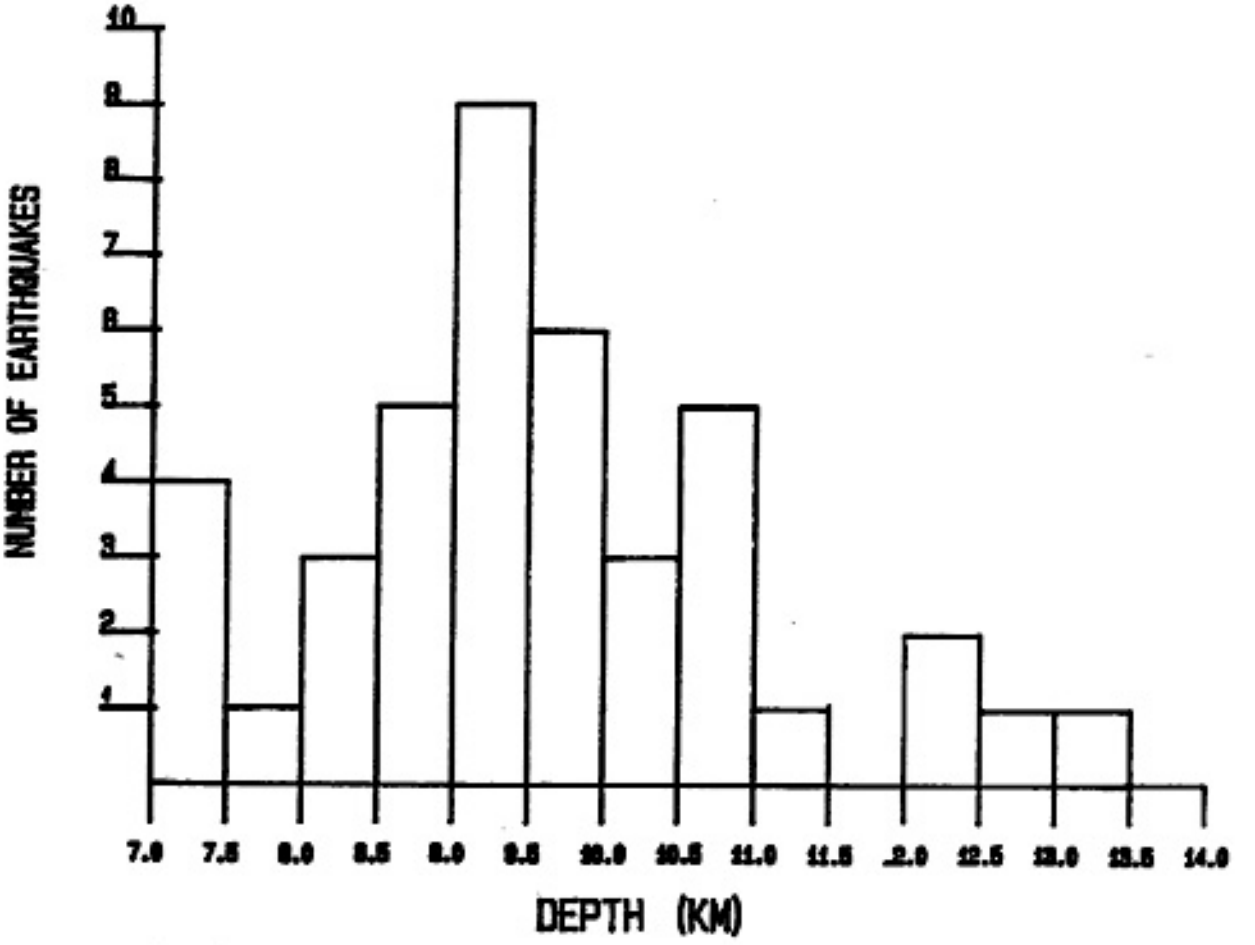


Figure 8. Distribution of focal depths for 41 A/B and A/A quality solutions for the April-May, 1986 swarm activity.

periphery of the Socorro magma body (Figure 5), the decrease in activity with depth is more gradual. Only one event was recorded at a depth between 11.0 and 11.5 km. In contrast to the September, 1985 swarm, 4 events (9.8%) were recorded at depths between 12.0 and 13.5 km. The deepest hypocenter was recorded at 13.2 km.

Both swarms exhibit peak activity between 9.0 and 9.5 km and an absence of activity below 14.0 km. This absence of activity defines 14.0 km as the approximate base of the seismogenic zone (King, 1986).

Figure 9 is a second but different type of depth distribution plot for the 34 A/B events for the September, 1985 swarm. The events are plotted in sequence of occurrence and numbered 1 through 34. The time axis is non-linear and covers the period from 10:39 on September 17 through 16:20 on September 20, 1985. The events are plotted against the depth at which they occur with an error bar representing ERZ as determined by HYPO71. Table 3 contains a listing of the number of each event plotted in Figure 9, the day and time of occurrence, the depth and the uncertainty in the depth. Using the uncertainties on the depths to define the range in focal activity, the maximum range is 6.68 to 14.61 km and the minimum range is 9.50 to 11.00 km. One anomalous event falls outside this minimum range and occurs at 13.61 + 1.0 km.

Figure 10 shows the sequential depth distribution plot for the 41 A/B and A/A events of the April-May, 1986 swarm.

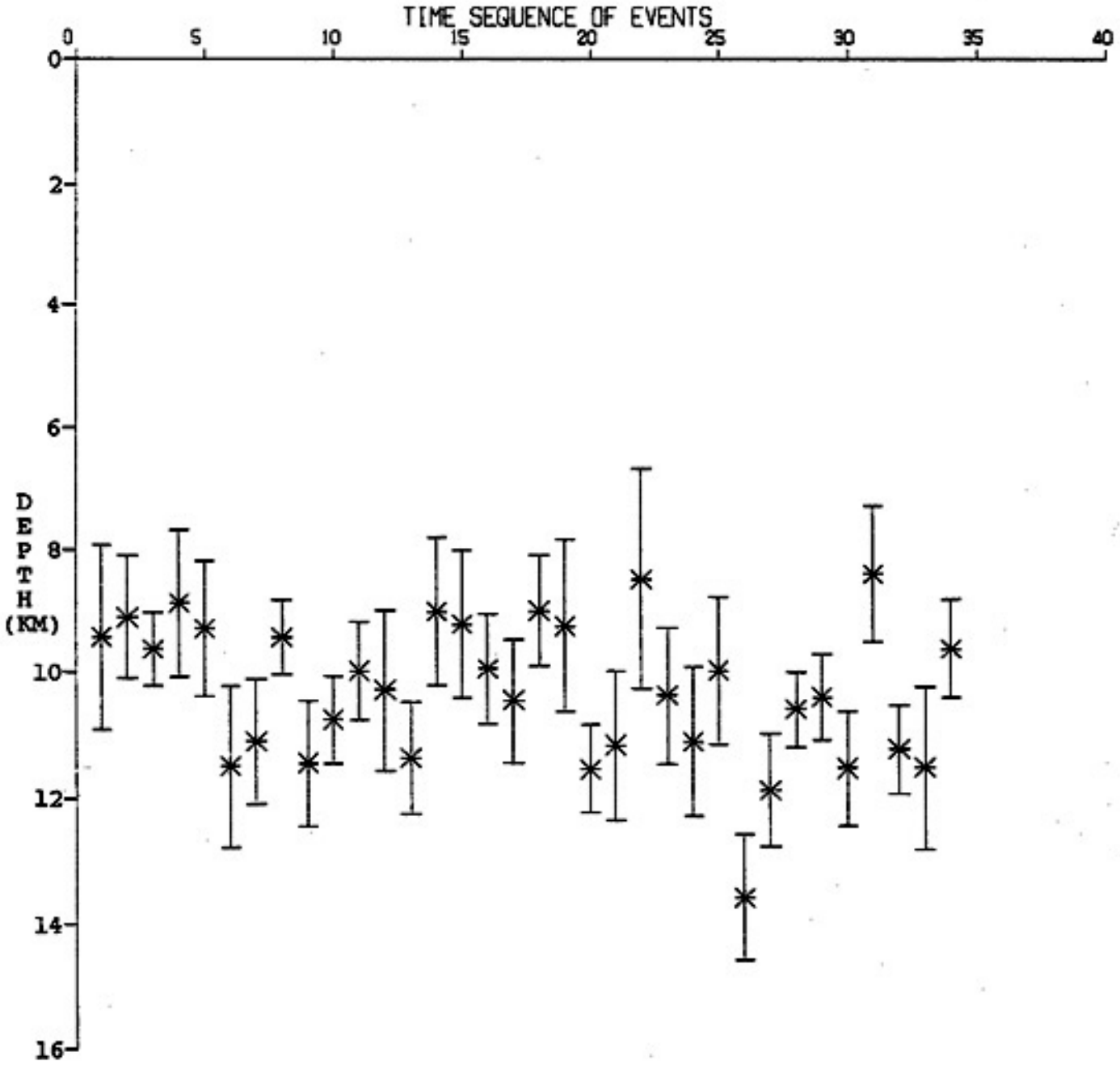


Figure 9. Chronologic sequence of events versus depth for the swarm of September, 1985.

Table 3. A/B Quality Events Plotted in Figure 9 for the September 1985 Swarm.

EVENT	DAY	TIME	DEPTH	ERZ
1	9-17	10:39	9.41	1.5
2		11:05	9.09	1.0
3		11:06	9.60	0.6
4		22:06	8.86	1.2
5	9-18	11:14	9.27	1.1
6		11:37	11.50	1.3
7		17:01	11.10	1.0
8		17:14	9.42	0.6
9		17:16	11.45	1.0
10		18:02	10.76	0.7
11		18:22	9.97	0.8
12		18:23	10.28	1.3
13		19:19	11.37	0.9
14		19:23	9.00	1.2
15		19:26	9.21	1.2
16		19:38	9.94	0.9
17		19:40	10.45	1.0
18		19:50	8.99	0.9
19		20:00	9.24	1.4
20		20:23	11.56	0.7
21		21:25	11.18	1.2
22		21:40	8.48	1.8
23	9-19	02:24	10.37	1.1
24		02:27	11.12	1.2
25		02:28	9.97	1.2
26		02:31	13.61	1.0
27		02:57	11.90	0.9
28		03:03	10.60	0.6
29		06:30	10.41	0.7
30		09:38	11.55	0.9
31		09:44	8.40	1.1
32		10:05	11.25	0.7
33	9-20	14:37	11.54	1.3
34		16:20	9.62	0.8
		MEAN	10.31	1.02
		SD	1.17	0.2

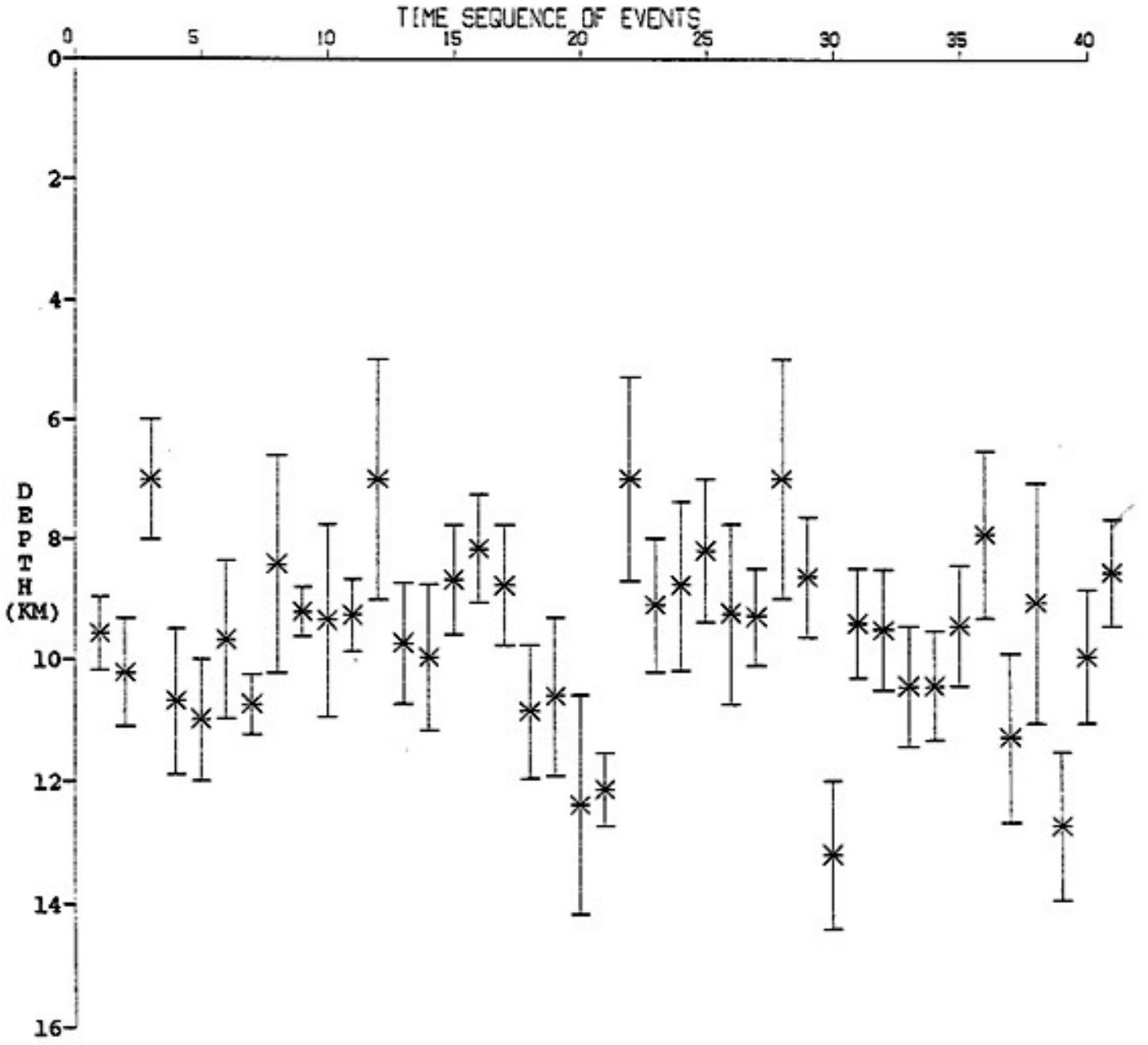


Figure 10. Chronologic sequence of events versus depth for the swarm of April-May, 1986.

The events are plotted in the same manner and at the same scale as for the September, 1985 swarm to allow direct comparison. The time-scale is non-linear and covers the period from 18:14 on April 27 through 14:42 on May 5, 1986. Table 4 contains a listing of the pertinent information for these events.

The depths and associated uncertainties for this swarm are more randomly distributed than for the previously mentioned swarm. There seems to be an oscillatory nature to the distribution of depths throughout the duration of the swarm as opposed to any linear change. This pattern of depth distribution can be broken up into two somewhat repetitious segments. Events numbered 8 through 21 exhibit a change in focal depth with time from shallow to deep as do events numbered 22 through 34. The very random sequence seen in the last 6 events numbered 36 through 41 corresponds to swarm activity over a time span of 6 days, from April 30 through May 5.

Using the uncertainties on the depths to define the range in focal activity, the maximum range is 5.00 to 14.42 km and the minimum range is 8.00 to 12.00 km.

The addition of recordings from portable seismograph stations operating from April 29 through May 1, resulted in a shallower distribution of depths for the events numbered 32 through 39. Figure 11 is a plot of these six sequential A/A events versus depth of focus. Table 5 contains information on these events. The relative depth

Table 4. A/B and A/A Quality Events Plotted in Figure 10 for the April-May, 1986 Swarm.

EVENT	DAY	TIME	DEPTH *	ERZ
1	4-27	18:14	9.56	0.6
2		18:14	10.21	0.9
3		22:17	7.00	1.0
4	4-28	03:08	10.67	1.2
5		03:15	10.97	1.0
6		03:15	9.66	1.3
7		03:24	10.72	0.5
8		03:25	8.41	1.8
9		03:50	9.20	0.4
10		03:59	9.34	1.6
11		05:37	9.26	0.6
12		05:42	7.00	2.0
13		05:47	9.72	1.0
14		06:48	9.96	1.2
15		07:59	8.68	0.9
16		10:13	8.16	0.9
17		11:09	8.78	1.0
18		11:51	10.86	1.1
19		12:59	10.61	1.3
20		13:32	12.39	1.8
21		15:10	12.14	0.6
22		15:37	7.00	1.7
23	4-29	02:48	9.11	1.1
24		05:30	8.78	1.4
25		06:49	8.20	1.2
26		08:30	9.24	1.5
27		08:35	9.30	0.8
28		15:20	7.00	2.0
29		15:32	8.65	1.0
30		16:02	13.22	1.2
31	4-30	01:28	9.41	0.9
32		04:07	9.52	1.0
33		05:39	10.45	1.0
34		06:41	10.45	0.9
35		16:12	9.46	1.0
36		16:15	7.94	1.4
37	5-1	09:32	11.31	1.4
38		16:28	9.08	2.0
39	5-4	19:50	12.77	1.2
40		22:30	9.98	1.1
41	5-5	14:42	8.58	0.9
		MEAN	9.58	1.16
		SD	1.50	0.40

* Depths listed here are based on readings of permanent stations only.

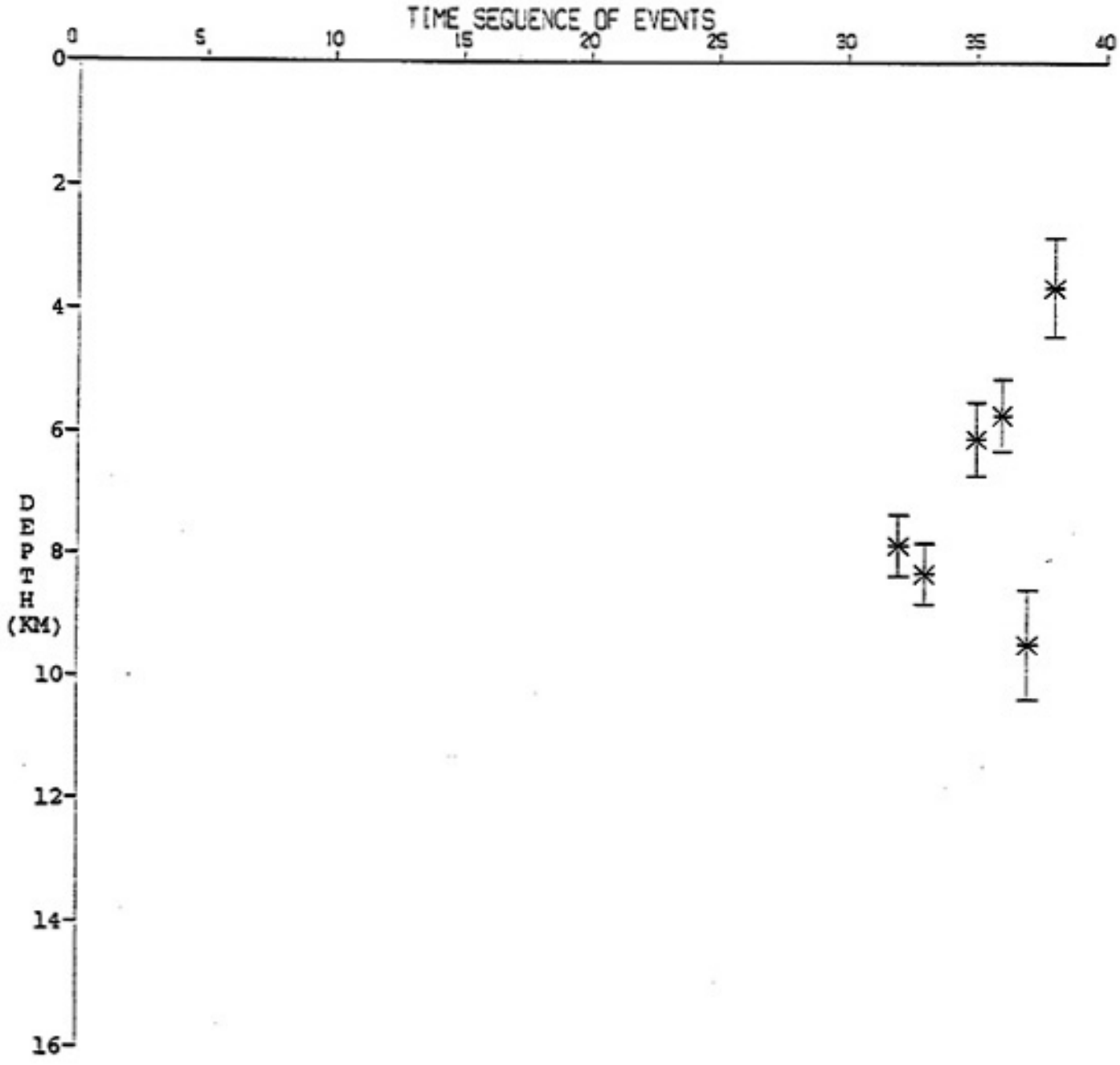


Figure 11. Chronologic sequence of events versus depth for events located by readings from portable as well as permanent seismographs during the April-May, 1986 swarm.

Table 5. A/A Quality Events Plotted in Figure 11 for the April-May, 1986 Swarm.

EVENT	DAY	TIME	DEPTH *	ERZ
32	4-30	04:07	7.86	0.5
33		05:39	8.32	0.5
35		16:12	6.10	0.6
36		16:15	5.72	0.6
37	5-1	09:32	9.48	0.9
38		16:28	3.64	0.8

* Depths listed are based on readings from temporary as well as permanent stations

distribution for these events is very similar to the depth distribution obtained using permanent network stations only, but they are on the average 2.77 km shallower. The location of the three portable stations within one focal depth as opposed to one or no station within one focal depth for the permanent network could, in conjunction with a more complex crustal structure than assumed, explain the shallower depths of focus.

ERRORS IN FOCAL DEPTHS

Depth of focus is the least constrained parameter in the location of an event. HYPO71 has determined depths of focus in the September, 1985 swarm to within an average of ± 1.04 km for A/B events and in the April-May, 1986 swarm to within an average of ± 1.16 km for A/A and A/B events. The uncertainty in the depth of focus or ERZ, takes into account ambiguity inherent in the computerized location program.

In order to analyze how the human error that exists in the timing of the events affects the depth distribution, 41 A/B and A/A solutions from the April-May, 1986 swarm were analyzed to determine the depth and associated uncertainties when reading errors were considered in the timing of events. Events are timed to 0.1 second. Random errors of ± 0.15 seconds for the initial P readings and ± 0.20 seconds for the initial S readings are representative of errors inherent in timing events from the analog recordings.

The procedure followed was to generate a 'perfect' data set by altering the P and S readings so that the residual times in the HYPO71 solution were 0.00. This also resulted in zero values for the RMS, ERH and ERZ. Random noise between ± 0.15 seconds was added to all P readings and noise

between ± 0.20 seconds was added to all S readings for each event. Ten new solutions per event were determined by HYPO71 corresponding to ten different sets of added random noise. An average depth and corresponding standard deviation (a new ERZ) was then determined for each event.

In Figure 12 the sequence of events is plotted against the average depth at which they occur as found through the above error analysis. Table 6 lists information on these events. In comparing this distribution to the distribution found through the usual HYPO71 location procedure (Figure 10), we see that the oscillatory pattern is still evident and the overall depth and uncertainty range is similar. The depth and uncertainty range for the initial HYPO71 solutions is between 5.00 and 14.42 km compared to a range found through the error analysis of between 5.87 and 15.61 km. The average focal depth for the initial solutions is 9.58 km. The average focal depth found through the error analysis is 9.57 km. The average ERZ is 1.16 and 1.01 km, respectively.

The error thus introduced into the calculation of the depth of focus by timing errors is similar in value to the uncertainty given by the HYPO71 location procedure. This is to be expected. Since intial station corrections were adjusted to give an average residual of zero for all stations, the observed residuals for a particular event (from which ERH and ERZ are calculated) reflect reading errors.

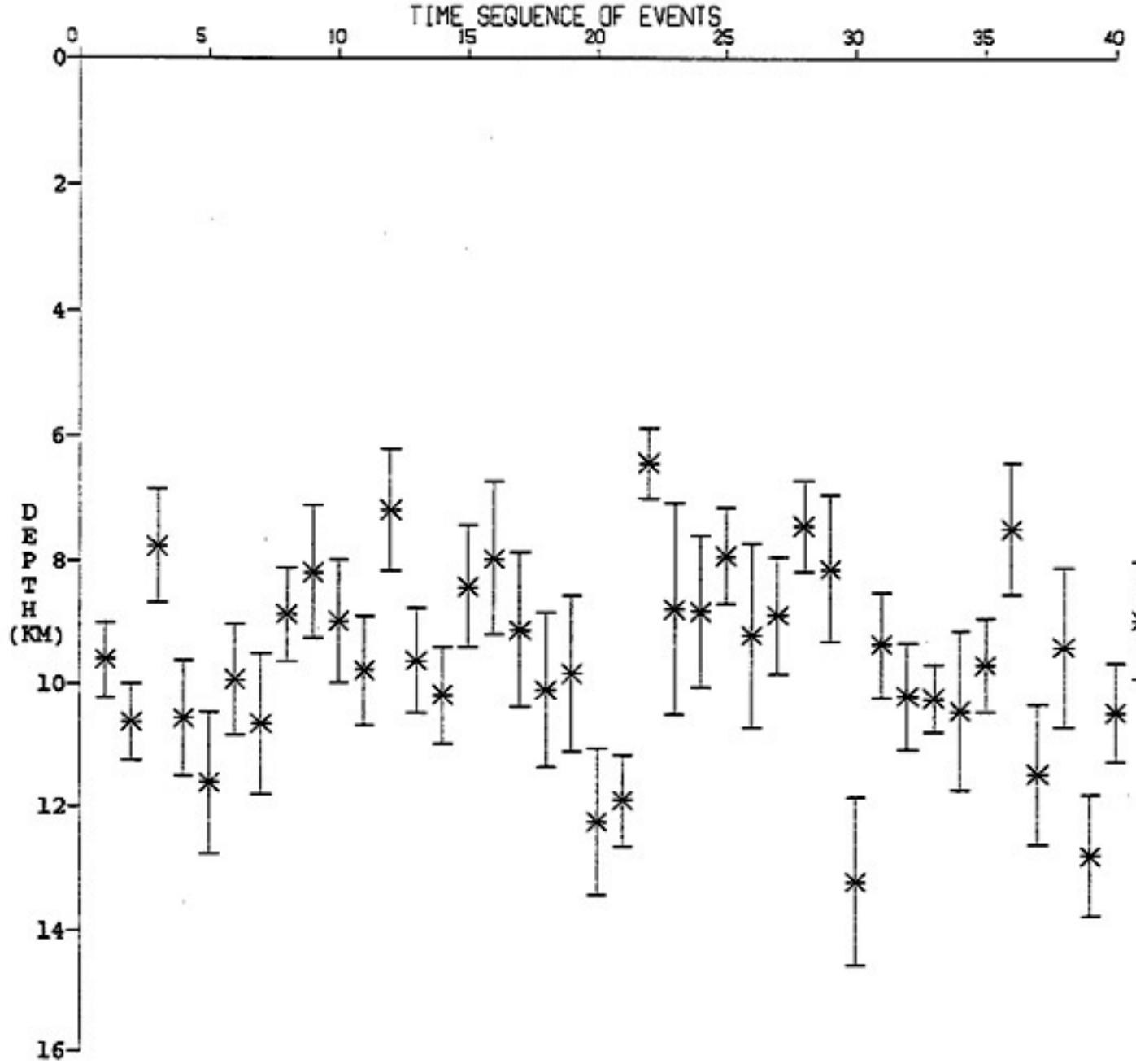


Figure 12. Chronologic sequence of events versus average depth as determined through error analysis for the April-May, 1986 swarm.

Table 6. A/B and A/A Quality Events Plotted in Figure 12 for the April-May, 1986 Swarm

EVENT	DAY	TIME	DEPTH *	ERZ
1	4-27	18:14	9.61	0.62
2		18:14	10.62	0.62
3		22:17	7.76	0.91
4	4-28	03:08	10.56	0.94
5		03:15	11.61	1.15
6		03:15	9.93	0.90
7		03:24	10.65	1.14
8		03:25	8.86	0.76
9		03:50	8.18	1.07
10		03:59	8.97	1.01
11		05:37	9.78	0.88
12		05:42	7.18	0.97
13		05:47	9.62	0.86
14		06:48	10.18	0.79
15		07:59	8.41	0.99
16		10:13	7.96	1.23
17		11:09	9.12	1.26
18		11:51	10.10	1.26
19		12:59	9.84	1.27
20		13:32	12.25	1.19
21		15:10	11.90	0.74
22		15:37	6.43	0.56
23	4-29	02:48	8.78	1.72
24		05:30	8.82	1.24
25		06:49	7.91	0.77
26		08:30	9.21	1.50
27		08:35	8.87	0.96
28		15:20	7.43	0.73
29		15:32	8.13	1.19
30		16:02	13.23	1.38
31	4-30	01:28	9.36	0.86
32		04:07	10.21	0.88
33		05:39	10.24	0.55
34		06:41	10.45	1.31
35		16:12	9.71	0.77
36		16:15	7.48	1.07
37	5-1	9:32	11.49	1.13
38		16:28	9.42	1.31
39	5-4	19:50	12.82	0.98
40		22:30	10.49	0.81
41	5-5	14:42	8.97	0.97
		MEAN	9.57	1.01
		SD	1.52	0.26

* Depths listed here are based on readings of permanent stations only.

FOCAL MECHANISMS

In determining the source mechanism of an earthquake, the focus is surrounded by an imaginary sphere called the focal sphere. The position of the recording stations on the focal sphere are projected onto an equal-area circle - the stereographic Schmidt net.

The locations of the P- first motion readings on the upper focal hemisphere plot are determined from the azimuthal angle between the earthquake epicenter and the recording station and the emergence angle of the seismic ray from the earthquake focus to the station as determined by HYPO71.

The polarity of any given station can be changed inadvertantly during repair or routine maintenence. In this study the polarity of all stations was checked by using first motions of teleseisms having impulsive first arrivals.

In order to reduce possible errors in the fault-plane solutions, great care was taken in reading the P- first motions. First motion readings for the strongest swarm events were used while first motion data for very emergent arrivals and for noisy stations were not used.

Fault plane solutions here are concerned with determining the fault mechanism and the orientation of three

axes - P, T, and B. The orientation of the P axis is inferred to be equivalent to the direction of maximum principal compressive stress. The P axis is always located in a quadrant of dilatational first arrivals. The orientation of the T axis is equivalent to the direction of least principal compressive stress. It is located 90 degrees from the P axis in a quadrant of compressional first arrivals. The B axis (null axis) is an axis of intermediate stress. It is located at the fault-plane and auxiliary-plane intersection.

Composite fault plane solutions were used to determine the source mechanisms for all swarm activity. Composite solutions superimpose first motion data for a number of events believed to have similar source mechanisms. First motion data for all events used in the fault plane solutions can be found in Appendix 3.

Figure 13 is the composite solution utilizing 10 of the best recorded and strongest events of the April-May, 1986 swarm. All three portable seismograph stations were within one focal depth of the epicenter. The close locations of these stations and the reversal in first motion for portable station LC2 act to restrict the orientation of the nodal planes. The focal mechanism is one of dominantly strike-slip faulting.

The solution for the main shock, magnitude 2.4, is shown in Figure 14. The lack of close stations to constrain the solution allows a range of mechanisms (considering only

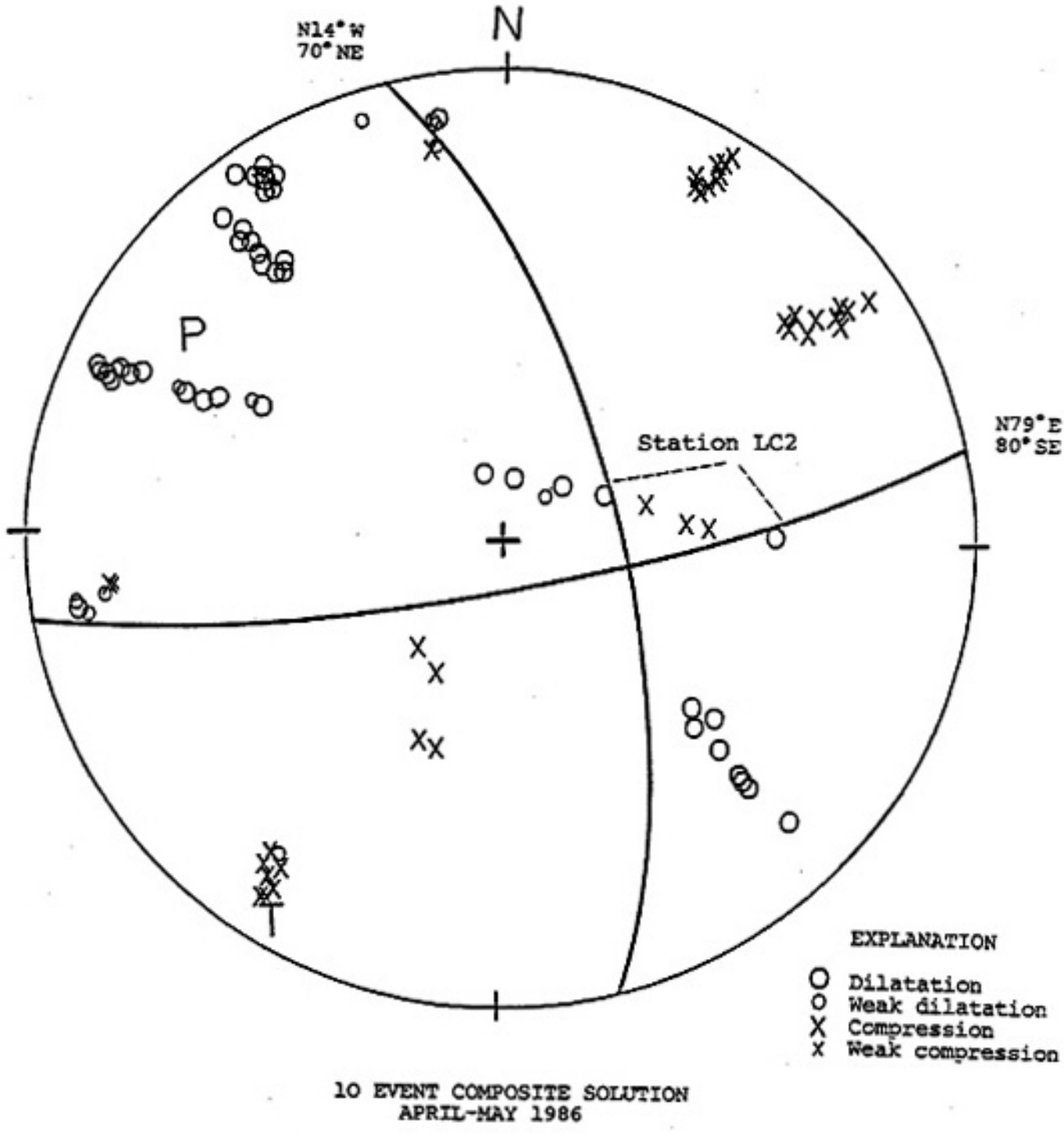


Figure 13. Ten event composite solution for the April-May, 1986 swarm. Shown is the best and most well constrained solution indicating dominantly strike-slip faulting. Station LC2 exhibits reversal in first motion.

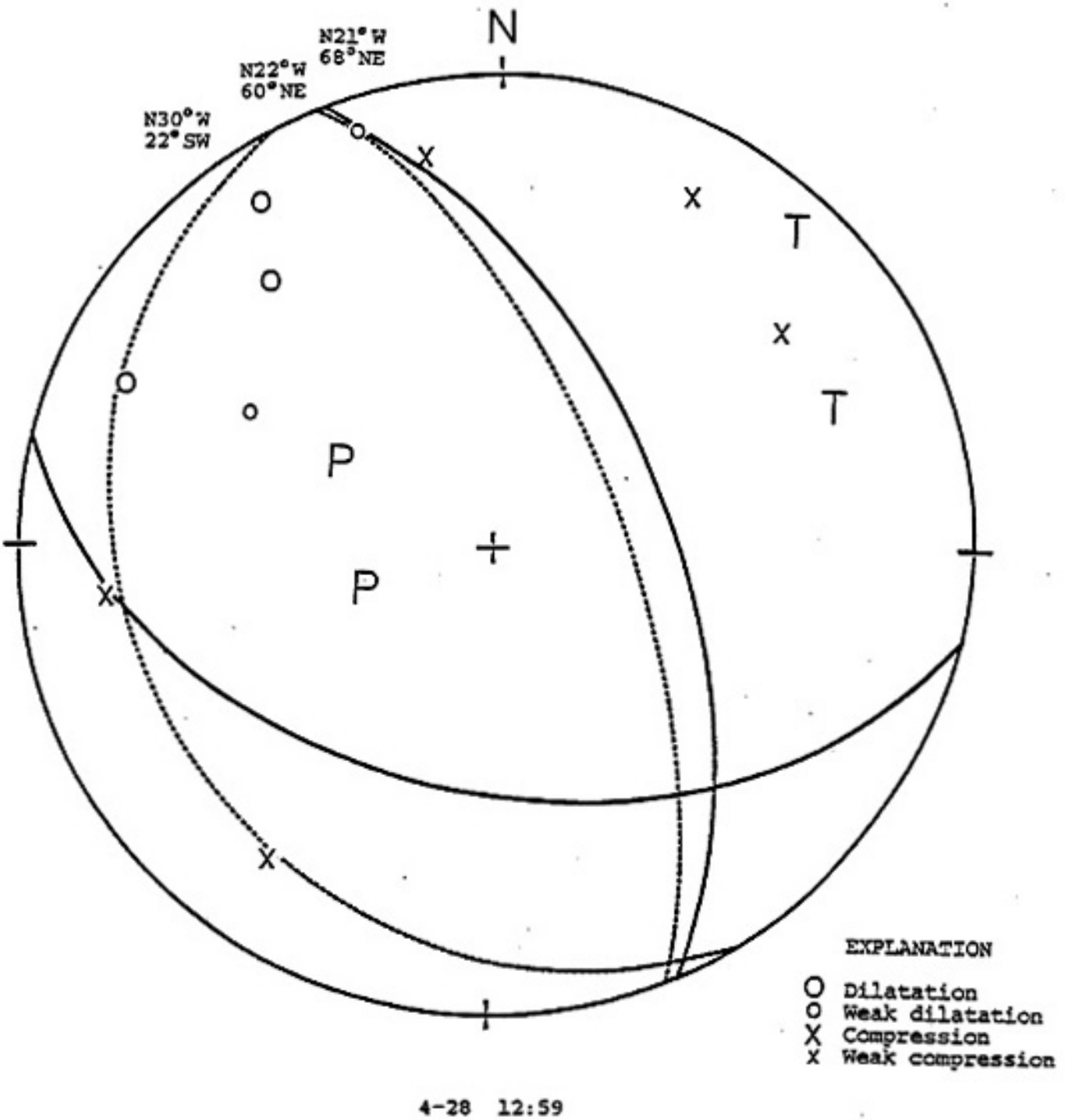


Figure 14. End member orientations for the range of possible normal solutions for the strongest event, M_τ = 2.4, of the April-May, 1986 swarm.

normal faulting) from nearly pure normal dip-slip to normal with some strike slip component.

The April-May, 1986 swarm may be associated with the mapped Hot Springs-Montosa fault zone (Figure 15). It should be noted however, that the manner in which the surface faults are mapped by Chapin (1983a) is somewhat ambiguous. Dashed fault lines are usually used to express uncertainty in the location of the fault but this is not explicitly stated. In a second article by Chapin (1983b), solid lines are used to indicate faults with good evidence of right slip and dashed lines are used to indicate fault zones only suspected of having right slip.

The epicenters of the April-May, 1986 swarm correspond in location to a surface branch of the Hot Springs-Montosa fault zone that strikes approximately N12°W. This correlates with a strike of N14°W and dip of 70°NE for one of the nodal planes in the composite fault plane solution. The T axis strikes N31°E and plunges - 7°. The sense of movement along this choice of fault plane is left-lateral.

Figure 16 is a composite solution utilizing 10 of the best recorded and strongest shocks for the September, 1985 swarm. The fault plane solution is poorly constrained as no seismograph station showed a reversal in first motion and there were no stations within one focal depth of the epicenter. The preferred focal mechanism is dominantly strike-slip because of the close spatial relation with the Hot Springs-Montosa fault. Reverse and pure strike-slip

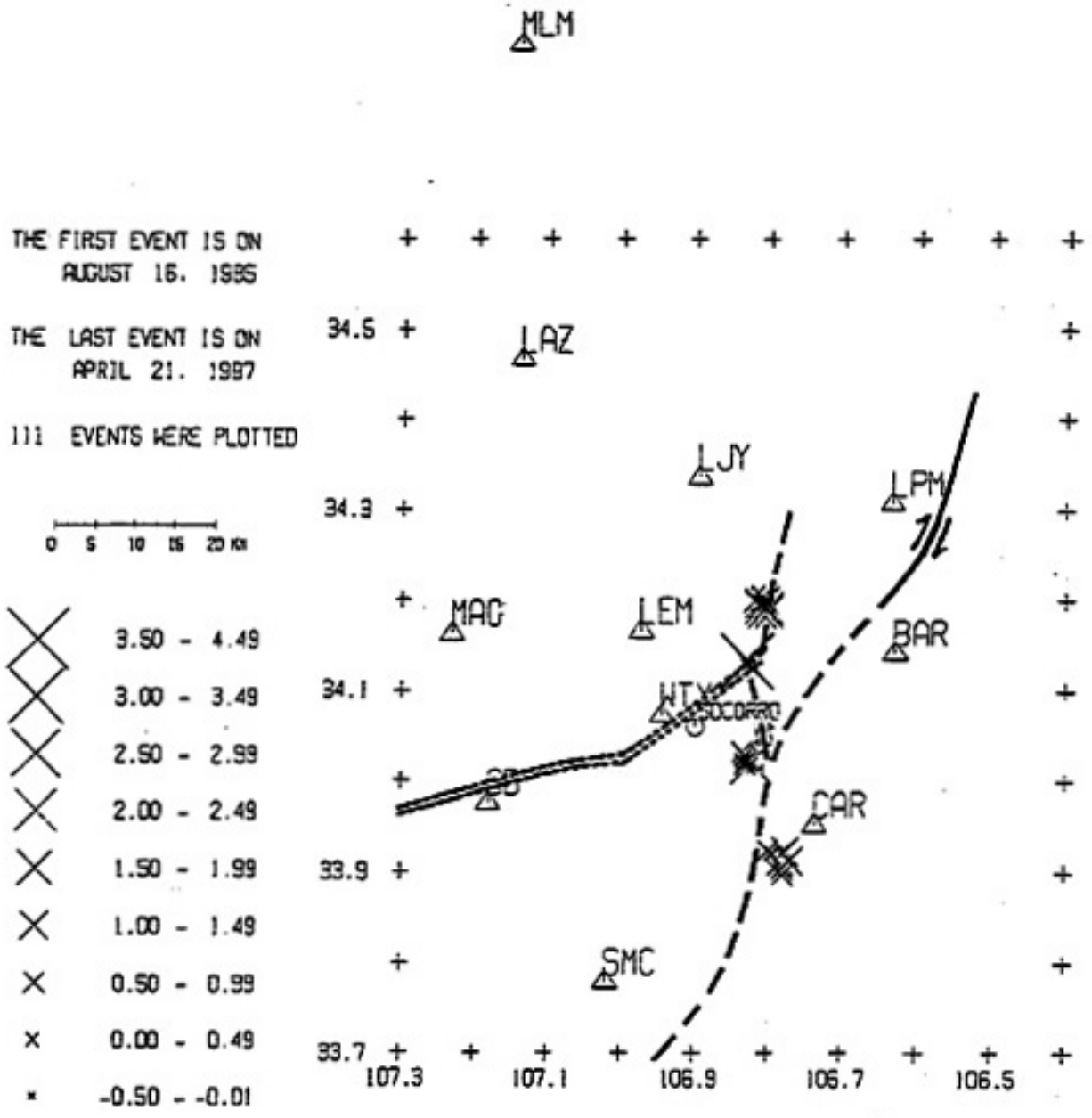
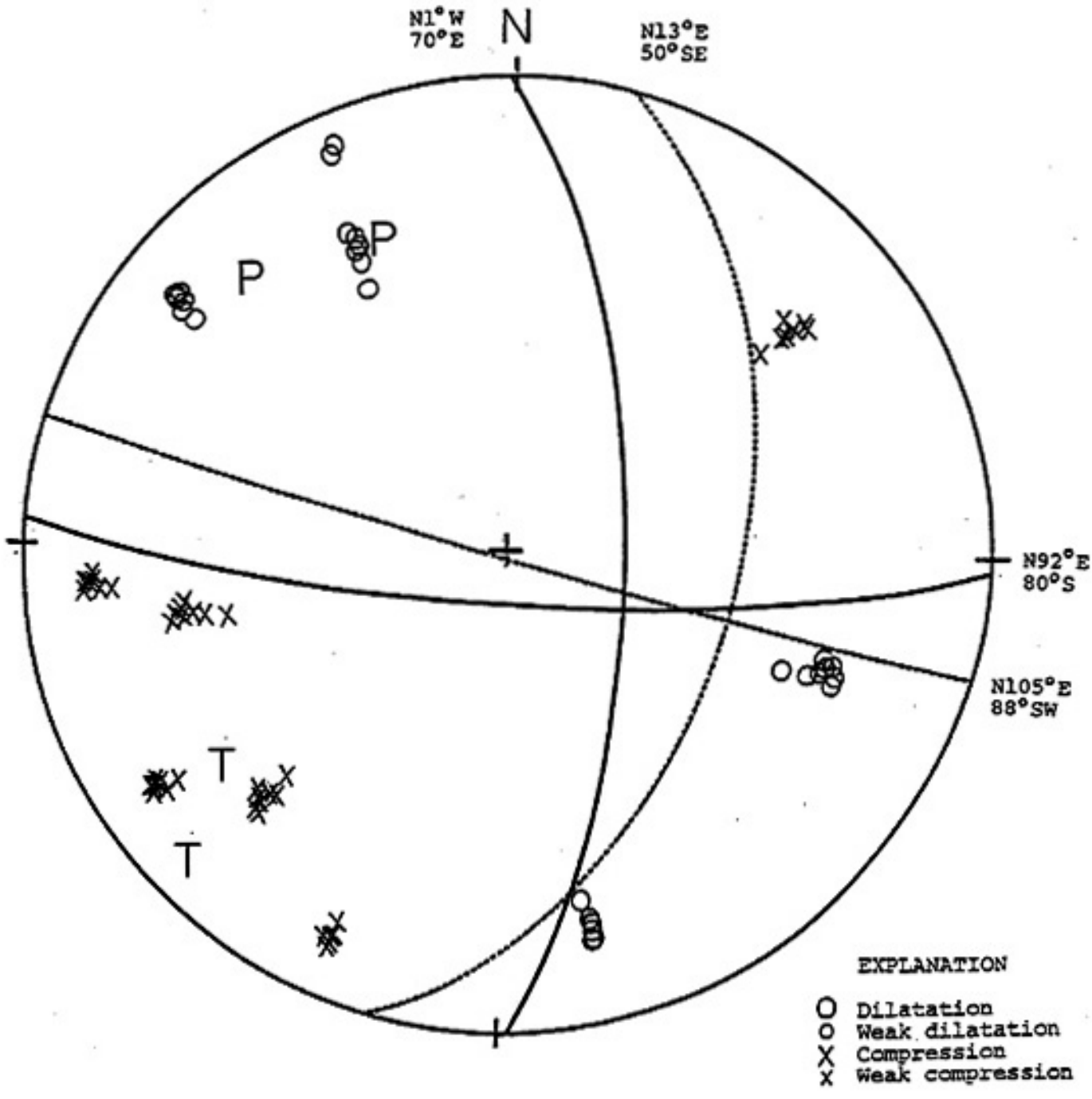


Figure 15. Shown is the Hot Springs-Montosa fault, a major strike-slip fault zone and the Morenci lineament, a transverse shear zone (short-dashed double line). Solid arrows indicate relative movement as mapped by Chapin (1983a); dashed arrows indicate relative movement as determined in this study.



10 EVENT COMPOSITE SOLUTION
SEPTEMBER 1985

Figure 16. Ten event composite solution for the September, 1985 swarm. Shown are the end member orientations for dominantly strike-slip solutions.

solutions are possible but not considered probable. The location of the swarm in areas of active uplift (Figure 5), may introduce some dip-slip component into the fault mechanism due to the extensional stress regime present.

The orientation of the nodal planes and the predominantly strike-slip fault mechanism were also chosen on the basis of the similarity between this poorly constrained solution and the well constrained solution of the April-May, 1986 swarm. Figure 17 demonstrates the similarity between the nodal planes in both solutions.

The swarm of September, 1985 is located near a mapped surface branch of the Hot Springs-Montosa fault that strikes approximately N10°E. The nodal plane most closely matching this fault in the composite fault plane solution strikes N13°E with a dip of 50°SE. The T axis strikes N52°E and plunges - 26°. The sense of movement along the fault plane is left-lateral.

To further investigate the focal mechanism and stress field in this area, fault plane solutions were analyzed for a magnitude 3.4 event on August 16, 1985 and a swarm on April 21, 1987. Locations for these events are shown in Figure 4.

The range of predominantly strike-slip fault solutions for the event of August 16, 1985 is presented in Figure 18. The epicentral location for this shock lies very close to a segment of the Hot Springs-Montosa fault that strikes approximately N12°W. Therefore, either nodal plane in the

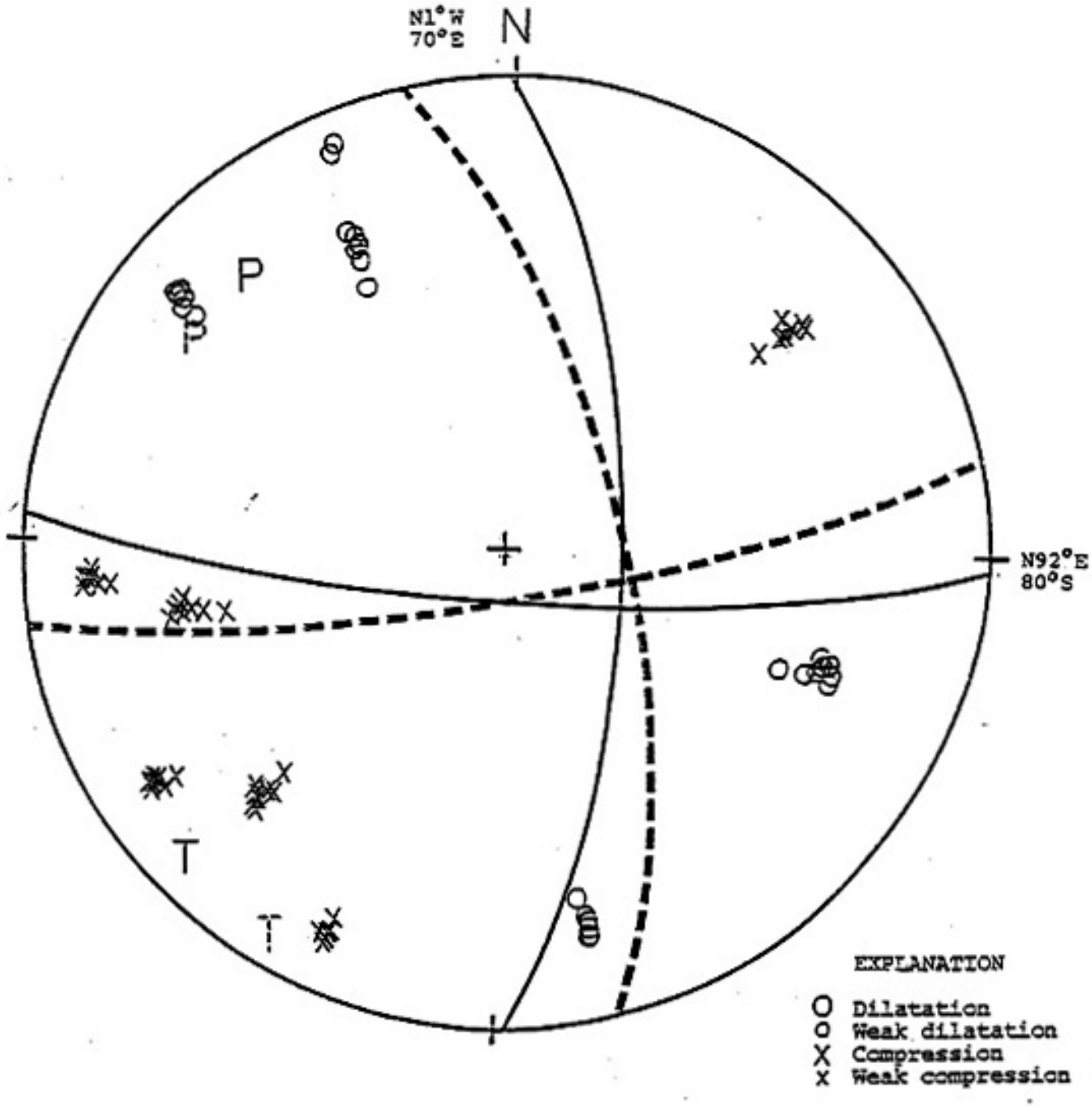


Figure 17. Nodal planes from the well constrained April-May, 1986 solution (dashed lines) superimposed on the composite solution for the September, 1985 swarm.

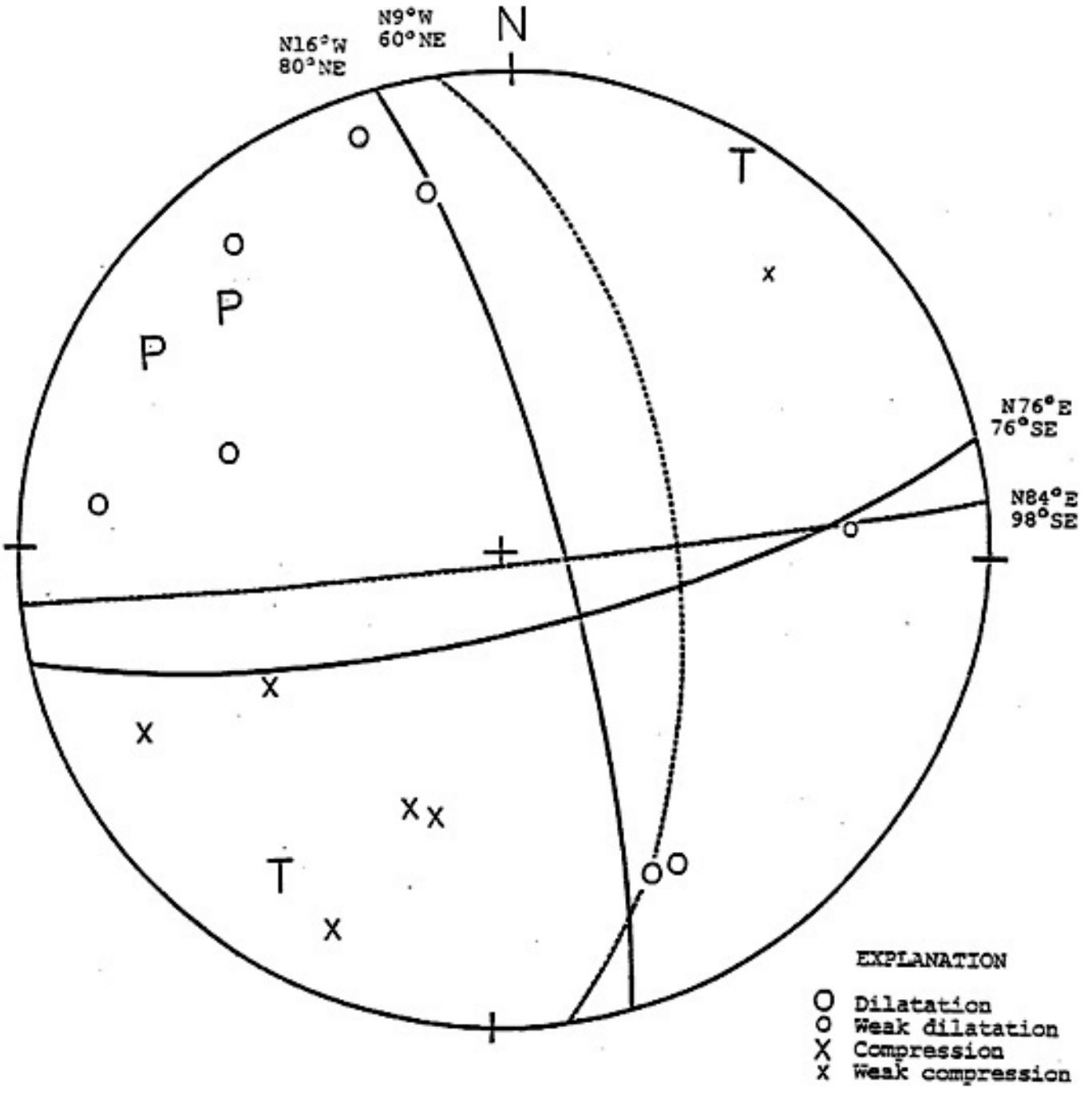


Figure 18. End members for the range of possible strike-slip fault mechanisms for a magnitude 3.4 event on August 16, 1985.

composite fault plane solution which has a northerly strike may be the fault plane. The orientation of the T axis varies between N30°E with a plunge of 4°and N33°E with a plunge of - 19°. The sense of movement is left-lateral.

A strong influence in choosing a predominantly strike-slip fault mechanism for this poorly constrained solution is the similarity to the well constrained April-May, 1986 solution. Figure 19 demonstrates the similarity between the nodal planes for both solutions.

A three event composite solution for the swarm of April 21, 1987 is presented in Figure 20. The solution is poorly constrained and the end members to a range of normal fault mechanisms is presented. The solutions range from nearly pure normal dip-slip to normal with some strike-slip component. The T axis ranges between N19°W with a plunge of 6° and N27°E with a plunge of 26°.

This swarm activity is more difficult to associate with any mapped faults. The events are located near a surface fault that is curved and strikes approximately 10-13° east of north. This does not agree with the strike of any nodal planes from the fault plane diagram.

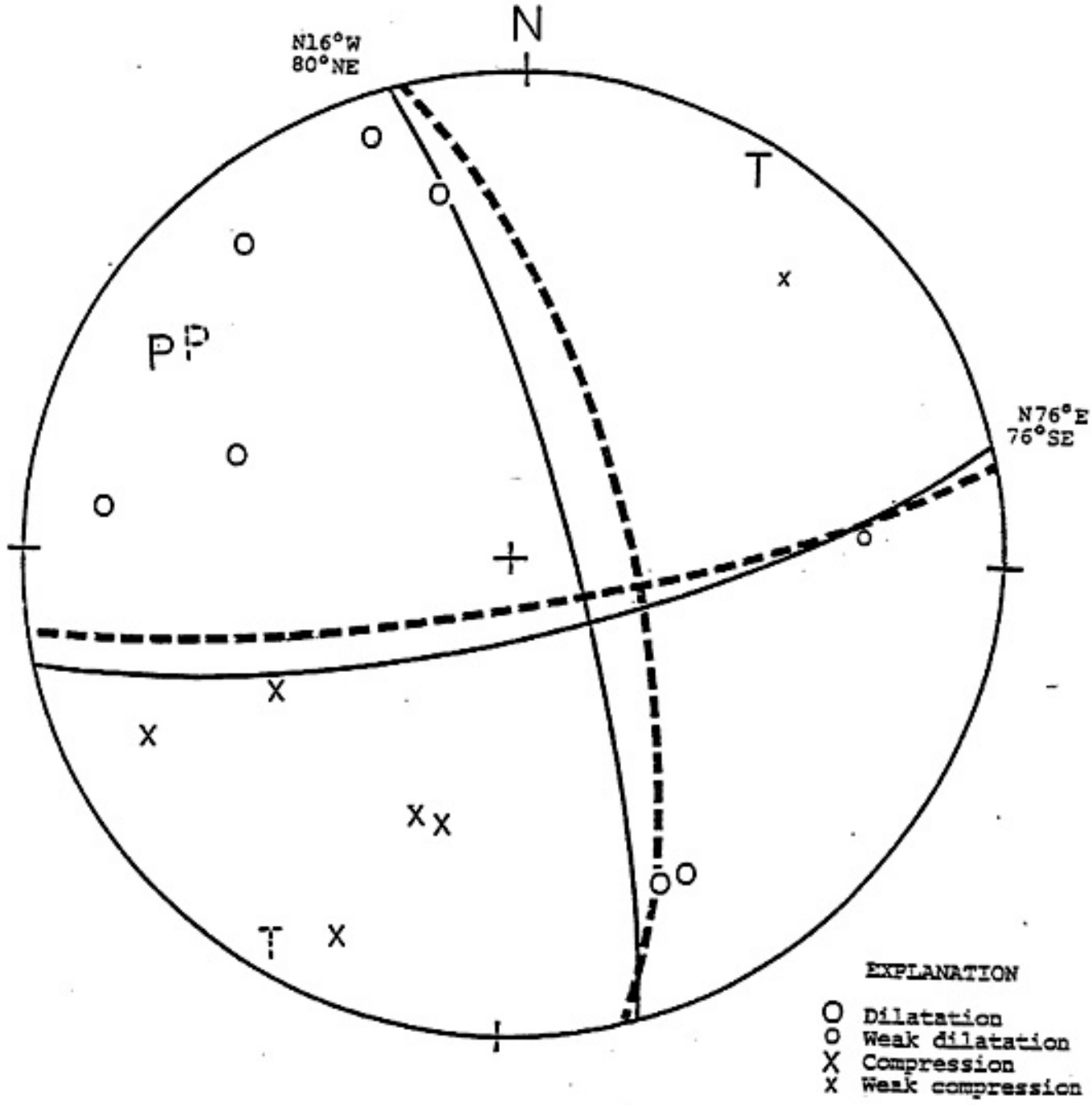


Figure 19. Nodal planes from the well constrained April-May, 1986 solution (dashed lines) superimposed on the fault plane solution for the April 16, 1985 event.

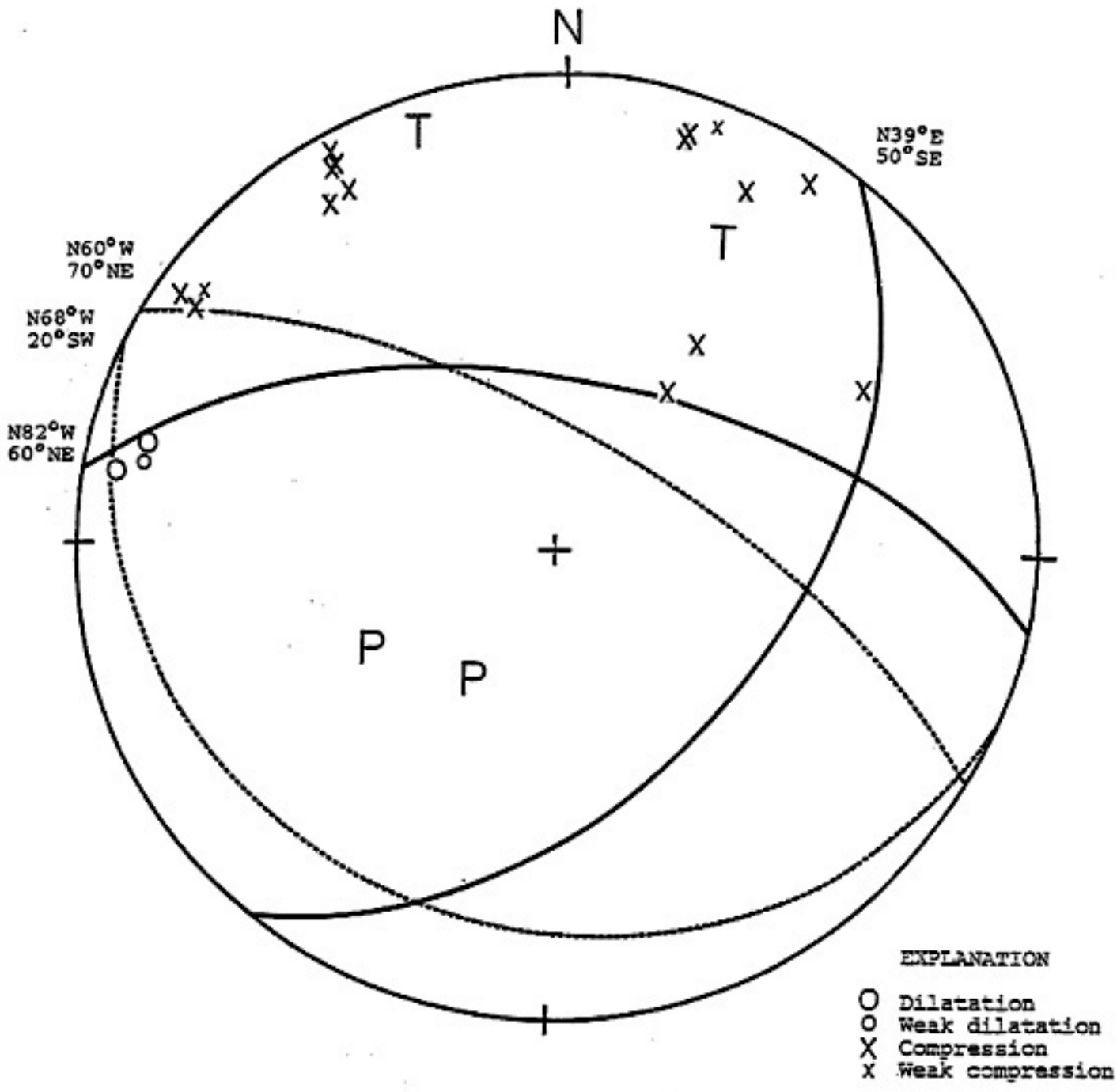


Figure 20. Three event composite solution for the April 21, 1987 swarm. Shown are the end members to the range of possible normal fault solutions.

PREVIOUS FOCAL MECHANISM STUDIES

A comprehensive focal mechanism study of 336 events occurring from May 1975 to January 1978 was undertaken by Weider (1981). Part of the Socorro area between latitudes 33.94° to 34.35° and longitudes 106.86° to 107.07° was divided into 12 areas and a composite fault plane solution was determined for each area (Figure 21). Most solutions indicate normal faulting. The solution for area 7 exhibits the largest amount of strike-slip movement.

The orientations of the T axes for 7 of the 12 areas found by Weider are shown in Figure 22. The orientations range between N42°E and N84°E giving an average direction of N63°E; the plunge of the axes varies between 5° and 26°, indicating approximate east-west crustal extension.

Fault plane solutions were also analyzed by Ake (1984) for two microearthquake swarms that occurred in May and July of 1983. The swarms were located in the Socorro Mountain area approximately 2 km southwest of station WTX between latitudes 34.02° to 34.09° and longitude 106.95° to 106.97°. Nine event composite solutions for both swarms are presented in Figure 23. The focal mechanism was determined to be nearly pure normal dip-slip.

In summary, a well constrained focal mechanism with the

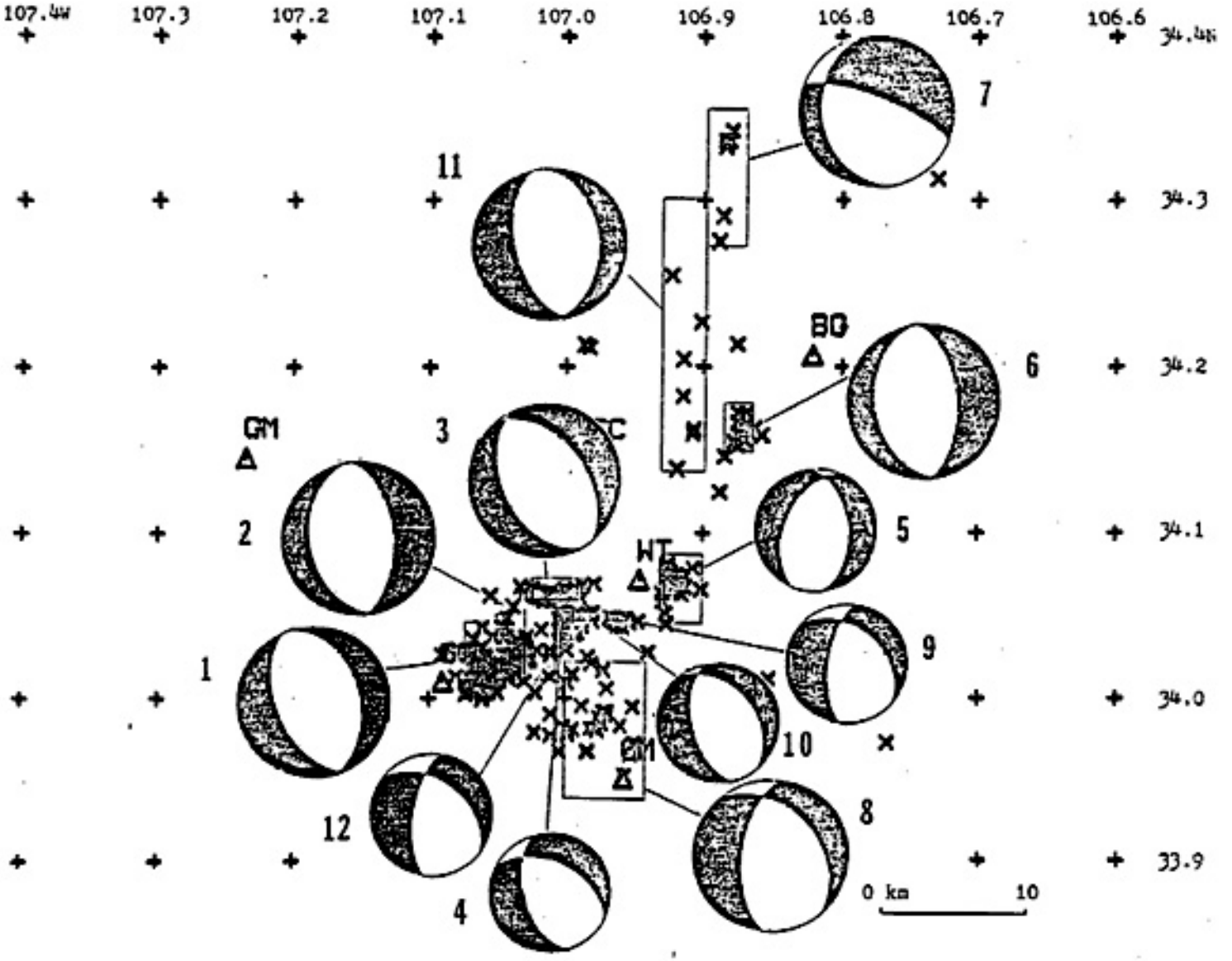


Figure 21. Composite fault plane solutions for 12 areas as analyzed by Weider. White areas are dilatational quadrants and black areas, compressional quadrants. Upper focal sphere used. (from Weider, 1981).

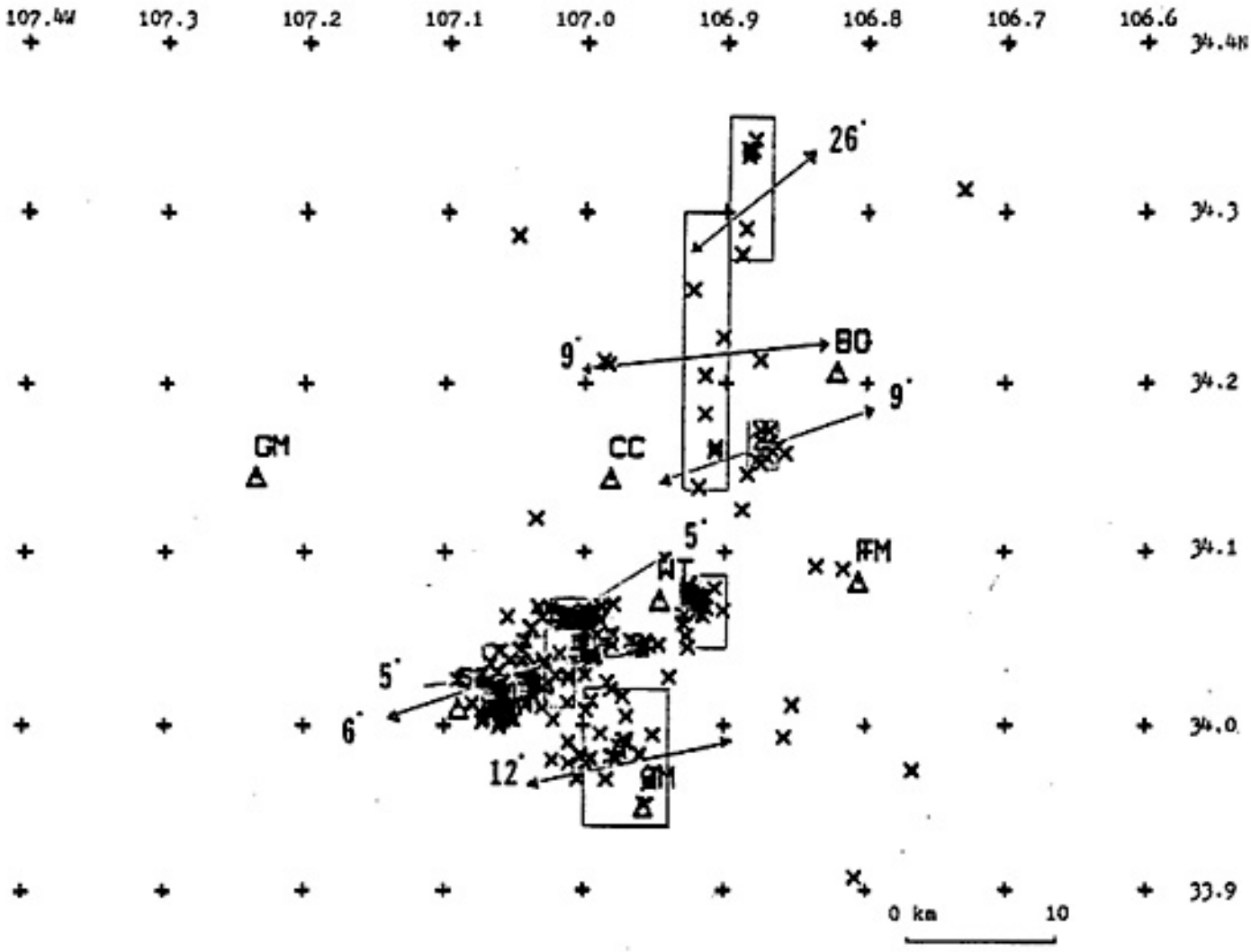


Figure 22. Orientations of T axes for 7 areas analyzed by Weider. (from Weider, 1981).

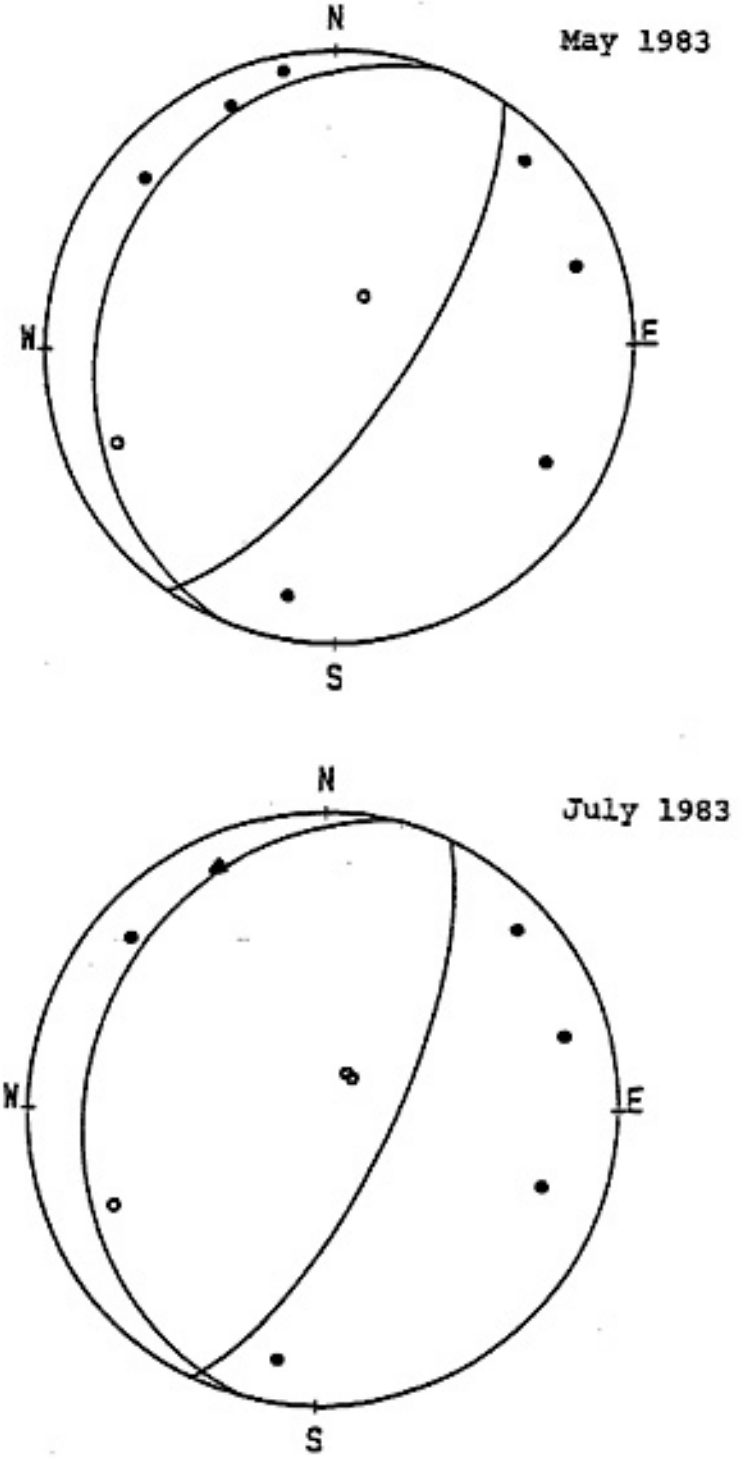


Figure 23. Composite fault plane solutions for swarm activity in May and July, 1983. Open circles are dilatations and black circles are compressions. Triangle represents station where P first motions reversed. Upper focal sphere used. (from Ake, 1984).

dominantly strike-slip faulting, as found for the April-May, 1986 swarm, does not appear in the previous studies by Weider (1981) and Ake (1984).

DISCUSSION AND CONCLUSION

The focal mechanisms for the September, 1985 and April-May, 1986 swarms and the shock of August 16, 1985, are possibly very similar. Most likely all fault plane solutions indicate north-south strike and high dip of the probable fault plane along with left-lateral, strike-slip sense of movement. This apparent similarity and the close proximity of the epicenters to the Hot Springs-Montosa fault zone, strongly suggest activity along this fault. The apparent lack of agreement found in the April 21, 1987 fault plane solution is a complex issue and unresolvable from data analyzed in this report.

Zoback and Zoback (1980) have found that the average orientation of the T axes from a number of well-constrained solutions in an area is a fairly reliable indicator of the direction of tensional stress. The orientations of the T axes for activity along the Hot Springs-Montosa fault as found here range between N31°E and N52°E with an average direction of N38°E. T axes considered were for the probable fault planes for the September, 1985 and April-May, 1986 swarms and the event of August 16, 1985. This contrasts with the average direction of tensional stress obtained previously by Weider of N63°E for areas west of the fault

zone.

A change of 25° to the north for the average orientation of the T axes found through this study, cannot by itself, reliably indicate a change in the direction of tensional stress. A change in the stress field is supported however, by the predominantly strike-slip focal mechanism found for activity associated with the fault zone. This type of focal mechanism is considered new and somewhat unusual for the Socorro area. Both of these observations may combine, at first approximation, to indicate a change in the geologic stress field in the vicinity of the Hot Springs-Montosa fault zone near Socorro.

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Appendix 1

This appendix contains HYPO71 solutions and output for events analyzed in this report.

