

Library  
3276  
Call no. 572

PRELIMINARY REPORT NO. 2

Pueblo Viejo-Quixal Seismography Network

Submitted to: Ing. Edgar Celada, INDE  
Prepared by: Dr. Tosimatu Matumoto

November 10, 1979

Institute for Geophysics  
Contribution No. 572

## INDEX

		Page
I	Summary	1
II	Purpose and Design Criteria of the Pueblo Viejo- Quixal Seismograph Network	2
III	Description of Equipment	5
IV	Network Operation	12
V	Data Analysis	14
VI	Distribution of Earthquakes	19
VII	Frequency Versus Magnitude Relation, Recurrence Time	23
VIII	Conclusion and Recommendation	25
	Tables	27
	Figures	36
Appendix I	Specification of the Memory-Trigger System	
Appendix II	List of Earthquakes Recorded by Pueblo Viejo-Quixal Seismograph Network	

## I Summary

Report No. 2 is prepared to cover the data period from March 17 through July 10, 1979. During this period, the memory-trigger-system is installed and the timing resolution of seismic data is remarkably improved. Purpose and design criteria of the Pueblo Viejo-Quixal seismograph network and the description of the instrument are included in this report.

Preliminary analysis of epicenter distribution started to illustrate some of the possible linearment along the active faults. The limited data permits us only a tentative conclusion, which might be subject to change as the data accumulates, but some of the features important to the Pueblo Viejo-Quixal Hydroelectric project are:

- 1) A moderate activity along the Chixoy-Polochic fault system is revealed.
- 2) A possible north-south trending activity across the dam site and along the Rio Chixoy to the north is suggested.

## II Purpose and Design Criteria of the Pueblo Viejo-Quixal Seismograph Network

### Purpose

The study of microearthquakes provides a rapid way of mapping active faults in regions of high seismic activity. More than 1000 microearthquakes may be detected in a region where only one earthquake had been recorded by the distant stations of the World Wide Seismograph Network during the same period.

The Pueblo Viejo-Quixal Seismograph Network is installed by the Marine Science Institute of the University of Texas (UT/MSI) for Instituto Nacional de Electrificación (INDE) to monitor the seismic activity in the area associated with the Pueblo Viejo-Quixal hydroelectric project.

The information delivered from the seismological studies provides essential information on the safety of the dam, such as maximum magnitude acceleration, and duration time of an earthquake at the site. It is expected that the detailed seismic study verifies the engineering criteria and points out the zone, if there is any, to be monitored with special attention.

One of the critical periods in a hydroelectric project is during the loading of the reservoir as it is filled. Changes of water level result in changes of the pore pressures of fluids in the surrounding rocks. Increased pore pressure acts as a lubricant for an existing fault and often triggers water-induced earthquakes. The Kariba

earthquake, Zambia (Sept. 23, 1963, M=6.3), the Kremasta earthquake, Greece, (Feb. 5, 1965, M=6.2), and the Koyna earthquake, India, (Dec. 10, 1967, M=6.4) are some of the well-known examples of destructive earthquakes which occurred in the proximity of dam sites as the reservoirs were being filled.

Predicting destructive earthquakes is one of the most important problems in modern seismology. Many researchers are working toward this goal, but the method for predicting earthquakes are still crude. However, we have found some premonitory phenomena in Central America. Specifically, changes of the velocities of seismic waves prior to an earthquake of magnitude 3.6 were observed in northern Costa Rica. In addition, a significant gap in the normal seismic activity was discovered in Oaxaca, Mexico region. Such a cessation of the normal activity level sometimes precedes a major earthquake, as was proven by the earthquake which occurred in the Oaxaca area in 1978. The data analysis stated that an earthquake with a magnitude 7.5 or greater would be likely to occur in that region. On November 29, 1978, an earthquake of magnitude 7.8 took place roughly one-half degree away from our predicted location.

#### Design Criteria

As shown in Figure 1 and Table 1, the Pueblo Viejo-Quixal seismograph comprises six remote stations and a central recording station located at Pt. 1. The location of the stations was carefully selected

to fulfill the following requirements:

1. A remote station must be within a line of sight from the central recording station to secure the continuous data transmission by UHF radio frequency.
2. To provide the highest detection capability and the most accurate epicenter determination in the vicinity of the dam site.
3. To provide an extended areal coverage for the comprehensive studies of local, regional and deep-focus earthquakes. --

The stations 1 through 3, as shown in Figure 1, are located closely together near the dam site, forming an inner cluster to provide the highest sensitivity and greatest precision of epicenter determination at the proximity of the dam site. Stations 4 through 7, on the other hand, are distributed at greater distances to cover the area up to 40 km from the dam site.

Figure 2 shows the frequency-magnification curves for a recording station. This system attains up to  $10^6$  of amplitude magnification at 10 Hz when operated at maximum gain. Limited by background noise at the sensing station, the system is usually operated at 12<sup>db</sup> attenuation level of PA/VCO.

Operated at 12<sup>db</sup> attenuation level, any earthquake with magnitude 0.5 or greater in Richter scale will be recorded within the inner cluster stations. The standard error of the epicenter is expected to be less than 500 meters within the inner cluster. Within 40 km range, the network will be able to register an event with magnitude 2.5 or greater.

### III Description of Equipment

The seismic monitoring system of Pueblo Viejo-Quixal seismograph network is characterized by several advanced features. The seismic signals from the remote stations are continuously transmitted back to the central recording station to monitor the signals on real time bases. At the base station, these signals are directly registered on the drum recorders to insure continuity of the recording. Also, an advanced memory-trigger system permits us to record all the seismic signals plus time code on magnetic tape when a possible earthquake is detected. This recording system provides a higher resolution in time domain that is essential for an accurate epicenter determination. A crystal controlled timing system provides a precision time mark that can be calibrated up to 1 millisecond with the standard time signal broadcasted from the Bureau of Standards, Boulder, Colorado. Figure 3 shows the block diagram of the seismic monitoring system. A description of individual equipment is given in the following section.

#### A. Remote Station

Each remote station is equipped with geophone, PA/VCO, transmitter, antenna, battery and solar panels.

1. Geophone (Kinematics; SS-1) A geophone senses ground vibration and converts it to an electric signal. At a remote station, the geophone is installed in a vertical position in order to sense vertical ground motion. The geophone and the cables connecting it to the transmitting stations are buried to prevent damage and wind noise.

Natural frequency	: 1 Hz
Transduction motor constant	: 335 Volt/meter/sec
Coil impedance	: 5600 ohms
External resistance for $h=0.7$	: 4500 ohms

2. Preamplifier/Voltage controlled oscillator (Interproduct; Ivco)

The output signal from the geophone is amplified and converted to a variable frequency by VCO. The preamplifier has a maximum gain of 90 db and 8 adjustable steps each with 6 db attenuation. The output from VCO is a sine wave that varies in frequency following the amplifier output signal. There are five center frequencies (frequency for zero output from amplifier) at 1360, 1700, 2040, and 2720 Hz. The preamplifier and VCO are contained in a single metal box.

Bandwidth, 3 db points	: 0.1 Hz to 10 Hz with 12 db/octave roll-off.
Preamplifier input impedance	: 10 K ohm
VCO output distortion	: less than 3% of fundamental frequencies.
VCO output level	: -5 dbm max. into 600 ohm load.
VCO deviation	: $\pm$ 125 Hz for $\pm$ 2.5 volt input.

3. Radio Transmitter and Antenna (Monitron T-40-45F35) The output from the VCO is fed into a transmitter and directional antenna for transmission back to the central recording



station. The output power (RF power) of the transmitter is approximately 500 milliwatts. The carrier frequency of the transmitter ranges between 402 MHz and 406 MHz as shown in Table 2.

Input power	:	12 volt DC, 140 mA
RF output	:	500 mW
Output impedance	:	50 ohms
Frequency stability	:	0.0005%
Modulation bandwidth	:	300 Hz to 3k Hz minimum
Modulation distortion	:	2% maximum, 0.5% typical

4. Battery and solar panel (Solarex, 1480 HP UNIPANEL)

Power for each station is provided by a 12 volt storage battery and three solar panels. The battery is charged by solar panels at the rate 0.5 ampere per panel under full sun. Three panels are connected in parallel to the battery. At a remote station, the transmitter and PA/VCO combined, draw approximately 150 milliamperes at 12 volts.

Peak output (per panel	:	8.0 watts
Ampere at nominal voltage	:	0.5 amp (in full sun)
Watt-hour/week (U. S. average	:	26.0

## B. Central Recording Station

The following equipment is located at the Central recording station.

1. Radio Receivers and Antennas (MONITRON; R40-45F): The radio signals from six remote stations are received at the central recording station. Six directional antennas are located near the laboratory. Each antenna is aimed at its respective transmitting station. Cables lead the received radio signals to the six receivers located in the laboratory. The output from each receiver is a variable frequency tone identical to the VCO output signal at the remote station.

Input power	:	10 to 15 VDC at 25 mA
Sensitivity	:	25 <sup>db</sup> S + N/N at 1 microvolt typical
Selectivity	:	60 <sup>db</sup> at $\pm$ 30 KHz
Frequency stability	:	$\pm$ 0.001% from -30 <sup>o</sup> C to 60 <sup>o</sup> C
Audio output	:	Adjustable from zero to +6dbm (600 ohms)
Audio distortion	:	2% maximum, 0.5% typical

2. Discriminators The output signal from each receiver is fed into a discriminator. This instrument converts the high frequency tone into the amplified seismic signal that was originally fed into the VCO at the remote station.

Input level : 10 millivolt to  
2 volt RMS. Loss  
of signal will lock  
output to -5 VDC.

Input impedance : 50,000 ohms.

Output level : Adjusted to  $\pm 2.5$   
volt for  $\pm 125$  Hz  
deviation.

Output filtering : Low pass 10 Hz with  
 $18^{\text{db}}$ /octave roll-off.

3. Delay Memory and Trigger Circuits The output from each discriminator is fed into a digital memory unit (DL-100) where about 20 seconds of data are stored. Data flow in one end of the memory, and 20 seconds later, flow out the other end into a trigger identification circuit (TD-200) and coincidence detector circuits (CD-300). The trigger identification circuit compares the signal with the average background noise level that was received over the preceding 100 seconds. If an input signal exceeds the threshold determined by the background noise level, the trigger identification circuit for that station is set to the triggered mode for the next 20 seconds. The coincidence detector examines the number of stations set to the triggered mode, and if three or more remote stations are triggered, it starts the tape recorder and keeps it running for the next 75 seconds.

This system significantly improves the timing resolution of the signals. A detailed discussion on the timing resolution will be presented in the section Data Handling. Another merit

of this system is the reduction of operating cost and data handling. The recorder operates only when an earthquake occurs so that much less recording tape and paper for data playback are used. If continuously recording without the memory trigger system, approximately 60 times more tape (and playback papers) will be consumed and a full-time attendance is required. The specification of the Delay-Memory-Trigger System is attached as Appendix I.

4. Recorders Dual recording system is deployed in the Pueblo Viejo-Quixat-seismograph network. As shown in Figure 3, the output signal from each discriminator is recorded on a separate ink-writing drum recorder respectively on a continuous basis. This drum recording system assures registering of a small event that is detected only at one or two stations but is not large enough to trigger the memory-trigger system. Another system, incorporated with the memory-trigger system is a tape recorder. A 4-track tape recorder with 1-7/8 inch-per-second is used for this purpose. Up to four different signals are multiplexed and recorded on a single track. Table 3 shows the track number and the center frequency in modulation. One 10½ inch tape records up to 160 events.
5. Timing System Precise timing signals are registered on both drum recorder and tape recorder. On the drum recorder, minute and hour marks with 0.5 second duration are

illustrated by a small deflection of the pen, and a more complicated Binary Coded (BCD) Timing Signal is recorded on Track 3 as shown in Figures 5 and 6. The digital clock that supplies these time signals can be calibrated up to 1 millisecond by the standard time signal (WWV) broadcast by the Bureau of Standards, Boulder, Colorado.

#### IV. Network Operation

Six remote stations and a central recording station were installed during the period of February 9-12, 1979. The drum recorders were deployed during this phase. Table 2 shows the VCO center frequencies and radio telemetry carrier frequencies for the remote stations.

On April 28, 1979, the delay-memory-trigger system and a tape recorder were installed. When a possible earthquake is detected, the signals from the remote stations are recorded on the magnetic tape with four recording tracks. Each track registers up to four multiplexed-data channels. Track number, assigned center frequency and station number on the tape recording system are shown in Table 3. This advanced system is designed to provide an improved time resolution which is of essential importance to an accurate epicenter determination. In early stages of operation of the memory-trigger system, the system suffered a large number of false triggering, set off by noisy stations. The true-false triggering ratio has been significantly improved after May 19 when Dr. Matumoto adjusted the system. The recording period covered by each magnetic tape is listed in Table 4.

With the installation of the memory-trigger system, the construction of the Pueblo Viejo-Quixal seismograph network was completed by April 30, 1979.

Since its initial installation, two stations were relocated. Station 3, located at Panrum, 8.3 km southeast of the base station, suffered an extremely high noise level, originating from traffic of heavy vehicles for the construction along the newly-constructed service road approximately 1 km away. To improve the signal-to-noise ratio, station 3 was moved to

Cerro San Juan, 6.7 km southwest of the base station, on April 28, 1979.

Station 7 was damaged on March 27, 1979, by local banditry. With new equipment, the station was reconstructed at a new site (Chiguihuital, 39.6 km south) on June 8, 1979.

## V. Data Analysis

Seismic data through July 2, 1979, was returned to Galveston for detailed analysis.

### 1) Timing Resolution

In the early phase of data processing, the arrival time of the seismic signals was read off from the drum recorder. Beginning May 10, 1979, an improved recording system became available and accordingly, a new processing method has been employed. In this new method, the seismic signals are played back from magnetic tapes and much higher timing resolution is obtained.

The playback system equipped at the Marine Science Institute, Galveston, Texas, consists of the following equipment:

- 4 track tape playback system
- Matching discriminator set
- A/D converter
- PDP-15 computer package
- High speed electrostatic printer/plotter

Two computer programs were developed to analyse the data from the Pueblo Viejo-Quixal network. They are:

- ADC111: This program converts analog input to digital output with designated sensitivity and sampling rate, and



N7/AD2: This program plots the digitized data on a high-speed electrostatic printer/plotter with pre-determined paper speed.

In processing, two different sets of playback packages are produced: A) compressed time-scale playout (1 mm/sec) as shown in Figure 4, and B) expanded time-scale playout (10 mm/sec) as shown in Figure 5. The former is used for quick referencing of an event and examining the quality of digitization process and the latter is to read the onset of the first arrivals, to identify the direction of the initial motion, to identify the Binary Coded Time, and to examine the detailed seismic signature.

Each playout includes 9 data channels corresponding to 9 remote stations and two edge channels to illustrate the Binary Coded Time Signal (IRIG-C Code) to identify the time of recording.

During the period of May 18 through May 21, 1979, two different approaches of data processing were tested to compare the accuracy of the epicenter determination. The first method is to read the arrival times from the drum recorder which is operated at the speed of 1 mm/sec. This recording system provides the timing precision up to 0.1 to 0.2 seconds. The second approach is to read the time from the expanded playout that provides the timing resolution approximately one order of magnitude better than the drum recording system. Figure 6 shows a comparison of the errors resulting from the two different systems. The standard deviations of the hypocenter matrices (which is approximately proportional to the error of the origin times) from two different data set are used to plot an event. The standard deviation from the drum recorders ( $S_1$ ) is taken as an ordinate and one from tape recording system ( $S_2$ ) is taken as abscissa.

The diagonal line in the graph indicates the locus of the points with equal errors for both systems ( $S_1 = S_2$ ). Any data point with the relation  $S_1 > S_2$  is distributed in an area above the diagonal line. Of 24 events tested, 19 events are distributed within the domain of  $S_1 > S_2$ , or in other words, the epicenter determinations from the tape recorder system are superior than those from the drum recorder system. The data points with arrows indicate that the values of the coordinates along the axis parallel to the arrows were too large to be shown in the proper scale.

## 2. Magnitude Determination

Magnitude of an earthquake is given by the equation

$$M = \log A + \alpha \log D + \beta \quad (1)$$

where  $A$  is the maximum trace amplitude,  $D$  is the distance and  $\alpha$  and  $\beta$  are the constants. The amplitude of a large event, however, frequently exceeds the dynamics ranges of the recording system and the magnitude of a large event, if based on equation (1) is unable to determine.

To avoid this difficulty, an alternative method for magnitude determination is developed. Empirically it is known that the duration time of an earthquake,  $\tau$ , is correlated to the magnitude of the event in the following form:

$$M_\tau = a + b \log \tau \quad (2)$$

$\tau$  is the duration time of an event measured in seconds and  $a$  and  $b$  are constants. To find out the value of the constants  $a$  and  $b$ , the duration times of the events with known body wave magnitude,  $m_b$ , reported by the National Earthquake Information Service, U.S.G.S., are

plotted in Figure 7.

Based on this data, the following empirical formula is given for magnitude determination:

$$M_{\tau} = -2.67 + 3.06 \log \tau \quad (3)$$

where  $M_{\tau}$  is the magnitude determined from the duration time and is equivalent with the body wave magnitude  $m_b$ . The value of the magnitude listed in Appendix II is determined from this equation.

### 3) Seismic Energy Generated by the Explosions

To test the validity of the magnitude scale defined by equation (3), the relation between the magnitude and the yield of an explosion that was recorded by the Pueblo Viejo-Quixal network is examined. Figure 8 shows a plot between the magnitude,  $M_T$ , versus the yield of an explosion,  $Y$  (kg).

Thermal energy of an explosion generated by one kilogram of TNT is approximately  $10^6$  calories, or  $4.2 \times 10^{13}$  ergs. It is generally accepted that approximately 1 to 0.1 per cent of energy is converted into seismic energy if detonated in hard rocks. If we denote the conversion rate as  $k$ , the effective seismic energy  $E_s$  from an explosion of yield  $Y$  is:

$$E_s = 4.2 \times 10^{13} \times k \times Y \quad (4)$$

The energy of an earthquake is given by Gutenberg and Richter (1954) as follows:

$$\log E = 11 + 1.6 M \quad (5)$$

Inserting equation (4) into (5), we get

$$M = 0.63 \log Y + 0.38 \quad (k=1\%) \quad (6)$$

or

$$M = 0.63 \log Y - 0.24 \quad (k=0.1\%) \quad (7)$$

$M$  versus  $Y$  relations given by equations (6) and (7) are plotted in Figure 8.

While most of the events are distributed between two lines, some of the large explosions produce seismic energy more effectively (better than 1%) as contrasted to the ratio of seismic energy conversion for smaller events are less effective (less than 0.1%).

## VI Distribution of Earthquakes

During 5 months operation from February 13 to July 3, 1979, approximately 1100 events were recorded by the Pueblo Viejo-Quixal network. A list of the earthquakes is attached to this report as Appendix II.

### 1. Events Originated From the Explosions

Figure 9 shows the distribution of the events in the vicinity of Pueblo Viejo dam site. Only the events with the most accurate epicenter determination ( $I\bar{Q} \leq$  and  $S \leq 0.5$ ) are plotted in this figure. An x indicates earthquake of tectonic origin and a + sign illustrates an explosion earthquake ( $I\bar{Q}=7$ ). The number attached to the events indicates the earthquake file number shown in Appendix II. The interval between the tick marks shown at the margin correspond to 1 km distance.

The events from the explosions can be utilized to test the accuracy of the epicenter determination. Of 53 events identified as explosion earthquakes, 17 events with  $S \leq 0.5$  were plotted. Table 6 shows the identified explosion events. Most of the explosions were assumed to be detonated at the west bank of the dam site (930 contour line). Of 17 events plotted, 7 events (File numbers 217, 386, 973, 1051, 1054, 1064, 1073) are distributed within 1 km from the explosion site, 6 events (230, 274, 418, 704, 871, 1059) are within 2 km, and 4 additional events (33, 122, 631, 865) are between 2 to 3 km.

For most of the events with greater errors in the epicenter determination, malfunctions of the stations, especially those of the inner stations are responsible for the large errors. The high noise at Pt 3

before relocating to Cerro San Juan and the interruption of operations at Pt 7 from April through June, deteriorated, to some extent, the quality of data and the accuracy of epicenter determination.

A marked improvement of the epicenter determination is evident after the improved recording system was installed. The recording and processing from the improved recording system began on May 10 (corresponding to the earthquake file number 700). The better concentration of explosion events to the real explosion sites can be observed for file nos. 700 through 1100 as compared with the events 1 through 699 is figure 9.

It is concluded that the accuracy of the epicenter determination is, in general better than 1 km under the normal station operation condition. This is in accordance with the anticipated precision described in the section "Design Criteria".

One of the reservations, however, is the ambiguity of the crustal model. Table 5 shows the crustal model used in this study. This model was obtained from our previous study in Costa Rica and does not necessarily represent the true structure in Guatemala. If an improper crustal model is used, the depth of an earthquake is affected more seriously.

A solution to resolve the ambiguity of the velocity structure and depth determination is to use the large explosions to measure the true velocity of seismic waves. For this purpose, however, it is necessary to record the shot time up to the precision of 1/100 second.

## 2. Active Faults Delineated From the Microearthquakes

Preliminary analysis of epicenter distribution started to illustrate some of the possible linearments along the active faults. However, limited data, based on a 5 month recording period, permits us only a tentative conclusion which may be subject to change as additional data is accumulated.

Figure 9 shows the distribution of epicenters which have been determined with the highest precision.

Four possible linearments, denoted as A through D, are shown in the figure.

Zone A that trends east-west and is approximately parallel to the Cuilco-Chixoy-Polochic fault system. The Guatemala earthquake of February 4, 1976, typically illustrated that the Motagua fault is a currently active plate boundary between North American and Caribbean plates. But the activity confirmed by Zone A indicates that probably the boundary between two major plates is not confined to a single fault, but to a couple of fault systems. These include Cuilco-Chixoy-Polochic, Motagua, and probably Jocotan faults in echelon, which constitute an effective plate boundary.

Preliminary observation indicated that the activity level along the Cuilco-Chixoy-Polochic fault is approximately equal to those along the Motagua fault system.

Weakly defined Zone B is probably the most important for the Pueblo Viejo-Quixal project. With north-south trending, this line runs across the dam site and proceeds approximately along the drainage of Rio Chixoy to the north.

The length of this linearment is estimated to be 19 km long. But the events at the northern terminus along this line run beyond any known fault features and these events may represent the activity along Zone A rather than Zone B. If this is the case, the length of Zone B is less than 10 km. In addition, six events in the immediate proximity of the dam site (file nos. 32, 79, 91, 325, 357, 1093) did not correspond to any reported explosions. Some of them may well have originated from the explosions. Extended monitoring for a prolonged period and careful logging of explosions are necessary to study the activity along this linearment.

Zone C and D are reunning approximately north-south or NNE-SSW. As Matumoto et al. (1976) and Plafker et al. (1976) pointed out, several north-south trending fault systems distributed south of the Motagua fault are considered to be the result of "splintering" of the wedge shaped, unstable, western-most section of the Caribbean plate. Usually these faults are characterized by normal faulting and absorb the east-erly movement of the Caribbean plate. The fault plane solutions along these zones, as well as along other zones, are yet to be studied. However, if Zone C and D are caused by similar splintering effects, they may show east-side, down-thrown normal faulting.



## VII Frequency Versus Magnitude Relation, Recurrence Time

The relation between the number of earthquakes and their magnitude provides a useful clue to estimate the level of activity and recurrence time of an earthquake with a specified magnitude.

The study in this section is to describe the relation between the number of earthquakes versus magnitude in order to specify the regional seismicity level. This does not necessarily reflect the estimation of maximum magnitude that may take place along a specified fault.

Additional constraint, such as the length of the fault and other geological observations should be incorporated to weigh the seismic risk for the hydroelectric project.

Also, having only a 5 month period of recording is far from representing an "average" regional trend of activity. Local and regional seismicity fluctuates from time to time. Especially prior to a major earthquake, unusual quiescence is frequently observed. Therefore, the results described in this section are also to be considered as preliminary.

The magnitude scale,  $M_T$ , employed in this report is determined by the duration time of an earthquake and is equivalent to the body wave magnitude  $m_b$ .

For practical uses, the surface wave magnitude  $M_s$  is commonly used and it is convenient to express in the surface wave magnitude. The relation between  $m_b$  or  $M_T$  and  $M_s$  is given by Gutenberg (1956) as follows:

$$M_s = 1.67 m_b - 4.67 \quad (8)$$

Figure 11 shows the plot of the number of earthquakes versus magnitude. The number of earthquakes was counted for those with the magnitude equal to or

greater than  $M_T$  and located within 100 km square. By the use of equation (8), both  $M_T$  and  $M_s$  are indicated on abscissa.

As the distance increases, the network is usually unable to record small events. Because of this reason, some of the small events are missing from the counting, and the distribution becomes concave towards small magnitude.

The regression line drawn in Figure 11 which is given by the distribution with the range of  $M_T \geq 3.5$  is expressed as follows:

$$\log N = 2.33 - 0.59 M_s$$

Noting that this relation is based on a 5 month recording period, we need to normalize  $N$  to be the annual count. Multiplying  $N$  by 2.4, we get:

$$\log N = 2.71 - 0.59 M_s \quad (9)$$

Table 7 shows the expected event count  $N$  (per year), and recurrence time (year) calculated from equation (9).

Scarcity of data prohibits us from separating the source region, but the majority of the events may have been attributed to the Cuilco-Chixoy-Polochic fault system. The regional activity level (within the area of 100 km square) is approximately identical to those along the Motogua fault.

## VII Conclusion and Recommendation

Based on a 5 month recording period, a preliminary analysis of the data revealed that:

1. The well located explosion events show, in general, that the calculated epicenter is in good agreement with the actual explosion site within an expected error range.
2. Four possible linearments are indicated by the distribution of the epicenters. Zone A is the most active fault and runs east-westwards along the Cuilco-Chixoy-Polochic fault. Zone B is trending north-south and runs across the dam site and along the drainage of Rio Chixoy to the north. However, some of the events along this zone may have originated from explosions.
3. The regional activity level with the area of 100 km square centered at the base station is approximately the same as those along the Motagua fault.

To maintain the operationa effectiveness and to improve the precision of data analysis, the following is recommended:

1. By the use of a couple of high-yield explosions, a special measurement aimed at calibrating the network should be carried out. It is expected that some of the ambiguities, especially the velocity structure and station corrections, will be clarified through

this measurement. For preparation, Dr. Matumoto should be notified at least 2 weeks prior to these explosions.

2. Logging of the explosions should be continued.
3. Shipment of data on a bi-weekly basis is recommended. A memo describing any changes of operating conditions should be attached.
4. The need to replace spare components and tools should be examined and those deemed necessary should be purchased as soon as possible.

