

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SOUTHERN GREAT BASIN SEISMOLOGICAL DATA REPORT FOR 1981  
AND PRELIMINARY DATA ANALYSIS

By

A. M. Rogers, S. C. Harmsen, W. J. Carr, and W. Spence

Open-File Report 83-669

Prepared in cooperation with the  
Nevada Operations Office  
U.S. Department of Energy  
(Interagency Agreement DE-AI08-78ET44802)

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards. Any use of trade names is for descriptive purposes only and does not imply endorsement of the USGS.

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**ABSTRACT**

Earthquake data for the calendar year 1981 are reported for earthquakes occurring within and adjacent to the southern Great Basin seismograph network. Locations, magnitudes, and selected focal mechanisms for these events and events from prior years of network operations are presented and discussed in relation to the geologic framework of the region. These data are being collected to aid in the evaluation of the seismic hazard to a potential repository site at Yucca Mountain in the southwestern Nevada Test Site. The regional stress field orientation, as inferred from focal mechanisms, is characterized by a northwest-directed least compressive stress and a northeast-directed greatest compressive stress. We infer from this stress orientation that faults of north to northeast trend are most susceptible to slip. Faults of this orientation exist within the Yucca Mountain block, but they probably have not moved significantly in the last 500,000 years. Yucca Mountain lies within a fairly large area of relatively low level seismicity extending west to the Funeral Mountains, south to the Black Mountains and Nopah Range, and southeast to the Spring Mountains. One M 1.7 earthquake has been located in the Yucca Mountain block in about 1 year of intense monitoring. At present somewhat conflicting geologic, seismologic, and stress evidence hinder definitive conclusions about the seismic hazard at the proposed repository site.

**INTRODUCTION**

Seismological studies of the southern Great Basin (SGB) region are being conducted to assess the seismic and tectonic suitability of the Nevada Test Site (NTS) region for a nuclear waste repository. The project goals are to study the seismicity of the region and determine the seismic hazard to the facility. Because of the scarcity and inconsistent deployment of seismograph stations in this area in the past, few data have been available previously about the level of seismicity and its relation to faults. Furthermore, because of the extensive alluvium cover in the Basin and Range, many important faults are partially or completely hidden and difficult to evaluate geologically. Detailed seismic studies are required to help define seismic source zones that will be relevant to the assessment of the seismic hazard, particularly the hazard to the temporary support facilities of the repository. Although delineation of currently active fault zones does not assure that activity in the future will not shift to presently inactive zones, it is possible that by combining current earthquake patterns with the record of Quaternary faulting some prediction can be made of future tectonism.

In 1979 a 47-station seismic network (fig. 1) was installed within a 160-km radius of NTS to locate and study earthquakes. This network covers the tectonic features of greatest significance (fig. 2) relative to seismic-hazard assessment at NTS, including (1) Fish Lake Valley-Death Valley-Furnace Creek fault zones, (2) the apparent east-west belt of seismicity, and (3) the NTS "paleoseismic zone." Also shown on figure 2 are other major tectonic features that may or may not be vital in seismic-hazard assessment at NTS, but may be important to an understanding of regional tectonics. The regional extent of this network is necessary for tectonic studies and to provide seismological data in the event a site may be chosen off the NTS. In May 1981, a six-station supplemental mini-net was deployed on Yucca Mountain to lower the detection threshold and improve location accuracy for earthquakes at the candidate site.

The principal intent of this report is to make data obtained by the network generally available, to indicate the progress of ongoing research, and to present preliminary interpretations of these data. Appendices A, B, C, and D set forth the basic data related to earthquakes during the 1981 calendar year. These appendices record earthquake origin times, epicenters and focal depths, local magnitudes, and information pertaining to the quality of the locations; the phase readings, first motion directions, and durations used to compute the earthquake parameters are also included. The main body of this report presents and discusses these data, sometimes including past as well as more recent data in order to preserve continuity and perspective.

The data collected in the final quarter of this report period are of higher quality (fig. 3) because of the installation of a digital online detection and recording facility based on a DEC PDP 11-34 computer and associated peripheral equipment (Johnson, 1979). The digital data are analyzed using a DEC PDP 11-70 computer that is an existing part of the U.S. Geological Survey (USGS) computer facility. This method of data recording and analysis is a significant improvement over the old method employing 16 mm film recorders and requiring reader scanning of three 24-hour film records. The computer system continually scans the incoming real-time signals and saves data only when a triggering algorithm indicates that an earthquake has been detected. The reader is required to separate false triggers from earthquake triggers, display the digital traces on an oscilloscope screen, and take readings from the screen electronically that are saved in the computer memory. This technique has not only resulted in at least a doubling of the number of earthquakes that it is possible to detect and read (fig. 1), but has increased the accuracy of the process by eliminating errors caused by misreading times, incorrect association of a reading with the proper station, transcription errors, and key punching errors. The film records, however, continue to serve as a backup during periods when the computer fails. Computer failure averages about 20 minutes per day and usually occurs in block time intervals, occasionally lasting as long as 24 hours if they occur between operator visits on weekends.

#### ACKNOWLEDGMENTS

Robert Herrmann aided us for an extended period during a 6-month sabbatical in Golden and supplied the operational software library for the real-time

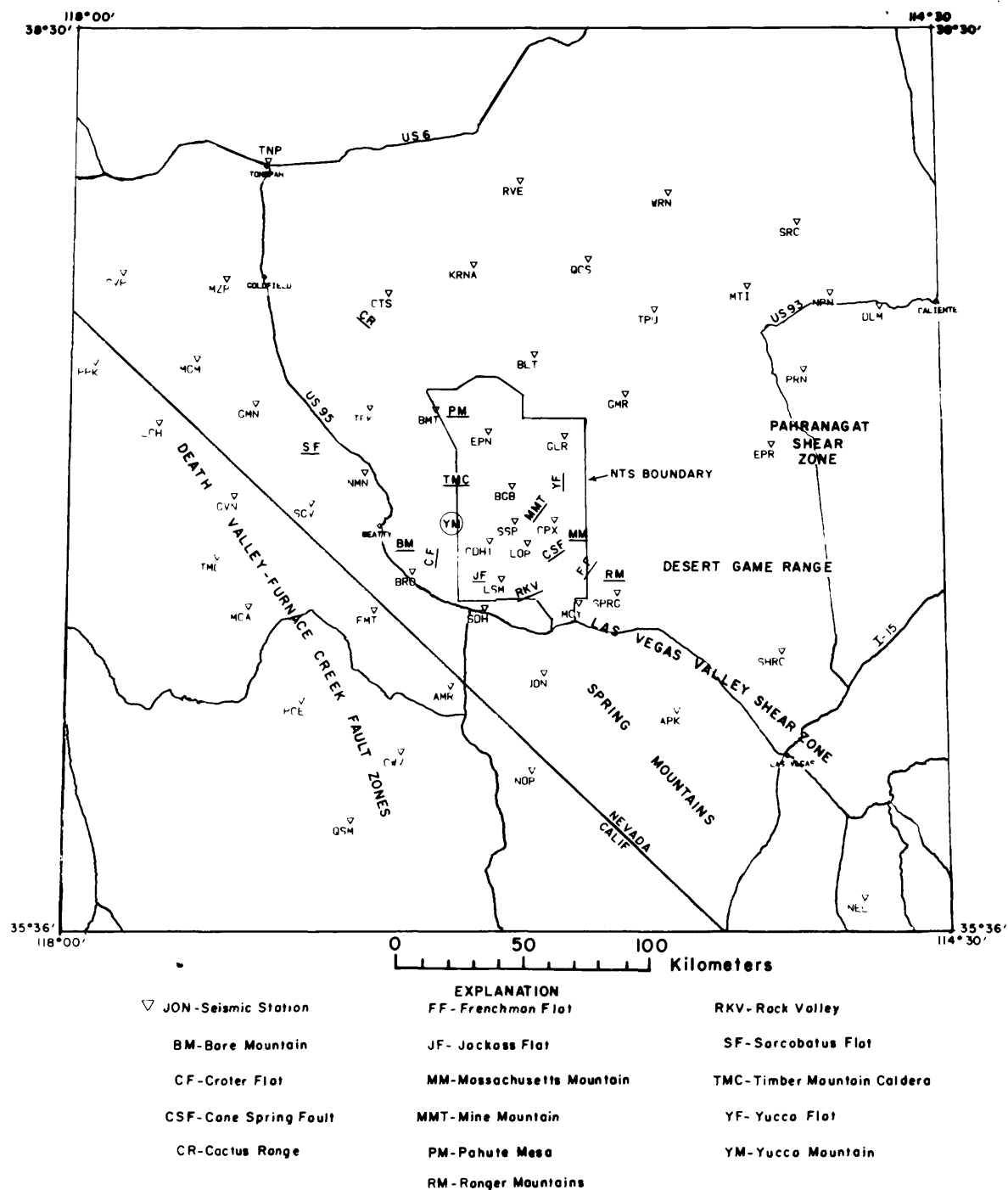
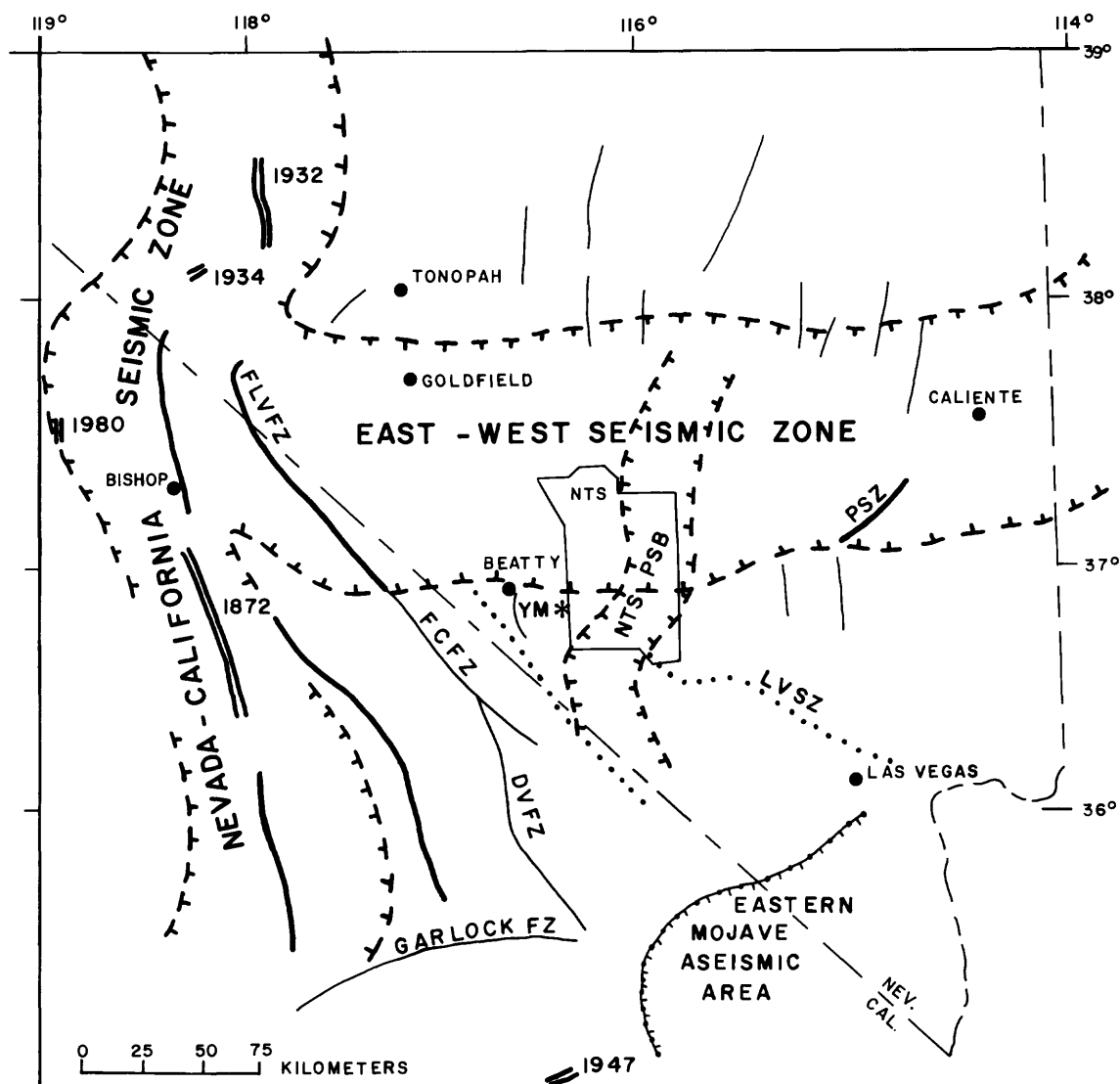


Figure 1.--Locations of seismograph stations in the southern Great Basin are indicated by triangles. Generalized locations of geographic features are also shown.