HYPO71 SOLUTIONS FOR SWARM EVENTS OF SEPTEMBER, 1985

DATE	ORIGIN TIME (HR-MIN-SEC)	LATITUDE (DEG-MIN)	LONGITUDE (DEG-MIN)	DEPTH (KM)	MAG	NO	DM	GAP	RMS	ERH	ERZ	Q	SQD
850917	10:29:19.07	3412.25	10648.50	08.25	0.00	16	16	82	0.18	0.5	1.7	B	BB
850917	10:36:22.17	3411.79	10648.00	06.27	0.05	12	16	79	0.05	0.2	0.8	B	AC
850917	10:39:10.50	3411.47	10648.48	09.41	-0.17	10	16	102	0.13	0.7	1.5	B	AB
850917	10:41:26.03	3411.83	10648.63	07.00	0.20	13	15	79	0.07	0.3	1.4	B	AC
850917	11:05:48.25	3411.96	10649.21	09.09	0.78	16	15	77	0.09	0.3	1.0	B	AB
850917	11:06:25.10	3411.89	10648.68	09.60	0.04	14	15	105	0.07	0.2	0.6	B	AB
850917	11:42:08.42	3411.96	10648.36	07.00	0.22	13	16	80	0.09	0.4	1.8	B	AC
850917	19:50:50.53	3411.97	10648.27	13.36	0.11	14	16	80	0.16	0.6	1.6	B	BB
850917	22:06:38.39	3412.51	10648.92	08.86	0.33	14	15	110	0.12	0.4	1.2	B	AB
850918	11:14:55.38	3411.74	10648.46	09.27	0.75	16	16	75	0.09	0.3	1.1	B	AB
850918	11:37:22.70	3411.94	10648.62	11.50	-0.15	13	16	105	0.12	0.4	1.3	B	AB
850918	17:01:16.49	3411.89	10648.45	11.10	0.28	15	16	79	0.09	0.3	1.0	B	AB
850918	17:14:55.85	3411.96	10648.62	09.42	-0.10	15	16	80	0.06	0.2	0.6	B	AB
850918	17:16:44.12	3411.75	10648.56	11.45	-0.38	10	16	104	0.07	0.3	1.0	B	AB
850918	18:02:07.11	3411.75	10648.44	10.76	0.59	16	16	75	0.06	0.2	0.7	B	AB
850918	18:22:14.38	3411.54	10648.33	09.97	0.79	13	16	74	0.05	0.2	0.8	B	AB
850918	18:23:03.09	3411.68	10648.58	10.28	0.01	14	15	75	0.09	0.4	1.3	B	AB
850918	19:19:30.85	3411.90	10648.43	11.37	1.28	15	16	76	0.08	0.3	0.9	B	AB
850918	19:20:50.85	3410.82	10648.25	10.68	-0.51	10	16	159	0.12	0.7	1.2	B	AC
850918	19:23:09.00	3411.89	10648.51	09.00	0.69	15	16	76	0.10	0.4	1.2	B	AB
850918	19:26:03.36	3411.90	10648.41	09.21	-0.07	14	16	80	0.10	0.3	1.2	B	AB
850918	19:38:00.31	3411.67	10648.51	09.94	0.57	13	16	75	0.07	0.3	0.9	B	AB
850918	19:39:28.88	3411.73	10648.99	11.48	0.20	15	17	76	0.23	0.9	2.7	B	BB
850918	19:40:29.13	3411.57	10648.42	10.45	-0.55	13	16	103	0.08	0.3	1.0	B	AB
850918	19:50:17.74	3411.71	10648.64	08.99	0.06	13	15	78	0.07	0.3	0.9	B	AB
850918	20:00:19.64	3411.73	10648.74	09.24	-0.07	11	15	104	0.08	0.4	1.4	B	AB
850918	20:23:23.79	3411.71	10648.75	11.56	0.36	18	15	76	0.07	0.2	0.7	B	AB
850918	21:19:19.41	3411.38	10648.00	10.67	1.31	09	17	73	0.13	0.8	2.7	B	BB
850918	21:25:51.88	3411.67	10648.49	11.18	0.00	12	16	78	0.09	0.4	1.2	B	AB
850918	21:40:06.57	3412.25	10648.60	08.48	0.04	14	16	82	0.13	0.5	1.8	B	AB
850919	02:24:05.31	3411.36	10648.29	10.37	1.68	12	16	73	0.07	0.3	1.1	B	AB
850919	02:27:25.97	3411.67	10648.39	11.12	0.39	15	16	78	0.10	0.4	1.2	B	AB
850919	02:28:12.97	3411.81	10648.87	09.97	1.23	12	15	93	0.09	0.4	1.2	B	AB
850919	02:31:08.29	3412.00	10648.27	13.61	1.47	14	16	76	0.11	0.5	1.0	B	AB
850919	02:57:18.97	3411.80	10648.48	11.90	-0.15	17	16	79	0.10	0.3	0.9	B	AB
850919	03:03:24.63	3411.93	10648.73	10.60	0.14	16	15	79	0.06	0.2	0.6	B	AB
850919	06:30:37.40	3411.50	10648.80	10.41	0.65	12	15	133	0.06	0.3	0.7	B	AB
850919	09:38:41.58	3411.65	10648.61	11.55	1.65	12	15	114	0.06	0.3	0.9	B	AB
850919	09:44:39.14	3411.85	10648.44	08.40	0.62	13	16	115	0.09	0.3	1.1	B	AB
850919	10:05:03.50	3412.13	10648.23	11.25	0.24	17	16	115	0.08	0.3	0.7	B	AB
850920	14:26:51.10	3411.56	10648.70	07.00	0.89	12	15	114	0.09	0.4	1.6	B	AC
850920	14:37:33.90	3411.78	10648.56	11.54	0.69	12	16	76	0.09	0.4	1.3	B	AB
850920	16:20:28.17	3411.37	10648.39	09.62	-0.52	12	16	102	0.07	0.3	0.8	B	AB

HYPO71 SOLUTIONS FOR SWARM EVENTS OF APRIL-MAY, 1986

DATE	ORIGIN TIME (HR-MIN-SEC)	LATITUDE (DEG-MIN)	LONGITUDE (DEG-MIN)	DEPTH (KM)	MAG	NO	DM	GAP	RMS	ERH	ERZ	Q	SQD
860427	18:14:30.87	3401.45	10649.68	09.56	-0.15	10	12	83	0.06	0.3	0.6	B	AB
860427	18:15:00.58	3401.06	10650.02	10.21	-0.37	11	12	87	0.09	0.4	0.9	B	AB
860427	22:17:36.39	3401.04	10649.68	07.00	-0.50	09	11	84	0.06	0.4	1.0	B	AB
860427	23:46:54.92	3400.89	10649.73	09.26	-0.45	07	11	172	0.03	0.3	0.8	B	AC
860428	00:42:17.91	3401.21	10649.78	10.25	-0.91	06	12	168	0.05	0.6	1.6	B	AC
860428	00:44:36.32	3401.26	10649.47	09.09	-0.52	08	11	160	0.06	0.5	1.4	B	AC
860428	03:08:36.78	3401.01	10649.73	10.67	-0.17	09	11	86	0.07	0.5	1.2	B	AB
860428	03:15:04.26	3401.13	10649.70	10.97	0.46	12	11	83	0.07	0.4	1.0	B	AB
860428	03:15:57.84	3401.26	10649.73	09.66	-0.40	08	12	84	0.08	0.6	1.3	B	AB
860428	03:24:02.46	3401.25	10649.80	10.72	-0.79	08	12	82	0.03	0.2	0.5	B	AB
860428	03:25:55.06	3401.31	10649.75	08.41	-0.06	11	12	82	0.15	0.8	1.8	B	AB
860428	03:50:03.46	3401.30	10649.81	09.20	0.12	08	12	85	0.02	0.2	0.4	B	AB
860428	03:59:57.85	3401.56	10649.70	09.34	0.21	10	12	80	0.09	0.5	1.6	B	AB
860428	04:01:28.12	3400.99	10649.48	11.93	-0.49	06	11	168	0.05	0.7	1.7	B	AC
860428	05:37:33.17	3401.24	10649.66	09.26	-0.33	07	11	84	0.03	0.2	0.6	B	AB
860428	05:42:04.25	3401.77	10649.88	07.00	0.64	13	12	78	0.12	0.5	2.0	B	AB
860428	05:47:57.21	3401.21	10649.67	09.72	-0.02	10	11	82	0.08	0.4	1.0	B	AB
860428	06:48:27.04	3401.26	10649.64	09.96	-0.04	12	11	82	0.12	0.6	1.2	B	AB
860428	07:59:13.56	3401.43	10649.58	08.68	0.05	11	12	80	0.09	0.3	0.9	B	AB
860428	10:13:58.12	3401.12	10649.67	08.16	-0.30	10	11	83	0.06	0.3	0.9	B	AB
860428	11:09:56.04	3401.17	10649.78	08.78	-0.36	10	12	85	0.08	0.4	1.0	B	AB
860428	11:51:37.47	3401.21	10649.68	10.86	0.26	09	11	82	0.06	0.4	1.1	B	AB
860428	12:36:56.63	3401.19	10649.80	09.59	-0.55	07	12	168	0.03	0.3	0.9	B	AC
860428	12:59:49.21	3401.15	10649.37	10.61	2.10	11	11	82	0.09	0.5	1.3	B	AB
860428	13:32:34.43	3400.66	10649.46	12.39	-0.33	07	11	87	0.05	0.6	1.8	A	AA
860428	15:10:49.96	3400.85	10649.18	12.14	-0.33	10	10	104	0.06	0.3	0.6	B	AB
860428	15:37:57.34	3401.14	10649.57	07.00	-0.30	13	11	83	0.10	0.5	1.7	B	AB
860429	02:48:48.23	3401.36	10649.58	09.11	-0.31	09	12	106	0.06	0.3	1.1	B	AB
860429	02:51:59.46	3400.89	10648.58	11.60	-0.23	07	10	108	0.08	1.0	2.1	B	BB
860429	05:30:22.71	3401.27	10649.80	08.78	-0.22	11	12	82	0.10	0.5	1.4	B	AB
860429	06:49:39.79	3401.31	10649.09	08.20	-0.35	13	11	82	0.14	0.5	1.2	B	AB
860429	08:30:31.06	3401.94	10650.01	09.24	0.67	15	11	77	0.12	0.4	1.5	B	AB
860429	08:31:32.89	3401.57	10649.69	07.00	-0.32	10	12	159	0.06	0.4	1.1	B	AC
860429	08:35:13.27	3401.34	10649.45	09.30	0.32	12	11	81	0.09	0.4	0.8	B	AB
860429	15:20:18.13	3401.31	10649.78	07.00	0.22	11	12	82	0.11	0.5	2.0	B	AB
860429	15:32:49.44	3401.09	10649.77	08.65	-0.53	09	11	107	0.07	0.4	1.0	B	AB
860429	16:02:53.58	3400.82	10649.40	13.22	-0.17	08	11	102	0.09	0.6	1.2	B	AB
860430	01:28:29.31	3400.83	10649.66	09.41	-0.11	12	11	86	0.10	0.4	0.9	B	AB
860430	04:07:44.28	3401.57	10649.91	09.52	0.12	16	12	80	0.09	0.3	1.0	B	AB
860430	05:39:52.67	3401.33	10649.66	10.45	0.12	13	12	81	0.09	0.4	1.0	B	AB
860430	06:41:48.72	3401.35	10649.61	10.45	-0.20	09	12	83	0.05	0.3	0.9	B	AB
860430	16:12:18.83	3401.45	10649.71	09.46	0.51	14	12	81	0.09	0.4	1.0	B	AB
860430	16:15:27.84	3401.61	10649.94	07.94	0.35	13	12	80	0.08	0.3	1.4	B	AB
860501	09:32:07.20	3401.01	10649.17	11.31	-0.29	10	11	83	0.07	0.5	1.4	A	AA
860501	16:28:32.94	3401.65	10649.90	09.08	0.63	13	12	79	0.14	0.6	2.0	B	AB
860501	21:30:25.72	3401.41	10649.53	07.00	-0.43	08	12	112	0.07	0.9	2.5	B	BB
860504	18:10:15.98	3401.60	10649.83	08.45	0.76	12	12	80	0.14	0.6	2.1	B	BB
860504	19:50:03.48	3401.31	10649.55	12.77	-0.31	10	11	106	0.07	0.4	1.2	B	AB
860504	22:30:39.38	3401.27	10650.04	09.98	0.31	14	12	83	0.10	0.4	1.1	B	AB
860505	14:42:16.49	3401.10	10649.67	08.58	-0.29	10	11	107	0.09	0.4	0.9	B	AB
860505	14:47:01.33	3401.34	10650.20	05.82	-0.39	09	12	109	0.04	0.3	1.0	B	AC

HYPO71 SOLUTIONS FOR SWARM EVENTS RECORDED BY PORTABLE STATIONS DURING THE APRIL-MAY, 1986 SWARM

DATE	ORIGIN TIME (HR-MIN-SEC)	LATITUDE (DEG-MIN)	LONGITUDE (DEG-MIN)	DEPTH (KM)	MAG	NO	DM	GAP	RMS	ERH	ERZ	Q	SQD
860430	04:07:44.34	3401.59	10649.79	07.86	0.12	19	01	65	0.08	0.3	0.5	A	AA
860430	05:39:52.77	3401.36	10649.57	08.32	0.12	16	01	79	0.08	0.3	0.5	A	AA
860430	16:12:18.98	3401.70	10649.51	06.10	0.51	17	01	67	0.10	0.4	0.6	A	AA
860430	16:15:27.94	3401.72	10649.85	05.72	0.35	16	01	64	0.08	0.3	0.6	A	AA
860501	09:32:07.31	3401.15	10649.04	09.48	-0.29	14	02	81	0.14	0.7	0.9	A	AA
860501	16:28:33.17	3401.81	10649.78	03.64	0.63	15	01	78	0.12	0.4	0.8	A	AA

HYPO71 SOLUTIONS FOR SWARM EVENTS OF APRIL 21, 1987

870421	08:19:37.28	3353.82	10646.67	07.91	0.85	13	07	250	0.07	0.4	0.5	C	AD
870421	08:21:37.65	3355.39	10646.41	07.24	1.02	09	05	277	0.08	0.8	0.6	C	AD
870421	08:31:35.29	3354.82	10646.05	08.25	1.03	12	05	245	0.06	0.4	0.6	C	AD
870421	08:35:48.59	3355.45	10647.79	03.67	0.89	07	07	218	0.04	0.9	1.8	C	AD
870421	08:53:27.31	3355.26	10647.51	06.62	0.10	11	06	176	0.08	0.4	0.7	B	AC
870421	09:04:41.65	3354.27	10646.65	07.50	0.61	13	07	201	0.12	0.7	1.0	C	AD
870421	09:10:05.37	3354.43	10646.55	08.45	0.56	11	06	200	0.11	0.7	0.8	C	AD
870421	09:15:32.23	3354.28	10647.28	06.88	0.22	12	07	194	0.05	0.3	0.5	C	AD
870421	09:35:27.68	3355.23	10647.41	06.88	0.31	11	06	178	0.12	0.7	1.0	B	AC
870421	10:31:13.44	3355.32	10646.70	07.98	0.47	14	05	184	0.11	0.5	0.7	C	AD

HYPO71 SOLUTION FOR AUGUST 16, 1985 EVENT

850816	14:56:52.62	3407.64	10650.25	10.78	3.40	11	12	85	0.07	0.4	1.1	B	AB

DATE AND TIME OF RUN 5-14-87

85/ 8/16 14156

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IO	KNS	KFN	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

											ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	52.70	34- 4.43	106-56.85	7.00*	0	1.29	0.00	D0B	2.00	6.64	-10.16	0.00	15.89	51.28	0.00	1.67	1.42	0.00	6.64	-10.16	0.00
2	53.22	34- 8.02	106-50.25	7.00	12	0.11	-0.36	A0B	2.00	-0.72	0.00	3.78	6.39	0.02	8.44	0.28	0.00	1.30	-0.72	0.00	3.78
3	52.66	34- 7.64	106-50.25	10.78	12	0.07	-0.04	A2B	0.50	0.00	0.00	-0.50	-1.00	-1.00	0.35	0.00	0.00	0.84	0.00	0.00	0.00
4	52.62	34- 7.64	106-50.25	10.78	12	0.07	0.00	A2B	2.00	-0.04	0.02	-0.44	0.01	0.00	0.16	0.32	0.25	1.09	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IM	NR	AVR	AAR	NN	AVXM	SDXM	NF	AVFM	SDFM	I
850816	1456 52.62	34- 7.64	106-50.25	10.78	3.40	11	12	85	J	0.07	0.4	1.1	B	AIB	3.85	10	17	0.00	0.06	0	0.0	0.0	3	3.4	0.0	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SHMK	S-SEC	TSOBS	S-RES	S-WT	DT
NIK	11.7	239	132	P	0	1456	55.20	2.58	2.72	-0.08	-0.06	1.18	0	0	0.00	0									
LEM	13.3	289	129	P	0	1456	55.60	2.98	2.93	0.06	-0.01	1.18	0	0	0.00	0									
BAR	19.8	85	119	P	0	1456	56.50	3.88	3.79	-0.03	0.11	1.18	0	0	0.00	0									
CAR	21.9	154	117	P	2	1456	56.70	4.08	4.13	0.03	-0.08	1.18	0	0	0.00	0									
LJV	23.8	347	114	P	2	1456	57.50	4.88	4.47	0.56	-0.15	0.58	0	0	0.00	0			330	3.4					
LPM	23.9	242	111	P	0	1456	57.50	4.88	5.11	-0.23	0.00	1.14	0	0	0.00	0			330	3.4					
SB	25.9	242	107	P	0	1456	59.25	6.63	6.85	0.22	0.00	1.10	0	0	0.00	0									
MAG	30.6	276	106	P	0	1456	59.30	6.68	6.53	0.08	0.07	1.10	0	0	0.00	0									
LAN	41.2	318	105	P	0	1456	60.05	7.43	7.29	0.04	0.10	1.08	0	0	0.00	0									
SMC	42.2	203	104	P	4	1456	64.00	11.38	7.44	0.13	3.83	0.00	0	0	0.00	0									
NLM	81.3	340	98	P	0	1456	66.50	13.88	14.01	-0.10	-0.03	0.87	0	0	0.00	0			330	3.4					
ALO	90.8	21	96	P	2	1456	69.07	16.45	16.65	-0.13	-0.08	0.39	0	0	0.00	0				S	2	20.30-32.32-60.94	**	0.00		
MTL	143.4	350	94	P	4	1456	77.60	24.98	24.58	0.00	0.40	0.00	0	0	0.00	0									
SPD	185.9	13	93	P	4	1456	83.30	30.68	31.84	0.00	-1.16	0.00	0	0	0.00	0									
CZL	255.7	19	92	P	4	1456	94.40	41.78	41.40	0.00	0.62	0.00	0	0	0.00	0									
MSA	312.1	14	92	P	4	1457	39.80	47.18	53.38	0.00	-6.20	0.00	0	0	0.00	0									

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
CKA	42.7	204.4	84.7	34.2
WMC	9.3	223.2	84.7	15.4
DN	3.5	128.8	68.7	25.1
BG2	9.1	346.0	7.3	2.0
SNR	11.7	237.1	84.7	1.5

LAT	LON	Z	AVRPS	RMS	DRMS
10.34	53.50	5.78	0.53	0.74	0.67
10.34	46.99	5.78	0.14	0.29	0.72
10.34	53.50	15.78	-0.16	0.48	(0.70)
10.34	46.99	15.78	-0.56	0.78	(0.70)
7.64	50.25	2.12	0.38	0.18	0.10
				0.63	0.00
7.64	50.25	19.44	-0.74	0.30	(0.22)
4.93	53.50	5.78	0.24	0.82	0.74
4.93	46.99	5.78	-0.15	0.77	0.70
4.93	53.50	15.78	-0.46	0.67	(0.59)

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/17 10:29

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH
5.850	0.000

ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
7.	20.	250.	1.73205	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	17.71	34- 8.62	106-37.78	7.00*	0	2.35	0.00	DOC	2.00	6.72	23.19	0.00	27.01	216.96	0.00	1.29	1.57	0.00	6.72	23.19	0.00
2	20.84	34-12.25	106-52.86	7.00	10	1.07	-1.49	DOB	2.00	0.00	-6.70	2.67	0.23	370.39	3.72	0.00	0.35	1.36	0.00	-6.70	2.67
3	19.06	34-12.25	106-48.50	9.67	16	0.18	-0.11	B1B	0.50	0.00	0.00	-1.42	0.30	-1.00	1.07	0.00	0.00	1.37	0.00	0.00	-1.42
4	19.08	34-12.25	106-48.50	8.25	16	0.18	-0.01	B3B	0.50	-0.17	0.00	0.00	0.21	-1.00	-1.00	0.37	0.00	0.00	0.00	0.00	0.00
4	19.07	34-12.25	106-48.50	8.25	16	0.18	0.00	B2B	2.00	-0.18	0.02	-0.35	0.20	0.00	0.04	0.41	0.34	1.08	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850917	1029 19.07	34-12.25	106-48.50	8.25	0.00	16	16	82	1	0.18	0.5	1.7	B	B1B	1.42	10	16	0.00	0.15	0	0.0	0.0	8	0.0	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.9	254	117	P 0	1029	22.40	3.33	3.06	0.06	0.21	1.96	0	0	0.00	0			23	0.2	S 2	24.50	5.43	[illegible]	[illegible]	
CJY	16.7	331	116	P 2	1029	22.90	3.83	3.19	0.56	0.08	1.01	0	0	0.00	0			13	-0.5*	S 2	25.20	6.13	-0.36	[illegible]	
BAR	18.0	113	115	P 0	1029	22.30	3.23	3.38	-0.08	-0.07	2.02	0	0	0.00	0			24	0.2	S 3	24.10	5.03	-0.09*	0.06	
WTX	19.4	221	113	P 3	1029	22.50	3.43	3.60	-0.02	-0.15	0.50	0	0	0.00	0			25	0.3	S 3	25.40	6.33	0.13	0.50	
LPM	20.1	53	112	P 1	1029	22.60	3.53	3.71	-0.30	-0.12	1.50	0	0	0.00	0			19	-0.1	S 2	25.20	6.13	0.22	0.97	
CAR	28.7	166	106	P 1	1029	23.90	4.83	5.11	-0.08	-0.20	1.43	0	0	0.00	0			22	0.1	S 3	27.60	8.53	-0.16	0.40	
LAZ	37.5	306	102	P 1	1029	26.00	6.93	6.57	0.22	0.14	1.39	0	0	0.00	0			24	0.2	S 3	30.50	11.43	-0.33	0.43	
MAG	39.3	263	102	P 1	1029	26.00	6.93	6.87	0.08	-0.02	1.39	0	0	0.00	0			14	-0.4	S 3	31.00	11.93	-0.18	0.40	

LAT	LON	Z	AVRPS	RMS	DRMS	
14.96	51.75	3.25	0.37	1.07	0.89	
14.96	45.24	3.25	-0.15	0.96		0.79
14.96	51.75	13.25	-0.35	0.93	(0.75)	
14.96	45.24	13.25	-0.83	0.87		(0.69)
12.25	48.50	0.00	0.31	0.22	0.05	
				0.18	0.00	
12.25	48.50	16.91	-0.89	0.39	(0.21)	
9.55	51.75	3.25	0.32	1.05	0.68	
9.55	45.24	3.25	-0.08	0.98		0.81
9.55	51.75	13.25	-0.41	0.95	(0.77)	
9.55	45.24	13.25	-0.74	0.87		(0.70)

```
DATE AND TIME OF RUN  3/13/86 1501 pj#

                                                                                                        85/ 9/17       10:33
RESET TO    TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8)  TEST(9)  TEST(10)  TEST(11)  TEST(12)  TEST(13)
             0.1000  10.0000   2.0000   0.0500   7.0000   4.0000  -3.6300   2.7900   0.0000  100.0000    8.0000    0.5000    [illegible]

VELOCITY   DEPTH   ZTR XNEAR XFAR   PDS         IQ  KMS  KPH TPUN IMAG  IR  IPRN CODE
 5.850     0.000    7.  20.  250.  1.7320508     3    1    0    0    1   0    1  1011

                                                          ADJUSTMENTS (KM)      PARTIAL F-VALUES      STANDARD ERRORS      ADJUSTMENTS TAKEN
 I  ORIG  LAT N     LONG W     DEPTH  DM  RMS AVRPS SKD   CF   DLAT   DLON   DZ   DLAT   DLON   DZ   DLAT  DLON   DZ   DLAT   DLON   DZ
 1 32.26 34-10.03 106-58.55  7.00*   0 2.46  0.00 D0B  2.00  4.82-15.76  0.00  6.87109.41  0.00  1.84  1.51  0.00  4.82-15.76  0.00
 2 33.21 34-12.63 106-48.29  7.00   16 0.24 -0.77 B0C  2.00 -0.98  0.00  0.00  5.63  1.63 -1.00  0.41  0.00  0.00 -0.98  0.00  0.00
 3 32.46 34-12.11 106-48.29  7.00   16 0.20  0.00 B1C  0.50  0.00  0.37  0.00  0.02  1.49 -1.00  0.00  0.30  0.00  0.00  0.37  0.00
 4 32.46 34-12.11 106-48.53  7.00   16 0.19  0.00 B3C  0.50  0.00  0.07  0.00 -1.00  0.05 -1.00  0.09  0.30  0.00  0.00  0.00  0.00
 4 32.46 34-12.11 106-48.53  7.00   16 0.19  0.00 B2C  2.00 -0.08  0.07  0.05  0.04  0.04  0.00  0.42  0.34  2.26  0.00  0.00  0.00

 DATE    ORIGIN      LAT N     LONG W     DEPTH     MAG NO DM GAP M  RMS  ERH  ERZ Q SQD  ADJ IN NR  AVR  AAR NM AVXM SDXM NF AVFM SDFM I
850917 1033 32.46 34-12.11 106-48.53    7.00     0.09 16 16  81 1 0.19  0.5  2.3 C B1C 0.37 10 17 0.00 0.16  0  0.0  0.0  8  0.1  0.3 4

 STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLY/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES S-WT   DT
 LEM  15.8 255 114  P 0 1033 35.70  3.24  2.95  0.06  0.23  1.72   0   0  0.00 0            25 0.3   S 3 37.80  5.34  0.13  0.44
 LWY  17.0 332 112  P 3 1033 36.40  3.94  3.14  0.56  0.24  0.43   0   0  0.00 0            14-0.4*  S 3 38.80  6.34 -0.66  0.45
 BAR  17.9 112 111  P 0 1033 35.80  3.34  3.29 -0.08  0.13  1.78   0   0  0.00 0            26 0.1   S 2 38.00  5.54 -0.02  0.90
 WTX  19.1 221 110  P 3 1033 36.00  3.54  3.48 -0.02  0.08  0.45   0   0  0.00 0            14-0.4*  S 3 38.50  6.04  0.04  0.45
 LPM  20.3  53 109  P 0 1033 36.10  3.64  3.67 -0.30  0.27  1.66   0   0  0.00 0            28 0.4   S 1 38.00  5.54 -0.29  1.23
 CAR  28.5 166 104  P 0 1033 37.30  4.84  5.01 -0.08 -0.09  1.73   0   0  0.00 0            19-0.1   S 2 40.80  8.34 -0.21  0.84
 LAZ  37.7 306 101  P 1 1033 39.20  6.74  6.55  0.22 -0.03  1.24   0   0  0.00 0            24 0.2   S 2 44.10 11.64 -0.09  0.83
 MAG  39.2 264 100  P 1 1033 39.20  6.74  6.81  0.08 -0.15  1.22   0   0  0.00 0            28 0.4   S 2 44.00 11.54 -0.40  0.63
 SMC  50.8 203  98  P 4 1033 43.10 10.64  8.77  0.10  1.77  0.00   0   0  0.00 0

       LAT        LON         Z      AVRPS       RMS                  DRMS

      14.81      51.78      2.00      0.11      1.09          0.90
      14.81      45.27      2.00     -0.05      1.12                          0.93
      14.81      51.78     12.00     -0.49      1.04          (  0.85)
      14.81      45.27     12.00     -0.67      0.93                          (  0.74)

      12.11      48.53      0.00      0.23      0.21                 0.02
                                                0.19                  0.00
      12.11      48.53     15.66     -0.81      0.36                 (  0.17)

       9.40      51.78      2.00      0.26      1.01          0.82
       9.40      45.27      2.00      0.07      1.12                          0.93
       9.40      51.78     12.00     -0.32      0.91          (  0.72)
       9.40      45.27     12.00     -0.55      0.98                          (  0.79)
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DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/17 10136

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7930	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFN	IpUn	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050*	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	21.34	34- 8.62	106-37.78	7.00*	0	2.46	0.00	DOC	2.00	6.97	23.46	0.00	21.46	150.86	0.00	1.51	1.41	0.00	6.97	23.46	0.00
2	23.98	34-12.39	106-53.03	7.00	9	1.29	-2.04	DOH	2.00	-0.76	-7.95	0.00	8.58	999.98	0.30	0.26	0.42	0.00	-0.76	-7.95	0.00
3	22.26	34-11.98	106-47.86	7.00	17	0.08	-0.14	A0C	2.00	-0.35	0.22	0.00	5.45	3.76	1.13	0.15	0.11	0.00	-0.35	0.22	0.00
4	22.12	34-11.79	106-48.00	7.00	16	0.06	0.00	A1C	0.50	0.00	0.00	-0.73	-1.00	0.07	1.24	0.00	0.00	0.65	0.00	0.00	-0.73
5	22.17	34-11.79	106-48.00	6.27	16	0.05	0.00	A3C	0.50	0.00	0.02	0.00	-1.00	0.06	-1.00	0.00	0.10	0.00	0.00	0.00	0.00
5	22.17	34-11.79	106-48.00	6.27	16	0.05	0.00	A2C	2.00	0.01	0.03	-0.13	0.01	0.06	0.02	0.15	0.11	0.83	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	WR	AVX	AAR	DM	AVAR	SDXR	NF	AVFM	SDFM	I
850917	1036	22.17	34-11.79	106-48.00	6.27	0.05	12	16	79	1	0.05	0.2	0.8	H	AIC	0.73	10	14	0.00	0.05	0	0.0	0.0	7	0.0	0.4	5

STN	DIST	AZN	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	A	XMAG	RMK	PNP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	OT
LEM	16.4	258	111	P	0	1036	25.20	3.03	3.00	0.06	-0.03	1.53	0	0	0.00	0			24	0.2	S	2	27.50	5.33	0.02	0.77
BAR	17.0	141	118	P	0	1036	25.20	3.03	3.09	-0.08	-0.02	1.53	0	0	0.00	0			29	0.5	S	1	27.30	5.13	-0.09	1.14
LVY	17.9	330	109	P	2	1036	25.30	3.73	3.24	0.56	-0.07	0.77	0	0	0.00	0			12	-0.6*	S	3	28.20	6.03	-0.55	*0.00
WTX	19.3	224	108	P	4	1036	25.70	3.55	3.46	-0.02	0.09	0.00	0	0	0.00	0			12	-0.6*	S	3	28.20	6.03	0.06	0.38
LPH	20.0	50	107	P	0	1036	25.50	3.33	3.58	-0.30	0.05	1.52	0	0	0.00	0			25	0.3	S	1	27.90	5.73	0.04	1.15
CAR	27.7	167	103	P	1	1036	27.00	4.83	4.86	-0.08	0.05	1.10	0	0	0.00	0			22	0.1	S	3	30.30	8.33	0.05	0.47
LA2	38.7	306	99	P	1	1036	29.00	6.83	6.70	0.22	-0.09	1.05	0	0	0.00	0			31	0.5	S	2	34.20	12.03	0.05	0.70

LAT	LON	Z	AVRPS	RMS	DRMS		
14.49	51.25	1.27	0.07	1.08	1.03		
14.49	44.74	1.27	0.11	1.06		1.01	
14.49	51.25	11.27	-0.56	1.02	(0.96)		
14.49	44.74	11.27	-0.51	0.91		(0.86)	
11.79	48.00	0.00	0.21	0.09			
				0.05	0.04		
11.79	48.00	14.93	-0.85	0.31	0.00		
					(0.26)		
9.08	51.25	1.27	-0.07	1.04	0.99		
9.08	44.74	1.27	0.04	1.18		1.12	
9.08	51.25	11.27	-0.66	0.96	(0.91)		
9.08	44.74	11.27	-0.59	1.00		(0.95)	

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/17 10139

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	6.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFN	IPHN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	10:43	34-10.03	106-58.55	7.00*	0	2.29	0.00	DOR	2.00	0.16	-17.45	0.00	2.76	33.15	0.00	3.71	3.93	0.00	0.16	-17.45	0.00
2	10:51	34-11.36	106-47.19	7.00	17	0.42	-1.13	COC	2.00	-2.28	2.27	0.00	4.84	10.34	0.41	1.04	0.70	0.00	-2.28	2.27	0.00
3	10:58	34-12.12	106-48.66	7.00	16	0.24	0.00	BIC	0.50	-0.67	0.00	0.00	0.82	-1.00	0.50	0.74	0.00	0.00	-0.67	0.00	0.00
4	10:53	34-11.76	106-48.66	7.00	15	0.18	0.02	BIC	0.50	-0.54	-0.28	2.41	0.97	0.52	1.20	0.65	0.39	2.26	-0.54	-0.28	2.41
5	10:52	34-11.47	106-48.48	9.41	16	0.13	-0.02	A2B	0.50	-0.18	0.00	0.00	0.16	-1.00	-1.00	0.45	0.00	0.00	0.00	0.00	0.00
6	10:50	34-11.47	106-48.48	9.41	16	0.13	0.00	A2B	2.00	-0.13	-0.03	-0.29	0.05	0.01	0.04	0.57	0.35	1.48	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TH	AR	AVR	AAR	NR	AVXR	SDXR	WF	AVFR	SDFR	F
850917	1039 10.50	34-11.47	106-48.48	9.41	-0.17	10	16	102	1	0.13	0.7	1.5	B	A1B	2.49	10	11	0.00	0.06	0	0.0	0.0	0	-0.2	0.3	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PHX	CALX	K	XMAG	RMK	FMP	FMAG	SMAK	S-SEC	TSOBS	S-RES	S-WT	DI
LEM	15.6	259	121	P	1039	13.80	3.30	3.11	0.06	0.13	1.32	0	0	0.00	0			20	0.0	S	2	16.80	5.50	0.01	0.09	
BAR	17.5	108	118	P	0	1039	13.90	3.40	3.39	-0.08	0.04	1.77	0	0	0.00	0			21	0.1	S	1	16.10	5.60	-0.14	1.13	
CJY	18.0	333	118	P	4	1039	16.60	6.10	3.48	0.56	2.06	0.00	0	0	0.00	0											
KPM	21.0	50	114	P	3	1039	14.30	3.80	3.93	-0.30	0.17	0.44	0	0	0.00	0			20	0.0							
CAR	27.3	166	109	P	1	1039	15.30	4.80	4.24	-0.08	-0.06	1.29	0	0	0.00	0			16	-0.3	S	2	18.90	8.40	-0.02	0.86	
LAZ	38.4	307	104	P	1	1039	17.50	7.00	5.76	0.22	-0.02	1.22	0	0	0.00	0			19	-0.1	S	2	21.50	11.00	-1.10	-0.07	
MAC	39.2	265	103	P	2	1039	17.40	6.90	6.89	0.08	-0.07	0.81	0	0	0.00	0			11	-0.7*							

LAT	LON	Z	AVRPS	RMS	DRMS
14.18	51.74	4.41	0.04	1.11	0.98
14.18	45.23	4.41	-0.20	0.82	0.69
14.18	51.74	14.41	-0.75	1.10	(0.97)
14.18	45.23	14.41	-0.97	0.71	(0.59)
11.47	48.48	0.75	0.41	0.24	0.11
11.47	48.48	18.07	-1.02	0.13 0.47	0.00 (0.35)
8.77	51.74	4.41	0.34	0.87	0.74
8.77	45.23	4.41	0.37	1.36	1.24
8.77	51.74	14.41	-0.47	0.77	(0.64)
8.77	45.23	14.41	-0.49	1.09	(0.96)

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/17 10:41

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFH	IPUN	INAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	ON	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	26.07	34-10.03	106-58.55	7.00*	0	2.22	0.00	DUB	2.00	5.28	-1.77	0.00	10.42	89.41	0.00	1.04	1.77	0.00	5.28	-1.77	0.00
2	26.91	34-12.89	106-47.63	7.00	16	0.24	-1.10	AUC	2.00	-1.28	1.01	-2.23	20.56	15.69	2.33	0.28	0.26	1.46	-1.28	1.01	-2.23
3	26.04	34-12.19	106-48.29	4.77	16	0.12	-0.03	A3C	0.50	0.00	0.00	-1.09	-1.00	-1.00	0.39	0.00	0.00	1.74	0.00	0.00	0.00
4	26.01	34-12.19	106-48.29	4.77	16	0.12	0.00	A2C	2.00	0.01	0.00	-1.08	0.00	0.00	0.33	0.24	0.22	1.90	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IB	nR	AVR	AAR	BR	AVXR	SDXR	nF	AVFR	SDFR	I
850917	1041	26.01	34-12.19	106-48.29	4.77	0.20	16	16	82	1	0.12	0.3	1.9	B	AIC	2.76	10	16	0.00	0.10	0	0.0	0.0	8	0.2	0.3	3

STN	DIST	AZM	AIH	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PKX	CALX	K	XMAG	RMK	FMP	FMAG	SKMK	S-SEC	TSMO	S-RES	S-WT	DT
LEM	16.2	255	106	P	0 1041	29.00	2.99	2.88	0.06	0.05	1.54	0	0	0.00	0			30	0.5	S	2	31.40	5.39	0.30	0.52	
LJV	17.0	330	106	P	1 1041	29.80	3.79	3.02	0.56	0.21	1.03	0	0	0.00	0			20	0.0	S	2	32.00	5.99	-0.20	0.71	
BDR	17.2	113	105	P	0 1041	29.10	3.09	3.13	-0.08	-0.04	1.54	0	0	0.00	0			39	0.3*	S	2	31.10	5.09	-0.19	0.73	
MTX	17.6	223	104	P	0 1041	29.30	3.29	3.43	-0.02	-0.12	1.52	0	0	0.00	0			26	0.0	S	2	31.86	5.79	-0.12	0.76	
LPH	19.9	322	103	P	1 1041	29.30	3.29	3.50	-0.30	0.09	1.14	0	0	0.00	0			28	0.4	S	2	31.50	5.49	-0.05	0.77	
CAK	28.6	167	99	P	0 1041	30.90	4.99	4.95	-0.08	-0.02	1.48	0	0	0.00	0			21	0.1	S	2	34.50	8.48	0.05	0.74	
LAC	37.9	305	97	P	0 1041	32.70	6.69	6.53	0.22	-0.05	1.42	0	0	0.00	0			23	0.2	S	1	37.00	11.59	-0.60	1.05	
MAG	39.6	263	97	P	1 1041	33.00	6.99	6.82	0.08	0.09	1.04	0	0	0.00	0			15	-0.3*	S	3	37.50	11.49	-0.47	-0.03	

LAT	LON	Z	AVRPS	RMS	DRMS
14.90	51.55	0.00	-0.19	1.12	1.00
14.90	45.04	0.00	-0.38	0.92	(0.93) 0.80
14.90	51.55	9.77	-0.27	1.05	(0.73)
14.90	45.04	9.77	-0.78	0.85	
12.19	48.29	0.00	0.10	0.11	-0.01
				0.13	0.00
12.19	48.29	13.43	-0.69	0.29	(0.17)
9.49	51.55	0.00	-0.33	1.00	0.88
9.49	45.04	0.00	-0.20	1.10	(0.79) 0.98
9.49	51.55	9.77	-0.12	0.91	(0.89)
9.49	45.04	9.77	-0.63	1.01	

DATE AND TIME OF RUN 3/13/86 1501 PST

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5600	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFN	IPUN	IMAG	IR	IPEN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	48.97	34-10.03	106-58.55	7.00*	0	1.65	0.00	DOA	2.00	4.60	-14.13	0.00	17.95	94.56	0.00	1.09	1.45	0.00	4.60	-14.13	0.00
2	49.03	34-12.52	106-49.35	7.00	15	0.18	-0.67	HOC	2.00	-1.04	0.00	2.09	25.92	0.04	2.15	0.20	0.00	1.42	-1.04	0.00	2.09
3	48.28	34-11.98	106-49.35	9.09	14	0.10	-0.02	A1B	0.50	0.00	-0.22	0.00	-1.00	1.21	0.29	0.00	0.20	0.00	0.00	-0.22	0.00
4	48.25	34-11.96	106-49.21	9.09	15	0.09	0.00	A2B	2.00	0.00	0.00	-0.55	-1.00	-1.00	0.34	0.00	0.00	0.93	0.00	0.00	0.00
										-0.08	0.00	-0.43	0.16	0.00	0.17	0.20	0.22	1.05	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	N	RMS	ERH	ERZ	Q	SOD	ADJ	IN	WR	AVR	AAR	WR	AVAR	SDXM	WF	AVFM	SDFM	I
850917	11 5 48.25	34-11.96	106-49.21	9.09	0.78	16	15	77	1	0.09	0.3	1.0	b	A1D	0.22	10	16	0.00	0.08	0	0.0	0.0	10	0.8	0.2	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	APAG	RMK	FMP	FMAG	SRMK	S-SEC	PSOBS	S-RES	S-WT	DT
LEM	14.7	255	122	P 0	11 5	51.30	3.05	2.95	0.06	0.04	1.36	0	0	0.00	0			45	1.0						
LJX	16.7	335	119	P 0	11 5	52.10	3.85	3.26	0.56	0.03	1.02	0	0	0.00	0			35	0.7						
WTX	18.3	219	116	P 0	11 5	51.80	3.55	3.49	-0.02	0.08	1.33	0	0	0.00	0			40	0.8	S 1	54.20	5.95	-0.06	1.02	
BAR	18.8	110	116	P 0	11 5	51.80	3.55	3.57	-0.08	0.06	1.35	0	0	0.00	0			45	1.0						
LPH	21.3	54	113	P 0	11 5	51.90	3.65	3.96	-0.30	-0.01	1.36	0	0	0.00	0			45	1.0						
CAR	26.5	164	108	P 0	11 5	52.10	4.85	5.11	-0.08	-0.18	1.11	0	0	0.00	0			45	1.0	S 1	59.90	8.85	-0.07	0.97	
CAZ	27.0	307	104	P 0	11 5	52.10	6.85	6.53	0.22	0.12	1.21	0	0	0.00	0			50	1.1	S 0	59.80	11.55	-0.11	1.22	
MAG	38.2	264	103	P 0	11 5	55.10	6.85	6.71	0.08	0.06	1.24	0	0	0.00	0			27	0.4	S 2	59.90	11.65	-0.11	0.91	
SHC	50.2	202	100	P 0	11 5	57.00	8.75	8.71	0.10	-0.06	1.17	0	0	0.00	0			35	0.7	S 2	63.70	15.45	0.18	0.38	
HLM	74.4	336	97	P 2	11 6	1.10	12.85	12.82	-0.08	0.11	0.50	0	0	0.00	0			32	0.6	S 3	10.00	21.75	-0.32	0.04	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	9.4	86.5	56.0	23.3
POL	13.9	260.4	8.7	3.5
DUN	10.2	173.6	37.6	9.7
HSD	13.1	311.8	28.0	3.6
SAD	9.3	319.3	28.0	11.9
SAH	9.7	305.6	43.6	1.4
ALA	10.9	308.2	28.0	0.7
BG2	4.0	281.6	43.6	18.0

LAT	LON	Z	AVRPS	RMS	DRMS
11.66	52.46	4.09	0.31	1.04	0.95
11.66	45.96	4.09	-0.40	0.81	0.72
11.66	52.46	14.09	-0.35	1.02	(0.92)
11.66	45.96	14.09	-0.97	0.79	(0.70)
11.96	49.21	0.43	0.32	0.14	0.05
				0.09	0.00
11.96	49.21	17.75	-0.77	0.28	(0.19)
9.25	52.46	4.09	0.68	0.91	0.82
9.25	45.96	4.09	0.00	1.01	0.92
9.25	52.46	14.09	-0.04	0.74	(0.65)
9.25	45.96	14.09	-0.63	0.90	(0.81)

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/17 11: 6

RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	25.74	34-10.03	106-58.55	7.00*	0	2.39	0.00	D0R	2.00	3.97	-14.97	0.00	3.13	70.25	0.00	2.25	1.79	0.00	3.97	-14.97	0.00
2	26.02	34-12.18	106-48.80	7.00	15	0.12	-0.75	A0C	2.00	-0.54	-0.16	2.60	11.23	2.19	11.06	0.16	0.12	0.78	-0.54	-0.16	2.60
3	25.13	34-11.89	106-48.68	9.60	15	0.07	-0.03	A3B	0.50	0.00	0.00	-0.26	-1.00	-1.00	0.23	0.00	0.00	0.56	0.00	0.00	0.00
3	25.10	34-11.89	106-48.68	9.60	15	0.07	0.00	A2B	2.00	-0.03	-0.02	-0.25	0.03	0.01	0.17	0.17	0.13	0.62	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850917	11 6 25.10	34-11.89	106-48.68	9.60	0.04	14	15	105	1	0.07	0.2	0.6	B	A1B	2.66	10	14	0.00	0.06	0	0.0	0.0	7	0.0	0.3	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.4	256	122	P 0	11 6	28.30	3.20	3.11	0.06	0.04	2.01	0	0	0.00	0			25	0.4	S 2	30.60	5.50	0.02	1.01	
BAR	18.0	110	118	P 2	11 6	28.50	3.40	3.49	-0.08	-0.01	1.01	0	0	0.00	0			22	0.1	S 3	30.90	5.80	-0.10	0.90	
LPM	20.7	52	115	P 2	11 6	28.80	3.70	3.90	-0.30	0.10	1.00	0	0	0.00	0			26	0.3	S 2	31.30	6.20	-0.04	1.00	
CAR	28.2	165	109	P 1	11 6	30.00	4.90	5.08	-0.08	-0.10	1.46	0	0	0.00	0			25	0.3	S 2	33.80	8.70	0.04	0.97	
LAZ	37.7	307	104	P 1	11 6	32.00	6.90	6.65	0.22	0.03	1.39	0	0	0.00	0			15	-0.3	S 3	36.90	11.80	-0.10	0.46	
MAG	39.0	264	104	P 1	11 6	32.10	7.00	6.86	0.08	0.06	1.38	0	0	0.00	0			15	-0.3	S 2	37.00	11.90	-0.12	0.92	
SMC	50.3	202	101	P 3	11 6	34.00	8.90	8.76	0.10	0.04	0.44	0	0	0.00	0			20	0.0	S 3	40.50	15.40	0.06	0.44	

LAT	LON	Z	AVRPS	RMS	DRMS	
14.59	51.94	4.60	0.26	1.01	0.95	
14.59	45.43	4.60	-0.30	0.98		0.91
14.59	51.94	14.60	-0.51	0.99	(0.92)	
14.59	45.43	14.60	-0.99	0.85		(0.79)
11.89	48.68	0.94	0.39	0.17	0.10	
				0.07	0.00	
11.89	48.68	18.26	-0.89	0.36	(0.30)	
9.18	51.94	4.60	0.67	0.98	0.91	
9.18	45.43	4.60	0.11	1.05		0.98
9.18	51.94	14.60	-0.13	0.88	(0.81)	
9.18	45.43	14.60	-0.65	0.92		(0.85)

DATE AND TIME OF RUN 3/13/86 1501 pjs

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	8.49	34-10.03	106-58.55	7.00*	0	2.43	0.00	D0A	2.00	7.20	-14.86	0.00	10.37	50.60	0.00	2.24	2.09	0.00	7.20	-14.86	0.00
2	8.84	34-13.93	106-48.88	7.00	14	0.52	-0.65	D0B	2.00	-4.04	0.00	0.03	228.65	-1.00	0.34	0.27	0.00	0.00	-4.04	0.00	0.00
3	8.37	34-11.74	106-48.88	7.00	15	0.13	-0.05	A1C	0.50	0.00	0.00	-1.53	-1.00	0.31	1.50	0.00	0.00	1.25	0.00	0.00	-1.53
4	8.41	34-11.74	106-48.88	5.47	15	0.13	-0.01	A3C	0.50	0.00	0.11	0.00	-1.00	0.29	-1.00	0.00	0.20	0.00	0.00	0.00	0.00
4	8.40	34-11.74	106-48.88	5.47	15	0.13	0.00	A2C	2.00	0.10	0.11	-0.26	0.13	0.28	0.02	0.27	0.21	1.65	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850917	1142 8.40	34-11.74	106-48.88	5.47	0.22	18	15	76	1	0.13	0.3	1.6	B	A1C	1.53	10	19	0.00	0.10	0	0.0	0.0	9	1.2	0.4	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEN	15.1	257	110	P 0	1142	11.30	2.90	2.74	0.06	0.10	1.75	0	0	0.00	0			32	0.6	S 2	13.40	5.00	0.14	0.88	
LJY	17.3	334	108	P 3	1142	12.10	3.70	3.10	0.56	0.03	0.44	0	0	0.00	0										
BAR	18.2	109	107	P 0	1142	11.70	3.30	3.25	-0.08	0.13	1.75	0	0	0.00	0			27	0.4	S 3	11.90	5.50	0.01	0.44	
WTX	19.3	221	107	P 2	1142	11.50	3.10	3.26	-0.02	-0.14	0.88	0	0	0.00	0			15	-0.3*	S 3	11.90	5.50	-0.12	0.44	
LPN	21.1	52	105	P 0	1142	11.80	3.40	3.73	-0.30	-0.03	1.74	0	0	0.00	0			34	0.6	S 2	14.20	5.80	-0.14	0.67	
CAR	28.0	165	101	P 0	1142	13.20	4.80	4.87	-0.08	0.01	1.69	0	0	0.00	0			37	0.6	S 2	16.70	8.30	0.00	0.45	
LAZ	37.6	307	98	P 1	1142	15.20	6.80	6.50	0.22	0.08	1.21	0	0	0.00	0			20	0.0	S 2	19.70	11.30	-0.35	0.41	
MAG	38.6	265	98	P 0	1142	15.10	6.70	6.67	0.08	-0.05	1.61	0	0	0.00	0			15	-0.3*	S 1	20.00	11.60	-0.10	1.21	
SMC	50.0	202	96	P 3	1142	17.00	8.60	8.59	0.10	-0.10	0.38	0	0	0.00	0			25	0.3	S 3	23.50	15.10	0.04	0.18	
NLN	75.0	336	94	P 2	1142	21.50	13.10	12.86	-0.08	0.32	0.67	0	0	0.00	0			24	0.2	S 2	24.60	16.20	-5.93	*0.00	

LAT	LON	Z	AVRPS	RMS	DRMS
14.45	52.13	0.47	0.11	1.05	0.92
14.45	45.62	0.47	-0.36	1.08	0.95
14.45	52.13	10.47	-0.35	1.05	(0.92)
14.45	45.62	10.47	-0.78	1.00	(0.87)
11.74	48.88	0.00	0.13	0.14	0.01
				0.13	0.00
11.74	48.88	14.13	-0.67	0.31	(0.19)
9.04	52.13	0.47	0.40	1.05	0.92
9.04	45.62	0.47	-0.11	1.07	0.95
9.04	52.13	10.47	-0.09	0.95	(0.82)
9.04	45.62	10.47	-0.56	0.98	(0.85)

DATE AND TIME OF RUN 4-16-87 SW NEW COR C

85/ 9/17 19:50

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	[illegible]	0.5000	[illegible]

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	49.76	34- 8.62	106-37.78	7.00*	0	2.11	0.00	D0C	2.00	0.20	22.43	0.00	21.76	137.30	0.00	1.33	1.91	0.00	0.20	22.43	0.00
2	52.50	34-11.97	106-52.37	7.00	10	0.89	-1.32	D0B	2.00	0.00	-5.67	0.36	0.01	127.90	7.84	0.00	0.45	2.27	0.00	-5.67	0.36
3	50.69	34-11.97	106-48.68	13.36	15	0.20	-0.14	B0B	2.00	0.00	-0.62	0.00	0.23	2.01	-1.03	0.00	0.38	0.00	0.00	-0.62	0.00
4	50.52	34-11.97	106-48.27	13.36	16	0.16	0.01	B3B	0.50	-0.24	0.00	0.00	0.36	-1.00	-1.00	0.40	0.00	0.00	0.00	0.00	0.00
4	50.53	34-11.97	106-48.27	13.36	16	0.16	0.00	B2B	2.00	-0.24	-0.01	-0.32	0.31	0.01	0.64	0.34	0.38	1.57	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850917	1950 50.53	34-11.97	106-48.27	13.36	0.[illegible]	14	16	80	1	0.16	0.6	1.5	B	BIB	0.62	10	16	0.00	0.11	0	0.0	0.0	0	0.0	0.0	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEN	16.1	256	130	P 0	1950	54.20	3.67	3.57	0.06	0.04	2.40	0	0	0.00	0										
LJY	17.4	331	128	P 4	1950	54.50	3.97	3.74	0.56	-0.33	0.00	0	0	0.00	0					S 3	57.20	6.67	-0.76	0.05	
BAR	17.5	111	127	P 1	1950	54.00	3.47	3.76	-0.08	-0.21	1.78	0	0	0.00	0										
KTX	19.2	223	125	P 4	1950	54.50	3.97	4.00	-0.02	-0.01	0.00	0	0	0.00	0					S 3	57.60	7.07	0.17	0.59	
LPM	20.1	51	124	P 1	1950	54.50	3.97	4.13	-0.30	0.14	1.78	0	0	0.00	0					S 3	57.20	6.67	0.64	0.60	
CAR	26.2	167	115	P 1	1950	55.80	5.27	5.33	-0.08	0.02	1.74	0	0	0.00	0					S 3	59.60	9.07	-0.02	0.58	
LAZ	38.1	106	109	P 2	1950	57.90	7.37	6.91	0.22	0.24	1.06	0	0	0.00	0					S 3	62.70	12.17	-0.17	0.55	
MAG	39.6	264	109	P 1	1950	57.70	7.17	7.15	0.08	-0.06	1.65	0	0	0.00	0					S 3	63.00	12.47	-0.05	0.55	
SMC	50.7	203	105	P 3	1950	59.60	9.07	8.97	0.10	0.00	0.52	0	0	0.00	0					S 3	65.50	14.97	-0.74	0.13	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
SPR	7.9	86.0	60.1	25.4
POL	15.4	261.2	7.6	2.9
ALQ	88.2	21.1	40.3	30.3
DM	10.2	181.7	36.3	15.0
HSD	13.8	326.5	25.0	4.5
SAD	10.3	313.1	25.0	7.0
SAH	10.9	301.9	42.0	5.1
ALA	12.1	303.8	42.0	2.2
BG2	5.5	270.5	42.0	14.4

LAT	LON	Z	AVRPS	RMS
14.68	51.53	8.36	0.34	0.95
14.68	45.02	8.36	-0.12	0.93
14.68	51.53	18.36	-0.62	0.88
14.68	45.02	18.36	-0.99	0.80
11.97	48.27	4.70	0.57	0.23
				0.16
11.97	48.27	22.02	-0.99	0.36
9.27	51.53	8.36	0.60	0.91
9.27	45.02	8.36	0.20	0.92
9.27	51.53	18.36	-0.32	0.86
9.27	45.02	18.36	-0.69	0.77

DRMS

0.79 (0.72) 0.77 (0.64)

0.08 0.00 (0.20)

0.75 (0.70) 0.76 (0.61)

DATE AND TIME OF RUN 3/13/86 1501 PST

MS/ 9/17 19150

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KNS	KFN	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050#	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	50.57	34-10.03	106-58.55	7.00*	0	2.27	0.00	DUB	2.00	4.13	-15.62	0.00	6.70	154.20	0.00	1.60	1.26	0.00	4.13	-15.62	0.00
2	51.46	34-12.27	106-48.38	7.00	16	0.17	-0.63	BOC	2.00	0.00	0.66	0.00	0.62	7.34	-1.00	0.00	0.24	0.00	0.00	0.66	0.00
3	50.84	34-12.27	106-48.81	7.00	15	0.12	0.01	A1C	0.50	-0.34	0.00	0.00	1.32	-1.00	0.03	0.30	0.00	0.00	-0.34	0.00	0.00
4	50.84	34-12.08	106-48.81	7.00	15	0.10	0.00	A3C	0.50	0.00	0.00	0.78	-1.00	-1.00	0.28	0.00	0.00	1.47	0.00	0.00	0.00
4	50.85	34-12.08	106-48.81	7.00	15	0.10	0.00	A2C	2.00	-0.08	-0.04	0.94	0.07	0.03	0.24	0.29	0.24	1.90	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IM	MK	AVR	AAR	NM	AVAR	SDAR	NF	AVFR	SDFR	I
850917	1950 50.85	34-12.08	106-48.81	7.00	0.11	13	15	90	1	0.10	0.4	1.9	B	AIC	0.34	10	13	0.00	0.07	0	0.0	0.0	7	0.1	0.3	4

STN	DIST	AZM	AIN	PRMK	SRMK	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PMX	CALX	K	XMAG	RMK	PMP	PMAG	SRMP	S-SEC	TSOBS	S-RES	...	DT
LEM	15.3	255	115	P	0	1950	53.90	3.05	2.88	0.06	0.11	1.94	0	0	0.00	0		20	0.4						
LJY	16.8	333	113	P	3	1950	54.00	3.15	3.11	0.58	-0.52	0.12	0	0	0.00	0		15	-0.2	S	3	56.60	5.75	-0.60*	0.03
BAR	18.2	11	111	P	0	1950	54.10	3.25	3.35	-0.08	-0.02	1.98	0	0	0.00	0		10	0.5	S	3	56.50	5.65	-0.02	0.49
LPM	20.7	53	109	P	1	1950	54.30	3.45	3.73	-0.30	0.02	1.48	0	0	0.00	0		25	0.3	S	2	56.90	6.05	0.11	0.97
CAR	28.6	165	104	P	1	1950	55.70	4.85	5.03	-0.08	-0.09	1.43	0	0	0.00	0		21	0.2	S	3	59.30	8.45	-0.11	0.46
LAZ	37.5	307	101	P	1	1950	57.60	6.75	6.69	0.22	0.04	1.37	0	0	0.00	0		20	0.0	S	2	62.30	11.45	-0.16	0.90
MAG	38.8	264	100	P	1	1950	57.70	6.85	6.74	0.08	0.03	1.36	0	0	0.00	0		17	-0.2	S	3	62.70	11.85	0.04	0.45

LAT	LON	Z	AVRPS	RMS	DRMS
14.79	52.07	2.00	0.21	1.06	0.96
14.79	45.56	2.00	-0.05	0.92	
14.79	52.07	12.00	-0.37	1.02	0.82
14.79	45.56	12.00	-0.62	0.78	(0.91)
					(0.66)
12.08	48.81	0.00	0.19	0.15	0.05
				0.10	0.00
12.08	48.81	15.66	-0.75	0.20	(0.16)
9.38	52.07	2.00	0.08	0.94	0.84
9.38	45.56	2.00	-0.05	1.13	
9.38	52.07	12.00	-0.48	0.94	1.03
9.38	45.56	12.00	-0.61	0.98	(0.84)
					(0.98)

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/17 22: 6

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

											ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	38.40	34-10.03	106-58.55	7.00*	0	2.56	0.00	DOB	2.00	4.58	-14.79	0.00	3.69	84.87	0.00	2.38	1.91	0.00	4.56	-14.79	0.00
2	39.16	34-12.51	106-48.92	7.00	15	0.13	-0.04	AIC	0.50	0.00	0.00	1.86	-1.00	0.11	1.99	0.00	0.00	1.32	0.00	0.00	1.86
3	38.40	34-12.51	106-48.92	8.86	15	0.12	-0.01	A3R	0.50	0.00	-0.06	0.00	-1.00	0.09	-1.00	0.00	0.20	0.00	0.00	0.00	0.00
4	38.39	34-12.51	106-48.92	8.86	15	0.12	0.00	A2R	2.00	0.00	-0.06	-0.04	0.02	0.07	0.00	0.36	0.23	1.23	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IM	MR	AVK	AAR	NM	AVXM	SDXM	nf	AVFM	SDFM	I
850917	22 6 38.39	34-12.51	106-48.92	8.86	0.33	14	15	110	1	0.12	0.4	1.2	B	A1B	1.86	10	14	0.00	0.10	0	0.0	0.0	7	0.3	0.2	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	K	AMAG	RMK	PMP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	WT
LEM	15.4	252	120	P	0	22 6	41.60	3.21	3.04	0.06	0.11	1.81	0	0	0.00	0			28	0.4	S	2	43.80	5.41	0.05	0.92
BAR	18.8	113	115	P	0	22 6	41.80	3.41	3.55	-0.08	-0.06	1.85	0	0	0.00	0			32	0.6	S	2	44.20	5.81	-0.20	0.87
LPH	20.3	55	114	P	1	22 6	41.90	3.51	3.79	-0.30	0.02	1.38	0	0	0.00	0			30	0.5	S	2	44.00	6.21	0.16	0.88
CAM	29.4	165	107	P	1	22 6	41.50	5.11	5.44	-0.08	-0.05	1.33	0	0	0.00	0			27	0.3	S	3	47.10	9.01	-0.07	0.44
LAZ	36.7	206	104	P	2	22 6	45.00	6.61	6.46	0.22	-0.07	0.86	0	0	0.00	0			28	0.4	S	2	49.70	11.31	-0.26	0.75
MAC	38.7	262	103	P	1	22 6	45.40	7.01	6.79	0.08	0.14	1.23	0	0	0.00	0			30	0.5	S	2	50.20	11.81	-0.09	0.85
SD	42.5	232	102	P	2	22 6	46.10	7.71	7.42	0.16	0.13	0.81	0	0	0.00	0			29	0.1	S	3	51.00	12.61	-0.52	-0.03

LAT	LON	Z	AVRPS	RMS		DRMS	
15.21	52.18	3.86	-0.17	1.00	0.88		
15.21	45.67	3.86	-0.23	1.02		0.90	
15.21	52.18	13.86	-0.52	0.97	(0.85)		
15.21	45.67	13.86	-0.89	0.87		(0.75)	
12.51	48.92	0.20	0.34	0.19		0.07	
				0.12		0.00	
12.51	48.92	17.52	-0.88	0.36		(0.24)	
9.80	52.18	3.86	0.51	1.06	0.93		
9.80	45.67	3.86	0.13	1.06		0.93	
9.80	52.18	13.86	-0.25	0.98	(0.86)		
9.80	45.67	13.86	-0.60	0.89		(0.77)	

DATE AND TIME OF RUN 3/13/86 1501 pjs

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	54.10	34- 8.62	106-32.78	7.00#	0	1.99	0.00	DOC	2.00	-7.46	23.01	0.00	62.3824	9.47	0.00	0.95	1.47	0.00	-7.46	23.01	0.00
2	56.88	34-12.66	106-32.74	7.00	10	0.77	-1.09	DOB	2.00	-1.58	-6.27	4.32	34.5349	7.05	10.49	0.26	0.28	1.33	-1.58	-6.27	4.32
3	55.39	34-11.85	106-48.66	11.32	15	0.11	-0.13	AOB	2.00	0.00	-0.31	-2.05	1.96	2.21	5.07	0.00	0.21	0.86	0.00	-0.31	-2.05
4	55.39	34-11.85	106-48.46	9.27	16	0.09	-0.02	A1B	0.50	-0.20	0.00	0.00	0.98	-1.00	0.11	0.20	0.00	0.00	-0.20	0.00	0.00
5	55.38	34-11.74	106-48.46	9.27	16	0.09	0.00	A3B	0.50	0.00	0.00	-0.35	-1.00	-1.00	0.12	0.00	0.00	1.02	0.00	0.00	0.00
5	55.38	34-11.74	106-48.46	9.27	16	0.09	0.00	A2B	2.00	0.00	0.00	-0.43	0.00	0.12	0.15	0.22	0.23	1.12	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	1114 55.38	34-11.74	106-48.46	9.27	0.75	16	16	75	1	0.09	0.3	1.1	B	A1B	0.20	10	16	0.00	0.06	0	0.0	0.0	11	0.8	0.2	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	AMAG	RMK	PHP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.7	258	121	P	0	1114	58.60	3.22	3.12	0.06	0.04	1.47	0	0	0.00	0			44	1.0					
BAR	17.0	110	118	P	0	1114	58.60	3.22	3.48	-0.08	-0.10	1.47	0	0	0.00	0			47	1.0					
LUV	17.6	333	118	P	1	1114	59.40	4.02	3.48	0.56	0.06	1.10	0	0	0.00	0			29	0.5					
WTX	18.7	223	116	P	0	1114	59.00	3.62	3.57	-0.02	0.07	1.47	0	0	0.00	0			34	0.6	S	3	64.50	6.12	-0.03	0.37
LPH	20.6	54	114	P	0	1114	59.00	3.62	3.86	-0.30	-0.06	1.47	0	0	0.00	0			48	1.1						
CAR	37.8	160	108	P	0	1114	60.30	4.92	5.01	-0.08	-0.01	1.42	0	0	0.00	0			46	1.0	S	3	64.90	6.52	-0.02	0.36
LAZ	38.2	307	104	P	0	1114	62.30	6.92	6.71	0.22	-0.01	1.36	0	0	0.00	0			38	0.8	S	3	67.00	11.62	-0.39	0.34
MAG	39.3	295	103	P	0	1114	62.40	7.02	6.90	0.08	-0.04	1.35	0	0	0.00	0			30	0.5	S	3	67.20	11.82	-0.27	0.34
SBD	50.2	205	102	P	0	1114	62.90	7.52	7.39	0.16	-0.03	1.33	0	0	0.00	0			32	0.6						
SMC	50.2	203	100	P	0	1114	64.20	8.82	8.73	0.10	-0.01	1.28	0	0	0.00	0			31	0.5	S	3	70.80	15.42	0.13	0.32
NLM	75.3	336	97	P	2	1114	68.40	13.02	12.97	-0.08	0.13	0.56	0	0	0.00	0			38	0.8						

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	8.3	83.1	58.9	26.6
DM	9.8	180.1	37.6	14.2
RSD	14.0	328.4	25.7	4.1
SAD	10.4	316.0	35.7	9.1
SAH	10.9	303.8	42.2	3.1
ALA	12.1	306.3	42.2	0.5
BG2	5.3	283.7	42.2	19.0

LAT	LON	Z	AVRPS	RMS	DRMS
14.44	51.71	4.27	0.28	0.83	0.74
14.44	45.20	4.27	-0.38	0.78	0.69
14.44	51.71	14.27	-0.32	0.79	(0.71)
14.44	45.20	14.27	-0.91	0.69	(0.60)
11.74	48.46	0.61	0.30	0.13	0.04
11.74	48.46	17.93	-0.70	0.25	0.00 (0.16)
9.03	51.71	4.27	0.66	0.83	0.74
9.03	45.20	4.27	0.01	0.82	0.73
9.03	51.71	14.27	0.01	0.76	(0.67)
9.03	45.20	14.27	-0.56	0.70	(0.61)

DATE AND TIME OF RUN 3/13/86 1501 pjs

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RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	22.21	34- 8.62	106-37.78	7.00*	0	2.38	0.00	DOC	2.00	6.59	24.45	0.00	22.93	165.86	0.00	1.38	1.90	0.00	6.59	24.15	0.00
2	24.83	34-12.19	106-53.67	7.00	8	1.28	-1.81	DOB	2.00	0.00	-7.32	5.47	0.47	731.36	16.27	0.00	0.27	1.36	0.00	-7.32	5.47
3	22.77	34-12.19	106-48.91	12.47	15	0.15	-0.16	AOB	2.00	0.00	-0.45	0.00	1.50	2.90	-1.00	0.00	0.27	0.00	0.00	-0.45	0.00
4	22.60	34-12.19	106-48.62	12.47	16	0.13	0.00	A1B	0.50	-0.46	0.00	-0.97	1.85	0.01	0.70	0.34	0.00	1.16	-0.46	0.00	-0.97
5	22.70	34-11.94	106-48.62	11.50	16	0.12	0.00	A1B	0.50	0.00	0.00	-0.09	-1.00	-1.00	0.01	0.00	0.00	1.16	0.00	0.00	0.00
5	22.70	34-11.94	106-48.62	11.50	16	0.12	0.00	A2B	2.00	-0.02	0.00	-0.09	0.00	0.00	0.00	0.35	0.27	1.32	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	1137 22.70	34-11.94	106-48.62	11.50	-0.15	13	16	105	1	0.12	0.4	1.3	B	A1B	1.08	10	13	0.00	0.10	0	0.0	0.0	7	-0.1	0.4	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.6	256	126	P 0	1137	26.20	3.50	3.31	0.06	0.14	1.76	0	0	0.00	0			23	0.2	S 3	28.60	5.90	0.07	0.45	
BAR	17.9	111	123	P 0	1137	26.10	3.40	3.64	-0.08	-0.16	1.76	0	0	0.00	0			23	0.2	S 3	28.40	5.70	-0.47*	-0.05	
LPM	20.6	52	119	P 0	1137	26.50	3.80	4.03	-0.30	0.07	1.80	0	0	0.00	0			19	-0.1	S 2	29.20	6.50	0.04	0.91	
CAR	28.2	166	112	P 0	1137	27.90	5.20	5.21	-0.08	0.08	1.74	0	0	0.00	0			22	0.1	S 2	31.50	8.80	-0.08	0.88	
LAZ	37.8	307	107	P 2	1137	29.60	6.90	6.75	0.22	-0.06	0.84	0	0	0.00	0			19	-0.1	S 3	34.30	11.60	-0.26	0.37	
MAG	39.1	264	106	P 1	1137	29.80	7.10	6.96	0.08	0.06	1.25	0	0	0.00	0			13	-0.5	S 2	34.70	12.00	-0.20	0.79	
SB	42.2	234	105	P 3	1137	30.40	7.70	7.48	0.16	0.06	0.41	0	0	0.00	0			10	-0.8*						

LAT	LON	Z	AVRPS	RMS	DRMS	
14.64	51.87	6.50	0.17	0.96	0.84	
14.64	45.36	6.50	-0.01	0.99		0.87
14.64	51.87	16.50	-0.60	0.94	(0.82)	
14.64	45.36	16.50	-0.63	0.81		(0.69)
11.94	48.62	2.84	0.48	0.20	0.08	
				0.12	0.00	
11.94	48.62	20.16	-0.95	0.34	(0.22)	
9.23	51.87	6.50	0.46	0.98	0.86	
9.23	45.36	6.50	0.33	0.98		0.86
9.23	51.87	16.50	-0.41	0.92	(0.80)	
9.23	45.36	16.50	-0.56	0.81		(0.69)

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IO	KNS	KFH	IPUN	INAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050*	3	1	0	0	1	0.	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	17.50	34-10.03	106-50.55	7.00*	0	1.82	0.00	DOA	2.00	3.99	-14.25	0.00	7.48	75.11	0.00	3.46	1.64	0.00	3.99	-14.25	0.00
2	17.46	34-12.19	106-49.28	7.00	15	0.21	-0.64	BOC	2.00	-0.56	-1.27	4.24	6.60	32.48	9.27	0.22	0.22	1.39	-0.56	-1.27	4.24
3	16.54	34-11.89	106-48.45	11.24	16	0.09	-0.06	AIB	0.50	0.00	0.00	-0.65	0.28	-1.00	0.58	0.00	0.00	0.87	0.00	0.00	-0.65
4	16.53	34-11.89	106-48.45	10.58	16	0.09	0.00	AIB	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.13
5	16.53	34-11.89	106-48.45	10.71	16	0.09	0.00	AIB	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.13
6	16.53	34-11.89	106-48.45	10.84	16	0.09	0.00	AIB	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.13
7	16.50	34-11.89	106-48.45	10.97	16	0.09	0.00	AIB	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.13
8	16.49	34-11.89	106-48.45	11.10*	16	0.09	0.00	A3B	0.50	0.00	-0.08	0.00	-1.00	0.15	-1.00	0.00	0.22	0.00	0.00	0.00	0.00
4	16.49	34-11.89	106-48.45	11.10	16	0.09	0.00	A2R	2.00	-0.03	-0.06	-0.55	0.02	0.07	0.28	0.23	0.24	1.03	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SOU	ADJ	IR	MF	AVR	AAR	DM	AVAR	SDXR	MF	AVRX	SDPR	I
850918	17 1 16.49	34-11.89	106-48.45	11.10	0.28	15	16	79	1	0.09	0.3	1.0	B	AIB	0.13	10	15	0.00	0.08	0	0.0	0.0	10	0.3	0.4	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	PMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.8	257	125	P	17 1	19.80	3.31	3.30	0.06	-0.05	1.46	0	0	0.00	0			38	0.7						
LUY	17.4	332	123	P	17 1	20.70	4.21	3.52	0.56	0.13	1.40	0	0	0.00	0			20	0.0						
BAR	17.7	111	122	P	17 1	20.00	3.51	3.59	-0.08	0.02	1.40	0	0	0.00	0			36	0.7						
NTX	18.9	222	120	P	17 1	20.20	3.71	3.75	-0.02	-0.02	1.05	0	0	0.00	0			14	-0.4*	S	2	23.00	6.51	0.05	0.70
LPM	20.4	51	119	P	17 1	20.05	3.56	3.98	-0.30	-0.11	1.04	0	0	0.00	0			38	0.7						
CAR	28.1	166	112	P	17 1	21.50	5.01	5.16	-0.08	-0.07	1.35	0	0	0.00	0			37	0.7	S	2	25.20	8.71	-0.09	0.07
LAZ	38.0	307	106	P	17 1	23.60	7.11	6.77	0.22	0.12	1.29	0	0	0.00	0			32	0.0	S	2	28.40	11.91	-0.19	0.04
MAG	39.3	264	106	P	17 1	23.60	7.11	6.98	0.08	0.05	1.28	0	0	0.00	0			22	0.1	S	2	28.60	12.11	-0.13	0.04
SB	42.4	234	105	P	17 1	24.20	7.71	7.49	0.16	0.06	0.94	0	0	0.00	0			15	-0.3*						
SMC	50.5	203	102	P	17 1	25.40	8.91	8.83	0.10	-0.02	0.91	0	0	0.00	0			21	0.1	S	3	32.20	15.71	0.24	0.30

LAT	LON	Z	AVRPS	RMS	DRMS
14.59	51.71	6.10	0.37	0.93	0.84
14.59	45.20	6.10	-0.37	0.75	0.60
14.59	51.71	16.10	-0.39	0.87	(0.78)
14.59	45.20	16.10	-1.04	0.67	(0.58)
11.89	48.45	2.44	0.41	0.15	0.05
				0.09	0.00
11.89	48.45	19.76	-0.83	0.29	(0.20)
9.18	51.71	6.10	0.78	0.80	0.71
9.18	45.20	6.10	0.06	0.89	0.80
9.18	51.71	16.10	-0.02	0.72	(0.62)
9.18	45.20	16.10	-0.66	0.77	(0.68)

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-1.6300	2.7900	0.0000	100.0000	6.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	56.12	34-10.03	106-58.55	7.00*	0	2.24	0.00	DOB	2.00	6.32	-15.87	0.00	11.35	96.17	0.00	1.86	1.62	0.00	6.32	-15.87	0.00
2	56.78	34-13.45	106-48.22	7.00	15	0.34	-0.87	COC	2.00	-2.76	0.61	3.16	264.01	22.69	13.30	6.17	0.11	0.86	-2.76	0.61	3.16
3	55.85	34-11.96	106-48.62	10.16	16	0.07	-0.06	A1B	0.50	0.00	0.00	-0.74	0.19	-1.00	1.60	0.00	0.00	0.55	0.00	0.00	-0.74
4	55.85	34-11.96	106-48.62	9.42	16	0.06	0.00	A1B	0.50	-0.07	0.00	0.00	0.20	-1.00	-1.00	0.15	0.02	0.00	0.00	0.00	0.00
4	55.85	34-11.96	106-48.62	9.42	16	0.06	0.00	A2B	2.00	-0.07	0.03	0.00	0.15	0.05	0.00	0.17	0.13	0.65	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	1714 55.85	34-11.96	106-48.62	9.42	-0.10	15	16	80	1	0.06	0.2	0.6	B	A1B	0.74	10	15	0.60	0.05	0	0.0	0.0	8	-5.1	0.4	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LKM	15.6	256	121	P 0	1714	59.60	3.15	3.11	0.06	-0.02	1.71	0	0	0.00	0			26	0.3	S 3	61.20	5.35	-0.14	0.43	
LJY	17.1	333	119	P 3	1714	59.80	3.95	3.34	0.56	0.05	0.41	0	0	0.00	0			14	-0.4						
BAR	18.0	111	118	P 0	1714	59.25	3.40	3.47	-0.08	0.01	1.71	0	0	0.00	0			28	0.4*	S 3	61.75	5.90	0.03	0.43	
WTX	18.8	222	117	P 2	1714	59.40	3.55	3.60	-0.02	-0.03	0.86	0	0	0.00	0			10	-0.8*	S 2	62.20	6.35	0.14	0.86	
LPM	20.6	52	115	P 0	1714	59.45	3.60	3.87	-0.30	0.03	1.71	0	0	0.00	0			21	0.1	S 2	62.00	6.15	-0.03	0.85	
CAR	28.3	166	108	P 0	1715	0.80	4.95	5.09	-0.08	-0.06	1.65	0	0	0.00	0			21	0.1	S 3	1.50	8.65	-0.03	0.41	
LAZ	37.7	307	104	P 0	1715	2.80	6.95	6.65	0.22	0.02	1.58	0	0	0.00	0			18	-0.1	S 3	7.65	11.80	-0.10	0.40	
MAG	39.1	264	104	P 0	1715	2.80	6.95	6.87	0.08	0.00	1.57	0	0	0.00	0			16	-0.3	S 3	7.75	11.50	-0.14	0.39	

LAT	LON	Z	AVRPS	RMS	DRMS	
14.66	51.87	4.42	0.21	0.89	0.83	
14.66	45.36	4.42	-0.13	0.97		0.92
14.66	51.87	14.42	-0.53	0.90	(0.83)	
14.66	45.36	14.42	-0.81	0.86		(0.80)
11.96	48.62	0.76	0.37	0.15	0.09	
				0.06	0.00	
11.96	48.62	18.08	-0.87	0.30	(0.21)	
9.25	51.87	4.42	0.47	0.94	0.93	
9.25	45.36	4.42	0.13	0.93		0.87
9.25	51.87	14.42	-0.77	0.82	(0.76)	
9.25	45.36	14.42	-0.63	0.77		(0.71)

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	43.86	34-10.03	106-58.55	7.00*	0	2.07	0.00	DOR	2.00	6.02	-18.23	0.00	5.56	58.37	0.00	2.55	2.39	0.00	6.02	-18.23	0.00
2	45.36	34-13.28	106-46.69	7.00	16	0.48	-1.06	CUC	2.00	-2.54	2.63	3.47	53.14	69.15	2.60	0.35	0.32	2.08	-2.54	2.63	3.47
3	44.24	34-11.91	106-48.39	10.47	16	0.09	-0.05	A1B	0.50	-0.30	0.25	0.00	1.40	1.24	0.45	0.25	0.22	0.00	-0.30	0.25	0.00
4	44.20	34-11.75	106-48.56	10.47	16	0.08	0.00	A1B	0.50	0.00	0.00	0.97	0.06	-1.00	1.31	0.00	0.00	0.85	0.00	0.00	0.97
5	44.12	34-11.75	106-48.56	11.45	16	0.07	0.00	A3B	0.50	0.00	0.00	0.00	-1.00	0.11	-1.00	0.00	0.19	0.00	0.00	0.00	0.00
5	44.12	34-11.75	106-48.56	11.45	16	0.07	0.00	A2B	2.00	-0.03	0.06	0.07	0.02	0.08	0.01	0.25	0.22	1.00	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	1716	44.12	34-11.75	106-48.56	11.45	-0.38	10	16	104	1	0.07	0.3	1.0	B	A1B	0.97	10	11	0.00	0.05	0	0.0	0.0	6	-0.4	0.2	5

STN	DIST	AZM	AIN	PRMK		HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK		S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.6	258	126	P	0	1716	47.50	3.38	3.30	0.06	0.02	1.68	0	0	0.00	0			14	-0.4	S	3	50.00	5.88	0.06	0.41	
BAR	17.7	110	123	P	0	1716	47.60	3.48	3.61	-0.08	-0.05	1.68	0	0	0.00	0			19	-0.1	S	3	49.70	5.58	-0.53	**0.00	
LPM	20.7	51	119	P	0	1716	47.90	3.78	4.05	-0.30	0.03	1.67	0	0	0.00	0			14	-0.4	S	3	50.70	6.58	0.09	0.41	
CAR	27.9	166	112	P	0	1716	49.25	5.13	5.15	-0.08	0.06	1.60	0	0	0.00	0			17	-0.2	S	2	52.80	8.68	-0.10	0.61	
LAZ	38.0	307	107	P	1	1716	51.10	6.98	6.79	0.22	-0.03	1.16	0	0	0.00	0			12	-0.6	S	3	55.90	11.78	-0.30	0.19	
MAG	39.1	265	106	P	3	1716	51.20	7.08	6.97	0.08	0.03	0.38	0	0	0.00	0			13	-0.5							

LAT	LON	Z	AVRPS	RMS	DRMS	
14.45	51.81	6.45	0.06	0.98	0.91	
14.45	45.30	6.45	0.09	0.85		0.78
14.45	51.81	16.45	-0.78	0.94	(0.87)	
14.45	45.30	16.45	-0.75	0.75		(0.68)
11.75	48.56	2.79	0.47	0.15	0.08	
				0.07	0.00	
11.75	48.56	20.11	-0.96	0.31	(0.24)	
9.04	51.81	6.45	0.30	0.88	0.80	
9.04	45.30	6.45	0.46	1.00		0.92
9.04	51.81	16.45	-0.55	0.74	(0.67)	
9.04	45.30	16.45	-0.47	0.81		(0.74)

DATE AND TIME OF RUN 3/13/86 1501 pjs

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPHN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	31.72	34-10.03	106-48.55	7.00*	0	2.05	0.00	DOB	2.00	0.00	-15.06	0.00	1.91	78.55	-1.00	0.00	1.70	0.00	0.00	-15.06	0.00
2	32.42	34-10.03	106-48.74	7.00	15	0.33	-0.51	COC	2.00	2.90	0.00	0.00	81.32	-1.00	0.05	0.32	0.00	0.00	2.90	0.00	0.00
3	31.74	34-11.60	106-48.74	7.00	15	0.09	-0.02	AIC	0.50	0.00	0.00	-2.07	0.09	-1.00	1.36	0.00	0.00	1.77	0.00	0.00	-2.07
4	31.82	34-11.60	106-48.74	4.93	15	0.09	0.00	A3C	0.50	0.00	-0.08	0.00	-1.00	0.12	-1.00	0.00	0.22	0.00	0.00	0.00	0.00
								B2C	2.00	-0.07	-0.07	-0.08	0.03	0.05	0.00	0.36	0.30	3.42	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SOD	ADJ	TH	DR	AVR	AAR	RR	AVRX	SDRX	RE	AVRZ	SDRZ	I
850918	1733 31.82	34-11.60	106-48.74	4.93	-0.25	9	15	93	1	0.09	0.5	3.4	C	BIC	2.07	10	9	0.00	0.07	0	0.0	0.0	7	-0.3	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PMX	CALX	K	AMAG	RMK	FMP	FMAG	SMAK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.2	258	108	P	1733	34.70	2.88	2.74	0.06	0.09	1.00	0	0	0.00	0			18	-0.1						
LJY	17.6	334	106	P	1733	35.50	3.68	3.13	0.56	-0.01	1.00	0	0	0.00	0			11	-0.7						
BAR	17.9	109	105	P	1733	34.90	3.08	3.18	-0.08	-0.01	1.00	0	0	0.00	0			19	-0.1						
LPM	21.1	51	103	P	1733	35.20	3.38	3.71	-0.36	-0.02	0.99	0	0	0.00	0			21	0.1	S	2 37.70	5.88	-0.02	0.06	
CAR	28.7	165	100	P	1733	36.50	4.68	4.80	-0.08	-0.04	1.29	0	0	0.00	0			19	-0.1						
LAZ	30.0	308	97	P	1733	38.75	6.93	6.55	0.22	0.17	1.23	0	0	0.00	0			18	-0.1	S	2 42.40	11.56	-0.13	0.01	
MAG	34.8	265	97	P	1733	38.50	6.68	6.69	0.08	-0.09	1.22	0	0	0.00	0			11	-0.7						

LAT	LON	Z	AVRPS	RMS	DRMS
14.30	52.00	0.00	0.33	0.99	0.91
14.30	45.49	0.00	-0.05	0.85	(0.88)
14.30	52.00	9.93	-0.07	0.96	0.76
14.30	45.49	9.93	-0.41	0.72	(0.84)
11.60	48.74	0.00	0.09	0.09	0.00
				0.09	0.00
11.60	48.74	13.59	-0.57	0.20	(0.11)
8.89	52.00	0.00	-0.01	0.82	0.74
8.89	45.49	0.00	-0.29	0.92	(0.71)
8.89	52.00	9.93	-0.33	0.80	0.84
8.89	45.49	9.93	-0.64	0.83	(0.75)

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	5.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XMEAR	XFAR	POS	IO	KMS	KFN	IpUN	INAC	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	7.04	34-10.03	106-58.55	7.00*	0	1.71	0.00	DQA	2.00	3.72	-14.34	0.00	7.84	80.63	0.00	1.33	1.00	0.00	3.72	-14.34	0.00
2	7.06	34-12.04	106-49.21	7.00	15	0.18	-0.58	HOC	2.00	-0.54	-1.19	4.24	13.25	56.47	18.52	0.15	0.16	0.98	-0.54	-1.19	4.24
3	7.13	34-11.75	106-48.44	11.24	16	0.07	-0.05	A1B	0.50	0.00	0.00	-0.46	-1.00	0.31	0.53	0.00	0.00	0.00	0.00	0.00	-0.48
4	7.11	34-11.75	106-48.44	10.76	16	0.06	0.00	A3B	0.50	0.00	-0.09	0.00	-1.00	0.33	-1.00	0.00	0.16	0.00	0.00	0.00	0.00
4	7.11	34-11.75	106-48.44	10.76	16	0.06	0.00	A2B	2.00	-0.01	-0.09	0.07	0.00	0.29	0.01	0.16	0.17	0.74	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	N	RMS	ERH	ERZ	Q	SOD	ADJ	IM	IR	AVR	AAR	RR	AVAR	SLAR	AT	AVFR	SDFR	I
850918	18 2 7.11	34-11.75	106-48.44	10.76	0.59	16	16	75	1	0.06	0.2	0.7	B	A1B	0.48	10	16	0.00	0.05	0	0.0	0.0	11	0.0	0.3	4

STN	DIST	AZM	AIN	PHMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SMAG	S-SEC	TSOBS	S-RES	---T	DT
LEM	15.7	258	124	P	0	18	2	10.40	3.29	3.26	0.06	-0.03	1.41	0	0	0.00	0			44	1.0					
BAR	17.6	110	121	P	0	18	2	10.50	3.39	3.52	-0.08	-0.05	1.44	0	0	0.00	0			47	1.0					
LJY	17.6	332	121	P	0	18	2	11.30	4.19	3.55	0.56	0.10	1.44	0	0	0.00	0			27	0.4					
WTX	18.7	223	120	P	0	18	2	10.70	3.59	3.69	-0.02	-0.08	1.44	0	0	0.00	0			24	0.2	S	3	13.00	6.49	0.13	0.36
LPN	20.6	151	118	P	0	18	2	10.75	3.64	3.97	-0.30	-0.03	1.44	0	0	0.00	0			41	0.9					
CAR	27.8	166	111	P	0	18	2	12.10	4.99	5.10	-0.08	-0.03	1.39	0	0	0.00	0			40	0.8	S	3	15.90	8.79	0.10	0.35
LAZ	38.2	307	106	P	0	18	2	14.10	6.99	6.78	0.22	-0.01	1.33	0	0	0.00	0			42	0.9	S	3	19.10	11.99	-0.13	0.33
MAG	39.3	268	105	P	0	18	2	14.20	7.09	6.97	0.08	0.04	1.32	0	0	0.00	0			31	0.5	S	3	19.30	12.19	-0.02	0.33
BD	42.3	235	104	P	0	18	2	14.70	7.59	7.45	0.16	-0.02	1.30	0	0	0.00	0			22	0.1						
SHC	50.2	203	102	P	0	18	2	16.00	8.89	8.78	-0.10	0.01	1.25	0	0	0.00	0			24	0.2	S	3	22.70	15.59	0.20	0.31
HLM	75.5	336	98	P	2	18	2	20.10	12.99	13.00	-0.00	0.07	0.55	0	0	0.00	0			28	0.4						

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STK	8.2	83.2	59.0	26.6
BG2	5.3	283.3	42.2	18.7

LAT	LON	Z	AVRPS	RMS
14.45	51.69	5.76	0.33	0.84
14.45	45.18	5.76	-0.30	0.77
14.45	51.69	15.76	-0.36	0.79
14.45	45.18	15.76	-0.92	0.67
11.75	48.44	2.10	0.37	0.14
			0.00	0.00
11.75	48.44	19.42	-0.77	0.25
9.05	51.69	5.76	0.67	0.82
9.05	45.18	5.76	0.02	0.80
9.05	51.69	15.76	-0.06	0.75
9.05	45.18	15.76	-0.63	0.69

DRMS

0.77
(0.73)

0.71
(0.60)

0.07
0.00
(0.19)

0.75
(0.69)

0.74
(0.62)

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 DATE AND TIME OF RUN  3/13/86 1501 pjs

                                                                                                                     85/ 9/18      18: 3
            TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8)  TEST(9) TEST(10) TEST(11) TEST(12) TEST(13)
RESET TO    0.1000  10.0000   2.0000   0.0500   7.0000   4.0000  -3.6300   2.7900   0.0000 160.0000   8.9000   0.5000   5.0000

VELOCITY    DEPTH    ZTR XNEAR XFAR    POS        IQ  KMS  KFM IPUN IMAG   IR  IPRN CODE
 5.850      0.000     7.  20.  250. 1.7320508     3    1    0    0    1     0    1  1011

                                                                  ADJUSTMENTS (KM)   PARTIAL F-VALUES   STANDARD ERRORS   ADJUSTMENTS TAKEN
 I  ORIG  LAT N    LONG W    DEPTH   DM   RMS AVRPS SKD    CF     DLAT  DLON    DZ   DLAT  DLON    DZ   DLAT  DLON    DZ   DLAT  DLON    DZ
 1 40.99 34-10.03 106-58.55  7.00*   0  1.44  0.00 D0R   2.00    3.40-14.48  0.00   3.04 60.32  0.00   1.95  1.78  0.00   3.40-14.48  0.00
 2 41.36 34-11.87 106-49.13  7.00   15  0.10 -0.60 A0C   2.00    0.00 -0.35  0.00  -1.00  2.23  0.32   0.00  0.24  0.00   0.00 -0.35  0.00
 3 40.74 34-11.87 106-48.90  7.00   15  0.09  0.00 B3C   0.50    0.00  0.00  1.25  -1.00 -1.00  0.36   0.00  0.00  2.08   0.00  0.00  0.00
 3 40.74 34-11.87 106-48.90  7.00   15  0.09  0.00 B2C   2.00    0.11 -0.10  1.34   0.13  0.13  0.31   0.31  0.29  2.42   0.00  0.00  0.00

 DATE    ORIGIN     LAT N     LONG W      DEPTH    MAG NO DM GAP M  RMS   ERH  ERZ Q SQD  ADJ IN NR  AVR  AAR NM AVXM SDXM NF AVFM SDFM I
850918 18 3 40.74 34-11.87 106-48.90     7.00   -0.33 10 15  92 1 0.09   0.4  2.4 C B1C 0.35 10 10 0.00 0.07  0  0.0  0.0  7 -0.3  0.3 3

 STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLY/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES  S-WT    DT
 LEM  15.1 256 115 P 0 18 3 43.60  2.86  2.85  0.06 -0.05  1.43  0   0  0.00 0            19-0.1
 LJY  17.1 334 112 P 1 18 3 44.60  3.86  3.16  0.56  0.14  1.07  0   0  0.00 0             9-1.0*
 BAR  18.3 110 111 P 1 18 3 43.90  3.16  3.35 -0.08 -0.11  1.07  0   0  0.00 0            19-0.1
 LPM  21.0  53 108 P 1 18 3 44.20  3.46  3.78 -0.30 -0.02  1.07  0   0  0.00 0            22-0.1
 CAR  28.2 165 104 P 0 18 3 45.60  4.86  4.97 -0.08 -0.03  1.38  0   0  0.00 0            16-0.3   S 2 49.40  8.66  0.19  0.69
 LAZ  37.5 307 101 P 1 18 3 47.50  6.76  6.52  0.22  0.02  0.99  0   0  0.00 0            13-0.5   S 2 52.30 11.56 -0.11  0.66
 MAG  38.6 264 100 P 0 18 3 47.50  6.76  6.71  0.08 -0.03  1.31  0   0  0.00 0            13-0.5   S 3 52.65 11.91  0.15  0.33

      LAT        LON          Z      AVRPS       RMS                  DRMS

     14.57      52.15       2.00      0.32      1.07            0.98
     14.57      45.64       2.00     -0.27      0.71                              0.62
     14.57      52.15      12.00     -0.22      1.01             (  0.92)
     14.57      45.64      12.00     -0.75      0.63                               (  0.54)

     11.87      48.90       0.00      0.18      0.11                      0.02
                                                0.09                        0.00
     11.87      48.90      15.66     -0.68      0.10                       (  0.08)

      9.16      52.15       2.00      0.36      0.75            0.66
      9.16      45.64       2.00     -0.12      1.07                              0.98
      9.16      52.15      12.00     -0.18      0.69             (  0.59)
      9.16      45.64      12.00     -0.61      0.95                               (  0.86)
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DATE AND TIME OF RUN 3/13/86 1501 pjs

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	41.68	34-10.03	106-58.55	7.00*	0	2.19	0.00	D0R	2.00	4.22	-16.28	0.00	10.79	188.24	0.00	1.28	1.19	0.00	4.22	-16.28	0.00
2	42.84	34-12.31	106-47.96	7.00	17	0.21	-0.74	H0C	2.00	-0.66	1.02	0.00	3.91	13.40	0.06	0.33	0.28	0.00	-0.66	1.02	0.00
3	42.13	34-11.96	106-48.62	7.00	16	0.13	0.00	A3C	0.50	-0.12	0.00	0.00	0.18	-1.03	-1.00	0.29	0.00	0.00	0.00	0.00	0.00
3	42.13	34-11.96	106-48.62	7.00	16	0.13	0.00	B2C	2.00	-0.11	-0.02	0.54	0.11	0.00	0.05	0.32	0.31	2.41	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	1820	42.13	34-11.96	106-48.62	7.00	-0.75	14	16	90	1	0.13	0.4	2.4	C	B1C	1.22	10	15	0.00	0.11	0	0.0	0.0	8	-0.7	0.4	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.6	256	114	P 0	1820	45.20	3.07	2.92	0.06	0.09	2.06	0	0	0.00	0			15-0.3						
LJY	17.1	333	112	P 3	1820	45.50	3.37	3.16	0.56	-0.36	0.47	0	0	0.00	0			6-1.54	S 3	47.70	5.57	-0.68	*0.00	
BAR	18.0	111	111	P 0	1820	45.40	3.27	3.30	-0.08	0.05	2.08	0	0	0.00	0			15-0.3	S 3	47.50	5.37	-0.20	0.52	
LPH	20.6	52	109	P 2	1820	45.60	3.47	3.71	-0.30	0.05	1.04	0	0	0.00	0			14-0.4	S 2	46.20	6.07	0.16	1.02	
CAR	28.3	166	104	P 1	1820	47.10	4.97	4.98	-0.08	0.07	1.51	0	0	0.00	0			10-0.8	S 3	50.50	8.37	-0.11	0.50	
CAR	28.3	166	104	P 2	1820	46.90	4.77	4.98	-0.08	-0.13	1.00	0	0	0.00	0			11-0.7	S 3	50.40	8.27	-0.21	0.49	
LAZ	37.7	307	101	P 2	1820	48.80	6.67	6.56	0.22	-0.11	0.96	0	0	0.00	0			10-0.8	S 2	53.80	11.67	-0.07	0.96	
MAG	39.1	264	100	P 2	1820	49.00	6.87	6.79	0.08	0.00	0.96	0	0	0.00	0			9-1.0	S 3	54.30	12.17	0.27	0.44	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	8.5	86.1	58.5	24.6
DM	10.2	178.7	90.4	13.0
RSD	13.5	328.5	26.1	4.2
SAD	9.9	315.4	26.1	8.8
SAH	10.4	302.7	42.6	3.9
ALA	11.6	305.4	42.6	1.2
RC2	4.9	279.8	42.6	15.8

LAT	LON	Z	AVRPS	RMS	DRMS	
14.66	51.88	2.00	0.03	1.11	0.98	
14.66	45.37	2.00	-0.17	0.86		0.73
14.66	51.88	12.00	-0.56	1.05	(0.92)	
14.66	45.37	12.00	-0.72	0.74		(0.61)
11.96	48.62	0.00	0.21	0.16	0.03	
				0.13	0.00	
11.96	48.62	15.66	-0.75	0.26	(0.13)	
9.25	51.88	2.00	0.16	0.93	0.80	
9.25	45.37	2.00	0.17	1.19		1.06
9.25	51.88	12.00	-0.41	0.92	(0.80)	
9.25	45.37	12.00	-0.42	1.03		(0.91)

DATE AND TIME OF RUN 3/13/86 1501 pjs

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KNS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	15.12	34-10.03	106-58.55	7.00*	0	1.07	0.00	DOA	2.00	3.72	-14.58	0.00	6.37	60.73	0.00	1.48	1.87	0.00	3.72	-14.58	0.00
2	15.19	34-12.04	106-49.06	7.00	15	0.17	-0.01	DOC	2.00	-0.69	-0.91	2.97	6.74	10.75	2.83	0.27	0.28	1.76	-0.69	-0.91	2.97
3	14.40	34-11.67	106-48.46	9.97	16	0.07	-0.02	A0B	2.00	-0.25	0.00	0.00	2.06	1.72	-1.00	0.17	0.00	0.00	-0.25	0.00	0.00
4	14.39	34-11.54	106-48.46	9.97	16	0.06	0.00	A1B	0.50	0.00	-0.21	0.00	0.17	1.97	-1.00	0.00	0.15	0.00	0.00	-0.21	0.00
5	14.38	34-11.54	106-48.33	9.97	16	0.05	0.00	A3B	0.50	-0.04	0.00	0.00	0.07	-1.00	-1.00	0.15	0.00	0.00	0.00	0.00	0.00
5	14.38	34-11.54	106-48.33	9.97	16	0.05	0.00	A2B	2.00	-0.04	-0.01	-0.05	0.06	0.00	0.00	0.17	0.18	0.85	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	1822	14.38	34-11.54	106-48.33	9.97	0.79	13	16	74	1	0.05	0.2	0.8	B	A1B	0.21	10	14	0.00	0.04	0	0.0	0.0	11	0.8	0.3	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEN	15.8	259	122	P 0	1822	17.60	3.22	3.20	0.06	-0.03	1.31	0	0	0.00	0			50	1.1						
BAR	17.3	109	120	P 0	1822	17.70	3.32	3.41	-0.08	-0.01	1.31	0	0	0.00	0			55	1.2						
LJY	18.0	333	119	P 0	1822	18.50	4.12	3.52	0.56	0.04	1.31	0	0	0.00	0			29	0.5						
WTX	18.6	224	118	P 0	1822	17.90	3.52	3.60	-0.02	-0.06	1.31	0	0	0.00	0			38	0.8	S 3	20.90	6.52	0.32	0.08	
LPM	20.7	50	116	P 0	1822	18.00	3.62	3.93	-0.30	0.00	1.31	0	0	0.00	0			49	1.1						
CAR	27.4	166	110	P 0	1822	19.30	4.92	4.98	-0.08	0.02	1.27	0	0	0.00	0			45	1.0						
LAZ	38.5	307	104	P 0	1822	21.40	7.02	6.81	0.22	0.00	1.21	0	0	0.00	0			40	0.8	S 3	26.00	11.62	-0.55	0.00	
MAG	39.5	265	104	P 0	1822	21.40	7.02	6.96	0.08	-0.01	1.20	0	0	0.00	0			33	0.6						
SB	42.2	235	103	P 0	1822	22.00	7.62	7.41	0.16	0.06	1.19	0	0	0.00	0			27	0.4						
SMC	49.9	203	101	P 1	1822	23.10	8.72	8.71	0.10	-0.09	0.85	0	0	0.00	0			32	0.6	S 3	29.90	15.52	0.27	0.14	
MLM	75.7	336	97	P 2	1822	27.40	13.02	13.05	-0.08	0.05	0.50	0	0	0.00	0			35	0.7						

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	8.1	80.4	59.1	28.5
POL	15.2	264.2	6.0	1.0
DM	9.4	181.3	37.1	15.2
BSD	14.4	328.5	25.4	4.0
SAD	10.8	316.6	25.4	9.5
SAH	11.2	304.8	41.9	2.3
ALA	12.5	307.2	25.4	0.0
BG2	5.6	286.9	41.9	20.2

LAT	LON	Z	AVRPS	RMS	DRMS		
14.24	51.58	4.97	0.35	0.78	0.72		
14.24	45.07	4.97	-0.28	0.78		0.72	
14.24	51.58	14.97	-0.31	0.74	(0.68)		
14.24	45.07	14.97	-0.86	0.60		(0.61)	
11.54	48.33	1.31	0.32	0.13			0.07
				0.05			0.00
11.54	48.33	18.63	-0.73	0.24			(0.19)
8.83	51.58	4.97	0.56	0.83	0.77		
8.83	45.07	4.97	-0.02	0.79		0.73	
8.83	51.58	14.97	-0.10	0.77	(0.72)		

DATE AND TIME OF RUN 3/13/86 1501 pjs

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	4.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	JQ	KNS	KFM	IpUN	IHAC	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	3.81	34-10.03	106-58.55	7.00*	0	1.87	0.00	DOA	2.00	3.53	-14.30	0.00	7.25	107.26	0.00	1.31	1.38	0.00	3.53	-14.30	0.00
2	3.84	34-11.94	106-48.24	7.00	15	0.17	-0.54	BUC	2.00	0.00	-0.80	3.28	0.97	7.54	2.14	0.00	0.29	2.25	0.00	-0.80	3.28
3	3.10	34-11.94	106-48.72	10.28	15	0.11	-0.02	AOB	2.00	-0.49	0.00	0.00	4.04	0.93	-1.00	0.24	0.00	0.00	-0.49	0.00	0.00
4	3.10	34-11.68	106-48.72	10.28	15	0.09	0.00	AJB	0.50	0.00	-0.21	0.00	-1.00	0.94	0.00	0.00	0.21	0.00	0.00	-0.21	0.00
5	3.09	34-11.68	106-48.58	10.28	15	0.09	0.00	AJB	0.50	0.00	0.00	-0.30	-1.00	-1.00	0.07	0.00	0.00	1.17	0.00	0.00	0.00
	3.09	34-11.68	106-48.58	10.28	15	0.09	0.00	A2B	2.00	-0.05	0.01	-0.34	0.05	0.00	0.06	0.26	0.25	1.35	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	AR	AVR	AAR	NR	AVXR	SDXR	SF	AVFM	SDFM	I
850918	1823	3.09	34-11.68	106-48.58	10.28	0.01	14	15	75	1	0.09	0.4	1.3	B	AIB	0.21	10	15	0.00	0.07	0	0.0	0.0	11	0.0	0.0	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PHX	CALX	K	XMAG	RMK	PHT	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	QT
LFM	15.5	258	124	P	1823	6.40	3.31	3.18	0.06	0.07	1.22	0	0	0.00	0			28	0.4						
LIY	17.6	333	120	P	1823	7.30	4.21	3.49	0.56	-0.16	1.19	0	0	0.00	0			17	-0.2						
BAK	17.7	109	120	P	1823	6.50	3.41	3.50	-0.08	-0.02	1.65	0	0	0.00	0			32	0.6*						
WTX	18.5	223	119	P	1823	8.60	5.51	3.62	-0.02	-0.09	1.65	0	0	0.00	0			15	-0.3						
LPH	20.8	51	116	P	1823	6.70	3.61	3.97	-0.30	-0.06	1.64	0	0	0.00	0			28	0.1						
CAR	27.7	169	110	P	1823	8.10	5.01	5.09	-0.08	0.03	0.80	0	0	0.00	0			24	0.2	S	3	11.70	8.61	-0.01	0.10
LAZ	38.1	307	105	P	1823	10.00	6.91	6.74	0.22	-0.05	0.76	0	0	0.00	0			21	0.1	S	3	14.40	11.31	-0.75	0.00
MAG	39.1	265	105	P	1823	10.10	7.01	6.91	0.08	0.02	0.76	0	0	0.00	0			16	-0.3	S	2	15.00	11.91	-0.40	0.72
SB	42.0	235	104	P	1823	10.70	7.61	7.39	0.16	0.06	1.49	0	0	0.00	0			16	-0.1						
SNC	50.0	203	102	P	1823	11.90	8.81	8.73	0.10	-0.02	1.08	0	0	0.00	0			15	-0.3	S	1	18.00	15.51	0.21	0.33
MLH	75.3	336	98	P	1823	16.10	13.01	12.99	-0.08	0.09	0.31	0	0	0.00	0			10	-0.1						

LAT	LON	Z	AVRPS	RMS	PRMS
14.38	51.84	5.28	0.28	0.82	0.73
14.38	45.33	5.28	-0.29	0.87	(0.65)
14.38	51.84	15.28	-0.39	0.74	0.78
14.38	45.33	15.28	-0.93	0.73	(0.64)
11.68	48.58	1.62	0.36	0.15	0.06
11.68	48.58	10.94	-0.77	0.05	0.00
				0.25	(0.16)
8.97	51.84	5.28	0.64	0.87	0.78
8.97	45.33	5.28	-0.06	0.83	(0.75)
8.97	51.84	15.28	-0.08	0.84	0.74
8.97	45.33	15.28	-0.58	0.71	(0.62)

DATE AND TIME OF RUN 3/13/86 1501 p1s

85/ 9/18 18:30

RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	[illegible]

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	59.44	34-10.03	106-58.55	7.00*	0	1.96	0.00	D0A	2.00	2.93	-14.73	0.00	4.2	105.72	0.00	1.42	1.33	0.00	2.93	-14.73	0.00
2	59.81	34-11.62	106-48.96	7.00	15	0.16	-0.57	B0C	2.00	0.00	0.00	-3.02	1.32	-1.00	2.32	0.00	0.00	1.98	0.00	0.00	-3.02
3	59.39	34-11.62	106-48.96	3.98	15	0.15	-0.04	A1C	0.50	-0.37	0.00	0.00	1.55	0.43	-1.00	0.30	0.00	0.00	-0.37	0.00	0.00
4	59.36	34-11.42	106-48.96	3.98	15	0.14	0.00	A3C	0.50	0.00	-0.20	0.00	-1.00	0.48	-1.00	0.00	0.29	0.00	0.00	0.00	0.00
4	59.36	34-11.42	106-48.96	3.98	15	0.14	0.00	B2C	2.00	-0.02	-0.16	-1.49	0.00	0.24	0.21	0.32	0.33	3.29	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	1830	59.36	34-11.42	106-48.96	3.98	0.24	13	15	75	1	0.14	0.5	3.3	C	B1C	0.37	10	14	0.00	0.12	0	0.0	0.0	9	0.2	0.4	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	14.8	259	105	P 1	1831	2.30	2.94	2.63	0.06	0.26	1.11	0	0	0.00	0			47	1.0*						
WTX	17.8	222	103	P 4	1831	2.60	3.24	3.11	-0.02	0.15	0.00	0	0	0.00	0			22	0.1	S 3	4.50	5.14	-0.21	0.41	
LJY	17.8	336	103	P 3	1831	3.00	3.64	3.12	0.56	-0.04	0.45	0	0	0.00	0			16	-0.3*	S 3	5.50	6.14	-0.23	0.39	
BAR	18.1	107	102	P 1	1831	2.30	2.94	3.17	-0.08	-0.15	1.31	0	0	0.00	0			30	0.5						
LPH	21.6	51	100	P 1	1831	2.90	3.54	3.75	-0.30	0.09	1.33	0	0	0.00	0			30	0.5	S 3	5.30	5.94	-0.04	0.45	
CAN	27.4	164	98	P 0	1831	3.90	4.54	4.74	-0.08	-0.11	1.73	0	0	0.00	0			27	0.4	S 2	7.50	8.14	0.06	0.67	
LAZ	37.9	308	96	P 0	1831	6.20	6.84	6.52	0.22	0.11	1.65	0	0	0.00	0			24	0.2	S 3	10.80	11.41	-0.23	0.37	
MAG	38.5	265	96	P 0	1831	6.00	6.64	6.61	0.08	-0.05	1.66	0	0	0.00	0			17	-0.2						
SD	41.3	235	96	P 1	1831	6.70	7.34	7.08	0.16	0.10	1.22	0	0	0.00	0			18	-0.1						

LAT	LON	Z	AVRPS	RMS	DRES
14.12	52.22	0.00	0.10	1.04	0.91
14.12	45.71	0.00	-0.37	0.82	0.68
14.12	52.22	8.98	-0.21	1.01	(0.88)
14.12	45.71	8.98	-0.63	0.75	(0.62)
11.42	48.96	0.00	0.06	0.13	-0.01
				0.14	0.00
11.42	48.96	12.64	-0.50	0.24	(0.11)
8.71	52.22	0.00	0.28	0.91	0.78
8.71	45.71	0.00	-0.14	0.96	0.83
8.71	52.22	8.98	-0.03	0.87	(0.73)
8.71	45.71	8.98	-0.43	0.89	(0.76)

DATE AND TIME OF RUN 3/13/86 1501 pjs

RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	3.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	22.81	34-10.03	106-58.55	7.00*	0	2.60	0.00	D0R	2.00	3.42	-17.00	0.00	2.39	122.22	0.00	2.22	1.54	0.00	3.42	-17.00	0.00
2	23.78	34-11.88	106-47.49	7.00	16	0.29	-0.73	B0C	2.00	-0.81	1.92	-6.79	5.42	46.99	13.41	0.35	0.28	1.86	-0.81	1.92	-6.79
3	23.48	34-11.44	106-48.74	0.21	15	0.11	-0.19	A1C	0.50	0.29	-0.15	0.00	0.93	0.64	0.00	0.30	0.19	0.00	0.29	-0.15	0.00
4	23.30	34-11.60	106-48.64	0.21	15	0.10	0.00	A3C	0.50	0.00	0.02	0.00	-1.00	0.01	-1.00	0.00	0.18	0.00	0.00	0.00	0.00
4	23.30	34-11.60	106-48.64	0.21	15	0.10	0.00	C2C	2.00	0.01	0.02	0.00	0.00	0.01	0.00	0.31	0.20	119.83	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	19 9 23.30	34-11.60	106-48.64	0.21	-0.60	12	15	103	1	0.10	0.41	19.8	C	C1C	0.33	10	12	0.00	0.07	0	0.0	0.0	7	-0.6	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.4	258	90	P 0	19 9	26.10	2.80	2.63	0.06	0.11	1.96	0	0	0.00	0			16	-0.3	S 3	27.60	4.50	-0.16	0.48	
BAR	17.8	109	90	P 0	19 9	26.30	3.00	3.04	-0.08	0.04	1.96	0	0	0.00	0			16	-0.3	S 2	28.00	4.70	-0.42	0.24	
LPM	21.0	51	90	P 1	19 9	26.60	3.30	3.59	-0.10	0.01	1.47	0	0	0.00	0			15	-0.3	S 2	29.00	5.70	0.01	0.98	
CAR	27.6	165	90	P 1	19 9	27.90	4.60	4.72	-0.08	-0.04	1.42	0	0	0.00	0			13	-0.5						
LAZ	38.1	307	90	P 2	19 9	30.10	6.80	6.51	0.22	0.07	0.89	0	0	0.00	0			11	-0.7	S 2	34.80	11.50	-0.16	0.88	
MAG	39.0	265	90	P 3	19 9	30.10	6.80	6.66	0.08	0.06	0.45	0	0	0.00	0			9	-1.0	S 3	34.90	11.60	-0.08	0.45	
SB	41.9	235	90	P 2	19 9	30.60	7.30	7.15	0.16	-0.01	0.89	0	0	0.00	0			8	-1.1*						

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	8.6	81.7	57.8	27.0
BG2	5.1	287.2	42.4	20.2

LAT	LON	Z	AVRPS	RMS	DRMS		
14.31	51.89	0.00	-0.11	1.07	0.97		
14.31	45.38	0.00	-0.21	1.00		0.90	
14.31	51.89	5.21	-0.23	1.06	(0.97)		
14.31	45.38	5.21	-0.33	0.90		(0.86)	
11.60	48.64	0.00	0.00	0.10			0.00
				0.10			0.00
11.60	48.64	8.87	-0.34	0.19			(0.09)
8.90	51.89	0.00	-0.06	1.07	0.97		
8.90	45.38	0.00	-0.12	1.01		0.92	
8.90	51.89	5.21	-0.18	1.05	(0.95)		
8.90	45.38	5.21	-0.25	0.98		(0.88)	

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DATE AND TIME OF RUN  3/13/86 1501 pjs

                                                                                                          85/ 9/18     1916
            TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8) TEST(9) TEST(10) TEST(11) TEST(12) TEST(13)
RESET TO     0.1000  10.0000   2.0000   0.0500   7.0000   4.0000  -3.6300   2.7900  0.0000 100.0000   [illegible]   0.5000   [illegible]

VELOCITY    DEPTH    ZTR XNEAR XFAR    POS        IQ  KMS  KFM IPUN IMAG   IR  IPRN CODE
 5.850      0.000     7.   20.  250. 1.7320508     3    1    0    0    1    0     1  1011

                                                                     ADJUSTMENTS (KM)    PARTIAL F-VALUES    STANDARD ERRORS    ADJUSTMENTS TAKEN
  I  ORIG   LAT N     LONG W     DEPTH   DM   RMS  AVRPS SKD    CF    DLAT  DLON    DZ   DLAT   DLON    DZ   DLAT  DLON    DZ   DLAT  DLON    DZ
  1 15.42  34-10.03 106-58.55   7.00*    0  2.21   0.00 DOA   2.00   5.05-15.26   0.00 20.86204.66  0.00   1.11  1.07  0.00   5.05-15.26  0.00
  2 15.91  34-12.76 106-48.62   7.00    16  0.19  -0.67 B1C   0.50  -0.68  0.61 -4.33   3.55  3.12  3.17   0.36  0.34  2.43  -0.68  [illegible] -4.33
  3 15.51  34-12.39 106-49.01   2.67    15  0.16  -0.07 B3C   0.50   0.00  0.00 -3.07  -1.00 -1.00  0.43   0.00  0.00  9.06   0.00  [illegible]  0.00
  3 15.44  34-12.39 106-49.01   2.67    15  0.16   0.00 C2C   2.00  -0.02 -0.02 -2.92   0.00  0.00  0.28   0.33  0.31  5.54   0.00  [illegible]  0.00

  DATE     ORIGIN    LAT N     LONG W      DEPTH     MAG NO DM GAP M  RMS   ERH   ERZ Q SQD  ADJ IN NR  AVR  AAR NM AVXM SDXM NF AVFM SDFM I
850918 1916 15.44 34-12.39 106-49.01     2.67   -0.15 16 15  87 1 0.16   0.5   5.5 C CIC 4.43 16 17 0.00 0.12  0  0.0  0.0 16 [illegible]  0.5 3

  STN   DIST AZM AIN PRMK HRMN P-SEC  TPOBS  TPCAL DLY/H1 P-RES  P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES  S-WT    DT
  LEM   15.2 253 100  P 2 1916 18.30   2.86   2.64   0.06  0.17  0.92  0   0  0.00 0               34 0.64
  LJY   16.1 333  99  P 2 1916 18.50   3.06   2.80   0.56 -0.29  0.83  0   0  0.00 0               17-0.6   S 3 20.60  5.30 -0.45  [illegible].20
  BAR   18.8 112  98  P 1 1916 18.50   3.06   3.25  -0.08 -0.11  1.40  0   0  0.00 0               26 0.3   S 3 21.00  5.56  0.07  [illegible].47
  WTX   19.1 219  98  P 1 1916 18.80   3.36   3.29  -0.02  0.09  1.42  0   0  0.00 0               22 0.1   S 3 20.90  5.46 -0.20  [illegible].15
  LPM   20.6  55  97  P 0 1916 18.60   3.16   3.54  -0.30 -0.08  1.89  0   0  0.00 0               27 0.1   S 2 21.20  5.76  0.15  [illegible].93
  CAR   29.2 165  95  P 2 1916 20.30   4.86   5.01  -0.08 -0.07  0.91  0   0  0.00 0               18-0.1   S 2 24.00  8.56  0.02  0.91
  LAZ   36.8 306  94  P 0 1916 22.30   6.86   6.30   0.22  0.34  1.35  0   0  0.00 0               20 0.0   S 1 26.70 11.26 -0.03  [illegible].31
  MAG   38.6 263  94  P 0 1916 22.10   6.66   6.61   0.08 -0.02  1.74  0   0  0.00 0               16-0.3   S 3 27.10 11.66  0.08  [illegible].43
  SB    42.3 333  94  P 2 1916 22.70   7.26   7.24   0.16 -0.13  0.84  0   0  0.00 0               13-0.5
  SMC   51.0 202  93  P 4 1916 23.80   8.36   8.73   0.10 -0.47  0.00  0   0  0.00 0                0-1.1*

      LAT         LON          Z      AVRPS        RMS                  DRMS

     15.10       52.27       0.00      0.13        1.11            0.95
     15.10       45.76       0.00     -0.34        0.91                               0.76
     15.10       52.27       7.67     -0.13        1.10             (   0.94)
     15.10       45.76       7.67     -0.56        0.86                                (   0.70)

     12.39       49.01   .   0.00      0.03        0.19                       0.00
                                                   0.16                         0.00
     12.39       49.01      11.33     -0.47        0.25                       (   0.09)

      9.69       52.27       0.00      0.16        1.04            0.88
      9.69       45.76       0.00     -0.27        1.03                               0.87
      9.69       52.27       7.67     -0.08        1.01             (   0.85)
      9.69       45.76       7.67     -0.50        0.97                                (   0.81)
```