Table 1. Pueblo Viejo-Quixal Seismograph Network

Station	Name	Code	Longitude Degree, W.	Latitude Degree, N.	Elevation meter
1	Chilley	GU1	90.49110	15.35314	1702
2	San Juan	GU2	90.47495	15.29417	1180
* 3	Cerro San Juan	GU3	90.53983	15.31483	1860
4	Xucaneb	GU4	90.27692	15.38760	1650
5	Najitila	GU5	90.49579	15.45765	1960
6	Chimaqua	GU6	90.69218	15.25592	2220
** 7	Chiquihuital	GU7	90.41100	15.00383	2290
* relocated April 28, 1979.			previous location		
	Panrum		90.43750	15.31872	912
** relocated June 8, 1979			previous location		
	Chitucan		90.49637	15.18818	728

Table 2. VCO Center Frequency and RF Carrier Frequency

Station	PA/VCO		Azimuth from Base Station	RF
	VCO Freq. HZ	Attenuation db		Carrier Freq. MHZ
1Z	2380	12		
1W	2040	12		
1E	1700	12		
2	1360	12	N 164 <sup>0</sup> E	405.355
3	2380	12	N 123 <sup>0</sup> E	404.355
4	2040	12	N 80 <sup>0</sup> E	404.855
5	1700	12	N 107 <sup>0</sup> W	402.855
6	1360	12	N 117 <sup>0</sup> W	403.855
7	2380	12	N 179 <sup>0</sup> E	403.355

402.355 mHz  
transmitter demolished

Table 3. Track Number and VCO/Multiplex Frequency for  
the Tape Recording System

Station No.	Track No.	VCO Frequency, HZ
1Z	1	2380
1N		2040
1E		1700
2		1360
3	2	2380
4		2040
5		1700
6		1360
7	3	2380
BCD Time Code		2040

Table 4. Recording Period of Magnetic Tapes

Tape No.	No. of Events (PT. 2)	Beginning				End				Total Recording Time			Blank Time		
		Mon.	Day	Hr.	Min.	Mon.	Day	Hr.	Min.	Day	Hr.	Min.	Day	Hr.	Min.
1	1	May	01	19	08	May	02	05	31	10	23		7	19	
2	2		02	12	50		03	02	44	13	54		10	55	
3	2		03	13	49		04	03	28	13	39		9	37	
4	4		04	13	05		04	22	06	09	01		16	12	
5	3		05	14	18		05	19	05	04	47		1	31	
6	1		05	20	36		06	01	16	04	40		12	02	
7	3		06	13	18		06	19	15	05	57		19	06	
8	6		07	14	21		07	20	01	05	40		1	18	
9	2		07	21	19		08	01	43	04	24		11	26	
10	2		08	13	09		09	01	24	12	15		12	36	
11	2		09	14	00		09	21	49	07	49		0	29	
12	3		09	22	18		10	01	36	03	18		11	25	
13	0		10	13	01		10	20	41	07	40		17	47	
14	1		11	14	28		11	23	17	08	49		0	42	
15	5	May	11	23	59	May	12	10	31	10	32		2	47	
16	5		12	13	18		12	20	16	06	58		18	10	
17	4		13	14	26		14	07	31	17	05		5	46	
18	4		14	13	17		14	23	44	10	27		15	13	
19	23		15	14	57		18	05	13	2	14	16	7	57	



Table 4. Recording Period of Magnetic Tape  
(continued)

Tape No.	No. of Events (PT.2)	Beginning				End				Total Recording Time			Blank Time		
		Mon.	Day	Hr.	Min.	Mon.	Day	Hr.	Min.	Day	Hr.	Min.	Day	Hr.	Min.
20	45	May	18	13	10	May	22	21	37	4	08	27	16	40	
21	8		23	14	17		24	21	17	1	07	00	16	40	
22	10		25	14	28		26	07	52		17	24	7	02	
23	10		26	14	54		27	13	30		22	36	0	10	
24	6		27	13	40		29	18	56	2	04	36	2	48	
25	12		29	21	44		30	09	56		12	12	3	18	
26	10		30	13	14		31	02	00		11	46	13	7	
27	17	May	31	15	07	June	1	21	44	1	6	37	20	2	
28	4	June	2	17	46	June	3	03	10		9	24	13	59	
29	20		3	17	09		5	11	41	1	18	32	10	47	
30	16		5	22	28		8	10	26	2	11	58	4	24	
31	18		8	15	50		10	18	10	2	2	20	3	40	
32	6		10	21	50		12	17	33	1	19	43	2	26	
33	7		12	19	56		14	04	35	1	8	39	11	38	
34	55		14	16	13	June	23	15	50	8	23	37	9	8	
35	66	June	24	00	58	July	2	13	21	8	12	23			

Table 5. . Crustal Model

<u>Vp (Km/sec)</u>	<u>Vs (km/sec)</u>	<u>Thickness (Km)</u>
5.10	2.94	8.20
6.20	3.58	12.90
6.60	3.81	22.30
7.90	4.65	16.60
8.15	4.60	--

Table 6. Explosion Earthquakes and Events Near the Dam Site

File No.	Yr.	MD	HM	NP	NS	IQ	MB	X(km)	Y(km)	Z(km)	S	Explosion
32	79	216	1701	5	4	2	2.5	2.92	-8.72	5.24	0.38	
33	79	216	1702	5	1	7	2.3	2.47	-8.17	3.19	0.16	
58	79	219	201	3	3	3	.3	0.82	-4.79	5.00	0.21	
81	79	221	858	4	2	3	2.2	2.29	-8.86	7.81	0.10	
91	79	222	2224	4	0	2	2.0	0.94	-7.07	7.29	0.00	
92	79	222	2258	3	0	3	3.8	1.03	1.77	5.00	0.05	
99	79	224	1620	3	3	3	2.8	0.97	-4.69	5.00	0.05	
122	79	227	2053	5	1	7	2.3	1.85	-8.65	7.26	0.05	
17	79	308	1820	5	0	7	.9	0.58	-7.69	5.00	0.23	
230	79	309	2225	6	3	1	3.3	-2.37	-6.96	1.36	0.25	
231	79	309	2350	7	0	7	1.8	-0.96	-7.10	1.29	0.06	
274	79	314	2124	4	1	7	1.8	-0.60	-6.83	3.23	0.24	
321	79	320	2040	2	1	3	.5	0.90	0.17	5.00	0.23	
325	79	321	10	6	2	3	1.4	1.22	-8.85	8.96	0.22	
344	79	323	151	4	4	7	.2	-1.82	-1.92	6.98	0.13	
357	79	324	2251	6	4	3	2.4	-0.13	-6.99	7.84	0.15	
386	79	329	1843	4	3	7	2.0	-0.90	-8.07	6.49	0.38	930 m contour 2050 kg
418	79	403	2258	7	2	7	2.5	0.54	-6.74	7.40	0.06	930 m contour 7200 kg
620	79	509	2326	2	1	7	1.3	1.70	-6.50	5.00	0.62	930 m contour 226 kg
628	79	510	1214	4	2	3	2.0	0.74	-2.14	7.40	0.05	
631	79	511	124	3	0	7	2.1	2.46	-6.58	5.00	0.00	930 m contour 1900 kg
704	79	515	2715	5	0	7	2.3	-4.00	-6.30	5.00	2.08	930 m contour 4200 kg

Table 6. Explosion Earthquakes and Events Near the Dam Site  
(continued)

file No.	Yr.	MD	HM	NP	NS	IQ	MB	X(km)	Y(km)	Z(km)	S	Explosion
852	79	522	2321	4	0	7	1.6					930 m contour 650 kg
865	79	523	2323	3	0	7	2.7	1.83	-6.35	5.00	0.13	930 m contour 2925 kg
871	79	524	746	3	0	7	1.3	0.79	-6.79	5.00	0.00	
881	79	525	2325	4	0	4	1.6	1.00	-5.80	4.70	0.01	930 m contour 150 kg
923	79	530	2323	2	1	7	1.3	1.70	-6.50	5.00	0.01	930 m contour 450 kg
935	79	601	1754	4	0	7	2.8	-0.50	-8.90	0.00	0.00	930 m contour 3076 kg
973	79	605	1114	4	2	7	1.3	0.38	-8.36	5.00	0.20	
002	79	609	1803	3	0	5	2.5	2.90	-5.90	5.00	2.70	930 m contour 1100 kg
039	79	614	2327	4	0	7	1.8	1.00	-10.60	5.00	0.47	930 m contour 484 kg
051	79	621	742	5	0	3	2.5	-0.11	-8.27	3.03	0.15	
051	79	624	114	4	1	7	.9	-0.12	-8.64	0.31	0.19	
054	79	624	1644	4	0	7	.9	-0.09	-8.23	3.18	0.01	930 m contour 175 kg
059	79	625	2323	4	0	7	1.0	1.15	-7.92	5.00	0.27	930 m contour 176 kg
060	79	626	823	4	0	7	0.9	2.90	-10.50	5.00	0.32	930 m contour 180 kg
064	79	627	1019	6	2	7	1.1	-0.93	-8.23	0.67	0.03	
073	79	628	2324	4	2	7	.7	-8.84	-7.75	0.96	0.16	
077	79	629	1906	6	1	7	1.3	0.50	-11.90	5.00	0.80	930 m contour 1325 kg
079	79	629	2210	6	4	2	.9	-3.58	-8.35	1.88	0.37	

Table 7. Annual Number of Earthquakes and Recurrence Time

$$\log N = 2.71 - 0.59 M_s$$

Surface wave magnitude

$M_s$	5.0	5.5	6.0	6.5	7.0	7.5
$\log N$ Exact count (per year)	-0.24	-0.54	-0.83	-1.13	-1.42	-1.72
$N$ Recurrence Time (year)	0.57	0.29	0.15	0.074	0.038	0.019
$1/N$	1.74	3.5	6.8	13.5	26.3	52.5

## FIGURE CAPTIONS

- Figure 1. Pueblo Viejo-Quixal seismograph network, location of the stations.
- Figure 2. Magnification curve of the seismic monitoring system. Drum recorder is operated at 10% of attenuator setting.
- Figure 3. Block diagram of the seismic monitoring system.
- Figure 4. Seismogram, played back from magnetic tape compressed scale playback (1 mm/sec).
- Figure 5. Seismogram, played back from magnetic tape expanded scale playback (10 mm/sec).
- Figure 6. Comparison of the standard error of the epicenter determination.  $S_1$  is the error from the drum recording system and  $S_2$  is the one from the improved recording system.
- Figure 7. Duration + time ( $\tau$ ) versus the body wave magnitude ( $m_b$ ).  $m_b$  is reported by the National Earthquake Information Service, U. S. G. S.
- Figure 8. Magnitude of explosion earthquakes versus yield of explosion (in kg).
- Figure 9. Distribution of events in the vicinity of dam site. x is an earthquake and + represents an explosion event. The number attached is the file number of an event (Appendix II).
- Figure 10. Distribution of regional events and possible linearments (Zone A through D).
- Figure 11. Cumulative number of earthquakes versus magnitude.

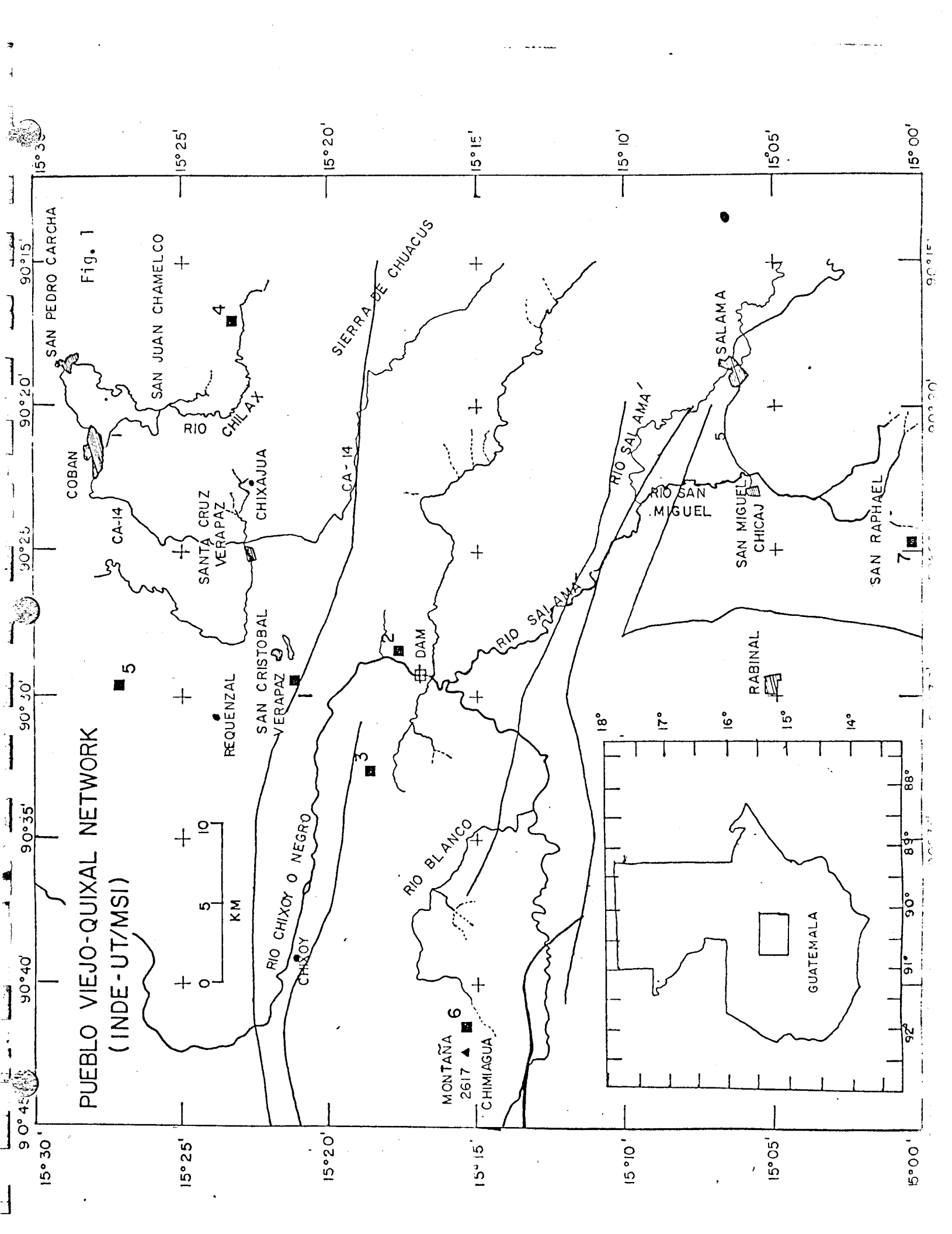
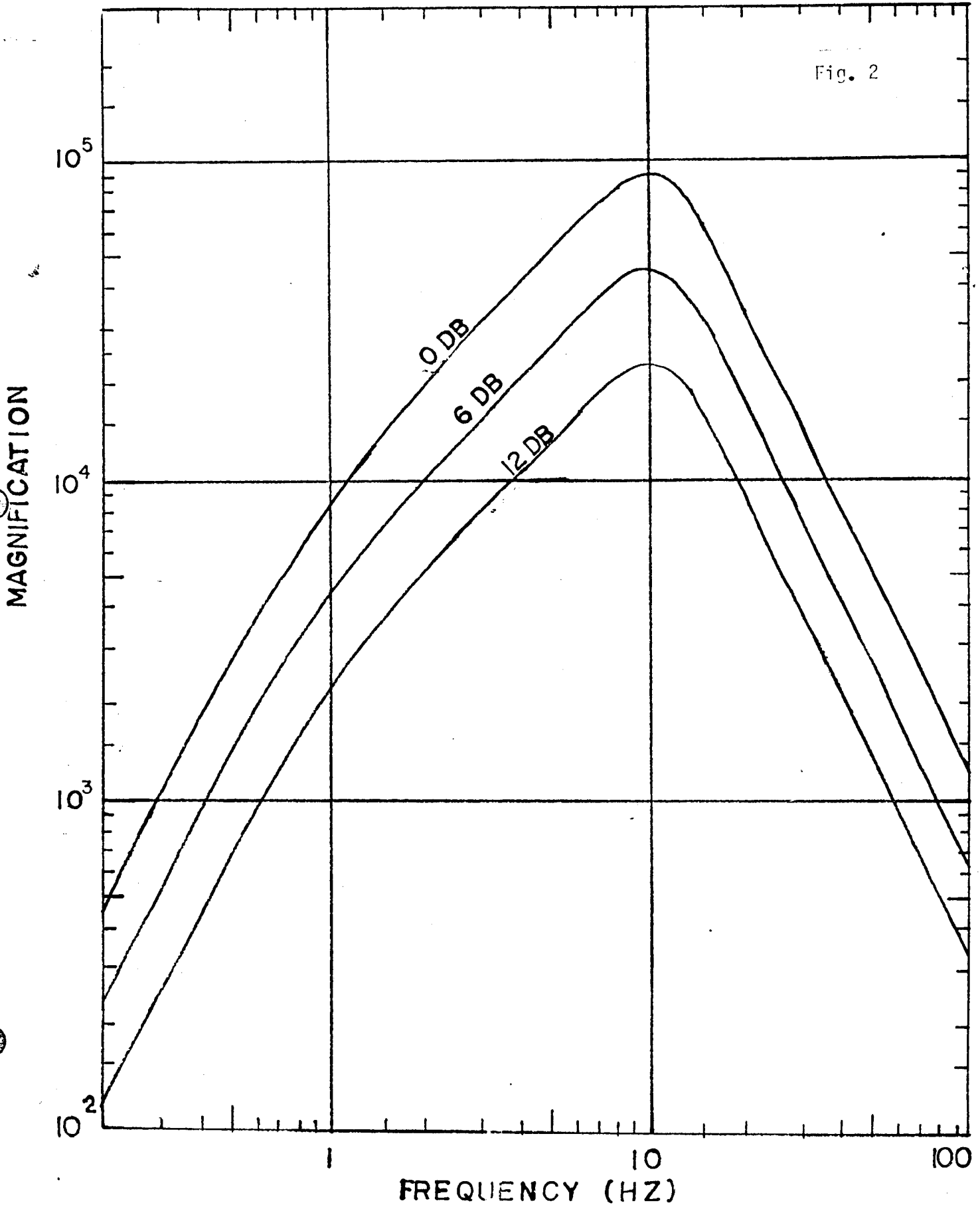


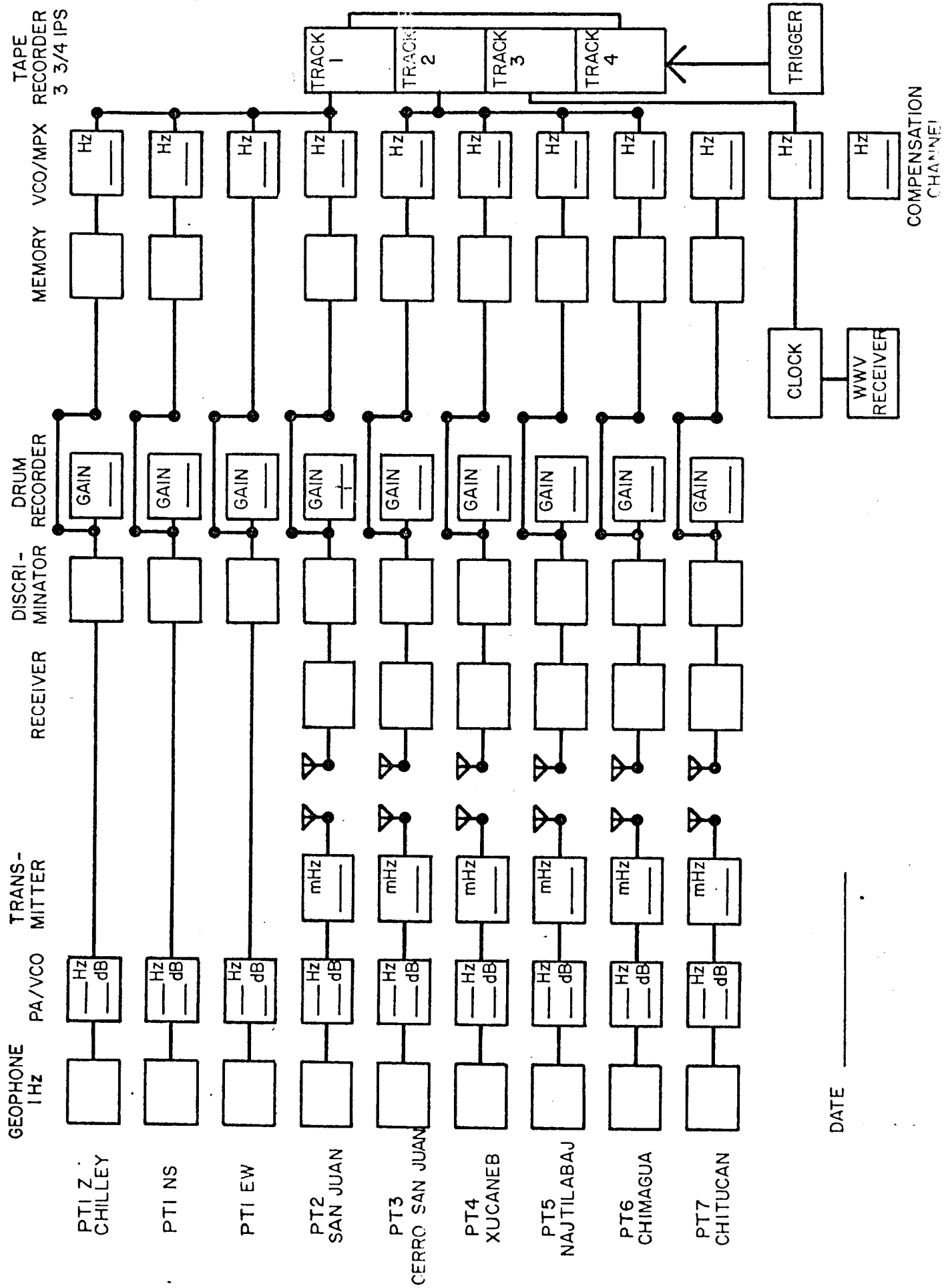
Fig. 2





# PUEBLO - CHIXOY SEISMOGRAPH NETWORK

FIG. 3



DATE \_\_\_\_\_

Appendix II. List of earthquakes recorded by the Pueblo Viejo-Quixal  
Seismograph Network

(February 13 - July 2, 1979)

<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. 6 signifies a distant earthquake and 7 is an explosion event.
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 and 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)