EXPLANATION	
1872	
==	Historic rupture, year
---	Seismically active with Quaternary faults
- - -	Seismically inactive with Quaternary faults
....	Seismically inactive without Quaternary faults
~~~~	Eastern Mojave aseismic area
* YM	Yucca Mountain
FLV FZ	Fish Lake Valley fault zone
FC FZ	Furnace Creek fault zone
DVFZ	Death Valley fault zone
LV SZ	Las Vegas Valley Shear zone
PSZ	Pahrnagat Shear zone
NTSPSB	Nevada Test Site Paleoseismic Belt

Figure 2.--Generalized tectonic features in the vicinity of the Nevada Test Site that are relevant to the assessment of seismic hazard.

digital data acquisition on the PDP 11-34 computer and the digital processing software for the PDP 11-70 computer system. The original event detection algorithm and a magnitude estimation method were developed by Carl Johnson of the U.S. Geological Survey, who also provided advice on several occasions. Additional assistance on the digital system was given by Steve Malone and Eric Haug. James W. Dewey provided assistance in the joint hypocenter determination relocation of the 1966 earthquake series in southeastern Nevada.

Some local magnitude estimates of SGB earthquakes were obtained with the aid of Roy Miller, Kate Hutton, Ute Vetter, and William D. Richins. We also thank Richins and David S. Brumbaugh for supplying seismograms that aided in the determination of a focal mechanism for a felt earthquake near Alamo, Nev. Focal mechanism plots were generated using an adaptation of a computer program obtained from Stuart Sipkin.

Field equipment maintenance and calibration was provided by Don Morgan and Bill Johnson of the Stanwick Corporation, under the direction of Dee Overturf and Tom Bice of the USGS, who were also responsible for equipment service and calibration at the recording facility in Golden, Colo.

#### MAGNITUDE DETERMINATION

Magnitudes of earthquakes located within this network are computed from the duration of ground motion employing the relation:

$$M_D = -0.87 + 2.0 \log \bar{\tau} + 0.0035 \bar{\Delta}$$

where  $\bar{\tau}$  = the geometric mean of the total signal duration in seconds from all stations recording the event, that is, the time between the first motion and the point at which the signal is lost in the background noise;  $\bar{\Delta}$  = the arithmetic mean distance in kilometers between epicenter and the stations. Although the relation above was developed for a slightly different definition of duration (Lee, and others, 1972), the correspondence between duration magnitude,  $M_D$ , and Richter magnitude,  $M_L$ , is satisfactory (fig. 4). The  $M_L$  magnitudes in figure 4 were reported by the California Institute of Technology, the University of California at Berkeley, and the University of Utah for earthquakes with magnitudes exceeding about  $M_L$  3.  $M_L$  magnitudes for smaller earthquakes are equivalent Richter magnitudes and were calculated from SGB network amplitudes that were converted to equivalent Wood-Anderson seismograph amplitudes (Brune and Allen, 1967; Eaton, and others, 1970). Figure 4 shows that our  $M_D$  overestimates  $M_L$  by about 0.25 magnitude units, except at the higher end of the observed magnitude range where  $M_L$  and  $M_D$  appear to be about equal. The corrections to the equivalent Richter magnitudes suggested by Thatcher (1973) would increase  $M_L$  between 0 and 0.4 magnitude units, and would likely result in a closer correspondence between  $M_D$  and  $M_L$  than shown. The correction cannot be made, however, without additional information such as the frequency bandwidth of the maximum trace amplitudes and the high frequency asymptote of the earthquake spectral density. Even without this correction, the relation given above for  $M_D$  appears to closely estimate  $M_L$  in the magnitude range  $1 \leq M_L \leq 4+$ . According to Bakun and Lindh (1977),  $M_D$  for values less than  $M_L$  1 will underestimate  $M_L$ . The magnitudes in this range, thus, are only relative measures of size and not true estimates of  $M_L$ .

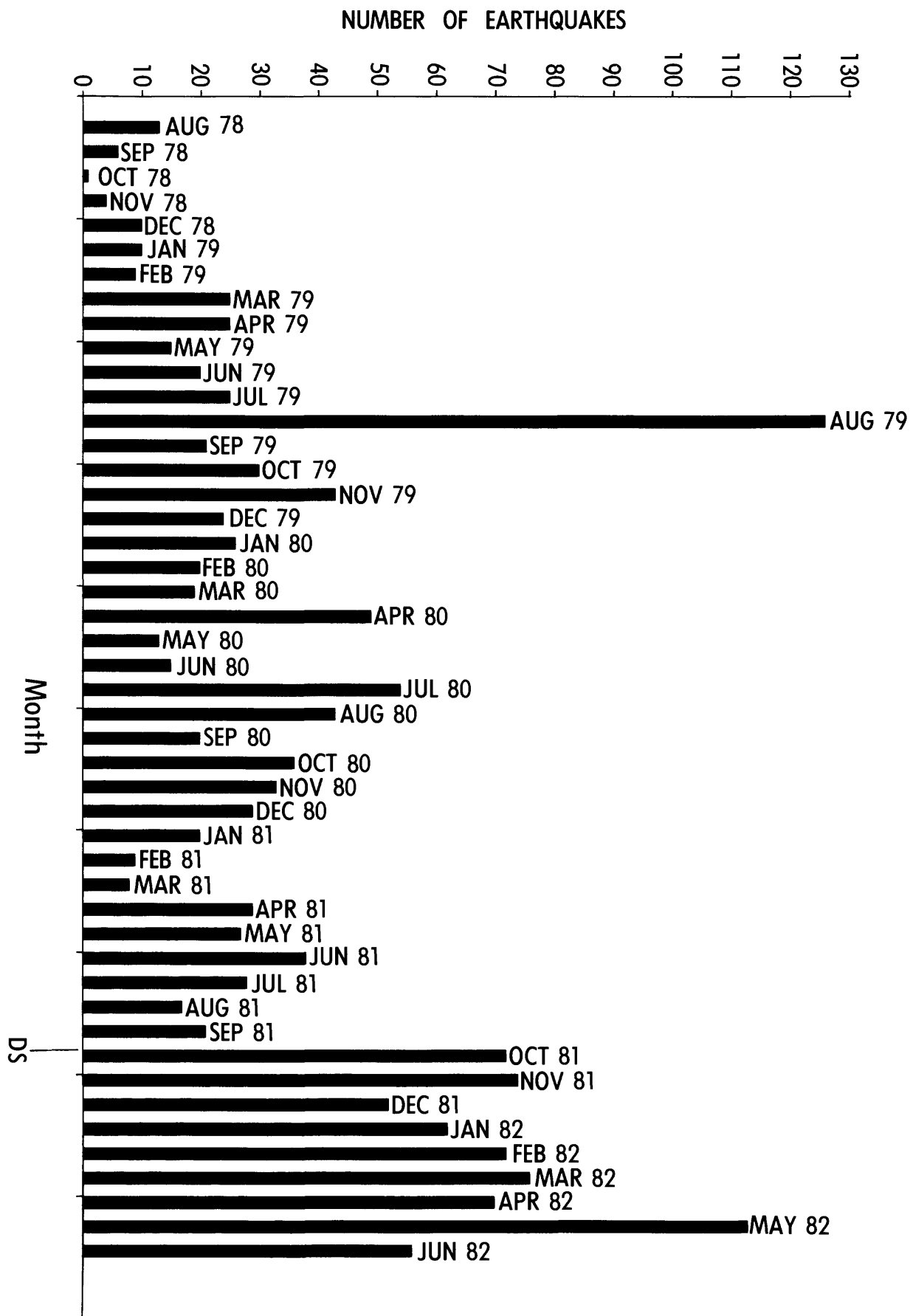


Figure 3.--Histogram of the number of earthquakes located per month.  
DS indicates the start date of the digital recording system.

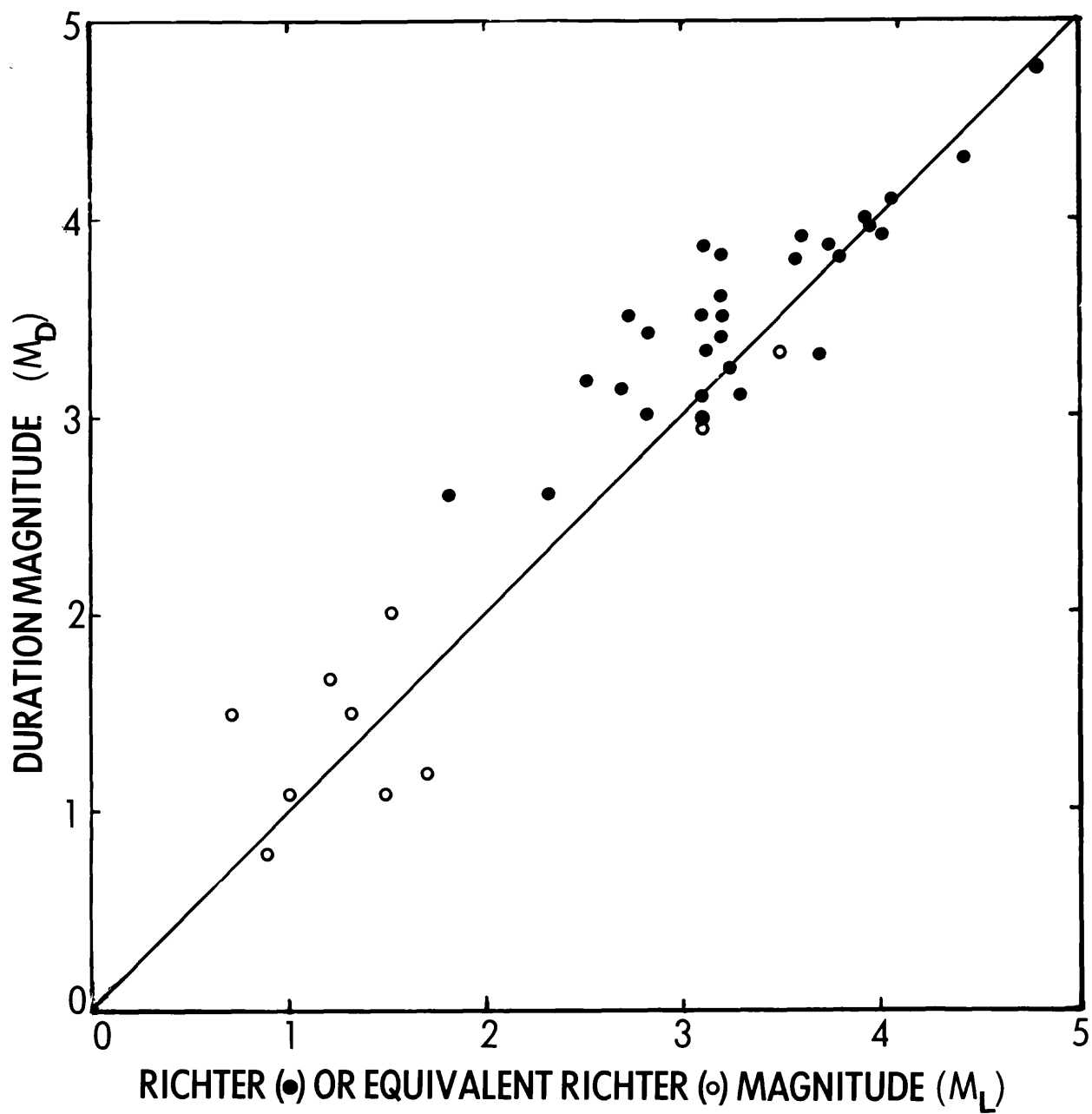


Figure 4.--Comparison of duration magnitude  $M_D$  with Richter magnitude  $M_L$ .

## EARTHQUAKE LOCATION PROCEDURES

Earthquakes in this study were located using the computer program HYP071 (Lee and Lahr, 1975) with program parameters and crustal model as given in appendix B. Both P- and S-wave phase readings were employed when an improved hypocentral solution resulted (that is, lower root-mean-square (RMS) travel-time residuals and smaller standard errors), otherwise only P-times were used. During 1981, 401 earthquakes were located. These events have magnitudes ranging between 0.4 and 4.3, and they have a horizontal modal standard error of 0.5 km and a depth modal standard error of 1.0 km. The quality (Q) distribution of 1981 earthquake locations, as defined in appendix D, is as follows:

<u>Q</u>	<u>Number</u>	<u>Percent</u>
A	3	0.7
B	142	35.6
C	186	46.6
D	68	17.0

The relative location errors of hypocenters presented in this report have been reduced by the use of a revised crustal velocity model and station corrections. We used the program called VELEST 2 (Ellsworth, 1977; Ellsworth and Roecker, 1981) to simultaneously invert for selected hypocenters, a velocity model and station corrections. The initial velocity model is given below and is considerably different than that used previously (Rogers and others, 1981).

<u>Depth to top of layer from sea level (km)</u>	<u>V<sub>p</sub> (km/s)</u>
0.0	3.8
1.0	5.9
3.0	6.15
24.0	6.9
32.0	7.8

This model is based on previous refraction data (Roller and Healy, 1963) and interpretation of reflection phases in those data by L. C. Pakiser (oral commun., 1983). The near-surface 3.8-km/s layer is based on rock core velocities taken from drill holes at the Nevada Test Site (Rod Carroll, oral commun., 1982). The lower crustal layer, beginning at a depth of 24 km, is based on Pakiser's observation of reflections in Roller and Healy's (1963) chemical explosion data. Reflections from this horizon are generally obscured in nuclear explosion data by the high-energy levels in the early parts of the recorded signal, leading to past speculation that much of the southern Great Basin crust consisted of a single, low-velocity layer (Prodehl, 1970). The model we adopted is essentially two-layered (two major velocity contrasts excluding the surface layer) and is compatible with accepted data on the northern Great Basin crustal structure (Prodehl, 1970).

For the inversion experiment, we selected 50 of the best-recorded and geographically most widely distributed earthquakes. A Yucca Flat nuclear event was also included with fixed hypocenter, but free origin time, because it was determined that fixing the nuclear explosion origin time resulted in strong negative bias in the station terms. This result using the present crustal model is likely due to relatively shallower Paleozoic rocks beneath Yucca Flat, especially on the west side of Yucca fault, compared to the region as a whole. Traveltimes from nuclear events also show fair correlation with the shotpoint velocity (Taylor, 1983) indicating that near-surface velocity structure produces some of the bias in nuclear event traveltimes. Accordingly, the inversion was performed with minimal constraint from nuclear shot data. The station terms resulting from the final inversion are shown in figure 5. The mean delay at each station is the result of traveltime differences along diverse ray paths from a wide range of azimuths (the program corrects for station elevation). It is likely, therefore, that the delays reflect mostly near surface velocity changes. For this reason we employ the delays as station corrections to help improve the earthquake locations in a relocation of the entire data catalog (1978-81). Using these station terms to correct arrival times has resulted in a tightening of seismicity trends and clusters and a reduction of the RMS residuals and standard errors.

Velocity variations were strongly damped during the inversion, forcing their effect to be absorbed in the mean station residuals. This procedure was required because, when velocity variations were not strongly damped, geologically implausible velocities resulted and the average RMS errors in the hypocenter solutions were not significantly improved compared to the highly damped velocity model. It is surmised that lateral velocity variations introduce first-order perturbations of traveltimes that are not accommodated by a one-dimensional model; therefore, freeing the velocities in the inversion does not lead to an improvement in the model or the locations. The solution to this problem will involve a three-dimensional velocity inversion, which is currently under study.

Employing the above P-wave crustal velocity model and station correction terms, we derived the corresponding S-wave velocity model from P- and S-wave station times using Wadati diagrams (Kisslinger and Engdahl, 1973) for six well recorded earthquakes. As shown in figure 6, a  $V_p/V_s$  ratio of 1.71 was obtained having a low-standard error. The linearity of the data and the low data scatter are good support for our assumption that Poisson's ratio does not vary significantly within the crust in the SGB.

#### **DESCRIPTION OF EARTHQUAKE LOCATIONS, FOCAL MECHANISMS AND THEIR RELATION TO MAPPED SURFACE FAULTING**

Seismicity maps showing the relation between tectonic features, focal mechanisms and epicenters are shown in figures 7-12, and plate 1. Figure 7 also shows the regions of the detailed figures 8-12. The focal mechanism data are shown in figures 16-18. The revised crustal model and relocated earthquake hypocenters provided the impetus to reevaluate the focal mechanisms presented in a previous report (Rogers and others, 1981), leading to modification of some mechanisms and rejection of others. Both the earthquake locations and focal mechanisms presented in this report should take precedence

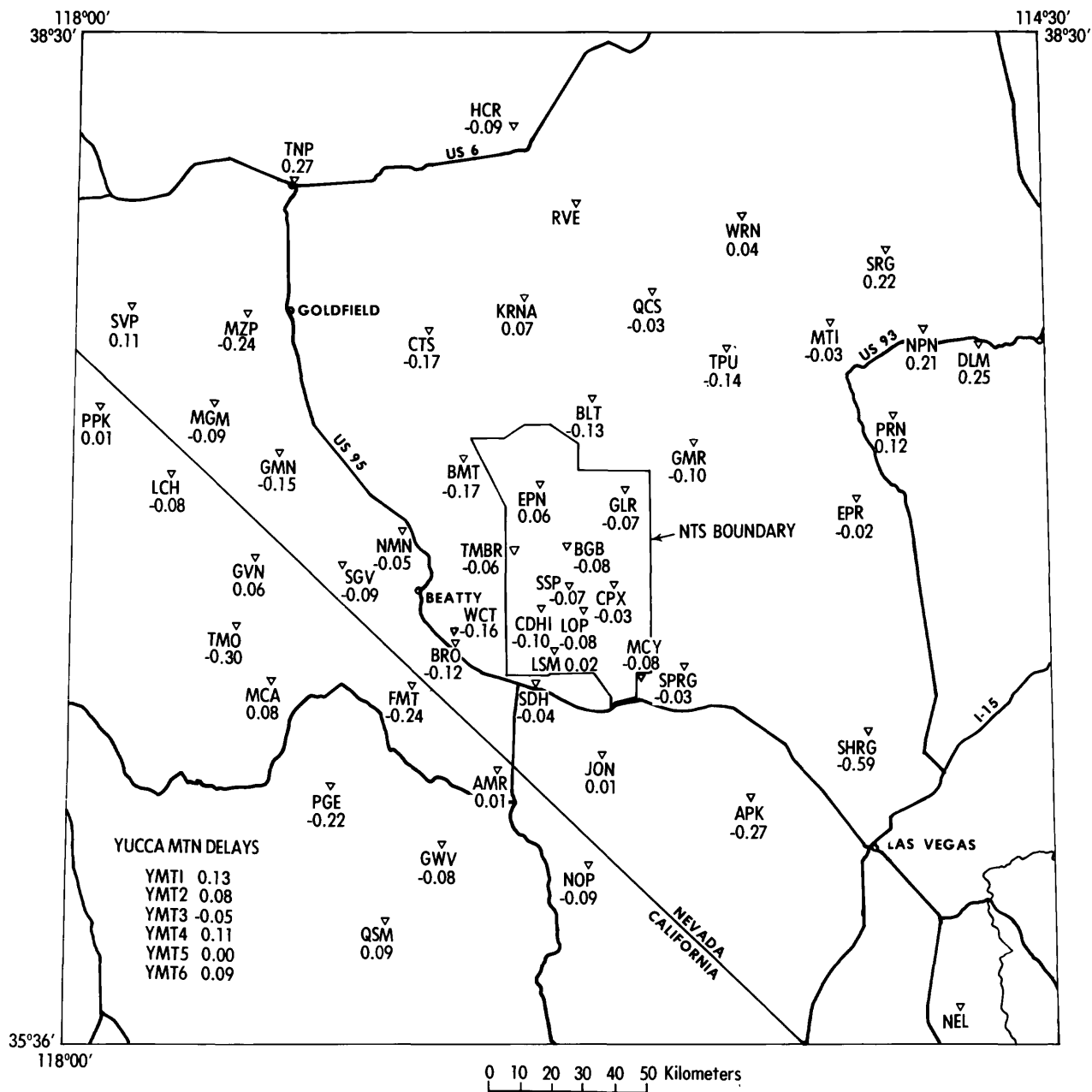


Figure 5.--Station delays resulting from the simultaneous location of 50 widely scattered well-recorded earthquakes and one fixed location Yucca Flat nuclear event.

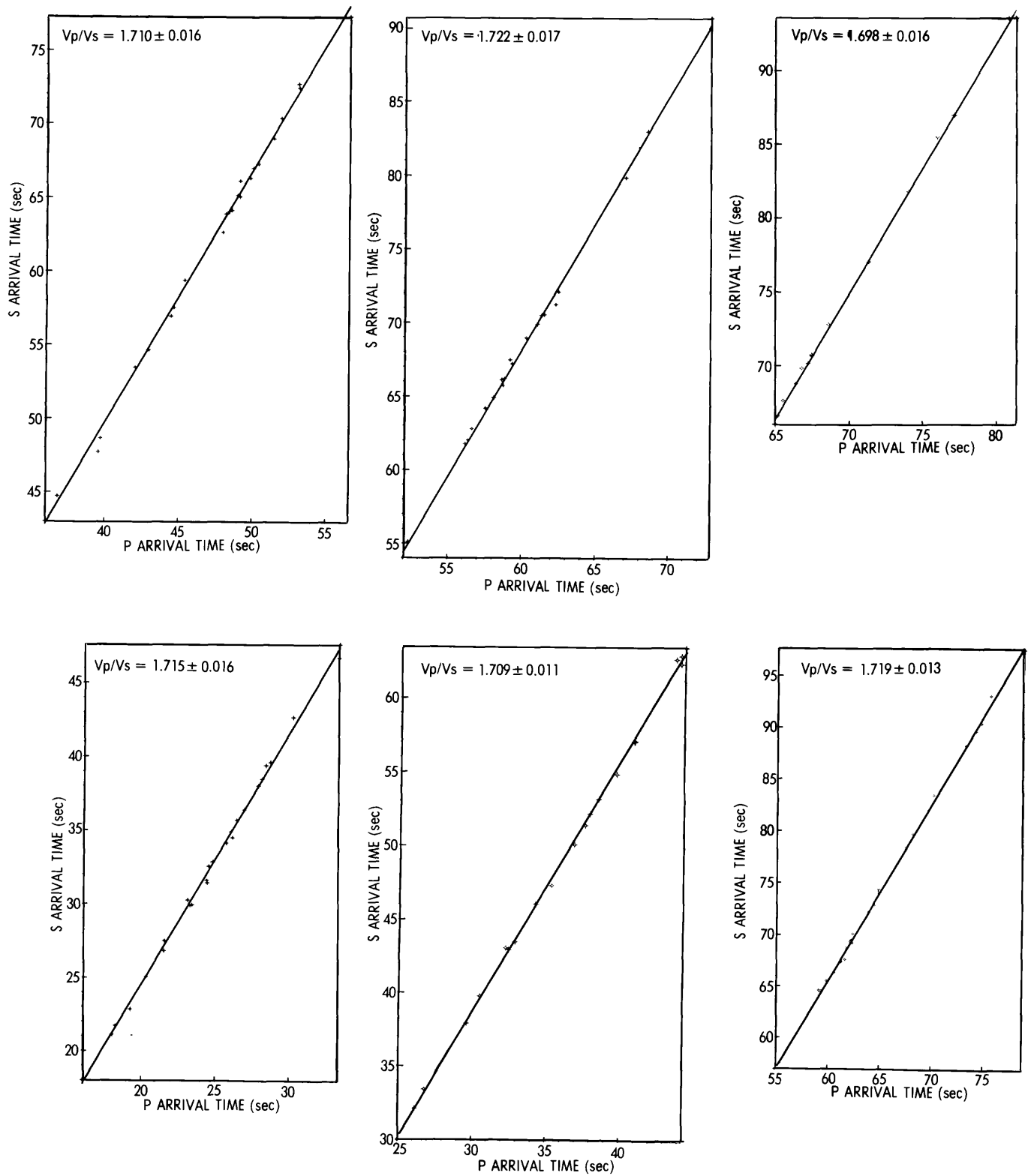


Figure 6.--S-arrival time vs. P-arrival time for six well-recorded earthquakes.



over those results previously reported. It is observed from these maps (especially fig. 7 and pl. 1) that seismicity is widespread throughout the SGB, although, as noted in past reports, there are areas of quiescence or near quiescence. The principal pattern is one of widespread diffuse seismicity punctuated by tight clusters of earthquakes, each generally containing one or more of the largest events recorded to date ( $M_L$  4-4.5). Fewer numbers of earthquakes occur near the northern and southern margins of the network giving the appearance of a seismic bridge or belt connecting the Intermountain seismic zone with the Nevada seismic zone. This band of earthquakes, termed the southern Nevada east-west seismic belt (Smith, 1978), is more apparent on a regional scale map and was first noted in the pre-network data. The tectonic significance of seismicity in this zone is not yet understood.

Earthquakes induced by nuclear explosions continue to occur at Pahute Mesa and Yucca Flat (fig. 11). The nuclear events have been removed from our catalogs and maps. The seismicity maps in this report are contaminated in the Pahute Mesa and Yucca Flat regions by induced seismicity from nuclear explosions. Research by Hamilton and others (1971) and Rogers and others (1977) indicated that underground nuclear explosions aftershocks appear to be restricted to within 6 to 14 km from ground zero. The number of aftershocks occurring also appears to decrease to the background level within less than 15 days. However, no clear-cut way of removing these earthquakes from the catalog has yet been devised. A more detailed evaluation of this problem is planned and will be presented in a future report. Except for this activity, the most active areas are the Pahrnagat shear zone (PZ) (fig. 8), the Mine Mountain (MM)--Cane Spring (CS)--Rock Valley (RV)--Frenchman Flat (FF) fault systems (fig. 9), the Thirsty Canyon (TC) (fig. 11), Sarcobatus Flat (SF) (fig. 12) and western Gold Flat (GF) areas (fig. 11), and a region along the California-Nevada border near Gold Mountain (GM) (fig. 12). The PZ, MM-CS-RV-FF, and GM zones are geologically and seismologically similar because they are characterized by major northeast-trending left-lateral faults that localize a large percentage of the regional earthquakes. In the PZ the majority of epicenters appear to be underlain by short north- to north-northeast-trending fault segments lying between the major northeast-striking shear zones (fig. 8). These epicenter locations, together with the two focal mechanisms in this area, suggest that the mode of faulting is right-lateral strike slip on north-trending faults.

An earthquake producing a strike-slip focal mechanism occurred beneath Frenchman Flat (B, fig. 9). The northwest-trending Yucca Frenchman (YFF) shear zone passes about 2 km to the northeast of this earthquake and is characterized by right-lateral bending of northeast-trending fault zones and a general change in structural grain. Faults on the north side of YFF trend northerly, and faults on the south side of YFF trend northeasterly. The north-trending focal mechanism fault plane coincides with the general structural grain occurring on the north side of the YFF, and the east-northeast-trending plane agrees with the structural grain to the south of YFF. Because alluvium covers the area around the epicenter, it is not possible to unequivocally select the correct fault plane. If the east-northeast-trending plane is preferred, left-lateral strike slip is required. Two historical earthquakes in this region, the 1971 Massachusetts Mountain and

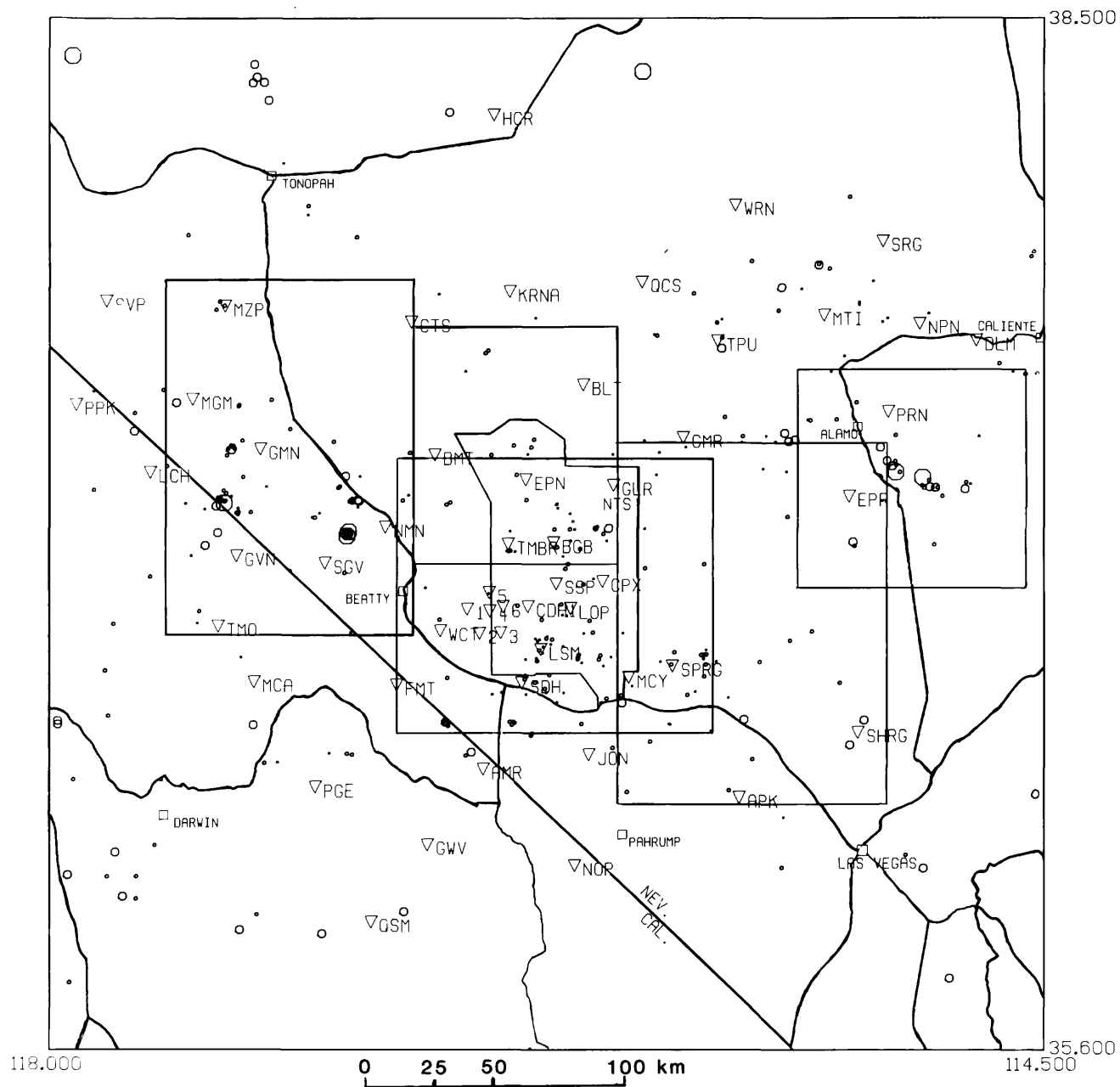


Figure 7.--Regional seismicity for the calendar year 1981. Boxes indicate the areas shown in figures 8-12.

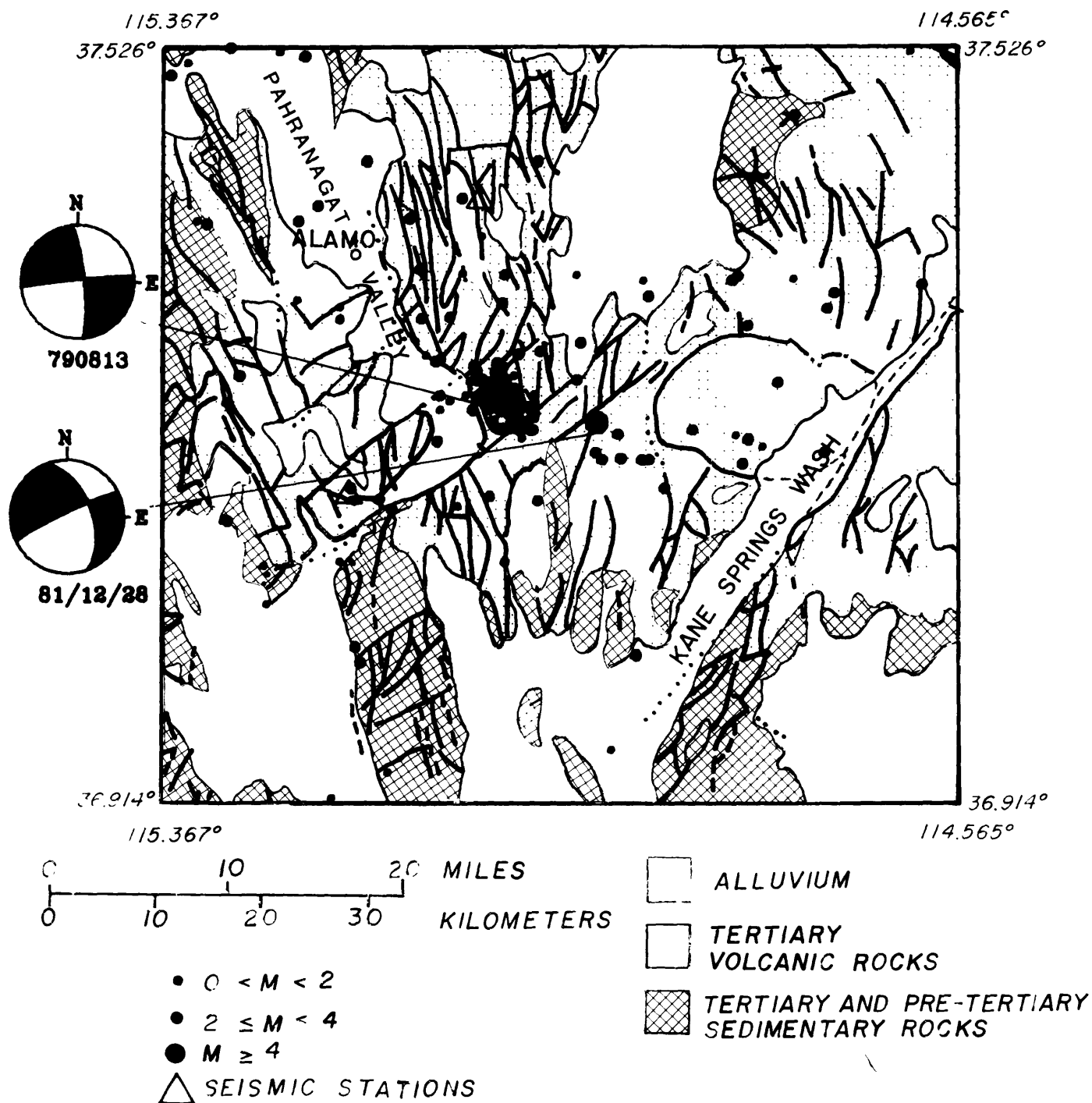


Figure 8.--Seismicity and focal mechanisms in the Pahranaagat shear zone for the time period August 1, 1978, through December 31, 1981.

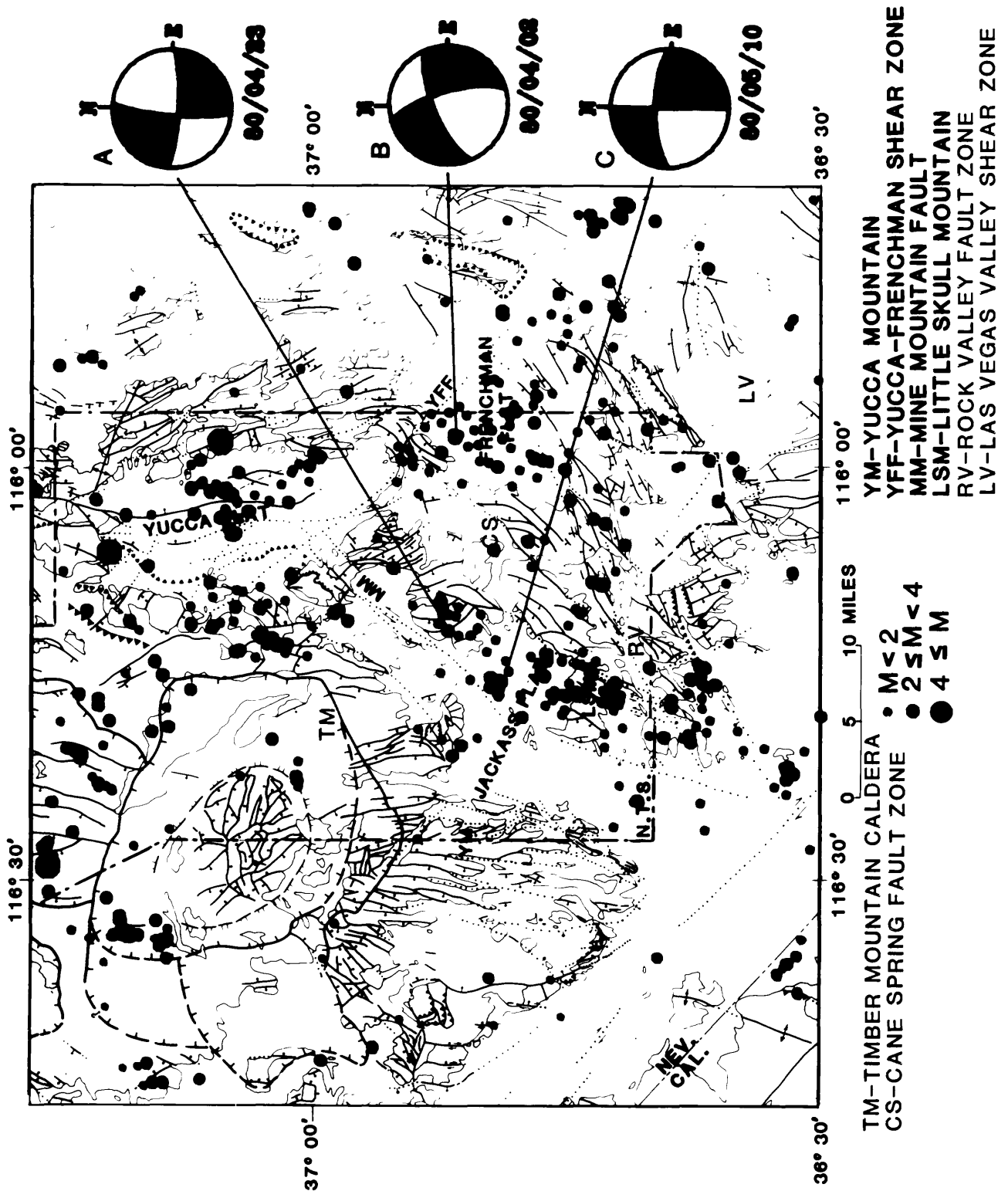


Figure 9.--Seismicity and focal mechanisms in the southern NTS region, including Yucca Mountain, for the time period August 1, 1978, through December 31, 1981.

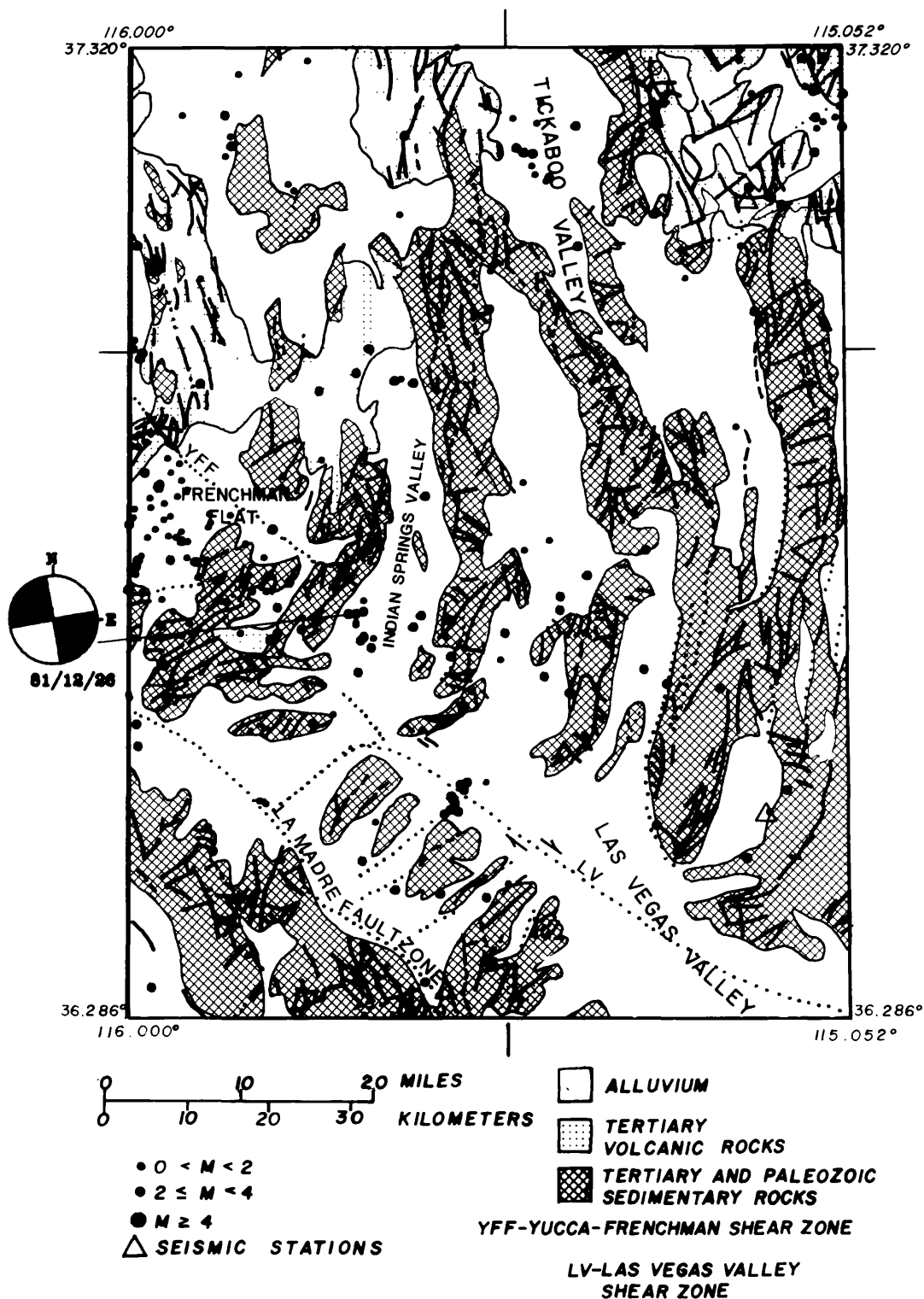


Figure 10.--Seismicity and focal mechanisms east of NTS, for the time period August 1, 1978, through December 31, 1981.

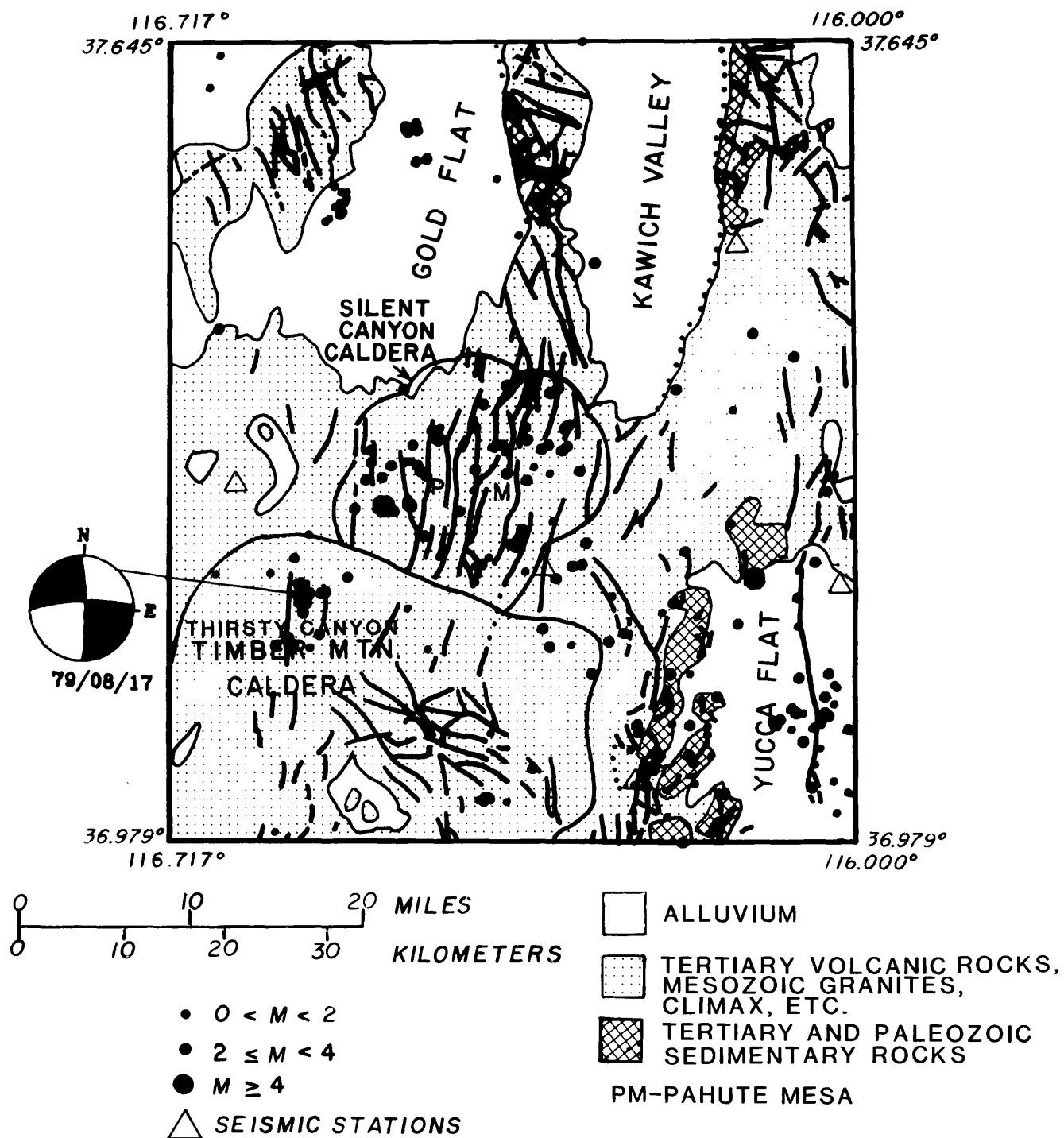


Figure 11.--Seismicity and focal mechanisms in the northern NTS region for the time period August 1, 1978, through December 31, 1981.

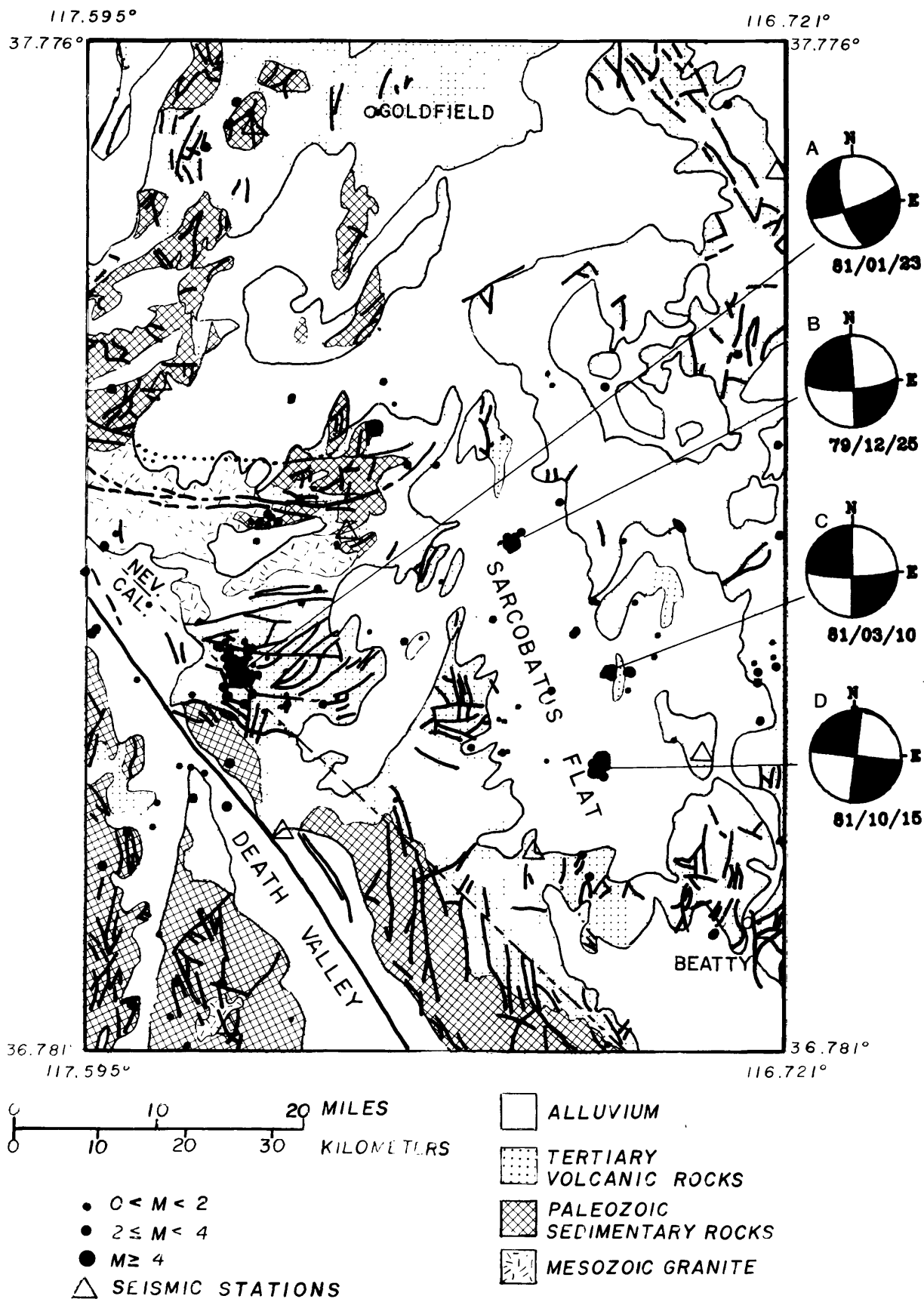


Figure 12.--Seismicity and focal mechanisms west of NTS for the time period August 1, 1978, through December 31, 1981.

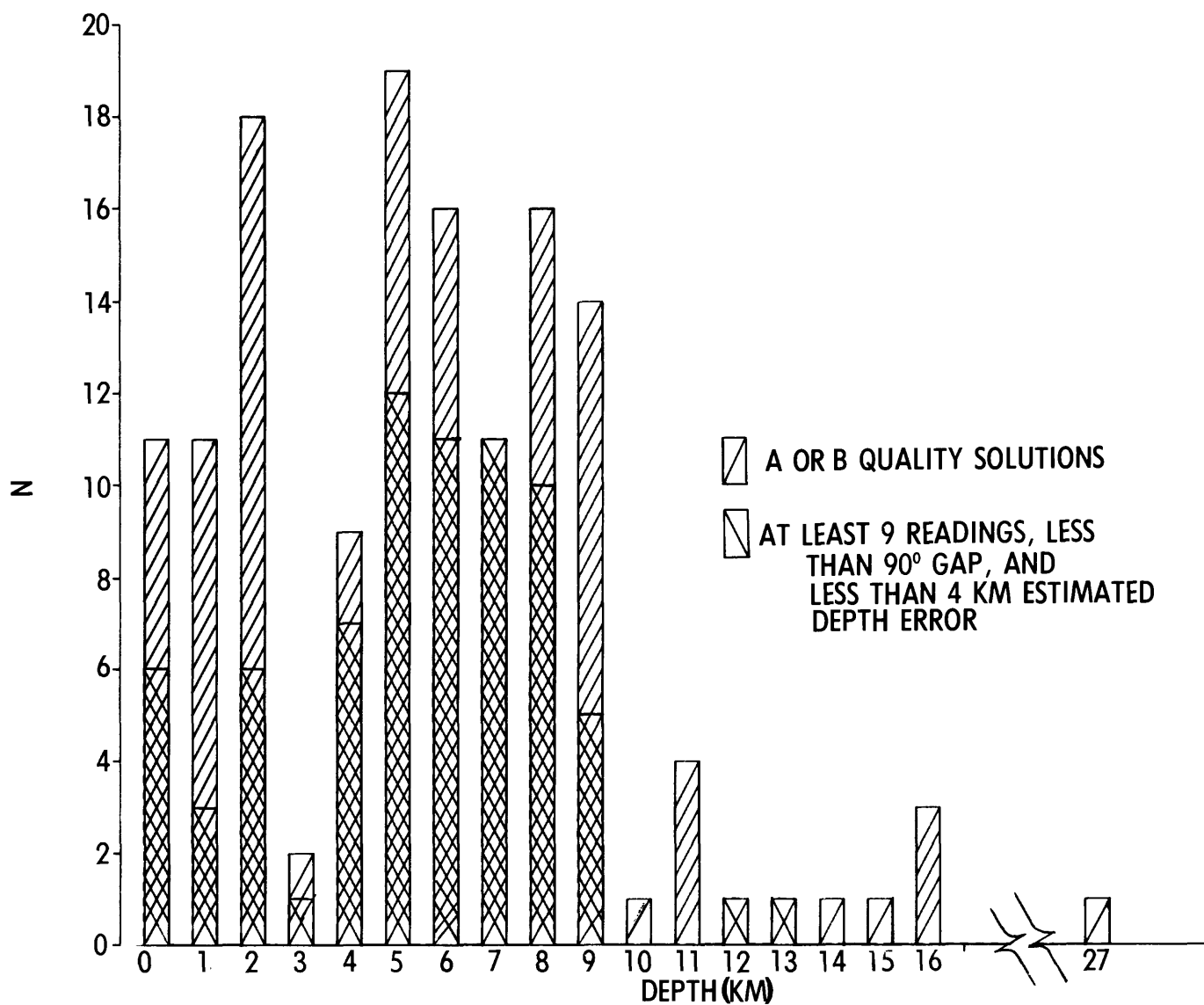


Figure 13.--Distribution of focal depths below sea level for well-located earthquakes in the southern Great Basin. For clarity the bars are spaced apart, although the depth intervals are continuous. For instance, the depth intervals start with 0-0.5, 0.5-1.5, and so on.



1973 Ranger Mountain (both  $M \sim 4$ ), produced strike-slip focal mechanisms with fault plane orientations similar to that observed here. For the 1971 earthquake, roughly 4 km north of earthquake B (fig. 9), Carr (1974) preferred the east-northeast-striking focal plane. As with earthquake B (fig. 9), a preferred focal plane could not be chosen for the 1973 earthquake (Carr, 1974).

A mechanism for an earthquake located in Jackass Flats (C, fig. 9) indicates strike slip, although the proper fault plane cannot be determined. Neither fault plane, however, would indicate slip on the Mine Mountain fault zone, in spite of the fact that epicenters appear to be near the projection of the surface trace of this fault. An earthquake at nearby Lookout Peak indicates a strike-slip mechanism (A, fig. 9) and could be associated with right-lateral motion on one of several mapped north-trending faults. Some earthquakes south of Little Skull Mountain, and events northwest of Mercury, occur on and near the trace of the RV fault and near the projected intersection of the CS and the RV faults suggesting association with those structures. No focal mechanisms have yet been obtained for these events because they are of low magnitude. Although no evidence exists in this data set that the northeast shear zones are active, except the localization of events in these zones, it is known from previous studies that Quaternary fault scarps and earthquakes do occur on northeast-trending zones in the SGB. Two regional examples of normal fault earthquakes on northeast-trending faults were observed on Pahute Mesa (Hamilton and others, 1971) and at Lake Mead (Rogers and Lee, 1976).

The clearest evidence of earthquake fault plane orientation occurs in five active zones where epicenter lineations are observed. Alinement of earthquakes and focal mechanisms in Indian Springs valley (fig. 10), Thirsty Canyon (fig. 11), and three Sarcobatus Flat locations (fig. 12, B, C, D; pl. 1) suggest right-lateral strike slip on north-striking faults. In addition, earthquakes at Thirsty Canyon are close to a mapped fault of north strike.

A focal mechanism for a Gold Mountain  $M 4.0$  earthquake (A, fig. 12) indicates strike slip with a small component of normal faulting. The epicenter lies in a region of east- to northeast-trending faults, so that this trend is preferred with left-lateral strike slip.

Fault orientation appears to be more important than age in microearthquake occurrence in the Nevada portion of the SGB (pl. 1). For instance, most faults of northwest orientation are inactive, including the Las Vegas Valley shear zone, and the La Madre fault zone bordering the Spring Mountains. By comparison, from evidence of late Quaternary displacement or current seismicity, many faults of north to northeast orientation are active, such as Yucca fault, faults flanking Bare Mountain, Rock Valley and Mine Mountain, the Pahrnagat shear zone and faults southwest of Gold Mountain. The youngest surface displacement on these faults ranges in age from pre-Quaternary to Holocene (YF) (pl. 1).

## EARTHQUAKE DEPTHS

As noted previously (Rogers and others, 1981), earthquake focal depths in the SGB appear to have a bimodal distribution (fig. 13), with peaks in the number of earthquakes occurring at about 2 km and 5 km below sea level. Very few well-located earthquakes have depths greater than 10 km. This pattern is persistent, although different crustal models have been employed and station delays are now incorporated into the location procedures. Some events within the shallower zone may be artificially constrained because of a layer boundary within that zone and the location procedure, but it is unlikely that this effect is important for all the earthquakes in that depth range because the peaks in the distribution do not occur at a layer boundary.

Most of the strike-slip mechanisms are for earthquakes occurring in the deeper active zone (4-9 km). Only two of the single event mechanisms have depths less than 5 km. The Thirsty Canyon and Sarcobatus Flat composite focal mechanisms are derived from earthquakes spanning both depth ranges. In this small sample, therefore, strike-slip faulting does not appear to be depth limited as found for western Nevada (Vetter and Ryall, 1983).

## TEMPORAL PATTERNS OF SEISMICITY

The 1979 Pahranaagat earthquake series (fig. 8) followed a foreshock-main shock-aftershock (FMA) pattern with a main shock of about M 4 (Rogers and others, 1981). The region was nearly quiescent in 1980. On January 16, 1981, an M 4 occurred near the southeastern limit of the 1979 aftershock zone (figs. 5 and 6) but had no foreshocks or aftershocks. An M 4 occurred in this zone on December 28, 1981, about 10 km east-southeast of the 1979 series. This earthquake followed the FMA pattern and was accompanied by 10 aftershocks and 1 foreshock.

The Thirsty Canyon sequence (fig. 11) began a day after the first Pahranaagat series, on August 13, 1979. This cluster of 38 earthquakes occurred more as a swarm than as a FMA style series, consisting of a large number of M 2 earthquakes with no distinct main shock.

Three distinct series have occurred in Sarcobatus Flat (fig. 12) 50-75 km northwest of Yucca Mountain. The first series (B, fig. 12) on the north side of Sarcobatus Flat began in December 1979 with an M 4.0 earthquake followed by seven aftershocks. Southeast of this group, near the middle of Sarcobatus Flat (C, fig. 12), an M 3.4 earthquake on March 10, 1981, was followed by three M 3+ events on April 3 and 4, and seven additional M <3 events in June, July, August, and November. The cluster of earthquakes in the southern portion of Sarcobatus Flat (D, fig. 12) was comprised by an FMA series of 12 foreshocks beginning on October 13, 1981, followed by an M 4.0 main shock on October 15 and 34 M  $\leq$ 3.4 aftershocks to December 11.

In the Gold Mountain area (A, fig. 12), 33 earthquakes occurred (M <3.0) between December 1978 and November 1980. On January 23, 1981, an M 4.0 earthquake occurred in this zone followed by two aftershocks (M <3.0). Sixteen more events followed between April and December 1981.

The contrast between the southeastern NTS activity and the zones just discussed is notable. Since the installation of the network, there has been a nearly continuous series of earthquakes occurring in southeastern NTS. This activity has a larger proportion of small magnitude earthquakes than any other part of the region. No earthquakes larger than M 3.4 have occurred in this zone during the monitoring period and only four larger than 3.0 have occurred. The data suggest that the "b-value" for the southeastern NTS region may be higher than that for the entire network area (fig. 14), although, at present, not enough data has been collected to estimate the recurrence relation for this subregion. A second feature of the seismicity in this zone is that significant changes in the rates of seismicity appear to occur as indicated by the ratios of small ( $M < 2$ ) to large ( $M \geq 2$ ) earthquakes (table 1). Here we assume that even though the number of earthquakes at magnitudes less than 2 is incomplete, this incompleteness is invariant with the time period for the first two periods. A one degree-of-freedom  $\chi^2$  test on a 2 x 2 contingency table of the number of earthquakes in each magnitude class and time period (for the first two time periods) shows that we must reject the hypothesis that the number of earthquakes in each magnitude class is independent of the time interval at a 1 percent significance level. The ratio of small-to-large events has fluctuated from values relatively high to low to intermediate. In terms of the recurrence curve, in the second period the number of earthquakes at low magnitudes decreased simultaneously with a decrease in the b-value. If the difference between the first and the second period were due to a decrease in network operation efficiency, one would expect both size categories to decrease in the second period. If the third period changes were due to the installation of digital detection and recording facilities, one would expect both size categories to increase as they did for the region as a whole (fig. 3). Because the observed results in both cases are contrary to the results expected due to operational changes, it seems probable that the temporal changes are real.

Table 1.--Comparison of earthquake rates in two magnitude ranges for earthquakes in the southern NTS region (36.5°-36.9° N., 115.7°-116.5° W.)

Time period	Rates (number earthquakes/month)	
	M >2	M <2
1.) Aug. 1979 - Sept. 1980	1.1	7.9
2.) Oct. 1980 - Sept. 1981	2.9	1.3
3.) Oct. 1981 - June 1982	2.1	5.0

A possible interpretation of these results is that changes in source stress conditions occurred regionally, such that, in the second period, stress was stored along fault zones for longer intervals and released by relatively larger events than in the first interval. The required source conditions might occur as synchronous subregional changes in the normal stress across active faults of similar orientation. Observations of regional changes in earthquake occurrences were noted in the SGB near the Pahrnagat shear zone by

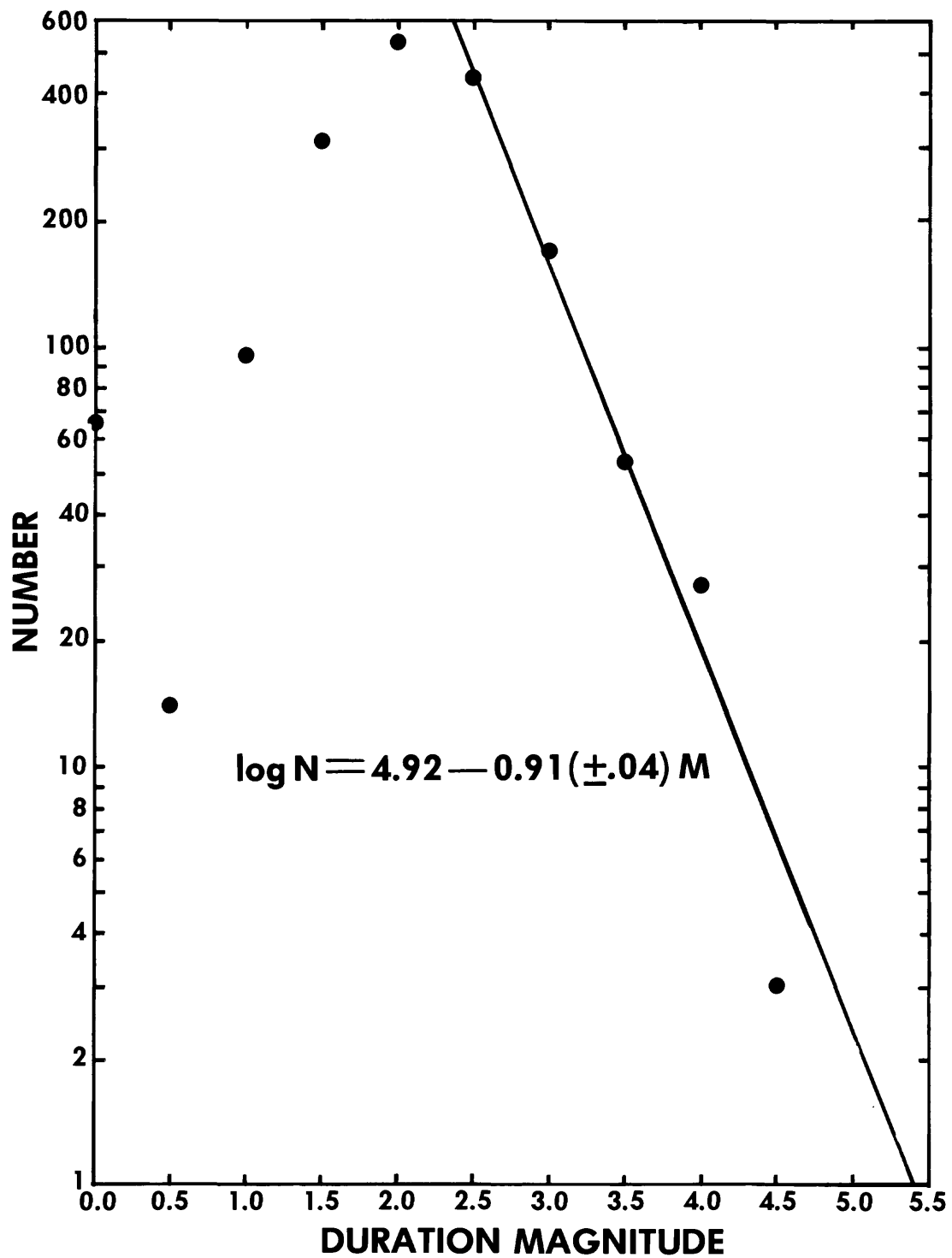


Figure 14.--Frequency of recurrence of earthquakes in the monitored region for the period August 1979 to June 1982.

Molnar and others (1969). Coupling between active zones also seems apparent in the northern Great Basin, as suggested by W. Gawthrop (written commun., 1980). The Cedar Mountain (1932, M 7.2) and Excelsior Mountain (1934, M 6.3) earthquakes, 50 km apart, appear to be related temporally and spatially, although the style of faulting for the two events differed considerably. More closely related in time and space are the two Rainbow Mountain earthquakes (M 6.8), the Dixie Valley (M 6.8) and Fairview Peak (M 7.2) earthquakes. All these events occurred in 1954 on north- and north-northeast-trending faults in an area about 50 km across. Coupling between paleostructures in mountain ranges of the northern Great Basin has also been suggested by Wallace (1978).

The recurrence curve in figure 14 is derived using a maximum likelihood technique assuming a minimum and maximum magnitude of 2.5 and 6.0, respectively (Bender, 1983). These recurrence data show that only 3 earthquakes in the range 4.25 to 5.25 have occurred, although the recurrence curve predicts approximately 10. The probability of this result is about 1 percent (Bender, 1983). In fact, excluding nuclear event aftershocks, fewer than five M 5+ earthquakes have occurred in the presently monitored zone during 40 years of historic record that are reliable (Rogers and others, 1977). Several interpretations of these data are possible. First, a maximum magnitude may exist for this region in the range 5 to 6, and, therefore, the frequency of events at the upper magnitudes does not follow the recurrence curve of figure 14. Second, there has been a recent increase (from 1979 to present) in the number of earthquakes occurring, which could explain the discrepancy in the number of historic M 5+ events, but does not explain the lack of M 4.25+ earthquakes in the current record. Third, it is possible to obtain a bent recurrence curve by combining zones with differing b-values, lower magnitude thresholds, and (or) maximum magnitudes. At present a choice cannot be made between the three possibilities. Additional data and more detailed analysis are necessary to evaluate these interpretations.

