

Technical Report #2, 22 October 1982
Pueblo Viejo-Quixal Seismograph Network
11 March 1981 through 16 April 1982

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INTRODUCTION

Since the Pueblo Viejo-Quixal Seismograph was installed in February 1979, approximately 46 months have elapsed. By the end of July 1982, more than 6000 local and regional earthquakes were recorded and approximately 3500 events were located.

The data, data analysis and interpretation of the data up to 10 March 1981 were already reported in the following:

Preliminary Report #1	25 April 1979
Preliminary Report #2	10 November 1979
Preliminary Report #3	29 July 1980
Technical Report #1	10 April 1981

The objective of this report is twofold: (1) to summarize the results of the seismic program following the preceeding period (11 March 1981 through 16 April 1982), and (2) to review the major findings uncovered under this program. To facilitate reviewing the scope, some of the data presented in the previous reports will be duplicated and described again in this text.

1. OPERATION OF PUEBLO VIEJO-QUIXAL SEISMOGRAPH NETWORK

1.1. Operation of the Network

Since the installation of the Pueblo Viejo-Quixal Seismograph Network in February 1979, we have experienced several setbacks. Of the most severe nature was that station 6 and 7 were destroyed by the local bandits on March 27, 1979 (station 6), March 7, 1981 and March 20, 1982 (station 7, twice) respectively. Station 7 was relocated twice, on April 29, 1979 and October 5, 1979, and station 6 was relocated on March 1, 1981. Due to these incidents, we lost 3 geophones, 3 PA/VCO's, 3 transmitters, 3 antennas and 9 solar panels.

On July 27, 1982, the central recording station was hit by lightning and suffered extensive damages, including timing system, 9 pen motors (for drum recorders), 2 receivers and unidentified number of modules in the delay-memory-trigger system. So far the timing system, 2 receivers and 2 pen motors have been repaired but only two pen motors were replaced and two drum recording systems are operating.

Figure 1A and Table 1 show the locations of the stations before and after they were relocated. A closed square illustrates the currently used station and an open square illustrates the location previously occupied but no longer in use.

1.2. Operation During the Period From March 1981 through May 1982

During this 14-month period, combined total of down time for the remote stations (days out of operation) reached as much as 1902 days

(Figure 1B), comprising approximately 49 percent of the total operational time of 3870 days (430 days x 9 stations). The down time of each station is illustrated in Figure 1B by a black bar.

Average station down time of the seismograph network established by the University of Texas and operated in other countries (such as the Dominican Republic and Ecuador) is usually 10 to 20 percent. The station down time of the Pueblo Viejo-Quixal in the preceeding year (February 1979 through March 1981) was 15.4 percent. The reason for this high rate of down time in this period is primarily due to depleted spare component. The lost and damaged equipment by local banditry and lightning have never been replaced due to lack of funds.

Two geophones from station INS and LEW, for instance, were moved to stations 6 and 7 after these stations were demolished by local residents. Stations INS and LEW were out of operation for a long time because there simply were no spare geophones. After station 7 vault was flooded on early April 1982 and transmitters were damaged, we did not have any spare transmitters and the station became idle.

The University of Texas proposal is usually prepared by including the spare component enough for "normal" operation. We estimate the life span of necessary spare components. Heavy constraint on budget required by INDE made it impossible for us to provide comfortable number of spare components for the operation.

It is emphasized that the lost and/or damaged component, caused by the reasons beyond the University's technical responsibility, such as local banditry, flood and lightning, should be replaced promptly. Appropriate budgetary arrangement by INDE on such occasions are urgently needed.

2. DISTRIBUTIONS OF THE EARTHQUAKES RECORDED BY THE PUEBLO VIEJO-QUIXAL SEISMOGRAPH NETWORK: 11 March 1981 through 16 April 1982

2.1. Data Analysis

During the period from 11 March 1981 through 16 April 1982, 1309 earthquakes were recorded (see attachment). The daily rate of earthquakes recorded through this period was 3.24 events/day. This rate was significantly lower than the rate of the preceeding period (Feb. 1979 through Feb. 1981) estimated at 5.93 events/day. This lower rate in this period was primarily due to the lower-than-average performance of the remote stations which cut down the perceptibility of the network.

A procedure for data analysis was described in the previous reports (Preliminary Report #1, p. 2-4; #2, p. 14-17; #3, p. 5-8). It was emphasized in these reports that the accuracy of the epicenter determination is affected by the various factors such as the number of the stations recorded, distribution of recording stations, signal-to-noise ratio, the station correction, the crustal model employed and timing resolution of the recording system.

To draw a meaningful conclusion from an ensemble of data, therefore, all the data should not be handled equally, but only the data with higher accuracy should be selected.

2.2. The Regional Seismicity

Distribution of earthquakes recorded during the period from 11 March 1981 through 16 April 1982 is illustrated in Figure 2A. The plot covering the period prior to 10 March 1981 is shown in Figure 2B for reference.

In these figures, only the events that meet the following conditions are selected and plotted:

1. IQ (quality factor) was equal to or less (better) than 3.
2. S (the standard deviation) was less than 0.5.

An X in these figures represents event with the depths between 0 to 60 km and an open square indicates events deeper than 60 km. The size of the symbol is approximately parallel to the magnitude, but sizes in Figure 2A and 2B have not been coordinated. The largest earthquake in Figure 2A was located at $90^{\circ}41'W$ and $15^{\circ}29'$ and magnitude (M_r) was 5.8. The heavy lines in Figures 2A and 2B show the regional fault systems and the lighter solid lines illustrate the contact between two different geological elements (after Bonis et al., 1970). These two figures show similar pattern of distribution, in general there exist some differences in detail. From these figures we can observe the following trends:

- (a) Linearly aligned distribution along the Chixoy-Polochic fault indicates that this fault is indeed active. The activity is significantly higher towards east of $90^{\circ}40'$ meridian.
- (b) The scattered activity distributes along the Motagua fault. Due to the distance from the network, the error in the epicenter determination in this area is far greater than those within the network. On the contrary to the trend along the Chixoy-Polochic fault, the activity along the Motagua fault is primarily confined to the west of $90^{\circ}40'$ meridian. Taking into account the effect of the distance on perceptibility, the level of seismic activity along the Motagua fault is estimated approximately 2 times higher than those at the Chixoy-Polochic fault.

(c) In Figure 2A, a linearment with the orientation of northwest to southeast is extending from the upper left-hand corner of the figure, passing through stations 2, 3 and the dam site to the east of station 7. This trend was almost absent in the previous study period (Figure 2A). It started to emerge more clearly during the current study period as shown in Figure 2A. Since the trend of this linearment is approximately parallel to one of the fault plane solutions (section 2.3), this distribution is considered to be reflecting the regional stress pattern as shown in Figure 2C, Case I. Under the stress field of north-south compression provided by northerly thrust of the Cocos plate and east-west tension resulted from westward movement of the Caribbean plate, the rupture generally develops into the direction of northwest-southeast or northeast-southwest. An alternative interpretation is offered by the differential movements of Motagua and Chixoy-Polochic faults as shown in Figure 2C, Case II. The movements of both the fault systems are left-lateral and the Motagua fault is moving faster than the Chixoy-Polochic fault. Accordingly, the area between two fault systems is subjected to shearing force. The direction of rupture will be again northwest-southeast or northeast-southwest.

(d) The events distributed east of station 5 can be interpreted either along northeast-southwest linearment which is conjugated to the trend described in section (c), or isolated linearment trending east-west. The distribution shown in Figure 2B, which is stretching both eastward and westward as compared to those shown in Figure 2A, probably favors the latter interpretation.

2.3. The Seismicity in the Vicinity of the Pueblo Viejo Dam Site

Figures 3A and 4A show the earthquake located near the Pueblo Viejo dam site during the period of 11 March 1979 through 16 April 1982. The corresponding plot for the preceeding period are exhibited in Figure 3B and 4B for reference. All the explosion events were eliminated from these figures to simplify the illustration. Most of the events north of Rio Chixoy and the events southeast of station 1 are probably associated with the activity of the Chixoy-Polochic fault.

The activities near the dam site are aligned to the northwest-southeast or northeast-southwest trending or in echelon of these trends. Two solutions obtained in the fault plane solutions (described in the next section) are N17°W and N48°E respectively (Figure 5), and are roughly parallel to the directions of the active seismic zones mentioned above. The differential shear illustrated in Figure 2C, Case II also gives the identical directions of the possible rupture zones.

The important revision revealed during this period is the length of northwest-southeast trending activity. Taking the distance between the events located at 15°39'N, 90°56'W and 15°03'N, 90°20.5', the length of this potential rupture zone is 92 km long.

Utsu (1968) delivered the relation between surface magnitude M_s and the length of aftershock zone l as follows:

$$M_s = 2 \log l \text{ (km)} + 3.6 \quad (1)$$

It is generally accepted that the aftershock zone represents the area in which the rupture occurred. Therefore, we can consider l as the length of the rupture zone as well. If we take the value of l at 92km, the magnitude (M_s) calculated from equation (1) is estimated at 7.5.

Since the value $l = 92 \text{ km}$ represents the maximum length of possible rupture zones, $M_s = 7.5$ gives the maximum magnitude we would expect from this local faults.

2.4. Composite Fault Plane Solutions

The current station coverage in Guatemala is insufficient for the construction of focal mechanism (or fault plane) solutions for individual events; however, it is possible to combine the initial motion from many events within a given tectonic regime and construct a single composite fault plane solution. To compliment our study based on the data from the Pueblo Viejo-Quixal Network, we are requesting the micro-film copy of the seismograms from the World-Wide Standardized Seismograph Network (WWSSN) for the events that occurred in Guatemala and recorded by the sufficient number of stations, but have not received at this writing.

During this study period, we did not get the sufficient number of stations operating at the same time, and was judged that the data set from this period was not favorable to improve the composite fault plane solutions. Therefore, we have to deploy the result that was concluded in the previous report.

Figure 5 shows an upper hemisphere equal-area projection of the reliable first motions. A closed circle shows compression and an open circle illustrates dilation of the first motion. This composite fault plane solutions demonstrate that the earthquakes are a combination of normal faulting and strike-slip mechanism. Two solutions illustrated in Figure 5 are:

Fault Plane #1	Strike N17°W	Dip 30°E
Fault Plane #2	Strike N48°E	Dip 35°NW

Along Fault Plane #1, we do expect the motion of right-lateral strike-slip and east downthrown normal faulting. For Fault Plane #2, the anticipated movements are left-lateral strike-slip and northwest downthrown normal faulting. These solutions also suggest the regional stress pattern of east-west tension and north-south compression. These solutions are in general agreement with the study of Burkhart (1978) based on Landsat imagery that support the regional movement expected from the eastward motion of the Caribbean and north to North-eastward motion of the Cocos Plates.

3. MAGNITUDE-FREQUENCY RELATION AND RECURRENCE TIME

3.1. Relation Between the Magnitude Scales

Currently two different magnitude circles, m_b (body wave magnitude) and M_s (surface wave magnitude), are widely used. The former, the body wave magnitude, is determined from the maximum amplitude of body waves and the latter, surface wave magnitude, was determined from the surface wave amplitude.

Another magnitude scale, M_T , which is commonly used by many operating networks, is determined from the duration time of the events. For a large event, the maximum amplitude is readily clipped and it became impossible to determine neither m_b nor M_s . M_T , the duration time magnitude, on the other hand, is always applicable and able to cover the wide range of magnitude. The drawback of M_T is that this method requires an empirical formula that connects M_T to other magnitude scales.

Empirically it is known that the duration time of an earthquake, τ , is correlated to the magnitude of the event in the following form:

$$M\tau = a + b \log \tau.$$

To find out the value of a and b , the duration times of the events with known body wave magnitude, m_b , reported by the NEIS, are plotted in Figure 6. Based on this data, the following empirical formula is given for the duration time magnitude, $M\tau$:

$$M\tau = -2.67 + 3.06 \log \tau \text{ (in sec)}$$

3.2. Frequency - Magnitude Relation

3.2.1. The NEIS Data File

To examine the level of seismic activity, two sets of data were studied. All the events reported in the NEIS earthquake file during the period from 1963 through 1980 and within the region $89^\circ - 92^\circ$ West and $12^\circ - 16^\circ$ North, were counted for in the individual magnitude ranges. Figure 7A shows the plot of the cumulative events count N versus magnitude m_b . The data point shows relatively good linear alignment between $m_b = 4.9$ and 6.4 , but started to fall down below the magnitude $m_b = 4.5$. This is due to the effect that the regional perceptibility of the WWSSN is approximately 4.5 and some of the events below this magnitude started to escape from being detected. This relation is given as follows:

$$\log N = 7.19 - 1.15 m_b \text{ (for } 89^\circ - 92^\circ, 18 \text{ years)}$$

If the event count is normalized for the annual count

$$\log N' = 5.93 - 1.15 m_b \text{ (for } 89^\circ - 92^\circ, \text{ per year)}$$

Based on this relation, the annual count of the events and the recurrence time, $1/N'$, is calculated and shown in Table 2A.

3.2.2. The Data From Pueblo Viejo-Quixal Network

Figure 7B shows the frequency-magnitude relation recorded by the Pueblo Viejo-Quixal Network. Data period covers from 13 February 1979 through 16 April 1982. Two sets of data are shown in this figure. Closed circles show all the events located by the network and closed squares illustrate the events that were located within 200 km square from the dam site. Closed circles define a linear trend for the magnitude range 5.5 and up. The count starts to fall down for the events with magnitude smaller than 5.5.

The observed frequency-magnitude relation is given by:

$$\log N = 7.86 - 1.32 M_r \text{ (for the events within 200 km grid, per year)}$$

3.3. Recurrence Time

By the use of the frequency-magnitude relations defined in sections (3.2.1.) and (3.2.2.), the recurrence time ($1/N$) as the function of the magnitude range can be readily calculated and shown in Table 2A and 2B.

Table 2A gives the recurrence time based on the NEIS data (for the region $89^\circ - 92^\circ$ West and $12^\circ - 16^\circ$ North) and 2B indicates the recurrence time based on the data from the Pueblo Viejo-Quixal Network (for the grid of 200 km for each side). Throughout the entire magnitude ranges, the latter gives approximately 4 times higher seismicity than the former.

4. ACCELERATION AND INTENSITY

4.1. Acceleration Recorded At The Dam Site

Two sets of 3-component KINEMATRICS SMA-1 strong motion accelerographs have been operated at the dam site since March 1978. Records for the period between February 1981 and May 1982 are analyzed.

To facilitate the comparison of the data, the observed maximum acceleration from earthquakes during the period from March 1978 through May 1982 is listed in Table 4A as reported in the previous report. Table 4B shows the maximum acceleration excited by the explosions. The data from this study period is exhibited in Table 4C.

The date shown in the first column on each Table is the recording period labeled in each roll of the record. Since this SMA-1 is not equipped with the timing system that enables us to identify the absolute time of the events, it is not possible for us to identify each earthquake recorded by SMA-1. Each table shows the recording period on each roll of film, the ID number within the roll, the maximum acceleration (measured in g) for longitudinal, vertical and transversal components, and the duration of recognizable amplitudes.

During the 14-month period from March 1981 through May 1982, 13 events were recorded by the strong motion accelerograph at the rate of 10.3 events/year. The number of earthquakes recorded by SMA-1 in the previous period (March 1978 through February 1981) was 49 events at the rate of 16.3 events/year. The greatest maximum acceleration recorded during this period was 0.119g for transversal component and 0.037g for vertical component (30 April - 3 June 1981). The greatest maximum acceleration experienced prior to the current study period was 0.133g for longitudinal component (10 March - 7 April 1978) and 0.050 g for vertical component (18 January - 11 February 1981, Table 4A).

4.2. Calculated Acceleration from the NEIS Data File

To examine the accelerations that could have been generated by the regional earthquakes in the NEIS data file, the maximum acceleration was calculated based on the magnitude and distance and shown in Table 5. The following equation (Esteva, 1973) was used to calculate the peak ground acceleration from given magnitude:

$$a = 5000 \exp (0.8M) / (HD + 40)^2$$

where a = peak ground acceleration in cm/sec^2
 M = magnitude. When both m_b and M_s are given,
 larger value is used.
 HD = hypocentral distance in km

Although this formula was established for the region of California, it was assumed that this formula still provides the first approximation in Guatemala.

Correlations of the calculated acceleration listed in Table 5 and the observed acceleration shown in Table 4A was not quite successful because no absolute time is available for strong motion accelerograms. Only one event (No. 1 of 10 March - 27 April 1978) could be correlated with an earthquake from the NEIS data (30 March 1978, 19h30M, $m_b = 5.1$, hypocentral distance = 47 km). This earthquake gives the largest calculated acceleration at the dam site for the recording period. The calculated acceleration at the dam site from the earthquake of 30 March 1978 is about 40cm/sec^2 (0.04g) based on the above formula. The maximum accelerations of this event on the accelerograms are 0.133, 0.033, and 0.065 for longitudinal, transversal and vertical component respectively. In most earthquakes, the vertical ground acceleration is ranging from one-third to two-thirds of the horizontal acceleration. If we

assume that the calculated acceleration given by Esteva's formula is for vertical ground acceleration, the calculated and observed maximum accelerations of this event are relatively well correlated to each other.

In Table 5, it is interesting to note that the calculated acceleration at the dam site from 4 February 1976 Guatemala earthquake ($m_b = 6.2$, $M_s = 7.5$, $H_d = 150$ km) was 0.057g. One of the largest aftershocks (4 February 1976, 09h 30m, $m_b = 5.4$, $H_D = 38.7$ km) provided even greater acceleration of 0.062g. This is due to the difference in the distances of these events from the dam site, despite the latter was the event with much smaller magnitude.

One of the important conclusions we can draw from Table 5 is that none of the events have exceeded 0.07g during the past 18 years (1963-1980).

4.3. Intensity Associated With the Guatemala Earthquake of 4 February 1976

The greatest earthquake that occurred in Guatemala in recent years is 4 February 1976 Guatemala earthquake. The reported surface wave magnitude was 7.5. The intensity distribution associated with this earthquake is shown in Figure 8 (after Espinosa et al., 1976). Intensity VI in the modified Mercalli scale was assigned at the Pueblo Viejo dam site.

There are several churches in the neighboring communities that suffered moderate to severe structural damages but managed to survive from 4 February 1976 earthquake. Figure 9 shows the damages of the church located in San Cristobal Verapaz. It is said that these churches were built near the 16th century and their original structures have survived since. The church in San Cristobal Verapaz, for instance, reported to have been damaged in 1907 by an earthquake (not reported in NEIS Earthquake File)

causing some cracks on the walls and a part of the roof fell down. The structure was primarily made of adobe with little or no structural reinforcement. This structure is categorized as Masonary class D (poor structure) after C.F. Richter (1958).

The extent of the structural damage by 1976 Guatemala earthquake for the church in San Cristobal Verapaz clearly indicates that this church will not survive for the ground motion of intensity VIII and greater. This observation supports the conclusion that the area adjacent to San Cristobal Verapaz never experienced the ground motion equal to or greater than intensity IX in the modified Mercalli scale at least for the past 300 to 400 years.

5. CONCLUSION AND RECOMMENDATION

5.1. Conclusion

A. Two major fault systems, the Motagua fault and Cuilco-Chixoy-Polochic fault, are proved to be active and comprise a complex plate boundary between the North American and the Caribbean plates. Due to the nature of plate boundary, potential for major earthquake, probably up to magnitude 7.5, exists along these faults.

B. The composite fault plane solutions of the earthquakes in the area of Pueblo Viejo dam site and given as follows:

Fault Plane #1	Strike N17°W	Dip 30°E
Fault Plane #2	Strike N48°E	Dip 35°NW

These solutions are approximately in agreement with the stress field comprising of north-south compression and east-west tension. This stress field is interpreted as the consequence of the regional plate

motions; namely northward thrust of Cocos plate and westward movement of the Caribbean plate.

C. A prominent northwest-southeast trending lineation that passes through the vicinity of the dam site started to emerge during the study period of 11 March 1981 through 16 April 1982. This trend was not observed during the preceeding period. The dimensions of this active zone is tentatively measured at 92 km long. Based on Utsu's formula (1968), the greatest earthquake that may take place along this zone is estimated at 7.5 (M_s).

D. The recurrence time of the regional earthquakes is estimated from both the NEIS earthquake data file and the data from Pueblo Viejo-Quixal Network. The recurrence time for magnitude (m_b) 7.5 are estimated at 501 years and 110 years respectively.

E. The strong motion accelerographs operated at the dam site since March 1978 registered the greatest maximum acceleration of 0.133g for the horizontal component and 0.050g for vertical. The peak (vertical) accelerations that could have been measured at the dam site for all the major earthquakes since 1963 were calculated using Estiva's formula (1973). The calculated peak acceleration associated with the 1976 Guatemala earthquake and one of the largest aftershocks at the dam site were 0.057 g and 0.062g respectively. During the past 18 years, no earthquake exceeded the peak acceleration of 0.07g.

F. Surviving old church (said to have been constructed in 16th century) in San Cristobal Verapaz indicates that this area has not experienced the ground motion with the intensity greater than IX for nearly the past 400 years.

5.2. Recommendation

- A. The seismic monitoring program will face another crucial phase when impounding of the reservoir starts in early 1983. Before this critical period starts, it is necessary (1) to remedy all the instrumental problems and bring the network into top condition, and (2) to install the Computerized Seismic Monitoring System to enhance the real time monitoring capability for the water induced earthquake.
- B. To achieve these targets, it is urged to improve the following:
 - B1. To sign the contract for the lease of the computerized system and extension of the seismic program as soon as possible.
 - B2. To process the invoice submitted by the University immediately. Delay in payment arose the concern of the University administration.
 - B3. For the equipment lost or damaged by the causes uncontrollable by the University, should be replaced immediately at INDE's expense.
- C. To improve the maintenance of the seismic system. The following procedure should be followed both by INDE and UT personnel:
 - C1. Examination of the station performance (by means of seismic signal at the base station) on daily basis and prompt identification of any malfunction.
 - C2. Prompt response by INDE's maintenance crew to remedy the malfunction when a potential problem is identified.
 - C3. If INDE's maintenance crew is unable to remedy the problem, immediately contact UT personnel. Detailed description of the problem should be furnished along with this report.

- C4. Improvement of technical background for INDE's maintenance crew, including on spot training by visiting UT technician/scientist and sending a technician to Texas for training course.
- C5. Sending the data on bi-weekly basis. UT personnel examines the record upon arrival and contacts INDE if any malfunction is identified on the record.

REFERENCES

- Aki, Keitti (1965). Maximum likelihood estimate of b in the formula $\log N = a - bM$ and its confidence limits, Bull. Earthq. Res. Inst. 43, 237-239.
- Bonis, S., O. H. Bohnenberger, and G. Dengo (1970). Mapa Geologico de la Republica de Guatemala.
- Burkhart, B. (1978). Offset across the Polochic fault of Guatemala and Chiapas, Mexico, Geology, 6, 328-332.
- Dean, B. and C. Drake (1978). Focal mechanism solutions and tectonics of the Middle Amerca arc, Journal of Geology, 86, 111-128.
- Dengo, G. (1967). Geological structure of Central America, in Studies in Tropical Oceanography, Miami Univ., Miami, Florida, 5, 56-73.
- Espinosa, A. F., J. Asturias, and A. Quesada (1976). Applying the lessons learned in the 1976 Guatemala earthquake to earthquake-hazard-zoning problems in Guatemala, International Symposium on the February 4th, 1976 Guatemala earthquake and the reconstruction process, Proc. Vol. I.
- Esteva, L., and Villavérde (1973). Seismic risk, design spectra, and structural reliability, 5th World Conference on Earthquake Engineering, Proc. Vol. 2, Rome 1973, 2586-2596.
- Gutenberg, B. and C. F. Richter (1954). Seismicity of the earth, Princeton Univ. Press. Princeton, N.J. 310 pp.
- Matumoto, T. and G. V. Latham (1976). Aftershocks of the Guatemala earthquake of February 4, 1976, Geophys. Res. letters, 33, 599-602.
- Molnar, P. and L. R. Sykes (1969). Tectonics of the Caribbean and Middle America region from focal mechanisms and seismicity, Bull. Geol. Soc. Am. 80, 1639-1684.

- Muehlberger, W. and A. Kitchie (1975). Caribbean-Americas plate boundary in Guatemala and southern Mexico as seen on Skylab IV orbital photography, *Geology*, 3, 232-235.
- Ohtake, M., T. Matumoto, and G. V. Latham (1977). Seismicity gap near Oaxaca, southern Mexico as a probable precursor to a large earthquake, *Pageoph.* 115, 375-385.
- Richter, C. F. (1958). *Elementary seismology*, Freeman and Company, San Francisco and London, 768 pp.
- Utsu, T. (1968). Seismic activity in Hokkaido and its vicinity, *Geophys. Bull. Hokkaido Univ., Japan*, 20, 51-57.

FIGURE CAPTIONS

- Figure 1A Distribution of Stations. Closed square indicates the location of the current station. Open square indicates the location of the station previously occupied but not in use now.
- Figure 1B Down time of remote stations. Shaded bar indicates the time in which station was out of operation.
- Figure 2A Epicenter plot of the regional events from 11 March 1981 through 16 April 1982. An X represents an event shallower than 60 km and an open square shows earthquakes deeper than 60 km. The size of the symbol is proportional to the magnitude of the event. The largest earthquake shown in this figure is 5.8 located at $90^{\circ}41'W$ and $15^{\circ}29'N$.
- Figure 2B Epicenter plot for the period from 13 February 1979 through 11 March 1981.
- Figure 2C Schematic diagram of stress field and the direction of ruptures.
- Figure 3A,
4A Epicenter plot in the vicinity of the Pueblo Viejo dam site during the period from 11 March 1981 through 16 April 1982.
- Figure 3B,
4B Epicenter plot in the vicinity of the Pueblo Viejo dam site during the period from 13 February 1979 through 11 March 1981.
- Figure 5 Composite fault plane solutions in the area covered by the Pueblo Viejo-Quixal Seismograph Network. Closed circle (and shaded area) represent the upward movement of initial motion and open circle indicates the downward movement. Arrows show the principal axes of compressional and tensional stress.

Figure 6 Relation of m_b versus duration time, τ (in sec). The value of m_b is adopted from the NEIS data file. An empirical formula of

$$M\tau = -2.67 + 3.06 \log \tau$$

was sought from this diagram.

Figure 7A Frequency-magnitude relation from the NEIS data file

Figure 7B Frequency-magnitude relation based on the data from the Pueblo Viejo-Quixal Seismograph Network.

Figure 8 Intensity distribution of 4 February 1976 Guatemala Earthquake (after Espinosa et al. 1976).

Figure 9 Damages caused by the Guatemala earthquake of 4 February 1976 at San Cristobal Verapaz.