Fig. 6

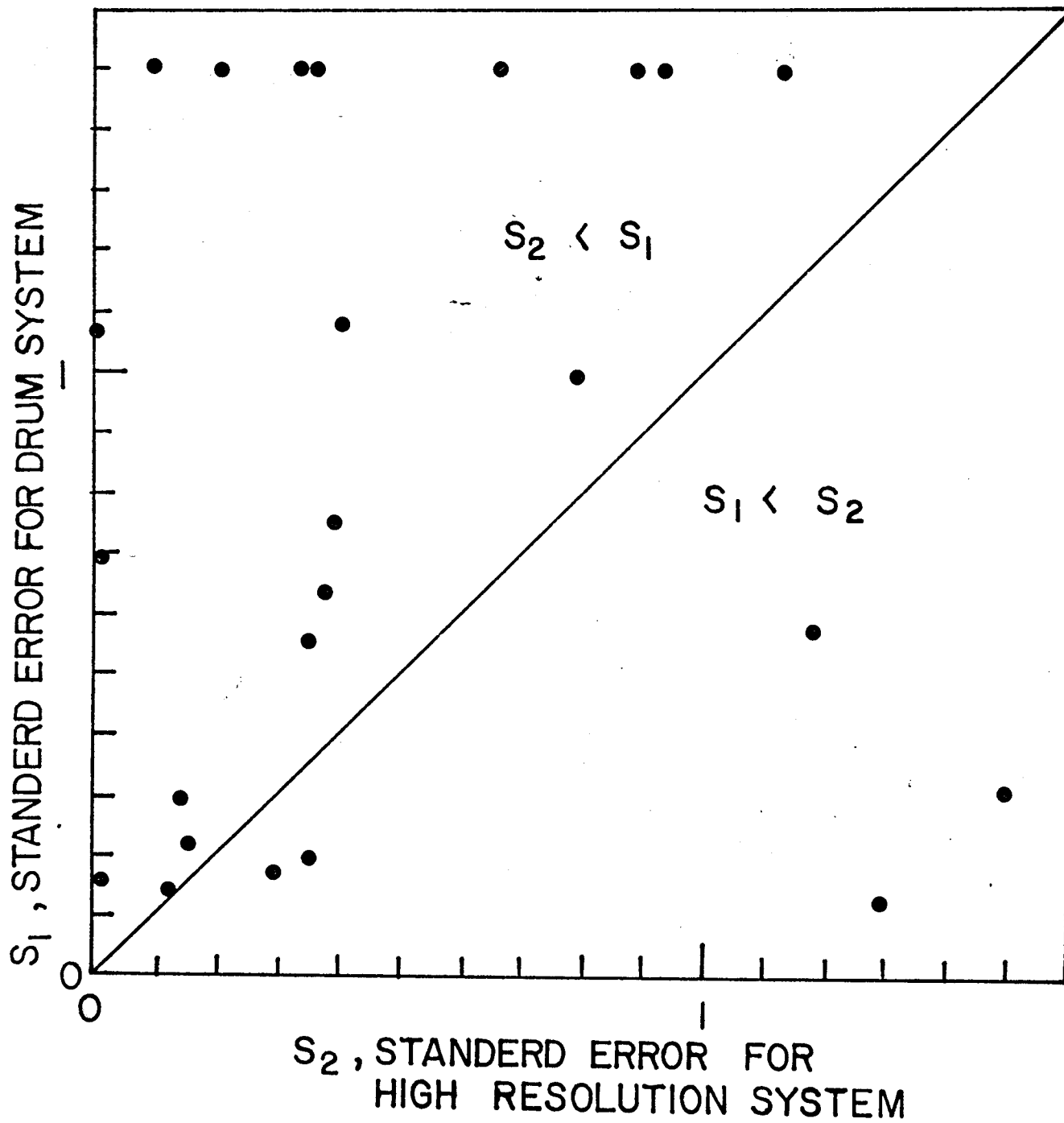


Fig. 7

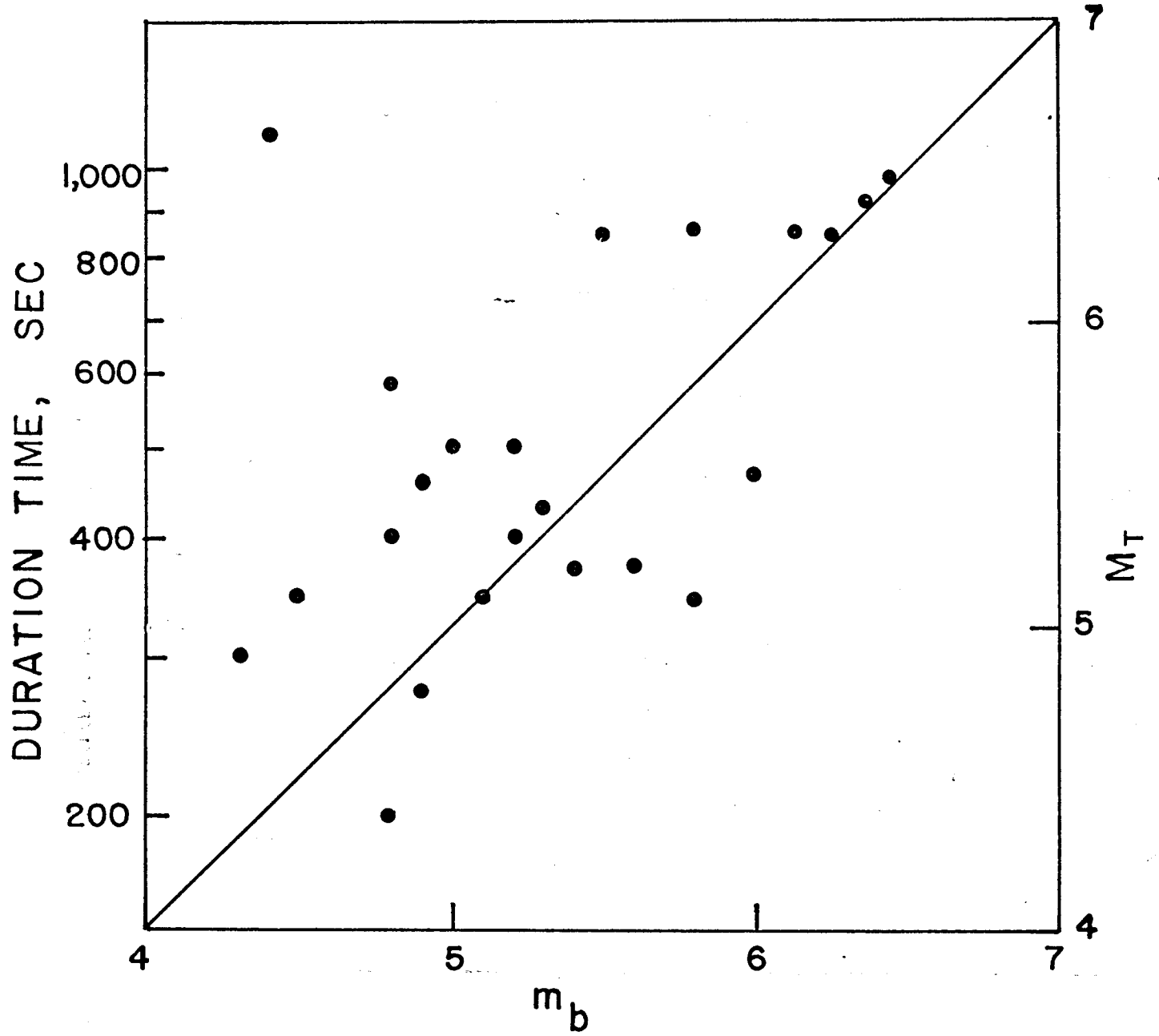


Fig. 8

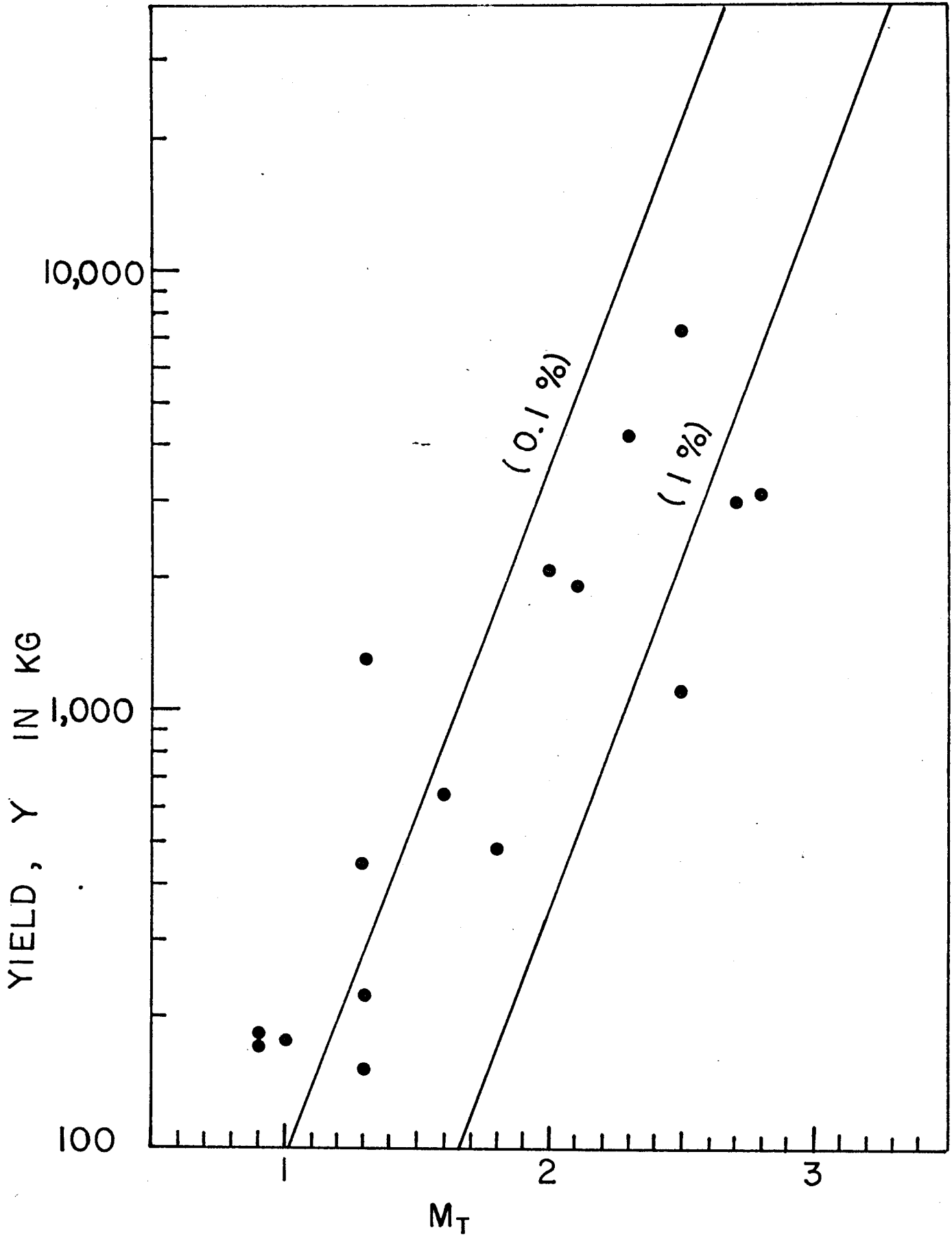


Fig. 9

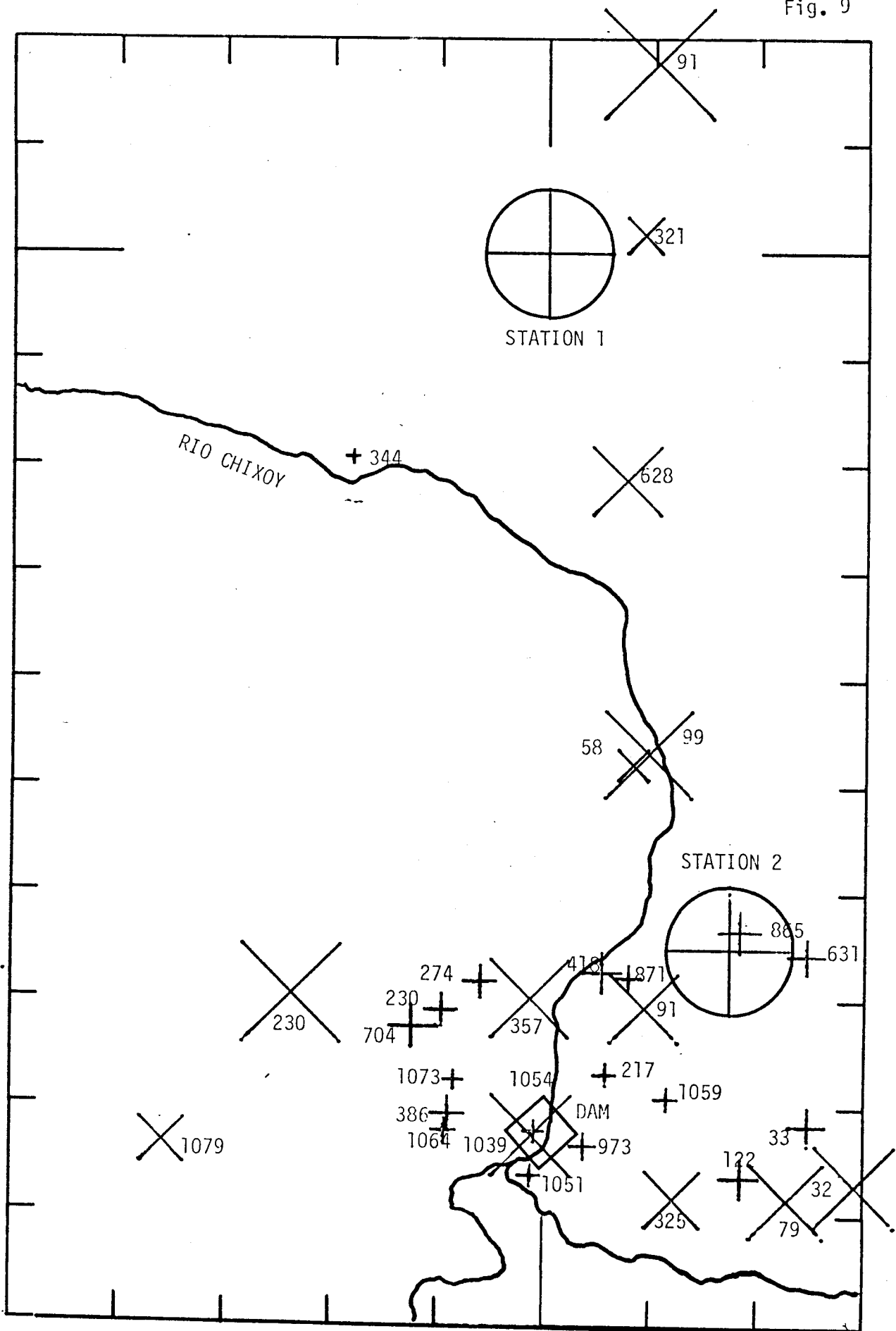


Fig. 10

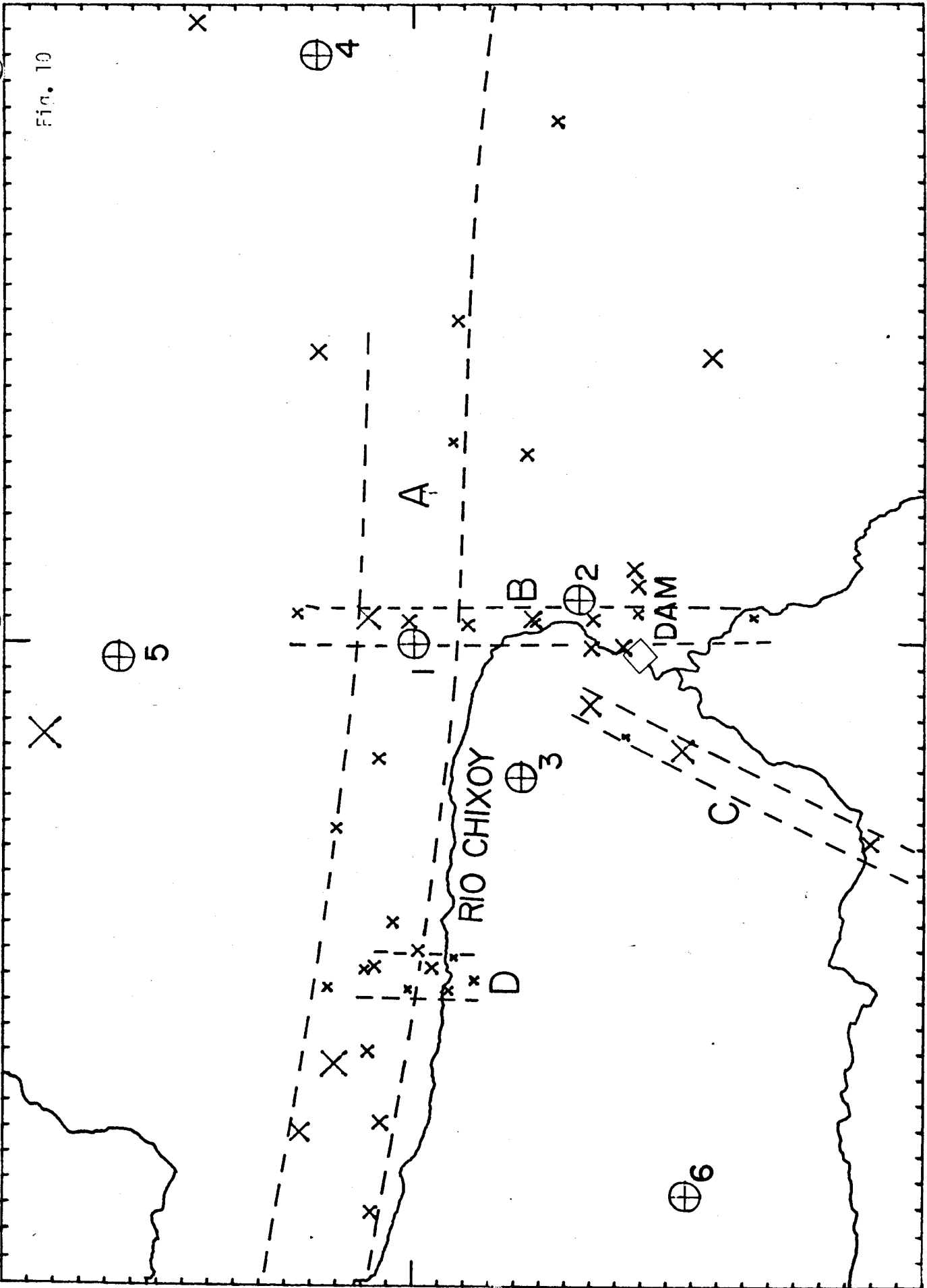
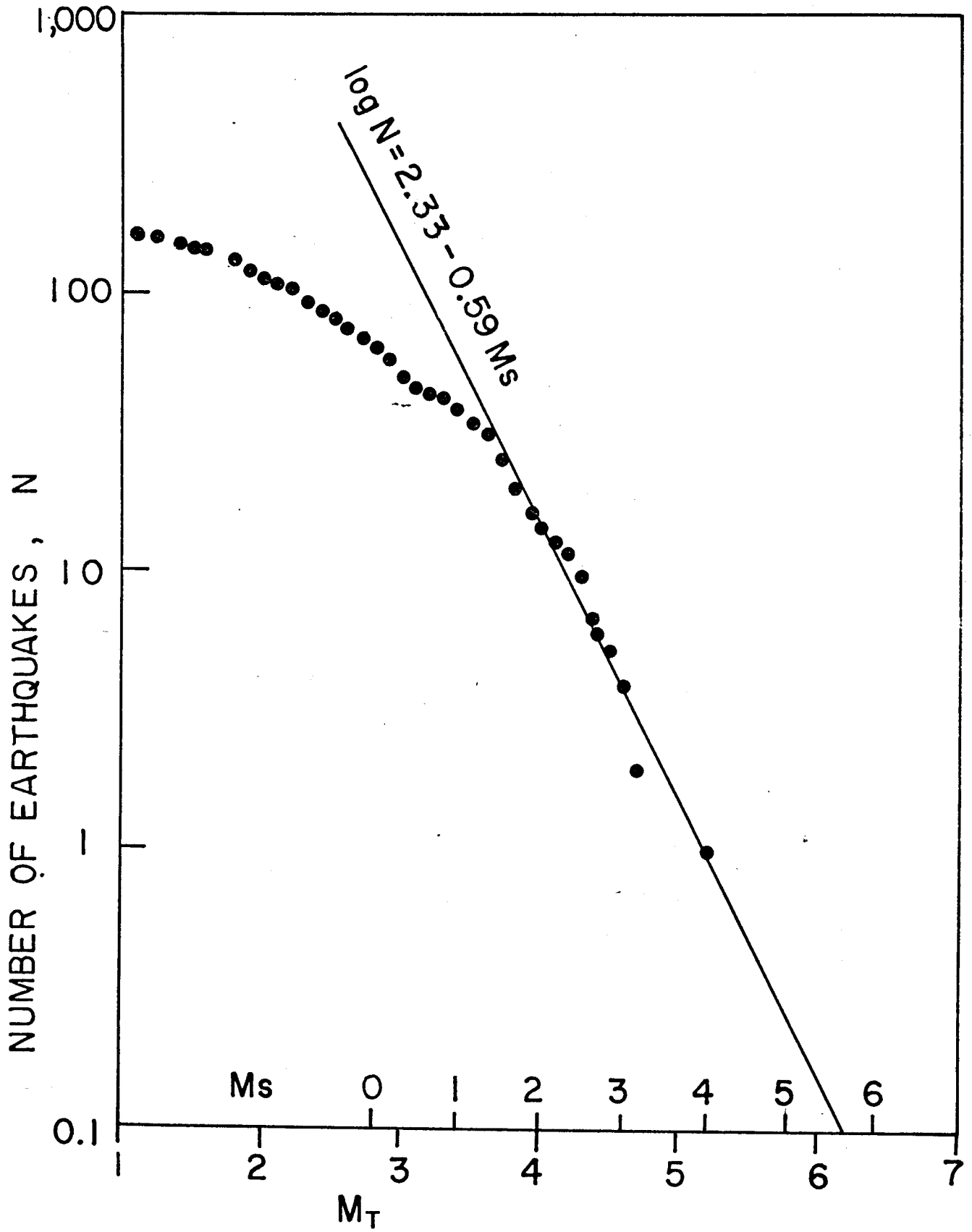


Fig. 11



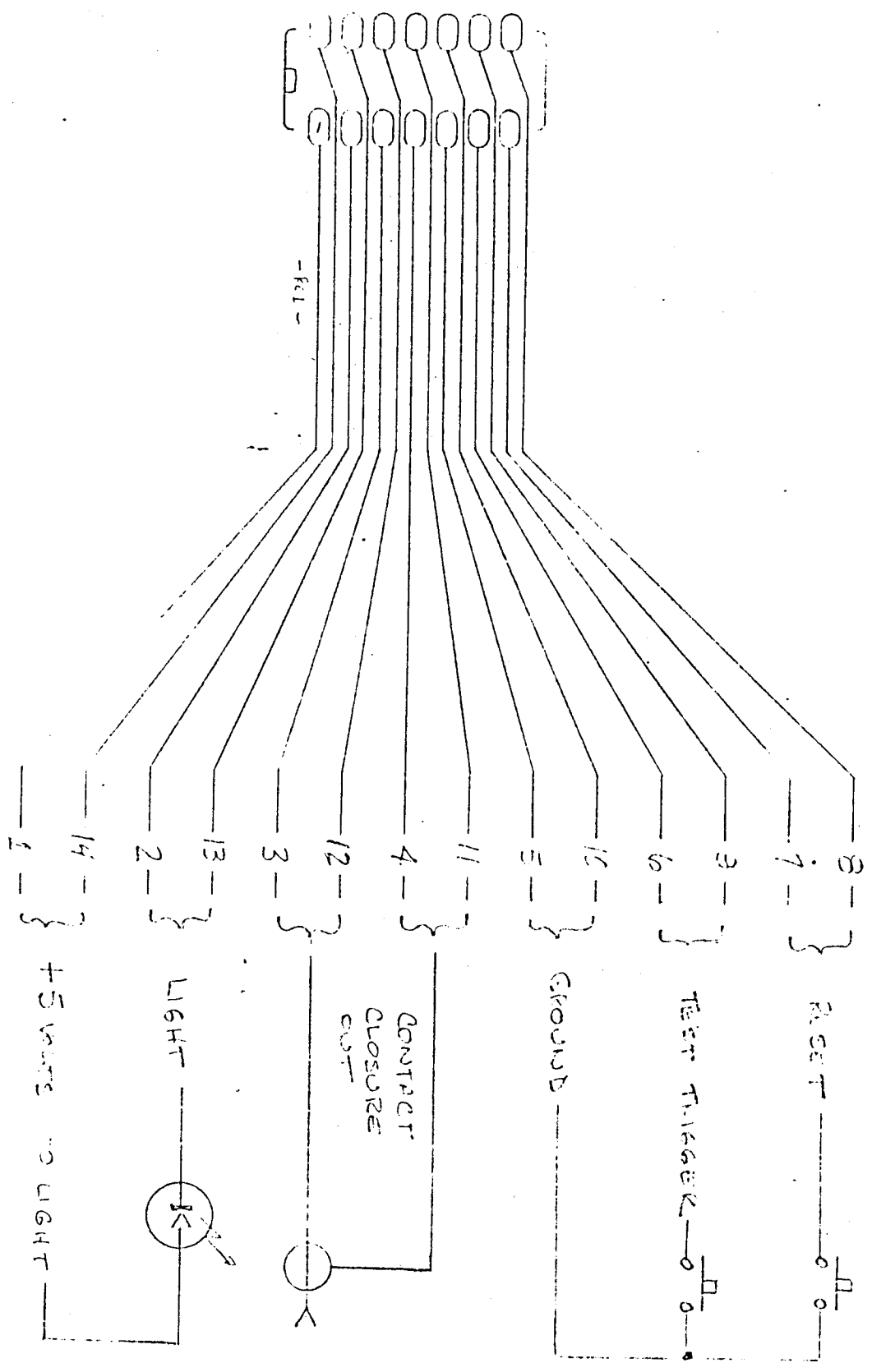


APPENDIX I -- Specification of the Delay-Memory-Trigger System

DELAY LINE

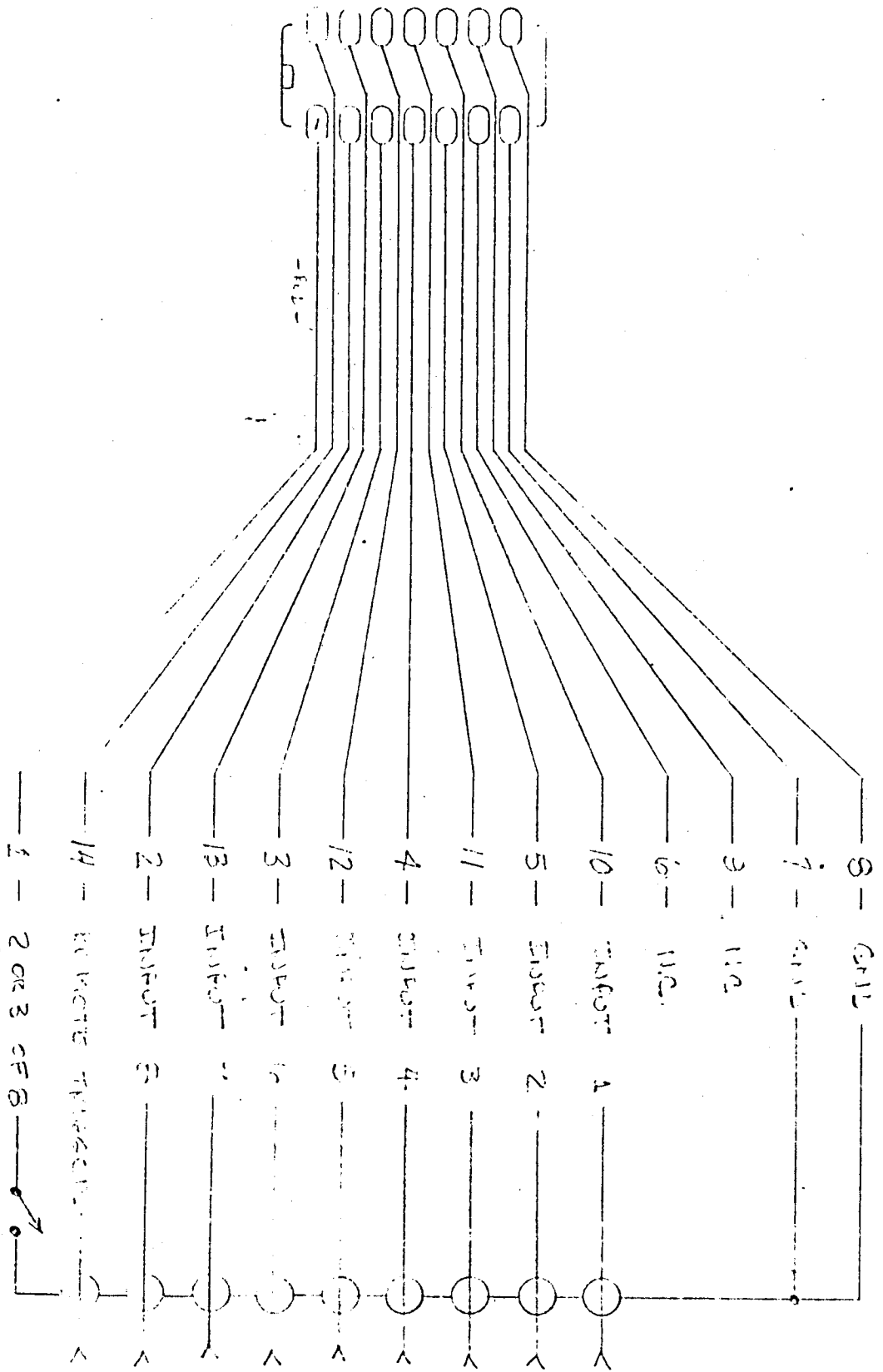
DL-100

The purpose of the delay line module is to delay a seismic analog signal for a fixed time period. Switch selectable delay times of 10, 20 and 40 seconds are available. A bypass position is also provided for system checkout. The 2 input and output jacks are paralleled for ease in cabling.



14 Pin Flat Cable - Angular Connector  
 FLAT CABLE - 2M 33L6

Condenser Driver Detector. 2. 300  
 SOCKET NO. 2



14 PIN SW. ... - FOL ... 609 M141  
 PART ORDER - EM 3265

(2 OF 8 SELECTOR WHEN ASSEMBLED)

CONDENSER DETECTOR  
 SOCKET NO. 1

PARTS LIST FOR COMPLIANCE DETECTOR  
FRONT PANEL AND MODULE

ITEM	PART NO.	DESCRIPTION
ENC.	EFP-204-9.70C	2" MODULE
J1-J9	31-221	BNC BULKHEAD CONNECTOR
J10	31-010	ISOLATED ENC CONNECTOR
L1	NSL4944	LED LIGHT & HOLDER
P1, P2	609-M141	14 PIN DIP HEADER
S3	MTR-106D	SPDT TOGGLE SWITCH
S4, S5	46-101	SPDT PUSHBUTTON SWITCH
MISC	3365	14 COND FIBER CABLE
	1417	GROUND LUG
	PLT-1M	TY-WRAP

CD-300 TABLE 1 CONT'D

ITEM	PART NO.	DESCRIPTION
SK	8059-2GZ 314-A640D 316-A640D	SOCKET, 3 PIN TO-5 SOCKET, 14 PIN DIP SOCKET, 16 PIN DIP
XIAL1	SX-IV	CRYSTAL, 32.768 KHz
BOARD	CD-300	PRINTED CIRCUIT BOARD

PARTS LIST FOR CONCORDANCE DETECTOR  
PRINTED CIRCUIT BOARD

ITEM	PART NO.	DESCRIPTION
C1, C4	CK06 BX 473K	CAPACITOR, CERAMIC 0.047 MFD
C2	CK05 BX 200K	CAPACITOR, CERAMIC 20 pfd.
C3	DD-050	CAPACITOR, CERAMIC 5 pfd
C5, C7	CK06 BX 103K	CAPACITOR, CERAMIC 0.01 MFD
C6	CE13BC107K	CAPACITOR, TANTALUM 100 mfd., 10V
Q1	2N2222A	TRANSISTOR
R1-R14	CC1003	RESISTOR 100K
R15	CC2003	RESISTOR 200K
R16	CC2004	RESISTOR 200K
R17	CC1002	RESISTOR 10K
R18	CC2001	RESISTOR 2K
R19	CC10R0	RESISTOR 10 OHM
S1, S2	76C04	SWITCH, DIP
U1, U5	MM74C914-N	INTEGRATED CIRCUIT
U2, U3, U11	MM74C107N	" "
U4	CD4007N	" "
U6	MM74C151N	" "
U7	MM74C00N	" "
U8, U9	CD404011	" "
U10	MM74C221N	" "
U12	MM74C10N	" "
U13, U14	MM74C04N	" "
U15	MM74C30N	" "
RL1	W171-DIP7	24 Ay, DIP REEL

# CARD EDGE CONNECTOR

CONTINUOUS IMPROVEMENT

CP-3000

Bottom TOP

GND  
 DATA 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 REMOTE TRIGGER  
 2 OF 6 OR 3 OF 6  
 RESET  
 TEST TRIGGER  
 CONTACT CLOSURE OUT {  
 LED OUT (PULL DOWN)  
 +5 VOLTS

1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22

Bottom TOP

WIRE SIDE COMPONENT SIDE





COINCIDENCE DETECTOR

(CD-300)

The purpose of the coincidence detector module is to take logic signals from external event detectors and turn on a recording device when preset coincidence parameters are met. Any number of inputs between two and eight may be used. Unused inputs are ignored by the system. A front panel switch selects either any two of the total inputs or any three of the total inputs on to provide a coincidence output. The output remains on as long as these input conditions are met. After coincidence is lost an internal timer starts, keeping the output on until the preset time period is over. This time period may be set in the range of 2 to 255 seconds, depending on needs. This feature provides minimum recorder run time, with short events, so a full time code cycle can be recorded. Test run and reset functions are also provided, along with an external input that turns on the output. This feature can be used for special recording periods irregardless of the coincidence inputs.



SPECIFICATIONS

INPUT: + 5 volt peak to peak  
seismic signal  
100 k ohms

OUTPUT: CMOS logic low  
on trigger

TEST: Momentary contact  
pushbutton simulates trigger

RESET: Momentary contact  
pushbutton resets trigger logic

RATIO: Selects ratio of short term average (1 sec)  
to long term average (100 sec) to enable  
trigger. Ratios available are 1.4, 2, 2.8,  
4, 5.6, 8, 11.3 and 16.

DELAY: Delay time between loss of trigger and loss  
of output.  
Switch selectable, 20 or 40 seconds.

POWER: + 15 VDC 10 MA IDLE, 10 MA RUNNING  
- 15 VDC 10 MA IDLE, 10 MA RUNNING  
+ 5 VDC 1 MA IDLE, 20 MA RUNNING  
(NOTE: Power is for both units in module)

PHYSICAL Standard 2" wide module  
Overall 2" x 5 $\frac{1}{4}$ " x 10 $\frac{1}{2}$ " deep.

TRIGGER DETECTOR

TD-200

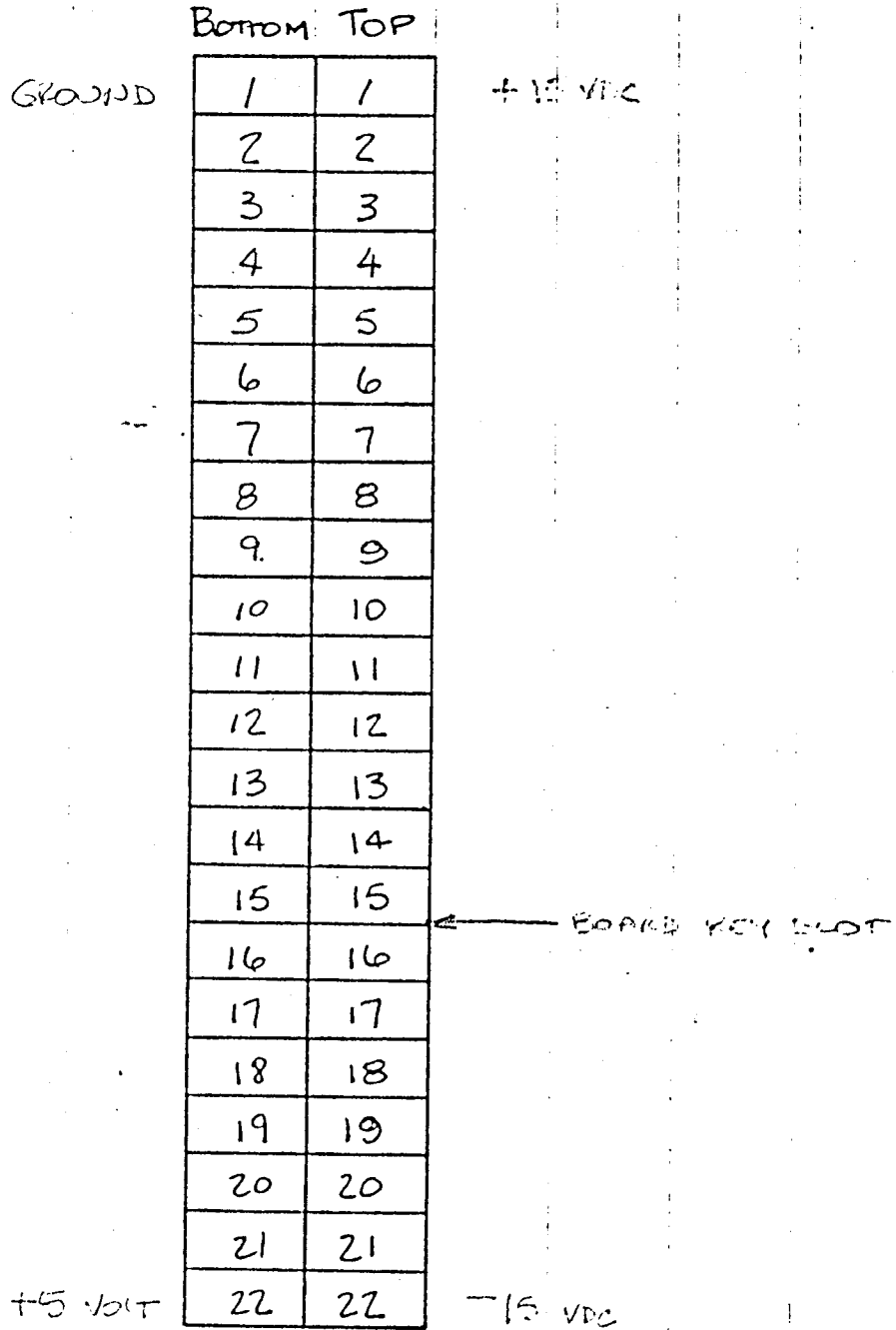
The purpose of the trigger detector module is to detect the onset of a seismic event. This is a dual module and contains two independent trigger detectors. Input is an analog seismic signal and output is a low going CMOS logic level. A trigger is detected by comparison of a short term average signal with a long term average signal. The short term average is one second. The long term average (background average) is 100 seconds. A switch is provided to select the trigger ratio between the short term over the long term average. There are eight steps from 1.4 to 16 in a  $2^n$  sequence.

After a trigger is detected the output will remain enabled (low) for the duration of the trigger plus 20 or 40 seconds (switch selectable). This allows coincidence to be detected over large arrays for short events. After ten minutes of continuous trigger the background average is unclamped and allowed to rise. This, in effect, will limit triggering on major events to approximately 12 mins. The unit will retrigger any time the preset ratio is exceeded. Push buttons are provided for test trigger and reset.