## DISCUSSION

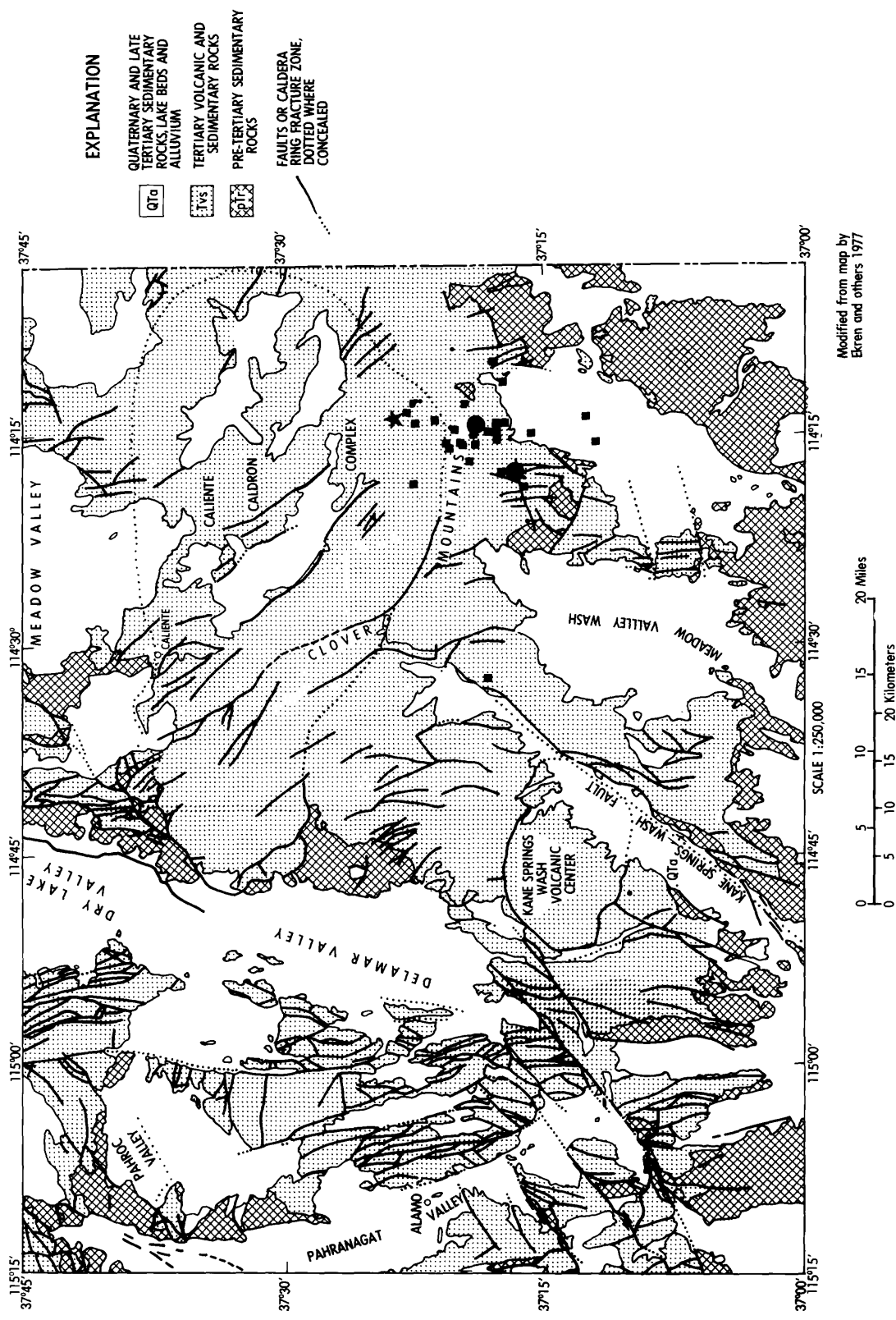
Although Yucca Mountain and a large area to the west and south are relatively quiet seismically, data in this report together with the historic record of seismicity in this region, add to the increasing body of evidence suggesting that north- to northeast-trending faults are the most seismogenic in this region. The age of the last surface movement of a fault does not necessarily correlate with the degree of present seismicity on it, as indicated by the abundant seismicity on faults with no record of Quaternary displacement. Thus, a preliminary conclusion could be made that the north-trending faults at Yucca Mountain should be considered potentially active even though geologic evidence and present near absence of seismicity indicate they are not active. The length of faults at and near Yucca Mountain and the historic record would permit a M 6-7 (Mark and Bonilla, 1977) earthquake there. Two earthquakes of about M 6 have occurred within the east-west seismic belt at Death Valley in 1908 (Richter, 1958) (110 km southwest of the site) and near the Nevada-Utah border in 1966 (Beck, 1970) (210 km northeast of the site).

We relocated the 1966 earthquake series by employing the joint epicenter method (Dewey and Spence, 1979), using a regional traveltime model. The main

shock ( $M = 6.1$ , USGS) was followed by an extensive aftershock series (fig. 15) in a single zone with a north-northeast orientation, as opposed to the finding of two active patches of aftershocks well-removed from the cluster of aftershocks surrounding the main shock (Beck, 1970). The focal mechanism of the 1966 main shock indicates nearly pure strike slip on either a vertical north-northeast-striking fault (right-lateral) or a nearly vertical east-southeast-trending fault (left-lateral) (Smith and Lindh, 1978). Although little is known of the geology in the epicentral region, transcurrent northeast-trending faults do occur there together with north-trending faults (Ekren and others, 1977). Because of the orientation of the 1966 aftershock zone and the existence in this region of north-trending faults, we conclude that the most likely faulting for the 1966 main shock was nearly pure right-lateral strike slip on a vertical north-northeast-trending fault.

In some respects the evidence for seismic hazard from the geologic record is in conflict with that from the seismic record. From the seismic evidence we must conclude that any faults of north to northeast trend are potentially active in the current stress field, whereas, the geologic data suggest that faults of this orientation, such as those at Yucca Mountain, have not had large ( $>1$  m) surface displacement in the last 500,000 years, and have had no surface displacement in the last 40,000 years. That such disparities in fault activity are possible is the conclusion of studies in the northern Great Basin as well (Wallace, 1978). Even in active zones, areas exist that have been stable for hundreds of thousands of years. Until more is known about why areas are stable or unstable in the same region, however, it is not possible to rule out significant future seismic activity on faults at Yucca Mountain. This position is taken partly because (1) stress measurements at Yucca Mountain indicate that faults there may be near failure (Healy and others, 1982), and (2) faults of orientation and style similar to those at Yucca Mountain exist on Pahute Mesa, where extensive stress release has occurred after nuclear tests on faults approaching 10 km in length. Although movement on these faults was induced by nuclear explosions, the extent of faulting, the size of fault displacements, and the magnitude and depths of accompanying aftershocks indicate that these faults were tectonically stressed near the failure point, with slip being triggered by additional stresses produced by the nuclear explosions.

It should be noted that stress data alone cannot be used to conclude that earthquakes are likely in a given area. Important factors in rock failure along faults are the coefficient of friction and pore pressure. The former is derived from laboratory measurements, the latter assumes a hydrostatic condition due to the thickness of the saturated zone. Furthermore, the conditions required for a large earthquake to occur are (1) shear stresses approaching that required for failure over a large area of a fault zone, and (2) significant displacement at the time of failure. Alternatively, stresses could be relieved aseismically by fault creep, or in a series of numerous very small events. Abundant evidence suggests that scarps in the Great Basin are produced by large earthquakes, not creep (Bucknam and others, 1980; Crone, 1983), and there is very little evidence that creep is a significant mode of stress release in the Great Basin (R. C. Bucknam, oral commun., 1983). For instance, significant creep events on any of the numerous faults that are crossed by cultural features would be easily noted. Some Basin and Range



GENERALIZED GEOLOGIC MAP OF THE CLOVER MOUNTAIN-PAHRANAGAT-PAHROC REGION, SOUTHEASTERN LINCOLN COUNTY, NEVADA

Figure 15.—Locations of the 1966 earthquake series in southeastern Nevada in relation to the geological structures mapped by Ekren and others (1977). Main shock is shown by star and two aftershocks of  $M > 5$  are shown by large filled circles. Symbols showing locations of the smaller aftershocks are based on the length of the semimajor axis,  $a$ , of the joint hypocenter confidence ellipse on the computed coordinates (Dewey and Spence, 1979), for each event: ■ for  $a < 12$  km, and • for  $a \geq 12$  km.

scarps are inferred to have resulted from historic earthquakes as large as M 8. Taken together, the stress data, the historic seismicity, and the indication from current seismicity that fault activity is more dependent on fault orientation than fault age suggest that the potential for significant seismicity on Yucca Mountain faults should be considered.

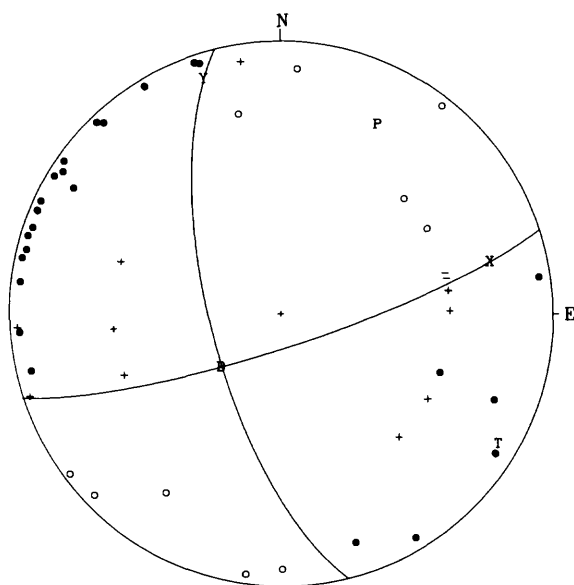
Earthquakes in the southern Great Basin occur at depths as much as 10 km, but no spatial coherence has yet been observed in the focal depths, with each active zone generally displaying the full range of depths for the best located events. As yet, no evidence has been obtained that earthquakes in this region are occurring on listric faults, with decreasing dip as depth increases. We therefore conclude that earthquakes are occurring on faults of significant vertical extent, suggesting the potential for the occurrence of a large earthquake.

Inactivity on the northwest-trending Death Valley-Furnace Creek zone (figs. 1 and 2) is a paradox in the sense that, although quiescence would be predicted there based on the current southern Great Basin stress orientation, the existence of numerous Holocene scarps on these faults indicates this fault zone is active (Hunt and Mabey, 1966; G. E. Brogan, written commun., 1979). Geologic evidence, then, suggests that the stress orientation in the Death Valley region is rotated in such a fashion to be more favorable to the formation of the observed scarps. A stress orientation more like that in the San Andreas region than that in the southern Great Basin is required, further suggesting that quiescence on the Death Valley-Furnace Creek fault zone is due to relatively recent stress release there. The zone could be compared to that section of the San Andreas fault zone that ruptured in 1857, but is presently quiescent. Although no direct evidence from this study has been obtained to support rotation of the stress field in Death Valley, Zoback and Zoback (1980) examined a large body of data and concluded that a more east-west least principal stress was likely in this region, although they placed the province border farther to the west. The Walter and Weaver (1980) study of the Coso volcanic field, 80 km west of Death Valley, also suggests that a change in the stress field orientation occurs between the San Andreas and NTS. The Coso field earthquakes exhibit right-lateral strike slip on northwest-trending faults and normal faulting on north-striking faults. Because the geologic evidence suggests that this stress orientation may extend to the Death Valley-Furnace Creek region, a stress rotation is inferred to occur over a short distance between Death Valley and NTS.

#### SUMMARY

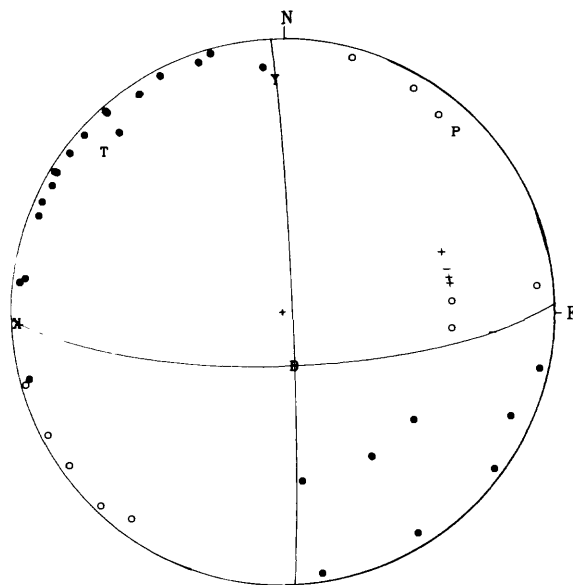
1. Over 1,600 earthquakes have been located within the network from 1979 to mid-1982; magnitudes ranged between 0 and about 4. The occurrence of earthquakes is widespread in the SGB, confirming the existence of the "east-west" seismic belt, first noted in the historical record, that connects the Intermountain and Nevada seismic zones.
2. The pattern of seismicity is characterized by a diffuse background level of earthquakes, punctuated by several zones of more compact and intense activity. Some of these concentrations of earthquakes have occurred as foreshock-main shock-aftershock series ( $M_L \sim 4$  main shocks), and others have had no distinguishing event.





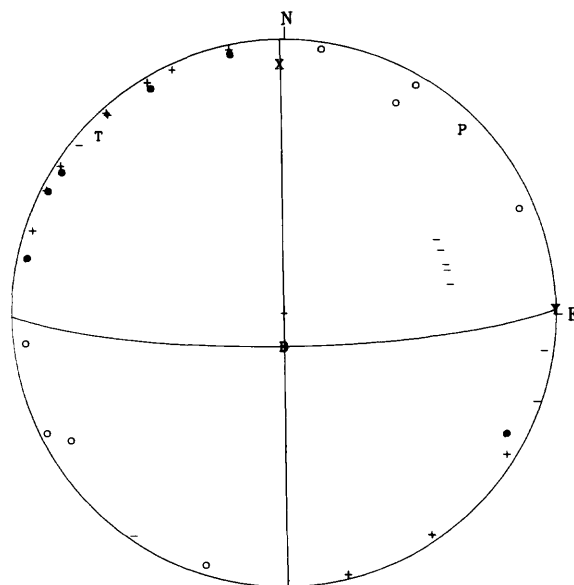
DATE/TIME: 81/01/23 4:41:12  
 LAT: 37.148 N LONG: 117.387 W  
 DEPTH, km: 10.2 MI: 4.0  
 COMMENT: Gold Mountain

	azi	plunge
P axis	27.2	22.6
T axis	120.8	7.9
B axis	228.7	65.9
X axis	76.0	21.6
Y axis	342.0	10.0



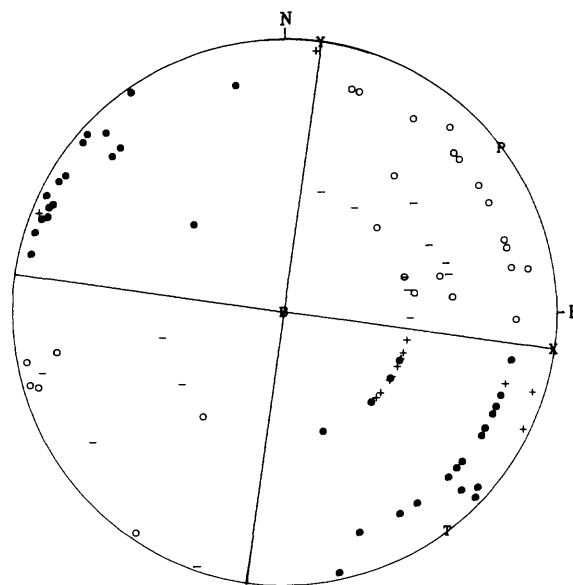
DATE/TIME: 79/12/25 14:17:11.8  
 LAT: 37.288 N LONG: 117.062 W  
 DEPTH, km: 8.09 MI: 4.1  
 COMMENT: Sarcobatus Flat

	azi	plunge
P axis	43.7	9.2
T axis	311.5	13.3
B axis	167.2	73.7
X axis	267.2	2.9
Y axis	358.0	16.0



DATE/TIME: 81/03/10 23:27:56  
 LAT: 37.155 N LONG: 118.917 W  
 DEPTH, km: 6.59 MI: 3.4  
 COMMENT: Sarcobatus Flat

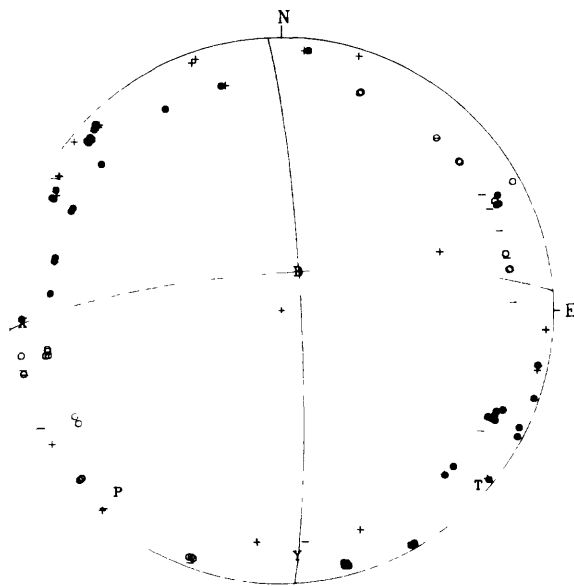
	azi	plunge
P axis	44.4	7.1
T axis	313.6	7.1
B axis	179.0	80.0
X axis	359.0	10.0
Y axis	89.0	0.0



DATE/TIME: 81/10/15 04:21:09  
 LAT: 37.055 N LONG: 118.955 W  
 DEPTH, km: 9.24 MI: 4.0  
 COMMENT: Sarcobatus Flat Composite w/  
 81/11/19 21:40:53 z=2.80 MI=3.6  
 81/12/03 03:38:49 z=8.05 MI=2.5

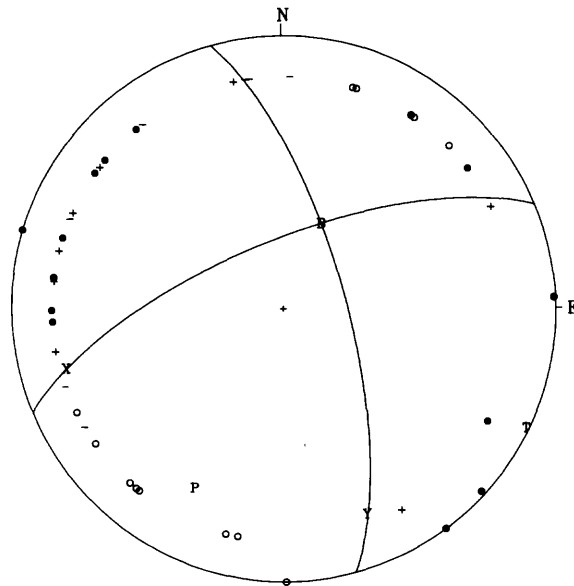
	azi	plunge
P axis	53.0	0.0
T axis	143.0	0.0
B axis	0.0	90.0
X axis	98.0	0.0
Y axis	8.0	0.0

Figure 16.--Lower hemisphere focal mechanism data for mechanisms shown in figures 8-12. Solid dots are compressions and open circles are dilatations.



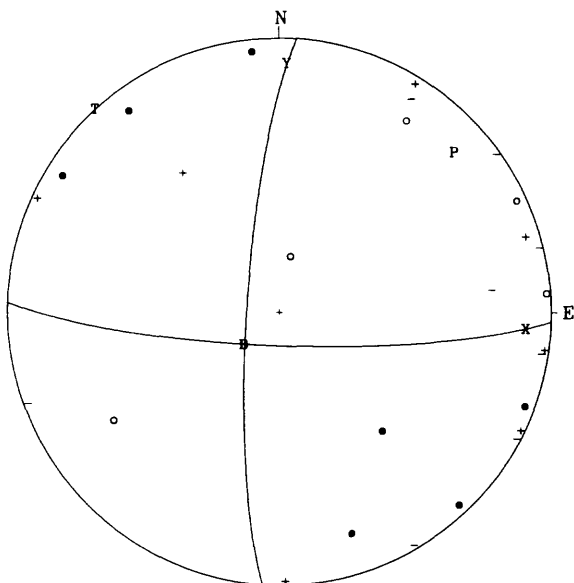
DATE/TIME: 79/08/17 14:53:07  
 LAT: 37.185 N LONG: 116.570 W  
 DEPTH, km: 6.28 MI: 2.9  
 COMMENT: Thirsty Canyon Composite w/  
 79/08/13 8:30:08 z=3.0 MI=2.6  
 79/08/13 23:26:24 z=6.46 MI=2.7  
 79/08/14 3:53:20 z=6.84 MI=2.2  
 79/08/14 11:39:51 z=1.91 MI=2.7  
 79/08/14 11:45:12 z=0.89 MI=2.1  
 79/08/17 2:37:37 z=7.26 MI=2.5

	azi	plunge
P axis	222.0	12.0
T axis	131.2	3.6
B axis	24.8	77.5
X axis	267.1	5.9
Y axis	176.0	11.0



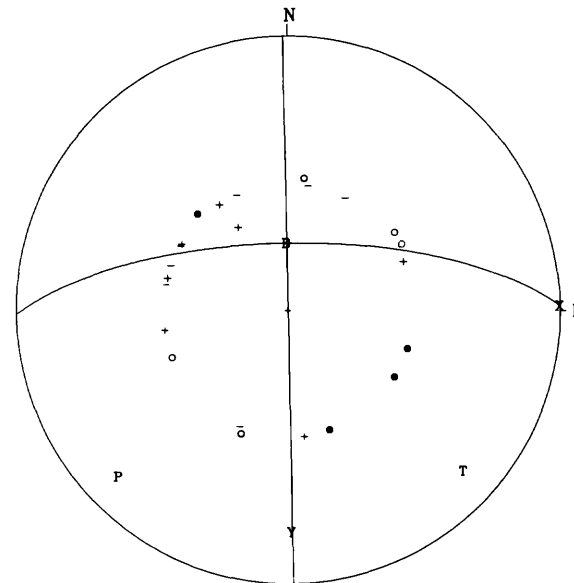
DATE/TIME: 80/04/02 16:20:41.4  
 LAT: 38.880 N LONG: 115.961 W  
 DEPTH, km: 1.38 MI: 3.4  
 COMMENT: Frenchman Flat (S. NTS)

	azi	plunge
P axis	206.8	26.0
T axis	118.4	0.8
B axis	24.6	62.0
X axis	255.1	18.7
Y axis	158.0	20.0



DATE/TIME: 80/04/23 04:08:40.3  
 LAT: 38.874 N LONG: 116.182 W  
 DEPTH, km: 8.65 MI: 2.3  
 COMMENT: Lookout Peak (S. NTS)

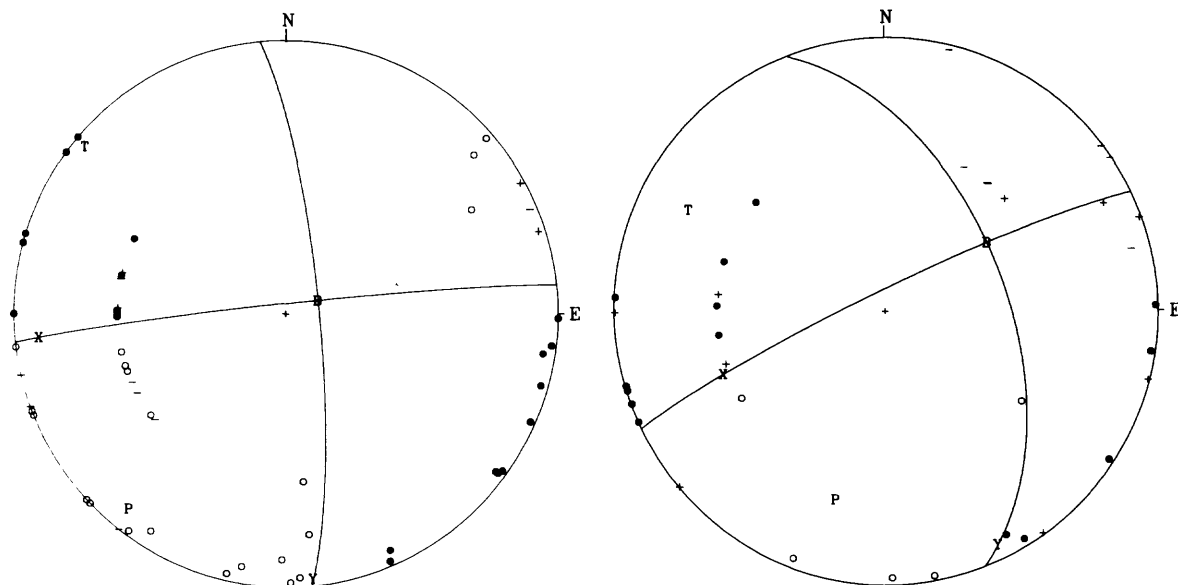
	azi	plunge
P axis	47.9	14.1
T axis	317.9	0.1
B axis	227.4	75.9
X axis	93.8	9.8
Y axis	2.0	10.0



DATE/TIME: 80/05/10 11:03:32.5  
 LAT: 36.811 N LONG: 116.267 W  
 DEPTH, km: 0.81 MI: 2.2  
 COMMENT: Jackass Flats (S. NTS)

	azi	plunge
P axis	225.8	14.0
T axis	132.2	14.0
B axis	358.0	70.0
X axis	89.0	0.0
Y axis	179.0	20.0

Figure 17.--Lower hemisphere focal mechanism data for mechanisms shown in figures 8-12. Solid dots are compressions and open circles are dilatations.

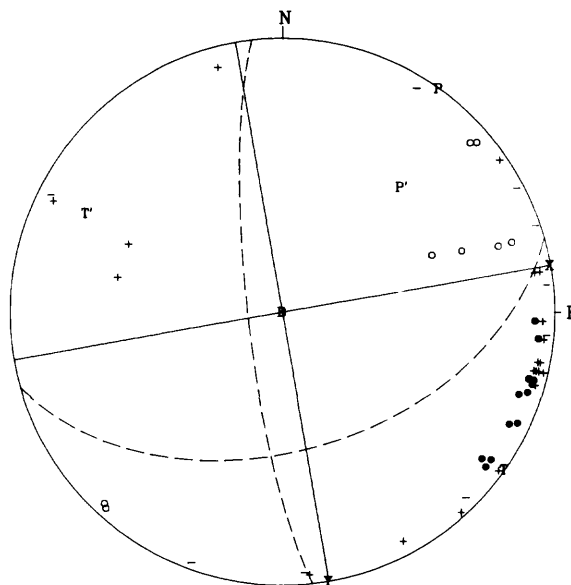


DATE/TIME: 790813 18:23:38  
 LAT: 37.238 N LONG: 115.029 W  
 DEPTH, km: 7.63 MI: 4.1  
 COMMENT: Pahrnanagat S.Z Composite w/  
 790814 03:03:15 z=4.66 MI=4.0

	azi	plunge
P axis	218.9	9.2
T axis	309.7	4.9
B axis	67.5	79.6
X axis	264.5	10.0
Y axis	174.0	3.0

DATE/TIME: 81/12/28 22:45:42  
 LAT: 37.222 N LONG: 114.928 W  
 DEPTH, km: 5.27 MI: 4.0  
 COMMENT: Pahrnan.S.Z.; felt at Alamo

	azi	plunge
P axis	195.2	29.8
T axis	297.3	20.2
B axis	56.5	53.0
X axis	248.9	38.4
Y axis	154.5	6.0



DATE/TIME: 81/12/26 17:29:44 •  
 LAT: 38.725 N LONG: 115.708 W  
 DEPTH, km: 8.84 MI: 2.9  
 COMMENT: Indian Springs Composite w/  
 81/12/23 00:32:19 z=7.15 MI=2.2

	azi	plunge
P axis	43.1	36.9
T axis	297.0	20.2
B axis	184.4	48.1
X axis	83.5	10.4
Y axis	344.0	42.0

Figure 18.--Local hemisphere focal mechanism data for mechanisms shown in figures 8-12. Solid dots are compressions and open circles are dilatations.

3. The most seismically active areas occur in regions of major Tertiary northeast-trending left-lateral shear. Three important zones in this category are the Pahrnagat, southern NTS, and Gold Mountain shear zones. Although some earthquakes are probably occurring on the northeast-trending faults, the larger earthquakes in these zones, for which focal mechanisms are available, have occurred on shorter intervening fault segments with a north strike.
4. Seismicity also occurs in north-trending faults zones. These earthquakes occur on or near segments of north-trending faults such as the Thirsty Canyon fault, Yucca fault, and Pahute Mesa faults (north-northeast trending) or are visible as north-trending epicenter lineations such as at Indian Springs Valley and Sarcobatus Flat.
5. Yucca Mountain lies within a broad zone of low-level seismicity extending on the west to the Funeral Mountains, on the south to the Black Mountains and Nopah Range. Another region of relative quiescence extends from near Gold Flat to Tonopah.
6. Focal mechanisms, epicenter lineations, and epicenter-fault associations indicate that earthquakes occur principally as right-lateral strike-slip events on north-trending faults. A focal mechanism for an  $M \sim 6$  earthquake near the Nevada-Utah border in 1966 also indicated strike slip on a north-northeast-trending fault. Two  $M 4$  earthquakes in 1971 and 1973 in southeast NTS were strike slip. Artificially induced earthquakes at Pahute Mesa and Lake Mead are either strike slip on north-trending faults or normal faulting on northeast-striking faults, indicating the likelihood that the northeast-trending faults are also active or potentially active.
7. A least principal stress with northwest orientation, and a greatest and intermediate principal stress of about equal magnitude are implied by the results to date. With this stress configuration faults of northwest orientation are less likely to produce earthquakes, a result that is supported by the current and historic seismicity, and by scarcity of northwest-striking Quaternary fault scarps east of Death Valley. The Death Valley-Furnace Creek, La Madre, and Las Vegas Valley shear zones are not presently producing earthquakes, although the presence of Holocene scarps on the Death Valley-Furnace Creek zone suggest that present quiescence there may be due to causes other than fault orientation.
8. From the historical seismicity of the southern Great Basin (two earthquakes of  $M \sim 6$ ), and length of active faults, a maximum magnitude of  $M 6-7$  is inferred for the SGB. Earthquake depths range between 0 and about 10 km; very few well-located events are deeper than 10 km. This observation suggests that faults of significant width are active in the SGB and supports the conclusion that a large earthquake is possible.
9. The only earthquake that has been located at Yucca Mountain in about 1 year of intensive monitoring has a magnitude of about 1.7. Faults there do not exhibit evidence of significant movement in at least the last 500,000 years, although their trend would permit slip in the present-day stress field similar to that resulting from historic and present-day seismicity on other north-to-northeast-trending faults in the SGB.

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## **APPENDIX A**

Station codes, locations, instrumentation, and polarity reversals



STATION CODE							
CODE	STATION	PERIOD OF OPERATION (DAY/MONTH/YEAR)	LATITUDE (DEG MINUTES)	LONGITUDE (DEG MINUTES)	ELEVATION (METERS)	SEISMOMETER MODEL	GAIN (DB)
AMR	Amargosa, Cal	24/07/78-present	36 23 86 N	116 28 45 W	720	L-4C	84
APK	Angels Peak, Nev	15/06/75-present*	36 19 17 N	115 34 46 W	2680	S-13 to 21/3/81 L-4C 21/3/81-pr	84
BGB	Big Butte, Nev	23/01/79-present	37 02 27 N	116 13 66 W	1720	L-4C	84
BLT	Belted Range, Nev	30/05/79-present	37 28 93 N	116 07 35 W	1820	L-4C	84
BMT	Black Mountain, Nev	26/02/80-present	37 17 02 N	116 38 74 W	2191	L-4C	84
BRD	Bare Mountain, Nev	28/11/78-08/04/81	36 45 76 N	116 37 52 W	920	L-4C	84
CDHI	Calico Hills, Nev	01/02/80-present*	36 51 62 N	116 19 05 W	1387	L-1-3DS (vert )	90
CDHS	Calico Hills, Nev	01/02/80-18/11/81	36 51 62 N	116 19 05 W	1055	L-1-3DS (horiz )	108
CPX	CP-1, Nev	--/--/77-01/03/80*	36 55 80 N	116 03 33 W	1285	NCC-21 to 5/8/80 L-4C 5/8/80-pr	84
CPS	Cactus Peak, Nev	24/04/79-present	37 39 40 N	116 43 54 W	1890	L-4C	84
DLM	Delamar Mountains, Nev	08/06/78-present*	37 36 35 N	114 44 33 W	1730	L-4C	84
EPN	Echo Peak, Nev	02/09/75-present	37 12 85 N	116 19 42 W	2285	S-13 to 25/4/80 L-4C 25/4/80 pr	84
EPR	East Pahrnagat Rg, Nev	23/01/79-present*	37 10 12 N	115 11 19 W	1300	L-4C	84
FMT	Funeral Mountains, Cal	28/11/78-present	36 38 38 N	116 46 73 W	1025	L-4C	84
GLR	Groom Lake Road, Nev	20/11/75-present*	37 11 96 N	116 01 06 W	1435	L-4C	84
GMN	Gold Mountain, Nev	13/07/79-present*	37 18 01 N	117 15 58 W	2155	L-4C	84
GMR	Groom Range, Nev	23/01/79-present	37 20 03 N	115 46 27 W	1580	L-4C	84
GVN	Grapevine, Cal	28/11/78-present	37 00 09 N	117 20 55 W	865	L-4C	84
GWV	Greenwater Valley, Cal	24/07/78-present	36 11 20 N	116 40 24 W	1540	L-4C	84
HCR	Hot Creek Range, Nev	21/07/81-present	38 14 02 N	116 26 18 W	2030	L-4C	84
JDN	Johnnie, Nev	24/07/78-present*	36 26 39 N	116 06 18 W	920	L-4C	84
KRN	Kawich Range, Nev	30/05/79-23/04/80	37 42 37 N	116 20 07 W	2570	L-4C	84
KRNA	Kawich Range, Nev	23/04/80-present	37 44 47 N	116 22 80 W	1980	L-4C	84
LCH	Last Chance Range, Cal	13/07/79-present*	37 14 08 N	117 38 84 W	1455	L-4C	84
LEE	Leeds, Utah	01/01/71-01/06/80	37 14 58 N	113 22 60 W	1067	Benioff	
LOP	Lookout Peak, Nev	23/01/79-present	36 51 25 N	116 10 05 W	1695	L-4C	84
LSM	Little Skull Mt , Nev	13/12/79-present	36 44 40 N	116 16 37 W	1140	S-13	84
LSN	Little Skull Mt , Nev	19/02/79-13/12/79	36 45 21 N	116 15 57 W	1070	L-4C	84
MCA	Marble Canyon, Cal	23/01/79-present	36 38 89 N	117 16 85 W	300	L-4C	84
MCX	Mercury, Nev	15/06/77-07/03/80	36 39 37 N	115 59 45 W	1160	S-13	84
MCY	Mercury, Nev	07/03/80-present*	36 39 70 N	115 57 73 W	1285	S-13	84

MGM	Magruder Mountain, Nev	13/07/79-present*	37 26 47 N	117 29 79 W	2100	L-4C	84
MTI	Mount Irish, Nev	08/06/79-present*	37 40 60 N	115 16 36 W	1525	L-4C	84
MZP	Montezuma Peak, Nev	13/07/79-present	37 42 04 N	117 22 98 W	2375	L-4C	84
NEL	Nelson, Nev	01/01/71-01/06/80	35 42 73 N	114 50 62 W	1052	Benioff	
NMN	Nasa Mountain, Nev	28/11/78-present	37 04 85 N	116 49 09 W	1530	L-4C	84
NOP	Nopah Range, Cal	24/07/78-present	36 07 68 N	116 09 16 W	970	L-4C to 25/4/80 S-13 25/4/80-pr	84 84
NPN	North Pahroc Pk, Nev	08/06/79-present*	37 39 16 N	114 56 22 W	1650	L-4C	84
PCE	Panamint Range, Cal	28/11/78-present*	36 20 93 N	117 03 95 W	1850	L-4C	84
PPK	Piper Mountain, Cal	13/07/79-present*	37 25 58 N	117 54 43 W	1830	L-4C	84
PRN	Pahroc Range, Nev	21/01/72-present*	37 24 42 N	115 02 99 W	1470	NGC-21 to 19/6/80 S-13 19/6/80-pr	84 84
QCS	Queen City Summit, Nev	08/06/79-present	37 46 07 N	115 54 98 W	1890	L-4C	84
QSM	Queen of Sheba Mine, Ca	28/11/78-present	35 57 93 N	116 52 10 W	670	L-4C	84
RVE	Reveille Range, Nev	08/06/79-20/07/81	38 01 18 N	116 11 51 W	2290	L-4C	84
SDH	Striped Hills, Nev	24/07/78-present	36 38 73 N	116 20 29 W	1055	L-4C	84
SGV	South Grapevine Mts, Ca	28/11/78-present	36 58 87 N	117 01 94 W	1565	L-4C	84
SHRG	Sheep Range, Nev	22/05/79-present	36 30 27 N	115 09 31 W	1645	L-4C	84
SPRG	Spotted Range, Nev	28/05/79-present	36 41 64 N	115 48 56 W	1235	L-4C	84
SRG	Seaman Range, Nev	08/06/79-present*	37 52 93 N	115 04 08 W	1645	L-4C	84
SSP	Shoshone Peak, Nev	10/10/73-present*	36 55 50 N	116 13 11 W	2065	NGC-21 to 25/5/80 L-4C 27/5/80-pr	84 84
SVP	Silver Peak Range, Nev	13/07/79-present*	37 42 90 N	117 48 05 W	2620	L-4C	84
TMBR	Timber Mt, Nev	19/02/82-present	37 02 05 N	116 23 13 W	1758	L-4C	84
TMD	Tin Mountain, Cal	28/11/78-present	36 48 32 N	117 24 48 W	2195	L-4C	84
TNP	Tonopah, Nev	31/08/64-02/19/82	38 04 92 N	117 13 08 W	1931	Benioff	
TPK	Tolicha Peak, Nev	11/06/79-12/02/80*	37 16 11 N	116 48 26 W	2080	L-4C	84
TPU	Tempiute Mountain, Nev	08/06/79-present*	37 36 30 N	115 38 75 W	1915	L-4C	84
WCT	Wildcat Mountain, Nev	08/04/81-present	36 47 53 N	116 37 60 W	1000	L-4C	84
WRN	Worthington Mts, Nev	08/06/79-present	37 58 90 N	115 35 30 W	1760	L-4C	84
YMT1	Yucca Mountain, Nev	05/03/81-present*	36 51 20 N	116 31 80 W	1200	S-13	84
YMT2	Yucca Mountain, Nev	05/03/81-present*	36 47 12 N	116 29 19 W	1220	S-13	84
YMT3	Yucca Mountain, Nev	05/03/81-present*	36 47 23 N	116 24 79 W	1050	S-13	84
YMT4	Yucca Mountain, Nev	01/04/81-present*	36 50 89 N	116 26 93 W	1256	S-13	72
YMT5	Yucca Mountain, Nev	01/04/81-present*	36 53 90 N	116 27 23 W	1350	S-13	72
YMT6	Yucca Mountain, Nev	01/04/81-present*	36 51 51 N	116 24 26 W	1150	S-13	66

\*INDICATES STATION HAVING POLARITY REVERSAL (SEE FOLLOWING TABLE)

4

\*POLARITY REVERSALS

CODE	STATION	PERIOD OF REVERSE POLARITY <sup>1</sup> (DAY/MONTH/YEAR)	PERIOD OF REVERSE POLARITY <sup>2</sup>
APK	Angels Peak, Nev.	21/3/81 - present	21/3/81 to 31/12/81
CDH1	Calico Hills, Nev.	30/3/81 to 3/8/81; also 1/12/81 to present	30/3/81 to 3/8/81; also 1/12/81-31/12/81
CPX	CP-1, Nev.	5/8/80 to 13/12/80	
DLM	Delamar Mts., Nev.	28/6/79 to 29/8/79	
EPN	Echo Peak, Nev.	1/11/78 to 01/05/80	
EPK	East Pahrnagat Range, Nev.	10/12/79 to 20/2/80	
GLP	Green Lake Road, Nev.	1/11/78 to 22/2/79	
GMN	Gold Mountain, Nev.	28/6/79 to 29/8/79; also 5/8/80 to 17/12/80	
JON	Johnnie, Nev.	1/11/78 to 22/2/79	
LCH	Last Chance Range, Nev.	28/6/79 to 29/8/79	
MCY	Mercury, Nev.	7/3/80 to 5/3/80	
MGH	Magruder Mountain, Nev.	28/6/79 to 29/8/79	
MTI	Mount Irish, Nev.	28/6/79 to 29/8/79	
MZP	Montezuma Peak, Nev.	28/6/79 to 29/8/79	
NPN	North Pahroc Range, Nev.	28/6/79 to 29/8/79	
PPK	Piper Mountain, Cal.	28/6/79 to 29/8/79	
PRN	Pahroc Range, Nev.	10/12/79 to 20/2/80	
QCS	Queen City Summit, Nev.	28/6/79 to 29/8/79	
QSM	Queen of Sheba Mine, Nev.	28/6/79 to 29/8/79	
RVE	Reveille Range, Nev.	28/6/79 to 29/8/79	
SRG	Seaman Range, Nev.	28/6/79 to 29/8/79	
SSP	Shoshone Peak, Nev.	28/6/79 to 01/06/80	
SvP	Silver Peak Range, Nev.	28/6/79 to 29/8/79	
TPK	Tolicha Peak, Nev.	11/06/79 to 29/8/79	
TPU	Tempiute Mountain, Nev.	28/6/79 to 29/8/79	
WRN	Worthington Mts., Nev.	28/6/79 to 29/8/79	
YMT1	Yucca Mountain, Nev.	05/03/81 to present	05/03/81 - 01/10/81
YMT2	Yucca Mountain, Nev.	05/03/81 to present	05/03/81 - 23/11/81
YMT3	Yucca Mountain, Nev.	05/03/81 to present	05/03/81 - 01/10/81
YMT3	Yucca Mountain, Nev.	05/03/81 to present	05/03/81 - 01/10/81
YMT4	Yucca Mountain, Nev.	01/04/81 to present	01/04/81 - 01/11/81
YMT5	Yucca Mountain, Nev.	01/04/81 to present	01/04/81 - 23/11/81
YMT6	Yucca Mountain, Nev.	01/04/81 to present	01/04/81 - 01/10/81

<sup>1</sup>Pertains to developer films.

<sup>2</sup>Pertains to data reported in this bulletin.

## **APPENDIX B**

Input parameters to HYPO 71

HYPOCENTER PARAMETERS FOR LOCAL EVENTS ARE COMPUTED BY  
 THE COMPUTER PROGRAM HYPO71 (LEE AND LAHR, 1975),  
 MODIFIED TO COMPUTE RAY-PATH TIMES TO THE ACTUAL STATION ELEVATIONS.  
 THE CRUSTAL MODEL EMPLOYED IN THE 1981 DATA REPORT IS:

DEPTH TO TOP OF LAYER (KM),      P-WAVE VELOCITY (KM/SEC)  
 FROM SEA LEVEL ( 0.0 KM)

STATION ELEVATION	3.8
1.0	5.9
3.0	6.15
24.0	6.9
32.0	7.8

VALUES OF TEST VARIABLES EMPLOYED IN HYPO71 ARE:

TEST(1) = 0.1 SEC	TEST(5) = 5. KM	TEST (9) = 0.0035
TEST(2) = 30.0 KM	TEST(6) = 1.0	TEST(10) = 100. KM
TEST(3) = 0.5	TEST(7) = -0.87	TEST(11) = 8.
TEST(4) = 0.05 KM	TEST(8) = 2.00	TEST(12) = 0.5
		TEST(13) = 1. KM

PERTINENT CONTROL CARD OPTIONS ARE:

ZTR = 5.0 KM

XNEAR = 10 KM

XFAR = 220 KM

POS = 1.71 (P TO S VELOCITY RATIO)

\* \*

EXPLANATION OF HYPOCENTER SOLUTION COLUMN HEADINGS

DATE - DAY, MONTH, AND YEAR IN COORDINATED UNIVERSAL TIME (UTC)

STA - STATION CODE

PHASE - PHASE IDENTIFICATION

I OR E INDICATES THE CHARACTER OF PHASE ARRIVAL

(I = IMPULSIVE, E = EMERGENT)

TIME - ARRIVAL TIME OF PHASE IN HOURS, MINUTES, AND SECONDS (COORDINATED  
UNIVERSAL TIME)

AMP - PEAK VOLTAGE RESPONSE OF SEISMOMETER SYSTEM TO MAXIMUM SURFACE-  
WAVE AMPLITUDE, IN DIGITAL COUNTS. 2048 COUNTS REPRESENTS  
A 5 VOLT RESPONSE. NOT USED IN THIS BULLETIN.

PER - PERIOD OF PHASE, IN HUNDREDTH'S OF A SECOND

XMAg - STATION MAGNITUDE COMPUTED BY THE METHOD OF EATON, O'NEILL,  
AND MURDOCK (1970), NOT USED IN THIS BULLETIN.

DUR - DURATION, IN SECONDS, OF CODA OF WAVE TRAIN  
FROM A LOCAL EVENT

FMAg - STATION MAGNITUDE COMPUTED BY THE METHOD OF LEE, BENNETT,  
AND MEAGHER (1972)

$$FMAg = -0.87 + 2.0 * \log(DUR) + .0035 * DIST$$

EMPLOYING PRELIMINARY VALUES OF CONSTANTS DETERMINED BY  
LEE, BENNETT, and MEAGHER (1972)

DIST - GREAT CIRCLE DISTANCE TO EVENT, IN KILOMETERS

AZI - STATION-TO-EPICENTER AZIMUTH TAKEN CLOCKWISE  
FROM NORTH, IN DEGREES

AIN - ANGLE OF INCIDENCE TO DOWNWARD VERTICAL, IN DEGREES

TOBS - OBSERVED TRAVEL-TIME (O), IN SECONDS

TCAL - CALCULATED TRAVEL-TIME (C), IN SECONDS

RES - PHASE TRAVEL-TIME RESIDUAL, IN SECONDS (O-C)

REMARKS- DESCRIPTIVE INFORMATION.

# EXPLANATION OF PHASE READING COLUMN HEADINGS

HYPOCENTERS ARE LISTED IN CHRONOLOGICAL ORDER.

HYPOCENTER INFORMATION IS ARRANGED AS FOLLOWS:

```

.....
. DATE ORIGIN TIME RMS NO MB TYPE OF SOLUTION .
. LATITUDE ERX ERH M L .
. LONGITUDE ERY GAP AVFM GS GEOGRAPHIC LOCATION.
. DEPTH ERZ NM AVXM LD .
.....
. PHASE DATA .
. . . . .
. . . . .
.....
    
```

## EXPLANATION OF HYPOCENTER SOLUTION VARIABLE NAMES

RMS = ROOT-MEAN-SQUARE OF TRAVEL-TIME RESIDUALS, IN SECONDS

ERX = STANDARD ERROR IN LATITUDE, IN KILOMETERS

ERY = STANDARD ERROR IN LONGITUDE, IN KILOMETERS

ERZ = STANDARD ERROR IN DEPTH, IN KILOMETERS

NO = NUMBER OF STATION READINGS

ERH = STANDARD ERROR OF EPICENTER, IN KILOMETERS;  
HYPO71 NOTATION (LEE AND LAHR, 1975)

GAP = LARGEST AZIMUTHAL SEPARATION BETWEEN STATIONS, IN DEGREES

MB = AVERAGE BODY-WAVE MAGNITUDE, FROM TELESEISMIC P-WAVE  
AMPLITUDES OR FROM PG PHASE AMPLITUDES

M = AVERAGE SURFACE-WAVE MAGNITUDE (MS) IF EVENT IS A TELESEISM;  
M IS LOCAL MAGNITUDE (ML) OTHERWISE

AVFM = AVERAGE MAGNITUDE COMPUTED BY THE METHOD OF LEE, BENNETT, AND  
MEAGHER (1972)

NM = NUMBER OF STATION READINGS USED FOR COMPUTING AVXM

AVXM = AVERAGE MAGNITUDE COMPUTED BY THE METHOD OF EATON, O'NEILL, AND  
KORDECK (1970)

Q = SOLUTION QUALITY OF HYPOCENTER

Q IS THE AVERAGE OF QS AND QD, WHERE:

QS = STATISTICAL RATING OF SOLUTION

QD = STATISTICAL RATING OF STATION DISTRIBUTION

# QUALITY RATINGS:

Q	EPICENTER	FOCAL DEPTH
-	-----	-----
A	EXCELLENT	GOOD
B	GOOD	FAIR
C	FAIR	POOR
D	POOR	POOR

QS	KMS	EPH	ERZ
--	---	---	---
A	<0.15	<1.0	<2.0
B	<0.30	<2.5	<5.0
C	<0.50	<5.0	
D	OTHERS		

QD	QD	GAP	DEPR (ERROR IN DEPTH)
--	--	---	----
A	>6	< 90	<DEPTH OR 5 KM
B	>6	<135	<2*DEPTH OR 10 KM
C	>6	<180	< 50 KM
D	OTHERS		

## EXPLANATION OF HYPOCENTER SUMMARY NOTATION

F = DEPTH WAS ALLOWED TO GO FREE OR REMAINED AT THE STARTING DEPTH (15 KM)

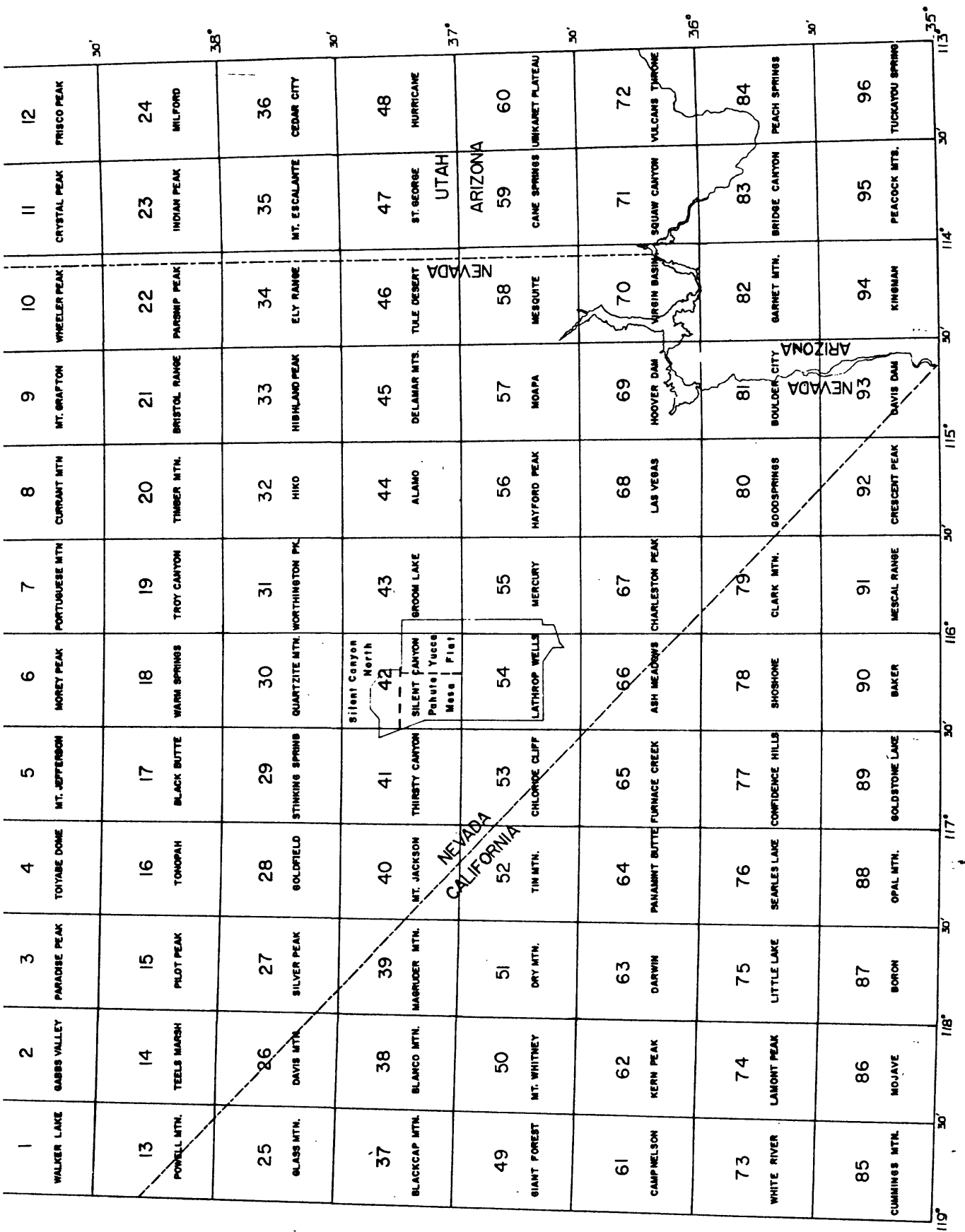
D = DEPTH WAS HELD AT A FIXED DEPTH

B = BLAST; DEPTH IS AT OR NEAR 0 KILOMETERS



## **APPENDIX C**

Input 1981 hypocenters summary



JAN	03	6	3	57.38	36.71 N	115.50 W	2.4 F	2.0	MERCURY
	03	16	19	36.22	37.82 N	115.29 W	2.1 F	3.9	Hiko
	03	18	4	52.45	36.70 N	115.69 W	0.9 F	2.5	MERCURY
	04	7	2	40.67	37.81 N	115.26 W	0.8 F	2.7	Hiko
	04	11	30	52.29	37.82 N	115.29 W	0.1 F	2.4	Hiko
	05	0	34	1.70	36.45 N	116.52 W	0.2 F	3.1	FURNACE CREEK
	05	0	38	14.36	36.44 N	116.54 W	5.1 F	2.0	FURNACE CREEK
	05	11	57	22.55	37.15 N	116.76 W	5.1 F	2.8	THIRSTY CANYON
	06	2	21	4.33	37.31 N	116.37 W	1.4 F	2.5	SILENT CANYON - NORTH
	06	6	8	25.57	37.16 N	116.94 W	5.0 D	2.7	THIRSTY CANYON
	06	20	49	46.10	38.37 N	117.28 W	3.8 F	3.6	TONUPAH
	09	5	26	34.65	36.10 N	117.80 W	0.1 F	2.6	DARWIN
	09	22	29	50.30	36.77 N	116.29 W	0.9 F	1.7	LATHROP WELLS
	10	5	29	20.61	37.54 N	118.03 W	7.0 D	3.5	SILVER PEAK
	12	17	16	27.16	36.33 N	114.53 W	5.0 D	3.8	HOOVER DAM
	16	0	14	40.46	37.24 N	115.02 W	8.1 F	4.0	ALAMO
	23	4	41	12.07	37.15 N	117.39 W	10.2 F	4.0	MT. JACKSON
	28	1	5	22.00	37.15 N	117.39 W	8.5 F	2.8	MT. JACKSON
	28	6	55	57.97	37.15 N	117.39 W	5.6 F	2.8	MT. JACKSON
FEB	08	8	21	21.39	36.47 N	115.18 W	1.0 F	3.1	LAS VEGAS
	12	0	39	13.70	38.32 N	117.25 W	5.0 D	3.1	TONUPAH
	13	18	0	0.70	36.97 N	116.19 W	1.0 F	2.8	LATHROP WELLS
	15	20	8	46.49	38.34 N	117.27 W	5.1 F	3.2	TONUPAH
	16	20	12	22.04	36.41 N	114.47 W	5.5 F	3.4	
	22	14	46	57.51	36.12 N	114.93 W	0.1 F	3.1	HOOVER DAM
	22	18	37	1.89	35.81 N	114.83 W	0.7 F	3.2	BOULDER CITY
	26	22	21	8.12	36.54 N	115.13 W	1.0 F	3.0	HAYFORD PEAK
	28	3	23	54.20	37.19 N	114.78 W	0.2 F	3.2	DELAMAR MOUNTAINS
MAR	02	15	28	24.04	37.19 N	117.85 W	5.3 F	2.8	MAGRUDER MOUNTAIN
	03	23	14	32.30	37.27 N	115.05 W	5.5 F	3.0	ALAMO
	05	19	41	52.17	36.53 N	116.36 W	1.9 F	2.6	LATHROP WELLS

## LOCAL HYPOCENTER SUMMARY

MAR 10	23 27	56.08	37.15 N	116.92 W	6.6 F	3.4	THIRSTY CANYON
14	1 9	5.15	36.53 N	116.37 W	3.0 F	2.5	LATHROP WELLS
16	13 10	59.08	36.53 N	115.57 W	2.3 F	3.6	MERCURY
28	23 11	16.23	37.08 N	116.17 W	4.9 F	2.7	SILENT CANYON - YUCCA FLAT
29	11 19	44.63	36.54 N	117.97 W	0.1 F	3.0	DRY MOUNTAIN
APR 02	19 40	2.30	38.32 N	117.29 W	3.0 F	3.5	TONOPAH
03	0 53	43.34	38.27 N	117.23 W	2.4 F	3.1	TONOPAH
03	10 43	58.75	37.57 N	116.46 W	3.0 F	2.7	QUARTZITE MOUNTAIN
05	16 34	17.19	36.04 N	117.75 W	0.3 F	3.2	DAKWIN
06	18 19	47.02	36.44 N	114.48 W	0.3 F	3.5	
07	23 3	28.07	37.16 N	116.92 W	0.9 F	3.1	THIRSTY CANYON
08	4 38	31.89	37.15 N	116.91 W	6.4 F	3.0	THIRSTY CANYON
08	4 44	52.79	37.15 N	116.91 W	6.5 F	3.2	THIRSTY CANYON
09	13 36	5.56	36.82 N	116.27 W	5.7 F	2.0	LATHROP WELLS
09	23 44	35.81	37.06 N	116.05 W	0.1 F	2.8	SILENT CANYON - YUCCA FLAT
10	11 56	58.45	36.92 N	116.12 W	0.9 F	2.2	LATHROP WELLS
11	1 37	47.59	36.53 N	116.38 W	1.4 F	2.7	LATHROP WELLS
12	5 33	8.66	36.60 N	116.04 W	5.2 F	2.4	LATHROP WELLS
12	8 15	23.70	36.77 N	116.23 W	0.5 F	2.9	LATHROP WELLS
13	20 21	27.80	36.90 N	116.46 W	4.2 F	1.7	YUCCA MOUNTAIN

LOCAL HYPOCENTER SUMMARY

17	1 23	48.06	37.58 N	115.64 W	0.4 F	3.3	WORTHINGTON PEAK
17	1 42	9.66	36.53 N	116.37 W	0.6 F	2.6	LATHROP WELLS
17	2 15	25.14	37.61 N	115.63 W	1.0 F	2.8	WORTHINGTON PEAK
17	5 31	1.04	37.15 N	117.38 W	11.7 F	1.7	MT. JACKSON
17	8 38	32.82	37.29 N	116.73 W	0.3 F	2.4	THIRSTY CANYON
19	2 3	31.52	37.43 N	115.16 W	0.0 F	2.2	ALAMO
20	12 29	49.50	36.94 N	117.65 W	4.0 F	2.6	DRY MOUNTAIN
20	18 7	23.69	37.66 N	115.65 W	5.0 D	1.8	WORTHINGTON PEAK
21	9 3	9.61	36.70 N	115.81 W	2.6 F	2.0	MERCURY
21	11 10	43.12	37.74 N	115.73 W	7.3 F	2.0	WORTHINGTON PEAK
22	16 2	2.04	37.06 N	117.41 W	5.5 F	3.5	MT. JACKSON
24	16 35	4.67	36.72 N	116.14 W	2.1 F	2.6	LATHROP WELLS
24	16 39	18.62	36.73 N	116.14 W	0.3 F	2.8	LATHROP WELLS
25	15 28	49.40	36.79 N	116.09 W	5.3 F	2.9	LATHROP WELLS
26	20 34	28.80	36.71 N	116.14 W	0.4 F	2.9	LATHROP WELLS
28	19 13	38.80	36.90 N	116.25 W	15.9 F	1.8	LATHROP WELLS
30	16 55	22.51	36.72 N	116.14 W	-0.1 F	1.6	LATHROP WELLS
MAY 02	21 53	42.53	37.12 N	117.34 W	6.4 F	2.7	MT. JACKSON
03	14 47	34.03	37.31 N	117.36 W	2.1 F	2.7	MT. JACKSON
03	15 38	11.39	36.63 N	116.36 W	9.7 F	2.3	LATHROP WELLS
03	16 49	50.07	37.30 N	117.38 W	4.8 F	1.9	MT. JACKSON
03	16 56	41.82	37.30 N	117.37 W	0.9 F	2.3	MT. JACKSON
03	17 6	17.30	37.30 N	117.36 W	0.8 F	3.1	MT. JACKSON
03	17 8	51.95	37.33 N	117.32 W	1.9 F	2.5	MT. JACKSON
03	17 16	59.98	37.31 N	117.35 W	1.6 F	2.3	MT. JACKSON
04	1 29	48.24	36.98 N	115.70 W	3.2 F	2.8	MERCURY
05	7 52	9.28	37.31 N	117.36 W	1.4 F	2.9	MT. JACKSON
05	13 59	5.25	36.37 N	118.13 W	5.0 D	4.1	
05	14 34	52.29	36.39 N	118.07 W	0.3 F	4.0	DARWIN
05	20 9	17.03	37.30 N	117.35 W	1.1 F	2.1	MT. JACKSON
05	20 38	17.24	37.28 N	117.38 W	1.0 F	2.1	MT. JACKSON
07	4 29	58.09	37.12 N	117.34 W	5.0 F	2.5	MT. JACKSON
07	14 48	26.34	37.44 N	117.22 W	0.1 F	2.7	MT. JACKSON
10	17 28	48.43	37.14 N	117.42 W	7.8 F	3.2	MT. JACKSON
12	0 40	55.19	35.94 N	117.33 W	2.2 F	3.1	SEARLES LAKE
12	11 55	3.80	37.14 N	116.60 W	0.4 F	2.5	THIRSTY CANYON

## LOCAL HYPOCENTER SUMMARY

MAY	12	13 20 36.33	37.03 N	117.45 W	1.8 F	3.0	MT. JACKSON
	18	18 46 18.45	36.69 N	116.30 W	-0.2 F	2.0	LATHROP WELLS
	19	12 35 58.46	36.67 N	116.27 W	4.8 F	1.6	LATHROP WELLS
	20	6 50 16.76	36.61 N	115.99 W	9.0 F	2.8	MERCURY
	23	13 34 36.18	36.76 N	116.22 W	7.0 D	1.7	LATHROP WELLS
	23	18 50 22.03	36.16 N	117.85 W	8.9 F	3.9	DARWIN
	25	4 59 20.08	36.10 N	117.94 W	5.9 F	3.8	DARWIN
	25	19 39 1.45	36.17 N	117.77 W	0.3 F	3.5	DARWIN
	28	13 22 53.67	37.12 N	117.29 W	5.2 F	2.7	MT. JACKSON
	29	5 22 54.14	36.66 N	115.70 W	13.2 F	2.1	MERCURY
	29	9 13 16.28	37.15 N	117.40 W	2.2 F	2.8	MT. JACKSON
	29	11 7 54.78	36.65 N	116.33 W	2.5 F	2.1	LATHROP WELLS
	30	6 15 16.30	37.32 N	115.40 W	7.0 F	3.8	ALAMO
	31	2 55 2.51	37.33 N	115.38 W	0.3 F	3.7	ALAMO
JUN	02	0 31 18.83	37.98 N	117.09 W	26.0 F	2.4	GOLDFIELD
	03	13 19 49.92	37.11 N	115.40 W	10.7 F	2.2	ALAMO
	04	3 0 1.88	36.59 N	115.99 W	16.0 F	3.1	MERCURY
	04	11 5 22.89	36.71 N	116.28 W	0.9 F	2.6	LATHROP WELLS
	04	12 53 40.35	37.35 N	115.41 W	0.2 F	3.2	ALAMO
	06	13 5 7.54	36.46 N	116.02 W	0.0 F	2.2	ASH MEADOWS
	06	15 39 57.10	37.19 N	117.24 W	4.0 F	1.7	MT. JACKSON
	07	18 24 0.40	36.65 N	116.29 W	3.6 F	2.0	LATHROP WELLS
	08	14 44 20.04	36.95 N	116.96 W	1.0 F	2.3	CHLORIDE CLIFF
	10	7 31 34.85	36.42 N	117.24 W	0.7 F	2.3	PANAMINT BUTTE
	10	19 52 10.09	37.16 N	117.40 W	6.5 F	2.4	MT. JACKSON
	11	0 30 34.00	37.16 N	117.40 W	5.3 F	2.0	MT. JACKSON
	11	18 0 19.54	38.35 N	115.91 W	5.0 D	4.0	TROY CANYON
	13	17 46 59.65	37.35 N	116.49 W	7.0 D	2.9	SILENT CANYON - NORTH
	15	17 57 57.98	36.74 N	116.28 W	7.7 F	2.3	LATHROP WELLS
	16	5 25 28.91	36.77 N	116.25 W	3.7 F	2.1	LATHROP WELLS
	17	1 46 51.74	36.78 N	116.25 W	0.6 F	1.7	LATHROP WELLS
	17	3 26 34.73	36.78 N	116.25 W	2.1 F	1.9	LATHROP WELLS
	17	9 4 40.81	36.73 N	116.26 W	1.0 F	1.6	LATHROP WELLS
	18	15 1 20.05	37.36 N	117.15 W	1.3 F	2.3	MT. JACKSON
	18	17 0 0.34	36.98 N	116.18 W	1.5 F	2.8	LATHROP WELLS
	19	4 48 27.57	36.77 N	115.39 W	2.0 F	2.4	HAYFORD PEAK
	21	4 51 35.16	37.02 N	116.13 W	4.1 F	2.0	SILENT CANYON - YUCCA FLAT
	22	5 33 42.41	36.85 N	117.47 W	5.6 F	2.3	TIN MOUNTAIN
	22	9 22 38.47	37.39 N	115.62 W	0.0 F	2.0	GRUOM LAKE

LOCAL HYPOCENTER SUMMARY

22	18 31	43.89	36.75 N	116.26 W	4.3 F	1.7	LATHROP WELLS
23	15 17	31.08	37.12 N	117.05 W	5.0 D	1.7	MT. JACKSON
24	1 11	48.93	37.58 N	116.46 W	9.1 F	2.0	QUARTZITE MOUNTAIN
25	15 46	4.73	36.48 N	115.89 W	9.6 F	2.2	CHARLESTON PEAK
26	7 15	10.96	36.62 N	116.25 W	5.0 D	1.3	LATHROP WELLS
27	13 44	32.96	36.84 N	116.19 W	5.8 F	1.4	LATHROP WELLS
27	20 43	20.55	36.87 N	116.20 W	5.0 D	2.2	LATHROP WELLS
27	21 50	4.71	36.74 N	116.17 W	0.3 F	1.4	LATHROP WELLS
27	23 50	28.76	37.15 N	116.94 W	4.2 F	2.1	THIRSTY CANYON
28	2 42	9.32	36.97 N	115.90 W	4.4 F	2.3	MERCURY
28	23 49	3.18	36.10 N	117.70 W	1.0 F	2.8	DARWIN
29	7 9	42.94	37.32 N	117.00 W	2.6 F	2.6	MT. JACKSON
29	22 17	50.15	36.73 N	115.80 W	4.2 F	2.4	MERCURY
30	0 1	1.84	36.62 N	116.19 W	5.0 D	1.3	LATHROP WELLS
30	6 29	38.06	36.62 N	115.73 W	5.0 D	1.8	MERCURY
30	12 6	58.85	36.61 N	116.32 W	7.6 F	1.8	LATHROP WELLS
JUL 03	10 31	51.98	37.15 N	116.59 W	4.6 F	2.7	THIRSTY CANYON
04	0 4	46.34	37.33 N	116.30 W	2.9 F	2.8	SILENT CANYON - NORTH
04	5 2	29.31	37.15 N	116.95 W	9.5 F	2.9	THIRSTY CANYON
04	5 31	55.57	37.17 N	116.74 W	29.2 F	1.6	THIRSTY CANYON
04	5 53	24.22	37.15 N	116.94 W	4.3 F	1.6	THIRSTY CANYON
04	11 25	37.39	37.17 N	116.94 W	6.4 F	2.6	THIRSTY CANYON
05	16 10	44.28	36.61 N	115.76 W	0.0 F	2.1	MERCURY
09	17 36	13.98	36.12 N	115.42 W	0.1 F	2.9	LAS VEGAS
12	2 42	31.21	37.15 N	116.94 W	5.0 D	2.2	THIRSTY CANYON
14	15 47	36.09	37.16 N	117.41 W	2.3 F	2.7	MT. JACKSON
14	17 8	49.41	37.16 N	117.40 W	4.2 F	2.6	MT. JACKSON
15	1 41	4.21	36.53 N	116.61 W	14.6 F	3.0	CHLORIDE CLIFF
15	2 23	31.11	36.52 N	116.60 W	2.1 F	2.6	CHLORIDE CLIFF
15	4 37	16.00	36.53 N	116.61 W	11.2 F	2.7	CHLORIDE CLIFF
15	5 12	31.01	36.54 N	116.61 W	8.3 F	1.9	CHLORIDE CLIFF
16	15 11	34.17	37.40 N	117.70 W	8.4 F	2.2	MAGKUDER MOUNTAIN
16	15 15	3.94	37.08 N	116.03 W	0.5 F	3.4	SILENT CANYON - YUCCA FLAT
18	21 22	7.84	35.79 N	117.93 W	4.8 F	2.9	LITTLE LAKE

LOCAL HYPOCENTER SUMMARY

	21	15 36	30.65	36.72 N	116.06 W	1.6 F	2.0	LATHROP WELLS
	22	2 31	20.01	37.23 N	115.86 W	2.3 F	1.5	GROOM LAKE
	22	4 7	59.79	37.19 N	116.99 W	3.2 F	2.8	THIRSTY CANYON
	24	12 2	27.66	37.35 N	117.70 W	1.9 F	3.5	MAGRUDER MOUNTAIN
	24	20 47	58.77	36.71 N	116.07 W	0.2 F	2.0	LATHROP WELLS
	27	10 45	30.89	36.71 N	115.85 W	0.7 F	1.6	MERCURY
	27	20 20	31.86	36.43 N	115.53 W	1.6 F	2.4	CHARLESTON PEAK
	28	0 3	55.71	37.67 N	116.29 W	14.0 F	1.8	QUARTZITE MOUNTAIN
	28	7 49	9.62	36.64 N	115.95 W	8.3 F	1.6	MERCURY
AUG	01	4 26	40.52	36.71 N	116.28 W	6.7 F	1.8	LATHROP WELLS
	02	12 37	35.01	37.08 N	115.90 W	2.3 F	1.7	GROOM LAKE
	02	21 52	1.63	37.22 N	117.32 W	0.3 F	2.1	MT. JACKSON
	05	16 56	10.62	35.32 N	116.61 W	6.1 F	3.4	
	06	11 25	30.81	36.83 N	116.18 W	4.5 F	1.9	LATHROP WELLS
	06	18 57	48.10	36.63 N	116.26 W	2.1 F	2.5	LATHROP WELLS
	07	9 39	48.09	37.16 N	116.32 W	0.0 F	2.2	SILENT CANYON - PAHUTE MESA
	07	18 57	51.65	36.86 N	116.35 W	5.0 D	2.0	LATHROP WELLS
	16	0 16	8.74	36.71 N	116.32 W	1.9 F	1.3	LATHROP WELLS
	16	11 24	8.60	36.50 N	116.30 W	1.5 F	2.2	LATHROP WELLS
	23	2 9	17.04	37.16 N	116.94 W	5.9 F	2.7	THIRSTY CANYON
	25	18 43	30.29	38.62 N	117.11 W	6.1 F	3.1	
	26	4 10	21.17	36.72 N	117.33 W	1.8 F	0.7	TIN MOUNTAIN
	26	5 18	34.83	36.69 N	116.05 W	1.6 F	1.9	LATHROP WELLS
	26	16 10	5.30	36.37 N	117.61 W	22.9 F	2.3	DAKWIN
	26	16 37	39.56	36.67 N	116.24 W	7.7 F	2.1	LATHROP WELLS
	27	9 30	18.19	37.25 N	115.93 W	6.6 F	0.4	GROOM LAKE
SEP	01	0 3	18.73	37.65 N	115.65 W	5.0 D	2.3	NORTHINGTON PEAK
	01	16 19	36.38	37.42 N	117.33 W	4.8 F	2.3	MT. JACKSON
	07	3 51	51.93	37.34 N	115.02 W	1.8 F	2.2	ALAMO
	09	18 46	11.78	38.72 N	117.07 W	5.0 D	3.0	
	12	1 1	55.34	36.77 N	116.28 W	36.2 F	1.3	LATHROP WELLS
	12	21 23	35.32	35.99 N	116.75 W	13.3 F	3.7	CONFIDENCE HILLS



LOCAL HYPOCENTER SUMMARY

SEP										
15	4	56	47.55	37.01 N	116.38 W	5.1 F	1.7		SILENT CANYON - PAHUTE MESA	
15	6	17	26.60	37.02 N	116.38 W	8.6 F	1.7		SILENT CANYON - PAHUTE MESA	
15	6	44	49.54	37.01 N	116.38 W	6.8 F	1.8		SILENT CANYON - PAHUTE MESA	
15	7	52	48.50	37.01 N	116.38 W	4.8 F	1.6		SILENT CANYON - PAHUTE MESA	
16	4	15	55.18	37.01 N	116.39 W	5.8 F	1.9		SILENT CANYON - PAHUTE MESA	
16	11	8	23.41	37.01 N	116.39 W	7.2 F	1.7		SILENT CANYON - PAHUTE MESA	
21	4	59	24.86	37.01 N	116.38 W	6.5 F	2.0		SILENT CANYON - PAHUTE MESA	
21	5	16	17.78	37.01 N	116.38 W	4.3 F	1.2		SILENT CANYON - PAHUTE MESA	
23	9	35	40.43	37.11 N	117.06 W	8.6 F	1.9		MT. JACKSON	
24	2	24	42.72	37.22 N	116.91 W	20.3 F	1.5		THIRSTY CANYON	
24	2	35	55.04	37.20 N	116.98 W	3.0 F	2.3		THIRSTY CANYON	
25	17	59	43.61	37.89 N	116.92 W	0.0 F	2.3		STINKING SPRING	
26	10	48	53.16	36.71 N	115.65 W	0.1 F	1.7		MERCURY	
28	17	32	35.85	37.69 N	117.41 W	5.0 D	2.6		GOLDFIELD	
28	17	48	31.15	37.71 N	117.40 W	5.0 D	2.5		GOLDFIELD	
28	18	18	59.98	37.70 N	117.39 W	6.2 F	2.3		GOLDFIELD	

# LOCAL HYPOCENTER SUMMARY

OCT 05	20 17 30.65	37.13 N	116.21 W	4.7 F	2.2	SILENT CANYON - YUCCA FLAT
05	20 42 6.80	37.15 N	116.21 W	5.8 F	0.9	SILENT CANYON - YUCCA FLAT
05	21 12 4.17	37.14 N	116.22 W	4.7 F	1.6 1.0	SILENT CANYON - YUCCA FLAT
05	21 31 19.90	37.14 N	116.22 W	5.3 F	0.9	SILENT CANYON - YUCCA FLAT
06	1 24 4.95	37.17 N	117.36 W	3.4 F	1.7	MT. JACKSON
06	21 24 0.28	36.65 N	115.22 W	5.0 D	2.3	HAYFORD PEAK
07	2 28 15.90	37.13 N	117.34 W	5.8 F	1.2	MT. JACKSON
07	12 54 2.91	37.10 N	116.16 W	4.6 F	1.1	SILENT CANYON - YUCCA FLAT
08	12 19 27.23	38.01 N	113.22 W	5.0 D	3.0	
09	2 27 30.33	36.79 N	115.98 W	11.0 F	1.2	MERCURY
09	3 26 59.95	36.16 N	114.99 W	12.0 F	2.1	HOVER DAM
09	15 11 58.91	37.34 N	114.73 W	9.9 F	1.9	DELAMAR MOUNTAINS
10	12 21 55.91	37.13 N	117.46 W	9.4 F	1.2	MT. JACKSON
13	14 47 53.53	37.06 N	116.95 W	7.7 F	3.8	THIRSTY CANYON
13	14 51 57.92	37.06 N	116.95 W	4.8 F	2.1	THIRSTY CANYON
13	14 56 14.17	37.06 N	116.95 W	1.2 F	2.1	THIRSTY CANYON
13	15 8 16.46	37.06 N	116.95 W	4.2 F	2.1	THIRSTY CANYON
13	19 51 12.36	37.06 N	116.95 W	6.5 F	3.5	THIRSTY CANYON
14	2 33 11.83	37.06 N	116.94 W	4.6 F	1.5	THIRSTY CANYON
14	3 11 42.08	37.06 N	116.95 W	0.5 F	2.1	THIRSTY CANYON
14	4 31 59.02	37.06 N	116.95 W	5.3 F	2.6	THIRSTY CANYON
14	8 45 46.49	37.06 N	116.95 W	5.6 F	3.4	THIRSTY CANYON
14	9 15 15.95	37.07 N	116.95 W	5.6 F	3.4	THIRSTY CANYON
14	12 28 46.07	37.06 N	116.96 W	6.6 F	2.3	THIRSTY CANYON
14	15 51 33.80	37.07 N	116.95 W	4.3 F	2.1	THIRSTY CANYON
14	22 23 10.30	37.05 N	116.96 W	5.6 F	2.4	THIRSTY CANYON
15	2 23 49.33	37.06 N	116.95 W	7.3 F	2.6	THIRSTY CANYON
15	4 21 9.43	37.06 N	116.96 W	7.9 F	4.0	THIRSTY CANYON
15	7 19 5.16	37.06 N	116.96 W	8.5 F	2.0	THIRSTY CANYON
15	7 22 50.19	37.07 N	116.95 W	7.9 F	2.1	THIRSTY CANYON
15	18 43 12.67	37.06 N	116.96 W	5.1 F	2.3	THIRSTY CANYON
15	22 56 13.87	38.10 N	117.18 W	5.0 D		TONOPAH
16	5 9 13.56	37.05 N	116.95 W	5.2 F	2.0	THIRSTY CANYON
16	1 47 42.43	37.07 N	116.96 W	0.8 F	2.1	THIRSTY CANYON
16	2 33 40.95	36.53 N	115.82 W	9.4 F	1.3	MERCURY

## LOCAL HYPOCENTER SUMMARY

OCT

16	13 37 38.39	38.24 N	116.59 W	1.8 F	3.2	BLACK BUTTE
17	1 12 1.48	37.05 N	116.95 W	7.3 F	1.9	THIRSTY CANYON
17	17 59 50.46	36.44 N	116.94 W	8.0 F	2.4	FURNACE CREEK
17	21 16 4.15	36.44 N	116.95 W	12.7 F	2.1	FURNACE CREEK
18	0 51 33.21	37.07 N	116.96 W	7.8 F	1.9	THIRSTY CANYON
19	0 18 9.48	36.62 N	116.25 W	5.1 F	1.5	LATHROP WELLS
19	1 43 47.73	37.06 N	116.95 W	7.8 F	1.8	THIRSTY CANYON
19	18 34 48.34	37.29 N	116.32 W	5.3 F	1.5	SILENT CANYON - NORTH
19	23 30 44.56	36.94 N	116.09 W	0.2 F	0.5	LATHROP WELLS
20	5 3 6.05	38.54 N	116.69 W	0.5 F	3.2	
20	5 12 44.71	37.04 N	115.17 W	0.2 F	3.5	ALAMO
20	9 28 53.03	37.03 N	115.17 W	5.5 F	2.3	ALAMO
22	19 10 4.05	37.06 N	116.95 W	4.9 F	2.1	THIRSTY CANYON
22	23 35 29.41	35.43 N	118.19 W	5.4 F	3.6	
23	6 16 45.15	37.71 N	115.15 W	5.2 F	1.9	HIKU
24	1 45 14.20	37.07 N	116.95 W	7.4 F	2.0	THIRSTY CANYON
24	16 29 10.77	37.83 N	115.53 W	0.2 F	2.2	WORTHINGTON PEAK
24	16 56 14.78	36.72 N	116.29 W	9.4 F	1.0	LATHROP WELLS
24	21 34 46.13	37.06 N	116.95 W	5.6 F	3.4	THIRSTY CANYON
25	22 18 30.61	37.00 N	117.50 W	7.0 F	1.6	MAGRUDER MOUNTAIN
26	1 25 8.32	36.75 N	116.19 W	0.4 F	1.1	LATHROP WELLS
26	4 50 28.60	36.76 N	116.24 W	4.2 F	1.0	LATHROP WELLS
26	15 18 14.87	37.73 N	116.63 W	5.0 D	0.6	STINKING SPRING
26	15 23 26.46	37.67 N	115.63 W	1.1 F	0.8	WORTHINGTON PEAK
27	0 24 14.17	37.07 N	116.95 W	7.7 F	2.2	THIRSTY CANYON
27	0 26 24.57	36.60 N	115.61 W	32.5 F	1.9	MERCURY
27	0 27 12.80	36.79 N	115.32 W	9.6 F	2.0	HAYFORD PEAK
27	0 27 48.66	37.29 N	115.85 W	5.0 D	1.9	GRUON LAKE
27	3 16 8.22	36.18 N	117.63 W	2.9 F	2.6	DAKWIN
27	6 40 55.86	36.96 N	117.15 W	5.0 D		TIN MOUNTAIN
27	15 24 14.17	37.52 N	116.54 W	5.0 D	0.7	STINKING SPRING

LOCAL HYPOCENTER SUMMARY

28	5	9	56.41	37.00 N	116.19 W	8.1 F	1.2	SILENT CANYON - YUCCA FLAT
28	15	8	46.04	37.96 N	117.09 W	14.0 F	0.7	GOLDFIELD
29	1	47	41.92	36.86 N	116.18 W	8.2 F	1.3	LATHROP WELLS
29	13	50	59.97	36.59 N	116.21 W	1.6 F	1.2	LATHROP WELLS
29	17	49	33.75	38.01 N	115.18 W	9.9 F	2.1	TIMBER MOUNTAIN
30	6	42	59.82	37.08 N	116.22 W	7.1 F	2.0	SILENT CANYON - YUCCA FLAT
30	12	27	55.98	37.25 N	117.59 W	6.0 F	2.2	MAGNUDEK MOUNTAIN
30	19	42	24.39	37.75 N	115.35 W	5.0 D	1.9	HINK
30	20	15	47.91	37.52 N	115.25 W	3.0 F	1.4	HINK
NCV 02	5	50	30.40	35.93 N	117.04 W	15.8 F	3.0	SEARLES LAKE
05	1	39	42.22	36.03 N	117.70 W	6.0 F	2.7	DARWIN
05	8	42	49.53	37.15 N	115.07 W	5.8 F	1.8	ALAMO
06	1	14	2.16	37.03 N	114.89 W	0.4 F	2.2	DELMAR MOUNTAINS
06	6	52	30.23	37.50 N	116.04 W	5.3 F	2.0	SILVER PEAK
06	21	12	24.41	37.12 N	117.34 W	8.9 F	1.6	MT. JACKSON
07	13	26	13.58	36.37 N	117.92 W	0.4 F	2.6	DARWIN
08	6	9	42.75	36.33 N	115.97 W	5.3 F	2.2	CHARLESTON PEAK
08	14	42	2.62	37.06 N	116.95 W	4.3 F	2.4	THIRSTY CANYON
09	0	24	55.06	37.03 N	116.21 W	4.6 F	2.0	SILENT CANYON - YUCCA FLAT
09	3	34	37.33	37.11 N	117.07 W	9.4 F	2.1	MT. JACKSON
09	15	48	16.57	36.53 N	117.97 W	0.1 F	3.3	DRY MOUNTAIN
10	15	45	38.99	37.27 N	115.02 W	5.1 F	2.5	ALAMO
10	23	42	19.57	37.07 N	116.95 W	4.6 F	2.1	THIRSTY CANYON
11	1	34	19.40	37.07 N	116.95 W	7.7 F	1.8	THIRSTY CANYON
11	6	49	13.72	37.04 N	116.17 W	1.8 F	1.1	SILENT CANYON - YUCCA FLAT
11	21	29	55.46	37.28 N	116.02 W	4.0 F	1.4	SILENT CANYON - NORTH
12	15	23	2.60	37.42 N	117.33 W	0.3 F	2.3	MT. JACKSON
12	21	28	10.36	37.08 N	116.08 W	4.3 F	2.5	SILENT CANYON - YUCCA FLAT
13	0	47	53.84	36.81 N	117.48 W	7.9 F	1.5	TIN MOUNTAIN

LOCAL HYPOCENTER SUMMARY

NOV	13	21 16 42.57	37.21 N	114.78 W	9.5 F	2.3	DELAMAR MOUNTAINS
	14	5 45 52.69	36.62 N	116.41 W	3.8 F	1.9	LATHRUP WELLS
	14	12 13 38.62	36.61 N	116.44 W	7.2 F	1.9	LATHRUP WELLS
	14	14 17 6.44	37.71 N	115.15 W	4.6 F	1.3	HIKU
	14	20 17 44.89	37.51 N	114.53 W	8.3 F	2.5	HIGHLAND PEAK
	14	20 24 4.28	37.53 N	114.47 W	8.4 F	2.1	
	15	4 33 55.06	37.56 N	115.20 W	10.7 F	1.0	HIKU
	15	14 30 19.96	37.06 N	116.96 W	4.4 F	2.1	THIRSTY CANYON
	16	8 4 26.73	37.51 N	114.57 W	5.7 F	2.8	HIGHLAND PEAK
	17	3 18 8.14	37.52 N	114.61 W	9.1 F	1.8	HIGHLAND PEAK
	18	0 45 15.71	37.20 N	114.76 W	9.3 F	1.9	DELAMAR MOUNTAINS
	18	18 39 43.66	37.24 N	115.41 W	9.2 F	1.7	ALAMO
	19	10 10 43.89	37.31 N	115.08 W	5.3 F	3.7	ALAMO
	19	19 56 31.33	36.66 N	116.60 W	14.3 F	2.1	CHLORIDE CLIFF
	19	21 40 53.48	37.05 N	116.95 W	2.6 F	3.8	THIRSTY CANYON
	19	21 44 20.42	37.06 N	116.95 W	6.7 F	2.4	THIRSTY CANYON
	19	21 56 52.48	37.06 N	116.95 W	9.3 F	2.1	THIRSTY CANYON
	19	22 1 54.59	37.06 N	116.96 W	5.8 F	2.5	THIRSTY CANYON
	19	23 1 42.55	37.06 N	116.96 W	6.0 F	1.9	THIRSTY CANYON
	20	1 31 45.35	36.53 N	115.82 W	8.7 F	1.7	MERCURY
	20	4 10 51.45	36.26 N	115.42 W	9.1 F	1.4	LAS VEGAS
	20	4 20 58.67	37.67 N	115.05 W	1.1 F	1.6	HIKU
	20	6 42 16.94	37.85 N	114.54 W	7.3 F	2.4	HIGHLAND PEAK
	20	9 6 3.87	37.06 N	116.96 W	4.5 F	1.8	THIRSTY CANYON

## LOCAL HYPOCENTER SUMMARY

21	1 50 56.41	36.44 N	117.02 W	16.3 F	1.7	PANAMINT BUTTE
21	4 44 19.77	37.06 N	116.96 W	2.0 F	1.9	THIRSTY CANYON
21	18 44 19.81	37.07 N	116.95 W	0.1 F	2.1	THIRSTY CANYON
21	22 29 16.74	37.54 N	114.66 W	1.7 F	2.3	HIGHLAND PEAK
21	23 59 49.92	37.06 N	116.95 W	5.7 F	2.2	THIRSTY CANYON
22	12 50 12.29	37.15 N	117.52 W	1.6 F	1.4	MAGRUDER MOUNTAIN
22	18 27 10.41	37.24 N	115.49 W	12.8 F	1.9	ALAMO
22	22 23 48.73	36.67 N	116.33 W	2.6 F	1.4	LATHRUP WELLS
22	22 51 26.24	37.33 N	115.91 W	4.6 F	1.4	GRUOM LAKE
23	1 0 26.77	37.06 N	116.95 W	0.1 F	2.1	THIRSTY CANYON
23	3 18 48.94	37.06 N	116.96 W	2.4 F	2.1	THIRSTY CANYON
23	4 35 57.67	36.81 N	117.78 W	4.9 F	2.0	DRY MOUNTAIN
23	6 14 42.11	37.34 N	115.56 W	0.5 F	2.4	GRUOM LAKE
23	6 28 13.18	37.32 N	115.56 W	1.0 F	1.7	GRUOM LAKE
23	9 5 10.29	36.68 N	117.81 W	9.6 F	2.3	DRY MOUNTAIN
23	18 26 4.10	37.01 N	116.36 W	8.3 F	1.4	SILENT CANYON - PAHUTE MESA
23	19 10 13.53	37.07 N	116.95 W	0.4 F	1.9	THIRSTY CANYON
23	23 29 51.18	37.24 N	115.01 W	2.6 F	2.0	ALAMO
24	12 14 50.20	37.84 N	114.55 W	9.8 F	2.7	HIGHLAND PEAK
24	20 49 29.95	37.06 N	116.95 W	4.4 F	1.9	THIRSTY CANYON
25	4 2 49.58	37.06 N	116.95 W	4.7 F	2.4	THIRSTY CANYON
26	3 46 29.51	37.47 N	117.60 W	4.5 F	2.0	MAGRUDER MOUNTAIN
28	1 15 39.64	37.68 N	114.90 W	1.9 F	1.9	HIGHLAND PEAK
29	10 11 20.54	36.78 N	116.12 W	12.0 F	1.4	LATHRUP WELLS
30	16 39 55.62	36.49 N	116.31 W	9.3 F	2.1	ASH MEADOWS
30	17 43 52.90	36.42 N	117.20 W	6.5 F	1.5	PANAMINT BUTTE
DEC 02	23 6 48.54	37.06 N	116.95 W	0.4 F	2.8	THIRSTY CANYON
03	3 36 49.88	37.07 N	116.95 W	0.2 F	2.5	THIRSTY CANYON
04	7 22 48.13	37.62 N	115.86 W	7.2 F	2.0	WORTHINGTON PEAK
05	13 43 37.64	37.62 N	115.87 W	7.3 F	1.9	WORTHINGTON PEAK
07	2 51 55.52	37.77 N	115.10 W	1.8 F	1.4	HIKU

LOCAL HYPOCENTER SUMMARY

07	20 58 53.22	37.03 N	116.23 W	5.0 D	1.6	SILENT CANYON - YUCCA FLAT
08	8 24 48.73	37.07 N	116.38 W	1.5 F	1.4	SILENT CANYON - PAHUTE MESA
08	8 25 12.11	35.60 N	116.31 W	24.1 F	1.8	SHOSHONE
08	12 34 56.00	37.66 N	115.07 W	1.9 F	1.7	HIKO
09	15 52 41.50	36.55 N	117.80 W	0.2 F	2.7	DRY MOUNTAIN
10	0 49 18.55	37.38 N	115.33 W	11.2 F	1.8	ALAMO
10	1 28 12.17	36.70 N	116.13 W	6.0 F	1.3	LATHROP WELLS
10	2 25 9.86	37.08 N	116.15 W	20.6 F	1.1	SILENT CANYON - YUCCA FLAT
10	23 30 53.17	37.06 N	116.96 W	4.7 F	2.4	THIRSTY CANYON
11	4 4 37.77	37.07 N	116.95 W	4.8 F	2.0	THIRSTY CANYON
11	16 54 36.76	36.79 N	116.94 W	5.0 D	1.4	CHLORIDE CLIFF
12	0 19 49.45	36.83 N	116.63 W	1.4 F	2.2	CHLORIDE CLIFF
13	1 20 6.77	38.40 N	117.92 W	11.0 F	4.3	PILOT PEAK
15	23 17 37.78	37.15 N	116.94 W	5.7 F	2.1	THIRSTY CANYON
17	6 19 24.02	37.38 N	115.32 W	16.2 F	2.0	ALAMO
19	14 13 36.37	36.76 N	116.28 W	0.8 F	1.8	LATHROP WELLS
19	18 21 50.40	37.32 N	115.45 W	19.4 F	1.8	ALAMO
19	20 46 33.22	37.28 N	116.44 W	5.1 F	2.2	SILENT CANYON - NORTH
20	19 3 59.24	36.72 N	115.70 W	7.4 F	2.3	MERCURY
21	7 14 17.46	37.18 N	117.39 W	9.0 F	2.1	MT. JACKSON
22	16 44 56.49	37.25 N	115.03 W	1.4 F	3.5	ALAMO
22	19 11 59.37	36.74 N	115.69 W	5.5 F	1.7	MERCURY
23	0 32 19.09	36.73 N	115.69 W	7.2 F	2.2	MERCURY
23	1 8 31.55	37.34 N	115.48 W	6.5 F	1.9	ALAMO
23	7 14 19.76	37.23 N	116.36 W	0.2 F	2.4	SILENT CANYON - NORTH
23	22 8 42.47	36.72 N	115.70 W	7.1 F	1.7	MERCURY
25	9 44 40.50	36.72 N	116.02 W	4.1 F	1.6	LATHROP WELLS
25	15 22 22.28	36.71 N	115.70 W	8.9 F	1.8	MERCURY
26	5 42 55.37	37.18 N	117.38 W	6.1 F	2.2	MT. JACKSON
26	6 4 10.27	37.90 N	117.51 W	5.1 F	2.8	SILVER PEAK
26	17 29 44.36	36.72 N	115.71 W	8.6 F	2.9	MERCURY
28	11 57 18.59	36.53 N	116.13 W	5.3 F	2.1	LATHROP WELLS
28	22 45 42.46	37.22 N	114.93 W	5.3 F	4.0	DELAMAR MOUNTAINS
29	0 41 25.03	37.19 N	114.88 W	5.5 F	3.2	DELAMAR MOUNTAINS

# LOCAL HYPOCENTER SUMMARY

29	9 16 13.40	37.19 N	114.88 W	8.8 F	2.8	DELAMAR MOUNTAINS
29	10 42 52.55	37.19 N	114.92 W	2.1 F	2.5	DELAMAR MOUNTAINS
30	0 5 12.82	37.19 N	114.90 W	5.8 F	3.7	DELAMAR MOUNTAINS
30	9 56 29.40	37.21 N	114.91 W	11.1 F	2.4	DELAMAR MOUNTAINS
30	10 46 55.46	37.17 N	114.86 W	9.8 F	2.3	DELAMAR MOUNTAINS
30	16 9 12.94	37.20 N	114.93 W	5.4 F	2.9	DELAMAR MOUNTAINS
30	16 44 0.19	37.38 N	115.23 W	8.6 F	2.1	ALAMO
31	3 18 33.51	37.26 N	115.02 W	5.6 F	2.7	ALAMO
31	13 10 23.79	35.99 N	117.27 W	6.3 F	2.4	SEARLES LAKE



## **APPENDIX D**

Hypocenters, phase readings, durations, and first motion directions  
for 1981 earthquakes

## 1981 SGB LOCAL-EVENT DATA REPORT

JAN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JAN H = 6 3 57.38 UTC				RMS = 0.07	NU = 7	FREE DEPTH SOLUTION									
03 LAT = 36.705 N				ERX = 0.5	EHH = 0.8	AVFM = 2.0	W = C								
LONG = 115.502 W				ERY = 0.7	GAP = 218	AVXM =	WS = b	MERCURY							
DEPTH = 2.37 KM				ERZ = 3.7	NM =	WD = D									
.....															
03	SPRG	EPD	6 4 2.42					19	1.8	27.5	267	74	5.04	5.05	0.01
		ISD	6 4 5.91										8.53	8.59	-0.07
03	SHRG	EPD	6 4 3.73					20	1.9	38.2	126	74	6.55	6.89	0.05
03	MCY	EPD4	6 4 4.06					37	2.4	41.4	263	74	6.68	7.33	-0.57
03	APK	EPD	6 4 4.91					18	1.8	43.3	189	74	7.53	7.92	-0.13
		ISD	6 4 10.51										13.13	13.09	0.04
03	EPR	EPD4	6 4 9.22					16	1.7	58.6	29	74	11.84	10.14	1.72
03	JUN	EPD	6 4 7.95					17	1.8	61.3	241	74	10.57	10.49	0.07
03	LUP	EPD4	6 4 8.52					22	2.0	61.6	286	74	11.14	10.70	0.51
03	LSM	EPD4	6 4 7.65					24	2.1	69.0	213	74	10.27	11.78	-1.54
03	GMR	EPD4	6 4 19.50					20	2.0	73.6	341	74	22.12	12.65	9.56
03	SDH	EPD	6 4 10.16					16	1.8	75.0	265	74	12.78	12.74	0.07
03	PRN	EPD4	6 4 14.50					20	2.0	87.7	27	74	17.12	14.89	2.10
		ESD4	6 4 17.70										20.32	25.67	-5.35
03	MTI	EPD4	6 4 17.50					20	2.1	109.7	11	74	20.12	18.49	1.66
		ESD4	6 4 21.90										24.52	31.57	-7.05
03	NPN	EPD4	6 4 18.55					20	2.1	110.5	26	74	21.17	19.62	1.34
03	DLM	EPD4	6 4 19.30					20	2.2	120.8	34	74	21.92	20.33	1.34
.....															

# 1981 SGB LOCAL-EVENT DATA REPORT

JAN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JAN	H = 16	19	36.22	UTC	RMS =	0.11	NO = 27								FREE DEPTH SOLUTION
03	LAT =	37.816	N		ERX =	0.2	ERH = 0.3	AVFM =	3.9	W = B					
03	LONG =	115.294	W		ERY =	0.3	GAP = 124	AVXM =		WS = A					HIKO
03	DEPTH =	2.10	KM		ERZ =	1.1	NM =			WD = C					
.....															
03	MTI	IPU	16 19 39.28					190	3.7	15.6	173	95	3.06	3.16	-0.07
03	SRG	IPU	16 19 40.58					108	3.3	21.2	70	93	4.36	4.14	0.01
03	WRN	EPU	16 19 42.12					111	3.3	31.7	305	74	5.90	5.87	0.00
03	NPN	EPU	16 19 42.78					187	3.8	36.4	120	74	6.56	6.60	-0.25
03	TPU	IPD	16 19 42.97					177	3.8	39.1	233	74	6.75	7.10	-0.21
03	PRN	EPU	16 19 45.16					175	3.8	50.3	155	74	8.94	8.83	0.00
03	DLM	EPU	16 19 46.10					176	3.8	54.3	115	74	9.88	9.53	0.11
03	QCS	EPD	16 19 45.76					154	3.7	55.0	264	74	9.54	9.69	-0.11
03	GMR	EPD	16 19 47.71					175	3.9	68.1	218	74	11.49	11.75	-0.15
03	EPR	EPU	16 19 49.07					151	3.7	72.5	172	74	12.85	12.40	0.47
03	BLT	EPD	16 19 50.12					170	3.9	82.0	243	74	13.90	14.06	-0.02
03	RVE	EPU	16 19 50.41					130	3.6	82.1	286	74	14.19	14.17	0.02
03	GLR	EPD	16 19 52.14					168	3.9	93.7	223	74	15.92	15.88	0.12
03	KRNA	EPD	16 19 52.80					175	4.0	95.9	265	74	16.58	16.35	0.16
03	EPN	EPD	16 19 55.66					190	4.1	112.9	234	74	19.44	19.18	0.21
03	BGB	EPD	16 19 56.20					164	4.0	119.5	224	74	19.98	20.14	-0.08
03	CTS	EPD4	16 19 58.12					180	4.1	127.5	262	74	21.90	21.46	0.61
03	SSP	EPD	16 19 57.83					144	3.9	128.4	220	74	21.61	21.65	0.05
03	LOP	EPD	16 19 58.20					200	4.2	131.9	216	74	21.98	22.14	-0.08
03	SPRG	EPU	16 19 58.65					142	3.9	132.6	200	74	22.43	22.17	0.30
03	BMT	EPD4	16 19 59.15					130	3.8	133.3	244	74	22.93	22.48	0.63
03	CDH5	IPD4	16 20 0.54					97	3.6	139.6	221	74	24.32	23.26	1.16
03	CDH1	IPD4	16 20 0.71					99	3.6	139.6	221	74	24.49	23.33	1.27
03	MCY	EPU	16 20 0.02					180	4.1	141.2	205	74	23.80	23.57	0.32
03	SHRG	EPD4	16 20 1.14					139	3.9	146.1	175	74	24.92	24.44	1.07
03	LSM	EPD	16 20 1.04					147	4.0	147.6	216	74	24.82	24.58	0.22
03	SDH	EPD	16 20 2.46					185	4.2	159.6	216	74	26.24	26.51	-0.23
03	BRO	EPD	16 20 3.37					150	4.1	166.1	225	49	27.15	27.34	-0.07
03	APK	IPD4	16 20 4.99					135	4.0	168.0	189	49	28.77	27.98	1.06
03	JON	EPD	16 20 4.16					186	4.3	168.8	205	49	27.94	27.69	0.25
03	SGV	EPD	16 20 5.27					155	4.1	179.6	239	49	29.05	29.22	-0.08
03	GMN	EPD4	16 20 7.01					130	4.0	182.8	252	49	30.79	29.76	1.18
03	MZP	EPD4	16 20 7.20					103	3.8	184.4	266	49	30.98	30.02	1.20
03	FMT	IPU4	16 20 6.31					150	4.1	185.5	225	49	30.09	29.85	0.48
03	NOP	EPD	16 20 8.12					162	4.3	202.3	202	49	31.90	32.00	0.00
03	GVN	EPD	16 20 8.26					130	4.1	202.6	244	49	32.04	32.01	-0.03
03	GWV	EPD	16 20 10.28					170	4.4	218.4	214	49	34.06	34.19	-0.05
03	SVP	EPU	16 20 11.06					130	4.1	221.0	267	49	34.84	34.78	-0.04
03	PPK	EPD4	16 20 13.21					120	4.1	234.8	259	49	36.99	36.35	0.63
.....															
JAN	H = 18	4	52.45	UTC	RMS =	0.17	NO = 25								FREE DEPTH SOLUTION
03	LAT =	36.697	N		ERX =	0.3	ERH = 0.4	AVFM =	2.5	W = C					
03	LONG =	115.692	W		ERY =	0.3	GAP = 73	AVXM =		WS = C					MERCURY
03	DEPTH =	0.87	KM		ERZ =	31.3	NM =			WD = C					
.....															
03	SPRG	IPU	18 4 54.52					42	2.4	10.5	268	40	2.07	2.26	-0.16
03	MCY	IPU	18 4 56.57					56	2.7	24.5	261	40	4.12	4.64	-0.43
03	CPX	IPU	18 4 59.81					29	2.2	41.5	309	38	7.36	7.44	-0.04
03	APK	IPD	18 5 0.11					31	2.3	43.2	166	38	7.66	8.00	-0.06
03	LOP	IPU	18 5 0.46					38	2.5	45.9	292	38	8.01	8.24	-0.15
03	JON	EPU	18 5 0.62					35	2.4	46.6	332	38	8.17	8.18	-0.02
03	LSM	IPU	18 5 1.50					51	2.7	52.2	275	38	9.05	9.14	-0.11
03	SHRG	EPD	18 5 1.21					26	2.1	52.5	114	38	8.76	9.31	0.05
03	SSP	EPD	18 5 1.90					29	2.2	53.4	298	38	9.45	9.54	0.00
03	SDH	EPU	18 5 2.46					30	2.3	58.1	264	38	10.01	10.08	-0.03
03	CDH5	EPU	18 5 2.70					33	2.4	58.7	288	38	10.25	10.19	0.16
03	CDH1	EPU	18 5 2.75					33	2.4	58.7	288	38	10.30	10.26	0.14
03	BGB	EPD4	18 5 2.55					35	2.4	61.0	308	38	10.10	10.69	-0.51
03	GLR	EPD	18 5 3.15					37	2.5	62.9	332	38	10.70	10.95	-0.18
03	EPR	EPD	18 5 4.22					40	2.6	69.1	41	38	11.77	11.93	-0.13
03	GMR	EPU	18 5 4.40					39	2.6	71.1	354	38	11.95	12.31	-0.25

1981 SGB LOCAL-EVENT DATA REPORT

JAN 1981	STA	PHASE	TIME (UTC)			AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 03	EPN	EPD	18	5	6.20					39	2.6	80.4	316	38	13.75	13.97	-0.28
. 03	BRO	EPD	18	5	6.90					35	2.5	83.8	275	38	14.45	14.23	0.34
. 03	PRN	EPD	18	5	8.85					33	2.5	97.3	36	38	16.40	16.55	-0.27
. 03	FMT	EPD	18	5	9.20					33	2.5	97.4	266	38	16.75	16.47	0.53
. 03	TPU	EPD4	18	5	10.80					30	2.4	100.9	2	38	18.35	17.22	1.27
. 03	MTI	EPD	18	5	12.20					31	2.5	114.9	19	38	19.75	19.43	0.35
. 03	QCS	EPD	18	5	13.18					35	2.6	120.5	350	38	20.73	20.42	0.35
. 03	SGV	EPD4	18	5	13.99					34	2.6	123.7	285	38	21.54	20.87	0.76
. 03	NPN	EPD	18	5	14.10					26	2.4	125.5	32	38	21.65	21.17	0.27
. 03	PGE	EPD	18	5	14.20					30	2.5	129.0	253	38	21.75	21.79	0.19
. 03	DLM	EPD2	18	5	15.40					28	2.5	131.7	40	38	22.95	22.19	0.51
. 03	QSM	EPD4	18	5	15.70					24	2.4	133.2	232	38	23.25	22.23	0.94
. 03	MCA	EPD4	18	5	19.30					26	2.5	142.1	268	38	26.85	23.60	3.18
. 03	SRG	EPD4	18	5	17.25					30	2.6	142.7	23	38	24.80	23.97	0.61
. 03	GVN	EPD4	18	5	18.31					33	2.7	151.2	283	38	25.86	25.18	0.62
. 03	GMN	EPD	18	5	18.58					28	2.6	154.8	296	38	26.13	26.04	0.24

JAN H = 7 2 40.67 UTC RMS = 0.19 NO = 10 FREE DEPTH SOLUTION  
 . 04 LAT = 37.806 N ERX = 0.5 ERH = 1.0 AVFM = 2.7 Q = C  
 . LONG = 115.256 W ERY = 0.8 GAP = 157 AVXM = GS = C HIKO  
 . DEPTH = 0.84 KM ERZ = 20.1 NM = WD = C

. 04	MTI	EPD	7 2 43.15					60	2.7	14.5	186	40	2.48	3.00	-0.48	
. 04	SRG	EPD	7 2 44.50					56	2.7	18.5	63	40	3.83	3.71	-0.09	
. 04	NPN	EPD	7 2 47.10					50	2.6	32.9	121	38	6.43	6.12	0.10	
. 04	TPU	EPD4	7 2 46.85					46	2.6	41.3	237	38	6.18	7.54	-1.22	
. 04	PRN	EPD	7 2 49.50					52	2.7	47.9	158	38	8.83	8.53	0.19	
. 04	DLM	EPD	7 2 50.10					35	2.4	50.7	116	38	9.43	9.04	0.15	
. 04	QCS	EPD4	7 2 56.61					24	2.1	58.3	266	38	15.94	10.31	5.66	
. 04	GMR	EPD4	7 2 51.90					40	2.6	69.5	221	38	11.23	12.05	-0.72	
. 04	BLT	EPD4	7 2 54.35					56	2.9	84.6	245	38	13.68	14.56	-0.75	
. 04	GLR	EPD	7 2 56.55					35	2.6	95.3	225	38	15.88	16.22	-0.27	
. 04	KRNA	EPD	7 2 57.81					37	2.6	99.2	266	38	17.14	16.97	0.10	
. 04	EPN	EPD	7 3 0.01					50	2.9	115.1	235	38	19.34	19.62	-0.33	
. 04	CPX	EPD4	7 3 1.83					48	2.9	120.3	216	38	21.16	20.26	0.94	
. 04	BGB	EPD	7 3 1.55					40	2.8	121.2	225	38	20.88	20.49	0.47	
. 04	SPRG	EPD4	7 3 3.62					50	3.0	132.9	202	38	22.95	22.29	0.69	
. 04	LUP	EPD4	7 3 3.78					46	2.9	133.1	217	38	23.11	22.42	0.78	
. 04	SGV	EPD	7 3 10.56					50	3.2	182.0	240	29	29.89	29.69	0.30	

JAN H = 11 30 52.29 UTC RMS = 0.19 NO = 10 FREE DEPTH SOLUTION  
 . 04 LAT = 37.818 N ERX = 0.7 ERH = 1.3 AVFM = 2.4 Q = D  
 . LONG = 115.294 W ERY = 1.2 GAP = 187 AVXM = GS = C HIKO  
 . DEPTH = 0.05 KM ERZ = 30.5 NM = WD = D

. 04	MTI	EPD	11 30 55.40					30	2.1	15.8	173	40	3.11	3.38	-0.24	
. 04	SRG	EPD	11 30 56.70					30	2.2	21.1	70	40	4.41	4.30	-0.11	
. 04	NPN	EPD	11 30 59.30					30	2.2	36.4	120	36	7.01	6.86	-0.06	
. 04	TPU	EPD	11 30 59.40					30	2.2	39.3	233	38	7.11	7.38	-0.13	
. 04	PRN	EPD	11 31 1.80					30	2.3	50.4	155	38	9.51	9.10	0.29	
. 04	DLM	EPD	11 31 2.40					31	2.3	54.3	116	38	10.11	9.78	0.08	
. 04	GMR	EPD	11 31 4.30					29	2.3	68.3	218	38	12.01	12.03	0.08	
. 04	BLT	EPD	11 31 6.81					30	2.4	82.1	243	38	14.52	14.31	0.33	
. 04	GLR	EPD4	11 31 9.80					33	2.5	93.9	223	38	17.51	16.16	1.42	
. 04	KRNA	EPD4	11 31 0.00					27	2.3	96.0	265	38	7.71	16.61	-8.98	
. 04	EPN	EPD4	11 31 12.48					43	2.8	113.1	234	38	20.19	19.46	0.67	
. 04	BGB	EPD	11 31 12.20					35	2.6	119.7	224	38	19.91	20.42	-0.43	
. 04	SSP	EPD4	11 31 14.92					30	2.5	128.6	220	38	22.63	21.93	0.78	
. 04	LOP	EPD4	11 31 16.03					30	2.5	132.1	216	38	23.74	22.42	1.39	
. 04	MCY	EPD	11 31 16.21					38	2.8	141.4	205	38	23.92	23.85	0.15	

## 1981 SGB LOCAL-EVENT DATA REPORT

JAN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JAN H = 0 34			1.70 UTC	RMS = 0.09	NO = 19	FREE DEPTH SOLUTION									
05 LAT = 36.447 N			ERX = 0.2	ERH = 0.3	AVFM = 3.1	u = B		FURNACE CREEK							
LONG = 116.516 W			ERY = 0.2	GAP = 112	AVXM =	uS = B									
DEPTH = 0.24 KM			ERZ = 4.4	NM =	uD = B										
.....															
05	AMR	IPU	0 34	3.34				82	3.0	6.7	146	40	1.64	1.63	0.00
05	SDH	IPU	0 34	6.95				58	2.8	27.2	36	40	5.24	5.17	0.11
05	BRO	EPU	0 34	8.23				75	3.0	36.4	344	38	6.53	6.66	-0.01
05	JON	IPU	0 34	8.56				70	2.9	37.1	91	38	6.86	6.78	0.07
05	LSM	IPU	0 34	8.81				100	3.3	39.1	34	38	7.11	7.15	-0.07
05	PGE	EPU	0 34	10.70				89	3.2	50.5	258	38	8.99	9.15	0.07
05	MCY	EPU4	0 34	10.09				90	3.2	55.0	64	38	8.39	9.76	-1.30
05	CPX	EPU	0 34	13.56				56	2.9	67.6	38	38	11.86	11.81	0.07
05	SPRG	EPU	0 34	13.56				70	3.1	68.9	67	38	11.86	12.02	-0.13
05	BGB	EPD	0 34	13.93				85	3.2	70.4	21	38	12.22	12.37	-0.06
05	MCA	EPU	0 34	14.00				65	3.0	72.0	288	38	12.30	12.33	-0.12
05	SGV	EPU	0 34	14.83				60	2.9	75.1	322	38	13.13	13.09	0.12
05	APK	EPD	0 34	16.41				55	2.9	85.7	100	38	14.70	15.04	-0.07
05	GVN	EPU	0 34	18.22				62	3.1	96.1	310	38	16.52	16.36	0.09
05	GMN	EPD	0 34	21.20				55	3.0	115.6	325	38	19.49	19.79	-0.15
05	GMR	EPU4	0 34	22.26				68	3.2	118.7	34	38	20.56	20.19	0.47
05	SHRG	EPU4	0 34	22.92				67	3.2	122.1	87	38	21.21	20.75	1.05
05	LCH	EPD2	0 34	24.42				46	2.9	133.5	311	38	22.71	22.57	0.23
05	EPR	EPU4	0 34	26.53				74	3.4	143.2	56	38	24.83	24.10	0.74
05	KRNA	EPD4	0 34	26.98				53	3.1	144.1	5	38	25.28	24.40	0.81
05	TPU	EPD4	0 34	27.28				57	3.2	149.9	31	38	25.58	25.33	0.39
05	PPK	EPD	0 34	29.52				43	3.0	164.9	311	29	27.82	27.69	0.12
05	PRN	EPU	0 34	30.01				60	3.5	168.6	51	29	28.31	28.09	0.10
05	MTI	EPU4	0 34	30.07				54	3.2	175.6	39	29	28.37	29.00	-0.60
05	RVE	EPD	0 34	31.25				49	3.1	176.9	9	29	29.55	29.33	0.21
05	NPN	EPD	0 34	33.16				77	3.6	194.1	46	29	31.45	31.39	-0.14
05	DLM	EPU4	0 34	36.65				35	2.9	203.9	51	29	34.94	32.67	2.03
.....															
JAN H = 0 38			14.36 UTC	RMS = 0.18	NO = 17	FREE DEPTH SOLUTION									
05 LAT = 36.437 N			ERX = 0.5	ERH = 0.6	AVFM = 2.0	u = C		FURNACE CREEK							
LONG = 116.536 W			ERY = 0.5	GAP = 111	AVXM =	uS = B									
DEPTH = 5.06 KM			ERZ = 3.7	NM =	uD = C										
.....															
05	FMT	IPU	0 38	19.58				16	1.6	31.3	316	95	5.22	5.62	-0.16
05	BRO	EPD	0 38	20.50				16	1.7	37.0	348	94	6.14	6.52	-0.27
05	PGE	EPD	0 38	22.95				16	1.7	48.5	258	93	8.59	8.59	0.22
05	CDH5	EPD	0 38	23.28				18	1.8	50.9	23	93	8.92	8.80	0.22
05	CDH1	EPD4	0 38	24.36				17	1.8	50.9	23	93	10.00	8.87	1.23
05	QSM	EPD	0 38	24.71				8	1.1	60.3	210	92	10.35	10.25	0.01
05	CPX	EPD	0 38	26.16				24	2.1	69.6	38	92	11.80	11.89	-0.06
05	MCA	EPU	0 38	26.23				9	1.3	70.7	289	92	11.87	11.87	-0.09
	ESD4		0 38	26.74									12.38	20.44	-8.06
05	SPRG	EPD	0 38	26.59				30	2.3	71.0	66	92	12.23	12.11	0.14
	ESD4		0 38	26.81									12.45	20.66	-8.21
05	BGB	EPD	0 38	26.19				15	1.7	72.1	22	92	11.83	12.40	-0.49
05	SGV	EPD	0 38	27.12				38	2.6	74.9	324	92	12.76	12.81	0.03
	ESU4		0 38	27.91									13.55	21.76	-8.21
05	APK	EPD	0 38	28.91				27	2.3	87.3	99	92	14.55	15.06	-0.24
05	GVN	EPD	0 38	30.64				29	2.4	95.5	311	91	16.28	16.02	0.19
	ESU4		0 38	31.11									16.75	27.50	-10.75
05	GLR	EPD	0 38	30.91				29	2.4	96.4	29	91	16.55	16.29	0.32
05	GMN	EPD4	0 38	34.36				25	2.3	115.5	326	90	20.00	19.08	1.07
05	GMR	EPD	0 38	34.77				10	1.6	120.6	34	90	20.41	19.92	0.59
	ESD4		0 38	35.73									21.37	33.88	-12.52
05	BLT	EPU4	0 38	35.52				20	2.2	121.7	18	90	21.16	20.09	1.20