FIG. 1A

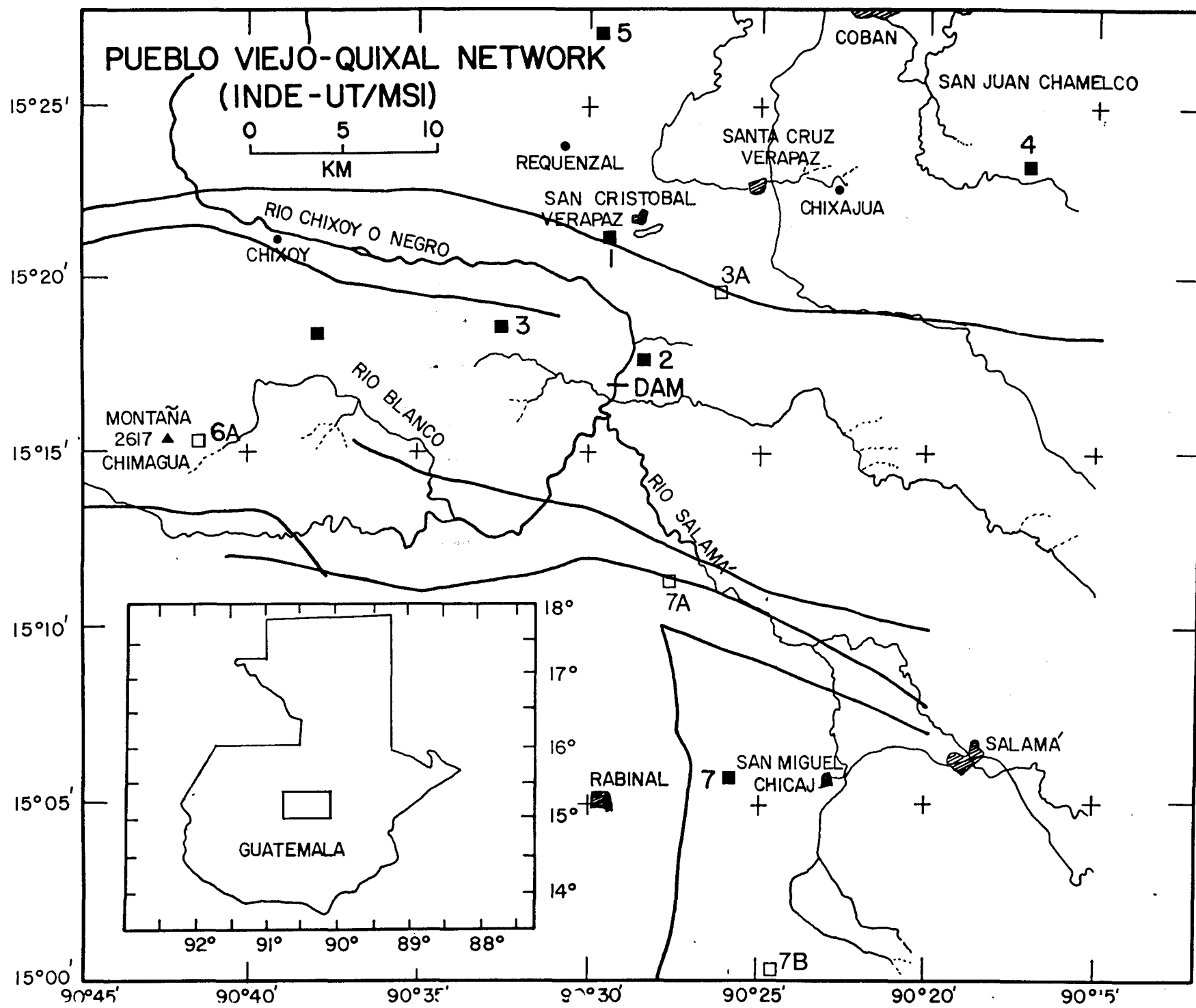
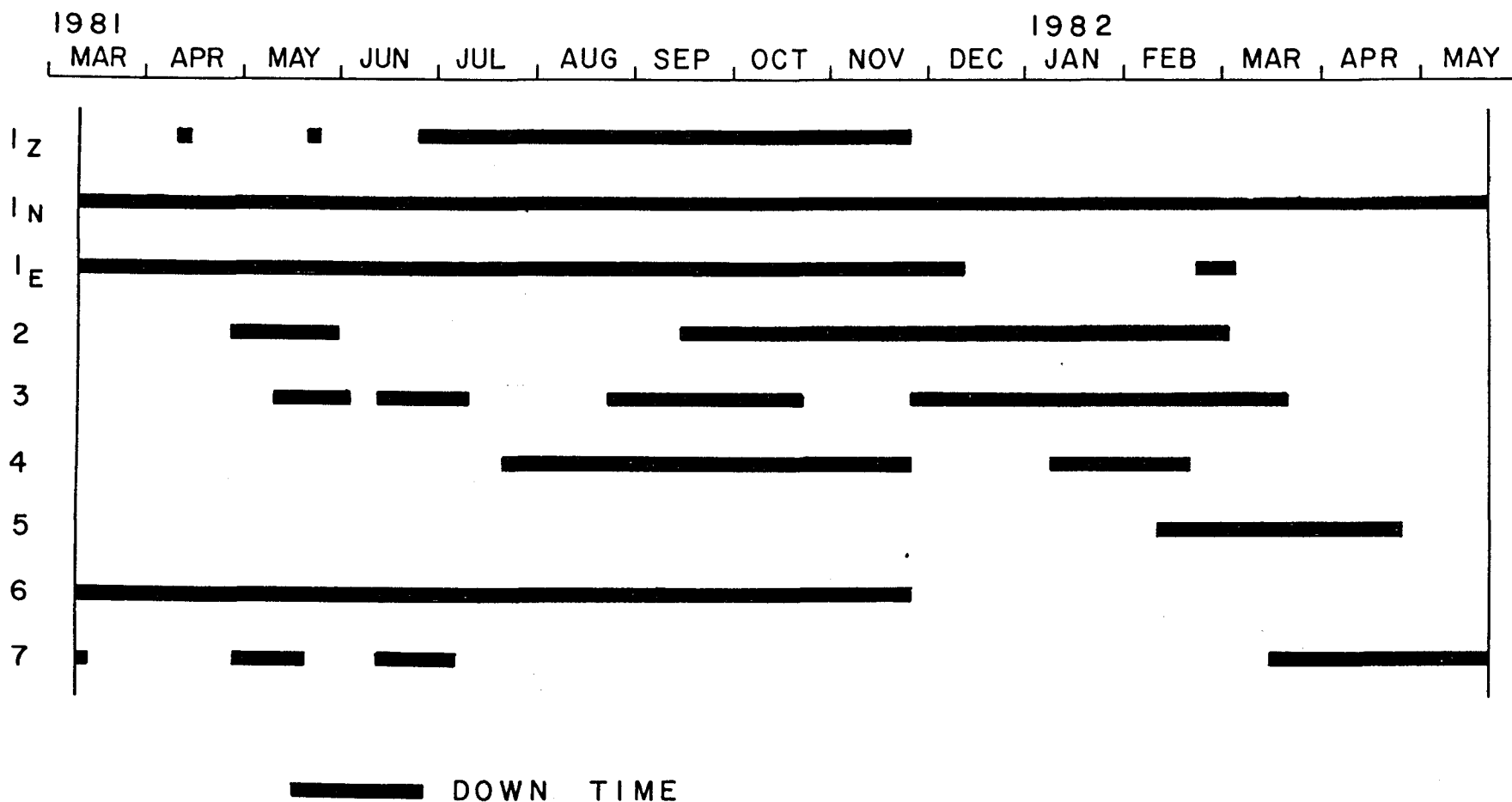


FIG. 1B



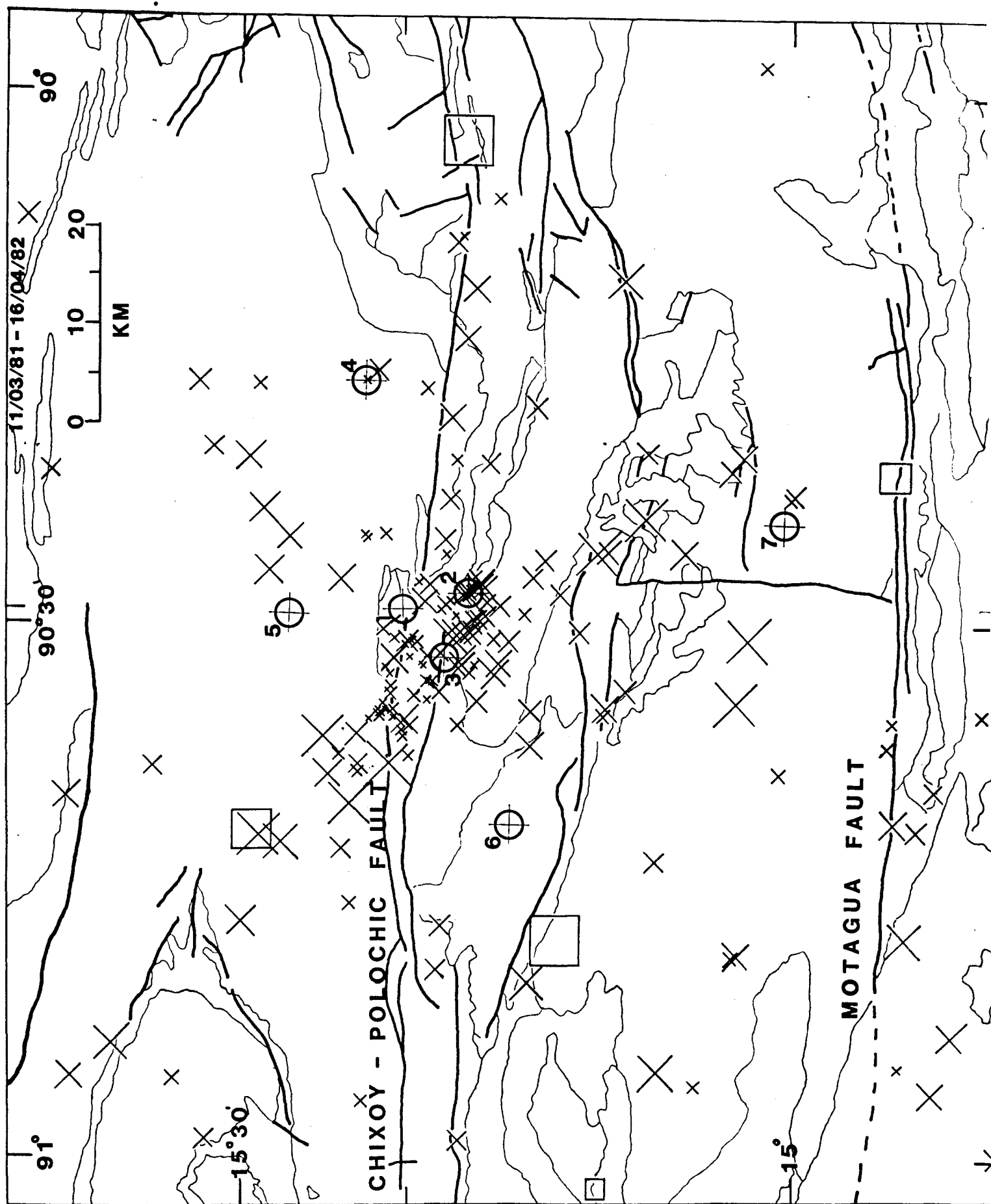


FIG. 2A

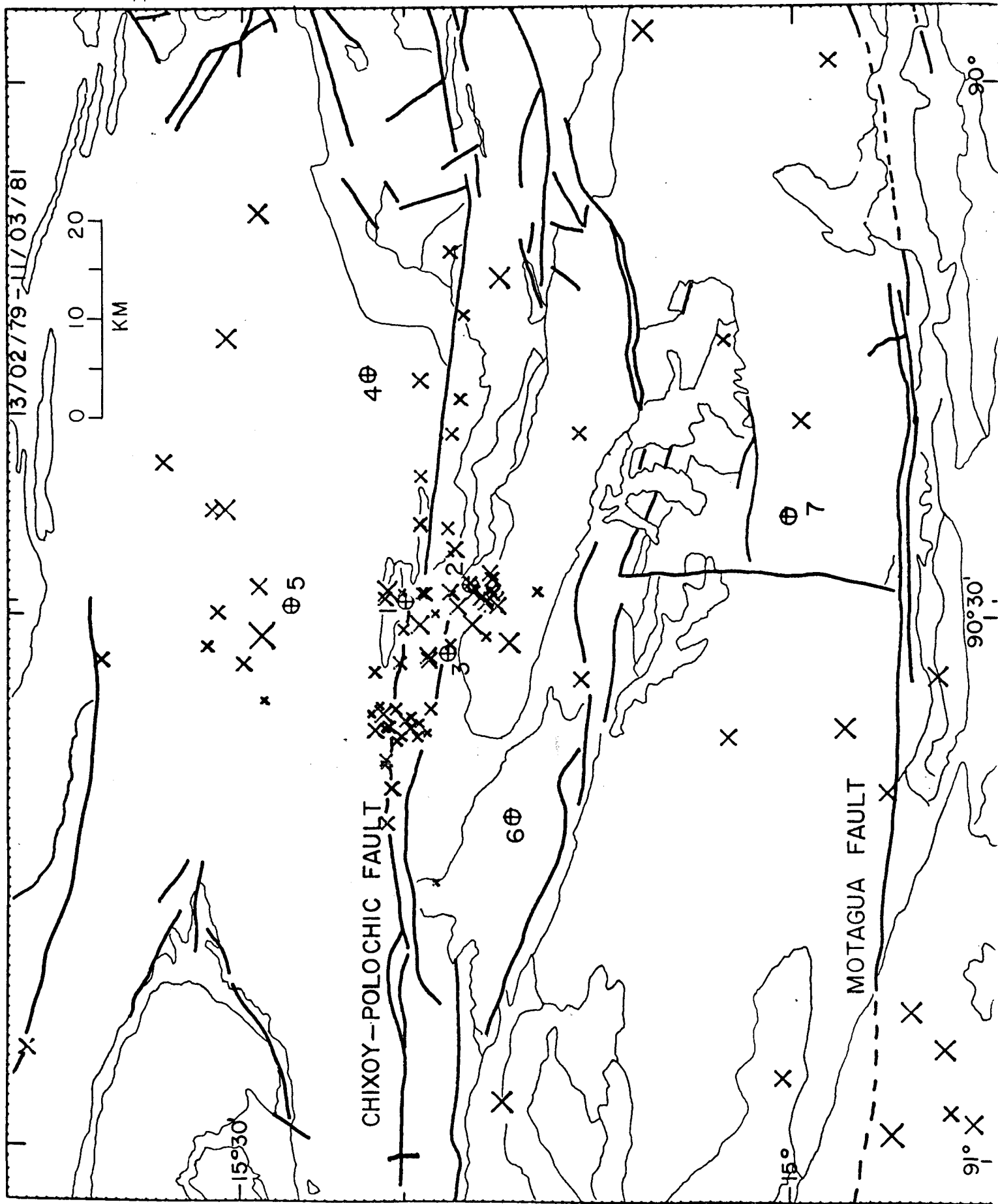


FIG. 2B

FIG. 2C

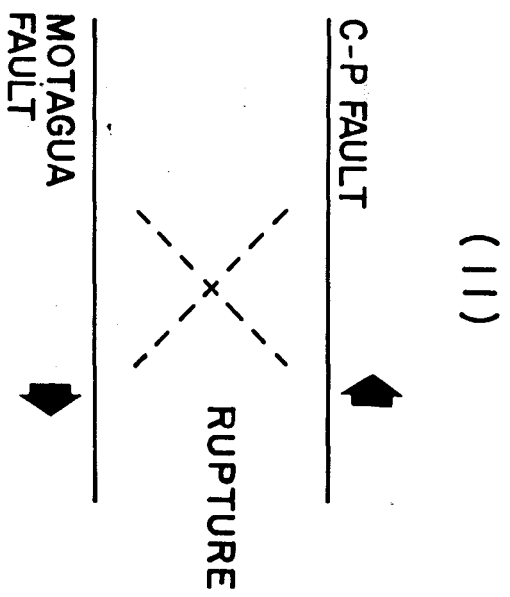
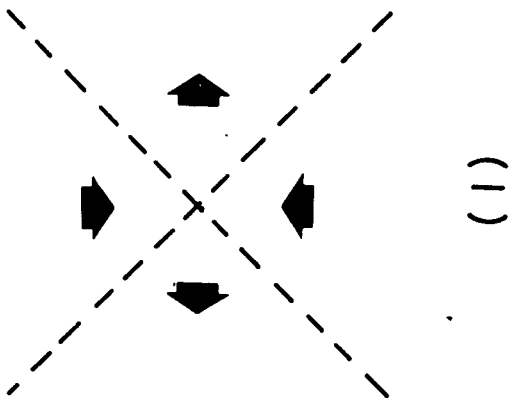