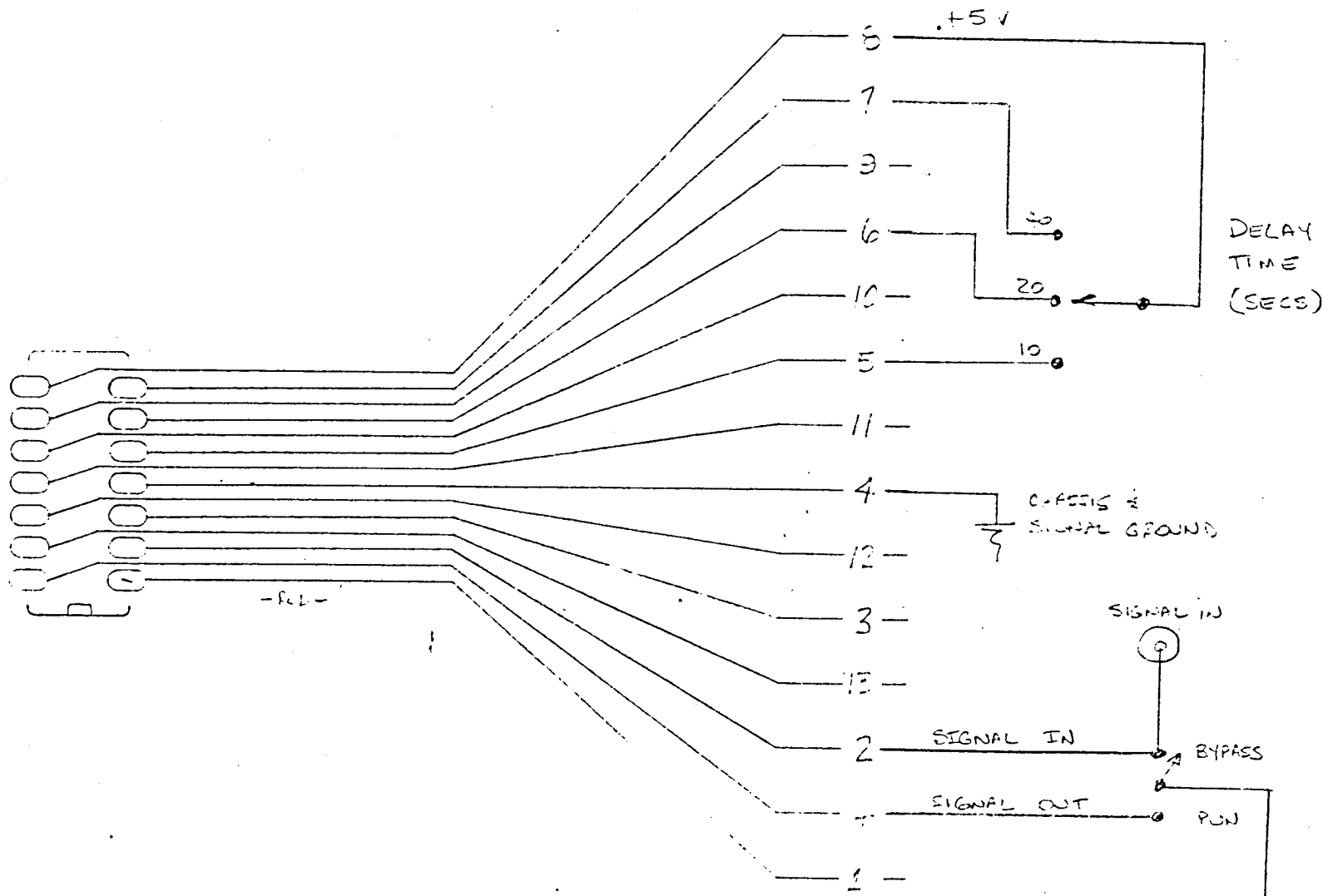
CARD EDGE CONNECTOR

DELAY LINE DL-100

CONTROL BOARD



BOTTOM TOP  
WIRE SIDE COMPONENT SIDE



14 PIN DIP HEADER - ARROW 609-14-00  
 FLAT CABLE - 3M 3200

DELAY LINE DL-100  
 FRONT PANEL WIRING

SPECIFICATIONS

INPUT: + 5 volts peak to peak max  
0.1 to 15 Hz, 6 db points  
100 k ohms typical

OUTPUT: + 5 volts peak to peak max  
(same as input)  
0.1 to 15 Hz, 6 db points  
10 ohms

DELAY: Switch selectable  
10, 20 or 40 seconds

BYPASS: Connects input jack  
directly to output  
Note that during bypass signal is  
still going into delay line.

POWER: + 15 VDC 15 MA  
- 15 VDC 10 MA  
+ 5 VDC 1 MA

PHYSICAL: Standard 2" wide module  
Overall 2" x 5 $\frac{1}{4}$ " x 10 $\frac{1}{2}$ " deep.

NO	YR	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
1	79	213	237	3102		5	4	2	10	3.9	-92.272	15.532	-195.0	19.8	218.8	46.7	84.3	53.8	0.57
2	79	213	238	2883		4	2	3	9	4.6	-91.257	15.014	-83.9	-37.4	43.9	29.0	32.2	58.1	0.56
3	79	213	425	5820		3	2	4	6	2.5	0.000	0.000	-269.2	-79.6	37.9	1310.0	1310.0	1310.0	16.49
4	79	213	539	1894		3	3	4	6	2.3	0.000	0.000	-100.6	-51.9	27.9	505.8	621.6	395.8	5.42
5	79	213	544	1786		4	4	4	10	4.4	-88.864	13.056	178.1	-254.0	187.5	109.1	125.0	262.3	0.67
6	79	214	118	1064		5	5	4	10	2.9	-91.409	15.281	-100.5	-7.9	166.4	44.1	58.6	29.8	0.94
7	79	214	437	3438		6	6	2	10	3.1	-92.262	14.069	-194.0	-141.9	90.4	27.4	23.6	74.5	0.29
8	79	214	553	4607		6	3	4	10	3.2	-90.233	14.890	28.2	-51.2	32.5	14.6	14.1	28.2	0.76
9	79	214	1337	536		6	4	3	10	2.7	-90.276	14.292	23.4	-117.3	139.5	74.0	63.6	63.1	1.16
10	79	214	1809	2725		5	4	4	10	3.1	-89.946	14.659	59.6	-76.7	5.0	16.9	15.3	0.0	0.90
11	79	215	932	1669		3	6	4	10	1.4	-90.140	15.348	38.4	-0.5	5.1	2.1	2.1	0.9	0.15
12	79	215	958	2029		6	7	3	6	2.3	0.000	0.000	-76.8	-51.3	22.6	50.9	69.2	71.1	2.30
13	79	215	1146	0		7	0	3	4	4.4	0.000	0.000	1310.0	1181.5	1310.0	1310.0	1310.0	1310.0	3.26
14	79	215	1529	509		6	4	4	10	3.8	-92.737	12.090	-246.0	-360.8	329.8	259.4	241.6	276.0	1.27
15	79	215	1540	3975		7	5	1	9	3.6	-91.747	14.202	-137.6	-127.2	4.4	29.1	30.1	13.2	0.69
16	79	215	1704	1035		5	0	5	10	1.6	-90.305	15.247	20.3	-11.7	3.4	7.6	6.5	59.1	0.82
17	79	215	1719	1946		5	5	3	10	1.1	-90.481	15.232	1.0	-13.4	12.3	1.7	1.4	2.9	0.19
18	79	215	1923	389		5	1	2	10	2.8	-90.388	15.246	11.2	-11.7	19.7	7.5	8.4	28.2	0.91
19	79	215	2056	2927		7	6	2	10	4.9	-91.261	13.475	-84.3	-207.6	144.2	36.2	43.5	62.2	0.54
20	79	215	2130	1896		4	1	4	10	3.0	0.000	0.000	-61.3	-281.1	88.0	344.5	296.6	993.3	2.72
21	79	215	2144	307		4	4	4	10	1.6	-90.742	15.371	-27.5	2.0	5.0	10.8	7.5	0.0	0.85
22	79	215	2237	2338		4	1	5	10	3.3	0.000	0.000	9.7	22.7	5.0	12.8	24.0	0.0	3.47
23	79	215	2341	1521		3	2	5	5	2.8	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1067.38
24	79	216	19	4657		3	3	4	10	3.8	-90.922	15.101	-47.2	-27.9	64.6	10.9	8.8	10.2	0.34
25	79	216	100	4469		4	3	4	10	2.2	-90.507	15.164	-1.8	-20.9	111.5	55.9	86.2	39.3	1.43
26	79	216	310	2805		4	6	4	6	2.7	0.000	0.000	-92.4	-230.5	84.7	345.5	292.1	384.2	3.58
27	79	216	841	958		3	2	5	6	0.7	0.000	0.000	1310.0	-665.7	5.0	1310.0	1310.0	0.0	435.17
28	79	216	856	2455		7	6	1	10	2.3	-90.662	15.364	-18.8	1.3	7.3	5.1	1.6	4.4	0.26
29	79	216	1015	5000		7	6	6	10	6.4	-87.903	11.418	283.4	-435.2	759.2	59.8	75.3	56.1	0.25
30	79	216	1040	1434		7	7	1	8	3.5	-91.050	13.236	-61.3	-234.1	48.9	117.5	144.3	381.2	1.97
31	79	216	1343	1093		6	5	1	6	2.8	-90.749	14.556	-28.2	-88.1	23.4	61.9	39.7	83.6	1.63
32	79	216	1701	3482		5	4	2	10	2.5	-90.464	15.274	2.9	-8.7	5.2	2.1	1.2	4.0	0.38
33	79	216	1702	3495		5	1	7	10	2.3	-90.468	15.279	2.5	-8.2	3.2	1.0	0.5	1.5	0.16
34	79	216	2157	5601		6	6	1	9	2.6	-90.926	15.006	-47.7	-38.4	6.0	4.6	5.7	73.7	0.34
35	79	216	2203	928		6	2	4	5	3.1	0.000	0.000	-143.7	5.6	15.1	394.7	542.0	727.3	9.78
36	79	216	2224	4127		5	2	4	10	4.1	-90.546	13.922	-6.0	-158.2	269.5	128.4	232.9	139.5	1.38
37	79	216	2252	5022		7	6	1	10	3.3	-90.895	15.014	-44.3	-37.5	20.4	3.6	3.9	1.9	0.27
38	79	216	2315	3897		5	1	4	5	3.4	0.000	0.000	-157.7	-38.6	45.4	687.3	720.9	439.3	13.35
39	79	217	233	1863		6	4	2	9	3.4	-90.731	13.086	-26.3	-250.7	62.0	56.6	73.6	248.5	0.88
40	79	217	601	0		7	0	1	10	3.4	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	0.0	9.04
41	79	217	602	1359		4	2	3	5	4.5	0.000	0.000	-56.1	95.6	52.5	208.2	276.9	309.5	4.12
42	79	217	1058	0		4	0	4	5	2.2	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	3.12
43	79	217	1418	1766		7	1	2	7	4.4	0.000	0.000	-123.8	-180.5	31.2	448.3	547.1	883.1	7.12
44	79	217	1719	3793		7	4	2	10	3.4	-92.371	14.456	-205.9	-99.2	5.0	73.4	138.6	0.0	1.85
45	79	217	2125	4346		5	5	4	6	2.2	0.000	0.000	-114.4	21.2	51.2	82.9	167.4	146.9	2.66
46	79	217	2136	1832		5	4	4	10	3.1	-90.142	15.253	38.2	-11.0	36.8	23.5	32.7	38.6	1.73
47	79	217	2303	2980		5	6	3	8	3.3	-91.071	12.651	-63.5	-298.8	53.0	41.3	69.0	317.8	0.55
48	79	217	2324	3535		3	1	2	10	1.3	0.000	0.000	-199.6	23.2	5.0	1310.0	1310.0	0.0	56.78
49	79	217	2328	238		6	5	5	10	1.1	-90.464	15.333	2.9	-2.2	11.7	1.1	1.6	1.7	0.24
50	79	218	110	5793		7	7	1	10	3.7	-91.531	12.911	-113.9	-270.1	56.2	78.3	109.8	398.0	1.08



NO	YR	D	H	M	S	NP	NS	IO	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
51	79	218	317	4283		6	6	3	8	2.0	-90.497	14.764	-0.7	-65.1	2.6	13.8	19.2	72.4	1.12
52	79	218	318	1427		7	7	1	10	3.5	-92.043	14.146	-169.9	-133.4	124.4	34.7	46.8	53.2	0.60
53	79	218	934	4854		7	5	3	10	3.7	0.000	0.000	66.5	-135.6	5.0	65.9	52.2	0.0	2.89
54	79	218	1012	491		7	3	1	5	4.8	0.000	0.000	-29.2	-325.4	43.0	822.5	972.7	1213.5	12.08
55	79	218	1423	0		3	5	4	3	3.5	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
56	79	218	1616	5243		6	4	3	7	2.9	0.000	0.000	-223.4	-188.5	86.8	355.8	523.1	490.3	4.82
57	79	218	2249	5715		5	4	3	10	3.4	-90.369	14.816	13.3	-59.3	5.0	15.9	13.5	0.0	0.90
58	79	219	201	3992		3	3	3	10	0.3	-90.483	15.309	0.8	-4.8	5.0	0.9	1.2	0.0	0.21
59	79	219	621	4074		7	7	1	6	3.5	-91.153	13.462	-72.5	-209.1	56.2	36.6	16.7	15.0	0.65
60	79	219	813	5914		4	1	4	10	3.3	0.000	0.000	24.5	-48.6	5.0	84.1	127.5	0.0	4.43
61	79	219	907	1487		4	1	4	10	2.5	-92.181	13.921	-185.1	-158.3	85.8	41.1	38.6	114.1	0.39
62	79	219	1002	5797		4	3	4	5	1.6	-90.596	14.996	-11.6	-39.4	2.9	5.1	9.1	4.7	0.60
63	79	219	1358	2958		7	5	2	10	3.8	-90.111	14.916	41.6	-48.3	33.3	13.7	15.6	30.6	0.86
64	79	219	1625	408		6	3	1	10	1.9	-90.434	15.320	6.2	-3.7	25.7	8.0	12.8	13.0	1.00
65	79	219	1625	3427		7	7	1	10	2.5	-90.363	15.369	14.0	1.8	9.8	3.3	4.3	5.3	1.04
66	79	219	1719	0		7	0	1	5	1.8	-76.405	10.602	1310.0	-525.4	1310.0	1310.0	1310.0	1310.0	1.80
67	79	219	1808	3726		4	1	7	10	0.3	-90.492	15.295	-0.1	-6.4	5.0	8.6	6.3	0.0	0.71
68	79	219	1854	278		4	2	4	6	1.3	-91.176	15.686	-75.0	36.8	20.8	8.9	7.4	26.8	0.27
69	79	219	1854	2776		3	2	4	5	1.3	0.000	0.000	4.1	-16.6	3.3	86.0	29.2	25.4	2.88
70	79	219	2008	0		6	0	2	6	1.6	0.000	0.000	-36.0	1310.0	1310.0	1310.0	1310.0	1310.0	4.52
71	79	219	2008	0		6	0	3	3	2.8	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	16.70
72	79	219	2121	981		3	5	3	5	1.8	-89.617	15.965	95.6	67.7	18.3	11.1	13.6	40.2	0.39
73	79	219	2127	4406		5	5	2	9	2.9	-89.864	15.655	68.6	33.4	6.7	8.7	9.1	61.9	0.44
74	79	220	319	4602		7	6	2	10	3.6	-93.382	16.953	-316.6	177.0	239.0	50.4	72.9	107.9	0.49
75	79	220	431	2579		7	6	1	10	3.8	-90.607	14.950	-12.7	-44.5	15.5	3.3	5.3	10.6	0.37
76	79	220	508	3443		7	7	1	10	2.7	-90.664	14.749	-19.0	-66.8	34.6	4.3	5.4	9.4	0.29
77	79	220	939	4281		7	7	1	10	4.9	-89.963	14.412	57.7	-104.0	95.2	17.6	22.2	33.3	0.53
78	79	221	15	602		2	2	5	10	0.9	0.000	0.000	3.6	-1.9	29.9	179.6	72.9	0.0	4.52
79	79	221	533	1735		5	4	1	10	4.3	-92.218	15.121	-189.1	-25.6	113.2	9.6	13.3	17.3	0.18
80	79	221	639	4958		5	0	2	10	3.8	-90.828	14.681	-36.9	-74.3	48.9	18.3	36.9	12.9	0.12
81	79	221	858	5009		4	2	3	10	2.2	-90.470	15.272	2.3	-8.9	7.8	1.2	0.5	0.6	0.10
82	79	221	1258	2925		5	5	3	10	2.9	-90.592	15.000	-11.1	-38.9	5.0	6.6	11.2	0.0	0.95
83	79	221	1557	0		4	0	6	4	5.2	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	4.67
84	79	221	2226	3787		3	4	4	6	3.6	0.000	0.000	-251.0	353.4	81.6	1310.0	1170.7	1310.0	8.28
85	79	222	613	3194		3	4	4	10	3.8	-92.909	18.544	-264.8	353.0	187.8	141.1	244.0	641.2	1.13
86	79	222	707	735		2	2	5	10	1.3	-90.555	15.206	-7.0	-16.2	2.0	8.0	18.8	0.0	0.18
87	79	222	813	0		5	0	4	4	4.3	0.000	0.000	1310.0	27.3	1310.0	1310.0	1019.6	1310.0	4.52
88	79	222	919	0		5	1	6	10	5.4	-98.192	20.484	-843.3	567.5	50.5	217.3	319.6	0.0	1.45
89	79	222	1450	3213		5	5	4	5	3.8	0.000	0.000	-255.7	-90.4	58.4	182.0	223.4	598.1	2.83
90	79	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
91	79	222	2224	484		4	0	2	10	2.0	-90.482	15.289	0.9	-7.1	7.3	0.1	0.0	0.1	0.00
92	79	222	2258	2919		3	0	3	10	3.8	-90.481	15.369	1.0	1.8	5.0	0.3	0.2	0.0	0.05
93	79	223	642	4750		5	1	3	5	3.8	0.000	0.000	-146.2	-47.3	16.3	190.2	137.4	332.7	2.50
94	79	223	650	1299		2	2	5	10	3.1	-88.680	14.546	198.3	-89.2	5.0	30.0	54.7	0.0	0.74
95	79	223	1438	4058		3	3	5	10	3.4	-90.223	15.032	29.3	-35.5	23.2	6.7	7.3	13.6	0.45
96	79	223	2358	4522		3	2	5	10	2.3	-90.494	15.288	-0.4	-7.2	8.7	2.2	1.3	6.5	0.16
97	79	224	844	5277		5	4	3	7	2.8	0.000	0.000	-186.7	-226.8	2.7	972.6	1202.7	1310.0	12.80
98	79	224	1154	5825		4	4	4	5	3.7	0.000	0.000	-328.0	322.6	220.9	1310.0	1310.0	1310.0	11.34
99	79	224	1620	4384		3	3	3	10	2.8	-90.482	15.310	1.0	-4.7	5.0	1.3	0.8	0.0	0.24
100	79	224	1750	0		7	1	6	10	5.1	-97.093	19.177	-722.9	423.0	590.1	96.1	129.7	179.6	0.34

NO	YR	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
101	79	225	340	2207		2	3	4	5	1.8	0.000	0.000	24.3	-70.0	8.7	516.2	116.4	686.8	4.14
102	79	225	516	5857		4	4	4	10	2.9	-91.295	12.162	-88.0	-352.9	63.8	119.0	119.0	575.7	0.86
103	79	225	1022	2566		5	1	2	10	4.5	-94.430	17.617	-431.3	250.5	234.8	102.4	90.1	237.2	0.45
104	79	225	1105	2084		5	4	2	8	3.5	0.000	0.000	-219.7	-171.8	10.7	1310.0	706.9	1310.0	7.49
105	79	225	1425	1790		4	3	3	5	3.7	0.000	0.000	-200.6	-167.0	135.5	1310.0	1153.0	1310.0	12.99
106	79	225	1709	4147		3	3	4	10	3.0	0.000	0.000	-104.4	-191.9	5.0	537.6	347.0	0.0	4.24
107	79	225	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
108	79	225	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
109	79	225	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
110	79	226	154	5081		6	1	1	5	4.3	-90.088	14.570	44.1	-86.5	24.8	11.3	12.9	26.6	0.39
111	79	226	900	3131		2	2	4	6	2.2	0.000	0.000	461.3	1310.0	5.0	1310.0	1310.0	0.0	512.40
112	79	226	1317	1485		5	5	3	6	2.2	-90.986	14.683	-54.3	-74.0	43.8	72.9	58.2	68.3	1.88
113	79	226	1703	5317		3	3	4	10	2.0	0.000	0.000	-48.4	-33.1	5.0	43.0	43.9	0.0	2.50
114	79	226	1824	2064		5	3	9	10	4.9	-94.232	17.583	-409.7	246.7	138.3	108.0	98.3	419.7	0.59
115	79	226	1903	1809		6	4	1	10	3.7	-90.574	14.588	-9.2	-84.6	5.0	34.8	20.6	0.0	1.37
116	79	227	239	1156		7	4	1	10	3.1	-90.967	14.833	-52.2	-57.5	18.0	4.1	4.5	2.0	0.24
117	79	227	239	5314		4	5	2	10	3.5	-90.936	14.787	-48.7	-62.5	5.0	10.4	9.8	0.0	0.42
118	79	227	245	2431		7	4	1	5	3.8	0.000	0.000	-79.1	104.3	77.1	92.9	118.3	110.2	2.82
119	79	227	540	3742		6	6	2	7	2.9	-90.984	14.745	-54.0	-67.1	22.4	21.2	26.4	44.7	1.11
120	79	227	904	1996		6	5	1	6	3.6	-91.055	14.817	-61.8	-59.2	15.6	44.6	54.3	73.4	1.98
121	79	227	1631	695		8	1	1	10	4.9	-91.513	13.648	-111.9	-188.5	117.6	19.4	21.1	36.1	0.27
122	79	227	2053	4266		5	1	7	10	2.3	-90.474	15.274	1.8	-8.7	7.3	0.3	0.3	0.2	0.05
123	79	227	2149	906		7	5	1	9	3.6	-91.256	13.435	-83.8	-212.1	66.0	50.1	58.3	151.2	0.82
124	79	227	2311	2207		5	3	7	10	1.0	-90.626	15.337	-14.8	-1.8	23.9	9.0	8.8	17.9	1.07
125	79	228	324	4220		3	5	4	5	1.6	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1268.53
126	79	228	517	4618		7	5	2	5	2.2	0.000	0.000	165.0	-166.5	14.4	182.5	230.2	683.1	3.84
127	79	228	518	4764		5	2	4	10	1.6	-90.359	14.459	14.4	-98.9	5.0	9.1	7.0	0.0	0.33
128	79	228	840	1187		4	3	2	5	2.3	0.000	0.000	-87.2	102.5	52.2	253.5	285.3	403.5	4.09
129	79	228	949	2289		4	0	4	10	3.9	0.000	0.000	10.6	2.5	5.0	10.3	24.0	0.0	3.07
130	79	228	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
131	79	228	1712	5000		5	1	6	10	5.6	-96.818	12.662	-692.8	-297.6	731.5	505.1	671.6	442.3	1.69
132	79	228	1840	4161		7	6	2	9	2.9	-91.011	14.821	-56.9	-58.8	3.5	17.2	22.0	107.0	1.04
133	79	228	2012	4000		7	1	6	6	5.6	-98.471	18.430	-873.8	340.4	161.9	256.3	348.9	830.1	1.06
134	79	228	2048	883		7	7	2	6	2.2	-90.958	14.854	-51.2	-55.1	15.7	6.7	7.3	5.4	0.43
135	79	228	2137	0		7	1	6	10	6.5	-92.411	18.159	-210.3	310.4	979.4	208.9	280.5	117.2	0.71
136	79	228	2345	2813		2	2	6	10	1.8	-90.264	15.378	24.9	2.8	5.0	5.6	4.0	0.0	0.32
137	79	228	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
138	79	301	557	235		3	3	5	10	1.7	-90.507	14.422	-1.7	-103.0	5.0	11.7	6.3	0.0	0.36
139	79	301	734	2554		4	4	4	10	2.4	-89.335	15.046	126.5	-33.9	5.0	12.0	21.2	0.0	0.72
140	79	301	1243	2205		3	3	5	10	1.8	-89.038	15.324	159.0	-3.1	25.6	10.9	30.5	6.6	0.56
141	79	301	1335	1734		4	4	4	10	2.3	-89.159	15.022	145.8	-36.6	5.0	2.3	4.6	0.0	0.13
142	79	301	1413	1037		5	5	3	10	2.5	-91.020	14.799	-57.9	-61.2	15.8	6.0	6.0	4.4	0.30
143	79	301	1437	73		3	0	6	5	4.8	-89.397	14.781	119.7	-63.2	5.0	282.7	151.8	0.0	1.74
144	79	301	1508	5617		3	3	5	10	2.2	-91.522	13.946	-112.9	-155.6	149.8	23.3	19.3	23.7	0.24
145	79	301	1509	4077		3	3	5	10	2.5	-91.673	13.704	-129.5	-182.4	74.7	44.1	37.1	135.5	0.45
146	79	301	2124	428		6	6	3	10	2.8	-91.931	13.872	-157.7	-163.8	115.2	22.8	29.2	40.5	0.37
147	79	302	240	669		5	5	4	10	2.0	-90.958	14.838	-51.2	-56.9	18.8	3.7	3.5	2.3	0.19
148	79	302	312	5884		6	6	4	10	2.2	-89.544	16.004	103.7	72.0	33.3	8.5	11.3	2.6	0.33
149	79	302	500	3802		3	3	5	6	1.8	-90.539	14.729	-5.3	-69.0	17.6	52.3	34.7	25.5	1.93
150	79	302	632	3485		5	5	3	7	2.2	-89.674	15.521	89.4	18.7	11.8	2.9	4.5	57.5	0.17

NO	YR	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
151	79	302	845	5675		4	0	4	10	2.9	-90.387	15.198	11.4	-17.1	21.9	0.0	0.0	0.1	0.00
152	79	302	1026	3322		2	2	5	10	0.9	-90.594	15.301	-11.4	-5.7	5.0	12.9	26.6	0.0	0.48
153	79	302	1213	3780		3	3	5	7	2.2	-92.560	14.366	-226.6	-109.1	63.1	65.2	53.6	216.8	0.63
154	79	302	1230	0		6	1	6	10	4.9	-98.260	12.887	-850.7	-272.7	150.8	126.3	155.1	735.2	0.45
155	79	302	1408	3404		5	5	5	10	1.8	-90.829	15.414	-37.0	6.8	17.1	10.0	8.7	18.2	0.77
156	79	302	1708	2494		5	1	2	10	2.5	-90.386	15.387	11.5	3.8	15.2	4.7	7.2	17.5	0.79
157	79	302	1727	320		3	0	5	10	4.1	-90.605	15.287	-12.5	-7.3	5.0	15.4	1.9	0.0	0.21
158	79	302	1729	5791		6	1	3	8	4.4	0.000	0.000	-448.4	-133.0	117.0	941.7	1243.5	1310.0	6.88
159	79	302	2254	1224		7	7	1	10	4.1	-90.824	13.714	-36.5	-181.2	58.1	11.0	5.1	5.8	0.24
160	79	303	4	1172		6	6	2	10	3.6	-90.984	14.798	-54.0	-61.3	13.3	4.7	5.9	38.8	0.28
161	79	303	103	355		5	1	5	10	2.5	-90.454	15.226	4.0	-14.0	22.3	1.0	1.4	2.8	0.13
162	79	303	315	4560		7	0	2	10	5.2	-90.850	15.265	-39.3	-9.7	30.5	24.3	5.7	20.4	0.29
163	79	303	812	1789		6	4	3	6	3.2	0.000	0.000	-73.6	-235.0	82.1	274.8	325.9	404.6	4.32
164	79	303	832	4589		6	5	1	10	3.1	-90.480	13.702	1.1	-182.6	87.1	9.2	10.2	25.6	0.18
165	79	303	912	2092		6	5	1	6	3.3	-89.250	15.169	135.8	-20.3	29.3	6.2	12.5	5.4	0.35
166	79	303	1146	1940		5	3	3	10	3.5	-91.691	14.080	-131.5	-140.8	164.6	31.1	26.0	28.3	0.29
167	79	303	1522	3095		2	1	5	10	2.2	-90.366	15.277	13.7	-8.4	5.0	0.1	0.0	0.0	0.00
168	79	303	1838	1216		7	5	1	10	4.3	-93.503	16.098	-329.8	82.4	161.3	22.2	29.6	61.2	0.24
169	79	304	22	3092		3	2	4	10	2.5	-91.730	14.357	-135.7	-110.2	94.9	14.2	13.8	23.2	0.18
170	79	304	516	0		5	4	4	8	3.2	0.000	0.000	-286.5	-167.5	83.8	1310.0	1310.0	1310.0	12.35
171	79	304	534	5152		7	5	3	9	3.7	0.000	0.000	-355.8	-46.2	53.6	280.0	402.7	951.5	3.11
172	79	304	804	1939		5	5	3	6	2.0	-90.628	14.938	-15.0	-45.9	9.0	11.1	20.9	31.8	1.14
173	79	304	809	5451		3	1	3	10	1.8	-90.103	14.837	42.4	-57.1	65.8	0.5	1.0	0.8	0.01
174	79	304	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
175	79	304	1841	1998		4	4	4	10	2.0	-91.002	15.348	-56.0	-0.5	10.1	3.8	5.1	16.0	0.22
176	79	304	0	0		0	0	2	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
177	79	304	2148	1691		6	1	3	10	3.1	-90.451	13.723	4.4	-180.2	67.0	20.6	19.5	57.9	0.27
178	79	305	42	3402		6	4	3	5	3.5	0.000	0.000	-88.7	169.2	38.5	264.5	348.1	424.9	6.49
179	79	305	151	1125		3	3	4	5	2.2	-90.658	14.817	-18.3	-59.2	13.5	6.1	7.0	12.5	0.36
180	79	305	303	3804		4	4	7	10	1.8	-90.599	15.353	-11.9	0.0	13.7	1.4	1.8	2.7	0.18
181	79	305	841	461		6	6	3	5	3.6	0.000	0.000	36.4	991.4	1064.9	1310.0	1310.0	1310.0	135.89
182	79	305	900	3660		5	2	0	10	3.3	0.000	0.000	242.7	72.9	5.0	136.8	386.1	0.0	4.10
183	79	305	1034	3510		4	6	2	10	3.9	-87.041	15.174	377.7	-19.7	5.0	10.2	97.8	0.0	0.57
184	79	305	1141	2642		5	5	3	10	3.5	-92.079	16.572	-173.9	134.9	85.5	63.9	115.1	314.1	1.10
185	79	305	1402	3838		4	5	4	10	2.7	0.000	0.000	88.3	47.6	5.0	65.0	199.5	0.0	3.95
186	79	305	1722	2106		2	3	4	2	3.2	0.000	0.000	23.0	3.8	5.0	1310.0	1310.0	0.0	24.46
187	79	305	1818	1472		5	5	2	6	2.7	-91.105	15.409	-67.3	6.2	15.9	28.4	31.6	67.4	1.33
188	79	305	2239	4599		6	4	3	10	4.2	0.000	0.000	-208.4	-140.9	181.7	266.9	331.3	304.1	3.33
189	79	305	34	1381		4	3	4	10	3.3	-91.061	14.842	-62.4	-56.5	20.6	5.8	7.3	3.2	0.29
190	79	306	1012	1531		3	1	4	10	3.3	-91.260	13.267	-84.2	-230.7	5.0	74.5	39.4	0.0	0.75
191	79	306	1201	3797		5	1	3	10	3.8	-93.829	15.229	-365.6	-13.7	187.9	113.8	195.6	191.9	0.82
192	79	306	1637	5716		5	3	3	10	3.6	-90.735	15.184	-26.8	-18.7	20.0	16.3	16.1	17.1	1.22
193	79	306	1745	3856		6	2	2	10	1.8	-90.531	15.365	-4.5	1.4	6.6	3.3	2.4	8.3	0.62
194	79	306	1814	0		3	0	7	4	0.3	0.000	0.000	1310.0	-750.6	5.0	1310.0	1310.0	0.0	711.44
195	79	306	2248	1508		5	4	3	9	2.0	-91.061	14.833	-62.5	-57.4	23.7	23.0	15.8	39.1	0.66
196	79	306	2312	4505		3	3	4	8	3.1	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	919.44
197	79	307	253	0		6	0	3	10	2.5	0.000	0.000	1310.0	1310.0	1293.8	1310.0	1310.0	0.0	12.84
198	79	307	254	872		6	5	3	5	3.9	-90.993	15.687	-55.0	37.0	10.0	14.5	13.2	50.3	0.79
199	79	307	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
200	79	307	808	5326		5	3	3	7	3.1	0.000	0.000	-107.8	-260.9	53.2	454.7	404.3	810.6	4.14