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/18 1919

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO -	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRT	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	31.94	34-10.03	106-58.55	7.00*	0	1.43	0.00	D0A	2.00	3.90	-13.69	0.00	12.95	64.25	0.00	1.08	1.71	0.00	3.90	-13.69	0.00
2	31.70	34-12.14	106-49.64	7.00	14	0.21	-0.50	B0C	2.00	-0.43	-1.59	4.37	3.17	24.26	0.53	0.24	0.32	1.71	-0.43	-1.59	4.37
3	30.92	34-11.90	106-48.60	11.37	16	0.09	-0.05	A1B	0.50	0.00	-0.27	0.00	0.11	1.20	-1.00	0.00	0.25	0.00	0.00	-0.27	0.00
4	30.85	34-11.90	106-48.43	11.37	16	0.08	0.00	A3B	0.50	-0.10	0.00	0.00	0.27	-1.00	-1.00	0.19	0.00	0.00	0.00	[illegible]	0.00
4	30.85	34-11.90	106-48.43	11.37	16	0.08	0.00	A2B	2.00	-0.10	-0.01	0.03	0.23	0.02	0.00	0.21	0.26	0.90	0.00	[illegible]	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	1919	30.85	34-11.90	106-48.43	11.37	1.28	15	16	76	1	0.08	0.3	0.9	B	A1B	0.27	10	15	0.00	0.07	0	0.0	0.0	11	1.3	0.3	4

STN	DIST	AZM	AIN	PRMK		HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK		S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.8	257	126	P	3	1919	34.30	3.45	3.33	0.06	0.06	0.52	0	0	0.00	0			54	1.2							
LJY	17.4	332	123	P	2	1919	35.00	4.15	3.55	0.56	0.04	1.04	0	0	0.00	0			64	1.9							
BAR	17.7	111	123	P	2	1919	34.30	3.45	3.59	-0.08	-0.06	1.04	0	0	0.00	0			82	1.7							
WTX	19.0	222	121	P	1	1919	34.50	3.65	3.78	-0.02	-0.11	1.51	0	0	0.00	0			75	1.6	S	3	37.40	6.55	0.03	0.52	
LPM	20.4	61	119	P	2	1919	34.60	3.75	3.99	-0.30	0.06	1.03	0	0	0.00	0			70	1.5							
CAR	28.1	166	112	P	1	1919	36.00	5.15	5.18	-0.08	0.05	1.51	0	0	0.00	0			67	1.5							
LAZ	38.0	306	107	P	0	1919	37.80	6.95	6.78	0.22	-0.06	1.92	0	0	0.00	0			58	1.3	S	3	42.60	11.75	-0.38	-0.03	
MAG	39.4	264	106	P	1	1919	38.00	7.15	7.00	0.08	0.06	1.41	0	0	0.00	0			49	1.1							
SB	42.4	234	105	P	1	1919	38.60	7.75	7.51	0.16	0.08	1.39	0	0	0.00	0			34	0.6*							
SMC	50.5	203	103	P	0	1919	39.70	8.85	8.85	0.10	-0.10	1.77	0	0	0.00	0			49	1.1	S	3	46.50	15.65	0.14	0.43	
MGN	75.0	336	99	P	2	1919	43.80	12.95	12.97	-0.08	0.05	0.79	0	0	0.00	0			57	1.2	S	3	53.50	22.65	0.32	0.10	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STM	8.2	85.3	59.3	25.5
POL	15.1	261.5	7.5	2.7
OM	10.1	180.4	36.6	14.2
RSD	13.8	327.6	25.5	4.3
SAD	10.2	314.6	25.5	8.1
SAH	10.7	302.3	42.2	4.2
ALA	11.9	305.0	42.2	1.5
MG2	5.3	280.3	42.2	16.1

LAT	LON	Z	AVRPS	RMS	DRMS		
14.61	51.68	6.37	0.39	0.85	0.77		
14.61	45.17	6.37	-0.35	0.75			0.67
14.61	51.68	16.37	-0.27	0.83	(0.75)		
14.61	45.17	16.37	-0.92	0.68			(0.60)
11.90	48.43	2.71	0.35	0.16		0.08	
				0.08		0.00	
11.90	48.43	20.03	-0.71	0.28		(0.19)	
9.20	51.68	6.37	0.68	0.79	0.71		
9.20	45.17	6.37	-0.03	0.82			0.74
9.20	51.68	16.37	0.00	0.73	(0.65)		
9.20	45.17	16.37	-0.65	0.69			(0.61)

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DATE AND TIME OF RUN  3/13/86 1501 pjs

                                                                                                                    85/ 9/18      19:20
RESET TO     TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8)  TEST(9) TEST(10) TEST(11) TEST(12) TEST(13)
             0.1000  10.0000   2.0000   0.0500   7.0000   4.0000  -3.6300   2.7900   0.0300 100.0000   8.0000   0.5000   2.0000

VELOCITY   DEPTH   ZTR XNEAR XFAR   POS          IQ  KMS  KFM IPUN IMAG   IR  IPRN CODE
 5.850     0.000    7.  20.  250. 1.7320508      3    1    0    0    1     0    1  1011

                                                                    ADJUSTMENTS (KM)     PARTIAL F-VALUES     STANDARD ERRORS      ADJUSTMENTS TAKEN
 I  ORIG  LAT N     LONG W      DEPTH   DM  RMS  AVRPS SKD   CP     DLAT   DLON   DZ    DLAT   DLON   DZ    DLAT   DLON   DZ    DLAT   DLON   DZ
 1 51.22 34-10.03 106-58.55   7.00*   0 3.00   0.00 DOB  2.00    0.00-15.83   0.00    0.93 51.07 -1.00   0.00   2.21   0.00   0.00-15.83   0.00
 2 51.83 34-10.03 106-48.25   7.00   16 0.21  -0.71 BOC  2.00    1.47   0.00   3.68    0.83  0.43  5.63   0.56   0.00   1.52   1.47   0.00   3.68
 3 50.92 34-10.82 106-48.25  10.68   16 0.12  -0.07 A3C  0.50    0.00   0.00  -0.68  -1.00 -1.00  0.43   0.00   0.00   1.04   0.00   0.00   0.00
 3 50.85 34-10.82 106-48.25  10.68   16 0.12   0.00 A2C  2.00    0.24   0.20  -1.02   0.15  0.54  0.07   0.03   0.27   1.24   0.00   0.00   0.00

 DATE    ORIGIN    LAT N     LONG W      DEPTH    MAG NO DM GAP M  RMS   ERH   ERZ Q SQD  ADJ IN NR  AVR  AAR NM AVXM SDXM NF AVFM SDFM I
850918 1920 50.85 34-10.82 106-48.25   10.68   -0.51 10 16 159 1 0.12   0.7   1.2 B AIC 3.96 10 11 0.00 0.10  0  0.0  0.0  6 -0.5  0.4 3

 STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLY/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES  S-WT    DT
 LEM  15.8 264 124  P 1 1920 54.30  3.45  3.25   0.06  0.14 1.57   0   0 0.00 0              15-0.3  S 2 56.56  5.65 -0.09  1.08
 BAR  16.8 105 122  P 2 1920 54.30  3.45  3.40  -0.08  0.13 1.05   0   0 0.00 0              16-0.3  S 2 56.50  5.65 -0.10  1.07
 LJY  19.3 334 119  P 4 1920 55.00  4.15  3.76   0.56 -0.17 0.00   0   0 0.00 0               8-1.18
 LPM  21.5  47 116  P 1 1920 54.60  3.75  4.10  -0.30 -0.05 1.62   0   0 0.00 0              20 0.04  S 2 57.50  6.65  0.06  1.07
 LAZ  39.5 309 105  P 3 1920 58.10  7.25  6.99   0.22  0.05 0.50   0   0 0.00 0              11-6.7   S 3 64.90 12.05 -0.43  0.12
 MAG  39.5 267 105  P 2 1920 58.00  7.15  6.99   0.08  0.08 0.98   0   0 0.00 0              12-0.6   S 2 62.90 12.05 -0.20  0.94

              MISSING STATION  DELTA   AZIM  EX-GAP  RD-GAP
                         BG2     6.2  298.3    41.4    10.2

    LAT        LON          Z     AVRPS      RMS                       DRMS

   13.53      51.50       5.68     0.58     0.88             0.76
   13.53      44.99       5.68     0.26     1.22                               1.10
   13.53      51.50      15.68    -0.40     0.90             (  0.78)
   13.53      44.99      15.68    -0.72     1.00                               (  0.88)

   10.82      48.25       2.02     0.54     0.24                         0.12
                                            0.12                           0.00
   10.82      48.25      19.34    -1.09     0.43                          (  0.31)

    8.12      51.50       5.68     0.26     1.11             0.99
    8.12      44.99       5.68    -0.09     1.05                               0.94
    8.12      51.50      15.68    -0.70     1.02             (  0.91)
    8.12      44.99      15.68    -1.01     0.82                               (  0.70)
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DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/18 19:21

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0600	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KNS	KFM	IPUN	INAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	OM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	6.93	34- 8.62	106-37.78	7.00*	0	2.23	0.00	DOC	2.00	8.56	23.65	0.00	40.48	211.80	0.00	1.33	1.02	0.00	8.56	23.65	0.00
2	10.65	34-13.25	106-53.16	7.00	10	1.11	-1.36	DOR	2.00	-2.11	-6.86	3.41	33.31	429.58	4.54	0.37	0.33	1.69	-2.11	-6.86	3.41
3	8.78	34-12.11	106-48.69	10.41	16	0.17	-0.14	DOD	2.00	0.00	0.00	-2.81	-1.00	0.35	4.41	0.00	0.00	1.33	0.00	0.00	-2.81
4	8.88	34-12.11	106-48.69	7.60	16	0.15	-0.03	R3C	0.50	0.00	-0.16	0.00	-1.00	0.36	-1.00	0.00	0.27	0.00	0.00	0.00	0.00
4	8.85	34-12.11	106-48.69	7.60	16	0.15	0.00	R2C	2.00	-0.01	-0.13	-0.76	0.00	0.16	0.16	0.30	0.21	1.90	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	R	RMS	ERH	ERZ	Q	SOD	ADJ	TH	AR	AVR	AAR	AM	AVAR	SDXG	MF	AVFM	SDFM	I
850918	1921	8.85	34-12.11	106-48.69	7.60	0.41	15	16	80	1	0.15	0.5	1.9	C	B!C	2.81	10	16	0.00	0.12	0	0.0	0.0	0	0.4	0.6	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	PMP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.5	255	116	P	2 1921	12.10	3.25	4.96	0.06	0.24	0.94	0	0	0.00	0			37	0.7	S	3 14.40	5.55	0.33	0.34	
LUJ	16.8	337	114	P	2 1921	12.50	3.65	3.16	0.56	-0.07	1.53	0	0	0.00	0			14	-0.4	S	3 15.00	6.15	-0.29	0.44	
BAK	18.2	311	113	P	2 1921	12.00	3.15	3.37	-0.08	-0.13	1.01	0	0	0.00	0			58	1.3	S	3 14.30	5.45	-0.24	0.47	
WTX	19.0	22	112	P	2 1921	12.40	3.55	3.50	-0.02	0.08	1.02	0	0	0.00	0			28	0.4	S	3 14.40	5.55	-0.47	0.18	
LPH	20.5	53	110	P	0 1921	12.30	3.45	3.73	-0.30	0.02	2.03	0	0	0.00	0			41	0.9	S	3 14.80	5.95	0.01	0.31	
CAR	28.8	306	105	P	0 1921	13.70	4.85	5.05	-0.08	-0.12	0.00	0	0	0.00	0			13	-0.5	S	2 17.50	8.95	0.04	0.98	
LAZ	37.5	306	101	P	0 1921	15.80	6.95	6.54	0.22	0.40	1.80	0	0	0.00	0			29	0.5	S	2 20.80	11.75	0.05	0.94	
MAG	39.0	264	101	P	0 1921	15.60	6.75	6.79	0.08	-0.12	1.85	0	0	0.00	0			29	0.5	S	2 20.80	11.75	-0.15	0.91	

LAT	LON	Z	AVRPS	RMS	DKMS
14.81	51.94	2.60	0.54	1.06	0.91
14.81	45.43	2.60	-0.17	0.95	0.80
14.81	51.94	12.60	-0.13	1.03	(0.88)
14.81	45.43	12.60	-0.76	0.85	(0.70)
12.11	48.69	0.00	0.23	0.15	-0.01
12.11	48.69	16.26	-0.79	0.34	0.00 (0.18)
9.40	51.94	2.60	-0.37	1.02	0.87
9.40	45.43	2.60	-0.33	0.88	0.82
9.40	51.94	12.60	-0.27	0.92	(0.76)
9.40	45.43	12.60	-0.92	0.83	(0.68)

DATE AND TIME OF RUN 3/13/86 1501 PJ#

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RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	10.18	34-10.03	106-58.55	7.00*	0	1.47	0.00	DOA	2.00	3.74	-13.15	0.00	8.36	40.42	0.00	1.29	2.07	0.00	3.74	-13.15	0.00
2	9.84	34-12.05	106-49.99	7.00	14	0.29	-0.59	BOB	2.00	0.00	-1.88	0.00	-1.00	11.19	0.41	0.00	0.96	0.00	0.00	-1.88	0.00
3	9.10	34-12.05	106-48.76	7.00	15	0.15	0.01	B1C	0.50	0.00	-0.39	2.00	0.33	1.09	1.17	0.00	0.38	1.85	0.00	-0.39	2.00
4	8.99	34-12.05	106-48.51	9.00	16	0.13	-0.01	A1B	0.50	-0.30	0.00	0.00	0.99	0.12	-1.00	0.31	0.00	0.00	-0.30	0.00	0.00
5	9.00	34-11.89	106-48.51	9.00	16	0.10	0.01	A3B	0.50	0.00	-0.19	0.00	-1.00	0.49	-1.00	0.00	0.28	0.00	0.00	0.00	0.00
5	9.00	34-11.89	106-48.51	9.00	16	0.10	0.00	A2B	2.00	-0.15	-0.22	0.14	0.27	0.52	0.01	0.29	0.36	1.19	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	1923	9.00	34-11.89	106-48.51	9.00	0.69	15	16	76	1	0.10	0.4	1.2	B	A1B	0.30	10	15	0.00	0.07	0	0.0	0.0	11	0.7	0.2	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.7	257	120	P 2	1923	12.20	3.20	3.09	0.06	0.04	1.59	0	0	0.00	0			43	0.9						
LJY	17.3	332	117	P 3	1923	13.00	4.00	3.34	0.56	0.10	0.79	0	0	0.00	0			31	0.5						
BAR	17.8	111	117	P 2	1923	12.20	3.20	3.40	-0.08	-0.13	1.59	0	0	0.00	0			46	1.1						
NTX	18.9	222	116	P 2	1923	12.60	3.60	3.57	-0.02	0.04	1.59	0	0	0.00	0			28	0.4	S 3	15.10	6.10	-0.06	0.79	
LPH	20.5	52	114	P 3	1923	12.60	3.60	3.83	-0.30	0.07	0.79	0	0	0.00	0			38	0.8						
CAR	28.1	166	108	P 3	1923	14.00	5.00	5.04	-0.08	0.03	0.77	0	0	0.00	0			40	0.8						
LAZ	37.9	307	103	P 3	1923	16.00	7.00	6.06	0.22	0.11	0.73	0	0	0.00	0			33	0.6						
MAG	39.2	264	103	P 2	1923	16.00	7.00	6.88	0.08	0.03	1.46	0	0	0.00	0			33	0.6	S 3	20.00	11.00	-0.93	**0.06	
SB	42.3	234	102	P 1	1923	16.50	7.50	7.40	0.16	-0.06	2.15	0	0	0.00	0			27	0.4						
SMC	50.4	203	100	P 2	1923	17.80	8.80	8.76	0.10	-0.06	1.38	0	0	0.00	0			38	0.8	S 3	24.50	15.50	0.15	0.68	
MLN	75.0	336	97	P 3	1923	21.80	12.80	12.91	-0.08	-0.04	0.60	0	0	0.00	0			34	0.6	S 3	32.20	23.20	0.97	**0.03	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STH	8.3	85.1	58.9	25.4
DM	10.1	179.7	36.8	13.7
SAD	10.1	315.2	25.8	8.6
SAH	10.6	302.8	42.4	3.8
BG2	5.1	280.9	42.4	16.6

LAT	LON	Z	AVRPS	RMS
14.59	51.76	4.00	0.27	0.80
14.59	45.25	4.00	-0.53	0.81
14.59	51.76	14.00	-0.33	0.76
14.59	45.25	14.00	-1.05	0.75
11.89	48.51	0.34	0.28	0.18
				0.10
11.89	48.51	17.66	-0.70	0.35
9.18	51.76	4.00	0.78	0.84
9.18	45.25	4.00	-0.02	0.73
9.18	51.76	14.00	0.13	0.80
9.18	45.25	14.00	-0.58	0.61

DRMS

0.70 0.71

(0.66) (0.64)

0.08

0.00

(0.24)

0.78 0.63

(0.69) (0.51)

DATE AND TIME OF RUN 3/13/86 1501 pjs

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RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7960	0.0300	100.0000	0.3000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	2.63	34- 8.62	106-37.78	7.00*	0	2.29	0.00	D0C	2.00	6.67	24.35	0.00	33.08	173.46	0.00	1.16	1.85	0.00	6.67	24.35	0.00
2	5.29	34-12.23	106-53.61	7.00	9	1.20	-1.87	D0B	2.00	-0.40	-7.75	3.94	2.61	999.99	11.17	0.25	0.23	1.05	-0.40	-7.75	3.94
3	3.39	34-12.01	106-48.56	10.94	16	0.12	-0.18	A0B	2.00	0.00	0.00	-1.73	-1.00	1.36	2.89	0.00	0.00	1.02	0.00	0.00	-1.73
4	3.36	34-12.01	106-48.56	9.21	16	0.12	-0.01	A1B	0.50	0.00	-0.24	0.00	0.49	1.22	-1.00	0.00	0.21	0.00	0.00	-0.24	0.00
5	3.35	34-12.01	106-48.41	9.21	16	0.11	0.00	A1B	0.50	-0.22	0.00	0.00	0.90	-1.00	0.01	0.23	0.00	0.00	-0.22	0.00	0.00
6	3.36	34-11.90	106-48.41	9.21	16	0.10	0.00	A3B	0.50	0.00	0.00	0.20	-1.00	-1.06	0.04	0.00	0.00	1.09	0.00	0.00	0.00
6	3.36	34-11.90	106-48.41	9.21	16	0.10	0.00	A2B	2.00	-0.03	-0.05	0.28	0.01	0.04	0.06	0.21	0.22	1.16	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	1926	3.36	34-11.90	106-48.41	9.21	-0.07	14	16	80	1	0.10	0.3	1.2	B	A1B	0.22	10	17	0.00	0.08	0	0.0	0.0	11	-0.1	0.5	6

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LGM	15.8	257	120	P 2	1926	6.70	3.34	3.13	0.06	0.15	0.96	0	0	0.00	0			24	0.2	S 3	9.00	5.64	0.11	0.49	
LJY	17.4	332	118	P 3	1926	7.40	4.04	3.36	0.56	0.12	0.49	0	0	0.00	0			10	-0.8*	S 3	9.70	6.34	-0.46	-10.03	
BAR	17.6	111	118	P 1	1926	6.60	3.24	3.40	-0.08	-0.08	1.51	0	0	0.00	0			27	0.4	S 3	9.10	5.74	-0.61	0.50	
WTX	19.0	223	116	P 2	1926	6.80	3.44	3.61	-0.02	-0.15	0.98	0	0	0.00	0			12	-0.6*						
LPM	20.4	51	114	P 0	1926	6.90	3.54	3.82	-0.30	0.02	2.01	0	0	0.00	0			30	0.5*	S 2	9.50	6.14	0.04	1.01	
CAR	28.1	166	108	P 0	1926	8.30	4.94	5.05	-0.08	-0.03	1.95	0	0	0.00	0			30	0.5*	S 2	12.09	8.65	0.03	0.97	
LAZ	38.0	306	104	P 2	1926	10.40	7.04	6.69	0.22	0.13	0.90	0	0	0.00	0			20	0.0	S 2	15.10	11.74	-0.23	0.61	
MAG	39.4	264	103	P 1	1926	10.40	7.04	6.91	0.08	0.04	1.39	0	0	0.00	0			19	-0.1						
SB	42.5	234	102	P 4	1926	8.20	4.84	7.43	0.16	-2.75	0.00	0	0	0.00	0			24	0.2						
SMC	50.5	203	100	P 4	1926	12.20	8.84	8.78	0.10	-0.04	0.00	0	0	0.00	0			12	-0.6*						
MLM	75.1	336	97	P 4	1926	16.70	13.34	12.93	-0.08	0.49	0.00	0	0	0.00	0			14	-0.4						

LAT	LON	Z	AVRPS	RMS	DRMS	
14.60	51.67	4.21	0.16	1.06	0.96	
14.60	45.16	4.21	0.04	0.97	(0.88)	0.87
14.60	51.67	14.21	-0.59	0.98		(0.69)
14.60	45.16	14.21	-0.70	0.79		
11.90	48.41	0.55	0.35	0.16	0.06	
				0.10	0.00	
11.90	48.41	17.87	-0.89	0.32	(0.23)	
9.19	51.67	4.21	0.24	0.95	0.85	
9.19	45.16	4.21	0.20	1.08	(0.80)	0.94
9.19	51.67	14.21	-0.49	0.90		(0.83)
9.19	45.16	14.21	-0.55	0.93		

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	106.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	1.06	34-10.03	106-58.55	7.00*	0	1.57	0.00	DQA	2.00	3.99	-14.41	0.00	0.99	48.97	0.00	1.51	2.06	0.06	3.99	-14.41	0.00
2	1.10	34-12.19	106-49.17	7.00	15	0.17	-0.60	BOC	2.00	-0.96	-1.02	2.94	26.34	74.71	7.47	0.19	0.20	1.00	-0.96	-1.02	2.94
3	0.34	34-11.67	106-48.51	9.94	16	0.07	-0.03	A3B	0.50	0.00	0.00	-0.48	-1.00	-1.00	0.38	0.00	0.00	0.78	0.00	0.00	0.00
3	0.31	34-11.67	106-48.51	9.94	16	0.07	0.00	A2B	2.00	-0.04	-0.05	-0.43	0.04	0.05	0.24	0.20	0.22	0.66	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	1938	0.31	34-11.67	106-48.51	9.94	0.57	13	16	75	1	0.07	0.3	0.9	B	A1B	3.26	10	13	0.00	0.06	0	0.0	0.0	11	0.0	0.3	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.6	258	122	P 0	1938	3.50	3.19	3.16	0.06	-0.03	1.38	0	0	0.00	0			38	0.8						
BAR	17.6	109	119	P 0	1938	3.60	3.29	3.46	-0.08	-0.09	1.38	0	0	0.00	0			36	0.7						
LJY	17.7	333	119	P 1	1938	4.40	4.09	3.47	0.56	0.06	1.04	0	0	0.00	0			36	0.7						
WTX	18.6	223	118	P 0	1938	3.90	3.59	3.60	-0.02	0.01	1.38	0	0	0.00	0			27	0.1	S 3	6.46	6.09	-0.11	0.35	
LPM	20.8	51	116	P 1	1938	4.00	3.69	3.93	-0.30	0.06	1.03	0	0	0.00	0			48	1.1						
CAR	27.7	166	110	P 1	1938	5.30	4.99	5.03	-0.08	0.04	1.00	0	0	0.00	0			37	0.7						
LAZ	38.2	307	105	P 0	1938	7.30	6.99	6.74	0.22	0.03	1.27	0	0	0.00	0			39	0.8						
MAG	39.2	265	104	P 1	1938	7.40	7.09	6.91	0.08	0.10	0.95	0	0	0.00	0			35	0.7						
SB	42.1	235	103	P 1	1938	7.80	7.49	7.39	0.16	-0.06	0.94	0	0	0.00	0			22	0.1						
SMC	50.1	203	101	P 0	1938	9.20	8.89	8.73	0.10	0.07	1.20	0	0	0.00	0			29	0.5	S 3	15.50	15.19	-0.09	0.40	
NLM	75.4	336	98	P 1	1938	13.10	12.79	13.00	-0.08	-0.13	0.79	0	0	0.00	0			22	0.1						

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
BG2	5.2	285.2	42.3	20.4

LAT	LON	Z	AVRPS	RMS	DRMS	
14.37	51.76	4.94	0.30	0.77	0.70	
14.37	45.26	4.94	-0.30	0.76		0.69
14.37	51.76	14.94	-0.34	0.76	(0.69)	
14.37	45.26	14.94	-0.84	0.67		(0.60)
11.67	48.51	1.28	0.34	0.13	0.06	
				0.07	0.00	
11.67	48.51	18.60	-0.70	0.25	(0.18)	
8.96	51.76	4.94	0.62	0.84	0.78	
8.96	45.26	4.94	0.00	0.76		0.69
8.96	51.76	14.94	-0.05	0.76	(0.70)	
8.96	45.26	14.94	-0.62	0.65		(0.58)

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DATE AND TIME OF RUN  3/13/86 1501 pjs

                                                                                                  85/ 9/18      19:39
RESET TO     TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8) TEST(9) TEST(10) TEST(11) TEST(12) TEST(13)
             0.1000  10.0000   2.0000   0.0500   7.0000   4.0000  -3.6300   2.7900   0.0000 100.0000   6.0000   0.5600   5.0000

VELOCITY   DEPTH   ZTR XNEAR XFAR   POS        IQ  KMS  KFM IPUN IMAG  IR  IPRN CODE
 5.850     0.000    7.   20.  250. 1.7320508    3    1    0    0    1    0    1  1011

                                                            ADJUSTMENTS (KM)   PARTIAL F-VALUES   STANDARD ERRORS    ADJUSTMENTS TAKEN
I  ORIG  LAT N     LONG W     DEPTH  DM  RMS  AVRPS SKD   CF   DLAT  DLON   DZ   DLAT  DLON   DZ  DLAT  DLON   DZ   DLAT  DLON   DZ
1 27.47 34- 8.62 106-37.78  7.00*  0 1.71  0.00 DOC  2.00  6.34 21.53  0.00 25.28147.69  0.00  1.26  1.77  0.00  6.34 21.53  0.00
2 30.24 34-12.05 106-51.78  7.00  15 0.56 -0.81 DOC  2.00  0.00 -4.29  6.18  0.69 36.16  2.57  0.00  0.71  3.89  0.00 -4.29  6.18
3 28.86 34-12.05 106-48.99 13.18  17 0.24 -0.12 H1B  0.50 -0.60  0.00 -1.71  1.12  0.01  0.53  0.56  0.00  2.35 -0.00  0.00 -1.71
4 28.89 34-11.73 106-48.99 11.48  17 0.23 -0.01 H3B  0.50  0.00 -0.08  0.00 -1.00  0.02 -1.00  0.00  0.62  0.00  0.00  0.00  0.00
4 28.88 34-11.73 106-48.99 11.48  17 0.23  0.00 H2B  2.00  0.02 -0.08  0.06  0.00  0.02  0.00  0.58  0.68  2.66  0.00  0.00  0.00

 DATE    ORIGIN     LAT N     LONG W     DEPTH     MAG NO DM GAP M   RMS   ERH   ERZ Q SQD  ADJ IN NR  AVR  AAR NM AVXM SDXM NF AVFM SDFM I
850918 1939 28.88 34-11.73 106-48.99  11.48    0.20 15 17  76 1 0.23   0.9   2.7 B B1B 1.81 10 1r 0.00 0.13  0  0.0  0.0 10  0.2  0.3 4

 STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLT/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES  S-WT    DT
 LJY  17.3 335 124  P 1 1939 33.00  4.12  3.54  0.56  0.02 1.41   0   0  0.00 0               17-0.2
 MTX  18.1 221 122  P 0 1939 32.60  3.72  3.67 -0.02  0.07 1.88   0   0  0.00 0               21  0.1  S 3 35.60  6.72  0.40  0.47
 BAR  18.4 109 122  P 3 1939 32.30  3.42  3.70 -0.08 -0.20 0.47   0   0  0.00 0               35  0.7  S 2 32.30  3.42 -2.05**0.01
 LPM  21.3  52 118  P 1 1939 32.70  3.82  4.13 -0.30 -0.01 1.40   0   0  0.00 0               37  0.7*
 CAR  28.0 164 112  P 1 1939 33.90  5.02  5.17 -0.08 -0.07 1.36   0   0  0.00 0               30  0.5
 LAZ  37.5 308 107  P 1 1939 36.00  7.12  6.71  0.22  0.19 1.30   0   0  0.00 0               27  0.1  S 2 40.40 11.52 -0.48  0.07
 MAG  38.5 265 107  P 0 1939 35.80  6.92  6.86  0.08 -0.02 1.73   0   0  0.00 0               25  0.3  S 3 40.90 12.02  0.00  0.43
 SR   41.5 234 105  P 0 1939 36.40  7.52  7.37  0.16 -0.01 1.71   0   0  0.00 0               16-0.3  S 4 41.50 12.62 -0.47  0.06
 SMC  49.9 202 103  P 1 1939 37.50  8.62  8.75  0.10 -0.23 1.23   0   0  0.00 0               20  0.0  S 3 44.40 15.52  0.19  0.41
 NLM  75.0 336  99  P 3 1939 42.70 13.82 12.97 -0.08  0.94 0.32   0   0  0.00 0               18-0.1

     LAT      LON       Z     AVRPS     RMS                 DRMS

    14.43    52.25     6.48    0.43    0.98          0.75
    14.43    45.74     6.48   -0.45    0.83                          0.60
    14.43    52.25    16.48   -0.26    0.89           (  0.66)
    14.43    45.74    16.48   -1.09    0.81                           (  0.58)

    11.73    48.99     2.82    0.39    0.29                    0.06
                                       0.23                      0.00
    11.73    48.99    20.14   -0.77    0.37                     (  0.14)

     9.02    52.25     6.48    0.70    0.97          0.74
     9.02    45.74     6.48   -0.07    0.74                          0.51
     9.02    52.25    16.48   -0.01    0.87           (  0.64)
     9.02    45.74    16.48   -0.79    0.79                           (  0.56)
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DATE AND TIME OF RUN  3/13/86 1501 pjs

                                                                                                                     85/ 9/18      19140
RESET TO      TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8)  TEST(9)  TEST(10)  TEST(11)  TEST(12)  TEST(13)
              0.1000   10.0000  2.0000   0.0500   7.0000   4.0000   -3.0300  2.7900   0.0000   100.0000  6.0000    0.5000    5.0000

VELOCITY   DEPTH    ZTR XNEAR XFAR   POS         IQ  KMS  KFM IPUN IMAG   IR   IPRN CODE
 5.850     0.000     7.  20.  250.  1.7320508    3    1    0    0    1     0     1   1611

                                                                 ADJUSTMENTS (KM)     PARTIAL F-VALUES     STANDARD ERRORS      ADJUSTMENTS TAKEN
 I  ORIG  LAT N     LONG W     DEPTH   DM  RMS  AVRPS SKD    CF    DLAT   DLON    DZ   DLAT   DLON    DZ    DLAT  DLON   DZ    DLAT  DLON    DZ
 1 29.09 34-10.03 106-58.55  7.00*   0 2.45  0.00 DOB   2.00  5.70-15.90   0.00  9.06124.18  0.00  1.89  1.93  0.00  5.70-15.90  0.00
 2 30.00 34-13.11 106-48.20  7.00   17 0.34 -0.74 CUC   2.00 -2.84  0.31   3.45 95.64  2.32  3.95  0.29  0.47  1.74 -2.84  0.34  3.45
 3 29.18 34-11.57 106-46.42 10.45   16 0.08 -0.05 A3B   0.50 -0.12  0.00   0.00  0.35 -1.00 -1.00  0.26  0.90  0.00  0.00  0.00  0.00
 3 29.13 34-11.57 106-48.42 10.45   16 0.08  0.00 A2B   2.00 -0.17 -0.01   0.02  0.29  0.00  0.00  0.22  0.19  0.98  0.00  0.00  0.00

 DATE    ORIGIN     LAT N     LONG W     DEPTH     MAG NO DM GAP M  RMS   ERH  ERZ Q SQD  ADJ IN NR  AVR  AAR NM AVXM SDXM NF AVFM SDFM I
850918 1940 29.13 34-11.57 106-48.42  10.45   -0.55 13 16 103 1 0.08   0.3  1.0 B A1B 4.48 10 14 0.00 0.05  0  0.0  0.0  7 -0.5  0.2 3

 STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLY/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES  S-WT   DT
 LEM  15.7 259 124  P 1 1940 32.40  3.27  3.22  0.06 -0.01  1.71  0   0  0.00 0                14-0.4  S 4 34.60  5.47 -0.21  0.06
 BAR  17.4 109 121  P 0 1940 32.50  3.37  3.48 -0.08 -0.02  2.20  0   0  0.00 0                16-0.3  S 3 34.70  5.57 -0.31  0.17
 WTX  18.5 224 119  P 2 1940 32.70  3.57  3.64 -0.02 -0.04  1.14  0   0  0.00 0                 9-1.0  S 3 39.50  6.37  0.11  0.55
 LPM  20.8  50 117  P 1 1940 32.80  3.67  3.97 -0.30  0.00  1.70  0   0  0.00 0                15-0.3  S 2 39.60  6.47  0.11  1.09
 CAR  27.5 166 111  P 2 1940 34.10  4.97  5.03 -0.08  0.03  1.10  0   0  0.00 0                15-0.3  S 3 37.60  8.47 -0.10  0.55
 LAZ  38.4 307 105  P 3 1940 36.10  6.97  6.80  0.22 -0.05  0.52  0   0  0.00 0                11-0.7  S 3 41.20 12.07 -0.09  0.52
 MAG  39.3 265 105  P 1 1940 36.25  7.12  6.95  0.08  0.09  1.52  0   0  0.00 0                11-0.7  S 3 41.00 11.87 -0.31  0.15

          MISSING STATION   DELTA    AZIM   EX-GAP   RD-GAP
                 BG2          5.4   286.6    42.1     20.5

      LAT        LON          Z      AVRPS       RMS                       DRMS

     14.28      51.68       5.45      0.10      0.85              0.77
     14.28      45.17       5.45      0.04      1.07                                0.99
     14.28      51.68      15.45     -0.69      0.88             ( 0.80)
     14.28      45.17      15.45     -0.77      0.86                               ( 0.78)

     11.57      48.42       1.79      0.44      0.16                       0.08
                                                0.08                        0.00
     11.57      48.42      19.11     -0.95      0.30                      ( 0.22)