FIG. 3A

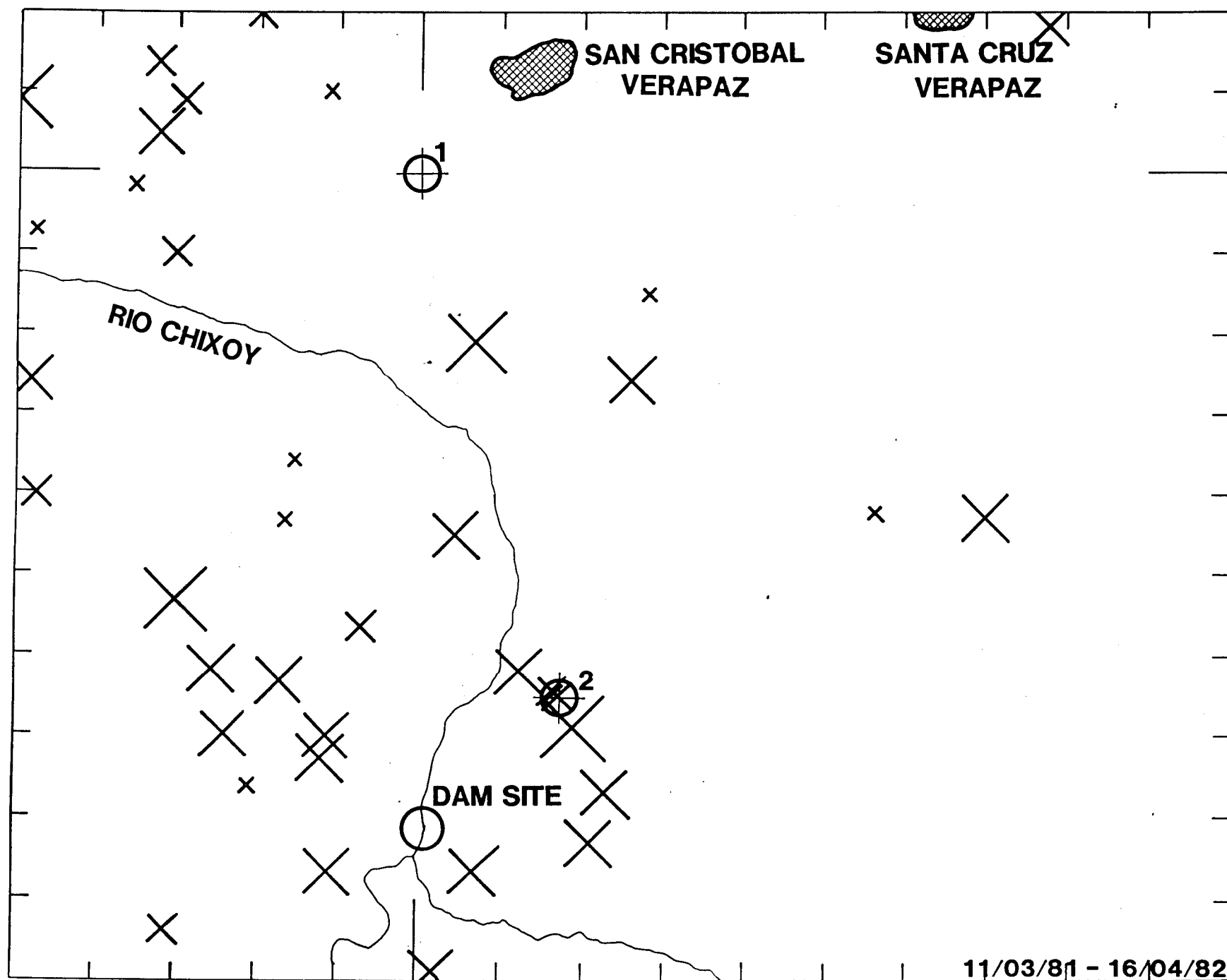


FIG. 3B

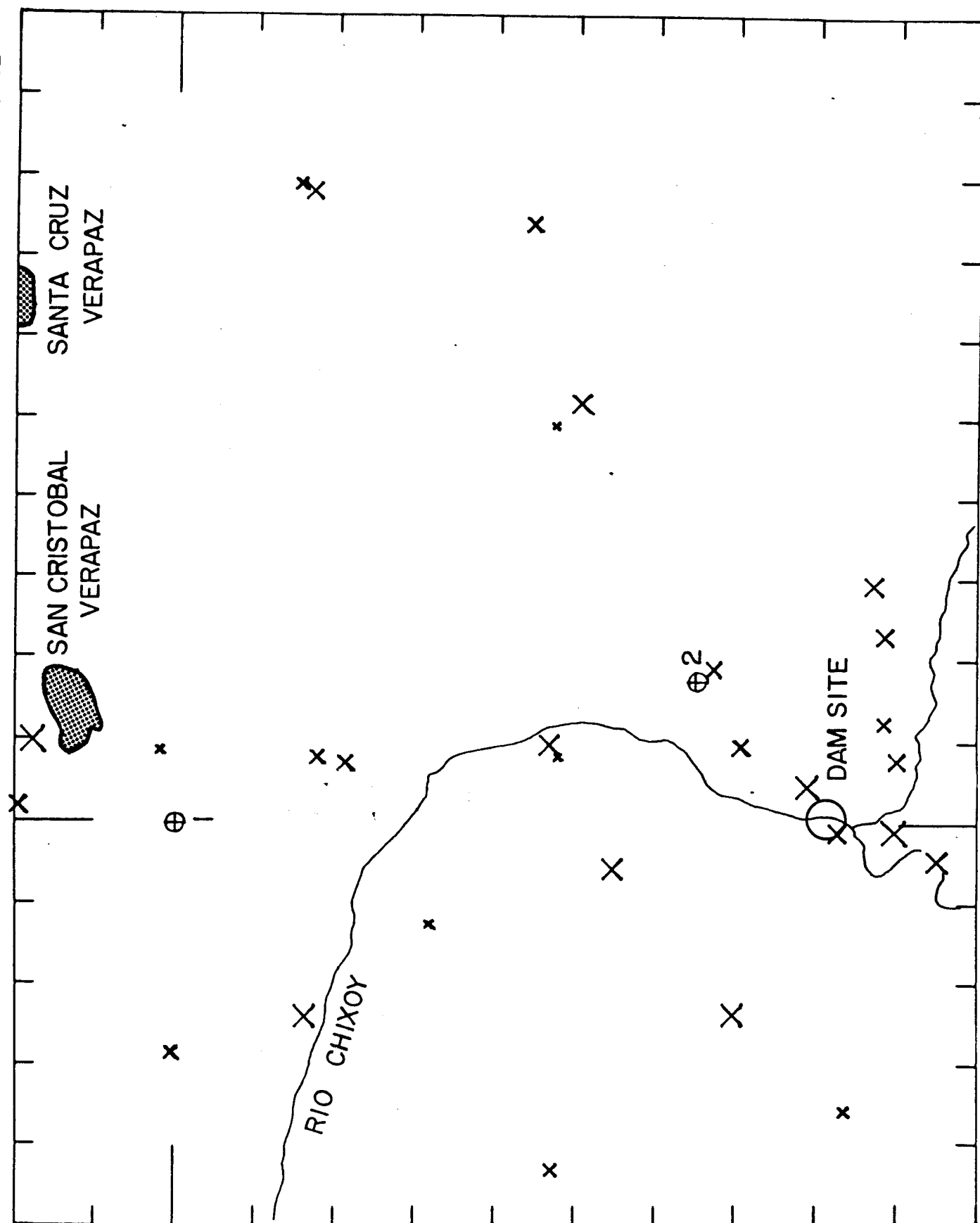


FIG. 4A

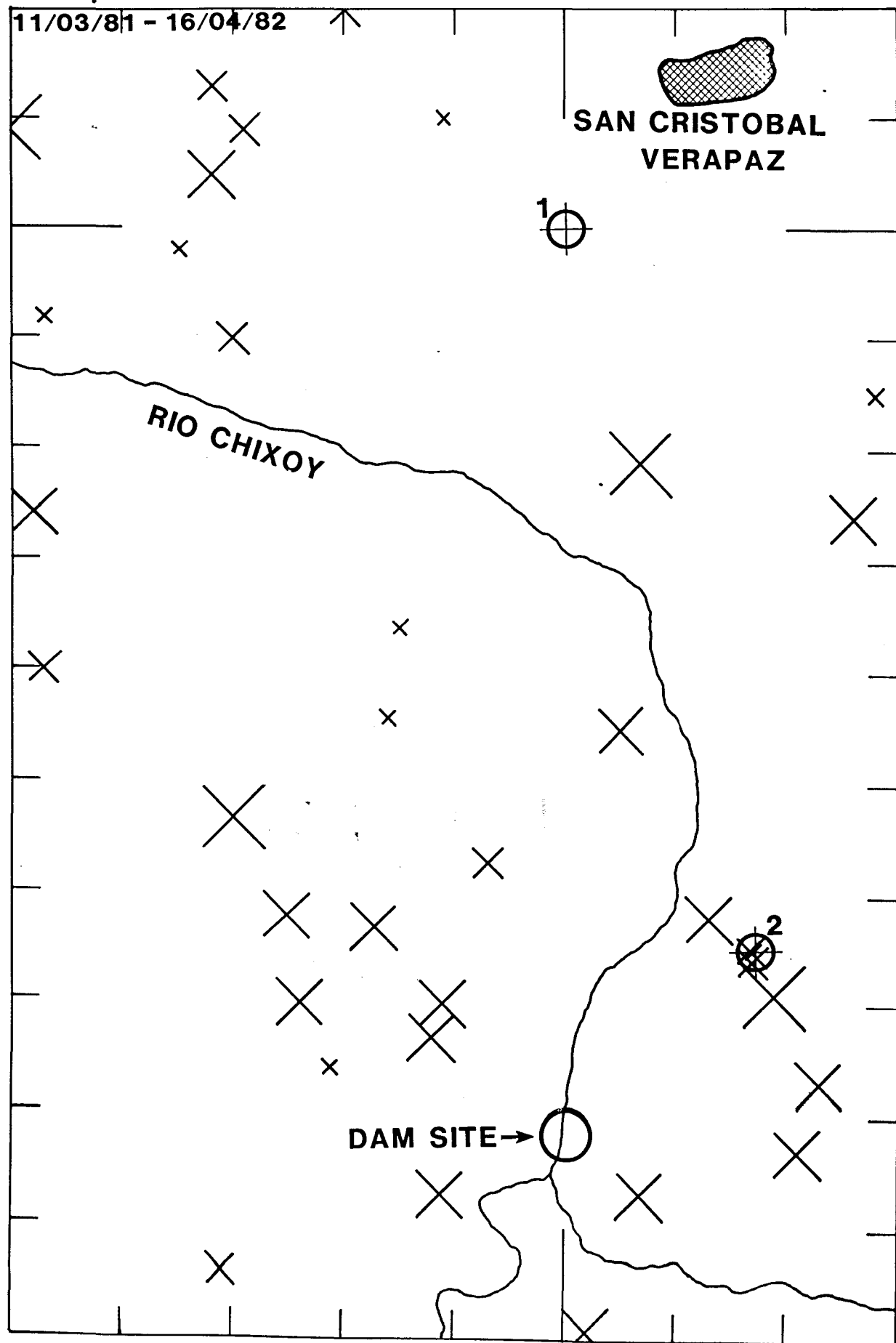


FIG. 4B

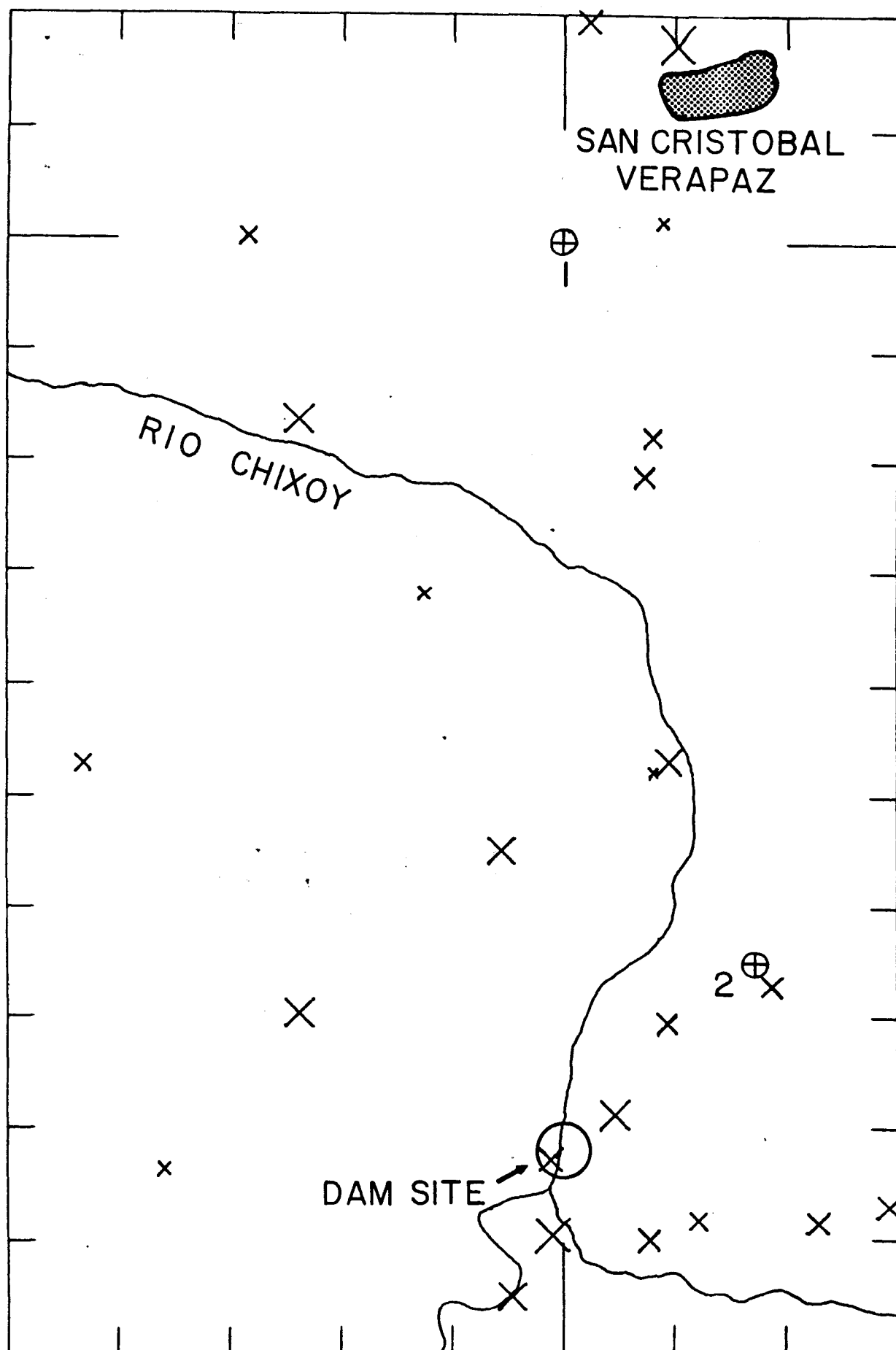


FIG. 5

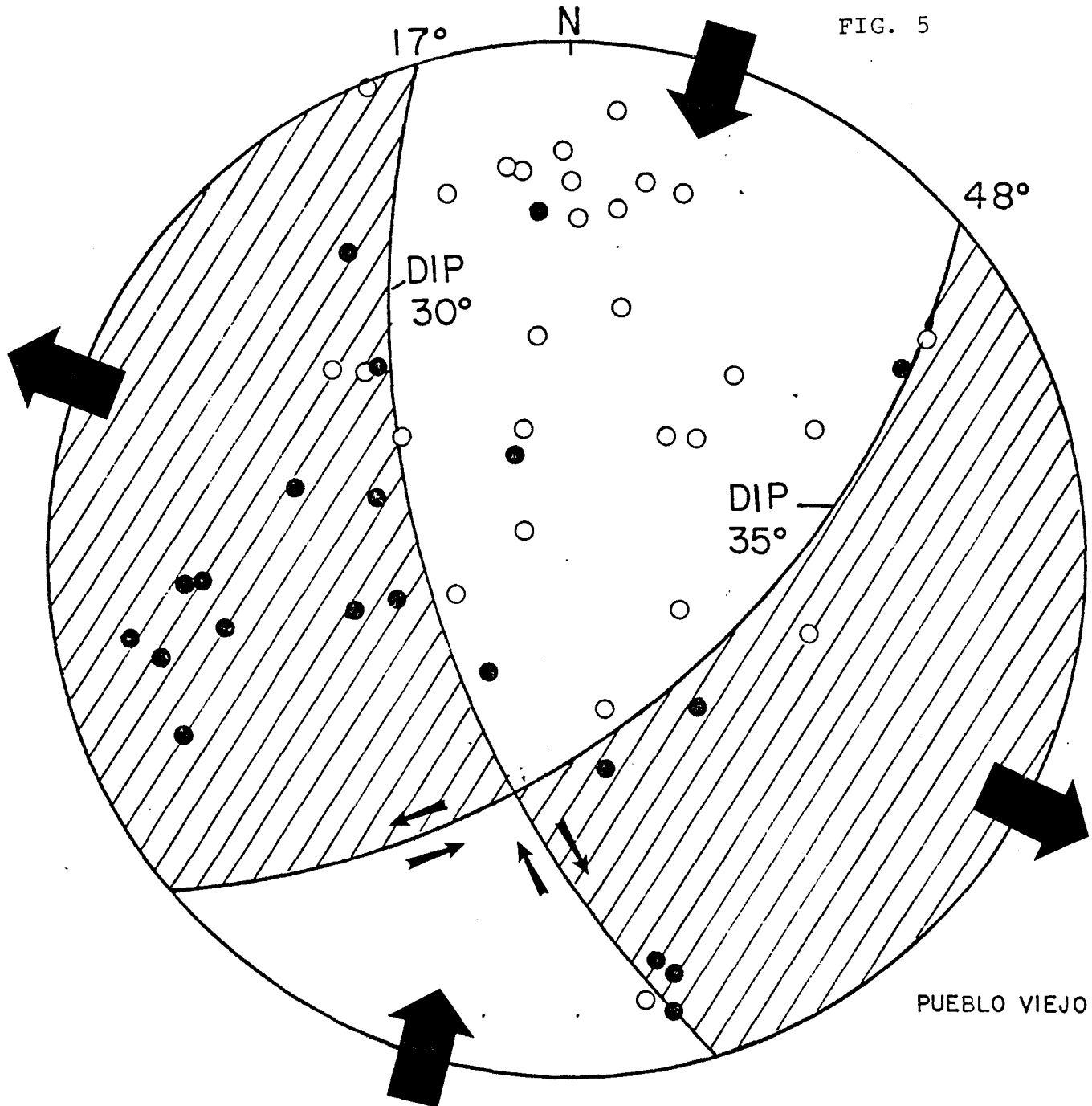


FIG. 6

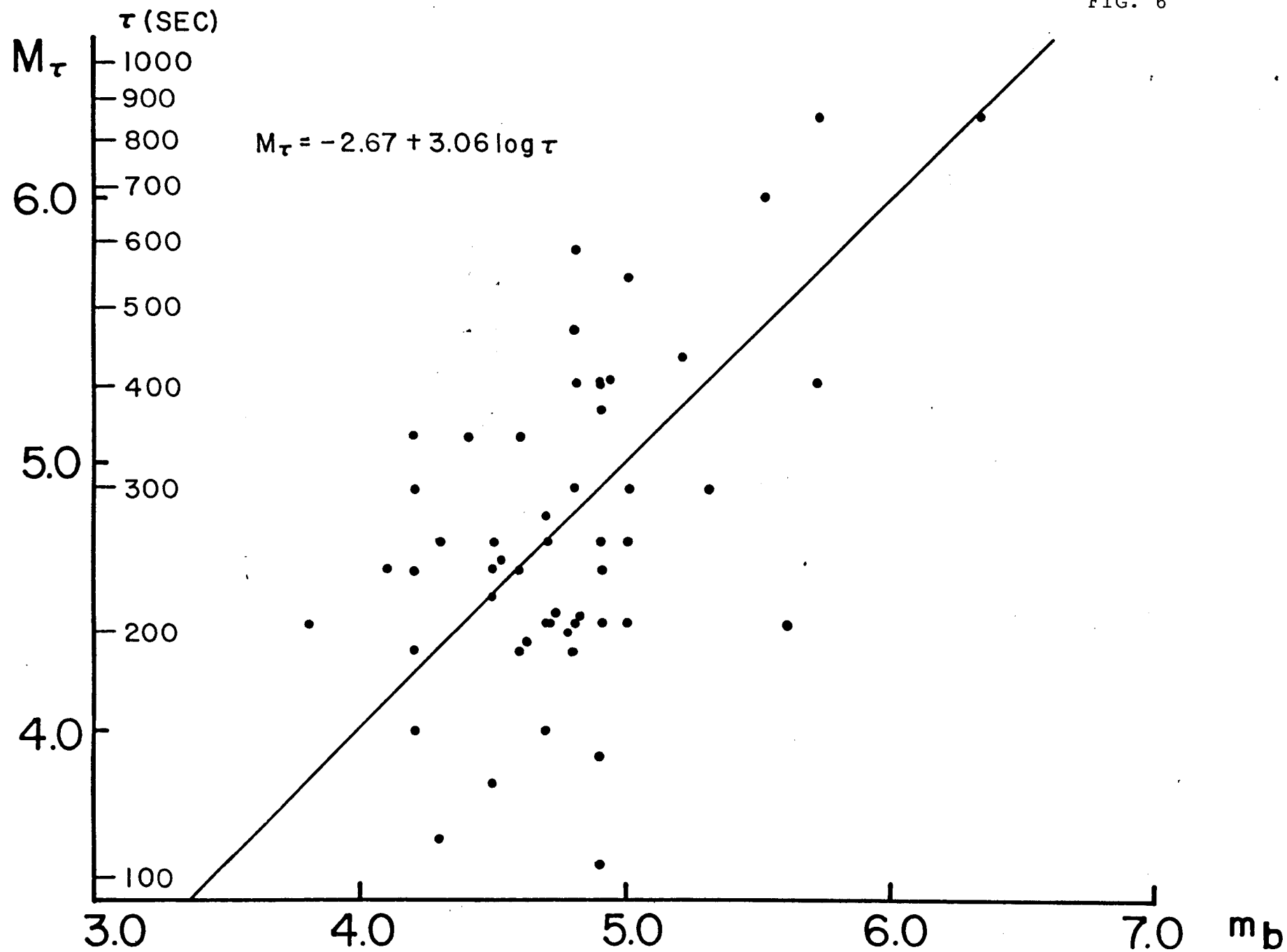


FIG. 7A

NEIS DATA FILE (1963-1980, 89°-92°W, 12°-16°N)

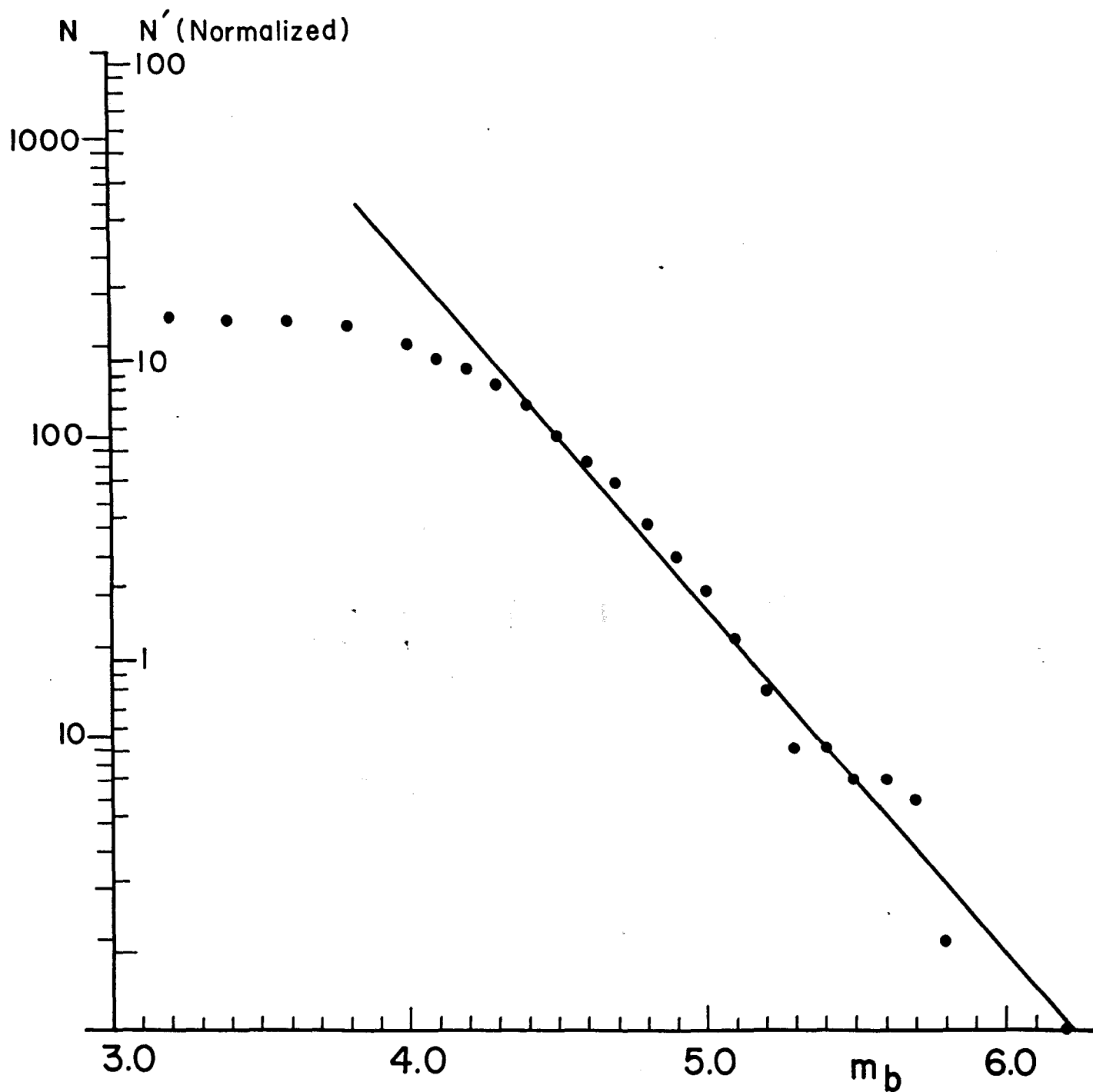


FIG. 7B

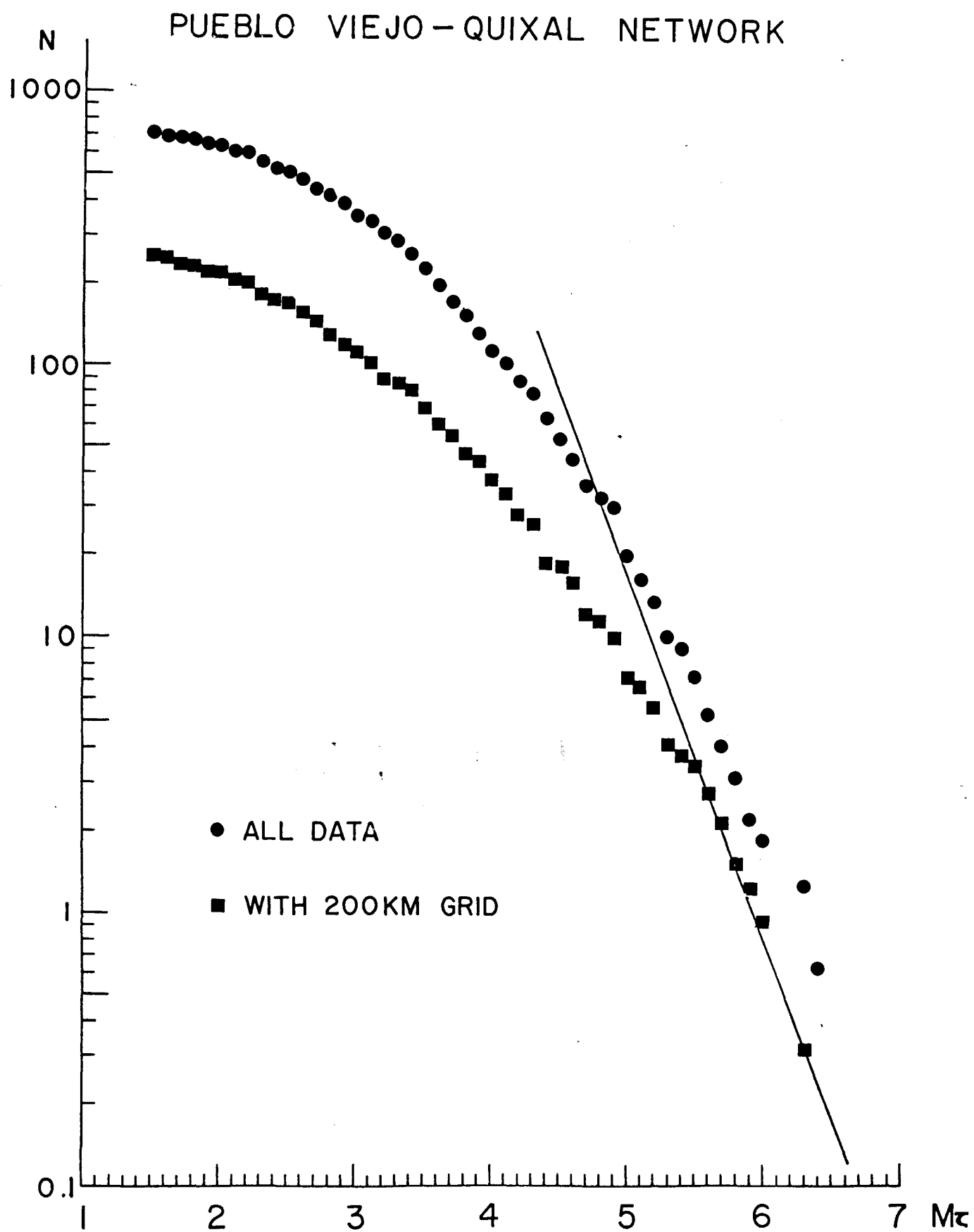
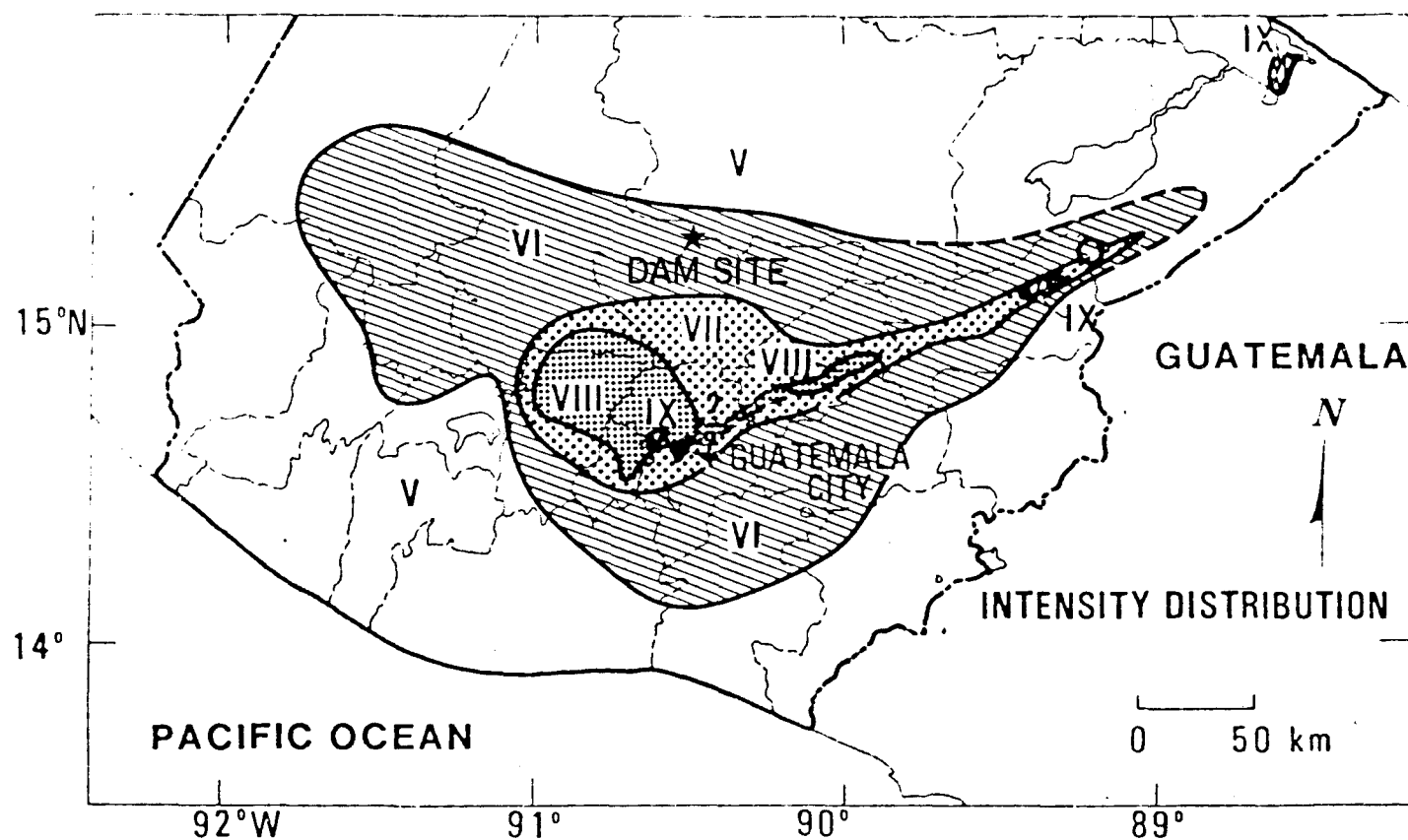


FIG. 8



Distribucion de intensidades Modificadas de Mercalli en la Republica de Guatemala. El circulo localizado al Este de las isosistas identifica el lugar del epicentro del terremoto del 4 de Febrero de 1976.

FIG. 9

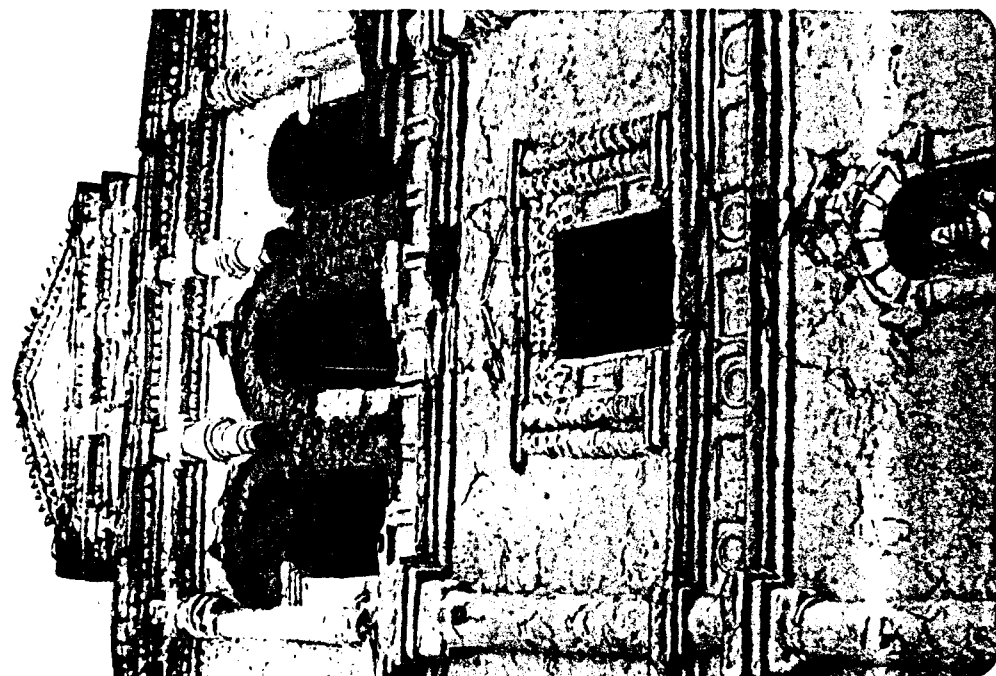
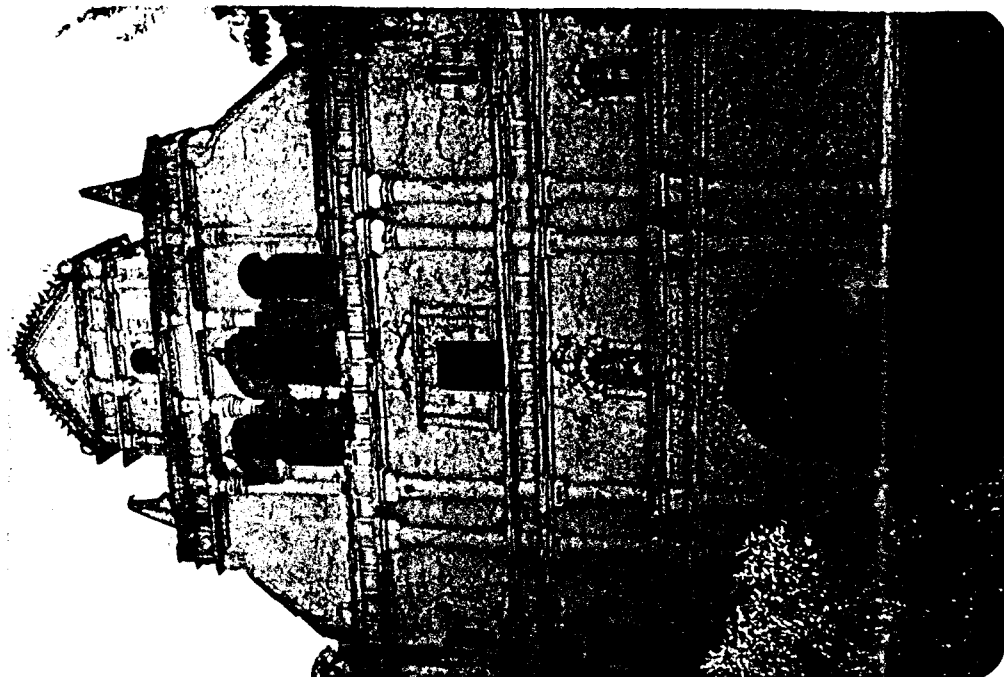


TABLE 1. LIST OF STATIONS OF PUEBLO VIEJO-QUIXAL SEISMOGRAPH NETWORK

<u>NO.</u>	<u>LONG (DEGREE)</u>	<u>LAT. (DEGREE)</u>	<u>ELEVATION (KM)</u>	<u>NAME</u>	<u>REMARK</u>
1	90.4911	15.3531	1.702	Chilley	13 Feb. 1979 - Present
2	90.4750	15.2942	1.180	San Juan	13 Feb. 1979 - Present
3*	90.4375	15.3187	1.560	Panrum	13 Feb. 1979 - 28 Apr. 1979
	90.5398	15.3148	1.860	Cerro San Juan	29 Apr. 1979 - Present
4	90.2769	15.3876	1.650	Xucaneb	13 Feb. 1979 - Present
5	90.4958	15.4577	1.960	Najitila	13 Feb. 1979 - Present
6°	90.6922	15.2559	2.220	Chimagua	13 Feb. 1979 - 15 Feb. 1981
	90.6318	15.3099	2.113		1 Mar. 1981 - Present
7+	90.4964	15.1882	1.020	Chitucan	13 Feb. 1979 - 28 Apr. 1979
	90.41100	15.0038	2.290	Chiquihuita	29 Apr. 1979 - 4 Oct. 1979
	90.4283	15.0948	1.480	Cerro Champerez	5 Oct. 1979 - Present

* Station 3 relocated on 28 April 1979

° Station 6 relocated on 1 March 1981

+ Station 7 relocated on 28 April 1979 and on 5 October 1979

Table 2A. Recurrence Time

Based on the NEIS Data File, for 89° - 92° West and 12° - 16° North

$$\log n'' = 5.93 - 1.15 m_b, R \text{ (Recurrence Time)} = 1/N'$$

m_b	5.0	5.5	6.0	6.5	7.0	7.5
$\log N$	0.18	-0.40	-0.97	-1.55	-2.12	-2.70
N' (per year)	1.51	0.40	0.11	0.029	0.0076	0.0002
R (year)	.66	2.5	9.3	35	132	501

Table 2B. Recurrence Time

Based on the Pueblo Viejo-Quixal Network Data, Within 200 km Square
from the Dam Site

$$\log N = 7.86 - 1.32 M, R \text{ (Recurrence Time)} = 1/N$$

M	5.0	5.5	6.0	6.5	7.0	7.5
$\log N$	1.26	0.60	-0.06	-0.72	-1.38	-2.04
N (per year)	18.2	4.00	0.87	0.19	0.04	0.009
R (year)	0.05	0.25	1.15	5.25	24.0	109.6

TABLE 4A. OBSERVED MAXIMUM ACCELERATIONS FROM EARTHQUAKES (g)

DATE	SITE 1 (LEFT)					SITE 2 (RIGHT)				
	NO.	L	V	T	D	NO.	L	V	T	D
3/10 - 4/27, 1978	1	-	0.042	0.042	2.5	1	0.133	0.033	0.061	7.5
8/18 - 8/19, 1978						1	0.042	0.028	0.033	4.8
9/10 - 10/30, 1978						1	0.031	0.008	0.014	0.6
						2	0.028	0.006	0.014	3.5
						3	0.036	0.011	0.019	1.3
						4	0.050	0.014	0.028	4.5
						5	0.028	0.006	0.008	3.8
						6	0.031	0.006	0.014	5.0
3/14 - 7/12, 1979	1	0.025	-	0.028	1.4					
	2	0.111	-	0.089	1.5					
	3	0.069	-	0.061	1.5					
	4	0.050	-	0.017	0.8					
	5	0.022	-	0.019	1.1					
	6	0.019	-	0.014	1.2					
6/20 - 8/30, 1979	1	0.022	0.028	0.028	0.7	1	0.028	0.014	0.003	1.1
	2	0.014	0.006	0.014	0.7	2	0.028	0.014	0.006	4.5
	3	0.025	0.006	0.028	0.8	3	0.028	0.006	0.022	2.4
	4	0.017	0.003	0.014	1.0	4	0.028	0.022	0.006	0.7
	5	0.017	0.006	0.022	1.0	5	0.056	0.042	0.028	0.6
	6	0.028	0.014	0.028	1.0	6	0.014	0.008	0.003	2.2
	7	0.028	0.008	0.022	1.1					
	8	0.022	0.003	0.022	1.0					
	9	0.028	0.003	0.017	0.9					
	10	0.056	0.006	0.022	1.0					
1/27 - 5/28, 1980 (A)	1	0.003	-	0.008	1.0					
6/26 - 8/21, 1980 (A)	1	0.014	-	0.008	1.5					
8/1 - 8/12, 1980 (A)	1	0.019	0.014	0.014						
	2	0.053	0.017	0.033	1.9					
	3	0.125	0.042	0.052	1.2					
	4	0.069	0.042	0.069	2.5					
	5	0.056	0.028	0.050	0.7					
	6	0.056	0.028	0.022	1.6					
	7	0.033	0.017	0.019	2.0					
	8	0.028	0.019	0.014	1.2					
8/12 - 8/28, 1980	1	0.033	0.042	0.061	0.6					
	2	0.011	0.016	0.028	0.7					

DATE	SITE 1 (LEFT)					SITE 2 (RIGHT)				
	NO.	L	V	T	D	NO.	L	V	T	D
10/10 - 10/24, 1980	1	0.019	0.022	0.033	0.7					
	2	0.002	0.008	0.028	0.8					
10/24 - 11/14, 1980	1	0.028	0.014	0.033	1.1					
11/14 - 12/30, 1980	1	0.025	0.022	0.039	1.1	1	0.014	0.003	0.006	2.7
	2	0.028	0.028	0.028	1.1					
	3	0.056	0.042	0.086	1.6					
12/3 - 1/18, 1980	1	0.056	0.042	0.064	1.5					
	2	0.026	0.008	0.014	0.8					
	3	0.022	0.006	0.022	0.8					
	4	0.019	0.014	0.031	1.2					
1/18 - 2/11, 1981	1	0.056	0.033	0.083	1.5	1	0.014	0.014	0.014	0.9
	2	0.055	0.050	0.078	1.6	2	0.008	0.006	0.014	1.2
2/11 - 2/27, 1981	1	0.053	0.022	0.028	1.5					

* Abbreviations:

L = Longitudinal component (g)
 V = Vertical component (g)
 T = Transverse component (g)
 D = Total signal duration (sec)

(A) ID number is not known

TABLE 4B. OBSERVED MAXIMUM ACCELERATIONS FROM EXPLOSIONS (g)