05	SHRG	EPD4	0 38	35.26				26	2.4	123.9	87	90	20.90	20.46	1.03
05	LCH	EPD4	0 38	37.34				30	2.5	132.9	312	90	22.98	21.91	1.14
05	EPR	EPD4	0 38	39.63				31	2.6	145.2	56	90	25.27	23.92	1.37
05	TPU	EPD	0 38	39.79				7	1.4	151.7	31	90	25.43	24.98	0.59
05	PRN	EPU	0 38	42.29				16	2.1	170.7	51	52	27.93	27.75	0.06
05	MTI	EPU	0 38	42.55				17	2.2	177.6	39	52	28.19	28.64	-0.43

## 1991 SGB LOCAL-EVENT DATA REPORT

JAN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JAN H = 11 57 22.55 UTC				RMS =	0.12	NO =	12	FREE DEPTH SOLUTION							
05 LAT = 37.155 N				ERX =	0.4	ERH =	0.6	AVFM =	2.8	W = C					
LONG = 116.757 W				ERY =	0.4	GAP =	135	AVXM =		WS = B		THIRSTY CANYON			
DEPTH = 5.13 KM				ERZ =	4.7	NM =				WD = C					
.....															
05	BMT	EPD	11 57 25.93					44	2.5	17.3	35	103	3.38	3.61	-0.07
05	SGV	IPD	11 57 28.32					55	2.7	31.2	232	95	5.77	5.72	0.14
05	EPN	IPD4	11 57 31.41					58	2.8	39.0	80	94	8.86	7.13	1.66
05	BRU	EPD	11 57 30.04					55	2.8	45.1	165	93	7.49	7.84	-0.23
05	BGR	EPD	11 57 31.14					59	2.8	48.8	105	93	8.59	8.61	0.06
05	CDH1	EPD	11 57 31.38					59	2.9	51.0	130	93	8.83	8.89	0.03
05	SSP	IPD4	11 57 30.92					56	2.8	54.3	118	93	8.37	9.57	-1.13
		ISD4	11 57 34.76										12.21	16.23	-4.03
05	GVN	EPD	11 57 31.92					51	2.7	54.8	252	93	9.37	9.40	-0.09
05	CTS	IPD4	11 57 40.21					55	2.8	55.7	3	93	17.66	9.76	8.07
05	LOP	EPD	11 57 33.24					70	3.0	62.2	123	92	10.69	10.78	-0.01
05	LSM	IPD4	11 57 33.94					57	2.9	63.1	137	92	11.39	10.81	0.55
05	BLT	EPD	11 57 33.93					66	3.0	66.9	57	92	11.38	11.57	-0.06
05	CPX	EPD4	11 57 34.91					50	2.8	67.3	112	92	12.36	11.52	0.87
05	SDH	EPD	11 57 34.21					50	2.8	67.8	147	92	11.66	11.55	0.14
05	KRNA	EPD	11 57 35.32					65	3.0	73.1	27	92	12.77	12.61	0.09
05	MCA	EPD4	11 57 35.30					50	2.8	73.1	220	92	12.75	12.27	0.40
05	MCY	EPD	11 57 37.61					77	3.2	89.5	128	92	15.06	15.14	-0.01
05	GMR	EPD4	11 57 38.74					53	2.9	89.7	77	92	16.19	15.23	1.05
05	PGE	EPD4	11 57 39.51					51	2.9	93.7	197	91	16.96	15.93	1.25
05	JON	EPD4	11 57 40.02					62	3.1	98.5	144	91	17.47	16.53	0.92
05	SPRG	EPD	11 57 39.26					32	2.5	98.8	121	91	16.71	16.64	0.10
05	GWV	EPD4	11 57 42.81					55	3.0	107.8	176	91	20.26	18.17	2.17
05	PRN	EPD4	11 57 48.84					40	2.9	153.9	80	90	26.29	25.33	0.84
.....															
JAN H = 2 21 4.33 UTC				RMS =	0.28	NO =	7	FREE DEPTH SOLUTION							
06 LAT = 37.310 N				ERX =	2.7	ERH =	3.1	AVFM =	2.5	W = D					
LONG = 116.366 W				ERY =	1.4	GAP =	198	AVXM =		WS = C		SILENT CANYON - NORTH			
DEPTH = 1.39 KM				ERZ =	430.8	NM =				WD = D					
.....															
06	EPN	IPD4	2 21 8.36					73	2.9	11.3	161	93	4.03	2.57	1.40
06	BLT	EPD	2 21 9.11					23	2.0	28.8	48	74	4.78	5.44	-0.53
06	BGB	EPD	2 21 10.24					45	2.6	32.6	158	74	5.91	6.03	-0.05
06	GLR	EPD	2 21 10.52					32	2.3	33.2	112	74	6.19	6.08	0.18
06	KRNA	EPD	2 21 13.25					26	2.1	47.9	359	74	8.92	8.58	0.27
06	GMR	EPD	2 21 13.58					31	2.3	52.8	87	74	9.25	9.29	0.06
06	LOP	EPD	2 21 13.56					35	2.4	53.6	161	74	9.23	9.44	-0.13
06	LSM	EPD4	2 21 18.23					32	2.4	63.8	173	74	13.90	10.99	2.89
06	MCY	EPD4	2 21 20.63					29	2.3	80.4	153	74	16.30	13.72	2.66
06	MTI	EPD4	2 21 23.11					37	2.6	104.9	67	74	18.78	17.75	1.06
06	PRN	EPD4	2 21 25.64					40	2.7	117.0	85	74	21.31	19.71	1.48
06	SRG	EPD4	2 21 27.24					40	2.8	131.0	61	74	22.91	22.03	0.66
06	NPN	EPD	2 21 27.06					37	2.7	131.9	73	74	22.75	22.17	0.36
.....															
JAN H = 6 8 25.57 UTC				RMS =	0.14	NO =	16	FIXED DEPTH SOLUTION							
06 LAT = 37.159 N				ERX =	0.5	ERH =	0.6	AVFM =	2.7	W = C		DEPTH CONTROL INADEQUATE			
LONG = 116.936 W				ERY =	0.3	GAP =	170	AVXM =		WS = B		THIRSTY CANYON			
DEPTH = 5.00 KM				ERZ =	3.0	NM =				WD = D					
.....															
06	EPN	IPD	6 8 35.34					44	2.6	54.7	84	93	9.77	9.68	0.03
06	CTS	IPD	6 8 35.61					33	2.4	58.3	19	92	10.04	10.18	0.03
06	FMT	IPD4	6 8 34.05					50	2.7	59.3	166	92	8.48	10.17	-1.45
06	BGB	IPD	6 8 36.57					50	2.8	64.4	102	92	11.00	11.14	-0.06
06	MCA	EPD	6 8 36.45					50	2.8	64.5	203	92	10.88	10.86	-0.06
06	LSM	EPD2	6 8 38.40					47	2.7	75.2	128	92	12.83	12.78	0.03
06	LOP	EPC2	6 8 38.50					46	2.7	76.3	116	92	12.93	13.08	-0.07
06	SDH	IPD	6 8 38.44					42	2.6	78.0	137	92	12.87	13.22	-0.31
06	BLT	IPD	6 8 39.02					31	2.4	80.6	64	92	13.45	13.79	-0.21
06	KRNA	IPD	6 8 39.52					34	2.5	81.2	37	92	13.95	13.93	-0.05
06	PGE	EPD	6 8 41.10					50	2.8	90.7	187	91	15.53	15.44	0.31

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JAN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	T0BS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 06	AMR	EPD	6 8 41.82					28	2.4	94.0	154	91	16.25	15.76	0.48
. 06	MCY	EPX3	6 8 43.40					43	2.8	102.9	122	91	17.83	17.32	0.59
. 06	GWV	IPU4	6 8 44.78					35	2.6	110.5	168	90	19.21	18.27	1.02
. 06	QCS	IPU4	6 8 45.02					27	2.4	112.7	53	90	19.45	18.62	0.86
. 06	TPU	EPU4	6 8 47.32					50	3.0	124.2	67	90	21.75	20.50	1.39
. 06	QSM	EPD	6 8 47.78					40	2.8	132.6	177	90	22.21	21.86	0.26
. 06	NUP	EPD	6 8 47.65					33	2.6	134.2	149	90	22.08	22.13	0.05
. 06	MTI	EPU	6 8 51.49					50	3.1	158.1	69	90	25.92	26.01	-0.06
. 06	PRN	EPU	6 8 53.24					60	3.3	169.5	81	52	27.67	27.60	-0.05
. 06	SRG	EPD4	6 8 56.07					60	3.3	183.7	64	52	30.50	29.46	0.82

JAN H = 20 49 46.10 UTC RMS = 0.11 NO = 14 FREE DEPTH SOLUTION  
. 06 LAT = 38.374 N ERX = 0.7 ERH = 1.8 AVFM = 3.6 Q = C  
LONG = 117.280 W ERY = 1.6 GAP = 265 AVXM = Q = B TONOPAH  
DEPTH = 3.76 KM ERZ = 1.5 NM = QD = D

. 06	CTS	EPU	20 50 1.50					90	3.4	93.3	149	90	15.40	15.48	0.09
. 06	RVE	EPU	20 50 3.29					77	3.3	103.1	112	90	17.19	17.07	0.12
. 06	KRNA	EPU	20 50 3.58					87	3.4	105.7	132	90	17.48	17.49	-0.08
. 06	PPK	EPU	20 50 5.75					60	3.1	118.8	208	90	19.65	19.61	0.02
. 06	GMN	EPU	20 50 5.70					65	3.2	119.2	179	90	19.60	19.69	0.06
. 06	LCH	EPU	20 50 7.44					75	3.3	130.5	194	90	21.34	21.53	-0.11
. 06	BLT	EPD	20 50 9.46					111	3.7	142.0	134	90	23.36	23.39	0.10
. 06	GVN	EPD	20 50 11.36					90	3.6	152.4	182	90	25.26	25.09	0.11
. 06	SGV	EPU	20 50 11.65					90	3.6	156.1	172	90	25.55	25.69	-0.05
. 06	TPU	EPD	20 50 13.10					77	3.5	166.8	121	90	27.00	27.42	-0.28
. 06	GLR	EPU	20 50 13.55					150	4.1	171.4	140	52	27.45	27.96	-0.44
. 06	BGB	EPU4	20 50 13.51					147	4.1	175.0	148	52	27.41	28.48	-0.99
. 06	GMR	EPU	20 50 14.40					96	3.7	175.9	131	52	28.30	28.57	-0.17
. 06	BRO	EPD4	20 50 16.55					90	3.7	187.9	162	52	30.45	29.96	0.60
. 06	CDH1	EPD3	20 50 16.10					115	3.9	188.3	153	52	30.00	30.12	-0.02
. 06	MCA	EPU4	20 50 17.50					52	3.2	191.6	180	52	31.40	30.29	1.03
. 06	MTI	EPD	20 50 16.40					70	3.5	192.6	114	52	30.30	30.70	-0.37
. 06	FMT	EPU4	20 50 18.50					85	3.7	197.5	167	52	32.40	31.22	1.42
. 06	SDH	EPD4	20 50 18.88					101	3.9	209.2	157	52	32.78	32.71	0.10
. 06	NPN	EPD	20 50 20.05					120	4.1	220.8	111	52	33.95	34.35	-0.61
. 06	PRN	EPU	20 50 20.40					120	4.1	223.6	119	52	34.30	34.66	-0.48
. 06	PGE	EPU4	20 50 21.25					75	3.7	225.5	175	52	35.15	35.00	0.37
. 06	SPRG	EPU4	20 50 23.63					80	3.7	227.3	145	52	37.53	35.09	2.47
. 06	JON	EPU4	20 50 22.89					97	3.9	238.6	154	52	36.79	36.46	0.32
. 06	DLM	EPU	20 50 22.30					70	3.7	238.9	111	52	36.20	36.69	-0.74
. 06	QSM	EPU4	20 50 31.60					68	3.7	269.8	172	52	45.50	40.40	5.01

JAN H = 5 26 34.65 UTC RMS = 0.14 NO = 8 FREE DEPTH SOLUTION  
. 09 LAT = 36.096 N ERX = 4.2 ERH = 4.7 AVFM = 2.6 Q = D  
LONG = 117.799 W ERY = 2.2 GAP = 282 AVXM = Q = C DARWIN  
DEPTH = 0.09 KM ERZ = 13.6 NM = QD = D

. 09	PGE	EPD	5 26 46.98					25	2.2	71.7	67	38	12.33	12.62	-0.07
. 09	MCA	EPU	5 26 47.73					22	2.1	76.9	37	38	13.08	13.15	-0.15
. 09	QSM	EPD	5 26 49.27					22	2.1	85.2	100	38	14.62	14.57	-0.04
. 09	GVN	EPD	5 26 53.06					31	2.5	108.5	22	38	18.41	18.41	-0.05
. 09	SGV	EPD	5 26 55.43					35	2.6	119.9	35	38	20.78	20.40	0.47
. 09	AMR	EPU4	5 26 55.89					36	2.7	123.8	74	38	21.24	20.86	0.37
. 09	LCH	EPU4	5 26 57.11					27	2.4	127.1	6	38	22.46	21.55	0.99
. 09	BRO	EPU	5 26 56.35					25	2.4	128.7	55	38	21.70	21.70	0.12
. 09	GMN	EPU4	5 26 59.73					28	2.5	142.1	20	38	25.08	24.13	1.10
. 09	NOP	EPD	5 26 59.56					40	2.9	148.3	89	38	24.91	24.90	0.10
. 09	LOP	EPU	5 27 2.95					47	3.1	168.7	60	29	28.30	28.18	0.21
. 09	BGB	EPU4	5 27 4.24					25	2.5	175.2	53	29	29.59	29.02	0.65
. 09	EPN	EPU4	5 27 5.62					54	3.2	181.1	47	29	30.97	29.90	1.01
. 09	CTS	EPU4	5 27 7.76					38	3.0	197.9	29	29	33.11	31.96	1.32
. 09	GMR	EPU4	5 27 12.58					18	2.4	227.4	53	29	37.93	35.68	2.35

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JAN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JAN H = 22 29 50.30 UTC RMS = 0.11 NU = 6 FREE DEPTH SOLUTION															
09 LAT = 36.771 N ERX = 1.4 ERH = 1.6 AVFM = 1.7 Q = D															
LONG = 116.291 W ERY = 0.6 GAP = 184 AVXM = Q = C LATHROP WELLS															
DEPTH = 0.85 KM ERZ = 36.4 NM = QD = D															
.....															
09	LSM	IPD	22 29 51.43				26	2.0	3.8	155	40	1.13	1.10	0.02	
09	LOP	EPD	22 29 53.13				19	1.7	14.4	50	40	2.83	3.01	-0.10	
09	SDH	EPD	22 29 53.06				11	1.3	14.5	197	40	2.76	2.91	-0.10	
09	SSP	EPD	22 29 54.11				16	1.6	18.3	21	40	3.81	3.75	0.14	
09	MCY	IPD	22 29 55.97				23	2.0	31.8	112	38	5.67	5.86	-0.11	
09	JON	EPD	22 29 57.61				14	1.6	40.4	155	38	7.31	7.19	0.12	
.....															
JAN H = 5 29 20.61 UTC RMS = 0.08 NO = 3 FIXED DEPTH SOLUTION															
10 LAT = 37.544 N ERX = ERH = AVFM = 3.5 Q = C DEPTH CONTROL INADEQUATE															
LONG = 118.030 W ERY = GAP = 266 AVXM = Q = A SILVER PEAK															
DEPTH = 7.00 KM ERZ = NM = QD = D															
.....															
10	PPK	EPD	5 29 24.10						16.9	140	110	3.49	3.57	-0.08	
10	SVP	EPD	5 29 26.15						27.7	47	102	5.54	5.42	0.01	
10	SGV	EPD	5 29 41.70				90	3.4	108.2	125	92	21.09	18.25	2.94	
10	CTS	IPD	5 29 43.54						115.8	84	92	22.93	19.55	3.55	
10	MCA	EPD	5 29 44.29				82	3.4	119.6	146	92	23.68	19.84	3.77	
10	KRNA	EPD	5 29 46.68						147.3	81	52	26.07	24.68	1.33	
10	HCR	EPD	5 29 44.75						159.7	61	52	24.14	26.27	-2.04	
10	BGB	EPD	5 29 48.30				100	3.7	169.3	109	52	27.69	27.44	0.33	
10	LOP	EPD	5 29 50.30						182.2	115	52	29.69	29.08	0.69	
10	SRG	EPD	5 29 55.80						263.9	82	52	35.19	39.54	-4.57	
.....															
JAN H = 17 16 27.16 UTC RMS = 0.10 NU = 6 FIXED DEPTH SOLUTION															
12 LAT = 36.329 N ERX = 4.9 ERH = 6.3 AVFM = 3.8 Q = D DEPTH CONTROL INADEQUATE															
LONG = 114.529 W ERY = 3.9 GAP = 296 AVXM = Q = D HOOVER DAM															
DEPTH = 5.00 KM ERZ = 2.3 NM = QD = D															
.....															
12	PRN	EPD	17 16 48.41				152	3.9	128.3	339	90	21.25	21.17	-0.04	
12	MCY	EPD	17 16 52.89				90	3.5	133.6	286	90	25.73	22.02	3.79	
12	JON	EPD	17 16 50.41				85	3.5	141.7	275	90	23.25	23.35	-0.10	
12	DLM	EPD	17 16 50.07				125	3.8	142.9	352	90	22.91	23.54	-0.88	
12	NPN	EPD	17 16 52.96				137	3.9	151.3	346	90	25.80	24.91	0.69	
12	GMR	EPD	17 16 52.92				140	4.0	157.2	315	90	25.76	25.87	-0.01	
12	LOP	EPD	17 16 53.32				95	3.6	157.8	292	90	26.16	25.95	0.29	
12	MTI	EPD	17 16 56.32				114	3.8	163.5	336	52	29.16	26.85	2.34	
12	SDH	EPD	17 16 54.28				86	3.6	165.8	282	52	27.12	27.04	0.13	
12	BGB	EPD	17 16 54.90				145	4.1	171.0	297	52	27.74	27.85	-0.02	
12	AMR	EPD	17 16 58.29				85	3.6	174.6	273	52	31.13	28.09	3.03	
12	BRD	EPD	17 17 2.61				97	3.8	193.9	284	52	35.45	30.60	4.97	
12	PGE	EPD	17 17 7.05				113	4.0	227.9	271	52	39.89	35.17	4.94	
12	CTS	EPD	17 17 4.16				90	3.9	244.8	307	52	37.00	37.35	-0.18	
.....															
JAN H = 0 14 40.46 UTC RMS = 0.11 NU = 24 FREE DEPTH SOLUTION															
16 LAT = 37.236 N ERX = 0.4 ERH = 0.5 AVFM = 4.0 Q = B															
LONG = 115.021 W ERY = 0.3 GAP = 157 AVXM = Q = A ALAMO															
DEPTH = 8.10 KM ERZ = 0.8 NM = QD = C															
.....															
16	EPR	EPD	0 14 43.90				180	3.7	16.5	243	114	3.44	3.45	0.01	
16	PRN	EPD	0 14 44.50				275	4.1	19.2	352	111	4.04	3.89	0.03	



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JAN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 16	NPN	EPD	0 14 49.00				270	4.2	46.9	9	98	8.54	8.32	0.01	
. 16	DLM	EPD	0 14 49.30				190	3.9	48.1	31	97	8.84	8.53	0.06	
. 16	MTI	EPD	0 14 49.90				260	4.1	53.8	336	96	9.44	9.41	0.06	
. 16	GMR	EPD	0 14 51.80				250	4.2	67.4	279	95	11.34	11.63	-0.19	
. 16	TPU	EPD	0 14 52.10				220	4.1	69.1	306	95	11.64	11.97	-0.19	
. 16	SRG	EPD	0 14 53.00				250	4.2	71.9	357	95	12.54	12.36	-0.04	
. 16	SHRG	EPD	0 14 53.70				150	3.8	82.0	188	94	13.24	14.01	-0.18	
. 16	SPRG	EPD	0 14 56.10				140	3.7	92.4	229	93	15.64	15.61	0.06	
. 16	WRN	EPD	0 14 56.77				145	3.8	96.8	329	93	16.31	16.43	-0.16	
. 16	CPX	EPD4	0 14 57.35				140	3.8	98.0	250	93	16.89	16.53	0.39	
. 16	QCS	EPD	0 14 57.23				150	3.8	98.8	307	93	16.77	16.78	0.02	
. 16	BLT	EPD	0 14 57.55				140	3.8	101.3	286	93	17.09	17.18	0.04	
. 16	MCY	EPD	0 14 58.13				200	4.1	105.3	233	93	17.67	17.72	0.03	
. 16	BGB	EPD4	0 14 59.60				170	4.0	109.5	258	93	19.14	18.49	0.73	
. 16	LUP	EPD4	0 14 59.73				170	4.0	110.5	247	93	19.27	18.64	0.71	
. 16	APK	EPD	0 14 59.60				170	4.0	113.0	206	93	19.14	19.26	0.15	
. 16	EPN	EPD	0 15 0.39				210	4.2	115.7	269	93	19.93	19.61	0.26	
. 16	CDH5	EPD4	0 15 1.35				155	3.9	122.7	250	93	20.89	20.50	0.49	
. 16	CDH1	EPD4	0 15 1.40				130	3.8	122.7	250	93	20.94	20.57	0.47	
. 16	LSM	EPD4	0 15 2.14				170	4.0	124.3	244	93	21.68	20.77	0.89	
. 16	JON	EPD4	0 15 2.67				180	4.1	130.9	228	92	22.21	21.80	0.40	
. 16	KRNA	EPD	0 15 2.97				145	3.9	132.6	295	92	22.51	22.29	0.15	
. 16	SDH	IPD4	0 15 3.23				180	4.1	134.4	241	92	22.77	22.41	0.40	
. 16	RVE	EPD	0 15 3.17				140	3.9	135.2	310	92	22.71	22.77	-0.06	
. 16	BMT	EPD	0 15 4.85				180	4.1	144.1	272	52	23.99	24.21	-0.05	
. 16	BRO	EPD4	0 15 5.90				120	3.8	152.2	250	52	25.44	24.94	0.62	
. 16	CTS	EPD3	0 15 6.64				140	4.0	158.0	287	52	26.18	25.91	0.44	
. 16	NOP	EPD4	0 15 7.45				190	4.2	159.2	219	52	26.99	25.86	1.23	
. 16	AMR	EPD4	0 15 7.73				185	4.2	159.6	234	52	27.27	25.85	1.41	
. 16	FMT	EPD4	0 15 8.80				130	4.0	170.1	247	52	28.34	27.26	1.32	
. 16	SGV	EPD	0 15 9.30				180	4.3	181.0	261	52	28.84	28.79	0.14	
. 16	GWV	EPD4	0 15 11.23				160	4.2	187.9	232	52	30.77	29.66	1.19	
. 16	GMN	EPD	0 15 11.80				160	4.2	198.6	272	52	31.34	31.18	0.31	
. 16	PGE	EPD4	0 15 14.70				120	4.0	207.4	242	52	34.24	32.23	2.23	
. 16	GVN	EPD	0 15 13.00				160	4.3	208.0	263	52	32.54	32.09	0.39	
. 16	MCA	EPD4	0 15 13.70				135	4.1	211.7	252	52	33.24	32.44	0.72	
. 16	MZP	EPD	0 15 13.90				90	3.8	215.1	284	52	33.44	33.35	0.33	
. 16	LCH	EPD	0 15 16.00				100	3.9	233.2	270	52	35.54	35.45	0.17	
. 16	PPK	EPD	0 15 19.20				130	4.3	256.8	275	52	38.74	38.56	0.17	

JAN H = 4 41 12.07 UTC RMS = 0.09 NO = 33 FREE DEPTH SOLUTION  
 . 23 LAT = 37.148 N ERX = 0.2 ERH = 0.2 AVFM = 4.0 Q = B  
 . LONG = 117.387 W ERY = 0.2 GAP = 110 AVXM = Q = A MT. JACKSON  
 . DEPTH = 10.22 KM ERZ = 0.5 NM = QD = B

. 23	GVN	IPD	4 41 15.71				215	3.9	16.7	166	120	3.64	3.54	0.04	
. 23	GMN	IPD	4 41 16.23				185	3.7	20.3	34	116	4.16	4.34	-0.03	
. 23	LCH	IPU	4 41 16.87				175	3.7	25.1	293	111	4.80	4.91	-0.02	
. 23	MGM	IPU	4 41 18.56				182	3.8	34.0	343	105	6.49	6.42	0.16	
. 23	SGV	IPU	4 41 18.80				203	3.9	36.5	120	104	6.73	6.71	0.11	
. 23	TMO	EPD	4 41 19.03				175	3.7	38.1	183	103	6.96	7.09	0.18	
. 23	PPK	IPU	4 41 21.83				170	3.8	55.5	304	99	9.76	9.80	-0.05	
. 23	MCA	EPD	4 41 21.62				160	3.7	56.3	170	98	9.55	9.60	-0.12	
. 23	MZP	IPD	4 41 22.68				135	3.6	61.3	0	98	10.61	10.85	0.00	
. 23	SVP	IPU	4 41 24.96				115	3.5	72.8	330	96	12.89	12.76	0.03	
. 23	FMT	IPU	4 41 25.08				170	3.9	78.2	136	96	13.01	13.29	-0.04	
. 23	BRC	IPU	4 41 25.59				210	4.1	80.1	122	96	13.52	13.58	0.07	
. 23	CTS	IPD	4 41 25.89				175	3.9	81.3	46	96	13.82	13.97	0.02	
. 23	PGE	IPU	4 41 27.88				170	3.9	93.2	162	95	15.81	15.89	0.14	
. 23	EPN	IPU	4 41 28.45				185	4.0	94.6	86	95	16.38	16.22	0.11	
. 23	TNP	IPD	4 41 30.14				185	4.0	104.7	8	94	18.07	17.78	0.03	
. 23	SSP	IPU	4 41 30.09				180	4.0	106.9	103	94	18.02	18.15	-0.05	
. 23	SDH	IPU	4 41 30.28				200	4.1	108.8	121	94	18.21	18.26	0.00	
. 23	LSM	EPD	4 41 30.24				190	4.1	109.1	115	94	18.17	18.32	-0.17	
. 23	KRNA	IPD	4 41 30.93				200	4.1	110.9	54	94	18.86	18.78	0.01	
. 23	LUP	EPD	4 41 30.96				187	4.1	113.3	107	94	18.89	19.12	-0.15	
. 23	AMR	EPD	4 41 31.55				200	4.1	116.5	136	94	19.48	19.43	0.04	

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JAN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
23	BLT	IPD	4 41 31.78				180	4.1	118.1	72	94	19.71	19.92	-0.07	
23	CPX	IPU	4 41 32.10				140	3.8	121.0	102	94	20.03	20.28	-0.22	
23	GLR	EPD	4 41 32.13				178	4.1	121.7	87	94	20.06	20.42	-0.29	
23	GNV	EPD	4 41 32.80				210	4.2	124.4	149	94	20.73	20.89	-0.08	
23	MCY	EPD4	4 41 37.90				190	4.2	137.9	113	52	25.83	22.99	2.92	
23	QSM	EPD	4 41 35.08				160	4.0	139.2	161	52	23.01	23.01	-0.08	
23	RVE	EPD	4 41 35.53				180	4.1	143.1	47	52	23.46	23.89	-0.43	
23	GMR	EPD	4 41 36.27				200	4.2	144.9	82	52	24.20	23.95	0.35	
23	SPRG	IPU	4 41 36.90				195	4.2	149.3	110	52	24.83	24.44	0.42	
23	NOP	EPD	4 41 37.59				215	4.3	158.1	136	52	25.52	25.51	0.11	
23	WRN	EPD4	4 41 42.35				150	4.1	183.8	60	52	30.28	28.98	1.26	
23	APK	IPD4	4 41 41.76				130	4.0	186.2	120	52	29.69	29.50	0.46	
23	EPR	IPU	4 41 42.57				120	4.0	195.3	89	52	30.50	30.35	0.17	
23	PRN	EPD	4 41 44.30				190	4.4	209.2	82	52	32.23	32.16	-0.05	
23	SHRG	IPD4	4 41 45.13				135	4.1	211.6	110	52	33.06	32.51	1.14	
23	NPN	EPD	4 41 45.83				200	4.5	224.0	76	52	33.76	34.11	-0.56	
23	DLM	EPD	4 41 47.95				200	4.6	239.9	78	52	35.88	36.16	-0.53	

JAN H = 1 5 22.00 UTC RMS = 0.08 NU = 9 FREE DEPTH SOLUTION  
 28 LAT = 37.152 N ERX = 0.4 ERH = 0.5 AVFM = 2.8 Q = B  
 LONG = 117.385 W ERY = 0.4 GAP = 124 AVXM = WS = A MT. JACKSON  
 DEPTH = 8.51 KM ERZ = 1.2 NM = QD = C

28	GVN	IPU	1 5 25.58				60	2.7	17.2	167	114	3.58	3.48	0.04	
28	GMN	IPD	1 5 25.94				54	2.7	19.8	34	112	3.94	4.16	-0.07	
28	LCH	IPD	1 5 26.73				63	2.8	25.0	291	107	4.73	4.81	0.00	
28	MGM	IPU	1 5 28.22				62	2.8	33.5	343	102	6.22	6.29	0.02	
28	SGV	IPU	1 5 28.56				52	2.7	36.7	121	101	6.56	6.67	-0.02	
28	PPK	EPD	1 5 31.69				50	2.7	55.4	303	97	9.69	9.74	-0.06	
28	TNP	EPD4	1 5 52.80				30	2.4	104.2	8	93	30.80	17.68	12.85	
28	LSM	EPD4	1 5 40.75				40	2.7	109.2	115	93	18.75	18.32	0.41	
28	KRNA	EPD	1 5 41.00				40	2.7	110.5	54	93	19.00	18.70	0.23	
28	LOP	EPD	1 5 40.85				45	2.8	113.3	107	93	16.85	19.10	-0.18	
28	BLT	EPD4	1 5 42.10				35	2.6	117.8	72	93	20.10	19.85	0.37	
28	MCY	EPD4	1 5 45.40				40	2.8	138.0	113	92	23.40	23.04	0.44	
28	JON	EPD4	1 5 49.04				38	2.8	139.1	125	92	27.04	23.13	3.89	
28	RVE	EPD	1 5 46.05				35	2.7	142.7	48	52	24.05	24.01	0.04	
28	SPRG	EPD4	1 5 47.28				63	3.3	149.4	110	52	25.28	24.62	0.69	

JAN H = 6 55 57.97 UTC RMS = 0.11 NU = 14 FREE DEPTH SOLUTION  
 28 LAT = 37.154 N ERX = 0.4 ERH = 0.5 AVFM = 2.8 Q = B  
 LONG = 117.389 W ERY = 0.3 GAP = 125 AVXM = WS = A MT. JACKSON  
 DEPTH = 5.55 KM ERZ = 1.9 NM = QD = C

28	GVN	IPU	6 56 1.41				60	2.7	17.5	166	103	3.44	3.37	0.01	
28	LCH	EPD	6 56 2.54				50	2.6	24.6	291	99	4.57	4.64	0.02	
28	MGM	IPU	6 56 4.08				56	2.7	33.2	343	96	6.11	6.17	0.04	
28	SGV	IPU2	6 56 4.30				66	2.9	37.1	121	95	6.33	6.68	-0.25	
28	PPK	EPD	6 56 7.49				50	2.7	55.0	303	93	9.52	9.63	-0.12	
28	CTS	EPD	6 56 11.50				50	2.8	81.0	46	92	13.63	13.87	-0.07	
28	EPN	EPD	6 56 14.00				60	3.0	94.8	86	92	16.03	16.21	-0.23	
28	TNP	EPD	6 56 16.00				30	2.4	104.1	8	92	18.03	17.64	0.12	
28	LSM	EPD	6 56 16.00				30	2.5	109.6	115	91	18.03	18.37	-0.36	
28	LOP	EPD4	6 56 17.45				60	3.1	113.7	107	91	19.48	19.16	0.40	
28	BLT	EPD2	6 56 17.90				30	2.5	118.0	72	91	19.93	19.90	0.17	
28	GNV	EPD	6 56 19.00				55	3.0	125.1	149	91	21.03	20.99	0.12	
28	MCY	EPD	6 56 20.85				55	3.1	138.4	113	90	22.88	22.81	0.15	
28	JON	EPD4	6 56 20.30				40	2.8	139.5	125	90	22.33	22.99	-0.66	
28	RVE	EPD4	6 56 18.70				45	2.9	142.8	48	90	20.73	23.53	-2.79	
28	SPRG	EPD	6 56 22.89				50	3.1	149.8	110	90	24.92	24.66	0.30	
28	NOP	EPD	6 56 24.00				30	2.6	158.8	136	52	26.03	26.06	0.07	

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FEB	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
FEB H = 8 21 21.39 UTC RMS = 0.22 NU = 13 FREE DEPTH SOLUTION 08 LAT = 36.469 N ERX = 1.4 ERH = 2.8 AVFM = 3.1 W = D LONG = 115.185 W ERY = 2.4 GAP = 234 AVXM = WS = C LAS VEGAS DEPTH = 0.98 KM ERZ = 11.0 NM = WD = D															
08	SHRG	IPU	8 21 22.20					96 3.1	4.8	34	40	0.81	1.35	0.05	
08	SPRG	EPU	8 21 32.01					76 3.1	61.2	294	38	10.62	10.61	0.03	
08	MCY	EPD	8 21 33.90					78 3.2	72.8	287	38	12.51	12.50	0.08	
08	JON	EPU	8 21 35.12					45 2.7	82.3	268	38	13.73	13.98	-0.26	
08	LDP	EPU4	8 21 38.75					63 3.1	97.7	296	38	17.36	16.64	0.80	
08	LSM	EPU4	8 21 39.13					41 2.7	101.9	287	38	17.74	17.21	0.51	
08	PRN	EPU	8 21 38.90					71 3.2	104.8	7	38	17.51	17.75	-0.36	
08	SSP	EPU4	8 21 39.99					60 3.1	105.3	299	38	18.60	17.96	0.72	
08	GMR	EPU	8 21 40.08					69 3.2	109.3	331	38	18.69	18.50	0.28	
08	BGB	EPD	8 21 40.06					89 3.4	112.5	304	38	18.67	19.05	-0.30	
08	AMR	EPD4	8 21 41.50					50 2.9	115.9	266	38	20.11	19.40	0.69	
08	EPN	EPU4	8 21 44.50					75 3.3	131.1	309	38	23.11	22.18	0.86	
08	DLM	EPU	8 21 43.95					52 3.0	132.3	17	38	22.56	22.27	0.03	
08	BRD	EPD0	8 21 44.07					46 2.9	133.0	284	38	22.68	22.21	0.58	
08	NPN	EPD	8 21 44.12					56 3.1	133.2	10	38	22.73	22.41	0.11	
08	MTI	EPD4	8 21 41.40					50 3.0	134.3	357	38	20.01	22.55	-2.52	
08	GWV	EPD4	8 21 43.71					50 3.0	137.1	257	38	22.32	23.01	-0.61	
08	WRN	EPU2	8 21 50.04					50 3.1	171.7	348	29	28.65	28.37	0.23	
08	SGV	EPU0	8 21 50.08					79 3.5	174.6	289	29	28.69	28.71	0.07	
08	KRNA	EPD	8 21 50.33					85 3.6	176.7	323	29	28.94	29.07	-0.20	
08	CTS	EPD4	8 21 53.30					65 3.4	190.1	314	29	31.91	30.77	1.31	
08	RVE	EPU4	8 21 55.70					45 3.1	194.0	333	29	34.31	31.35	2.95	
FEB H = 0 39 13.70 UTC RMS = 0.19 NU = 9 FIXED DEPTH SOLUTION 12 LAT = 38.324 N ERX = 4.4 ERH = 8.9 AVFM = 3.1 W = D DEPTH CONTROL INADEQUATE LONG = 117.246 W ERY = 7.8 GAP = 274 AVXM = WS = D TONOPAH DEPTH = 5.00 KM ERZ = 7.5 NM = WD = D															
12	MZP	EPD	0 39 25.47					45 2.7	70.2	190	92	11.77	12.22	-0.21	
12	GMN	EPD	0 39 32.19					53 3.0	113.7	181	90	18.49	18.78	-0.14	
12	LCH	EPD	0 39 34.59					55 3.1	126.0	196	90	20.89	20.79	0.18	
12	GVN	EPU	0 39 38.12					52 3.1	147.0	183	90	24.42	24.21	0.15	
12	SGV	EPU	0 39 38.70					61 3.2	150.2	173	90	25.00	24.73	0.36	
12	GLR	EPU0	0 39 40.71					44 3.0	165.2	139	52	27.01	27.04	0.04	
12	BGB	EPU4	0 39 41.58					77 3.5	168.7	148	52	27.88	27.55	0.41	
12	BRD	EPD4	0 39 43.46					57 3.3	181.8	162	52	29.76	29.05	0.83	
12	CDH1	EPD4	0 39 43.92					40 3.0	182.0	153	52	30.22	29.18	1.14	
12	MTI	EPD	0 39 43.50					40 3.0	187.6	113	52	29.80	29.94	-0.11	
12	FMT	EPD4	0 39 45.14					35 2.9	191.4	168	52	31.44	30.31	1.37	
12	SRG	EPU4	0 39 45.74					70 3.5	197.2	104	52	32.04	31.20	0.62	
12	NPN	EPD	0 39 47.39					70 3.6	216.1	110	52	33.69	33.61	-0.13	
12	PRN	EPD	0 39 47.58					60 3.5	218.3	118	52	33.88	33.86	-0.10	
12	SPRG	EPU4	0 39 49.58					60 3.5	221.1	145	52	35.88	34.16	1.75	
12	DLM	EPD4	0 39 49.47					15 2.3	234.2	110	52	35.77	35.96	-0.44	
FEB H = 16 0 0.70 UTC RMS = 0.12 NU = 18 FREE DEPTH SOLUTION 13 LAT = 36.966 N ERX = 0.4 ERH = 0.4 AVFM = 2.8 W = B LONG = 116.186 W ERY = 0.3 GAP = 68 AVXM = WS = A LATHROP WELLS DEPTH = 1.02 KM ERZ = 1.6 NM = WD = B															
13	SSP	IPU0	18 0 1.80					88 3.0	5.4	212	90	1.10	1.12	0.06	
13	BGB	IPU	18 0 2.24					14 1.5	8.7	335	90	1.54	1.68	-0.07	
13	CPX	IPU	18 0 2.96					88 3.1	12.4	109	90	2.26	2.30	-0.01	
13	LDP	EPU	18 0 2.93					80 3.0	12.6	172	90	2.23	2.33	-0.02	
13	CDH1	IPD	18 0 3.68					52 2.6	16.6	225	90	2.98	3.01	0.07	
13	CDH5	EPD	18 0 3.71					37 2.3	16.6	225	90	3.01	3.01	0.10	
13	LSM	EPU	18 0 5.22					65 2.8	26.3	197	90	4.52	4.66	-0.16	
13	GLP	EPU4	18 0 5.31					80 3.0	29.9	30	74	4.61	5.55	-0.88	
13	EPN	EPU0	18 0 6.11					74 3.0	30.1	336	90	5.41	5.30	0.05	
13	SDH	EPU0	18 0 7.19					75 3.0	38.1	201	74	6.49	6.81	-0.28	

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FEB 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 13	BRG	EPD2	18 0 8.61					65 2.9	45.2	240	74	7.91	7.93	0.09	
. 13	SPRG	IPD	18 0 8.85					92 3.2	45.2	132	74	8.15	8.01	0.17	
. 13	BLT	EPD4	18 0 11.08					50 2.7	57.5	6	74	10.38	10.13	0.38	
. 13	JON	EPD	18 0 10.82					80 3.1	58.9	173	74	10.12	10.17	-0.06	
. 13	FMT	EPD	18 0 11.06					34 2.4	64.1	236	74	10.36	11.03	-0.44	
. 13	SGV	EPD	18 0 13.86					67 3.0	75.3	271	74	13.16	12.97	0.28	
. 13	GWV	EPD4	18 0 18.01					75 3.2	96.8	207	74	17.31	16.45	0.94	
. 13	GVN	EPD	18 0 18.38					62 3.1	103.0	272	74	17.68	17.32	0.30	
. 13	MCA	EPD4	18 0 18.78					41 2.7	103.9	250	74	18.08	17.35	0.65	
. 13	PGE	EPD4	18 0 19.51					48 2.9	104.3	229	74	18.81	17.74	1.29	
. 13	PRN	EPD	18 0 19.77					11 1.6	112.1	64	74	19.07	18.93	0.01	
. 13	MTI	EPD4	18 0 20.72					51 2.9	113.0	46	74	20.02	19.09	0.95	
. 13	RVE	EPD4	18 0 21.70					45 2.8	116.9	360	74	21.00	19.88	1.12	
. 13	WRN	EPD4	18 0 22.69					45 2.9	124.5	25	74	21.99	21.00	0.95	
. 13	NPN	EPD	18 0 23.60					92 3.5	134.4	55	74	22.90	22.60	0.09	
. 13	SRG	EPD	18 0 24.34					11 1.7	141.9	44	74	23.64	23.81	-0.39	
. 13	DLM	EPD4	18 0 19.52					28 2.5	146.7	61	74	18.82	24.60	-6.04	

FEB H = 20 8 46.49 UTC RMS = 0.15 NO = 15 FREE DEPTH SOLUTION  
 . 15 LAT = 38.338 N ERX = 2.2 ERH = 3.6 AVFM = 3.2 W = D  
 . LONG = 117.271 W ERY = 2.9 GAP = 283 AVXM = W = C TONOPAH  
 . DEPTH = 5.12 KM ERZ = 1.1 NM = W = D

. 15	CTS	EPD1	20 9 1.42					68 3.1	89.5	148	92	14.93	15.26	-0.16	
. 15	RVE	EPD	20 9 3.67					70 3.2	100.9	110	91	17.18	17.20	-0.03	
. 15	MGM	EPD4	20 9 3.07					55 3.0	101.5	191	91	16.58	17.26	-0.59	
. 15	KRNA	EPD	20 9 3.96					75 3.2	102.6	130	91	17.47	17.41	-0.01	
. 15	GMN	IPD	20 9 5.66					55 3.0	115.2	179	91	19.17	19.51	-0.19	
. 15	BMT	IPD4	20 9 8.15					82 3.4	129.4	155	90	21.66	21.34	0.49	
. 15	GVN	EPD	20 9 11.08					90 3.6	148.5	182	90	24.59	24.44	0.08	
. 15	EPN	EPD4	20 9 11.87					80 3.5	150.1	146	90	25.38	24.71	0.61	
. 15	SGV	EPD	20 9 11.76					90 3.6	152.1	172	90	25.27	25.03	0.33	
. 15	WRN	EPD	20 9 11.95					65 3.3	152.6	105	90	25.46	25.12	0.30	
. 15	GLR	EPD	20 9 13.82					75 3.5	167.8	139	52	27.33	27.37	0.03	
. 15	BGR	EPD	20 9 14.31					77 3.5	171.2	147	52	27.82	27.86	0.04	
. 15	GRD	EPD	20 9 15.71					68 3.4	183.9	162	52	29.22	29.31	0.03	
. 15	CDH1	EPD	20 9 15.80					60 3.3	184.4	153	52	29.31	29.48	-0.07	
. 15	MCA	EPD4	20 9 17.40					58 3.3	187.5	180	52	30.91	29.63	1.20	
. 15	MTI	EPD	20 9 16.51					63 3.4	190.3	113	52	30.02	30.27	-0.22	
. 15	LOP	EPD	20 9 16.83					73 3.5	191.4	149	52	30.34	30.45	-0.03	
. 15	FMT	EPD4	20 9 18.23					62 3.4	193.4	167	52	31.74	30.56	1.42	
. 15	SRG	EPD4	20 9 18.87					13 2.1	199.8	105	52	32.38	31.51	0.65	
. 15	SDH	EPD2	20 9 18.67					73 3.6	205.1	156	52	32.18	32.06	0.15	
. 15	NPN	EPD	20 9 20.38					10 1.9	218.7	110	52	33.89	33.94	-0.26	
. 15	PRN	EPD	20 9 20.42					10 1.9	221.0	118	52	33.93	34.20	-0.39	
. 15	PGE	EPD4	20 9 22.76					35 3.0	221.5	175	52	36.27	34.34	2.14	
. 15	AMR	EPD4	20 9 29.17					70 3.6	226.6	162	52	42.68	34.74	7.93	
. 15	DLM	EPD	20 9 22.62					65 3.6	236.8	110	52	36.13	36.28	-0.40	
. 15	GWV	EPD4	20 9 26.90					73 3.7	244.6	167	52	40.41	37.23	3.25	
. 15	QSM	EPD4	20 9 30.87					46 3.4	265.7	172	52	44.38	39.74	4.55	

FEB H = 20 12 22.04 UTC RMS = 0.21 NU = 13 FREE DEPTH SOLUTION  
 . 16 LAT = 36.414 N ERX = 3.5 ERH = 4.5 AVFM = 3.4 W = D  
 . LONG = 114.466 W ERY = 2.8 GAP = 269 AVXM = W = C  
 . DEPTH = 5.51 KM ERZ = 2.4 NM = W = D

. 16	SHRG	EPD	20 12 32.06					58 2.9	62.5	279	93	10.02	10.82	-0.21	
. 16	APK	EPD4	20 12 39.74					65 3.1	100.0	264	92	17.70	17.12	0.85	
. 16	EPR	EPD	20 12 40.06					75 3.2	105.6	323	91	18.02	17.76	0.26	
. 16	SPRG	EPD	20 12 42.33					98 3.5	124.2	285	91	20.29	20.77	-0.45	
. 16	DLM	EPD	20 12 44.27					76 3.4	134.5	350	90	22.23	22.18	-0.19	
. 16	MCY	EPD	20 12 44.40					70 3.3	136.8	282	90	22.36	22.55	-0.11	
. 16	JUN	EPD	20 12 46.34					63 3.2	146.9	271	90	24.30	24.18	0.11	
. 16	CPX	EPD	20 12 47.29					93 3.6	153.1	292	90	25.25	25.20	0.08	
. 16	NOP	EPD	20 12 47.63					72 3.4	154.8	258	90	25.59	25.47	0.22	
. 16	MTI	EPD	20 12 47.91					82 3.5	157.5	333	90	25.87	25.91	-0.01	

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FEB 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
. 16	LOP	EPD3	20 12 48.31					70	3.4	159.9	288	90	26.27	26.30	0.05	
. 16	GLR	EPD	20 12 48.68					91	3.6	163.6	302	52	26.64	26.79	-0.08	
. 16	LSM	EPD4	20 12 49.37					70	3.4	165.7	283	52	27.33	26.98	0.33	
. 16	SSP	EPD4	20 12 49.59					70	3.4	166.6	290	52	27.55	27.31	0.32	
. 16	SDH	EPD4	20 12 50.02					65	3.3	169.7	279	52	27.98	27.48	0.54	
. 16	CDH1	EPD	20 12 50.02					60	3.3	172.9	287	52	27.98	27.97	0.11	
. 16	EPN	EPD1	20 12 52.20					70	3.5	188.1	298	52	30.16	30.12	-0.02	
. 16	BRO	EPD4	20 12 53.94					66	3.5	197.1	281	52	31.90	30.96	1.07	
. 16	GWV	EPD4	20 12 54.88					65	3.5	199.6	263	52	32.84	31.43	1.50	
. 16	QSM	EPD4	20 12 58.80					86	3.8	221.7	257	52	36.76	34.06	2.61	
. 16	SGV	EPD4	20 12 58.81					10	2.0	237.8	285	52	36.77	36.33	0.53	
. 16	CTS	EPD	20 12 58.71					63	3.6	243.9	304	52	36.67	37.18	-0.34	
. 16	GVN	EPD4	20 13 2.43					88	3.9	265.2	284	52	40.39	39.68	0.65	

FEB H = 14 46 57.51 UTC RMS = 0.17 NO = 9 FREE DEPTH SOLUTION  
 22 LAT = 36.120 N ERX = 2.5 ERH = 3.6 AVFM = 3.1 W = D  
 LONG = 114.926 W ERY = 2.6 GAP = 271 AVXM = W = C HOOVER DAM  
 DEPTH = 0.10 KM ERZ = 10.4 NM = W = D

22	SPRG	EPD	14 47 14.88					52	2.9	101.6	309	38	17.37	17.36	0.04	
22	NOP	EPD0	14 47 16.14					62	3.1	110.4	270	38	18.63	18.74	-0.03	
22	MCY	IPD0	14 47 16.34					65	3.1	110.6	303	38	18.83	18.84	0.07	
22	JON	EPD	14 47 16.02					45	2.8	111.5	289	38	18.51	18.90	-0.40	
22	EPR	EPD	14 47 17.52					64	3.2	118.6	349	38	20.01	20.14	-0.12	
22	LSM	EPD0	14 47 21.05					50	3.0	139.0	300	38	23.54	23.42	0.10	
22	SDH	EPD0	14 47 20.94					40	2.8	139.4	295	38	23.43	23.47	0.00	
22	PRN	EPD4	14 47 23.06					60	3.2	143.2	356	38	25.55	24.17	1.25	
22	BGB	EPD0	14 47 23.64					66	3.3	154.7	311	38	26.13	26.09	0.12	
22	BRO	EPD4	14 47 26.09					44	3.0	168.3	295	29	28.56	27.94	0.75	
22	NPN	EPD	14 47 26.38					44	3.0	170.0	360	29	28.87	28.34	0.32	
22	QSM	EPD4	14 47 25.86					54	3.2	175.9	264	29	28.35	28.87	-0.62	
22	SGV	EPD4	14 47 32.76					56	3.4	211.3	297	29	35.25	33.61	1.73	

FEB H = 18 37 1.89 UTC RMS = 0.31 NU = 12 FREE DEPTH SOLUTION  
 22 LAT = 35.805 N ERX = 2.4 ERH = 4.6 AVFM = 3.2 W = D  
 LONG = 114.833 W ERY = 4.0 GAP = 304 AVXM = W = C BOULDER CITY  
 DEPTH = 0.69 KM ERZ = 4.0 NM = W = D

22	SHRG	EPD4	18 37 14.34					68	3.1	82.8	340	38	12.45	14.27	-1.23	
22	APK	EPD	18 37 16.90					38	2.6	87.8	311	38	15.01	15.30	-0.02	
		ISD4	18 37 26.96										25.07	25.70	-0.63	
22	SPRG	EPD	18 37 23.58					46	2.9	132.1	318	38	21.69	22.19	-0.47	
		ESD	18 37 40.07										38.18	37.89	0.29	
22	JON	EPD	18 37 24.77					55	3.1	134.3	302	38	22.88	22.49	0.38	
22	MCY	IPD	18 37 25.07					65	3.2	139.1	313	38	23.18	23.35	-0.08	
22	EPR	EPD	18 37 27.57					76	3.4	154.6	348	38	25.68	25.86	-0.16	
		ESD	18 37 46.32										44.43	44.19	0.24	
22	AMR	EPD4	18 37 30.76					60	3.3	161.8	294	38	28.87	26.92	1.95	
22	SDH	EPD	18 37 29.63					50	3.1	164.4	305	29	27.74	27.34	0.44	
22	LSM	EPD	18 37 29.62					50	3.1	165.8	309	29	27.73	27.55	0.17	
22	GWV	EPD4	18 37 31.80					60	3.3	171.0	284	29	29.91	28.31	1.69	
22	PRN	EPD	18 37 31.23					60	3.3	178.8	354	29	29.34	29.29	-0.06	
22	QSM	EPD4	18 37 35.71					64	3.4	184.6	276	29	33.82	29.85	3.88	
22	BGB	EPD0	18 37 32.36					60	3.3	185.4	318	29	30.47	30.19	0.37	
22	GLR	EPD4	18 37 32.92					57	3.3	187.6	326	29	31.03	30.41	0.69	
22	BRO	EPD4	18 37 34.49					55	3.3	192.9	303	29	32.60	30.97	1.75	
22	NPN	EPD	18 37 34.95					55	3.3	205.2	357	29	33.06	32.72	0.14	
22	SGV	EPD4	18 37 41.48					45	3.3	236.6	303	29	39.59	36.71	2.97	
22	GVN	EPD4	18 37 45.71					25	2.8	261.4	301	29	43.82	39.73	4.03	

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FEB 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DJR	FAG	DIST (KM)	AZI (JEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
FEB H = 22 21 8.12 UTC				RMS =	0.35	NU =	10	FREE DEPTH SOLUTION							
26 LAT = 36.540 N				ERX =	3.2	ERH =	3.7	AVFM =	3.0	W = D					
LONG = 115.134 W				ERY =	1.8	GAP =	197	AVXM =		WS = C		HAYFORD PEAK			
DEPTH = 0.97 KM				ERZ =	24.0	NM =				WD = D					
.....															
26	SHRG	IPU	22 21 8.71					51	2.6	4.4	205	40	0.59	1.28	-0.10
26	EPR	EPD4	22 21 18.84					61	2.9	69.9	356	38	10.72	12.04	-1.29
26	JUN	EPD	22 21 22.37					38	2.6	87.5	263	38	14.25	14.82	-0.58
26	PRN	EPD0	22 21 24.89					65	3.1	96.5	4	38	16.77	16.39	0.26
26	NUP	IPD	22 21 25.80					45	2.8	102.3	243	38	17.68	17.24	0.54
26	SDH	IPU4	22 21 26.95					78	3.3	108.3	276	38	18.83	18.24	0.63
26	BGB	EPD4	22 21 28.50					51	2.9	112.1	299	38	20.36	18.99	1.47
26	AMR	EPD4	22 21 29.25					40	2.8	121.1	262	38	21.13	20.24	0.88
26	NPA	EPD	22 21 29.06					54	3.0	124.7	8	38	20.94	21.02	-0.29
26	MTI	EPD0	22 21 29.69					45	2.9	126.7	354	38	21.57	21.32	0.28
26	BRO	EPD4	22 21 32.12					42	2.9	135.5	280	38	24.00	22.63	1.49
26	GwV	EPD	22 21 32.39					40	2.8	143.3	254	38	24.27	24.02	0.33
26	SRG	EPD	22 21 33.12					66	3.3	149.0	2	38	25.00	24.98	-0.19
26	KRNA	EPD	22 21 36.36					59	3.3	173.2	320	29	28.24	28.62	-0.45
26	SGV	EPD	22 21 37.20					53	3.2	176.3	286	29	29.08	28.93	0.25
.....															
FEB H = 3 23 54.20 UTC				RMS =	0.13	NU =	13	FREE DEPTH SOLUTION							
28 LAT = 37.169 N				ERX =	0.9	ERH =	1.0	AVFM =	3.2	W = D					
LONG = 114.780 W				ERY =	0.4	GAP =	199	AVXM =		WS = C		DELAMAR MOUNTAINS			
DEPTH = 0.21 KM				ERZ =	157.6	NM =				WD = D					
.....															
28	PRN	IPU	3 24 0.80					90	3.2	34.0	315	38	6.60	6.40	0.08
28	EPR	IPD0	3 24 0.80					90	3.2	36.2	266	38	6.60	6.72	-0.10
28	DLM	IPD	3 24 2.78					58	2.8	46.4	4	38	8.58	8.46	-0.13
28	NPN	IPD	3 24 3.95					77	3.1	53.3	345	38	9.75	9.57	-0.03
28	MTI	EPD	3 24 6.16					63	3.0	69.5	321	38	11.96	12.18	-0.19
28	SRG	EPD	3 24 8.73					90	3.3	81.0	342	38	14.53	14.08	0.23
28	SHRG	EPD	3 24 8.17					60	3.0	83.1	204	38	13.97	14.41	0.15
28	TPU	EPD2	3 24 9.92					60	3.0	89.8	301	38	15.72	15.55	0.31
28	SPRG	EPD	3 24 12.22					70	3.2	107.0	239	38	18.02	18.21	-0.16
28	CPX	EPD4	3 24 14.40					43	2.8	117.0	256	38	20.20	19.85	0.38
28	APK	EPD	3 24 14.54					45	2.9	119.8	216	38	20.34	20.59	0.02
28	MCY	IPU4	3 24 15.17					85	3.4	120.6	241	38	20.97	20.43	0.62
28	LOP	EPD	3 24 16.10					65	3.2	129.0	253	38	21.90	21.89	0.09
28	SSP	IPD	3 24 16.43					65	3.2	131.2	257	38	22.23	22.33	-0.02
28	EPN	IPU4	3 24 17.95					73	3.3	137.1	271	38	23.75	23.33	0.36
28	JUN	IPD4	3 24 18.83					61	3.2	144.5	235	38	24.63	24.24	0.38
28	SDH	EPD4	3 24 19.86					50	3.1	151.5	247	38	25.66	25.41	0.29
28	KRNA	IPD	3 24 20.35					50	3.1	154.1	293	38	26.15	26.03	0.05
28	BMT	EPD4	3 24 22.43					75	3.5	166.0	274	29	28.23	27.92	0.48
28	NUP	EPD4	3 24 22.90					70	3.4	170.1	226	29	28.70	28.16	0.63
28	SGV	EPD4	3 24 25.34					67	3.5	201.6	263	29	31.19	32.34	-1.06
28	GMN	EPD	3 24 29.26					58	3.4	220.5	273	29	35.06	34.90	0.31
28	GVN	EPD	3 24 29.51					64	3.5	228.8	265	29	35.31	35.67	-0.42
28	LCH	EPD4	3 24 37.33					45	3.3	254.6	271	29	43.13	39.12	4.09
.....															

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MAR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
MAR H = 15 28 24.04 UTC				RMS =	0.08	NU =	14	FREE DEPTH SOLUTION							
02 LAT = 37.185 N				ERX =	0.5	ERH =	0.7	AVFM =	2.8	Q =	C				
LONG = 117.846 W				ERY =	0.5	GAP =	223	AVXM =		QS =	B	MAGRUDER MOUNTAIN			
DEPTH = 5.31 KM				ERZ =	2.1	NM =				QD =	D				
.....															
02	LCH	IPU	15 28 27.66					50	2.6	18.5	72	102	3.62	3.65	0.05
02	PPK	EPU	15 28 29.21					45	2.5	27.4	349	97	5.17	5.16	0.00
02	MGM	EPU	15 28 31.54					49	2.7	42.1	47	94	7.50	7.59	-0.01
02	GVN	EPU	15 28 32.49					48	2.7	49.1	114	93	8.45	8.48	-0.10
02	GMN	EPU	15 28 33.27					47	2.7	53.6	76	93	9.23	9.47	-0.10
02	SGV	EPU	15 28 36.70					53	2.8	75.7	107	92	12.66	12.95	-0.21
02	CTS	EPU	15 28 42.75					40	2.7	112.2	62	91	18.71	18.95	-0.07
02	PGE	EPD4	15 28 44.44					40	2.7	116.0	143	91	20.40	19.56	1.06
02	BRD	EPD	15 28 43.84					40	2.7	118.3	113	91	19.80	19.75	0.17
02	EPN	EPD4	15 28 46.91					45	2.9	135.2	89	90	22.87	22.28	0.52
02	BGB	EPD	15 28 48.06					43	2.9	144.8	96	90	24.02	23.84	0.26
02	SDH	EPD	15 28 48.42					42	2.9	147.1	114	90	24.38	24.22	0.20
02	LSM	EPD2	15 28 48.72					42	2.9	148.4	109	90	24.68	24.44	0.22
02	AMR	EPU	15 28 49.09					42	2.9	150.4	126	90	25.05	24.75	0.28
02	GKV	EPU4	15 28 49.49					45	3.0	152.6	137	90	25.45	25.12	0.41
02	CPX	EPU4	15 28 50.95					40	2.9	161.7	100	52	26.91	26.53	0.41
02	GLR	EPD3	15 28 50.94					40	2.9	162.3	89	52	26.90	26.64	0.33
02	SPRG	EPD	15 28 54.30					45	3.1	189.5	107	52	30.26	30.08	0.21
.....															
MAR H = 23 14 32.30 UTC				RMS =	0.20	NU =	7	FREE DEPTH SOLUTION							
03 LAT = 37.268 N				ERX =	1.7	ERH =	2.4	AVFM =	3.0	Q =	C				
LONG = 115.052 W				ERY =	1.7	GAP =	181	AVXM =		QS =	B	ALAMO			
DEPTH = 5.52 KM				ERZ =	4.5	NM =				QD =	D				
.....															
03	PRN	IPU	23 14 35.47					80	3.0	15.5	1	106	3.17	3.18	-0.14
03	NPN	EPU	23 14 40.07					80	3.1	43.9	13	94	7.77	7.80	-0.24
03	DLM	EPD	23 14 41.03					60	2.8	46.6	36	94	8.73	8.26	0.22
03	TPU	EPU	23 14 43.35					77	3.1	64.8	305	93	11.05	11.25	-0.06
03	GLR	EPD4	23 14 47.81					70	3.1	86.1	265	92	15.51	14.61	0.96
03	WRN	EPD	23 14 48.43					52	2.9	92.3	329	92	16.13	15.69	0.39
03	BLT	EPD4	23 14 50.39					50	2.9	97.8	284	92	18.09	16.59	1.62
03	MCY	EPD	23 14 50.05					65	3.1	105.3	230	91	17.75	17.71	0.11
03	LOP	EPU4	23 14 51.87					60	3.1	109.3	245	91	19.57	18.45	1.20
03	CDH5	EPD4	23 14 56.71					40	2.8	121.3	248	91	24.41	20.27	4.24
03	NUP	EPD	23 14 58.28					55	3.2	160.3	218	52	25.98	26.25	-0.18
.....															
MAR H = 19 41 52.17 UTC				RMS =	0.09	NU =	9	FREE DEPTH SOLUTION							
05 LAT = 36.532 N				ERX =	0.3	ERH =	0.4	AVFM =	2.6	Q =	B				
LONG = 116.364 W				ERY =	0.2	GAP =	104	AVXM =		QS =	A	LATHROP WELLS			