      8.87      51.68       5.45      0.37      1.02              0.94
      8.87      45.17       5.45      0.30      0.93                                0.80
      8.87      51.68      15.45     -0.46      0.94             ( 0.87)
      8.87      45.17      15.45     -0.57      0.71                               ( 0.63)
```

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DATE AND TIME OF RUN  3/13/86 1501 pjs

                                                                                                                   85/ 9/18      1950
RESET TO      TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8)  TEST(9) TEST(10) TEST(11) TEST(12) TEST(13)
               0.1000  10.0000   2.0000   0.0500   7.0000   4.0000  -1.6300   2.7900   0.0000 100.0000   8.0000   0.5000   5.0000
VELOCITY     DEPTH    ZTR XNEAR XFAR   POS          IQ   KMS   KFM IPUN IMAG   IR   IPRN CODE
 5.850       0.000     7.   20. 250. 1.7320508       3     1     0    0    1    0     1  1011

                                                                  ADJUSTMENTS (KM)    PARTIAL F-VALUES    STANDARD ERRORS    ADJUSTMENTS TAKEN
 I  ORIG  LAT N     LONG W     DEPTH  DM  RMS  AVRPS SKD    CF    DLAT  DLON    DZ   DLAT  DLON    DZ    DLAT  DLON    DZ    DLAT  DLON    DZ
 1 18.44 34-10.03 106-58.55   7.00*   0 1.85   0.00 DOB   2.00   4.25-14.98  0.00   4.70 55.65  0.00   1.96  2.91  0.00   4.25-14.98  0.00
 2 18.63 34-12.33 106-48.80   7.00   15 0.15  -0.78 BOC   2.00  -1.14  0.00  1.99  29.61  1.81  2.92   0.21  0.90  1.16  -1.14  0.00  1.99
 3 17.77 34-11.71 106-48.80   8.99   15 0.08  -0.02 AOR   2.00   0.00 -0.24  0.00  -1.00  2.28  0.11   0.00  0.16  0.00   0.00 -0.24  0.00
 4 17.74 34-11.71 106-48.64   8.99   15 0.07   0.00 A3B   0.50   0.00  0.00 -0.28  -1.00 -1.00  0.12   0.00  0.90  0.01   0.00  0.00  0.00
 4 17.74 34-11.71 106-48.64   8.99   15 0.07   0.00 A2B   2.00   0.03 -0.01 -0.32   0.02  0.00  0.12   0.21  0.19  0.93   0.00  0.00  0.00

  DATE    ORIGIN     LAT N      LONG W      DEPTH    MAG NO DM GAP M  RMS   ERH  ERZ Q SQD  ADJ IN NP  AVR  AAR NM AVXM SDXM NF AVFM SDFM I
850918 1950 17.74 34-11.71 106-48.64    8.99    0.06 13 15  78 1 0.07   0.3  0.9 B A1B 0.21 10 13 0.00 0.06  0  0.0  0.0  0  0.1  0.3 4

  STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLY/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES S-WT    DT
  LEM  15.1 258 120  P 2 1950 20.90  3.16  3.05  0.06   0.05 0.90   0   0  0.00 0                28 0.3   S 3 22.00  5.26 -0.13  0.45
  LJY  17.5 333 117  P 1 1950 21.60  3.86  3.37  0.56  -0.06 1.34   0   0  0.00 0                15-0.3
  BAR  17.8 109 117  P 0 1950 21.10  3.36  3.42 -0.08   0.03 1.79   0   0  0.00 0                35 0.7*
  WTX  18.5 222 116  P 1 1950 21.20  3.46  3.51 -0.02  -0.03 1.34   0   0  0.00 0                15-0.3   S 3 23.00  6.26  0.21  0.45
  LPM  20.9  51 113  P 3 1950 21.40  3.66  3.88 -0.30   0.08 0.45   0   0  0.00 0                27 0.4
  CAR  27.8 165 108  P 0 1950 22.60  4.86  5.00 -0.08  -0.06 1.73   0   0  0.00 0                18-0.1   S 3 24.20  6.46 -0.06  0.13
  LAZ  38.0 307 103  P 1 1950 24.70  6.96  6.67  0.22   0.07 1.24   0   0  0.00 0                27 0.1   S 2 27.60 11.86 -0.07  0.83
  MAG  39.0 265 103  P 0 1950 24.70  6.96  6.84  0.08   0.04 1.64   0   0  0.00 0                18-0.1   S 3 29.70 11.96 -0.03  0.41

        LAT          LON           Z       AVRPS        RMS                     DRMS

       14.42        51.90        3.99       0.40        1.01          0.94
       14.42        45.39        3.99      -0.37        0.66                            0.59
       14.42        51.90       13.99      -0.30        0.95          ( 0.88)
       14.42        45.39       13.99      -0.55        0.63                            ( 0.56)

       11.71        48.64        0.33       0.31        0.10                     0.03
                                                        0.07                       0.00
       11.71        48.64       17.65      -0.78        0.23                     ( 0.16)

        9.01        51.90        3.99       0.60        0.78          0.71
        9.01        45.39        3.99      -0.05        1.01                            0.95
        9.01        51.90       13.99      -0.11        0.64          ( 0.57)
        9.01        45.39       13.99      -0.71        0.89                            ( 0.82)
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  DATE AND TIME OF RUN  3/13/86 1501 pjs

                                                                                                        85/ 9/18    20: 0
           TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8) TEST(9) TEST(10) TEST(11) TEST(12) TEST(13)
RESET TO   0.1000  10.0000   2.0000   0.0500   7.0000   4.0000  -3.6300   2.7900  0.0000 100.0000   8.0000   0.5000   5.0000

VELOCITY   DEPTH    ZTR XNEAR XFAR   POS        IQ  KMS  KFM IPUN IMAG   IR  IPRN CODE
 5.850     0.000     7.  20. 250. 1.7320508      3   1    0    0    1     0    1  1011

                                                         ADJUSTMENTS (KM)   PARTIAL F-VALUES    STANDARD ERRORS    ADJUSTMENTS TAKEN
 I  ORIG  LAT N    LONG W    DEPTH   DM  RMS AVRPS SKD   CF   DLAT  DLON    DZ  DLAT  DLON    DZ  DLAT  DLON    DZ  DLAT  DLON    DZ
 1 19.96 34-10.03 106-58.55  7.00*   0 2.39  0.00 D0B  2.00  3.65-14.77  0.00  2.79119.59  0.00  2.19  1.35  0.00  3.65-11.77  0.00
 2 20.26 34-12.01 106-48.93  7.00   15 0.10 -0.48 A0C  2.00 -0.50  0.00  0.00  3.71  0.54 -1.00  0.26  0.00  0.00 -0.50  0.00  0.00
 3 19.78 34-11.73 106-48.93  7.00   15 0.09  0.01 A1C  0.50  0.00 -0.30  2.24  0.01  2.23  1.88  0.00  0.20  1.64  0.00 -0.30  2.24
 4 19.66 34-11.73 106-48.74  9.24   15 0.08 -0.02 A1B  0.50  0.00  0.00 -0.38 -1.00 -1.00  0.12  0.00  0.00  1.08  0.00  0.00  0.00
 4 19.64 34-11.73 106-48.74  9.24   15 0.08  0.00 A2B  2.00  0.02  0.01 -0.14  0.01  0.00  0.09  0.29  0.23  1.44  0.00  0.00  0.00

 DATE    ORIGIN    LAT N    LONG W    DEPTH    MAG NO DM GAP M  RMS  ERH  ERZ Q SQD  ADJ IN NR  AVR  AAR NM AVXM SDXM NF AVFM SDFM I
850918 20 0 19.64 34-11.73 106-48.74   9.24  -0.07 11 15 104 1 0.08  0.4  1.4 B A1B 2.26 10 11 0.00 0.07  0  0.0  0.0  6 -0.1  0.3 4

 STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLY/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES  S-WT    DT
 LEM  15.3 257 121  P 1 20 0 22.90  3.26  3.05  0.06  0.14 1.37   0   0  0.00 0              25 0.3
 BAR  18.0 109 117  P 1 20 0 23.00  3.36  3.46 -0.08 -0.02 1.37   0   0  0.00 0              28 0.4   S 3 25.40  5.76 -0.10  0.46
 LPM  21.0  52 114  P 1 20 0 23.30  3.66  3.92 -0.30  0.04 1.37   0   0  0.00 0              20 0.0   S 3 25.80  6.16 -0.11  0.46
 CAR  27.9 165 108  P 1 20 0 24.60  4.96  5.02 -0.08  0.01 1.33   0   0  0.00 0              18-0.1   S 3 28.20  8.56 -0.01  0.44
 LAZ  37.8 307 104  P 1 20 0 26.60  6.96  6.66  0.22  0.08 1.27   0   0  0.00 0              14-0.4   S 3 31.40 11.76 -0.15  0.42
 MAG  38.9 265 103  P 0 20 0 26.50  6.86  6.83  0.08 -0.05 1.68   0   0  0.00 0              13-0.5   S 2 31.50 11.86 -0.11  0.64

       LAT        LON          Z      AVRPS        RMS                         DRMS

      14.44      52.00       4.24      0.26       1.00              0.92
      14.44      45.49       4.24     -0.09       0.92                                 0.64
      14.44      52.00      14.24     -0.38       1.01           (   0.93)
      14.44      45.49      14.24     -0.73       0.75                                (   0.66)

      11.73      48.74       0.58      0.33       0.14                       0.06
                                                  0.08                         0.00
      11.73      48.74      17.90     -0.77       0.25                       (  0.17)

       9.03      52.00       4.24      0.39       0.87              0.79
       9.03      45.49       4.24      0.08       1.06                                 0.98
       9.03      52.00      14.24     -0.27       0.84           (   0.76)
       9.03      45.49      14.24     -0.60       0.85                                (   0.77)
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DATE AND TIME OF RUN 4-16-87 SA NEW CUR C

85/ 9/10 20:23

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.0000	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	24.58	34-10.03	106-58.55	7.00*	0	1.76	0.00	DOA	2.00	3.60	-14.01	0.06	10.78	109.59	0.00	1.11	1.34	0.00	3.00	-14.01	0.00
2	24.65	34-12.01	106-49.43	7.00	14	0.17	-0.55	DOC	2.00	-0.56	-0.83	4.56	7.65	14.12	9.21	0.21	0.22	1.50	-0.56	-0.83	4.56
3	23.86	34-11.71	106-48.89	11.56	15	0.03	-0.06	A1B	0.50	0.00	-0.21	0.00	0.12	1.85	-1.00	0.00	0.15	0.00	0.00	-0.21	0.00
4	23.79	34-11.71	106-48.75	11.56	15	0.07	0.00	A3B	0.50	-0.05	0.00	0.00	0.11	-1.00	-1.00	0.14	0.60	0.00	0.03	0.00	0.00
4	23.79	34-11.71	106-48.75	11.56	15	0.07	0.00	A2B	2.00	-0.05	-0.04	-0.03	0.09	0.05	0.00	0.15	0.16	0.71	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850910	2023 23.79	34-11.71	106-48.75	11.56		18	15	76	1	0.07	0.2	0.7	B	A1B	0.21	16	18	0.00	0.05	0	0.0	0.0	0	0.0	0.0	9

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.3	258	127	P 1	2023	27.20	3.41	3.27	0.06	0.07	1.47	0	0	0.00	0										
LJY	17.5	334	124	P 1	2023	28.00	4.21	3.58	0.56	0.07	1.47	0	0	0.00	0										
BAR	18.0	109	123	P 0	2023	27.40	3.61	3.66	-0.08	0.03	1.93	0	0	0.00	0										
ATX	18.4	222	122	P 1	2023	27.40	3.61	3.71	-0.02	-0.08	1.47	0	0	0.00	0					S 3	30.10	6.31	-0.00	0.?9	
LPN	21.0	52	119	P 0	2023	27.50	3.71	4.10	-0.30	-0.09	1.95	0	0	0.00	0										
CAR	27.9	165	113	P 0	2023	28.90	5.11	5.16	-0.08	0.03	1.91	0	0	0.00	0					S 3	32.00	8.01	0.02	0.68	
LAZ	37.8	307	107	P 0	2023	30.80	7.01	6.76	0.22	0.02	1.82	0	0	0.00	0					S 3	35.50	11.71	-0.39**	0.02	
MAG	38.8	265	107	P 1	2023	30.80	7.01	6.93	0.08	0.00	1.36	0	0	0.00	0					S 3	36.00	12.21	0.07	0.45	
SB	41.8	234	105	P 1	2023	31.30	7.51	7.42	0.16	-0.07	1.33	0	0	0.00	0					S 3	36.60	12.81	-0.32	0.13	
SMC	50.0	202	103	P 2	2023	32.70	8.91	8.77	0.10	0.04	0.90	0	0	0.00	0					S 3	39.20	15.41	0.09	0.33	
MLN	75.2	336	99	P 3	2023	37.10	13.31	13.00	-0.00	0.39**	0.01	0	0	0.00	0					S 3	46.20	22.41	0.03	0.34	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	8.7	83.1	57.5	26.0
PDL	14.6	262.7	7.1	2.0
ALQ	89.0	21.4	75.5	30.1
DM	9.7	177.5	37.9	12.4
RSD	13.8	330.1	20.6	3.8
SAD	10.1	318.0	26.6	10.7
SAH	10.5	305.1	42.7	1.9
ALA	11.8	307.8	26.6	0.5
BOZ	4.8	285.6	42.7	20.9

LAT	LON	Z	AVRPS	RMS
14.41	52.01	6.56	0.35	0.88
14.41	45.50	6.56	-0.21	0.85
14.41	52.01	16.56	-0.40	0.84
14.41	45.50	16.56	-0.39	0.75
11.71	48.75	2.90	0.42	0.17
				0.07
11.71	48.75	20.22	-0.82	0.25
9.00	52.01	6.56	0.64	0.87
9.00	45.50	6.56	0.06	0.88
9.00	52.01	16.56	-0.14	0.77

DRMS

0.41 0.79
(0.77) (0.00)

0.10
0.00
(0.18)

0.30 0.41
(0.70)

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/18 20:23

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7966	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050B	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	24.19	34-10.03	106-50.55	7.00*	0	1.97	0.00	D0A	2.00	4.68	-15.16	0.00	10.86	116.31	0.00	1.42	1.39	0.00	4.66	-15.16	0.00
2	24.60	34-12.56	106-48.68	7.00	16	0.18	-0.64	B0C	2.00	-1.42	0.00	0.00	88.21	-1.00	0.45	0.15	0.00	0.00	-1.42	0.00	0.00
3	23.97	34-11.80	106-48.68	7.00	15	0.06	-0.01	A3C	0.50	0.00	0.00	0.63	-1.00	-1.00	0.46	0.00	0.00	0.93	0.00	0.00	0.00
3	23.97	34-11.80	106-48.68	7.00	15	0.06	0.00	A2C	2.00	-0.02	-0.07	0.78	0.02	0.25	0.56	0.15	0.11	1.05	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	2023	23.97	34-11.80	106-48.68	7.00	0.36	14	15	78	1	0.06	0.2	1.0	B	A1C	1.42	10	14	0.00	0.01	0	0.0	0.0	9	0.4	0.3	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.4	257	114	P 2	2023	27.10	3.13	2.89	0.06	0.18	0.91	0	0	0.00	0			35	0.7						
LJY	17.4	333	112	P 1	2023	27.75	3.78	3.20	0.56	0.02	1.36	0	0	0.00	0			27	0.1						
BAR	17.9	110	111	P 1	2023	27.20	3.23	3.29	-0.08	0.02	1.36	0	0	0.00	0			40	0.8						
WTX	18.6	222	111	P 1	2023	27.30	3.33	3.39	-0.02	-0.04	1.36	0	0	0.00	0			23	0.2	S 3	29.60	5.63	-0.01	0.45	
LPM	20.8	52	109	P 0	2023	27.40	3.43	3.75	-0.30	-0.02	1.81	0	0	0.00	0			35	0.7	S 3	29.90	5.93	-0.05	0.45	
CAR	28.0	165	104	P 1	2023	28.80	4.83	4.93	-0.08	-0.02	1.31	0	0	0.00	0			32	0.6	S 3	32.40	8.43	0.03	0.44	
LAZ	37.8	307	100	P 0	2023	30.80	6.83	6.58	0.22	0.04	1.67	0	0	0.00	0			25	0.3	S 3	35.60	11.63	-0.14	0.42	
MAG	39.0	264	100	P 0	2023	30.80	6.83	6.77	0.08	-0.01	1.66	0	0	0.00	0			20	0.0	S 3	35.60	11.63	-0.03	0.42	
SMC	50.2	203	98	P 3	2023	32.60	8.63	8.06	0.10	-0.13	0.39	0	0	0.00	0			19	-0.1						

LAT	LON	Z	AVRPS	RMS	DRMS	
14.50	51.93	2.00	0.26	0.92	0.85	
14.50	45.42	2.00	-0.21	0.89		0.83
14.50	51.93	12.00	-0.27	0.89	(0.83)	
14.50	45.42	12.00	-0.68	0.78		(0.72)
11.80	48.68	0.00	0.19	0.09	0.03	
				0.06	0.00	
11.80	48.68	15.66	-0.66	0.19	(0.13)	
9.09	51.93	2.00	0.36	0.92	0.86	
9.09	45.42	2.00	-0.12	0.87		0.81
9.09	51.93	12.00	-0.15	0.83	(0.75)	
9.09	45.42	12.00	-0.62	0.76		(0.70)

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/18 2119

RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-1.6300	2.7900	0.0000	100.0000	6.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	18.11	34- 8.62	106-37.78	7.00*	0	1.28	0.00	DOC	2.00	6.47	22.85	0.00	25.40	77.03	0.00	1.28	2.60	0.00	6.47	22.85	0.00
2	20.84	34-12.12	106-52.64	7.00	15	0.71	-0.91	DOC	2.00	-1.37	-7.12	7.34	9.38	135.22	5.95	0.45	0.61	3.01	-1.37	-7.12	3.67
3	19.54	34-11.38	106-48.00	10.67	17	0.13	-0.13	A3B	0.50	0.00	-0.25	0.00	-1.00	0.23	-1.00	0.00	0.52	0.00	0.00	0.00	0.00
3	19.41	34-11.38	106-48.00	10.67	17	0.13	0.00	B2B	2.00	-0.12	-0.29	0.49	0.00	0.19	0.03	0.50	0.67	2.00	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	2119 19.41	34-11.38	106-48.00	10.67	1.31	9	17	73	1	0.13	0.8	2.7	B	B|B	0.13	10	11	0.00	0.12	0	0.0	0.0	11	1.1	0.3	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	16.3	261	123	P 4	2119	22.70	3.29	3.33	0.06	-0.10	0.00	0	0	0.00	0			57	1.3						
BAR	16.7	108	123	P 2	2119	22.80	3.39	3.39	-0.08	0.08	0.76	0	0	0.00	0			91	1.8*						
LJY	18.5	332	120	P 1	2119	23.50	4.09	3.65	0.56	-0.12	1.14	0	0	0.00	0			56	1.1						
WTX	18.7	226	120	P 0	2119	23.20	3.79	3.69	-0.02	0.12	1.50	0	0	0.00	0			90	1.8*						
LPM	20.5	48	117	P 2	2119	22.90	3.49	3.95	-0.30	-0.16	0.74	0	0	0.00	0			66	1.4						
CAR	27.0	167	112	P 2	2119	24.30	4.89	4.96	-0.08	0.01	0.75	0	0	0.00	0			74	1.6						
LAZ	39.1	307	105	P 1	2119	26.70	7.29	6.93	0.22	0.14	1.03	0	0	0.00	0			58	1.3						
MAG	39.9	266	105	P 1	2119	26.50	7.09	7.07	0.08	-0.06	1.06	0	0	0.00	0			30	0.8*						
SB	42.4	236	104	P 4	2119	26.60	7.19	7.48	0.16	-0.45	0.00	0	0	0.00	0			53	1.2						
SMC	49.9	204	102	P 1	2119	28.00	8.59	8.72	0.10	-0.23	0.86	0	0	0.00	0			57	1.3						
MLM	76.2	335	98	P 0	2119	32.60	13.19	13.15	-0.08	0.12	1.14	0	0	0.00	0			39	0.8						

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	7.7	77.6	60.2	29.4
POL	15.6	205.4	39.8	0.3
DM	9.1	184.5	36.9	17.5
KSD	14.9	327.5	24.5	4.1
SAD	11.3	315.7	24.5	8.7
SAH	11.8	304.5	41.3	2.5
ALA	13.0	306.8	41.3	0.2
BG2	6.1	288.1	41.3	18.9

LAT	LON	Z	AVRPS	RMS	DRMS
14.09	51.26	5.67	0.47	0.82	0.69
14.09	44.75	5.67	-0.09	0.74	0.61
14.09	51.26	15.67	-0.16	0.84	(0.71)
14.09	44.75	15.67	-0.68	0.65	(0.52)
11.38	48.00	2.01	0.33	0.18	0.05
				0.13	0.00
11.38	48.00	19.33	-0.69	0.27	(0.14)
8.68	51.26	5.67	0.43	0.78	0.65
8.68	44.75	5.67	-0.15	0.77	0.64
8.68	51.26	15.67	-0.18	0.70	(0.57)
8.68	44.75	15.67	-0.73	0.61	(0.48)

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DATE AND TIME OF RUN  3/13/86 1501 pjs

                                                                                                              85/ 9/18      21:25
RESET TO   TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8)  TEST(9)  TEST(10)  TEST(11)  TEST(12)  TEST(13)
           0.1000   10.0000  2.0000   0.0500   7.0000   4.0000   -3.6300  2.7900   0.0000   100.0000  0.0000    0.5000    5.0000

VELOCITY   DEPTH   ZTR XNEAR XFAR  POS        IQ  KMS  KFM IPUN IMAG  IR  IPRN CODE
 5.850     0.000    7.  20.  250. 1.7320508    3   1    0    0    1    0    1  1011

                                                                      ADJUSTMENTS (KM)      PARTIAL F-VALUES       STANDARD ERRORS       ADJUSTMENTS TAKEN
 I  ORIG  LAT N     LONG W     DEPTH   DM  RMS  AVRPS SKD   CF    DLAT   DLON    DZ     DLAT   DLON    DZ     DLAT  DLON   DZ     DLAT   DLON    DZ
 1 52.84 34-10.03 106-58.55   7.00*   0  1.48   0.00 D0B  2.00   5.18-14.53   0.00   9.03  66.26   0.00   1.72  1.78  0.00   5.18-14.53   0.00
 2 52.88 34-12.83 106-49.09   7.00   15  0.27  -0.70 B0C  2.00  -1.68  -0.65   4.18  15.84   2.70   2.20   0.42  0.38  2.82  -1.68  -0.65   1.18
 3 51.93 34-11.92 106-48.67  11.18   15  0.13  -0.05 A0B  2.00  -0.46   0.00   0.00   2.13   0.34  -1.00   0.32  0.00  0.00  -0.46   0.00   0.00
 4 51.89 34-11.67 106-48.67  11.18   15  0.10   0.01 A1B  0.50   0.00  -0.28   0.00   0.17   1.31  -1.00   0.00  0.24  0.00   0.00  -0.28   0.00
 5 51.88 34-11.67 106-48.49  11.18   16  0.09   0.00 A3B  0.50  -0.15   0.00   0.00   0.38  -1.00  -1.00   0.24  0.00  0.00   0.00   0.00   0.00
 5 51.88 34-11.67 106-48.49  11.18   16  0.09   0.00 A2B  2.00  -0.15  -0.02   0.02   0.26   0.01   0.00   0.29  0.25  1.19   0.00   0.00   0.00

 DATE     ORIGIN    LAT N     LONG W     DEPTH    MAG NO DM GAP M  RMS   ERH  ERZ Q SQD  ADJ  IN NR  AVR  AAR  NM AVXM SDXM NF AVFM SDFM I
850918 2125 51.88 34-11.67 106-48.49  11.18    0.00 12 16  78 1 0.09   0.4  1.2 B A1B 0.28 10 14 0.00 0.06   0  0.0  0.0  9  0.0  0.5 5

 STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLY/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES S-WT  DT
 LEM  15.6 258 126  P 2 2125 55.30  3.42  4.29   0.06  0.07 0.82  0   0  0.00 0             28 0.4
 BAR  17.6 109 122  P 2 2125 55.40  3.52  3.56  -0.08  0.03 0.83  0   0  0.00 0             25 0.3
 LJY  17.7 333 122  P 1 2125 56.00  4.12  3.58   0.56 -0.02 1.24  0   0  0.00 0             13-0.5*
 WTX  18.6 223 121  P 1 2125 55.60  3.72  3.71  -0.02  0.03 1.24  0   0  0.00 0             13-0.5*  S 2 58.30  6.42  0.03  0.83
 LPM  20.7  51 118  P 1 2125 55.60  3.72  4.03  -0.30 -0.01 1.24  0   0  0.00 0             18 1.1*
 CAR  27.7 166 112  P 0 2125 56.80  4.92  5.11  -0.08 -0.11 1.60  0   0  0.00 0             20 0.0   S 3 60.00  8.72  0.01  0.40
 LAZ  38.2 307 106  P 0 2125 59.00  7.12  6.80   0.22  0.09 1.51  0   0  0.00 0             20 0.0   S 2 63.50 11.62 -0.55*46.05
 MAG  39.2 265 106  P 0 2125 59.00  7.12  6.97   0.08  0.06 1.50  0   0  0.00 0             19-0.1   S 2 63.90 12.02 -0.20  0.74
 SMC  50.1 203 103  P 4 2126  1.00  9.12  8.77   0.10  0.24 0.00  0   0  0.00 0             12-0.6*  S 4  7.50 15.62  0.25  0.00

      LAT       LON         Z      AVRPS      RMS                 DRMS

     14.38     51.74      6.18      0.53      0.89          0.81
     14.38     45.24      6.18     -0.31      0.77                          0.68
     14.38     51.74     16.18     -0.28      0.87          (  0.79)
     14.38     45.24     16.18     -1.00      0.73                          (  0.65)

     11.67     48.49      2.52      0.42      0.19                   0.10
                                              0.09                     0.00
     11.67     48.49     19.84     -0.90      0.31                   (  0.22)

      8.97     51.74      6.18      0.65      0.86          0.77
      8.97     45.24      6.18     -0.11      0.95                          0.87
      8.97     51.74     16.18     -0.17      0.68          (  0.60)
      8.97     45.24     16.18     -0.84      0.80                          (  0.72)
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DATE AND TIME OF RUN 3/13/86 1501 pjs

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	6.5000	5.0000

65/ 9/16 21:40

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	7.21	34-10.03	106-58.55	7.00*	0	1.84	0.00	D0A	2.00	4.10	-11.77	0.00	7.18	67.97	0.00	1.53	1.79	0.00	4.10	-11.77	0.00
2	7.36	34-12.25	106-48.94	7.00	15	0.15	-0.08	A0C	2.00	0.00	-0.52	0.00	-1.06	3.01	0.00	0.00	0.30	0.00	0.00	-0.52	0.00
3	6.65	34-12.25	106-48.60	7.00	16	0.13	0.00	A1C	0.50	0.00	0.00	1.48	0.03	-1.00	0.01	0.00	0.00	1.09	0.00	0.00	1.48
4	6.58	34-12.25	106-48.60	8.48	16	0.13	-0.01	A3B	0.50	-0.08	0.00	0.00	0.07	-1.00	-1.00	0.31	0.00	0.00	0.00	0.00	0.00
4	6.57	34-12.25	106-48.60	8.48	16	0.13	0.00	A2B	2.00	-0.07	-0.04	0.37	0.04	0.01	0.04	0.35	0.32	1.84	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850918	2140	6.57	34-12.25	106-48.60	8.48	0.04	14	16	92	1	0.13	0.5	1.8	A	A1B	1.48	10	15	0.00	0.09	0	0.0	0.0	9	0.0	0.2	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.7	254	118	P 0	2140	9.80	3.23	3.06	0.06	0.11	1.71	0	0	0.00	0			25	0.3						
LJY	16.7	332	117	P 2	2140	10.50	3.93	3.28	0.56	0.17	0.83	0	0	0.00	0			15	-0.4	S 3	14.80	8.23	-0.28	0.33	
BAR	18.1	112	115	P 1	2140	9.90	3.33	3.42	-0.08	-0.01	1.31	0	0	0.00	0			25	0.3						
WTX	19.3	221	114	P 2	2140	10.00	3.43	3.60	-0.02	-0.15	0.84	0	0	0.00	0			19	-0.1	S 3	13.00	6.43	0.23	0.38	
LPM	20.2	53	113	P 0	2140	10.00	3.43	3.75	-0.30	-0.02	1.74	0	0	0.00	0			25	0.3						
CAR	28.8	166	106	P 0	2140	11.60	5.03	5.13	-0.08	-0.02	1.68	0	0	0.00	0			23	0.2	S 4	15.30	8.73	-0.01	0.00	
LAZ	37.4	306	103	P 0	2140	13.50	6.93	6.56	0.22	0.15	1.56	0	0	0.00	0			23	0.2	S 2	18.10	11.53	-0.21	0.74	
MAG	39.2	263	102	P 0	2140	13.50	6.93	6.85	0.08	0.00	1.60	0	0	0.00	0			15	-0.3	S 3	18.50	11.93	-0.08	0.40	
SMC	51.0	202	99	P 2	2140	15.20	8.63	8.84	0.10	-0.31	0.51	0	0	0.00	0			20	0.0	S 3	22.00	15.43	-0.05	0.38	

LAT	LON	Z	AVRPS	RMS	DRMS			
14.95	51.85	3.48	0.39	0.98	0.85			
14.95	45.34	3.48	-0.30	0.83			0.70	
14.95	51.85	13.48	-0.25	0.87		(0.74)		
14.95	45.34	13.48	-0.86	0.71				(0.56)
12.25	48.60	0.00	0.27	0.15	0.03			
				0.13	0.00			
12.25	48.60	17.14	-0.72	0.21	(0.08)			
9.54	51.85	3.48	0.52	0.84	0.71			
9.54	45.34	3.48	-0.11	0.89			0.76	
9.54	51.85	13.48	-0.10	0.78		(0.65)		
9.54	45.34	13.48	-0.67	0.80				(0.67)

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/19 2:24

RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFM	IPHN	IMAG	IR	IPRT	CODE
5.850	0.000	7.	20.	250.	1.7120508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	6.05	34-10.03	106-58.55	7.00*	0	1.63	0.00	DOA	2.00	2.86	-14.73	0.00	3.42	57.42	0.00	1.51	1.94	0.00	2.86	-14.73	0.00
2	6.10	34-11.58	106-48.96	7.00	15	0.14	-0.55	AUC	2.00	-0.40	-1.03	3.37	3.51	19.07	5.58	0.22	0.24	1.41	-0.40	-1.03	3.37
3	5.34	34-11.36	106-48.29	10.37	16	0.07	-0.03	AJR	0.50	0.00	-0.10	0.03	-1.00	0.23	-1.00	0.00	0.21	0.00	0.00	0.00	0.00
3	5.31	34-11.36	106-48.29	10.37	16	0.07	0.00	AZH	2.00	-0.02	-0.08	-0.26	0.01	0.10	0.05	0.22	0.25	1.13	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IB	AR	AVR	AAR	NR	AVAR	STAR	DF	AVFM	SDFM	I
850919	224	5.31	34-11.36	106-48.29	10.37	1.68	12	16	73	1	0.07	0.3	1.1	B	AIR	3.55	10	12	0.00	0.05	0	0.0	0.0	11	1.7	0.4	3

STN	DIST	AZM	AIN	PRMK	NRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	A	AMAG	RMK	PAP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.8	260	123	P	0	224	8.50	3.19	3.23	0.06	-0.11	1.19	0	0	0.00	0			55	1.2					
BAR	17.1	108	121	P	0	224	8.60	3.29	3.42	-0.08	-0.05	1.19	0	0	0.00	0			115	2.1					
LOY	18.4	333	119	P	0	224	9.50	4.19	3.90	0.56	0.03	1.19	0	0	0.00	0			68	1.5					
WTX	18.4	225	119	P	0	224	9.00	3.69	3.91	-0.02	0.10	1.19	0	0	0.00	0			69	1.5					
LPN	20.9	49	116	P	0	224	9.00	3.69	3.98	-0.30	0.00	1.18	0	0	0.00	0			117	2.1					
CAR	27.1	166	111	P	1	224	10.20	4.89	4.95	-0.08	0.02	0.86	0	0	0.00	0			116	2.1					
LAZ	38.8	307	105	P	0	224	12.40	7.09	6.86	0.22	0.00	1.09	0	0	0.00	0			93	1.9					
MAG	39.5	266	105	P	0	224	12.50	7.18	6.98	0.08	0.13	1.09	0	0	0.00	0			49	1.1*					
SR	42.0	236	104	P	0	224	12.80	7.49	7.40	0.16	-0.07	1.07	0	0	0.00	0			71	1.5					
SHC	49.7	304	102	P	0	224	14.10	8.79	8.97	0.10	0.01	1.03	0	0	0.00	0			93	1.9	S	1	20.40	15.09	-0.11	0.26
MLN	76.0	336	98	P	1	224	18.30	12.99	13.12	-0.08	-0.05	0.67	0	0	0.00	0			71	1.5					

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	8.1	78.0	58.9	29.0
POL	15.2	265.4	5.3	0.3
DH	9.1	181.8	37.4	15.6
RSD	14.7	329.0	25.4	3.8
SAD	11.5	317.5	35.4	10.1
SAH	11.5	306.0	41.8	1.5
ALA	12.7	308.2	25.4	0.7
BG2	5.7	289.9	41.8	17.6

LAT	LON	Z	AVRPS	RMS
14.06	51.54	5.37	0.37	0.76
14.06	45.03	5.37	-0.21	0.78
14.06	51.54	15.37	-0.20	0.73
14.06	45.03	15.37	-0.79	0.65
11.36	48.29	1.71	0.34	0.13
11.36	48.29	19.03	-0.71	0.24
8.65	51.54	5.37	-0.56	0.82
8.65	45.03	5.37	-0.05	0.74
8.65	51.54	15.37	-0.10	0.79
8.65	45.03	15.37	-0.66	0.62

DRMS

0.69
(0.66)
0.71
(0.58)
0.06
0.00
(0.17)
0.75
(0.72)
0.67
(0.55)

DATE AND TIME OF RUN 4-16-87 SW NEW COR C

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	6.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	26.63	34-10.03	106-48.55	7.00*	0	1.87	0.00	D0A	2.00	3.56	-14.78	0.00	6.21	79.74	0.00	1.43	1.65	0.00	3.56	-14.78	0.00
2	26.93	34-11.96	106-48.93	7.00	15	0.19	-0.67	B0C	2.00	0.00	-0.83	0.00	-1.00	-6.31	0.86	0.00	0.33	0.00	0.00	-0.83	0.00
3	26.23	34-11.96	106-48.39	7.00	16	0.15	0.01	B0C	2.00	0.00	0.00	3.10	1.14	-1.00	2.35	0.00	0.00	2.02	0.00	0.00	3.10
4	26.05	34-11.96	106-48.39	10.10	16	0.12	-0.02	A0B	2.00	-0.52	0.00	0.00	4.54	-1.00	0.74	0.24	0.00	0.00	-0.52	0.00	0.00
5	26.05	34-11.67	106-48.39	10.10	16	0.10	0.00	A1B	0.50	0.00	0.00	1.02	-1.00	0.45	0.72	0.00	0.00	1.21	0.00	0.00	1.02
6	25.98	34-11.67	106-48.39	11.12	16	0.10	0.00	A3B	0.50	0.00	-0.15	0.00	-1.00	0.46	-1.00	0.00	0.23	0.00	0.00	-0.06	0.00
8	25.97	34-11.67	106-48.39	11.12	16	0.10	0.00	A2B	2.00	-0.03	-0.15	0.11	0.02	0.38	0.01	0.26	0.25	1.23	0.00	-0.06	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SOU	ADJ	IN	HR	AVR	AAR	NF	AVXR	SDXR	NF	AVFR	SDFR	I
850919	227 25.97	34-11.67	106-48.39	11.12	0.39	15	16	78	1	0.10	0.4	1.2	B	A1B	1.02	10	16	0.00	0.08	0	0.0	0.0	0	0.0	0.0	0

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	PNP	PMAG	SHMK	S_SEC	TSURS	S-RES	S-WT	DT
LEM	13.8	258	125	P	227	29.40	3.43	3.30	0.06	0.07	1.39	0	0	0.00	0										
BAR	17.5	110	122	P	227	29.40	3.43	3.54	-0.08	-0.03	1.85	0	0	0.00	0										
LJY	17.8	332	122	P	227	30.10	3.43	3.58	0.56	-0.02	1.33	0	0	0.00	0						S 3	32.30	8.53	-0.85	0.00
WTX	16.7	2	122	P	227	29.80	3.43	3.72	-0.02	0.13	1.36	0	0	0.00	0						S 3	32.50	8.53	0.12	0.10
LPN	20.6	50	122	P	227	29.60	3.43	3.90	-0.30	-0.08	1.38	0	0	0.00	0										
CAR	27.7	166	122	P	227	31.00	5.03	5.10	-0.08	0.01	1.79	0	0	0.00	0						S 3	34.50	8.53	-0.16	0.44
CAS	38.3	301	106	P	227	33.20	7.23	6.82	0.22	0.19	1.22	0	0	0.00	0						S 3	38.00	12.03	-0.17	0.42
MAG	39.4	264	106	P	227	33.00	7.03	9.99	0.08	-0.05	1.27	0	0	0.00	0						S 3	38.00	12.03	-0.23	0.41
SB	42.2	235	105	P	227	33.60	7.63	7.47	0.16	0.00	0.83	0	0	0.00	0										
SMC	50.1	201	103	P	227	34.80	8.83	8.78	0.10	-0.05	0.40	0	0	0.00	0						S 3	41.20	15.23	-0.16	0.40

MISSING STATION	DELTA	AZIM	EX-GAP	MD-GAP
STN	8.2	82.3	59.0	27.2
POL	15.1	263.1	0.0	1.7
DH	9.7	160.7	37.0	14.6
RSO	14.2	328.3	25.5	4.1
SAD	10.5	316.0	25.5	9.1
SAH	11.0	304.0	43.1	2.9
ALA	12.2	306.5	43.1	0.4
BC2	5.4	284.0	42.1	19.8

LAT	LON	Z	AVRPS	RMS	DRMS
14.38	51.65	6.12	0.34	0.91	0.61
14.38	45.14	6.12	-0.24	0.77	(0.72) 0.67
14.38	51.65	16.12	-0.46	0.81	(0.57)
14.38	45.14	16.12	-0.95	0.67	
11.67	48.39	2.46	0.41	0.18	0.06
11.67	48.39	19.78	-0.84	0.10	0.00
				0.26	(0.16)
8.97	51.65	6.12	0.62	0.88	0.78
8.97	45.14	6.12	0.09	0.92	0.83
8.97	51.65	16.12	-0.16	0.79	(0.69)

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/19 2:28

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	6.5000	5.0000

VELOCITY	DEPTH	ZTR	XMEAR	XFAR	POS	IQ	KNS	KFM	IpUN	IMAG	IR	IPRR	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	14.10	34-10.03	106-50.55	7.00*	0	1.46	0.00	DOA	2.00	4.38	-13.57	0.00	10.56	41.73	0.06	1.35	2.10	0.06	4.38	-13.57	0.00
2	13.70	34-12.40	106-46.72	7.00*	14	0.18	-0.51	ROC	2.00	-1.09	-1.29	2.97	18.38	19.12	3.97	0.25	0.30	1.49	-1.09	-1.29	2.97
3	13.00	34-11.81	106-48.87	9.97	15	0.09	-0.03	A3D	0.50	0.00	0.00	-0.63	-1.00	-1.00	0.38	0.00	0.00	1.03	0.00	0.00	0.00
4	12.97	34-11.81	106-48.87	9.97	15	0.09	0.00	A2D	2.00	-0.04	-0.09	-0.51	0.03	0.09	0.21	0.27	0.31	1.19	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TM	NR	AVR	AAR	NR	AVXR	SDXR	NF	AVFR	SDFR	I
850919	228 12.97	34-11.81	106-48.87	9.97	1.23	12	15	93	1	0.09	0.4	1.2	B	A1B	3.42	10	12	0.00	0.07	0	0.0	0.0	9	1.2	0.5	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALA	K	XMAG	RMK	PMP	PMAG	SMK	S-SEC	TSOBS	S-RES	S-WT	DT
LCM	15.1	257	123	P	1	228	16.10	3.13	3.09	0.06	-0.02	1.08	0	0	0.00	0			40	1.1						
BAK	18.2	109	119	P	2	228	19.30	3.53	3.55	-0.08	-0.14	0.72	0	0	0.00	0			110	2.1*						
WTX	18.4	221	118	P	0	228	19.50	3.53	3.57	-0.02	-0.02	1.44	0	0	0.00	0			85	1.1	S	3	19.90	0.03	-0.13	0.36
LPH	21.0	52	115	P	0	228	10.70	3.73	3.98	-0.30	0.05	1.44	0	0	0.00	0			53	1.2						
LAZ	37.6	307	105	P	0	228	20.06	7.03	6.64	0.22	0.17	1.33	0	0	0.00	0			80	1.7	S	3	21.80	11.63	-0.06	0.33
MAC	38.7	264	104	P	0	228	19.90	6.93	6.82	0.08	0.03	1.33	0	0	0.00	0			45	1.0						
SB	41.8	334	103	P	1	228	20.40	7.43	7.34	0.16	-0.07	0.98	0	0	0.00	0			23	0.2*						
SHC	50.1	202	101	P	0	228	21.80	8.83	8.73	0.10	0.00	1.25	0	0	0.00	0			40	0.8	S	2	28.40	15.43	0.14	-0.03
MLH	74.9	336	98	P	0	228	25.70	12.73	12.92	-0.08	-0.11	1.10	0	0	0.00	0			75	1.6						

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STK	8.9	84.5	57.2	25.0
POL	14.4	261.8	7.8	2.5
CAR	28.1	164.7	92.7	37.4
DH	9.9	176.4	92.7	25.8
HSD	13.6	330.5	28.8	5.6
SAD	9.8	318.1	28.8	10.8
SAN	10.2	305.1	42.9	2.1
ALA	11.5	307.7	28.8	0.4
BG2	4.6	283.9	42.9	19.6

LAT	LON	Z	AVRPS	RMS	DRMS
14.52	52.13	4.97	0.36	0.72	0.64
14.52	45.62	4.97	-0.37	0.85	
14.52	52.13	14.97	-0.21	0.79	0.76
14.52	45.62	14.97	-0.88	0.79	(0.70)
11.81	48.87	1.31	0.31	0.15	
				0.09	0.06
11.81	48.87	18.63	-0.65	0.26	0.00
					(0.17)
9.11	52.13	4.97	0.72	0.91	0.82
9.11	45.62	4.97	-0.12	0.68	
9.11	52.13	14.97	0.06	0.80	0.59
9.11	45.62	14.97	-0.68	0.57	(0.48)

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/19 2131

RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	9.42	34-10.03	106-58.55	7.00*	0	1.03	0.00	D0A	2.00	5.36	-13.76	0.00	9.19	43.31	0.06	1.77	2.09	0.00	5.36	-13.76	0.00
2	9.31	34-12.94	106-49.59	7.00	15	0.32	-0.57	C0C	2.00	-1.23	-1.64	9.26	7.15	13.10	13.51	0.46	0.45	2.52	-1.23	-1.64	4.63
3	8.49	34-12.28	106-48.53	11.63	16	0.15	-0.06	B1B	0.50	-0.51	-0.39	1.98	1.59	1.00	1.91	0.40	0.49	1.44	-0.51	-0.39	1.98
4	8.29	34-12.00	106-48.27	13.61	16	0.11	0.00	A1B	0.50	-0.18	0.00	0.00	0.36	-1.00	-1.06	0.30	0.00	0.00	0.00	0.00	0.00
4	8.29	34-12.00	106-48.27	13.61	16	0.11	0.00	A2B	2.00	-0.22	-0.14	-0.41	0.45	0.20	0.15	0.33	0.32	1.05	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850919	231	8.29	34-12.00	106-48.27	13.61	1.47	14	16	76	1	0.11	0.5	1.0	B	A|B	2.08	10	11	0.00	0.07	0	0.0	0.0	11	1.5	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	16.1	256	130	P 0	231	11.90	3.61	3.60	0.06	-0.05	1.47	0	0	0.00	0			49	1.1						
LJY	17.3	331	128	P 1	231	12.60	4.31	3.76	0.56	-0.02	1.10	0	0	0.00	0			76	1.6						
BAR	17.5	112	128	P 0	231	11.90	3.61	3.79	-0.08	-0.10	1.47	0	0	0.00	0			103	2.0*						
MTX	19.3	223	125	P 0	231	12.30	4.01	4.03	-0.02	0.00	1.47	0	0	0.00	0			54	1.2	S 2	15.20	6.91	-0.04	0.74	
LPM	20.1	51	124	P 0	231	12.30	4.01	4.15	-0.30	0.16	1.41	0	0	0.00	0			101	2.0						
CAR	28.2	167	116	P 0	231	13.50	5.21	5.35	-0.08	-0.07	1.42	0	0	0.00	0			83	1.7						
LAZ	38.1	306	110	P 1	231	14.90	6.61	6.92	0.22	-0.53**	0.15	0	0	0.00	0			74	1.6						
MAG	39.6	264	109	P 0	231	15.60	7.31	7.16	0.08	0.07	1.33	0	0	0.00	0			54	1.2						
SB	42.7	234	108	P 1	231	16.10	7.81	7.67	0.16	-0.02	0.99	0	0	0.00	0			43	0.9*	S 2	22.10	13.81	0.25	0.58	
SMC	50.8	203	105	P 0	231	17.40	9.11	8.99	0.10	0.02	1.27	0	0	0.00	0			71	1.5	S 3	23.90	15.61	-0.13	0.32	
MLM	75.0	335	100	P 3	231	21.30	13.01	13.02	-0.08	0.07	0.28	0	0	0.00	0			58	1.3						

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	7.9	86.4	60.1	25.2
POL	15.4	261.0	7.7	3.0
DM	10.3	181.7	36.3	14.9
RSD	13.7	326.4	25.0	4.6
SAD	10.2	312.9	25.0	6.9
SAN	10.8	300.8	42.0	5.2
ALA	12.0	303.6	42.0	2.4
DG2	5.5	277.9	42.0	14.0

LAT	LON	Z	AVRPS	RMS	DRMS	
14.71	51.53	8.61	0.29	0.66	0.56	
14.71	45.02	8.61	-0.35	0.80		0.70
14.71	51.53	18.61	-0.56	0.62	(0.52)	
14.71	45.02	18.61	-1.10	0.70		(0.59)
12.00	48.27	4.95	0.53	0.24	0.13	
				0.11	0.00	
12.00	48.27	22.27	-0.89	0.28	(0.17)	
9.30	51.53	8.61	0.82	0.91	0.80	
9.30	45.02	8.61	0.20	0.71		0.60
9.30	51.53	18.61	-0.09	0.80	(0.70)	
9.30	45.02	18.61	-0.65	0.62		(0.52)

DATE AND TIME OF RUN 4-16-87 SW NEW COR C

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7500	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	19.69	34-10.03	106-58.55	7.00*	0	2.15	0.00	D0A	2.00	4.27	-15.47	0.00	6.29	78.98	0.00	1.76	1.79	0.00	4.27	-15.47	0.00
2	20.08	34-12.34	106-48.46	7.00	16	0.21	-0.76	B0C	2.00	-1.00	0.00	6.06	21.59	0.19	23.95	0.22	0.60	1.24	-1.00	0.00	6.06
3	18.99	34-11.80	106-48.48	13.06	16	0.11	-0.13	A0B	2.00	0.00	0.00	-1.16	-1.00	0.16	2.36	0.00	0.00	0.75	0.00	0.00	-1.16
4	18.98	34-11.80	106-48.48	11.70	16	0.10	0.00	A3B	0.50	0.00	-0.08	0.00	-1.00	0.19	-1.00	0.00	0.19	0.00	0.00	0.00	0.00
4	18.97	34-11.80	106-48.48	11.90	16	0.10	0.00	A2B	2.00	-0.09	-0.09	-0.04	0.15	0.38	0.00	0.24	0.50	0.80	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850919	257	18.97	34-11.80	106-48.48	11.90	-0.15	17	16	79	1	0.10	0.3	0.9	B	A1B	1.16	10	17	0.00	0.00	0	0.0	0.0	0	[illegible]	0.0	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.7	257	127	P 0	257	22.50	3.53	3.37	0.06	0.10	2.03	0	0	0.00	0					S 3	25.00	6.03	0.09	[illegible]	
LJY	17.5	332	124	P 2	257	23.10	4.13	3.62	0.56	-0.05	1.05	0	0	0.00	0										
BAR	17.7	110	124	P 0	257	22.50	3.53	3.64	-0.00	-0.04	2.10	0	0	0.00	0										
WYX	18.8	223	122	P 2	257	22.80	3.83	3.80	-0.02	0.04	1.05	0	0	0.00	0					S 3	25.50	6.53	-0.02	[illegible]	
LPM	20.6	51	120	P 1	257	22.80	3.83	4.06	-0.30	0.06	1.55	0	0	0.00	0					S 2	25.50	6.53	0.01	1.05	
CAR	27.9	166	113	P 1	257	23.90	4.93	5.19	-0.08	-0.18	1.33	0	0	0.00	0					S 3	27.00	8.03	-0.22	0.37	
LAZ	38.1	307	107	P 1	257	26.10	7.13	6.82	0.22	0.09	1.42	0	0	0.00	0					S 2	31.00	12.03	-0.17	0.66	
MAG	39.3	264	107	P 1	257	26.10	7.13	7.01	0.08	0.03	1.41	0	0	0.00	0					S 3	31.10	12.13	-0.10	[illegible]	
SB	42.3	234	106	P 3	257	26.60	7.63	7.51	0.16	-0.04	0.47	0	0	0.00	0										
SNC	50.3	203	103	P 3	257	28.10	9.13	6.84	0.10	0.19	0.36	0	0	0.00	0					S 3	34.60	15.63	0.14	[illegible]	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
SPR	8.3	84.0	58.9	26.1
POL	15.0	262.2	7.2	2.3
ALQ	88.7	21.2	78.8	30.0
DM	9.9	179.9	36.9	14.0
RSO	13.9	328.3	25.7	4.2
SAD	10.3	315.6	45.7	8.9
SAH	10.8	303.3	42.4	3.4
ALA	12.0	305.9	42.3	0.8
BG2	5.2	282.5	42.3	18.0

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     LAT        LON          Z     AVRPS        RMS                    DRMS

    14.51      51.73       6.90     0.41       0.91         0.01
    14.51      45.22       6.90    -0.14       0.92                            0.02
    14.51      51.73      16.90    -0.47       0.86         (  0.76)
    14.51      45.22      16.90    -0.92       0.79                             (  0.69)

    11.80      48.48       3.24     0.50       0.20                    0.10
                                               0.10                      0.00
    11.80      48.48      20.56    -0.95       0.33                    (  0.23)

     9.10      51.73       6.90     0.61       0.96         0.86
     9.10      45.22       6.90     0.12       0.86                            0.76
     9.10      51.73      16.90    -0.27       0.82         (  0.72)
     9.10      45.22      16.90    -0.74       0.75                             (  0.65)
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DATE AND TIME OF RUN 4-16-87 SW NEW COR C

85/ 9/19 3: 3

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRT	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	25.16	34-10.03	106-58.55	7.00*	0	1.99	0.00	DOA	2.00	4.52	-15.35	0.00	8.03	78.92	0.00	1.60	1.73	0.00	4.52	-15.35	0.00
2	25.61	34-12.48	106-48.56	7.00	16	0.16	-0.76	BOC	2.00	-1.00	0.27	4.44	61.39	5.30	31.35	0.13	0.12	0.79	-1.00	0.27	4.44
3	24.64	34-11.93	106-48.73	11.44	15	0.06	-0.07	A03	2.00	0.00	0.00	-0.83	0.16	-1.00	2.09	0.60	0.66	0.51	0.00	0.00	-0.83
4	24.64	34-11.93	106-48.73	10.60	15	0.06	0.00	A38	0.50	-0.05	0.00	0.00	0.18	-1.00	-1.00	0.12	0.06	0.60	0.00	0.00	0.00
4	24.63	34-11.93	106-48.73	10.60	15	0.06	0.00	A2R	7.00	-0.05	0.02	0.00	0.16	0.07	0.00	0.13	0.12	0.57	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850919	3 3 24.63	34-11.93	106-48.73	10.60	0.14	16	15	79	1	0.06	0.2	0.6	B	A10	0.03	10	16	0.00	0.04	0	0.0	0.0	0	0.0	0.0	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEN	15.4	256	125	P 0	3 3	27.90	3.27	3.19	0.06	0.01	1.84	0	0	0.00	0					S 3	30.20	5.57	-0.07	0.46	
LJY	17.1	333	122	P 2	3 3	28.70	4.07	3.44	0.56	0.07	0.92	0	0	0.00	0										
BAR	18.1	116	120	P 0	3 3	28.20	3.57	3.59	-0.08	0.06	1.84	0	0	0.00	0										
WTX	18.7	221	120	P 2	3 3	28.30	3.67	3.67	-0.02	0.01	0.92	0	0	0.00	0					S 3	31.00	6.37	0.03	0.46	
LPH	20.7	52	117	P 0	3 3	28.30	3.67	3.93	-0.30	-0.01	1.84	0	0	0.00	0					S 3	31.00	6.37	-0.01	0.46	
CAR	24.3	165	111	P 1	3 3	29.60	4.97	5.16	-0.08	-0.11	1.33	0	0	0.00	0					S 2	33.40	8.77	-0.63	0.59	
LAZ	37.6	307	106	P 1	3 3	31.60	6.97	6.68	0.22	0.07	1.28	0	0	0.00	0					S 4	36.30	11.67	-0.09	0.05	
MAG	38.9	264	105	P 1	3 3	31.60	6.97	6.89	0.08	-0.01	1.27	0	0	0.00	0					S 3	36.70	12.07	-0.61	0.42	
SHC	50.4	202	102	P 2	3 3	33.50	8.87	8.80	0.10	-0.04	0.80	0	0	0.00	0					S 3	40.20	15.57	0.15	0.40	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	8.6	85.9	50.0	21.5
PDL	14.6	261.0	8.0	3.0
ALQ	88.6	21.5	79.2	30.9
DM	10.1	177.7	37.0	12.4
RSD	13.5	329.2	26.4	4.1
SAD	9.8	316.3	26.4	9.5
SAR	10.3	303.4	42.8	3.4
ALA	11.5	306.1	42.8	0.7
BG2	4.8	280.6	42.8	16.6

LAT	LON	Z	AVRPS	RMS
14.64	51.99	5.60	0.28	0.95
14.64	45.48	5.60	-0.20	0.89
14.64	51.99	15.60	-0.51	0.84
14.64	45.48	15.60	-0.91	0.79
11.93	48.73	1.94	0.43	0.16
				0.06
11.93	48.73	19.26	-0.86	0.26
9.23	51.99	5.60	0.61	0.92
9.23	45.48	5.60	0.13	0.94
9.23	51.99	15.60	-0.21	0.75
9.23	45.48	15.60	-0.63	0.63

DRMS

```
0.90
                   0.83
( 0.83)
                   ( 0.74)
           0.10
            0.00
           ( 0.20)
0.86
                   0.88
( 0.69)
                   ( 0.76)
```

DATE AND TIME OF RUN 3/13/86 1501 pjs

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	3.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	LR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	38.28	34-10.03	106-50.55	7.00*	0	1.48	0.00	DUA	2.00	0.00	-12.49	0.00	1.98	22.91	-1.00	0.00	2.61	0.00	0.00	-12.49	0.00
2	38.48	34-10.03	106-50.42	7.00	12	0.37	-0.58	COD	2.00	2.55	-2.25	3.41	198.59	141.12	19.96	0.18	0.19	0.76	2.55	-2.25	3.41
3	37.47	34-11.41	106-48.95	10.41	15	0.07	-0.05	AIB	0.50	0.17	-0.24	0.00	0.73	1.35	0.25	0.20	0.21	0.00	0.17	-0.24	0.00
4	37.40	34-11.50	106-48.80	10.41	15	0.06	0.00	A2R	0.50	0.00	0.00	-0.36	-1.00	-1.00	0.32	0.00	0.00	0.63	0.00	0.00	0.00
4	37.40	34-11.50	106-48.80	10.41	15	0.06	0.00	A2R	2.00	0.01	-0.01	-0.36	0.00	0.00	0.26	0.21	0.22	0.71	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SOD	ADJ	IR	NP	AVR	AAR	DR	AVXD	SDXM	NF	AVFM	SDFM	I
850919	630	37.40	34-11.50	106-48.80	10.41	0.65	12	15	133	1	0.06	0.3	0.7	B	AIB	0.29	10	13	0.00	0.05	0	0.0	0.0	8	0.0	0.3	4

STA	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/RI	P-RES	P-WT	AMX	PMX	CALX	K	AMAG	RMK	PMP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.1	259	125	P	630	40.60	3.20	3.14	0.06	0.01	1.47	0	0	0.00	0			30	0.5	S	42.70	5.30	-0.43	0.37	
LJV	17.8	335	120	P	630	41.50	4.10	3.52	0.56	0.02	1.11	0	0	0.00	0			30	0.5						
SAK	17.9	108	120	P	630	40.80	3.40	3.55	-0.08	-0.06	1.47	0	0	0.00	0			55	1.2*						
MTX	18.0	223	120	P	630	41.00	3.60	3.56	-0.02	0.06	1.11	0	0	0.00	0			36	0.7	S	43.60	6.20	0.07	0.37	
CAR	27.5	165	111	P	630	42.40	5.00	5.03	-0.08	0.06	1.43	0	0	0.00	0			40	0.8	S	48.00	11.60	-0.03	0.36	
LAZ	38.0	308	105	P	630	44.40	7.00	6.78	0.22	0.05	1.36	0	0	0.00	0			35	0.7	S	49.00	11.60	-0.45	0.00	
MAG	38.7	265	105	P	630	44.30	6.90	6.86	0.08	-0.03	1.35	0	0	0.00	0			25	0.3						
SNC	49.6	203	102	P	630	46.10	8.70	8.07	0.10	-0.06	1.28	0	0	0.00	0			30	0.5	S	52.00	15.20	0.02	0.32	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	8.8	80.7	133.2	27.1
DM	9.4	176.9	37.9	12.2
SAD	10.3	319.7	26.8	14.9
HG2	4.9	290.1	42.6	17.8

LAT	LON	Z	AVRPS	RMS	DRMS
14.21	52.05	5.41	0.26	0.88	0.81
14.21	45.54	5.41	-0.43	0.62	(0.73) 0.55
14.21	52.05	15.41	-0.48	0.79	(0.50)
14.21	45.54	15.41	-1.03	0.56	
11.50	48.80	1.75	0.39	0.10	0.10
				0.06	0.00
11.50	48.80	19.07	-0.77	0.25	(0.19)
8.80	52.05	5.41	0.80	0.72	0.66
8.80	45.54	5.41	0.13	0.87	(0.56) 0.81
8.80	52.05	15.41	0.01	0.62	(0.72)
8.80	45.54	15.41	-0.57	0.78	

DATE AND TIME OF RUN 3/13/86 1501 pst

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-1.6300	2.7900	0.0000	100.0000	0.0000	0.5000	3.0000

VELOCITY	DEPTH	ZFR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPRN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	ON	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	42.51	34-10.03	106-58.55	7.00*	0	1.35	0.00	DOA	2.00	3.11	-13.16	0.00	5.01	44.45	0.00	1.39	1.97	0.00	3.11	-13.16	0.00
2	42.45	34-11.71	106-45.96	7.00	13	0.20	-0.48	BOB	2.00	0.00	-1.91	4.55	0.00	66.46	16.53	0.00	0.23	1.12	0.00	-1.91	4.55
3	41.65	34-11.71	106-48.74	11.55	15	0.06	-0.06	A1B	0.50	0.00	-0.20	0.00	0.49	0.79	-1.00	0.00	0.22	0.00	0.00	-0.20	0.00
4	41.58	34-11.71	106-48.61	11.55	15	0.06	0.00	A1R	0.50	-0.12	0.00	0.00	0.54	-1.00	0.26	0.10	0.00	0.00	-0.12	0.00	0.00
5	41.58	34-11.65	106-48.61	11.55	15	0.06	0.00	A3R	0.50	0.00	0.00	-0.12	-1.00	-1.00	0.29	0.00	0.00	0.78	0.00	0.00	0.00
5	41.58	34-11.65	106-48.61	11.55	15	0.06	0.00	A2R	2.00	0.00	0.02	-0.43	0.00	0.01	0.24	0.17	0.24	0.68	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	FM	NR	AVR	AAR	AM	AVAM	SDAM	AF	AVFM	SDFM	I
850919	938	41.58	34-11.65	106-48.61	11.55	1.65	12	15	114	1	0.06	0.3	0.9	B	A1B	0.12	10	12	0.00	0.05	0	0.0	0.0	11	1.0	0.5	5

STN	DIST	AZM	AIN	PRMK	HRMK	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRA	CALX	A	AMAG	RMK	FMP	PMAG	SRMK	S-SEC	TOBS	S-RES	S-WT	DT
LEM	15.4	258	127	P	0	938	44.90	3.32	3.30	0.06	-0.04	1.12	0	0	0.00	0			60	1.3					
LJY	17.6	338	123	P	0	938	45.80	4.22	4.61	0.56	0.05	1.17	0	0	0.00	0			95	1.9					
MTX	18.4	223	122	P	0	938	45.20	3.62	3.72	-0.02	-0.08	1.17	0	0	0.00	0			100	1.9					
LPH	20.9	51	119	P	0	938	45.30	3.72	4.08	-0.30	-0.07	1.16	0	0	0.00	0			70	1.5					
CAR	27.2	105	113	P	0	938	46.70	5.12	5.13	-0.08	0.07	1.13	0	0	0.00	0			110	2.1					
CAR	27.7	105	113	P	1	938	46.70	5.12	5.13	-0.08	0.07	0.85	0	0	0.00	0			105	2.0					
LAZ	38.1	307	107	P	0	938	48.70	7.12	6.80	0.22	0.09	1.08	0	0	0.00	0			70	1.5					
MAG	39.0	265	109	P	0	938	48.80	7.02	6.96	0.08	-0.02	1.07	0	0	0.00	0			50	1.1*					
SD	31.9	235	105	P	0	938	49.20	7.62	7.44	0.16	0.02	1.06	0	0	0.00	0			30	0.5*					
SNC	50.0	203	103	P	0	938	50.40	8.82	8.77	0.10	-0.05	1.02	0	0	0.00	0			110	2.1	S	3	57.06	15.42	0.06	0.25
MLM	75.3	336	99	P	0	938	54.50	12.92	13.03	-0.08	-0.03	0.89	0	0	0.00	0			120	2.2*					

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STK	5.5	62.3	114.4	31.3
PDL	14.8	263.2	6.7	1.7
BAR	17.8	109.0	114.4	56.4
DH	9.6	178.7	37.4	13.3
MSD	14.0	329.6	36.2	3.9
SAD	10.3	317.5	29.2	10.3
SAM	10.8	305.2	42.4	2.1
ALA	12.0	307.6	26.2	0.3
NC2	5.1	286.1	42.4	21.2

LAT	LON	Z	AVRPS	KMS	DKMS
14.35	51.87	6.55	0.38	0.76	0.70
14.35	45.36	6.55	-0.29	0.72	0.67
14.35	51.87	16.55	-0.30	0.72	(0.66)
14.35	45.36	16.55	-0.88	0.63	(0.57)
11.65	48.61	2.89	0.38	0.14	0.09
				0.00	0.00
11.65	48.61	20.21	-0.72	0.24	(0.18)
8.94	51.87	6.55	0.69	0.73	0.67
8.94	45.36	6.55	-0.03	0.74	0.68

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/19 9:44

RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	39.70	34-10.03	106-58.55	7.00*	0	1.77	0.00	D0A	2.00	3.76	-14.98	0.00	3.54	45.14	0.00	2.00	2.23	0.00	3.76	-14.98	0.00
2	40.07	34-12.06	106-48.80	7.00	15	0.14	-0.83	A0C	2.00	0.00	-0.56	0.00	1.56	3.84	-1.00	0.00	0.28	0.00	0.00	-0.56	0.00
3	39.21	34-12.06	106-48.44	7.00	16	0.11	0.01	A0C	2.00	-0.40	0.00	0.00	3.04	-1.00	1.06	0.23	0.00	0.00	-0.40	0.00	0.00
4	39.22	34-11.85	106-48.44	7.00	16	0.10	0.00	A1C	0.50	0.00	0.00	1.40	-1.00	0.15	1.54	0.00	0.00	1.13	0.00	0.00	1.40
5	39.15	34-11.85	106-48.44	8.40	16	0.09	-0.01	A3B	0.50	-0.10	0.00	0.00	0.20	-1.00	-1.00	0.21	0.00	0.00	0.00	0.00	0.00
5	39.14	34-11.85	106-48.44	8.40	16	0.09	0.00	A2R	2.00	-0.09	-0.05	0.01	0.16	0.04	0.00	0.23	0.24	1.10	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850919	944 39.14	34-11.85	106-48.44	8.40	0.62	13	16	115	1	0.09	0.3	1.1	B	A|B	1.40	10	14	0.00	0.07	0	0.0	0.0	9	0.6	0.1	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	15.8	257	118	P 0	944	42.30	3.16	3.06	0.06	0.04	1.53	0	0	0.00	0			35	0.7	S 2	44.50	5.36	-0.04	0.76	
LJY	17.4	332	116	P 0	944	43.10	3.96	3.31	0.56	0.09	1.50	0	0	0.00	0			40	0.8						
WTX	18.9	223	114	P 1	944	42.60	3.46	3.53	-0.02	-0.05	1.15	0	0	0.00	0			30	0.5						
LPM	20.5	51	112	P 0	944	42.60	3.46	3.78	-0.30	-0.02	1.53	0	0	0.00	0			40	0.8	S 3	44.90	5.76	-0.27	0.20	
CAR	28.0	166	107	P 0	944	44.00	4.86	4.99	-0.08	-0.06	1.46	0	0	0.00	0			32	0.6	S 2	47.80	8.66	0.15	0.68	
CAR	28.0	166	107	P 2	944	44.10	4.96	4.99	-0.08	0.04	0.74	0	0	0.00	0			30	0.5						
LAZ	38.1	307	102	P 0	944	46.10	6.96	6.66	0.22	0.08	1.39	0	0	0.00	0			35	0.7	S 3	50.60	11.46	-0.40	0.00	
MAG	39.3	261	102	P 1	944	46.10	6.96	6.88	0.08	0.00	1.05	0	0	0.00	0			40	0.5	S 3	51.00	11.86	-0.19	0.32	
SMC	50.4	203	99	P 2	944	47.80	8.66	8.74	0.10	-0.18	0.61	0	0	0.00	0			30	0.5						

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	8.2	84.5	114.8	33.2
RG2	5.3	281.4	42.2	17.1

LAT	LON	Z	AVRPS	RMS	DRMS		
14.55	51.69	3.40	0.34	0.94	0.85		
14.55	45.18	3.40	-0.36	0.83			0.74
14.55	51.69	13.40	-0.33	0.84	(0.76)		
14.55	45.18	13.40	-0.91	0.76			(0.67)
11.85	48.44	0.00	0.28	0.15		0.06	
				0.09		0.00	
11.85	48.44	17.06	-0.75	0.26		(0.17)	
9.14	51.69	3.40	0.62	0.82	0.73		
9.14	45.18	3.40	-0.12	0.88			0.80
9.14	51.69	13.40	-0.05	0.65	(0.57)		
9.14	45.18	13.40	-0.69	0.86			(0.77)

DATE AND TIME OF RUN 4-16-87 SW NEW COR C

85/ 9/19 10: 5

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	4.45	34-10.03	106-58.55	7.00*	0	1.73	0.00	D0A	2.00	4.46	-14.25	0.00	10.04	93.88	0.00	1.41	1.94	0.00	4.46	-14.25	0.00
2	4.67	34-12.44	106-49.27	7.00	15	0.23	-0.80	60C	2.00	-0.35	-1.42	3.02	2.48	25.61	4.92	0.22	0.28	1.36	-0.35	-1.42	3.02
3	3.62	34-12.25	106-48.35	10.02	16	0.10	-0.02	A1B	0.50	-0.22	-0.18	1.24	1.80	0.80	2.53	0.17	0.26	0.78	-0.22	-0.18	1.24
4	3.51	34-12.13	106-48.23	11.25	16	0.08	0.00	A3B	0.50	-0.02	0.00	0.00	0.01	-1.00	-1.00	0.16	0.00	0.00	0.00	0.00	0.00
4	3.50	34-12.13	106-48.23	11.25	16	0.08	0.00	A2B	2.00	-0.02	0.01	0.01	0.01	0.00	0.00	0.17	0.21	0.73	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850919	10 5 3.50	34-12.13	106-48.23	11.25	0.24	17	16	115	1	0.08	0.3	0.7	B	A1B	1.27	10	18	0.00	0.00	0	0.0	0.0	0	0.0	0.0	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	16.2	255	125	P 0	10 5	7.00	3.50	3.37	0.06	0.06	2.05	0	0	0.00	3					S 3	9.50	6.00	0.05	0.52	
LJY	17.1	330	123	P 1	10 5	7.60	4.10	3.50	0.56	0.03	1.56	0	0	0.00	0					S 3	9.90	6.40	-0.64**	0.00	
WTX	19.5	222	120	P 1	10 5	7.40	3.90	3.85	-0.02	0.07	1.54	0	0	0.00	0					S 3	10.10	6.60	-0.03	0.52	
LPN	19.9	52	120	P 1	10 5	7.20	3.70	3.91	-0.30	0.09	1.54	0	0	0.00	0					S 3	9.50	6.00	-0.25	0.45	
CAR	28.4	167	112	P 0	10 5	8.60	5.10	5.23	-0.08	-0.05	2.00	0	0	0.00	0					S 2	12.40	8.90	-0.02	1.00	
LAZ	36.0	306	106	P 1	10 5	10.50	7.00	6.78	0.22	0.00	1.43	0	0	0.00	0					S 3	15.50	12.00	-0.12	0.17	
MAG	39.7	264	106	P 1	10 5	10.60	7.10	7.05	0.08	-0.04	1.42	0	0	0.00	0					S 3	15.70	12.20	-0.16	0.46	
SMC	51.0	203	102	P 2	10 5	12.50	9.00	8.93	0.10	-0.03	0.90	0	0	0.00	0					S 3	19.10	15.60	-0.04	0.45	
MLM	74.8	335	99	P 3	10 5	16.60	13.10	12.93	-0.38	0.25	0.30	0	0	0.00	0					S 3	25.00	22.10	-0.15	0.34	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	7.9	68.1	115.1	36.2
POL	15.5	260.1	8.2	3.5
BAR	17.5	112.4	115.1	54.6
ALQ	67.9	21.1	76.7	30.8
DM	10.5	182.0	36.0	15.0
RSD	13.6	325.6	21.7	1.8
SAO	10.1	311.7	21.7	6.0
SAN	10.8	299.5	42.0	6.1
ALA	12.0	302.5	42.0	3.1
MG2	5.5	275.4	42.0	11.6

LAT	LON	Z	AVRPS	RMS
14.84	51.49	6.25	0.51	0.93
14.84	44.98	6.25	-0.31	0.82
14.84	51.49	16.25	-0.36	0.86
14.84	44.98	16.25	-1.02	0.77
12.13	48.23	2.59	0.44	0.19
				0.08
12.13	48.23	19.91	-0.87	0.33
9.43	51.49	6.25	0.73	0.90
9.43	44.98	6.25	-0.08	0.92
9.43	51.49	16.25	-0.10	0.74
9.43	44.98	16.25	-0.80	0.86

DRMS

0.84 0.74
(0.78) (0.69)

0.10
0.00
(0.25)

0.82 0.83
(0.65) (0.77)

DATE AND TIME OF RUN 4-16-87 SW NEW COR C

85/ 9/20 14:26

***** FOLLOWING EVENT IS OUT OF ORDER *****

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	3.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	PDS	ID	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	ZF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	51.85	34-10.03	106-58.55	7.00*	0	1.92	0.00	DOB	2.00	4.78	-11.97	0.00	5.01	52.46	0.00	2.14	2.07	0.00	4.78	-11.97	0.00
2	51.92	34-12.62	106-48.81	7.00	16	0.25	-0.86	BOC	2.00	-1.96	0.00	0.00	41.15	0.51	-1.00	0.31	0.00	0.00	-1.96	1.00	0.00
3	51.12	34-11.56	106-48.81	7.00	15	0.10	-0.01	A1C	0.50	0.00	-0.16	0.00	0.02	0.55	-1.00	0.00	0.22	0.00	0.00	-0.16	0.00
4	51.10	34-11.56	106-48.70	7.00	15	0.09	0.00	A3C	0.50	0.00	0.00	0.31	-1.00	-1.00	0.05	0.00	0.00	1.40	0.00	0.00	0.00
								A2C	2.00	0.04	-0.02	0.30	0.02	0.01	0.01	0.26	0.24	1.56	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	NMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVH	AAR	NM	AVAR	SDAR	DF	AVRM	SDRM	I
850920	1426	51.10	34-11.56	106-48.70	7.00		12	15	114	1	0.09	0.4	1.6	B	A1C	0.16	10	12	0.00	0.08	0	0.0	0.0	0	0.0	0.0	4

STN	DIST	AZM	AIN	PRMK	MRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XNAV	RMK	FMP	FMAG	SMMK	S-SEC	TSOBS	S-RES	S-WT	DI
LEM	15.3	259	115	P	1 1426	54.10	3.00	2.87	0.06	0.07	1.62	0	0	0.00	0				S	3	56.40	5.30	0.22	0.16	
RTX	16.2	223	111	P	0 1426	54.30	3.20	3.34	-0.02	-0.12	2.10	0	0	0.00	0				S	3	56.40	5.30	-0.41	0.05	
LPK	21.1	51	108	P	1 1426	54.60	3.50	3.80	-0.30	0.00	1.63	0	0	0.00	0				S	3	57.10	6.00	-0.07	0.54	
CAK	27.6	165	104	P	1 1426	55.90	4.80	4.86	-0.08	0.02	1.56	0	0	0.00	0				S	3	59.30	8.40	0.11	0.51	
LAZ	38.1	308	100	P	2 1426	58.00	6.90	6.92	0.22	0.06	0.99	0	0	0.00	0				S	3	02.80	11.70	-0.14	0.49	
MAG	38.9	265	100	P	1 1426	58.00	6.90	6.75	0.08	0.07	1.49	0	0	0.00	0				S	3	02.80	11.70	-0.14	0.49	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	8.7	81.3	114.2	30.4
PDL	14.0	263.8	0.6	1.3
BAR	17.8	108.4	114.2	56.7
DN	9.4	177.8	57.8	12.8
KSD	14.1	330.4	102.5	2.8
SAD	10.4	318.7	102.5	1.2
SAH	10.2	306.4	42.5	1.2
ALA	12.0	308.6	102.5	1.2
LUJ	18.9	339.5	102.5	3.9
LUJ2	22.5	340.4	102.5	32.8
BG2	5.0	288.4	42.5	19.2

LAT	LON	Z	AVRPS	RMS	DRMS
14.26	51.96	2.00	0.24	0.86	0.76
14.26	45.45	2.00	-0.53	0.93	0.83
14.26	51.96	12.00	-0.34	0.85	(0.75)
14.26	45.45	12.00	-0.99	0.89	(0.79)
11.56	48.70	0.00	0.18	0.10	0.01
				0.09	0.00
11.56	48.70	15.66	-0.73	0.27	(0.18)
8.85	51.96	2.00	-0.76	0.89	0.80
8.85	45.45	2.00	-0.22	0.78	0.69
8.85	51.96	12.00	-0.41	0.88	(0.58)
8.85	45.45	12.00	-0.74	0.77	(0.67)

DATE AND TIME OF RUN 3/13/86 1501 pjs

85/ 9/20 14137

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFN	IpUN	IMAG	IR	IPRU	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (Km) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	34.43	34-10.03	106-58.55	7.00*	0	1.64	0.00	DOA	2.00	3.24	-14.73	0.00	5.58	65.87	0.00	1.37	1.41	0.00	3.24	-14.73	0.00
2	34.73	34-11.78	106-48.96	7.00	15	0.13	-0.55	AOC	2.00	0.00	-0.58	5.60	0.01	5.73	12.09	0.00	0.24	1.81	0.00	-0.36	5.60
3	33.91	34-11.78	106-48.59	12.60	16	0.07	-0.07	A1B	0.50	0.00	-0.21	0.00	-1.00	1.21	0.02	0.00	0.19	0.00	0.00	-0.21	0.00
4	33.83	34-11.78	106-48.45	12.60	16	0.09	-0.02	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.00
5	33.83	34-11.78	106-48.48	12.60	16	0.09	-0.02	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.00
6	33.84	34-11.78	106-48.51	12.60	16	0.09	-0.02	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.00
7	33.84	34-11.78	106-48.53	12.60	16	0.09	-0.02	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.00
8	33.84	34-11.78	106-48.55	12.60	16	0.09	-0.02	A1B	0.50	0.00	0.00	-1.06	0.01	-1.00	1.09	0.00	0.00	1.02	0.00	0.00	-1.06
9	33.90	34-11.78	106-48.56	11.54	16	0.09	0.00	A2B	0.50	-0.02	-0.03	0.09	0.01	0.01	0.00	0.24	0.31	1.27	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	K	RMS	ERH	ERZ	Q	SQD	ADJ	IN	HR	AVR	AAR	RM	AVAR	SDAR	HR	AVRM	SDRM	I
850920	1437 33.90	34-11.78	106-48.56	11.54	0.69	12	16	76	1	0.09	0.4	1.3	B	A1B	1.06	10	17	0.00	0.06	0	0.0	0.0	9	0.7	0.3	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	AMAG	RMK	PRP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LRN	15.6	257	127	P	0	1437	37.40	3.50	3.31	0.06	0.13	1.22	0	0	0.00	0		33	0.6						
LUJ	17.5	333	123	P	0	1437	38.10	4.20	3.58	0.56	0.06	1.22	0	0	0.00	0		33	0.6						
BAH	17.8	110	123	P	0	1437	37.50	3.60	3.62	-0.08	0.09	1.22	0	0	0.00	0		56	1.2*						
LPM	20.7	51	119	P	0	1437	37.60	3.70	4.05	-0.30	-0.05	1.22	0	0	0.00	0		41	0.9						
CAR	27.9	166	112	P	0	1437	39.00	5.10	5.16	-0.08	0.02	1.18	0	0	0.00	0		35	0.7	S	2	42.50	8.60	-0.21	0.59
LAZ	36.0	307	107	P	0	1437	40.90	7.00	6.79	0.22	-0.01	1.13	0	0	0.00	0		34	0.6	S	2	45.80	11.90	-0.24	0.56
MAG	39.1	264	106	P	0	1437	41.00	7.10	6.98	0.08	0.04	1.12	0	0	0.00	0		39	0.8						
SNC	50.2	203	103	P	0	1437	42.80	8.90	8.81	0.10	-0.01	1.06	0	0	0.00	0		26	0.3	S	2	47.30	15.40	-0.03	0.53
HLM	75.2	336	99	P	0	1437	46.80	12.90	13.00	-0.08	-0.02	0.93	0	0	0.00	0		28	0.4						

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
STR	8.4	83.8	58.5	26.0
DN	8.9	154.2	39.0	13.5
SAD	10.2	316.3	26.0	9.4
SAH	10.7	303.9	42.4	3.0
BG2	5.1	283.1	42.4	18.7

LAT	LON	Z	AVRPS	RMS	PRMS
14.49	51.81	6.54	0.40	0.97	0.89
14.49	45.30	6.54	-0.08	0.78	
14.49	51.81	16.54	-0.30	0.92	0.69
14.49	45.30	16.54	-0.75	0.67	(0.83) (0.58)
11.78	48.56	2.88	0.40	0.18	0.09
				0.09	0.00
11.78	48.56	20.20	-0.77	0.26	(0.17)
9.08	51.81	6.54	0.46	0.77	0.69
9.08	45.30	6.54	0.08	0.96	
9.08	51.81	16.54	-0.26	0.73	0.89
9.08	45.30	16.54	-0.60	0.80	(0.65) (0.71)

DATE AND TIME OF RUN 4-16-87 SW NEW COR C

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	28.19	34-10.03	106-58.55	7.00*	0	2.43	0.00	D0B	2.00	0.09	-15.33	0.00	1.48	98.33	-1.00	0.00	1.85	0.00	0.00	-15.33	0.00
2	28.92	34-10.03	106-48.57	7.00	15	0.25	-0.58	B0C	2.00	2.29	-0.29	3.25	114.23	4.90	11.19	0.21	0.13	0.30	2.29	-0.29	3.25
3	28.17	34-11.27	106-48.39	10.25	16	0.07	-0.05	A1D	0.50	0.20	0.00	-0.63	0.83	0.00	0.76	0.22	0.00	0.73	0.20	0.00	-0.63
4	28.17	34-11.37	106-48.39	9.62	16	0.07	0.00	A1B	0.50	0.00	0.00	0.00	-1.00	0.00	-1.00	0.00	0.14	0.00	0.00	0.00	0.00
4	28.17	34-11.37	106-48.39	9.62	16	0.07	0.00	A2B	2.00	0.00	0.01	-0.03	0.00	0.00	0.00	0.23	0.16	0.45	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850920	1620 28.17	34-11.37	106-48.39	9.62	-0.52	12	16	102	1	0.07	0.3	0.8	B	A1B	0.66	10	12	0.00	0.05	0	0.0	0.0	1	-0.5	0.0	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEN	15.7	260	122	P 1	1620	31.40	3.23	3.15	0.06	0.03	1.55	0	0	0.00	0			13	-0.5	S 3	33.70	5.53	-0.02	0.52	
BAR	17.3	108	119	P 0	1620	31.50	3.33	3.38	-0.08	0.03	2.06	0	0	0.00	0					S 3	33.70	5.53	-0.16	0.52	
LPM	21.0	49	115	P 1	1620	31.80	3.63	3.94	-0.30	-0.01	1.54	0	0	0.00	0					S 3	34.50	6.33	0.02	0.51	
CAR	27.1	166	110	P 1	1620	33.00	4.83	4.92	-0.08	-0.01	1.50	0	0	0.00	0					S 3	36.70	8.53	0.15	1.06	
LAZ	38.7	308	101	P 2	1620	35.20	7.03	6.81	0.22	0.00	0.95	0	0	0.00	0					S 3	40.50	12.33	0.10	1.17	
MAG	39.3	266	104	P 1	1620	35.10	6.93	6.92	0.08	-0.07	1.42	0	0	0.00	0					S 3	40.20	12.03	-0.10	[illegible]	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
BG2	5.6	290.1	41.9	17.1

LAT	LON	Z	AVRPS	RMS	DRMS		
11.08	51.64	4.62	0.16	0.97	0.90		
14.08	45.13	4.62	0.00	0.92			0.86
14.08	51.64	14.62	-0.57	0.95	(0.88)		
14.08	45.13	14.62	-0.72	0.77			(0.70)
11.37	48.39	0.96	-0.39	0.16		0.09	
				0.07		0.00	
11.37	48.39	18.28	-0.84	0.26		(0.20)	
8.67	51.64	4.62	0.33	0.90	0.84		
8.67	45.13	4.62	0.21	1.07			1.00
8.67	51.64	14.62	-0.40	0.82	(0.75)		
8.67	45.13	14.62	-0.56	0.87			(0.80)

DATE AND TIME OF RUN 3/13/86 1501 pjs

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0800	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KNS	KFM	IpHN	INAG	IR	IpHm	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

											ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	2.39	34- 4.43	106-56.85	7.00*	0	1.93	0.00	DOC	2.00	8.15	-11.98	0.60	19.83	91.44	0.00	1.83	1.45	0.00	8.15	-11.98	0.00
2	3.44	34- 8.84	106-49.06	7.00	14	0.23	-0.62	BOC	2.00	-0.81	1.09	0.00	4.65	10.31	0.09	0.38	0.25	0.00	-0.81	1.09	0.00
3	2.82	34- 8.40	106-49.77	7.00	13	0.13	0.00	A3H	0.50	0.00	0.00	0.63	-1.00	-1.00	0.17	0.00	0.00	1.52	0.00	0.00	0.00
5	2.82	34- 8.40	106-49.77	7.00	13	0.13	0.00	A2H	2.00	-0.04	0.01	0.65	0.01	0.00	0.14	0.41	0.27	1.73	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SOD	ADJ	IM	NR	AVR	AAR	NM	AVAR	SDAR	NF	AVFM	SDFM	I
850920	1927	2.82	34- 8.40	106-49.77	7.00	0.26	13	13	78	1	0.13	0.5	1.7	B	A1B	1.35	10	13	0.00	0.11	0	0.0	0.0	8	0.3	0.2	3

STN	DIST	AZM	AIN	PHWK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PKX	CALX	K	XMAG	RWK	FMP	FMAG	SRWK	S-SEC	TSOBS	S-OBS	S-WT	DT
NTA	13.1	235	118	P	0 1927	5.40	2.58	2.51	-0.02	0.06	1.55	0	0	0.00	0			24	0.2						
LER	15.6	282	117	P	1 1927	5.60	2.78	2.62	0.06	0.10	1.15	0	0	0.00	0			35	0.7	S	3	7.00	4.78	0.14	0.37
BAR	18.6	89	111	P	0 1927	6.20	3.38	3.40	-0.08	0.07	1.55	0	0	0.00	0			27	0.4	S	2	8.40	5.58	-0.16	0.74
CAR	20.6	157	107	P	0 1927	6.70	3.88	4.04	-0.08	-0.08	1.51	0	0	0.00	0			28	0.4						
LJY	22.6	344	107	P	2 1927	7.50	4.68	4.05	0.56	0.07	0.76	0	0	0.00	0			19	-0.1						
LPM	29.3	42	105	P	0 1927	7.40	4.58	4.65	-0.30	0.23	1.27	0	0	0.00	0			27	0.4	S	2	10.20	7.38	-0.16	0.72
MAG	37.2	291	101	P	0 1927	9.30	6.88	6.47	0.08	-0.06	1.43	0	0	0.00	0			25	0.3	S	3	13.90	11.08	-0.26	0.27
LAZ	40.7	316	100	P	0 1927	10.00	7.18	7.06	0.22	-0.10	1.39	0	0	0.00	0			18	-0.1	S	3	15.20	12.38	-0.23	0.30

LAT	LON	Z	AVRPS	RMS	DRMS
11.11	53.02	2.00	0.34	0.94	0.81
11.11	46.52	2.00	0.16	1.00	
11.11	53.02	12.00	-0.24	0.89	(0.77)
11.11	46.52	12.00	-0.42	0.88	0.88
					(0.76)
8.40	49.77	0.00	0.21	0.16	0.03
				0.13	0.00
8.40	49.77	15.66	-0.73	0.27	(0.15)
5.70	53.02	2.00	-0.04	0.93	0.81
5.70	46.52	2.00	-0.15	0.94	
5.70	53.02	12.00	-0.52	0.79	(0.66)
5.70	46.52	12.00	-0.70	0.80	0.81
					(0.67)

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  DATE AND TIME OF RUN  3/13/86 1501 pjs

                                                                                                                85/ 9/20     22: 0
RESET TO      TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8)  TEST(9) TEST(10)  TEST(11) TEST(12) TEST(13)
              0.1000  10.0000   2.0000   0.0500   7.0000   4.0000  -3.6300   2.7900   0.0000 100.0000   6.0000   0.5000   5.0000

VELOCITY   DEPTH    ZTR XNEAR XFAR   POS       IQ  KMS  KFM IPUN IMAG   IR  IPRN CODE
 5.850     0.000     7.  20. 250. 1.7320508    3    1    0    0    1     0    1  1011

                                                               ADJUSTMENTS (KM)    PARTIAL F-VALUES   STANDARD ERRORS    ADJUSTMENTS TAKEN
 I  ORIG  LAT N     LONG W    DEPTH   NM  RMS AVRPS SKD    CF   DLAT  DLON    DZ  DLAT  DLON    DZ  DLAT  DLON    DZ  DLAT  DLON    DZ
 1  6.77 34- 4.43 106-56.85  7.00*    0 1.61  0.00 DOC   2.00  8.36-12.79  0.00 12.48 38.20  0.00  2.37  2.07  0.00  6.36-12.79  0.00
 2  7.72 34- 8.95 106-48.54  7.00    15 0.29 -1.01 POC   2.00 -0.88  1.43  0.00  3.43 18.09  0.67  0.47  0.34  0.00 -0.88  1.43  0.00
 3  6.80 34- 8.47 106-49.47  7.00    14 0.14 -0.02 A1R   0.50 -0.51  0.00  1.59  1.83  0.01  1.65  0.38  0.00  1.24 -0.51  0.00  1.59
 4  6.67 34- 8.20 106-49.47  8.59    13 0.12 -0.01 A3R   0.50 -0.14  0.00  0.00  0.17 -1.00 -1.00  0.33  0.00  0.00  0.00  0.00  0.00
 4  6.66 34- 8.20 106-49.47  8.59    13 0.12  0.00 A2R   2.00 -0.13  0.01 -0.08  0.12  0.00  0.01  0.38  0.25  1.05  0.00  0.00  0.00

 DATE    ORIGIN      LAT N     LONG W     DEPTH     MAG NO DM GAP M  RMS  ERH  ERZ Q SQD  ADJ IN NR  AVR  AAR NM AVXM SDXM NF AVFM SDFM I
850920 22 0  6.66 34- 8.20 106-49.47    8.59    0.04 13 13  87 1 0.12  0.5  1.0 B A1B 1.67 10 13 0.00 0.09  0  0.0  0.0  7  0.0  0.4 4

 STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLY/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES  S-WT    DT
 WTX  13.3 237 123  P 1 22 0  9.40  2.74  2.70 -0.02  0.06 1.46  0   0  0.00 0            17-0.6*  S 2 11.40  4.74  0.09  0.97
 LEM  14.2 283 121  P 2 22 0  9.50  2.84  2.83  0.06 -0.05 0.97  0   0  0.00 0            22 0.1   S 2 11.60  4.94 -0.07  0.97
 BAR  18.1  88 115  P 1 22 0 10.00  3.34  3.43 -0.08 -0.01 1.46  0   0  0.00 0            29 0.5   S 2 12.40  5.74 -0.06  0.97
 CAR  22.0 158 111  P 0 22 0 10.50  3.84  4.05 -0.08 -0.12 1.91  0   0  0.00 0            35 0.7*  S 3 14.20  7.54  0.07**0.01
 LPM  26.3  42 108  P 3 22 0 11.50  4.84  4.73 -0.30  0.42 0.32  0   0  0.00 0            19-0.1   S 3 14.50  7.84  0.18  0.47
 MAG  37.7 274 103  P 1 22 0 13.40  6.74  9.81  0.08  0.05 1.35  0   0  0.00 0            24 0.2
 LAZ  41.3 315 102  P 1 22 0 14.20  7.54  7.21  0.22  0.11 1.32  0   0  0.00 0            11-0.5*  S 2 19.30 12.64 -0.23  0.81

        LAT         LON          Z      AVRPS        RMS                        DRMS

       10.90       52.72       3.59       0.40       1.07             0.95
       10.90       46.22       3.59      -0.10       0.90                                  0.78
       10.90       52.72      13.59      -0.43       1.01            (   0.89)
       10.90       46.22      13.59      -0.82       0.86                                 (   0.74)

        8.20       49.47       0.00       0.38       0.23                         0.10
                                                     0.12                           0.00
        8.20       49.47      17.25      -0.93       0.43                         (  0.31)

        5.49       52.72       3.59       0.41       0.99             0.87
        5.49       46.22       3.59      -0.02       1.09                                  0.97
        5.49       52.72      13.59      -0.40       0.73            (   0.61)
        5.49       46.22      13.59      -0.79       0.96                                 (   0.84)
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DATE AND TIME OF RUN 3/13/86 1501 pjs

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

85/ 9/21 6? 0

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	27.72	34-10.03	106-58.55	7.00*	0	2.23	0.00	D0B	2.00	17.84	-9.42	0.00	76.89	30.50	0.00	2.03	1.71	0.00	17.84	-9.42	0.00
2	28.16	34-19.68	106-52.42	7.00	20	0.16	-1.21	B0C	2.00	-0.73	0.41	0.00	5.22	2.45	0.27	0.32	0.26	0.00	-0.73	0.41	0.00
3	27.03	34-19.28	106-52.68	7.00	19	0.13	0.00	A3C	0.50	0.00	0.00	-0.97	-1.00	-1.00	0.32	0.00	0.90	1.72	0.00	0.00	0.00
3	27.03	34-19.28	106-52.68	7.00	19	0.13	0.00	A2C	2.00	0.00	-0.02	-0.99	0.00	0.00	0.25	0.34	0.47	1.96	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
850921	6 0 27.03	34-19.28	106-52.68	7.00	0.14	15	19	117	1	0.13	0.4	2.0	B	AIC	0.84	10	15	0.00	0.42	0	0.0	0.0	8	-0.1	0.4	[illegible]

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LEM	19.4	207	110	P 1	6 0	30.50	3.47	3.53	0.06	-0.12	1.15	0	0	0.00	0			16	-0.3	S 2	33.20	6.17	-0.05	0.78	
LPM	22.5	92	107	P 0	6 0	30.70	3.67	4.03	-0.30	-0.06	1.54	0	0	0.00	0			27	0.4	S 3	33.60	6.57	0.11	0.38	
LAZ	25.6	290	105	P 0	6 0	31.60	4.57	4.54	0.22	-0.19	1.39	0	0	0.00	0			22	0.1	S 2	35.40	8.37	0.12	0.74	
WTX	28.3	193	104	P 1	6 0	31.80	4.77	4.99	-0.02	-0.20	1.03	0	0	0.00	0			13	-0.5*	S 3	35.60	8.57	-0.04	0.36	
BAR	30.4	131	103	P 0	6 0	32.20	5.17	5.34	-0.08	-0.09	1.47	0	0	0.00	0			31	0.5	S 2	36.20	9.17	0.00	0.75	
MAG	37.1	242	101	P 0	6 0	33.70	6.67	6.45	0.08	0.14	1.40	0	0	0.00	0			20	0.4	S 2	38.40	11.37	0.00	0.72	
CAR	43.0	162	99	P 0	6 0	34.50	7.47	7.45	-0.08	0.10	1.39	0	0	0.00	0			32	0.6	S 2	40.00	12.97	0.21	0.63	
MLM	59.9	336	97	P 0	6 0	37.40	10.37	10.31	-0.08	0.14	1.25	0	0	0.00	0			19	-0.1						

LAT	LON	Z	AVRPS	RMS	DRMS	
21.99	55.94	2.00	-0.24	1.04	0.92	
21.99	49.42	2.00	-0.47	0.70		0.66
21.99	55.94	12.00	-0.68	1.03	(0.91)	
21.99	49.42	12.00	-0.88	0.80		(0.67)
19.28	52.68	0.00	0.17	0.13	0.01	
				0.13	0.00	
19.28	52.68	15.66	-0.63	0.28	(0.15)	
16.58	55.94	2.00	0.59	0.88	0.76	
16.58	49.42	2.00	0.40	1.06		0.94
16.58	55.94	12.00	0.08	0.76	(0.63)	
16.58	49.42	12.00	-0.10	0.98		(0.85)

out of area

DATE AND TIME OF RUN 3/13/86 1501 PST

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0006	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFN	IPUN	IHAC	IR	IPRN	CODF
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	49.97	34- 4.43	106-56.85	7.00*	0	1.74	0.00	DOC	2.00	9.10	-10.98	0.00	32.11	46.56	0.00	1.91	0.91	0.00	9.10	-10.98	0.00
2	51.02	34- 9.35	106-49.71	7.00	14	0.35	-0.48	COC	2.00	-2.46	0.81	0.00	16.18	4.13	0.10	0.61	0.40	0.00	-2.46	0.81	0.00
3	50.52	34- 8.02	106-50.24	7.00	12	0.13	0.00	A3R	0.50	-0.20	0.00	0.00	0.14	-1.00	-1.00	0.46	0.00	0.00	0.00	0.00	0.00
4	50.52	34- 8.02	106-50.24	7.00	12	0.13	0.00	B2R	2.00	-0.25	-0.13	0.36	0.19	0.11	0.01	0.59	0.29	3.32	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SQD	4DM	IN	NR	AVR	AAR	DR	AVX	SDFH	AVFH	SDFH
850921	7 8 50.52	34- 8.02	106-50.24	7.00	0.10	9	12	86	1	0.13	0.7	3.3	B	BIB	2.59	10	9	0.00	0.10	0	0.0	0.0	6	0.1	0.2

STN	DIST	AZM	AIN	PHNK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	ARAG	PMK	PMP	PAAG	SRMK	S-SEC	TSMO	S-RES	S-WT	DT
WTX	12.1	236	120	P 1	7 8	53.00	2.48	2.39	-0.02	0.11	1.16	0	0	0.00	0			17	-0.2						
BAR	19.3	87	110	P 0	7 8	54.00	3.40	3.52	-0.08	0.04	1.57	0	0	0.00	0			25	0.1	S	3 59.20	5.08	-0.27	0.34	
CAK	22.2	155	107	P 0	7 8	54.30	3.78	3.98	-0.08	-0.13	1.53	0	0	0.00	0			24	0.1						
LPH	27.4	43	104	P 0	7 8	55.20	4.68	4.82	-0.30	0.16	1.47	0	0	0.00	0			22	0.1	S	2 58.30	7.78	-0.05	0.16	
MAG	36.6	275	101	P 1	7 8	57.00	6.48	6.36	0.08	0.03	1.09	0	0	0.00	0			21	0.2	S	2 [illegible].70	11.19	0.02	0.13	
LAZ	40.7	317	100	P 2	7 8	57.40	6.88	7.06	0.22	-0.41	0.35	0	0	0.00	0			19	-0.1						

LAT	LON	Z	AVRPS	RMS	DRMS
10.73	53.49	2.00	0.03	0.89	0.73
10.73	46.99	2.00	0.26	1.10	0.97
10.73	53.49	12.00	-0.47	0.87	(0.74)
10.73	46.99	12.00	-0.30	0.97	(0.83)
8.02	50.24	0.00	0.21	0.14	0.01
				0.13	0.00
8.02	50.24	15.66	-0.70	0.21	(0.98)
5.32	53.49	2.00	-0.07	1.05	0.92
5.32	46.99	2.00	0.09	0.88	0.75
5.32	53.49	12.00	-0.60	0.93	(0.80)
5.32	46.99	12.00	-0.48	0.75	(0.62)

DATE AND TIME OF RUN 3/13/86 1501 pjs

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.3000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFN	IPUN	IMAG	IR	IPLN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS DLAT	DLON	DZ	TAKEN DZ
1	18.55	34- 4.43	106-56.85	7.00*	0	1.41	0.00	DOC	2.00	5.70	-12.63	0.00	7.37	55.84	0.00	2.13	1.99	0.00	5.70	-12.63	0.00	
2	19.32	34- 7.51	106-48.64	7.00	14	0.22	-0.64	BOR	2.00	0.06	1.24	0.00	-1.00	22.59	0.01	0.08	0.26	0.00	0.00	1.24	0.00	0.00
3	18.73	34- 7.51	106-49.45	7.00	13	0.12	0.00	AIB	0.50	0.06	0.00	0.10	-1.00	-1.00	0.01	0.00	0.00	1.45	0.00	0.00	0.00	0.00
3	18.73	34- 7.51	106-49.45	7.00	13	0.12	0.00	AIB	2.00	0.02	0.00	0.09	0.00	0.00	0.00	0.48	0.30	1.00	0.00	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IR	MR	AVR	AAR	DM	AVAM	SDAM	MF	AVFM	SDFM
850921	7 9 18.73	34- 7.51	106-49.45	7.00	0.47	11	13	86	1	0.12	0.6	1.7	B	AIB	1.24	10	12	0.00	0.11	0	0.0	0.0	0	0.5	0.3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	PMP	PMAG	SRMK	S-SEC	TSRES	S-RES	S-WT	U
WTX	12.7	242	119	P 1	7 9	21.10	2.37	2.48	-0.02	-0.09	0.99	0	0	0.00	0			27	0.4	S 3	22.40	3.97	-0.58	0.00	
LPM	14.5	288	116	P 0	7 9	21.60	2.87	2.76	0.06	0.05	1.32	0	0	0.00	0			17	-0.2*	S 2	23.70	4.97	0.08	0.05	
BAR	18.2	84	111	P 0	7 9	22.10	3.37	3.33	-0.08	0.12	1.29	0	0	0.00	0			45	1.0*	S 2	24.20	5.47	-0.17	0.04	
CAM	20.9	157	109	P 0	7 9	22.50	3.77	3.76	-0.08	0.09	1.30	0	0	0.00	0			37	0.7						
LJY	24.4	344	106	P 1	7 9	23.50	4.77	4.33	0.56	-0.12	0.96	0	0	0.00	0			25	0.3						
LPM	27.2	40	104	P 0	7 9	23.20	4.47	4.80	-0.10	-0.04	1.28	0	0	0.00	0			47	0.7						
MAG	37.9	276	100	P 0	7 9	25.20	6.47	6.58	0.08	-0.14	1.16	0	0	0.00	0			32	0.6						
LAZ	42.2	317	99	P 0	7 9	26.40	7.67	7.32	0.22	0.13	1.15	0	0	0.00	0			28	0.3	S 3	32.00	13.27	0.21	0.27	

MISSING STATION DELTA AZIN EX-GAP RD-GAP
DM 2.5 142.5 72.5 14.1

LAT	LON	Z	AVRPS	RMS				
10.22	52.70	2.00	0.45	0.97		0.86		
10.22	46.20	2.00	0.08	0.89			0.77	
10.22	52.70	12.00	-0.19	0.90		(0.79)		
10.22	46.20	12.00	-0.47	0.80			(0.69)	
7.51	49.45	0.00	0.21	0.15			0.03	
				0.12			0.00	
7.51	49.45	15.66	-0.75	0.32			(0.21)	
4.81	52.70	2.00	0.09	0.83		0.72		
4.81	46.20	2.00	-0.30	0.95			0.83	
4.81	52.70	12.00	-0.50	0.64		(0.51)		
4.81	46.20	12.00	-0.86	0.84			(0.73)	

DATE AND TIME OF RUN 3/13/86 1501 pjs

RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

85/ 9/21 7:11

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	46.95	34- 4.43	106-56.85	7.00*	0	1.87	0.00	DOC	2.00	8.61	-11.15	0.00	26.88	167.76	0.00	1.69	0.86	0.00	8.61	-11.15	0.00
2	48.03	34- 9.09	106-49.60	7.00	14	0.29	-0.44	DOC	2.00	-2.13	0.59	0.00	19.26	3.71	0.19	0.48	0.30	0.00	-2.13	0.59	0.00
3	47.57	34- 7.94	106-49.98	7.00	12	0.12	-0.02	RJR	0.50	0.00	0.00	-0.50	-1.00	-1.00	0.05	0.00	0.90	2.16	0.00	0.00	0.00
3	47.55	34- 7.94	106-49.98	7.00	12	0.12	0.00	RJR	2.00	0.12	0.11	-0.96	0.05	0.09	0.11	0.51	0.26	2.69	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM
850921	711 47.55	34- 7.94	106-49.98	7.00	-0.29	9	12	86	1	0.12	0.6	2.9	B	B!B	2.21	10	9	0.00	0.10	0	0.0	0.0	6	-0.3	0.4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	D
MTX	12.4	237	120	P 2	711	50.10	2.55	2.43	-0.02	0.15	0.82	0	0	0.00	0			9	-1.0*						
BAR	19.0	87	110	P 1	711	51.00	3.45	3.45	-0.08	0.08	1.26	0	0	0.00	0			21	0.1	S 2	53.30	5.75	-0.09	0.84	
CAR	21.9	155	108	P 0	711	51.40	3.85	3.93	-0.08	0.00	1.68	0	0	0.00	0			23	0.2						
LPM	27.2	43	104	P 1	711	52.10	4.55	4.80	-0.30	0.06	1.23	0	0	0.00	0			18	-0.1	S 2	55.22	7.67	-0.11	0.80	
MAG	37.0	275	101	P 1	711	53.90	6.35	6.43	0.08	-0.16	1.17	0	0	0.00	0			19	-0.1	S 2	58.70	11.15	-0.13	0.76	
LA2	41.1	317	100	P 2	711	55.20	7.65	7.13	0.22	0.30	0.48	0	0	0.00	0			10	-0.8*						

LAT	LON	Z	AVRPS	RMS
10.64	53.23	2.00	0.04	0.93
10.64	46.73	2.00	0.33	1.12
10.64	53.23	12.00	-0.48	0.96
10.64	46.73	12.00	-0.25	0.95
7.94	49.98	0.00	0.21	0.14
				0.12
7.94	49.98	15.66	-0.72	0.28
5.23	53.23	2.00	-0.08	1.04
5.23	46.73	2.00	0.14	0.76
5.23	53.23	12.00	-0.61	0.99
5.23	46.73	12.00	-0.45	0.78

DRMS

0.81 (0.04) 1.00 (0.03)

0.07 0.00 (0.16)

0.92 (0.87) 0.84 (0.66)