DATE	SITE 1 (LEFT)					SITE 2 (RIGHT)				
	NO.	L	V	T	D	NO.	L	V	T	D
3/10/ - 4/27, 1978	1	-	0.086	0.222	1.3	1	0.167	0.039	0.078	1.2
	2	-	0.139	0.097	0.3	2	0.161	0.075	0.081	0.9
	3	-	0.167	0.083	0.3	3	0.267	0.194	0.139	0.4
11/78 - 3/14, 1979	1	0.031	0.092	0.119	1.8					
	2	0.050	0.086	0.128	1.8					
8/12 - 8/28, 1980	1	0.058	0.067	0.153	1.0	1	0.389	-	0.111	1.4
						2	0.111	-	0.031	1.0
						3	0.139	-	0.028	1.2
						4	0.111	-	0.028	1.2
8/28 - 9/10, 1980							0.119	-	0.032	1.4
10/10 - 10/24, 1980	1	0.139	0.222	0.250	1.5					
	2	0.058	0.061	0.222	1.8					

* Abbreviations (see Table 4A)

OBSERVED MAXIMUM ACCELERATION FROM EARTHQUAKES (G)

DATE	SITE 1 (LEFT)					SITE 2 (RIGHT)				
	NO.	L	V	T	D	NO.	L	V	T	D
2/27-3/27, 1981	1	0.025	0.018	0.047	1.8					
4/30-6/3, 1981						1	0.117	0.037	0.119	24.8
8/26-10/7, 1981						1	0.058	0.021	0.036	2.8
						2	0.018	0.032	0.048	0.8
10/22-11/18, 1981						1	0.029	0.016	0.036	6.0
12/2, '81-1/7, '82						1	0.035	—	0.048	2.6
2/5/-2/17, 1982						1	0.053	0.032	0.060	3.0
3/11-3/31, 1982	1	0.040	0.006	0.042	3.0					
3/31-4/14, 1982						1	0.029	0.016	—	0.8
						2	0.035	0.027	—	0.6
4/29-5/18, 1982						1	0.041	0.011	0.048	4.8
						2	0.058	0.027	0.060	20.0
						3	0.018	—	—	2.4

Table 5. CALCULATED ACCELERATION AT THE PUEBLO VIEJO DAM SITE

NO	YR	DAY	HM	SEC	LAT	LON	DEPTH	MB	MS	ED	HD	ACC	G
1	1963	55	1334	147	1470	-9130	119	56	0	108.21	160.84	10.94	0.0112
2	1964	73	2108	121	1450	-9090	33	48	0	96.93	102.39	11.47	0.0117
3	1964	258	1545	222	1550	-9080	38	48	0	41.23	56.07	25.20	0.0257
4	1964	259	751	288	1540	-9060	33	39	0	17.77	37.48	18.86	0.0192
5	1964	259	2156	72	1530	-9080	74	44	0	33.37	81.18	11.50	0.0117
6	1966	299	2043	158	1520	-9060	20	44	0	14.77	24.86	40.15	0.0410
7	1967	227	256	302	1470	-9070	45	45	0	68.03	81.57	12.38	0.0126
8	1970	8	1618	555	1534	-9051	25	44	0	6.98	25.96	38.83	0.0396
9	1970	39	1619	207	1467	-9024	33	46	0	72.65	79.80	13.81	0.0141
10	1970	119	1401	328	1452	-9260	33	50	75	242.12	244.35	21.25	0.0217
11	1971	285	944	593	1594	-9117	35	57	57	95.71	102.25	23.62	0.0241
12	1971	291	1640	505	1594	-9114	35	47	0	100.95	107.18	9.91	0.0101
13	1972	15	1921	208	1596	-9099	33	47	0	92.39	90.11	11.25	0.0115
14	1974	238	627	407	1595	-9104	33	51	40	94.73	100.32	15.02	0.0153
15	1974	365	2021	90	1413	-9182	39	57	61	191.60	195.53	11.86	0.0121
16	1975	83	715	323	1513	-9081	33	45	0	38.18	50.47	22.36	0.0220
17	1976	35	901	434	1532	-8910	5	62	75	149.35	149.44	56.21	0.0574
18	1976	35	930	294	1494	-9056	5	54	0	38.36	38.69	60.71	0.0620
19	1976	35	1003	499	1417	-9072	5	50	0	125.29	125.39	9.98	0.0102
20	1976	35	1124	571	1469	-9087	5	47	0	77.02	77.18	15.64	0.0160
21	1976	36	409	302	1523	-9062	5	43	39	15.02	15.83	50.02	0.0510
22	1976	37	157	176	1536	-9027	5	40	39	25.23	25.72	28.40	0.0290
23	1976	37	411	45	1487	-9101	5	47	0	72.00	72.17	17.07	0.0174
24	1976	37	1811	589	1431	-9043	5	50	0	107.52	107.64	12.52	0.0128
25	1976	37	1819	179	1476	-9061	5	57	53	58.97	59.18	48.59	0.0496
26	1976	41	228	398	1492	-9077	5	42	34	49.93	50.18	17.70	0.0181
27	1976	41	617	426	1483	-8979	5	49	38	90.25	90.39	14.82	0.0151
28	1976	67	254	42	1472	-9101	5	51	47	83.47	83.62	19.35	0.0197
29	1976	67	315	412	1480	-9088	5	51	50	67.67	67.86	25.42	0.0259
30	1976	69	742	373	1486	-9094	5	52	43	67.09	67.27	27.84	0.0284
31	1976	73	1630	415	1476	-9106	5	54	51	84.07	84.22	24.36	0.0249
32	1977	97	2028	287	1475	-9123	33	49	40	98.86	104.22	12.12	0.0124
33	1978	53	607	370	1424	-9137	100	57	0	149.06	179.50	9.92	0.0101
34	1978	89	1930	126	1504	-9030	33	51	38	33.50	47.02	39.05	0.0398
35	1978	210	1437	327	1484	-9102	10	40	40	74.50	74.62	10.60	0.0102
36	1979	267	2071	142	1534	-9085	33	40	40	112.00	112.10	20.00	0.0200
37	1979	282	749	292	1432	-9000	33	50	47	113.03	119.67	10.71	0.0109
38	1979	300	1435	573	1383	-9089	58	57	68	165.85	175.70	24.76	0.0253
39	1979	300	2143	249	1377	-9073	65	55	65	169.07	181.13	20.00	0.0205
40	1980	42	2327	336	1434	-9024	33	40	0	107.43	112.30	10.02	0.0102
41	1980	222	545	95	1588	-8851	22	61	64	222.50	223.59	12.04	0.0123

Abbreviations on next page

ABBREVIATIONS (Table 5)

YR:	Year	] ORIGIN TIME
DAY:	Day (Julian)	
HM:	Hour and minute	
SEC:	Second	
LAT:	Latitude	
LON:	Longitude	
MB:	Body wave magnitude. Decimal point should be placed between two digit numbers.	
MS:	Surface wave magnitude. Decimal point should be placed between two digit numbers.	
ED:	Epicentral distance in kilometers	
HD:	Hypocentral distance in kilometers	
ACC:	Acceleration in cm/sec^2	
G:	Acceleration in g	

Appendix. List of earthquakes recorded by the Pueblo-Chixoy-Quixal-Seismograph Network. 11 March 1981 - 16 April 1982

<u>Column</u>	<u>Abbreviation</u>	<u>Description</u>
1	NO	Identification number
2	YR	Year
3	M D	Month and Day
4	H M	Hour and minutes, G.M.T. (to calculate local time, subtract 6 hours)
5	S	Second of the origin time, a decimal point should be assumed between 2nd and 3rd digit.
6	NP	Number of P-arrival reading
7	NS	Number of S-arrival reading
8	IQ	Quality number, ranging 1 through 5, 1 being the most accurate reading
9	ITR	Number of iterations carried out during the epicenter calculations
10	MAG	Magnitude x10, magnitude is calculated based on the duration time.
11	LONG	Longitude of epicenter (in degree)
12	LAT	Latitude of epicenter (in degree)
13	X	Distance measured from the central station (eastward positive)
14	Y	Distance measured from the central station (northward positive)
15	DEPTH	Depth; if a negative depth is obtained during the iteration process, the epicenter program automatically fixes the depth at 5.0 km and x, y are calculated.
16	DX	Standard error for X (in km)
17	DY	Standard error for Y (in km)
18	DZ	Standard error for Z (in km)
19	S	Standard error for origin time (in sec)

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
4501	81	310	1605	4083			5	2	3	5	4.6	-90.770	13.090	-30.6	-249.7	80.6	92.5	135.5	212.3	1.15
4502	81	310	1635	1732			2	2	5	2	1.9	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	26.92
4503	81	310	2133	5201			5	5	2	10	2.6	-91.690	15.590	-132.1	27.2	5.0	2.6	7.6	0.0	0.16
4504	81	310		0			0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4505	81	311	220	4729			5	3	2	10	3.9	0.000	0.000	257.2	44.4	5.0	89.6	327.0	0.0	3.13
4506	81	311	232	4842			5	5	2	10	2.7	-89.300	15.560	129.8	23.6	49.1	12.9	30.8	89.2	0.46
4507	81	311	306	439			5	5	2	10	3.9	-91.590	14.850	-121.3	-55.2	93.6	16.0	25.3	26.9	0.32
4508	81	311	411	5508			4	3	3	10	0.9	-90.530	15.340	-4.7	-0.8	11.6	2.3	1.2	3.2	0.17
4509	81	311		0			0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4510	81	312	38	1480			5	5	2	10	3.6	-90.960	13.690	-51.6	-183.9	5.0	65.1	24.4	0.0	0.95
4511	81	312		0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4512	81	312	1854	3464			3	1	7	5	1.6	-90.510	15.260	-3.1	-9.4	0.3	1.3	3.0	9.8	0.18
4513	81	312	2313	3445			3	3	4	10	2.9	-89.210	14.440	139.3	-100.8	94.1	105.1	44.9	213.0	0.48
4514	81	312		0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4515	81	313	32	2490			5	5	2	10	4.2	-92.340	15.580	-202.6	25.3	159.4	18.3	29.2	28.3	0.22
4516	81	313	150	1977			4	4	3	10	2.4	-91.010	14.760	-57.3	-65.0	5.0	11.4	10.1	0.0	0.20
4517	81	313	722	4266			2	4	5	10	2.5	-91.160	14.680	-73.0	-74.0	71.8	39.8	30.3	70.2	0.30
4518	81	313	843	4345			5	1	3	10	4.6	-90.790	15.210	-33.5	-15.0	78.7	12.6	16.8	12.1	0.35
4519	81	313		0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4520	81	313	1028	1695			3	1	7	9	2.5	-90.510	15.280	-2.4	-7.0	0.2	1.7	3.1	17.1	0.31
4521	81	313		0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4522	81	313		0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4523	81	313		0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4524	81	314		0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4525	81	314	830	4844			2	2	5	6	2.7	0.000	0.000	327.0	327.0	5.0	327.0	327.0	0.0	175.10
4526	81	314		0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4527	81	314	1650	1242			5	5	2	10	3.6	-91.430	13.930	-103.5	-156.7	131.9	37.9	53.1	71.0	0.49
4528	81	314	2111	4359			5	5	2	10	3.3	-92.010	14.260	-167.1	-120.2	5.0	16.5	23.4	0.0	0.28
4529	81	314		0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4530	81	316	934	962			3	3	4	10	1.6	-90.620	15.350	-14.7	-0.3	5.0	3.5	1.6	0.0	0.23
4531	81	316	1252	4510			2	2	5	10	3.3	-91.920	17.510	-156.6	239.5	105.2	196.8	130.0	0.0	0.99
4532	81	316	2206	587			1	2	5	10	0.3	0.000	0.000	-5.1	21.8	5.0	327.0	327.0	0.0	20.61
4533	81	317	205	1970			5	4	4	10	4.8	-91.590	13.600	-120.8	-193.7	107.4	42.0	55.3	124.6	0.49
4534	81	317	849	1348			3	3	4	10	0.3	-90.500	15.320	-1.5	-3.6	3.3	0.5	0.6	2.6	0.11
4535	81	317	1019	762			5	3	2	10	4.9	-90.410	14.320	7.9	-113.2	5.0	14.4	8.4	0.0	0.49
4536	81	317	1508	5878			2	2	5	2	3.1	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	59.91
4537	81	317	1654	1396			1	2	5	10	2.0	-90.370	15.000	12.6	50.2	5.0	8.2	1.9	0.0	0.06
4538	81	317	1743	4846			2	2	5	10	2.5	-91.160	14.640	-73.6	-78.3	5.0	108.6	122.2	0.0	0.62
4539	81	317	1954	1715			4	5	2	6	2.5	0.000	0.000	-32.7	327.0	60.0	327.0	327.0	327.0	29.65
4540	81	317	2334	1365			5	5	3	10	3.8	-91.330	15.870	-92.8	58.1	5.0	43.7	51.1	0.0	1.90
4541	81	317		0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4542	81	317		0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4543	81	318	534	2251			3	4	4	10	1.0	-90.600	15.350	-12.8	0.1	11.2	2.0	1.3	3.5	0.11
4544	81	318	2023	4517			2	2	5	10	2.6	-90.390	14.990	11.4	-39.4	22.3	66.3	49.4	0.0	1.66
4545	81	318	2202	4706			3	3	4	10	2.3	-90.610	14.780	-13.3	-63.1	5.0	10.4	6.9	0.0	0.42
4546	81	318	2222	3771			2	1	5	7	3.2	0.000	0.000	-79.6	-257.1	5.0	327.0	327.0	0.0	5.19
4547	81	319	613	514			6	6	1	10	4.9	-88.520	15.270	214.9	-8.6	5.0	11.0	37.3	0.0	0.77
4548	81	319	715	2015			5	6	1	10	1.6	-90.600	15.350	-12.0	0.1	10.9	1.9	0.8	1.8	0.15
4549	81	319	911	3393			6	6	1	7	3.1	-89.640	14.730	92.8	-67.9	47.0	12.5	10.2	37.3	0.17

GU EQFILE																				
NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
4551	81	320	220	3708	6	6	1	9	4.0			-90.250	14.250	26.1	-122.0	8.9	10.8	4.8	5.8	0.36
4552	81	320	238	4738	6	4	2	6	4.4			-89.770	15.030	78.2	-35.3	17.2	7.1	6.2	4.0	0.42
4553	81	320	243	1132	6	4	1	5	3.8			-89.620	15.050	94.8	-32.8	7.2	12.3	10.7	36.1	0.62
4554	81	320	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4555	81	320	913	496	6	0	3	10	3.6			-90.480	15.330	0.7	-2.1	7.9	2.8	1.5	1.8	0.37
4556	81	320	1359	4299	6	6	1	6	3.0			-90.810	14.780	-35.5	-63.2	14.2	32.3	27.2	21.3	1.31
4557	81	320	2004	4913	1	2	5	1	1.6			0.000	0.000	6.0	-28.5	5.0	0.0	0.0	0.0	11.81
4558	81	321	22	572	4	5	2	10	2.5			-91.080	16.240	-65.5	98.4	5.0	17.8	14.4	0.0	0.50
4559	81	321	1409	2497	6	6	2	10	2.0			-90.580	15.360	-10.7	0.9	12.5	2.0	0.9	1.7	0.18
4560	81	321	1435	3329	6	4	2	10	4.9			-91.590	13.900	-120.5	-160.0	82.6	27.3	16.1	71.7	0.38
4561	81	321	2324	2105	5	3	2	10	3.7			-88.950	14.290	168.4	-117.6	5.0	27.8	46.8	0.0	0.88
4562	81	322	328	3084	5	5	2	9	2.0			-90.340	15.520	16.4	19.1	5.0	3.4	6.4	0.0	0.57
4563	81	323	186	5723	4	4	2	10	3.7			-90.310	13.630	-35.2	-189.6	5.0	65.7	24.1	0.0	1.26
4564	81	323	208	2817	4	4	3	10	3.2			-89.810	13.300	73.5	-227.1	5.0	44.3	17.8	0.0	0.63
4565	81	323	333	1090	3	3	4	10	0.3			-90.500	15.310	-1.6	-4.4	3.7	3.2	5.3	12.2	0.54
4566	81	323	909	5266	3	3	4	6	3.0			-91.280	12.900	-87.4	-270.6	84.4	56.9	90.5	234.0	0.57
4567	81	324	1455	1633	2	2	5	2	1.7			0.000	0.000	6.0	-28.5	5.0	327.0	327.0	0.0	8.07
4568	81	324	1527	1406	6	5	1	9	4.9			-92.480	15.660	-210.6	34.3	47.6	327.0	308.6	327.0	0.79
4569	81	324	1750	2145	6	2	7	5	2.0			-90.470	15.270	2.1	-8.3	0.7	1.5	1.2	4.0	0.38
4570	81	324	1953	582	5	5	2	10	3.8			-91.430	13.530	-103.7	-200.7	5.0	28.6	19.4	0.0	0.51
4571	81	325	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4572	81	325	513	4912	2	2	5	2	2.0			0.000	0.000	6.0	-28.5	5.0	327.0	327.0	0.0	14.63
4573	81	325	928	1903	5	5	2	10	3.8			-91.530	15.150	-114.3	-21.4	175.0	16.4	11.8	12.5	0.24
4574	81	325	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4575	81	325	1050	496	2	2	5	10	2.5			-91.440	14.940	-104.0	-45.3	48.9	1.5	2.8	0.0	0.03
4576	81	325	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4577	81	325	2208	3064	4	4	3	10	3.0			-88.310	15.750	237.9	44.9	5.0	12.6	32.5	0.0	0.57
4578	81	326	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4579	81	326	621	13	3	4	3	10	3.0			0.000	0.000	327.0	0.0	5.0	327.0	327.0	0.0	36.54
4580	81	326	1208	4616	5	5	2	10	3.2			-90.420	14.210	7.3	-126.2	5.0	13.4	5.4	0.0	0.40
4581	81	326	1624	1572	3	3	4	10	0.9			-90.500	15.360	-1.1	1.0	5.0	5.3	2.0	0.0	0.62
4582	81	326	1756	3325	5	1	6	10	4.9			-90.830	13.890	50.0	-161.3	251.7	27.8	19.9	17.1	0.25
4583	81	327	14	4596	3	3	4	10	2.0			-90.290	15.540	23.0	21.4	19.0	1.7	3.0	3.6	0.15
4584	81	327	631	2313	4	1	7	7	2.3			-90.520	15.250	-3.2	-10.8	5.0	4.9	7.0	0.0	0.52
4585	81	327	811	2234	4	5	2	10	3.6			-89.440	13.640	114.8	-188.9	5.0	85.1	64.6	0.0	1.31
4586	81	327	952	2793	2	2	5	2	1.6			0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
4587	81	327	1120	3005	2	2	5	2	2.7			0.000	0.000	6.0	-28.5	5.0	327.0	327.0	0.0	26.52
4588	81	327	1312	2757	4	5	2	3	5.0			0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
4589	81	327	1340	5670	6	1	2	10	4.4			-92.340	15.330	-203.0	-1.5	175.2	47.0	39.4	74.3	0.56
4590	81	327	1710	3782	6	1	7	10	3.9			-90.550	15.270	-6.5	-9.1	5.7	1.8	0.6	0.9	0.16
4591	81	327	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4592	81	328	408	1649	6	5	6	10	4.9			-91.540	13.640	-115.9	-189.1	5.0	20.0	16.2	0.0	0.38
4593	81	328	715	1177	3	1	5	10	3.2			0.000	0.000	-1.7	-4.9	-3.4	17.8	38.5	176.5	2.37
4594	81	328	811	4393	5	4	7	5	2.0			0.000	0.000	327.0	327.0	273.8	327.0	327.0	327.0	129.70
4595	81	330	1343	1461	3	4	4	5	1.3			0.000	0.000	327.0	16.4	320.5	327.0	327.0	327.0	94.86
4596	81	330	1652	378	5	4	2	10	3.4			-89.580	15.610	99.5	28.5	58.4	46.2	13.4	253.4	0.54
4597	81	330	2108	3037	5	1	3	10	4.7			-90.390	16.820	10.1	162.5	121.7	207.4	49.9	101.4	0.81
4598	81	331	233	1184	5	5	2	10	4.0			-89.050	14.910	157.4	-48.8	5.0	12.7	27.7	0.0	0.83
4599	81	331	914	2900	5	5	2	10	3.5			-88.700	15.790	196.0	49.3	5.0	19.7	44.3	0.0	1.13
4600	81	331	1135	1501	1	0	5	10	2.0			-90.000	15.000	0.0	-28.5	5.0	327.0	327.0	0.0	0.00

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
4601	81	331	1628	1255			3	3	4	10	0.3	-90.520	15.350	-3.5	-0.2	9.8	0.9	0.6	1.1	0.04
4602	81	331	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4603	81	331	2029	4206			4	3	3	10	2.9	-91.040	14.630	-60.9	-79.2	38.8	19.4	13.9	2.1	0.24
4604	81	401	32	4650			5	4	3	10	4.1	-91.240	13.700	-82.6	-182.4	173.7	278.4	71.5	206.0	0.93
4605	81	401	1811	4000			5	0	6	9	5.7	-83.430	-16.660	327.0	327.0	327.0	327.0	327.0	327.0	0.45
4606	81	401	2152	2445			5	5	2	5	4.3	-90.980	14.430	-54.3	-101.3	8.3	50.6	37.3	24.0	0.88
4607	81	402	612	3429			5	5	2	10	3.2	-91.560	14.390	-117.5	-106.4	109.7	14.8	21.5	25.9	0.23
4608	81	402	641	3212			4	4	3	10	0.3	-90.540	15.330	-5.7	-2.0	6.5	3.2	2.0	4.3	0.36
4609	81	402	1435	3723			5	5	2	5	3.3	-91.060	14.630	-62.3	-78.9	21.1	12.3	15.9	34.1	0.42
4610	81	402	1933	581			5	5	2	5	4.1	-91.600	13.820	-128.8	-169.6	35.0	37.9	49.7	113.5	0.53
4611	81	402	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4612	81	403	211	2600			5	5	2	10	1.3	-90.580	15.360	-9.8	1.3	9.8	0.9	0.5	1.0	0.07
4613	81	403	1202	5502			5	5	2	4	3.0	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
4614	81	403	1612	3537			5	0	3	10	5.4	-90.400	15.130	9.0	-24.3	13.6	0.8	5.2	3.8	0.03
4615	81	403	1815	2813			4	6	2	10	2.7	-90.210	14.730	30.4	-67.9	5.0	22.8	13.9	0.0	0.96
4616	81	404	703	715			2	2	5	2	1.3	0.000	0.000	-0.5	11.6	5.0	327.0	327.0	0.0	7.88
4617	81	404	734	1903			2	2	5	2	2.2	0.000	0.000	6.0	-28.5	5.0	327.0	327.0	0.0	19.08
4618	81	404	1938	3661			4	4	3	10	0.9	-90.570	15.330	-9.1	-2.2	11.0	3.4	0.9	1.8	0.19
4619	81	404	1958	3741			5	6	2	10	1.6	-90.030	15.260	49.6	-10.4	13.2	54.3	8.9	77.0	1.09
4620	81	404	2020	1463			3	3	4	10	2.0	-89.930	14.760	60.8	-65.4	5.0	41.3	42.6	0.0	1.92
4621	81	405	52	4175			3	5	3	10	2.7	-90.420	16.110	7.2	83.8	5.0	18.9	11.1	0.0	0.81
4622	81	405	911	4148			2	2	5	2	1.6	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
4623	81	405	1026	1348			6	1	2	8	5.8	-93.780	13.880	327.0	-162.6	45.8	44.2	43.0	327.0	0.43
4624	81	405	1322	4445			6	6	1	10	2.9	-90.280	14.330	22.2	-112.6	5.0	20.3	9.8	0.0	0.73
4625	81	405	1424	589			3	5	3	10	1.3	-90.110	15.260	41.6	-9.8	5.0	2.5	1.1	0.0	0.18
4626	81	406	404	2915			4	5	0	10	3.7	-89.730	16.160	82.4	89.5	257.0	167.3	44.9	68.1	0.50
4627	81	406	1039	4554			5	4	2	10	0.9	-90.430	15.310	5.7	-4.2	9.6	2.0	0.8	1.8	0.17
4628	81	406	1348	1643			4	5	3	5	2.3	-90.890	14.770	-43.8	-64.3	2.6	39.5	21.1	152.6	1.09
4629	81	406	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4630	81	406	1815	1034			5	5	2	6	3.0	0.000	0.000	-87.6	-73.7	20.8	160.1	46.7	327.0	2.11
4631	81	406	1856	473			4	4	3	10	4.0	-92.170	14.840	-104.4	-56.6	5.0	6.5	13.2	0.0	0.35
4632	81	407	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4633	81	407	1526	5666			6	5	1	10	3.5	-88.250	15.940	244.8	65.7	5.0	14.6	36.2	0.0	0.62
4634	81	407	2123	2343			6	5	1	10	3.9	-89.170	15.090	144.6	-28.4	30.5	6.4	12.5	3.7	0.42
4635	81	407	2322	4043			6	4	1	10	4.0	-89.980	14.140	55.4	-133.4	238.6	13.2	9.8	6.4	0.14
4636	81	408	142	3522			5	5	2	10	3.1	-91.030	13.640	-59.6	-189.3	5.0	22.7	9.3	0.0	0.41
4637	81	408	237	4137			6	4	1	10	4.0	-90.970	13.880	-52.9	-161.9	103.4	42.8	26.4	52.8	0.67
4638	81	408	1011	2973			2	1	5	1	0.3	-90.470	15.290	1.7	-6.5	5.0	0.0	0.0	0.0	1.53
4639	81	408	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4640	81	408	1218	500			6	6	6	10	5.2	-89.220	16.780	138.4	157.8	327.0	196.7	145.0	63.9	1.02
4641	81	408	1646	4975			6	4	1	10	3.0	-92.100	15.560	-176.6	23.8	154.7	11.4	9.6	15.4	0.15
4642	81	408	2321	1115			2	1	5	1	0.6	-90.470	15.290	1.7	-6.5	5.0	0.0	0.0	0.0	1.14
4643	81	409	1006	4432			2	1	5	1	0.3	-90.470	15.290	1.7	-6.5	5.0	0.0	0.0	0.0	0.72
4644	81	409	1025	3272			4	5	2	10	0.9	-90.540	15.360	-6.2	1.3	12.9	4.3	1.4	2.7	0.37
4645	81	410	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4646	81	411	1351	5978			5	3	2	10	3.1	-90.420	15.450	7.2	11.5	6.2	2.6	1.1	1.6	0.15
4647	81	411	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4648	81	412	17	4115			4	3	3	10	3.2	-88.700	15.990	196.0	71.4	146.4	307.9	90.1	327.0	1.15
4649	81	412	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4650	81	412	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00