DEPTH = 1.93 KM				ERZ =	1.2	NM =				QD =	C				
.....															
05	SDH	EPU	19 41 54.54					56	2.7	12.8	10	95	2.37	2.59	-0.18
05	AMR	EPD	19 41 55.48					54	2.7	17.9	214	93	3.31	3.39	-0.09
05	LSM	EPU	19 41 56.57					45	2.5	24.5	19	74	4.40	4.57	-0.19
05	JON	EPU	19 41 56.94					56	2.7	25.5	114	74	4.77	4.69	0.07
05	BRD	EPU	19 41 58.29					56	2.7	34.7	318	74	6.12	6.19	0.05
05	CDH1	EPU	19 41 58.79					35	2.3	36.7	6	74	6.62	6.60	0.12
05	MCY	EPU	19 41 59.01					50	2.7	38.7	68	74	6.84	6.91	0.01
05	LOP	EPD	19 41 59.41					45	2.6	39.8	26	74	7.24	7.18	0.14
05	NOP	EPD	19 42 0.59					50	2.7	48.7	157	74	8.42	8.47	0.04
05	BGB	EPD4	19 41 58.69					40	2.5	57.4	12	74	6.52	10.05	-3.45
.....															
MAR H = 23 27 56.08 UTC				RMS =	0.10	NU =	35	FREE DEPTH SOLUTION							
10 LAT = 37.155 N				ERX =	0.2	ERH =	0.2	AVFM =	3.4	Q =	B				
LONG = 116.917 W				ERY =	0.2	GAP =	36	AVXM =		QS =	A	THIRSTY CANYON			
DEPTH = 6.59 KM				ERZ =	1.1	NM =				QD =	C				
.....															
10	SGV	IPU	23 28 0.20					100	3.2	21.9	208	104	4.12	4.26	-0.05
10	BMT	IPU	23 28 1.37					100	3.2	28.0	59	100	5.29	5.36	0.10

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MAR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
. 10	GMN	IPU	23 28	2.26				98	3.2	34.4	298	98	6.18	6.39	-0.06	
. 10	GVN	IPD	23 28	3.41				100	3.3	41.5	246	96	7.33	7.26	0.01	
. 10	BRD	IPU	23 28	4.66				100	3.3	50.7	149	95	8.58	8.76	-0.06	
. 10	EPN	IPD	23 28	5.78				100	3.3	53.1	83	95	9.70	9.43	0.21	
. 10	CTS	IPD	23 28	6.06				95	3.3	58.2	17	94	9.98	10.17	-0.02	
. 10	FMT	IPU	23 28	5.92				100	3.3	58.5	168	94	9.84	10.05	0.03	
. 10	MGM	EPU	23 28	6.59				93	3.3	60.4	302	94	10.51	10.58	0.02	
. 10	CDH1	IPD	23 28	6.91				93	3.3	62.6	122	94	10.83	10.79	0.14	
. 10	CDH5	EPD	23 28	6.84				100	3.3	62.6	122	94	10.76	10.72	0.14	
. 10	BGB	IPU	23 28	6.98				100	3.3	62.6	102	94	10.90	10.86	0.12	
. 10	MCA	IPD	23 28	6.96				101	3.4	65.0	210	94	10.88	10.95	-0.15	
. 10	LCH	EPD	23 28	7.45				80	3.2	65.5	278	94	11.37	11.27	0.18	
. 10	MZP	EPU	23 28	8.60				90	3.3	73.3	326	93	12.52	12.72	0.03	
. 10	LSM	EPD	23 28	8.59				104	3.4	73.6	129	93	12.51	12.53	-0.04	
. 10	LOP	IPU	23 28	8.84				100	3.4	74.6	117	93	12.76	12.80	0.04	
. 10	SDH	EPU	23 28	8.94				100	3.4	76.6	138	93	12.86	12.99	-0.09	
. 10	BLT	IPD	23 28	9.52				95	3.4	79.2	63	93	13.44	13.58	-0.01	
. 10	CPX	EPU	23 28	9.94				98	3.4	80.7	108	93	13.86	13.70	0.18	
. 10	PGE	IPD	23 28	11.51				88	3.3	90.5	188	93	15.43	15.41	0.24	
. 10	PPK	EPD3	23 28	12.28				100	3.5	92.8	289	92	16.20	15.79	0.40	
. 10	AMR	EPU	23 28	11.63				97	3.4	92.9	155	92	15.55	15.57	-0.03	
. 10	MCY	EPU	23 28	13.02				95	3.4	101.2	123	92	16.94	17.04	-0.02	
. 10	TNP	EPU	23 28	14.27				85	3.4	106.2	345	92	18.19	17.99	-0.08	
. 10	JON	EPU	23 28	13.92						107.6	138	92	17.84	18.01	-0.18	
. 10	GWV	EPU	23 28	14.35				95	3.5	109.7	168	92	18.27	18.48	-0.13	
. 10	SPRG	EPU	23 28	14.75				95	3.5	111.2	117	92	18.67	18.66	0.04	
. 10	RVE	EPD	23 28	15.50				95	3.5	115.3	34	92	19.42	19.55	-0.13	
. 10	NQP	EPU	23 28	18.04				90	3.5	132.9	149	92	21.96	22.14	-0.09	
. 10	MTI	EPD	23 28	21.84				90	3.6	156.7	68	52	25.76	25.81	-0.02	
. 10	PRN	EPD	23 28	23.61				100	3.7	167.9	80	52	27.53	27.23	0.18	
. 10	SRG	EPD	23 28	25.74				95	3.7	182.3	64	52	29.66	29.13	0.31	
. 10	NPN	EPD	23 28	25.52				95	3.7	183.8	73	52	29.44	29.32	-0.09	
. 10	DLM	EPD	23 28	27.43				61	3.4	199.2	75	52	31.35	31.31	-0.21	

MAR H = 1 9 5.15 UTC RMS = 0.08 NU = 9 FREE DEPTH SOLUTION  
 . 14 LAT = 36.534 N ERX = 0.3 ERH = 0.4 AVFM = 2.5 W = C  
 . LONG = 116.369 W ERY = 0.3 GAP = 106 AVXM = QS = C LATHROP WELLS  
 . DEPTH = 2.99 KM ERZ = 101.5 NM = WD = C

. 14	SDH	EPU	1 9	7.53				45	2.5	12.7	12	74	2.38	2.58	-0.16	
. 14	AMR	EPD	1 9	8.46				43	2.5	17.8	212	74	3.31	3.35	-0.05	
. 14	LSM	EPU	1 9	9.57				42	2.5	24.4	21	74	4.42	4.51	-0.10	
. 14	JON	EPD	1 9	10.00				46	2.5	26.0	114	74	4.85	4.72	0.13	
. 14	BRD	EPD	1 9	11.14				44	2.5	34.2	318	74	5.99	6.06	0.05	
. 14	CDH1	EPD	1 9	11.57				38	2.4	36.5	7	74	6.42	6.52	0.00	
. 14	MCY	EPD	1 9	11.99				45	2.6	39.0	69	74	6.84	6.91	0.01	
. 14	LOP	EPD	1 9	12.29				40	2.5	39.8	27	74	7.14	7.13	0.10	
. 14	GWV	EPD4	1 9	15.23				35	2.4	47.1	215	74	10.08	8.28	1.88	
. 14	NOP	EPU	1 9	13.47				37	2.4	49.1	157	74	8.32	8.48	-0.07	

MAR H = 13 10 59.08 UTC RMS = 0.10 NO = 19 FREE DEPTH SOLUTION  
 . 16 LAT = 36.534 N ERX = 0.2 ERH = 0.3 AVFM = 3.6 W = C  
 . LONG = 115.567 W ERY = 0.2 GAP = 87 AVXM = QS = B MERCURY  
 . DEPTH = 2.29 KM ERZ = 3.1 NM = WD = C

. 16	APK	IPD	13 11	3.52				130	3.4	23.8	182	74	4.44	4.76	-0.05	
. 16	SPRG	IPU	13 11	4.06						28.0	309	74	4.98	5.15	-0.14	
. 16	SHRG	IPU	13 11	5.23				126	3.5	37.0	95	74	6.15	6.70	0.04	
. 16	MCY	IPU	13 11	5.82						38.1	292	74	6.74	6.80	0.02	
. 16	JON	IPU	13 11	7.86				140	3.6	49.1	258	74	8.78	8.52	0.25	
. 16	CPX	IPU	13 11	9.96				150	3.7	62.0	315	74	10.88	10.68	0.23	
. 16	LOP	IPU	13 11	10.33				140	3.6	64.4	304	74	11.25	11.16	0.17	
. 16	LSM	IPU	13 11	10.79				130	3.6	67.2	290	74	11.71	11.50	0.19	
. 16	NOP	EPD	13 11	10.80						69.3	229	74	11.72	11.80	0.01	
. 16	SDH	IPU	13 11	11.36						70.1	280	74	12.28	11.96	0.36	
. 16	SSP	IPU	13 11	11.70						72.6	307	74	12.62	12.57	0.13	



# 1981 SGB LOCAL-EVENT DATA REPORT

MAR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 16	CDH1	IPD	13 11 12.20						76.2	298	74	13.12	13.02	0.20	
. 16	EPR	IPD4	13 11 11.80				150	3.8	78.2	26	74	12.72	13.32	-0.58	
. 16	BGB	EPD	13 11 12.81						81.3	313	74	13.73	13.91	-0.10	
. 16	AMR	IPU4	13 11 13.61						82.7	259	74	14.53	13.93	0.59	
. 16	GLR	EPD	13 11 13.12				128	3.6	84.1	331	74	14.04	14.30	-0.20	
. 16	BRD	IPU4	13 11 15.89				135	3.7	98.1	285	74	16.81	16.47	0.46	
. 16	EPN	EPD	13 11 16.40						101.2	318	74	17.32	17.27	-0.01	
. 16	GWV	IPU4	13 11 17.62						106.2	249	74	18.54	17.93	0.69	
. 16	FMT	EPD4	13 11 17.60						109.1	276	74	18.52	18.29	0.47	
. 16	BLT	EPD	13 11 18.30						116.3	335	74	19.22	19.62	-0.27	
. 16	PGE	EPD4	13 11 22.48				120	3.8	136.0	261	74	23.40	22.84	0.78	
. 16	DLM	IPD	13 11 22.70						139.9	32	74	23.62	23.44	-0.07	
. 16	KRNA	IPU	13 11 24.68						152.2	332	74	25.60	25.50	0.03	
. 16	CTS	EPD	13 11 25.87						161.7	320	49	26.79	26.97	-0.01	

MAR H = 23 11 16.23 UTC RMS = 0.19 NO = 12 FREE DEPTH SOLUTION  
. 28 LAT = 37.076 N ERX = 0.8 ERH = 1.0 AVFM = 2.7 Q = B  
LONG = 116.169 W ERY = 0.6 GAP = 97 AVXM = QS = B SILENT CANYON - YUCCA FLAT  
DEPTH = 4.88 KM ERZ = 2.7 NM = QD = B

. 28	BGB	IPD	23 11 18.04				85	3.0	6.8	231	125	1.81	1.90	-0.01	
. 28	SSP	IPD	23 11 19.69				60	2.7	17.4	195	101	3.46	3.59	-0.05	
. 28	GLR	IPD	23 11 19.89				58	2.7	19.1	45	99	3.66	3.74	-0.01	
. 28	CPX	IPU	23 11 19.96				55	2.7	19.1	148	99	3.73	3.71	0.05	
. 28	EPN	IPU	23 11 20.02				90	3.1	20.6	318	99	3.79	4.15	-0.42	
. 28	CDH5	IPD	23 11 21.01				74	3.0	27.4	209	96	4.78	4.99	-0.11	
. 28	CDH1	IPU	23 11 21.06				51	2.6	27.4	209	96	4.83	5.06	-0.13	
. 28	LSM	EPD4	23 11 20.07				44	2.6	38.5	194	94	3.84	6.81	-2.99	
. 28	BLT	EPD	23 11 24.10				31	2.3	45.2	5	93	7.87	8.04	-0.04	
. 28	GMR	IPD	23 11 24.44				45	2.6	45.4	51	93	8.21	8.02	0.29	
. 28	MCY	EPD4	23 11 23.05				37	2.4	49.6	158	93	6.82	8.64	-1.74	
. 28	SDH	EPD	23 11 24.89				50	2.7	50.2	198	93	8.66	8.69	0.01	
. 28	SGV	IPU	23 11 29.68				58	2.9	77.6	262	92	13.45	13.26	0.28	
. 28	CTS	EPD4	23 11 31.46				25	2.2	81.1	323	91	15.23	13.89	1.51	
. 28	MTI	IPU4	23 11 35.46				40	2.7	103.6	50	90	19.23	17.15	2.11	
. 28	RVE	EPD4	23 11 34.89				23	2.2	104.7	359	90	18.66	17.33	1.33	
. 28	GVN	EPD	23 11 34.12				40	2.7	104.8	265	90	17.89	17.35	0.48	
. 28	PRN	EPD4	23 11 35.35				65	3.1	105.9	70	90	19.12	17.52	1.48	
. 28	WRN	EPD4	23 11 36.16				20	2.1	112.8	27	90	19.93	18.65	1.24	
. 28	MGM	EPD4	23 11 37.74				32	2.6	124.5	289	90	21.51	20.54	1.05	
. 28	SRG	EPD4	23 11 39.31				72	3.3	132.2	47	90	23.08	21.79	1.07	

MAR H = 11 19 44.63 UTC RMS = 0.24 NO = 14 FREE DEPTH SOLUTION  
. 29 LAT = 36.539 N ERX = 2.3 ERH = 2.8 AVFM = 3.0 Q = D  
LONG = 117.972 W ERY = 1.5 GAP = 241 AVXM = QS = C DRY MOUNTAIN  
DEPTH = 0.08 KM ERZ = 10.0 NM = QD = D

. 29	MCA	IPU	11 19 55.33				45	2.7	63.1	79	38	10.70	10.90	-0.28	
. 29	GVN	IPU	11 19 58.04				55	2.9	76.1	48	38	13.41	13.15	0.20	
. 29	LCH	EPD	11 19 58.58				35	2.5	82.5	21	38	13.95	14.30	-0.27	
. 29	PGE	IPD	11 19 59.10				51	2.8	84.0	105	38	14.47	14.63	0.06	
. 29	SGV	IPD	11 20 1.40				75	3.2	97.2	60	38	16.77	16.72	0.14	
. 29	PPK	EPD	11 20 1.53				48	2.8	98.7	3	38	16.90	17.01	-0.12	
. 29	MGM	EPD	11 20 3.51				40	2.7	108.7	23	38	18.88	18.71	0.26	

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MAR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 29	QSM	EPD	11 20 4.74			45		2.8	117.8	123	38	20.11	19.88	0.14	
. 29	MZP	IPD4	11 20 8.94			35		2.7	139.2	22	38	24.31	23.71	0.84	
. 29	BMT	EPD4	11 20 9.51			70		3.3	144.3	55	38	24.88	24.50	0.55	
. 29	SDH	EPD4	11 20 14.80			45		2.9	146.7	85	38	30.17	24.66	5.55	
. 29	CDH5	EPD	11 20 10.03			75		3.4	152.1	76	38	25.40	25.54	-0.04	
. 29	CDH1	IPD	11 20 10.04			60		3.2	152.1	76	38	25.41	25.61	-0.10	
. 29	LSM	EPD4	11 20 12.55			48		3.0	153.7	82	38	27.42	25.82	2.08	
. 29	SSP	EPD	11 20 11.34			50		3.1	162.5	75	38	26.71	27.44	-0.65	
. 29	EPN	EPD	11 20 12.30			60		3.3	165.0	63	29	27.67	27.84	-0.23	
. 29	BGB	EPD	11 20 12.69			50		3.1	165.3	70	29	28.06	27.75	0.39	
. 29	CTS	EPD	11 20 12.85			35		2.8	166.4	42	29	28.22	27.93	0.46	
. 29	CPX	EPD4	11 20 14.62			40		3.0	176.8	76	29	29.99	29.12	0.90	
. 29	MCY	EPD4	11 20 11.17			39		2.9	180.4	86	29	26.54	29.59	-2.97	
. 29	TNP	EPD4	11 20 16.12			48		3.1	183.9	21	29	31.49	30.18	1.04	
. 29	GLR	EPD4	11 20 16.75			30		2.7	189.0	67	29	32.12	30.73	1.46	
. 29	SPRG	EPD4	11 20 17.56			60		3.4	194.3	85	29	32.93	31.36	1.60	
. 29	KRNA	EPD4	11 20 17.54			35		2.9	194.6	47	29	32.91	31.57	1.27	
. 29	BLT	EPD4	11 20 17.31			40		3.0	195.1	58	29	32.68	31.60	1.21	
. 29	GMR	EPD4	11 20 20.06			22		2.6	215.1	66	29	35.43	34.11	1.42	
. 29	APK	EPD4	11 20 17.50			60		3.4	216.5	96	29	32.87	34.54	-1.40	
. 29	PRN	EPD4	11 20 31.64			48		3.5	277.4	70	29	47.01	42.07	4.82	

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1981 SGB LOCAL-EVENT DATA REPORT

APR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
APR H = 19 40 2.30 UTC				RMS = 0.31	NO = 14	FREE DEPTH SOLUTION									
02 LAT = 38.322 N				ERX = 1.9	ERH = 4.3	AVFM = 3.5		u = D							
LONG = 117.286 W				ERY = 3.8	GAP = 255	AVXM =		uS = C	TONOPAH						
DEPTH = 3.00 KM				ERZ = 4.4	NM =			uD = D							
.....															
02	TNP	EPD	19 40 7.19			113	3.3	27.3	167	74		4.89	5.15	-0.53	
02	CTS	EPD	19 40 17.49			100	3.4	88.8	146	74		15.19	15.13	0.22	
02	RVE	EPD	19 40 19.64			85	3.3	101.6	109	74		17.34	17.30	0.04	
02	KRNA	EPD2	19 40 20.03			120	3.6	102.5	129	74		17.73	17.38	0.27	
02	PPK	EPD	19 40 21.62			60	3.1	113.5	209	74		19.32	19.13	0.18	
02	LCH	EPD	19 40 23.24			66	3.2	124.8	195	74		20.94	20.90	0.11	
02	BLT	EPD	19 40 25.64			100	3.6	138.5	132	74		23.34	23.20	0.27	
02	GVN	EPD4	19 40 27.47			84	3.5	146.7	182	74		25.17	24.33	0.77	
02	SGV	EPD	19 40 27.71			82	3.5	150.5	171	74		25.41	25.11	0.39	
02	WRN	EPD	19 40 28.00			95	3.6	153.5	104	74		25.70	25.62	0.03	
02	TPU	EPD	19 40 29.21			71	3.4	164.4	119	49		26.91	27.25	-0.20	
02	GLR	EPD	19 40 30.00			75	3.5	167.4	138	49		27.70	27.53	0.24	
02	GMR	EPD	19 40 30.70			79	3.5	172.8	129	49		28.40	28.25	0.25	
02	BRO	EPD	19 40 31.31			69	3.4	182.7	161	49		29.01	29.37	-0.24	
02	CDH1	EPD4	19 40 30.51			66	3.4	183.5	152	49		28.21	29.57	-1.26	
02	LOP	EPD4	19 40 34.11			126	4.0	190.6	149	49		31.81	30.56	1.33	
02	MTI	EPD	19 40 32.58			67	3.5	190.9	112	49		30.28	30.55	-0.24	
02	NPN	EPD	19 40 36.37			74	3.6	219.3	110	49		34.07	34.23	-0.38	
02	PGE	EPD4	19 40 37.18			63	3.5	219.9	175	49		34.88	34.35	0.75	
02	PRN	IPD	19 40 36.74			73	3.6	221.4	117	49		34.44	34.46	-0.14	
02	JON	EPD4	19 40 39.51			100	3.9	233.7	153	49		37.21	35.91	1.29	
.....															
APR H = 0 53 43.34 UTC				RMS = 0.43	NO = 10	FREE DEPTH SOLUTION									
03 LAT = 38.274 N				ERX = 3.6	ERH = 7.5	AVFM = 3.1		u = D							
LONG = 117.230 W				ERY = 6.6	GAP = 255	AVXM =		uS = D	TONOPAH						
DEPTH = 2.38 KM				ERZ = 7.7	NM =			uD = D							
.....															
03	TNP	EPD	0 53 47.15			75	3.0	21.4	177	74		3.81	4.21	-0.66	
03	RVE	EPD	0 53 59.89			60	3.0	95.3	107	74		16.55	16.31	0.25	
03	GMN	EPD	0 54 1.94			47	2.9	108.2	181	74		18.60	18.36	0.39	
03	PPK	EPD	0 54 2.19			46	2.8	111.4	212	74		18.85	18.82	0.02	
03	LCH	EPD	0 54 4.05			50	3.0	121.1	198	74		20.71	20.32	0.47	
03	BLT	EPD4	0 54 6.43			65	3.2	131.2	132	74		23.09	22.05	1.18	
03	GVN	EPD4	0 54 7.70			55	3.1	141.6	184	74		24.36	23.54	0.77	
03	EPN	EPD4	0 54 8.06			85	3.5	142.3	146	74		24.72	23.94	0.73	
03	SGV	EPD4	0 54 8.24			63	3.2	144.6	173	74		24.90	24.17	0.83	
03	GLR	EPD	0 54 10.10			55	3.2	160.2	138	49		26.76	26.67	0.16	
03	GMR	EPD	0 54 10.74			59	3.3	165.6	129	49		27.40	27.39	0.11	
03	CDH1	EPD	0 54 12.28			58	3.3	176.4	153	49		28.94	28.74	0.31	
03	MTI	EPD	0 54 12.81			47	3.1	184.3	111	49		29.47	29.78	-0.27	
03	NPN	EPD	0 54 16.57			53	3.3	212.9	109	49		33.23	33.48	-0.45	
03	DLM	EPD	0 54 18.81			51	3.4	231.3	109	49		35.47	35.86	-0.63	
.....															
APR H = 10 43 58.75 UTC				RMS = 0.11	NO = 7	FREE DEPTH SOLUTION									
03 LAT = 37.570 N				ERX = 0.6	ERH = 0.8	AVFM = 2.7		u = C							
LONG = 116.465 W				ERY = 0.6	GAP = 127	AVXM =		uS = C	QUARTZITE MOUNTAIN						
DEPTH = 3.04 KM				ERZ = 168.0	NM =			uD = C							
.....															
03	KRNA	EPD	10 44 2.52			66	2.8	20.5	22	90		3.77	3.63	0.07	
03	CTS	EPD	10 44 2.91			50	2.6	25.0	293	90		4.16	4.37	-0.03	
03	BLT	EPD	10 44 3.87			64	2.9	31.8	108	90		5.12	5.47	-0.22	
03	GLR	EPD	10 44 8.09			42	2.6	57.1	136	90		9.34	9.58	-0.17	
03	BGB	EPD	10 44 9.17			31	2.3	62.7	160	90		10.42	10.49	0.01	
03	GMR	EPD	10 44 9.88			40	2.6	66.7	113	90		11.13	11.14	0.09	
03	MTI	EPD4	10 44 16.89			33	2.5	105.9	84	90		18.14	17.53	0.65	
03	PRN	EPD4	10 44 20.40			38	2.7	126.4	98	90		21.65	20.86	0.68	
03	JON	EPD	10 44 20.51			60	3.1	129.5	166	90		21.76	21.35	0.40	
.....															

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APR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
APR H = 16 34 17.19 UTC				RMS =	0.23	NO =	9	FREE DEPTH SOLUTION							
05 LAT = 36.039 N				ERX =	5.6	ERH =	6.9	AVFM =	3.2	Q =	D				
LONG = 117.745 W				ERY =	4.0	GAP =	272	AVXM =		QS =	D	DARWIN			
DEPTH = 0.30 KM				ERZ =	19.8	NM =				QD =	D				
.....															
05	PGE	EPD3	16 34 29.62					64 3.0	70.1	61	38	12.43	12.33	0.32	
05	MCA	EPD	16 34 30.44					50 2.8	79.5	32	38	13.25	13.52	-0.35	
05	GSM	EPD	16 34 30.72					45 2.7	79.5	96	38	13.53	13.61	-0.17	
05	GMV	EPD	16 34 34.06					66 3.1	98.2	80	38	16.87	16.82	0.13	
05	GVN	EPD	16 34 36.17					74 3.3	112.8	19	38	18.98	19.06	-0.14	
05	AMR	EPD4	16 34 38.10					79 3.3	121.1	71	38	20.91	20.38	0.52	
05	SGV	EPD	16 34 38.08					72 3.3	122.6	31	38	20.89	20.79	0.19	
05	SDH	EPD	16 34 41.27					69 3.3	143.2	62	38	24.08	24.05	0.07	
05	MGM	EPD	16 34 44.09					46 3.0	157.2	8	38	26.90	26.54	0.45	
05	BMT	EPD	16 34 45.54					81 3.5	169.5	35	29	28.35	28.35	0.17	
05	EPN	EPD4	16 34 48.34					82 3.6	182.2	44	29	31.15	30.00	1.09	
05	CTS	EPD4	16 34 50.80					49 3.2	201.3	27	29	33.61	32.36	1.42	
05	KRNA	EPD4	16 34 54.81					75 3.7	224.8	33	29	37.62	35.39	2.16	
05	GMR	EPD4	16 34 55.55					54 3.4	227.6	51	29	38.36	35.65	2.81	
.....															
APR H = 18 19 47.02 UTC				RMS =	0.13	NO =	13	FREE DEPTH SOLUTION							
06 LAT = 36.440 N				ERX =	1.8	ERH =	2.3	AVFM =	3.5	Q =	C				
LONG = 114.478 W				ERY =	1.4	GAP =	272	AVXM =		QS =	B				
DEPTH = 0.27 KM				ERZ =	4.7	NM =				QD =	D				
.....															
06	APK	EPD	18 20 3.96					76 3.2	99.3	262	38	16.94	17.25	-0.03	
06	PRN	EPD	18 20 7.24					71 3.2	118.8	335	38	20.22	20.18	-0.07	
06	SPRG	EPD	18 20 7.52					113 3.7	122.5	283	38	20.50	20.72	-0.18	
06	DLM	EPD	18 20 9.46					72 3.3	131.5	350	38	22.44	22.29	-0.09	
06	MCY	EPD	18 20 9.68					75 3.4	135.1	281	38	22.66	22.78	-0.04	
06	JON	EPD	18 20 11.43					69 3.3	145.8	270	38	24.41	24.45	-0.04	
06	GMR	EPD	18 20 12.72					77 3.4	152.1	311	38	25.70	25.61	0.19	
06	MTI	EPD	18 20 12.95					67 3.3	154.4	333	38	25.93	25.97	-0.01	
06	LOP	EPD	18 20 13.68					65 3.3	158.0	287	38	26.66	26.60	0.14	
06	TPU	EPD	18 20 15.11					65 3.3	166.1	321	29	28.09	27.86	0.37	
06	SDH	EPD	18 20 15.11					68 3.4	168.3	278	29	28.09	27.94	0.20	
06	SRG	EPD	18 20 15.34					85 3.6	168.4	342	29	28.32	28.10	0.01	
06	GMV	EPD4	18 20 20.86					75 3.6	199.0	262	29	33.84	31.99	1.94	
06	BMT	EPD	18 20 21.19					107 3.9	214.7	296	29	34.17	34.16	0.19	
06	KRNA	EPD4	18 20 21.57					60 3.5	222.3	311	29	34.55	35.08	-0.60	
06	SGV	EPD	18 20 23.87					96 3.9	236.1	285	29	36.85	36.75	0.20	
06	CTS	EPD4	18 20 23.78					60 3.5	241.4	304	29	36.76	37.51	-0.57	
06	GVN	EPD4	18 20 27.95					89 4.0	263.5	284	29	40.93	40.10	0.77	
06	GMN	EPD4	18 20 28.58					79 3.9	265.7	291	29	41.56	40.68	1.03	
.....															
APR H = 23 3 28.07 UTC				RMS =	0.09	NO =	21	FREE DEPTH SOLUTION							
07 LAT = 37.156 N				ERX =	0.2	ERH =	0.3	AVFM =	3.1	Q =	C				
LONG = 116.916 W				ERY =	0.2	GAP =	75	AVXM =		QS =	C	THIRSTY CANYON			
DEPTH = 0.85 KM				ERZ =	13.0	NM =				QD =	C				
.....															
07	SGV	IPD	23 3 32.30					98 3.2	22.0	208	40	4.23	4.27	0.05	
07	BMT	EPD	23 3 33.01					87 3.1	27.9	60	40	4.94	5.40	-0.29	
07	GMN	IPD	23 3 34.43					91 3.2	34.4	298	38	6.36	6.47	0.04	
07	GVN	EPD	23 3 35.41					85 3.1	41.6	246	38	7.34	7.37	-0.09	
07	BRO	IPD4	23 3 36.25					64 2.9	50.7	149	38	8.18	8.87	-0.57	
07	EPN	EPD2	23 3 37.85					65 2.9	53.0	83	38	9.78	9.52	0.19	
07	CTS	IPD	23 3 38.16					56 2.8	58.1	17	38	10.09	10.26	-0.01	
07	FMT	IPD	23 3 38.00					75 3.1	58.6	168	38	9.93	10.17	0.00	
07	MGM	EPD	23 3 38.64					91 3.3	60.4	302	38	10.57	10.68	-0.02	
07	BGB	EPD	23 3 39.10					81 3.2	62.6	102	38	11.03	10.97	0.14	
07	LCH	EPD4	23 3 40.02					89 3.3	65.5	278	38	11.95	11.38	0.65	
07	SDH	EPD	23 3 41.08					65 3.0	76.6	138	38	13.01	13.10	-0.05	
07	BLT	EPD	23 3 41.63					60 3.0	79.2	63	38	13.56	13.68	0.01	
07	GLR	EPD	23 3 41.63					78 3.2	79.9	87	38	13.56	13.73	-0.10	
07	KRNA	IPD	23 3 42.12					60 3.0	80.5	36	38	14.05	13.93	0.05	

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APR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 07	PGE	EPD	23 3 43.37					76 3.2	90.6	188	38	15.30	15.54	-0.02	
. 07	AMR	EPD	23 3 43.91					54 2.9	92.9	155	38	15.84	15.69	0.14	
. 07	MCY	EPD	23 3 45.12					67 3.1	101.2	123	38	17.05	17.15	-0.02	
. 07	GMR	EPD	23 3 45.71					84 3.3	103.6	79	38	17.64	17.60	0.14	
. 07	JON	EPD	23 3 46.11					56 3.0	107.6	138	38	18.04	18.12	-0.09	
. 07	GNV	EPD	23 3 46.69					55 3.0	109.8	168	38	18.62	18.60	0.10	
. 07	SPRG	EPD	23 3 47.00					73 3.2	111.2	117	38	18.93	18.77	0.19	
. 07	GSM	EPD	23 3 50.03					70 3.3	132.2	178	38	21.96	22.06	-0.19	
. 07	WRN	EPD4	23 3 53.70					40 2.9	148.9	52	38	25.63	25.00	0.59	
. 07	PRN	EPD4	23 3 55.57					65 3.3	167.8	80	29	27.50	27.84	-0.47	
. 07	NPN	EPD4	23 3 57.72					82 3.6	183.7	73	29	29.65	29.93	-0.49	

APR H = 4 38 31.89 UTC RMS = 0.10 NO = 22 FREE DEPTH SOLUTION  
 . 08 LAT = 37.155 N ERX = 0.2 ERH = 0.3 AVFM = 3.0 W = B  
 . LONG = 116.914 W ERY = 0.2 GAP = 79 AVXM = W = A THIRSTY CANYON  
 . DEPTH = 6.37 KM ERZ = 1.2 NM = W = C

. 08	SGV	IPD	4 38 35.96					94 3.2	22.0	209	103	4.07	4.27	-0.11	
. 08	BMT	EPD	4 38 37.11					85 3.1	27.7	59	100	5.22	5.31	0.08	
. 08	GMN	IPD	4 38 38.19					82 3.1	34.7	298	97	6.30	6.42	0.02	
. 08	GVN	IPD	4 38 39.23					81 3.1	41.8	246	96	7.34	7.30	-0.02	
. 08	BRO	IPD4	4 38 39.92					50 2.7	50.6	149	95	8.03	8.74	-0.59	
. 08	EPN	EPD	4 38 41.48					79 3.1	52.8	83	94	9.59	9.38	0.15	
. 08	CTS	EPD	4 38 41.78					58 2.9	58.1	17	94	9.89	10.16	-0.10	
. 08	FMT	IPD	4 38 41.57					48 2.7	58.5	168	94	9.68	10.04	-0.13	
. 08	BGB	EPD	4 38 42.65					67 3.0	62.4	102	94	10.76	10.82	0.02	
. 08	LSM	EPD	4 38 44.34					65 3.0	73.4	129	93	12.45	12.49	-0.06	
. 08	LUP	EPD	4 38 44.57					70 3.1	74.4	117	93	12.68	12.76	0.00	
. 08	SDH	EPD	4 38 44.71					65 3.0	76.4	138	93	12.82	12.96	-0.10	
. 08	GLR	EPD4	4 38 46.34					54 2.9	79.7	86	93	14.45	13.57	0.94	
. 08	KRNA	EPD	4 38 45.77					57 2.9	80.4	36	93	13.88	13.80	0.00	
. 08	CPX	EPD	4 38 45.73					64 3.0	80.4	108	93	13.84	13.66	0.21	
. 08	PGE	IPD	4 38 47.30					58 3.0	90.5	189	92	15.41	15.42	0.21	
. 08	AMR	EPD	4 38 47.54					60 3.0	92.8	155	92	15.65	15.55	0.08	
. 08	MCY	EPD	4 38 48.67					65 3.1	101.0	123	92	16.78	17.00	-0.14	
. 08	GNV	EPD	4 38 50.25					60 3.1	109.7	169	92	18.36	18.47	-0.03	
. 08	SPRG	EPD4	4 38 50.05					60 3.1	111.0	117	92	18.16	18.62	-0.43	
. 08	RVE	EPD	4 38 51.24					53 3.0	115.2	34	92	19.35	19.52	-0.17	
. 08	GSM	EPD	4 38 53.96					46 2.9	132.1	178	92	22.07	21.95	0.03	
. 08	WRN	EPD4	4 38 57.34					53 3.1	148.7	52	52	25.45	24.86	0.54	
. 08	EPR	EPD4	4 38 57.56					72 3.4	153.3	89	52	25.67	25.35	0.33	
. 08	MTI	EPD	4 38 57.69					52 3.1	156.4	68	52	25.80	25.80	0.03	
. 08	PRN	EPD	4 38 59.44					60 3.3	167.6	80	52	27.55	27.22	0.21	
. 08	NPN	EPD	4 39 1.42					59 3.3	183.5	72	52	29.53	29.30	0.01	

APR H = 4 44 52.79 UTC RMS = 0.15 NO = 24 FREE DEPTH SOLUTION  
 . 08 LAT = 37.154 N ERX = 0.3 ERH = 0.4 AVFM = 3.2 W = B  
 . LONG = 116.913 W ERY = 0.3 GAP = 75 AVXM = W = A THIRSTY CANYON  
 . DEPTH = 6.49 KM ERZ = 1.5 NM = W = C

. 08	SGV	IPD	4 44 56.88					103 3.2	22.0	209	103	4.08	4.27	-0.09	
. 08	BMT	IPD	4 44 58.05					92 3.2	27.7	59	100	5.26	5.31	0.11	
. 08	GMN	IPD	4 44 59.00					111 3.3	34.8	298	98	6.21	6.45	-0.09	
. 08	GVN	IPD	4 45 0.02					90 3.2	41.8	246	96	7.23	7.31	-0.14	
. 08	WCT	IPD4	4 45 0.08					59 2.8	47.6	148	95	7.29	8.27	-0.83	
. 08	EPN	EPD2	4 45 2.40					88 3.2	52.7	83	95	9.60	9.37	0.17	
. 08	CTS	EPD	4 45 2.73					57 2.8	58.2	17	94	9.94	10.17	-0.07	
. 08	MGM	EPD	4 45 3.34					87 3.2	60.8	302	94	10.55	10.64	0.00	
. 08	BGB	EPD	4 45 3.60					66 3.0	62.3	102	94	10.61	10.80	0.08	
. 08	LCH	EPD	4 45 4.41					86 3.2	65.8	278	93	11.61	11.33	0.37	
. 08	LSM	EPD	4 45 5.11					75 3.1	73.3	129	93	12.32	12.47	-0.17	
. 08	LUP	EPD	4 45 5.58					75 3.1	74.2	117	93	12.79	12.74	0.13	
. 08	SDH	EPD	4 45 5.66					97 3.4	76.2	138	93	12.86	12.93	-0.03	
. 08	BLT	EPD	4 45 6.17					64 3.0	78.9	63	93	13.38	13.53	-0.03	
. 08	CPX	EPD	4 45 6.54					74 3.1	80.3	108	93	13.75	13.64	0.13	
. 08	KRNA	EPD	4 45 6.72					63 3.0	80.5	36	93	13.93	13.81	0.04	

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APR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
08	PGE	EPD	4 45 8.21					62 3.0	90.4	189	92	15.42	15.40	0.23	
08	AMR	EPU	4 45 8.17					75 3.2	92.6	155	92	15.38	15.53	-0.17	
08	GMR	EPU	4 45 10.05					70 3.2	103.3	79	92	17.26	17.44	-0.09	
08	SPRG	EPU	4 45 11.34					89 3.4	110.8	117	92	18.55	18.59	-0.02	
08	RVE	EPD	4 45 12.15					60 3.1	115.2	34	92	19.35	19.53	-0.17	
08	EPR	EPU4	4 45 18.70					91 3.6	153.3	89	52	25.91	25.33	0.59	
08	MTI	EPD	4 45 18.44					62 3.3	156.4	68	52	25.65	25.78	-0.11	
08	PRN	EPD	4 45 20.03					65 3.3	167.5	80	52	27.24	27.20	-0.09	
08	NPA	EPD	4 45 22.09					78 3.6	183.5	72	52	29.30	29.29	-0.20	
08	DLM	EPU	4 45 24.17					56 3.3	198.9	75	52	31.38	31.28	-0.16	

APR H = 13 36 5.56 UTC RMS = 0.06 NO = 9 FREE DEPTH SOLUTION  
 09 LAT = 36.824 N ERX = 0.3 ERH = 0.4 AVFM = 2.0 Q = B  
 LONG = 116.268 W ERY = 0.3 GAP = 72 AVXM = Q = A  
 DEPTH = 5.68 KM ERZ = 1.3 NM = QD = B

09	LSM	EPU	13 36 7.76					23 1.9	9.3	183	119	2.20	2.19	-0.01	
09	LOP	EPD	13 36 7.87					23 1.9	9.6	69	119	2.31	2.36	0.04	
09	YMT6	EPD	13 36 8.28					32 2.2	12.8	288	111	2.72	2.71	-0.08	
09	YMT3	EPD	13 36 8.44					25 2.0	13.4	252	109	2.88	2.78	0.15	
09	ESU		13 36 10.19									4.63	4.67	-0.04	
09	YMT4	EPD	13 36 9.00					25 2.0	17.0	286	105	3.44	3.39	-0.05	
09	YMT5	EPU	13 36 9.38					25 2.0	18.5	297	103	3.82	3.65	0.17	
09	BGB	EPD	13 36 10.03					20 1.8	24.0	9	99	4.47	4.61	-0.05	
09	MCY	EPU	13 36 11.40					30 2.2	32.7	123	96	5.84	5.91	0.01	

APR H = 23 44 35.81 UTC RMS = 0.17 NO = 12 FREE DEPTH SOLUTION  
 09 LAT = 37.063 N ERX = 0.6 ERH = 0.7 AVFM = 2.8 Q = C  
 LONG = 116.052 W ERY = 0.4 GAP = 112 AVXM = Q = C  
 DEPTH = 0.14 KM ERZ = 17.9 NM = QD = C

09	CPX	EPD	23 44 38.66					61 2.8	14.7	181	40	2.85	3.13	-0.25	
09	GLR	EPD	23 44 38.99					55 2.7	15.5	11	40	3.18	3.28	-0.04	
09	BGB	EPU	23 44 39.17					53 2.6	15.9	260	40	3.36	3.41	0.03	
09	SSP	EPD4	23 44 42.79					67 2.9	21.3	224	40	6.98	4.40	2.66	
09	LUP	EPU	23 44 40.66					71 2.9	25.3	204	40	4.85	5.01	-0.08	
09	EPN	EPU	23 44 41.56					59 2.8	29.4	305	40	5.75	5.82	-0.13	
09	YMT6	EPU	23 44 43.19					67 2.9	38.7	234	38	7.38	7.11	0.18	
09	GMR	EPD	23 44 43.14					50 2.7	39.1	40	38	7.33	7.26	0.17	
09	YMT5	EPD	23 44 43.31					57 2.8	40.1	243	38	7.50	7.39	0.11	
09	LSM	EPD	23 44 43.61					56 2.8	40.9	209	38	7.80	7.46	0.32	
09	SPRG	EPD	23 44 44.34					56 2.8	46.3	152	38	8.53	8.36	0.20	
09	BLT	EPU	23 44 44.29					56 2.8	47.0	352	38	8.48	8.59	0.02	
09	JON	EPU	23 44 47.53					53 2.8	69.3	184	38	11.72	12.03	-0.32	
09	RVE	EPU4	23 44 55.32					40 2.7	106.9	353	38	19.51	18.44	1.07	
09	GMN	EPU4	23 44 56.68					53 3.0	110.4	284	38	20.87	18.97	2.04	
09	GVN	EPU4	23 44 56.98					52 3.0	115.1	267	38	21.17	19.46	1.64	

APR H = 11 56 58.45 UTC RMS = 0.22 NO = 7 FREE DEPTH SOLUTION  
 10 LAT = 36.921 N ERX = 0.8 ERH = 1.4 AVFM = 2.2 Q = C  
 LONG = 116.122 W ERY = 1.1 GAP = 94 AVXM = Q = C  
 DEPTH = 0.92 KM ERZ = 46.6 NM = QD = B

10	CPX	IPU	11 56 59.92					30 2.1	6.1	80	40	1.47	1.51	0.00	
10	LUP	IPD	11 57 0.08					39 2.3	8.4	209	40	1.63	1.98	-0.27	
10	BGB	EPU	11 57 1.21					23 1.9	16.0	324	40	2.76	3.28	-0.44	
10	LSM	EPU4	11 57 4.82					31 2.2	24.1	214	40	6.37	4.54	1.81	
10	YMT6	EPD4	11 57 2.37					27 2.1	26.1	255	40	3.92	4.87	-1.04	
10	YMT5	EPD0	11 57 4.08					31 2.2	29.7	265	40	5.63	5.52	0.11	
10	YMT3	EPD4	11 57 6.63					42 2.5	29.7	240	38	8.18	5.46	2.77	
10	MCY	IPU	11 57 4.46					36 2.4	32.1	154	38	6.01	5.90	0.19	
10	EPN	EPU4	11 57 5.91					24 2.0	37.2	331	38	7.46	6.93	0.47	
10	SPRG	EPU	11 57 5.24					35 2.3	37.6	132	38	6.79	6.78	0.04	
10	KRNA	EPD0	11 57 15.00					28 2.4	93.9	346	38	16.55	16.09	0.39	

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APR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
APR H = 1	37	47.59	UTC	RMS =	0.08	NO = 11									FREE DEPTH SOLUTION
11	LAT =	36.529	N	ERX =	0.2	ERH =	0.3	AVFM =	2.7	Q = B					LATHROP WELLS
	LONG =	116.376	W	ERY =	0.2	GAP =	79	AVXM =		QS = A					
	DEPTH =	1.43	KM	ERZ =	1.3	NM =				WD = C					
.....															
11	AMR	IPU	1 37 50.70						17.0	211	92	3.11	3.24	-0.14	
11	LSM	IPU	1 37 52.10						25.1	22	90	4.51	4.46	0.02	
11	JON	IPU	1 37 52.52						26.4	112	74	4.93	4.86	0.05	
11	YMT4	EPD	1 37 54.10				55	2.7	35.9	349	74	6.51	6.48	-0.08	
11	YMT6	EPD	1 37 54.09						36.6	356	74	6.50	6.57	-0.16	
11	FMT	EPD	1 37 54.17				40	2.5	38.1	289	74	6.58	6.78	0.04	
11	LOP	EPD	1 37 54.90						40.6	27	74	7.31	7.33	0.06	
11	YMT5	EPU	1 37 55.01				60	2.8	41.5	350	74	7.42	7.42	0.00	
11	GWV	EPD	1 37 55.85				50	2.7	46.3	215	74	8.26	8.22	0.11	
11	NOP	EPU	1 37 56.00				50	2.7	48.9	156	74	8.41	8.52	-0.02	
11	CPX	EPU	1 37 56.78						52.9	33	74	9.19	9.24	-0.03	
.....															
APR H = 5	33	8.66	UTC	RMS =	0.05	NO = 8									FREE DEPTH SOLUTION
12	LAT =	36.602	N	ERX =	0.3	ERH =	0.4	AVFM =	2.4	Q = B					LATHROP WELLS
	LONG =	116.040	W	ERY =	0.2	GAP =	127	AVXM =		QS = A					
	DEPTH =	5.17	KM	ERZ =	1.6	NM =				WD = B					
.....															
12	MCY	IPU	5 33 10.82					36	2.3	9.6	47	115	2.16	2.23	0.01
12	JON	IPU	5 33 12.26					34	2.3	18.9	197	100	3.60	3.60	-0.01
12	SPRG	EPU	5 33 12.98					47	2.6	23.0	64	98	4.32	4.33	0.02
12	LSM	EPU	5 33 13.41					30	2.2	25.8	306	97	4.75	4.76	-0.03
12	SDH	IPU	5 33 13.59					30	2.2	27.1	280	96	4.93	4.95	0.02
12	LOP	EPD	5 33 14.11					35	2.3	30.2	338	96	5.45	5.58	-0.05
12	CPX	EPU4	5 33 15.76					32	2.3	36.4	358	94	7.10	6.50	0.63
12	YMT3	EPD	5 33 15.62					44	2.6	39.0	302	94	6.96	6.87	0.13
12	NOP	EPD	5 33 17.82					33	2.4	53.6	191	93	9.16	9.23	0.02
12	GVN	EPU4	5 33 30.60					31	2.5	124.4	291	90	21.94	20.53	1.35
12	GMN	EPU4	5 33 32.23					38	2.8	133.3	306	90	23.57	21.99	1.73
.....															
APR H = 8	15	23.70	UTC	RMS =	0.16	NO = 18									FREE DEPTH SOLUTION
12	LAT =	36.769	N	ERX =	0.4	ERH =	0.5	AVFM =	2.9	Q = B					LATHROP WELLS
	LONG =	116.233	W	ERY =	0.4	GAP =	61	AVXM =		QS = B					
	DEPTH =	0.53	KM	ERZ =	0.6	NM =				WD = A					
.....															
12	LSM	IPU	8 15 25.15					67	2.8	4.8	227	109	1.45	1.33	0.09
12	LOP	IPD	8 15 26.22					67	2.8	11.1	32	40	2.52	2.52	0.08
12	SDH	IPD	8 15 26.62					65	2.8	16.6	214	40	2.92	3.32	-0.37
12	SSP	EPU4	8 15 29.48					55	2.7	17.3	4	40	5.78	3.65	2.21
12	CPX	EPD	8 15 28.19					62	2.8	23.9	42	40	4.49	4.61	-0.09
12	MCY	EPU	8 15 28.80					70	2.9	27.0	116	40	5.10	5.13	0.04
12	BGB	EPD	8 15 29.15					70	2.9	29.8	1	40	5.45	5.70	-0.17
12	JON	EPD	8 15 30.58					56	2.8	38.4	162	38	6.88	6.92	-0.06
12	SPRG	IPU	8 15 30.80					59	2.8	38.8	102	38	7.10	7.06	0.07
12	AMR	EPD4	8 15 31.21					58	2.8	46.5	208	38	7.51	8.21	-0.71
12	EPN	EPD4	8 15 34.62					66	2.9	50.0	351	38	10.92	9.10	1.75
12	BMT	EPU	8 15 35.98					65	3.0	67.9	327	38	12.28	11.98	0.46
12	SGV	EPU	8 15 36.48					64	3.0	75.0	288	38	12.78	13.01	-0.15
12	GWV	EPU	8 15 36.87					55	2.9	75.6	211	38	13.17	13.10	0.14
12	PGE	EPU4	8 15 39.59					57	2.9	87.9	238	38	15.89	15.17	0.94
12	MCA	EPU	8 15 40.06					45	2.8	94.6	262	38	16.36	15.93	0.34
12	GVN	EPD	8 15 41.25					49	2.9	102.2	285	38	17.55	17.29	0.20
12	EPR	EPD4	8 15 41.85					58	3.0	103.2	65	38	18.15	17.55	0.62
12	QSM	EPU4	8 15 42.10					65	3.1	105.8	213	38	18.40	17.84	0.47

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APR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	F MAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
APR H = 20 21 27.75 UTC RMS = 0.09 NO = 16 13 LAT = 36.895 N ERX = 0.3 ERH = 0.4 AVFM = 1.7 Q = B LONG = 116.463 W ERY = 0.2 GAP = 114 AVXM = GS = A DEPTH = 4.29 KM ERZ = 0.5 NM = GD = B															
FREE DEPTH SOLUTION															
YUCCA MTN.															
13	YMT5	IPD	20 21 29.00						1.0	56	168	1.25	1.19	0.06	
13	YMT4	EPD	20 21 29.40						5.2	169	128	1.65	1.54	-0.01	
13	YMT6	IPD	20 21 29.46						6.5	127	120	1.71	1.69	-0.07	
		ISX	20 21 30.70									2.95	3.04	-0.09	
13	YMT3	EPD	20 21 30.25						12.6	159	103	2.50	2.60	-0.05	
		ISX	20 21 32.05									4.30	4.35	-0.06	
13	LSM	EP 1	20 21 32.30						24.0	135	95	4.55	4.45	0.07	
		ISX2	20 21 35.50									7.75	7.65	0.09	
13	BGB	EP	20 21 32.55						26.3	53	94	4.80	4.95	-0.07	
13	LOP	EP	20 21 32.70						26.7	99	94	4.95	5.00	0.03	
13	SDH	EP	20 21 32.80						29.7	158	93	5.05	5.36	-0.27	
13	CPX	EP 3	20 21 34.60						36.5	84	93	6.85	6.51	0.36	
13	FMT	EP 2	20 21 34.55						39.9	225	92	6.80	7.00	0.03	
13	BMT	EP 1	20 21 35.85						46.2	339	92	8.10	8.28	-0.01	
		ISX4	20 21 42.00									14.25	13.87	0.38	
13	MCY	EP 3	20 21 37.00						51.6	120	92	9.25	8.96	0.37	
13	JON	EP 4	20 21 39.00						59.7	147	91	11.25	10.22	1.02	
		ISX2	20 21 45.40									17.65	17.49	0.16	
13	SPRG	EP 4	20 21 39.00						62.4	111	91	11.25	10.71	0.57	



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APR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUHS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
APR H = 1			23 48.06	UTC	RMS =	0.22	NO =	11	FREE DEPTH SOLUTION						
17 LAT =			37.584 N		ERX =	0.7	ERH =	1.2	AVFM =	3.3	W =	B			
LONG =			115.636 W		ERY =	0.9	GAP =	99	AVXM =		WS =	B	WURTHINGTON PEAK		
DEPTH =			0.38 KM		ERZ =	0.7	NM =				WD =	B			
.....															
17	TPU	IPD	1 23 48.68					111	3.2	2.6	333	132	0.62	0.91	-0.15
17	GMR	EPD4	1 23 52.06					102	3.3	30.3	203	40	4.00	5.77	-1.68
17	QCS	EPD	1 23 54.28					96	3.2	32.0	309	38	6.22	6.13	0.12
17	MTI	EPD	1 23 54.07					91	3.2	33.7	72	38	6.01	6.32	-0.28
17	PRN	EPD	1 23 58.13					103	3.3	55.4	111	38	10.07	9.85	0.10
17	EPR	EPD	1 23 58.68					91	3.3	60.9	139	38	10.62	10.70	-0.07
17	NPN	EPD	1 23 59.64					110	3.4	62.2	83	38	11.58	10.98	0.39
17	BGB	EPD	1 24 1.39					119	3.6	80.2	221	38	13.33	13.92	-0.52
17	YMT5	EPD	1 24 6.22					80	3.3	105.2	224	38	18.16	17.92	0.24
17	YMT3	EPD4	1 24 7.56					95	3.5	112.1	218	38	19.50	18.97	0.58
17	WCT	EPD	1 24 9.32					71	3.3	124.4	225	38	21.26	20.95	0.46
17	SGV	EPD	1 24 11.78					88	3.5	140.7	242	38	23.72	23.73	0.07
17	FMT	EPD	1 24 12.69					47	3.0	146.0	224	38	24.63	24.48	0.39
17	QSM	EPD4	1 24 22.57					67	3.5	210.6	211	29	34.51	33.26	1.16
.....															
APR H = 1			42 9.66	UTC	RMS =	0.15	NO =	18	FREE DEPTH SOLUTION						
17 LAT =			36.526 N		ERX =	0.3	ERH =	0.6	AVFM =	2.6	W =	C			
LONG =			116.374 W		ERY =	0.5	GAP =	101	AVXM =		WS =	C	LATHROP WELLS		
DEPTH =			0.60 KM		ERZ =	23.3	NM =				WD =	C			
.....															
17	SDH	EPD0	1 42 12.23					53	2.6	13.6	13	40	2.57	2.80	-0.19
17	AMR	EPD	1 42 12.83					60	2.7	16.9	212	40	3.17	3.29	-0.13
17	LSM	EPD	1 42 14.24					46	2.5	25.4	21	40	4.58	4.81	-0.25
17	JON	EPD	1 42 14.62					45	2.5	26.1	112	40	4.96	4.89	0.06
17	YMT3	EPD	1 42 15.00					40	2.4	29.1	353	40	5.34	5.43	-0.04
17	WCT	EPD	1 42 16.26					44	2.5	37.2	323	38	6.60	6.73	0.02
17	YMT4	EPD3	1 42 16.43					36	2.4	38.3	350	38	6.77	6.97	-0.31
17	FMT	EPD	1 42 16.59					53	2.7	38.4	289	38	6.93	6.93	0.23
17	MCY	EPD2	1 42 16.63					55	2.7	39.8	68	38	6.97	7.21	-0.17
17	LOP	EPD	1 42 16.98					45	2.6	40.8	27	38	7.32	7.46	-0.07
17	YMT5	EPD	1 42 17.23					33	2.3	41.9	350	38	7.57	7.58	-0.01
17	CPX	EPD2	1 42 18.73					32	2.3	53.1	32	38	9.07	9.38	-0.28
17	SPRG	EPD2	1 42 18.93					34	2.4	53.8	70	38	9.27	9.49	-0.19
17	BGB	EPD	1 42 19.84					50	2.7	58.2	13	38	10.18	10.31	-0.05
17	SGV	EPD	1 42 23.29					32	2.4	77.5	311	38	13.63	13.40	0.31
17	GMR	EPD	1 42 27.74					69	3.2	104.5	31	38	18.08	17.79	0.38
17	BLT	EPD4	1 42 30.02					39	2.7	108.4	12	38	20.36	18.48	2.00
17	TPU	EPD2	1 42 32.26					36	2.7	135.9	28	38	22.60	22.98	-0.24
17	MTI	EPD	1 42 36.56					37	2.8	160.9	37	38	26.90	26.95	-0.03
.....															
APR H = 2			15 25.14	UTC	RMS =	0.17	NO =	8	FREE DEPTH SOLUTION						
17 LAT =			37.613 N		ERX =	0.9	ERH =	1.1	AVFM =	2.8	W =	B			
LONG =			115.633 W		ERY =	0.6	GAP =	129	AVXM =		WS =	B	WORTHINGTON PEAK		
DEPTH =			1.00 KM		ERZ =	1.9	NM =				WD =	B			
.....															
17	TPU	IPD	2 15 25.65					54	2.6	1.7	237	129	0.51	0.89	-0.24
17	MTI	EPD	2 15 30.96					49	2.6	32.6	78	74	5.82	6.02	-0.17
17	GMR	EPD4	2 15 29.67					70	2.9	33.3	201	74	4.53	6.14	-1.52
17	WRN	EPD	2 15 32.68					47	2.6	41.1	6	74	7.54	7.44	0.05
17	PRN	IPD	2 15 35.38					59	2.9	56.5	114	74	10.24	9.88	0.23
17	NPN	EPD4	2 15 36.86					53	2.8	61.7	86	74	11.72	10.76	0.74
17	BGB	EPD	2 15 39.47					47	2.8	82.8	220	74	14.33	14.22	0.19
17	CPX	EPD4	2 15 41.16					39	2.6	84.5	206	74	16.02	14.41	1.64
17	SPRG	EPD4	2 15 43.36					65	3.1	103.2	189	74	18.22	17.44	0.81
17	YMT5	EPD	2 15 43.51					53	3.0	107.6	223	74	18.37	18.19	0.18
17	YMT6	EPD	2 15 42.96					62	3.1	108.2	219	74	17.82	18.23	-0.50
17	JUN	EPD	2 15 47.92					52	3.0	136.8	198	74	22.78	22.83	-0.06
.....															

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APR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DJR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
APR H =	5 31	1.04 UTC	RMS =	0.00	NO =	4									FREE DEPTH SOLUTION
17 LAT =	37.155 N	ERX =			ERH =			AVFM =	1.7	W =	C				
LONG =	117.379 W	ERY =			GAP =	121		AVXM =		WS =	A				MT. JACKSON
DEPTH =	11.67 KM	ERZ =			NM =					WD =	D				
.....															
17 GVN EPU	5 31	4.85					20	1.8	17.3	169	123	3.81	3.75	0.00	
17 GMN EPU	5 31	5.20					20	1.8	19.3	33	121	4.16	4.31	0.00	
17 LCH EPD	5 31	6.01					14	1.5	25.4	290	113	4.97	5.05	0.00	
17 SGV EPU	5 31	7.69					17	1.7	36.3	122	106	6.65	6.74	0.00	
.....															
APR H =	8 38	32.82 UTC	RMS =	0.14	NO =	12									FREE DEPTH SOLUTION
17 LAT =	37.290 N	ERX =	0.4		ERH =	0.6		AVFM =	2.4	W =	C				
LONG =	116.731 W	ERY =	0.4		GAP =	89		AVXM =		WS =	C				THIRSTY CANYON
DEPTH =	0.30 KM	ERZ =	35.3		NM =					WD =	B				
.....															
17 BMT EPD	8 38	34.47					40	2.4	7.6	96	40	1.65	2.08	-0.25	
17 EPN EPU4	8 38	40.51					47	2.6	37.1	103	38	7.69	7.05	0.58	
17 CTS EPU	8 38	40.18					33	2.3	40.6	1	38	7.36	7.54	-0.01	
17 SGV EPD	8 38	40.40					34	2.3	43.5	218	38	7.58	7.94	-0.27	
17 GMN EPU	8 38	41.37					30	2.2	46.9	271	38	8.55	8.61	0.09	
17 YMT5 EPD	8 38	41.73					27	2.2	50.0	150	38	8.91	8.96	-0.05	
17 BGB EPD	8 38	42.15					32	2.3	52.8	122	38	9.33	9.48	-0.07	
17 YMT4 EPU	8 38	42.71					27	2.2	53.3	152	38	9.89	9.47	0.31	
17 WCT EPU4	8 38	42.17					28	2.2	56.1	170	38	9.35	9.87	-0.36	
17 BLT EPU	8 38	43.03					40	2.5	57.9	68	38	10.21	10.34	0.00	
17 KRNA EPD	8 38	43.47					37	2.5	58.9	32	38	10.65	10.53	0.05	
17 GVN EPU	8 38	43.87					27	2.2	63.1	239	38	11.05	10.98	0.01	
17 LOP EPD	8 38	44.92					45	2.7	69.7	134	38	12.10	12.22	-0.04	
17 GMR EPU4	8 38	48.06					31	2.4	85.3	87	38	15.24	14.73	0.61	
17 MCY EPU	8 38	49.66					43	2.7	97.7	136	38	16.84	16.70	0.22	
.....															
APR H =	2 3	31.52 UTC	RMS =	0.18	NO =	4									FREE DEPTH SOLUTION
19 LAT =	37.433 N	ERX =			ERH =			AVFM =	2.2	W =	C				
LONG =	115.160 W	ERY =			GAP =	187		AVXM =		WS =	B				ALAMO
DEPTH =	0.03 KM	ERZ =			NM =					WD =	D				
.....															
19 PRN IPU	2 3	33.91					35	2.3	10.2	106	40	2.39	2.42	-0.15	
19 MTI EPU	2 3	36.89					31	2.2	28.8	340	40	5.37	5.59	-0.19	
19 NPN EPD	2 3	37.96					30	2.2	31.4	39	38	6.44	6.04	0.19	
19 TPU EPU	2 3	40.26					21	1.9	47.3	294	38	8.74	8.68	0.19	
.....															
APR H =	12 29	49.50 UTC	RMS =	0.10	NO =	17									FREE DEPTH SOLUTION
20 LAT =	36.944 N	ERX =	1.0		ERH =	1.4		AVFM =	2.6	W =	C				
LONG =	117.648 W	ERY =	0.9		GAP =	225		AVXM =		WS =	B				DRY MOUNTAIN
DEPTH =	3.99 KM	ERZ =	2.3		NM =					WD =	D				
.....															
20 GVN IPU	12 29	54.36					65	2.9	27.9	77	93	4.86	5.03	-0.23	
20 LCH EPU	12 29	55.28					39	2.4	32.3	0	92	5.78	5.86	0.00	
20 MCA EPD	12 29	57.30					23	2.0	46.4	135	91	7.80	7.91	-0.19	
20 SGV EPU	12 29	58.58					52	2.8	55.0	86	91	9.08	9.57	-0.40	
20 WCT EPD	12 30	4.81					27	2.3	92.6	100	90	15.31	15.36	0.11	
20 YMT1 EPD	12 30	6.22					39	2.7	100.3	96	90	16.72	16.61	-0.02	