NO	YR	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
201	79	307	838	1959		2	2	5	10	0.3	-90.409	15.245	8.9	-11.9	5.0	3.8	1.0	0.0	0.16
202	79	307	946	1866		3	4	4	6	2.5	0.000	0.000	-294.5	-44.9	44.7	1310.0	1310.0	1310.0	10.00
203	79	307	1631	2194		7	1	5	10	0.0	-90.367	15.038	13.6	-34.8	15.5	6.5	11.4	14.7	0.57
204	79	307	1658	5846		7	1	1	7	3.9	-89.866	14.131	68.4	-135.1	54.5	20.7	27.6	58.7	0.50
205	79	307	1802	199		5	5	4	10	4.4	-90.235	15.043	28.0	-34.2	37.7	28.4	28.1	40.0	1.79
206	79	307	2020	22		4	5	3	10	2.2	0.000	0.000	-32.7	6.3	5.0	27.7	19.9	0.0	2.41
207	79	307	2058	2057		4	2	4	8	3.9	0.000	0.000	23.7	-25.6	7.8	26.7	42.4	35.2	2.66
208	79	307	2129	2999		3	5	4	6	2.7	-91.171	13.456	-74.5	-209.7	38.3	33.4	75.4	248.4	0.58
209	79	307	2233	1567		4	3	3	10	1.6	-90.479	15.394	1.2	4.6	22.2	4.3	8.7	8.5	0.60
210	79	308	409	4139		4	6	4	10	4.3	-90.263	15.073	24.9	-31.0	29.5	4.1	5.1	7.2	0.38
211	79	308	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
212	79	308	750	3437		6	3	3	5	3.1	-91.831	13.712	-146.7	-181.5	47.7	39.4	51.1	82.0	0.73
213	79	308	920	4403		7	4	2	10	2.2	-90.418	15.500	8.0	16.3	5.0	5.3	13.0	0.0	1.40
214	79	308	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
215	79	308	1439	5754		6	2	1	10	4.3	0.000	0.000	-49.7	-116.1	5.0	58.1	46.9	0.0	2.13
216	79	308	1509	0		5	0	3	4	4.2	0.000	0.000	1310.0	262.1	7.1	1310.0	1310.0	0.0	1310.00
217	79	308	1820	4447		5	0	7	10	0.9	-90.485	15.283	0.6	-7.7	5.0	1.1	1.0	0.0	0.23
218	79	308	2117	5929		4	3	4	6	2.2	-90.557	14.877	-7.3	-52.6	9.1	6.4	6.4	16.6	0.31
219	79	309	111	5652		8	5	1	5	4.5	-90.978	14.908	-53.4	-49.2	7.4	5.7	6.4	24.8	0.37
220	79	309	223	387		7	6	2	5	2.7	-91.033	14.876	-59.4	-52.7	16.0	11.1	11.1	7.9	0.64
221	79	309	336	2827		6	3	1	10	1.8	-90.304	15.301	20.4	-5.7	7.7	1.5	1.7	1.1	0.23
222	79	309	512	4455		2	3	4	10	2.0	-90.927	14.803	-47.8	-60.8	33.8	5.2	17.4	25.8	0.18
223	79	309	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
224	79	309	520	0		4	0	6	7	1.3	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
225	79	309	715	0		3	0	4	5	1.8	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
226	79	309	817	3601		3	1	4	10	2.5	-90.402	15.510	9.7	17.4	5.0	39.7	32.8	0.0	1.53
227	79	309	827	0		6	0	4	2	4.3	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	14.47
228	79	309	1212	0		4	0	6	2	0.9	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
229	79	309	2220	1931		6	3	2	5	2.5	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
230	79	309	2225	396		6	3	1	6	3.3	-90.512	15.290	-2.4	-7.0	1.4	0.9	0.7	5.3	0.25
231	79	309	2350	364		7	0	7	10	1.8	-90.499	15.288	-1.0	-7.1	1.3	0.2	0.2	1.1	0.06
232	79	310	121	1969		4	3	4	8	2.9	0.000	0.000	-269.7	-152.8	41.3	1310.0	1310.0	1310.0	14.75
233	79	310	251	23		6	3	4	10	3.5	0.000	0.000	32.8	-13.0	98.3	62.6	87.3	56.1	2.47
234	79	310	644	4343		5	3	2	7	0.6	-90.613	15.383	-13.5	3.4	1.7	3.9	4.7	29.1	0.79
235	79	310	844	3101		6	4	3	10	3.6	-90.002	13.258	53.4	-231.7	5.0	44.8	20.1	0.0	0.92
236	79	310	1110	0		7	0	2	6	2.9	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	4.43
237	79	310	1536	0		3	0	4	3	3.3	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
238	79	310	1650	1781		5	5	3	10	1.0	-90.614	15.354	-13.5	0.2	11.1	1.4	1.4	5.3	0.24
239	79	310	1656	1763		4	3	3	10	1.3	-90.615	15.340	-13.6	-1.4	10.5	1.0	0.9	4.0	0.15
240	79	311	357	5214		6	5	3	7	2.8	0.000	0.000	-148.0	-232.7	61.0	327.8	380.6	557.4	4.34
241	79	311	446	4507		5	5	3	10	2.3	-91.632	13.602	-125.0	-193.6	76.5	16.1	21.5	60.7	0.27
242	79	311	651	0		5	0	3	8	3.7	-83.434	4.417	772.6	-1209.5	597.9	1310.0	1310.0	1310.0	1.34
243	79	311	739	0		4	4	4	4	3.3	0.000	0.000	1027.8	472.1	1310.0	1310.0	1310.0	1310.0	864.40
244	79	311	845	5184		4	2	4	10	3.6	-93.155	15.966	-291.7	67.8	350.0	42.5	40.6	42.9	0.24
245	79	311	922	0		3	0	5	6	1.7	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	16.20
246	79	311	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
247	79	311	1214	958		4	4	4	10	3.6	-93.421	17.131	-320.9	196.7	240.0	46.4	42.9	83.4	0.29
248	79	311	1219	3972		5	0	3	10	5.0	-90.332	15.225	17.3	-14.2	33.4	28.7	32.9	102.9	1.54
249	79	311	1540	2372		3	0	2	10	1.7	-90.375	15.337	12.7	-1.7	5.0	0.3	0.8	0.0	0.04
250	79	312	241	1296		5	1	6	10	3.8	-94.321	16.105	-419.4	83.3	5.0	30.0	107.2	0.0	0.70

NO	YR	D	H	M	S	NP	NS	IO	ITR	MAG	LONG (DEG)	L (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	L2 (KM)	S
251	79	312	830	1728	6	6	2	10	3.2	-91.928	14.102	-157.3	-138.3	76.0	34.2	45.7	89.6	0.65	
252	79	312	906	843	3	3	5	10	1.4	-90.427	14.944	6.9	-45.2	5.0	10.6	13.4	0.0	0.82	
253	79	312	913	43	6	6	2	7	2.8	0.000	0.000	212.4	-12.8	41.8	119.5	385.5	139.9	5.78	
254	79	312	1444	2300	5	4	3	10	3.3	-91.258	16.863	-84.0	167.1	219.7	35.3	44.6	44.5	0.48	
255	79	312	1535	0	5	0	3	7	4.7	0.000	0.000	903.6	1310.0	1310.0	1310.0	1310.0	1310.0	3.39	
256	79	312	1711	4046	6	3	2	10	1.8	-90.606	15.346	-12.7	-0.7	17.8	0.8	0.8	1.9	0.12	
257	79	312	2320	280	3	3	5	10	2.2	-90.256	15.459	25.6	11.8	5.0	7.8	8.1	0.0	0.64	
258	79	312	2321	3226	5	4	3	5	3.5	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	518.17	
259	79	313	634	2333	4	4	4	10	3.5	-91.831	14.220	-146.8	-125.3	5.0	14.9	17.4	0.0	0.34	
260	79	313	1449	0	7	0	2	7	4.8	-85.913	7.757	501.2	-840.1	472.0	1310.0	1310.0	1310.0	0.67	
261	79	313	1539	651	7	5	1	7	3.4	-90.830	13.122	-37.2	-246.7	87.2	132.7	154.8	272.2	1.99	
262	79	313	2034	1515	8	4	1	10	4.1	-90.753	13.203	-28.7	-237.7	38.0	61.1	491.0	650.5	0.31	
263	79	313	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	
264	79	314	49	5366	7	1	6	10	2.0	-90.581	15.354	-9.9	0.1	14.1	0.7	0.7	1.8	0.12	
265	79	314	50	5924	2	1	5	1	0.3	0.000	0.000	0.0	0.0	5.0	0.0	0.0	0.0	2.15	
266	79	314	136	3818	2	1	5	7	0.3	-90.536	15.386	-5.0	3.7	5.0	11.5	12.7	0.0	0.30	
267	79	314	835	3353	7	6	1	10	3.4	-91.916	13.797	-156.0	-172.0	115.7	22.2	28.0	44.4	0.35	
268	79	314	943	2824	7	0	2	7	3.8	-88.487	10.856	219.4	-497.3	246.1	1310.0	1310.0	1310.0	1.31	
269	79	314	1109	4000	4	1	6	10	6.5	-90.690	18.221	-897.7	317.2	5.0	79.9	214.3	0.0	0.67	
270	79	314	1215	3691	5	2	3	10	3.4	-91.608	13.507	-122.4	-204.1	5.0	155.0	109.0	0.0	1.21	
271	79	314	1239	0	3	0	5	5	2.8	0.000	0.000	1310.0	771.5	5.0	1310.0	1310.0	0.0	19.54	
272	79	314	1538	0	4	0	6	3	5.4	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	10.28	
273	79	314	1825	863	7	7	1	10	2.3	-89.429	15.079	116.2	-30.3	14.6	5.4	10.6	5.1	0.43	
274	79	314	2124	5354	4	1	7	10	1.8	-90.496	15.291	-0.6	-6.8	3.2	2.1	0.9	3.5	0.24	
275	79	314	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	
276	79	314	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	
277	79	315	40	5981	3	2	1	10	0.6	-90.611	15.331	-13.2	-2.4	5.2	0.4	0.6	3.1	0.07	
278	79	315	134	1227	4	1	6	10	4.1	-92.886	17.732	-262.3	263.2	200.0	63.1	56.2	127.8	0.34	
279	79	315	346	36	8	2	1	7	4.7	-88.787	13.539	186.6	-200.5	87.0	70.8	95.1	213.2	0.96	
280	79	315	703	0	4	0	4	3	3.5	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	11.81	
281	79	315	754	108	7	5	1	10	4.4	-87.338	14.477	345.1	-96.9	5.0	47.7	152.7	0.0	1.58	
282	79	315	1143	5750	4	1	4	10	2.4	-91.673	14.113	-129.4	-137.1	5.0	55.6	51.8	0.0	0.88	
283	79	315	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
284	79	315	1233	4910	6	3	1	5	1.1	-90.612	15.359	-13.3	0.7	1.4	7.7	7.7	34.1	1.25	
285	79	315	1828	5870	7	7	1	10	2.1	-90.312	14.578	19.6	-85.7	5.0	10.0	8.1	0.0	0.70	
286	79	316	650	4743	5	3	3	10	3.8	-93.700	17.277	-351.4	212.8	5.0	20.6	33.6	0.0	0.30	
287	79	316	930	4636	5	0	3	7	2.6	0.000	0.000	-333.7	-97.7	119.2	1310.0	1310.0	1310.0	7.46	
288	79	316	1204	4215	2	1	5	5	0.6	0.000	0.000	52.0	-184.7	5.0	1310.0	1310.0	0.0	33.23	
289	79	316	1233	4794	6	6	3	10	0.5	-90.607	15.370	-12.8	1.9	5.0	1.4	1.5	0.0	0.34	
290	79	316	1750	1810	3	5	3	5	1.3	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00	
291	79	316	1851	1397	5	0	3	8	3.0	-86.843	14.195	399.4	-128.0	77.4	1310.0	1310.0	1310.0	1.16	
292	79	316	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	
293	79	317	36	0	5	4	3	10	2.1	0.000	0.000	-96.0	-57.9	5.0	1055.0	1310.0	0.0	70.30	
294	79	317	838	0	6	0	2	10	3.9	0.000	-82.830	1310.0	1310.0	1310.0	1310.0	1310.0	0.0	1.82	
295	79	317	1744	3288	5	1	3	6	3.4	-92.194	13.528	-186.5	-201.8	36.8	60.5	105.7	251.1	0.72	
296	79	317	1755	5858	5	2	3	10	3.7	-91.014	15.650	-57.3	32.9	5.0	33.8	32.8	0.0	1.84	
297	79	317	1814	363	4	1	7	10	1.6	-90.446	15.312	4.9	-4.4	14.8	1.6	1.6	2.4	0.09	
298	79	317	1918	0	4	0	4	5	2.3	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00	
299	79	318	649	1312	6	5	1	10	1.8	-90.423	15.312	7.4	-4.5	14.1	1.2	1.9	2.4	0.26	
300	79	318	1806	2431	5	2	7	10	1.6	-90.539	15.305	-5.3	-5.3	5.0	4.0	6.3	0.0	1.11	

NO	YR	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LG (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
301	79	318	2015		0	7	1	6	10	5.2	0.000	0.000	25.9	-923.8	5.0	1310.0	909.6	0.0	24.61
302	79	318	2110	316		7	4	2	10	3.8	-91.995	14.049	-164.7	-144.2	60.5	30.0	58.1	132.0	0.47
303	79	319	1001		0	4	0	4	6	3.2	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	8.19
304	79	319	1026		0	4	0	4	2	1.8	0.000	0.000	1310.0	-909.9	5.0	1310.0	1310.0	0.0	1310.00
305	79	319	1050	1619		3	3	5	10	2.9	0.000	0.000	-57.4	-173.8	5.0	100.0	55.4	0.0	2.63
306	79	319	1155	1625		3	3	5	9	2.1	-90.616	14.700	-13.7	-72.1	8.8	27.2	150.9	213.5	0.96
307	79	319	1202	1832		6	5	3	6	2.1	0.000	0.000	-66.6	-19.6	12.5	47.3	80.9	64.9	2.39
308	79	319	1259	2119		6	5	3	6	2.4	-90.490	14.512	0.1	-92.9	9.4	39.9	67.4	200.0	1.90
309	79	319	1347	2252		4	4	4	10	2.2	-92.004	15.327	-165.7	-2.8	143.8	21.5	42.0	25.6	0.35
310	79	319	1454	5568		2	1	3	10	1.1	-90.418	15.339	7.9	-1.6	5.0	0.1	0.0	0.0	0.00
311	79	319	1859	1099		5	5	3	10	1.8	-90.859	14.787	-40.4	-62.6	48.8	21.0	21.5	34.3	0.71
312	79	319	2121	3750		6	1	6	10	4.0	-89.748	13.042	81.3	-255.5	262.0	27.2	52.0	58.1	0.24
313	79	320	30	2000		3	1	6	2	5.1	0.000	0.000	0.0	0.0	5.0	1310.0	1310.0	0.0	231.79
314	79	320	142	2994		5	3	4	5	1.7	0.000	0.000	-47.2	-1.6	16.2	178.6	315.2	115.3	3.69
315	79	320	211	758		2	2	5	2	1.7	0.000	0.000	0.0	0.0	5.0	1310.0	1310.0	0.0	4.23
316	79	320	803	4232		3	0	5	10	3.9	-90.572	15.017	-8.9	-37.1	5.0	0.4	1.7	0.0	0.01
317	79	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
318	79	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
319	79	320	1814	1576		5	0	4	10	3.8	-95.195	17.203	-515.1	204.6	222.5	1310.0	1310.0	1310.0	1.89
320	79	320	2025	3301		3	1	5	10	0.0	-90.509	15.342	-2.0	-1.2	5.0	6.8	6.9	0.0	0.88
321	79	320	2040	2173		2	1	3	7	-0.5	-90.482	15.354	0.9	0.2	5.0	10.2	9.1	0.0	0.23
322	79	320	2144	1093		2	2	5	2	2.2	0.000	0.000	23.0	3.8	5.0	1310.0	1310.0	0.0	18.22
323	79	320	2145	4666		2	2	5	2	1.0	0.000	0.000	23.0	3.8	5.0	1310.0	1310.0	0.0	2.46
324	79	320	2150	3451		4	0	5	10	3.1	-90.372	15.383	12.9	3.3	5.0	1.0	2.5	0.0	0.29
325	79	321	10	4324		6	2	3	10	1.4	-90.479	15.273	1.2	-8.8	9.0	1.0	1.7	2.2	0.22
326	79	321	54	5985		6	4	3	10	3.0	-90.419	14.973	7.8	-42.0	25.6	5.8	9.7	22.8	0.53
327	79	321	117	3710		5	5	4	10	1.8	-91.058	15.313	-62.1	-4.4	27.0	4.3	7.7	8.8	0.24
328	79	321	256	958		6	6	3	10	3.0	-92.651	14.521	-236.6	-91.9	82.1	34.3	64.7	88.4	0.48
329	79	321	540	3447		4	3	6	10	3.5	-89.665	11.560	90.4	-419.4	5.0	184.8	54.2	0.0	1.29
330	79	321	1625	5868		5	4	6	10	3.4	-91.276	13.348	-85.9	-221.7	185.7	46.7	83.8	97.5	0.56
331	79	321	1938	1535		5	1	4	10	3.0	-90.576	15.109	-9.4	-27.0	5.0	12.1	31.4	0.0	1.30
332	79	321	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
333	79	321	2134	3914		6	5	3	6	3.3	-90.806	16.092	-34.5	81.7	8.2	36.2	57.4	163.5	1.93
334	79	322	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
335	79	322	236	697		3	3	5	2	0.3	0.000	0.000	0.0	0.0	5.0	1310.0	1310.0	0.0	7.78
336	79	322	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
337	79	322	427	4742		4	4	5	10	0.8	-90.626	15.150	-14.8	-22.4	5.0	5.5	17.5	0.0	1.14
338	79	322	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
339	79	322	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
340	79	322	1351	2028		5	4	4	10	2.2	-90.374	15.564	12.8	23.4	9.7	1.1	2.2	8.2	0.15
341	79	322	1402	1986		5	1	4	10	2.6	-90.378	15.572	12.3	24.3	5.0	0.8	2.5	0.0	0.13
342	79	322	2037	3828		6	6	3	10	2.6	-90.362	15.572	14.1	24.3	5.0	0.9	1.9	1.3	0.17
343	79	322	2346	4486		6	5	6	10	3.1	-88.461	13.872	222.2	-163.8	5.0	20.8	26.8	0.0	0.48
344	79	323	151	144		4	4	7	10	-0.2	-90.507	15.335	-1.8	-1.9	7.0	2.1	1.4	1.3	0.13
345	79	323	534	3371		6	5	3	5	2.8	0.000	0.000	-104.9	107.2	98.4	133.7	246.2	174.3	3.29
346	79	323	1124	0		3	0	5	6	2.9	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
347	79	323	1131	3958		5	4	4	10	2.1	-90.720	15.369	-25.1	1.8	5.5	1.6	1.3	1.0	0.15
348	79	323	1151	2723		5	3	4	6	3.2	0.000	0.000	-274.5	176.6	86.4	1310.0	1310.0	1310.0	29.27
349	79	323	1255	0		5	0	3	4	3.0	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	5.87
350	79	323	1455	5986		4	4	5	6	0.8	-90.685	15.410	-21.3	6.4	6.5	23.0	27.7	51.7	1.83

NO	YR	D	H	M	S	NP	NS	IQ	TR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
351	79	323	1936		0	5	1	6	10	5.5	-83.437	17.375	772.4	223.7	497.5	150.3	269.0	272.9	0.41
352	79	323	2014		0	5	0	0	10	3.9	0.000	0.000	1310.0	1310.0	617.3	1310.0	1310.0	0.0	3.60
353	79	323	2031	4500		5	0	4	10	4.3	-90.316	15.231	19.2	-13.4	5.0	2.1	2.7	0.0	0.25
354	79	323	2210	1640		4	4	4	7	3.1	0.000	0.000	-286.3	29.4	75.6	631.1	1265.7	1190.9	7.31
355	79	324	1252	5445		4	0	5	7	3.4	0.000	0.000	-112.9	-183.8	81.2	1310.0	1310.0	1310.0	4.86
356	79	324	1908	5220		3	0	5	10	4.0	-90.296	15.487	21.3	14.8	5.0	1.3	2.1	0.0	0.09
357	79	324	2251	3033		6	4	3	10	2.4	-90.492	15.289	-0.1	-7.0	7.8	0.6	1.1	0.6	0.15
358	79	325	139		0	6	0	3	10	4.1	-112.882	-1.249	1310.0	1310.0	1206.2	1310.0	1310.0	0.0	0.45
359	79	325	201	5603		3	0	5	1	3.8	0.000	0.000	23.0	3.8	5.0	0.0	0.0	0.0	96.11
360	79	325	217		0	6	0	3	10	4.3	-102.837	5.175	1310.0	-1125.7	1145.5	424.2	627.9	0.0	0.29
361	79	325	238		0	6	0	3	10	3.4	-106.797	10.878	1310.0	-494.9	1310.0	855.3	874.1	0.0	0.60
362	79	325	1034		0	3	0	5	3	3.4	0.000	0.000	1310.0	-277.5	5.0	1310.0	1310.0	0.0	164.08
363	79	325	1310	2940		5	4	3	10	3.8	-88.737	16.169	192.0	90.3	3.6	39.9	66.7	13.2	0.83
364	79	326	254	3704		5	6	3	10	2.7	-88.607	15.615	206.2	29.0	5.0	22.3	112.9	0.0	1.04
365	79	326	1515	1577		3	0	5	10	2.9	-90.695	15.297	-22.3	-6.1	5.0	0.8	0.5	0.0	0.03
366	79	326	1808	5262		5	0	4	10	1.8	-90.740	15.605	-27.3	27.9	37.0	0.2	0.3	0.3	0.00
367	79	326	1913	936		3	3	5	10	0.8	-90.402	15.508	9.7	17.2	5.0	16.8	13.9	0.0	1.43
368	79	326	2231		0	6	0	3	6	4.0	0.000	0.000	-300.1	-197.6	1310.0	1310.0	1310.0	1310.0	2.42
369	79	326	2328		0	6	0	3	3	2.4	0.000	0.000	-969.6	1310.0	5.0	1310.0	1310.0	0.0	1152.66
370	79	327	716	5361		6	3	3	10	3.6	-90.696	14.724	-22.5	-69.5	41.9	5.1	7.4	14.0	0.22
371	79	327	1430	2884		4	0	4	10	1.4	-90.937	15.439	-48.9	9.5	48.4	15.0	4.0	14.3	0.04
372	79	327	2107		0	4	0	4	5	1.7	0.000	0.000	1310.0	-717.5	5.0	1310.0	1310.0	0.0	1310.00
373	79	328	142	4481		3	4	4	5	2.2	-89.601	14.825	97.4	-58.3	29.4	45.6	62.5	100.4	1.05
374	79	328	926	4445		4	3	6	8	3.1	0.000	0.000	-249.3	-181.9	80.1	379.9	635.4	647.6	3.46
375	79	328	1039	5407		5	5	3	10	2.1	-91.504	16.221	-111.0	96.0	27.1	9.6	9.7	9.0	0.40
376	79	328	1609		0	4	0	4	6	4.1	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	0.0	1310.00
377	79	328	1705	3824		2	3	5	10	2.8	-92.545	14.442	-224.9	-100.7	5.0	80.5	173.0	0.0	0.92
378	79	328	2107		0	4	0	5	5	1.7	0.000	0.000	1310.0	-717.5	5.0	1310.0	1310.0	0.0	1310.00
379	79	328	2310	3066		3	0	5	8	4.3	-90.408	15.378	9.1	2.8	5.0	15.4	3.1	0.0	0.35
380	79	328	2353	4187		4	0	4	10	1.7	-90.547	15.181	-6.2	-19.0	5.0	4.9	17.0	0.0	0.41
381	79	329			0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
382	79	329			0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
383	79	329			0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
384	79	329			0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
385	79	329	1325		0	3	0	5	5	2.1	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
386	79	329	1843	5379		4	3	7	10	2.0	-90.499	15.280	-0.9	-8.1	6.5	5.2	3.6	5.9	0.38
387	79	329	1956		0	4	0	4	3	3.8	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	10.97
388	79	329	2157	3381		3	2	5	10	1.8	0.000	0.000	-3.3	26.4	5.0	78.5	55.2	0.0	3.53
389	79	329	2232	3199		4	3	4	10	3.3	-92.355	14.026	-204.1	-146.8	135.7	33.7	44.0	50.8	0.29
390	79	329	2241		0	3	0	5	4	3.2	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	15.32
391	79	329	2312	3747		4	2	4	10	3.3	-89.383	14.841	121.3	-56.6	5.0	15.6	20.2	0.0	0.53
392	79	329	2344	3533		4	4	4	10	2.9	-90.193	15.917	32.5	62.4	5.0	25.0	18.5	0.0	0.95
393	79	329	2352	4993		4	1	4	10	2.7	0.000	0.000	-18.7	76.4	69.7	117.6	162.5	159.3	2.60
394	79	329	2355	2284		3	3	5	10	2.3	-89.799	15.035	75.8	-35.1	5.0	5.3	6.8	0.0	0.28
395	0	0	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
396	79	330	840	5489		2	2	5	10	2.6	0.000	0.000	-545.5	-66.5	288.0	1310.0	1310.0	0.0	69.38
397	79	330	1715	1047		4	2	6	2	4.2	0.000	0.000	1310.0	623.1	1310.0	1310.0	1310.0	1310.0	1054.92
398	79	330	1823	3264		3	1	5	10	2.8	-88.630	15.093	203.7	-28.7	184.0	7.5	9.7	10.5	0.06
399	79	331	28	4779		5	0	4	10	4.2	-90.627	15.225	-15.0	-14.1	5.0	0.7	2.4	0.0	0.16
400	79	331	33	4373		4	4	4	5	2.8	0.000	0.000	-53.6	40.0	43.6	100.7	123.2	123.7	3.17

NO	YR	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DL TH (KM)	DX (KM)	DY (KM)	L (KM)	5
401	79	331	533	4784		2	3	5	7	2.6	0.000	0.000	-68.0	53.9	2.2	309.2	319.2	1249.6	5.98
402	79	331	846	744		2	3	5	2	2.9	0.000	0.000	51.3	-21.0	1310.0	1310.0	1310.0	1310.0	737.89
403	79	331	1040	3810		2	2	6	2	3.0	0.000	0.000	-0.5	11.6	5.0	1310.0	1310.0	0.0	61.27
404	79	401	456	1458		2	3	5	5	3.1	0.000	0.000	-1075.8	-353.0	159.0	1310.0	1310.0	1310.0	188.94
405	79	401	1551	679		2	3	5	5	3.8	0.000	0.000	339.8	29.7	75.2	1310.0	1310.0	1310.0	29.71
406	79	401	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
407	79	401	2308	3033		2	3	5	6	2.2	0.000	0.000	-87.3	-41.7	4.8	491.5	798.0	801.4	6.49
408	79	402	33	2814		2	2	5	7	2.2	0.000	0.000	811.7	486.4	1310.0	1310.0	1310.0	0.0	326.46
409	79	402	317	0		3	0	5	3	3.7	0.000	0.000	1310.0	-174.3	5.0	1310.0	1310.0	0.0	305.09
410	79	402	321	4942		3	1	6	5	3.4	0.000	0.000	1310.0	522.6	601.6	1310.0	1310.0	1310.0	287.86
411	79	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
412	79	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
413	79	402	1659	0		3	0	5	3	3.6	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	674.80
414	79	403	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
415	79	403	434	3516		2	2	5	6	2.1	0.000	0.000	-800.8	-815.4	5.0	1310.0	1310.0	0.0	209.05
416	79	403	440	1390		2	2	5	9	3.3	0.000	0.000	-259.7	-230.7	5.0	1310.0	1310.0	0.0	8.19
417	79	403	934	0		0	3	5	6	2.2	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1204.42
418	79	403	2258	4262		7	2	7	10	2.5	-90.486	15.292	0.5	-6.7	7.4	0.3	0.4	0.2	0.06
419	79	404	646	3685		3	0	5	10	1.9	-90.416	15.385	8.2	3.6	5.0	0.2	0.4	0.0	0.06
420	79	404	1624	5536		3	4	4	7	3.3	0.000	0.000	-112.9	-225.2	59.1	425.7	748.3	1310.0	5.09
421	79	404	2318	910		5	6	3	8	2.8	-91.055	14.938	-61.8	-45.8	21.1	9.0	10.4	4.2	0.38
422	79	405	50	2737		3	3	5	10	1.4	-90.604	15.604	-12.4	27.8	5.0	9.7	19.7	0.0	1.20
423	79	405	301	391		5	3	3	6	4.1	0.000	0.000	-313.8	63.5	86.3	1310.0	1310.0	1310.0	16.06
424	79	405	1219	5018		3	0	5	8	2.2	-89.464	13.968	112.4	-153.1	5.0	113.2	39.5	0.0	1.01
425	79	405	1255	5696		3	3	5	10	2.1	-91.730	15.431	-135.7	8.7	174.6	14.9	28.6	13.5	0.23
426	79	405	2143	3485		3	2	5	10	2.5	-89.965	14.962	57.5	-43.2	5.0	21.6	19.8	0.0	1.13
427	79	406	705	3885		2	2	5	2	2.4	0.000	0.000	-21.6	-10.7	5.0	1310.0	1310.0	0.0	50.70
428	79	406	1808	4603		3	3	5	5	2.1	0.000	0.000	-38.1	14.0	5.9	63.3	70.2	122.3	3.52
429	79	406	2038	0		3	0	5	5	3.3	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
430	79	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
431	79	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
432	79	407	1950	1166		4	3	6	10	3.8	0.000	0.000	-222.2	-266.9	82.6	282.2	485.1	1195.4	2.60
433	79	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
434	79	408	912	2035		4	0	4	5	3.9	0.000	0.000	-108.1	59.9	233.8	194.0	933.6	1310.0	2.46
435	79	408	2339	715		3	0	5	10	4.6	-90.520	15.317	-3.2	-3.9	5.0	0.0	0.1	0.0	0.01
436	79	409	1021	0		4	0	4	7	0.9	0.000	0.000	127.1	1310.0	1310.0	1310.0	1310.0	1310.0	2.98
437	79	409	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
438	79	409	1416	1988		4	3	4	6	3.6	-90.780	16.054	-31.7	77.6	44.5	21.3	35.1	46.7	0.97
439	79	409	1641	472		4	0	4	10	4.6	-90.516	15.233	-2.7	-13.3	7.9	0.1	0.1	0.1	0.01
440	79	409	1825	2314		4	4	4	10	2.5	-89.232	15.888	137.8	59.2	5.0	10.8	23.2	0.0	0.37
441	79	409	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
442	79	410	110	0		4	0	4	2	4.9	0.000	0.000	-4.0	-1242.8	5.0	1310.0	1310.0	0.0	713.90
443	79	410	1202	686		2	2	6	6	3.4	0.000	0.000	0.3	336.3	5.0	1310.0	849.4	0.0	7.80
444	79	410	1732	1455		3	1	5	6	2.8	0.000	0.000	-0.6	81.7	7.8	189.7	245.8	656.3	4.77
445	79	410	2016	0		4	0	4	7	4.0	-104.089	2.838	1310.0	1310.0	415.9	1310.0	1310.0	1310.0	0.29
446	79	411	1418	0		3	0	5	4	4.7	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	4.34
447	79	411	1826	1432		3	3	5	5	2.4	0.000	0.000	127.2	268.1	57.3	1310.0	1310.0	1310.0	42.62
448	79	411	2025	0		3	0	5	4	3.2	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	291.32
449	79	411	2157	2025		4	3	4	10	3.0	-89.302	14.937	130.1	-46.0	5.0	11.2	21.3	0.0	0.53
450	79	411	2238	1846		4	3	4	10	2.8	-89.387	15.125	120.8	-25.2	5.0	20.2	45.4	0.0	1.09