GU EQFILE																				
NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
4651	81	412	2046	1247			3	3	4	10	2.5	-90.880	14.600	-43.3	-83.3	5.0	24.6	20.5	0.0	1.02
4652	81	413		28	3189		6	3	2	10	4.9	-91.260	15.420	-84.3	8.0	51.5	22.2	21.3	59.4	0.84
4653	81	413		45	2640		2	1	5	1	2.3	0.000	0.000	6.0	-28.5	5.0	0.0	0.0	0.0	5.93
4654	81	413		205	1233		2	3	5	5	1.8	-90.580	14.820	-10.6	-58.3	1.2	59.4	20.8	20.7	0.51
4655	81	413		1534	2350		2	2	5	10	0.9	-90.560	15.360	-7.7	1.4	10.2	3.4	0.7	0.0	0.09
4656	81	413		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4657	81	414		304	4199		3	3	4	10	3.0	0.000	0.000	-89.8	-167.3	5.0	188.2	107.4	0.0	2.56
4658	81	414		322	531		2	2	5	10	1.6	0.000	0.000	-0.3	168.2	128.1	327.0	327.0	0.0	18.05
4659	81	414		0	0		0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4660	81	414		1134	273		2	2	5	10	2.9	-90.700	15.780	-23.1	47.6	5.0	8.9	5.6	0.0	0.16
4661	81	414		1932	4906		4	3	3	5	2.7	-90.470	15.290	1.3	-6.2	5.0	11.0	2.3	0.0	0.50
4662	81	415		538	1080		4	4	3	2	3.9	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
4663	81	415		1127	3584		2	2	5	10	0.3	0.000	0.000	-26.9	327.0	327.0	327.0	327.0	0.0	159.37
4664	81	415		1412	380		1	2	5	10	0.9	-90.540	15.360	-5.9	1.8	5.0	0.1	0.0	0.0	0.00
4665	81	415		1501	5097		5	4	2	10	3.5	-90.190	15.200	32.3	-7.6	6.2	2.2	0.9	1.1	0.12
4666	81	415		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4667	81	415		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4668	81	415		1023	3659		5	4	1	10	3.7	-88.330	14.970	236.0	-41.8	5.0	14.0	53.0	0.0	0.49
4669	81	415		2236	4891		1	2	5	10	0.3	-90.420	15.380	7.3	3.5	5.0	0.7	0.2	0.0	0.02
4670	81	415		2309	2819		2	1	5	10	2.7	-91.050	14.030	-149.4	-145.7	5.0	1.1	1.3	0.0	0.01
4671	81	416		1957	4120		6	5	1	10	3.5	-90.610	14.460	-14.0	-97.8	207.6	18.1	13.6	8.4	0.25
4672	81	417		1235	4703		6	5	1	10	3.9	-91.000	14.020	-56.5	-146.7	96.4	46.5	28.1	59.4	0.02
4673	81	417		2223	728		5	5	2	10	4.0	-91.420	15.130	-101.9	-23.6	202.9	22.0	15.7	13.1	0.29
4674	81	418		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4675	81	418		626	2208		4	3	3	10	3.6	-91.130	13.720	-70.9	-180.6	126.8	98.4	21.0	94.6	0.35
4676	81	418		904	3937		4	4	2	10	3.6	0.000	0.000	245.3	-11.7	5.0	105.5	327.0	0.0	4.99
4677	81	418		1043	1924		5	5	2	10	3.1	-91.850	13.760	-149.4	-175.6	97.6	16.5	11.1	48.9	0.21
4678	81	418		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4679	81	419		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4680	81	419		1153	4665		2	1	5	10	3.4	-89.640	14.100	93.1	-138.1	5.0	9.0	5.3	0.0	0.08
4691	81	419		2340	3547		2	2	5	10	2.7	-90.720	14.420	-25.4	-102.2	223.6	327.0	68.4	0.0	1.24
4682	81	420		550	4500		5	0	3	4	6.1	0.000	0.000	327.0	327.0	5.0	327.0	327.0	0.0	327.00
4683	81	420		603	4175		4	5	2	10	3.5	-91.970	14.310	-162.4	-114.5	5.0	16.9	22.9	0.0	0.64
4684	81	420		613	1283		2	2	5	10	3.3	-92.100	14.030	-176.7	-145.6	87.2	30.3	35.2	0.0	0.17
4685	81	420		636	2174		4	4	3	10	3.6	-92.040	15.610	-170.2	29.3	177.8	86.9	64.0	96.0	1.10
4686	81	420		656	5855		4	5	2	10	3.6	-91.740	14.000	-136.9	-149.1	5.0	11.0	11.9	0.0	0.31
4687	81	420		805	1629		3	3	4	10	3.3	-91.920	14.320	-156.8	-113.3	5.0	11.0	16.1	0.0	0.40
4688	81	420		815	2211		4	4	2	10	3.0	-91.600	14.160	-121.9	-131.4	163.8	122.5	31.7	121.0	0.47
4689	81	420		850	5740		5	0	4	10	5.2	-91.020	14.740	-58.3	-67.1	50.0	77.3	70.8	36.0	0.22
4690	81	420		946	590		5	5	2	10	4.6	-91.800	13.940	-144.3	-156.0	129.7	21.1	14.4	33.4	0.27
4691	81	420		1906	1279		5	5	2	8	4.5	-92.040	13.900	-170.6	-160.3	46.3	30.7	22.9	161.1	0.48
4692	81	420		2046	2502		5	5	2	10	3.7	-88.950	16.440	167.9	120.7	5.0	34.7	49.3	0.0	1.13
4693	81	420		2048	3370		4	4	2	10	3.7	-88.060	15.730	265.6	41.8	36.4	24.5	130.9	0.0	0.78
4694	81	421		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4695	81	421		58	5290		3	4	4	10	3.4	-90.970	13.660	-52.4	-186.8	165.5	153.1	46.7	79.4	0.46
4696	81	421		116	3359		5	2	2	10	4.9	0.000	0.000	-145.2	-187.8	5.0	317.8	186.4	0.0	4.28
4697	81	421		128	3048		3	4	3	10	3.3	-91.930	14.250	-158.2	-121.4	5.0	4.9	6.1	0.0	0.17
4698	81	421		229	2863		1	2	5	10	2.8	-89.700	13.780	86.3	-173.9	5.0	35.7	20.2	0.0	0.13
4699	81	421		602	481		3	2	4	10	0.9	-90.580	15.360	-10.8	1.0	5.0	5.0	1.8	0.0	0.34
4700	81	421		985	3725		0	5	2	7	4.1	0.000	0.000	327.0	327.0	2.9	327.0	327.0	327.0	41.77

GU EQFILE																				
NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
4701	81	421	1627	3279	1	2	5	10	3.1			-92.070	14.620	-173.2	-81.0	5.0	18.0	40.2	0.0	0.15
4702	81	421	2330	300	5	4	2	10	1.3			-90.550	15.330	-7.3	-2.3	10.5	2.8	1.2	2.4	0.27
4703	81	422	58	2379	3	3	4	10	3.1			-89.600	14.410	96.7	-104.2	196.5	246.7	72.5	107.0	0.86
4704	81	422	407	4869	3	3	4	8	1.6			-90.620	15.410	-14.6	6.6	5.0	10.8	4.9	0.0	0.73
4705	81	422	729	2507	5	5	2	10	4.3			-91.870	14.220	-151.7	-125.1	5.0	29.5	38.5	0.0	1.02
4706	81	422	1113	5893	4	2	3	5	3.7			-91.330	13.810	-92.1	-170.0	4.4	89.4	67.8	38.2	1.97
4707	81	422	1838	774	4	4	2	10	1.3			-90.510	15.360	-2.9	0.9	13.1	1.7	0.7	1.9	0.12
4708	81	423	18	4267	2	2	5	10	2.9			-92.610	14.490	-232.3	-94.9	96.5	43.1	94.3	0.0	0.67
4709	81	423	45	908	5	6	1	10	3.5			-91.610	13.550	-122.6	-198.4	90.2	80.1	27.8	205.7	0.60
4710	81	423	400	3368	3	3	4	3	2.0			0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
4711	81	423	1011	1368	2	1	7	1	1.3			-90.470	15.290	1.7	-6.5	5.0	0.0	0.0	0.0	0.52
4712	81	423	1043	5999	6	6	1	10	3.1			-89.760	15.470	189.4	13.3	5.0	2.3	6.5	0.0	0.17
4713	81	424	14	553	4	5	2	5	3.2			-88.360	16.500	232.4	127.2	33.6	62.8	145.2	32.3	1.09
4714	81	424	818	4000	2	2	5	2	2.0			0.000	0.000	327.0	-146.3	327.0	327.0	327.0	327.0	327.00
4715	81	424	1038	502	1	2	5	10	2.2			-89.680	14.920	89.7	-47.5	5.0	3.4	4.7	0.0	0.04
4716	81	424	1635	4667	5	6	1	10	3.1			-92.000	14.340	-165.9	-111.1	5.0	10.7	15.4	0.0	0.48
4717	81	424	1748	3978	6	5	1	10	3.4			-91.700	13.540	-132.6	-200.3	113.5	28.9	18.5	56.8	0.55
4718	81	425	41	1173	4	4	2	10	3.6			-92.050	14.510	-171.4	-92.7	5.0	27.3	50.6	0.0	0.64
4719	81	425	58	2135	5	5	2	10	3.9			-91.650	13.030	-127.5	-168.4	5.0	40.6	35.8	0.0	0.87
4720	81	425	339	5914	6	6	1	10	3.6			-92.130	14.410	-179.8	-103.7	5.0	38.1	62.0	0.0	1.31
4721	81	425	411	5955	2	3	5	5	2.7			-91.820	14.580	-145.6	-93.9	158.5	137.4	23.6	73.7	0.23
4722	81	425	1114	914	3	1	5	10	2.7			-90.480	15.310	0.5	-4.5	4.0	0.0	0.0	0.0	0.00
4723	81	425	1314	4216	5	5	2	10	1.8			-90.580	15.370	-10.6	2.3	10.7	2.7	1.4	2.9	0.22
4724	81	425	1427	1417	2	2	5	10	2.3			-89.240	14.690	136.1	-72.5	63.0	8.4	14.0	0.0	0.14
4725	81	425	2041	3380	3	4	3	10	0.7			-90.600	15.350	-12.3	0.3	18.7	2.4	1.0	2.0	0.10
4726	81	425	2130	1600	1	2	5	10	0.3			-90.420	15.380	7.4	3.7	5.0	0.2	0.0	0.0	0.00
4727	81	426	56	5912	4	5	2	10	1.6			-90.510	15.340	-3.0	-1.0	8.7	1.4	0.8	1.4	0.17
4728	81	426	1119	595	3	0	5	10	0.9			-90.510	15.390	-2.2	5.1	5.0	0.0	0.0	0.0	0.00
4729	81	426	1329	820	4	4	2	10	1.3			-90.560	15.360	-8.4	1.2	10.7	2.2	0.9	2.5	0.15
4730	81	426	2037	1106	3	3	4	6	2.5			-90.120	15.690	39.7	37.7	11.9	4.9	7.2	17.4	0.30
4731	81	426	2331	659	4	4	2	10	2.7			-90.580	15.230	-10.2	-12.8	15.4	9.4	3.8	10.1	0.72
4732	81	427	1125	4064	4	4	6	10	3.9			-90.150	14.030	36.5	-145.4	200.5	17.8	26.6	22.1	0.21
4733	81	427	1150	3209	1	3	5	5	2.3			-90.570	14.690	-9.3	-72.8	12.7	45.5	11.6	42.6	0.28
4734	81	427	1822	3339	3	3	4	10	1.6			-90.590	15.340	-11.8	-0.5	7.8	0.9	0.3	0.9	0.04
4735	81	428	301	3966	4	4	2	10	3.4			-92.370	16.260	-206.0	100.7	191.5	25.3	40.1	42.4	0.27
4736	81	428	821	52	5	5	2	6	3.7			-92.410	14.760	-210.7	-64.9	83.6	47.5	36.8	85.3	0.72
4737	81	428	1004	1890	2	2	5	10	2.9			-88.640	14.410	201.7	-104.2	87.2	24.2	43.4	0.0	0.30
4738	81	428	1202	3428	2	2	5	10	1.8			-90.920	15.560	-47.1	23.4	26.2	4.5	5.0	0.0	0.18
4739	81	428	1430	5587	2	2	5	10	2.7			-88.840	14.610	100.7	-81.5	5.0	13.1	26.1	0.0	0.26
4740	81	429	117	1002	5	5	2	10	4.6			0.000	0.000	12.5	-97.1	5.0	51.7	28.6	0.0	2.11
4741	81	429	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4742	81	429	649	993	2	2	5	10	1.8			-90.740	15.340	-28.2	-0.6	15.3	26.9	16.9	0.0	1.13
4743	81	429	1379	1102	5	5	2	10	3.0			-90.530	15.370	-5.0	0.0	10.2	3.7	2.2	4.6	0.40
4744	81	429	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4745	81	430	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4746	81	430	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4747	81	430	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4748	81	430	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4749	81	430	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4750	81	430	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
4751	81	430	1245	1433			2	2	5	10	3.8	-92.560	15.430	-227.1	8.7	87.3	10.6	55.1	0.0	0.37
4752	81	430	1351	3790			3	3	5	10	3.9	-89.380	15.170	120.7	-19.8	5.0	8.6	23.3	0.0	0.42
4753	81	430		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4754	81	430	1700	4368			3	1	7	10	2.7	-90.540	15.300	-5.8	-5.7	4.0	0.0	0.0	0.0	0.00
4755	81	430	1732	1299			2	2	5	10	4.2	-91.900	15.210	-154.6	-15.6	63.3	17.0	58.0	0.0	0.56
4756	81	430		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4757	81	501	551	2500			2	3	6	10	5.4	-95.050	13.120	327.0	-246.6	5.0	85.2	171.3	0.0	0.40
4758	81	501		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4759	81	501	1129	4701			1	2	5	10	2.0	-90.970	15.530	-53.2	20.4	5.0	0.2	0.2	0.0	0.00
4760	81	501	1814	802			3	2	6	10	4.5	-90.710	13.840	-24.3	-167.3	266.0	63.9	105.4	71.7	0.53
4761	81	501	1907		4		2	3	5	10	3.7	-92.810	15.450	-254.5	11.4	5.0	15.5	154.3	0.0	0.59
4762	81	501		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4763	81	501		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4764	81	501	2138	789			4	2	3	10	5.2	-92.350	14.380	-204.7	-107.2	88.0	62.8	137.3	267.0	0.03
4765	81	501		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4766	81	502	821	2914			2	2	5	10	2.5	0.000	0.000	-168.0	76.5	115.9	327.0	327.0	0.0	12.48
4767	81	502	912	2908			2	2	5	9	1.8	0.000	0.000	-251.6	113.9	298.5	327.0	327.0	0.0	77.78
4768	81	502		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4769	81	502	1623	2500			3	3	6	10	6.4	-90.660	19.830	-19.4	327.0	327.0	45.5	83.9	115.9	0.21
4770	81	502		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4771	81	502		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4772	81	502	2325	1273			4	2	3	10	5.3	-90.530	12.890	-4.8	-272.2	173.7	59.8	111.1	196.4	0.53
4773	81	503		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4774	81	503	1344	1176			3	2	6	8	5.5	-94.580	15.950	327.0	66.4	94.2	144.3	266.1	327.0	0.89
4775	81	503	1423	3500			3	2	6	10	5.4	-96.110	17.400	327.0	227.3	205.2	63.6	136.6	285.2	0.28
4776	81	503	2337	5855			3	3	4	10	4.2	-92.350	15.770	-204.4	46.2	117.7	2.8	5.7	6.9	0.03
4777	81	504		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4778	81	504	917	4694			2	2	5	10	2.0	0.000	0.000	-315.4	327.0	70.8	327.0	327.0	0.0	258.41
4779	81	504	1004	3076			3	3	4	10	4.0	-90.860	15.510	-41.2	18.2	5.0	25.0	27.4	0.0	1.45
4780	81	504	1124	5482			1	3	5	10	3.1	-90.210	15.760	30.2	45.1	19.7	0.3	0.5	1.6	0.01
4781	81	504		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4782	81	504		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4783	81	504	2048	5166			3	3	4	10	3.1	-89.710	14.960	84.4	-42.9	5.0	7.9	10.2	0.0	0.35
4784	81	505	1310	3556			4	4	3	4	3.8	0.000	0.000	-145.9	327.0	327.0	327.0	327.0	327.0	327.00
4785	81	505		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4786	81	505	1423	4211			4	3	2	10	4.5	-91.110	13.410	-67.9	-214.9	5.0	47.3	20.4	0.0	0.61
4787	81	505	2220	3637			4	4	2	5	4.4	-89.610	14.960	96.1	-42.8	21.9	11.4	25.6	43.6	0.49
4788	81	506		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4789	81	506	718	3991			4	2	7	10	3.4	-90.390	15.470	10.1	14.0	7.5	0.3	0.9	0.5	0.08
4790	81	506		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4791	81	506		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4792	81	506	2139	1500			2	3	6	10	6.3	-89.000	17.800	162.9	271.0	327.0	327.0	327.0	321.4	0.81
4793	81	507	124	4336			3	3	4	10	2.2	-90.270	15.370	24.0	2.4	15.2	2.7	3.0	3.4	0.20
4794	81	507	1005	3955			2	2	5	10	0.9	-90.540	15.280	-5.6	-7.2	4.8	12.5	3.4	0.0	0.29
4795	81	507		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4796	81	507		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4797	81	507	2158	2524			2	1	5	5	2.7	0.000	0.000	-63.4	23.2	5.0	111.4	165.9	0.0	3.18
4798	81	507	2342	5467			4	4	2	10	4.7	-90.780	13.080	-31.6	-250.4	210.6	173.1	306.8	327.0	1.58
4799	81	508		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4800	81	508	116	376			3	3	4	10	3.7	0.000	0.000	327.0	-43.0	0.0	327.0	327.0	0.0	70.02

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
4801	81	508		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4802	81	508		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4803	81	508		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4804	81	508	1001	5520			3	3	4	6	3.7	-90.370	13.840	12.2	-167.0	52.0	60.0	77.3	253.5	1.03
4805	81	508		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4806	81	508		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4807	81	508		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4808	81	509		19		843	4	4	2	8	4.3	-90.200	13.920	31.3	-158.5	62.0	16.4	18.5	99.1	0.30
4809	81	509		134		1711	3	3	4	10	4.0	-90.010	14.010	51.7	-148.1	108.3	24.3	41.7	75.8	0.40
4810	81	509		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4811	81	509		539		5232	3	3	4	10	3.9	-89.940	13.990	60.2	-149.8	93.8	18.4	30.1	69.9	0.31
4812	81	509		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4813	81	509		830		1956	2	2	5	10	2.9	-92.580	15.400	-229.8	6.2	5.0	21.4	114.7	0.0	0.00
4814	81	509		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4815	81	509		1009		2883	2	2	5	9	1.6	-90.540	15.290	-5.7	-6.0	4.9	14.4	7.5	0.0	0.24
4816	81	509		1022		292	2	2	5	8	1.6	-90.520	15.350	-3.2	1.3	6.2	24.2	6.3	0.0	0.25
4817	81	509		1136		1742	3	2	6	10	2.9	-90.530	14.580	-5.2	-84.6	170.7	3.8	6.3	3.8	0.95
4818	81	509		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4819	81	509		1336		4932	2	2	5	10	3.2	-91.970	14.930	-162.2	-45.7	67.4	16.7	44.2	0.0	0.35
4820	81	509		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4821	81	509		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4822	81	509		1539		593	4	4	2	10	3.4	-88.720	15.440	193.6	10.5	5.0	5.6	34.6	0.0	0.34
4823	81	509		1907		5132	2	1	5	0	0.9	0.000	0.000	-4.4	-5.5	5.0	171.1	59.9	0.0	6.01
4824	81	509		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4825	81	509		2346		1094	2	2	5	10	3.3	-89.190	13.820	141.6	-168.6	86.3	65.8	55.7	0.0	0.49
4826	81	510		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4827	81	510		615		825	3	3	4	10	3.3	-92.410	14.270	-210.3	-119.0	101.3	23.5	45.2	81.7	0.28
4828	81	510		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4829	81	510		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4830	81	510		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4831	81	510		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4832	81	510		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4833	81	511		419		5248	2	2	5	6	3.0	0.000	0.000	327.0	254.9	5.0	327.0	327.0	0.0	138.46
4834	81	511		821		5299	2	1	5	10	3.4	-89.540	13.730	103.5	-178.4	5.0	7.9	6.1	0.0	0.04
4835	81	511		1004		3322	3	3	4	10	3.7	0.000	0.000	213.2	115.5	5.0	162.9	327.0	0.0	7.36
4836	81	511		1044		4296	4	3	3	10	4.5	-91.810	13.540	-145.5	-199.7	111.0	39.2	70.8	149.0	0.41
4837	81	511		1648		4302	1	2	5	10	0.9	-90.910	14.900	-46.6	-49.4	5.0	4.2	4.1	0.0	0.03
4838	81	511		1655		45	1	2	5	10	2.2	-90.710	15.400	-24.1	6.3	5.0	0.2	0.2	0.0	0.03
4839	81	512		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4840	81	512		2313		4861	3	2	4	10	4.3	-90.860	13.640	-40.5	-188.5	185.8	5.8	12.9	16.0	0.05
4841	81	513		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4842	81	513		1821		4400	4	4	2	10	2.9	-90.500	15.290	-1.1	-7.0	1.7	1.6	0.7	8.1	0.22
4843	81	513		1833		4889	4	4	2	10	4.3	-92.120	15.690	-178.4	38.2	198.4	29.5	19.1	30.2	0.30
4844	81	513		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4845	81	513		2203		5600	2	2	5	10	3.1	-91.900	16.780	-155.2	158.8	84.3	105.7	115.8	0.0	0.67
4846	81	513		2210		3348	4	4	2	10	3.9	-93.500	14.550	327.0	-87.8	259.5	137.4	87.7	192.5	0.87
4847	81	513		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4848	81	513		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4849	81	514		142		2335	2	2	5	10	3.5	-89.260	17.560	134.1	244.7	101.5	4.6	2.6	0.0	0.04
4850	81	514		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
4851	81	514	852	5729	3	3	4	5	3.4			-90.470	14.370	1.8	-107.8	1.6	50.2	26.6	269.9	1.28
4852	81	514	1530	3000	3	3	4	9	5.2			-94.500	18.270	327.0	323.0	77.4	151.7	93.7	327.0	0.73
4853	81	514	1749	5932	2	2	5	3	4.4			0.000	0.000	34.5	327.0	327.0	327.0	327.0	327.0	327.00
4854	81	514	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4855	81	515	346	3806	2	2	5	10	3.9			-92.320	14.410	-201.3	-104.1	5.0	18.3	32.7	0.0	0.27
4856	81	515	1131	3940	2	1	5	10	2.9			-90.250	13.640	26.0	-189.1	5.0	2.1	0.8	0.0	0.02
4857	81	515	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4858	81	515	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4859	81	516	254	1921	4	4	3	10	4.8			-88.490	15.030	218.1	-35.2	89.7	72.4	236.4	327.0	1.58
4860	81	516	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4861	81	516	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4862	81	516	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4863	81	516	2128	4842	2	2	5	10	4.4			-92.420	16.040	-212.0	76.9	86.0	253.9	327.0	0.0	0.53
4864	81	517	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4865	81	517	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4866	81	517	800	5419	2	2	5	10	2.8			-90.520	15.350	-3.2	0.5	5.0	7.7	7.6	0.0	0.49
4867	81	517	1519	3641	1	2	5	1	3.4			0.000	0.000	-0.5	11.6	5.0	0.0	0.0	0.0	41.28
4868	81	517	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4869	81	517	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4870	81	517	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4871	81	518	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4872	81	518	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4873	81	518	857	830	3	2	4	10	5.0			0.000	0.000	-82.4	-96.4	5.0	66.2	54.9	0.0	2.28
4874	81	522	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4875	81	522	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4876	81	522	2309	2496	3	2	4	10	2.7			-90.380	15.230	20.4	-13.5	5.7	0.3	0.6	0.2	0.02
4877	81	523	212	3614	2	2	5	10	3.3			0.000	0.000	137.0	-139.9	5.0	240.0	244.1	0.0	2.32
4878	81	523	229	2045	4	3	7	10	3.7			-90.240	15.290	27.3	-6.8	5.0	5.2	4.9	0.0	0.42
4879	81	523	318	1346	3	3	4	5	4.5			-91.260	17.970	-84.6	290.0	35.9	92.2	139.6	327.0	1.80
4880	81	523	707	2406	3	3	4	10	3.8			-92.660	15.960	-238.1	67.3	120.6	9.0	18.9	27.2	0.11
4881	81	523	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4882	81	523	926	2387	3	3	4	10	2.5			-89.580	15.070	99.0	-30.6	5.0	6.3	11.2	0.0	0.29
4883	81	523	1841	4610	2	2	7	10	2.2			-90.570	15.280	-9.1	-7.4	6.6	1.2	0.4	0.0	0.03
4884	81	524	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4885	81	524	326	2181	2	1	5	10	3.5			-91.090	13.840	-65.7	-166.9	5.0	5.0	2.4	0.0	0.06
4886	81	524	409	1144	2	1	5	10	3.5			-90.170	13.340	34.2	-221.8	5.0	4.7	0.8	0.0	0.01
4887	81	524	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4888	81	524	942	5088	3	2	4	5	2.7			-90.520	14.080	-3.7	-140.4	37.2	76.7	76.6	219.9	1.37
4889	81	524	1029	1484	2	2	5	10	3.8			0.000	0.000	-261.5	-302.5	327.0	327.0	327.0	0.0	121.63
4890	81	524	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4891	81	524	1325	4387	4	2	7	10	3.5			-90.590	15.350	-11.2	-0.1	16.3	0.9	0.7	1.1	0.06
4892	81	524	2234	1667	3	3	4	10	4.0			-91.290	16.160	-88.3	90.0	5.0	15.7	16.6	0.0	0.51
4893	81	524	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4894	81	525	203	4230	5	4	2	5	4.0			-91.670	13.760	-129.2	-176.1	39.8	98.4	63.4	327.0	1.63
4895	81	525	659	1739	5	5	2	5	4.0			-91.970	13.990	-162.6	-150.3	40.3	60.3	42.9	302.2	1.11
4896	81	525	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4897	81	525	1215	2203	3	3	4	10	4.3			-92.010	14.300	-166.5	-116.2	206.2	45.2	83.9	58.9	0.46
4898	81	525	1344	4753	4	2	4	10	3.9			-90.980	13.520	-54.3	-201.7	0.9	34.8	13.7	11.9	0.52
4899	81	525	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4900	81	525	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
4901	81	525	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4902	81	526	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4903	81	526	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4904	81	526	802	4686	2	2	5	2	2.5	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.0	327.0	327.00
4905	81	526	1028	2535	2	2	5	10	1.8	0.000	0.000	-46.9	-14.6	231.9	327.0	327.0	327.0	0.0	0.0	44.54
4906	81	526	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4907	81	526	1055	5265	3	3	4	10	3.7	-91.190	13.470	-77.0	-207.6	58.2	21.4	10.0	0.0	0.0	0.0	0.26
4908	81	526	1128	4826	5	4	2	10	4.7	-92.790	17.850	-252.2	276.5	5.0	53.0	50.5	0.0	0.0	0.0	0.66
4909	81	526	1823	2583	2	1	5	10	4.1	-92.180	15.680	-185.3	36.6	5.0	2.3	5.5	0.0	0.0	0.0	0.05
4910	81	526	1937	2734	2	2	5	10	2.3	-90.390	15.300	11.0	-4.9	5.0	4.2	2.7	0.0	0.0	0.0	0.23
4911	81	526	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4912	81	527	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4913	81	527	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4914	81	527	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4915	81	527	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4916	81	527	1752	3161	2	2	5	9	2.9	0.000	0.000	268.4	327.0	327.0	327.0	327.0	327.0	0.0	0.0	141.22
4917	81	527	2026	1614	3	4	4	5	3.2	-90.770	14.670	-30.8	-75.6	20.8	11.8	14.3	21.9	0.0	0.0	0.51
4918	81	528	545	4880	5	0	7	2	5.3	0.000	0.000	327.0	327.0	5.0	327.0	327.0	327.0	0.0	0.0	55.03
4919	81	528	610	2893	4	3	7	10	3.7	-90.310	15.300	19.5	-5.1	8.2	11.8	8.4	24.7	0.0	0.0	1.27
4920	81	528	845	4798	5	4	7	10	2.5	-90.530	15.320	-4.8	-2.6	12.1	1.6	0.8	1.6	0.0	0.0	0.17
4921	81	528	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4922	81	528	957	5455	3	2	5	9	2.3	0.000	0.000	18.6	-4.2	4.9	33.0	31.2	65.6	0.0	0.0	2.07
4923	81	528	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4924	81	528	1636	3727	5	2	7	10	3.4	-90.310	15.300	19.4	-5.0	7.0	0.9	1.0	1.0	0.0	0.0	0.19
4925	81	528	1714	880	2	1	5	10	1.3	-90.280	15.480	22.8	14.2	5.0	0.0	0.0	0.0	0.0	0.0	0.00
4926	81	528	1841	3357	3	2	4	10	2.7	-90.420	15.310	7.0	-4.3	21.7	0.4	0.6	1.3	0.0	0.0	0.04
4927	81	529	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4928	81	529	0	0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4929	81	529	835	1801	5	2	3	10	4.6	-90.790	14.890	-33.5	-50.2	47.0	7.6	6.7	9.2	0.0	0.0	0.31
4930	81	529	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4931	81	529	1217	803	5	5	2	10	4.1	-89.120	15.800	150.1	-49.9	5.0	13.4	26.4	0.0	0.0	0.0	0.85
4932	81	529	1510	3537	5	4	2	10	4.1	-90.510	14.420	-2.2	-102.9	202.2	18.5	13.8	9.4	0.0	0.0	0.25
4933	81	607	1156	1433	2	1	5	1	0.3	-90.280	15.380	23.0	3.8	5.0	0.0	0.0	0.0	0.0	0.0	0.64
4934	81	607	1440	2131	4	2	4	10	2.3	-90.320	14.110	18.3	-137.4	5.0	17.7	8.6	0.0	0.0	0.0	0.42
4935	81	607	1823	5292	4	1	7	10	2.6	-90.470	15.280	2.3	-7.7	1.7	0.3	0.2	0.6	0.0	0.0	0.05
4936	81	607	0	0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4937	81	607	2226	976	4	2	4	10	3.5	-90.690	14.980	-21.8	-49.1	5.0	15.4	15.0	0.0	0.0	0.0	0.84
4938	81	608	223	5518	4	1	4	10	4.9	0.000	0.000	202.2	40.5	5.0	101.5	190.9	0.0	0.0	0.0	3.37
4939	81	608	536	1810	4	3	6	10	4.9	-89.170	16.090	144.2	82.5	327.0	321.8	233.1	92.0	0.0	0.0	1.51
4940	81	608	739	2360	2	3	5	5	2.0	-90.690	14.880	-22.4	-51.3	10.9	5.6	2.6	21.8	0.0	0.0	0.13
4941	81	608	0	0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4942	81	609	0	0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4943	81	609	2257	5921	3	2	6	5	4.9	-90.120	12.200	39.8	327.0	79.1	327.0	327.0	327.0	327.0	0.0	1.97
4944	81	609	0	0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4945	81	610	0	0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4946	81	610	0	0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4947	81	610	0	0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4948	81	611	254	2151	2	3	5	10	2.5	0.000	0.000	-104.3	-64.2	5.0	327.0	327.0	0.0	0.0	0.0	3.35
4949	81	611	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4950	81	611	1728	5823	3	3	4	10	3.6	-90.690	13.610	-22.1	-192.4	5.0	4.8	1.5	0.0	0.0	0.0	0.07