20 YMT5 EPD	12 30	7.14					45	2.8	106.6	93	90	17.64	17.63	0.01	
20 YMT4 EPU	12 30	7.51					45	2.8	107.0	95	90	18.01	17.71	0.19	
20 YMT6 EPD	12 30	7.84					32	2.5	111.3	95	90	16.34	18.39	-0.14	
20 GWV EPU4	12 30	10.68					33	2.6	121.3	134	90	21.18	20.02	1.24	
20 SDH EPU	12 30	9.60					33	2.6	121.5	106	90	20.10	20.06	0.08	
20 EPN EPD3	12 30	9.92					34	2.6	121.5	76	90	20.42	20.06	0.30	
20 LSM EPD	12 30	10.29					33	2.6	124.8	100	90	20.79	20.60	0.17	
20 BGB EPU	12 30	10.58					33	2.6	126.9	85	90	21.08	20.93	0.23	
20 LOP EPU	12 30	11.47					33	2.6	132.3	94	90	21.97	21.82	0.23	
20 GLR EPU	12 30	13.92					36	2.8	147.7	79	90	24.42	24.32	0.17	
20 MCY EPU4	12 30	15.08					37	2.8	153.7	102	90	25.58	25.29	0.37	
20 SPRG EPD	12 30	16.64					45	3.0	166.4	100	52	27.14	27.26	-0.08	

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APR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (JEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 20	GMR	EPU3	12 30 17.75					32 2.7	172.4	75	52	26.25	28.10	0.25	
.....															
. APR H = 18 7 23.69 UTC RMS = 0.27 NO = 3															
. 20 LAT = 37.657 N ERX = ERH = AVFM = 1.8 Q = C FIXED DEPTH SOLUTION															
. LONG = 115.651 W ERY = GAP = 250 AVXM = QS = B DEPTH CONTROL INADEQUATE															
. DEPTH = 5.00 KM ERZ = NM = WD = D WORTHINGTON PEAK															
.....															
. 20	TPU	IPU	18 7 25.02					22 1.8	5.8	179	132	1.33	1.84	-0.37	
. 20	MTI	EPD	18 7 29.94					18 1.8	33.4	86	95	6.25	6.07	0.21	
. 20	GMR	EPD	18 7 30.51					19 1.8	37.4	197	94	6.82	6.73	0.19	
.....															
. APR H = 9 3 9.61 UTC RMS = 0.03 NO = 5															
. 21 LAT = 36.698 N ERX = 0.9 ERH = 1.4 AVFM = 2.0 Q = C FREE DEPTH SOLUTION															
. LONG = 115.812 W ERY = 1.1 GAP = 154 AVXM = QS = B MERCURY															
. DEPTH = 2.59 KM ERZ = 1.0 NM = WD = D															
.....															
. 21	SPRG	IPU	9 3 10.44					27 2.0	0.5	157	170	0.83	0.87	0.00	
. 21	MCY	EPD4	9 3 11.79					35 2.3	14.1	253	97	2.18	2.86	-0.60	
. 21	LOP	EPD	9 3 16.12					22 1.9	36.2	299	74	6.51	6.55	0.04	
. 21	LSM	EPD4	9 3 17.59					18 1.8	41.5	276	74	7.98	7.30	0.66	
. 21	SDH	EPD0	9 3 17.78					16 1.7	47.4	263	74	8.17	8.25	-0.04	
. 21	YMT3	EPD	9 3 19.04					21 2.0	54.5	280	74	9.43	9.40	0.08	
. 21	GMR	EPD	9 3 21.62					24 2.1	70.6	3	74	12.01	12.13	-0.02	
.....															
. APR H = 11 10 43.12 UTC RMS = 0.33 NO = 6															
. 21 LAT = 37.736 N ERX = 1.2 ERH = 2.0 AVFM = 2.0 Q = C FREE DEPTH SOLUTION															
. LONG = 115.732 W ERY = 1.6 GAP = 177 AVXM = QS = C WORTHINGTON PEAK															
. DEPTH = 7.35 KM ERZ = 5.3 NM = WD = C															
.....															
. 21	TPU	IPU0	11 10 45.96					31 2.2	16.3	153	113	2.84	3.51	-0.53	
. 21	QCS	EPD	11 10 46.64					21 1.8	16.6	282	112	3.52	3.55	0.00	
. 21	ESD		11 10 48.89									5.77	6.02	-0.25	
. 21	MTI	EPD	11 10 50.78					24 2.0	41.1	99	98	7.66	7.34	0.35	
. 21	GMR	EPD0	11 10 51.41					24 2.0	44.8	184	97	8.29	7.96	0.43	
. 21	PRN	EPD	11 10 55.42					23 2.1	70.5	121	94	12.30	12.09	0.09	
. 21	NPN	EPD4	11 10 58.29					19 1.9	70.7	98	94	15.17	12.17	2.79	
.....															
. APR H = 16 2 2.04 UTC RMS = 0.08 NO = 14															
. 22 LAT = 37.065 N ERX = 0.3 ERH = 0.5 AVFM = 3.5 Q = B FREE DEPTH SOLUTION															
. LONG = 117.408 W ERY = 0.4 GAP = 171 AVXM = QS = A MT. JACKSON															
. DEPTH = 5.52 KM ERZ = 1.2 NM = WD = C															
.....															
. 22	GVN	EPD	16 2 4.20					132 3.4	9.2	141	118	2.16	2.10	0.00	
. 22	LCH	EPD	16 2 7.19					99 3.2	28.3	311	97	5.15	5.24	-0.01	
. 22	GMN	EPD	16 2 7.39					129 3.5	29.2	27	97	5.35	5.52	-0.02	
. 22	SGV	EPD	16 2 8.21					115 3.4	34.7	106	95	6.17	6.30	-0.03	
. 22	MGM	EPD	16 2 9.48					89 3.2	42.4	349	94	7.44	7.65	-0.12	
. 22	PPK	EPD	16 2 12.51					84 3.2	59.7	312	93	10.47	10.40	0.06	
. 22	MZP	EPD	16 2 14.11					78 3.2	70.5	2	92	12.07	12.27	0.04	
. 22	BNT	EPD	16 2 14.41					97 3.4	71.9	70	92	12.37	12.46	0.08	
. 22	YMT5	EPD	16 2 16.85					80 3.2	86.9	102	92	14.81	14.74	0.07	
. 22	YMT4	EPD	16 2 17.20					79 3.2	88.0	105	92	15.16	14.89	0.16	
. 22	YMT2	EPD	16 2 16.82					160 3.8	88.1	111	92	14.78	14.85	-0.15	
. 22	YMT3	EPD	16 2 17.69					129 3.7	94.1	109	92	15.65	15.83	-0.13	
. 22	SPRG	EPD	16 2 26.79					92 3.6	148.3	106	90	24.75	24.42	0.36	
. 22	APK	EPD4	16 2 32.72					54 3.2	183.6	117	52	30.68	29.64	1.32	
. 22	EPR	EPD4	16 2 34.81					115 3.9	197.8	87	52	32.77	31.14	1.65	
. 22	SHRG	EPD	16 2 34.54					221 4.6	210.5	107	52	32.50	32.85	0.25	

## 1981 SGB LOCAL-EVENT DATA REPORT

APR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
APR H = 16 35 4.67 UTC				RMS =	0.12	NO =	18	FREE DEPTH SOLUTION							
24 LAT = 36.717 N				ERX =	0.3	ERH =	0.4	AVFM =	2.6	Q =	B	LATHROP WELLS			
LONG = 116.142 W				ERY =	0.3	GAP =	72	AVXM =		QS =	A				
DEPTH = 2.06 KM				ERZ =	1.2	NM =				QD =	C				
.....															
24	LSM	EPD	16 35 7.08					39	2.4	12.0	282	96	2.41	2.47	-0.09
24	LDP	EPD	16 35 7.71					45	2.5	15.4	351	95	3.04	3.16	-0.04
24	MCY	EPD	16 35 7.97					46	2.5	17.2	111	94	3.30	3.38	-0.01
24	SDH	EPD	16 35 8.22					50	2.6	19.3	246	93	3.55	3.69	-0.10
24	CDH5	EPD	16 35 8.61					68	2.9	22.3	315	74	3.94	4.19	-0.16
24	CDH1	EPD	16 35 8.79					67	2.9	22.3	315	74	4.12	4.26	-0.05
24	YMT3	EPD	16 35 9.47					50	2.6	25.2	288	74	4.80	4.67	0.18
24	YMT6	EPD	16 35 9.89					54	2.7	28.2	304	74	5.22	5.17	-0.04
24	SPRG	EPD	16 35 10.00					51	2.6	29.8	95	74	5.33	5.45	-0.10
24	JUN	EPD	16 35 10.29					38	2.4	31.0	174	74	5.62	5.58	0.03
24	YMT2	EPD	16 35 10.70					59	2.8	31.4	284	74	6.03	5.68	0.27
24	YMT4	EPD	16 35 10.43					50	2.6	32.1	301	74	5.76	5.83	-0.19
24	YMT5	EPD	16 35 10.71					56	2.7	34.3	306	74	6.04	6.21	-0.18
24	YMT1	EPD	16 35 11.54					43	2.5	37.7	294	74	6.87	6.71	0.02
24	WCT	EPD	16 35 12.50					23	2.0	44.1	281	74	7.83	7.72	0.27
24	GMR	EPD	16 35 18.25					29	2.3	76.0	26	74	13.58	13.03	0.65
24	BMT	EPD	16 35 18.30					41	2.6	77.2	324	74	13.63	13.35	0.44
24	TPU	EPD	16 35 23.08					25	2.3	107.8	24	74	18.41	18.27	0.28
24	PRN	EPD	16 35 25.99					39	2.7	123.6	52	74	21.32	20.75	0.44
24	MTI	EPD	16 35 27.90					26	2.4	131.5	36	74	23.23	22.04	1.21
24	NPN	EPD	16 35 31.17					34	2.7	149.1	46	74	26.50	24.93	1.36
24	SRG	EPD	16 35 32.31					58	3.2	160.6	36	74	27.64	26.79	0.62
.....															
APR H = 16 39 18.62 UTC				RMS =	0.15	NO =	22	FREE DEPTH SOLUTION							
24 LAT = 36.726 N				ERX =	0.3	ERH =	0.4	AVFM =	2.8	Q =	C	LATHROP WELLS			
LONG = 116.138 W				ERY =	0.3	GAP =	71	AVXM =		QS =	C				
DEPTH = 0.30 KM				ERZ =	14.3	NM =				QD =	C				
.....															
24	LSM	EPD	16 39 21.18					64	2.8	12.2	277	40	2.56	2.63	-0.10
24	LDP	EPD	16 39 21.72					62	2.8	14.5	349	40	3.10	3.13	0.05
24	MCY	EPD	16 39 22.00					68	2.9	17.2	115	40	3.38	3.52	-0.06
24	SDH	EPD	16 39 22.29					59	2.7	20.0	243	40	3.67	3.95	-0.24
24	CDH5	EPD	16 39 22.70					80	3.0	21.9	313	40	4.08	4.26	-0.09
24	CDH1	EPD	16 39 22.78					75	3.0	21.9	313	40	4.16	4.33	-0.07
24	SSP	EPD	16 39 26.11					30	2.2	23.2	342	40	7.49	4.69	2.88
24	CPX	EPD	16 39 23.50					57	2.7	23.8	18	40	4.88	4.63	0.27
24	YMT3	EPD	16 39 23.49					78	3.0	25.3	286	40	4.87	4.84	0.07
24	YMT6	EPD	16 39 23.78					69	2.9	28.0	302	40	5.16	5.31	-0.25
24	SPRG	EPD	16 39 24.10					59	2.8	29.6	97	40	5.48	5.60	-0.09
24	YMT2	EPD	16 39 24.59					58	2.8	31.6	282	38	5.97	5.90	-0.01
24	YMT4	EPD	16 39 24.41					52	2.7	32.0	299	38	5.79	6.00	-0.32
24	YMT5	EPD	16 39 24.91					78	3.0	34.1	304	38	6.29	6.37	-0.08
24	BGB	EPD	16 39 25.32					69	2.9	35.5	347	38	6.70	6.67	0.11
24	YMT1	EPD	16 39 25.54					55	2.7	37.6	292	38	6.92	6.90	-0.12
24	WCT	EPD	16 39 26.48					39	2.5	44.3	280	38	7.86	7.94	0.07
24	AMR	EPD	16 39 26.90					37	2.4	47.3	220	38	8.28	8.38	-0.11
24	GLR	EPD	16 39 28.08					38	2.5	53.6	11	38	9.46	9.55	-0.02
24	EPH	EPD	16 39 29.37					72	3.0	56.6	343	38	10.75	10.22	0.46
24	FMT	EPD	16 39 28.60					44	2.6	58.1	260	38	9.98	10.20	0.02
24	NOP	EPD	16 39 30.30					48	2.7	66.4	181	38	11.68	11.54	0.23
24	GMR	EPD	16 39 32.19					50	2.8	74.9	26	38	13.57	13.05	0.62
24	GWV	EPD	16 39 32.06					42	2.6	76.6	219	38	13.44	13.31	0.21
24	BLT	EPD	16 39 34.28					30	2.4	83.9	1	38	15.66	14.56	1.22
24	SHRG	EPD	16 39 34.62					34	2.5	91.3	106	38	16.00	15.73	0.86
24	TPU	EPD	16 39 37.28					34	2.6	106.7	24	38	18.66	18.29	0.50
24	KRNA	EPD	16 39 39.12					66	3.2	114.7	349	38	20.50	19.60	0.83
24	CTS	EPD	16 39 38.91					39	2.7	115.7	333	38	20.29	19.75	0.71
24	QCS	EPD	16 39 40.21					33	2.6	117.3	10	38	21.59	20.00	1.62
24	PRN	EPD	16 39 40.21					54	3.0	122.7	52	38	21.59	20.80	0.67
24	MTI	EPD	16 39 41.49					48	2.9	130.5	36	38	22.87	22.07	0.82
24	RVE	EPD	16 39 44.10					35	2.7	143.6	358	38	25.48	24.37	1.11

## 1981 SGB LOCAL-EVENT DATA REPORT

APR 1981	STA	PHASE	TIME (UTC)	AMP (NU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
24	WRN	EPD4	16 39 44.79					32 2.7	147.6	19	38	26.17	24.90	1.22	
24	NPN	EPD4	16 39 40.21					54 3.1	148.1	46	38	21.59	24.97	-3.59	
24	SRG	EPD4	16 39 46.50					51 3.1	159.5	36	38	27.88	26.82	0.83	
24	TNP	EPD4	16 39 48.96					50 3.2	178.3	328	29	30.34	29.42	0.65	

APR H = 15 28 49.40 UTC RMS = 0.26 NO = 30 FREE DEPTH SOLUTION  
 25 LAT = 36.788 N ERX = 0.4 ERH = 0.6 AVFM = 2.9 Q = B  
 LONG = 116.089 W ERY = 0.4 GAP = 86 AVXM = QS = B LATHROP WELLS  
 DEPTH = 5.30 KM ERZ = 5.0 NM = WD = B

25	LUP	IPU	15 28 51.60	68	2.8	10.1	316	115	2.20	2.41	-0.13
25	CPX	IPU	15 28 52.34	59	2.7	16.0	11	104	2.94	3.23	-0.26
25	LSM	EPD	15 28 52.59	65	2.8	17.3	252	103	3.19	3.39	-0.22
25	MCY	IPU	15 28 52.59	91	3.1	18.0	141	102	3.19	3.54	-0.27
25	CDHS	EPD	15 28 53.38	85	3.1	21.9	291	99	3.98	4.12	-0.04
25	COH1	EPD	15 28 53.42	62	2.8	21.9	291	99	4.02	4.19	-0.07
25	SPRG	IPU	15 28 54.04	52	2.7	27.1	113	97	4.64	4.98	-0.32
25	SDH	EPD	15 28 54.31	53	2.7	27.3	235	97	4.91	4.99	-0.04
25	YMT3	EPD	15 28 54.60	94	3.2	28.8	270	96	5.20	5.22	0.03
25	YMT6	EPD	15 28 54.50	92	3.2	29.2	286	96	5.10	5.32	-0.31
25	BGB	EPD	15 28 54.79	74	3.0	30.3	336	96	5.39	5.61	-0.15
25	YMT4	EPD	15 28 55.30	61	2.8	33.5	285	95	5.90	6.02	-0.23
25	YMT5	IPU	15 28 55.69	81	3.1	34.8	291	95	6.29	6.26	0.03
25	YMT2	EPD	15 28 55.67	66	2.9	35.3	269	95	6.27	6.27	-0.09
25	JUN	EPD	15 28 56.34	71	3.0	38.7	182	94	6.94	6.80	0.13
25	YMT1	EPD	15 28 56.41	64	2.9	39.9	280	94	7.01	7.05	-0.17
25	GLR	EPD	15 28 57.20	66	2.9	46.1	8	94	7.80	8.10	-0.24
25	WCT	EPD4	15 28 58.23	52	2.7	48.0	271	93	8.83	8.33	0.66
25	EPN	EPD	15 28 58.41	77	3.1	51.7	336	93	9.01	9.19	-0.24
25	AMR	EPD4	15 28 59.64	42	2.6	55.4	219	93	10.24	9.47	0.76
25	FMT	EPD	15 29 0.42	39	2.5	63.8	255	92	11.02	10.90	0.35
25	GMR	EPD	15 29 1.31	63	3.0	66.8	25	92	11.91	11.51	0.50
25	APK	EPD	15 29 1.39	46	2.7	69.5	138	92	11.99	12.16	0.10
25	NOP	EPD	15 29 1.82	62	3.0	73.5	184	92	12.42	12.46	0.05
25	BLT	EPD	15 29 2.72	43	2.7	77.1	358	92	13.32	13.22	0.23
25	GMV	EPD4	15 29 4.49	54	2.9	84.7	218	92	15.69	14.46	0.77
25	SGV	EPD	15 29 4.29	57	2.9	86.8	284	92	14.89	14.75	0.23
25	SHRG	EPD	15 29 4.41	47	2.8	89.3	111	92	15.01	15.17	0.43
25	TPU	EPD	15 29 6.43	39	2.7	98.7	23	91	17.03	16.76	0.41
25	PGE	EPD	15 29 6.76	29	2.4	100.1	241	91	17.36	16.98	0.60
25	MCA	EPD	15 29 8.00	33	2.5	107.6	262	91	18.60	17.89	0.63
25	KRNA	EPD4	15 29 8.92	46	2.8	108.9	346	91	19.52	18.43	1.02
25	QCS	EPD4	15 29 9.49	50	2.9	109.8	8	91	20.09	18.57	1.55
25	CTS	EPD	15 29 8.69	43	2.8	111.7	330	91	19.29	18.89	0.57
25	PRN	EPD4	15 29 10.19	60	3.1	115.1	53	91	20.79	19.35	1.32
25	GMN	EPD	15 29 9.71	48	2.9	118.7	299	91	20.31	20.07	0.38
25	MTI	EPD4	15 29 10.71	49	2.9	122.4	36	91	21.31	20.54	0.80
25	RVE	EPD4	15 29 13.26	51	3.0	137.0	356	90	23.86	22.58	1.28
25	WRN	EPD4	15 29 13.71	49	3.0	139.7	18	90	24.31	23.01	1.25
25	NPN	EPD4	15 29 14.00	63	3.2	140.2	47	90	24.60	23.10	1.29
25	DLM	EPD4	15 29 15.72	39	2.8	150.3	53	90	26.32	24.75	1.32
25	SRG	EPD4	15 29 15.68	77	3.4	151.4	37	90	26.28	24.93	1.13
25	TNP	EPD4	15 29 19.09	53	3.2	175.0	325	52	29.69	26.38	1.04

APR H = 20 34 28.80 UTC RMS = 0.16 NO = 32 FREE DEPTH SOLUTION  
 26 LAT = 36.714 N ERX = 0.3 ERH = 0.4 AVFM = 2.9 Q = C  
 LONG = 116.142 W ERY = 0.3 GAP = 43 AVXM = QS = C LATHROP WELLS  
 DEPTH = 0.36 KM ERZ = 10.4 NM = WD = C

26	LSM	EPD	20 34 31.39	56	2.7	12.1	284	40	2.59	2.60	-0.04
26	LUP	EPD	20 34 32.00	60	2.7	15.7	352	40	3.20	3.34	-0.06
26	MCY	EPD	20 34 32.23	90	3.1	17.1	110	40	3.43	3.48	0.03
26	SDH	EPD	20 34 32.44	64	2.8	19.1	247	40	3.64	3.78	-0.11
26	CDHS	EPD	20 34 32.89	88	3.1	22.6	316	40	4.09	4.37	-0.18
26	CPX	EPD	20 34 33.40	75	3.0	25.2	18	40	4.60	4.86	-0.23
26	YMT3	EPD0	20 34 33.69	73	2.9	25.4	289	40	4.89	4.84	0.10

## 1981 SGB LOCAL-EVENT DATA REPORT

APR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 26	YMT6	EPD0	20 34 33.96					76	3.0	28.4	304	40	5.16	5.38	-0.31
. 26	SPRG	EPD0	20 34 34.32					64	2.8	29.6	94	40	5.52	5.63	-0.08
. 26	JON	EPD	20 34 34.48					52	2.7	30.6	173	38	5.68	5.70	-0.03
. 26	YMT2	EPD0	20 34 34.76					175	3.7	31.6	285	38	5.96	5.89	-0.01
. 26	YMT4	EPD0	20 34 34.70					69	2.9	32.3	301	38	5.90	6.05	-0.26
. 26	YMT5	EPD0	20 34 35.11					110	3.3	34.6	306	38	6.31	6.43	-0.13
. 26	BGB	EPD0	20 34 35.48					66	2.9	36.8	348	38	6.68	6.86	-0.11
. 26	YMT1	EPD	20 34 35.81					50	2.7	37.8	294	38	7.01	6.92	-0.05
. 26	WCT	EPD0	20 34 36.68					46	2.6	44.1	281	38	7.88	7.91	0.12
. 26	AMR	EPD	20 34 37.00					51	2.7	46.0	220	38	8.20	8.16	0.03
. 26	GLR	EPD4	20 34 38.01					58	2.8	55.0	12	38	9.21	9.77	-0.49
. 26	FMT	EPD0	20 34 38.81					48	2.7	57.5	262	38	10.01	10.10	0.15
. 26	EPN	EPD4	20 34 40.20					47	2.7	57.8	344	38	11.40	10.41	0.93
. 26	NUP	EPD	20 34 39.84					46	2.7	65.0	181	38	11.04	11.30	-0.18
. 26	APK	EPD0	20 34 40.47					33	2.4	67.1	131	38	11.67	11.99	-0.06
. 26	GWV	EPD	20 34 42.12					42	2.6	75.3	219	38	13.32	13.09	0.31
. 26	GMR	EPD	20 34 42.32					63	3.0	76.3	26	38	13.52	13.26	0.35
. 26	BMT	EPD	20 34 42.59					61	3.0	77.5	325	38	13.79	13.59	0.37
. 26	SGV	EPD0	20 34 43.49					54	2.9	84.8	290	38	14.69	14.65	0.13
. 26	BLT	EPD4	20 34 44.06					35	2.5	85.3	1	38	15.26	14.77	0.61
. 26	SHRG	EPD4	20 34 44.89					165	3.9	91.3	105	38	16.09	15.71	0.96
. 26	PGE	EPD4	20 34 45.11					36	2.6	92.2	244	38	16.31	15.90	0.63
. 26	TPU	EPD	20 34 47.37					47	2.9	108.1	24	38	18.57	18.51	0.20
. 26	GVN	EPD	20 34 48.21					50	2.9	111.7	287	38	19.41	18.87	0.48
. 26	CTS	EPD4	20 34 49.27					41	2.8	116.8	334	38	20.47	19.91	0.73
. 26	QCS	EPD4	20 34 50.31					25	2.3	118.7	10	36	21.51	20.21	1.32
. 26	GMN	EPD	20 34 49.10					59	3.1	118.9	303	38	20.30	20.31	0.14
. 26	PRN	EPD	20 34 50.36					91	3.5	123.8	52	38	21.56	20.97	0.46
. 26	MTI	EPD4	20 34 51.56					42	2.8	131.8	36	38	22.76	22.27	0.51
. 26	RVE	EPD4	20 34 54.16					34	2.7	145.0	358	38	25.36	24.58	0.78
. 26	MGM	EPD	20 34 53.59					40	2.8	145.0	304	38	24.79	24.54	0.34
. 26	LCH	EPD	20 34 53.71					33	2.7	145.9	293	38	24.91	24.56	0.42
. 26	NPN	EPD	20 34 54.27					66	3.3	149.3	46	38	25.47	25.15	0.11
. 26	DLM	EPD4	20 34 56.69					42	2.9	159.1	52	38	27.89	26.76	0.88
. 26	SRG	EPD4	20 34 54.18					106	3.7	160.8	36	38	25.38	27.02	-1.87
. 26	TNP	EPD4	20 34 59.16					32	2.8	179.3	328	29	30.36	29.53	0.56
. 26	SVP	EPD	20 34 59.52					30	2.7	184.5	307	29	30.72	30.36	0.25

## 1981 SGB LOCAL-EVENT DATA REPORT

APR 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DLR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
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.....
. APR H = 19 13 38.80 UTC RMS = 0.17 NO = 9 FREE DEPTH SOLUTION
. 28 LAT = 36.904 N ERX = 0.9 ERH = 2.4 AVFM = 1.8 Q = C
. LONG = 116.254 W ERY = 2.2 GAP = 191 AVXM = QS = B LATHROP WELLS
. DEPTH = 15.87 KM ERZ = 3.2 NM = QD = 0
.....
. 28 CDH5 IPU0 19 13 41.79 28 2.1 7.5 229 155 2.99 3.24 -0.15
. 28 LOP IPU0 19 13 42.42 17 1.6 9.5 126 150 3.62 3.56 0.14
. 28 YMT6 IPU1 19 13 42.74 17 1.6 14.3 249 138 3.94 3.89 -0.04
. 28 CPX IPU0 19 13 43.00 22 1.9 18.0 81 131 4.20 4.34 -0.11
. 28 LSM EPX3 19 13 42.58 17 1.7 18.3 185 131 3.78 4.35 -0.59
. 28 YMT4 EPX3 19 13 43.58 19 1.8 18.7 250 130 4.78 4.42 0.25
. 28 YMT2 EPU1 19 13 44.16 26 2.0 24.6 237 122 5.36 5.16 0.12
. 28 MCY IPU1 19 13 46.05 23 2.0 37.5 136 112 7.25 7.08 0.25
. 28 JDN EPU1 19 13 48.00 12 1.5 53.3 165 105 9.20 9.45 -0.25
.....
. APR H = 16 55 22.51 UTC RMS = 0.01 NO = 4 FREE DEPTH SOLUTION
. 30 LAT = 36.717 N ERX = ERH = AVFM = 1.6 Q = C
. LONG = 116.144 W ERY = GAP = 172 AVXM = QS = A LATHROP WELLS
. DEPTH = -0.05 KM ERZ = NM = QD = 0
.....
. 30 LSM EPU 16 55 25.16 14 1.5 11.8 283 40 2.65 2.64 -0.01
. 30 LOP EPU 16 55 25.79 18 1.7 15.4 352 40 3.28 3.36 0.00
. 30 MCY EPU 16 55 26.05 16 1.6 17.4 111 40 3.54 3.62 0.00
. 30 CDH1 EPX2 16 55 26.89 20 1.8 22.2 316 40 4.38 4.45 0.02
. 30 JDN EPX2 16 55 28.42 31.0 173 38 5.91 5.84 0.06
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## 1981 SGB LOCAL-EVENT DATA REPORT

MAY 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
MAY H = 21	53	42.53	UTC	RMS = 0.09	NO = 14							FREE DEPTH SOLUTION			
02 LAT =	37.122	N		ERX = 0.3	ERH = 0.4	AVFM = 2.7	Q = B								
LONG =	117.336	W		ERY = 0.3	GAP = 112	AVXM =	QS = A	MT. JACKSON							
DEPTH =	6.38	KM		ERZ = 1.7	NM =		WD = C								
.....															
02	GVN	IPD	21 53 45.37			67	2.8	13.4	182	112	2.84	2.78	0.01		
02	GMN	EPD	21 53 46.61			54	2.7	20.9	19	104	4.08	4.22	0.01		
02	LCH	EPD	21 53 48.00			45	2.5	30.3	294	99	5.47	5.58	-0.03		
02	SGV	EPD	21 53 48.11			62	2.8	31.2	120	98	5.58	5.74	-0.07		
02	MGM	IPU	21 53 49.46			45	2.6	38.2	338	97	6.93	6.98	0.04		
02	PPK	EPD	21 53 53.19			37	2.5	60.9	304	94	10.66	10.60	0.05		
02	BMT	EPD	21 53 53.54			60	2.9	63.9	74	94	11.01	11.16	0.03		
02	YMT1	EPD	21 53 55.45			58	2.9	77.8	113	93	12.92	13.21	-0.42		
02	CIS	EPD	21 53 56.04			53	2.9	80.3	42	93	13.51	13.76	-0.08		
02	YMT5	EPD	21 53 56.57			36	2.5	82.4	108	93	14.04	13.99	0.05		
02	YMT4	EPD	21 53 57.02			36	2.5	83.7	110	93	14.49	14.20	0.19		
02	EPN	EPD	21 53 58.17			52	2.9	90.5	83	92	15.64	15.50	0.09		
02	SDH	EPD	21 53 59.93			43	2.8	103.5	121	92	17.40	17.36	0.08		
02	LSM	EPD4	21 54 0.61			45	2.8	103.8	114	92	18.08	17.43	0.63		
02	BLT	EPD	21 54 1.69			40	2.7	114.8	70	92	19.16	19.36	-0.07		
.....															
MAY H = 14	47	34.03	UTC	RMS = 0.06	NO = 9							FREE DEPTH SOLUTION			
03 LAT =	37.307	N		ERX = 0.2	ERH = 0.5	AVFM = 2.7	Q = B								
LONG =	117.358	W		ERY = 0.4	GAP = 132	AVXM =	QS = A	MT. JACKSON							
DEPTH =	2.09	KM		ERZ = 1.1	NM =		WD = B								
.....															
03	GMN	IPU	14 47 35.91			48	2.5	8.7	95	100	1.88	2.13	-0.11		
03	MGM	IPU	14 47 37.84			39	2.4	19.3	320	94	3.81	3.90	-0.01		
03	LCH	EPD	14 47 38.98			36	2.3	26.9	253	74	4.95	5.02	0.01		
03	GVN	EPD	14 47 40.07			47	2.6	33.9	178	74	6.04	6.04	-0.07		
03	SGV	EPD	14 47 42.13			50	2.7	46.3	141	74	8.10	8.20	-0.01		
03	BMT	EPD	14 47 44.98			48	2.7	63.2	92	74	10.95	11.08	0.04		
03	YMT5	EPD	14 47 49.82			43	2.7	92.3	119	74	15.79	15.64	0.15		
03	YMT4	EPD	14 47 50.36			43	2.7	94.3	121	74	16.33	15.94	0.27		
03	YMT3	EPD	14 47 51.14			53	2.9	102.1	124	74	17.11	17.17	-0.01		
03	SPRG	EPD4	14 48 0.05			53	3.1	153.7	116	74	26.02	25.60	0.45		
.....															
MAY H = 15	38	11.39	UTC	RMS = 0.10	NO = 11							FREE DEPTH SOLUTION			
03 LAT =	36.632	N		ERX = 0.7	ERH = 0.9	AVFM = 2.3	Q = C								
LONG =	116.356	W		ERY = 0.7	GAP = 192	AVXM =	QS = A	LATHROP WELLS							
DEPTH =	9.71	KM		ERZ = 1.1	NM =		QD = D								
.....															
03	SDH	IPU0	15 38 13.32			32	2.1	2.2	47	168	1.93	2.01	-0.04		
03	LSM	IPU0	15 38 14.89			41	2.4	14.1	32	123	3.50	3.20	0.28		
03	YMT3	IPU0	15 38 15.00			49	2.6	18.0	343	117	3.61	3.72	-0.07		
03	YMT2	IPU0	15 38 15.58			53	2.7	20.6	326	113	4.19	4.12	-0.01		
03	YMT4	EPD4	15 38 15.84			42	2.5	25.3	340	109	4.45	4.88	-0.54		
03	YMT6	EPD0	15 38 16.21			46	2.5	25.5	350	109	4.82	4.88	-0.15		
03	CDH5	EPD4	15 38 16.42			42	2.5	25.6	8	109	5.03	4.87	0.26		
03	AMR	EPX4	15 38 16.84			19	1.8	28.1	202	107	5.45	5.19	0.25		
03	YMT1	IPU0	15 38 17.05			50	2.6	29.1	328	106	5.66	5.44	0.09		
03	LOP	EPD2	15 38 16.89			38	2.4	29.8	34	106	5.50	5.67	-0.09		
03	WCT	EPX4	15 38 17.05			23	2.0	30.0	306	106	5.66	5.55	0.27		
03	YMT5	EPX2	15 38 17.21			41	2.5	30.8	344	105	5.82	5.75	0.07		
03	JON	IPU0	15 38 17.11			23	2.0	31.1	133	105	5.72	5.70	0.00		
03	MCY	EPD0	15 38 17.74			44	2.5	35.4	85	103	6.35	6.45	-0.03		
03	BGB	EPX2	15 38 19.68			29	2.2	46.5	14	100	8.29	8.31	0.06		
03	SPRG	EPX4	15 38 20.68			27	2.2	49.3	82	99	9.29	8.67	0.65		
.....															
MAY H = 16	49	50.07	UTC	RMS = 0.26	NO = 4							FREE DEPTH SOLUTION			
03 LAT =	37.296	N		ERX =	ERH =	AVFM = 1.9	Q = C								
LONG =	117.375	W		ERY =	GAP = 187	AVXM =	QS = B	MT. JACKSON							
DEPTH =	4.79	KM		ERZ =	NM =		QD = D								
.....															
03	GMN	EPD	16 49 52.00			20	1.8	10.3	87	113	1.93	2.50	-0.41		
03	MGM	EPD	16 49 53.91			19	1.8	19.3	326	99	3.84	3.91	0.02		
03	SGV	EPD	16 49 58.37			20	1.9	46.4	139	93	8.30	8.18	0.22		
03	BMT	EPD	16 50 1.43			20	2.0	64.7	91	92	11.36	11.29	0.25		
03	YMT5	EPD4	16 50 2.38			19	2.0	93.1	118	91	12.31	15.73	-3.42		
03	SPRG	EPD4	16 50 2.99			19	2.2	154.6	116	90	12.92	25.44	-12.49		
.....															
MAY H = 16	56	41.82	UTC	RMS = 0.14	NO = 5							FREE DEPTH SOLUTION			
03 LAT =	37.301	N		ERX = 0.8	ERH = 1.4	AVFM = 2.3	Q = D								
LONG =	117.372	W		ERY = 1.2	GAP = 149	AVXM =	QS = C	MT. JACKSON							
DEPTH =	0.92	KM		ERZ = 53.4	NM =		QD = D								
.....															
03	GMN	EPD	16 56 43.74			30	2.1	10.0	91	40	1.92	2.34	-0.27		
03	MGM	EPD	16 56 45.62			26	2.0	19.1	325	40	3.80	3.87	0.02		
03	GVN	EPD	16 56 47.88			32	2.3	33.3	175	38	6.06	6.01	-0.02		
03	BMT	EPD	16 56 53.18			30	2.3	64.5	92	38	11.36	11.35	0.18		
03	YMT3	EPD	16 56 59.67			35	2.6	102.8	124	38	17.85	17.35	0.55		
.....															



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MAY 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
MAY H = 17	6	17.30	UTC	RMS =	0.13	NO =	15								FREE DEPTH SOLUTION
03	LAT =	37.298	N	ERX =	0.3	ERH =	0.4	AVFM =	3.1	U =	C				
	LONG =	117.360	W	ERY =	0.3	GAP =	109	AVXM =		US =	C				MT. JACKSON
	DEPTH =	0.78	KM	ERZ =	15.4	NM =				WD =	B				
.....															
03	GMN	IPU	17 6 19.15					90	3.1	8.9	88	40	1.85	2.18	-0.18
03	MGM	IPU	17 6 21.12					78	3.0	20.0	323	40	3.82	4.06	-0.15
03	GVN	EPD	17 6 23.28					85	3.1	32.9	177	38	5.98	5.98	-0.06
03	MZP	EPD	17 6 25.19					65	2.9	44.7	357	38	7.89	8.21	-0.08
03	SGV	EPD	17 6 25.44					93	3.2	45.6	140	38	8.14	8.19	0.04
03	PPK	EPD	17 6 26.50					58	2.8	50.5	286	38	9.20	9.04	0.15
03	BMT	EPD	17 6 28.56					85	3.2	63.3	91	38	11.26	11.19	0.24
03	CTS	EPD	17 6 29.17					46	2.7	68.8	55	38	11.87	12.02	0.02
03	WCT	EPD2	17 6 31.59							86.1	131	38	14.29	14.64	-0.20
03	YMT4	EPD	17 6 33.62					76	3.2	93.9	121	38	16.32	15.98	0.23
03	YMT2	EPD4	17 6 34.55					95	3.4	96.5	126	38	17.25	16.36	0.81
03	KRNA	EPD	17 6 34.61					48	2.8	99.7	60	38	17.31	17.06	0.18
03	BGB	EPD2	17 6 35.20					65	3.1	104.6	106	38	17.90	17.80	0.18
03	BLT	EPD	17 6 36.34					45	2.8	111.4	79	38	19.04	18.94	0.23
03	SDH	EPD	17 6 36.75					53	3.0	116.2	129	38	19.45	19.56	-0.07
03	CPX	EPD4	17 6 38.42					71	3.3	123.0	109	38	21.12	20.70	0.45
03	SPRG	EPD	17 6 43.23					75	3.4	153.4	116	38	25.93	25.64	0.31
03	QSM	EPD4	17 6 43.41					57	3.2	154.3	163	38	26.11	25.67	0.35
03	MTI	EPD4	17 6 48.87					60	3.3	189.3	77	29	31.57	30.62	0.98
.....															
MAY H = 17	8	51.95	UTC	RMS =	0.05	NO =	3								FREE DEPTH SOLUTION
03	LAT =	37.325	N	ERX =		ERH =		AVFM =	2.5	U =	C				
	LONG =	117.322	W	ERY =		GAP =	333	AVXM =		US =	A				MT. JACKSON
	DEPTH =	1.92	KM	ERZ =		NM =				WD =	D				
.....															
03	GMN	EPD	17 8 53.42					37	2.3	6.2	116	104	1.47	1.70	-0.08
03	BMT	EPD	17 9 2.39					35	2.4	60.2	94	74	10.44	10.59	0.02
03	YMT5	EPD	17 9 7.37					33	2.5	90.5	122	74	15.42	15.36	0.06
03	SPRG	EPD3	17 9 18.05					35	2.7	151.8	117	74	26.10	25.29	0.84
.....															
MAY H = 17	16	59.98	UTC	RMS =	0.09	NO =	4								FREE DEPTH SOLUTION
03	LAT =	37.309	N	ERX =		ERH =		AVFM =	2.3	U =	C				
	LONG =	117.353	W	ERY =		GAP =	177	AVXM =		US =	A				MT. JACKSON
	DEPTH =	1.56	KM	ERZ =		NM =				WD =	D				
.....															
03	GMN	EPD	17 17 1.84					30	2.1	8.3	96	96	1.86	2.05	-0.04
03	MGM	EPD	17 17 3.82					20	1.8	19.5	319	92	3.84	3.93	0.00
03	SGV	EPD	17 17 8.17					35	2.4	46.2	142	74	8.19	8.20	0.08
03	YMT5	EPD	17 17 15.27					27	2.3	92.0	120	74	15.29	15.61	-0.32
03	YMT3	EPD4	17 17 17.62					42	2.7	101.9	125	74	17.64	17.15	0.54
.....															
MAY H = 1	29	48.24	UTC	RMS =	0.02	NO =	4								FREE DEPTH SOLUTION
04	LAT =	36.978	N	ERX =		ERH =		AVFM =	2.8	U =	C				
	LONG =	115.697	W	ERY =		GAP =	196	AVXM =		US =	A				MERCURY
	DEPTH =	3.24	KM	ERZ =		NM =				WD =	D				
.....															
04	CPX	EPD	1 29 53.76					56	2.7	32.3	261	90	5.52	5.56	-0.01
04	EPR	EPD	1 29 56.66					64	2.9	50.1	65	90	8.42	8.44	0.00
04	YMT5	EPD4	1 30 9.92					43	2.6	68.1	263	90	21.68	11.37	10.31
04	BMT	EPD	1 30 3.14					47	2.8	90.9	292	90	14.90	15.09	-0.02
04	GVN	EPD	1 30 12.47					42	2.9	146.5	271	90	24.23	24.13	0.04
.....															
MAY H = 7	52	9.28	UTC	RMS =	0.16	NO =	9								FREE DEPTH SOLUTION
05	LAT =	37.310	N	ERX =	0.6	ERH =	1.1	AVFM =	2.9	U =	B				
	LONG =	117.362	W	ERY =	0.9	GAP =	132	AVXM =		US =	B				MT. JACKSON
	DEPTH =	1.40	KM	ERZ =	3.8	NM =				WD =	B				
.....															
05	GMN	IPU	7 52 11.18					80	3.0	9.1	97	94	1.90	2.18	-0.13

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MAY 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 05	MGM	EPD	7 52 12.97					47	2.5	18.9	321	91	3.69	3.83	-0.05
. 05	LCH	EPD	7 52 14.04					40	2.4	26.7	252	90	4.76	4.72	0.12
. 05	GVN	EPD	7 52 15.12					57	2.8	34.2	177	74	5.84	6.12	-0.34
. 05	SGV	EPD	7 52 17.17					55	2.8	46.7	141	74	7.89	8.30	-0.32
. 05	BMT	EPD	7 52 20.37					75	3.1	63.5	93	74	11.09	11.16	0.10
. 05	YMT5	EPD	7 52 25.02					70	3.1	92.7	119	74	15.74	15.74	0.00
. 05	YMT2	EPD	7 52 26.29					67	3.1	97.4	127	74	17.01	16.44	0.49
. 05	YMT3	EPD	7 52 26.93					70	3.2	102.6	124	74	17.65	17.27	0.43

MAY H = 13 59 5.25 UTC RMS = 0.23 NO = 16  
 . 05 LAT = 36.372 N ERX = 4.7 ERH = 5.7 AVFM = 4.1 Q = D  
 . LONG = 118.125 W ERY = 3.2 GAP = 285 AVXM = Q8 = D  
 . DEPTH = 5.00 KM ERZ = 2.3 NM = QD = D

FIXED DEPTH SOLUTION

DEPTH CONTROL INADEQUATE

. 05	GVN	EPD	13 59 21.77					178	4.0	98.9	45	91	16.52	16.58	-0.11
. 05	LCH	EPD	13 59 22.50					168	3.9	104.8	24	91	17.25	17.67	-0.33
. 05	SGV	EPD	13 59 24.91					177	4.0	118.8	55	90	19.66	19.62	0.14
. 05	MGM	EPD	13 59 27.18					173	4.1	131.2	25	90	21.93	21.64	0.38
. 05	GVN	EPD	13 59 27.16					160	4.0	132.3	99	90	21.91	21.81	0.19
. 05	AMR	EPD	13 59 29.25					160	4.1	148.1	89	90	24.00	24.39	-0.40
. 05	YMT1	EPD	13 59 30.38					180	4.2	152.5	69	90	25.13	25.11	-0.10
. 05	YMT2	EPD	13 59 30.91					200	4.3	153.9	73	90	25.66	25.32	0.26
. 05	YMT4	EPD	13 59 31.45					168	4.1	159.5	70	90	26.20	26.24	-0.15
. 05	YMT3	EPD	13 59 31.58					195	4.3	160.2	73	52	26.33	26.31	0.08
. 05	YMT5	EPD4	13 59 30.79					168	4.1	160.6	69	90	25.54	26.41	-0.87
. 05	SDH	EPD	13 59 32.01					160	4.1	163.0	79	52	26.76	26.67	0.14
. 05	BMT	EPD4	13 59 32.97					187	4.3	166.3	53	90	27.72	27.35	0.54
. 05	LSM	EPD	13 59 33.05					147	4.1	170.7	76	52	27.80	27.68	0.10
. 05	NOP	EPD4	13 59 33.27					170	4.2	179.5	99	52	28.02	28.76	-0.65
. 05	JUN	EPD	13 59 34.03					160	4.2	181.6	88	52	28.78	29.02	-0.25
. 05	LGP	EPD	13 59 34.64					155	4.2	183.2	73	52	29.39	29.41	0.07
. 05	CTS	EPD	13 59 35.46					144	4.1	189.3	41	52	30.21	30.24	0.14
. 05	CPX	EPD	13 59 36.05					154	4.2	195.1	71	52	30.80	30.84	-0.01
. 05	SHRG	EPD4	13 59 45.64					135	4.3	266.8	87	52	40.39	40.12	0.86

MAY H = 14 34 52.29 UTC RMS = 0.19 NO = 18  
 . 05 LAT = 36.390 N ERX = 1.9 ERH = 2.4 AVFM = 4.0 Q = D  
 . LONG = 118.065 W ERY = 1.5 GAP = 253 AVXM = Q8 = C  
 . DEPTH = 0.31 KM ERZ = 8.8 NM = QD = D

FREE DEPTH SOLUTION

DARWIN

. 05	TMO	EPD	14 35 4.99					110	3.5	74.8	52	38	12.70	13.15	-0.15
. 05	MCA	EPD	14 35 4.91					103	3.4	75.9	68	38	12.62	12.95	-0.41
. 05	PGE	EPD	14 35 7.31					111	3.5	89.8	93	38	15.02	15.52	-0.28
. 05	GVN	EPD	14 35 8.43					171	3.9	93.7	44	38	16.14	15.96	0.12
. 05	SGV	EPD	14 35 11.69					170	4.0	113.3	55	38	19.40	19.29	0.20
. 05	PPK	EPD	14 35 12.03					155	3.9	115.9	7	38	19.74	19.77	-0.04
. 05	QSM	EPD	14 35 12.31					115	3.7	117.5	114	38	20.02	19.78	0.15
. 05	FMT	EPD	14 35 12.00					95	3.5	118.6	76	38	19.71	20.03	-0.08
. 05	WCT	EPD	14 35 14.90					92	3.5	136.3	71	38	22.61	22.91	-0.14
. 05	YMT2	EPD	14 35 17.24					200	4.3	148.2	73	38	24.95	24.86	0.01
. 05	SVP	EPD4	14 35 18.54					151	4.0	149.0	9	38	26.25	25.31	0.83
. 05	YMT4	EPD	14 35 17.98					171	4.1	153.8	70	38	25.69	25.81	-0.23
. 05	YMT3	EPD	14 35 18.24					182	4.2	154.5	73	38	25.95	25.88	0.12
. 05	YMT5	EPD	14 35 18.32					171	4.1	154.9	69	38	26.03	26.01	0.02
. 05	YMT6	EPD4	14 35 18.18					132	3.9	157.5	71	38	25.89	26.39	-0.59
. 05	BMT	EPD	14 35 19.58					170	4.2	160.9	52	38	27.29	27.16	0.30
. 05	CDH5	EPD	14 35 19.95					103	3.7	164.9	72	29	27.66	27.50	0.26
. 05	CDH1	EPD	14 35 20.00					78	3.5	164.9	72	29	27.71	27.57	0.24
. 05	BGB	EPD	14 35 21.62					91	3.7	179.3	66	29	29.33	29.50	-0.09
. 05	CPX	EPD4	14 35 24.10					160	4.2	189.4	72	29	31.81	30.69	1.15
. 05	GLR	EPD	14 35 24.60					125	4.0	203.6	64	29	32.31	32.55	-0.17
. 05	SPRG	EPD4	14 35 26.32					174	4.3	204.9	81	29	34.03	32.67	1.39
. 05	GMR	EPD	14 35 28.04					144	4.3	229.8	63	29	35.75	35.94	-0.09
. 05	TPU	EPD	14 35 30.79					118	4.2	253.9	58	29	38.50	39.10	-0.46
. 05	MTI	EPD4	14 35 36.30					119	4.3	286.7	60	29	44.01	43.22	0.82
. 05	PRN	EPD4	14 35 38.21					134	4.4	291.5	67	29	45.92	43.83	1.97

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MAY 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	FOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
. 05	NPN	EPU4	14 35 39.50					132	4.5	311.8	63	29	47.21	46.46	0.54	
. 05	SRG	EPU4	14 35 42.31					136	4.5	313.7	58	29	50.02	46.72	3.08	
. 05	DLM	EPD4	14 35 48.23					82	4.1	325.4	65	29	55.94	48.23	7.46	
.....																
. MAY H = 20 9 17.03 UTC RMS = 0.07 NU = 5 FREE DEPTH SOLUTION																
. 05 LAT = 37.302 N ERX = 0.3 ERH = 0.6 AVFM = 2.1 Q = C																
. LONG = 117.349 W ERY = 0.5 GAP = 141 AVXM = Q = 8 MT. JACKSON																
. DEPTH = 1.11 KM ERZ = 2.5 NM = QD = D																
.....																
. 05	GMN	EPU	20 9 18.78					30	2.1	7.9	91	91	1.75	1.98	-0.08	
. 05	MGM	EPU	20 9 20.61					23	1.9	20.2	320	90	3.58	3.63	0.04	
. 05	GVN	EPU	20 9 23.04					27	2.1	33.3	179	74	6.01	5.99	-0.04	
. 05	SGV	EPD	20 9 25.02					27	2.2	45.4	142	74	7.99	8.10	-0.01	
. 05	BMT	EPD	20 9 28.17					25	2.1	62.4	92	74	11.14	11.00	0.32	
.....																
. MAY H = 20 38 17.24 UTC RMS = 0.02 NU = 4 FREE DEPTH SOLUTION																
. 05 LAT = 37.283 N ERX = ERH = AVFM = 2.1 Q = C																
. LONG = 117.375 W ERY = GAP = 191 AVXM = Q = A MT. JACKSON																
. DEPTH = 1.02 KM ERZ = NM = QD = D																
.....																
. 05	GMN	EPU	20 38 19.04					30	2.1	10.4	80	90	1.80	1.96	-0.01	
. 05	MGM	EPD	20 38 20.85					20	1.8	20.6	328	90	3.61	3.69	0.00	
. 05	SGV	EPD	20 38 25.26					27	2.2	45.3	138	74	8.02	8.08	0.02	
. 05	BMT	EPD	20 38 28.40					25	2.2	64.6	90	74	11.16	11.36	-0.03	
.....																
. MAY H = 4 29 58.09 UTC RMS = 0.10 NU = 12 FREE DEPTH SOLUTION																
. 07 LAT = 37.120 N ERX = 0.6 ERH = 0.8 AVFM = 2.5 Q = C																
. LONG = 117.343 W ERY = 0.4 GAP = 159 AVXM = Q = 8 MT. JACKSON																
. DEPTH = 4.96 KM ERZ = 3.7 NM = QD = C																
.....																
. 07	GVN	EPD	4 30 0.83					45	2.5	13.2	180	106	2.74	2.68	0.01	
. 07	GMN	EPU	4 30 2.12					45	2.5	21.3	20	99	4.03	4.24	-0.05	
. 07	SGV	EPU	4 30 3.56					45	2.5	31.7	119	95	5.47	5.79	-0.23	
. 07	MGM	EPU	4 30 4.93					30	2.2	38.1	339	94	6.84	6.95	-0.01	
. 07	WCT	EPD	4 30 10.21					30	2.3	73.5	120	92	12.12	12.47	-0.18	
. 07	YMT1	EPU	4 30 11.43					43	2.7	78.4	112	92	13.34	13.30	-0.08	
. 07	YMT4	EPU	4 30 12.58					37	2.6	84.3	110	91	14.49	14.29	0.10	
. 07	YMT6	EPD	4 30 13.09					34	2.5	88.5	109	91	15.00	14.95	-0.03	
. 07	PGE	EPD4	4 30 12.42					28	2.3	89.1	104	91	14.33	15.19	-0.64	
. 07	SDH	EPD	4 30 15.34					31	2.5	103.9	120	91	17.25	17.44	-0.15	
. 07	LSM	EPD	4 30 15.99					32	2.5	104.3	114	91	17.90	17.53	0.36	
. 07	KRNA	EPU	4 30 16.58					34	2.6	109.7	51	90	18.49	18.14	0.28	
. 07	GLR	EPU4	4 30 18.62					32	2.6	118.0	86	90	20.53	19.49	1.11	
. 07	MCY	EPD4	4 30 20.42					37	2.7	133.2	112	90	22.33	21.96	0.45	
. 07	JON	EPU	4 30 20.43					30	2.6	134.0	124	90	22.34	22.09	0.24	
. 07	GMR	EPD4	4 30 21.93					30	2.6	141.6	80	90	23.84	23.32	0.62	
. 07	SPRG	EPU4	4 30 22.38					40	2.8	144.7	109	90	24.29	23.83	0.50	
.....																
. MAY H = 14 48 26.34 UTC RMS = 0.06 NU = 7 FREE DEPTH SOLUTION																
. 07 LAT = 37.439 N ERX = 0.9 ERH = 1.3 AVFM = 2.7 Q = D																
. LONG = 117.219 W ERY = 0.9 GAP = 225 AVXM = Q = C MT. JACKSON																
. DEPTH = 0.14 KM ERZ = 38.5 NM = QD = D																
.....																
. 07	GMN	EPD	14 48 29.42					60	2.7	15.8	193	40	3.08	3.48	-0.25	
. 07	MGM	EPU	14 48 31.21					40	2.4	24.6	271	40	4.87	4.96	0.00	
. 07	GVN	EPD	14 48 35.47					45	2.6	49.7	193	38	9.13	8.84	0.23	
. 07	SGV	EPU	14 48 35.72					54	2.8	53.4	162	38	9.38	9.58	-0.11	
. 07	WCT	EPD	14 48 41.50					30	2.4	89.0	144	38	15.16	15.25	0.07	
. 07	YMT4	EPD	14 48 42.77					47	2.8	93.2	133	38	16.43	16.00	0.32	
. 07	YMT2	EPD	14 48 43.16					47	2.8	97.6	138	38	16.82	16.67	0.07	
. 07	YMT3	EPU	14 48 43.76					46	2.8	101.9	135	38	17.42	17.36	0.11	
.....																

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MAY 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
MAY H = 17 28 48.43 UTC				RMS =	0.20	NO =	21	FREE DEPTH SOLUTION							
10 LAT = 37.139 N				ERX =	0.5	ERH =	0.8	AVFM =	3.2	u =	C				
LONG = 117.416 W				ERY =	0.5	GAP =	149	AVXM =		us =	B	MT. JACKSON			
DEPTH = 7.75 KM				ERZ =	2.1	NM =				GD =	C				
.....															
10	GMN	EPU	17 28 52.68					97	3.2	22.6	38	107	4.25	4.55	-0.15
10	LCH	EPU	17 28 53.00					77	3.0	23.1	297	106	4.57	4.48	0.17
10	MGM	IPU	17 28 54.64					87	3.1	34.2	348	100	6.21	6.38	-0.08
10	SGV	EPU	17 28 55.63					104	3.3	38.4	117	99	7.20	6.92	0.36
10	PPK	EPU	17 28 57.94					70	3.0	54.0	306	96	9.51	9.50	0.00
10	MCA	EPU4	17 28 55.69					65	3.0	55.8	168	96	7.26	9.48	-2.30
10	MZP	EPU	17 28 58.95					71	3.1	62.4	3	95	10.52	10.97	-0.21
10	BMT	EPU	17 29 0.62					90	3.3	70.2	77	94	12.19	12.21	0.15
10	SVP	EPU	17 29 1.18					65	3.0	72.4	332	94	12.75	12.65	-0.01
10	WCT	EPU	17 29 2.03					58	2.9	80.1	119	94	13.60	13.57	0.19
10	CTS	EPD	17 29 2.59					50	2.8	83.8	47	94	14.16	14.35	-0.02
10	YMT1	EPU	17 29 3.48					96	3.4	85.1	112	94	15.05	14.41	0.50
10	YMT2	EPU	17 29 4.39					95	3.4	91.8	115	93	15.96	15.48	0.40
10	PGE	EPU4	17 28 58.48					63	3.1	93.1	160	93	10.05	15.86	-5.59
10	YMT6	EPU4	17 29 5.24					80	3.3	95.3	109	93	16.81	16.06	0.66
10	EPN	EPU	17 29 5.51					85	3.3	97.3	85	93	17.08	16.62	0.40
10	CDH5	EPU4	17 29 2.20					57	3.0	102.6	108	93	13.77	17.22	-3.35
10	BGB	EPU	17 29 6.52					58	3.0	106.2	96	93	18.09	17.95	0.22
10	SDH	EPD4	17 29 12.20					85	3.4	110.6	120	93	23.77	18.53	5.28
10	KRNA	EPD	17 29 8.11					65	3.2	113.5	54	93	19.68	19.19	0.42
10	AMR	EPD4	17 29 12.36					70	3.2	117.6	134	92	23.93	19.60	4.32
10	BLT	EPU	17 29 9.08					65	3.2	120.8	72	92	20.65	20.35	0.43
10	GWV	EPU	17 29 9.05					70	3.3	125.0	148	92	20.62	20.96	-0.26
10	MCY	EPU4	17 29 7.63					83	3.5	140.0	112	92	19.20	23.36	-4.08
10	JON	EPU4	17 29 7.38					80	3.4	140.6	124	92	18.95	23.37	-4.43
10	RVE	EPU	17 29 13.14					48	3.0	145.7	48	52	24.71	24.46	0.24
10	GMR	EPD4	17 29 13.43					58	3.2	147.6	82	52	25.00	24.55	0.55
10	QCS	EPD	17 29 13.69					50	3.1	149.8	62	52	25.26	24.90	0.39
10	SPRG	EPD	17 29 13.36					76	3.4	151.5	109	52	24.93	24.96	0.00
10	TPU	EPD4	17 29 16.08					57	3.2	164.7	72	52	27.65	26.82	0.97
10	PRN	EPU	17 29 21.17					65	3.5	211.9	82	52	32.74	32.76	-0.14
.....															
MAY H = 0 40 55.19 UTC				RMS =	0.10	NO =	14	FREE DEPTH SOLUTION							
12 LAT = 35.943 N				ERX =	1.1	ERH =	1.6	AVFM =	3.1	u =	C				
LONG = 117.332 W				ERY =	1.2	GAP =	262	AVXM =		us =	B	SEARLES LAKE			
DEPTH = 2.23 KM				ERZ =	3.6	NM =				GD =	D				
.....															
12	QSM	EPU	0 41 2.48					57	2.8	41.9	87	74	7.29	7.28	-0.09
12	PGE	EPD	0 41 3.84					48	2.7	51.0	28	74	8.65	9.02	-0.15
12	GWV	EPD	0 41 6.43					64	3.0	65.4	66	74	11.24	11.29	0.03
12	MCA	EPU	0 41 8.33					45	2.7	78.4	3	74	13.14	13.15	-0.09
12	FMT	EPD	0 41 10.39					47	2.8	91.9	33	74	15.20	15.49	-0.06
12	TMO	EPU	0 41 11.31					52	2.9	95.9	356	74	16.12	16.39	0.02
12	NOP	EPU	0 41 13.35					67	3.2	108.3	79	74	18.16	18.15	0.10
12	GVN	EPU	0 41 15.13					65	3.2	117.5	360	74	19.94	19.62	0.26
12	SGV	EPD	0 41 15.04					65	3.2	118.3	13	74	19.85	19.90	0.04
12	YMT2	EPU	0 41 15.44					74	3.3	120.5	39	74	20.25	20.15	0.01
12	YMT3	EPU4	0 41 16.60					74	3.3	124.9	41	74	21.41	20.86	0.59
12	YMT4	EPU	0 41 16.97					74	3.3	129.3	38	74	21.78	21.63	0.04
12	YMT5	EPD	0 41 17.74					74	3.3	132.1	37	74	22.55	22.10	0.45
12	LCH	EPU	0 41 19.77					50	3.0	146.1	349	74	24.58	24.40	0.26
12	APK	EPD4	0 41 22.79					50	3.1	163.7	75	49	27.60	27.42	0.45
12	MGM	EPU	0 41 22.63					50	3.1	166.9	355	49	27.44	27.70	-0.18
12	EPN	EPD4	0 41 23.63					60	3.3	167.4	33	49	28.44	27.81	0.56
12	KRNA	EPU4	0 41 31.40					58	3.4	216.9	23	49	36.21	34.08	2.05
.....															

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MAY 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
MAY H = 11 55 3.80 UTC				RMS = 0.08	NO = 14	FREE DEPTH SOLUTION									
12 LAT = 37.143 N				ERX = 0.2	ERH = 0.5	AVFM = 2.5	Q = C								
LONG = 116.603 W				ERY = 0.4	GAP = 90	AVXM =	QS = C	THIRSTY CANYON							
DEPTH = 0.41 KM				ERZ = 19.3	NM =		QD = C								
.....															
12	BMT	EPD	11 55 7.09			43	2.5	16.1	346	40		3.29	3.48	-0.03	
12	EPN	EPD2	11 55 9.07			40	2.4	26.0	72	40		5.27	5.18	0.02	
12	YMT5	EPD	11 55 9.48			47	2.6	30.2	154	38		5.68	5.72	-0.04	
12	YMT4	EPD	11 55 10.44			47	2.6	33.6	156	38		6.64	6.24	0.28	
12	BGB	EPD	11 55 10.21			43	2.5	35.3	109	38		6.41	6.62	-0.13	