```
DATE AND TIME OF RUN  3/13/86 1501 pjs

                                                                                                  85/ 9/21        HI 4
RESET TO    TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8)  TEST(9)  TEST(10)  TEST(11)  TEST(12)  TEST(13)
            0.1000   10.0000  2.0000   0.0500   7.0000   4.0000   -3.6300  2.7900   0.0000   100.0000  8.9000    6.5000    5.0000

VELOCITY  DEPTH   ZTR XNEAR XFAR  POS         IQ  KMS  KFM IPUN IMAG  IR  IPRN CODE
 5.850    0.000    7.  20.  250.  1.7320508    3   1    0    0    1    0    1   1011

                                                                 ADJUSTMENTS (KM)     PARTIAL F-VALUES      STANDARD ERRORS     ADJUSTMENTS TAKEN
 I  ORIG  LAT N     LONG W     DEPTH   DM  RMS  AVRPS SKD  CF     DLAT   DLON   DZ    DLAT   DLON   DZ     DLAT  DLON   DZ    DLAT   DLON   DZ
 1  0.87 34- 4.43 106-56.85   7.00*   0  1.02  0.00  DOA  2.00   5.06-11.24   0.00  20.03  95.24  0.00   0.69  1.15  0.00  5.06-11.24   0.00
 2  0.81 34- 7.17 106-49.54   7.00   12  0.15 -0.45  AOB  2.00   0.99   0.49  0.00  26.95   8.10  0.84   0.18  0.17  0.00  0.99   0.49   0.00
 3  0.40 34- 7.71 106-49.86   7.00   12  0.08  0.00  A1B  0.50   0.09   0.00  0.74   0.06  -1.00  0.79   0.00  0.90  0.83  0.00   0.00   0.74
 4  0.36 34- 7.71 106-49.86   7.74   12  0.08  0.00  A3B  0.50   0.05   0.00  0.00   0.07  -1.00 -1.00   0.17  0.90  0.00  0.00   0.00   0.00
 4  0.36 34- 7.71 106-49.86   7.74   12  0.08  0.00  A2B  2.00   0.05   0.02  0.00   0.07   0.02  0.00   0.19  0.18  0.86  0.00   0.00   0.00

 DATE    ORIGIN    LAT N     LONG W     DEPTH    MAG NO DM GAP M  RMS   ERH  ERZ Q SQD  ADJ  IN NR  AVR  AAR NM AVXM SDXM NF AVFM SDFM
850921  8 4  0.36 34- 7.71 106-49.86    7.74    0.38 15 12  70 1 0.08  0.3  0.9 B A1B 0.74 10 15 0.00 0.06  0  0.0  0.0 10  4.4  0.5

 STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLY/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES S-WT   D
 WTX  12.3 239 122  P 0  8 4  2.80  2.44  2.48 -0.02 -0.07  1.42  0   0  0.00 0              13-0.5*
 LEM  13.8 287 119  P 0  8 4  3.20  2.84  2.71  0.06  0.07  1.42  0   0  0.00 0              24 0.2   S 2  9.10  4.74 -0.06  0.71
 BAR  18.8  85 112  P 0  8 4  3.80  3.44  3.47 -0.08  0.05  1.42  0   0  0.00 0              44 1.0*
 CAR  21.5 155 110  P 1  8 4  4.20  3.84  3.90 -0.08  0.02  1.06  0   0  0.00 0              25 0.3
 LJY  23.8 345 108  P 1  8 4  5.20  4.84  4.28  0.56  0.00  1.05  0   0  0.00 0              18-0.1*
 LPM  27.4  42 106  P 0  8 4  5.00  4.64  4.86 -0.30  0.08  1.38  0   0  0.00 0              48 1.1*  S 2  8.10  7.74 -0.16  0.69
 SR   36.5 242 102  P 2  8 4  7.00  6.64  6.37  0.16  0.11  0.66  0   0  0.00 0              21 0.1   S 2 11.80 11.44  0.13  0.66
 MAG  37.2 276 102  P 0  8 4  6.90  6.54  6.49  0.08 -0.03  1.32  0   0  0.00 0              43 0.9*
 LAZ  41.6 317 101  P 0  8 4  7.70  7.34  7.22  0.22 -0.10  1.29  0   0  0.00 0              34 0.6   S 3 13.30 12.94  0.06  0.32
 SMC  42.5 204 100  P 1  8 4  7.80  7.44  7.39  0.10 -0.05  0.96  0   0  0.00 0              25 0.3   S 2 13.20 12.84 -0.13  0.64
          MISSING STATION  DELTA   AZIM   EX-GAP   HD-GAP
                       DM   3.2   137.4    70.0     18.1

     LAT       LON        Z      AVRPS      RMS                  DRMS

    10.41     53.11      2.74     0.45      0.84          0.77
    10.41     46.61      2.74    -0.15      1.00                           0.93
    10.41     53.11     12.74    -0.20      0.72         ( 0.64)
    10.41     46.61     12.74    -0.70      0.94                          ( 0.86)

     7.71     49.86      0.00     0.24      0.13                   0.06
                                            0.08                     0.00
     7.71     49.86     16.40    -0.70      0.23                  ( 0.15)

     5.00     53.11      2.74     0.40      1.00          0.92
     5.00     46.61      2.74    -0.26      0.78                           0.70
     5.00     53.11     12.74    -0.23      0.90         ( 0.82)
     5.00     46.61     12.74    -0.78      0.74                          ( 0.66)
```

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/27 10:14

***** FOLLOWING EVENT IS OUT OF ORDER *****

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	INAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	30.33	33-57.25	106-44.17	1.000	0	1.05	0.00	DOB	2.00	9.35	10.91	0.00	60.54	76.57	0.00	1.20	1.25	0.00	9.35	10.91	0.00
2	31.66	34- 2.31	106-51.26	1.00	9	0.31	-0.57	COB	2.00	-1.59	-2.23	2.56	66.47	151.46	12.83	0.19	0.18	0.72	-1.59	-2.23	2.56
3	30.90	34- 1.45	106-49.81	9.56	12	0.06	-0.03	A1B	0.30	0.00	-0.21	0.00	0.31	1.62	-1.00	0.00	0.16	0.00	0.00	-0.21	0.00
4	30.87	34- 1.45	106-49.68	9.56	12	0.06	0.00	A3B	0.50	-0.10	0.00	0.00	0.34	-1.00	-1.00	0.18	0.00	0.00	0.00	0.00	0.00
4	30.87	34- 1.45	106-49.68	9.56	12	0.06	0.00	A2B	2.00	-0.11	-0.02	0.09	0.27	0.01	0.02	0.21	0.19	0.63	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	ERM	AVXM	SDXM	AZ	AVFM	SDFM	I
860427	1814 30.87	34- 1.45	106-49.68	9.56	-0.15	10	12	83	1	0.06	0.3	0.6	B	AIB	0.21	10	11	0.00	0.04	0	0.0	0.0	7	-0.1	0.2	4

STN	DIST	AZM	AIN	PHMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	K	XNAG	RMK	PMP	PNAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.7	133	129	P 1	1814	33.40	2.53	2.59	-0.09	0.03	1.35	0	0	0.00	0			15-0.3		S 4	35.00	4.13	-0.20	0.00	
WTA	12.1	296	128	P 0	1814	33.50	2.63	2.64	-0.01	0.00	1.80	0	0	0.00	0			16-0.1		S 3	35.50	4.63	0.07	0.45	
LEM	20.7	319	115	P 2	1814	34.70	3.83	3.90	-0.05	-0.12	0.45	0	0	0.00	0			23 0.2							
BAR	22.6	55	113	P 0	1814	35.20	4.33	4.20	0.10	0.03	1.78	0	0	0.00	0			16-0.1		S 3	38.20	7.33	-0.12	0.44	
SHC	32.5	213	106	P 1	1814	36.70	5.83	5.79	0.11	-0.07	1.28	0	0	0.00	0			16-0.3							
LPH	36.7	29	105	P 1	1814	37.10	6.23	6.48	-0.21	0.02	1.25	0	0	0.00	0			16-0.3		S 3	41.60	10.73	-0.03	0.42	
LAZ	50.8	326	101	P 2	1814	39.90	9.03	8.84	0.10	0.09	0.78	0	0	0.00	0			17-0.2							

LAT	LON	Z	AVRPS	RMS	DRMS
4.15	52.92	4.56	0.41	0.83	0.77
4.15	46.43	4.56	0.49	0.95	0.89
4.15	52.92	14.56	-0.40	0.64	(0.58)
4.15	46.43	14.56	-0.28	0.92	(0.86)
1.45	49.68	0.90	0.38	0.17	0.11
				0.06	0.00
1.45	49.68	18.22	-0.85	0.31	(0.26)
58.74	52.92	4.56	-0.12	0.80	0.81
58.74	46.43	4.56	-0.09	0.74	0.69
58.74	52.92	14.56	-0.86	0.75	(0.70)
58.74	46.43	14.56	-0.76	0.59	(0.53)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/27 18:14

RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	59.90	33-57.25	106-44.17	7.00*	0	1.10	0.00	D0B	2.00	8.32	10.73	0.00	46.49	75.32	0.00	1.22	1.24	0.00	8.32	10.73	0.00
2	1.32	34- 1.75	106-51.14	7.00	10	0.29	-0.47	D0B	2.00	-1.28	-1.72	3.21	14.12	28.05	5.51	0.34	0.32	1.37	-1.28	-1.72	3.21
3	0.60	34- 1.06	106-50.02	10.21	12	0.09	-0.03	A3B	0.50	0.00	0.00	0.55	-1.00	-1.00	0.50	0.00	0.00	0.77	0.00	0.00	0.00
3	0.58	34- 1.06	106-50.02	10.21	12	0.09	0.00	A2B	2.00	-0.14	-0.12	0.51	0.21	0.18	0.34	0.30	0.29	0.88	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860427	1815	0.58	34- 1.06	106-50.02	10.21	-0.37	11	12	87	1	0.09	0.4	0.9	B	A1B	3.86	10	12	0.00	0.06	0	0.0	0.0	7	-0.4	0.2	3

STN	DIST	AZM	AIN	PRMK		HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK		S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.7	128	131	P	1	1815	3.10	2.52	2.65	-0.09	-0.04	1.41	0	0	0.00	0			11	-0.7							
WTX	12.9	300	130	P	1	1815	3.20	2.62	2.69	-0.01	-0.06	1.41	0	0	0.00	0			15	-0.3	S	3	5.40	4.82	0.18	0.42	
LEM	20.2	322	116	P	1	1815	4.60	4.02	3.98	0.05	0.00	1.41	0	0	0.00	0			20	0.0	S	3	7.80	7.22	0.25	0.32	
BAR	23.5	54	114	P	1	1815	5.00	4.42	4.37	0.10	-0.05	1.39	0	0	0.00	0			12	-0.6	S	3	8.00	7.42	-0.33	0.11	
SMC	31.6	213	108	P	1	1815	6.40	5.82	5.67	0.11	0.04	1.34	0	0	0.00	0			14	-0.4							
LPM	37.6	29	105	P	0	1815	7.00	6.42	6.66	-0.27	0.04	1.74	0	0	0.00	0			15	-0.3	S	3	11.90	11.32	0.26	0.24	
LAZ	51.1	327	101	P	1	1815	9.50	8.92	8.91	0.10	-0.08	1.21	0	0	0.00	0			18	-0.1	S	4	15.50	14.92	-0.68	0.00	

LAT	LON	Z	AVRPS	RMS	DRMS	
3.76	53.27	5.21	0.61	0.91	0.82	
3.76	46.78	5.21	0.51	0.83		0.74
3.76	53.27	15.21	-0.21	0.73	(0.64)	
3.76	46.78	15.21	-0.29	0.83		(0.74)
1.06	50.02	1.55	0.40	0.20	0.11	
				0.09	0.00	
1.06	50.02	18.87	-0.85	0.34	(0.25)	
58.35	53.27	5.21	-0.16	0.81	0.72	
58.35	46.78	5.21	-0.22	0.75		0.66
58.35	53.27	15.21	-0.90	0.68	(0.60)	
58.35	46.78	15.21	-0.92	0.64		(0.55)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/27 22117

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IO	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250*	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	36.11	33-57.25	106-44.17	7.00*	0	1.14	0.00	DOB	2.00	10.63	12.61	0.00	70.79	103.69	0.00	1.26	1.21	0.00	10.63	12.61	0.00
2	37.26	34- 3.00	106-52.36	7.00	7	0.68	-0.96	DOR	2.00	-3.63	-4.12	0.00	120.91	276.09	1.26	0.33	0.25	0.00	-3.63	-4.12	0.00
3	36.48	34- 1.04	106-49.68	7.00	11	0.06	-0.07	A3B	0.50	0.00	-0.11	0.00	-1.00	0.37	-1.00	0.00	0.17	0.00	0.00	0.00	0.00
3	36.39	34- 1.04	106-49.68	7.00	11	0.06	0.00	A2B	2.00	0.05	-0.13	0.26	0.01	0.35	0.06	0.27	0.22	1.03	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TM	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860427	2217	36.39	34- 1.04	106-49.68	7.00	-0.50	9	11	84	1	0.06	0.4	1.0	B	AIB	5.49	10	10	0.00	0.05	0	0.0	0.0	8	-0.5	0.2	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PMX	CALX	K	XMAG	MMK	FMP	FMAG	SMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.2	130	122	P 0	2217	58.60	2.21	2.26	-0.09	0.04	1.94	0	0	0.00	0			15-0.3		S 3	40.00	3.61	-0.15	0.48	
WTX	24.6	299	116	P 1	2217	38.90	2.51	2.45	-0.01	0.08	1.45	0	0	0.00	0			13-0.5							
LEM	31.3	321	108	P 3	2217	40.26	3.81	3.83	0.05	-0.06	0.48	0	0	0.00	0			14-0.4							
BAR	33.1	53	107	P 0	2217	40.68	4.21	4.12	0.10	-0.01	1.91	0	0	0.00	0			16-0.3		S 3	43.70	7.31	0.00	0.48	
SHC	33.8	214	102	P 2	2217	42.10	5.71	5.57	0.11	0.03	0.92	0	0	0.00	0			10-0.8							
LPM	37.3	29	101	P 3	2217	42.60	6.11	6.50	-0.27	-0.11	0.45	0	0	0.00	0			11-0.7							
MAG	40.6	293	80	P 2	2217	43.40	7.01	7.04	0.03	-0.06	0.88	0	0	0.00	0			12-0.6							
LAZ	51.4	326	98	P 4	2217	45.20	8.81	8.87	0.10	-0.16	0.00	0	0	0.00	0			15-0.3							

LAT	LON	Z	AVRPS	RMS	DRMS
3.74	52.93	2.00	0.08	0.91	0.85
3.74	46.43	2.00	0.27	0.84	0.78
3.74	52.93	12.00	-0.56	0.83	(0.77)
3.74	46.43	12.00	-0.37	0.80	(0.74)
1.04	49.68	0.00	0.25	0.14	0.08
1.04	49.68	15.66	-0.76	0.06 0.23	0.00 (0.17)
5.33	52.93	2.00	-0.18	0.77	0.71
5.33	46.43	2.00	0.18	0.99	0.93
5.33	52.93	12.00	-0.39	0.77	(0.71)
5.33	46.43	12.00	-0.54	0.60	(0.53)

DATE AND TIME OF RUN 11-1-86 1130

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	5.0000

86/ 4/27 23146

VELOCITY	DEPTH	ZTR.	XNEAR	XFAR	POS	IQ	KNS	KFM	IPHN	IHAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7120508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	54.43	34-57.25	106-44.17	7.000	0	1.16	0.00	DOC	2.00	11.17	12.16	0.00	83.24	71.86	0.00	1.22	0.93	0.00	11.17	12.16	0.00
2	56.02	34- 3.29	106-52.06	7.000	7	0.65	-0.75	DOC	2.00	-4.43	-3.12	3.28	88.22	99.23	11.16	0.32	0.22	0.98	-4.43	-3.12	3.28
3	54.02	34- 0.89	106-50.04	10.28	12	0.07	-0.09	AOC	2.00	0.00	-0.48	-1.02	0.02	13.96	4.29	0.00	0.13	0.49	0.00	-0.48	-1.02
4	54.02	34- 0.89	106-49.73	9.26	11	0.03	0.00	A3C	0.50	0.02	0.00	0.00	0.02	-1.00	-1.00	0.15	0.00	0.00	0.00	0.00	0.00
4	54.02	34- 0.89	106-49.73	9.26	11	0.03	0.00	A2C	2.00	0.05	0.00	-0.14	0.04	0.00	0.03	0.26	0.14	0.77	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	RP	AVR	AAR	NN	AVXM	SDXM	NF	AVFM	SDFM	I
860427	2346 54.92	34- 0.89	106-49.73	9.26	-0.45	7	11	172	1	0.03	0.3	0.8	A	AIC	1.11	10	9	0.00	0.02	0	0.0	0.0	7	-0.5	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/RI	P-RES	P-WT	AMX	PRX	CALX	A	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.1	128	130	P 0	2346	57.30	2.38	2.48	-0.09	0.00	1.52	0	0	0.00	0			17-0.5							
WTX	12.5	300	126	P 1	2346	57.60	2.68	2.66	-0.01	-0.03	1.14	0	0	0.00	0			11-0.7							
LEM	2.4	121	112	P 1	2346	58.00	3.08	3.09	0.05	-0.06	1.13	0	0	0.00	0			18-0.1							
BAM	3.3	51	112	P 0	2346	58.10	4.38	4.28	0.10	0.00	1.50	0	0	0.00	0			20 0.0	S	3	62.50	7.58	-0.01	0.37	
LPM	3.9	20	104	P 1	2347	1.30	6.38	6.62	-0.27	0.02	0.35	0	0	0.00	0			16-0.8	S	4	0.30	11.38	0.38	0.00	
MAG	50.2	264	101	P 4	2347	3.20	7.28	7.15	0.03	0.13	0.00	0	0	0.00	0			12-0.6							
LAZ	51.6	328	100	P 1	2347	4.00	9.08	8.98	0.10	0.02	0.98	0	0	0.00	0			15-0.3							

LAT	LON	Z	AVRPS	RMS	DRMS
3.60	52.98	4.26	0.49	0.88	0.85
3.60	46.48	4.26	0.53	0.64	0.61
3.60	52.98	14.26	-0.30	0.84	(0.81)
3.60	46.48	14.26	-0.20	0.66	(0.63)
0.89	49.73	0.60	0.38	0.15	0.13
				0.03	0.00
0.89	49.73	17.92	-0.86	0.27	(0.24)
58.19	52.98	4.26	-0.28	0.52	0.50
58.19	46.48	4.26	-0.07	0.36	0.89
58.19	52.98	14.26	-0.91	0.38	(0.35)
58.19	46.48	14.26	-0.83	0.58	(0.55)

DATE AND TIME OF RUN

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITI	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	17.92	33-57.28	106-44.17	7.00*	0	1.30	0.00	D0C	2.00	12.22	13.31	0.00	27.59	39.46	0.00	2.33	2.12	0.00	12.22	13.31	0.00
2	19.31	34- 3.86	106-52.81	7.00	6	0.84	-1.24	D0C	2.00	-4.90	-3.72	5.74	11.05	94.26	8.71	0.46	0.38	1.95	-4.90	-3.72	5.74
3	17.82	34- 1.21	106-50.39	12.74	11	0.12	-0.19	A0C	2.00	0.00	-0.94	-1.35	0.02	22.24	2.21	0.00	0.20	0.91	0.00	-0.94	-1.35
4	17.82	34- 1.21	106-49.78	11.39	12	0.07	-0.02	A1C	0.50	0.00	0.00	-1.14	-1.00	0.02	1.95	0.00	0.00	0.82	0.00	0.00	-1.14
5	17.92	34- 1.21	106-49.78	10.25	12	0.05	0.00	A3C	0.50	0.00	0.03	0.00	-1.00	0.02	-1.00	0.00	0.23	0.60	0.00	0.00	0.00
5	17.91	34- 1.21	106-49.78	10.25	12	0.05	0.00	A2C	2.00	-0.05	0.04	0.04	0.01	0.01	0.00	0.51	0.34	1.62	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
800420	042 17.91	34- 1.21	106-49.78	10.25	-0.91	6	12	166	1	0.05	0.6	1.6	B	A1C	1.14	10	6	0.00	0.05	0	0.0	0.0	4	-0.9	0.3	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.6	130	132	P 0	042	20.50	2.59	2.64	-0.09	0.03	1.42	0	0	0.00	0			7	-1.3	S 3	22.20	4.29	-0.13**	0.35	
WTX	12.2	298	130	P 2	042	20.70	2.79	2.72	-0.01	0.07	0.71	6	0	0.00	0			8	-1.1						
LEN	20.9	320	116	P 0	042	21.90	3.99	3.98	0.05	-0.05	1.41	0	0	0.00	0			10	-0.8						
BAR	23.0	54	114	P 0	042	22.30	4.39	4.30	0.10	-0.02	1.40	0	0	0.00	0			14	-0.4	S 2	25.00	7.09	0.00	0.70	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
WNC	8.7	305.8	22.1	7.5
CH	14.1	236.7	167.8	61.5
DN	9.9	11.8	93.6	42.3
WKH	8.8	305.5	22.1	7.3

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     LAT        LON          Z      AVRPS       RMS                        DRMS

    3.91      53.03       5.25       0.25      0.91            0.86
    3.91      46.53       5.25       0.68      0.78                            0.72
    3.91      53.03      15.25      -0.68      0.81            (   0.76)
    3.91      46.53      15.25      -0.29      0.72                            (   0.66)

    1.21      49.78       1.59       0.54      0.19                  0.14
                                               0.05                    0.00
    1.21      49.78      18.91      -1.00      0.18                  (   0.13)

   58.51      53.03       5.25      -0.28      0.61            0.56
   58.51      46.53       5.25       0.31      0.99                            0.94
   58.51      63.03      15.25      -1.12      0.53            (   0.48)
   58.51      46.53      15.25      -0.71      0.57                            (   0.52)
```

DATE AND TIME OF RUN

86/ 4/20 0144

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.650	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	35.66	33-57.25	106-44.17	7.00*	0	1.15	0.00	D0C	2.00	11.87	11.96	0.00	91.73	167.72	0.00	1.24	0.92	0.00	11.87	11.96	0.00
2	37.42	34- 3.67	106-51.94	7.00	8	0.67	-0.71	D0C	2.00	-4.45	-3.33	3.13	87.67	115.56	4.85	0.48	0.31	1.42	-4.45	-3.33	3.13
3	36.32	34- 1.26	106-49.77	10.13	12	0.08	-0.09	A0C	2.00	0.00	-0.47	0.00	-1.00	4.40	1.22	0.00	0.22	0.00	0.00	-0.47	0.00
4	36.23	34- 1.26	106-49.47	10.13	11	0.07	0.00	A1C	0.50	0.00	0.00	-1.04	-1.00	0.07	1.83	0.00	0.00	0.77	0.00	0.00	-1.04
5	36.32	34- 1.26	106-49.47	9.09	11	0.06	0.00	A3C	0.50	0.00	0.05	0.00	-1.00	0.07	-1.00	0.00	0.20	0.00	0.00	0.00	0.00
5	36.32	34- 1.26	106-49.47	9.09	11	0.06	0.00	A2C	2.00	0.01	0.06	-0.11	0.00	0.05	0.01	0.45	0.26	1.35	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	K	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	044 36.32	34- 1.26	106-49.47	9.09	-0.52	8	11	160	1	0.06	0.5	1.4	B	A1C	1.04	10	9	0.00	0.05	0	0.0	0.0	7	-0.5	0.2	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.3	132	129	P 0	044	38.70	2.38	2.47	-0.09	0.00	1.66	0	0	0.00	0			11	-0.7	S 4	40.00	3.68	-0.45	0.00	
WTX	12.6	297	126	P 1	044	39.00	2.68	2.65	-0.01	0.04	1.24	0	0	0.00	0			14	-0.4						
LEM	21.2	319	113	P 1	044	40.20	3.88	3.94	0.05	-0.10	1.24	0	0	0.00	0			14	-0.4						
BAR	22.6	54	112	P 1	044	40.60	4.28	4.18	0.10	0.03	1.23	0	0	0.00	0			18	-0.1	S 3	43.70	7.38	0.01	0.41	
LPH	36.8	24	104	P 2	044	42.50	6.18	6.48	-0.27	-0.03	0.77	0	0	0.00	0			10	-0.8						
MAG	40.7	293	103	P 3	044	43.40	7.08	7.14	0.03	-0.08	0.38	0	0	0.00	0			12	-0.6						
LAZ	51.3	326	100	P 1	044	45.40	9.08	8.90	0.10	0.08	1.07	0	0	0.00	0			14	-0.4						

LAT	LON	Z	AVRPS	RMS
3.97	52.72	4.09	0.54	0.86
3.97	46.22	4.09	0.44	0.67
3.97	52.72	14.09	-0.21	0.85
3.97	46.22	14.09	-0.24	0.69
1.26	49.47	0.43	0.36	0.16
				0.06
1.26	49.47	17.75	-0.83	0.29
58.56	52.72	4.09	-0.22	0.56
58.56	46.22	4.09	-0.14	0.92
58.56	52.72	14.09	-0.84	0.44
58.56	46.22	14.09	-0.86	0.57

DRMS

0.80 0.62 (0.79) (0.63)

0.11 0.00 (0.23)

0.50 0.86 (0.38) (0.52)

DATE AND TIME OF RUN 11-1-86 1130

86/ 4/28 31 8

***** FOLLOWING EVENT IS OUT OF ORDER *****

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFN	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	I011

I	ORIG	LAT N	LONG W	DEPTH	OM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	36.37	33-57.25	106-44.17	7.00*	0	1.05	0.00	D0B	2.00	9.64	12.28	0.00	62.00	83.65	0.00	1.22	1.34	0.00	9.64	12.28	0.00
2	37.76	34- 2.47	106-52.14	7.00	8	0.49	-0.64	C0B	2.00	-2.44	-3.22	3.67	58.24	113.92	8.08	0.32	0.30	1.29	-2.44	-3.22	3.67
3	36.86	34- 1.14	106-50.05	10.67	12	0.08	-0.08	A0B	2.00	0.00	-0.50	0.00	0.21	5.14	-1.00	0.00	0.22	0.00	0.00	-0.50	0.00
4	36.79	34- 1.14	106-49.71	10.67	11	0.08	0.01	A1B	0.50	-0.24	0.00	0.00	0.83	0.02	-1.00	0.27	0.00	0.00	-0.24	0.00	0.00
5	36.78	34- 1.01	106-49.73	10.67	11	0.07	0.00	A2B	2.00	0.00	0.04	0.00	-1.00	0.05	-1.00	0.00	0.26	0.00	0.00	0.00	0.00
5	36.78	34- 1.01	106-49.73	10.67	11	0.07	0.00	A2B	2.00	0.02	0.06	-0.20	0.00	0.03	0.03	0.33	0.32	1.20	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IU	UR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	3 8 36.78	34- 1.01	106-49.73	10.67	-0.17	9	11	86	1	0.07	0.5	1.2	B	AIR	0.24	10	10	0.00	0.06	0	0.0	0.0	7	-0.2	0.2	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	X	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAM	11.3	129	133	P	0	3 8	39.30	2.52	2.65	-0.09	-0.04	1.44	0	0	0.00	0			17-0.2						
WTX	12.4	300	132	P	0	3 8	39.60	2.82	2.80	-0.01	0.03	1.44	0	0	0.00	0			17-0.2						
LEM	31.3	321	117	P	1	3 8	40.80	4.02	4.06	0.05	-0.09	1.07	0	0	0.00	0			15-0.3						
BAK	31.3	53	115	P	0	3 8	41.20	4.42	4.36	0.10	-0.04	1.42	0	0	0.00	0			25 0.3	S	3	44.50	7.72	0.00	0.35	
SNC	31.8	214	109	P	1	3 8	42.70	5.92	5.73	0.11	0.09	1.02	0	0	0.00	0			14-0.4						
LPH	37.4	29	106	P	1	3 8	43.20	6.42	6.65	-0.27	0.04	1.00	0	0	0.00	0			19-0.1	S	3	46.10	11.32	-0.27	0.33	
LAZ	51.4	326	102	P	1	3 8	45.80	9.02	8.98	0.10	-0.05	0.93	0	0	0.00	0			17-0.2	S	4	52.00	15.22	-0.50	0.00	

LAT	LON	Z	AVRPS	RMS	DRMS
3.72	52.98	5.67	0.49	0.78	0.70
3.72	46.48	5.67	0.51	0.85	
3.72	52.98	15.67	-0.33	0.71	0.77
3.72	46.48	15.67	-0.29	0.79	(0.71)
					(0.63)
1.01	49.73	2.01	0.45	0.19	
				0.07	0.12
1.01	49.73	19.33	-0.86	0.28	0.00
					(0.21)
58.31	52.98	5.67	-0.15	0.78	0.71
58.31	46.48	5.67	-0.05	0.78	
58.31	52.98	15.67	-0.89	0.70	0.70
58.31	46.48	15.67	-0.80	0.54	(0.47)
					(0.62)

DATE AND TIME OF RUN 11-1-86 1130

R6/ 4/28 3115

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	6.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050$_8$	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	3.43	33-57.25	106-44.17	7.00*	0	1.06	0.00	DDH	2.00	10.50	11.54	0.00	148.18	229.22	0.00	0.87	0.76	0.00	10.50	11.54	0.00
2	6.24	34- 2.93	106-51.66	7.00	8	0.44	-0.45	CDH	2.00	-2.79	-2.61	3.97	69.71	90.21	8.46	0.33	0.27	1.36	-2.79	-2.61	3.97
3	4.36	34- 1.42	106-49.97	10.92	12	0.10	-0.05	ADH	2.00	-0.54	-0.40	0.00	4.42	3.57	0.13	0.26	0.21	0.00	-0.54	-0.40	0.00
4	4.26	34- 1.13	106-49.70	10.97	11	0.07	0.00	A3D	0.50	0.00	0.00	-0.40	-1.00	-1.00	0.28	0.00	0.00	0.74	0.00	0.00	0.00
4	4.26	34- 1.13	106-49.70	10.97	11	0.07	0.00	A2B	2.00	-0.02	0.00	-0.36	0.01	0.00	0.14	0.29	0.22	0.96	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG N	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NN	AVXM	SDXM	NF	AVFM	SDFM	I
860428	315 4.26	34- 1.13	106-49.70	10.97	0.46	12	11	83	1	0.07	0.4	1.0	B	A1B	0.68	10	15	0.00	0.05	0	0.0	0.0	10	0.5	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.4	130	134	P	0	315	4.80	2.54	2.70	-0.09	-0.07	1.50	0	0	0.00	0			32	0.6					
WTX	12.4	299	132	P	0	315	7.10	2.84	2.82	-0.01	0.02	1.50	0	0	0.00	0			30	0.5					
LEM	21.1	320	117	P	0	315	8.40	4.14	4.07	0.05	0.02	1.50	0	0	0.00	0			34	0.6					
BAR	31.0	54	115	P	0	315	8.80	4.54	4.46	0.10	0.08	1.45	0	0	0.00	0			46	0.8					
SNC	32.0	214	109	P	2	315	10.20	5.94	5.78	0.11	0.05	0.70	0	0	0.00	0			30	0.5	S	4	14.50	10.24	0.04	0.00
SB	32.9	262	108	P	1	315	10.60	6.34	5.93	0.37	0.04	0.35	0	0	0.00	0			22	0.1	S	3	15.10	10.84	-0.07	0.35
LJX	36.8	350	107	P	1	315	11.40	7.14	6.40	-0.65	-0.09	1.03	0	0	0.00	0			31	0.5	S	4	15.20	10.94	-1.27	0.00
LPM	37.2	29	106	P	0	315	10.60	6.34	6.63	-0.27	-0.03	1.39	0	0	0.00	0			17	-0.2*	S	3	15.00	10.74	-0.28	0.22
MAG	40.5	293	105	P	1	315	11.40	7.14	7.17	0.03	-0.07	1.03	0	0	0.00	0			30	0.5						
LAZ	51.3	326	102	P	1	315	13.30	9.04	8.96	0.10	-0.02	0.97	0	0	0.00	0			34	0.6	S	3	19.40	15.14	-0.56	0.00

LAT	LON	Z	AVRPS	RMS	DRMS
3.83	52.95	5.97	0.76	0.73	0.66
3.83	46.46	5.97	0.39	0.77	0.70
3.83	52.95	15.97	-0.01	0.70	(0.64)
3.83	46.46	15.97	-0.33	0.75	(0.68)
1.13	49.70	2.31	0.41	0.19	0.12
				0.07	0.00
1.13	49.70	19.63	-0.80	0.28	(0.22)
5.42	52.95	5.97	-0.09	0.73	0.66
5.42	46.46	5.97	-0.34	0.76	0.70
5.42	52.95	15.97	-0.74	0.64	(0.57)
5.42	46.46	15.97	-0.98	0.54	(0.47)

DATE AND TIME OF RUN 11-1-86 1130

86/ 4/28 3:15

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR.	XNEAR	XFAR	POS	IQ	KMS	KFH	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	OH	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	57.62	33-57.25	106-44.17	7.00	0	1.14	0.00	D0B	2.00	11.07	13.11	0.00	41.36	48.29	0.00	1.72	1.89	0.00	11.07	13.11	0.00
2	58.49	34- 3.24	106-52.68	7.00	7	0.66	-0.95	B0A	2.00	-3.59	-4.17	2.66	136.31	218.16	6.97	0.31	0.28	1.01	-3.59	-4.17	2.66
3	57.92	34- 1.30	106-49.97	9.66	12	0.06	-0.08	A1B	0.50	-0.28	0.00	0.00	1.80	0.33	-1.00	0.21	0.00	0.00	-0.28	0.00	0.00
4	57.84	34- 1.14	106-49.97	9.66	12	0.10	-0.02	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.06	0.00	0.00
5	57.84	34- 1.17	106-49.97	9.66	12	0.09	-0.02	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.06	0.00	0.00
6	57.84	34- 1.20	106-49.97	9.66	12	0.09	-0.02	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.06	0.00	0.00
7	57.84	34- 1.23	106-49.97	9.66	12	0.09	-0.02	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.06	0.00	0.00
8	57.85	34- 1.26	106-49.97	9.66	12	0.09	-0.02	A1B	0.50	0.00	-0.37	0.00	-1.00	1.51	0.25	0.00	0.30	0.00	0.00	-0.37	0.00
9	57.84	34- 1.26	106-49.73	9.66	12	0.08	0.00	A3B	0.50	0.00	0.00	-0.47	-1.00	-1.00	0.28	0.00	0.00	0.88	0.00	0.00	0.00
10	57.84	34- 1.26	106-49.73	9.66	12	0.08	0.00	A2B	2.00	-0.03	0.05	-0.47	0.01	0.02	0.14	0.42	0.39	1.27	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TH	NR	AVR	AAP	NM	AVXM	SDXM	AF	AVFM	SDFM	I
860428	315 57.84	34- 1.26	106-49.73	9.66	-0.40	8	12	84	1	0.08	0.6	1.3	H	AIB	0.37	10	9	0.00	0.06	0	0.0	0.0	6	-0.1	0.3	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	PMP	PMAG	SRNK	S-SEC	TSOBS	S-RES	S-WT	DT
CAN	11.6	131	130	P 0	316	0.40	2.56	2.56	-0.09	0.00	1.44	0	0	0.00	0			16-0.3		S 3	2.00	4.16	-0.14	0.36	
WTX	32.2	298	128	P 0	316	0.50	2.66	2.66	-0.01	0.01	1.44	0	0	0.00	0			14-0.4							
BAR	22.9	54	113	P 0	316	2.20	4.36	4.24	0.10	0.02	1.43	0	0	0.00	0			21 0.1		S 3	5.10	7.26	-0.26	0.36	
SNC	32.2	213	107	P 1	316	3.60	5.76	5.74	0.11	-0.09	1.03	0	0	0.00	0			12-0.6							
LPN	37.0	29	105	P 1	316	4.20	6.36	6.54	-0.27	0.09	1.00	0	0	0.00	0			11-0.7		S 4	8.50	10.66	-0.20	0.00	
LAZ	51.0	326	101	P 1	316	6.80	8.96	8.88	0.10	-0.02	0.94	0	0	0.00	0			14-0.4							

LAT	LON	Z	AVRPS	RMS	DRMS
3.97	52.97	4.66	0.22	0.82	0.74
3.97	46.48	4.66	0.46	0.86	0.78
3.97	52.97	14.66	-0.51	0.79	(0.70)
3.97	46.48	14.66	-0.33	0.84	(0.76)
1.26	49.73	1.00	0.41	0.21	0.12
1.26	49.73	18.32	-0.82	0.08 0.33	0.00 (0.24)
58.56	52.97	4.66	-0.09	0.79	0.68
58.56	46.48	4.66	0.16	0.90	0.81
58.56	52.97	14.66	-0.62	0.70	(0.61)
58.56	46.48	14.66	-0.63	0.54	(0.45)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/28 3:24

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPHN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	2.21	33-57.25	106-44.17	7.00*	0	1.18	0.00	DOB	2.00	10.29	10.93	0.00	24.94	34.24	0.00	2.06	1.87	0.00	10.29	10.93	0.00
2	2.50	34- 2.81	106-51.27	7.00	9	0.47	-0.71	COK	2.00	-2.59	-2.14	6.11	17.67	17.27	3.95	0.62	0.52	3.07	-2.59	-2.14	6.11
3	2.43	34- 1.41	106-49.88	13.11	12	0.09	-0.16	AOA	2.00	-0.31	0.00	-2.39	4.78	1.22	30.03	0.14	0.00	0.44	-0.31	0.00	-2.39
4	2.48	34- 1.25	106-49.88	10.72	12	0.03	-0.02	A1B	0.50	0.00	-0.12	0.00	0.20	1.34	-1.00	0.00	0.10	0.00	0.00	-0.12	0.00
5	2.46	34- 1.25	106-49.80	10.72	12	0.03	0.00	A2B	0.50	0.06	0.00	0.00	0.23	-1.00	-1.00	0.11	0.00	0.00	0.00	0.00	0.00
5	2.46	34- 1.25	106-49.80	10.72	12	0.03	0.00	A2B	2.00	0.06	-0.01	-0.04	0.16	0.00	0.01	0.14	0.12	0.50	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NN	AVXH	SDXH	NF	AVFM	SDFM	I
860428	324	2.46	34- 1.25	106-49.80	10.72	-0.79	8	12	82	1	0.03	0.2	0.5	B	AIB	0.12	10	10	0.00	0.02	8	0.0	0.0	7	-0.8	0.5	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/R1	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.6	131	133	P	0	324	5.10	2.64	2.70	-0.09	0.02	1.72	0	0	0.00	0			16-0.3*						
WTX	32.1	298	114	P	1	324	6.40	3.94	2.77	-0.01	1.18**	0.00	0	0	0.00	0			6-1.5*	S	4	7.30	4.84	0.06	0.00
LEM	20.8	320	117	P	0	324	6.50	4.04	4.01	0.05	-0.02	1.72	0	0	0.00	0			20 0.0*	S	3	9.50	7.04	0.01	0.43
BAR	30.0	54	115	P	0	324	8.00	4.44	4.34	0.10	0.00	1.70	0	0	0.00	0			11-0.2	S	3	10.10	7.64	-0.05	0.43
SHC	34.1	-2	108	P	1	324	8.30	5.04	5.78	0.31	-0.05	0.41	0	0	0.00	0			4-1.5*						
LPR	37.1	20	106	P	1	324	8.80	6.34	6.60	-0.22	0.00	1.20	0	0	0.00	0			9-1.0						
MAC	40.3	293	105	P	1	324	9.70	7.24	7.13	0.03	0.08	0.39	0	0	0.00	0			12-0.6						

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
MNC	8.7	305.5	27.4	12.6
DN	9.8	12.0	68.8	17.2
WKM	8.7	305.3	27.4	12.3

LAT	LON	Z	AVRPS	RMS	DRMS
3.95	53.05	5.72	0.47	0.96	0.93
3.95	46.55	5.72	-0.72	0.72	(0.79)
3.95	53.05	15.72	-0.34	0.82	0.69
3.95	46.55	15.72	-0.15	0.69	(0.66)
1.25	49.80	2.06	0.46	0.18	0.15
				0.03	0.00
1.25	49.80	19.38	-0.87	0.30	(0.28)
5.54	53.05	5.72	-0.22	0.74	0.71
5.54	46.55	5.72	0.18	0.87	(0.62)
5.54	53.05	15.72	-0.96	0.65	0.84
5.54	46.55	15.72	-0.68	0.56	(0.53)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/28 3125

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR.	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	TPRH	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	54.20	31-57.25	106-44.17	7.00*	0	1.00	0.00	D0H	2.00	9.84	11.24	0.00	43.38	89.18	0.00	1.49	1.19	0.00	9.84	11.24	0.00
2	55.85	34- 2.57	106-51.47	7.00	9	0.45	-0.53	C0B	2.00	-2.33	-2.64	0.00	13.61	36.00	0.42	0.63	0.44	0.00	-2.33	-2.64	0.00
3	55.18	34- 1.31	106-49.75	7.00	12	0.16	-0.03	B1R	0.50	0.00	0.00	1.41	0.01	-1.00	0.57	0.00	0.00	1.86	0.00	0.00	1.41
4	55.07	34- 1.31	106-49.75	8.41	12	0.15	-0.01	A3B	0.50	0.00	0.00	0.61	-1.00	-1.00	0.17	0.00	0.00	1.49	0.00	0.00	0.00
4	55.06	34- 1.31	106-49.75	8.41	12	0.15	0.00	A2B	2.00	-0.11	0.00	0.71	0.03	0.00	0.16	0.63	0.43	1.78	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	N	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	325 55.06	34- 1.31	106-49.75	8.41	-0.06	11	12	82	1	0.15	0.8	1.9	B	AIB	1.41	10	11	0.00	0.10	0	0.0	0.0	8	-0.1	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.7	131	126	P	0	325	57.50	2.46	2.46	-0.09	0.08	1.67	0	0	0.00	0		24	0.2						
MAM	12.1	297	125	P	0	325	57.50	2.44	2.52	-0.01	-0.07	1.67	0	0	0.00	0		19	-0.1	S	3	59.70	4.64	0.29	0.37	
LPM	20.8	320	112	P	1	325	58.00	3.04	3.04	0.05	-0.04	1.25	0	0	0.00	0		26	0.3							
BAK	22.9	54	110	P	0	325	58.30	4.24	4.16	0.10	-0.02	1.66	0	0	0.00	0		22	0.1	S	3	62.40	7.34	-0.04	0.41	
SMC	32.2	2	105	P	3	326	0.60	5.54	5.69	0.11	-0.26	0.35	0	0	0.00	0		12	-0.6*							
LPH	37.0	29	103	P	0	326	1.30	6.24	6.48	-0.27	0.03	1.55	0	0	0.00	0		15	-0.3	S	3	5.50	10.44	-0.31	0.31	
MAG	40.3	293	102	P	1	326	2.00	6.94	7.04	0.03	-0.13	1.13	0	0	0.00	0		18	-0.1							
LAZ	50.9	326	99	P	1	326	4.40	9.34	8.83	0.10	0.42	0.61	0	0	0.00	0		20	0.0							

LAT	LON	Z	AVRPS	RMS	DRMS		
4.02	53.00	3.41	0.60	0.88	0.73		
4.02	46.50	3.41	0.47	0.82		0.67	
4.02	53.00	13.41	-0.13	0.80	(0.65)		
4.02	46.50	13.41	-0.19	0.83		(0.69)	
1.31	49.75	0.00	0.30	0.19			
				0.15	0.04		
1.31	49.75	17.07	-0.79	0.35	0.00		
					(0.20)		
58.61	53.00	3.41	-0.18	0.70			
58.61	46.50	3.41	-0.36	0.68	0.56		
58.61	53.00	13.41	-0.79	0.62		0.66	
58.61	46.50	13.41	-0.88	0.61	(0.47)		
						(0.47)	

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/28 3150

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFN	IPUN	IMAG	IH	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	2.86	34- 2.25	106-44.17	7.00*	0	1.13	0.00	DOR	2.00	10.07	11.14	0.00	54.05	70.08	0.00	1.37	1.33	0.00	10.07	11.14	0.00
2	4.28	34- 2.10	106-51.40	7.00	9	0.41	-0.56	CDR	2.00	-2.46	-2.27	2.20	377.54	314.66	24.06	0.13	0.11	0.45	-2.46	-2.27	2.20
3	3.50	34- 1.37	106-49.93	9.20	12	0.03	-0.03	AOB	2.00	0.00	-0.19	0.00	1.35	3.51	-1.00	0.00	0.10	0.00	0.00	-0.19	0.00
4	3.46	34- 1.37	106-49.81	9.20	12	0.03	0.00	AIB	0.50	-0.13	0.00	0.00	1.63	-1.00	0.00	0.10	0.00	0.00	-0.13	0.00	0.00
5	3.46	34- 1.30	106-49.81	9.20	12	0.02	0.00	A3B	0.50	0.00	0.00	-0.02	-1.00	-1.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00
								A2B	2.00	0.00	0.00	-0.02	0.00	0.00	0.00	0.12	0.11	0.38	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DK	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TN	NR	AVR	AAR	NM	AVXM	SDXM	MF	AVFM	SDFM	I
860428	350	3.46	34- 1.30	106-49.81	9.20	0.12	8	12	85	1	0.02	0.2	0.4	B	AIB	0.13	10	10	0.00	0.02	0	0.0	0.0	0	0.1	0.4	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PHX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.7	131	128	P	0	350	5.90	2.44	2.54	-0.09	-0.01	1.32	0	0	0.00	0			32	0.6					
DEV	12.1	298	127	P	0	350	6.00	2.56	2.59	-0.01	-0.04	1.32	0	0	0.00	0			29	0.1	S	3	8.00	4.54	0.07	0.33	
LEM	20.8	320	114	P	1	350	7.40	3.84	3.88	0.05	0.01	0.99	0	0	0.00	0			31	0.6							
BAR	22.9	54	112	P	0	350	7.80	4.34	4.22	0.10	0.02	1.30	0	0	0.00	0			28	0.4							
SMC	33.1	213	106	P	1	350	9.30	5.84	5.71	0.11	0.02	0.94	0	0	0.00	0			16	0.3							
DUT	36.4	350	105	P	4	350	10.30	6.84	6.26	0.65	-0.07	0.00	0	0	0.00	0			13	0.5*							
LPM	37.0	29	104	P	0	350	9.70	6.24	6.52	-0.27	-0.01	1.22	0	0	0.00	0			17	0.2	S	4	14.30	10.84	0.02	0.00	
LAZ	50.9	326	100	P	2	350	12.40	8.94	8.84	0.10	0.00	0.57	0	0	0.00	0			25	0.3							

LAT	LON	Z	AVRPS	RMS	DRMS		
4.00	53.05	4.20	0.47	0.87	0.84		
4.00	46.56	4.20	0.34	0.79		0.74	
4.00	53.05	14.20	-0.31	0.67	(0.65)		
4.00	46.56	14.20	-0.38	0.81		(0.78)	
1.30	49.81	0.54	0.35	0.14			
				0.02		0.11	
1.30	49.81	17.86	-0.80	0.28		0.00	
						(0.25)	
58.59	53.05	4.20	-0.07	0.73	0.70		
58.59	46.56	4.20	-0.11	0.82		0.80	
58.59	53.05	14.20	-0.81	0.57	(0.55)		
58.59	46.56	14.20	-0.77	0.63		(0.60)	

DATE AND TIME OF RUN 11-1-86 1130

86/ 4/28 3159

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFH	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050W	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	56.92	33-57.25	106-44.17	7.00*	0	1.12	0.00	DOB	2.00	9.82	11.55	0.0019	1.31	168.55	0.00	0.71	0.89	0.00	9.82	11.55	0.00
2	58.64	34- 2.56	106-51.67	7.00	8	0.43	-0.44	COB	2.00	-1.85	-3.03	2.34	43.48	99.03	2.72	0.28	0.30	1.42	-1.85	-3.03	2.34
3	57.85	34- 1.56	106-49.70	9.34	12	0.09	-0.03	A3B	0.50	0.00	-0.20	0.00	-1.00	0.43	-1.00	0.00	0.30	0.00	0.00	0.00	0.00
3	57.85	34- 1.56	106-49.70	9.34	12	0.09	0.00	A2B	2.00	-0.07	-0.18	-0.26	0.05	0.25	0.03	0.32	0.36	1.59	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAp	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	MN	AVXM	SDXM	NF	AVFM	SDFM	I
860428	359 57.85	34- 1.56	106-49.70	9.34	0.21	10	12	80	1	0.09	0.5	1.6	B	AIB	4.25	10	10	0.00	0.08	0	0.0	0.0	R	0.2	0.2	3

STN	DIST	AZM	AIN	PHNK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	PMP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.9	133	128	P	2 4 0	0.30	2.45	2.59	-0.09	-0.05	1.10	0	0	0.00	0			24	0.2						
WTX	12.0	295	128	P	2 4 0	0.50	2.65	2.60	-0.01	0.06	1.10	0	0	0.00	0			22	0.1						
LEM	20.5	319	119	P	0 4 0	1.80	3.95	3.85	0.05	0.05	2.20	0	0	0.00	0			31	0.5						
BAR	22.5	55	113	P	2 4 0	2.10	4.25	4.17	0.10	-0.02	1.09	0	0	0.00	0			31	0.6						
SHC	32.6	213	106	P	1 4 0	3.70	5.85	5.80	0.11	-0.06	1.56	0	0	0.00	0			21	0.1						
LPM	36.5	29	104	P	3 4 0	4.10	6.25	6.44	-0.27	0.07	0.51	0	0	0.00	0			21	0.1	S	3	8.40*******	-0.14	0.51	
MAG	40.2	292	103	P	3 4 0	5.00	7.15	7.06	0.03	0.06	0.50	0	0	0.00	0			19	-0.1						
LA2	50.6	325	100	P	2 4 0	6.90	9.05	8.80	0.10	0.15	0.95	0	0	0.00	0			22	0.1	S	3	13.00*******	-0.26	0.48	

LAT	LON	Z	AVRPS	RMS	DRMS		
4.27	52.95	4.34	0.70	0.89	0.80		
4.27	46.45	4.34	0.21	0.79		0.69	
4.27	52.95	14.34	-0.02	0.81	(0.72)		
4.27	46.45	14.34	-0.43	0.73		(0.64)	
1.56	49.70	0.68	0.33	0.15	0.05		
				0.09	0.00		
1.56	49.70	18.00	-0.76	0.26	(0.16)		
58.86	52.95	4.34	-0.07	0.75	0.65		
58.86	46.45	4.34	-0.38	0.77		0.68	
58.86	52.95	14.34	-0.57	0.72	(0.63)		
58.86	46.45	14.34	-0.90	0.59		(0.50)	

DATE AND TIME OF RUN 11-1-86 1:30

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	6.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IO	KNS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	27.74	33-57.25	106-44.17	7.00	0	1.13	0.00	DOC	2.00	4.81	8.63	9.85	7.34	81.86	17.53	1.78	0.45	2.35	4.81	8.63	4.93
2	28.30	33-59.85	106-49.77	11.93	10	0.15	-0.34	A0D	2.00	2.11	-0.45	0.00	18.14	2.27	0.00	0.49	0.10	0.00	2.11	-0.45	0.00
3	28.13	34- 0.99	106-49.48	11.93	11	0.05	-0.01	A3C	0.50	0.00	0.00	-0.26	-1.00	-1.00	0.08	0.00	0.00	0.94	0.00	0.00	0.00
3	28.12	34- 0.99	106-49.48	11.93	11	0.05	0.00	A2C	2.00	-0.02	0.03	-0.26	0.00	0.01	0.02	0.65	0.34	1.67	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TM	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	4 1 28.12	34- 0.99	106-49.48	11.93	-0.49	8	11	168	1	0.05	0.7	1.7	B	A1C	2.16	10	7	0.00	0.04	0	0.0	0.0	5	-0.5	0.2	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PMX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.0	130	137	P 1	4 1	30.80	2.68	2.77	-0.09	0.01	1.08	0	0	0.00	0			13-0.5		5 4	32.30	4.18	-0.46	0.00	
WTX	12.8	299	133	P 0	4 1	31.10	2.98	2.99	-0.01	0.01	1.44	0	0	0.00	0			10-0.8							
LEM	21.5	320	119	P 1	4 1	32.30	4.18	4.21	0.05	-0.07	1.07	0	0	0.00	0			1R-0.1							
BAR	22.9	53	118	P 0	4 1	32.60	4.48	4.41	0.10	-0.03	1.42	0	0	0.00	0			14-0.4		S 3	36.00	7.88	0.07	0.16	
LAZ	51.7	326	103	P 2	4 1	37.40	9.28	9.06	0.10	0.12	0.62	0	0	0.00	0			19-0.5							

LAT	LON	Z	AVRPS	RMS	DRMS		
3.70	52.73	6.93	0.65	0.81	0.76		
3.70	46.24	6.93	0.54	0.63		0.57	
5.70	52.73	16.93	-0.37	0.75	(0.69)		
5.70	46.24	16.93	-0.36	0.62		(0.57)	
0.99	49.48	3.27	0.59	0.19			
				0.05	0.14		
0.99	49.48	20.59	-1.02	0.23	0.00		
					(0.17)		
58.29	52.73	6.93	-0.10	0.55	0.50		
58.29	46.24	6.93	-0.85	0.82		0.76	
56.29	52.73	16.93	-0.93	0.41	(0.35)		
58.29	46.24	16.93	-0.95	0.53		(0.47)	

DATE AND TIME OF RUN 11-1-86 1:30

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SAD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	32.59	33-57.25	106-44.17	7.00*	0	0.09	0.00	DDB	2.00	10.84	11.78	0.00	68.93	88.35	0.00	1.31	1.25	0.00	10.84	11.78	0.00
2	44.09	34- 3.11	106-51.82	7.00	8	0.53	-0.62	DDB	2.00	-3.30	-3.06	2.26	315.74	304.13	10.75	0.19	0.18	0.69	-3.30	-1.06	2.26
3	39.23	34- 1.33	106-49.83	9.26	12	0.04	-0.05	ADB	2.00	0.00	-0.26	0.00	1.66	4.21	-1.00	0.00	0.13	0.00	0.00	-0.26	0.00
4	39.16	34- 1.33	106-49.66	9.26	12	0.03	0.00	AOB	2.00	-0.17	0.00	0.00	2.04	-1.00	0.14	0.12	0.00	0.00	-0.17	0.00	0.00
5	39.17	34- 1.24	106-49.66	9.26	11	0.03	0.00	A3B	0.50	0.00	0.00	-0.15	-1.00	-1.00	0.14	0.00	0.00	0.40	0.00	0.00	0.00
5	39.17	34- 1.24	106-49.66	9.26	11	0.03	0.00	A2B	2.00	0.02	0.02	-0.13	0.02	0.02	0.11	0.17	0.14	0.58	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IM	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	537 33.17	34- 1.24	106-49.66	9.26	-0.33	7	11	84	1	0.03	0.2	0.5	B	AIB	0.17	10	8	0.00	0.02	0	0.0	0.0	7	-0.3	0.3	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/RI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.5	131	129	P	0	537	35.60	2.43	2.52	-0.09	0.00	1.26	0	0	0.00	0			16-0.3						
WTX	12.3	298	127	P	0	537	35.80	2.63	2.63	-0.01	0.00	1.26	0	0	0.00	0			14-0.4						
LEM	21.0	320	114	P	1	537	37.10	3.93	3.92	0.05	-0.04	0.94	0	0	0.00	0			24 0.2*						
HAR	22.8	54	112	P	0	537	37.50	4.33	4.21	0.10	0.02	1.25	0	0	0.00	0			18-0.1	S	4	40.50	7.33	-0.14	0.00
SMC	32.8	213	106	P	2	537	39.00	5.83	5.72	0.11	0.00	0.60	0	0	0.00	0			10-0.6*						
LPH	37.0	329	104	P	1	537	39.40	6.23	6.52	-0.27	-0.02	0.88	0	0	0.00	0			13-0.5						
LA2	51.1	326	100	P	1	537	42.20	9.03	8.68	0.10	0.05	0.82	0	0	0.00	0			15-0.3						

LAT	LON	2	AVRPS	RMS	DRMS
3.94	52.91	4.26	0.48	0.83	0.81
3.94	46.42	4.26	0.39	0.70	
3.94	52.91	14.26	-0.26	0.74	(0.72)
3.94	46.42	14.26	-0.31	0.73	0.68
					(0.70)
1.24	49.66	0.60	0.35	0.15	0.12
1.24	49.66	17.92	-0.80	0.03	0.00
				0.26	(0.24)
58.53	52.91	4.26	-0.13	0.84	0.62
58.53	46.42	4.26	-0.11	0.84	
58.53	52.91	14.26	-0.84	0.49	(0.46)
58.53	46.42	14.26	-0.79	0.58	0.81
					(0.56)

DATE AND TIME OF RUN 11-1-86 1:30

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

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VELOCITY	DEPTH	ZTR	XNEAR	XFAR	PDS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	1.08	33-57.25	106-44.17	7.00*	0	1.07	0.00	DOB	2.00	10.77	11.77	0.00	169.65	204.00	0.00	0.83	0.82	0.00	10.77	11.77	0.00
2	4.98	34- 3.08	106-51.82	7.00	8	0.45	-0.47	COR	2.00	-2.42	-2.98	0.00	35.56	65.95	0.20	0.41	0.37	0.09	-2.42	-2.98	0.00
4	4.28	34- 1.77	106-49.88	7.00	12	0.12	-0.03	A3B	0.50	0.00	0.00	0.74	-1.00	-1.00	0.20	0.00	0.00	1.67	0.00	0.00	0.00
3	4.25	34- 1.77	106-49.88	7.00	12	0.12	0.00	A2B	2.00	-0.14	-0.04	1.00	0.12	0.01	0.26	0.39	0.35	1.97	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	H	RMS	ERH	ERZ	Q	SOD	ADJ	TH	NR	AVR	AAR	HR	AVXM	SDXM	NF	AVFM	SDFM	I
860428	542	4.25	34- 1.77	106-49.88	7.00	0.64	13	12	78	1	0.12	0.5	2.0	B	AIB	3.84	10	14	0.00	0.00	0	0.0	0.0	10	0.0	0.3	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
WTX	11.6	294	121	P	0	542	6.60	2.35	2.31	-0.01	0.05	1.53	0	0	0.00	0			33	0.6					
CAR	12.4	134	120	P	0	542	6.60	2.35	2.43	-0.09	0.01	1.53	0	0	0.00	0			46	1.0					
LRM	20.0	319	109	P	0	542	8.00	3.75	3.83	0.05	0.08	1.59	0	0	0.00	0			39	0.8					
BAR	22.5	56	107	P	0	542	8.40	4.15	4.03	0.10	0.02	1.51	0	0	0.00	0			42	0.9					
SNC	22.8	212	102	P	1	542	9.90	5.65	5.73	0.11	-0.19	1.00	0	0	0.00	0			37	0.7					
SB	24.8	225	102	P	1	542	10.70	6.45	5.74	0.37	0.35	0.69	0	0	0.00	0			16	-0.1	S	3	14.50	10.25	-0.33	0.20
LJY	24.8	350	102	P	1	542	11.00	6.75	6.03	0.65	0.07	1.07	0	0	0.00	0			33	0.6	S	4	15.00	10.75	-0.82	0.00
LPH	26.3	30	101	P	1	542	10.30	6.05	6.32	-0.27	0.00	1.06	0	0	0.00	0			28	0.5	S	2	14.60	10.35	-0.13	0.69
NAG	29.8	292	100	P	2	542	11.00	6.75	6.91	0.03	-0.19	0.65	0	0	0.00	0			20	0.5						
LAZ	50.1	326	98	P	0	542	13.00	8.75	8.65	0.10	0.00	1.33	0	0	0.00	0			41	0.9	S	3	19.20	14.95	-0.21	0.30

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
RNC	8.0	300.5	24.7	6.3
DN	8.9	14.1	40.0	16.0
WKM	9.1	300.2	24.7	6.1

LAT	LON	Z	AVRPS	RMS	DRMS
4.47	53.13	2.00	0.64	0.81	0.69
4.47	46.63	2.00	0.21	0.87	0.74
4.47	53.13	12.00	0.09	0.77	(0.64)
4.47	46.63	12.00	-0.27	0.83	(0.70)
1.77	49.88	0.00	0.19	0.19	0.04
1.77	49.88	15.66	-0.64	0.12	0.00
				0.26	(0.14)
59.06	53.13	2.00	-0.06	0.83	0.71
59.06	46.63	2.00	-0.45	0.76	0.64
59.06	53.13	12.00	-0.54	0.78	(0.66)
59.06	46.63	12.00	-0.88	0.60	(0.48)

DATE AND TIME OF RUN 11-1-86 1:30

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPHN	IMAG	IR	IPRD	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	56.43	33-57.25	106-44.17	7.00*	0	1.06	0.00	DDR	2.00	9.44	10.97	0.00	56.59	83.89	0.00	1.25	1.20	0.00	9.44	10.97	0.00
2	58.00	34- 2.35	106-51.30	7.00	9	0.37	-0.46	COB	2.00	-2.11	-2.25	2.72	46.78	69.34	6.05	0.31	0.27	1.11	-2.11	-2.25	2.72
3	57.24	34- 1.21	106-49.83	9.72	12	0.09	-0.03	AIB	0.50	0.00	-0.25	0.00	0.20	1.01	-1.00	0.00	0.25	0.00	0.00	-0.25	0.00
4	57.21	34- 1.21	106-49.67	9.72	11	0.08	0.00	A2R	0.50	-0.13	0.00	0.00	0.23	-1.00	-1.00	0.28	0.00	0.00	0.00	0.00	0.00
									2.00	-0.16	0.00	0.37	0.24	0.00	0.15	0.33	0.28	0.96	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	TN	NR	AVR	AAR	DM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	547 57.21	34- 1.21	106-49.67	9.72	-0.02	10	11	82	1	0.08	0.4	1.0	B	AIB	0.25	10	11	0.00	0.07	0	0.0	0.0	8	0.0	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/M1	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	RMK	PMP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.4	131	130	P	547	59.70	2.49	2.57	-0.09	0.02	1.35	0	0	0.00	0			13	-0.5*						
WTX	12.3	208	128	P	547	59.80	2.59	2.68	-0.01	-0.08	1.35	0	0	0.00	0			22	0.1	S	3	62.00	4.79	0.16	0.34	
LEM	21.0	320	115	P	548	1.30	4.09	3.96	0.05	0.08	1.34	0	0	0.00	0			37	0.6*							
BAR	22.9	54	113	P	548	1.50	4.29	4.25	0.10	-0.05	1.33	0	0	0.00	0			24	0.2	S	4	4.70	7.49	-0.04	0.00	
SMC	32.1	213	107	P	548	3.00	5.79	5.74	0.11	-0.05	0.96	0	0	0.00	0			15	-0.3							
LPR	37.1	29	105	P	548	3.60	6.39	6.55	-0.27	0.11	1.25	0	0	0.00	0			19	-0.1	S	3	8.00	10.79	-0.08	0.31	
MAG	40.5	293	103	P	548	4.40	7.19	7.12	0.03	0.04	0.92	0	0	0.00	0			18	-0.1							
LAZ	51.2	326	101	P	548	6.10	8.89	8.90	0.10	-0.11	0.87	0	0	0.00	0			20	0.0							

LAT	LON	Z	AVRPS	RMS	DRMS
3.92	52.92	4.72	0.63	0.83	0.75
3.92	46.42	4.72	0.33	0.79	
3.92	52.92	14.72	-0.13	0.73	(0.65) 0.71
3.92	46.42	14.72	-0.37	0.79	(0.71)
1.21	49.67	1.06	0.35	0.10	
				0.08	0.08
1.21	49.67	18.38	-0.78	0.29	0.00 (0.21)
58.51	52.92	4.72	-0.03	0.71	
58.51	46.42	4.72	-0.68	0.77	0.63
58.51	52.92	14.72	-0.72	0.63	(0.55) 0.69
58.51	46.42	14.72	-0.90	0.59	(0.51)

DATE AND TIME OF RUN 11-1-86 1130

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KNS	KFH	IPUH	IHAG	IR	IPRH	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	26.12	33-57.25	106-44.17	7.00*	0	1.10	0.00	DOR	2.00	10.42	11.32	0.00	70.76	118.93	0.00	1.24	1.04	0.00	10.42	11.32	0.00
2	27.98	34- 2.89	106-51.52	7.00	8	0.48	-0.49	COR	2.00	-2.02	-2.90	0.00	6.59	22.26	1.09	0.78	0.62	0.00	-2.02	-2.90	0.00
3	27.31	34- 1.80	106-49.64	7.00	12	0.15	0.00	B1B	0.50	-0.99	0.00	2.96	4.50	0.36	3.72	0.47	0.00	1.53	-0.99	0.00	2.96
4	27.06	34- 1.26	106-49.64	9.96	11	0.12	-0.02	A3B	0.50	-0.21	0.00	0.00	0.30	-1.00	-1.00	0.42	0.00	0.00	0.00	0.00	0.00
4	27.04	34- 1.26	106-49.64	9.96	11	0.12	0.00	A2D	2.00	-0.22	-0.09	0.01	0.20	0.07	0.00	0.50	0.36	1.25	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TM	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	648	27.04	34- 1.26	106-49.64	9.96	-0.04	12	11	82	1	0.12	0.6	1.2	B	A1B	3.12	10	13	0.00	0.06	0	0.0	0.0	9	0.0	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.5	132	131	P 0	648	29.50	2.46	2.59	-0.09	-0.04	1.59	0	0	0.00	0			21	0.1						
NTC	12.5	267	139	P 0	648	29.80	2.76	2.71	-0.01	0.06	1.59	0	0	0.00	0			22	0.1	S	3	31.80	4.76	0.08	0.40	
LEN	21.0	320	115	P 0	648	31.00	3.96	3.97	0.05	-0.06	1.58	0	0	0.00	0			28	0.4							
SAR	22.8	54	114	P 0	648	31.40	4.36	4.25	0.10	0.01	1.57	0	0	0.00	0			25	0.3	S	3	34.00	6.96	-0.57	0.26	
SNC	32.2	213	107	P 1	648	32.90	5.86	5.77	0.11	-0.01	0.38	0	0	0.00	0			16	-0.3							
LJY	35.6	350	109	P 1	648	34.00	6.96	6.31	-0.05	0.00	1.11	0	0	0.00	0			13	-0.5	S	3	37.90	10.86	-1.20**	0.00	
LPK	37.0	298	105	P 1	648	34.20	6.36	6.58	-0.27	0.00	1.10	0	0	0.00	0			18	-0.1	S	3	38.30	11.26	0.40	0.31	
MAG	40.5	293	104	P 1	648	34.20	7.16	7.13	0.03	0.00	1.08	0	0	0.00	0			16	-0.3							
LAZ	51.1	326	101	P 1	648	36.00	8.96	8.90	0.10	-0.04	1.03	0	0	0.00	0			19	-0.1							

LAT	LON	Z	AVRPS	RMS	DRMS
3.97	52.88	4.96	0.73	0.82	0.70
3.97	46.39	4.96	0.44	0.71	(0.64) 0.59
3.97	52.88	14.96	-0.06	0.76	(0.61)
3.97	46.39	14.96	-0.29	0.73	
1.26	49.64	1.30	0.38	0.21	0.09
1.26	49.64	18.62	-0.82	0.36	0.12 0.00 (0.24)
58.56	52.88	4.96	-0.21	0.71	0.59
58.56	46.39	4.96	-0.38	0.80	(0.47) 0.69
58.56	52.88	14.96	-0.86	0.58	(0.46)
58.56	46.39	14.96	-1.00	0.58	

DATE AND TIME OF RUN 3-6-87

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.0300	2.7900	0.0000	100.0000	0.0000	0.5000	5.0000

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VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KNS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	12.64	33-57.25	106-44.17	7.00*	0	1.04	0.00	DOB	2.00	9.73	11.10	0.00	106.99	139.07	0.00	0.94	0.94	0.00	9.73	11.10	0.00
2	14.21	34- 2.52	106-51.36	7.00	9	0.40	-0.51	COR	2.00	-2.03	-2.08	1.68	68.83	161.43	3.75	0.24	0.21	0.87	-2.03	-2.08	1.68
3	13.48	34- 1.42	106-49.64	8.68	12	0.08	-0.03	A1B	0.50	0.00	-0.20	0.00	0.07	0.96	-1.00	0.00	0.00	0.00	0.00	-0.20	0.00
4	13.45	34- 1.42	106-49.51	8.68	12	0.07	0.00	A3B	0.50	-0.06	0.00	0.00	0.08	-1.00	-1.00	0.23	0.00	0.00	0.00	0.00	0.00
4	13.45	34- 1.42	106-49.51	8.68	12	0.07	0.00	A2B	2.00	-0.06	-0.01	-0.10	0.05	0.00	0.01	0.27	0.23	0.88	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IM	NR	AVR	AAR	NR	AVAM	SDAM	NF	AVFM	SDFM	I
860428	759 13.45	34- 1.42	106-49.51	8.68	0.05	11	12	80	1	0.07	0.3	0.9	B	A1B	0.20	10	12	0.00	0.05	0	0.0	0.0	8	0.1	0.2	9