NO	YR	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
451	79	411	2313	5024		4	0	4	10	3.6	-90.351	15.486	15.3	14.7	6.4	5.5	3.7	0.8	0.10
452	79	412	158	2527		3	1	5	5	2.8	0.000	0.000	-242.4	10.4	65.6	1310.0	1310.0	1310.0	27.64
453	79	412	537	2696		3	3	5	10	3.1	-87.762	15.943	298.8	65.2	5.0	28.5	109.2	0.0	0.70
454	79	412	1110	45		3	0	5	10	2.9	-90.667	15.384	-19.3	3.4	5.0	0.0	0.0	0.0	0.00
455	79	412	1825	1188		4	2	4	2	3.5	0.000	0.000	113.9	-43.5	1310.0	1310.0	1310.0	1310.0	1310.00
456	79	412	2036	3258		3	3	5	10	2.7	-92.568	14.787	-227.4	-62.5	5.0	18.2	55.1	0.0	0.45
457	79	412	2240	3195		3	2	5	10	2.9	-92.443	14.405	-213.8	-104.9	109.7	7.6	10.1	14.3	0.07
458	79	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
459	79	413	331	3367		3	3	5	10	2.7	-91.360	13.578	-95.2	-196.3	112.2	28.4	34.2	56.5	0.27
460	79	413	551	3097		2	3	5	2	3.6	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
461	79	413	813	1680		3	3	5	10	2.5	-90.724	15.729	-25.5	41.7	18.3	1.0	1.2	3.8	0.05
462	79	413	910	0		3	0	5	5	1.8	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
463	79	413	1344	1423		2	1	5	10	2.5	-91.948	16.420	-159.6	118.1	5.0	3.9	3.5	0.0	0.06
464	79	414	201	299		3	0	5	10	3.7	-90.617	15.212	-13.8	-15.5	5.0	0.0	0.2	0.0	0.01
465	79	414	519	3557		3	1	6	6	3.7	0.000	0.000	518.9	-54.5	5.0	318.3	1310.0	0.0	5.88
466	79	414	647	0		3	0	5	5	3.8	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	225.96
467	79	414	1009	0		3	0	5	3	5.3	0.000	0.000	1310.0	1259.3	5.0	1310.0	1310.0	0.0	981.37
468	79	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	0.00
469	79	414	1626	3756		2	2	5	10	2.2	-90.265	16.388	24.7	105.6	5.0	8.2	2.7	0.0	0.09
470	79	414	1929	2966		5	4	3	10	3.5	-90.247	15.514	26.6	17.8	14.6	1.8	2.4	3.0	0.16
471	79	415	206	0		3	0	5	3	3.7	0.000	0.000	918.8	-5.9	5.0	1310.0	1310.0	0.0	56.60
472	79	415	423	1545		3	3	5	2	2.9	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
473	79	415	730	1054		3	3	5	2	2.9	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
474	79	415	1537	2767		4	4	4	10	0.9	-90.617	15.384	-13.8	3.4	13.7	1.0	1.2	3.2	0.14
475	79	415	2233	1424		4	0	3	10	5.3	-90.523	15.483	-3.5	14.4	6.6	0.8	0.6	0.6	0.03
476	79	415	2308	3210		4	4	3	5	3.0	-88.581	15.154	209.1	-21.9	43.0	74.6	100.6	246.4	1.01
477	79	416	140	2807		4	0	4	5	1.8	-90.495	15.261	-0.5	-10.1	0.1	16.5	17.1	71.2	1.58
478	79	416	911	2440		4	4	4	10	1.3	-90.562	15.352	-7.8	-0.1	11.2	1.4	1.6	4.6	0.24
479	79	416	1128	5900		4	2	6	10	4.0	-93.774	17.168	-359.5	200.8	140.8	126.5	216.9	545.9	0.95
480	79	416	1418	3574		3	3	5	2	3.1	0.000	0.000	1310.0	705.6	1310.0	1310.0	1310.0	1310.0	1310.00
481	79	416	1957	4917		4	0	4	10	4.7	-90.505	15.055	-1.6	-32.9	21.0	0.9	3.3	2.4	0.08
482	79	417	522	2355		3	3	5	2	2.7	0.000	0.000	1310.0	743.2	1310.0	1310.0	1310.0	1310.0	1310.00
483	79	417	1704	1621		4	4	4	10	2.1	-90.569	15.356	-8.6	0.4	12.0	1.3	1.5	4.3	0.21
484	79	418	11	564		3	3	5	10	2.0	-91.039	15.020	-60.1	-36.8	22.3	6.5	8.5	11.6	0.25
485	79	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
486	79	418	428	4943		2	2	5	10	1.4	-90.489	15.500	0.2	16.3	5.0	77.4	29.5	0.0	0.26
487	79	418	504	278		2	2	5	10	2.7	0.000	0.000	30.1	-165.0	5.0	178.2	76.5	0.0	3.04
488	79	418	1111	388		3	3	5	6	2.1	-91.058	14.781	-62.1	-63.2	7.6	13.3	15.1	47.5	0.39
489	79	418	1654	2567		2	2	5	10	2.4	-90.142	15.692	38.1	37.5	5.0	4.0	4.1	0.0	0.17
490	79	418	2303	1009		3	3	5	10	2.9	-90.533	15.150	-4.7	-22.4	235.9	175.5	220.8	43.1	1.73
491	79	419	19	596		1	2	5	10	2.5	-91.005	15.735	-56.4	42.3	5.0	0.6	1.0	0.0	0.02
492	79	419	235	836		2	2	5	10	2.3	-90.169	15.037	35.2	-34.9	5.0	4.8	4.6	0.0	0.23
493	79	419	300	629		3	2	5	7	3.3	0.000	0.000	-185.7	-459.3	42.0	1310.0	1310.0	1310.0	67.80
494	79	419	452	0		5	0	3	3	3.5	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	15.08
495	79	419	703	4118		3	3	5	10	2.6	-92.051	14.599	-170.9	-83.4	5.0	14.9	28.2	0.0	0.32
496	79	419	1135	4693		4	3	4	10	4.2	-91.647	13.560	-126.6	-198.3	103.7	31.5	37.9	76.2	0.33
497	79	419	1140	1965		3	3	5	2	3.2	0.000	0.000	1310.0	505.4	1310.0	1310.0	1310.0	1310.0	1310.00
498	79	419	1539	4470		3	3	5	2	3.1	0.000	0.000	1310.0	636.3	1310.0	1310.0	1310.0	1310.0	1310.00
499	79	419	1932	1520		4	3	4	10	3.2	-91.091	14.819	-65.7	-59.0	18.4	8.8	9.7	3.3	0.27
500	79	419	2018	623		4	4	4	10	2.7	-90.214	15.027	30.3	-36.0	20.7	2.5	3.1	8.3	0.13

NO	YR	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	L (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
501	79	419	2131	838		4	1	4	10	3.2	-90.309	13.910	19.9	-159.5	5.0	15.6	12.1	0.0	0.35
502	79	420	334	5252		2	2	5	2	2.5	0.000	0.000	-0.5	11.6	5.0	1310.0	1310.0	0.0	11.19
503	79	420	632	674		3	0	5	10	3.6	-90.598	15.291	-11.8	-6.8	5.0	0.1	0.1	0.0	0.01
504	79	420	1031	0		4	0	4	3	3.8	0.000	0.000	1310.0	-906.3	1310.0	1310.0	1310.0	1310.0	1310.00
505	79	420	1215	2835		4	3	6	10	4.8	-87.003	18.558	381.8	354.5	5.0	84.4	89.9	0.0	0.45
506	79	420	1338	2269		2	2	5	10	3.4	-91.898	16.062	-154.2	78.5	5.0	9.6	13.5	0.0	0.32
507	79	420	1858	3678		3	3	5	6	3.4	0.000	0.000	264.7	43.8	26.6	336.0	402.5	1178.1	2.94
508	79	420	1923	3000		5	1	6	6	5.5	-99.604	16.852	-997.9	165.8	284.7	108.6	141.9	251.7	0.26
509	79	420	2224	1286		5	0	3	10	4.2	-90.641	15.381	-16.4	3.1	34.1	2.4	1.9	14.1	0.09
510	79	421	21	0		3	2	6	2	3.2	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
511	79	421	216	373		3	3	5	2	3.2	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
512	79	421	848	3818		4	4	4	10	2.2	-90.296	15.338	21.3	-1.6	7.0	4.4	3.3	1.8	0.30
513	79	421	1029	2209		3	3	5	10	2.2	-90.625	14.828	-14.7	-58.0	22.9	8.3	8.2	27.8	0.35
514	79	421	1447	5085		3	3	5	10	3.5	-89.670	14.643	89.9	-78.5	5.0	8.8	9.7	0.0	0.36
515	79	421	1451	2566		3	3	5	10	2.9	-89.703	14.601	86.2	-83.2	5.0	10.3	10.7	0.0	0.41
516	79	421	1456	2950		4	2	4	10	3.8	-89.667	14.661	90.2	-76.5	5.0	6.9	6.5	0.0	0.23
517	79	421	1535	1717		3	3	5	10	1.8	-90.605	15.355	-12.5	0.3	3.1	1.0	1.1	11.0	0.18
518	79	421	1655	4379		4	3	4	10	1.8	-90.613	15.365	-13.4	1.3	11.6	2.0	2.5	8.8	0.31
519	79	421	1753	0		3	0	5	4	3.4	0.000	0.000	1310.0	-1011.9	5.0	1310.0	1310.0	0.0	380.91
520	79	421	2032	0		4	0	4	7	4.1	-109.784	-4.662	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1.28
521	79	421	2044	4024		4	4	4	10	2.0	-90.371	15.594	13.1	26.6	6.4	3.3	3.6	1.7	0.23
522	79	422	424	0		3	0	5	4	3.5	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	4.65
523	79	422	532	5467		3	3	5	7	2.7	-91.136	14.996	-70.6	-39.5	12.1	10.3	13.2	29.5	0.36
524	79	422	604	0		3	0	5	6	2.4	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	564.16
525	79	422	932	1149		3	3	5	10	2.5	-91.015	14.918	-57.4	-48.1	23.3	7.8	9.2	15.9	0.26
526	79	422	1032	0		3	0	5	8	1.7	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	901.78
527	79	422	1628	1321		3	0	5	10	0.7	-90.529	15.369	-4.2	1.8	5.0	0.1	0.1	0.0	0.02
528	79	422	1716	2580		3	3	6	10	3.1	-90.058	17.412	47.3	227.8	133.4	74.1	82.3	144.5	0.64
529	79	422	1835	0		3	0	5	5	4.2	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	41.80
530	79	422	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
531	79	422	2327	2170		4	2	4	6	3.8	0.000	0.000	-69.2	-65.2	21.4	207.7	223.2	269.6	4.04
532	79	423	556	0		4	0	6	1	4.2	0.000	0.000	1310.0	166.4	5.0	1310.0	1310.0	0.0	1138.73
533	79	423	604	5776		4	0	6	10	4.7	-90.590	15.370	-10.9	1.9	5.0	0.2	0.3	0.0	0.05
534	79	423	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
535	79	424	157	0		3	0	6	5	4.4	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	231.86
536	79	424	625	3271		2	2	5	10	2.0	0.000	0.000	-558.1	-95.4	821.9	1310.0	1310.0	0.0	180.89
537	79	424	1203	2145		3	1	5	10	2.8	-90.553	16.019	-6.8	73.7	5.0	59.4	56.6	0.0	1.99
538	79	424	1431	360		4	3	4	10	3.3	-89.622	14.975	95.0	-41.7	5.0	2.8	4.2	0.0	0.14
539	79	502	416	870		5	0	3	10	4.6	-90.512	14.689	-2.4	-73.5	13.2	2.7	17.5	49.9	0.14
540	79	502	1120	107		3	3	5	10	2.5	-91.494	14.980	-109.8	-41.2	8.1	13.8	39.6	0.0	0.21
541	79	502	1541	5734		2	2	5	10	2.8	-93.147	15.012	-290.8	-37.7	204.4	82.5	935.1	0.0	1.43
542	79	502	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
543	79	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
544	79	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
545	79	503	707	31		2	2	5	2	1.3	-90.538	15.314	-5.2	-4.2	5.0	1310.0	1310.0	0.0	1.87
546	79	503	1117	5339		4	1	4	10	3.0	-90.547	15.266	-6.1	-9.6	16.6	4.0	8.7	9.5	0.40
547	79	503	1839	3149		5	5	4	10	2.3	-90.545	14.441	-6.0	-100.9	5.0	13.7	6.8	0.0	0.51
548	79	504	116	0		3	0	5	3	3.8	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
549	79	504	131	3322		3	2	5	10	3.3	-90.335	15.017	17.1	-37.1	28.9	3.0	10.7	15.6	0.12
550	79	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

NO	YR	D	H	M	S	NP	NS	IO	ITR	MAG	LONG (DEG)	L (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
551	79	504	808	1518		3	2	5	7	3.0	0.000	0.000	-567.3	-831.6	5.0	1310.0	1310.0	0.0	129.23
552	79	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
553	79	504	900	5874		3	3	5	2	4.0	0.000	0.000	20.4	-371.1	1310.0	1310.0	1310.0	1310.0	411.12
554	79	504	1039	5110		4	3	5	10	3.1	-91.049	14.896	-61.1	-51.6	5.0	13.1	16.4	0.0	0.29
555	79	504	1100	674		5	0	4	5	2.8	-90.524	15.356	-3.7	0.4	0.7	5.0	5.1	16.7	1.02
556	79	504	1612	1547		4	4	5	10	1.9	-90.059	15.118	47.3	-26.0	5.0	3.0	3.3	0.0	0.21
557	79	504	1635	2128		2	2	5	7	1.9	0.000	0.000	74.5	58.1	5.0	326.9	957.5	0.0	3.10
558	79	504	1744	1230		4	2	5	10	2.5	-90.552	15.602	-6.7	27.6	16.6	1.7	5.6	11.3	0.07
559	79	504	1756	983		1	2	5	5	2.2	0.000	0.000	-165.2	-68.7	5.0	1310.0	1310.0	0.0	13.98
560	79	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
561	79	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
562	79	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
563	79	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
564	79	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
565	79	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
566	79	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
567	79	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
568	79	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
569	79	504	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
570	79	504	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
571	79	505	1516	1572		4	4	5	10	2.3	-90.720	15.004	-25.1	-38.6	5.0	12.1	10.4	0.0	0.60
572	79	505	1543	5268		3	3	5	10	2.3	-90.693	14.632	-22.2	-79.7	38.7	10.5	3.1	0.0	0.07
573	79	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
574	79	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
575	79	505	2009	3000		3	1	6	10	5.2	-90.724	18.061	-25.6	388.0	927.7	115.7	312.2	137.9	0.12
576	79	505	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
577	79	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
578	79	505	2336	0		3	3	5	1	2.7	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
579	79	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
580	79	506	136	1505		2	2	5	7	2.2	0.000	0.000	-121.7	36.7	5.0	1044.3	1117.5	0.0	4.85
581	79	506	252	708		4	2	4	7	3.8	0.000	0.000	-117.2	52.9	19.3	112.5	467.1	481.6	3.15
582	79	506	504	0		4	0	4	4	4.6	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	3.88
583	79	506	804	1408		6	5	3	10	3.2	-90.099	13.180	42.9	-240.3	174.2	189.5	501.2	769.8	1.49
584	79	506	807	1389		6	5	3	5	3.5	-90.472	14.948	2.1	-44.8	15.6	14.4	31.9	66.2	0.96
585	79	506	1114	3395		3	3	5	10	3.6	-91.629	17.036	-124.6	186.2	220.5	13.2	48.6	51.1	0.06
586	79	506	1137	1960		4	2	5	10	1.6	-90.400	15.352	9.9	-0.1	13.1	1.3	1.0	1.2	0.05
587	79	506	1553	0		5	0	4	1	3.6	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
588	79	506	1559	0		5	0	4	4	1.4	-114.751	9.851	1310.0	-608.5	1310.0	1310.0	1310.0	1310.0	1.52
589	79	506	1815	4810		5	4	4	10	2.7	-90.638	15.364	-16.2	1.2	12.2	1.7	3.5	4.6	0.19
590	79	506	2036	955		5	4	4	10	3.3	-89.786	15.996	77.2	71.1	5.0	44.8	48.8	0.0	0.88
591	79	506	2135	5201		5	5	4	10	2.9	-89.560	14.917	101.9	-48.2	5.0	7.7	15.3	0.0	0.35
592	79	507	3	5020		5	4	4	10	2.8	-92.021	14.316	-167.6	-114.7	113.4	7.1	15.1	9.8	0.05
593	79	507	346	5417		3	3	5	10	2.7	-90.677	14.994	-20.4	-39.6	56.0	13.6	39.2	28.5	0.25
594	79	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
595	79	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
596	79	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
597	79	507	1546	2367		4	4	5	10	2.5	-89.631	14.663	94.1	-76.2	123.9	35.7	33.6	37.1	0.16
598	79	507	1731	3068		5	0	4	10	4.5	0.000	0.000	12.9	-15.7	5.0	73.7	186.7	0.0	14.15
599	79	507	1754	4418		6	6	3	10	2.1	-89.948	15.483	59.5	14.4	5.0	26.4	75.7	0.0	1.17
600	79	507	1805	0		6	0	3	5	3.1	0.000	0.000	1182.4	1310.0	5.0	1310.0	1310.0	0.0	869.19

NO	YR	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
601	79	507	1859	2200		4	1	4	10	2.2	0.000	0.000	-80.9	-30.3	186.7	304.7	710.8	88.0	2.20
602	79	507	1917	3697		4	3	4	6	3.6	-90.692	13.847	-22.0	-166.5	44.7	17.3	38.4	94.5	0.19
603	79	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
604	79	507	2320	157		2	1	7	1	1.0	-90.475	15.294	1.7	-6.5	5.0	0.0	0.0	0.0	1.54
605	79	508	42	4302		4	3	4	10	4.0	-90.620	14.062	-14.2	-142.8	154.1	60.3	169.1	158.4	0.42
606	79	508	221	0		3	0	6	4	4.2	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
607	79	508	851	5248		2	2	5	10	2.8	-90.049	15.043	48.4	-34.2	5.0	19.9	29.7	0.0	0.43
608	79	508	931	709		2	2	5	10	3.0	-90.293	13.587	21.6	-195.3	5.0	48.4	7.4	0.0	0.17
609	79	508	1532	5957		4	3	6	10	4.1	-89.174	17.193	144.1	203.5	5.0	173.3	108.8	0.0	1.23
610	79	508	1643	4704		2	2	5	10	2.6	0.000	0.000	4.9	-2.7	-2.8	280.3	342.7	0.0	19.49
611	79	508	1711	1299		2	1	5	10	2.5	-90.679	14.915	-20.6	-48.4	5.0	3.8	4.3	0.0	0.14
612	79	509	414	5501		2	2	6	10	2.9	-92.491	16.555	-219.0	133.0	5.0	218.2	319.1	0.0	0.30
613	79	509	749	1257		3	3	6	10	3.1	-89.059	13.981	156.7	-151.8	5.0	17.2	19.3	0.0	0.22
614	79	509	815	5169		2	2	6	10	2.6	-89.049	14.037	157.9	-145.5	5.0	93.6	114.5	0.0	0.99
615	79	509	1907	3442		2	2	5	10	2.6	-89.901	14.857	64.5	-54.9	5.0	22.7	28.3	0.0	0.35
616	79	509	2059	364		3	5	4	10	2.5	-90.727	15.046	-25.9	-33.9	72.8	4.3	11.7	5.2	0.09
617	79	509	2103	0		6	0	6	10	3.8	-89.997	9.870	54.0	-606.4	791.2	810.5	1310.0	1310.0	0.60
618	79	509	2156	911		5	5	4	10	1.9	-90.631	15.352	-15.4	-0.1	11.3	0.7	1.3	1.7	0.07
619	79	509	2207	1864		4	0	4	10	3.9	-91.063	15.758	-62.6	44.8	67.7	4.6	5.4	6.7	0.02
620	79	509	2326	5042		2	1	7	1	1.3	-90.475	15.294	1.7	-6.5	5.0	0.0	0.0	0.0	0.62
621	79	510	100	0		2	2	5	2	3.1	0.000	0.000	217.2	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
622	79	510	234	0		3	0	5	5	3.4	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
623	79	510	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
624	79	510	709	1679		2	3	6	10	3.3	-92.009	13.348	-166.3	-221.8	5.0	43.5	32.6	0.0	0.20
625	79	510	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
626	79	510	955	0		4	0	5	8	4.2	0.000	0.000	381.9	1310.0	5.0	1310.0	1310.0	0.0	1236.55
627	79	510	1143	5132		5	5	4	7	2.9	-90.496	15.647	-0.6	32.6	9.7	6.7	10.2	35.8	0.34
628	79	510	1214	2163		4	2	3	10	2.0	-90.484	15.333	0.7	-2.1	7.4	0.5	0.4	1.0	0.05
629	79	510	2323	1573		3	3	5	10	2.9	0.000	0.000	536.7	95.9	5.0	1310.0	1310.0	0.0	42.88
630	79	510	2329	424		3	3	5	10	2.7	0.000	0.000	-30.2	-148.1	47.0	271.9	1226.5	1310.0	2.62
631	79	511	124	3435		3	0	7	10	2.1	-90.468	15.293	2.5	-6.6	5.0	0.1	0.2	0.0	0.00
632	79	511	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
633	79	511	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
634	79	511	612	2561		2	2	5	1	2.0	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
635	79	511	841	4856		4	0	4	10	3.1	-90.877	15.838	-42.3	53.7	14.8	7.3	14.0	17.4	0.02
636	79	511	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
637	79	511	1010	5688		4	4	6	10	3.5	0.000	0.000	-77.9	-315.8	5.0	808.5	218.6	0.0	5.45
638	79	511	1317	1771		5	5	4	10	1.8	-90.737	15.155	-27.0	-21.9	8.0	6.6	5.2	3.0	0.22
639	79	511	1842	4152		2	4	5	10	2.7	-90.625	13.419	-14.7	-213.9	5.0	32.4	7.3	0.0	0.33
640	79	511	2049	0		5	0	4	6	4.2	0.000	0.000	1310.0	1310.0	198.1	1310.0	1310.0	0.0	1310.00
641	79	511	2055	4571		3	3	5	2	2.8	0.000	0.000	-21.6	-10.7	5.0	1310.0	1310.0	0.0	34.86
642	79	511	2336	2		3	0	5	10	4.5	-90.606	15.080	-12.6	-30.2	5.0	0.0	0.4	0.0	0.00
643	79	512	38	3237		2	3	5	10	2.8	-90.611	14.622	-13.2	-80.8	57.5	28.0	75.6	171.8	0.25
644	79	512	205	762		2	2	5	2	2.2	0.000	0.000	-5.2	-4.2	5.0	1310.0	1310.0	0.0	16.09
645	79	512	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
646	79	512	324	5396		3	0	5	8	4.2	0.000	0.000	-28.4	28.2	5.0	376.0	929.8	0.0	3.03
647	79	512	421	0		3	0	6	6	3.8	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1227.51
648	79	512	536	5311		4	4	5	10	1.8	-90.725	15.344	-25.6	-1.0	48.8	26.3	57.7	19.7	0.24
649	79	512	730	4060		5	5	4	10	3.6	-90.388	15.478	11.3	13.8	5.0	6.3	4.8	0.0	0.43
650	79	512	742	2698		3	3	5	10	2.5	-90.117	14.684	40.9	-73.9	5.0	3.9	3.4	0.0	0.15

NO	YR	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	L (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
651	79	512	744	5756		5	5	4	10	2.5	-90.923	15.762	-47.3	45.2	68.6	9.8	21.8	25.4	0.24
652	79	512	1018	2915		5	4	4	10	2.7	-92.012	16.080	-166.6	80.4	116.0	132.5	319.0	458.9	1.23
653	79	512	1308	1497		4	4	5	10	2.3	-90.195	15.736	32.3	42.4	5.0	6.0	5.1	0.0	0.16
654	79	512	1358	1942		4	4	5	10	2.1	-90.407	14.695	9.2	-72.8	5.0	7.0	5.2	0.0	0.35
655	79	512	1433	0		5	0	4	3	4.0	0.000	0.000	1310.0	573.1	1310.0	1310.0	1310.0	1310.0	1310.00
656	79	512	1456	2590		4	4	4	10	2.2	-90.237	14.643	27.8	-78.4	65.6	13.0	30.5	49.5	0.30
657	79	512	1509	5630		5	5	4	10	2.5	-91.235	15.555	-81.5	22.4	5.0	9.2	16.2	0.0	0.59
658	79	512	1552	2390		5	5	4	10	2.4	-90.875	15.570	-42.1	24.1	87.2	15.9	34.8	19.9	0.32
659	79	512	1612	2125		5	5	4	5	2.8	0.000	0.000	0.8	-131.7	58.1	537.2	1084.3	1140.2	6.26
660	79	512	1747	4296		4	4	4	10	2.3	-90.829	15.631	-37.1	30.8	95.1	17.8	42.6	23.9	0.32
661	79	512	1750	1399		5	5	4	10	2.3	-90.563	15.141	-7.9	-23.4	102.0	27.6	58.2	14.1	0.50
662	79	512	1821	0		5	0	4	10	3.4	0.000	0.000	1310.0	1310.0	20.2	1310.0	1310.0	0.0	2.69
663	79	512	2128	1240		3	3	6	5	3.8	-92.975	18.134	-272.0	307.6	146.7	105.5	408.0	531.6	0.41
664	79	513	124	0		3	0	6	6	3.4	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
665	79	513	316	141		3	3	5	10	2.4	-91.419	15.737	-101.7	42.5	64.4	15.3	86.9	96.3	0.32
666	79	513	340	0		3	0	6	4	3.5	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
667	79	513	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
668	79	513	644	0		5	0	4	1	1.8	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
669	79	513	729	487		5	5	4	10	3.0	-90.397	15.532	10.2	19.8	12.5	3.2	4.5	8.6	0.19
670	79	513	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
671	79	513	1749	2000		5	1	6	5	4.9	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
672	79	513	2244	3000		5	1	6	6	5.3	-83.620	9.710	752.2	-624.1	217.6	722.6	1310.0	1310.0	1.22
673	79	514	223	2474		5	4	4	10	3.0	-90.505	14.938	-1.6	-45.8	20.3	4.3	4.9	15.5	0.25
674	79	514	443	5241		2	2	5	2	2.2	0.000	0.000	-21.6	-10.7	5.0	1310.0	1310.0	0.0	24.22
675	79	514	506	4371		5	0	4	10	3.7	-90.388	15.301	11.2	-5.7	11.0	29.2	5.0	14.1	0.28
676	79	514	614	0		5	0	6	3	4.6	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
677	79	514	952	0		5	0	4	5	2.9	0.000	0.000	1310.0	1310.0	243.7	1310.0	1310.0	0.0	1310.00
678	79	514	1132	0		5	0	4	4	2.0	0.000	0.000	1310.0	1310.0	95.7	1310.0	1310.0	0.0	1310.00
679	79	514	1136	4171		5	5	4	10	2.6	-91.136	13.782	-70.6	-173.7	5.0	27.7	12.2	0.0	0.45
680	79	514	1140	0		4	0	4	2	2.7	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
681	79	514	1217	1486		4	5	4	10	2.0	-90.861	15.599	-40.6	27.2	52.4	9.5	26.2	31.0	0.39
682	79	514	1647	5677		5	3	4	2	3.6	0.000	0.000	70.8	-5.5	1310.0	1310.0	1310.0	1310.0	1284.35
683	79	514	1650	0		5	0	6	1	3.7	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
684	79	514	1949	5474		5	3	4	10	2.2	-90.672	14.720	-19.9	-69.9	29.9	26.2	45.4	112.9	0.73
685	79	514	2009	763		5	5	4	6	2.5	0.000	0.000	-110.1	29.5	43.6	240.3	635.9	654.1	4.03
686	79	514	2022	1753		5	5	4	10	2.8	0.000	0.000	-358.8	-67.0	5.0	1310.0	1310.0	0.0	33.36
687	79	514	2249	2731		5	5	4	10	2.6	-91.018	14.814	-57.8	-59.5	25.2	8.5	13.3	21.8	0.18
688	79	514	2312	0		5	1	6	10	5.1	-82.232	10.856	904.2	-497.4	5.0	235.8	417.8	0.0	0.91
689	79	514	2346	4660		5	5	4	10	2.0	-90.545	14.999	-6.0	-39.1	33.4	11.2	22.9	27.4	0.54
690	79	515	58	3713		4	4	4	5	2.6	0.000	0.000	-191.4	-187.8	80.5	1310.0	1310.0	1310.0	22.09
691	79	515	105	4834		4	4	5	10	2.8	-91.556	15.273	-116.7	-8.8	5.0	1.9	14.1	0.0	0.12
692	79	515	111	2265		3	3	5	10	2.2	-91.471	15.657	-107.4	33.7	5.0	14.6	28.7	0.0	0.55
693	79	515	545	5412		5	5	4	2	3.5	0.000	0.000	65.4	0.9	1310.0	1310.0	1310.0	1310.0	372.53
694	79	515	1125	5802		4	4	5	2	2.8	0.000	0.000	1310.0	-349.1	1310.0	1310.0	1310.0	1310.0	455.27
695	79	515	1312	0		4	0	6	5	3.9	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	35.22
696	79	515	1347	5162		5	5	4	5	2.7	-89.502	15.534	108.2	20.1	48.4	59.9	130.5	49.4	1.17
697	79	515	1601	0		5	0	4	10	3.6	-66.739	-12.815	1310.0	1310.0	1310.0	1310.0	1310.0	0.0	0.80
698	79	515	1640	0		5	0	6	3	3.8	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
699	79	515	1858	5825		5	5	4	10	2.8	0.000	0.000	-756.4	14.7	5.0	1310.0	1310.0	0.0	67.81
700	79	515	2022	4812		5	5	4	10	2.5	-91.272	13.902	-85.5	-160.5	5.0	17.6	9.7	0.0	0.28