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
4951	81	611		0		0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4952	81	611	1833	925			4	1	4	10	6.3	-89.550	15.410	102.6	6.7	53.8	7.5	11.5	13.6	0.18
4953	81	612	111	2135			4	2	7	10	2.5	-90.470	15.210	1.2	-15.7	8.7	6.6	11.6	2.9	0.53
4954	81	612	1050	4384			4	3	3	5	3.5	-91.530	13.600	-114.7	-193.1	27.1	109.1	141.1	327.0	1.40
4955	81	612	1205	4184			2	3	5	5	3.3	-91.890	13.440	-153.3	-211.2	40.8	71.8	43.8	184.6	0.38
4956	81	612	1226	2499			4	2	6	10	4.6	-93.130	14.540	-289.0	-89.9	5.0	28.8	74.1	0.0	0.45
4957	81	612	1237	2255			4	3	6	5	4.6	0.000	0.000	222.4	327.0	161.3	327.0	327.0	327.0	3.11
4958	81	612		0		0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4959	81	612		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4960	81	612	2146	2136			2	2	5	10	3.4	-88.820	14.020	182.8	-146.6	89.1	89.1	107.9	0.0	0.70
4961	81	612	2216	5510			3	3	4	10	3.6	-88.340	15.870	234.6	57.5	5.0	14.3	43.2	0.0	0.39
4962	81	612		0		0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4963	81	613	417	2639			3	3	4	5	3.4	-91.630	13.410	-130.9	-214.7	33.3	105.8	123.8	327.0	1.18
4964	81	613		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4965	81	613	1545	4296			2	2	5	10	2.8	0.000	0.000	327.0	327.0	207.6	327.0	327.0	0.0	217.82
4966	81	613	1639	1727			3	1	7	9	2.7	-90.430	15.260	0.2	-9.9	5.0	35.3	17.0	0.0	0.98
4967	81	614	34	5021			3	3	4	10	3.7	-91.740	13.500	-136.8	-204.1	57.0	23.4	38.2	327.0	0.25
4968	81	614		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4969	81	614	1338	5026			2	2	5	10	3.5	-88.730	14.180	192.1	-129.2	88.5	168.4	238.5	0.0	1.06
4970	81	614	1345	5501			3	4	3	5	3.6	-92.210	14.490	-188.4	-94.7	30.1	67.1	64.9	297.7	0.67
4971	81	614	1513	2242			4	4	2	6	4.0	-92.290	13.370	-198.0	-218.8	78.0	83.5	114.9	320.1	0.80
4972	81	614		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4973	81	615	758	5996			3	5	2	6	2.7	-90.380	14.260	11.8	-119.8	1.5	69.0	24.8	32.9	1.68
4974	81	615		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4975	81	615	2046	4557			2	2	5	10	3.4	-91.410	13.620	-101.6	-190.7	83.5	133.4	72.4	0.0	0.68
4976	81	616	538	1756			5	3	3	10	3.5	-90.610	15.230	-13.5	-12.8	18.6	8.5	3.6	10.0	0.59
4977	81	616		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4978	81	616		0		0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4979	81	617	104	4108			4	4	3	10	2.3	-90.530	15.360	-10.0	1.3	9.1	2.2	0.9	2.5	0.14
4980	81	617	627	5496			5	1	3	7	4.9	-90.860	14.600	-41.0	-82.4	43.1	21.1	15.9	60.1	0.57
4981	81	617	857	4054			4	4	2	10	4.1	-90.830	15.240	-37.5	-12.3	27.8	8.5	9.4	12.8	0.44
4982	81	617		0		0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4983	81	618	1449	676			2	2	5	10	2.2	0.000	0.000	-75.1	103.9	39.7	327.0	214.6	0.0	8.02
4984	81	618		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4985	81	618	1908	913			3	3	4	10	3.8	-92.360	15.390	-204.9	4.6	78.2	9.1	29.0	46.7	0.15
4986	81	618		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4987	81	618		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4988	81	619	840	2634			3	3	4	10	0.9	-90.460	15.340	2.8	-1.5	5.0	4.4	1.0	0.0	0.23
4989	81	619	1851	4861			3	3	4	8	3.6	-91.750	13.470	-138.1	-207.8	63.5	11.9	13.3	81.8	0.12
4990	81	620		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4991	81	620		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4992	81	620	1037	2859			3	3	4	10	1.8	-90.410	15.360	7.8	1.8	5.0	3.1	0.9	0.0	0.20
4993	81	620		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4994	81	620		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4995	81	626	1808	4043			2	2	5	10	0.9	-90.480	15.330	0.7	-2.1	17.7	76.3	15.9	0.0	1.69
4996	81	626		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4997	81	626	2257	692			3	3	4	10	2.8	-89.540	15.090	103.7	-28.9	42.4	12.8	25.9	69.1	0.45
4998	81	627	322	3006			3	3	0	7	3.7	-91.040	13.070	-60.5	-251.7	69.4	47.8	49.0	237.1	0.46
4999	81	627	1347	1500			3	2	4	10	4.9	-95.200	16.390	327.0	114.8	5.0	46.4	225.1	0.0	0.69
5000	81	627		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00

GU EQFILE																				
NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5001	81	627	0	0	0	0	0	0	6	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5002	81	628	242	330	2	2	2	2	5	10	2.5	-92.310	14.210	-200.0	-125.8	90.9	18.4	27.8	0.0	0.21
5003	81	628	1014	1859	2	2	2	2	5	10	2.8	-89.660	13.440	90.1	-210.6	87.1	182.8	78.1	0.0	0.41
5004	81	628	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5005	81	629	102	4287	3	2	3	2	4	10	4.9	-89.660	12.460	90.0	-319.3	114.2	6.1	7.4	30.3	0.04
5006	81	629	355	500	3	2	3	2	6	10	4.9	-95.740	15.840	327.0	54.6	246.6	209.2	327.0	327.0	0.88
5007	81	629	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5008	81	629	511	3893	3	3	3	3	5	6	3.4	-90.420	14.100	6.8	-138.1	25.0	74.2	63.9	327.0	1.40
5009	81	629	2057	1941	3	3	3	3	4	10	4.5	-93.220	14.650	-298.8	-76.9	94.3	6.7	11.5	36.9	0.05
5010	81	630	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5011	81	630	247	5000	3	3	3	3	5	10	4.1	0.000	0.000	327.0	42.9	5.0	327.0	327.0	0.0	101.40
5012	81	630	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5013	81	630	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5014	81	630	1911	3033	3	3	3	3	4	10	4.2	-89.550	14.970	102.4	-42.1	5.0	7.0	11.1	0.0	0.30
5015	81	630	2029	3500	3	2	3	2	0	10	3.8	-89.600	14.920	88.4	-47.1	5.0	20.6	33.0	0.0	0.83
5016	81	630	2236	2182	2	2	2	2	5	10	2.9	-89.030	15.300	159.1	-5.4	5.0	2.3	7.7	0.0	0.14
5017	81	630	2243	2021	3	3	3	3	4	5	4.0	0.000	0.000	-81.2	-242.4	25.2	200.4	216.3	327.0	2.16
5018	81	701	107	3365	3	3	3	3	4	5	3.9	-90.940	14.870	-49.2	-52.9	13.9	21.8	22.9	12.8	0.73
5019	81	701	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5020	81	701	1537	2965	2	1	2	1	5	10	4.0	-90.920	15.120	-47.0	-25.3	5.0	0.1	0.1	0.0	0.00
5021	81	701	1616	4244	2	2	2	2	5	5	2.5	0.000	0.000	48.3	327.0	5.0	327.0	327.0	0.0	90.90
5022	81	701	1943	1589	3	3	3	3	4	10	4.4	0.000	0.000	-99.6	-307.1	5.0	327.0	327.0	0.0	11.52
5023	81	701	2142	2300	2	2	2	2	5	10	2.2	-90.000	15.300	53.4	-5.4	5.0	2.2	2.5	0.0	0.10
5024	81	701	2301	3214	2	2	2	2	5	10	3.0	-92.740	15.790	-246.4	40.4	95.7	5.7	21.8	0.0	0.14
5025	81	702	1406	1039	2	2	2	2	5	2	3.6	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	50.91
5026	81	702	1448	1929	2	2	2	2	5	2	1.8	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	3.07
5027	81	702	1754	1877	2	1	2	1	7	6	2.2	0.000	0.000	5.8	-30.9	5.0	327.0	180.7	0.0	6.20
5028	81	702	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5029	81	702	2042	4815	2	2	2	2	5	5	0.9	0.000	0.000	180.6	-71.6	172.2	327.0	327.0	327.0	51.73
5030	81	702	2116	4472	3	3	3	3	4	10	2.7	-91.020	15.180	-58.5	-19.0	67.6	16.9	23.2	21.6	0.52
5031	81	703	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5032	81	703	422	5407	3	3	3	3	4	10	4.0	-92.640	15.180	-235.5	-18.8	111.3	8.0	13.1	23.4	0.00
5033	81	703	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5034	81	703	758	5377	2	2	2	2	5	10	2.0	0.000	0.000	-242.3	239.0	5.0	327.0	327.0	0.0	69.83
5035	81	703	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5036	81	703	1749	1779	2	2	2	2	5	10	2.6	-89.870	13.210	67.8	-236.1	92.4	185.2	53.5	0.0	0.21
5037	81	704	528	500	3	3	3	3	6	9	5.3	-95.140	19.910	327.0	327.0	94.5	94.9	133.6	327.0	0.35
5038	81	704	1143	788	2	3	2	3	5	10	0.9	-90.140	15.290	37.8	-6.2	3.9	0.4	0.6	0.2	0.02
5039	81	704	1626	5144	2	1	2	1	7	8	3.0	-90.470	15.290	1.9	-6.9	5.0	8.5	0.6	0.0	0.08
5040	81	704	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5041	81	704	2203	3941	3	3	3	3	4	7	3.3	-88.930	16.900	170.7	172.1	44.2	80.2	116.2	327.0	1.04
5042	81	705	0	0	0	0	0	0	6	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5043	81	705	54	599	3	3	3	3	4	10	3.4	-91.320	15.520	-91.0	19.1	5.0	10.0	22.2	0.0	0.55
5044	81	705	0	0	0	0	0	0	6	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5045	81	705	1000	2803	2	1	2	1	7	8	1.6	-90.460	15.280	3.1	-7.2	5.0	49.7	31.7	0.0	1.53
5046	81	705	0	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5047	81	705	1457	1917	2	2	2	2	5	10	2.4	0.000	0.000	-8.8	-112.1	84.9	327.0	327.0	0.0	7.62
5048	81	705	1727	2762	2	1	2	1	7	9	1.8	-90.480	15.310	0.8	-4.2	5.0	63.1	11.0	0.0	1.43
5049	81	706	328	5447	3	2	2	2	4	10	3.8	0.000	0.000	45.1	-175.5	5.0	207.9	107.4	0.0	4.51
5050	81	706	405	3450	2	2	2	2	0	10	2.7	-89.780	15.400	77.8	-210.1	85.1	197.5	72.5	0.0	0.36

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5051	81	706	830	4651	3	3	4	5	3.5		-91.770	13.730	-140.2	-178.7	41.9	41.7	50.7	147.7	0.52	
5052	81	706	1639	4228	2	2	5	6	2.3		0.000	0.000	-125.5	-116.2	184.5	327.0	327.0	327.0	35.15	
5053	81	707	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5054	81	707	112	4291	3	3	4	10	3.2		-92.070	14.030	-173.9	-145.9	115.4	32.0	44.4	89.5	0.34	
5055	81	707	611	1665	3	3	4	10	6.0		0.000	0.000	-75.3	-143.9	213.4	277.7	327.0	303.0	2.69	
5056	81	707	1242	5681	3	3	5	5	5.2		0.000	0.000	-191.6	-160.3	7.0	327.0	327.0	327.0	5.32	
5057	81	707	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5058	81	707	2314	249	3	2	7	6	2.3		0.000	0.000	-11.9	-24.2	8.6	211.6	223.8	321.2	7.86	
5059	81	708	55	4248	3	3	4	10	3.4		-92.150	14.370	-181.7	-107.8	5.0	23.4	38.2	0.0	0.41	
5060	81	708	0	0	0	0	7	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5061	81	710	2158	349	4	4	2	10	4.3		-91.970	15.810	-162.1	51.6	144.9	65.3	61.4	96.7	0.89	
5062	81	711	0	0	0	0	7	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5063	81	711	1338	1209	2	2	5	10	1.8		-90.610	14.910	-14.0	-48.7	5.0	6.3	9.5	0.0	0.40	
5064	81	711	0	0	0	0	7	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5065	81	714	1903	4090	1	2	5	1	2.9		0.000	0.000	-0.5	11.6	5.0	0.0	0.0	0.0	44.37	
5066	81	715	317	3437	2	2	5	10	3.1		0.000	0.000	18.3	327.0	327.0	327.0	327.0	0.0	124.46	
5067	81	715	326	3837	2	2	5	10	2.8		-92.750	15.000	-247.6	-38.3	97.2	18.8	87.5	0.0	0.38	
5068	81	715	1334	442	3	3	4	10	3.5		-89.600	15.340	97.2	-1.0	95.5	21.9	14.3	23.7	0.48	
5069	81	715	1540	4926	2	2	5	10	3.5		-92.280	16.710	-196.9	151.1	5.0	128.0	180.0	0.0	0.63	
5070	81	715	1545	2290	2	2	5	6	2.5		0.000	0.000	129.0	327.0	5.0	327.0	327.0	0.0	327.00	
5071	81	715	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5072	81	716	0	0	0	0	7	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5073	81	716	616	4812	4	1	4	10	3.5		-92.180	15.680	-185.8	36.4	223.6	56.3	39.6	48.6	0.49	
5074	81	716	833	1000	4	0	5	3	2.7		0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	3.65	
5075	81	716	845	4663	3	2	7	10	3.5		0.000	0.000	327.0	-95.0	5.0	327.0	327.0	0.0	78.52	
5076	81	722	1540	2659	2	2	5	10	2.2		-90.650	14.870	-18.4	-53.2	20.5	5.3	4.5	0.0	0.21	
5077	81	722	1939	4000	2	1	6	10	5.5		-86.500	17.510	327.0	239.4	5.0	5.3	10.4	0.0	0.04	
5078	81	722	1958	670	2	2	5	10	4.1		0.000	0.000	233.7	-309.9	95.6	327.0	327.0	0.0	21.56	
5079	81	723	104	3663	2	1	5	10	2.9		-91.860	14.300	-150.2	-115.7	5.0	24.3	27.2	0.0	0.41	
5080	81	723	826	3259	3	3	4	10	4.1		-88.950	14.210	168.2	-125.6	56.3	98.3	56.9	327.0	0.34	
5081	81	723	1734	2699	3	1	5	10	3.7		-90.210	13.830	30.7	-168.3	233.4	32.8	13.9	5.9	0.06	
5082	81	723	2309	300	3	3	4	10	4.4		-88.940	14.120	169.3	-135.5	135.0	137.4	66.3	146.6	0.36	
5083	81	724	733	3000	2	2	4	10	5.0		-86.800	18.000	327.0	292.8	5.0	129.6	170.8	0.0	0.87	
5084	81	724	0	0	0	0	7	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5085	81	724	0	0	0	0	7	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5086	81	724	0	0	0	0	7	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5087	81	724	2247	680	3	3	4	10	1.8		-90.490	15.240	-0.6	-12.2	2.3	4.6	3.7	26.8	0.38	
5088	81	724	2308	3218	3	2	5	10	2.8		-90.780	15.320	-32.0	-3.6	12.5	0.8	0.6	2.8	0.02	
5089	81	725	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5090	81	725	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5091	81	725	0	0	0	0	6	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5092	81	726	0	0	0	0	6	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5093	81	726	826	1811	3	3	4	10	4.0		-90.080	16.460	53.0	123.1	5.0	93.8	45.0	0.0	1.48	
5094	81	726	845	3668	3	0	5	10	5.1		-90.430	15.170	5.6	-19.6	5.0	0.2	0.1	0.0	0.00	
5095	81	726	0	0	0	0	6	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5096	81	727	1337	1157	2	2	5	7	2.6		0.000	0.000	15.8	-223.1	5.0	327.0	327.0	0.0	38.76	
5097	81	727	1545	240	3	2	4	10	4.1		-89.640	14.870	92.4	-52.5	42.2	58.5	49.0	205.3	0.48	
5098	81	727	2246	5050	3	1	5	10	4.9		-90.440	16.260	5.3	100.7	155.1	13.1	5.8	4.3	0.03	
5099	81	728	1341	757	2	2	5	10	3.1		-89.470	15.400	111.7	5.7	49.5	19.9	34.9	0.0	0.70	
5100	81	730	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0		

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5101	81	731	741	3816	2	2	5	9	2.5			0.000	0.000	111.0	327.0	129.2	327.0	327.0	0.0	70.04
5102	81	731	1417	2216	3	3	4	10	3.1			-90.500	13.170	-1.9	-240.7	55.2	46.0	5.2	0.0	0.23
5103	81	731	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5104	81	731	1450	3098	2	1	5	1	3.2			0.000	0.000	1.7	-6.5	5.0	0.0	0.0	0.0	58.96
5105	81	731	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5106	81	731	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5107	81	801	416	5585	2	2	5	10	2.3			-89.760	15.200	80.0	-16.7	5.0	12.7	16.5	0.0	0.60
5108	81	801	637	2044	3	2	4	10	4.7			0.000	0.000	98.1	-229.3	5.0	327.0	181.1	0.0	2.67
5109	81	801	730	747	2	2	5	10	1.8			-89.980	15.020	55.2	-36.4	5.0	9.3	10.0	0.0	0.43
5110	81	801	833	4965	2	2	5	10	3.7			-91.410	13.300	-101.1	-226.5	5.0	226.3	118.2	0.0	1.44
5111	81	801	919	1912	2	2	5	10	3.3			-88.320	16.460	236.8	123.1	99.9	115.8	183.4	0.0	1.52
5112	81	804	206	1318	3	2	4	10	5.3			-91.390	18.010	-98.8	294.0	5.0	58.3	17.8	0.0	0.28
5113	81	804	1016	3033	3	1	5	10	2.5			0.000	0.000	1.4	-4.2	5.0	44.5	81.1	0.0	3.90
5114	81	805	1514	4040	2	2	5	2	2.3			0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	7.01
5115	81	809	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5116	81	810	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5117	81	810	0	0	0	0	6	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5118	81	810	1023	2500	3	0	5	4	5.8			0.000	0.000	327.0	327.0	5.0	327.0	327.0	0.0	148.25
5119	81	811	419	1070	3	2	4	10	3.3			-90.460	15.410	3.0	6.3	5.0	8.1	10.5	0.0	0.66
5120	81	912	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5121	81	912	0	0	0	0	6	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5122	81	912	806	3941	3	2	4	10	2.5			-90.720	15.120	-25.6	-25.3	5.0	12.0	11.5	0.0	0.80
5123	81	912	832	3025	3	1	5	2	2.3			0.000	0.000	-47.7	327.0	327.0	327.0	327.0	327.0	327.00
5124	81	913	38	2961	3	3	5	10	2.9			-90.070	14.320	45.9	-114.1	5.0	49.1	36.5	0.0	1.96
5125	81	913	1724	3546	3	3	4	2	4.0			0.000	0.000	223.1	327.0	327.0	327.0	327.0	327.0	327.00
5126	81	914	1242	5119	3	1	6	2	5.2			0.000	0.000	29.7	327.0	327.0	327.0	327.0	327.0	327.00
5127	81	915	2050	5798	3	2	4	2	5.1			0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
5128	81	1126	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5129	81	1126	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5130	81	1126	714	4014	3	1	5	7	3.8			-93.550	15.110	327.0	-26.8	73.4	102.7	140.8	327.0	0.42
5131	81	1126	858	3825	3	3	4	10	3.4			-91.280	16.690	-86.5	148.2	5.0	52.0	32.2	0.0	0.91
5132	81	1126	2233	1750	3	2	5	10	3.3			-90.470	14.220	1.6	-124.5	5.0	23.7	11.5	0.0	0.53
5133	81	1126	2346	4758	3	3	4	7	2.0			-90.630	15.390	-15.5	4.5	0.3	0.5	0.5	6.2	0.05
5134	81	1127	45	3337	2	2	5	10	2.2			0.000	0.000	-12.6	-54.4	5.0	114.0	127.9	0.0	6.04
5135	81	1127	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5136	81	1127	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5137	81	1127	1156	1189	4	4	2	10	3.1			-90.880	14.850	-43.3	-54.6	5.0	13.9	12.6	0.0	0.95
5138	81	1127	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5139	81	1127	2247	1616	3	2	7	10	2.2			-90.500	15.270	-1.1	-0.7	5.0	1.8	4.0	0.0	0.45
5140	81	1128	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5141	81	1128	717	3458	5	4	2	10	3.1			-90.810	14.670	-35.3	-74.9	5.0	9.6	8.1	0.0	0.57
5142	81	1128	1055	2480	5	1	3	6	5.4			0.000	0.000	139.5	327.0	32.7	256.7	327.0	327.0	2.57
5143	81	1128	1228	4259	3	3	5	10	2.7			-91.410	16.020	-100.6	74.1	5.0	12.7	15.7	0.0	0.55
5144	81	1128	1253	2373	2	2	5	5	1.6			0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	237.09
5145	81	1128	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5146	81	1128	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5147	81	1129	151	893	2	2	5	10	2.3			-90.340	15.130	15.9	-24.6	5.0	5.0	5.3	0.0	0.28
5148	81	1129	349	5773	2	2	5	10	0.3			-90.590	15.380	-11.0	3.5	3.5	2.1	1.7	0.0	0.03
5149	81	1129	545	1469	2	2	5	6	2.2			0.000	0.000	-55.9	-52.8	5.0	209.8	327.0	0.0	3.78
5150	81	1129	624	1048	5	4	2	10	3.6			-90.790	14.690	-32.8	-73.3	5.0	10.3	9.5	0.0	0.56

CC

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5151	81	11	29	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5152	81	11	29	1558	717		3	3	4	10	1.8	-90.280	15.330	22.3	-2.3	6.7	4.4	1.8	2.9	0.14
5153	81	11	30	128	5814		4	4	2	10	3.3	-90.620	14.720	-15.1	-69.6	21.4	12.4	11.7	57.7	0.73
5154	81	11	30	837	3166		2	2	5	2	2.0	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	19.88
5155	81	11	30	914	3284		3	3	4	10	2.6	-90.690	14.480	-22.2	-96.1	30.1	36.1	41.1	327.0	0.96
5156	81	11	30	1212	1188		2	2	5	2	2.0	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	20.74
5157	81	11	30	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5158	81	11	30	1321	5393		4	3	3	10	3.5	-90.500	14.320	-1.4	-114.3	5.0	24.8	18.1	0.0	1.06
5159	81	11	30	1456	4518		4	5	2	5	4.1	0.000	0.000	-125.9	327.0	21.7	327.0	327.0	327.0	40.76
5160	81	11	30	1500	1166		2	2	5	2	2.2	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	18.74
5161	81	11	30	1900	2077		5	5	2	10	4.2	-90.450	14.550	3.7	-88.7	5.0	17.4	12.8	0.0	0.96
5162	81	11	30	1913	4363		2	2	5	3	1.8	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
5163	81	11	30	1951	2099		3	3	4	6	2.5	0.000	0.000	-28.3	-113.9	19.0	249.9	327.0	327.0	5.37
5164	81	11	30	0	0		0	0	6	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5165	81	11	30	2108	4613		3	3	6	5	3.6	0.000	0.000	-6.4	-92.1	41.6	141.0	260.5	327.0	4.25
5166	81	11	30	2126	1020		3	0	5	5	4.1	0.000	0.000	167.1	327.0	5.0	327.0	327.0	0.0	23.67
5167	81	11	30	2129	1268		2	2	5	10	3.4	0.000	0.000	327.0	327.0	327.0	327.0	327.0	0.0	327.00
5168	81	11	30	2131	2771		4	4	2	10	3.4	-90.480	14.490	0.5	-95.4	5.0	10.0	7.7	0.0	0.51
5169	81	11	30	2133	2015		3	3	4	7	3.3	-90.930	16.280	-48.2	103.5	13.2	5.8	3.5	4.1	0.14
5170	81	11	30	2140	4760		4	1	4	8	3.0	-90.500	14.520	-1.1	-92.1	11.4	3.4	6.2	20.5	0.16
5171	81	11	30	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5172	81	11	30	2154	2004		3	3	4	10	3.1	-90.600	14.520	-13.0	-91.4	5.0	18.6	15.9	0.0	0.92
5173	81	11	30	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5174	81	12	01	331	4535		6	6	1	10	4.1	0.000	0.000	108.4	10.9	5.0	57.2	65.9	0.0	3.83
5175	81	12	01	352	5466		3	2	4	10	4.2	-92.750	15.390	-248.3	4.2	71.3	7.8	28.0	83.1	0.15
5176	81	12	01	437	1000		5	0	3	2	4.9	0.000	0.000	327.0	327.0	5.0	327.0	327.0	0.0	3.36
5177	81	12	01	450	5377		4	4	3	10	3.1	-90.500	14.480	-10.8	-95.6	5.0	34.6	19.8	0.0	1.32
5178	81	12	01	453	901		2	1	5	1	1.3	0.000	0.000	-15.1	-4.8	5.0	0.0	0.0	0.0	19.31
5179	81	12	01	811	5178		3	3	4	5	2.6	0.000	0.000	-14.7	-91.0	37.1	63.7	45.4	36.5	2.09
5180	81	12	01	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5181	81	12	01	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5182	81	12	01	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5183	81	12	01	1330	4197		2	2	5	2	2.9	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	19.21
5184	81	12	01	1333	1668		3	3	6	10	2.8	-91.760	14.020	-139.9	-147.4	5.0	35.4	31.1	0.0	0.53
5185	81	12	01	1401	1791		4	4	3	10	2.7	-90.680	14.790	-21.2	-61.5	34.3	10.0	10.2	15.1	0.62
5186	81	12	01	0	0		0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5187	81	12	01	1511	5560		3	2	4	6	2.0	0.000	0.000	-91.3	-111.6	43.1	327.0	327.0	327.0	7.61
5188	81	12	01	1512	3918		5	3	2	10	3.9	-90.530	14.420	-4.9	-102.9	5.0	33.3	25.2	0.0	1.50
5189	81	12	01	1518	3545		3	3	4	10	3.0	-90.640	14.410	-17.3	-104.3	5.0	10.6	8.0	0.0	0.46
5190	81	12	01	1543	893		3	2	7	10	2.6	-90.150	15.300	37.1	-5.6	7.6	7.3	7.1	64.4	0.35
5191	81	12	01	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5192	81	12	01	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5193	81	12	01	2014	5005		2	2	5	10	2.7	-90.930	14.460	-48.3	-98.6	46.4	55.5	24.0	0.0	0.41
5194	81	12	01	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5195	81	12	01	2301	2107		2	2	5	10	3.0	-89.720	16.140	83.5	87.1	47.6	7.6	7.2	0.0	0.19
5196	81	12	02	536	4592		3	3	4	10	2.6	-90.080	14.580	44.2	-84.4	5.0	9.6	8.9	0.0	0.50
5197	81	12	02	1141	3557		3	3	4	5	3.7	-90.460	14.510	2.5	-92.9	8.2	6.6	8.1	39.1	0.35
5198	81	12	02	1842	1841		3	3	4	10	2.7	-90.260	14.710	24.5	-70.3	89.2	22.2	50.8	55.2	0.72
5199	81	12	02	1845	1204		3	2	4	5	3.3	0.000	0.000	37.8	-240.8	23.4	327.0	327.0	327.0	38.09
5200	81	12	02	1845	1204		2	2	5	10	2.7	-90.930	14.460	-48.3	-98.6	46.4	55.5	24.0	0.0	0.41