STN	DIST	AZM	AIN	PRMK	NRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMF	S-SEC	TSOBS	S-RES	S-WT	DI
CAR	11.5	133	127	P	0	759	15.80	2.35	2.48	-0.09	-0.03	1.43	0	0	0.00	0		24	0.2						
WTX	12.4	296	125	P	0	759	16.00	2.55	2.58	-0.01	-0.03	1.43	0	0	0.00	0		25	0.3	S	3	18.00	4.55	0.09	0.36
LEN	20.9	319	113	P	0	759	17.40	3.95	3.87	0.05	0.03	1.43	0	0	0.00	0		27	0.4						
BAR	42.4	54	111	P	0	759	17.80	4.35	4.11	0.10	0.13	1.42	0	0	0.00	0		24	0.2	S	3	29.50	7.05	-0.25	0.35
SNC	32.6	213	105	P	1	759	19.30	5.85	5.76	0.11	-0.02	1.01	0	0	0.00	0		15	-0.3						
LPM	36.6	29	103	P	0	759	20.60	6.15	6.43	-0.27	-0.01	1.33	0	0	0.00	0		17	-0.2	S	2	24.10	10.65	-0.02	0.00
MAC	40.6	292	102	P	2	759	21.50	7.05	7.09	-0.03	-0.08	0.65	0	0	0.00	0		18	-0.1						
LAZ	51.0	325	100	P	1	759	22.40	8.95	8.84	0.10	0.01	0.93	0	0	0.00	0		20	0.0	S	4	29.40	15.95	0.46	0.00

LAT	LON	Z	AVRPS	RMS			DRMS	
4.12	52.76	3.68	0.56	0.83		0.76		
4.12	46.27	3.68	0.42	0.92			0.84	
4.12	52.76	13.68	-0.16	0.73		(0.65)		
4.12	46.27	13.68	-0.25	0.88			(0.81)	
1.42	49.51	0.02	0.30	0.19				
				0.07		0.06		
1.42	49.51	17.34	-0.76	0.29		0.00		
						(0.22)		
58.71	52.76	3.68	-0.16	0.80		0.73		
58.71	46.27	3.68	-0.26	0.78			0.71	
58.71	52.76	13.68	-0.79	0.72		(0.65)		
58.71	46.27	13.68	-0.86	0.60			(0.53)	

DATE AND TIME OF RUN 11-1-86 1:30

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS DLAT	ADJUSTMENTS DLON	ADJUSTMENTS DZ	(KM)	PARTIAL F-VALUES DLAT	PARTIAL F-VALUES DLON	PARTIAL F-VALUES DZ	STANDARD ERRORS DLAT	STANDARD ERRORS DLON	STANDARD ERRORS DZ	ADJUSTMENTS TAKEN DLAT	ADJUSTMENTS TAKEN DLON	ADJUSTMENTS TAKEN DZ
1	12.64	33-57.25	106-44.17	7.00*	0	1.04	0.00	DOB	2.00	9.73	11.10	0.00	106.99	139.07	0.00	0.94	0.94	0.00	9.73	11.10	0.00
2	14.21	34- 2.52	106-51.38	7.00*	9	0.40	-0.51	COB	2.00	-2.00	-2.76	0.00	49.95	134.02	0.00	0.28	0.24	0.00	-2.00	-2.76	0.00
3	13.56	34- 1.43	106-49.58	7.00*	12	0.09	0.00	A2B	2.00	-0.09	-0.11	1.70	0.12	0.26	2.89	0.26	0.22	1.00	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TM	NR	AVM	AAP	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	759 13.56	34- 1.43	106-49.58	7.00*	0.05	11	12	80	1	0.09	0.3	1.0	B	A1B	3.41	11	12	0.00	0.07	0	0.0	0.0	8	0.1	0.2	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	OT
CAM	11.6	193	121	P	0	759	15.80	2.24	2.32	-0.09	0.01	1.43	0	0	0.00	0			24	0.2						
MIX	24.3	298	120	P	0	759	16.00	2.44	2.41	-0.01	0.03	1.43	0	0	0.00	0			25	0.3	S	3	18.00	4.44	0.27	0.36
LEN	20.5	319	109	P	0	759	17.40	3.84	3.75	0.05	0.04	1.43	0	0	0.00	0			27	0.4						
BAR	22.5	54	107	P	0	759	17.80	4.24	4.03	0.10	0.11	1.42	0	0	0.00	0			24	0.2	S	3	20.50	6.94	-0.22	0.35
SMC	32.5	21	102	P	1	759	19.30	5.74	5.89	-0.11	-0.06	1.01	0	0	0.00	0			18	-0.3						
LPM	36.6	28	101	P	0	759	19.60	6.04	6.38	-0.27	-0.07	1.33	0	0	0.00	0			17	-0.2	S	2	24.10	10.54	-0.04	0.66
MAG	40.5	292	100	P	2	759	20.50	6.94	7.02	0.03	-0.11	0.65	0	0	0.00	0			19	-0.3						
LAZ	50.9	325	98	P	1	759	22.40	8.84	8.78	0.10	-0.04	0.93	0	0	0.00	0			20	0.0	S	4	29.40	15.84	0.45	0.00

LAT	LON	Z	AVRPS	RMS	DRMS		
1.14	52.83	2.00	0.49	0.86	0.78		
1.14	46.34	2.00	0.36	0.91		0.82	
1.14	52.83	12.00	-0.10	0.74	(0.65)		
1.14	46.34	12.00	-0.20	0.87		(0.79)	
1.43	49.58	0.00	0.19	0.13		0.04	
				0.09		0.00	
1.43	49.58	15.66	-0.70	0.25		(0.16)	
58.73	52.83	2.00	-0.23	0.82	0.73		
58.73	46.34	2.00	-0.33	0.79		0.71	
58.73	52.83	12.00	-0.75	0.73	(0.65)		
58.73	46.34	12.00	-0.83	0.62		(0.53)	

DATE AND TIME OF RUN 11-1-86 1:30

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IB	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	17.82	33-57.25	106-44.17	7.000*	0	1.01	0.00	D1D	0.50	11.76	12.59	0.00	12.42	33.35	0.00	2.07	2.18	0.00	11.76	12.59	0.00
2	19.01	34- 3.61	106-52.35	7.000	17	0.60	-1.00	D0D	2.00	-4.81	-3.66	3.90	976.97	492.00	9.85	0.15	0.16	1.24	-4.81	-3.66	3.90
3	17.97	34- 1.01	106-49.97	10.900	12	0.08	-0.14	X0D	2.00	0.00	-0.56	-1.09	0.19	7.71	4.08	0.00	0.20	0.54	0.00	-0.56	-1.09
4	17.95	34- 1.01	106-49.60	9.800	11	0.02	0.00	A1D	0.50	0.05	0.00	0.00	0.21	-1.00	-1.00	0.11	0.00	0.00	0.00	0.00	0.00
4	17.94	34- 1.01	106-49.60	9.80	11	0.02	0.00	A2D	2.00	0.16	0.08	-0.49	0.24	0.07	0.15	0.33	0.31	1.24	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NR	AVAH	SDXH	NF	AVFM	SDFM	I
860428	853 17.94	34- 1.01	106-49.60	9.80	-0.53	5	11	196	1	0.02	0.5	1.2	C	AID	1.23	10	6	0.00	0.02	0	0.0	0.0	4	-0.5	0.4	4

STN	DIST	AZM	AIM	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PHX	CALX	K	XMAG	RMK	PMP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.1	130	131	P 1	853	20.40	2.46	2.53	-0.09	0.01	1.13	0	0	0.00	0			10-0.8		S 4	22.00	4.05	-0.18	0.00	
BAR	33.0	53	113	P 0	853	22.30	4.36	4.27	0.10	-0.02	1.48	0	0	0.00	0			22 0.1*		S 3	25.50	7.56	-0.02	0.37	
LPH	37.0	28	105	P 1	853	24.30	6.36	6.60	-0.27	0.03	1.04	0	0	0.00	0			9-1.0							
LAZ	51.5	326	101	P 1	853	27.00	9.06	8.97	0.10	-0.01	0.97	0	0	0.00	0			14-0.4							

LAT	LON	Z	AVRPS	RMS	DRMS		
3.71	52.85	4.80	0.14	0.65	0.63		
3.71	46.36	4.80	0.96	0.65		0.63	
3.71	52.85	14.80	-0.46	0.82	(0.80)		
3.71	46.36	14.80	0.23	0.60		(0.58)	
1.01	49.60	1.14	0.36	0.18		0.16	
				0.02		0.00	
1.01	49.60	18.46	-0.76	0.31		(0.29)	
58.31	52.85	4.80	-0.61	0.51	0.49		
58.31	46.36	4.80	0.17	0.83		0.81	
58.31	52.85	14.80	-1.16	0.45	(0.43)		
58.31	46.36	14.80	-0.58	0.41		(0.39)	

DATE AND TIME OF RUN 11-1-86 1130

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR.	XNEAR	XFAR	POS	IQ	KHS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	OM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	56.95	34-57.25	106-44.17	7.000*	0	1.15	0.00	DOD	2.00	10.76	12.62	0.00	35.42	49.41	0.00	1.81	1.86	0.00	10.76	12.62	0.00
2	56.95	34- 3.07	106-52.37	7.000	7	0.65	-1.09	DOD	2.00	-3.65	-3.64	3.22	999.99	999.99	26.82	0.11	0.09	0.62	-3.65	-3.64	3.22
3	56.97	34- 1.09	106-50.00	10.22	12	0.07	-0.11	A0D	2.00	0.00	-0.59	0.00	-1.00	41.82	1.88	0.00	0.09	0.00	0.00	-0.59	0.00
4	56.80	34- 1.09	106-49.62	10.22	11	0.02	0.00	A0D	2.00	0.00	0.00	-0.52	-1.00	0.23	2.10	0.00	0.00	0.36	0.00	0.00	-0.52
5	56.95	34- 1.09	106-49.62	9.70	11	0.01	0.00	A3D	0.56	0.00	0.03	0.00	-1.00	0.28	-1.00	0.00	0.07	0.00	0.00	0.00	0.00
6	56.95	34- 1.09	106-49.62	9.70	11	0.01	0.00	A2D	2.00	0.01	0.04	-0.13	0.01	0.13	0.03	0.16	0.12	0.75	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	944 56.95	34- 1.09	106-49.62	9.70	-0.94	5	11	168	1	0.01	0.2	0.8	C	AID	0.52	10	5	0.00	0.01	0	0.0	0.0	4	-0.9	0.5	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/RI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.2	130	131	P	0	944	59.40	2.45	2.54	-0.09	0.00	1.55	0	0	0.00	0			S=1.1						
WTK	12.5	299	128	P	1	944	59.60	2.65	2.71	-0.01	-0.04	0.39	0	0	0.00	0			S=1.7*						
LEM	21.2	320	115	P	1	945	1.00	4.05	3.99	0.05	0.01	1.15	0	0	0.00	0			15=0.3*						
BAR	22.9	53	113	P	1	945	1.30	4.35	4.26	0.10	0.00	1.15	0	0	0.00	0			12=0.6	S	2	4.50	7.55	0.01	0.76

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
MNC	9.1	306.0	21.7	7.4
CH	14.2	238.0	168.1	60.6
DH	10.1	10.1	92.9	43.1
BG2	21.2	350.9	92.9	30.7
MKM	9.1	305.7	21.7	7.1

LAT	LON	Z	AVRPS	RMS	DRMS			
3.80	52.86	4.70	0.16	0.85	0.83			
3.80	46.37	4.70	0.75	0.84			0.83	
3.80	52.86	14.70	-0.70	0.76	(0.74)			
3.80	46.37	14.70	-0.18	0.71			(0.69)	
1.09	49.62	1.04	0.48	0.12		0.11		
1.09	49.62	18.36	-1.80	0.01		0.00		
				0.21		(0.20)		
58.39	52.86	4.70	-0.38	0.63	0.62			
58.39	46.37	4.70	0.31	0.90			0.89	
58.39	52.86	14.70	-1.13	0.57	(0.56)			
58.39	46.37	14.70	-0.66	0.56			(0.54)	

DATE AND TIME OF RUN 11-1-86 1130

86/ 4/28 10113

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	0.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KNS	KFN	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	57.47	33-52.25	106-44.17	7.00*	0	1.12	0.00	DOB	2.00	10.19	12.69	0.00	77.41127	7.89	0.00	1.16	1.12	0.00	10.19	12.69	0.00
2	59.02	34- 2.76	106-52.41	7.00	7	0.63	-0.69	DOB	2.00	-3.04	-3.89	1.79	232.98633	3.52	6.92	0.20	0.15	0.68	-3.04	-3.89	1.79
3	59.14	34- 1.12	106-49.89	8.79	12	0.08	-0.06	AOD	2.00	0.00	-0.34	0.00	-1.00	3.61	1.13	0.00	0.18	0.00	0.00	-0.34	0.00
4	59.08	34- 1.12	106-49.67	8.79	11	0.06	0.00	A1B	0.50	0.00	0.00	-0.63	-1.00	0.24	1.05	0.00	0.00	0.61	0.00	0.00	-0.63
5	59.12	34- 1.12	106-49.67	8.16	11	0.06	0.00	A2B	0.50	-0.09	0.00	0.00	0.21	-1.00	-1.00	0.20	0.00	0.00	0.00	0.00	0.00
6	59.12	34- 1.12	106-49.67	8.16	11	0.06	0.00	A2B	2.00	-0.09	0.08	-0.03	0.14	0.14	0.00	0.25	0.21	0.88	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NM	AVXN	SDXN	NF	AVFN	SDFN	I
860428	1013 58.12	34- 1.12	106-49.67	8.16	-0.30	10	11	83	1	0.06	0.3	0.9	B	A1B	0.63	10	10	0.00	0.05	0	0.0	0.0	8	-0.3	0.2	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/M1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.3	130	126	P	1014	0.50	2.38	2.39	-0.09	0.08	1.34	0	0	0.00	0			17-0.2		S	3	1.90	3.78	-0.20	0.34	
WTX	12.4	299	123	P	1014	0.70	2.58	2.54	-0.01	0.05	1.34	0	0	0.00	0			15-0.3								
LEM	21.2	320	111	P	1014	2.00	3.88	3.88	0.05	-0.05	1.33	0	0	0.00	0			24 0.2*								
BAR	23.0	53	110	P	1014	2.40	4.28	4.17	0.10	0.01	1.32	0	0	0.00	0			15-0.3		S	2	5.50	7.38	-0.01	0.66	
SHC	32.0	214	104	P	1014	3.80	5.68	5.64	0.11	-0.03	0.95	0	0	0.00	0			16-0.3								
LPR	34.2	29	102	P	1014	4.40	6.28	6.51	-0.27	-0.04	0.93	0	0	0.00	0			16-0.3								
MAG	40.6	293	101	P	1014	5.20	7.08	7.07	0.03	-0.02	0.92	0	0	0.00	0			14-0.4								
LAZ	51.3	326	99	P	1014	7.10	8.98	8.88	0.10	0.00	0.87	0	0	0.00	0			11-0.7								

LAT	LON	Z	AVRPS	RMS	DRMS
3.82	52.92	3.16	0.45	0.87	0.81
3.82	46.42	3.16	0.33	0.85	
3.82	52.92	13.16	-0.19	0.82	0.79
3.82	46.42	13.16	-0.31	0.79	
					(0.76) (0.73)
1.12	49.67	0.00	0.29	0.10	0.10
				0.06	0.00
1.12	49.67	16.82	-0.74	0.26	
					(0.20)
58.41	52.92	3.16	-0.14	0.73	0.67
58.41	46.42	3.16	-0.15	0.90	
58.41	52.92	13.16	-0.74	0.72	0.84
58.41	46.42	13.16	-0.78	0.58	
					(0.66) (0.52)

DATE AND TIME OF RUN 11-1-86 1130

86/ 4/28 111 9

***** FOLLOWING EVENT IS OUT OF ORDER *****

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	9.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	55.63	34- 1.25	106-44.17	7.00	0	1.14	0.00	DOR	2.00	0.00	0.00	14.72	-1.00	1.67	14.90	0.00	0.00	3.81	0.00	0.00	4.91
2	55.28	34- 1.25	106-44.17	11.91	0	0.93	-0.01	DOR	2.00	0.00	0.00	10.48	1.17	-1.00	6.53	0.00	0.00	4.10	0.00	0.00	5.24
3	54.76	34- 1.25	106-44.17	17.14*	0	0.77	-0.04	DOR	2.00	8.11	9.99	0.00	68.02	65.41	0.00	0.98	1.23	0.00	8.11	9.99	0.00
4	55.66	34- 1.63	106-50.68	17.14	11	0.33	-0.40	COA	2.00	-0.87	-1.36	-7.23	12.19	24.82	93.36	0.25	0.27	0.75	-0.87	-1.36	-3.62
5	55.66	34- 1.17	106-49.78	13.53	11	0.13	-0.02	AOA	2.00	0.00	0.00	-3.70	0.98	-1.00	30.39	0.00	0.00	0.67	0.00	0.00	-3.70
6	56.00	34- 1.17	106-49.78	9.83	12	0.09	-0.05	A1B	0.50	0.00	0.00	-1.04	0.48	-1.00	2.00	0.00	0.00	0.74	0.00	0.00	-1.04
7	56.04	34- 1.17	106-49.78	8.78	12	0.08	0.00	A3B	0.50	0.13	0.00	0.00	0.39	-1.00	-1.00	0.21	0.00	0.00	0.00	0.00	0.00
7	56.04	34- 1.17	106-49.78	8.78	12	0.08	0.00	A2B	2.00	0.17	0.06	-0.29	0.39	0.05	0.08	0.27	0.27	1.02	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	11 9 56.04	34- 1.17	106-49.78	8.78	-0.36	10	12	85	1	0.08	0.4	1.0	B	A1B	1.04	10	10	0.00	0.05	0	0.0	0.0	7	-0.4	0.3	7

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.5	130	127	P	0 11 9	58.50	2.46	2.47	-0.09	0.08	1.66	0	0	0.00	0			16-0.3		S 3	60.00	3.96	-0.17	+0.41	
WTX	2.2	209	126	P	0 11 9	58.60	2.56	2.57	-0.01	0.00	1.66	0	0	0.00	0			12-0.6							
LEN	2.0	321	113	P	P 2 11110	0.00	3.96	3.89	0.05	0.02	0.83	0	0	0.00	0			21 0.1							
BAR	3.0	54	113	P	P 2 11110	0.40	4.36	4.22	0.10	0.05	0.82	0	0	0.00	0			22 0.1		S 2	3.60	7.56	0.09	0.82	
SNC	7.0	21	106	P	P 1 11110	1.80	5.76	5.98	-0.11	-0.01	1.18	0	0	0.00	0			10-0.8							
LPM	7.2	29	103	P	P 1 11110	2.30	6.26	6.54	-0.27	-0.01	1.15	0	0	0.00	0			17-0.6		S 2	6.70	10.66	-0.19	0.77	
LAZ	51.1	326	100	P	P 2 11110	5.00	8.96	8.87	0.10	-0.01	0.72	0	0	0.00	0			15-0.3							

LAT	LON	Z	AVRPS	RMS	DRMS		
3.87	53.02	3.78	0.31	0.83	0.75		
3.87	46.53	3.78	0.54	0.98		0.90	
3.87	53.02	13.78	-0.42	0.74	(0.66)		
3.87	46.53	13.78	-0.21	0.92		(0.84)	
1.17	49.78	0.12	0.36	0.19		0.11	
				0.08		0.00	
1.17	49.78	17.44	-0.83	0.27		(0.19)	
58.46	53.02	3.78	-0.24	0.89	0.81		
58.46	46.53	3.78	0.04	0.93		0.85	
58.46	53.02	13.78	-0.95	0.86	(0.78)		
58.46	46.53	13.78	-0.72	0.59		(0.51)	

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/28 11151

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	36.82	33-57.25	106-44.17	7.00*	0	1.11	0.00	DOB	2.00	9.30	12.43	0.00	72.32	101.73	0.00	1.09	1.23	0.00	9.30	12.43	0.00
2	38.31	34- 2.28	106-52.25	7.00	8	0.47	-0.50	COB	2.00	-1.97	-2.99	0.00	9.16	21.24	1.91	0.65	0.65	0.00	-1.97	-2.99	0.00
3	37.76	34- 1.21	106-50.30	7.00	11	0.14	-0.03	AOR	2.00	0.00	-0.77	3.86	0.03	5.61	5.05	0.00	0.33	1.72	0.00	-0.77	3.86
4	37.52	34- 1.21	106-49.80	10.86	12	0.06	-0.04	A1B	0.50	0.00	-0.18	0.00	0.22	0.68	-1.00	0.00	0.22	0.00	0.00	-0.18	0.00
5	37.47	34- 1.21	106-49.68	10.86	11	0.06	0.00	A3B	0.50	-0.11	0.00	0.00	0.27	-1.00	-1.00	0.22	0.00	0.00	0.00	0.00	0.00
6	37.47	34- 1.21	106-49.68	10.86	11	0.06	0.00	A2B	2.00	-0.09	0.03	-0.34	0.11	0.01	0.10	0.27	0.27	1.07	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NM	AVXN	SDXM	AE	AVFM	SDFM	I
860428	1151	37.47	34- 1.21	106-49.68	10.86	0.26	9	11	82	1	0.06	0.4	1.1	B	AIB	0.18	10	10	0.00	0.04	0	0.0	0.0	8	0.3	0.2	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMP	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.5	131	133	P 1	1151	40.00	2.53	2.70	-0.09	-0.08	1.13	0	0	0.00	0			25	0.3						
WTX	12.3	298	131	P 2	1151	40.30	2.83	2.81	-0.01	0.03	0.75	0	0	0.00	0			20	0.0						
LEM	21.0	320	117	P 0	1151	41.60	4.13	4.04	0.05	0.04	1.50	0	0	0.00	0			31	0.5						
BAR	22.9	5	155	P 0	1151	41.90	4.43	4.33	0.10	0.00	1.48	0	0	0.00	0			36	0.7						
SNC	24.1	2	108	P 0	1151	42.40	5.03	5.19	-0.11	0.02	1.42	0	0	0.00	0			21	0.1						
LOM	34.1	29	106	P 2	1151	43.90	6.43	6.60	-0.27	0.10	0.70	0	0	0.00	0			21	0.1	S	3	49.20	11.73	0.76**0.00	
MAG	40.5	2	105	P 1	1151	44.60	7.13	7.16	-0.03	-0.07	1.03	0	0	0.00	0			21	0.1						
LAN	51.1	326	102	P 1	1151	46.50	9.03	8.94	0.10	-0.01	0.97	0	0	0.00	0			2P	0.4	S	3	52.50	15.03	-0.63**0.03	

LAT	LON	Z	AVRPS	RMS	DRMS
3.92	52.93	5.86	0.66	0.80	0.74
3.92	46.44	5.86	0.27	0.81	
3.92	52.93	15.86	-0.07	0.76	0.75
3.92	46.44	15.86	-0.44	0.73	
					(0.70)
					(0.67)
1.21	49.68	2.20	0.39	0.19	0.13
				0.06	0.00
1.21	49.68	19.52	-0.76	0.28	
					(0.22)
3.51	52.93	5.86	-0.02	0.73	0.67
3.51	46.44	5.86	-0.18	0.88	
3.51	52.93	15.86	-0.65	0.70	0.74
3.51	46.44	15.86	-0.83	0.56	
					(0.64)
					(0.50)

DATE AND TIME OF RUN 11-1-86 1130

8h/ 4/28 12136

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFM	IPHN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	OM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	56.06	33-57.25	106-44.17	7.00*	0	1.16	0.00	DOC	2.00	11.98	12.09	0.00	127.28	186.48	0.00	1.00	0.89	0.00	11.98	12.09	0.00
2	57.80	34- 1.74	106-52.02	7.00	7	0.64	-0.73	DOC	2.00	-4.70	-2.91	4.01	308.22	172.04	15.66	0.27	0.22	0.98	-4.70	-2.91	4.01
3	56.62	34- 1.19	106-50.13	11.01	12	0.07	-0.11	AQC	2.00	0.00	-0.51	-1.42	0.03	13.93	8.19	0.00	0.14	0.50	0.00	-0.51	-1.42
4	56.64	34- 1.19	106-49.80	9.59	12	0.03	-0.01	A3C	0.50	-0.02	0.00	0.00	0.02	-1.00	-1.00	0.14	0.00	0.00	0.00	0.00	0.00
4	56.63	34- 1.19	106-49.80	9.59	12	0.03	0.00	A2C	2.00	-0.02	0.01	0.00	0.01	0.01	0.00	0.28	0.16	0.88	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	1236 56.63	34- 1.19	106-49.80	9.59	-0.55	7	12	168	1	0.03	0.3	0.9	B	AIC	1.51	10	9	0.00	0.02	0	0.0	0.0	6	-0.6	0.4	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/III	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAB	11.6	130	130	P	1236	59.10	2.47	2.57	-0.09	-0.01	1.45	0	0	0.00	0			13-0.5		S 4	60.60	3.97	-0.32	0.00	
WTX	12.2	298	128	P	1236	59.10	2.67	2.65	-0.01	0.03	1.09	0	0	0.00	0			7-1.3*							
LEM	20.9	321	115	P	1237	0.60	3.97	3.94	0.05	-0.02	1.00	0	0	0.00	0			18-0.1							
BAR	23.0	54	113	P	1237	1.00	4.37	4.27	0.10	0.00	1.43	0	0	0.00	0			14-0.4		S 4	4.20	1.57	0.00	0.00	
LPM	37.2	29	104	P	1237	3.00	6.37	6.57	-0.27	0.07	0.67	0	0	0.00	0			12-0.6		S 3	7.50	10.87	-0.04	0.34	
LAZ	51.1	326	101	P	1237	5.60	8.97	8.89	0.10	-0.02	0.94	0	0	0.00	0			15-0.3							

LAT	LON	Z	AVRPS	RMS	DRMS
3.89	53.04	4.59	0.53	0.84	0.81
3.89	46.55	4.59	-0.58	0.66	0.63
3.89	53.04	14.59	-0.25	0.79	(0.76)
3.89	46.55	14.59	-0.16	0.71	(0.68)
1.19	49.80	0.93	0.39	0.16	0.13
1.19	49.80	18.25	-0.84	0.03	0.00
				0.20	(0.23)
58.48	53.04	4.59	-0.28	0.54	0.51
58.48	46.55	4.59	-0.11	0.38	0.86
58.48	53.04	14.59	-0.93	0.37	(0.34)
58.48	46.55	14.59	-0.84	0.57	(0.55)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/28 12:59

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR.	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	48.32	33-57.25	106-44.17	7.00*	0	0.48	0.00	DUM	2.00	10.17	11.15	0.00	105.69	137.51	0.00	0.99	0.95	0.00	10.17	11.15	0.00
2	58.09	34- 2.75	106-51.41	7.00	9	0.41	-0.37	COD	2.00	-2.69	-2.83	3.61	66.43	95.53	7.67	0.33	0.29	1.30	-2.69	-2.83	3.61
3	49.29	34- 1.29	106-49.58	10.61	11	0.08	-0.06	A1B	0.50	0.00	-0.24	0.00	0.40	0.95	-1.00	0.00	0.25	0.00	0.00	-0.24	0.00
3	49.22	34- 1.29	106-49.42	10.61	11	0.09	0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.05	0.00
3	49.22	34- 1.29	106-49.45	10.61	11	0.09	0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.05	0.00
3	49.22	34- 1.29	106-49.48	10.61	11	0.09	0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.05	0.00
3	49.22	34- 1.29	106-49.51	10.61	11	0.09	0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.05	0.00
4	49.22	34- 1.29	106-49.55	10.61	11	0.09	0.01	A1B	0.50	-0.26	0.00	0.00	0.65	-1.00	0.16	0.33	0.00	0.00	-0.26	0.00	0.00
5	49.22	34- 1.15	106-49.55	10.61	11	0.09	0.00	A1B	0.50	0.00	-0.27	0.00	-1.00	0.89	0.02	0.00	0.29	0.00	0.00	-0.27	0.00
6	49.21	34- 1.15	106-49.37	10.61	11	0.09	0.00	A1B	0.50	0.00	0.00	-0.15	-1.00	-1.00	0.02	0.00	0.00	1.01	0.00	0.00	0.00
6	49.21	34- 1.15	106-49.37	10.61	11	0.09	0.00	A2B	2.00	0.01	0.01	-0.18	0.00	0.00	0.02	0.40	0.35	1.35	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	1259 49.21	34- 1.15	106-49.37	10.61	2.10	11	11	82	1	0.09	0.5	1.3	B	A1B	0.27	10	11	0.00	0.07	0	0.0	0.0	9	2.1	0.2	6

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.0	132	134	P 0	1259	51.70	2.49	2.61	-0.09	-0.03	1.17	0	0	0.00	0			110	2.1						
WTX	12.8	297	130	P 0	1259	52.10	2.89	2.84	-0.01	0.06	1.17	0	0	0.00	0										
LEM	21.4	319	116	P 0	1259	53.30	4.09	4.08	0.05	-0.04	1.17	0	0	0.00	0										
BAR	22.6	53	115	P 0	1259	53.60	4.39	4.26	0.10	0.03	1.16	0	0	0.00	0			146	2.4						
SMC	32.3	214	108	P 1	1259	55.20	5.99	5.81	0.11	0.07	0.83	0	0	0.00	0			141	2.4						
SB	33.4	262	108	P 0	1259	55.50	6.29	5.99	0.37	-0.07	1.11	0	0	0.00	0			HR	1.8						
LJY	35.8	349	106	P 1	1259	56.10	6.89	6.39	0.65	-0.15	0.82	0	0	0.00	0			111	2.1						
LPM	36.9	28	106	P 0	1259	55.50	6.29	6.57	-0.27	-0.01	1.09	0	0	0.00	0			112	2.2						
MAG	41.0	293	105	P 0	1259	56.40	7.19	7.23	0.03	-0.07	1.07	0	0	0.00	0			84	1.7						
CAZ	51.5	326	102	P 0	1259	58.50	9.29	8.99	0.10	0.20	1.01	0	0	0.00	0			146	2.4						
NLM	93.0	341	97	P 2	1259	65.00	15.79	16.00	-0.22	0.01	0.40	0	0	0.00	0			95	1.9						

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
WMC	9.3	304.1	21.9	6.7
DM	9.9	8.1	39.0	18.9
WKM	9.4	303.8	21.9	6.5

LAT	LON	Z	AVRPS	RMS	DRMS	
3.86	52.62	5.61	0.74	0.69	0.60	
3.86	46.12	5.61	0.24	0.73		0.65
3.86	52.62	15.61	0.06	0.69	(0.61)	
3.86	46.12	15.61	-0.41	0.71		(0.62)
1.15	49.37	1.95	0.35	0.19	0.10	
				0.09	0.00	
1.15	49.37	19.27	-0.72	0.27	(0.19)	
58.45	52.62	5.61	-0.07	0.71	0.62	
58.45	46.12	5.61	-0.39	0.69		0.60
58.45	52.62	15.61	-0.56	0.66	(0.58)	

DATE AND TIME OF RUN 11-1-86 1:30

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	26.37	33-57.25	106-44.17	7.00*	0	1.05	0.00	D0D	2.00	11.61	12.55	0.00	41.38	18.80	0.00	1.80	2.90	0.00	11.61	12.55	0.00
2	27.35	34- 3.53	106-52.32	7.00	17	0.68	-1.28	D0D	2.00	-4.67	-3.32	0.00	140.42	37.34	0.02	0.39	0.54	0.00	-4.67	-3.32	0.00
3	26.33	34- 1.01	106-50.16	7.00	12	0.10	-0.07	A1D	0.50	0.35	-0.54	0.00	0.79	0.88	0.01	0.40	0.57	0.00	0.35	-0.54	0.00
4	26.32	34- 1.20	106-49.81	7.00	12	0.06	-0.02	A1D	0.50	0.65	0.00	-1.68	4.13	0.06	2.48	0.32	0.00	1.07	0.65	0.00	-1.68
5	26.44	34- 1.55	106-49.81	5.32	12	0.02	-0.02	A1D	0.50	0.00	0.00	-0.26	0.44	-1.00	0.53	0.00	0.00	0.38	0.00	0.00	-0.26
6	26.44	34- 1.55	106-49.81	5.05	12	0.02	0.00	A3D	0.50	0.03	0.00	0.00	0.15	-1.00	-1.00	0.08	0.00	0.00	0.00	0.00	0.00
6	26.44	34- 1.55	106-49.81	5.05	12	0.02	0.00	A2D	2.00	0.19	0.15	-1.07	0.85	0.56	0.81	0.21	0.21	1.19	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	13 3 26.44	34- 1.55	106-49.81	5.05	-0.50	6	12	193	1	0.02	0.3	1.2	C	A1D	0.26	10	7	0.00	0.02	0	0.0	0.0	4	-0.5	0.2	6

STN	DIST	AZM	AIN	PRMK	HRMK	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	12.0	133	113	P 0	13 3	28.60	2.16	2.23	-0.09	0.02	1.77	0	0	0.00	0			16-0.3	S 3	30.10	3.66	-0.04	0.44	
BAR	22.7	55	103	P 0	13 3	30.50	4.06	3.97	0.10	-0.01	1.75	0	0	0.00	0			16-0.3	S 3	33.50	7.06	0.01	0.44	
LPN	36.6	30	98	P 2	13 3	32.50	6.06	6.32	-0.27	0.01	0.82	0	0	0.00	0			10-0.8	S 3	37.40	10.96	0.48	**0.00	
LAZ	50.5	326	96	P 2	13 3	35.20	8.76	8.68	0.10	-0.02	0.77	0	0	0.00	0			12-0.6						

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     LAT        LON          Z       AVRPS       RMS                  DRMS

     4.25      53.06       0.05      -0.28      0.83         0.81
     4.25      46.57       0.05       0.78      0.85                            0.83
     4.25      53.06      10.05      -0.65      0.92         (  0.91)
     4.25      46.57      10.05       0.29      0.87                            (  0.85)

     1.55      49.81       0.00       0.13      0.08                 0.06
                                                0.02                   0.00
     1.55      49.81      13.71      -0.63      0.30                 (  0.28)

    58.84      53.06       0.05      -0.75      0.53         0.51
    58.84      46.57       0.05       0.39      0.94                            0.92
    58.84      53.06      10.05      -1.13      0.47         (  0.45)
    58.84      46.57      10.05      -0.21      0.51                            (  0.49)
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DATE AND TIME OF RUN 11-1-86 1:30

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR.	XNEAR	XFAR	POS	IO	KM6	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050*	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SXD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	34.32	33-57.25	106-44.17	7.00	0	1.03	0.00	DOB	2.00	0.00	0.00	16.55	-1.00	1.44	14.98	0.00	0.00	4.28	0.00	0.00	5.52
2	34.00	33-57.25	106-44.17	12.52	0	0.73	0.01	DOB	2.00	0.00	0.00	12.92	0.76	-1.00	10.36	0.00	0.00	4.01	0.00	0.00	5.46
3	34.46	33-57.25	106-44.17	18.98	0	0.58	-0.06	DOB	2.00	0.00	0.00	7.26	1.60	-1.00	2.79	0.00	0.00	4.35	0.00	0.00	3.63
4	34.02	33-57.25	106-44.17	22.61*	0	0.51	-0.02	DOB	2.00	5.39	5.51	0.00	15.40	12.04	0.00	1.37	1.59	0.00	5.39	5.51	0.00
5	34.52	34- 0.17	106-47.75	22.61	8	0.21	-0.09	BOA	2.00	0.82	2.63	-9.20	2.11	11.12	21.06	0.56	0.79	2.00	0.82	2.63	-4.60
6	34.09	34- 0.61	106-49.46	18.01	10	0.19	-0.05	BOA	2.00	0.00	0.00	-5.62	-1.00	0.49	40.17	0.00	0.00	0.89	0.00	0.00	-5.62
7	34.48	34- 0.61	106-49.46	12.39	10	0.06	-0.05	A1A	0.50	0.20	0.00	0.00	0.93	0.25	-1.00	0.21	0.00	0.00	0.20	0.00	0.00
7	34.43	34- 0.72	106-49.46	12.39	11	0.10	-0.02	A1A	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	-0.04	0.00	0.00
7	34.43	34- 0.70	106-49.46	12.39	11	0.10	-0.02	A1A	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	-0.04	0.00	0.00
7	34.43	34- 0.68	106-49.46	12.39	11	0.10	-0.02	A1A	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	-0.04	0.00	0.00
8	34.43	34- 0.66	106-49.46	12.39	11	0.05	0.00	A3A	0.50	0.00	-0.14	0.00	-1.00	0.45	-1.00	0.00	0.21	0.00	0.00	0.00	0.00
8	34.43	34- 0.66	106-49.46	12.39	11	0.05	0.00	A2A	2.00	0.00	-0.16	0.18	0.04	0.12	0.01	0.40	0.47	1.77	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERz	Q	SOD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	1332 34.43	34- 0.66	106-49.46	12.39	-0.33	7	11	87	1	0.05	0.6	1.8	A	A1A	0.04	10	8	0.00	0.04	0	0.0	0.0	6	-0.3	0.1	8

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	10.5	128	140	P	1332	37.10	2.67	2.78	-0.09	-0.02	1.43	0	0	0.00	0			1P=0.1							
BAR	23.2	51	118	P	1332	39.00	4.57	4.50	0.10	-0.03	1.41	0	0	0.00	0			1S=0.3		S	3	42.00	7.57	-0.39**	0.00
SNC	31.5	215	112	P	1332	40.40	5.97	5.78	0.11	0.08	0.99	0	0	0.00	0			1S=0.3							
LPM	37.8	238	109	P	1332	40.90	6.47	6.80	-0.27	-0.06	0.99	0	0	0.00	0			1S=0.5		S	3	45.90	11.47	0.16	0.28
MAG	47.2	298	107	P	1332	41.80	7.37	7.36	0.03	-0.01	0.98	0	0	0.00	0			1S=0.5							
CAZ	52.2	326	103	P	1332	43.70	9.27	9.17	0.10	0.00	0.92	0	0	0.00	0			1S=0.3							

LAT	LON	Z	AVRPS	RMS	DRMS
3.36	52.71	7.39	0.32	0.66	0.61
3.36	46.21	7.39	0.61	0.90	0.85
3.36	52.71	17.39	-0.39	0.82	(0.77)
3.36	46.21	17.39	-0.21	0.75	(0.70)
0.66	49.46	3.73	0.45	0.22	0.16
				0.85	0.00
0.66	49.46	21.05	-0.80	0.30	(0.25)
57.95	52.71	7.39	-0.16	0.89	0.83
57.95	46.21	7.39	0.07	0.78	0.73
57.95	52.71	17.39	-0.84	0.89	(0.84)
57.95	46.21	17.39	-0.73	0.45	(0.40)

DATE AND TIME OF RUN 11-1-86 1:30

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR.	XNEAR	XFAR	POS	IQ	KMS	KFH	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

											ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	49.79	33-57.25	106-44.13	7.00*	0	1.17	0.00	DOB	2.00	8.54	10.78	0.00	32.39	37.35	0.00	1.56	1.76	0.00	8.54	10.78	0.00
2	50.97	34- 1.87	106-51.17	7.00	14	0.37	-0.65	COB	2.00	-1.69	-2.76	7.63	44.41	304.99	84.29	0.14	0.16	0.77	-1.69	-2.76	3.52
3	50.17	34- 0.96	106-49.38	10.52	11	0.09	-0.07	AOR	2.00	0.00	-0.31	1.62	1.21	2.17	6.85	0.00	0.41	0.62	0.00	-0.31	1.62
4	49.97	34- 0.96	106-49.18	12.14	11	0.06	-0.01	A1B	0.50	-0.19	0.00	0.00	-1.36	0.02	-1.00	0.16	0.00	0.00	-0.19	0.00	0.00
5	49.96	34- 0.85	106-49.18	12.14	10	0.06	0.00	A3B	0.50	0.00	-0.03	0.00	-1.00	0.03	-1.00	0.00	0.17	0.00	0.00	0.00	0.00
6	49.96	34- 0.85	106-49.18	12.14	10	0.06	0.00	A2B	2.00	-0.01	-0.04	0.10	0.00	0.04	0.03	0.19	0.21	0.57	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	S	RMS	ERH	ERZ	Q	SOD	ADJ	IM	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	1510 49.96	34- 0.85	106-49.18	12.14	-0.33	10	10	104	1	0.06	0.3	0.6	B	A1B	0.19	10	10	0.00	0.04	0	0.0	0.0	6	-0.3	0.4	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	10.4	131	139	P	0 1510	52.60	2.64	2.74	-0.09	0.00	1.54	0	0	0.00	0			22	0.1	S 3	54.50	4.54	-0.04	0.39	
LEM	22.0	320	119	P	0 1510	54.40	4.44	4.39	0.05	0.10	1.15	0	0	0.00	0			22	0.1	S 2	57.50	7.54	0.01	0.76	
GAR	22.7	51	118	P	0 1510	54.50	4.54	4.39	0.10	-0.05	1.52	0	0	0.00	0			15	-0.3	S 2	57.70	7.74	-0.04	0.76	
SHC	32.0	215	111	P	0 1510	55.90	5.94	5.85	0.11	-0.02	1.46	0	0	0.00	0			9	-1.0*						
LPW	37.3	29	108	P	1 1510	56.40	6.44	6.70	-0.27	0.01	1.07	0	0	0.00	0			11	-0.5	S 3	61.00	11.04	-0.10	0.36	
LAZ	52.1	326	103	P	1 1510	59.10	9.14	9.15	0.10	-0.11	0.99	0	0	0.00	0			15	-0.3						

LAT	LON	Z	AVRPS	RMS	DRMS	
3.56	52.93	7.14	0.41	0.84	0.79	
3.56	45.93	7.14	0.67	0.92		0.86
3.56	52.93	17.14	-0.41	0.83	(0.78)	
3.56	45.93	17.14	-0.29	0.81		(0.76)
0.85	49.18	3.48	0.54	0.20	0.20	
				0.06		0.00
0.85	49.18	20.80	-0.94	0.16		(0.30)
58.15	52.93	7.14	0.14	0.83	0.77	
58.15	45.93	7.14	0.66	0.89		0.84
58.15	52.93	17.14	-0.58	0.84	(0.78)	
58.15	45.93	17.14	-0.78	0.56		(0.50)

DATE AND TIME OF RUN 11-1-86 1130

86/ 4/28 15137

***** FOLLOWING EVENT IS OUT OF ORDER *****

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR.	XNEAR	XFAR	POS	IQ	KNS	KFH	IPUN	IHAC	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL R-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	56.42	34-57.25	106-44.17	7.00*	0	1.29	0.00	D0B	2.00	9.51	10.60	0.00	89.79	27.74	0.00	1.00	0.94	0.00	9.51	10.60	0.00
2	58.05	34- 2.40	106-51.05	7.00	14	0.47	-0.52	C0C	2.00	-2.33	-2.29	0.00	53.56	65.06	1.00	0.32	0.28	0.00	-2.33	-2.29	0.00
3	57.37	34- 1.14	106-49.57	7.00	11	0.10	-0.02	A3B	0.50	0.11	0.00	0.00	0.17	-1.00	-1.00	0.25	0.00	0.00	0.00	0.00	0.00
3	57.34	34- 1.14	106-49.57	7.00	11	0.10	0.00	A2B	2.00	0.10	-0.06	0.13	0.08	0.04	0.01	0.35	0.32	1.69	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERz	Q	SQD	ADJ	IN	NP	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	1537 57.34	34- 1.14	106-49.57	7.00	-0.30	13	11	83	1	0.10	0.5	1.7	B	A1B	3.26	10	13	0.00	0.08	0	0.0	0.0	8	-0.3	0.3	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.2	131	122	P	0	1537	59.60	2.26	2.26	-0.09	0.09	1.99	0	0	0.00	0			21	0.1	S	3	61.00	3.66	-0.10	0.49	
LEM	32.2	320	108	P	1	1538	1.30	3.96	3.82	0.05	0.09	1.48	0	0	0.00	0			20	0.0	S	3	4.50	7.16	0.45	0.04	
BAR	42.8	53	107	P	1	1538	1.50	4.16	4.08	0.10	-0.02	1.99	0	0	0.00	0			20	0.0							
SNC	32.1	214	102	P	2	1538	3.00	5.66	5.61	0.11	-0.07	0.94	0	0	0.00	0			14	-0.4							
SB	39.1	262	101	P	3	1538	3.50	6.16	6.19	0.31	0.00	0.47	0	0	0.00	0			13	-0.5	S	3	7.70	10.36	-0.30	0.29	
LPM	40.4	283	100	P	1	1538	4.00	6.16	6.45	-0.27	-0.03	1.40	0	0	0.00	0			12	-0.6	S	3	7.90	10.56	-0.15	0.45	
MAC	40.7	293	100	P	1	1538	4.60	7.26	7.06	0.03	0.17	1.32	0	0	0.00	0			11	-0.5							
LAZ	51.4	326	98	P	1	1538	6.20	8.86	8.86	0.10	-0.10	1.28	0	0	0.00	0			15	-0.3	S	2	12.80	15.46	-0.06	0.86	

LAT	LON	Z	AVRPS	RMS		DRMS	
3.84	52.81	2.00	0.52	1.01	0.91		
3.84	46.32	2.00	0.31	0.79		0.69	
3.84	52.81	12.00	0.06	1.00	(0.90)		
3.84	46.32	12.00	-0.22	0.77		(0.67)	
1.14	49.57	0.00	0.19	0.16			
				0.10		0.06	
1.14	49.57	15.66	-0.62	0.23		0.00	
						(0.13)	
58.43	52.81	2.00	-0.15	0.78	0.67		
58.43	46.32	2.00	-0.31	1.05		0.95	
58.43	52.81	12.00	-0.63	0.77	(0.66)		
58.43	46.32	12.00	-0.84	0.72		(0.62)	

DATE AND TIME OF RUN 11-1-86 1130

86/ 4/28 16:57

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XMEAR	XFAR	POS	IQ	KHS	KFH	IPUN	INAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050W	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	9.42	33-57.25	106-46.17	7.00*	0	1.29	0.00	DOC	2.00	10.57	11.94	0.00	40.04	72.03	0.00	1.67	1.41	0.00	10.57	11.94	0.00
2	7.59	34- 2.97	106-51.92	7.00	16	0.59	-0.83	DOD	2.00	-3.18	-3.00	2.66	247.28	389.56	10.14	0.20	0.15	0.84	-3.18	-3.00	2.66
3	6.58	34- 1.24	106-49.98	9.66	12	0.06	-0.06	A0D	2.00	0.00	-0.44	0.00	-1.00	10.86	0.20	0.00	0.13	0.00	0.00	-0.44	0.00
4	6.53	34- 1.24	106-49.69	9.66	12	0.04	0.00	A3D	0.50	0.00	0.00	-0.25	-1.00	-1.00	0.23	0.00	0.00	0.52	0.00	0.00	0.00
								A2D	2.00	-0.01	0.03	-0.28	0.00	0.02	0.14	0.24	0.18	0.76	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860428	1657	6.53	34- 1.24	106-49.69	9.66	-0.38	7	12	189	1	0.04	0.3	0.8	C	AID	0.44	10	7	0.00	0.03	0	0.0	0.0	5	-0.4	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/M1	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.5	131	130	P	0	1657	9.00	2.47	2.57	-0.09	-0.01	1.61	0	0	0.00	0		16-0.3							
CEN	21.0	320	115	P	1	1657	10.50	3.97	3.94	0.05	-0.02	1.20	0	0	0.00	0		15-0.1		S	3	13.50	6.97	0.05	0.40	
BAR	24.9	53	112	P	0	1657	10.90	4.37	4.24	0.10	0.03	1.59	0	0	0.00	0		17-0.2		S	2	14.00	7.47	-0.05	0.79	
LPH	37.0	326	105	P	3	1657	12.50	6.37	6.54	-0.27	0.10	0.37	0	0	0.00	0		14-0.8								
LAZ	51.1	326	101	P	1	1657	15.50	8.97	8.89	0.10	-0.02	1.04	0	0	0.00	0		13-0.5								

LAT	LON	Z	AVRPS	RMS	DRMS		
3.95	52.94	4.66	0.37	0.92	0.89		
3.95	46.45	4.66	0.76	0.75		0.71	
3.95	52.94	14.66	-0.37	0.92	(0.89)		
3.95	46.45	14.66	-0.06	0.66		(0.62)	
1.24	49.69	1.00	0.41	0.16			
				0.04		0.12	
1.24	49.69	18.32	-0.89	0.32		0.00	
						(0.28)	
58.54	52.94	4.66	-0.42	0.54	0.50		
58.54	46.45	4.66	0.03	0.07		0.94	
58.54	52.94	14.66	-1.07	0.51	(0.47)		
58.54	46.45	14.66	-0.75	0.62		(0.58)	

DATE AND TIME OF RUN 11-1-86 1,30

86/ 4/29 2148

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	pDS	IQ	KHS	KFM	IpUN	IMAG	IR	IppM	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	47.55	33-57.25	106-44.17	7.00*	0	1.23	0.00	DDR	2.00	9.59	11.27	0.00	11.02	96.91	0.00	0.91	1.14	0.00	9.59	11.47	0.00
2	49.01	34- 2.44	106-51.49	7.00	15	0.43	-0.54	COC	2.00	-1.99	-2.72	2.11	98.31	134.41	2.41	0.20	0.23	1.35	-1.99	-2.72	2.11
3	48.27	34- 1.36	106-49.72	9.11	12	0.07	-0.03	A1B	0.50	0.00	-0.21	0.00	0.26	0.94	-1.00	0.00	0.22	0.00	0.00	-0.41	0.00
4	48.23	34- 1.36	106-49.58	9.11	12	0.06	0.00	A3B	0.50	-0.10	0.00	0.00	0.31	-1.00	-1.00	0.19	0.00	0.00	0.00	0.00	0.00
4	48.23	34- 1.36	106-49.58	9.11	12	0.06	0.00	A2B	2.00	-0.10	0.02	-0.16	0.14	0.01	0.02	0.23	0.27	1.11	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TM	NR	AVR	AAR	RM	AVXM	SDXM	NF	AVFM	SDFM	I
860429	248 48.23	34- 1.36	106-49.58	9.11	-0.31	9	12	106	1	0.06	0.3	1.1	B	A1B	0.21	10	9	0.00	0.04	0	0.0	0.0	6	-0.3	0.4	4

STN	DIST	AZM	AIN	PRMK	HRMM	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PMX	CALX	K	XMAG	RMK	FMP	FMAG	SRMX	S-SEC	TSOBS	S-RES	S-WT	DT
CAS	11.5	133	128	P	248	50.60	2.37	2.51	-0.09	-0.05	1.51	0	0	0.00	0			23	0.2						
CEM	20.9	310	148	P	248	52.20	3.97	3.90	0.05	0.02	1.51	0	0	0.00	0			20	0.0	S	3	55.20	6.97	0.13	0.38
BKR	22.6	54	112	P	248	52.50	4.27	4.16	0.10	0.00	1.12	0	0	0.00	0			20	0.0						
SNC	32.4	213	106	P	248	54.10	5.87	5.76	0.11	0.00	1.43	0	0	0.00	0			0	-1.0*						
LPH	36.8	20	104	P	248	54.50	6.27	6.47	-0.27	0.06	1.05	0	0	0.00	0			11	-0.7	S	3	59.00	10.27	-0.02	0.45
LAZ	51.0	326	100	P	248	57.20	8.97	8.86	0.10	0.01	1.31	0	0	0.00	0			14	-0.3	S	3	63.50	15.27	-0.25	0.13

LAT	LON	Z	AVRPS	RMS	DRMS
4.07	52.83	4.11	0.50	0.92	0.86
4.07	46.33	4.11	0.36	0.81	
4.07	52.83	14.11	-0.10	0.88	0.74
4.07	46.33	14.11	-0.28	0.77	(0.81)
					(0.71)
1.36	49.58	0.45	0.30	0.13	
1.36	49.58	17.77	-0.73	0.06	0.06
				0.27	0.00
					(0.21)
4.66	52.83	4.11	-0.13	0.75	0.69
4.66	46.33	4.11	-0.17	0.91	
4.66	52.83	14.11	-0.72	0.72	0.85
4.66	46.33	14.11	-0.77	0.65	(0.66)
					(0.59)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/29 2:51

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XMEAN	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	59.34	34- 0.25	106-44.17	7.00	0	1.01	0.00	DQR	2.00	0.00	0.00	15.96	-1.00	1.22	15.93	0.00	0.00	4.00	0.00	0.00	5.32
2	59.34	34- 0.25	106-44.17	7.00	0	0.69	0.01	DQR	2.00	6.73	7.16	3.23	94.17	53.32	6.91	0.69	0.98	1.23	6.73	7.16	3.23
3	59.39	34- 0.89	106-48.82	15.55	10	0.19	-0.34	BQR	2.00	0.00	0.00	-3.95	-1.00	0.06	9.54	0.00	0.00	1.28	0.00	0.00	-3.95
4	59.46	34- 0.89	106-48.82	11.60	10	0.08	-0.02	A1B	0.50	0.00	-0.37	0.00	0.14	0.94	-1.00	0.00	0.38	0.00	0.00	-0.37	0.00
5	59.46	34- 0.89	106-48.58	11.60	10	0.08	0.00	A3B	0.50	-0.12	0.00	0.00	0.45	-1.00	-1.00	0.29	0.00	0.00	0.00	0.00	0.00
5	59.46	34- 0.89	106-48.58	11.60	10	0.08	0.00	B2R	2.00	-0.45	-0.85	1.83	0.77	0.52	0.75	0.52	0.83	2.11	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	MF	AVFM	SDFM	I
860429	251 59.46	34- 0.89	106-48.58	11.60	-0.23	7	10	108	1	0.08	1.0	2.1	B	BIB	0.37	10	8	0.00	0.06	0	0.0	0.0	5	-0.2	0.3	5

STN	DIST	AZM	AIN	PRMK	MRMK	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	A	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	9.8	135	140	P	0	252	2.00	2.54	2.60	-0.09	0.03	1.55	0	0	0.00	0			24 0.2						
BARR	21.9	50	118	P	0	252	3.80	4.34	4.24	0.10	0.00	1.54	0	0	0.00	0			19-0.1	5	2	6.90	7.44	-0.08	0.77	
SNC	22.6	217	110	P	P	252	5.40	5.22	5.31	-0.11	-0.09	0.37	0	0	0.00	0			12-0.8							
LPN	51.8	26	107	P	1	252	8.70	9.24	9.60	-0.27	-0.09	1.08	0	0	0.00	0			15-0.3	5	2	10.60	11.14	-0.18	-0.89	
LAZ	52.6	325	102	P	1	252	8.80	9.34	9.21	0.10	0.03	1.00	0	0	0.00	0			18-0.3	5	3	14.80	15.34	-0.79	-0.00	

LAT	LON	Z	AVRPS	RMS	DRMS			
3.60	51.83	6.60	0.30	0.64	0.56			
3.60	45.34	6.60	-1.03	0.93		0.85		
3.60	51.83	16.60	-0.47	0.80	(0.72)			
3.60	45.34	16.60	0.09	0.78		(0.70)		
0.89	48.58	2.94	0.50	0.28		0.20		
0.89	48.58	20.26	-0.94	0.08 0.35		0.00 (0.27)		
59.19	51.83	6.60	-0.59	0.72	0.64			
59.19	45.34	6.60	-0.74	0.84		0.75		
59.19	51.83	16.60	-1.33	0.70	(0.63)			
59.19	45.34	16.60	-0.74	0.38		(0.31)		

DATE AND TIME OF RUN 11-1-86 1:30

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	PDS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	23.46	33-57.25	106-44.17	7.00*	0	1.37	0.00	DOC	2.00	10.45	12.40	0.00	77.57	168.20	0.00	1.19	0.96	0.00	10.45	12.40	0.00
2	25.13	34- 2.60	106-52.22	7.00	16	0.64	-0.72	DOC	2.00	-3.59	-2.60	0.00	15.13	15.97	0.19	0.92	0.65	0.00	-3.59	-2.60	0.00
3	24.20	34- 0.98	106-50.54	7.00	12	0.20	-0.01	B1C	0.50	0.00	-0.68	0.00	0.31	1.75	-1.00	0.00	0.51	0.00	0.00	-0.68	0.00
4	24.21	34- 0.96	106-50.10	7.00	12	0.15	0.01	B3C	0.50	0.32	0.00	0.00	0.36	-1.00	-1.00	0.53	0.00	0.00	0.00	0.00	0.00
4	24.22	34- 0.96	106-50.10	7.00	12	0.15	0.00	B2C	2.00	0.59	-0.27	-1.12	0.54	0.20	0.07	0.81	0.59	4.14	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DN	GAP	N	RMS	ERH	ERZ	Q	SQD	ADJ	TM	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860429	332 24.22	34- 0.96	106-50.10	7.00	-0.08	10	12	167	1	0.15	1.0	4.1	C	B1C	0.68	10	10	0.00	0.12	0	0.0	0.0	6	-0.1	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	PMP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.6	122	121	P	0	332	26.50	2.28	2.32	-0.09	0.04	2.12	0	0	0.00	0			28 0.4						
LEM	21.0	342	108	P	1	332	28.10	3.88	3.78	0.05	-0.05	1.58	0	0	0.00	0			24 0.2						
BAR	23.7	54	106	P	2	332	28.50	4.28	4.22	0.10	-0.04	2.09	0	0	0.00	0			14-0.3						
LPM	37.8	29	100	P	2	332	30.30	6.08	6.57	-0.27	-0.22	0.97	0	0	0.00	0			16-0.3	S	3	31.50	7.28	-0.20	0.52
MAC	40.1	294	100	P	3	332	31.40	7.18	6.96	0.03	0.19	0.47	0	0	0.00	0			18-0.1	S	3	35.40	11.18	0.47	0.46
LAZ	51.2	327	98	P	1	332	33.30	9.08	8.83	0.10	0.15	1.36	0	0	0.00	0			14-0.4	S	3	35.40	11.18	-0.92**	0.02
																				S	3	39.30	15.08	-0.39	0.42

LAT	LON	Z	AVRPS	RMS	DRMS
3.66	53.34	2.00	0.40	0.94	0.78
3.66	46.85	2.00	0.62	0.75	
3.66	53.34	12.00	-0.09	0.97	0.60
3.66	46.85	12.00	0.07	0.70	(0.81)
					(0.54)
0.96	50.10	0.00	0.19	0.18	
				0.15	0.03
0.96	50.10	15.66	-0.69	0.32	0.00
					(0.16)
58.25	53.34	2.00	-0.54	0.62	0.46
58.25	46.85	2.00	-0.53	1.07	0.92
58.25	53.34	12.00	-0.39	0.59	(0.43)
58.25	46.85	12.00	-0.75	0.70	(0.55)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/29 5:30

***** FOLLOWING EVENT IS OUT OF ORDER *****

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	pDS	IQ	KMS	KFM	IPUN	IMAG	IB	IPRM	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	21.96	33-57.25	106-44.17	7.00*	0	1.06	0.00	DOB	2.00	9.49	11.78	0.00	96.39169.29		0.00	0.97	0.91	0.00	9.49	11.76	0.00
2	33.50	34- 2.38	106-51.82	7.00	8	0.47	-0.56	COB	2.00	-2.08	-3.09	1.78	35.79149.38		2.05	0.34	0.25	1.24	-2.08	-3.09	1.78
3	22.25	34- 1.27	106-49.82	8.78	12	0.08	-0.05	A1R	0.50	0.00	-0.15	0.00	-1.00	0.56	0.07	0.00	0.20	0.00	0.00	-0.15	0.00
3	22.70	34- 1.27	106-49.72	8.78	12	0.09	0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.03	0.00
3	22.70	34- 1.27	106-49.74	8.78	12	0.10	0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.03	0.00
3	22.70	34- 1.27	106-49.76	8.78	12	0.10	0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.03	0.00
3	22.70	34- 1.27	106-49.78	8.78	12	0.10	0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.03	0.00
4	22.70	34- 1.27	106-49.80	8.78	12	0.10	0.01	A3B	0.50	0.00	0.00	-0.49	-1.00	-1.00	0.19	0.00	0.00	1.12	0.00	0.00	0.00
4	22.71	34- 1.27	106-49.80	8.78	12	0.10	0.00	A2B	2.00	-0.02	-0.16	-0.24	0.00	0.28	0.03	0.37	0.30	1.38	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	N	RMS	ERH	ERZ	Q	SQD	ADJ	IN	WR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860429	530 22.71	34- 1.27	106-49.80	8.78	-0.22	11	12	82	1	0.10	0.5	1.4	B	A1B	0.03	10	11	0.00	0.07	0	0.0	0.0	7	-0.2	0.4	4

STN	DIST	AZM	AIM	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.7	131	127	P 1	530	25.40	2.39	-0.09	-0.02	1.28	0	0	0.00	0				23	0.2						
WTX	12.1	298	126	P 0	530	25.30	2.39	-0.01	0.04	1.71	0	0	0.00	0				0	-1.0*						
LEN	20.8	320	113	P 3	530	26.70	3.99	3.86	0.05	0.43	0	0	0.00	0				20	0.0						
BAR	33.0	54	111	P 0	530	27.00	4.29	4.20	0.10	-0.02	1.69	0	0	0.00	0			24	0.2	S	2	30.10	7.39	-0.06	0.84	
SMC	33.1	213	105	P 2	530	28.50	5.79	5.69	0.11	-0.01	0.81	0	0	0.00	0											
LPN	37.1	29	103	P 1	530	28.90	6.19	6.51	-0.29	-0.05	1.19	0	0	0.00	0			15	-0.3	S	3	33.50	10.79	-0.02	0.40	
MAG	40.3	293	102	P 1	530	29.20	6.99	7.05	0.03	-0.09	1.17	0	0	0.00	0			14	-0.4							
LAZ	51.0	326	100	P 1	530	31.90	9.19	8.84	0.10	0.24	1.11	0	0	0.00	0			17	-0.2	S	3	38.00	15.29	-0.20	0.37	

LAT	LON	Z	AVRPS	RMS	DRMS
3.97	53.04	3.78	0.53	0.85	0.76
3.97	46.55	3.78	0.52	0.92	0.82
3.97	53.04	13.78	-0.16	0.85	(0.75)
3.97	46.55	13.78	-0.14	0.82	(0.72)
1.27	49.80	0.12	0.31	0.16	0.06
				0.10	0.00
1.27	49.80	17.44	-0.77	0.31	(0.21)
58.56	53.04	3.78	-0.25	0.83	0.73
58.56	46.55	3.78	-0.24	0.77	0.68
58.56	53.04	13.78	-0.84	0.61	(0.71)
58.56	46.55	13.78	-0.82	0.53	(0.44)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/29 6:49

***** FOLLOWING EVENT IS OUT OF ORDER *****

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	5.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	ON	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	38.91	33-57.25	106-44.17	7.00*	0	1.18	0.00	DOB	2.00	9.38	10.28	0.00	86.17	92.35	0.00	1.01	1.07	0.00	9.38	10.28	0.00
2	40.54	34- 2.32	106-50.85	7.00	10	0.50	-0.52	COB	2.00	-1.88	-2.70	0.00	24.52	61.56	1.95	0.38	0.34	0.00	-1.88	-2.70	0.00
3	39.89	34- 1.31	106-49.09	7.00	11	0.15	-0.02	A1B	0.50	0.00	0.00	1.20	-1.00	0.49	1.08	0.00	0.00	1.16	0.00	0.00	1.20
4	39.80	34- 1.31	106-49.09	8.20	11	0.14	0.00	A3B	0.50	0.00	-0.18	0.00	-1.00	0.35	-1.00	0.00	0.31	0.00	0.00	0.00	0.00
4	39.79	34- 1.31	106-49.09	8.20	11	0.14	0.00	A2B	2.00	-0.21	-0.23	0.68	0.41	0.42	0.31	0.38	0.35	1.23	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IM	NR	AVR	AAR	NN	AVXM	SDXM	NF	AVFM	SDFM	I
860429	649 39.79	34- 1.31	106-49.09	8.20	-0.35	13	11	82	1	0.14	0.5	1.2	B	A1B	1.20	10	14	0.00	0.10	0	0.0	0.0	8	-0.3	0.4	4

STN	DIST	AZM	AIN	PHWK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	10.9	135	127	P	1 649	41.80	2.01	2.33	-0.09	-0.24	1.20	0	0	0.00	0			20	0.0	S	2 43.80	4.01	0.12	0.88	
WTX	13.1	295	122	P	1 649	42.50	2.71	2.64	-0.01	0.08	1.31	0	0	0.00	0			R	-1.1*	S	3 44.50	4.71	0.16	0.43	
LEM	21.5	318	111	P	0 649	43.80	4.01	3.93	0.05	0.02	1.78	0	0	0.00	0			23	0.2*						
BAR	22.0	5	110	P	2 649	44.20	4.41	4.03	0.10	0.28	0.68	0	0	0.00	0			23	0.2*	S	2 46.60	6.81	-0.33	0.60	
SNC	32.8	215	104	P	1 649	45.60	5.81	5.77	0.11	-0.08	1.27	0	0	0.00	0			11	-0.7						
LPN	36.5	28	103	P	1 649	46.00	6.21	6.39	-0.27	0.08	1.24	0	0	0.00	0			11	-0.7	S	2 50.40	10.61	0.00	0.83	
MAG	40.5	298	101	P	2 649	47.00	7.21	7.18	0.03	-0.01	0.81	0	0	0.00	0			17	-0.2	S	4 52.20	12.41	-0.10	0.00	
LAZ	51.5	325	99	P	1 649	48.80	9.01	8.92	0.10	-0.01	1.16	0	0	0.00	0			15	-0.3	S	2 55.40	15.61	-0.02	0.77	

LAT	LON	Z	AVRPS	RMS	DRMS
4.01	52.34	3.20	0.58	1.04	0.90
4.01	45.84	1.20	0.37	0.93	0.80
4.01	52.34	13.20	-0.13	1.04	(0.90)
4.01	45.84	13.20	-0.33	0.90	(0.76)
1.31	49.09	0.00	0.28	0.20	0.06
1.31	49.09	16.86	-0.83	0.43	0.00 (0.30)
58.60	52.34	3.20	-0.15	0.82	0.69
58.68	45.84	1.20	-0.31	0.85	0.82
58.60	52.34	13.20	-0.80	0.80	(0.66)
58.60	45.84	13.20	-0.94	0.65	(0.52)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/29 8128

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR.	XNEAR	XFAR	POS	IQ	KHS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	I011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	22.49	34-57.25	106-44.17	7.00*	0	1.15	0.00	DOC	2.00	12.99	11.71	0.00	55.08	56.47	0.00	1.75	1.56	0.00	12.99	11.71	0.00
2	24.09	34- 4.28	106-51.78	7.00	15	0.69	-0.90	DOC	2.00	-4.88	-3.31	3.54	376.06	295.96	7.88	0.25	0.19	1.26	-4.88	-3.31	3.54
3	22.94	34- 1.64	106-49.63	10.54	12	0.08	-0.11	AOD	2.00	0.00	-0.67	-0.59	0.08	49.57	3.06	0.00	0.10	0.34	0.00	-0.67	-0.59
4	22.90	34- 1.64	106-49.19	9.95	11	0.02	0.00	A3D	0.50	-0.03	0.00	0.00	0.10	-1.00	-1.00	0.08	0.00	0.00	0.00	0.00	0.00
4	22.90	34- 1.64	106-49.19	9.95	11	0.02	0.00	A2D	2.00	-0.04	0.00	0.00	0.07	0.00	0.02	0.17	0.12	0.61	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860429	828 22.90	34- 1.64	106-49.19	9.95	-0.25	6	11	181	1	0.02	0.2	0.6	C	AID	0.90	10	6	0.00	0.01	0	0.0	0.0	5	-0.2	0.2	4

STN	DIST	AZM	AIN	PRMK	HRMM	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	PMP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.4	136	131	P 0	828	25.40	2.50	2.59	-0.09	0.00	1.38	0	0	0.00	0			21	0.1						
LEM	20.9	317	115	P 1	828	26.90	4.00	3.96	0.05	-0.01	1.03	0	0	0.00	0			18	-0.1						
BAR	21.8	54	116	P 0	828	27.10	4.20	4.10	0.10	0.00	1.37	0	0	0.00	0			17	-0.2	S	3	30.20	7.30	0.03	0.34
LPH	36.0	28	105	P 1	828	29.00	6.10	6.39	-0.27	-0.02	0.97	0	0	0.00	0			12	-0.6						
LAZ	50.9	325	101	P 1	828	31.90	9.00	8.87	0.10	0.03	0.90	0	0	0.00	0			15	-0.3						

LAT	LON	Z	AVRPS	RMS	DRMS
4.34	52.44	4.95	0.32	0.80	0.78
4.34	45.94	4.95	0.74	0.67	0.66
4.34	52.44	14.95	-0.37	0.86	(0.84)
4.34	45.94	14.95	-0.02	0.64	(0.63)
1.64	49.19	1.29	0.39	0.17	0.15
1.64	49.19	18.61	-0.81	0.02 0.28	0.00 (0.26)
[illegible]	52.44	4.95	-0.41	0.54	0.52
[illegible]	45.94	4.95	0.01	0.90	0.88
[illegible]	52.44	14.95	-1.01	0.43	(0.42)
0.93	45.94	14.95	-0.71	0.51	(0.50)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/29 8:30

***** FOLLOWING EVENT IS OUT OF ORDER *****

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR.	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	29.91	33-57.25	106-44.17	7.00*	0	1.11	0.00	D0B	2.00	10.88	11.51	0.00	417.91	330.01	0.00	0.53	0.63	0.00	10.88	11.51	0.00
2	31.87	34- 3.14	106-51.65	7.00	8	0.38	-0.43	C0B	2.00	-2.21	-2.51	2.24	64.08	65.56	2.33	0.28	0.31	1.47	-2.21	-2.51	2.24
3	31.09	34- 1.94	106-50.01	9.24	11	0.12	-0.03	A3B	0.50	0.00	0.00	-0.94	-1.00	-1.00	0.46	0.00	0.00	1.39	0.00	0.00	0.00
3	31.06	34- 1.94	106-50.01	9.24	11	0.12	0.00	A2B	2.00	-0.14	-0.20	-0.70	0.23	0.37	0.21	0.30	0.33	1.54	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860429	830 31.06	34- 1.94	106-50.01	9.24	0.67	15	11	77	1	0.12	0.4	1.5	B	A1B	4.03	10	17	0.00	0.10	0	0.0	0.0	11	0.7	0.3	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
WTX	11.3	293	129	P 0	830	33.60	2.54	2.49	-0.01	0.06	1.55	0	0	0.00	0			22	0.1*						
CAR	12.7	134	126	P 1	830	33.40	2.34	2.69	-0.09	-0.26	0.89	0	0	0.00	0			55	1.2*						
LEM	19.7	319	115	P 0	830	34.90	3.84	3.71	0.05	0.07	1.53	0	0	0.00	0			40	0.8						
BAR	22.5	57	112	P 1	830	35.40	4.34	4.16	0.10	0.07	1.13	0	0	0.00	0			50	1.1						
SB	32.7	259	106	P 1	830	37.30	6.24	5.81	0.37	0.06	1.10	0	0	0.00	0			23	0.2*	S 3	41.50	10.44	-0.26	0.28	
SMC	33.0	211	106	P 0	830	36.90	5.84	5.85	0.11	-0.13	1.43	0	0	0.00	0			35	0.7	S 2	41.50	10.44	0.11	0.71	
LJY	34.2	350	105	P 1	830	37.90	6.84	6.06	0.65	0.13	1.05	0	0	0.00	0			37	0.7	S 4	42.00	10.94	-0.68	0.00	
LPM	36.1	31	104	P 0	830	37.20	6.14	6.38	-0.27	0.03	1.44	0	0	0.00	0			37	0.7	S 2	41.50	10.44	-0.14	0.70	
MAG	39.5	291	103	P 0	830	38.10	7.04	6.93	0.03	0.07	1.40	0	0	0.00	0			29	0.5						
LAZ	49.8	325	101	P 1	830	39.90	8.84	8.65	0.10	0.09	1.00	0	0	0.00	0			45	1.0	S 2	46.00	14.94	-0.22	0.59	
MLM	91.3	342	96	P 4	830	47.40	16.34	15.69	-0.22	0.86	0.00	0	0	0.00	0			27	0.4	S 3	57.60	26.54	-0.26	0.20	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
WMC	7.7	299.1	25.6	6.1
DK	8.7	15.9	40.3	14.7
SNM	11.0	292.4	1.6	0.6
WKM	7.8	298.9	25.6	5.8

LAT	LON	Z	AVRPS	RMS	DRMS	
4.65	53.26	4.24	0.74	0.81	0.69	
4.65	46.77	4.24	0.13	0.65		0.82
4.65	53.26	14.24	0.06	0.79	(0.67)	
4.65	46.77	14.24	-0.45	0.92		(0.79)
1.94	50.01	0.58	0.29	0.15	0.03	
				0.12	0.00	
1.94	50.01	17.90	-0.71	0.29	(0.16)	
59.24	53.26	4.24	0.13	0.92	0.80	
59.24	46.77	4.24	-0.41	0.71		0.59
59.24	53.26	14.24	-0.46	0.86	(0.74)	
59.24	46.77	14.24	-0.94	0.57		(0.45)

DATE AND TIME OF RUN 11-1-86 1130

86/ 4/29 8131

***** FOLLOWING EVENT IS OUT OF ORDER *****

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IO	KMS	KFM	IPUN	IMAG	IR	TPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	31.97	33-57.25	109-44.17	7.00*	0	1.32	0.00	DOC	2.00	10.65	12.10	0.00	58.83	111.82	0.00	1.39	1.14	0.00	10.65	12.10	0.00
2	32.78	34- 3.01	106-52.03	7.00	8	0.64	-0.72	DOC	2.00	-3.10	-3.22	0.00	47.02	47.01	1.39	0.45	0.33	0.00	-3.10	-3.22	0.00
3	32.08	34- 1.32	106-49.94	7.00	12	0.09	-0.06	A1C	0.50	0.44	-0.38	0.00	3.36	4.42	0.11	0.24	0.18	0.00	0.44	-0.38	0.00
4	32.09	34- 1.57	106-49.69	7.00	12	0.06	0.00	A3C	0.50	0.00	0.00	0.17	-1.00	-1.00	0.06	0.00	0.00	0.69	0.00	0.00	0.00
								A2C	2.00	-0.03	-0.03	0.30	0.01	0.03	0.07	0.32	0.20	1.14	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DH	GAP	N	RMS	ERH	ERZ	Q	SQD	ADJ	TN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860429	831	32.89	34- 1.57	106-49.69	7.00	-0.32	10	12	159	1	0.06	0.4	1.1	B	AIC	0.58	10	11	0.00	0.06	0	0.0	0.0	7	-0.3	0.5	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAB	11.9	133	120	P 1	831	35.20	2.31	2.36	-0.09	0.04	1.38	0	0	0.00	0			20	0.0	S 3	36.70	3.81	-0.12	0.44	
WTX	12.0	295	120	P 1	831	35.30	2.41	2.28	-0.01	0.05	1.38	0	0	0.00	0			6	-1.5*						
LEM	20.5	319	109	P 3	831	36.70	3.81	3.70	0.05	0.06	0.46	0	0	0.00	0			18	-0.1						
BAR	22.5	55	107	P 1	831	37.10	4.21	4.03	0.10	0.08	1.36	0	0	0.00	0			25	0.3*	S 2	40.00	7.11	-0.04	0.91	
LPH	36.5	29	101	P 1	831	38.00	6.01	6.35	-0.27	-0.07	1.26	0	0	0.00	0			16	-0.3	S 3	44.00	11.11	0.58	0.00	
MAG	40.2	292	100	P 2	831	39.80	6.91	6.98	0.03	-0.10	0.82	0	0	0.00	0			17	-0.2						
LAZ	50.6	325	98	P 1	831	41.70	8.81	8.73	0.10	-0.02	1.19	0	0	0.00	0			15	-0.3	S 2	48.20	15.31	0.02	0.80	

LAT	LON	Z	AVRPS	RMS	DRMS
4.28	52.94	2.00	0.50	0.99	0.93
4.28	46.44	2.00	0.57	0.89	0.83
4.28	52.94	12.00	-0.07	1.01	(0.95)
4.28	46.44	12.00	-0.02	0.84	(0.78)
1.57	49.69	0.00	0.23	0.15	0.09
				0.06	0.00
1.57	49.69	15.66	-0.68	0.29	(0.23)
58.87	52.94	2.00	-0.42	0.66	0.59
58.87	46.44	2.00	-0.24	1.03	0.97
58.87	52.94	12.00	-0.93	0.61	(0.55)
58.87	46.44	12.00	-0.81	0.68	(0.62)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/29 8:35

***** FOLLOWING EVENT IS OUT OF ORDER *****

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-1.6300	2.7900	0.0000	100.0000	6.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	12.48	33-57.25	106-44.17	7.00*	0	1.17	0.00	D0B	2.00	10.10	11.08	0.00	93.30	97.76	0.00	1.05	1.12	0.00	10.10	11.08	0.00
2	14.11	34- 2.71	106-51.37	7.00	9	0.46	-0.53	C0B	2.00	-2.27	-2.74	2.30	48.22	80.26	3.63	0.33	0.31	1.21	-2.27	-2.74	2.30
3	13.30	34- 1.48	106-49.58	9.30	12	0.10	-0.02	A1B	0.50	-0.26	-0.20	0.00	0.84	0.57	0.00	0.29	0.27	0.00	-0.26	-0.20	0.00
4	13.26	34- 1.34	106-49.45	9.30	11	0.09	0.00	A3B	0.50	-0.16	0.00	0.00	0.41	-1.00	-1.00	0.24	0.00	0.00	0.00	0.00	0.00
4	13.27	34- 1.34	106-49.45	9.30	11	0.09	0.00	A2B	2.00	-0.14	-0.06	-0.17	0.23	0.05	0.04	0.29	0.26	0.83	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860429	835 13.27	34- 1.34	106-49.45	9.30	0.32	12	11	81	1	0.09	0.4	0.8	B	A1B	0.33	10	15	0.00	0.06	0	0.0	0.0	9	0.3	0.4	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.3	133	129	P 0	835	15.70	2.43	2.51	-0.09	0.02	1.53	0	0	0.00	0			40	0.8*	S 3	17.20	3.93	-0.25	0.20	
NTX	12.5	296	127	P 0	835	15.90	2.63	2.67	-0.01	-0.02	1.53	0	0	0.00	0			15	-0.3*	S 3	18.00	4.73	0.13	0.36	
LEN	21.1	319	114	P 1	835	17.30	4.03	3.94	0.05	0.05	1.13	0	0	0.00	0			33	0.6						
BAR	22.4	54	113	P 0	835	17.60	4.33	4.15	0.10	0.08	1.40	0	0	0.00	0			40	0.8*						
SMC	32.5	213	106	P 0	835	19.10	5.83	5.78	0.11	-0.06	1.45	0	0	0.00	0			26	0.3	S 4	23.50	10.23	0.03	0.00	
LJY	35.5	349	105	P 4	835	20.40	6.93	6.27	0.65	0.02	0.00	0	0	0.00	0			20	0.0	S 4	24.30	11.03	-0.95	0.00	
LPN	36.7	29	104	P 0	835	19.50	6.23	6.47	-0.27	0.03	1.42	0	0	0.00	0			25	0.3	S 2	23.70	10.43	-0.30	0.40	
MAG	40.7	292	103	P 1	835	20.40	7.13	7.14	0.03	-0.04	1.05	0	0	0.00	0			20	0.0						
LAZ	51.2	325	100	P 0	835	22.30	9.03	8.89	0.10	0.05	1.31	0	0	0.00	0			26	0.3	S 3	28.40	15.13	-0.43**	0.01	

LAT	LON	Z	AVRPS	RMS	DRMS	
4.05	52.70	4.30	0.58	0.87	0.79	
4.05	46.20	4.30	0.31	0.84		0.75
4.05	52.70	14.30	-0.11	0.78	(0.69)	
4.05	46.20	14.30	-0.38	0.84		(0.76)
1.34	49.45	0.64	0.32	0.19	0.11	
				0.09	0.00	
1.34	49.45	17.96	-0.78	0.32	(0.24)	
58.64	52.70	4.30	-0.03	0.77	0.68	
58.64	46.20	4.30	-0.25	0.69		0.80
58.64	52.70	14.30	-0.71	0.73	(0.64)	
58.64	46.20	14.30	-0.88	0.63		(0.54)

DATE AND TIME OF RUN 11-1-86 1:30

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CM	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	17.13	33-57.25	106-44.17	7.00*	0	1.25	0.00	DOR	2.00	9.47	11.16	0.00	18.82	19.44	0.00	0.87	0.83	0.00	9.47	11.16	0.00
2	18.85	34- 2.37	106-51.42	7.00	15	0.46	-0.48	COC	2.00	-1.97	-2.53	0.00	17.93	17.36	0.01	0.47	0.41	0.00	-1.97	-2.53	0.00
3	18.17	34- 1.31	106-49.78	7.00	12	0.11	-0.03	A3R	0.50	-0.19	0.00	0.00	0.19	-1.00	-1.00	0.30	0.00	0.00	0.00	0.00	0.00
3	18.13	34- 1.31	106-49.78	7.00	12	0.11	0.00	A2R	2.00	-0.21	0.13	0.28	0.38	0.17	0.07	0.34	0.32	1.98	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	WR	AVR	AAR	NN	AVXM	SUXM	MF	AVFM	SDFM	I
860429	1520	18.13	34- 1.31	106-49.78	7.00	0.22	11	12	42	1	0.11	0.5	2.0	B	AIB	3.21	10	12	0.00	0.0R	0	0.0	0.0	7	0.2	0.3	3