NO	YR	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
701	79	515	2024		0	5	0	4	2	2.2	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
702	79	515	2045	616		6	6	3	5	2.5	-89.995	14.965	54.3	-42.9	17.9	3.4	13.0	24.5	0.24
703	79	515	2142	5890		5	0	6	10	3.7	-90.670	15.143	-19.6	-23.2	5.0	3.4	11.5	0.0	0.23
704	79	515	2215	4178		5	0	7	10	2.3	0.000	0.000	-4.0	-6.3	5.0	9.2	15.2	0.0	2.08
705	79	515	2244	3650		7	1	3	9	5.1	-88.316	16.560	238.1	133.5	58.0	35.6	111.7	236.4	0.29
706	79	515	2343	3194		3	3	5	10	3.0	-92.506	15.735	-220.6	42.3	5.0	37.5	170.9	0.0	0.51
707	79	515	2357	5750		2	2	5	7	3.1	0.000	0.000	-255.2	-156.4	5.0	1310.0	1310.0	0.0	15.32
708	79	516	20	1335		4	4	4	5	2.1	0.000	0.000	-26.8	-63.8	16.2	102.2	137.7	200.6	2.28
709	79	516	38	2041		5	5	2	7	3.1	-90.972	14.671	-52.7	-75.4	15.1	51.3	32.6	23.0	1.38
710	79	516	143	312		4	0	4	10	2.0	-90.783	15.652	-32.0	33.1	5.0	81.2	68.8	0.0	0.32
711	79	516	237	3795		4	4	4	10	2.9	-92.420	15.889	-211.3	59.3	5.0	25.1	77.9	0.0	0.62
712	79	516	239	0		4	0	4	4	3.9	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	2.62
713	79	516	436	5451		2	2	5	10	2.3	-92.085	16.091	-174.6	81.7	5.0	54.3	99.2	0.0	0.93
714	79	516	509	1108		5	6	3	6	2.4	0.000	0.000	-110.1	79.9	4.9	222.1	814.6	1310.0	5.54
715	79	516	520	942		5	4	6	5	3.5	0.000	0.000	-170.2	222.0	73.9	824.6	1310.0	1310.0	7.58
716	79	516	751	2007		4	4	4	10	2.2	-90.501	14.727	-1.1	-69.2	101.0	55.9	129.1	94.7	0.87
717	79	516	923	684		6	6	3	10	2.5	-90.999	15.067	-55.6	-31.6	27.3	9.3	20.0	10.3	0.32
718	79	516	1341	1369		6	5	3	10	3.3	0.000	0.000	253.5	86.4	22.2	111.7	844.4	0.0	5.78
719	79	516	1346	2497		5	0	6	10	4.6	-90.373	15.078	12.9	-30.4	5.0	11.2	7.5	0.0	0.21
720	79	516	1359	1719		6	5	3	7	2.5	-91.310	15.033	-89.7	-35.4	43.7	53.1	139.5	31.8	1.15
721	79	516	1517	4014		5	0	6	10	4.3	-90.923	15.209	-47.4	-15.9	51.9	313.2	100.9	324.8	0.75
722	79	516	1547	0		5	0	6	6	3.4	0.000	0.000	-155.7	1310.0	5.0	1310.0	1310.0	0.0	33.99
723	79	516	1741	3101		5	5	4	5	2.1	0.000	0.000	7.7	221.3	36.4	1310.0	1310.0	1310.0	15.27
724	79	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
725	79	516	1913	4888		6	6	3	10	3.4	-89.043	15.153	158.5	-22.1	5.0	20.8	71.8	0.0	1.26
726	79	516	1922	5290		4	5	4	10	2.2	-90.748	14.488	-28.2	-95.7	5.0	10.2	5.4	0.0	0.35
727	79	516	1924	2850		4	4	4	5	2.2	0.000	0.000	227.3	221.6	5.0	1019.7	1310.0	0.0	28.30
728	79	516	1925	4815		6	6	3	10	2.3	-90.986	14.672	-54.2	-75.3	70.6	10.8	21.5	19.1	0.19
729	79	516	2122	1980		2	4	5	5	2.2	0.000	0.000	-11.9	-132.9	36.0	1037.0	1310.0	1310.0	5.07
730	79	516	2240	1219		5	5	4	10	2.2	-90.902	14.516	-45.0	-92.5	5.0	10.5	6.6	0.0	0.32
731	79	516	2246	205		5	5	3	5	2.3	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
732	79	516	2252	5436		6	5	3	5	2.6	-90.961	14.624	-51.6	-80.6	14.3	25.9	34.2	132.8	0.58
733	79	516	2259	3679		6	5	3	5	2.7	0.000	0.000	-27.5	-119.3	54.5	166.9	420.2	405.9	3.36
734	79	516	2307	1853		5	0	4	10	2.3	-90.339	15.416	16.6	7.0	3.1	87.7	55.0	23.1	0.42
735	79	516	2318	4177		6	5	3	10	2.4	-90.724	14.840	-25.5	-56.7	113.8	48.1	123.1	55.5	0.88
736	79	516	2325	273		3	3	5	10	2.5	-89.819	15.989	73.5	70.3	64.0	19.3	20.4	37.1	0.14
737	79	517	13	1570		6	6	3	8	3.3	-92.572	15.405	-227.9	5.8	70.5	185.9	557.9	448.9	1.96
738	79	517	17	2387		6	6	3	5	2.4	0.000	0.000	-94.9	73.3	78.3	143.2	394.9	269.2	2.91
739	79	517	105	4367		4	5	4	10	2.5	-90.860	13.271	-40.4	-230.3	5.0	51.1	13.1	0.0	0.57
740	79	517	121	4792		6	5	3	10	4.5	-88.554	15.737	212.0	42.5	5.0	18.9	90.7	0.0	0.38
741	79	517	317	0		6	0	6	3	4.6	0.000	0.000	1030.8	1180.3	1310.0	1310.0	1310.0	1310.0	9.21
742	79	517	539	773		4	6	3	5	2.0	0.000	0.000	-31.5	-100.8	44.4	173.7	431.5	409.3	3.05
743	79	517	626	3259		4	4	4	10	2.4	-90.731	14.737	-26.3	-68.1	234.8	42.8	101.3	25.7	0.30
744	79	517	642	4989		4	5	4	10	2.3	-91.168	14.785	-74.2	-62.7	5.0	16.0	18.4	0.0	0.42
745	79	517	734	0		4	0	5	6	3.6	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
746	79	517	1022	5148		6	5	3	10	3.4	-90.799	14.674	-33.8	-75.0	5.0	2.9	2.6	0.0	0.16
747	79	517	1042	1831		5	6	3	6	2.4	0.000	0.000	-47.7	-91.9	10.9	176.9	238.2	554.8	2.69
748	79	517	1046	865		3	3	5	10	2.5	-90.734	14.711	-26.6	-71.0	5.0	21.9	15.1	0.0	0.84
749	79	517	1048	4359		6	0	3	10	4.8	-90.600	14.761	-12.0	-65.5	34.5	3.2	10.5	12.6	0.08
750	79	517	1149	3052		5	5	4	6	3.3	-88.237	15.221	246.7	-14.6	75.9	62.3	143.5	187.9	0.49

NO	YR	D	H	M	S	NP	NS	IO	ITR	MAG	LONG (DEG)	L (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
751	79	517	1155	679		3	4	5	10	2.4	-90.635	14.621	-15.8	-80.9	5.0	4.9	2.9	0.0	0.18
752	79	517	1234	5024		5	3	4	5	3.1	-90.828	14.529	-36.9	-91.0	6.0	45.1	70.5	175.7	0.95
753	79	517	1615	2728		5	5	4	10	2.7	-89.436	15.473	115.5	13.4	5.0	66.8	126.5	0.0	1.32
754	79	517	1836	694		6	0	3	10	3.3	-90.961	15.202	-51.5	-16.7	96.8	10.6	7.6	16.3	0.05
755	79	517	1847	719		3	3	5	10	2.0	-90.700	14.493	-22.9	-95.1	5.0	23.6	7.0	0.0	0.24
756	79	517	1953	5302		3	0	6	5	4.1	-90.554	15.824	-6.9	52.1	5.0	38.7	374.5	0.0	1.15
757	79	517	2042	3305		5	5	4	10	3.9	-88.461	15.030	222.2	-35.6	5.0	13.2	72.4	0.0	0.49
758	79	517	2138	458		5	0	4	10	2.9	-90.658	15.419	-18.3	7.3	12.7	3.0	5.5	8.4	0.14
759	79	518	24	0		5	0	4	2	1.7	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
760	79	518	335	143		5	5	4	10	1.3	-90.671	15.394	-19.7	4.6	5.0	2.0	3.1	0.0	0.27
761	79	518	507	517		6	6	3	10	2.3	-90.850	14.530	-39.4	-91.0	69.5	25.6	48.3	64.1	0.45
762	79	518	512	4046		5	0	3	10	2.5	-90.562	15.191	-7.8	-17.9	14.9	1.1	2.9	2.9	0.11
763	79	518	525	2690		6	5	3	10	2.8	-91.019	14.567	-57.9	-86.9	41.1	13.3	10.0	4.3	0.33
764	79	518	537	524		6	0	3	10	2.7	-90.615	15.056	-13.6	-32.8	5.0	4.2	10.1	0.0	0.47
765	79	518	741	4105		4	6	4	5	2.9	0.000	0.000	-123.9	-83.0	45.6	595.6	1310.0	294.1	7.19
766	79	518	1052	1579		6	0	3	7	2.7	-90.443	17.889	5.2	280.5	64.1	179.5	1310.0	1310.0	1.35
767	79	518	1104	0		5	0	4	4	2.9	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1.25
768	79	518	1257	4421		4	5	6	10	3.8	0.000	0.000	-809.6	-154.2	5.0	1310.0	1310.0	0.0	62.31
769	79	518	1415	1892		5	0	2	10	4.3	-90.894	14.875	-44.2	-52.9	43.0	0.5	1.6	0.2	0.01
770	79	518	1423	4912		6	6	3	10	3.6	-92.460	14.164	-215.6	-131.5	46.8	109.9	175.1	36.1	0.86
771	79	518	1626	5140		5	1	3	10	3.5	-91.235	13.584	-81.5	-195.6	5.0	20.7	11.7	0.0	0.35
772	79	518	1704	1388		5	1	3	10	4.0	-90.816	13.426	-35.6	-213.0	5.0	53.6	35.7	0.0	0.92
773	79	518	1706	4433		5	1	3	10	3.3	-93.187	15.590	-295.2	26.2	5.0	30.8	120.8	0.0	0.76
774	79	518	2112	0		4	0	4	3	3.1	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
775	79	518	2229	0		4	0	4	1	2.2	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
776	79	518	2234	2394		5	5	4	10	2.4	-90.839	14.491	-38.2	-95.3	5.0	8.8	4.9	0.0	0.29
777	79	518	2236	978		4	0	4	7	3.7	-90.661	15.025	-18.6	-36.3	5.0	9.3	49.1	0.0	0.70
778	79	519	146	4584		5	0	6	10	4.6	-90.911	15.265	-46.0	-9.7	43.2	5.5	8.3	0.8	0.10
779	79	519	649	2490		6	6	6	10	3.8	-93.974	16.864	-381.4	167.1	362.6	83.9	234.7	195.2	0.36
780	79	519	1341	3060		3	3	5	10	1.3	-90.675	15.319	-20.2	-3.7	5.0	1.2	1.5	0.0	0.08
781	79	519	1423	0		6	0	6	7	3.7	0.000	0.000	1310.0	-864.9	84.9	1310.0	1310.0	1310.0	3.47
782	79	519	1455	1309		5	5	4	10	1.8	-90.945	15.307	-49.8	-5.1	5.0	6.0	9.9	0.0	0.47
783	79	519	1625	263		4	3	4	5	2.0	-90.489	14.514	0.2	-92.7	60.0	47.6	102.9	82.8	1.01
784	79	519	1800	578		4	0	7	10	1.6	-90.477	15.251	1.5	-11.3	5.0	6.2	7.6	0.0	0.52
785	79	519	1821	2102		4	2	4	10	3.6	0.000	0.000	-277.4	-352.4	5.0	1294.0	1036.7	0.0	9.57
786	79	519	1829	1387		5	6	3	10	2.2	-90.750	14.677	-28.4	-74.8	53.7	23.5	29.4	61.2	0.43
787	79	519	1843	2998		6	3	2	10	2.5	-90.138	15.300	38.6	-5.9	34.8	5.5	8.0	6.5	0.35
788	79	519	1938	1634		5	4	3	10	2.9	0.000	0.000	-730.2	-277.0	5.0	1310.0	1310.0	0.0	72.05
789	79	519	2020	3597		5	5	6	10	3.4	0.000	0.000	-334.9	95.8	5.0	334.3	1060.5	0.0	5.42
790	79	519	1959	1963		6	1	2	10	3.0	-91.231	15.473	-81.0	13.3	85.0	8.5	10.5	8.2	0.18
791	79	519	2020	3675		6	3	2	10	2.7	-93.314	15.364	-309.1	1.3	162.3	37.3	68.6	76.9	0.36
792	79	519	2226	0		4	0	4	2	2.3	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
793	79	519	2322	1904		5	5	4	6	2.2	0.000	0.000	-70.0	-0.3	14.1	72.8	200.0	207.9	2.45
794	79	519	2326	1102		3	2	4	10	2.7	-90.977	14.918	-53.3	-48.1	79.7	12.9	31.9	15.1	0.15
795	79	519	2329	0		5	0	4	1	3.4	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
796	79	519	2335	5197		2	2	5	10	2.5	-91.351	16.411	-94.2	117.1	5.0	2.8	1.7	0.0	0.02
797	79	520	3	3476		6	3	2	10	3.4	-90.133	15.486	39.2	14.7	5.6	7.6	6.4	2.9	0.38
798	79	520	102	250		5	5	4	7	2.3	-89.693	15.099	87.3	-28.1	6.8	27.5	59.4	397.7	0.72
799	79	520	211	1021		4	4	4	6	2.2	0.000	0.000	-44.8	-121.5	53.8	498.8	1084.1	1152.8	5.79
800	79	520	219	74		5	5	4	10	2.3	-90.801	14.627	-34.0	-80.3	5.0	11.9	7.5	0.0	0.48

NO	YR	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
801	79	520	512	649		3	4	4	5	2.1	0.000	0.000	3.4	-81.0	55.5	195.0	415.2	162.4	2.79
802	79	520	615	2000		5	0	7	6	3.7	-101.031	12.454	-1154.1	-320.6	1310.0	1310.0	1310.0	1310.0	0.96
803	79	520	658	3588		5	5	4	6	2.4	0.000	0.000	-87.4	-113.1	27.0	1268.2	790.1	227.1	7.59
804	79	520	700	833		4	4	4	10	2.3	-91.283	15.238	-86.7	-12.6	64.5	24.3	47.2	32.5	0.38
805	79	520	730	4901		5	1	3	10	2.3	-91.302	15.040	-88.8	-34.6	36.0	9.7	22.2	1.9	0.17
806	79	520	804	280		5	2	2	10	3.5	-90.936	14.752	-48.8	-66.4	5.0	9.2	9.2	0.0	0.40
807	79	520	813	1973		3	4	4	10	3.4	-90.389	15.150	11.1	-22.4	22.6	4.8	13.5	15.7	0.31
808	79	520	816	4980		4	3	3	10	2.9	-91.264	15.043	-84.7	-34.3	46.2	93.8	239.2	82.9	1.19
809	79	520	818	5435		6	3	2	10	3.7	-90.869	14.628	-41.4	-80.1	19.5	5.2	3.4	3.1	0.14
810	79	520	824	2000		5	1	6	10	5.5	-92.147	15.700	-181.4	38.5	952.9	77.9	219.5	22.0	0.14
811	79	520	853	37		4	0	6	10	4.5	-90.404	15.364	9.5	1.3	5.0	3.7	1.8	0.0	0.07
812	79	520	1006	2702		3	3	5	10	2.5	-90.300	14.869	20.8	-53.5	5.0	11.8	6.1	0.0	0.21
813	79	520	1016	156		2	2	5	10	2.7	-91.321	15.282	-90.9	-7.9	43.0	0.2	1.0	0.1	0.00
814	79	520	1032	4618		3	1	5	4	3.8	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
815	79	520	1038	299		5	4	2	6	3.4	-91.460	13.136	-106.1	-245.1	69.7	93.5	220.6	361.4	0.67
816	79	520	1129	5215		2	5	4	10	2.7	-90.653	14.963	-17.8	-43.1	5.0	8.5	4.9	0.0	0.37
817	79	520	1252	2347		5	5	2	10	3.8	-88.614	14.979	205.5	-41.3	5.0	19.8	66.4	0.0	0.80
818	79	520	1455	3368		4	4	5	6	2.7	-90.442	16.255	5.4	99.8	11.2	168.6	107.5	606.3	1.37
819	79	520	1544	4256		5	5	4	10	2.5	-90.857	15.155	-40.1	-21.8	97.1	9.6	20.5	3.7	0.17
820	79	520	1839	1766		4	4	5	10	2.2	-90.685	14.629	-21.3	-80.0	5.0	24.1	7.7	0.0	0.30
821	79	520	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
822	79	520	2038	2793		5	1	4	10	3.1	-90.222	15.783	29.4	47.6	5.0	32.4	42.3	0.0	1.11
823	79	520	2157	2579		3	0	5	10	0.3	-90.553	15.295	-6.9	-6.4	5.0	0.2	0.2	0.0	0.01
824	79	521	429	2813		2	2	5	10	2.2	-90.561	16.074	-7.7	79.7	5.0	12.7	2.8	0.0	0.13
825	79	521	602	5019		4	2	4	5	3.3	-90.876	14.642	-42.2	-78.6	22.0	64.8	176.9	165.1	1.29
826	79	521	816	570		3	4	4	10	2.5	-90.547	15.018	-6.2	-37.0	96.3	38.9	121.5	48.3	0.65
827	79	521	824	2737		5	5	4	7	2.7	-90.742	14.513	-27.5	-92.9	20.7	92.9	139.5	543.8	1.73
828	79	521	918	3647		4	3	5	5	2.7	-91.618	16.319	-123.4	106.9	51.1	195.6	197.6	317.6	1.05
829	79	521	1128	5756		2	3	5	8	3.1	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
830	79	521	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
831	79	521	1152	1183		3	3	4	10	3.1	-89.915	15.155	63.0	-21.8	5.6	12.7	25.1	0.0	0.67
832	79	521	1222	5197		4	4	3	10	3.0	-90.750	14.842	-28.4	-56.4	44.5	7.2	6.7	3.9	0.29
833	79	521	1313	5603		3	0	5	1	1.3	0.000	0.000	23.0	3.8	5.0	0.0	0.0	0.0	35.90
834	79	521	1340	1178		4	4	4	9	2.2	-90.745	14.381	-27.9	-107.5	20.6	66.3	95.3	1139.3	1.07
835	79	521	1733	5464		5	4	2	10	1.3	-90.864	14.745	-40.9	-67.2	32.6	17.1	31.6	61.3	0.41
836	79	521	1737	1959		4	2	5	10	2.7	-90.889	14.630	-43.6	-79.9	5.0	5.8	3.6	0.0	0.16
837	79	521	1745	3864		2	2	5	10	2.2	0.000	0.000	-274.4	-326.2	1291.4	1310.0	1310.0	0.0	246.60
838	79	521	1821	3037		5	2	5	10	3.7	-90.660	15.583	-18.6	25.4	5.0	2.6	3.3	0.0	0.29
839	79	521	2026	2900		3	0	6	9	5.1	-90.881	16.890	-42.7	170.0	5.0	435.6	1310.0	0.0	0.58
840	79	521	2229	1000		5	1	6	10	6.3	-91.646	22.378	-126.5	777.1	681.7	945.6	1310.0	1310.0	1.61
841	79	522	37	2984		2	1	5	5	1.9	0.000	0.000	630.3	233.0	5.0	1310.0	1310.0	0.0	116.41
842	79	522	508	1484		5	4	4	10	2.9	-90.999	14.796	-55.7	-61.5	35.1	9.6	19.8	26.1	0.22
843	79	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
844	79	522	841	2741		4	0	6	10	4.9	-90.423	15.284	7.5	-7.6	42.1	0.2	0.5	0.3	0.00
845	79	522	925	4476		4	0	4	10	3.6	-90.577	15.178	-9.5	-19.3	6.6	0.1	0.3	0.9	0.01
846	79	522	1017	1867		2	1	7	1	1.6	-90.538	15.314	-5.2	-4.2	5.0	0.0	0.0	0.0	1.03
847	79	522	1236	2153		3	3	4	10	1.7	-90.108	15.084	41.9	-29.7	48.4	12.4	16.6	17.0	0.20
848	79	522	1302	1916		4	1	4	6	3.4	-90.822	14.729	-36.3	-69.0	23.9	44.1	90.8	147.5	0.73
849	79	522	1428	4967		3	3	4	10	1.1	-90.477	15.055	1.5	-33.0	23.6	32.3	65.9	125.4	0.76
850	79	522	1622	1613		4	2	3	7	4.6	-93.235	15.818	-300.4	51.4	73.1	22.9	60.9	112.6	0.13



NO	YR	D	H	M	S	NP	NS	ID	ITR	MAG	LONG (DEG)	L (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
851	79	522	2141	632		4	0	7	10	2.5	-90.603	15.419	-12.3	7.3	8.0	0.1	0.4	0.1	0.01
852	79	522	2321	0		4	0	7	1	1.6	0.000	0.000	1310.0	1030.3	5.0	1310.0	1310.0	0.0	1310.00
853	79	523	16	5156		2	2	5	2	2.6	0.000	0.000	-21.6	-10.7	5.0	1310.0	1310.0	0.0	28.01
854	79	523	53	753		3	3	4	10	3.4	-90.640	15.060	-16.3	-32.4	36.8	14.8	49.1	36.1	0.54
855	79	523	110	0		4	1	6	10	5.8	-97.063	14.060	-719.7	-143.0	704.3	225.2	534.9	165.0	0.33
856	79	523	211	277		3	3	4	10	2.0	-90.373	15.943	12.8	65.3	5.0	10.8	7.0	0.0	0.38
857	79	523	415	2821		3	3	4	10	3.1	-91.163	16.120	-73.6	84.8	5.0	6.4	5.1	0.0	0.19
858	79	523	547	1173		3	3	4	10	2.9	-90.640	14.716	-16.4	-70.4	64.5	15.3	42.8	52.1	0.24
859	79	523	556	5986		3	2	4	10	2.1	-90.788	15.269	-32.5	-9.2	7.3	2.2	7.7	1.6	0.10
860	79	523	737	2850		4	4	2	6	3.2	0.000	0.000	-254.4	133.4	130.7	1310.0	1310.0	1310.0	25.32
861	79	523	949	4795		2	1	5	10	1.8	-90.623	14.973	-14.5	-42.0	5.0	2.2	3.6	0.0	0.12
862	79	523	1504	1190		2	2	5	2	1.3	-90.688	15.255	-21.6	-10.7	5.0	1310.0	1310.0	0.0	1.58
863	79	523	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
864	79	523	2202	448		3	2	4	5	3.3	0.000	0.000	-196.9	106.6	25.6	1310.0	1137.7	481.2	9.29
865	79	523	2323	1848		3	0	7	8	2.7	-90.474	15.295	1.8	-6.4	5.0	1.0	2.3	0.0	0.13
866	79	523	2348	5995		3	3	4	2	2.9	0.000	0.000	-208.5	-94.5	1310.0	1310.0	1310.0	1310.0	653.25
867	79	524	139	1642		3	3	4	2	3.1	0.000	0.000	50.7	9.4	1310.0	1310.0	1310.0	1310.0	1310.00
868	79	524	258	1279		3	3	4	5	2.0	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
869	79	524	325	3000		5	2	2	2	3.3	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
870	79	524	541	1992		4	2	2	6	3.3	-91.250	13.958	-83.2	-154.3	53.1	68.3	56.7	32.7	0.84
871	79	524	746	2046		3	0	7	10	1.3	-90.483	15.291	0.8	-6.8	5.0	0.0	0.0	0.0	0.00
872	79	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
873	79	524	1217	4612		3	0	6	10	2.5	-90.643	15.047	-16.7	-33.8	5.0	0.0	0.1	0.0	0.00
874	79	524	1354	4871		3	2	4	10	2.2	-90.734	14.912	-26.7	-48.7	5.0	7.7	9.2	0.0	0.38
875	79	524	1736	2998		3	0	6	10	1.3	-90.461	15.598	3.2	27.1	5.0	0.1	0.2	0.0	0.00
876	79	524	2050	4794		4	2	3	10	4.8	-93.910	15.396	-374.3	4.8	304.6	306.6	937.2	403.0	0.83
877	79	524	2116	2387		4	2	4	6	3.4	-91.012	13.133	-57.1	-245.5	77.0	76.3	195.2	421.7	0.42
878	79	525	1431	4642		6	5	1	10	3.3	-90.262	15.538	25.0	20.4	5.0	13.4	12.6	0.0	1.18
879	79	525	1738	2311		2	2	5	2	3.3	0.000	0.000	-21.6	-10.7	5.0	1310.0	1310.0	0.0	45.63
880	79	525	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
881	79	525	2325	2389		4	0	4	10	1.3	-90.481	15.300	1.0	-5.8	4.7	0.1	0.1	0.2	0.01
882	79	525	2332	0		4	0	4	4	1.6	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	33.75
883	79	526	26	2017		5	0	3	6	4.9	-93.165	15.943	-292.8	65.3	83.8	446.9	105.4	133.3	0.24
884	79	526	647	2684		5	4	2	10	4.9	-90.018	15.668	51.8	34.9	44.0	18.9	30.6	17.8	0.39
885	79	526	730	3717		2	2	5	2	0.3	0.000	0.000	1.7	-6.5	5.0	1310.0	1310.0	0.0	4.02
886	79	526	1753	1835		5	0	3	10	2.2	-91.082	15.665	-64.7	34.6	50.4	59.6	50.0	51.2	0.31
887	79	526	1915	1356		5	3	2	10	3.2	-90.891	14.917	-43.8	-48.2	37.6	10.5	22.7	20.9	0.30
888	79	526	1926	467		5	3	2	10	3.3	-90.990	15.657	-54.6	33.7	25.8	5.8	21.1	64.7	0.35
889	79	526	2001	3528		5	3	2	10	3.7	-91.886	14.564	-152.8	-87.2	77.9	11.1	28.3	18.0	0.11
890	79	526	2250	984		4	3	3	10	4.1	-90.997	14.757	-55.5	-65.9	29.4	9.0	14.7	29.5	0.17
891	79	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	0.00
892	79	527	100	1639		4	0	6	10	4.4	-90.757	14.141	-29.2	-134.0	129.2	6.6	40.0	37.4	0.00
893	79	527	201	1000		4	0	6	4	4.4	-106.616	5.780	1310.0	-1058.8	1310.0	1310.0	1310.0	1310.0	0.81
894	79	527	449	4211		4	4	2	6	3.1	-92.743	16.772	-246.6	156.9	85.6	62.4	165.7	295.9	0.41
895	79	527	731	5356		3	0	5	10	0.3	-90.534	15.091	-4.7	-29.0	5.0	0.1	0.4	0.0	0.00
896	79	527	1440	869		5	2	5	10	2.7	-91.016	14.779	-57.5	-63.5	5.0	26.4	19.5	0.0	0.93
897	79	527	2128	906		4	0	5	10	3.0	-90.360	15.248	14.3	-11.6	22.0	0.1	0.3	0.5	0.00
898	79	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	0.00
899	79	529	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
900	79	529	1741	2782		5	0	7	10	2.9	-90.673	15.251	-19.9	-11.2	3.7	1.3	0.7	2.6	0.02