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5201	81	1202	1848	5762	4	3	3	6	2.9		0.000	0.000	48.5	137.9	51.0	85.5	68.6	163.8	2.15	
5202	81	1202	1850	1798	4	4	3	10	4.0		-90.380	14.440	11.6	-100.6	5.0	6.2	4.6	0.0	0.30	
5203	81	1202	1856	485	3	3	4	10	2.7		-90.470	14.570	1.4	-86.3	81.5	12.6	24.9	36.0	0.38	
5204	81	1202	1925	17	2	2	5	10	2.0		-90.510	14.520	-2.8	-91.4	5.0	12.9	8.6	0.0	0.40	
5205	81	1203	127	3482	3	3	4	5	2.8		-90.530	14.490	-4.9	-95.4	1.7	22.0	26.6	207.3	1.13	
5206	81	1203	0	0	0	0	0	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5207	81	1203	209	387	4	3	3	10	4.0		-90.260	14.400	24.6	-104.5	0.6	61.5	305.2	327.0	0.86	
5208	81	1203	213	868	4	4	3	10	2.8		-90.370	14.520	13.3	-91.1	5.0	5.3	4.3	0.0	0.28	
5209	81	1203	234	3361	4	4	3	10	3.6		-89.910	14.700	63.1	-71.9	5.0	16.0	16.2	0.0	1.03	
5210	81	1203	248	914	4	4	3	10	3.5		-90.450	14.430	4.4	-101.6	5.0	7.5	5.4	0.0	0.36	
5211	81	1203	356	3089	2	2	5	10	2.9		0.000	0.000	61.5	61.2	38.9	62.2	65.2	0.0	2.33	
5212	81	1203	406	740	4	4	3	10	4.3		-90.380	14.530	11.4	-90.2	5.0	3.6	2.9	0.0	0.19	
5213	81	1203	714	2713	4	4	3	10	2.0		-90.490	14.570	-0.9	-86.1	5.0	10.7	9.1	0.0	0.61	
5214	81	1203	818	1643	2	2	5	2	1.8		0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00	
5215	81	1203	949	5665	4	3	3	10	2.9		-90.320	14.540	18.7	-89.4	5.0	13.7	12.9	0.0	0.74	
5216	81	1203	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5217	81	1203	1040	2154	2	1	5	10	2.3		-90.080	16.170	44.6	91.4	5.0	0.2	0.1	0.0	0.00	
5218	81	1203	1041	1420	2	2	5	10	2.4		-90.490	14.560	0.1	-87.6	44.7	17.1	11.7	0.0	0.43	
5219	81	1203	1042	525	3	3	4	10	4.0		-90.000	14.410	44.2	-103.9	69.0	41.5	21.7	43.4	0.84	
5220	81	1203	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5221	81	1203	1103	1534	2	2	5	10	2.3		-89.970	16.230	56.0	98.0	46.5	23.5	10.3	0.0	0.60	
5222	81	1203	1204	2941	2	2	5	2	2.2		0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00	
5223	81	1203	1827	2045	4	4	3	5	2.3		-90.500	15.280	-1.2	-7.3	1.9	2.8	1.0	23.1	0.26	
5224	81	1203	2304	5125	3	3	4	10	2.7		-90.870	14.620	-41.6	-80.3	90.1	23.4	44.8	45.8	0.59	
5225	81	1204	301	3623	3	3	4	10	3.3		-88.060	15.880	265.9	58.5	36.3	7.5	31.1	0.0	0.17	
5226	81	1204	849	3453	2	2	5	2	2.9		0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00	
5227	81	1204	1213	3768	5	0	7	10	4.6		-89.880	14.980	66.5	-40.2	5.0	7.2	3.9	0.0	0.05	
5228	81	1204	1257	4307	2	2	5	10	2.3		-89.780	16.200	77.2	94.4	48.4	16.9	14.8	0.0	0.41	
5229	81	1204	1316	5171	2	2	5	10	2.2		-89.900	16.290	64.6	104.7	5.0	10.7	8.2	0.0	0.32	
5230	81	1204	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5231	81	1204	2351	3702	2	2	5	10	2.9		-91.220	13.500	-79.9	-204.3	5.0	20.7	12.2	0.0	0.31	
5232	81	1205	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5233	81	1205	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5234	81	1205	1006	1170	3	3	4	6	2.8		0.000	0.000	-136.2	-252.1	85.3	327.0	327.0	327.0	5.52	
5235	81	1205	1040	3732	5	5	2	10	3.5		-90.470	14.500	1.4	-93.3	5.0	16.0	11.3	0.0	0.85	
5236	81	1205	1144	462	4	4	3	10	1.8		-90.350	15.300	15.0	-5.6	7.7	0.6	0.4	0.7	0.08	
5237	81	1205	2059	1033	4	4	2	10	2.5		-90.610	14.540	-13.6	-89.2	5.0	7.8	6.6	0.0	0.43	
5238	81	1205	2104	1583	5	5	2	10	1.8		-90.500	15.370	-2.0	2.0	4.1	3.1	3.5	4.1	0.83	
5239	81	1205	2356	2057	2	2	5	2	2.6		0.000	0.000	73.3	67.5	44.0	327.0	327.0	59.2	3.33	
5240	81	1206	315	4023	3	3	4	5	3.6		0.000	0.000	-157.9	-174.7	27.6	272.4	152.5	327.0	3.04	
5241	81	1206	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5242	81	1206	0	0	0	0	5	0	0.0		0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5243	81	1206	518	4748	2	1	5	10	2.2		-90.210	16.100	30.8	83.5	5.0	0.1	0.1	0.0	0.00	
5244	81	1206	750	5653	2	2	5	10	2.5		-90.100	16.330	42.6	108.4	48.6	32.6	22.5	0.0	0.78	
5245	81	1206	801	5659	2	2	5	10	3.2		-89.740	16.060	81.2	78.4	44.8	2.7	2.7	0.0	0.87	
5246	81	1206	923	1582	5	5	2	6	3.6		-89.620	14.800	94.5	-60.7	11.4	35.4	36.3	197.0	1.66	
5247	81	1206	953	3707	3	2	5	10	2.3		0.000	0.000	-14.9	-92.6	5.0	67.8	69.7	0.0	3.30	
5248	81	1206	1010	4799	4	3	3	6	2.7		-90.510	14.490	-2.4	-94.9	15.1	40.3	59.5	132.4	1.81	
5249	81	1206	1011	5230	4	3	3	10	2.9		0.000	0.000	49.0	-140.0	5.0	259.0	247.0	0.0	9.59	
5250	81	1206	1515	4946	3	3	4	10	2.5		-88.600	15.390	206.1	4.9	76.5	32.0	115.0	151.7	0.79	

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5251	81	1206	1637	5034	3	2	4	5	2.6			0.000	0.000	178.1	46.3	4.5	96.6	262.5	62.4	2.53
5252	81	1206	2027	1819	4	2	3	10	3.9			-90.240	11.590	27.1	327.0	5.0	148.2	33.7	0.0	1.25
5253	81	1206	2031	3598	3	3	4	10	2.7			-90.520	14.540	-3.8	-89.3	5.0	12.8	11.7	0.0	0.67
5254	81	1207	248	2544	3	2	4	10	2.0			-91.080	14.680	-64.6	-73.7	95.8	8.0	16.0	14.9	0.19
5255	81	1207	644	378	3	3	4	10	2.2			0.000	0.000	107.4	-35.6	5.0	75.9	128.6	0.0	3.60
5256	81	1207	1153	4806	5	5	2	5	3.8			-91.170	14.060	-75.4	-142.6	41.5	35.8	25.4	282.4	0.99
5257	81	1207	1233	2133	3	2	4	10	1.6			-89.850	14.920	69.9	-47.8	40.9	21.8	52.8	86.1	0.89
5258	81	1207	1315	1182	3	3	4	5	2.9			0.000	0.000	-36.8	-183.0	66.2	327.0	327.0	327.0	11.52
5259	81	1207	1347	1522	3	3	4	6	2.9			0.000	0.000	13.8	-160.5	21.2	327.0	327.0	327.0	9.98
5260	81	1208	137	1817	4	3	3	10	3.5			-91.150	14.040	-73.0	-145.0	146.4	73.1	68.6	77.4	1.34
5261	81	1208	251	1431	4	4	2	10	3.7			-90.680	16.200	-21.2	94.7	5.0	23.4	17.6	0.0	1.16
5262	81	1208	907	1985	1	3	5	10	2.6			-90.960	17.170	-51.5	201.0	5.0	21.7	7.7	0.0	0.19
5263	81	1208	2317	3000	4	2	3	10	5.1			-87.820	11.370	291.4	327.0	154.9	83.5	75.9	236.3	0.57
5264	81	1210	30	4053	3	3	4	7	0.9			-90.520	15.310	-3.5	-4.2	4.5	21.6	20.2	53.6	1.85
5265	81	1210	1262	5674	4	4	3	10	3.7			-90.760	16.140	-29.5	87.4	5.0	11.2	9.2	0.0	0.60
5266	81	1210	1914	1137	3	4	4	10	2.0			-90.500	15.290	-1.7	-6.3	8.0	1.7	2.4	2.0	0.21
5267	81	1210	2011	4296	2	2	5	10	2.5			-90.530	14.480	-5.3	-95.6	47.7	3.6	2.3	0.0	0.08
5268	81	1210	2013	1096	4	4	2	10	3.4			-90.480	14.780	0.2	-62.9	100.8	25.7	22.7	20.4	0.89
5269	81	1210	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5270	81	1210	2314	4850	3	3	4	4	3.7			0.000	0.000	165.2	327.0	327.0	327.0	327.0	327.0	327.00
5271	81	1210	2320	3982	2	2	5	2	2.3			0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	18.85
5272	81	1211	751	1498	5	5	2	10	3.5			-91.610	13.600	-123.3	-193.3	88.8	12.6	9.8	38.2	0.21
5273	81	1211	1825	310	3	3	4	6	2.8			0.000	0.000	-31.7	-115.0	50.3	193.7	327.0	327.0	4.33
5274	81	1211	2251	3475	3	3	4	10	1.3			-90.760	15.400	-29.6	5.8	5.1	1.8	1.1	0.9	0.11
5275	81	1212	2345	2194	4	3	4	10	2.7			-91.700	13.660	-132.8	-187.0	91.6	16.1	13.3	47.9	0.26
5276	81	1213	252	3978	3	3	4	10	2.2			0.000	0.000	19.6	-127.9	5.0	58.1	39.1	0.0	2.25
5277	81	1213	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5278	81	1213	859	275	5	4	2	10	4.1			-90.490	14.510	-0.5	-92.7	5.0	12.1	9.6	0.0	0.64
5279	81	1213	904	3672	5	5	2	6	3.7			0.000	0.000	11.6	-213.0	19.7	327.0	327.0	327.0	17.92
5280	81	1213	929	2251	2	2	5	2	1.6			0.000	0.000	23.0	3.8	5.0	327.0	327.0	0.0	15.82
5281	81	1213	1719	70	4	4	3	10	3.0			-90.370	14.490	13.0	-95.1	5.0	8.0	6.2	0.0	0.41
5282	81	1213	1905	1290	2	3	5	10	2.3			-90.460	14.460	3.2	-98.5	5.0	35.0	18.4	0.0	1.00
5283	81	1213	0	0	0	0	6	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5284	81	1213	2337	2945	2	2	5	2	2.3			0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	35.85
5285	81	1214	759	2029	3	3	4	10	2.9			-92.030	16.620	-168.9	140.6	5.0	82.8	103.5	0.0	1.72
5286	81	1214	1111	5021	3	3	4	10	2.2			-91.860	15.040	-150.5	-34.2	5.0	11.1	33.2	0.0	0.40
5287	81	1214	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5288	81	1214	1205	1913	2	1	5	10	2.8			-92.110	15.770	-178.0	46.9	5.0	2.7	4.9	0.0	0.86
5289	81	1214	1217	810	2	1	6	1	4.3			0.000	0.000	23.0	3.8	5.0	0.0	0.0	0.0	39.59
5290	81	1214	1612	2368	5	4	2	10	4.6			-90.770	13.680	-31.5	-184.5	75.0	60.0	39.0	155.0	1.20
5291	81	1214	2210	2500	3	3	6	10	4.6			-94.500	18.610	327.0	327.0	247.7	37.3	89.2	182.9	0.22
5292	81	1214	2325	3521	3	1	5	10	3.1			-91.760	13.810	-139.1	-170.2	166.9	9.5	20.0	18.9	0.09
5293	81	1214	2331	4671	2	2	5	2	2.7			0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	45.55
5294	81	1216	55	1305	4	3	6	10	4.1			-93.580	15.430	327.0	8.6	295.5	70.2	63.3	90.4	0.59
5295	81	1216	707	4264	4	4	6	10	3.1			-90.640	14.500	-17.1	-93.9	262.3	50.6	114.4	44.0	0.64
5296	81	1216	724	4623	5	3	2	10	3.4			-91.660	15.440	-128.6	10.1	181.6	28.2	29.0	23.2	0.49
5297	81	1216	750	1269	4	4	6	10	2.8			-90.360	14.900	13.6	-49.6	237.6	11.1	25.3	6.8	0.16
5298	81	1216	1846	2637	4	4	2	10	1.6			-90.380	15.000	11.4	-39.0	3.9	5.7	9.3	4.2	0.66
5299	81	1216	0	0	0	0	5	0	0.0			0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5300	81	1217	812	3937	1	2	5	10	2.3			-90.300	14.550	20.7	-88.4	5.0	2.6	2.0	0.0	0.07

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5301	81	12	17	10	34	3377	5	5	2	7	3.7	-91.120	15.700	-69.2	38.6	6.7	7.4	7.8	93.8	0.45
5302	81	12	17	12	28	189	4	4	2	10	3.4	-89.410	15.650	118.2	33.5	5.0	16.4	24.0	0.0	1.04
5303	81	12	17	17	21	3954	3	2	7	10	4.2	-91.070	14.160	-64.0	-131.4	5.0	20.8	22.3	0.0	0.70
5304	81	12	17	22	55	4246	5	5	2	10	4.9	-92.460	15.670	-216.4	35.5	157.8	43.4	42.9	69.6	0.68
5305	81	12	18	15	3	3681	3	3	4	10	1.8	-89.440	15.810	114.4	50.7	5.0	10.4	19.9	0.0	0.39
5306	81	12	18	14	08	4647	5	4	6	10	5.0	-93.790	14.020	327.0	-147.4	151.7	181.6	193.4	327.0	1.84
5307	81	12	18	14	20	2371	4	3	6	10	4.9	-94.090	15.070	327.0	-30.3	5.0	15.4	64.9	0.0	0.61
5308	81	12	18	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5309	81	12	19	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5310	81	12	19	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5311	81	12	19	9	45	5879	2	2	5	2	1.3	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
5312	81	12	21	10	31	4000	4	0	4	5	6.1	-134.940	-17.600	327.0	327.0	327.0	327.0	327.0	327.0	1.82
5313	81	12	21	12	45	3165	2	2	5	2	2.0	0.000	0.000	-145.4	-177.7	327.0	327.0	327.0	327.0	327.00
5314	81	12	21	13	38	5083	2	2	5	10	2.2	-90.400	14.380	0.4	-107.4	51.2	3.5	2.0	0.0	0.07
5315	81	12	21	15	10	983	2	2	5	10	1.8	-90.420	14.530	7.2	-90.5	5.0	10.2	6.6	0.0	0.31
5316	81	12	21	15	19	951	3	2	5	10	2.5	-89.850	16.270	70.2	102.3	5.0	34.8	27.1	0.0	1.07
5317	81	12	21	15	20	1103	2	1	5	10	2.0	-90.360	15.670	14.0	35.5	5.0	0.0	0.0	0.0	0.00
5318	81	12	21	15	20	3713	3	2	4	10	2.9	-90.600	14.440	-12.8	-100.6	5.0	38.7	26.7	0.0	1.22
5319	81	12	21	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5320	81	12	21	22	14	4944	3	3	4	10	3.1	-89.000	15.740	162.6	42.9	5.0	16.4	49.7	0.0	0.56
5321	81	12	21	22	26	2634	3	3	4	5	3.1	0.000	0.000	-29.9	-201.1	57.7	327.0	327.0	327.0	13.13
5322	81	12	21	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5323	81	12	22	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5324	81	12	22	12	11	2367	3	3	4	10	2.3	-90.720	14.350	-25.5	-110.0	109.9	18.4	37.6	43.9	0.40
5325	81	12	22	19	24	5000	2	2	5	10	1.8	0.000	0.000	327.0	327.0	19.9	327.0	327.0	0.0	327.00
5326	81	12	23	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5327	81	12	23	11	52	1793	3	3	4	10	1.6	-91.140	15.370	-72.0	2.8	5.0	3.6	6.5	0.0	0.21
5328	81	12	23	16	23	1985	3	2	4	10	2.9	-91.780	15.490	-142.2	15.8	160.5	7.2	17.4	0.3	0.12
5329	81	12	23	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5330	81	12	23	20	19	1267	2	2	6	8	3.4	0.000	0.000	-251.7	-255.5	107.9	327.0	327.0	0.0	11.17
5331	81	12	23	20	27	4401	3	3	4	10	3.2	-90.350	15.040	15.2	-34.3	46.4	20.2	18.8	29.1	0.62
5332	81	12	24	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5333	81	12	24	0	0	0	0	0	6	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5334	81	12	24	2	39	240	2	2	5	6	0.9	-90.570	15.350	-8.7	0.6	5.0	47.8	34.2	0.0	1.54
5335	81	12	24	4	35	5060	3	3	4	10	4.3	-92.010	14.020	-166.4	-146.6	98.7	30.3	32.3	42.4	0.16
5336	81	12	24	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5337	81	12	24	14	19	4869	3	3	6	10	4.4	-92.850	16.310	-258.5	106.7	5.0	81.9	184.4	0.0	1.52
5338	81	12	25	6	0	0	2	2	6	10	5.5	-95.620	16.540	327.0	131.7	260.0	7.2	28.9	0.0	0.09
5339	81	12	25	8	46	3089	3	2	5	10	5.0	-92.010	15.210	-166.6	-15.3	122.1	190.2	220.7	291.3	1.30
5340	81	12	25	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5341	81	12	26	6	27	5786	4	1	4	10	3.5	-92.060	15.150	-172.8	-21.6	113.9	23.7	47.6	30.9	0.32
5342	81	12	26	9	47	3215	3	3	4	10	2.2	-90.570	14.780	-8.9	-62.4	110.7	19.3	43.0	30.1	0.54
5343	81	12	26	11	06	4756	3	3	6	10	4.2	-93.200	16.060	-305.7	167.5	5.0	94.0	167.3	0.0	1.50
5344	81	12	26	14	02	1756	3	0	5	10	2.9	-90.360	15.050	13.9	-33.1	5.0	0.0	0.1	0.0	0.00
5345	81	12	26	17	24	876	3	3	4	10	4.4	-91.130	13.150	-70.0	-242.9	96.3	37.1	63.4	227.2	0.44
5346	81	12	26	17	44	1933	3	3	6	7	3.9	0.000	0.000	-165.1	-221.4	62.2	258.5	327.0	327.0	2.80
5347	81	12	27	2	27	2797	2	2	5	10	3.0	-92.180	13.940	-105.7	-156.2	88.9	206.3	233.9	0.0	0.32
5348	81	12	27	0	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5349	81	12	27	17	13	129	2	2	5	10	2.2	-90.560	15.150	-8.4	-22.4	13.2	0.7	1.1	0.0	0.04
5350	81	12	27	18	38	3290	2	2	5	2	4.1	0.000	0.000	-174.9	327.0	327.0	327.0	327.0	327.0	327.00

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5351	81	1227	2020	642			2	2	5	10	3.0	0.000	0.000	-107.6	-96.6	148.1	327.0	327.0	0.0	24.79
5352	81	1228	554	3599			2	3	5	10	2.3	-91.290	15.340	-88.4	-0.8	5.0	22.6	57.9	0.0	1.12
5353	81	1228	1407	4496			3	3	4	5	3.6	0.000	0.000	287.1	8.1	43.7	327.0	327.0	327.0	5.30
5354	81	1228	1454	2446			2	3	5	7	3.3	0.000	0.000	199.9	-216.1	53.0	327.0	327.0	327.0	9.59
5355	81	1228	1609	5987			4	2	4	10	5.1	-92.690	15.750	-241.0	44.7	113.3	44.8	133.2	177.6	0.70
5356	81	1229	425	4541			3	0	5	10	3.3	-90.810	14.750	-35.8	-66.5	5.0	3.2	5.6	0.0	0.01
5357	81	1229	921	5803			3	0	5	10	3.1	-90.540	15.260	-5.4	-9.6	5.0	0.0	0.0	0.0	0.00
5358	81	1229	1331	2455			3	3	4	10	2.0	-90.930	15.800	-48.4	50.1	5.0	6.1	6.4	0.0	0.36
5359	81	1229	1331	4033			3	3	4	10	3.6	-92.320	14.170	-200.3	-130.0	73.6	9.4	18.9	50.1	0.12
5360	81	1229	2104	858			2	1	5	10	4.0	-90.290	13.200	21.7	-237.2	5.0	23.5	7.2	0.0	0.14
5361	81	1230	249	4693			2	2	5	10	3.7	-92.840	15.300	-257.9	-5.2	59.5	5.7	33.0	0.0	0.20
5362	81	1230	1246	5465			3	0	5	10	6.0	-90.630	15.360	-15.4	1.7	5.0	0.1	0.1	0.0	0.01
5363	81	1230	1756	92			3	2	4	10	4.6	-90.820	16.310	-36.3	106.0	5.0	60.0	37.7	0.0	1.35
5364	81	1230	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5365	81	1230	2032	989			3	0	6	10	5.5	-90.660	15.400	-19.3	5.4	5.0	0.1	0.1	0.0	0.00
5366	81	1230	2353	1819			3	2	5	9	4.6	-93.210	15.710	-298.1	40.3	66.5	222.6	326.3	327.0	1.29
5367	81	1230	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5368	81	1231	36	1946			3	1	5	4	4.8	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
5369	81	1231	243	205			3	2	4	10	5.2	-91.810	14.260	-144.6	-120.1	143.0	113.3	133.3	88.6	0.61
5370	81	1231	420	3604			2	2	6	2	3.3	0.000	0.000	219.3	327.0	327.0	327.0	327.0	327.0	327.00
5371	81	1231	559	2109			2	2	5	10	2.7	-90.420	13.110	7.1	-247.4	93.9	59.2	10.4	0.0	0.34
5372	81	1231	814	5320			3	1	7	10	2.2	0.000	0.000	-20.5	-11.2	5.0	73.4	33.9	0.0	2.70
5373	81	1231	847	1791			2	2	5	10	2.4	-90.710	14.390	-25.0	-106.4	47.2	29.3	9.2	0.0	0.30
5374	81	1231	931	129			2	2	5	10	1.9	-89.430	15.270	115.7	-0.1	5.0	4.4	11.3	0.0	0.20
5375	81	1231	1026	178			2	2	6	10	3.4	-91.150	12.910	-72.2	-269.8	5.0	96.4	24.6	0.0	0.37
5376	82	102	2250	4831			3	3	4	8	3.5	-90.930	14.310	-48.9	-114.3	39.5	80.8	112.5	327.0	1.73
5377	82	103	20	432			2	2	5	7	3.2	-91.440	14.340	-104.0	-111.0	56.8	327.0	171.1	0.0	1.63
5378	82	103	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5379	82	103	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5380	82	103	134	600			3	0	5	10	3.6	-90.580	15.160	-9.9	-20.3	5.0	0.1	0.1	0.0	0.00
5381	82	103	517	1691			4	4	3	5	2.5	-89.690	15.010	86.9	-37.2	26.7	9.4	23.0	29.3	0.48
5382	82	103	540	3293			2	1	5	10	2.5	-90.380	14.510	11.2	-93.1	5.0	0.4	0.3	0.0	0.00
5383	82	103	639	1594			2	1	5	10	2.3	-91.740	15.520	-137.6	18.6	5.0	2.6	4.9	0.0	0.07
5384	82	103	655	2912			2	2	5	7	2.7	0.000	0.000	-325.4	-243.3	80.6	327.0	327.0	0.0	35.74
5385	82	103	824	4009			2	2	5	10	3.8	0.000	0.000	327.0	327.0	327.0	327.0	327.0	0.0	304.57
5386	82	103	846	3233			2	1	5	5	2.2	-90.990	14.390	-54.7	-106.5	5.0	96.2	45.6	0.0	1.51
5387	82	103	1005	5354			2	2	5	8	2.0	-91.210	14.570	-79.5	-86.3	47.1	96.3	55.4	0.0	0.45
5388	82	103	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5389	82	103	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5390	82	103	1442	448			2	1	6	10	4.1	-93.000	14.530	-275.0	-90.6	5.0	45.4	108.1	0.0	0.38
5391	82	103	1530	2772			3	3	6	10	5.0	-91.900	14.260	-154.3	-120.4	210.3	14.5	32.6	18.3	0.17
5392	82	103	1641	2874			4	3	6	6	5.8	-91.420	12.670	-101.8	-295.8	39.0	184.4	83.4	58.4	1.63
5393	82	103	2054	4444			3	3	4	5	4.4	0.000	0.000	-45.8	-183.1	77.4	327.0	327.0	327.0	14.46
5394	82	103	2111	4776			3	3	4	5	3.5	0.000	0.000	-178.2	327.0	33.3	327.0	327.0	327.0	105.89
5395	82	103	2250	3196			4	3	3	10	3.1	-90.530	14.520	-4.9	-91.9	86.9	64.5	121.7	174.5	1.79
5396	82	103	2250	5479			3	3	5	10	4.1	-91.340	15.550	-93.3	21.9	102.1	24.7	55.5	33.3	0.64
5397	82	103	2257	4855			2	2	5	10	3.1	-90.860	14.530	-40.8	-90.8	5.0	32.3	13.3	0.0	0.36
5398	82	103	2319	2055			2	2	5	9	2.2	0.000	0.000	327.0	327.0	43.8	327.0	327.0	0.0	80.77
5399	82	103	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5400	82	103	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00

GU EQFILE																				
NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5401	82	103	2347	4259			2	1	5	10	3.1	-91.470	15.420	-107.4	7.9	5.0	0.7	1.1	0.0	0.02
5402	82	104		4	368		3	3	4	5	3.3	0.000	0.000	-39.4	-104.5	42.0	176.3	315.0	327.0	4.33
5403	82	104		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5404	82	104	27	3020			2	1	5	10	2.4	-91.450	15.240	-105.6	-11.8	5.0	2.0	4.3	0.0	0.06
5405	82	104		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5406	82	104	29	4356			3	3	4	6	2.9	0.000	0.000	18.5	-154.0	50.0	327.0	219.5	327.0	9.36
5407	82	104	30	5905			3	3	4	5	4.8	0.000	0.000	-22.9	-133.7	3.8	327.0	327.0	327.0	10.42
5408	82	104		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5409	82	104	105	2737			2	2	5	9	3.3	0.000	0.000	-118.3	-117.9	43.2	327.0	327.0	0.0	12.26
5410	82	104	147	2199			3	3	4	10	3.4	-91.220	14.670	-80.4	-74.5	72.6	11.5	19.4	21.2	0.26
5411	82	104	258	3929			3	3	4	5	3.0	0.000	0.000	-115.8	327.0	122.5	327.0	327.0	327.0	45.87
5412	82	104		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5413	82	104	458	2898			1	2	5	1	2.9	0.000	0.000	-15.1	-4.8	5.0	0.0	0.0	0.0	16.66
5414	82	104	525	2704			4	4	3	10	3.4	-91.380	15.910	-97.6	62.3	5.0	34.9	45.0	0.0	1.69
5415	82	104	555	1408			2	1	5	10	1.9	-91.410	15.290	-101.4	-6.9	5.0	0.3	0.6	0.0	0.01
5416	82	104	737	277			2	2	6	10	4.5	-92.170	11.840	-104.4	327.0	5.0	327.0	261.2	0.0	0.93
5417	82	104	1002	5980			2	2	5	10	2.5	0.000	0.000	-47.7	-109.4	327.0	327.0	327.0	0.0	36.89
5418	82	106	1503	1902			2	2	5	10	1.8	-90.590	15.300	-11.7	-5.6	6.7	4.2	5.7	0.0	0.14
5419	82	106	1702	1062			2	2	5	2	2.2	0.000	0.000	-137.4	-90.0	327.0	327.0	327.0	327.0	327.00
5420	82	106	2119	147			2	2	5	9	1.8	0.000	0.000	-74.0	-82.7	92.8	327.0	269.1	0.0	5.42
5421	82	107	233		0		3	2	4	10	5.8	-94.600	17.220	327.0	206.6	5.0	110.7	227.6	0.0	1.25
5422	82	107	314	547			2	2	5	10	2.0	-91.430	15.670	-103.2	36.0	5.0	17.0	27.1	0.0	0.72
5423	82	107	736	5946			4	2	3	5	5.2	-91.050	14.220	-62.0	-124.6	89.4	30.5	59.3	46.8	0.59
5424	82	107	933	3382			2	2	5	10	3.2	0.000	0.000	-131.7	318.9	124.2	327.0	287.6	0.0	3.99
5425	82	107	939	5368			2	1	6	10	3.5	-91.730	16.400	-136.0	115.9	5.0	3.0	2.5	0.0	0.04
5426	82	107	1128	1283			4	4	2	6	4.8	-92.740	13.950	-246.8	-155.0	64.8	74.1	164.9	273.4	0.93
5427	82	107	1814	5997			2	2	5	10	2.0	-91.440	15.880	-104.0	59.1	49.8	9.3	12.5	0.0	0.26
5428	82	108		0	0		0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5429	82	108	41	633			3	2	5	10	3.7	-91.310	15.220	-89.7	-14.2	5.0	8.7	22.8	0.0	0.42
5430	82	108	242	3908			3	3	6	10	4.6	0.000	0.000	327.0	143.1	5.0	327.0	327.0	0.0	13.81
5431	82	108		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5432	82	120	1606	5815			3	3	4	10	3.5	0.000	0.000	-27.3	86.0	5.0	88.3	49.7	0.0	2.63
5433	82	120	1708	1886			1	2	5	1	2.2	0.000	0.000	-15.1	-4.8	5.0	0.0	0.0	0.0	14.77
5434	82	120	2002	70			2	2	5	10	2.3	-89.760	14.090	79.5	-139.4	5.0	7.8	5.4	0.0	0.13
5435	82	120		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5436	82	120		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5437	82	120	2349	156			2	2	5	10	2.6	-90.790	16.760	-33.4	156.7	62.8	6.2	2.1	0.0	0.06
5438	82	121	157	3973			2	2	6	10	3.3	-91.450	13.520	-105.2	-202.4	5.0	327.0	159.0	0.0	1.00
5439	82	121	328	4101			2	2	5	9	2.0	0.000	0.000	-82.8	-79.6	37.0	327.0	327.0	0.0	6.41
5440	82	121	429	3570			3	3	4	10	4.6	-90.880	16.220	-42.9	96.8	5.0	38.2	22.7	0.0	1.06
5441	82	121	441	3887			2	2	5	6	2.7	0.000	0.000	327.0	327.0	5.0	327.0	327.0	0.0	234.11
5442	82	121	1037	4710			2	2	5	10	2.6	0.000	0.000	-239.6	327.0	327.0	327.0	327.0	0.0	90.36
5443	82	121		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5444	82	121		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5445	82	121		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5446	82	121		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5447	82	122	49	1257			2	2	5	2	2.2	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
5448	82	122	114	5141			1	2	5	1	2.0	0.000	0.000	-15.1	-4.8	5.0	0.0	0.0	0.0	9.94
5449	82	122	321	742			3	3	4	10	3.5	-91.300	15.380	-95.9	4.0	5.0	10.0	24.1	0.0	0.57
5450	82	122		0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5451	82	122	1508	5739	1	2	5	1	2.0	0.000	0.000	-15.1	-4.8	5.0	0.0	0.0	0.0	0.0	16.00	
5452	82	122	2224	3906	3	3	4	10	2.9	-90.480	15.270	0.7	-8.7	5.0	2.3	2.8	0.0	0.19		
5453	82	123	633	5295	2	2	6	10	3.4	-89.900	14.030	64.3	-146.0	5.0	13.7	7.9	0.0	0.22		
5454	82	123	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5455	82	123	1008	380	3	3	4	10	4.6	-92.300	15.580	-198.8	25.9	156.8	16.7	18.9	26.0	0.09		
5456	82	123	1600	1595	1	3	5	10	1.8	-90.490	15.300	-0.7	-5.7	3.4	0.0	0.0	0.1	0.00		
5457	82	124	137	1182	2	3	5	10	3.0	-90.430	15.090	5.6	-28.4	5.0	9.3	11.7	0.0	0.79		
5458	82	124	306	2081	2	2	5	2	3.6	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00		
5459	82	124	1036	3589	2	2	5	7	2.5	-90.990	14.810	-55.4	-59.3	33.9	28.3	15.7	0.0	0.27		
5460	82	124	1615	3941	2	2	5	10	3.8	0.000	0.000	-80.7	-92.0	51.6	327.0	327.0	0.0	11.19		
5461	82	124	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5462	82	125	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5463	82	125	539	1030	2	2	6	10	5.0	-91.390	16.340	-98.6	109.7	59.6	10.6	9.8	0.0	0.20		
5464	82	125	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5465	82	125	1545	2283	2	2	5	10	2.7	-91.280	14.950	-86.9	-43.7	40.4	6.7	12.3	0.0	0.10		
5466	82	125	1602	519	2	2	5	10	2.3	-90.540	14.610	-6.3	-81.6	38.7	12.8	6.0	0.0	0.25		
5467	82	125	1917	5223	2	2	5	10	4.4	-92.730	15.220	-245.6	-14.4	5.0	2.6	14.2	0.0	0.09		
5468	82	126	104	492	3	1	7	10	3.0	-90.510	15.300	-3.0	-5.3	4.8	0.0	0.0	0.0	0.00		
5469	82	126	820	835	3	3	4	10	2.9	-90.730	14.790	-27.1	-61.9	19.1	4.9	3.3	15.9	0.08		
5470	82	126	1057	1850	2	2	5	10	3.0	-90.660	15.660	-18.6	34.0	17.8	1.5	2.0	0.0	0.09		
5471	82	126	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5472	82	126	1941	15	2	2	6	8	4.4	0.000	0.000	327.0	327.0	327.0	327.0	327.0	0.0	327.00		
5473	82	126	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5474	82	127	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5475	82	127	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5476	82	127	1953	5581	3	3	4	10	2.9	-90.630	15.580	-15.8	25.3	29.7	23.1	22.1	29.3	0.89		
5477	82	127	2017	491	2	1	5	10	2.0	-90.820	15.320	-36.2	-3.0	5.0	0.2	0.2	0.0	0.00		
5478	82	127	2152	975	3	3	6	10	4.7	-93.470	15.210	-326.3	-14.8	5.0	25.0	205.1	0.0	1.04		
5479	82	127	2249	3705	3	2	5	10	2.2	-90.440	15.220	4.7	-14.2	10.1	8.0	9.9	19.0	0.51		
5480	82	127	2328	5086	3	2	7	5	2.6	-90.600	15.390	-12.6	4.9	1.5	2.0	2.1	17.7	0.27		
5481	82	128	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5482	82	128	108	456	2	2	5	6	1.4	0.000	0.000	327.0	327.0	5.0	327.0	327.0	0.0	327.00		
5483	82	128	759	1823	3	2	5	10	1.6	-90.930	15.080	-48.1	-29.1	40.0	17.0	16.3	10.4	0.32		
5484	82	128	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5485	82	128	1857	5142	2	2	5	10	1.8	-90.630	15.390	-16.3	4.8	5.0	17.8	10.4	0.0	0.82		
5486	82	129	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5487	82	129	549	380	2	2	5	10	2.2	-90.720	14.690	-25.9	-72.7	35.1	5.3	2.4	0.0	0.08		
5488	82	129	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5489	82	129	1004	3671	3	2	7	6	2.2	0.000	0.000	-24.8	3.9	8.9	80.1	87.0	123.8	3.77		
5490	82	129	1348	3581	3	2	4	10	3.1	0.000	0.000	-28.9	98.0	5.0	105.6	54.5	0.0	2.57		
5491	82	129	0	0	0	0	6	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5492	82	129	1551	2143	2	2	5	8	2.8	0.000	0.000	-231.8	-256.5	87.4	327.0	327.0	0.0	20.54		
5493	82	129	2037	1414	2	2	5	10	2.3	0.000	0.000	327.0	327.0	36.8	327.0	327.0	0.0	300.57		
5494	82	129	2141	3208	3	0	7	10	1.9	-90.530	15.310	-4.7	-4.0	5.0	0.1	0.1	0.0	0.01		
5495	82	129	2238	5620	2	1	6	10	4.4	-89.800	15.180	74.6	-19.0	5.0	2.2	3.2	0.0	0.07		
5496	82	130	239	5550	3	0	6	10	5.7	-90.600	15.420	-12.8	8.2	5.0	0.0	0.0	0.0	0.00		
5497	82	130	0	0	0	0	6	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5498	82	130	646	1662	2	1	5	10	1.6	-90.570	15.990	-9.0	71.1	5.0	0.1	0.1	0.0	0.00		
5499	82	130	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00		
5500	82	131	263	2040	2	0	5	10	2.0	-91.100	14.970	-107.0	-107.1	51.3	327.0	327.0	0.0	0.00		