STN	DIST	AZM	AIN	PHMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PMX	CALX	K	XMAG	RMK	PKP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.7	131	121	P 0	1520	20.40	5.27	4.33	-0.09	0.03	1.62	0	0	0.00	0			34	0.6						
LEM	20.8	320	109	P 0	1520	22.00	3.87	3.75	0.05	0.07	1.62	0	0	0.00	0			27	0.4	S	3	24.90	6.77	0.18	0.40	
HAM	22.9	54	107	P 0	1520	22.40	4.27	4.09	0.10	0.07	1.66	0	0	0.00	0			32	0.6	S	3	25.00	6.87	-0.40	0.25	
SAC	32.2	213	102	P 0	1520	23.80	5.67	5.63	0.11	-0.07	1.54	0	0	0.00	0			19	-0.1							
SB	32.8	241	102	P 1	1520	24.00	5.87	5.74	0.37	-0.75**	0.00	0	0	0.00	0					S	2	28.60	10.47	-0.12	0.76	
LJY	35.4	350	101	P 2	1520	25.00	6.87	6.18	0.65	0.04	0.76	0	0	0.00	0			18	-0.3*							
MAG	40.3	293	100	P 1	1520	25.10	6.97	6.99	0.03	-0.05	1.11	0	0	0.00	0			21	0.1							
LAX	50.9	32	98	P 1	1520	27.10	8.97	8.79	0.10	0.0*	1.05	0	0	0.00	0			24	0.3	S	3	33.20	15.07	-0.31	0.28	

LAT	LON	Z	AVRPS	RMS			DRMS		
4.01	53.02	2.00	0.57	0.96		0.85			
4.01	46.53	2.00	0.08	0.88				0.77	
4.01	53.02	12.00	0.08	0.94		(0.83)			
4.01	46.53	12.00	-0.40	0.78				(0.67)	
1.31	49.78	0.00	0.18	0.14			0.04		
				0.17			0.00		
1.31	49.78	15.66	-0.64	0.27			(0.16)		
58.60	53.02	2.00	-0.10	0.85		0.74			
58.60	46.53	2.00	-0.35	0.93				0.82	
58.60	53.02	12.00	-0.36	0.83		(0.72)			
58.60	46.53	12.00	-0.83	0.72				(0.62)	

DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/29 15:32

***** FOLLOWING EVENT IS OUT OF ORDER *****

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050$_8$	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	49.87	33-57.25	106-44.17	7.00*	0	1.28	0.00	DOR	2.00	9.85	12.50	0.00	48.26	48.80	0.00	1.42	1.79	0.00	9.85	12.50	0.00
2	50.37	34- 2.58	106-52.29	7.00	16	0.60	-0.79	DOC	2.00	-2.76	-3.45	0.00	58.61	69.76	0.70	0.36	0.41	0.00	-2.76	-3.45	0.00
3	49.59	34- 1.09	106-50.05	7.00	12	0.10	-0.04	A1R	0.50	0.00	-0.43	1.65	0.01	1.51	1.64	0.00	0.35	1.29	0.00	-0.43	1.65
4	49.46	34- 1.09	106-49.77	8.65	11	0.07	-0.01	A3R	0.50	0.14	0.00	0.00	0.39	-1.00	-1.00	0.22	0.00	0.00	0.00	0.00	0.00
4	49.44	34- 1.09	106-49.77	8.65	11	0.07	0.00	A2R	2.00	0.15	-0.10	0.07	0.30	0.10	0.00	0.28	0.91	1.03	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SOD	ADJ	TN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860429	1532	49.44	34- 1.09	106-49.77	8.65	-0.53	9	11	107	1	0.07	0.4	1.0	B	AIR	1.71	10	9	0.00	0.05	0	0.0	0.0	6	-0.5	0.2	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	PMP	PMAG	SHMX	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.4	130	127	P	0	1532	51.90	5.46	5.45	-0.09	0.10	1.89	0	0	0.00	0			1P=0.1	S	3	53.30	3.66	-0.23	0.12	
LKM	21.1	321	112	P	1	1532	53.40	3.96	3.90	0.05	0.01	1.42	0	0	0.00	0			1S=0.3	S	3	56.30	6.86	0.02	0.47	
BKR	23.1	54	111	P	1	1532	53.70	4.26	4.22	0.10	-0.06	1.40	0	0	0.00	0			1P=0.6							
SMC	31.8	213	105	P	1	1532	55.20	5.76	5.84	-0.11	-0.01	1.36	0	0	0.00	0			1S=0.8							
LPM	37.3	29	103	P	2	1532	55.70	6.26	6.55	-0.27	-0.03	0.88	0	0	0.00	0			1P=0.7	S	3	60.70	11.26	0.38	0.03	
LAZ	51.3	326	100	P	1	1532	58.40	8.96	8.89	0.10	-0.03	1.24	0	0	0.00	0			1S=0.5							

LAT	LON	Z	AVRPS	RMS	DRMS			
3.79	53.02	3.65	0.29	0.95	0.87			
1.26	46.52	3.65	0.38	0.76		0.69		
3.79	53.02	13.65	-0.29	0.92	(0.85)			
3.79	46.52	13.65	-0.32	0.78		(0.71)		
1.09	49.77	0.00	0.33	0.20		0.13		
1.09	49.77	17.31	-0.73	0.07 0.26		0.00 (0.19)		
3.38	53.02	3.65	-0.18	0.73	0.66			
1.38	46.52	3.65	0.08	1.06		0.99		
3.38	53.02	13.65	-0.82	0.72	(0.65)			
3.38	46.52	13.65	-0.63	0.63		(0.56)		

DATE AND TIME OF RUN 11-1-86 11:30

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR.	XNEAR	XFAR	pOS	IQ	KMS	KFM	IPUN	IMAG	IB	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	53.05	33-57.25	106-44.17	7.00*	0	1.20	0.00	DBH	2.00	0.37	10.76	0.00	27.92	27.89	0.00	1.58	2.04	0.00	0.37	10.76	0.00
2	54.02	34- 1.78	106-51.16	7.00	14	0.35	-0.45	COB	2.00	-1.52	-2.26	6.22	19.67	30.92	9.90	0.34	0.41	1.98	-1.52	-2.26	6.22
3	53.72	34- 0.96	106-49.69	13.22	11	0.11	-0.11	A1B	0.50	-0.26	-0.44	0.00	0.53	1.08	0.21	0.35	0.42	0.00	-0.26	-0.44	0.00
4	53.58	34- 0.82	106-49.40	13.22	11	0.09	0.00	A3B	0.50	0.00	0.00	-0.58	-1.00	-1.00	0.36	0.00	0.00	0.97	0.00	0.00	0.00
4	53.58	34- 0.82	106-49.40	13.22	11	0.09	0.00	A2B	2.00	0.00	0.01	-0.58	0.00	0.00	0.23	0.38	0.46	1.22	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860429	16 2 53.58	34- 0.82	106-49.40	13.22	-0.17	8	11	102	1	0.09	0.6	1.2	B	A1B	0.51	10	8	0.00	0.00	0	0.0	0.0	6	-0.2	0.2	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PKX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	10.6	110	141	P 0	16 2	56.10	2.72	2.90	-0.09	-0.09	1.53	0	0	0.00	0			22	0.1						
LEM	21.8	320	121	P 0	16 2	57.90	4.32	4.37	0.05	-0.10	1.52	0	0	0.00	0			17	-0.2	S	2	61.30	7.72	0.07	0.76	
SMC	31.4	215	113	P 1	16 2	59.70	6.12	5.98	0.11	0.13	1.09	0	0	0.00	0			14	-0.4							
LPN	37.5	288	109	P 1	16 3	0.20	6.62	6.80	-0.27	0.09	1.06	0	0	0.00	0			16	-0.3	S	3	5.00	11.42	0.11	0.35	
MAG	41.2	294	108	P 2	16 3	1.00	7.42	7.39	0.03	0.00	0.70	0	0	0.00	0			18	-0.1							
LAZ	52.0	326	104	P 1	16 3	2.80	9.22	9.17	0.10	-0.05	0.99	0	0	0.00	0			18	-0.1							

LAT	LON	Z	AVRPS	RMS	DRMS			
3.52	52.65	8.22	0.80	0.88	0.79			
3.52	46.16	8.22	0.31	0.66		0.57		
3.52	52.65	18.22	-0.05	0.78	(0.69)			
3.52	46.16	18.22	-0.54	0.67		(0.58)		
0.82	49.40	4.56	0.55	0.24		0.15		
				0.09		0.00		
0.82	49.40	21.88	-0.90	0.36		(0.27)		
58.11	52.65	8.22	-0.11	0.68	0.59			
58.11	46.16	8.22	-0.22	0.88		0.79		
58.11	52.65	18.22	-0.73	0.66	(0.59)			
58.11	46.16	18.22	-1.03	0.67		(0.58)		

DATE AND TIME OF RUN 11-1-86 1:30

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***** FOLLOWING EVENT IS OUT OF ORDER *****

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IO	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050W	1	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SXD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	25.73	33-57.25	106-46.17	7.00*	0	1.42	0.00	DOC	2.00	12.84	9.29	0.00	25.99	12.81	0.00	2.52	2.60	0.00	12.84	9.29	0.00
2	27.12	34- 4.20	106-50.20	7.00	16	0.79	-0.93	DOC	2.00	-6.43	0.00	8.59	70.05	0.10	28.27	0.30	0.00	1.62	-6.43	0.00	4.30
3	25.80	34- 0.72	106-50.20	11.30	12	0.11	-0.19	AOD	2.00	0.00	-0.88	0.00	0.37	7.69	-1.00	0.00	0.31	0.00	0.00	-0.88	0.00
4	25.65	34- 0.72	106-49.63	11.30	11	0.06	0.00	AZD	0.50	-0.15	0.00	0.00	0.29	-1.00	-1.00	0.28	0.20	0.00	0.00	0.00	0.00
								AZD	2.00	-0.36	0.24	0.22	0.21	0.15	0.02	0.78	0.61	1.48	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	TM	NR	AVR	AAR	NM	AYXM	SDXM	NF	AYFM	SDFM	I
860430	011 25.65	34- 0.72	106-49.63	11.30	-0.42	6	11	194	1	0.06	1.0	1.5	C	AID	0.88	10	6	0.00	0.04	0	0.0	0.0	4	-0.4	0.2	4

STN	DIST	AZN	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAN	10.8	128	136	P	0	011	28.20	2.55	2.67	-0.09	-0.03	1.89	0	0	0.00	0			16-0.3	5	1	30.10	4.45	-0.02	0.47	
LKM	21.8	321	117	P	1	011	29.90	4.25	4.19	0.05	0.01	1.40	0	0	0.00	0			13-0.5	5	1	33.00	7.35	0.00	0.47	
BAR	23.4	52	119	P	3	011	30.40	4.75	4.44	0.10	0.21	0.46	0	0	0.00	0			16-0.3							
LPN	37.8	28	107	P	1	011	32.10	6.45	6.75	-0.27	-0.03	1.31	0	0	0.00	0			12-0.6							

LAT	LON	Z	AVRPS	RMS	DRMS
3.42	52.88	6.30	0.34	1.00	0.93
3.42	46.39	6.30	0.63	0.48	0.41
3.42	52.88	16.30	-0.55	0.97	(0.91)
3.42	46.39	16.30	-0.36	0.71	(0.65)
0.72	49.63	2.64	0.58	0.25	0.19
0.72	49.63	19.96	-1.00	0.06 0.38	0.00 (0.31)
58.01	52.88	6.30	-0.20	0.43	0.37
58.01	46.39	6.30	0.29	1.13	1.07
58.01	52.88	16.30	-1.10	0.29	(0.23)
58.01	46.39	16.30	-0.74	0.61	(0.54)

DATE AND TIME OF RUN

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RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	28.45	33-57.25	106-44.17	7.00*	0	1.08	0.00	D0B	2.00	7.73	10.07	0.00	50.96	101.85	0.00	1.06	1.00	0.00	7.73	10.07	0.00
2	29.96	34- 1.43	106-50.71	7.00	11	0.30	-0.35	D0B	2.00	-1.11	-1.62	2.41	9.40	27.51	3.86	0.36	0.31	1.22	-1.11	-1.62	2.41
3	29.34	34- 0.83	106-49.66	9.41	11	0.10	-0.03	A3B	0.50	0.00	-0.17	0.00	-1.00	0.18	-1.00	0.00	0.25	0.00	0.00	0.00	0.00
3	29.31	34- 0.83	106-49.66	9.41	11	0.10	0.00	A2B	2.00	0.06	-0.16	-0.02	0.03	0.39	0.00	0.34	0.28	0.91	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860430	128 29.31	34- 0.83	106-49.66	9.41	-0.11	12	11	80	1	0.10	0.4	0.9	B	A1B	3.11	10	14	0.00	0.07	0	0.0	0.0	8	-0.1	0.3	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.0	128	131	P 0	128	31.70	2.39	2.47	-0.09	0.01	1.47	0	0	0.00	0			26	0.3						
WTX	12.7	301	127	P 0	128	32.00	2.69	2.70	-0.01	0.00	1.47	0	0	0.00	0			13	-0.5	S 2	34.00	4.69	0.03	0.73	
LEM	21.6	321	114	P 0	128	33.40	4.09	4.02	0.05	0.02	1.40	0	0	0.00	0			19	-0.1	S 2	36.30	6.99	-0.07	0.72	
BAR	23.3	52	112	P 0	128	33.60	4.29	4.29	0.10	-0.10	1.40	0	0	0.00	0			24	0.2	S 3	37.00	7.69	0.08	0.36	
SMC	31.5	214	107	P 1	128	35.10	5.79	5.63	0.11	0.05	1.04	0	0	0.00	0			14	-0.4						
LPM	37.7	28	104	P 0	128	35.50	6.19	6.64	-0.27	-0.18	1.18	0	0	0.00	0			17	-0.2	S 2	40.60	11.29	0.20	0.38	
MAG	40.8	294	103	P 1	128	36.50	7.19	7.16	0.03	0.06	1.00	0	0	0.00	0			19	-0.1	S 4	41.20	11.89	-0.50	0.00	
LAZ	51.8	320	100	P 1	128	38.60	9.29	8.99	0.10	0.20	0.80	0	0	0.00	0			16	-0.1	S 4	44.40	15.09	-0.06	0.00	

LAT	LON	Z	AVRPS	RMS	DRMS	
3.53	52.91	4.41	0.78	0.95	0.65	
3.53	46.41	4.41	0.39	0.80		0.70
3.53	52.91	14.41	-0.06	0.75	(0.65)	
3.53	46.41	14.41	-0.34	0.82		(0.72)
0.83	49.66	0.75	0.38	0.21	0.11	
				0.10	0.00	
0.83	49.66	18.07	-0.84	0.35	(0.25)	
58.13	52.91	4.41	-0.14	0.79	0.69	
58.13	46.41	4.41	-0.38	0.79		0.69
58.13	52.91	14.41	-0.86	0.73	(0.63)	
58.13	46.41	14.41	-1.02	0.68		(0.58)

DATE AND TIME OF RUN 10-31-86 2:00 CEE

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IO	KHS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	43.26	33-57.25	106-44.17	7.00*	0	1.15	0.00	D0B	2.00	10.23	11.43	0.00	223.90	90.86	0.00	0.68	0.67	0.00	10.23	11.43	0.00
2	46.14	34- 2.78	106-51.59	7.00	8	0.41	-0.47	C0B	2.00	-2.20	-2.53	2.52	103.71	172.02	6.34	0.22	0.19	1.00	-2.20	-2.53	2.52
3	44.32	34- 1.60	106-49.95	9.52	12	0.09	-0.03	X1B	0.50	-0.23	-0.26	0.00	1.21	1.99	0.22	0.21	0.18	0.00	-0.23	-0.26	0.00
4	44.28	34- 1.47	106-49.79	9.52	12	0.09	-0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.05	0.05	0.00
5	44.27	34- 1.50	106-49.81	9.52	12	0.09	-0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.05	0.05	0.00
6	44.27	34- 1.55	106-49.85	9.52	12	0.09	-0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.05	0.05	0.00
7	44.28	34- 1.57	106-49.91	9.52	12	0.09	-0.01	A2B	0.50	0.00	0.00	-0.61	-1.00	-1.00	0.15	0.00	0.00	0.90	0.00	0.00	0.00
8	44.28	34- 1.57	106-49.91	9.52	12	0.09	0.00	A2B	2.00	-0.06	-0.13	-0.47	0.07	0.37	0.22	0.24	0.22	1.00	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SQD	ADJ	TN	WR	AVR	AAR	NN	AVXH	SDXM	NF	AVFM	SDFM	I
860430	4 7 44.28	34- 1.57	106-49.91	9.52	0.12	16	12	80	1	0.09	0.3	1.0	B	A1B	0.07	10	16	0.00	0.07	0	0.0	0.0	10	0.1	0.3	4

STN	DIST	AZM	AIM	PRMK	WRMK	P-SEC	TPOBS	TPCAL	DLY/M1	P-RES	P-WT	AMX	PRX	CALx	K	XMAG	RMK	PMP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
MTX	11.7	296	129	P	0	4 7	46.90	2.62	2.58	-0.01	0.05	1.68	0	0	0.00	0		19	-0.1						
CAS	22.2	332	120	P	0	4 7	48.70	4.42	4.44	-0.00	-0.15	1.68	0	0	0.00	0		16	0.7*						
LEM	30.3	350	116	P	0	4 7	49.20	5.03	5.03	0.00	-0.04	1.68	0	0	0.00	0		27	0.4	S	3 51.10	6.82	-0.10	0.42	
BAR	32.8	56	115	P	0	4 7	49.60	5.42	5.42	0.00	0.00	1.66	0	0	0.00	0		24	0.2	S	3 54.20	7.42	-0.06	0.41	
SNC	33.8	214	106	P	0	4 7	49.80	5.63	5.78	0.15	-0.07	0.79	0	0	0.00	0		17	-0.2	S	3 54.70	10.42	-0.21	0.40	
SB	33.8	350	106	P	3	4 7	50.00	5.83	5.83	0.00	0.03	0.40	0	0	0.00	0		11	-0.5*	S	3 54.80	10.52	-0.21	0.40	
LJV	34.2	350	105	P	1	4 7	50.00	6.22	6.15	-0.07	0.08	1.18	0	0	0.00	0		17	-0.2						
LPK	36.7	300	105	P	1	4 7	50.50	6.22	6.48	0.27	0.02	1.56	0	0	0.00	0		24	0.2	S	2 55.00	10.72	-0.03	0.78	
MAG	39.9	292	103	P	1	4 7	51.40	7.12	7.01	-0.03	0.08	1.15	0	0	0.00	0		27	0.4						
LAZ	50.4	326	101	P	1	4 7	53.20	8.92	8.77	0.10	0.05	1.09	0	0	0.00	0		26	0.3	S	2 59.40	15.12	-0.24	0.73	

LAT	LON	Z	AVRPS	RMS	DRMS
4.28	53.16	4.52	0.74	0.86	0.77
4.28	50.67	4.52	0.40	0.69	
4.28	50.16	14.52	0.01	0.66	(0.72)
4.28	46.67	14.52	-0.27	0.85	0.79
					(0.76)
1.57	49.91	0.86	0.34	0.15	0.06
				0.09	0.00
1.57	49.91	18.18	-0.78	0.30	(0.21)
88.87	53.16	4.52	-0.14	0.82	0.72
88.87	50.67	4.52	-0.37	0.78	
88.87	50.16	14.52	-0.75	0.77	(0.68)
88.87	46.67	14.52	-0.97	0.60	0.69
					(0.51)

DATE AND TIME OF RUN swmpor.dat 4-20-86

86/ 4/30 41 7

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	44.33	34- 1.96	106-47.24	7.00	0	0.45	0.00	COA	2.00	-0.68	3.78	2.32	6.802	13.84	14.50	0.26	0.26	0.61	-0.68	3.78	2.32
2	44.30	34- 1.59	106-49.69	9.32	1	0.11	-0.09	AOA	2.00	0.00	0.00	-1.46	-1.00	0.90	11.22	0.00	0.00	0.44	0.00	0.00	-1.46
3	44.35	34- 1.59	106-49.69	7.86	1	0.09	0.00	A1A	0.50	0.00	0.14	0.00	-1.00	0.62	0.05	0.00	0.18	0.00	0.00	u.14	0.00
4	44.35	34- 1.59	106-49.79	7.86	1	0.08	0.00	A3A	0.50	-0.05	0.00	0.00	0.07	-1.00	-1.00	0.19	0.00	0.00	0.00	0.00	0.00
4	44.34	34- 1.59	106-49.79	7.86	1	0.08	0.00	A2A	2.00	-0.04	0.03	-0.06	0.03	0.02	0.01	0.22	0.19	0.52	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860430	4 7 44.34	34- 1.59	106-49.79	7.86	0.12	19	1	65	1	0.08	0.3	0.5	A	A|A	0.14	10	20	0.00	0.05	0	0.0	0.0	10	0.1	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LC3	1.1	33	172	P 0	4 7	45.70	1.36	1.36	0.07	-0.07	1.53	0	0	0.00	0										
LC2	4.1	83	152	P 0	4 7	45.60	1.26	1.52	-0.34	0.08	1.55	0	0	0.00	0					S 3	47.30	2.96	0.92	*0.00	
LC1	4.4	198	151	P 0	4 7	45.90	1.56	1.54	0.00	0.02	1.55	0	0	0.00	0										
NTA	11.9	295	124	P 0	4 7	46.90	2.56	2.43	0.12	0.00	1.55	0	0	0.00	0			19	-0.1						
CAR	12.0	133	123	P 0	4 7	46.70	2.36	2.46	0.01	-0.11	1.53	0	0	0.00	0			36	0.7*						
LEH	20.4	319	111	P 0	4 7	48.20	3.86	3.73	0.09	0.03	1.54	0	0	0.00	0			27	0.4	S 3	51.10	6.76	0.13	0.38	
BAR	22.6	55	109	P 0	4 7	48.60	4.26	4.09	0.16	0.01	1.53	0	0	0.00	0			24	0.2	S 3	51.70	7.36	-0.01	0.38	
SNC	32.6	213	104	P 2	4 7	50.10	5.76	5.73	0.01	0.01	0.73	0	0	0.00	0			17	-0.2	S 3	54.70	10.36	0.41	0.18	
SB	32.9	260	103	P 1	4 7	50.50	6.16	5.78	0.42	-0.05	0.36	0	0	0.00	0			13	-0.5*	S 3	54.80	10.46	-0.29	0.28	
LJY	34.9	350	103	P 1	4 7	51.20	6.86	6.12	0.74	0.00	1.08	0	0	0.00	0			17	-0.2						
LPM	36.5	30	102	P 0	4 7	50.50	6.16	6.39	-0.26	0.03	1.43	0	0	0.00	0			24	0.2	S 2	56.00	10.66	0.04	0.72	
MAG	40.1	292	101	P 1	4 7	51.40	7.06	6.98	0.04	0.04	1.06	0	0	0.00	0			27	0.4						
LAZ	50.5	326	99	P 1	4 7	53.20	8.86	8.73	0.07	0.05	1.01	0	0	0.00	0			26	0.3	S 2	59.40	15.06	-0.19	0.62	

LAT	LON	Z	AVRPS	RMS	DRMS	
4.30	53.03	2.86	0.47	0.81	0.72	
4.30	46.54	2.86	0.30	0.84		0.74
4.30	53.03	12.86	-0.29	0.90	(0.81)	
4.30	46.54	12.86	-0.47	0.83		(0.74)
1.59	49.79	0.00	0.40	0.32	0.23	
				0.08	0.00	
1.59	49.79	16.52	-0.89	0.39	(0.31)	
58.89	53.03	2.86	-0.12	0.72	0.64	
58.89	46.54	2.86	-0.21	0.81		0.73
58.89	53.03	12.86	-0.66	0.66	(0.58)	
58.89	46.54	12.86	-0.94	0.55		(0.47)

DATE AND TIME OF RUN 10-31-86 2:00 CEE

86/ 4/30 5:39

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	9.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	51.62	33-57.25	106-44.17	7.00*	0	1.13	0.00	D0B	2.00	8.57	10.54	0.00	71.70	125.44	0.00	1.01	0.94	0.00	8.57	10.54	0.00
2	53.39	34- 1.88	106-51.02	7.00	10	0.31	-0.36	C0B	2.00	-1.03	-1.91	3.45	12.93	65.57	8.06	0.29	0.24	1.21	-1.03	-1.91	3.45
3	52.71	34- 1.33	106-49.78	10.45	12	0.09	-0.04	A1B	0.50	0.00	-0.17	0.00	0.07	0.66	-1.00	0.00	0.21	0.00	0.00	-0.17	0.00
4	52.67	34- 1.33	106-49.66	10.45	12	0.09	0.00	A3B	0.50	-0.07	0.00	0.00	0.08	-1.00	-1.00	0.25	0.00	0.00	0.00	0.00	0.00
4	52.67	34- 1.33	106-49.66	10.45	12	0.09	0.00	A2B	2.00	-0.07	0.00	-0.05	0.06	0.00	0.00	0.28	0.23	0.96	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860430	539 52.67	34- 1.33	106-49.66	10.45	0.12	13	12	91	1	0.09	0.4	1.0	B	A1B	0.17	10	14	0.00	0.07	0	0.0	0.0	8	0.1	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.6	132	132	P 1	539	55.30	2.63	2.67	-0.09	0.06	1.17	0	0	0.00	0			32	0.6						
WTX	12.2	297	130	P 0	539	55.40	2.73	2.75	-0.01	-0.01	1.56	0	0	0.00	0			15	-0.3						
LEM	20.9	320	117	P 0	539	56.60	3.93	3.99	0.05	-0.10	1.55	0	0	0.00	0			25	0.3	S 2	59.60	6.93	-0.06	0.77	
BAR	22.7	54	115	P 0	539	57.00	4.33	4.2[illegible]	0.10	-0.04	1.54	0	0	0.00	0			25	0.3	S 3	60.50	7.83	0.26	0.3[illegible]	
SMC	32.3	213	108	P 1	539	58.50	5.83	5.85	0.11	-0.08	1.10	0	0	0.00	0			18	-0.1	S 4	63.20	10.53	0.29	0.08	
LPN	36.9	29	106	P 0	539	58.90	6.23	6.55	-0.27	-0.05	1.44	0	0	0.00	0			23	0.2	S 2	63.50	10.83	-0.04	0.72	
MAG	40.4	293	104	P 1	539	59.90	7.23	7.14	0.03	0.07	1.06	0	0	0.00	0			20	0.0	S 3	65.20	12.53	0.12	0.35	
GAZ	61.0	326	102	P 1	540	1.80	9.13	8.90	0.10	0.14	1.01	0	0	0.00	0			23	0.2	S 3	68.40	15.73	0.15	0.34	

LAT	LON	Z	AVRPS	RMS	DRMS	
4.03	52.91	5.45	0.81	0.88	0.79	0.76
4.03	46.42	5.45	0.44	0.85		
4.03	52.91	15.45	-0.03	0.78	(0.69)	
4.03	46.42	15.45	-0.31	0.80		(0.72)
1.33	49.66	1.79	0.40	0.19	0.10	
				0.09	0.00	
1.33	49.66	19.11	-0.84	0.30	(0.21)	
58.63	52.91	5.45	-0.09	0.78	0.69	0.69
58.63	46.42	5.45	-0.41	0.78		
58.63	52.91	15.45	-0.81	0.75	(0.66)	
58.63	46.42	15.45	-1.04	0.65		(0.57)

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    DATE AND TIME OF RUN  swepor.dat 4-20-86

                                                                                                        86/ 4/30      5:39
RESET TO      TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8) TEST(9) TEST(10) TEST(11) TEST(12) TEST(13)
               0.1000  10.0000   2.0000   0.0500   7.0000   4.0000  -3.6300   2.7900  0.0000 100.0000   8.0000   0.5000   5.0000

VELOCITY    DEPTH    ZTR XNEAR XFAR   POS          IQ   KMS  KFM IPUN IMAG   IR  IPRN CODE
 5.850      0.000     7.   20.  250. 1.7320508      3    1    0    0    1     0    1  1011

                                                                   ADJUSTMENTS (KM)    PARTIAL F-VALUES    STANDARD ERRORS      ADJUSTMENTS TAKEN
 I  ORIG   LAT N     LONG W    DEPTH   DM  RMS  AVRPS SKD   CF    DLAT  DLON    DZ   DLAT   DLON    DZ   DLAT  DLON    DZ    DLAT  DLON    DZ
 1 52.82 34- 1.96 106-47.24    7.00    0 0.43   0.00 C0A  2.00 -1.11  3.44  2.72 16.32 189.46 23.04  0.27  0.25  0.57 -1.11  3.44  2.72
 2 52.73 34- 1.36 106-49.48    9.72    1 0.10  -0.09 A0A  2.00  0.00  0.00 -1.40 -1.00   0.62  9.73  0.00  0.00  0.45  0.00  0.00 -1.40
 3 52.77 34- 1.36 106-49.48    8.32    1 0.08  -0.01 A1A  0.50  0.00  0.14  0.00 -1.00   0.57  0.13  0.00  0.18  0.00  0.00  0.14  0.00
 4 52.77 34- 1.36 106-49.57    8.32    1 0.08   0.00 A3A  0.50  0.00  0.00 -0.15 -1.00  -1.00  0.13  0.00  0.00  0.43  0.00  0.00  0.00
 4 52.77 34- 1.36 106-49.57    8.32    1 0.08   0.00 A2A  2.00  0.06  0.02 -0.21  0.06   0.01  0.17  0.23  0.20  0.51  0.00  0.00  0.00

 DATE    ORIGIN     LAT N    LONG W     DEPTH    MAG NO DM GAP M  RMS   ERH   ERZ Q SQD  ADJ IN NR  AVR  AAR NM AVXM SDXM NF AVFM SDFM I
860430  539 52.77 34- 1.36 106-49.57    8.32    0.12 16  1  79 1 0.08  0.3   0.5 A A1A 0.14 10 18 0.00 0.06  0  0.0  0.0  8  0.1  0.3 4

 STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLY/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES  S-WT   DT
 LC3   1.4  11 170 P 0   539 54.20  1.43  1.44  0.07  -0.08  1.42  0   0  0.00 0
 LC2   3.8  76 156 P 0   539 54.60  1.23  1.67 -0.34   0.00  1.43  0   0  0.00 0                  S 3 55.60  2.83  0.70**0.00
 LC1   4.1 204 154 P 0   539 54.40  1.63  1.59  0.00   0.04  1.43  0   0  0.00 0
 CAR  11.5 133 126 P 1   539 55.30  2.53  2.43  0.01   0.09  1.06  0   0  0.00 0          32 0.6
 MTX  12.3 296 125 P 0   539 55.40  2.63  2.55  0.12  -0.04  1.43  0   0  0.00 0          15-0.3
 LEM  20.9 319 112 P 0   539 56.60  3.83  3.85  0.09  -0.11  1.38  0   0  0.00 0          25 0.3   S 2 59.60  6.83  0.01  0.71
 BAR  22.6  54 110 P 0   539 57.00  4.23  4.11  0.16  -0.04  1.42  0   0  0.00 0          25 0.3   S 3 60.50  7.73  0.33  0.20
 SNC  32.4 213 104 P 1   539 58.50  5.73  5.72  0.01  -0.01  1.02  0   0  0.00 0          18-0.1   S 4 63.20 10.43  0.50  0.00
 LPM  35.7  20 103 P 0   539 58.90  6.13  6.44 -0.26  -0.05  1.33  0   0  0.00 0          23 0.2   S 2 63.50 10.73  0.02  0.66
 MAG  40.5 292 102 P 1   539 59.90  7.13  7.07  0.04   0.01  0.98  0   0  0.00 0          20 0.0   S 3 65.20 12.43  0.11  0.32
 LAZ  51.0 326  99 P 1   540  1.80  9.03  8.94  0.07   0.12  0.92  0   0  0.00 0          23 0.2   S 3  8.40 15.63  0.20  0.29
        LAT        LON          Z      AVRPS       RMS                       DRMS

       4.06      52.81       3.32       0.51      0.81           0.73
       4.06      46.32       3.32       0.32      0.79                                  0.70
       4.06      52.81      13.32      -0.32      0.87            (  0.79)
       4.06      46.32      13.32      -0.51      0.78                                  (  0.70)

       1.36      49.57       0.00       0.47      0.34                       0.26
                                                  0.08                         0.00
       1.36      49.57      16.98      -0.95      0.40                       (  0.32)

      58.66      52.81       3.32      -0.08      0.71           0.63
      58.66      46.32       3.32      -0.24      0.79                                  0.72
      58.66      52.81      13.32      -0.90      0.66            (  0.58)
      58.66      46.32      13.32      -1.01      0.57                                  (  0.49)
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DATE AND TIME OF RUN 11-1-86 1:30

86/ 4/30 6141

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR.	XNEAR	XFAR	POS	IQ	KMS	KFK	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050@	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	48.24	34-57.25	106-44.17	7.00*	0	1.06	0.00	DOB	2.00	10.24	12.08	0.00	68.52	79.86	0.00	1.24	1.35	0.00	10.24	12.08	0.00
2	48.69	34- 2.79	106-52.02	7.00	8	0.50	-0.66	DOB	2.00	-2.48	-1.32	3.45	153.00	31.89	18.27	0.20	0.19	0.81	-2.48	-1.32	3.45
3	48.79	34- 1.45	106-49.80	10.45	12	0.07	-0.07	AOB	2.00	0.00	-0.38	0.00	0.91	3.88	-1.00	0.00	0.19	0.00	0.00	-0.38	0.00
4	48.73	34- 1.45	106-49.61	10.45	12	0.06	0.00	A1B	0.50	-0.19	0.00	0.00	1.03	0.02	-1.00	0.19	0.00	0.00	-0.19	0.00	0.00
5	48.72	34- 1.35	106-49.61	10.45	12	0.05	0.00	A2B	0.50	0.00	-0.02	0.00	-1.00	0.02	-1.00	0.00	0.18	0.00	0.00	0.00	0.00
6	48.72	34- 1.35	106-49.61	10.45	12	0.05	0.00	A2B	2.00	0.00	-0.02	-0.01	0.00	0.01	0.00	0.23	0.22	0.86	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TM	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860430	641 48.72	34- 1.35	106-49.61	10.45	-0.20	9	12	83	1	0.05	0.3	0.9	B	A1B	0.19	10	9	0.00	0.04	0	0.0	0.0	6	-0.2	0.3	5

STN	DIST	AZM	AIM	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	PHP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.5	132	132	P	0	641	51.30	2.58	2.66	-0.09	0.01	1.44	0	0	0.00	0			25 0.3						
BTX	12.3	209	130	P	0	641	51.50	2.78	2.76	-0.01	0.03	1.44	0	0	0.00	0			11-0.5						
LEN	20.9	319	117	P	1	641	52.70	3.98	3.99	0.05	-0.06	1.07	0	0	0.00	0			20 0.0						
BAR	22.6	54	115	P	0	641	53.10	4.38	4.26	0.10	0.02	1.42	0	0	0.00	0			20 0.0	S	3	56.30	7.58	0.02	0.35
SHC	32.6	213	108	P	1	641	54.60	5.88	5.81	0.11	-0.05	1.02	0	0	0.00	0			11-0.7*						
LPN	36.8	20	106	P	1	641	54.90	6.28	6.54	-0.27	0.01	1.00	0	0	0.00	0			5	3	59.40	10.68	-0.18	0.33	
LAZ	51.0	326	102	P	1	641	57.80	9.08	8.90	0.10	0.08	0.93	0	0	0.00	0			17-0.2						

LAT	LON	Z	AVRPS	RMS	DRMS
4.05	52.86	5.45	0.46	0.79	0.74
4.05	46.37	5.45	0.50	0.86	0.80
4.05	52.86	15.45	-0.35	0.71	(0.66)
4.05	46.37	15.45	-0.28	0.80	(0.75)
1.35	49.61	1.79	0.43	0.18	0.13
				0.05	0.00
1.35	49.61	19.11	-0.86	0.28	(0.22)
6.64	52.86	5.45	-0.12	0.78	0.73
6.64	46.37	5.45	-0.05	0.78	0.73
6.64	52.86	15.45	-0.84	0.71	(0.65)
6.64	46.37	15.45	-0.79	0.55	(0.49)

DATE AND TIME OF RUN 11-1-86 1;30

86/ 4/30 13:10

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	PDS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	24.20	33-57.25	106-44.17	7.00*	0	1.47	0.00	DOC	2.00	10.20	12.01	0.00	19.86	40.39	0.00	2.29	1.88	0.00	10.20	12.01	0.00
2	26.50	34- 2.77	106-51.97	7.00	16	0.47	-0.62	COD	2.00	-3.54	-1.02	9.59	42.75	4.81	17.05	0.54	0.47	2.32	-3.54	-1.02	4.79
3	25.30	34- 0.85	106-51.31	11.79	13	0.14	-0.09	A1D	0.50	-0.46	0.00	2.40	0.70	0.11	2.12	0.55	0.00	1.05	-0.46	0.00	2.40
4	24.98	34- 0.61	106-51.31	14.19	13	0.11	-0.01	A3D	0.50	0.00	-0.18	0.00	-1.00	0.19	-1.00	0.00	0.41	0.00	0.00	0.00	0.00
4	24.97	34- 0.61	106-51.31	14.19	13	0.11	0.00	A2D	2.00	0.08	-0.22	-0.19	0.01	0.14	0.02	0.66	0.57	1.48	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860430	1310 24.97	34- 0.61	106-51.31	14.19	-0.12	8	13	208	1	0.11	0.9	1.5	C	AID	2.44	10	9	0.00	0.08	0	0.0	0.0	5	-0.1	0.1	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	12.8	120	138	P	1310	28.10	3.13	3.27	-0.09	-0.05	1.39	0	0	0.00	0			20	0.0						
LEN	20.4	327	125	P	1310	29.60	4.63	4.25	0.05	0.33	0.34	0	0	0.00	0			17	-0.2	S	3	32.50	7.53	0.08	0.70
BAR	35.6	55	119	P	1310	30.000	5.03	5.09	0.10	-0.07	1.35	0	0	0.00	0			20	0.0	S	4	33.00	8.03	-0.80	0.00
LPN	39.5	321	110	P	1310	31.90	6.93	7.14	-0.27	0.06	1.92	0	0	0.00	0			12	-0.1	S	3	36.80	11.83	-0.57	0.63
LAZ	50.8	329	106	P	1310	34.10	9.13	9.01	0.10	0.02	1.21	0	0	0.00	0			15	-0.3	S	3	40.50	15.53	-0.24	0.46

LAT	LON	Z	AVRPS	RMS	DRMS
3.31	54.55	9.19	0.74	0.93	0.82
3.31	48.06	9.19	1.00	0.52	0.41
3.31	54.55	19.19	-0.12	0.82	(0.72)
3.31	48.06	19.19	0.09	0.62	(0.51)
0.61	51.31	5.53	0.57	0.27	0.16
0.61	51.31	22.85	-0.89	0.35	0.00 (0.24)
57.90	54.55	9.19	-0.44	0.52	0.41
57.90	48.06	9.19	-0.15	0.88	0.74
57.90	54.55	19.19	-1.20	0.43	(0.32)
57.90	48.06	19.19	-0.96	0.69	(0.58)

DATE AND TIME OF RUN 10-31-86 2100 CKE

86/ 4/30 16:12

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	17.82	33-57.25	106-44.17	7.00*	0	1.16	0.00	DOB	2.00	9.91	10.66	0.00	144.92	161.17	0.00	0.82	0.84	0.00	9.91	10.68	0.00
2	19.68	34- 2.61	106-51.11	7.00	9	0.36	-0.43	COB	2.00	-1.78	-2.14	2.46	25.52	41.92	2.04	0.35	0.33	1.72	-1.78	-2.14	2.46
3	18.85	34- 1.66	106-49.71	9.46	12	0.11	-0.01	A1B	0.50	-0.37	0.00	0.00	1.73	-1.00	0.06	0.28	0.00	0.00	-0.37	0.00	0.00
4	18.83	34- 1.45	106-49.71	9.46	12	0.09	0.01	A3B	0.50	-0.15	0.00	0.00	0.39	-1.00	-1.00	0.23	0.00	0.00	0.00	0.00	0.00
4	18.83	34- 1.45	106-49.71	9.46	12	0.09	0.00	A2B	2.00	-0.16	0.05	0.35	0.40	0.04	0.13	0.26	0.24	0.97	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860430	1612 18.83	34- 1.45	106-49.71	9.46	0.51	14	12	81	1	0.09	0.4	1.0	B	A1B	0.37	10	16	0.00	0.06	0	0.0	0.0	10	0.5	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.8	132	129	P 0	1612	21.30	2.47	2.58	-0.09	-0.03	1.66	0	0	0.00	0			40	0.8						
WTX	12.1	296	128	P 1	1612	21.40	2.57	2.62	-0.01	-0.05	1.24	0	0	0.00	0			25	0.3						
LEM	20.7	319	115	P 0	1612	22.80	3.97	3.88	0.05	0.03	1.65	0	0	0.00	0			34	0.6	S 2	25.80	6.97	0.15	0.78	
BAR	22.7	65	113	P 0	1612	23.20	4.37	4.20	0.10	0.07	1.62	0	0	0.00	0			38	0.8	S 4	25.70	6.87	-0.58	0.00	
SMC	32.4	213	106	P 0	1612	24.70	5.87	5.78	0.11	-0.02	1.57	0	0	0.00	0			41	0.9	S 4	29.30	10.47	0.27	0.00	
SB	33.0	261	106	P 3	1612	25.10	6.27	5.87	0.37	0.03	0.39	0	0	0.00	0			24	0.2	S 3	29.40	10.57	-0.23	0.36	
LJY	35.2	350	105	P 2	1612	25.80	6.97	6.23	0.65	0.09	0.77	0	0	0.00	0			18	-0.1*						
LPN	36.7	29	104	P 0	1612	25.00	6.17	6.48	-0.27	-0.04	1.54	0	0	0.00	0			30	0.5	S 2	29.10	10.27	-0.49**	0.06	
MAG	40.3	292	103	P 1	1612	26.00	7.17	7.07	0.03	0.07	1.12	0	0	0.00	0			29	0.5						
LAZ	50.8	326	101	P 1	1612	27.70	8.87	8.83	0.10	-0.06	1.08	0	0	0.00	0			34	0.6	S 3	33.90	15.07	-0.40	0.15	

LAT	LON	Z	AVRPS	RMS	DRMS	
4.15	52.96	4.46	0.68	0.86	0.77	
4.15	46.47	4.46	0.31	0.83		0.74
4.15	52.96	14.46	-0.01	0.76	(0.67)	
4.15	46.47	14.46	-0.35	0.78		(0.69)
1.45	49.71	0.80	0.31	0.20	0.11	
				0.09	0.00	
1.45	49.71	18.12	-0.79	0.31	(0.22)	
58.74	52.96	4.46	-0.03	0.83	0.74	
58.74	46.47	4.46	-0.42	0.81		0.72
58.74	52.96	14.46	-0.66	0.77	(0.69)	
58.74	46.47	14.46	-0.99	0.68		(0.59)

DATE AND TIME OF RUN swmpor.dat 4-20-86

86/ 4/30 16:12

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	18.80	34- 1.96	106-47.24	7.00	0	0.39	0.00	C0A	2.00	-0.48	3.50	0.00	3.08	133.35	0.06	0.27	0.30	0.00	-0.48	3.50	0.00
2	18.97	34- 1.70	106-49.51	7.00	1	0.11	-0.05	A0A	2.00	0.00	0.00	-0.90	-1.00	0.21	2.40	0.00	0.00	0.58	0.00	0.00	-0.90
3	18.99	34- 1.70	106-49.51	6.10	1	0.10	0.00	A3A	0.50	0.00	0.15	0.00	-1.00	0.41	-1.00	0.00	0.23	0.00	0.00	0.00	0.00
3	18.98	34- 1.70	106-49.51	6.10	1	0.10	0.00	A2A	2.00	0.01	0.17	-0.21	0.00	0.44	0.12	0.26	0.25	0.61	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860430	1612 18.98	34- 1.70	106-49.51	6.10	0.51	17	1	67	1	0.10	0.4	0.6	A	A1A	0.90	10	19	0.00	0.06	0	0.0	0.0	10	0.5	0.3	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LC3	0.8	14	173	P 1	1612	20.80	1.02	1.05	0.07	-0.10	1.17	0	0	0.00	0										
LC2	3.7	85	149	P 1	1612	19.90	0.92	1.22	-0.34	0.04	1.18	0	0	0.00	0										
LC1	4.7	202	142	P 0	1612	20.30	1.32	1.32	0.00	0.00	1.58	0	0	0.00	0										
CAR	11.9	135	117	P 0	1612	21.30	2.32	2.28	0.01	0.02	1.58	0	0	0.00	0			40	0.8						
MTX	12.1	294	117	P 0	1612	21.40	2.42	2.32	0.12	-0.03	1.18	0	0	0.00	0			25	0.3						
LEM	20.5	318	107	P 0	1612	22.80	3.82	3.66	0.09	0.07	1.56	0	0	0.00	0			34	0.6	S 2	25.80	6.82	0.33	0.28	
BAR	22.1	65	105	P 0	1612	23.20	4.22	3.93	0.16	0.13	1.51	0	0	0.00	0			38	0.8	S 4	25.70	6.72	-0.36	0.00	
SNC	33.0	213	100	P 0	1612	24.70	5.72	5.74	0.01	-0.03	1.49	0	0	0.00	0			43	0.9	S 4	29.30	10.32	-0.36	0.00	
SB	33.3	260	100	P 3	1612	25.10	6.12	5.80	0.42	-0.10	0.37	0	0	0.00	0			24	0.2	S 3	29.40	10.42	-0.35	0.11	
LJY	34.8	349	100	P 2	1612	25.80	6.82	6.04	0.74	0.04	0.74	0	0	0.00	0			18	-0.1*						
LPM	36.1	29	100	P 0	1612	25.00	6.02	6.27	-0.26	0.01	1.47	0	0	0.00	0			30	0.5	S 2	29.10	10.12	-0.29	0.46	
MAG	40.4	292	99	P 1	1612	26.00	7.02	6.98	0.04	0.00	1.08	0	0	0.00	0			29	0.5						
LAZ	50.6	325	97	P 1	1612	27.70	8.72	8.70	0.07	-0.06	1.03	0	0	0.00	0			34	0.6	S 3	33.90	14.92	-0.28	0.21	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
LC4	3.3	167.4	66.7	32.3

LAT	LON	Z	AVRPS	RMS	DRMS	
4.41	52.76	1.10	0.36	0.85	0.76	
4.41	46.27	1.10	0.10	0.82		0.72
4.41	52.76	11.10	-0.19	0.91	(0.81)	
4.41	46.27	11.10	-0.47	0.86		(0.76)
1.70	49.51	0.00	0.24	0.24	0.15	
				0.10	0.00	
1.70	49.51	14.76	-0.78	0.38	(0.28)	
59.00	52.76	1.10	-0.07	0.73	0.64	
59.00	46.27	1.10	-0.38	0.77		0.68
59.00	52.76	11.10	-0.67	0.70	(0.60)	
59.00	46.27	11.10	-0.93	0.63		(0.53)

DATE AND TIME OF RUN 10-31-86 2:00 CEE

86/ 4/30 16:15

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	26.76	33-57.25	106-44.17	7.00*	0	1.23	0.00	DOB	2.00	10.55	11.37	0.00	25.96	23.00	0.00	0.66	0.74	0.00	10.55	11.37	0.00
2	28.61	34- 2.96	106-51.55	7.00	8	0.44	-0.50	COB	2.00	-2.48	-2.49	1.97	165.95	145.55	2.08	0.19	0.21	1.37	-2.48	-2.49	1.97
3	27.81	34- 1.61	106-49.94	8.97	12	0.09	-0.03	A1B	0.50	0.00	0.00	-1.04	0.04	-1.00	0.95	0.00	0.00	1.06	0.00	0.00	-1.04
4	27.84	34- 1.61	106-49.94	7.94	12	0.08	0.00	A3B	0.50	-0.01	0.00	0.00	0.05	-1.00	-1.00	0.15	0.00	0.00	0.00	0.00	0.00
4	27.84	34- 1.61	106-49.94	7.94	12	0.08	0.00	A2B	2.00	-0.06	-0.06	0.22	0.08	0.07	0.02	0.23	0.24	1.44	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860430	1615 27.84	34- 1.61	106-49.94	7.94	0.35	13	12	80	1	0.08	0.3	1.4	B	A1B	1.04	10	15	0.00	0.07	0	0.0	0.0	9	0.3	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
MTI	11.6	296	124	P 3	1615	30.40	2.56	2.41	-0.01	0.16	0.43	0	0	0.00	0			20	0.0						
CAR	12.2	132	123	P 0	1615	30.20	2.36	2.49	-0.09	-0.04	1.72	0	0	0.00	0			40	0.8						
CER	20.2	320	111	P 0	1615	31.70	3.86	3.71	0.05	0.10	1.72	0	0	0.00	0			30	0.5	S 4	35.00	7.16	0.65	0.00	
BAR	22.8	58	109	P 3	1615	32.10	4.26	4.12	0.10	0.04	0.43	0	0	0.00	0			32	0.6	S 4	34.30	6.46	-0.85	0.00	
SMC	32.5	212	101	P 1	1615	33.60	5.76	5.72	0.11	-0.07	1.22	0	0	0.00	0			21	0.1	S 2	38.00	10.16	0.06	0.81	
SB	32.7	260	104	P 2	1615	34.00	6.16	5.75	0.37	0.04	0.81	0	0	0.00	0			22	0.1	S 2	38.30	10.46	-0.14	0.81	
LPM	36.6	30	102	P 0	1615	34.00	6.16	6.40	-0.27	0.02	1.60	0	0	0.00	0			26	0.2	S 3	38.30	10.46	-0.17	0.40	
MAG	39.8	292	101	P 1	1615	34.90	7.06	6.94	0.03	0.05	1.18	0	0	0.00	0			24	0.2						
LAZ	50.3	326	99	P 1	1615	36.60	8.76	8.71	0.10	-0.05	1.12	0	0	0.00	0			27	0.4	S 2	43.00	15.16	-0.10	0.75	

LAT	LON	Z	AVRPS	RMS	DRMS	
4.32	53.18	2.94	0.61	0.89	0.80	
4.32	46.69	2.94	-0.06	0.93		0.85
4.32	53.18	12.94	0.05	0.87	(0.79)	
4.32	46.69	12.94	-0.57	0.92		(0.84)
1.61	49.94	0.00	0.22	0.12	0.03	
				0.08	0.00	
1.61	49.94	16.60	-0.67	0.24	(0.16)	
58.91	53.18	2.94	0.35	0.96	0.88	
58.91	46.69	2.94	-0.37	0.88		0.80
58.91	53.18	12.94	-0.28	0.88	(0.80)	
58.91	46.69	12.94	-0.88	0.66		(0.58)

DATE AND TIME OF RUN swbpor.dat 4-20-86

86/ 4/30 16115

RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

									ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	27.67	34- 1.96	106-47.24	7.00	0	0.43	0.00	C0A	2.00	-0.68	3.73	1.65	4.53	90.22	6.91	0.32	0.39	0.63	-0.68	3.73	1.65
2	27.79	34- 1.59	106-49.67	8.65	1	0.15	-0.08	B0A	2.00	0.00	0.00	-0.89	-1.00	0.15	2.38	0.00	0.60	0.58	0.00	0.00	-0.89
3	27.79	34- 1.59	106-49.67	7.76	1	0.13	-0.01	A1A	0.50	0.00	0.00	-0.73	-1.00	0.27	1.78	0.00	0.60	0.55	0.00	0.00	-0.73
4	27.84	34- 1.59	106-49.67	7.03	1	0.10	-0.01	A0A	2.00	0.00	0.00	-0.72	-1.00	0.92	2.39	0.00	0.60	0.47	0.00	0.00	-0.72
5	27.88	34- 1.59	106-49.67	6.31	1	0.09	0.00	A1A	0.50	0.25	0.28	-0.59	1.48	1.60	1.17	0.20	0.22	0.54	0.25	0.28	-0.59
6	27.94	34- 1.72	106-49.85	5.72	1	0.08	0.00	A3A	0.50	-0.01	0.00	0.00	0.00	-1.00	-1.00	0.18	0.00	0.00	0.00	0.00	0.00
6	27.94	34- 1.72	106-49.85	5.72	1	0.08	0.00	A2A	2.00	-0.01	0.01	-0.01	0.00	0.00	0.00	0.20	0.22	0.56	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860430	1615 27.94	34- 1.72	106-49.85	5.72	0.35	16	1	64	1	0.08	0.3	0.6	A	A1A	0.70	10	20	0.00	0.06	0	0.0	0.0	9	0.3	0.3	6

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LC3	1.0	45	170	P 1	1615	29.00	1.06	0.99	0.07	0.00	1.17	0	0	0.00	0					S 3	30.60	2.66	0.82	*0.00	
LC2	4.2	87	144	P 0	1615	28.80	0.86	1.21	-0.34	-0.01	1.56	0	0	0.00	0					S 3	30.20	2.26	0.75	*0.00	
LC1	4.6	196	141	P 0	1615	29.20	1.26	1.26	0.00	0.01	1.56	0	0	0.00	0										
WTX	11.7	294	116	P 3	1615	30.40	2.46	2.22	0.12	0.12	0.39	0	0	0.00	0			20	0.0						
CAR	12.3	134	115	P 0	1615	30.20	2.26	2.32	0.01	-0.06	1.56	0	0	0.00	0			40	0.8						
LEM	20.1	319	106	P 0	1615	31.70	3.76	3.58	0.09	0.10	1.56	0	0	0.00	0			30	0.5	S 4	35.00	7.06	0.71	0.00	
BAR	22.5	56	104	P 3	1615	32.10	4.16	3.98	0.16	0.03	0.39	0	0	0.00	0			32	0.6	S 4	34.30	6.36	-0.80	0.00	
SMC	32.8	212	100	P 1	1615	33.60	5.66	5.69	0.01	-0.03	1.11	0	0	0.00	0			21	0.1	S 2	38.00	10.06	0.20	0.72	
SB	32.9	260	100	P 2	1615	34.00	6.06	5.70	0.42	-0.06	0.74	0	0	0.00	0			22	0.1	S 2	38.30	10.36	-0.24	0.67	
LPM	36.4	30	99	P 0	1615	34.00	6.06	6.29	-0.26	0.03	1.45	0	0	0.00	0			29	0.5	S 3	38.30	10.36	-0.09	0.36	
MAG	39.9	292	98	P 1	1615	34.90	6.96	6.89	0.04	0.04	1.07	0	0	0.00	0			24	0.2						
LAZ	50.2	326	97	P 1	1615	36.60	8.66	8.64	0.07	-0.05	1.02	0	0	0.00	0			27	0.4	S 2	43.00	15.06	-0.02	0.68	

LAT	LON	Z	AVRPS	RMS	DRMS	
4.43	53.10	0.72	0.24	0.85	0.77	
4.43	46.60	0.72	-0.09	0.84		0.76
4.43	53.10	10.72	-0.34	0.97	(0.89)	
4.43	46.60	10.72	-0.72	0.80		(0.72)
1.72	49.85	0.00	0.25	0.25	0.17	
				0.08	0.00	
1.72	49.85	14.38	-0.82	0.43	(0.35)	
59.02	53.10	0.72	0.06	0.82	0.73	
59.02	46.60	0.72	-0.22	0.82		0.74
59.02	53.10	10.72	-0.55	0.86	(0.78)	
59.02	46.60	10.72	-0.86	0.59		(0.51)

DATE AND TIME OF RUN 11-1-86 1130

86/ 4/30 181 6

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFM	IPHN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	51.52	34- 1.25	106-44.17	7.00*	0	1.23	0.00	DGC	2.00	12.45	13.41	0.00	99.99	99.23	0.00	1.31	1.50	0.00	12.45	13.41	0.00
2	54.00	34- 1.99	106-52.86	7.00	14	0.81	-1.09	DGD	2.00	-4.76	-4.05	0.00	228.60	170.88	0.71	0.31	0.31	0.00	-4.76	-4.05	0.00
3	54.03	34- 1.45	106-50.25	7.00	12	0.08	-0.07	A1D	0.50	0.25	-0.42	0.00	0.89	2.28	0.04	0.26	0.28	0.00	0.25	-0.42	0.00
4	54.00	34- 1.55	106-49.98	7.00	12	0.07	0.00	A3D	0.50	0.00	-0.05	0.00	-1.00	0.03	-1.00	0.00	0.25	0.00	0.00	0.00	0.00
4	54.00	34- 1.55	106-49.98	7.00	12	0.07	0.00	A2D	2.00	0.01	-0.08	0.23	0.00	0.05	0.01	0.42	0.36	1.94	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NH	AVXN	SDXN	NF	AVYN	SDYN	I
860430	18 6 54.00	34- 1.55	106-49.98	7.00	-0.31	6	12	188	1	0.07	0.6	1.9	C	AID	0.49	10	8	0.00	0.05	0	0.0	0.0	5	-0.3	0.1	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XNAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	12.2	132	120	P 0	18 6	56.30	2.30	2.40	-0.09	-0.02	1.59	0	0	0.00	0			13-0.1		S 3	58.00	4.00	-0.01	0.46	
LEM	20.3	320	109	P 1	18 6	57.80	3.80	3.66	0.05	0.09	1.19	0	0	0.00	0			14-0.4							
BAR	22.9	56	107	P 0	18 6	58.20	4.20	4.09	0.10	0.01	1.57	0	0	0.00	0			17-0.2		S 3	61.30	7.30	0.04	0.39	
LPN	36.9	30	101	P 1	18 6	58.20	6.20	6.39	-0.27	0.07	1.10	0	0	0.00	0			15-0.3		S 2	4.50	10.50	-0.11	0.74	
LAZ	50.4	326	98	P 1	18 7	2.70	8.70	8.70	0.10	-0.10	1.03	0	0	0.00	0			14-0.4							

LAT	LON	Z	AVRPS	RMS	DRMS
4.25	53.22	2.00	0.15	0.88	0.82
4.25	46.73	2.00	0.78	0.78	0.71
4.25	53.22	12.00	-0.36	0.93	(0.87)
4.25	46.73	12.00	0.19	0.79	(0.72)
1.55	49.98	0.00	0.21	0.12	0.05
				0.07	0.00
1.55	49.98	15.66	-0.70	0.26	(0.19)
50.84	53.22	2.00	-0.63	0.60	0.53
50.84	46.73	2.00	0.05	1.00	0.93
50.84	53.22	12.00	-1.13	0.56	(0.50)
50.84	46.73	12.00	-0.59	0.60	(0.54)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 5/ 1 3153

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KPM	IPDM	IMAG	IR	IPRM	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

											ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	29.07	33-57.25	106-44.17	7.00*	0	1.15	0.00	DOC	2.00	12.01	13.47	0.00	59.17	45.42	0.00	1.56	2.00	0.00	12.01	13.47	0.00
2	30.62	34- 3.74	106-52.92	7.00	14	0.12	-1.23	DOD	2.00	-4.46	-4.11	0.00	36.79	97.04	1.34	0.18	0.18	0.00	-4.46	-4.11	0.00
3	29.30	34- 1.33	106-50.24	7.00	12	0.07	-0.08	AOD	2.00	0.31	-0.44	0.00	3.90	6.30	0.42	0.15	0.18	0.00	0.31	-0.44	0.00
4	29.37	34- 1.50	106-48.63	7.00	12	0.04	0.00	A3D	0.50	0.00	0.00	0.27	-1.00	-1.00	0.22	0.00	0.00	0.57	0.00	0.00	0.00
4	29.37	34- 1.50	106-49.95	7.00	12	0.04	0.00	A2D	2.00	-0.11	-0.07	0.70	0.22	0.11	0.42	0.23	0.21	1.09	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SOD	ADJ	TN	NR	AVR	AAR	NM	AVXM	SDXM	MF	AVFM	SDFM	I
860501	353 29.37	34- 1.50	106-49.95	7.00	-0.42	8	12	188	1	0.04	0.3	1.1	C	AID	0.54	10	8	0.00	0.03	0	0.0	0.0	5	-0.4	0.2	4

STN	DIST	AZM	AIN	PRMK	HRMK	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	PMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	12.1	132	120	P	0	353	31.70	2.33	2.39	-0.09	0.03	1.65	0	0	0.00	0			20 0.0	S	3	33.30	3.93	-0.05	0.41	
LEM	20.1	320	109	P	1	353	33.10	3.73	3.68	0.05	0.01	1.23	0	0	0.00	0			15-0.3							
BAR	22.4	55	107	P	0	353	33.50	4.13	4.10	0.10	-0.06	1.63	0	0	0.00	0			12-0.6	S	2	36.70	7.33	0.07	0.81	
LPH	36.8	30	101	P	1	353	35.50	6.13	6.41	-0.27	0.00	1.15	0	0	0.00	0			13-0.5	S	2	40.00	10.63	0.01	0.76	
LAZ	50.5	326	98	P	3	353	38.20	8.83	8.71	0.10	0.02	0.36	0	0	0.00	0			12-0.6							

LAT	LON	Z	AVRPS	RMS	DRMS
4.20	53.20	2.00	0.01	0.83	0.79
4.20	46.71	2.00	0.02	0.84	0.80
4.20	53.20	12.00	-0.53	0.85	(0.81)
4.20	46.71	12.00	0.26	0.83	(0.79)
1.50	49.95	0.00	0.23	0.12	0.08
1.50	49.95	15.66	-0.75	0.03 0.22	0.00 (0.18)
58.79	53.20	2.00	-0.76	0.85	0.61
58.79	46.71	2.00	0.15	0.95	0.91
58.79	53.20	12.00	-1.28	0.60	(0.56)
58.79	46.71	12.00	-0.52	0.56	(0.52)

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DATE AND TIME OF RUN  10-31-86 2:00 CEE

                                                                                                          86/ 5/ 1        932
RESET TO    TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8)  TEST(9) TEST(10) TEST(11) TEST(12) TEST(13)
            0.1000   10.0000  2.0000   0.0500   7.0000   4.0000   -3.6300  2.7900   0.0000  100.0000 8.0000   0.5000   5.0000

VELOCITY  DEPTH   ZTR XNEAR XFAR  POS        IQ  KMS  KFM IPUN IMAG  IR  IPRN CODE
 5.850    0.000    7.  20.  250. 1.7320508    3   1    0    0    1    0   1   1011

                                                                   ADJUSTMENTS (KM)    PARTIAL F-VALUES    STANDARD ERRORS    ADJUSTMENTS TAKEN
 I  ORIG  LAT N     LONG W     DEPTH   DM  RMS  AVRPS SKD   CF     DLAT  DLON   DZ    DLAT  DLON    DZ    DLAT  DLON   DZ     DLAT  DLON   DZ
 1  6.99 33-57.25 106-44.17   7.00     0  1.00  0.00  DOB  2.00    0.00  0.00 16.45   0.68 -1.00 15.86   0.00  0.00  4.13   0.00  0.00  5.48
 2  6.66 33-57.25 106-44.17  12.48     0  0.78  0.00  DOB  2.00    0.00  0.00 12.42   1.83 -1.00 10.47   0.00  0.00  3.85   0.00  0.00  6.21
 3  6.12 33-57.25 106-44.17  18.69*    0  0.60 -0.07  DOB  2.00    6.95  7.17  0.00  89.14 71.27  0.00   0.74  0.85  0.00   6.95  7.17  0.00
 4  6.76 34- 1.01 106-48.83  18.69    10  0.25 -0.24  BOA  2.00    0.00  0.00 -5.73  -1.00  1.92 41.35   0.00  0.00  0.89   0.00  0.00 -5.73
 5  7.14 34- 1.01 106-48.83  12.96    10  0.09 -0.06  A1A  0.50    0.00  0.53 -1.65   0.48  3.35  3.06   0.00  0.29  0.94   0.00  0.53 -1.65
 6  7.21 34- 1.01 106-49.17  11.31    11  0.07 -0.01  A3A  0.50    0.11  0.00  0.00   0.32 -1.00 -1.00   0.20  0.00  0.00   0.00  0.00  0.00
 6  7.20 34- 1.01 106-49.17  11.31    11  0.07  0.00  A2A  2.00    0.29  0.30 -1.10   0.89  0.58  0.65   0.31  0.39  1.37   0.00  0.00  0.00

 DATE    ORIGIN     LAT N     LONG W     DEPTH    MAG  NO DM GAP M  RMS   ERH  ERZ Q SQD  ADJ  IN NR  AVR  AAR NM AVXM SDXM NF AVFM SDFM I
860501  932  7.20 34- 1.01 106-49.17   11.31   -0.29 10 11  83 1 0.07   0.5  1.4 A A1A 1.73 10 11 0.00 0.06  0  0.0  0.0  7 -0.3  0.4 6

 STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLY/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES S-WT    DT
 CAR  10.6 132 137  P 0  932  9.70  2.50  2.65  -0.09 -0.06 1.69  0   0  0.00 0           25 0.3*
 LEM  21.8 319 117  P 3  932 11.30  4.10  4.20   0.05 -0.15 0.42  0   0  0.00 0           17-0.2  S 4 14.50  7.30 -0.06  0.00
 BAR  22.5  52 117  P 0  932 11.60  4.40  4.30   0.10  0.00 1.67  0   0  0.00 0           22 0.1  S 2 14.90  7.70  0.08  0.83
 SMC  32.2 215 109  P 1  932 13.20  6.00  5.84   0.11  0.05 1.20  0   0  0.00 0            9-1.0* S 3 17.70 10.50  0.19  0.40
 LPM  37.0  28 107  P 1  932 13.60  6.40  6.62  -0.27  0.05 1.17  0   0  0.00 0           13-0.5  S 3 18.10 10.90 -0.10  0.39
 MAG  41.3 293 105  P 1  932 14.50  7.30  7.33   0.03 -0.06 1.15  0   0  0.00 0           15-0.3
 LAZ  61.9 325 102  P 1  932 16.40  9.20  9.08   0.10  0.02 1.09  0   0  0.00 0           15-0.3

      LAT        LON          Z        AVRPS        RMS                          DRMS

      3.71      52.42       6.31       0.32       0.66             0.59
      3.71      45.93       6.31       0.56       1.07                              1.00
      3.71      52.42      16.31      -0.39       0.80            (  0.73)
      3.71      45.93      16.31      -0.22       0.88                             (  0.81)

      1.01      49.17       2.65       0.44       0.21                      0.14
                                                  0.07                        0.00
      1.01      49.17      19.97      -0.83       0.32                      (  0.25)