NO	YR	D	H	M	S	NP	NS	IP	MAG	LONG (DEG)	LAT (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S	
901	79	529	1826	0	0	5	0	6	2	3.8	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	4.31
902	79	529	2142	4426	0	4	3	3	-10	2.9	-90.311	14.620	19.7	-81.0	148.7	9.6	29.1	17.5	0.00
903	79	530	28	5002	0	2	3	4	7	2.7	0.000	0.000	-154.0	-16.6	5.0	1310.0	1310.0	0.0	15.89
904	79	530	30	3332	0	3	3	4	10	3.3	-90.930	14.727	-48.1	-69.2	5.0	17.8	14.1	0.0	0.63
905	79	530	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
906	79	530	207	0	0	4	3	3	6	3.5	0.000	0.000	-835.8	-154.4	5.0	1310.0	1310.0	0.0	40.74
907	79	530	247	1572	0	4	4	4	6	2.9	-90.798	14.536	-33.6	-90.3	11.9	15.8	10.3	11.6	0.52
908	79	530	343	880	0	3	0	5	10	2.6	-90.463	15.206	3.1	-16.2	5.0	0.0	0.0	0.0	0.00
909	79	530	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
910	79	530	805	4181	0	4	1	6	10	4.5	-90.956	15.512	-50.9	17.6	5.0	8.1	6.2	0.0	0.32
911	79	530	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
912	79	530	855	2689	0	3	0	5	10	2.5	-90.652	15.180	-17.7	-19.1	5.0	0.1	0.7	0.0	0.01
913	79	530	917	866	0	6	0	2	10	4.6	-90.587	14.450	-10.5	-99.8	39.5	4.6	34.0	5.4	0.13
914	79	530	1312	4873	0	4	0	4	10	0.9	-90.796	15.557	-33.4	22.6	5.0	14.2	13.9	0.0	0.28
915	79	530	1416	2219	0	4	3	4	10	0.9	-90.507	15.303	-1.8	-5.5	7.4	0.6	0.8	1.2	0.10
916	79	530	1710	3385	0	3	2	5	6	2.2	0.000	0.000	-104.2	-22.9	5.0	269.3	480.6	0.0	5.04
917	79	530	1753	4088	0	6	5	2	7	4.1	-90.868	13.931	-41.3	-157.2	41.4	51.8	115.5	269.0	0.71
918	79	530	1802	3981	0	5	4	3	5	2.8	-90.324	14.990	18.2	-40.1	0.7	7.6	5.3	3.5	0.46
919	79	530	1903	984	0	5	4	3	5	3.7	-91.149	12.906	-72.1	-270.6	101.9	168.7	392.9	566.4	1.26
920	79	530	1938	1773	0	5	2	3	10	3.4	-91.843	14.349	-148.1	-111.0	74.8	22.2	44.2	47.4	0.17
921	79	530	2129	1570	0	3	0	5	10	3.1	-90.626	15.193	-14.8	-17.7	5.0	0.1	0.5	0.0	0.01
922	79	530	2308	1844	0	2	1	5	1	0.6	0.000	0.000	1.7	-6.5	5.0	0.0	0.0	0.0	6.28
923	79	530	2323	4192	0	2	1	7	1	1.3	-90.475	15.294	1.7	-6.5	5.0	0.0	0.0	0.0	0.75
924	79	530	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
925	79	530	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
926	79	531	1505	1240	0	5	1	3	10	4.5	-93.960	16.650	-379.9	143.5	5.0	11.2	30.2	0.0	0.20
927	79	531	1739	4492	0	5	3	2	10	4.2	-90.554	15.629	-7.0	30.6	248.8	38.2	107.6	19.0	0.29
928	79	531	1843	5397	0	3	5	3	10	3.8	-91.060	14.849	-62.3	-55.7	32.0	1.6	3.1	4.0	0.02
929	79	531	2225	1491	0	4	3	3	10	3.6	-90.529	15.257	-4.2	-10.6	9.4	0.8	1.4	1.8	0.11
930	79	531	2244	704	0	4	4	4	10	3.7	-90.626	15.376	-14.9	2.6	10.8	0.7	1.7	2.3	0.08
931	79	531	2304	4956	0	4	2	4	7	3.7	-91.027	14.842	-58.8	-56.5	15.1	5.4	8.0	3.4	0.16
932	79	601	6	5317	0	4	3	3	6	3.6	-90.684	14.868	-21.1	-53.6	21.5	4.1	6.0	14.7	0.09
933	79	601	222	2361	0	4	2	3	10	3.5	-90.801	15.610	-34.0	28.5	5.0	10.1	12.6	0.0	0.70
934	79	601	332	2092	0	5	3	2	10	3.8	-90.192	15.266	32.7	-9.6	3.4	3.3	3.5	3.1	0.25
935	79	601	835	2333	0	5	4	2	6	4.4	-92.371	13.834	-205.8	-168.0	37.4	41.2	133.3	228.0	0.37
936	79	601	1111	1760	0	4	2	3	6	3.7	-90.950	15.263	-50.2	-10.0	0.9	10.9	37.2	4.6	0.41
937	79	601	1258	3934	0	5	0	3	10	4.6	-91.043	14.736	-60.4	-68.2	40.5	16.2	38.8	6.5	0.15
938	79	601	1707	1000	0	5	1	3	8	5.3	-96.742	9.881	-684.5	-605.2	131.3	171.2	479.3	1153.5	0.33
939	79	601	1754	258	0	4	0	7	10	2.8	-90.495	15.272	-0.5	-8.9	0.0	0.0	0.0	1.0	0.00
940	79	601	2003	3818	0	3	2	4	10	4.0	-92.159	14.102	-182.7	-138.3	126.4	12.5	40.6	34.1	0.06
941	79	601	2021	2723	0	6	3	2	10	4.3	-92.593	16.447	-230.2	121.1	5.0	15.9	23.8	0.0	0.34
942	79	601	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
943	79	602	1813	4000	0	4	0	4	5	3.1	-97.797	7.045	-800.0	-918.9	222.3	1310.0	1310.0	1310.0	0.88
944	79	602	2042	2748	0	3	0	5	10	0.9	-90.533	15.446	-4.6	10.4	5.0	0.1	0.1	0.0	0.00
945	79	602	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
946	79	603	7	1000	0	4	0	4	10	3.4	-93.350	12.467	-313.1	-319.2	467.5	280.3	942.7	0.0	0.70
947	79	603	49	3422	0	3	0	5	10	2.3	-90.619	15.189	-14.0	-18.1	5.0	0.0	0.4	0.0	0.01
948	79	603	124	4026	0	4	3	3	10	2.5	-90.269	15.429	24.3	8.5	24.8	5.8	9.7	5.0	0.25
949	79	603	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
950	79	603	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

NO	YR	D	H	M	S	NP	NS	TD	TR	MAG	LONG (DEG)	L (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
951	79	603	1708	1696		3	1	5	10	2.5	-90.927	15.216	-47.7	-15.1	95.8	1.8	6.2	0.8	0.02
952	79	603	1746	4871		4	1	4	10	3.0	-91.313	13.613	-90.0	-192.4	5.0	53.9	14.9	0.0	0.38
953	79	604	8	3428		4	2	3	10	2.9	-91.671	13.967	-129.3	-153.2	5.0	38.8	28.4	0.0	0.42
954	79	604	37	5003		4	2	3	5	3.4	-88.368	14.786	232.4	-62.7	54.4	90.0	219.8	203.9	0.75
955	79	604	519	348		4	2	3	10	2.7	-90.561	14.749	-7.7	-66.8	5.0	5.8	6.5	0.0	0.30
956	79	604	627	3000		5	1	6	10	6.3	-98.919	14.640	-922.8	-78.8	440.9	155.8	335.0	291.0	0.23
957	79	604	702	216		5	0	4	5	3.9	-90.638	15.229	-16.1	-13.6	0.9	14.6	17.0	113.0	0.77
958	79	604	748	11		4	2	3	10	1.6	-90.556	15.380	-7.2	3.0	10.8	0.9	2.4	2.2	0.11
959	79	604	804	3106		5	1	4	10	4.6	-93.487	14.922	-328.1	-47.7	157.7	26.8	64.8	52.2	0.13
960	79	604	1028	2000		3	0	5	5	3.7	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	101.30
961	79	604	1153	424		5	0	4	10	4.3	-90.637	15.434	-16.1	9.0	5.0	0.9	2.2	0.0	0.07
962	79	604	1519	3210		4	1	4	10	2.5	-92.296	16.162	-197.6	89.5	161.1	9.6	23.7	25.4	0.05
963	79	604	1654	1305		5	2	2	6	3.4	0.000	0.000	159.7	-69.7	72.2	1310.0	1310.0	1310.0	4.54
964	79	604	2117	5139		4	1	4	10	3.0	-91.892	13.949	-153.5	-155.2	5.0	95.9	75.3	0.0	0.66
965	79	604	2320	2568		4	2	7	10	0.9	0.000	0.000	-26.9	-30.7	5.0	143.3	103.3	0.0	6.95
966	79	605	24	2583		5	0	4	10	4.4	-90.770	15.267	-30.6	-9.5	24.8	1.2	0.4	1.4	0.00
967	79	605	47	5849		4	1	4	10	0.9	-90.628	15.305	-15.0	-5.2	5.9	1.7	3.3	5.6	0.18
968	79	605	51	2943		4	1	4	6	3.1	-90.289	13.796	22.1	-172.2	51.9	156.7	342.0	765.6	1.63
969	79	605	222	4536		3	2	4	10	2.2	-90.402	14.916	9.7	-48.2	48.2	0.7	3.2	5.4	0.03
970	79	605	359	1593		3	1	5	10	2.6	0.000	0.000	-546.4	183.5	5.0	1310.0	1310.0	0.0	74.49
971	79	605	438	371		3	2	4	10	2.3	-91.221	14.965	-79.9	-42.9	42.9	12.8	21.9	1.4	0.13
972	79	605	854	4737		6	2	2	7	3.7	-90.126	14.287	39.9	-117.9	52.6	22.1	57.5	117.5	0.47
973	79	605	1114	3929		4	2	7	10	1.3	-90.487	15.277	0.4	-8.4	5.0	1.2	1.5	0.0	0.20
974	79	605	2233	0		3	0	6	3	3.9	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00
975	79	605	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
976	79	605	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
977	79	606	400	173		3	1	5	10	2.2	-90.704	14.965	-23.4	-42.8	28.2	0.3	0.7	0.9	0.00
978	79	606	552	1406		3	2	5	2	2.8	0.000	0.000	66.0	-50.9	1310.0	1310.0	1310.0	1310.0	642.21
979	79	606	2152	0		3	0	6	3	3.9	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	952.04
980	79	607	244	2713		3	1	5	10	1.3	-90.697	15.306	-22.6	-5.1	19.2	1.0	2.2	1.2	0.03
981	79	607	417	5994		2	1	5	10	3.3	-92.446	16.074	-214.1	79.8	5.0	34.2	85.0	0.0	0.45
982	79	607	903	0		5	0	6	4	4.6	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	4.06
983	79	607	934	1558		4	0	6	2	3.8	0.000	0.000	-967.5	-365.1	1310.0	1310.0	1310.0	1310.0	753.37
984	79	607	1201	0		3	1	5	2	4.2	0.000	0.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1310.00
985	79	607	1214	3724		2	1	5	10	1.6	-90.215	15.732	30.2	42.0	5.0	0.2	0.2	0.0	0.00
986	79	607	1422	0		5	0	6	6	4.5	0.000	0.000	-852.8	-907.9	1310.0	1310.0	1310.0	1310.0	5.42
987	79	607	1817	5154		3	1	5	10	3.0	-92.168	15.113	-183.7	-26.5	115.3	7.8	28.0	8.7	0.04
988	79	607	1820	5368		3	1	5	10	3.1	-89.899	13.767	64.8	-175.4	5.0	3.1	2.3	0.0	0.07
989	79	607	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
990	79	608	231	21		3	2	4	10	1.8	-90.923	15.776	-47.4	46.8	19.1	7.5	26.2	122.6	0.19
991	79	608	935	2869		5	2	4	9	2.9	-91.178	13.921	-75.3	-158.4	62.5	390.0	926.6	1310.0	1.24
992	79	608	1022	1951		5	1	3	6	3.4	0.000	0.000	-37.3	-118.6	54.0	228.6	538.4	650.0	3.18
993	79	608	1548	4961		2	1	5	6	2.7	-90.502	15.840	-1.2	53.9	5.0	51.6	21.3	0.0	0.73
994	79	608	1754	5175		4	0	7	10	2.0	-90.488	15.193	0.2	-17.6	5.0	3.8	15.3	0.0	0.22
995	79	608	1802	4292		5	1	5	5	2.7	-90.145	14.853	37.9	-55.3	14.8	23.4	35.0	15.1	1.16
996	79	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	0.00
997	79	609	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00
998	79	609	417	0		3	0	5	3	4.0	0.000	0.000	874.8	195.6	5.0	1310.0	1310.0	0.0	71.64
999	79	609	424	4779		3	2	4	10	2.8	-90.005	15.908	53.2	61.4	5.0	34.0	25.9	0.0	0.79
1000	79	609	0	0		0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00

NO	YR	D	H	M	S	NP	NS	IQ	ITR	MAG	LONG (DEG)	L (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
1001	79	609	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
1002	79	609	1803	3421	3	0	5	10	2.5	0.000	0.000	2.9	-5.9	5.0	163.5	123.7	0.0	2.70	
1003	79	609	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
1004	79	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	0.00	
1005	79	610	242	5047	2	2	5	10	2.7	-91.021	15.710	-58.0	39.5	5.0	12.8	16.5	0.0	0.46	
1006	79	610	739	5101	3	1	5	10	3.3	-90.063	16.162	46.8	89.5	5.0	56.5	34.5	0.0	0.76	
1007	79	610	1118	769	2	1	5	10	2.9	-91.029	15.734	-58.9	42.2	5.0	1.4	1.0	0.0	0.03	
1008	79	610	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
1009	79	610	0	0	0	0	5	0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
1010	79	610	1702	907	3	1	5	10	3.4	-89.355	17.170	124.3	201.0	5.0	206.8	130.7	0.0	1.05	
1011	79	614	1935	0	4	0	5	3	3.4	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00	
1012	79	614	2018	4931	2	1	5	1	2.2	0.000	0.000	-21.6	-10.7	5.0	0.0	0.0	0.0	19.58	
1013	79	614	2046	3632	4	2	3	10	2.6	-90.673	14.739	-20.0	-67.8	40.3	2.4	5.2	8.6	0.06	
1014	79	614	2322	1711	4	0	7	10	1.8	-90.481	15.257	1.0	-10.6	5.0	4.7	6.1	0.0	0.47	
1015	79	615	509	5631	4	0	5	10	2.7	0.000	0.000	-78.9	158.0	5.0	1310.0	1310.0	0.0	2.41	
1016	79	615	1858	4891	4	1	4	10	2.2	-90.178	15.032	34.2	-35.5	21.8	5.0	5.4	14.6	0.16	
1017	79	615	2355	609	5	1	0	2	3.3	0.000	0.000	1310.0	70.8	1310.0	1310.0	1310.0	1310.0	452.16	
1018	79	616	249	5423	4	0	6	10	4.6	-90.059	15.413	47.2	6.7	40.7	3.7	0.4	2.2	0.00	
1019	79	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	
1020	79	616	1405	5090	2	1	5	10	2.7	-91.337	13.618	-92.6	-191.8	5.0	191.6	61.8	0.0	0.66	
1021	79	616	1454	3496	5	1	3	10	3.1	-91.567	14.806	-117.9	-60.4	162.4	96.7	286.6	50.0	0.90	
1022	79	616	1734	408	5	1	3	10	2.9	-90.963	13.434	-51.7	-212.2	59.6	27.9	77.1	275.5	0.40	
1023	79	616	1805	4992	3	0	7	10	1.1	-90.365	15.453	13.7	11.1	5.0	4.1	2.4	0.0	0.08	
1024	79	616	2016	2583	2	2	5	5	1.8	0.000	0.000	198.7	53.1	5.0	1310.0	1310.0	0.0	48.06	
1025	79	616	2022	2092	3	1	5	10	2.1	-90.101	15.313	42.7	-4.4	5.0	8.6	5.2	0.0	0.27	
1026	79	616	2303	2966	3	2	4	10	2.5	-90.067	13.900	-41.2	-160.7	5.0	19.2	5.9	0.0	0.27	
1027	79	617	457	4653	5	2	2	10	0.9	-90.603	15.338	-12.3	-1.6	13.6	0.5	0.6	1.6	0.06	
1028	79	617	856	1682	5	1	6	10	2.9	-90.668	14.380	-19.5	-107.5	165.9	40.5	47.4	30.8	0.42	
1029	79	617	856	5505	4	1	4	5	3.3	0.000	0.000	-343.2	-783.4	203.2	1310.0	1310.0	1310.0	159.85	
1030	79	619	1803	0	4	0	7	2	1.2	0.000	0.000	1310.0	1223.3	5.0	1310.0	1310.0	0.0	1310.00	
1031	79	619	1945	988	2	1	5	10	2.9	-90.668	14.670	-19.4	-75.5	5.0	3.5	3.0	0.0	0.09	
1032	79	619	2202	4448	5	3	7	10	0.9	-90.562	15.364	-7.8	1.2	10.5	0.5	0.4	1.1	0.07	
1033	79	620	518	3645	3	1	5	10	3.1	-90.612	13.946	-13.3	-155.6	5.0	4.7	2.3	0.0	0.08	
1034	79	620	522	3214	5	1	3	10	3.5	-91.481	13.626	-108.4	-191.0	68.6	15.0	22.3	66.1	0.13	
1035	79	620	1850	0	3	0	5	8	3.2	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00	
1036	79	620	2241	3597	5	2	3	5	2.5	0.000	0.000	-32.2	-106.7	32.8	345.8	424.6	406.5	6.60	
1037	79	621	327	1078	4	1	4	6	2.3	-90.612	14.881	-13.3	-52.1	11.9	13.4	8.2	18.2	0.23	
1038	79	621	728	882	5	2	4	5	3.1	0.000	0.000	-233.7	-10.1	31.2	1310.0	1310.0	1310.0	22.68	
1039	79	621	742	442	5	0	3	10	2.5	-90.492	15.278	-0.1	-8.3	3.0	1.3	1.3	2.4	0.15	
1040	79	621	1207	0	3	0	5	4	2.7	0.000	0.000	1310.0	472.7	5.0	1310.0	1310.0	0.0	445.52	
1041	79	621	2326	0	4	0	7	3	1.3	0.000	0.000	1310.0	-434.3	1310.0	1310.0	1310.0	1310.0	7.85	
1042	79	621	2328	1259	6	0	6	10	2.7	-91.689	15.440	-131.2	9.7	232.6	129.1	20.6	222.5	0.11	
1043	79	622	631	4000	5	1	6	4	6.3	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	1310.00	
1044	79	622	1210	0	4	0	6	2	4.3	0.000	0.000	1310.0	1310.0	5.0	1310.0	1310.0	0.0	33.86	
1045	79	622	1717	0	4	1	4	4	3.1	0.000	0.000	1310.0	-709.1	1310.0	1310.0	1310.0	1310.0	1310.00	
1046	79	622	1944	5497	6	1	2	9	3.1	-90.665	15.393	-19.1	4.4	2.4	5.6	4.9	65.8	0.51	
1047	79	622	2216	2756	6	0	6	10	4.3	-91.791	15.788	-142.3	48.1	72.3	334.0	119.0	120.1	0.27	
1048	79	623	1200	2239	4	2	4	5	2.5	0.000	0.000	-9.4	-104.7	34.1	452.0	998.1	1147.9	7.03	
1049	79	623	2321	417	4	0	6	10	3.4	-90.558	15.340	-7.4	-1.3	5.0	7.7	3.0	0.0	0.61	
1050	79	624	26	0	4	0	6	7	3.9	-87.956	10.509	277.5	-535.8	1310.0	1310.0	1310.0	1310.0	0.21	

NO	YR	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
1051	79	624	114	1462		4	1	7	6	0.9	-90.492	15.275	-0.1	-8.6	0.3	1.4	1.5	7.2	0.19
1052	79	624	353	5389		5	1	2	10	4.1	-93.524	15.852	-332.1	55.2	115.7	11.7	14.4	45.0	0.07
1053	79	624	1604	1396		5	1	3	10	4.1	-93.656	16.651	-346.6	143.6	125.4	14.8	17.4	62.7	0.07
1054	79	624	1644	2554		4	0	7	10	0.9	-90.491	15.278	-0.1	-8.2	3.2	0.1	0.1	0.3	0.01
1055	79	624	1910	804		5	2	5	10	2.2	-89.344	14.967	125.5	-42.7	5.0	3.3	6.8	0.0	0.15
1056	79	624	2017	4455		5	2	2	5	3.8	-92.005	14.850	-165.8	-55.6	48.8	78.9	117.5	154.3	1.24
1057	79	624	2346	5785		5	3	2	10	3.0	0.000	0.000	-103.8	-116.8	5.0	171.6	157.7	0.0	3.11
1058	79	625	143	5768		5	2	2	10	2.9	-92.554	15.476	-225.9	13.6	91.6	9.0	11.5	27.1	0.08
1059	79	625	2323	5556		4	0	7	10	1.0	-90.480	15.281	1.2	-7.9	5.0	1.9	2.4	0.0	0.27
1060	79	626	823	2405		4	0	7	10	0.9	-90.464	15.258	2.9	-10.5	5.0	4.8	5.0	0.0	0.32
1061	79	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
1062	79	626	2136	5753		5	2	2	10	2.5	-92.138	14.730	-180.3	-68.8	104.1	115.5	243.6	114.1	0.84
1063	79	627	952	4000		6	1	6	9	6.3	-84.301	9.702	677.7	-624.9	5.0	78.3	83.7	0.0	0.34
1064	79	627	1019	4965		6	2	7	10	1.1	-90.499	15.278	-0.9	-8.2	0.7	0.2	0.2	1.4	0.03
1065	79	627	1435	178		6	1	7	5	4.3	-92.777	13.228	-250.3	-235.0	60.0	197.1	240.4	332.2	1.33
1066	79	627	1530	5186		6	2	3	10	3.7	-93.490	14.245	-328.4	-122.5	116.5	58.9	76.2	162.7	0.36
1067	79	627	2154	5716		6	0	6	10	4.6	-90.487	15.176	0.4	-19.5	47.7	22.1	34.2	57.4	0.36
1068	79	628	632	4000		6	1	6	10	4.3	-94.401	17.122	-428.1	195.7	5.0	39.9	81.7	0.0	0.50
1069	79	628	1041	2964		6	1	3	10	3.6	-90.932	13.388	-48.3	-217.3	5.0	46.0	21.8	0.0	0.49
1070	79	628	1801	3783		6	2	2	10	2.7	-90.857	15.246	-40.2	-11.8	5.0	13.5	13.3	0.0	0.93
1071	79	628	1810	5719		1	3	5	6	2.5	0.000	0.000	-150.5	-216.1	69.0	1310.0	1310.0	1310.0	5.96
1072	79	628	1853	48		2	2	4	10	2.9	-90.444	15.659	5.1	33.8	50.1	1.6	5.8	4.5	0.01
1073	79	628	2324	820		4	2	7	10	0.7	-90.498	15.283	-0.8	-7.7	1.0	0.8	1.9	4.5	0.16
1074	79	629	208	4127		4	1	4	8	2.9	-90.411	12.870	8.8	-274.5	66.8	232.7	527.9	1310.0	1.29
1075	79	629	444	2000		7	0	2	10	4.7	-97.324	18.319	-748.2	328.1	320.1	1310.0	1080.1	1018.7	0.13
1076	79	629	925	2255		6	3	7	7	1.3	-90.485	15.248	0.7	-11.5	5.0	5.0	6.2	0.0	0.67
1077	79	629	1906	4614		6	1	7	9	1.3	-90.486	15.245	0.5	-11.9	5.0	6.7	8.3	0.0	0.80
1078	79	629	2038	186		4	3	3	10	2.7	-90.854	15.543	-39.8	21.1	45.9	3.8	4.9	10.5	0.18
1079	79	629	2210	1339		6	4	2	10	0.9	-90.523	15.277	-3.6	-8.3	1.9	1.3	1.9	6.4	0.37
1080	79	630	442	2000		7	0	2	4	4.4	2.000	2.000	1310.0	1310.0	1310.0	1310.0	1310.0	1310.0	1.49
1081	79	630	535	5912		6	1	3	10	2.3	-91.628	15.248	-124.5	-11.5	179.1	8.7	9.7	5.1	0.08
1082	79	630	934	4624		6	1	3	10	4.2	-87.728	12.982	302.5	-262.2	5.0	53.5	75.3	0.0	0.61
1083	79	630	1016	5562		6	1	3	8	2.7	-91.714	14.138	-133.9	-134.4	40.4	63.2	82.9	259.1	0.33
1084	79	630	1601	5423		6	1	3	10	3.6	-94.714	15.738	-462.4	42.6	5.0	25.2	127.7	0.0	0.62
1085	79	630	1643	2705		6	2	2	5	3.6	-91.820	13.229	-145.5	-234.9	72.3	142.5	170.0	228.6	1.17
1086	79	630	1849	4541		6	2	2	10	3.7	-91.647	13.938	-126.6	-156.5	5.0	6.4	5.0	0.0	0.08
1087	79	701	306	3455		6	0	3	10	3.7	-90.297	14.962	21.2	-43.2	38.3	15.2	19.7	12.3	0.07
1088	79	701	817	1687		5	2	3	10	3.7	-92.301	13.078	-198.2	-251.6	5.0	81.8	61.0	0.0	0.42
1089	79	701	1103	5019		6	5	2	10	1.8	-90.606	15.366	-12.6	1.5	8.5	0.4	0.5	1.3	0.06
1090	79	701	1147	5415		5	1	3	10	3.6	-91.013	15.553	-57.2	22.1	20.9	9.3	9.0	38.0	0.33
1091	79	701	2008	5838		6	6	2	10	2.0	-90.694	15.367	-22.2	1.6	7.3	1.4	1.6	1.0	0.19
1092	79	701	2040	2816		6	0	6	10	4.3	-90.505	15.259	-1.6	-10.4	12.4	2.2	2.5	3.0	0.16
1093	79	701	2251	1754		6	0	3	10	2.9	-90.263	15.056	24.9	-32.8	47.8	51.3	47.3	36.0	0.23
1094	79	701	2331	1971		7	1	2	6	3.3	-92.127	13.918	-179.2	-158.6	64.3	96.1	158.4	276.9	1.27
1095	79	701	2333	892		6	0	6	10	2.5	-90.486	15.256	0.5	-10.7	16.1	4.3	4.2	5.5	0.20
1096	79	702	31	5650		5	0	6	10	3.1	-90.474	15.290	1.8	-6.9	10.5	2.0	1.5	1.9	0.13
1097	79	702	33	4798		6	0	6	10	3.4	-90.346	15.092	15.8	-28.8	29.2	5.3	5.7	3.7	0.04
1098	79	702	53	5051		7	0	6	10	2.9	-90.430	15.102	6.6	-27.8	12.8	0.7	1.7	3.2	0.07
1099	79	702	518	5411		6	6	2	10	1.8	-90.636	15.369	-16.0	1.7	9.1	0.5	0.7	2.9	0.09
1100	79	702	620	3000		6	0	6	8	3.9	-86.429	9.142	444.8	-687.0	141.1	1310.0	1310.0	0.0	0.34

NO	YR	D	H	M	S	NP	NS	IO	ITR	MAG	LONG (DEG)	L (DEG)	X (KM)	Y (KM)	DEPTH (KM)	DX (KM)	DY (KM)	DZ (KM)	S
1101	79	702	647	2563	7	3	2	5	3.7	-89.246	15.053	136.3	-33.1	18.4	12.4	29.8	82.6	0.48	
1102	79	702	739	2530	6	5	2	10	1.6	-90.590	15.360	-10.9	0.8	5.4	0.7	0.8	3.0	0.14	
1103	79	702	748	3589	5	0	6	10	2.9	-90.530	15.279	-4.4	-8.1	15.0	3.6	4.3	4.4	0.11	
1104	79	702	802	5321	6	4	2	10	2.7	-90.336	15.819	16.9	51.5	5.0	9.9	6.8	0.0	0.41	
1105	79	702	929	3496	6	0	6	10	3.1	-90.489	15.215	0.2	-15.2	23.0	0.7	0.9	1.1	0.02	
1106	79	702	1015	3339	6	5	2	10	1.8	-90.600	15.351	-12.0	-0.2	5.5	0.6	0.7	2.5	0.12	
1107	79	702	1028	2148	6	0	6	10	3.4	-90.330	15.063	17.5	-32.1	35.7	20.9	23.1	18.5	0.13	
1108	79	702	1420	3560	6	0	6	10	3.1	-90.548	15.268	-6.3	-9.4	17.3	1.4	2.1	3.6	0.11	
1109	79	702	1531	1717	6	0	6	10	3.0	-90.492	15.194	-0.2	-17.6	24.6	2.4	3.4	4.0	0.07	
1110	79	702	1732	3864	6	1	3	5	3.9	-92.101	13.885	-176.3	-162.3	51.4	88.3	122.1	155.3	0.90	
1111	79	702	2046	2324	5	0	6	10	2.9	-90.541	15.296	-5.5	-6.3	13.3	3.1	3.6	4.0	0.12	
1112	79	703	110	1794	5	3	2	9	1.3	-90.560	15.552	-7.6	22.1	3.9	20.3	28.0	34.1	1.69	
1113	79	703	307	1948	6	0	6	10	3.1	-90.393	15.154	10.6	-22.0	21.4	5.3	5.4	3.0	0.07	
1114	79	703	712	501	6	5	2	10	3.1	-91.857	15.557	-149.7	22.6	170.0	9.1	12.1	9.9	0.10	
1115	0	0	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	
1116	0	0	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	
1117	0	0	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	
1118	0	0	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	
1119	0	0	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	
1120	0	0	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	
1121	0	0	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	
1122	0	0	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	
1123	0	0	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	
1124	0	0	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	
1125	0	0	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	
1126	0	0	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	
1127	0	0	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	
1128	0	0	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	
1129	0	0	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	
1130	0	0	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	
1131	0	0	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	
1132	0	0	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	
1133	0	0	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	
1134	0	0	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	
1135	0	0	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	
1136	0	0	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	
1137	0	0	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	
1138	0	0	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	
1139	0	0	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	
1140	0	0	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	
1141	0	0	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	
1142	0	0	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	
1143	0	0	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	
1144	0	0	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	
1145	0	0	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	
1146	0	0	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	
1147	0	0	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	
1148	0	0	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	
1149	0	0	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	
1150	0	0	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	