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5501	82	131	1634	2000			3	0	5	6	3.5	-74.310	10.940	327.0	327.0	5.0	327.0	327.0	0.0	0.92
5502	82	131	1636	387			3	0	5	10	4.8	-90.180	15.150	33.7	-22.5	5.0	6.2	2.9	0.0	0.03
5503	82	131	2044	2462			2	3	5	2	2.6	0.000	0.000	327.0	164.8	327.0	327.0	327.0	327.0	327.00
5504	82	131	2239	2854			3	3	4	2	2.7	0.000	0.000	327.0	170.3	327.0	327.0	327.0	327.0	327.00
5505	82	131	2241	267			2	3	5	2	3.0	0.000	0.000	89.6	58.7	327.0	327.0	327.0	327.0	327.00
5506	82	131	2302	2525			3	3	4	2	4.0	0.000	0.000	327.0	-130.2	327.0	327.0	327.0	327.0	327.00
5507	82	131	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5508	82	201	43	2850			2	2	5	2	3.9	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
5509	82	201	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5510	82	201	414	3954			3	0	5	10	4.8	-89.780	15.030	76.9	-35.4	5.0	17.9	5.7	0.0	0.04
5511	82	201	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5512	82	201	929	2650			1	2	5	10	3.9	-92.910	16.180	-265.4	91.8	5.0	27.6	77.3	0.0	0.14
5513	82	201	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5514	82	201	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5515	82	201	2149	5271			3	3	4	10	3.9	-92.090	14.400	-175.1	-105.1	5.0	23.8	40.3	0.0	0.23
5516	82	202	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5517	82	202	524	494			3	3	4	10	4.3	-91.920	17.340	-156.5	220.4	5.0	127.8	91.0	0.0	1.29
5518	82	202	1124	4500			2	2	5	2	3.0	0.000	0.000	327.0	-262.4	327.0	327.0	327.0	327.0	327.00
5519	82	202	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5520	82	202	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5521	82	202	1649	117			2	2	5	7	2.2	0.000	0.000	-168.4	-238.4	44.2	327.0	327.0	0.0	36.75
5522	82	202	2030	2969			4	4	2	10	4.3	-90.950	13.660	-50.5	-186.2	5.0	8.0	3.1	0.0	0.15
5523	82	203	101	5267			2	2	5	10	2.2	-89.430	15.260	116.1	-9.3	52.8	22.9	57.8	0.0	0.02
5524	82	203	130	1347			2	2	5	10	-0.2	-90.580	15.370	-9.9	2.5	5.0	11.3	9.4	0.0	0.16
5525	82	203	326	5739			3	3	4	9	4.5	-93.760	14.710	327.0	-70.7	58.5	35.6	27.5	327.0	0.28
5526	82	203	427	4500			4	3	3	10	2.8	0.000	0.000	327.0	-326.9	5.0	327.0	327.0	0.0	8.85
5527	82	203	602	4000			4	0	4	3	4.4	0.000	0.000	-82.0	327.0	327.0	327.0	327.0	327.0	14.37
5528	82	203	606	2292			4	2	3	10	3.4	-91.190	13.610	-76.7	-192.1	5.0	23.2	11.0	0.0	0.41
5529	82	203	1103	4131			2	2	5	10	2.5	-91.820	15.340	-146.3	-1.2	195.3	0.1	0.2	0.0	0.00
5530	82	203	1534	3970			2	2	5	10	2.6	-91.040	14.610	-60.2	-81.9	42.0	6.1	6.1	0.0	0.22
5531	82	203	1655	2932			4	3	3	10	4.6	-91.680	13.530	-131.0	-200.8	75.6	37.9	16.3	170.2	0.35
5532	82	203	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5533	82	203	2238	5408			4	1	7	10	2.2	-90.430	15.160	5.7	-20.8	5.0	5.9	2.3	0.0	0.61
5534	82	204	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5535	82	204	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5536	82	205	956	3738			3	3	4	10	1.3	-90.560	15.340	-8.6	-1.1	5.7	0.8	0.4	2.3	0.06
5537	82	205	1123	4123			4	4	3	10	4.2	-91.870	16.300	-151.4	104.9	5.0	44.3	56.7	0.0	1.37
5538	82	205	1412	175			4	3	4	10	2.6	-90.530	15.290	-5.2	-6.1	17.7	5.8	3.8	11.5	0.58
5539	82	206	619	4233			4	4	3	10	2.7	-89.880	14.730	66.1	-67.9	42.4	10.0	10.5	3.0	0.41
5540	82	206	1255	2266			2	2	5	2	2.3	0.000	0.000	6.0	-28.5	5.0	327.0	327.0	0.0	45.35
5541	82	206	1609	5816			4	2	7	10	1.8	-90.550	15.290	-6.6	-6.7	15.7	1.7	1.0	4.0	0.18
5542	82	207	1320	4565			2	1	5	10	1.4	-90.590	14.910	-11.3	-49.0	5.0	0.2	0.5	0.0	0.01
5543	82	207	1742	1946			2	3	5	10	0.8	-90.510	15.280	-2.1	-7.6	0.8	0.4	0.6	10.3	0.04
5544	82	208	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5545	82	208	130	2709			2	1	5	10	3.1	-88.260	16.440	243.7	120.7	5.0	2.5	4.8	0.0	0.04
5546	82	208	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5547	82	208	440	4490			3	3	4	10	4.0	-92.010	14.340	-166.4	-111.1	5.0	11.1	15.6	0.0	0.38
5548	82	209	110	571			2	2	5	10	3.0	-88.680	14.880	197.5	-52.2	77.5	4.0	12.9	0.0	0.12
5549	82	209	222	781			2	2	5	10	2.9	-90.200	13.000	31.0	-251.0	120.2	3.8	1.0	0.0	0.00
5550	82	209	415	1474			2	2	5	10	2.2	-90.480	15.970	0.2	68.4	37.6	5.3	3.7	0.0	0.15

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5651	82	222		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5652	82	222		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5653	82	222	1023	4099			3	3	4	10	2.8	-89.410	14.210	117.7	-125.7	199.0	10.8	7.1	9.1	0.09
5654	82	222	1152	2432			3	3	4	10	2.5	-89.610	15.250	95.6	-10.5	73.9	7.6	6.4	11.5	0.19
5655	82	222		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5656	82	222	1224	829			2	2	5	2	3.2	0.000	0.000	6.0	-28.5	5.0	327.0	327.0	0.0	43.71
5657	82	222		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5658	82	222	1728	1443			3	2	4	10	4.2	-89.930	15.720	60.5	41.2	192.1	52.4	33.9	17.6	0.52
5659	82	222		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5660	82	223	139	2698			2	2	5	2	3.4	0.000	0.000	6.0	-28.5	5.0	327.0	327.0	0.0	57.43
5661	82	223		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.20
5662	82	223		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5663	82	227	1407	386			3	1	7	10	2.3	0.000	0.000	11.0	-7.1	5.0	138.1	26.4	0.0	2.14
5664	82	227	1739	5989			2	2	6	10	4.4	-86.840	15.360	327.0	1.9	5.0	4.8	34.4	0.0	0.16
5665	82	227		0		0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5666	82	228	5	2872			2	2	5	10	2.6	-92.210	14.860	-188.5	-53.7	5.0	31.0	83.0	0.0	1.20
5667	82	228	701	1656			2	2	6	10	3.5	-89.210	13.620	139.7	-191.4	5.0	62.2	49.0	0.0	0.36
5668	82	228	723	751			2	1	5	10	3.2	-89.140	13.660	147.0	-187.1	5.0	314.3	238.7	0.0	1.54
5669	82	228	836	2625			3	1	5	10	4.6	-88.860	15.980	178.3	69.4	5.0	8.9	16.7	0.0	0.27
5670	82	301	639	5018			2	1	5	10	2.8	-91.530	14.840	-113.8	-56.3	5.0	10.5	12.6	0.0	0.28
5671	82	304	219	3263			2	2	5	2	3.9	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	25.41
5672	82	304	222	1881			2	1	5	1	3.5	0.000	0.000	1.7	-6.5	5.0	0.0	0.0	0.0	48.69
5673	82	304	354	1914			2	1	7	1	1.8	-90.470	15.290	1.7	-6.5	5.0	0.0	0.0	0.0	0.43
5674	82	304	904	4667			2	2	5	2	2.2	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	23.47
5675	82	304	949	442			2	2	5	2	2.5	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	21.05
5676	82	304	1141	3706			4	0	6	10	5.6	-90.510	15.040	-3.2	-34.6	5.0	3.7	6.6	0.0	0.37
5677	82	304	1607	988			2	2	5	2	3.1	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	41.60
5678	82	304		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5679	82	305		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5680	82	305	300	3845			2	2	5	2	1.3	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	4.86
5681	82	305	1519	1067			3	3	4	10	4.5	-91.960	15.110	-161.4	-26.5	156.9	17.6	16.4	21.2	0.13
5682	82	306	414	2745			3	3	4	10	3.4	-90.870	13.230	-41.9	-234.3	91.3	15.0	8.8	41.4	0.10
5683	82	306	442	3900			2	2	5	2	2.7	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	59.35
5684	82	306	646	2701			3	3	4	6	3.6	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	253.08
5685	82	306	1323	426			2	1	5	1	4.9	0.000	0.000	-15.1	-4.8	5.0	0.0	0.0	0.0	91.17
5686	82	306	1432	1060			3	3	4	5	2.8	-92.200	14.320	-187.3	-113.4	106.1	43.5	40.5	72.7	0.35
5687	82	306		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5688	82	306	1932	2157			1	3	5	10	1.6	-90.640	15.010	-16.6	-37.8	36.5	0.3	0.2	0.4	0.00
5689	82	306		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5690	82	306	2110	1254			3	1	5	10	5.3	0.000	0.000	-20.3	128.5	5.0	188.4	88.5	0.0	3.06
5691	82	307	328	2357			3	0	5	10	5.5	-90.570	15.050	-9.4	-33.4	5.0	0.1	0.1	0.0	0.00
5692	82	309	1558	3443			2	2	5	2	1.3	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	3.43
5693	82	309		0		0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5694	82	310		0		0	0	0	6	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5695	82	310		0		0	0	0	6	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5696	82	310	1647	4424			2	2	5	2	2.2	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	15.62
5697	82	310	2210	4644			2	2	6	2	4.4	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	58.74
5698	82	310		0		0	0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5699	82	311	4	3500			2	1	6	1	4.6	0.000	0.000	-15.1	-4.8	5.0	0.0	0.0	0.0	101.77
5700	82	311	119	889			2	2	6	2	7.7	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	90.17

GU EQFILE																				
NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5701	82	311	517	104			3	3	4	10	4.5	-90.900	14.270	-45.0	-119.5	122.5	33.6	85.5	91.8	0.37
5702	82	311	756	3793			2	2	5	2	2.9	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	45.33
5703	82	311	921	3129			2	2	5	2	2.5	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	50.12
5704	82	311	1151	3812			2	1	6	1	4.9	0.000	0.000	1.7	-6.5	5.0	0.0	0.0	0.0	51.91
5705	82	311	1314	1679			1	2	5	10	3.1	0.000	0.000	327.0	327.0	5.0	327.0	327.0	0.0	327.00
5706	82	315	1443	3609			2	2	5	2	2.1	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	9.00
5707	82	315	2142	4878			2	2	5	2	3.1	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	21.94
5708	82	316	416	4091			2	2	6	2	3.1	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	30.97
5709	82	316	641	679			3	1	5	10	5.4	-92.980	14.520	-272.8	-91.7	5.0	46.0	128.3	0.0	0.33
5710	82	316	0	0			0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5711	82	316	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5712	82	316	1812	1229			4	0	7	10	2.3	-90.460	15.230	3.1	-13.1	9.7	0.1	0.1	0.2	0.00
5713	82	317	1356	4902			3	3	6	9	5.8	-86.980	15.080	327.0	-30.1	60.8	194.4	212.2	327.0	1.00
5714	82	317	2315	1612			3	1	7	7	0.9	0.000	0.000	3.5	-16.4	2.3	70.9	25.3	80.8	2.19
5715	82	318	900	1160			2	2	5	2	1.8	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	7.39
5716	82	318	2006	2466			3	3	4	5	2.0	0.000	0.000	-11.1	-22.4	9.3	35.5	30.2	67.3	2.78
5717	82	318	2034	2327			3	3	4	10	1.6	-90.580	15.170	-10.6	-20.0	2.9	9.5	8.2	45.1	0.99
5718	82	318	0	0			0	0	7	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5719	82	319	531	1343			3	3	6	10	3.8	-92.330	14.630	-201.9	-79.9	276.7	44.9	39.0	41.8	0.21
5720	82	319	709	5551			1	2	5	10	1.8	-90.810	15.050	-35.2	-33.0	5.0	0.1	0.2	0.0	0.00
5721	82	319	728	5672			1	2	5	10	2.3	-91.200	16.610	-78.5	139.8	5.0	15.6	8.9	0.0	0.09
5722	82	319	739	3639			3	3	5	5	2.8	0.000	0.000	-103.7	-123.9	60.3	300.7	265.9	327.0	3.77
5723	82	319	1424	3386			3	0	7	6	2.6	-90.460	15.320	2.6	-2.6	5.0	8.5	26.2	0.0	0.56
5724	82	319	1921	238			3	3	4	10	2.6	-90.660	15.760	-19.1	46.1	5.0	11.4	8.0	0.0	0.44
5725	82	319	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5726	82	320	1424	5353			3	3	4	10	2.0	-90.350	15.270	14.8	-8.9	6.6	7.1	29.6	2.2	0.28
5727	82	321	339	5839			3	0	6	5	5.7	-90.380	14.460	11.4	-97.7	5.0	30.6	176.4	0.0	0.32
5728	82	321	435	4489			2	2	5	2	1.6	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	8.84
5729	82	321	1130	2088			2	1	5	1	3.2	0.000	0.000	-15.1	-4.8	5.0	0.0	0.0	0.0	31.52
5730	82	321	1545	604			3	3	4	10	2.7	-91.400	14.900	-100.0	-49.6	5.0	14.7	28.8	0.0	0.34
5731	82	321	1912	4463			3	3	4	10	4.1	-91.170	15.880	-74.7	58.9	56.8	90.8	260.1	327.0	0.55
5732	82	321	2302	1895			3	3	4	6	3.6	-90.380	14.800	12.0	-60.7	14.9	66.5	242.2	327.0	1.07
5733	82	322	214	5200			3	3	4	10	4.6	-91.570	12.940	-119.2	-266.6	5.0	62.3	28.0	0.0	0.38
5734	82	322	617	694			3	3	6	10	3.0	-90.690	15.490	-22.1	15.4	96.0	13.7	93.9	21.6	0.19
5735	82	322	927	3900			3	3	4	10	2.8	-89.940	14.790	59.3	-61.8	73.5	54.0	202.0	160.8	0.38
5736	82	322	1016	5504			2	1	6	1	3.7	0.000	0.000	1.7	-6.5	5.0	0.0	0.0	0.0	8.27
5737	82	322	1855	1094			3	3	4	10	3.3	-91.620	13.340	-123.9	-221.8	5.0	42.4	23.7	0.0	0.30
5738	82	323	544	3465			3	1	6	10	4.3	-92.550	17.040	-226.3	187.6	269.8	32.6	217.0	145.2	0.08
5739	82	323	1718	5920			2	2	5	2	2.3	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	32.51
5740	82	324	130	5108			3	2	4	10	5.2	-93.810	14.020	327.0	-147.2	5.0	35.2	85.8	0.0	0.16
5741	82	324	609	414			3	4	6	10	4.0	-93.870	14.760	327.0	-65.2	5.0	59.3	327.0	0.0	0.46
5742	82	324	615	5400			4	2	3	6	5.2	-92.090	14.380	-175.1	-107.1	54.0	18.2	48.6	72.8	0.16
5743	82	324	754	1937			4	4	2	5	3.8	-89.300	14.400	129.5	-104.4	53.4	52.5	145.3	207.2	0.72
5744	82	324	804	434			2	2	5	2	2.3	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	39.99
5745	82	324	912	4797			2	2	5	2	2.3	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	43.72
5746	82	324	1555	4373			3	3	5	10	3.3	-90.690	14.480	-22.5	-95.6	5.0	13.8	6.1	0.0	0.33
5747	82	324	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5748	82	325	50	1510			2	2	5	2	2.7	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	19.51
5749	82	325	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5750	82	325	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00

GU EOFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
5751	82	325	201	5128			2	2	5	2	2.5	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	38.58
5752	82	325	1055	580			2	2	5	2	2.3	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	20.65
5753	82	325	1107	4569			4	2	7	10	3.3	-90.640	15.420	-16.6	7.9	6.9	2.0	4.8	8.5	0.19
5754	82	404	1354	500			3	3	6	2	4.5	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
5755	82	404	2043	3628			3	3	6	2	3.7	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00
5756	82	405	201	4610			3	3	4	2	4.2	0.000	0.000	-268.5	24.2	327.0	327.0	327.0	327.0	327.00
5757	82	406	1520	995			3	0	5	10	5.9	-91.090	15.670	-66.1	35.3	5.0	7.1	3.9	0.0	0.01
5758	82	406	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5759	82	406	1957	2070			3	0	5	10	5.0	-90.690	15.480	-22.8	14.4	5.0	0.2	0.1	0.0	0.00
5760	82	406	2007	1500			3	0	5	5	5.5	0.000	0.000	327.0	327.0	5.0	327.0	327.0	0.0	29.58
5761	82	407	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5762	82	407	1921	3656			3	1	6	2	5.0	0.000	0.000	264.2	327.0	327.0	327.0	327.0	327.0	327.00
5763	82	407	2018	693			2	1	5	10	3.1	-90.650	13.790	-18.1	-172.5	5.0	129.6	24.5	0.0	0.79
5764	82	407	2153	2000			3	0	5	5	4.4	0.000	0.000	327.0	327.0	5.0	327.0	327.0	0.0	327.00
5765	82	407	2253	4159			3	0	5	10	4.8	-90.700	15.460	-23.3	12.5	5.0	0.1	0.1	0.0	0.00
5766	82	408	202	3966			2	2	5	10	3.3	-90.870	13.650	-41.7	-187.5	5.0	74.4	16.7	0.0	0.46
5767	82	408	639	3421			3	3	5	10	3.6	-91.140	13.620	-71.2	-190.7	5.0	30.3	11.1	0.0	0.49
5768	82	409	158	2460			4	2	3	10	3.8	-92.250	13.880	-193.1	-162.8	5.0	138.7	150.7	0.0	1.41
5769	82	409	748	1103			4	3	3	6	4.2	0.000	0.000	-322.1	2.3	5.0	203.5	327.0	0.0	3.38
5770	82	409	754	3191			4	0	5	6	4.9	-90.670	14.790	-20.4	-62.1	9.5	17.1	70.9	63.0	0.17
5771	82	409	1626	3622			3	2	4	5	3.9	-91.870	14.420	-151.7	-102.4	233.9	39.5	273.1	60.3	0.17
5772	82	409	2232	4243			3	4	3	10	1.8	-90.310	15.300	19.2	-5.4	5.0	10.4	16.4	0.0	0.82
5773	82	410	33	2383			3	1	5	10	3.7	-90.920	13.780	-47.3	-173.0	5.0	54.3	18.0	0.0	0.56
5774	82	410	434	1232			4	4	3	10	3.7	-90.910	15.650	-46.9	33.9	5.0	12.0	11.6	0.0	0.76
5775	82	410	509	2202			4	3	4	10	2.0	-90.560	15.310	-8.4	-3.7	6.5	0.6	4.1	1.2	0.15
5776	82	410	811	3170			4	4	2	10	3.9	-88.640	14.370	202.6	-108.0	168.8	43.1	173.2	173.9	0.41
5777	82	410	938	750			3	4	3	10	3.9	-88.560	13.630	211.0	-190.4	5.0	40.1	45.1	0.0	0.70
5778	82	410	1239	3327			2	2	6	2	3.3	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	60.90
5779	82	410	1627	1500			4	3	6	5	6.3	0.000	0.000	327.0	327.0	45.2	327.0	327.0	327.0	73.36
5780	82	410	1816	140			4	2	3	7	4.6	0.000	0.000	327.0	-110.8	5.0	138.8	327.0	0.0	5.15
5781	82	411	631	4857			4	4	2	5	4.2	-93.090	15.280	-285.5	-7.5	5.0	23.0	97.7	0.0	0.62
5782	82	411	1029	3406			2	2	5	2	3.1	0.000	0.000	1.7	-6.5	5.0	327.0	327.0	0.0	44.23
5783	82	411	1147	3437			4	4	3	10	3.4	-90.860	13.980	-40.4	-151.1	5.0	8.7	4.0	0.0	0.24
5784	82	411	1913	572			3	2	4	10	4.6	0.000	0.000	-4.9	327.0	5.0	262.1	61.0	0.0	2.27
5785	82	412	502	862			4	0	4	5	5.1	-89.680	15.470	88.0	13.2	35.5	327.0	223.4	327.0	0.51
5786	82	412	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5787	82	412	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5788	82	412	728	3019			2	2	5	2	2.6	0.000	0.000	23.0	3.8	5.0	327.0	327.0	0.0	11.08
5789	82	412	0	0			0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5790	82	412	1402	4039			5	2	2	10	4.9	-91.710	15.190	-133.5	-17.7	173.7	159.1	327.0	109.1	1.75
5791	82	412	2004	5122			2	2	5	2	2.9	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	37.71
5792	82	412	2059	4772			3	3	4	6	2.3	-90.510	15.190	-2.4	-17.7	1.3	0.4	2.1	9.9	0.04
5793	82	413	114	1612			5	2	3	10	4.9	-90.650	17.970	-17.5	289.9	5.0	76.5	24.5	0.0	0.94
5794	82	413	436	4103			5	5	2	10	3.3	-89.610	15.960	95.6	67.7	5.0	21.2	26.3	0.0	0.67
5795	82	413	1820	351			3	1	5	10	4.3	-92.180	13.940	-185.5	-156.2	5.0	14.4	16.5	0.0	0.13
5796	82	413	1827	5026			4	2	3	5	5.1	0.000	0.000	327.0	241.4	35.4	327.0	327.0	327.0	37.78
5797	82	413	1934	4501			2	1	5	10	2.5	0.000	0.000	75.5	-115.7	5.0	327.0	327.0	0.0	4.35
5798	82	414	658	3031			2	1	5	10	3.2	-90.830	14.260	-37.5	-119.9	5.0	38.6	11.2	0.0	0.34
5799	82	414	1051	3319			3	3	4	5	3.3	0.000	0.000	63.0	-175.0	55.4	327.0	327.0	327.0	7.67
5800	82	414	1349	2960			2	2	5	10	3.5	0.000	0.000	-266.5	-8.7	80.8	327.0	327.0	0.0	9.31

GU EQFILE

NO	YR	M	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S	
5801	82	414		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5802	82	414		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
5803	82	415	131	732			2	2	5	2	4.1	0.000	0.000	-15.1	-4.8	5.0	327.0	327.0	0.0	43.62	
5804	82	415		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5805	82	415	331	3816			2	1	5	10	4.4	-91.840	16.020	-147.7	74.4	5.0	281.2	327.0	0.0	1.81	
5806	82	415	903	572			2	2	5	3	3.2	0.000	0.000	327.0	327.0	327.0	327.0	327.0	327.0	327.00	
5807	82	415	1212	4119			3	3	6	10	4.5	0.000	0.000	327.0	-147.8	5.0	327.0	327.0	0.0	11.31	
5808	82	415	1512	585			2	2	5	10	3.4	0.000	0.000	-168.1	179.3	87.7	327.0	327.0	0.0	3.02	
5809	82	415		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5810	82	415	1901	1494			3	3	4	10	4.3	-90.220	13.800	29.1	-171.6	5.0	8.8	4.7	0.0	0.24	
5811	82	416	30	5091			3	1	6	10	4.6	-90.880	15.620	-43.4	29.6	5.0	9.3	10.2	0.0	0.38	
5812	82	416		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
5813	82	416		0		0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	