     58.31      52.42       6.31      -0.15       0.91             0.86
     58.31      45.93       6.31      -0.08       0.79                              0.72
     58.31      52.42      16.31      -0.81       0.96            (  0.89)
     58.31      45.93      16.31      -0.71       0.46                             (  0.39)
```

DATE AND TIME OF RUN swmpor.dat 4-20-86

86/ 5/ 1 9132

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	7.57	34- 1.96	106-47.24	7.00	0	0.45	0.00	C0A	2.00	-1.49	2.77	3.00	10.80	33.07	14.29	0.45	0.48	0.79	-1.49	2.77	3.00
2	7.32	34- 1.15	106-49.04	10.00	2	0.15	-0.06	A1A	0.50	0.00	0.00	-0.52	-1.00	0.36	0.53	0.00	0.00	0.71	0.00	0.00	-0.52
3	7.31	34- 1.15	106-49.04	9.48	2	0.14	0.00	A3A	0.50	0.00	0.23	0.00	-1.00	0.34	-1.00	0.00	0.40	0.00	0.00	0.00	0.00
3	7.31	34- 1.15	106-49.04	9.48	2	0.14	0.00	A2A	2.00	-0.06	0.24	-0.16	0.02	0.22	0.04	0.49	0.60	0.86	0.00	0.00	0.00

DATE	ORIGIN		LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860501	932	7.31	34- 1.15	106-49.04	9.48	-0.29	14	2	81	1	0.14	0.7	0.9	A	A1A	0.52	10	15	0.00	0.12	0	0.0	0.0	7	-0.3	0.4	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LC3	1.8	343	169	P 0	932	9.20	1.89	1.65	0.07	0.17	1.57	0	0	0.00	0										
LC2	3.2	66	161	P 0	932	8.50	1.19	1.21	-0.34	-0.18	1.57	0	0	0.00	0					S 3	9.90	2.59	0.22	0.37	
LC1	4.2	216	156	P 1	932	8.80	1.49	1.77	0.00	-0.28	0.99	0	0	0.00	0										
CAR	10.6	134	132	P 0	932	9.70	2.39	2.44	0.01	-0.05	1.63	0	0	0.00	0			25	0.3*						
LEM	21.7	318	114	P 3	932	11.30	3.99	4.05	0.09	-0.15	0.39	0	0	0.00	0			17	-0.2	S 4	14.50	7.19	0.02	0.00	
BAR	22.2	52	113	P 0	932	11.60	4.29	4.12	0.16	0.02	1.62	0	0	0.00	0			22	0.1	S 2	14.90	7.59	0.18	0.78	
SMC	32.6	215	106	P 1	932	13.20	5.89	5.80	0.01	0.09	1.15	0	0	0.00	0			9	-1.0*	S 3	17.70	10.39	0.33	0.26	
LPM	36.7	27	104	P 1	932	13.60	6.29	6.48	-0.26	0.08	1.14	0	0	0.00	0			13	-0.5	S 3	18.10	10.79	0.02	0.38	
MAG	41.4	293	103	P 1	932	14.50	7.19	7.27	0.04	-0.11	1.10	0	0	0.00	0			15	-0.3						
LAZ	51.8	326	100	P 1	932	16.40	9.09	9.00	0.07	0.02	1.06	0	0	0.00	0			15	-0.3						

LAT	LON	Z	AVRPS	RMS	DRMS	
3.86	52.29	4.48	0.22	0.58	0.44	
3.86	45.79	4.48	0.43	0.93		0.79
3.86	52.29	14.48	-0.66	0.78	(0.63)	
3.86	45.79	14.48	-0.53	0.89		(0.75)
1.15	49.04	0.82	0.59	0.41	0.27	
				0.14	0.00	
1.15	49.04	18.14	-1.01	0.47	(0.32)	
58.45	52.29	4.48	-0.10	0.75	0.61	
58.45	45.79	4.48	0.10	0.67		0.52
58.45	52.29	14.48	-0.98	0.78	(0.63)	
50.45	45.79	14.48	-0.85	0.49		(0.35)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 5/ 1 11143

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KPN	IPHN	IMAG	IB	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	35.87	33-57.25	106-44.17	7.000*	0	1.12	0.00	DOC	2.00	12.61	12.89	0.00	53.88	36.73	0.00	1.72	2.13	0.00	12.61	12.89	0.00
2	38.06	34- 4.07	106-52.44	7.000	14	0.79	-1.32	DOD	2.00	-5.11	-4.03	0.00	94.80	56.33	0.69	0.53	0.54	0.00	-5.11	-4.03	0.00
3	37.02	34- 1.31	106-49.92	7.000	12	0.12	-0.09	A1D	0.50	0.00	-0.75	1.56	0.06	1.69	0.66	0.00	0.58	1.91	0.00	-0.75	1.56
4	36.90	34- 1.31	106-49.43	8.56	11	0.08	0.00	A1D	0.50	0.00	0.00	1.16	-1.00	0.16	1.27	0.00	0.00	1.03	0.00	0.00	1.16
5	36.83	34- 1.31	106-49.43	9.72	11	0.05	0.00	A1D	0.50	0.22	0.00	0.00	1.18	0.15	-1.00	0.21	0.00	0.00	0.22	0.00	0.00
6	36.83	34- 1.43	106-49.43	9.72	11	0.04	0.00	A2D	0.50	-0.00	-0.09	0.00	-1.00	0.19	-1.00	0.00	0.28	0.00	0.00	0.00	0.00
									2.00	-0.11	-0.19	0.72	0.12	0.43	0.39	0.30	0.29	1.16	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	H	RMS	KRU	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NM	AVXH	SDXN	KF	AVFN	SDFN	I
860501	1143 36.83	34- 1.43	106-49.43	9.72	-0.46	7	11	185	1	0.04	0.4	1.2	C	AID	0.22	10	7	0.00	0.02	0	0.0	0.0	5	-0.5	0.2	6

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	RMK	FMD	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAK	11.4	134	130	P	0 1143	39.30	2.47	2.56	-0.09	0.00	1.92	0	0	0.00	0			19-0.1		S 3	40.60	3.77	-0.51	0.01	
LEM	21.0	319	115	P	2 1143	40.90	4.07	3.95	0.05	0.07	0.95	0	0	0.00	0			12-0.6							
BAR	22.3	54	114	P	1 1143	41.10	4.27	4.16	0.10	0.01	1.43	0	0	0.00	0			15-0.3		S 2	44.20	7.37	-0.01	0.95	
LPH	36.5	29	105	P	1 1143	43.00	6.17	6.46	-0.27	-0.02	1.34	0	0	0.00	0			11-0.7							
LAZ	51.0	325	101	P	3 1143	45.70	8.87	8.88	0.10	-0.11	0.41	0	0	0.00	0			13-0.5							

LAT	LON	Z	AVRPS	RMS	DRMS
4.13	52.68	4.72	-0.01	0.81	0.76
4.13	46.18	4.72	0.84	0.81	
4.13	52.68	14.72	-0.71	0.90	0.76
4.13	46.18	14.72	-0.01	0.79	(0.86) (0.75)
1.43	49.43	1.06	0.43	0.17	0.12
				0.04	0.00
1.43	49.43	18.38	-0.91	0.33	(0.28)
58.72	52.68	4.72	-0.53	0.60	0.56
58.72	46.18	4.72	0.30	0.52	0.88
58.72	52.68	14.72	-1.38	0.58	(0.53) (0.39)
58.72	46.18	14.72	-0.59	0.44	

DATE AND TIME OF RUN 7-5-86 4:20 Cee

86/ 5/ 1 16:28

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1911

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	32.04	33-57.25	106-44.17	7.00*	0	1.14	0.00	D0B	2.00	10.10	10.71	0.001	26.14	144.92	0.00	0.90	0.89	0.00	10.10	10.71	0.00
2	33.72	34- 2.71	106-51.12	7.00	9	0.41	-0.44	C0B	2.00	-2.10	-2.21	0.00	19.76	23.06	0.79	0.17	0.46	0.00	-2.10	-2.21	0.00
3	33.10	34- 1.58	106-49.69	7.00	12	0.15	-0.03	B1B	0.50	0.00	0.00	1.82	0.11	-1.00	0.78	0.00	0.00	2.06	0.00	0.00	1.82
4	32.98	34- 1.58	106-49.69	8.82	12	0.14	-0.01	A3B	0.50	-0.12	0.00	0.00	0.11	-1.00	-1.00	0.37	0.00	0.00	0.00	0.00	0.00
4	32.97	34- 1.58	106-49.69	8.82	12	0.14	0.00	B2B	2.00	-0.15	-0.09	0.28	0.12	0.05	0.02	0.44	0.90	2.31	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860501	1628 32.97	34- 1.58	106-49.69	8.82	0.63	13	12	79	1	0.14	0.6	2.1	B	B1B	1.82	10	15	0.00	0.12	0	0.0	0.0	10	0.6	0.4	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.9	133	127	P 0	1628	35.40	2.43	2.53	0.03	-0.13	1.54	0	0	0.00	0			50	1.1						
NTX	12.0	295	126	P 1	1628	35.60	2.63	2.55	-0.08	0.17	1.15	0	0	0.00	0			15	-0.3*						
LEM	20.5	319	113	P 0	1628	36.80	3.83	3.81	0.06	-0.04	1.55	0	0	0.00	0			39	0.8						
BAR	22.5	55	111	P 0	1628	37.20	4.23	4.13	-0.03	0.13	1.57	0	0	0.00	0			48	1.1						
SMC	32.7	213	105	P 0	1628	38.70	5.73	5.78	0.11	-0.16	1.42	0	0	0.00	0			35	0.7	S 3	43.30	10.33	0.12	0.30	
SB	33.1	260	105	P 2	1628	39.40	6.43	5.05	0.22	0.46	0.59	0	0	0.00	0			20	0.4	S 2	43.40	10.43	-0.08	0.73	
LJY	35.0	350	104	P 3	1628	40.40	7.43	6.16	0.56	0.71**	0.01	0	0	0.00	0			25	0.3	S 4	45.60	12.63	0.99	0.00	
LPH	36.5	29	104	P 0	1628	39.10	6.13	6.41	-0.23	-0.05	1.44	0	0	0.00	0			40	0.8	S 4	43.30	10.33	-0.38	0.00	
MAG	40.2	292	102	P 2	1628	40.20	7.23	7.04	0.08	0.12	0.73	0	0	0.00	0			34	0.6						
LAZ	50.6	325	100	P 0	1628	41.80	8.83	8.78	0.04	0.02	1.35	0	0	0.00	0			40	0.8	S 2	48.00	15.03	-0.24	0.02	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
WHC	8.5	301.4	23.8	6.4
DM	9.2	11.8	39.7	17.6
NKM	8.5	301.2	23.8	6.2

LAT	LON	Z	AVRPS	RMS	DRMS	
4.29	52.94	3.82	0.66	0.89	0.74	
4.29	46.44	3.82	0.11	0.90		0.75
4.29	52.94	13.82	0.03	0.84	(0.70)	
4.29	46.44	13.82	-0.48	0.87		(0.73)
1.58	49.69	0.16	0.29	0.19	0.05	
				0.14	0.00	
1.58	49.69	17.48	-0.71	0.29	(0.15)	
58.88	52.94	3.82	0.17	0.87	0.73	
58.88	46.44	3.82	-0.30	0.81		0.67
58.88	52.94	13.82	-0.42	0.81	(0.66)	
58.88	46.44	13.82	-0.84	0.61		(0.47)

DATE AND TIME OF RUN swmpor.dat 4-20-86

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RESET TO	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

									ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	32.82	34- 1.96	106-47.24	7.00	0	0.43	0.00	COA	2.80	0.00	4.10	-2.43	0.36	101.49	8.16	0.00	0.41	0.85	0.00	4.10	-2.43
2	33.23	34- 1.96	106-49.91	4.57	1	0.14	-0.10	A1A	0.50	-0.28	0.00	-0.93	0.72	0.45	1.40	0.33	0.00	0.78	-0.28	0.00	-0.93
3	33.18	34- 1.81	106-49.91	3.64	1	0.12	0.00	A1A	0.50	0.00	-0.19	0.00	-1.00	0.52	0.05	0.00	0.26	0.00	0.00	-0.19	0.00
4	33.17	34- 1.81	106-49.78	3.64	1	0.12	0.00	A3A	0.50	0.00	-0.05	0.00	-1.00	0.03	-1.00	0.00	0.26	0.00	0.00	0.00	0.00
4	33.17	34- 1.81	106-49.78	3.64	1	0.12	0.00	A2A	2.00	-0.01	-0.07	0.18	0.00	0.05	0.05	0.33	0.30	0.81	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860501	1628 33.17	34- 1.81	106-49.78	3.64	0.63	15	1	78	1	0.12	0.4	0.8	A	A1A	0.19	10	17	0.00	0.09	0	0.0	0.0	10	0.6	0.4	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
LC3	0.8	47	167	P 0	1628	33.90	0.73	0.64	0.07	0.02	1.47	0	0	0.00	0										
LC2	4.1	89	132	P 0	1628	33.70	0.53	0.93	-0.34	-0.06	1.47	0	0	0.00	0										
WTX	11.7	294	107	P 1	1628	35.60	2.43	2.09	0.12	0.22	1.02	0	0	0.00	0			15	-0.3*						
CAR	12.3	134	106	P 0	1628	35.40	2.23	2.19	0.01	0.03	1.47	0	0	0.00	0			50	1.1						
LEM	20.1	318	100	P 0	1628	36.80	3.63	3.49	0.09	0.05	1.47	0	0	0.00	0			39	0.8						
BAR	22.4	56	99	P 0	1628	37.20	4.03	3.87	0.16	0.00	1.45	0	0	0.00	0			48	1.1						
SHC	32.9	212	96	P 0	1628	38.70	5.53	5.67	0.01	-0.15	1.34	0	0	0.00	0			35	0.7	S 3	43.30	10.13	0.30	0.28	
SB	33.0	259	96	P 2	1628	39.40	6.23	5.67	0.42	0.14	0.68	0	0	0.00	0			28	0.4	S 2	43.40	10.23	-0.32	0.47	
CJT	34.5	350	96	P 3	1628	40.40	7.23	5.93	0.74	0.56**	0.01	0	0	0.00	0			25	0.3	S 4	46.00	12.43	0.87	0.00	
LPM	36.2	30	96	P 0	1628	39.10	5.93	6.22	-0.26	-0.03	1.36	0	0	0.00	0			40	0.8	S 4	43.30	10.13	-0.19	0.00	
MAG	39.9	292	95	P 2	1628	40.20	7.03	6.85	0.04	0.14	0.66	0	0	0.00	0			34	0.6						
LAZ	50.2	325	94	P 0	1628	41.80	8.63	8.60	0.07	-0.04	1.27	0	0	0.00	0			40	0.8	S 2	48.00	14.83	-0.18	0.00	

LAT	LON	Z	AVRPS	RMS	ORMS	
4.51	53.03	0.00	0.24	0.94	0.82	
4.51	46.54	0.00	-0.09	0.80		0.68
4.51	53.03	8.64	-0.12	0.98	(0.86)	
4.51	46.54	8.64	-0.48	0.84		(0.72)
1.81	49.78	0.00	0.11	0.19	0.07	
				0.12	0.00	
1.81	49.78	12.30	-0.62	0.39	(0.27)	
59.10	53.03	0.00	-0.18	0.80	0.68	
59.10	46.54	0.00	-0.44	0.75		0.63
59.10	53.03	8.64	-0.50	0.84	(0.72)	
59.10	46.54	8.64	-0.80	0.66		(0.54)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 5/ 1 191 6

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IO	KMS	KFM	IPUN	IMAG	IR	IPRM	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CP	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	59.55	33-57.25	106-44.17	7.00*	0	1.05	0.00	D0C	2.00	11.29	12.08	0.00	31.49	12.35	0.00	2.01	3.44	0.00	11.29	12.08	0.00
2	0.56	34- 3.36	106-52.01	7.00	16	0.70	-1.24	D0D	2.00	-4.56	-3.18	0.00	118.61	26.05	0.27	0.42	0.62	0.00	-4.56	-3.18	0.00
3	59.54	34- 0.89	106-49.94	7.00	11	0.12	-0.07	X3D	0.50	0.00	-0.31	0.00	-1.00	0.27	-1.00	0.00	0.60	0.00	0.00	0.00	0.00
3	59.46	34- 0.89	106-49.94	7.00	11	0.12	0.00	B2D	2.00	-0.10	-0.57	1.48	0.02	0.46	0.22	0.82	0.84	3.18	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVYM	SDYM	I
860501	19 6 59.46	34- 0.89	106-49.94	7.00	-0.28	7	11	195	1	0.12	1.2	3.2	C	BID	5.56	10	7	0.00	0.11	0	0.0	0.0	4	-0.3	0.2	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.4	127	122	P 0	19 7	1.80	2.34	2.28	-0.09	0.14	1.58	0	0	0.00	0			20	0.0	S 2	3.20	3.74	-0.06	0.82	
LEN	21.2	322	108	P 2	19 7	3.40	3.94	3.82	0.05	0.07	0.81	0	0	0.00	0			15	-0.3						
BAR	31.6	53	107	P 0	19 7	5.60	6.14	6.20	-0.10	-0.16	1.50	0	0	0.00	0			15	-0.3	S 3	8.90	9.44	-0.01	0.41	
LPN	37.8	29	100	P 1	19 7	5.90	6.24	6.57	-0.27	-0.06	1.11	0	0	0.00	0			14	-0.4	S 2	10.50	11.04	0.13	0.74	

LAT	LON	Z	AVRPS	RMS	DRMS
1.59	53.19	2.00	-0.19	0.81	0.69
1.59	46.70	2.00	0.90	0.73	0.62
1.59	53.19	12.00	-0.72	0.89	(0.78)
1.59	46.70	12.00	0.20	0.85	(0.73)
0.89	49.94	0.00	0.26	0.20	0.08
				0.12	0.00
0.89	49.94	15.66	-0.81	0.31	(0.19)
58.19	53.19	2.00	-0.77	0.64	0.52
58.19	46.70	2.00	0.41	1.08	0.96
58.19	53.19	12.00	-1.34	0.54	(0.42)
58.19	46.70	12.00	-0.43	0.51	(0.39)

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 DATE AND TIME OF RUN  swmpor.dat 4-20-86

                                                                                                                    86/ 5/ 1      21:30
          TEST(1)  TEST(2)  TEST(3)  TEST(4)  TEST(5)  TEST(6)  TEST(7)  TEST(8)  TEST(9) TEST(10) TEST(11) TEST(12) TEST(13)
RESET TO  0.1000  10.0000   2.0000   0.0500   7.0000   4.0000  -3.6300   2.7900   0.0000 100.0000   8.0000   0.5000   5.0000

VELOCITY   DEPTH   ZTR XNEAR XFAR   POS        IQ  KMS  KFM IPUN IMAG  IR  IPRN CODE
 5.850     0.000    7.  20.  250.  1.7320508    3    1    0    0    1    0    1  1011

                                                                  ADJUSTMENTS (KM)    PARTIAL F-VALUES    STANDARD ERRORS    ADJUSTMENTS TAKEN
 I  ORIG  LAT N    LONG W    DEPTH  DM  RMS  AVRPS SKD   CF   DLAT  DLON    DZ   DLAT  DLON    DZ   DLAT  DLON   DZ   DLAT  DLON    DZ
 1 25.81 34- 1.96 106-47.24  7.00   0 0.42   0.00 C0B  2.00  0.00  4.53 -3.85  1.29 46.07 15.01  0.00  0.67  0.99  0.00  4.53 -3.85
 2 25.96 34- 1.96 106-50.19  3.15   5 0.14  -0.23 A0B  2.00  0.00  0.00 -3.74  1.44 -1.00 13.26  0.00  0.00  1.03  0.00  0.00 -1.58
 3 25.80 34- 1.96 106-50.18  1.58*  5 0.11  -0.02 A0B  2.00 -0.52 -0.83  0.00  7.22 10.95  0.00  0.20  0.25  0.00 -0.52 -0.83  0.00
 4 25.87 34- 1.69 106-49.65  1.58   4 0.05   0.00 A1B  0.50  0.00  0.00 -0.82 -1.00  0.18  0.83  0.00  0.00  0.90  0.00  0.00 -0.82
 5 25.89 34- 1.68 106-49.65  0.75   4 0.05  -0.01 A3B  0.50  0.05  0.00  0.00  0.09 -1.00 -1.00  0.16  0.00  0.00  0.00  0.00  0.00
 5 25.88 34- 1.68 106-49.65  0.75   4 0.05   0.00 B2B  2.00  0.08  0.14 -1.24  0.16  0.23  0.23  0.20  0.30  2.57  0.00  0.00  0.00

  DATE    ORIGIN    LAT N     LONG W    DEPTH    MAG NO DM GAP M  RMS  ERH  ERZ Q SQD  ADJ IN NR  AVR  AAR NM AVXM SDXM NF AVFM SDFM I
860501 2130 25.88 34- 1.68 106-49.65   0.75  -0.43  8  4 113 1 0.05  0.4  2.6 B BIB 0.82 10  9 0.00 0.04  0  0.0  0.0  5 -0.4  0.4 5

  STN  DIST AZM AIN PRMK HRMN P-SEC TPOBS TPCAL DLY/H1 P-RES P-WT AMX PRX CALX K XMAG RMK FMP FMAG SRMK S-SEC TSOBS S-RES  S-WT    DT
 LC2    3.9  85 101 P 0 2130 26.20  0.32  0.67  -0.34 -0.02 1.83   0   0 0.00 0
 CAR   12.0 134  94 P 0 2130 28.00  2.12  2.05   0.01  0.05 1.83   0   0 0.00 0               20 0.0   S 3 29.40  3.52 -0.06  0.45
 BAR   22.3  55  92 P 2 2130 29.80  3.92  3.82   0.16 -0.06 0.90   0   0 0.00 0               16-0.3   S 3 32.90  7.02  0.12  0.45
 SMC   32.9 213  91 P 2 2130 31.50  5.62  5.62   0.01 -0.01 0.86   0   0 0.00 0                8-1.1*
 LPM   36.3  29  91 P 1 2130 31.80  5.92  6.20  -0.26 -0.03 1.28   0   0 0.00 0               15-0.3   S 3 36.80 10.92  0.02**0.00
 LAZ   50.5 325  90 P 3 2130 34.60  8.72  8.63   0.07  0.02 0.40   0   0 0.00 0               14-0.4

          MISSING STATION  DELTA   AZIM  EX-GAP  RD-GAP
                      LC3    0.9   26.2    64.2     3.2
                      LC4    3.3  163.8    78.4    29.5

      LAT        LON         Z      AVRPS       RMS                      DRMS

      4.38      52.89      0.00     -0.60      0.73           0.68
      4.38      46.40      0.00      0.26      0.95                          0.90
      4.38      52.89      5.75     -0.76      0.78           (  0.74)
      4.38      46.40      5.75      0.03      0.99                          (  0.94)

      1.68      49.65      0.00      0.00      0.05                  0.00
                                               0.05                    0.00
      1.68      49.65      9.41     -0.52      0.37                  (  0.32)

     58.97      52.89      0.00     -0.79      0.69           0.64
     58.97      46.40      0.00      0.10      0.76                          0.71
     58.97      52.89      5.75     -0.96      0.69           (  0.64)
     58.97      46.40      5.75     -0.09      0.65                          (  0.60)

***** EXTRA BLANK CARD ENCOUNTERED *****
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DATE AND TIME OF RUN 11-1-86 1:30

86/ 5/ 2 4112

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	Iq	KNS	KFN	IpUN	IMAG	IH	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	18.97	33-57.25	106-44.17	7.00*	0	1.40	0.00	DOC	2.00	11.25	11.36	0.00	38.27	45.63	0.00	1.82	1.68	0.00	11.25	11.36	0.00
2	20.33	34- 3.34	106-51.55	7.00	16	0.74	-0.96	DOD	2.00	-4.34	-2.39	0.00	88.14	33.58	0.13	0.46	0.41	0.00	-4.34	-2.39	0.00
3	19.33	34- 0.99	106-50.00	7.00	12	0.10	-0.05	X1D	0.50	0.00	-0.23	0.00	0.10	0.52	-1.00	0.00	0.32	0.00	0.00	-0.23	0.00
4	19.29	34- 0.99	106-49.85	7.00	11	0.10	0.00	A3D	0.50	0.00	0.00	0.31	-1.00	-1.00	0.08	0.00	0.00	1.13	0.00	0.00	0.00
4	19.29	34- 0.99	106-49.85	7.00	11	0.10	0.00	A2D	2.00	0.10	-0.08	0.19	0.03	0.03	0.01	0.60	0.45	1.82	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SOD	ADJ	TN	NR	AVR	AAR	NN	AVXM	SDXM	NF	AVFM	SDFM	I
860502	412 19.29	34- 0.99	106-49.85	7.00	-0.36	8	11	193	1	0.10	0.7	1.8	C	A1D	0.23	10	R	0.00	0.09	0	0.0	0.0	5	-0.4	0.1	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CAIX	A	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.4	129	122	P	0 412	21.60	2.31	2.28	-0.09	0.11	1.49	0	0	0.00	0			1P-0.1		S	2 23.00	3.71	-0.09	0.75	
LEM	22.2	321	108	P	1 412	23.10	3.81	3.81	0.05	-0.05	1.15	0	0	0.00	0			15-0.3		S	2 26.00	6.21	0.02	0.77	
BAR	37.5	53	107	P	0 412	23.50	4.21	4.16	0.10	-0.06	1.52	0	0	0.00	0			14-0.4		S	2 26.80	7.51	0.12	0.73	
LPM	37.5	229	101	P	1 412	25.40	6.11	6.53	-0.27	-0.15	0.98	0	0	0.00	0			15-0.3							
LAZ	51.4	326	98	P	2 412	28.40	9.11	8.86	0.10	0.15	0.62	0	0	0.00	0			13-0.5							

LAT	LON	Z	AVRPS	RMS	DRMS
3.70	53.09	2.00	0.16	1.09	0.99
3.70	46.60	2.00	0.64	0.66	0.56
3.70	53.09	12.00	-0.42	1.07	(0.97)
3.70	46.60	12.00	-0.01	0.76	(0.66)
0.99	49.85	0.00	0.26	0.18	0.08
0.99	49.85	15.66	-0.82	0.34	0.00 (0.24)
58.29	53.09	2.00	-0.58	0.55	0.45
58.29	46.60	2.00	0.11	1.24	1.12
58.29	53.09	12.00	-1.17	0.51	(0.41)
58.29	46.60	12.00	-0.63	0.73	(0.63)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 5/ 2 14144

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.3000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPHN	IMAG	IR	IWRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	1.200	34- 57.25	106-44.17	7.000	0	1.03	0.00	D1D	0.50	10.69	11.89	0.00	18.82	17.42	0.00	2.46	2.65	0.00	10.69	11.89	0.00
2	3.29	34- 3.03	106-51.89	7.00	16	0.54	-0.68	D0D	2.00	-4.66	-4.04	12.81	20.89	13.52	2.03	1.02	1.10	9.00	-4.66	-4.04	6.40
3	2.16	34- 0.51	106-49.26	13.40	10	0.07	-0.20	A1D	0.50	0.00	-0.35	0.00	0.05	0.81	-1.00	0.00	0.44	0.00	0.00	-0.35	0.00
4	1.09	34- 0.51	106-49.08	13.40	10	0.07	0.00	A1D	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.07	0.00
5	1.09	34- 0.51	106-49.13	13.40	10	0.07	0.00	A1D	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.07	0.00
6	1.09	34- 0.51	106-49.13	13.40	10	0.07	0.00	A1D	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.07	0.00
4	1.97	34- 0.51	106-49.22	13.40	10	0.07	0.00	A3D	0.50	0.00	0.00	-0.38	-1.00	-1.00	0.11	0.00	0.00	1.15	0.00	0.00	0.00
4	1.97	34- 0.51	106-49.22	13.40	10	0.07	0.00	B2D	2.00	-0.23	-0.33	0.54	0.03	0.06	0.02	1.26	1.29	4.23	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	KAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NN	AVXH	SDXN	NF	AVFH	SDFN	I
860502	1444 1.97	34- 0.51	106-49.22	13.40	-0.24	5	10	198	1	0.07	1.8	4.2	C	BID	0.07	10	7	0.00	0.06	0	0.0	0.0	4	-0.2	0.2	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PKX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	10.1	128	143	P	2 1444	4.70	2.73	2.87	-0.09	-0.05	1.00	0	0	0.00	0			20	0.0	S	4	5.00	4.03	-0.78	0.00	
BAR	27.1	50	120	P	3 1444	6.80	4.83	4.57	0.10	0.16	0.53	0	0	0.00	0			20	0.0	S	4	9.70	7.73	-0.15	0.00	
LPH	37.0	27	109	P	1 1444	8.50	6.53	6.87	-0.27	-0.07	1.50	0	0	0.00	0			13	-0.5	S	3	13.40	11.43	0.00	0.50	
LA2	52.6	326	104	P	1 1444	11.40	9.43	9.28	0.10	0.05	1.39	0	0	0.00	0			14	-0.4							

LAT	LON	Z	AVRPS	RMS	DRMS
3.22	52.47	8.40	0.55	0.65	0.57
3.22	45.97	8.40	0.95	0.63	0.56
3.22	52.47	18.40	-0.17	0.83	(0.75)
3.22	45.97	18.40	0.17	0.64	(0.57)
0.51	49.22	4.74	0.49	0.26	0.19
0.51	49.22	22.06	-0.79	0.33	0.00
					(0.25)
57.81	52.47	8.40	-0.48	0.56	0.48
57.81	45.97	8.40	-0.08	0.80	0.73
57.81	52.47	18.40	-1.14	0.52	(0.44)
57.81	45.97	18.40	-0.86	0.39	(0.32)

DATE AND TIME OF RUN 11-1-86 1:30

86/ 5/ 4 18:10

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0600	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	14.76	33-57.25	106-44.17	7.00*	0	1.25	-0.00	DOB	2.00	10.75	11.74	0.00	156.63	129.65	0.00	0.86	1.03	0.00	10.75	11.74	0.00
2	16.77	34- 3.06	106-51.00	7.00	0	0.50	-0.44	COB	2.00	-1.98	-3.01	0.00	8.48	18.35	0.03	0.68	0.86	0.00	-1.98	-3.01	0.00
3	16.08	34- 1.99	106-49.83	7.00	11	0.19	0.02	BOB	2.00	-0.73	0.00	0.00	2.66	-1.00	0.38	0.45	0.00	0.00	-0.73	0.00	0.00
4	16.85	34- 1.60	106-49.83	7.00	12	0.14	0.00	A1B	0.50	0.00	0.00	1.45	0.50	-1.00	0.53	0.00	0.00	1.99	0.00	0.00	1.45
5	15.98	34- 1.60	106-49.83	8.45	12	0.14	-0.01	A3B	0.50	-0.26	0.00	0.00	0.50	-1.00	-1.00	0.37	0.00	0.00	0.00	0.00	0.00
6	15.98	34- 1.60	106-49.83	8.45	12	0.14	0.00	B2B	2.00	-0.29	0.05	0.35	0.43	0.02	0.03	0.45	0.45	2.09	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IM	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860504	1810 15.98	34- 1.60	106-49.83	8.45	0.76	12	12	80	1	0.14	0.6	2.1	B	B1B	1.45	10	14	0.00	0.09	0	0.0	0.0	9	0.8	0.4	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
MTX	11.8	295	126	P	0 1810	18.56	2.52	2.48	-0.01	0.05	1.54	0	0	0.00	0			20	0.0*	S 4	20.70	4.72	0.45	0.00	
CAR	12.1	133	125	P	1 1810	18.40	2.42	2.52	-0.09	-0.01	1.15	0	0	0.00	0			50	1.1						
LEW	20.2	119	115	P	0 1810	19.30	3.02	3.76	0.05	0.01	1.54	0	0	0.00	0			44	1.0						
BAR	22.7	56	110	P	0 1810	20.20	4.22	4.13	0.10	-0.01	1.52	0	0	0.00	0			55	1.2						
SHC	32.6	212	105	P	1 1810	21.60	5.62	5.55	0.11	-0.24	1.08	0	0	0.00	0			56	0.7						
LJV	34.9	350	104	P	2 1810	21.80	7.02	6.14	0.65	0.24	0.70	0	0	0.00	0			31	0.5	S 3	26.20	10.22	-0.07	0.36	
LPM	36.6	30	103	P	1 1810	22.10	6.12	6.41	-0.27	-0.02	1.07	0	0	0.00	0			50	1.1	S 2	26.70	10.72	-1.03**	0.02	
MAG	40.0	292	102	P	1 1810	23.00	7.02	6.99	0.03	0.00	1.05	0	0	0.00	0			30	0.5	S 4	28.00	12.02	-0.13	0.00	
LAZ	50.4	326	100	P	0 1810	25.00	9.02	8.74	0.10	0.18	1.31	0	0	0.00	0			36	0.7	S 2	31.00	15.02	-0.29	0.05	

MISSING STATION	DELTA	AZIM	EX-GAP	MD-GAP
NMC	8.3	302.1	23.9	6.7
DN	9.2	13.2	34.7	16.6
SMN	11.5	294.8	23.2	0.5
WKN	8.3	301.8	23.9	6.5

LAT	LON	Z	AVRPS	RMS	DRMS
4.30	53.08	3.45	0.73	0.86	0.72
4.30	46.59	13.45	0.24	0.75	(0.69)
4.30	53.08	13.45	0.01	0.83	0.61
4.30	46.59	13.45	-0.35	0.74	(0.60)
1.60	49.83	0.00	0.26	0.19	0.05
1.60	49.83	17.11	-0.71	0.14	0.00
				0.31	(0.18)
58.90	53.08	3.45	-0.12	0.77	0.63
58.90	46.59	13.45	-0.56	0.89	(0.58)
58.90	53.08	13.45	-0.65	0.72	0.75
58.90	46.59	13.45	-0.99	0.71	(0.57)

DATE AND TIME OF RUN 11-1-86 1130

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KHS	KFM	IPUN	INAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	3.40	33-57.25	106-44.17	7.00	0	1.19	0.00	DOR	2.00	0.00	0.00	18.64	1.25	-1.00	13.50	0.00	0.00	5.07	0.00	0.00	6.21
2	1.00	33-57.25	106-44.17	13.21*	0	0.90	0.00	DOR	2.00	9.08	10.77	0.00	269.31	249.11	0.00	0.55	0.68	0.00	9.08	10.77	0.00
3	4.02	34- 2.16	106-51.16	13.21	14	0.34	-0.57	COR	2.00	-1.58	-2.48	0.00	26.18	54.80	1.70	0.31	0.33	0.00	-1.58	-2.48	0.00
4	3.46	34- 1.31	106-49.55	13.21	11	0.08	-0.03	AOB	2.00	0.00	0.00	-1.10	0.05	-1.00	2.13	0.00	0.00	0.76	0.00	0.00	-1.16
4	3.46	34- 1.31	106-49.55	13.11	11	0.10	0.00	AOB	2.00	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.22
4	3.52	34- 1.31	106-49.55	13.11	11	0.10	0.01	AOB	2.00	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.22
4	3.60	34- 1.31	106-49.55	12.55	11	0.10	0.01	AOB	2.00	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.22
5	1.48	34- 1.31	106-49.55	12.77*	11	0.07	0.00	A2R	2.00	0.00	-0.12	0.00	-1.00	0.33	-1.00	0.00	0.20	0.00	0.00	0.00	0.00
	1.48	34- 1.31	106-49.55	12.77	11	0.07	0.00	A2R	2.00	0.04	0.04	-0.84	0.03	0.02	0.47	0.24	0.34	1.22	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TN	NR	AVX	AAR	NN	AVXM	SDXM	NF	AVFM	SDFM	I
860504	1950	3.48	34- 1.31	106-49.55	12.77	-0.31	10	11	106	1	0.07	0.4	1.2	B	AIB	0.22	10	10	0.00	0.05	0	0.0	0.0	6	-0.3	0.4	5

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	WMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.4	132	138	P	0	1950	6.30	2.82	2.93	-0.09	-0.02	1.94	0	0	0.00	0			20 0.0							
LEM	21.0	319	121	P	1	1950	7.70	4.22	4.20	0.05	-0.03	1.45	0	0	0.00	0			15-0.3							
BAR	32.6	54	119	P	0	1950	8.00	4.52	4.44	0.10	-0.02	1.92	0	0	0.00	0			18-0.1	S	2	11.30	7.82	-0.04	0.96	
SHC	32.4	214	112	P	1	1950	9.50	6.02	5.95	0.11	-0.03	1.38	0	0	0.00	0			8-1.1*	S	3	14.10	10.62	0.13	0.44	
LPN	36.8	29	109	P	3	1950	10.20	6.72	6.66	-0.27	0.33**	0.05	0	0	0.00	0			18-0.1	S	3	14.60	11.12	0.05	0.45	
LAZ	51.1	326	104	P	1	1950	12.70	9.22	9.01	0.10	0.12	1.22	0	0	0.00	0			18-0.1	S	3	19.00	15.52	-0.25	0.18	

LAT	LON	Z	AVRPS	RMS	DRMS			
4.01	52.80	7.77	0.39	0.78	0.72			
4.01	46.31	7.77	0.63	1.03		0.96		
4.01	52.80	17.77	-0.47	0.80	(0.79)			
4.01	46.31	17.77	-0.29	0.83		(0.76)		
1.31	49.55	4.11	0.57	0.20		0.13		
				0.07		0.00		
1.31	49.55	21.43	-0.94	0.33		(0.26)		
58.60	52.80	7.77	-0.09	0.88	0.82			
58.60	46.31	7.77	0.18	0.81		0.75		
58.60	52.80	17.77	-0.87	0.91	(0.84)			
58.60	46.31	17.77	-0.71	0.49		(0.42)		

DATE AND TIME OF RUN 11-1-86 1:30

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XMEAR	XFAR	POS	IQ	KNS	KFM	IPHN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050	3	1	0	0	1	8	1	1011

I	ORIG	LAT N	LONG W	DEPTH	OM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	38.29	33-57.25	106-44.17	7.00*	0	1.23	0.00	DOR	2.00	0.07	10.95	0.00	121.27	205.76	0.00	0.11	0.76	0.00	0.07	10.95	0.00
2	40.15	34- 2.10	106-51.28	7.00	9	0.31	-0.38	COM	2.00	-1.50	-1.86	2.98	33.31	67.97	5.78	0.26	0.23	1.24	-1.50	-1.86	2.98
3	39.42	34- 1.29	106-50.07	9.98	12	0.09	-0.03	X1B	0.50	-0.21	-0.18	0.00	0.84	0.82	0.01	0.23	0.20	0.00	-0.21	-0.18	0.00
4	39.38	34- 1.18	106-49.95	9.98	12	0.10	-0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.04	0.04	0.00
5	39.38	34- 1.20	106-49.97	9.98	12	0.10	-0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.04	0.04	0.00
6	39.38	34- 1.22	106-50.00	9.98	12	0.10	-0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.04	0.04	0.00
7	39.38	34- 1.24	106-50.02	9.98	12	0.10	0.00	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.04	0.04	0.00
8	39.38	34- 1.27	106-50.04	9.98	12	0.10	0.00	A2B	2.00	-0.07	-0.10	0.01	0.06	0.16	0.00	0.28	0.25	1.10	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	TM	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
860504	2230 39.38	34- 1.27	106-50.04	9.98	0.31	14	12	83	1	0.10	0.4	1.1	B	A1B	0.06	10	14	0.00	0.07	0	0.0	0.0	9	0.3	0.4	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
MTX	111.8	299	130	P	0	2230	42.00	2.62	2.64	-0.01	-0.01	1.44	0	0	0.00	0			15-0.3*						
CAR	120.9	330	130	P	0	2230	41.90	2.52	2.66	-0.09	-0.05	1.44	0	0	0.00	0			35 0.7						
LEM	120.6	352	116	P	0	2230	41.40	4.02	3.91	0.05	0.06	1.43	0	0	0.00	0			20 0.5	S	2	46.40	7.02	0.16	0.72
BAR	23.3	55	113	P	0	2230	43.80	4.42	4.33	0.10	-0.01	1.42	0	0	0.00	0			40 0.8*						
SMC	91.9	213	102	P	0	2230	45.20	5.82	5.71	0.11	-0.01	1.36	0	0	0.00	0			21 0.1						
SB	98.4	261	101	P	0	2230	45.70	6.32	5.80	0.11	0.15	0.34	0	0	0.00	0			17-0.2*	S	2	50.00	10.62	-0.07	0.88
LPK	97.2	30	105	P	0	2230	45.66	6.22	6.59	-0.27	-0.11	1.33	0	0	0.00	0			37 0.7	S	2	50.40	11.02	0.07	0.86
MAG	50.0	293	104	P	0	2230	46.50	7.12	7.04	0.03	0.05	1.31	0	0	0.00	0			20 0.0	S	2	51.60	12.12	-0.12	0.33
LAZ	50.8	326	101	P	1	2230	48.50	9.12	8.84	0.10	0.17	0.93	0	0	0.00	0			31 0.5	S	2	54.80	15.22	-0.27	0.62

LAT	LON	Z	AVRPS	RMS	DRMS
3.97	53.29	4.98	0.84	0.91	0.81
3.97	46.80	4.98	0.23	0.85	
3.97	53.29	14.98	-0.07	0.80	0.75
3.97	46.80	14.98	-0.47	0.81	(0.71)
1.27	50.04	1.32	0.37	0.17	0.07
1.27	50.04	18.64	-0.81	0.10	0.00
				0.29	(0.19)
58.56	53.29	4.98	-0.08	0.85	0.75
58.56	46.80	4.98	-0.44	0.80	
58.56	53.29	14.98	-0.60	0.81	0.70
58.56	46.80	14.98	-1.06	0.69	(0.71) (0.59)

DATE AND TIME OF RUN 11-1-86 1:30

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	9.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFN	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	16.3	33-57.25	106-44.17	7.00	0	1.18	0.00	DOR	2.00	0.00	0.00	11.61	-1.00	-1.83	12.64	0.00	0.00	3.27	0.00	0.00	5.81
2	15.8	33-57.25	106-44.17	12.81	0	0.80	0.02	DOB	2.00	0.00	0.00	6.31	-1.77	-1.00	4.34	0.00	0.00	3.03	0.00	0.00	6.31
3	15.1	33-57.25	106-44.17	19.11*	0	0.60	-0.05	DOB	2.00	5.76	6.30	0.00	11.42	7.58	0.00	1.71	2.29	0.00	5.76	6.30	0.00
4	15.6	34- 0.37	106-48.29	19.11	9	0.45	-0.22	COR	2.00	1.35	2.64	-9.72	14.54	13.59	162.85	0.35	0.46	0.76	1.35	2.64	-4.86
5	16.0	34- 1.10	106-49.98	14.26	12	0.28	-0.06	BOR	2.00	0.00	-0.48	-5.58	0.07	3.18	71.77	0.00	0.47	0.66	0.00	-0.48	-5.58
6	16.5	34- 1.10	106-49.67	8.67	11	0.07	-0.08	A1B	0.50	0.00	0.00	-0.46	0.05	-1.00	0.50	0.00	0.00	0.65	0.00	0.00	-0.46
7	16.5	34- 1.10	106-49.67	8.21	11	0.08	-0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.00
8	16.5	34- 1.10	106-49.67	8.30	11	0.08	-0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.00
9	16.5	34- 1.10	106-49.67	8.39	11	0.08	-0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.00
6	16.5	34- 1.10	106-49.67	8.69	11	0.09	-0.01	A1B	0.50	0.00	0.00	0.00	-1.00	-1.00	-1.00	0.00	0.00	0.00	0.00	0.00	0.00
7	16.5	34- 1.10	106-49.67	8.58*	11	0.09	-0.02	A2B	0.50	-0.15	0.00	0.00	0.45	-1.00	-1.00	0.22	0.00	0.00	0.00	0.00	0.00
7	16.49	34- 1.10	106-49.67	8.58	11	0.09	0.00	A2B	2.00	-0.01	0.05	-1.16	0.00	0.03	1.63	0.25	0.29	0.91	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NH	AVXM	SDXM	NF	AVFM	SDFM	I
860505	1442 16.49	34- 1.10	106-49.67	8.58	-0.29	10	11	107	1	0.09	0.4	0.9	B	A1B	0.09	10	11	0.00	0.06	0	0.0	0.0	6	-0.3	0.3	7

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	11.3	130	127	P	1442	18.80	2.41	2.42	-0.09	0.07	1.42	0	0	0.00	0			20	0.0	S 2	20.30	3.81	-0.24	0.24	
LEM	22.2	320	112	P	1442	20.50	4.01	3.94	0.05	0.05	0.94	0	0	0.00	0			20	0.0	S 3	23.30	6.81	-0.05	0.47	
BKR	23.0	53	110	P	1442	20.80	4.31	4.19	0.10	0.01	1.40	0	0	0.00	0			18	-0.1	S 2	24.00	7.51	0.07	0.93	
SKC	31.9	214	105	P	1442	22.30	5.81	5.65	-0.11	-0.04	1.34	0	0	0.00	0			10	-0.8*						
LPW	37.2	22	103	P	1442	22.70	6.21	6.53	-0.27	-0.06	1.31	0	0	0.00	0			14	-0.4	S 3	27.40	10.91	0.06	0.44	
LAZ	51.3	326	99	P	1442	25.50	9.01	8.90	0.10	0.01	0.82	0	0	0.00	0			15	-0.3	S 4	31.60	15.11	-0.48	0.00	

LAT	LON	Z	AVRPS	RMS	DRMS
5.80	52.91	3.58	0.11	0.91	0.82
5.80	46.42	3.58	0.64	0.57	0.88
5.80	52.91	13.58	-0.51	0.96	(0.87)
5.80	46.42	13.58	-0.14	0.94	(0.85)
1.10	49.67	0.00	0.35	0.17	0.09
1.10	49.67	17.24	-0.82	0.02	0.00
				0.39	(0.31)
58.39	52.91	3.58	-0.37	0.85	0.77
58.39	46.42	3.58	0.22	1.03	0.95
58.39	52.91	13.58	-1.06	0.88	(0.79)
58.39	46.42	13.58	-0.55	0.50	(0.42)

DATE AND TIME OF RUN 11-1-86 1130

86/ 5/ 5 14147

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

											ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	0.95	33-57.25	106-44.17	7.00*	0	1.25	0.00	D0B	2.00	11.30	14.28	0.00	86.71	89.09	0.00	1.21	1.51	0.00	11.30	14.28	0.00
2	2.25	34- 3.36	106-53.44	7.00	14	0.81	-1.13	D0C	2.00	-3.74	-4.66	0.00	101.47	146.17	0.56	0.37	0.39	0.00	-3.74	-4.66	0.00
3	1.50	34- 1.34	106-50.41	7.00	12	0.08	-0.06	A0B	2.00	0.00	-0.33	-1.18	0.00	3.41	3.02	0.00	0.18	0.68	0.00	-0.33	-1.18
4	1.50	34- 1.34	106-50.20	5.82	12	0.04	-0.01	A3C	0.50	0.00	0.00	-0.15	-1.00	-1.00	0.07	0.00	0.00	0.57	0.00	0.00	0.00
4	1.33	34- 1.34	106-50.20	5.82	12	0.04	0.00	A2C	2.00	0.00	0.00	-0.16	0.00	0.00	0.02	0.18	0.21	1.03	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	N	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXH	SDXM	NF	AVFM	SDFM	I
860505	1447	1.33	34- 1.34	106-50.20	5.82	-0.39	9	12	109	1	0.04	0.3	1.0	B	AIC	1.22	10	10	0.00	0.03	0	0.0	0.0	6	-0.4	0.4	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	A	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAK	12.2	129	115	P	1447	3.60	2.27	2.31	-0.09	0.05	1.42	0	0	0.00	0			21	0.1	S 2	5.10	3.77	-0.08	0.71	
LEM	20.3	321	106	P	1447	5.00	3.67	3.61	0.05	0.00	1.44	0	0	0.00	0			16	-0.3						
BAR	23.4	55	104	P	1447	5.50	4.12	4.12	0.10	-0.05	1.42	0	0	0.00	0			18	-0.1	S 2	8.70	7.37	0.06	0.70	
SNC	31.9	212	100	P	1447	7.00	5.67	5.54	0.11	-0.02	1.02	0	0	0.00	0			P	-1.1*						
LPE	37.3	30	99	P	1447	7.50	6.17	6.45	-0.27	-0.01	1.33	0	0	0.00	0			14	-0.4	S 3	12.10	10.77	0.07	0.33	
LAZ	50.5	326	97	P	1447	10.10	8.77	8.69	0.10	-0.02	0.62	0	0	0.00	0			14	-0.4	S 3	16.00	14.67	-0.56	**0.00	

LAT	LON	Z	AVRPS	RMS	DRMS
4.04	53.45	0.82	0.02	0.92	0.88
4.04	46.95	0.82	0.52	0.91	0.86
4.04	53.45	10.82	-0.40	0.95	(0.91)
4.04	46.95	10.82	0.00	0.89	(0.85)
1.34	50.20	0.00	0.15	0.09	0.05
				0.04	0.00
1.34	50.20	14.48	-0.66	0.27	(0.22)
58.63	53.45	0.82	-0.56	0.78	0.74
58.63	46.95	0.82	0.08	1.05	1.01
58.63	53.45	10.82	-1.01	0.77	(0.72)
58.63	46.95	10.82	-0.45	0.63	(0.58)

DATE AND TIME OF RUN 5-15-87 CEE

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRM	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

											ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	37.92	33-57.25	106-44.17	7.00	0	0.65	0.00	DOB	2.00	-6.34	3.30	4.2043	1.6325	9.4013	0.35	0.31	0.20	0.37	-6.34	3.30	4.20
2	37.20	33-53.82	106-46.31	11.20	7	0.14	-0.15	A0D	2.00	0.00	0.55	-2.93	0.44	6.69	26.95	0.00	0.21	0.56	0.00	0.55	-2.93
3	37.28	33-53.82	106-46.67	8.27	7	0.07	-0.02	A1D	0.50	0.00	0.00	-0.36	0.25	-1.00	0.92	0.00	0.00	0.40	0.00	0.00	-0.36
4	37.28	33-53.82	106-46.67	7.91	7	0.07	0.00	A3D	0.50	-0.17	0.00	0.00	0.27	-1.00	-1.00	0.32	0.00	0.00	0.00	0.00	0.00
4	37.28	33-53.82	106-46.67	7.91	7	0.07	0.00	A2D	2.00	-0.17	-0.01	0.01	0.22	0.00	0.00	0.37	0.22	0.50	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SGD	ADJ	IN	NR	AVR	AAR	NN	AVXH	SDXH	NF	AVFM	SDFM	I
870421	819 37.28	33-53.82	106-46.67	7.91	0.85	13	7	250	1	0.07	0.4	0.5	C	AID	0.36	10	14	0.00	0.05	0	0.0	0.0	5	0.9	0.3	9

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	ANX	PRX	CALX	K	XMAG	MMK	PMP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	21.3	332	137	P 0	819	39.15	1.87	1.84	0.03	0.00	1.59	0	0	0.00	0			30	0.5	S 2	40.50	3.22	-0.03	0.79	
NTK	24.2	321	108	P 4	819	45.60	8.32	4.46	-0.08	3.94	0.00	0	0	0.00	0										
BAR	30.5	327	105	P 0	819	42.70	5.42	5.39	-0.03	0.07	1.51	0	0	0.00	0			45	1.0						
LEM	34.9	329	103	P 0	819	43.40	6.12	6.11	0.06	-0.05	1.48	0	0	0.00	0			50	1.1	S 2	48.00	10.72	0.03	0.74	
BB	38.3	281	102	P 1	819	44.20	6.92	6.68	0.22	-0.02	1.10	0	0	0.00	0					S 2	49.40	11.92	-0.03	0.73	
LPH	48.0	16	99	P 0	819	45.30	8.02	8.32	-0.23	-0.06	1.39	0	0	0.00	0			55	1.2	S 2	51.40	14.12	0.12	0.70	
MAG	51.0	305	99	P 1	819	46.30	9.02	8.87	0.08	-0.07	1.03	0	0	0.00	0					S 3	52.90	15.62	0.13	0.34	
LAZ	65.2	329	97	P 1	819	48.40	11.12	11.23	0.04	-0.15	0.96	0	0	0.00	0			20	0.5	S 2	56.80	19.52	0.01	0.64	

LAT	LON	Z	AVRPS	RMS	DRMS
56.53	49.91	2.91	1.03	0.63	0.56
56.53	43.43	2.91	0.67	0.84	0.77
56.53	49.91	12.91	0.51	0.81	(0.74)
56.53	43.43	12.91	-0.05	0.69	(0.62)
53.82	46.67	0.00	0.22	0.20	0.13
				0.07	0.00
53.82	46.67	16.57	-0.61	0.32	(0.25)
51.12	49.91	2.91	-0.44	0.66	0.60
51.12	43.43	2.91	-0.87	0.54	0.48
51.12	49.91	12.91	-0.88	0.77	(0.70)
51.12	43.43	12.91	-1.36	0.49	(0.42)

DATE AND TIME OF RUN 5-15-87 CEK

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	38.10	33-57.25	106-44.17	7.00	0	0.36	0.00	C0C	2.00	-3.43	3.45	1.75	34.37	95.51	7.73	0.59	0.35	0.63	-3.43	3.45	1.75
2	37.64	33-55.39	106-46.41	8.75	5	0.13	-0.09	A00	2.00	0.00	0.00	-1.51	-1.00	0.54	11.86	0.00	0.00	0.44	0.00	0.00	-1.51
3	37.66	33-55.39	106-46.41	7.24	5	0.08	-0.01	A1D	0.50	0.00	0.17	0.00	-1.00	0.35	-1.00	0.00	0.29	0.00	0.00	0.00	0.00
3	37.65	33-55.39	106-46.41	7.24	5	0.08	0.00	A2D	2.00	-0.12	0.27	-0.21	0.03	0.46	0.11	0.64	0.10	0.64	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
870421	821 37.65	33-55.39	106-46.41	7.24	1.02	9	5	277	1	0.08	0.8	0.6	C	A1D	1.51	10	9	0.00	0.07	0	0.0	0.0	4	1.0	0.2	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	4.8	48	146	P 0	821	39.05	1.40	1.49	0.03	-0.12	1.44	0	0	0.00	0			41	0.9	S 2	40.40	2.75	0.12	0.72	
SAH	27.7	29	105	P 0	821	42.60	4.95	4.90	-0.03	0.08	1.39	0	0	0.00	0			41	0.9						
LEM	32.6	325	103	P 0	821	43.40	5.75	5.72	0.06	-0.03	1.36	0	0	0.00	0					S 2	47.65	10.00	-0.01	0.08	
LPM	45.1	17	99	P 0	821	45.30	7.65	7.81	-0.23	0.07	1.29	0	0	0.00	0			55	1.2	S 2	50.70	13.05	-0.06	0.64	
LAZ	62.9	328	97	P 1	821	48.55	10.90	10.82	0.04	0.03	0.88	0	0	0.00	0			50	1.1	S 2	56.40	18.75	-0.07	0.59	

MISSING STATION	DELTA	AZIM	EX-GAP	RD-GAP
MG	20.9	282.8	277.4	42.6
FC	25.8	263.0	277.4	62.4
CM	17.3	279.9	277.4	45.4

LAT	LON	Z	AVRPS	RMS	DRMS	
58.10	49.65	2.24	0.81	0.72	0.64	
58.10	43.16	2.24	0.90	0.56		0.48
58.10	49.65	12.24	0.24	0.99	(0.91)	
58.10	43.16	12.24	0.11	0.71		(0.63)
55.39	46.41	0.00	0.24	0.20	0.13	
				0.08	0.00	
55.39	46.41	15.90	-0.72	0.51	(0.43)	
52.69	49.65	2.24	-0.66	0.34	0.26	
52.69	43.16	2.24	-0.70	0.61		0.54
52.69	49.65	12.24	-1.20	0.55	(0.47)	
52.69	43.16	12.24	-1.27	0.51		(0.43)

DATE AND TIME OF RUN 5-15-87 CER

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	0.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	35.29	33-57.25	106-44.17	7.00	0	0.48	0.00	COb	2.00	-4.49	2.67	2.77	292.50	215.29	33.46	0.26	0.18	0.48	-4.49	2.67	2.77
2	35.29	33-54.82	106-45.90	9.77	5	0.08	-0.09	A0D	2.00	0.00	0.00	-1.52	-1.00	0.90	11.46	0.00	0.00	0.45	0.00	0.00	-1.52
3	35.29	33-54.82	106-45.90	8.25	5	0.07	0.00	A1D	0.50	0.00	0.22	0.00	-1.00	1.63	0.30	0.00	0.17	0.00	0.00	0.22	0.00
4	35.29	33-54.82	106-46.05	8.25	5	0.06	0.00	A3D	0.50	0.00	0.00	-0.28	-1.00	-1.00	0.31	0.00	0.00	0.50	0.00	0.00	0.00
5	35.29	33-54.82	106-46.05	8.25	5	0.06	0.00	A2D	2.00	-0.05	0.02	-0.28	0.02	0.01	0.20	0.32	0.21	0.62	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAH	NM	AVXM	SDXM	NP	AVPM	SDPM	I
870421	831 35.29	33-54.82	106-46.05	8.25	1.03	12	5	245	1	0.06	0.4	0.6	C	A1D	0.22	10	13	0.00	0.04	0	0.0	0.0	8	1.0	0.1	9

STN	DIST	AZM	AIN	PRMK	HRMM	P-SEC	TPOBS	TPCAL	DLY/M1	P-RES	P-WT	AMX	PRX	CALX	K	XNAG	RMK	FMP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	5.3	35	147	P	0	831	36.95	1.66	1.67	0.03	-0.04	1.66	0	0	0.00	0		49	1.1						
WTX	24.1	317	109	P	4	831	43.50	8.21	4.35	-0.08	3.94	0.00	0	0	0.00	0		45	1.0						
BAR	28.4	27	106	P	2	831	40.50	5.21	5.06	-0.03	0.16	0.00	0	0	0.00	0		46	1.0						
LEM	38.8	326	104	P	0	831	41.30	6.01	5.95	0.06	0.00	1.56	0	0	0.00	0		50	1.1	S	1	45.70	10.41	0.00	1.17
SS	38.8	280	102	P	2	831	42.20	6.91	6.78	0.22	-0.09	0.76	0	0	0.00	0		50	1.1	S	2	47.50	12.21	0.08	0.79
LPH	46.0	16	100	P	0	831	43.00	7.71	7.98	-0.23	-0.04	1.47	0	0	0.00	0		44	1.0	S	3	48.70	13.41	-0.02	0.73
HAG	51.0	303	99	P	1	831	44.20	8.91	8.84	0.08	0.00	1.07	0	0	0.00	0		43	0.9	S	3	50.70	15.41	-0.01	0.36
LAZ	64.1	328	97	P	1	831	46.40	11.11	11.05	0.04	0.02	1.00	0	0	0.00	0		48	1.1	S	2	54.50	19.21	0.01	0.07

LAT	LON	Z	AVRPS	RMS	DRMS
57.53	49.29	3.25	1.18	0.66	0.60
57.53	42.80	3.25	0.48	0.73	0.67
57.53	49.29	13.25	0.67	0.73	(0.67)
57.53	42.80	13.25	-0.13	0.71	(0.65)
54.82	46.05	0.00	0.24	0.19	0.13
				0.06	0.00
54.82	46.05	16.91	-0.61	0.31	(0.25)
52.12	49.29	3.25	-0.31	0.62	0.56
52.12	42.80	3.25	-0.97	0.57	0.51
52.12	49.29	13.25	-0.77	0.68	(0.62)
52.12	42.80	13.25	-1.42	0.51	(0.44)

DATE AND TIME OF RUN 5-15-87 CEE

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

										ADJUSTMENTS (KM)			PARTIAL F-VALUES			STANDARD ERRORS			ADJUSTMENTS TAKEN		
I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ	DLAT	DLON	DZ
1	48.66	33-57.25	106-44.17	7.00	0	0.59	0.00	DOB	2.00	-3.02	5.58	0.00	37.13	235.00	1.19	0.49	0.36	0.00	-3.02	5.58	0.00
2	48.62	33-55.62	106-47.79	7.00	6	0.12	-0.12	A0D	2.00	0.00	0.00	-3.33	-1.00	0.31	40.15	0.00	0.00	0.52	0.00	0.00	-3.33
3	48.66	33-55.62	106-47.79	3.67	6	0.04	-0.03	A1D	0.50	-0.31	0.00	0.00	0.59	-1.00	0.10	0.40	0.00	0.00	-0.31	0.00	0.00
4	48.59	33-55.45	106-47.79	3.67	7	0.04	0.00	A3D	0.50	0.00	0.00	-0.22	-1.00	-1.00	0.10	0.00	0.00	0.72	0.00	0.00	0.00
4	48.59	33-55.45	106-47.79	3.67	7	0.04	0.00	A2D	2.00	0.10	0.05	-0.45	0.02	0.02	0.06	0.85	0.40	1.85	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
870421	835 48.59	33-55.45	106-47.79	3.67	0.89	7	7	218	1	0.04	0.9	1.8	C	A1D	0.31	0	13	0.00	0.03	0	0.0	0.0	7	0.9	0.3	4

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/H1	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	6.5	61	119	P 0	835	49.90	1.31	1.28	0.03	0.00	1.26	0	0	0.00	0			33	0.6	S 2	50.90	2.31	0.04	0.00	
PAR	28.7	33	97	P 0	835	53.50	4.91	4.95	-0.03	-0.01	1.21	0	0	0.00	0			52	1.2						
LEM	31.4	328	97	P 0	835	54.00	5.41	5.40	0.06	-0.05	1.20	0	0	0.00	0			50	1.1	S 2	58.00	9.41	-0.05	0.00	
SB	36.0	279	96	P 1	835	55.00	6.41	6.18	0.22	0.01	0.88	0	0	0.00	0			49	1.1	S 2	60.10	11.51	0.42	0.00	
LPM	45.6	19	95	P 0	835	56.20	7.61	7.83	-0.23	0.01	1.12	0	0	0.00	0			52	1.2	S 3	61.50	12.91	-0.25	0.00	
MAG	48.1	303	94	P 2	835	56.90	8.31	8.25	0.08	-0.02	0.55	0	0	0.00	0			41	0.9	S 2	63.10	14.51	0.08	0.00	
LAZ	61.7	329	93	P 1	835	59.30	10.71	10.57	0.04	0.10	0.77	0	0	0.00	0			21	0.2*	S 2	66.80	18.21	-0.16	0.00	

LAT	LON	Z	AVRPS	RMS	DRMS
58.16	51.04	0.00	0.58	0.64	0.60
58.16	44.55	0.00	0.53	0.64	0.60
58.16	51.04	8.67	0.35	0.74	(0.70)
58.16	44.55	8.67	0.15	0.63	(0.58)
55.45	47.79	0.00	0.05	0.06	0.02
				0.04	0.00
55.45	47.79	12.33	-0.42	0.30	(0.26)
52.75	51.04	0.00	-0.58	0.60	0.56
52.75	44.55	0.00	-0.71	0.41	0.37
52.75	51.04	8.67	-0.78	0.65	(0.61)
52.75	44.55	8.67	-0.94	0.30	(0.26)

DATE AND TIME OF RUN 5-15-87 CEE

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KNS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	27.55	33-57.25	106-46.17	7.00	0	0.74	0.00	D0B	2.00	-3.67	5.14	2.26	93.86	45.53	14.28	0.38	0.43	0.60	-3.67	5.14	2.26
2	27.26	33-55.26	106-47.51	9.26	6	0.10	-0.14	B0C	2.00	0.00	0.00	-2.65	0.00	-1.00	21.78	0.00	0.00	0.57	0.00	0.00	-2.65
3	27.33	33-55.26	106-47.51	6.62	6	0.08	-0.02	A3C	0.50	0.10	0.00	0.00	0.47	-1.00	-1.00	0.23	0.00	0.00	0.00	0.00	0.00
3	27.31	33-55.26	106-47.51	6.62	6	0.08	0.00	A2C	2.00	0.27	0.21	-0.42	0.86	0.53	0.34	0.29	0.32	0.72	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	N	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
870421	853	27.31	33-55.26	106-47.51	6.62	0.10	11	6	176	1	0.08	0.4	0.7	B	AIC	2.65	10	12	0.00	0.06	0	0.0	0.0	7	0.1	0.2	3

STN	DIST	AZM	AIH	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	PMP	PMAG	SHMK	S-SEC	TSUBS	S-RES	S-WT	DI
CAR	6.3	57	136	P	0	853	28.90	1.59	1.57	0.03	-0.01	1.48	0	0	0.00	0			28	0.4	S	2	30.10	2.79	0.02	0.74	
SHC	26.3	253	104	P	1	853	32.00	4.69	4.64	0.11	-0.07	1.08	0	0	0.00	0			25	0.3	S	2	35.60	8.29	0.06	0.72	
BAR	28.8	32	104	P	0	853	32.40	5.09	5.05	-0.03	0.06	1.42	0	0	0.00	0			20	0.0							
LEM	37.9	326	102	P	0	853	33.00	5.69	5.57	0.06	0.05	1.40	0	0	0.00	0			20	0.0	S	2	37.00	9.69	-0.07	0.70	
LPM	45.8	19	98	P	0	853	35.00	7.69	7.92	-0.23	0.00	1.31	0	0	0.00	0			23	0.2	S	2	40.50	13.19	-0.13	0.66	
MAG	48.7	303	96	P	4	853	31.70	14.39	8.40	0.08	5.90	0.00	0	0	0.00	0			33	0.2							
LAZ	62.2	329	98	P	1	853	38.20	10.89	10.70	0.04	0.15	0.90	0	0	0.00	0			15	-0.3	S	2	45.70	18.39	-0.21	0.00	

LAT	LON	Z	AVRPS	RMS	DRMS
57.97	50.75	1.62	0.63	0.73	0.64
57.97	44.27	1.62	0.69	0.95	0.86
57.97	50.75	11.62	0.14	0.91	(0.83)
57.97	44.27	11.62	-0.03	0.88	(0.79)
55.26	47.51	0.00	0.19	0.18	0.09
				0.08	0.00
55.26	47.51	15.28	-0.67	0.40	(0.31)
52.56	50.75	1.62	-0.49	0.89	0.81
52.56	44.27	1.62	-0.57	0.60	0.51
52.56	50.75	11.62	-0.92	0.95	(0.87)
52.56	44.27	11.62	-1.09	0.49	(0.41)

DATE AND TIME OF RUN 5-15-87 CEE

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IQ	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	41.89	33-57.25	106-44.17	7.00	0	0.84	0.00	DOB	2.00	-5.50	3.83	3.10	136.89	74.60	20.21	0.47	0.44	0.69	-5.50	3.83	3.10
2	41.61	33-54.27	106-46.65	10.10	7	0.18	-0.12	ROD	2.00	0.00	0.00	-2.60	-1.00	0.95	N.30	0.00	0.00	0.90	0.00	0.00	-2.60
3	41.65	33-54.27	106-46.65	7.50	7	0.12	-0.02	A3D	0.50	0.00	0.19	0.00	-1.00	0.36	-1.00	0.00	0.31	0.00	0.00	0.00	0.00
3	41.65	33-54.27	106-46.65	7.50	7	0.12	0.00	A2D	2.00	0.27	0.41	-0.58	0.26	0.75	0.35	0.53	0.47	0.98	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SQD	ADJ	IN	NR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
870421	9 4 41.65	33-54.27	106-46.65	7.50	0.61	13	7	201	1	0.12	0.7	1.0	C	AID	2.00	10	14	0.00	0.10	0	0.0	0.0	9	0.6	0.4	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SKMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	6.6	37	138	P	1	9 4	43.30	1.65	1.71	0.03	-0.09	1.52	0	0	0.00	0			43	0.9	S 3	44.70	3.05	0.04	0.51	
NTX	24.2	320	107	P	4	9 4	49.60	7.95	4.34	-0.08	3.70	0.00	0	0	0.00	0			14	-0.4						
SMC	26.4	238	106	P	0	9 4	46.50	4.85	4.69	0.11	0.05	1.99	0	0	0.00	0			45	1.0	S 3	49.60	7.95	-0.36	0.21	
BAR	29.7	296	104	P	0	9 4	47.00	5.35	5.24	-0.03	0.14	1.90	0	0	0.00	0			42	0.9	S 3	51.00	9.35	0.32	0.27	
LEM	34.2	328	102	P	1	9 4	47.60	5.95	5.98	0.06	-0.09	1.43	0	0	0.00	0			40	0.8						
SBG	38.1	282	101	P	2	9 4	48.50	6.85	6.64	-0.22	0.00	0.94	0	0	0.00	0			25	0.3	S 3	53.70	12.05	0.16	0.45	
LPM	47.2	16	99	P	1	9 4	49.50	7.85	8.17	-0.23	-0.08	1.34	0	0	0.00	0			40	0.8						
MAG	50.8	304	98	P	2	9 4	50.60	8.95	8.78	0.08	0.09	0.88	0	0	0.00	0			34	0.6	S 3	56.70	15.05	-0.29	0.32	
LAZ	64.5	329	97	P	1	9 4	52.70	11.05	11.09	0.04	-0.08	1.23	0	0	0.00	0			31	0.5						

LAT	LON	Z	AVRPS	RMS	DRMS
56.98	49.90	2.50	0.72	0.51	0.39
56.98	43.41	2.50	0.35	1.05	
56.98	49.90	12.50	0.25	0.32	0.93
56.98	43.41	12.50	-0.25	0.89	(0.60)
					(0.77)
54.27	46.65	0.00	0.20	0.19	0.07
				0.12	0.00
54.27	46.65	16.16	-0.61	0.35	(0.23)
51.57	49.90	2.50	-0.11	0.94	0.82
51.57	43.41	2.50	-0.61	0.45	
51.57	49.90	12.50	-0.56	0.94	0.33
51.57	43.41	12.50	-1.09	0.40	(0.82)
					(0.28)

DATE AND TIME OF RUN 5-15-87 CEE

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IO	KMS	KFN	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.732050W	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	5.83	33-57.25	106-46.17	7.00	0	0.82	0.00	DOB	2.00	-5.21	3.67	3.63	118.74	67.78	33.46	0.48	0.45	0.63	-5.21	3.67	3.63
2	5.85	33-54.43	106-46.55	10.63	6	0.16	-0.13	BOD	2.00	0.00	0.00	-2.17	-1.00	0.24	9.70	0.00	0.00	0.70	0.00	0.00	-2.17
3	5.37	33-54.43	106-46.55	8.45	6	0.11	0.00	A2D	2.00	0.00	0.13	0.00	-1.00	0.19	-1.00	0.00	0.29	0.00	0.00	0.00	0.00
4	5.37	33-54.43	106-46.55	8.45	6	0.11	0.00	A3D	2.00	0.34	0.36	-0.47	0.43	0.66	0.38	0.51	0.44	0.77	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NK	AVR	AAR	NN	AVXM	SDXM	MF	AVFM	SDFM	I
870421	910 5.37	33-54.43	106-46.55	8.45	0.56	11	6	200	1	0.11	0.7	0.8	C	AID	2.17	10	12	0.00	0.09	0	0.0	0.0	5	0.6	0.2	3

STN	DIST	AZM	AIN	PRMK	HRMK	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	6.3	37	143	P	0	910	7.20	1.83	1.80	0.03	-0.01	1.69	0	0	0.00	0		35	0.7	S 2	8.50	3.13	-0.05	0.85	
SNC	26.7	238	108	P	2	910	10.10	4.73	4.78	-0.11	-0.17	0.75	0	0	0.00	0		35	0.7	S 2	14.00	8.63	0.15	0.76	
BAR	29.4	238	106	P	0	910	10.75	5.38	5.43	-0.03	-0.17	1.45	0	0	0.00	0		24	0.2						
LEN	34.0	327	104	P	0	910	11.50	6.13	5.99	0.06	0.08	1.57	0	0	0.00	0									
SB	38.2	281	102	P	4	910	10.00	4.63	9.69	-0.22	-2.28	0.00	0	0	0.00	0				S 2	17.20	11.83	-0.14	0.74	
LPN	46.9	16	100	P	0	910	13.20	7.83	8.14	-0.23	-0.08	1.48	0	0	0.00	0		29	0.5	S 3	19.00	13.63	-0.08	0.37	
LAZ	64.3	329	97	P	1	910	16.50	11.13	11.09	0.04	0.00	1.02	0	0	0.00	0		38	0.8	S 3	24.50	19.13	-0.15	0.32	

LAT	LON	Z	AVRPS	RMS	DRMS
57.14	49.80	3.45	0.76	0.53	0.43
57.14	43.31	3.45	0.61	1.03	0.92
57.14	49.80	13.45	0.11	0.81	(0.70)
57.14	43.31	13.45	-0.23	0.97	(0.86)
54.43	46.55	0.00	0.32	0.29	0.18
				0.11	0.00
54.43	46.55	17.11	-0.73	0.42	(0.31)
51.73	49.80	3.45	-0.28	0.91	0.81
51.73	43.31	3.45	-0.55	0.50	0.39
51.73	49.80	13.45	-0.62	0.99	(0.84)
51.73	43.31	13.45	-1.17	0.45	(0.35)

DATE AND TIME OF RUN 5-15-87 CEE

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	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	POS	IU	KMS	KFM	IPUN	IMAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	32.60	33-57.25	106-44.17	7.00	0	0.92	0.00	D0U	2.00	-5.83	4.30	3.62	441.45	213.57	57.82	0.28	0.29	0.48	-5.83	4.30	3.62
2	32.09	33-54.10	106-46.96	10.62	7	0.17	-0.16	B0D	2.00	0.34	0.49	-3.74	3.10	6.48	78.06	0.19	0.19	0.42	0.34	0.49	-3.74
3	32.27	33-54.28	106-47.28	6.88	7	0.05	-0.04	A3D	0.50	-0.05	0.00	0.00	0.10	-1.00	-1.00	0.15	0.00	0.00	0.00	0.00	0.00
3	32.23	33-54.28	106-47.28	6.88	7	0.05	0.00	A2D	2.00	-0.03	0.03	-0.10	0.02	0.02	0.04	0.20	0.21	0.51	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DK	GAP	M	RMS	ERH	ERZ	Q	SOD	ADJ	IN	NR	AVR	AAN	NN	AVXN	SDXR	NF	AVFM	SDFM	I
870421	915 32.23	33-54.28	106-47.28	6.88	0.22	12	7	194	1	0.05	0.3	0.5	C	AID	3.79	10	12	0.00	0.04	0	0.0	0.0	6	0.2	0.2	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/RI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	7.3	43	133	P 0	915	33.90	1.67	1.71	0.03	-0.07	1.78	0	0	0.00	0			31	0.5	S	35.40	3.17	0.16	0.45	
SMC	25.8	237	105	P 1	915	36.90	4.67	4.53	0.11	0.03	1.31	0	0	0.00	0			20	0.0	S	40.20	7.97	-0.06	0.87	
BAR	30.2	229	103	P 0	915	37.50	5.27	5.29	-0.03	0.01	1.71	0	0	0.00	0			25	0.3						
LEM	33.7	329	102	P 2	915	38.20	5.97	5.87	0.06	0.04	0.84	0	0	0.00	0					S	2 42.50	10.27	0.00	0.84	
LPM	47.5	17	98	P 1	915	40.20	7.97	8.20	-0.23	0.00	1.18	0	0	0.00	0			25	0.3	S	3 46.00	13.77	-0.03	0.79	
MAG	50.6	305	96	P 2	915	41.00	8.77	8.63	0.08	0.06	0.76	0	0	0.00	0			24	0.2	S	3 47.20	14.97	-0.11	0.39	
LAZ	64.0	330	96	P 1	915	43.30	11.07	11.00	0.04	0.03	1.08	0	0	0.00	0			20	0.0						

LAT	LON	Z	AVRPS	RMS	DRMS
56.99	50.52	1.88	0.68	0.64	0.58
56.99	44.04	1.88	0.60	1.03	0.98
56.99	50.52	11.88	0.20	0.82	(0.76)
56.99	44.04	11.88	-0.07	0.90	(0.85)
54.28	47.28	0.00	0.18	0.10	0.05
				0.05	0.00
54.28	47.28	15.54	-0.65	0.36	(0.31)
51.58	50.52	1.88	-0.34	0.98	0.93
51.58	44.04	1.88	-0.62	0.49	0.44
51.58	50.52	11.88	-0.78	0.97	(0.91)
51.58	44.04	11.88	-1.09	0.42	(0.36)

DATE AND TIME OF RUN 5-15-87 CEE

87/ 4/21 9:35

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-3.6300	2.7900	0.0000	100.0000	5.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	PDS	IQ	KMS	KFH	IPLN	IHAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	27.87	33-57.25	106-44.17	7.00	0	0.86	0.00	DOD	2.00	-3.73	4.98	2.15	39.18	64.83	6.24	0.60	0.62	0.86	-3.73	4.98	2.15
2	27.65	33-55.23	106-47.41	9.15	6	0.16	-0.11	BOC	2.00	0.00	0.00	-2.27	-1.00	0.05	7.25	0.00	0.00	0.84	0.00	0.00	-2.27
3	27.70	33-55.23	106-47.41	6.86	6	0.12	-0.02	A3C	0.50	0.00	0.00	-0.48	-1.00	-1.00	0.47	0.00	0.00	0.71	0.00	0.00	0.00
3	27.68	33-55.23	106-47.41	6.88	6	0.12	0.00	A2C	2.00	0.13	0.14	-0.67	0.07	0.08	0.44	0.49	0.48	1.01	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	ND	DM	GAP	K	RMS	ERH	ERZ	Q	SOD	ADJ	IM	NR	AVR	AAR	DM	AVXM	SDXM	MF	AVFM	SDFM	I
870421	935 27.68	33-55.23	106-47.41	6.88	0.31	11	6	178	1	0.12	0.7	1.0	B	AIC	2.27	10	11	0.00	0.10	0	0.0	0.0	6	0.3	0.3	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XNAG	RMK	PMP	PMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	6.2	55	138	P	0	935	29.40	1.72	1.52	0.03	0.10	1.75	0	0	0.00	0			29	0.1	S	2	30.30	2.62	-0.18	0.82
SHC	26.4	233	105	P	1	935	32.30	4.62	4.67	0.11	-0.16	1.23	0	0	0.00	0			31	0.5	S	2	36.00	8.32	0.04	0.86
BAR	28.8	31	102	P	0	935	32.70	5.02	5.06	-0.03	-0.01	1.70	0	0	0.00	0			27	0.4						
LPW	45.8	18	99	P	0	935	35.45	7.77	7.92	-0.23	0.08	1.55	0	0	0.00	0			25	0.3	S	2	40.85	13.17	-0.16	0.75
WAG	48.9	303	96	P	2	935	36.40	8.72	8.43	0.08	0.21	0.69	0	0	0.00	0			18	-0.1	S	2	42.40	14.72	-0.03	0.77
LAZ	62.4	329	96	P	2	935	38.55	10.87	10.72	0.04	0.11	0.70	0	0	0.00	0			35	0.7	S	3	46.00	18.32	-0.32	0.18

LAT	LON	Z	AVRPS	RMS	DRMS
57.94	50.65	1.88	0.50	0.68	0.56
57.94	44.16	11.88	0.63	1.09	0.97
57.94	50.65	11.88	0.00	0.94	(0.82)
57.94	44.16	11.88	-0.16	1.01	(0.89)
55.23	47.41	0.00	0.24	0.24	0.12
				0.12	0.00
55.23	47.41	15.54	-0.68	0.43	(0.31)
52.53	50.65	1.88	-0.35	1.05	0.93
52.53	44.16	11.88	-0.46	0.53	0.41
52.53	50.65	11.88	-0.81	1.09	(0.97)
52.53	44.16	11.88	-1.03	0.46	(0.34)

DATE AND TIME OF RUN 5-15-87 CEE

87/ 4/21 10131

	TEST(1)	TEST(2)	TEST(3)	TEST(4)	TEST(5)	TEST(6)	TEST(7)	TEST(8)	TEST(9)	TEST(10)	TEST(11)	TEST(12)	TEST(13)
RESET TO	0.1000	10.0000	2.0000	0.0500	7.0000	4.0000	-1.6300	2.7900	0.0000	100.0000	8.0000	0.5000	5.0000

VELOCITY	DEPTH	ZTR	XNEAR	XFAR	PDS	IQ	KMS	KFM	IPUN	INAG	IR	IPRN	CODE
5.850	0.000	7.	20.	250.	1.7320508	3	1	0	0	1	0	1	1011

I	ORIG	LAT N	LONG W	DEPTH	DM	RMS	AVRPS	SKD	CF	ADJUSTMENTS (KM) DLAT	DLON	DZ	PARTIAL F-VALUES DLAT	DLON	DZ	STANDARD ERRORS DLAT	DLON	DZ	ADJUSTMENTS TAKEN DLAT	DLON	DZ
1	13.39	33-57.25	106-44.17	7.00	0	0.67	0.00	DOB	2.00	-3.57	3.90	2.63	80.4111	13.32	17.90	0.40	0.37	0.62	-3.57	3.90	2.63
2	13.42	33-55.32	106-46.70	9.63	5	0.14	-0.10	A0D	2.00	0.00	0.00	-1.66	-1.00	0.35	6.64	0.00	0.00	0.64	0.00	0.00	-1.66
3	13.44	33-55.32	106-46.70	7.98	5	0.11	0.00	A3D	0.50	0.00	0.13	0.00	-1.00	0.25	-1.00	0.00	0.25	0.00	0.00	0.00	0.00
4	13.44	33-55.32	106-46.70	7.98	5	0.11	0.00	A2D	2.00	-0.01	0.18	-0.25	0.00	0.29	0.12	0.37	0.33	0.71	0.00	0.00	0.00

DATE	ORIGIN	LAT N	LONG W	DEPTH	MAG	NO	DM	GAP	M	RMS	ERH	ERZ	Q	SGD	ADJ	IN	OR	AVR	AAR	NM	AVXM	SDXM	NF	AVFM	SDFM	I
870421	1031 13.44	33-55.32	106-46.70	7.98	0.47	14	5	184	1	0.11	0.5	0.7	C	A1D	1.66	10	14	0.00	0.09	0	0.0	0.0	6	0.5	0.2	3

STN	DIST	AZM	AIN	PRMK	HRMN	P-SEC	TPOBS	TPCAL	DLY/HI	P-RES	P-WT	AMX	PRX	CALX	K	XMAG	RMK	FMP	FMAG	SRMK	S-SEC	TSOBS	S-RES	S-WT	DT
CAR	2.3	50	146	P	0	1031	15.10	1.66	1.63	0.03	0.00	1.65	0	0	0.00	0			30	0.5	S	2	18.30	2.86	-0.02	0.83	
SMC	2.3	235	106	P	0	1031	18.30	4.80	4.87	0.11	-0.12	1.55	0	0	0.00	0			30	0.5							
BAR	2.8	310	106	P	0	1031	18.55	5.11	4.99	-0.03	0.15	1.48	0	0	0.00	0			37	0.7							
LEM	3.2	326	104	P	0	1031	19.30	5.80	5.72	0.06	-0.08	1.55	0	0	0.00	0			30	0.5	S	2	23.50	10.06	0.05	0.76	
SB	3.7	279	102	P	1	1031	20.20	6.76	6.58	0.22	-0.04	1.14	0	0	0.00	0			20	0.3	S	2	25.40	11.96	0.18	0.68	
LPH	45.4	117	100	P	2	1031	21.10	7.66	7.87	-0.23	0.02	1.47	0	0	0.00	0			28	0.4	S	2	26.50	13.06	-0.17	0.67	
MAG	49.7	302	99	P	2	1031	22.15	8.71	8.60	0.08	0.03	0.72	0	0	0.00	0			30	0.5	S	2	28.30	14.86	-0.17	0.66	
LAZ	62.8	328	97	P	3	1031	24.40	10.96	10.82	0.04	0.10	0.33	0	0	0.00	0			33	0.6	S	2	32.00	18.56	-0.24	0.49	

LAT	LON	Z	AVRPS	RMS	DRMS
58.02	49.94	2.98	0.90	0.74	0.63
58.02	43.46	2.98	0.43	0.96	
58.02	49.94	12.98	0.34	0.89	0.85
58.02	43.46	12.98	-0.30	0.86	(0.78)
					(0.75)
55.32	46.70	0.00	0.25	0.24	0.13
				0.11	0.00
55.32	46.70	16.64	-0.66	0.34	(0.23)
52.61	49.94	2.98	-0.17	0.84	0.73
52.61	43.46	2.98	-0.72	0.66	
52.61	49.94	12.98	-0.69	0.91	0.55
52.61	43.46	12.98	-1.27	0.57	(0.80)
					(0.46)

***** EXTRA BLANK CARD ENCOUNTERED *****

***** EXTRA BLANK CARD ENCOUNTERED *****

Appendix 2

This appendix contains station locations, elevations and station corrections.

STATION	STATION COORDINATES			SEPTEMBER 1985 SWARM	APRIL-MAY 1986 SWARM		AUGUST 16, 1985 APRIL 21, 1987
	LATITUDE (DEG-MIN)	LONGITUDE (DEG-MIN)	ELEVATION (METERS)	STATION CORRECTION (SECONDS)	STATION CORRECTION W PORTABLES (SECONDS)	WO PORTABLES	STATION CORRECTION (SECONDS)
LAZ	3424.12	10708.36		0.22	0.07	0.10	0.04
BAR	3408.52	10637.68	2120	-0.08	0.16	0.10	-0.03
LPM	3418.77	10638.03		-0.30	-0.26	-0.27	-0.23
SB	3358.51	10710.84	3230	0.16	0.42	0.37	0.22
MLN	3448.85	10708.70	2088	-0.08	-0.22	-0.22	-0.10
CAR	3357.15	10644.07		-0.08	0.01	-0.09	0.03
SMC	3346.72	10701.16	1560	0.10	0.01	0.11	0.11
WTX	3404.33	10656.75	1555	-0.02	0.12	-0.01	-0.08
MAG	3409.75	10713.92		0.08	0.04	0.03	0.08
IJY	3420.19	10653.75		0.56	0.74	0.65	0.56
LEN	3409.93	10658.45	1698	0.06	0.09	0.05	0.06
LC1	3359.32	10650.66	1411		0.00		
LC2	3401.86	10647.14	1591		-0.34		
LC3	3402.11	10649.39	1494		0.07		
LC4	3359.94	10649.04	1507				

Appendix 3

This appendix contains first motion data for events used in fault plane solutions.

UNCORRECTED FIRST MOTION READINGS
SEPTEMBER 1985 SWARM

EVENTS

STATION	9-18 11:14	9-18 18:02	9-18 18:22	9-18 19:19	9-18 19:23	9-18 19:38	9-19 2:24	9-19 2:31	9-19 9:38	9-19 2:28
MAG	D	D	D	D	D	D	D	D	D	D
SB	D	D	D	D	D	D	D	D	D	D
SMC	D	D	D	D	D	D	D	D	D	D
LEM	D	D	D	D	D	D	D	D	D	D
LPM	U	U	U	U	U	U	U	U	U	U
MLM	-	D	poor U	-	-	U	U	U	U	U
LAZ	D	D	D	D	D	D	D	D	D	D
WTX	D	D	D	D	D	D	D	D	D	D
LJY	D	D	D	D	D	D	D	D	D	D
BAR	D	D	D	D	D	D	D	D	-	poor D
CAR EXT	U	U	U	U	U	U	U	U	U	U

UNCORRECTED FIRST MOTION READINGS
APRIL-MAY 1986 SWARM

EVENTS

STATION	4-28 3:15	4-28 12:59	4-28 5:42	4-29 8:30	4-30 4:07	4-30 5:39	4-30 16:12	4-30 16:15	5-1 9:32	5-1 16:28	5-4 22:30
CAR	D	-	D	-	D	D	D	-	D	D	D
WTX	U	poor U	U	U	U	U	U	poor U	-	U	U
LEM	D	D	D	D	D	D	D	D	poor D	D	D
BAR	U	U	U	U	U	U	U	U	U	U	U
SMC	poor U	D	D	D	U	D	D	D	D	D	D
SB	poor D	D	poor U	poor U	poor U	-	U	poor U	-	-	poor U
LJY	poor D	U	poor D	D	poor D	-	-	-	-	-	-
LPM	U	U	U	U	U	U	U	U	U	U	U
MAG	U	U	U	U	poor U	poor U	U	U	poor U	-	U
LAZ	D	D	D	D	D	D	D	D	poor U	D	D
MLM	-	poor D	-	-	-	-	-	-	-	-	-
CAR EXT	-	-	-	U	-	-	-	-	-	-	-
LC1	-	-	-	-	U	U	U	U	U	-	-
LC2	-	-	-	-	D	U	poor U	U	D	D	-
LC3	-	-	-	-	U	D	-	poor D	D	D	-

UNCORRECTED FIRST MOTION READINGS
SWARM OF APRIL 21, 1987

	EVENTS									
STATION	8:19	8:21	8:31	8:35	8:53	9:04	9:10	9:15	9:35	10:31
CAR	U	U	U	U	U	U	U	U	U	U
WTX	poor U	-	poor U	-	-	poor D	-	-	-	-
LEM	U	-	U	U	U	U	-	U	-	U
BAR	U	U	U	U	U	U	U	U	U	U
SMC	-	-	-	-	poor U	D	-	D	D	-
SB	poor U	-	poor U	U	-	-	-	-	-	-
LPM	U	U	U	U	U	U	U	-	U	U
MAG	poor D	-	D	D	-	-	-	poor D	-	poor D
LAZ	U	poor D	U	U	poor U	U	U	-	poor D	U

UNCORRECTED FIRST MOTION READINGS
AUGUST 16, 1987

STATION	
CAR	D
WTX	D
LEM	U
BAR	D
SMC	D
SB	D
LPM	poor U
LJY	D
MAG	U
LAZ	D
MLM	U

Appendix 4

This appendix provides a short note on the history of events in a restricted area near the western branch of the Hot Springs-Montosa fault zone near Socorro.

The western stretch of the Hot Springs-Montosa fault zone near Socorro has, until recently, been an area of low seismicity. Figure 1.1 is a plot of all recorded activity between latitudes 33.85 and 34.30 and longitudes 106.75 and 106.86. Data plotted from August 1975 through December 1986 contains B quality or better HYPO71 solutions while data from January 1 to May 1, 1987 contains C quality or better solutions.

Prior to 1983, only two events occurred, one in 1976 and the other in 1982. A less than optimal array of instrumentation in place during this time, however, did not always allow good solutions to be obtained in this region. The remaining activity, 219 events, occurred from April, 1983 through April, 1987.

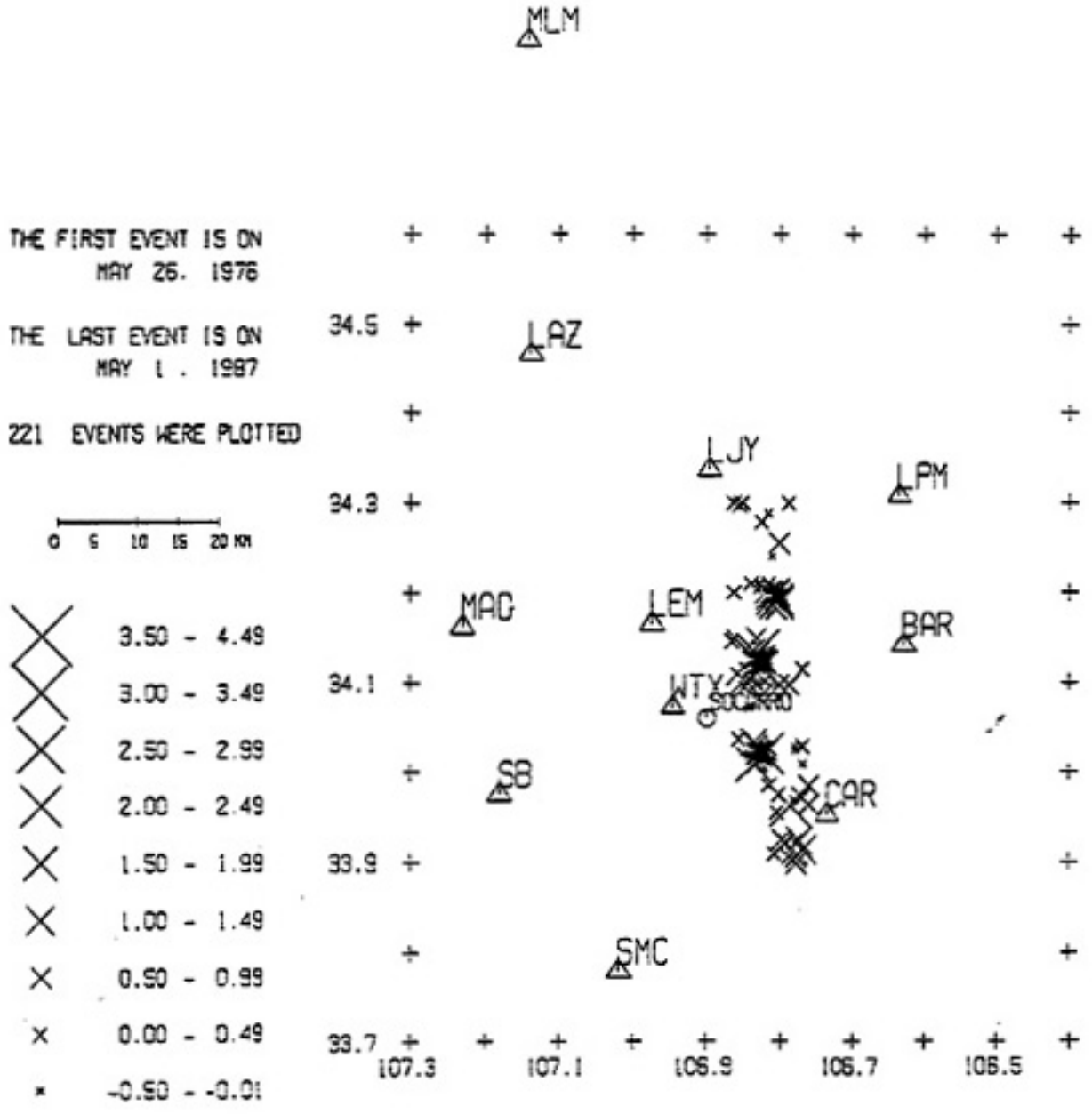

Figure 4.1. Locations of seismic activity near the west branch of the Hot Springs-Montosa fault from May 1976 through April 1987.

Appendix 5

This appendix contains the FORTRAN plotting program used in the preceeding analysis.

```
C
C
C*****************************************************************
C       Program to plot time sequence of events vs depth.       *
C       Values of depth are plotted with associated error       *
C       bar (in this case, ERZ).                                *
C       Grflib plotting subroutines are accessed.               *
C                            May, 1987                          *
C*****************************************************************
C
      PARAMETER  MX=1000
      DIMENSION  DEPTH(MX),TIME(MX),ERZ(MX),DMAX(MX),DMIN(MX)
         CHARACTER*10  DATFIL
C
C    open and read data file
C
      WRITE(5,*) ' Type in name of data file'
      READ(5,1) DATFIL
1        FORMAT(A10)
C
      WRITE(5,*) ' Type in the number of data to be plotted'
      READ(5,2) N
2     FORMAT(I5)
C
         OPEN(UNIT=36,FILE=DATFIL,DEVICE='DSK')
         OPEN(UNIT=37,FILE='REDSEQ',DEVICE='DSK')
C
         DO 6 I=1,N
6          READ(36,*) TIME(I),DEPTH(I),ERZ(I),IDUM
C
         WRITE(37,*) ' SEQINC.FOR DATA READ IN '
         DO 7 I=1,N
7             WRITE(37,8) TIME(I),DEPTH(I),ERZ(I)
C
8     FORMAT(1x,F7.4,3X,F5.2,3X,F3.1)
C
         DO 10 I=1,N
               DMIN(I) = DEPTH(I) - ERZ(I)
               DMAX(I) = DEPTH(I) + ERZ(I)
10       CONTINUE
C
         CALL INITAL
C
C        axes are set up as 8 inches
C
         CALL AXIS(1.0,1.0,'TIME SEQUENCE OF EVENTS',23,8.0,90.0,
     2 0.0,5.0)
         CALL AXIS(1.0,1.0,'DEPTH (KM)',-10,8.0,0.0,0.0,2.0)
         CALL PLOT(1.0,1.0,-3)
C
         DO 110 I=1, N
                CALL SYMBOL(DEPTH(I)/2.,TIME(I)/5.,0.15,11,0.,-1)
                CALL SYMBOL(DMIN(I)/2.,TIME(I)/5.,0.15,13,0.,-1)
```

```
                CALL SYMBOL(DMAX(I)/2.,TIME(I)/5.,0.15,13,0.,-1)
                CALL SYMBOL(DEPTH(I)/2.,TIME(I)/5.,ERZ(I),13,90.,-1)
110   CONTINUE
C
C             a second call to axis is sometimes required
C                  when the system is being strange.
C
C         CALL AXIS(0.0,0.0,'TIME SEQUENCE OF EVENTS',23,8.0,90.0,
C     2 0.0,5.0)
C         CALL AXIS(0.0,0.0,'DEPTH (KM)',-10,8.0,0.0,0.0,2.0)

      CALL RSTR
C
      STOP
      END
```