12	YMT6	EPD	11 55 10.12			42	2.5	36.2	151	38		6.32	6.64	-0.42	
12	CDH1	EPD	11 55 11.03			43	2.5	40.3	141	38		7.23	7.37	-0.04	
12	CDH5	EPD	11 55 11.07			43	2.5	40.3	141	38		7.23	7.30	0.07	
12	YMT2	EPD	11 55 11.30			49	2.7	41.1	165	36		7.50	7.42	0.00	
12	SGV	EPD	11 55 11.43			41	2.5	42.2	245	38		7.63	7.71	0.01	
12	YMT3	EPD	11 55 11.42			49	2.7	43.0	157	38		7.62	7.73	-0.07	
12	LUP	EPD3	11 55 13.13			30	2.3	50.3	130	38		9.33	9.05	0.36	
12	LSM	EPD4	11 55 13.79			29	2.2	53.5	147	38		9.99	9.46	0.51	
12	GVN	EPD	11 55 15.63			36	2.5	67.6	257	38		11.83	11.70	0.07	
12	GMR	EPD	11 55 17.15			37	2.5	76.8	74	38		13.35	13.33	0.11	
.....															
MAY H = 13 20 36.33 UTC				RMS = 0.14	NO = 20	FREE DEPTH SOLUTION									
12 LAT = 37.029 N				ERX = 0.6	ERH = 0.7	AVFM = 3.0	Q = C								
LONG = 117.454 W				ERY = 0.4	GAP = 185	AVXM =	QS = B	MT. JACKSON							
DEPTH = 1.78 KM				ERZ = 2.4	NM =		QD = D								
.....															
12	GVN	IPU	13 20 38.53			74	2.9	10.4	107	95		2.20	2.15	-0.01	
12	TMO	EPD	13 20 41.09			64	2.8	25.1	171	74		4.76	4.90	0.16	
12	GMN	IPD	13 20 42.48			65	2.9	34.8	30	74		6.15	6.46	-0.16	
12	SGV	EPD	13 20 42.86			70	3.0	37.9	98	74		6.53	6.85	-0.24	
12	MCA	EPD	13 20 43.94			61	2.9	45.0	160	74		7.61	7.73	-0.21	
12	MGM	EPD	13 20 44.63			58	2.8	45.9	355	74		8.30	8.27	0.12	
12	BMT	EPD	13 20 49.55			64	3.0	77.2	68	74		13.22	13.36	0.02	
12	WCT	EPD	13 20 49.36			50	2.8	78.3	110	74		13.03	13.30	-0.11	
12	YMT1	EPD	13 20 50.84			79	3.2	84.8	103	74		14.51	14.39	-0.02	
12	YMT2	EPD	13 20 51.93			78	3.2	90.6	107	74		15.60	15.32	0.20	
12	CDH5	EPD	13 20 53.67			65	3.1	103.0	100	74		17.34	17.33	0.10	
12	CDH1	EPD	13 20 53.74			65	3.1	103.0	100	74		17.41	17.40	0.10	
12	SDH	EPD	13 20 54.68			55	3.0	108.3	113	74		18.35	18.19	0.19	
12	BGB	EPD	13 20 54.68			62	3.1	109.2	89	74		18.35	18.47	-0.05	
12	LSM	EPD3	13 20 55.33			56	3.0	110.1	107	74		19.00	18.50	0.48	
12	LUP	EPD2	13 20 56.24			56	3.0	116.3	100	74		19.91	19.63	0.36	
12	GVN	EPD4	13 20 56.55			55	3.0	116.8	143	74		20.22	19.68	0.62	
12	TNP	EPD	13 20 56.67			45	2.9	118.8	10	74		20.34	20.07	-0.01	
12	KRNA	EPD	13 20 57.21			53	3.0	123.8	50	74		20.68	20.90	-0.09	
12	CPX	EPD	13 20 57.58			55	3.0	125.1	95	74		21.25	20.96	0.32	
12	BLT	EPD4	13 20 58.55			50	3.0	128.4	67	74		22.22	21.61	0.73	
12	GLR	EPD4	13 21 2.06			53	3.0	129.1	82	74		25.73	21.65	4.14	
12	SPRG	EPD	13 21 1.64			78	3.4	151.3	104	74		25.31	25.21	0.12	
12	PRN	EPD4	13 21 20.02			60	3.4	217.6	79	49		43.69	34.10	9.47	
.....															
MAY H = 18 46 18.45 UTC				RMS = 0.08	NO = 9	FREE DEPTH SOLUTION									
18 LAT = 36.690 N				ERX = 0.3	ERH = 0.4	AVFM = 2.0	Q = B								
LONG = 116.299 W				ERY = 0.2	GAP = 115	AVXM =	QS = A	LATHROP WELLS							
DEPTH = -0.23 KM				ERZ = 0.3	NM =		QD = B								
.....															
18	LSM	IPX	18 46 20.11			28	2.0	6.0	23	99		1.66	1.61	0.03	
18	SDH	EPX	18 46 20.00			25	1.9	6.0	215	98		1.55	1.60	-0.02	
18	YMT3	IPU0	18 46 21.63			25	2.0	14.8	317	40		3.18	3.17	0.06	
18	CDH5	EPX3	18 46 22.58			33	2.2	19.0	355	40		4.13	3.88	0.35	
18	YMT2	IPU0	18 46 22.53			31	2.2	19.8	302	40		4.08	4.02	-0.02	
18	YMT6	EPD4	18 46 23.21					20.9	333	40		4.76	4.23	0.44	
18	LDP	EPX	18 46 22.68					21.7	33	40		4.23	4.47	-0.16	
18	YMT4	EPX4	18 46 23.37			20	1.8	22.1	322	40		4.92	4.44	0.36	
18	YMT5	EPX	18 46 23.79			23	1.9	26.9	329	40		5.34	5.29	0.05	
18	YMT1	IPU0	18 46 24.00			29	2.2	27.4	311	40		5.55	5.33	0.08	
18	JON	EPX	18 46 24.68			14	1.5	32.9	148	38		6.23	6.19	0.03	
18	BGB	EPX4	18 46 25.47					39.1	9	38		7.02	7.37	-0.27	
.....															
MAY H = 12 35 58.46 UTC				RMS = 0.03	NO = 4	FREE DEPTH SOLUTION									
19 LAT = 36.671 N				ERX =	ERH =	AVFM = 1.6	Q = C								
LONG = 116.266 W				ERY =	GAP = 251	AVXM =	QS = A	LATHROP WELLS							
DEPTH = 4.77 KM				ERZ =	NM =		QD = D								
.....															
19	SDH	IPU1	12 36 0.21			11	1.2	7.1	246	121		1.75	1.79	0.00	
19	LSM	IPU0	12 36 0.37			15	1.5	7.6	355	119		1.91	1.89	0.00	
19	YMT3	EPD	12 36 1.89			15	1.5	18.4	314	99		3.43	3.54	-0.06	
19	YMT2	EPD0	12 36 2.95			20	1.8	23.4	303	97		4.49	4.35	0.06	
19	YMT6	EPX3	12 36 2.47			11	1.3	24.2	329	96		4.01	4.49	-0.57	
19	YMT5	EPX4	12 36 4.32			23	2.0	30.3	326	95		5.86	5.52	0.33	
.....															

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MAY H = 6	50	16.76	UTC	RMS = 0.08	NO = 8										FREE DEPTH SOLUTION
20	LAT = 36.610	N		ERX = 5.6	ERH = 6.9	AVFM = 2.8	Q = D								
	LONG = 115.989	W		ERY = 4.0	GAP = 255	AVXM =	WS = D								MERCURY
	DEPTH = 9.04	KM		ERZ = 9.0	NM =		WD = D								

20	MCY	EPU	6 50 18.92			55	2.6	6.2	23	146		2.16	2.23	0.01	
20	LSM	EPU	6 50 22.07			48	2.6	29.2	300	105		5.31	5.42	-0.13	
20	LOP	EPD	6 50 22.55			50	2.6	31.5	330	104		5.79	5.89	-0.02	
20	SDH	EPU	6 50 22.41			57	2.8	31.5	277	104		5.65	5.76	-0.07	
20	YMT3	EPU	6 50 24.46			60	2.8	42.5	298	100		7.70	7.52	0.23	
20	YMT2	EPU	6 50 25.29			60	2.9	48.3	294	98		8.53	8.46	-0.01	
20	YMT4	EPU3	6 50 25.56			60	2.9	50.1	305	98		8.80	8.79	-0.09	
20	YMT5	EPU	6 50 25.93			60	2.9	52.4	308	98		9.17	9.18	-0.01	

MAY H = 13	34	36.18	UTC	RMS = 0.00	NO = 3										FIXED DEPTH SOLUTION
23	LAT = 36.756	N		ERX =	ERH =	AVFM = 1.7	Q = C								DEPTH CONTROL INADEQUATE
	LONG = 116.221	W		ERY =	GAP = 226	AVXM =	QS = A								LATHROP WELLS
	DEPTH = 7.00	KM		ERZ =	NM =		QD = D								

23	LSM	IPU0	13 34 38.00			17	1.6	4.9	249	145		1.82	1.80	0.00	
23	LOP	EPX1	13 34 38.89			19	1.7	11.9	24	119		2.71	2.79	0.00	
23	COH1	EPX1	13 34 39.16			20	1.8	14.4	324	114		2.98	3.09	-0.01	

MAY H = 18	50	22.03	UTC	RMS = 0.21	NO = 19										FREE DEPTH SOLUTION
23	LAT = 36.156	N		ERX = 2.8	ERH = 3.5	AVFM = 3.9	Q = D								
	LONG = 117.848	W		ERY = 2.1	GAP = 265	AVXM =	WS = C								DARWIN
	DEPTH = 8.90	KM		ERZ = 1.4	NM =		WD = D								

23	PGE	IPU	18 50 34.66			140	3.7	73.4	73	95		12.63	12.67	0.19	
23	MCA	IPD	18 50 34.50			135	3.7	74.6	43	95		12.47	12.54	-0.15	
23	TMO	IPD	18 50 35.89					82.1	29	95		13.86	14.15	0.01	
23	QSM	IPU	18 50 36.95			160	3.9	90.7	103	94		14.92	15.22	-0.39	
23	GVN	IPD	18 50 39.88			150	3.8	104.2	26	94		17.85	17.45	0.34	
23	GWV	IPU	18 50 39.90			150	3.9	105.9	88	93		17.87	17.87	0.08	
23	FMT	EPD	18 50 40.35					109.9	61	93		18.32	18.41	0.15	
23	SGV	EPD	18 50 41.31			140	3.8	117.1	39	93		19.28	19.69	-0.32	
23	LCH	EPD	18 50 42.05					121.0	9	93		20.02	20.32	-0.21	
23	AMR	IPU	18 50 43.16					126.2	78	93		21.13	21.01	0.11	
23	GMN	EPD	18 50 45.11					137.4	22	93		23.08	23.12	0.11	
23	YMT2	EPX	18 50 45.70					140.5	60	93		23.67	23.40	0.19	
23	SDH	EPU	18 50 46.18					145.9	68	52		24.15	24.09	0.10	
23	MGM	EPD	18 50 46.53												
23	YMT5	IPD4	18 50 47.49			145	4.0	146.0	12	52		24.50	24.35	0.25	
23	YMT6	EPX	18 50 46.55					149.6	57	52		25.46	24.64	0.82	
23	NOP	IPU4	18 50 46.15					151.0	59	52		24.52	24.77	-0.34	
23	LSM	EPD	18 50 47.20					152.7	91	52		24.12	24.94	-0.73	
23	JON	EPU	18 50 47.70					155.4	65	52		25.17	25.33	-0.18	
23	BGB	EPU	18 50 50.15					159.8	79	52		25.67	25.85	-0.18	
23	MZP	EPD4	18 50 51.38					174.9	56	52		28.12	27.96	0.24	
23	MCY	EPX	18 50 50.20					176.4	14	52		29.35	28.30	1.29	
								178.2	72	52		28.17	28.29	-0.03	

## 1981 SGB LOCAL-EVENT DATA REPORT

MAY 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
MAY H = 4 59 20.08 UTC				RMS =	0.11	NU =	17	FREE DEPTH SOLUTION							
25 LAT = 36.101 N				ERX =	2.5	ERH =	2.8	AVFM =	3.8	W =	D				
LONG = 117.939 W				ERY =	1.4	GAP =	286	AVXM =		WS =	C	DARWIN			
DEPTH = 5.87 KM				ERZ =	0.9	NM =				WD =	D				
.....															
25	PGE	EPD	4 59 34.13					116	3.5	83.2	71	92	14.05	14.22	0.05
25	MCA	EPD	4 59 34.03					116	3.6	84.6	44	92	13.95	14.14	-0.27
25	TMO	EPD	4 59 35.32					120	3.6	91.5	31	92	15.24	15.64	-0.10
25	QSM	EPD	4 59 36.45					130	3.7	97.7	99	92	16.37	16.34	-0.05
25	GVN	EPD	4 59 39.13					141	3.8	113.3	28	92	19.05	18.92	0.08
25	GWV	EPD	4 59 39.28					130	3.8	114.6	85	92	19.20	19.27	0.02
25	FMT	EPD	4 59 40.07					95	3.5	120.0	60	91	19.99	20.04	0.19
25	SGV	EPD	4 59 41.34					143	3.9	127.0	40	91	21.26	21.30	0.06
25	AMR	EPD	4 59 42.56					120	3.8	135.8	76	91	22.48	22.55	-0.08
25	GMN	EPD	4 59 44.57					145	4.0	146.2	25	91	24.49	24.56	0.09
25	YMT2	EPD	4 59 45.28					155	4.0	151.0	60	52	25.20	25.05	0.08
25	YMT1	EPD	4 59 45.40					155	4.0	151.4	57	52	25.32	25.13	0.07
25	MGM	EPD4	4 59 46.89					140	4.0	153.9	15	90	26.81	25.32	1.59
25	YMT4	EPD	4 59 45.91					155	4.1	158.0	58	90	25.83	25.99	-0.27
25	YMT5	EPD	4 59 46.46					155	4.1	159.7	56	52	26.38	26.24	0.14
25	YMT6	EPD	4 59 46.37					155	4.1	161.1	59	52	26.29	26.37	-0.16
25	LSM	EPD	4 59 47.12					115	3.8	165.4	65	52	27.04	26.91	0.11
25	CDH5	EPD4	4 59 43.26					90	3.6	167.9	60	52	23.18	27.21	-3.93
25	BMT	EPD4	4 59 49.51					135	4.0	174.8	41	52	29.43	28.36	1.24
25	MZP	EPD4	4 59 51.67					135	4.0	184.3	16	52	31.59	29.62	2.22
25	MCY	EPD	4 59 49.79					134	4.0	187.9	71	52	29.71	29.83	-0.04
25	TNP	EPD4	4 59 58.96					85	3.8	229.0	16	52	38.88	35.25	3.37
.....															
MAY H = 19 39 1.45 UTC				RMS =	0.27	NU =	9	FREE DEPTH SOLUTION							
25 LAT = 36.165 N				ERX =	6.2	ERH =	7.2	AVFM =	3.5	W =	D				
LONG = 117.771 W				ERY =	3.7	GAP =	265	AVXM =		WS =	D	DARWIN			
DEPTH = 0.33 KM				ERZ =	364.1	NM =				WD =	D				
.....															
25	PGE	EPD2	19 39 13.35					95	3.3	66.5	72	38	11.90	11.74	0.38
25	MCA	EPD	19 39 13.29					95	3.3	69.4	39	38	11.84	11.88	-0.12
25	TMO	EPD	19 39 14.63					95	3.4	78.2	25	38	13.18	13.70	-0.22
25	QSM	EPD	19 39 15.69					96	3.4	84.2	105	38	14.24	14.37	-0.22
25	GWV	EPD	19 39 18.55					91	3.4	99.0	89	38	17.10	16.95	0.23
25	GVN	EPD	19 39 18.54					95	3.4	100.5	22	38	17.09	17.05	-0.02
25	FMT	EPD4	19 39 19.31					85	3.4	103.4	59	38	17.86	17.57	0.53
25	SGV	EPD1	19 39 20.72					109	3.6	112.2	36	38	19.27	19.10	0.26
25	YMT2	EPD4	19 39 24.68					115	3.7	134.3	59	38	23.23	22.60	0.55
25	YMT5	EPD4	19 39 26.19					114	3.7	143.4	55	38	24.74	24.13	0.61
25	MGM	EPD	19 39 26.29					85	3.5	143.8	10	38	24.84	24.35	0.58
25	YMT6	EPD	19 39 25.44					116	3.8	144.6	58	38	23.99	24.29	-0.40
25	CDH5	EPD4	19 39 22.72					70	3.4	151.4	59	38	21.27	25.37	-4.00
25	CTS	EPD4	19 39 33.66					76	3.6	190.0	29	29	32.21	30.90	1.48
25	TNP	EPD4	19 39 38.26					65	3.5	216.4	13	29	36.81	34.55	1.99
25	SHRG	EPD4	19 39 20.58					109	4.0	238.0	81	29	19.13	36.99	-17.28
.....															

## 1981 SGB LOCAL-EVENT DATA REPORT

MAY 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
MAY H = 13	22	53.67	UTC	RMS =	0.09	NO =	5					FREE DEPTH SOLUTION			
28	LAT =	37.122	N	ERX =	0.6	ERH =	0.8	AVFM =	2.7	Q =	D				
	LONG =	117.292	W	ERY =	0.6	GAP =	134	AVXM =		WS =	C	MT. JACKSON			
	DEPTH =	5.22	KM	ERZ =	5.3	NM =				WD =	D				
.....															
28	GVN	EPD	13 22 56.60					55	2.7	14.2	199	106	2.93	2.84	0.03
28	GMN	EPD	13 22 57.22					54	2.7	19.9	8	101	3.55	4.02	-0.33
28	SGV	EPD	13 22 58.77					54	2.7	27.9	124	96	5.10	5.18	0.01
28	MGM	EPD	13 23 0.82					50	2.7	39.8	333	94	7.15	7.22	0.02
28	BMT	EPD	13 23 4.09					50	2.7	60.1	73	92	10.42	10.54	0.05
28	YMT3	EPD	13 23 9.09					66	3.1	86.8	115	92	15.42	14.64	0.83
.....															
MAY H = 5	22	54.14	UTC	RMS =	0.00	NO =	5					FREE DEPTH SOLUTION			
29	LAT =	36.664	N	ERX =	0.4	ERH =	0.4	AVFM =	2.1	Q =	C				
	LONG =	115.696	W	ERY =	0.0	GAP =	294	AVXM =		WS =	A	MERCURY			
	DEPTH =	13.22	KM	ERZ =	0.2	NM =				WD =	D				
.....															
29	SPRG	EPD	5 22 57.31					26	2.0	10.7	288	141	3.17	3.20	0.00
29	MCY	EPD	5 22 58.94					33	2.3	23.8	269	118	4.80	4.89	0.00
29	JON	EPD	5 23 2.04					24	2.0	44.1	236	105	7.90	7.89	0.00
29	LOP	EPD	5 23 2.58					23	2.0	47.1	297	104	8.44	8.53	-0.01
29	83P	EPD	5 23 3.91					26	2.2	55.0	302	102	9.77	9.85	0.01
.....															
MAY H = 9	13	16.28	UTC	RMS =	0.06	NO =	6					FREE DEPTH SOLUTION			
29	LAT =	37.152	N	ERX =	0.5	ERH =	0.9	AVFM =	2.8	Q =	C				
	LONG =	117.400	W	ERY =	0.7	GAP =	130	AVXM =		WS =	B	MT. JACKSON			
	DEPTH =	2.23	KM	ERZ =	2.7	NM =				WD =	C				
.....															
29	GVN	IPU	9 13 19.68					57	2.7	17.5	163	94	3.40	3.35	-0.01
29	LCH	EPD	9 13 20.68					47	2.6	23.8	293	74	4.40	4.50	-0.02
29	MGM	IPU	9 13 22.37					48	2.6	33.2	345	74	6.09	6.17	0.01
29	SGV	EPD	9 13 22.96					57	2.8	37.8	120	74	6.68	6.81	-0.04
29	YMT5	EPD	9 13 31.29					60	3.0	88.8	108	74	15.01	15.07	-0.06
29	YMT4	EPD	9 13 31.91					60	3.0	90.3	111	74	15.63	15.28	0.24
29	YMT2	EPD	9 13 32.40					60	3.0	91.2	117	74	16.12	15.39	0.65
29	SPRG	EPD	9 13 42.00					48	3.0	150.7	110	74	25.72	25.09	0.66
.....															
MAY H = 11	7	54.78	UTC	RMS =	0.00	NO =	4					FREE DEPTH SOLUTION			
29	LAT =	36.655	N	ERX =		ERH =		AVFM =	2.1	Q =	C				
	LONG =	116.328	W	ERY =		GAP =	131	AVXM =		WS =	A	LATHROP WELLS			
	DEPTH =	2.47	KM	ERZ =		NM =				WD =	D				
.....															
29	SDH	IPD	11 7 55.58					29	2.1	1.4	219	153	0.80	0.84	0.00
29	LSM	EPD	11 7 57.05					26	2.0	10.7	28	99	2.27	2.26	0.00
29	YMT2	EPD	11 7 58.67					35	2.3	20.0	316	74	3.89	3.81	0.01
29	MCY	EPD	11 8 0.61					26	2.1	32.7	89	74	5.83	5.92	0.00
.....															
MAY H = 6	15	16.30	UTC	RMS =	0.12	NO =	15					FREE DEPTH SOLUTION			
30	LAT =	37.323	N	ERX =	0.5	ERH =	0.6	AVFM =	3.8	Q =	C				
	LONG =	115.398	W	ERY =	0.3	GAP =	145	AVXM =		WS =	B	ALAMO			
	DEPTH =	7.04	KM	ERZ =	2.8	NM =				WD =	C				
.....															
30	EPR	EPD	6 15 21.05					159	3.6	25.4	132	102	4.75	4.78	-0.01
30	BLT	EPD	6 15 27.23					153	3.7	66.5	285	94	10.93	11.52	-0.46
30	QCS	EPD	6 15 27.71					144	3.7	67.4	317	94	11.41	11.68	-0.23
30	CPX	EPD	6 15 28.67					151	3.7	72.8	233	94	12.37	12.43	-0.03
30	WRN	EPD	6 15 29.29					141	3.7	75.1	347	93	12.99	12.89	0.06
30	SPRG	EPD	6 15 29.19					150	3.8	78.8	208	93	12.89	13.39	-0.47
30	LOP	EPD	6 15 30.88					167	3.9	85.9	233	93	14.58	14.64	0.02
30	SHRG	EPD	6 15 31.36					158	3.9	93.3	167	93	15.06	15.84	-0.19
30	KRNA	EPD	6 15 32.92					147	3.8	98.4	298	93	16.62	16.73	-0.18
30	LSM	EPD	6 15 33.50					160	3.9	101.2	230	92	17.20	17.01	0.17
30	YMT5	EPD	6 15 34.16					159	3.9	105.0	243	92	17.86	17.68	0.18



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MAY 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
. 30	YMT3	EPD	6 15 34.48					159	3.9	107.9	237	92	18.18	18.08	0.15	
. 30	YMT2	IPD	6 15 35.55					159	3.9	113.4	238	92	19.25	18.99	0.18	
. 30	CTS	EPD	6 15 36.81					145	3.9	123.1	288	92	20.51	20.73	-0.05	
. 30	GMN	EPD4	6 15 43.64					136	4.0	165.1	269	52	27.34	26.98	0.51	
. 30	TNP	EPD	6 15 45.56					144	4.1	181.3	298	52	29.26	29.01	-0.02	

.....

MAY H = 2 55 2.51 UTC	RMS = 0.16	NU = 16	FREE DEPTH SOLUTION		
. 31 LAT = 37.328 N	ERX = 0.6	ERH = 0.7	AVFM = 3.7	W = C	
. LONG = 115.377 W	ERY = 0.5	GAP = 134	AVXM =	WS = C	ALAMO
. DEPTH = 0.28 KM	ERZ = 28.1	NM =		WD = C	

.....

. 31	PRN	EPD	2 55 8.36					152	3.6	30.2	73	40	5.85	5.76	-0.03	
. 31	GMR	IPD	2 55 8.63					151	3.6	35.0	271	38	6.12	6.57	-0.35	
. 31	MTI	EPD	2 55 9.64					145	3.6	39.7	13	38	7.13	7.32	-0.16	
. 31	GLR	EPD	2 55 12.80					122	3.5	58.6	256	38	10.29	10.38	-0.02	
. 31	DLM	EPD	2 55 14.17					136	3.6	64.2	61	38	11.66	11.35	0.06	
. 31	BLT	EPD	2 55 14.20					146	3.7	68.2	284	38	11.69	12.02	-0.20	
. 31	QCS	EPD3	2 55 14.82					145	3.7	68.2	316	38	12.31	12.04	0.30	
. 31	WRN	EPD	2 55 15.88					144	3.7	74.9	346	38	13.37	13.09	0.24	
. 31	BGB	EPD	2 55 16.54					133	3.7	82.2	247	38	14.03	14.26	-0.15	
. 31	EPN	EPD3	2 55 17.45					157	3.8	84.9	261	38	14.94	14.83	0.05	
. 31	MCY	EPD	2 55 17.81					152	3.8	90.5	215	38	15.30	15.53	-0.15	
. 31	LSM	EPD	2 55 20.19					155	3.9	103.1	231	38	17.68	17.55	0.11	
. 31	RVE	EPD	2 55 20.66					130	3.7	105.2	317	38	18.15	18.12	0.03	
. 31	JON	EPD	2 55 22.58					127	3.8	118.0	213	38	20.07	19.92	0.14	
. 31	CTS	EPD	2 55 23.82					136	3.8	124.7	287	38	21.31	21.22	0.26	
. 31	WCT	EPD4	2 55 24.99					120	3.7	126.1	242	38	22.48	21.25	1.39	
. 31	NOP	EPD	2 55 27.77					142	4.0	150.2	208	38	25.26	25.17	0.18	

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JUN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS				
.....																			
JUN	H =	0	31 18.83	UTC	RMS =	0.14	NO =	8	FREE DEPTH SOLUTION										
02	LAT =	37.979	N	ERX =	0.6	ERH =	0.9	AVFM =	2.4	u =	C								
	LONG =	117.089	W	ERY =	0.7	GAP =	213	AVXM =		us =	A	GOLDFIELD							
	DEPTH =	26.03	KM	ERZ =	0.7	NM =		WD =	D										
.....																			
02	HCR	EPD	0 31 30.49					40	2.6	63.9	64	96	11.66	11.67	0.08				
02	GMN	EPD	0 31 32.41					24	2.2	76.9	191	94	13.58	13.57	0.16				
02	BMT	EPD4	0 31 35.62					29	2.4	86.6	153	93	16.79	14.98	1.98				
02	LCH	EPD	0 31 34.75					26	2.3	96.2	211	62	15.92	16.17	-0.17				
02	QCS	EPD	0 31 36.23					29	2.4	105.8	103	62	17.40	17.49	-0.06				
02	EPN	EPD	0 31 36.92					39	2.7	108.5	141	62	18.09	17.93	0.09				
02	GVN	EPD4	0 31 37.63					26	2.3	110.8	192	62	18.80	17.90	0.84				
02	SGV	EPD4	0 31 38.87					15	1.9	110.9	177	62	20.04	18.07	2.06				
02	BGB	EPD4	0 31 41.50					37	2.7	129.3	144	62	22.67	20.47	2.28				
02	WRN	EPD	0 31 39.53					33	2.6	131.8	90	62	20.70	20.80	-0.14				
02	GMR	EPD4	0 31 41.53					31	2.6	136.5	122	62	22.70	21.36	1.44				
02	MTI	EPD	0 31 43.45					14	2.0	163.4	102	62	24.62	24.80	-0.15				
02	NPN	EPD	0 31 47.24					16	2.2	192.9	101	62	28.41	28.61	-0.42				
.....																			
JUN	H =	13	19 49.92	UTC	RMS =	0.06	NO =	6	FREE DEPTH SOLUTION										
03	LAT =	37.110	N	ERX =	0.8	ERH =	1.6	AVFM =	2.2	u =	D								
	LONG =	115.404	W	ERY =	1.4	GAP =	200	AVXM =		us =	C	ALAMO							
	DEPTH =	10.71	KM	ERZ =	8.4	NM =		WD =	D										
.....																			
03	GLR	EPD4	13 20 2.83					26	2.2	55.4	280	99	12.91	9.71	3.27				
03	CPX	IPD	13 20 0.61					28	2.2	61.3	251	98	10.69	10.63	0.08				
03	BGB	EPD	13 20 2.49					38	2.5	73.7	264	97	12.57	12.72	-0.07				
03	LDP	EPD2	13 20 2.68					27	2.3	73.7	247	97	12.76	12.71	0.12				
03	DLM	EPD	13 20 4.01					9	1.3	80.5	47	96	14.09	13.82	0.01				
03	CDH5	IPD	13 20 4.30					34	2.5	86.0	251	96	14.38	14.56	-0.08				
03	CDH1	EPD	13 20 4.38					27	2.3	86.0	251	96	14.46	14.63	-0.07				
.....																			
JUN	H =	3	0 1.88	UTC	RMS =	0.09	NO =	19	FREE DEPTH SOLUTION										
04	LAT =	36.588	N	ERX =	0.5	ERH =	0.5	AVFM =	3.1	u =	B								
	LONG =	115.987	W	ERY =	0.3	GAP =	174	AVXM =		us =	A	MERCURY							
	DEPTH =	16.04	KM	ERZ =	0.5	NM =		WD =	C										
.....																			
04	JON	IPD	3 0 6.34					79	3.0	19.4	212	129	4.46	4.46	-0.01				
04	LSM	EPD4	3 0 8.40					74	3.0	30.6	303	117	6.52	6.04	0.45				
04	SDH	IPD	3 0 8.32					74	3.0	32.1	282	116	6.44	6.24	0.24				
04	LDP	EPD	3 0 8.56					74	3.0	33.7	331	115	6.68	6.61	0.15				
04	CPX	EPD	3 0 9.02					61	2.8	38.5	351	112	7.14	7.24	-0.07				
04	CDH1	IPD	3 0 9.60					66	2.9	42.3	316	110	7.72	7.84	-0.02				
04	SSP	EPD	3 0 9.82					75	3.0	42.7	331	110	7.94	8.06	-0.04				
04	YMT6	EPD	3 0 10.39					50	2.7	47.9	309	107	8.51	8.66	-0.24				
04	AMR	EPD	3 0 10.55					79	3.1	48.5	244	107	8.67	8.66	0.00				
04	YMT2	EPD	3 0 10.84					89	3.2	49.5	296	107	8.96	8.89	-0.01				
04	YMT4	EPD	3 0 10.63					89	3.2	51.7	307	106	8.75	9.27	-0.63				
04	YMT5	EPD4	3 0 10.61					89	3.2	54.1	310	105	8.73	9.67	-0.95				
04	BGB	EPD	3 0 11.44					72	3.0	54.4	337	105	9.56	9.79	-0.15				
04	YMT1	EPD	3 0 12.04					128	3.5	56.6	301	105	10.16	10.03	0.00				
04	EPN	EPD	3 0 15.39					80	3.2	75.7	337	101	13.51	13.29	0.16				
04	GWV	EPD	3 0 14.83					87	3.3	75.8	234	101	12.95	13.14	-0.11				
04	PGE	EPD	3 0 18.89					49	2.9	100.2	255	98	17.01	17.13	0.10				
04	SGV	EPD	3 0 19.48					77	3.3	103.0	295	98	17.60	17.52	0.17				
04	QSM	EPD	3 0 19.42					60	3.1	105.0	229	98	17.54	17.66	-0.22				
04	GVN	EPD4	3 0 23.77					68	3.2	129.4	291	52	21.89	21.22	0.61				
04	MTI	EPD	3 0 24.16					46	2.9	136.5	28	52	22.28	22.28	0.03				
04	GMN	EPD	3 0 24.49					67	3.3	138.3	305	52	22.61	22.65	0.11				
04	NPN	EPD	3 0 26.24					59	3.2	150.6	38	52	24.36	24.12	0.03				
.....																			

## 1981 SGB LOCAL-EVENT DATA REPORT

JUN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (VEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JUN H = 11	5	22.89	UTC	RMS =	0.09	NO =	13								FREE DEPTH SOLUTION
04	LAT =	36.708	N	ERX =	0.4	ERH =	0.5	AVFM =	2.6	U =	C				
04	LONG =	116.284	W	ERY =	0.2	GAP =	119	AVXM =		US =	C				LATHROP WELLS
04	DEPTH =	0.85	KM	ERZ =	15.6	NM =				UD =	B				
.....															
04	LSM	IPD	11 5 23.99					41 2.4	3.6	16	40	1.10	1.08	0.00	
04	SDH	EPD	11 5 24.69					35 2.2	8.5	215	40	1.80	1.88	-0.05	
04	YMT3	IPU	11 5 26.02					77 3.0	14.3	308	40	3.13	2.87	0.31	
04	CDH5	IPD	11 5 26.18					33 2.2	17.1	350	40	3.29	3.54	0.04	
04	CDH1	IPD	11 5 26.25					34 2.3	17.1	350	40	3.36	3.41	0.05	
04	LOP	EPD	11 5 26.57					37 2.3	19.2	33	40	3.68	3.83	-0.07	
04	YMT2	EPD	11 5 27.03					77 3.0	19.8	296	40	4.14	3.80	0.26	
04	YMT6	EPD	11 5 26.69					31 2.2	19.8	327	40	3.80	3.82	-0.12	
04	YMT4	IPD	11 5 27.25					77 3.0	23.0	320	40	4.36	4.38	-0.13	
04	YMT5	EPD	11 5 27.89					77 3.0	26.0	324	40	5.00	4.91	0.09	
04	YMT1	EPD	11 5 28.15					77 3.0	27.1	306	40	5.26	5.06	0.07	
04	JON	EPD	11 5 29.06					31 2.2	33.9	151	38	6.17	6.14	0.02	
04	BGB	EPD	11 5 29.55					40 2.5	36.9	8	38	6.66	6.78	-0.05	
.....															
JUN H = 12	53	40.35	UTC	RMS =	0.04	NO =	7								FREE DEPTH SOLUTION
04	LAT =	37.346	N	ERX =	0.3	ERH =	0.6	AVFM =	3.2	U =	C				
04	LONG =	115.412	W	ERY =	0.5	GAP =	172	AVXM =		US =	C				ALAMO
04	DEPTH =	0.18	KM	ERZ =	59.6	NM =				UD =	C				
.....															
04	MTI	IPD	12 53 47.44					91 3.2	38.7	19	38	7.09	7.18	-0.06	
04	NPN	EPD	12 53 50.30					100 3.3	54.1	51	38	9.95	9.70	0.04	
04	DLM	EPD	12 53 52.26					74 3.1	66.1	64	38	11.91	11.68	-0.02	
04	SRG	EPD	12 53 52.42					106 3.4	66.8	27	38	12.07	11.77	0.08	
04	BGB	EPD	12 53 54.19					66 3.0	80.1	245	38	13.84	13.95	-0.03	
04	CDH5	EPD	12 53 56.79					74 3.2	96.9	236	38	16.44	16.54	0.00	
04	CDH1	EPD	12 53 56.89					58 3.0	96.9	236	38	16.54	16.61	0.03	
04	WCT	EPD2	12 54 2.37					46 2.9	124.3	240	38	22.02	20.98	1.20	
04	MCA	EPD4	12 54 11.32					59 3.3	183.5	245	29	30.97	29.74	1.15	
04	PGE	EPD4	12 54 11.75					56 3.3	184.5	233	29	31.40	30.22	1.40	
.....															
JUN H = 13	5	7.54	UTC	RMS =	0.04	NO =	6								FREE DEPTH SOLUTION
06	LAT =	36.460	N	ERX =	1.6	ERH =	1.7	AVFM =	2.2	U =	D				
06	LONG =	116.019	W	ERY =	0.6	GAP =	260	AVXM =		US =	C				ASH MEADOWS
06	DEPTH =	0.04	KM	ERZ =	11.2	NM =				UD =	D				
.....															
06	JON	IPU	13 5 9.43					24 1.9	7.9	254	40	1.89	1.92	-0.04	
06	LSM	EPD	13 5 14.62					23 2.0	38.5	324	38	7.08	7.10	-0.05	
06	LOP	EPD	13 5 15.89					21 1.9	45.8	343	38	8.35	8.39	0.04	
06	YMT3	EPD4	13 5 17.06					43 2.6	50.5	316	38	9.52	9.03	0.53	
06	CDH1	EPD	13 5 16.77					30 2.3	51.9	329	38	9.23	9.32	0.01	
06	YMT6	EPD	13 5 17.69					25 2.1	56.1	322	38	10.15	9.96	0.10	
06	GNV	EPD	13 5 19.14					28 2.3	65.9	243	38	11.60	11.64	0.04	
06	BGB	EPD4	13 5 20.12					18 1.9	66.8	344	38	12.58	11.82	0.84	
06	SGV	EPD4	13 5 26.78					36 2.6	107.5	303	38	19.24	18.40	0.92	
06	GVN	EPD4	13 5 31.01					29 2.5	132.7	297	38	23.47	22.36	1.05	
.....															
JUN H = 15	39	57.10	UTC	RMS =	0.01	NO =	5								FREE DEPTH SOLUTION
06	LAT =	37.194	N	ERX =	0.1	ERH =	0.1	AVFM =	1.7	U =	C				
06	LONG =	117.236	W	ERY =	0.1	GAP =	116	AVXM =		US =	A				MT. JACKSON
06	DEPTH =	3.97	KM	ERZ =	0.9	NM =				UD =	D				
.....															
06	GMN	IPD	15 39 59.66					19 1.7	12.0	350	103	2.56	2.72	-0.01	
06	GVN	EPD	15 40 1.44					21 1.9	23.3	204	94	4.34	4.28	0.00	
06	SGV	EPD	15 40 2.47					18 1.7	29.8	142	93	5.37	5.47	-0.01	
06	MGM	EPD	15 40 3.58					12 1.4	35.9	320	92	6.48	6.57	0.00	
06	BMT	EPD	15 40 6.39					17 1.8	53.4	79	91	9.29	9.45	0.02	
.....															

## 1981 SGB LOCAL-EVENT DATA REPORT

JUN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JUN H = 18	24	0.40	UTC	RMS = 0.09	NO = 6										FREE DEPTH SOLUTION
07	LAT = 36.647	N		ERX = 28.6	ERH = 68.1	AVFM = 2.0									
	LONG = 116.292	W		ERY = 61.9	GAP = 258	AVXM =									LATHROP WELLS
	DEPTH = 3.62	KM		ERZ = 81.3	NM =										
.....															
07	SDH	EPU	18 24	1.64				14 1.4	4.2	267	129	1.24	1.29	-0.01	
07	LSM	EPD	18 24	2.69				16 1.6	10.4	9	101	2.29	2.25	0.02	
07	YMT3	EPD	18 24	4.08				37 2.3	18.8	326	93	3.68	3.59	0.14	
07	LDP	EPD4	18 24	6.11				16 1.6	25.5	26	92	5.71	4.80	0.99	
07	YMT6	EPD	18 24	4.99				35 2.3	25.5	337	92	4.59	4.70	-0.19	
07	YMT4	EPD	18 24	5.59				37 2.4	28.1	330	92	5.19	5.14	-0.06	
07	YMT1	EPD4	18 24	6.68				20 1.8	31.2	317	92	6.28	5.62	0.53	
07	YMT5	EPD	18 24	6.25				37 2.4	31.4	333	92	5.85	5.70	0.15	
.....															
JUN H = 14	44	20.04	UTC	RMS = 0.08	NO = 5										FREE DEPTH SOLUTION
08	LAT = 36.954	N		ERX = 0.1	ERH = 0.5	AVFM = 2.3									
	LONG = 116.963	W		ERY = 0.5	GAP = 147	AVXM =									CHLORIDE CLIFF
	DEPTH = 1.04	KM		ERZ = 1.6	NM =										
.....															
08	SGV	EPU	14 44	21.55				36 2.3	6.9	296	90	1.51	1.36	0.24	
08	GVN	EPU	14 44	26.26				35 2.3	34.2	279	74	6.22	6.13	0.03	
08	TMO	EPU	14 44	27.53				25 2.1	42.9	247	74	7.49	7.83	-0.05	
08	CDH1	EPU	14 44	30.11				30 2.3	58.5	100	74	10.07	10.19	-0.02	
08	CDH5	EPU4	14 44	31.96				28 2.2	58.5	100	74	11.92	10.12	1.89	
08	BGB	EPU	14 44	31.43				31 2.3	66.1	82	74	11.39	11.50	-0.04	
08	DLM	EPU4	14 44	27.10				30 2.8	210.1	70	49	7.06	33.28	-26.47	
.....															
JUN H = 7	31	34.85	UTC	RMS = 0.15	NO = 5										FREE DEPTH SOLUTION
10	LAT = 36.416	N		ERX = 0.1	ERH = 0.1	AVFM = 2.3									
	LONG = 117.244	W		ERY = 0.1	GAP = 226	AVXM =									PANAMINT BUTTE
	DEPTH = 0.71	KM		ERZ = 1.7	NM =										
.....															
10	PGE	EPU	7 31	38.16				29 2.1	17.7	115	40	3.31	3.62	-0.10	
10	MCA	EPD	7 31	39.50				28 2.1	26.0	353	40	4.65	4.72	-0.16	
10	TMO	EPU	7 31	43.04				28 2.2	45.6	341	38	8.19	8.33	0.15	
10	QSM	EPD4	7 31	47.08				27 2.2	60.3	146	38	12.23	10.41	1.73	
10	CDH5	EPU2	7 31	51.35				37 2.6	96.5	59	38	16.50	16.37	0.23	
10	CDH1	EPD2	7 31	51.39				37 2.6	96.5	59	38	16.54	16.43	0.20	
.....															
JUN H = 19	52	10.09	UTC	RMS = 0.09	NO = 5										FREE DEPTH SOLUTION
10	LAT = 37.158	N		ERX = 0.9	ERH = 1.3	AVFM = 2.4									
	LONG = 117.401	W		ERY = 0.9	GAP = 128	AVXM =									MT. JACKSON
	DEPTH = 6.49	KM		ERZ = 8.5	NM =										
.....															
10	GVN	EPU	19 52	13.73				42 2.4	18.2	163	106	3.64	3.52	0.06	
10	GMN	EPU	19 52	13.96				42 2.4	20.2	39	105	3.87	4.11	-0.08	
10	LCH	EPU	19 52	14.38				35 2.3	23.4	291	102	4.29	4.48	-0.10	
10	MGM	EPD	19 52	16.23				34 2.3	32.5	345	98	6.14	6.07	0.16	
10	SGV	EPU	19 52	16.88				36 2.4	38.2	121	97	6.79	6.88	0.01	
.....															
JUN H = 0	30	34.00	UTC	RMS = 0.00	NO = 5										FREE DEPTH SOLUTION
11	LAT = 37.163	N		ERX = 0.0	ERH = 0.0	AVFM = 2.0									
	LONG = 117.399	W		ERY = 0.0	GAP = 125	AVXM =									MT. JACKSON
	DEPTH = 5.32	KM		ERZ = 0.2	NM =										
.....															
11	GVN	EPU	0 30	37.62				26 2.0	18.7	165	101	3.62	3.55	0.00	
11	GMN	EPU	0 30	37.82				26 2.0	19.5	39	101	3.82	3.97	0.00	
11	LCH	EPD	0 30	38.37				25 2.0	23.5	290	98	4.37	4.45	0.00	
11	MGM	EPU	0 30	39.88				24 2.0	32.0	344	96	5.88	5.96	0.00	
11	SGV	EPU	0 30	40.79				25 2.1	38.3	122	94	6.79	6.88	0.00	
.....															

## 1981 SGB LGCAL-EVENT DATA REPORT

JUN	STA	PHASE	TIME	AMP	PER	XMAG	DUR	FMAG	DIST	AZI	AIN	TQBS	TCAL	RES	REMARKS
1981			(UTC)	(MU)	(SEC)				(KM)	(DEG)	(DEG)	(SEC)	(SEC)	(SEC)	
JUN M = 18 0 19.54 UTC RMS = 0.17 NO = 8 11 LAT = 38.353 N ERX = 1.3 ERH = 3.8 AVFM = 4.0 Q = D LONG = 115.912 W ERY = 3.5 GAP = 249 AVXM = CS = C DEPTH = 5.00 KM ERZ = 55.2 NM = QD = D															
FIXED DEPTH SOLUTION DEPTH CONTROL INADEQUATE TROY CANYON															
11	MCR	EPX	18 0 23.00						47.7	254	95	8.46	8.50	0.05	
11	WRN	IPU	18 0 28.25						50.0	145	93	8.71	8.81	-0.15	
11	QCS	EPU	18 0 31.05						65.0	180	92	11.51	11.27	0.27	
11	KRNA	EPD	18 0 33.15						79.4	211	92	13.61	13.63	-0.10	
11	TPU	EPD	18 0 33.55						86.2	164	91	14.01	14.73	-0.58	
11	SRG	EPX4	18 0 35.80						90.6	125	91	16.26	15.40	0.64	
11	MTI	EPD	18 0 35.20						93.8	143	91	15.66	15.88	-0.20	
11	BLT	EPX3	18 0 36.40						98.4	191	91	16.86	16.70	0.29	
11	CTS	EPX4	18 0 38.10				176	4.0	105.3	223	91	18.56	17.33	0.89	
11	GMR	EPD	18 0 38.60						113.8	174	90	19.06	18.81	0.35	
11	NPN	EPX4	18 0 39.80						115.7	132	90	20.26	19.11	0.93	
11	TNP	EPX4	18 0 41.50				148	3.9	118.3	255	90	21.96	19.54	2.15	
11	GLR	EPX4	18 0 41.90						128.4	184	90	22.36	21.18	1.24	
11	PRN	EPD4	18 0 41.70						129.5	144	90	22.15	21.37	0.67	
11	EPN	EPD4	18 0 42.35						131.5	196	90	22.31	21.69	1.06	
11	BNT	EPD4	18 0 42.90						135.2	209	90	23.36	22.28	1.25	
11	EPR	EPX4	18 0 44.70						146.2	154	90	25.16	24.07	1.10	
11	MZP	EPD4	18 0 46.55						148.1	241	90	27.01	24.39	2.86	
11	BGB	EPD4	18 0 44.90						148.6	191	90	25.36	24.47	0.97	
11	SSP	EPX4	18 0 47.20						160.8	190	90	27.66	26.45	1.29	
11	GMN	EPD4	18 0 48.40				177	4.2	166.6	225	52	28.96	27.38	1.62	
11	LDP	EPD4	18 0 47.85				170	4.2	167.9	188	52	28.31	27.45	0.94	
11	YMT5	IPU4	18 0 48.00						168.4	197	52	28.46	27.44	1.02	
11	CDH1	IPU4	18 0 48.15						169.5	192	52	28.61	27.58	1.12	
11	CDH5	IPD4	18 0 48.00						169.5	192	52	28.46	27.51	1.05	
11	MGM	EPD4	18 0 49.33						172.2	234	52	29.79	28.10	1.78	
11	YMT4	IPD4	18 0 48.75						173.8	196	52	29.21	28.10	0.99	
11	YMT3	SPU4	18 0 49.45						179.4	194	52	29.91	28.77	1.19	
11	SVP	EPD4	18 0 51.05				175	4.2	180.4	247	52	31.51	29.26	2.13	
11	SGV	EPD4	18 0 50.10						181.5	213	52	30.56	29.17	1.48	
11	LSM	EPX4	18 0 50.35				172	4.2	181.9	190	52	30.31	29.11	1.67	
11	WCT	EPX4	18 0 50.00						184.4	200	52	30.46	29.40	1.21	
11	MCY	EPD4	18 0 50.80				173	4.3	187.3	181	52	31.26	29.91	1.43	
11	GVN	EPX4	18 0 52.45				177	4.3	196.0	220	52	32.91	30.86	1.98	
11	LCH	EPD4	18 0 53.05				174	4.3	196.9	231	52	33.51	31.11	2.47	
11	PPK	EPD4	18 0 54.40						203.4	240	52	34.86	32.03	2.81	
11	FMT	EPD4	18 0 53.10						205.0	202	52	33.56	32.05	1.74	
11	JDN	EPX4	18 0 54.50						213.0	185	52	34.96	33.05	1.89	

## 1981 SGB LOCAL-EVENT DATA REPORT

JUN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JUN H = 17	46	59.65	UTC	RMS =	0.01	NO =	3								
13	LAT =	37.352	N	ERX =		ERH =		AVFM =	2.9	W =	C				FIXED DEPTH SOLUTION
	LONG =	116.486	W	ERY =		GAP =	184	AVXM =		WS =	A				DEPTH CONTROL INADEQUATE
	DEPTH =	7.00	KM	ERZ =		NM =				WD =	D				SILENT CANYON - NORTH
.....															
13	BMT	EPD	17 47	3.00					16.1	242	112	3.35	3.51	0.01	
		ISU4	17 47	11.02								11.37	5.72	5.65	
13	EPN	EPU	17 47	4.00			77	3.0	21.0	137	106	4.35	4.30	-0.01	
13	BLT	EPX	17 47	5.98			57	2.8	35.3	66	98	6.33	6.46	0.00	
13	SSP	EPU4	17 47	10.00					53.1	153	95	10.35	9.39	1.04	
.....															
JUN H = 17	57	57.98	UTC	RMS =	0.12	NO =	21								FREE DEPTH SOLUTION
15	LAT =	36.739	N	ERX =	0.3	ERH =	0.4	AVFM =	2.3	W =	A				
	LONG =	116.277	W	ERY =	0.3	GAP =	73	AVXM =		WS =	A				LATHROP WELLS
	DEPTH =	7.74	KM	ERZ =	0.8	NM =				WD =	A				
.....															
15	LSM	IPD	17 57	59.80			38	2.3	0.4	71	177	1.82	1.67	0.12	
15	SDH	EPD	17 58	0.59			31	2.2	11.7	208	122	2.61	2.68	-0.03	
15	YMT3	IPD	17 58	0.81			51	2.6	13.1	294	119	2.83	2.87	0.00	
15	CDH5	EPD	17 58	0.81			49	2.6	14.0	345	117	2.83	3.00	-0.07	
15	CDH1	IPU	17 58	0.92			59	2.7	14.0	345	117	2.94	3.07	-0.04	
15	LOP	EPD	17 58	1.40			36	2.3	16.1	37	114	3.42	3.46	0.04	
15	YMT6	IPD4	17 58	0.39			47	2.5	17.5	320	112	2.41	3.54	-1.23	
15	YMT2	IPD	17 58	1.81			34	2.3	19.1	286	109	3.83	3.78	-0.03	
15	YMT4	IPD	17 58	1.89			41	2.4	21.0	312	108	3.91	4.10	-0.30	
15	SSP	IPU	17 58	2.17			35	2.3	21.3	14	108	4.19	4.33	-0.06	
15	YMT5	IPD	17 58	2.40			47	2.6	23.7	318	105	4.42	4.55	-0.14	
15	YMT1	IPD	17 58	2.84			46	2.5	25.8	300	104	4.86	4.84	-0.11	
15	MCY	IPU	17 58	3.39			36	2.3	29.4	107	102	5.41	5.44	0.05	
15	WCT	EPU	17 58	3.68			26	2.1	31.7	281	101	5.70	5.75	0.11	
15	BGB	EPU	17 58	4.08			29	2.2	33.5	8	100	6.10	6.18	0.00	
15	JUN	IPU	17 58	4.44			22	1.9	36.7	155	99	6.46	6.52	-0.07	
15	SPRG	EPU	17 58	5.31			30	2.2	42.1	97	98	7.33	7.46	-0.11	
15	BMT	EPD	17 58	10.00			29	2.3	68.8	332	95	12.02	11.97	0.22	
15	SGV	EPD4	17 58	9.79			36	2.5	72.5	292	94	11.81	12.44	-0.54	
15	APK	EPU	17 58	11.60			23	2.1	78.3	126	94	13.62	13.62	0.27	
15	GMR	EPD	17 58	11.99			20	2.0	79.9	34	94	14.01	13.66	0.45	
15	GVN	EPD	17 58	15.11			27	2.3	99.3	287	93	17.13	16.65	0.41	
15	GMN	EPD	17 58	16.30			20	2.1	107.4	505	93	18.32	18.23	0.24	
.....															
JUN H = 5	25	28.91	UTC	RMS =	0.11	NO =	13								FREE DEPTH SOLUTION
16	LAT =	36.772	N	ERX =	0.3	ERH =	0.5	AVFM =	2.1	W =	B				
	LONG =	116.253	W	ERY =	0.4	GAP =	91	AVXM =		WS =	A				LATHROP WELLS
	DEPTH =	3.65	KM	ERZ =	1.5	NM =				WD =	B				
.....															
16	LSM	IPU	5 25	30.19			31	2.1	4.0	207	131	1.28	1.29	-0.03	
16	CDH5	EPU	5 25	31.20			34	2.2	11.4	329	99	2.29	2.38	0.01	
		ESD4	5 25	55.59								26.68	3.90	22.78	
16	CDH1	IPD	5 25	31.30			37	2.3	11.4	329	100	2.39	2.45	0.04	
		ESD4	5 25	54.81								25.90	4.02	21.88	
16	LUP	EPD	5 25	31.40			32	2.2	11.9	40	99	2.49	2.59	-0.02	
16	YMT3	IPD	5 25	31.83			34	2.2	14.2	277	96	2.92	2.84	0.13	
16	SDH	EPU	5 25	31.79			16	1.6	16.0	209	95	2.88	3.13	-0.20	
16	SSP	EPD	5 25	32.29			34	2.3	17.2	10	94	3.38	3.54	-0.08	
16	YMT4	EPU	5 25	32.73			29	2.1	20.5	300	93	3.82	3.91	-0.19	
16	YMT2	EPD	5 25	33.09			15	1.6	20.7	274	93	4.18	3.89	0.21	
16	YMT5	EPD	5 25	33.12			35	2.3	22.8	308	93	4.21	4.29	-0.08	
16	YMT1	EPU	5 25	33.89			37	2.4	26.2	290	92	4.98	4.81	0.04	
16	MCY	IPU	5 25	34.11			32	2.2	28.7	115	92	5.20	5.24	0.04	
16	SPRG	EPD	5 25	36.17			18	1.8	40.6	102	91	7.26	7.16	0.13	
.....															

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JUN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JUN H =	1 46	51.74	UTC	RMS =	0.10	NO =	12								FREE DEPTH SOLUTION
17 LAT =	36.777	N		ERX =	0.3	ERH =	0.4	AVFM =	1.7	Q =	C				
LONG =	116.249	W		ERY =	0.3	GAP =	90	AVXM =		QS =	C				LATHROP WELLS
DEPTH =	0.65	KM		ERZ =	108.5	NM =				QD =	B				
.....															
17	LSM	EPD	1 46 53.01					14 1.4	4.6	207	40	1.27	1.29	-0.04	
17	CDH5	EPD	1 46 54.08					12 1.3	11.1	327	40	2.34	2.36	0.08	
17	CDH1	IPD	1 46 54.12					16 1.6	11.1	327	40	2.38	2.43	0.05	
17	LDP	EPD	1 46 54.29					20 1.8	11.2	40	40	2.55	2.52	0.11	
17	YMT3	IPD	1 46 54.71					37 2.3	14.5	274	40	2.97	2.94	0.08	
17	YMT6	EPD	1 46 54.96					13 1.4	16.5	303	40	3.22	3.31	-0.18	
17	SSP	EPD	1 46 55.19					16 1.6	16.6	9	40	3.45	3.51	0.02	
17	YMT4	EPD	1 46 55.64					14 1.5	20.5	299	40	3.90	4.00	-0.22	
17	YMT2	EPD	1 46 56.20					10 1.2	21.0	272	40	4.46	4.04	0.34	
17	YMT5	EPD	1 46 56.18					19 1.8	22.7	306	40	4.44	4.39	0.04	
17	YMT1	EPD	1 46 56.90					31 2.2	26.3	289	40	5.16	4.97	0.06	
17	MCY	EPD	1 46 57.00					21 1.9	28.7	117	40	5.26	5.39	-0.06	
17	SPRG	EPD4	1 46 53.69					13 1.5	40.4	103	38	1.95	7.29	-5.32	
.....															
JUN H =	3 26	34.73	UTC	RMS =	0.04	NO =	12								FREE DEPTH SOLUTION
17 LAT =	36.775	N		ERX =	0.2	ERH =	0.2	AVFM =	1.9	Q =	A				
LONG =	116.252	W		ERY =	0.1	GAP =	90	AVXM =		QS =	A				LATHROP WELLS
DEPTH =	2.11	KM		ERZ =	0.4	NM =				QD =	A				
.....															
17	LSM	EPD	3 26 35.95					25 1.9	4.3	206	112	1.22	1.20	-0.01	
17	CDH1	IPD	3 26 37.05					25 2.0	11.1	328	97	2.32	2.38	0.04	
17	CDH5	EPX3	3 26 37.00					24 1.9	11.1	328	97	2.27	2.31	0.05	
17	LDP	EPD	3 26 37.16					22 1.9	11.6	41	97	2.43	2.51	-0.01	
17	YMT3	IPD	3 26 37.63					23 1.9	14.4	275	95	2.90	2.87	0.07	
17	YMT6	IPD	3 26 37.95					23 1.9	16.4	304	94	3.22	3.23	-0.11	
17	SSP	EPX	3 26 38.16						16.9	10	94	3.43	3.49	0.02	
17	YMT4	EPD	3 26 38.53					17 1.7	19.5	294	94	3.80	3.76	-0.08	
17	YMT2	EPX4	3 26 39.21					14 1.5	21.0	273	74	4.48	3.97	0.42	
17	YMT5	EPX3	3 26 39.21					20 1.8	22.6	307	74	4.48	4.31	0.17	
17	YMT1	EPX2	3 26 39.68					34 2.3	26.3	289	74	4.95	4.86	-0.05	
17	MCY	EPD	3 26 39.95					28 2.1	28.8	116	74	5.22	5.29	0.00	
17	BGB	EPX	3 26 40.11					15 1.6	29.2	4	74	5.38	5.46	0.00	
.....															
JUN H =	9 4	40.81	UTC	RMS =	0.08	NO =	9								FREE DEPTH SOLUTION
17 LAT =	36.729	N		ERX =	0.3	ERH =	0.5	AVFM =	1.6	Q =	B				
LONG =	116.264	W		ERY =	0.3	GAP =	110	AVXM =		QS =	A				LATHROP WELLS
DEPTH =	0.96	KM		ERZ =	0.5	NM =				QD =	B				
.....															
17	LSM	IPD	9 4 41.48					13 1.4	1.5	328	145	0.67	0.68	-0.02	
17	SDH	EPD	9 4 43.14					6 0.7	11.4	216	40	2.33	2.35	0.03	
17	YMT3	EPD	9 4 43.80					29 2.1	14.6	296	40	2.99	2.90	0.14	
17	LDP	EPD	9 4 44.11					13 1.4	16.4	32	40	3.30	3.33	0.06	
17	YMT6	EPD	9 4 44.41					30 2.2	19.1	319	40	3.60	3.68	-0.17	
17	YMT4	EPD	9 4 44.93					16 1.6	22.6	312	40	4.12	4.29	-0.28	
17	YMT5	EPD	9 4 45.60					22 1.9	25.3	318	40	4.79	4.78	0.01	
17	YMT1	EPD	9 4 46.08					20 1.8	27.4	300	40	5.27	5.08	0.06	
17	MCY	EPD	9 4 45.89					11 1.3	28.0	105	40	5.08	5.21	-0.05	
.....															
JUN H =	15 1	20.05	UTC	RMS =	0.05	NO =	8								FREE DEPTH SOLUTION
18 LAT =	37.358	N		ERX =	0.2	ERH =	0.3	AVFM =	2.3	Q =	B				
LONG =	117.154	W		ERY =	0.2	GAP =	128	AVXM =		QS =	A				MT. JACKSON
DEPTH =	1.26	KM		ERZ =	1.6	NM =				QD =	C				
.....															
18	GMN	IPD	15 1 22.46					34 2.2	11.4	236	92	2.41	2.56	0.00	
18	MGM	EPD	15 1 25.84					22 1.9	31.7	287	74	5.79	5.98	-0.10	
18	GVN	EPD	15 1 27.80					31 2.3	43.0	203	74	7.75	7.55	0.14	
18	MZP	EPD	15 1 27.70					19 1.8	43.1	332	74	7.65	7.89	0.00	
18	SGV	IPD	15 1 27.63					41 2.5	43.2	166	74	7.58	7.73	-0.06	
18	BMT	EPD	15 1 28.18					37 2.4	45.8	100	74	8.13	8.29	0.01	
18	LCH	EPD	15 1 28.14					19 1.8	45.8	253	74	8.09	8.14	0.03	
18	YMT5	EPD	15 1 39.10					42 2.7	80.5	129	74	19.05	13.75	5.30	
18	YMT3	IPD	15 1 35.47					28 2.3	91.5	134	74	15.42	15.48	-0.01	
18	SPRG	EPD	15 1 44.05					34 2.7	140.5	122	74	24.00	23.49	0.54	
.....															
JUN H =	17 0	0.34	UTC	RMS =	0.20	NO =	22								FREE DEPTH SOLUTION
18 LAT =	36.979	N		ERX =	0.4	ERH =	0.6	AVFM =	2.8	Q =	B				
LONG =	116.176	W		ERY =	0.4	GAP =	74	AVXM =		QS =	B				LATHROP WELLS
DEPTH =	1.55	KM		ERZ =	1.4	NM =				QD =	B				
.....															
18	SSP	EPD	17 0 1.78					80 3.0	7.1	212	97	1.44	1.83	-0.31	
18	BGB	EPD	17 0 2.09					78 2.9	7.9	325	95	1.75	1.90	-0.07	
18	CPX	IPD	17 0 2.88					71 2.9	12.1	117	93	2.54	2.52	0.05	
18	LDP	EPD	17 0 2.96					77 3.0	13.9	177	93	2.62	2.90	-0.20	
18	CDH5	EPD	17 0 3.56					60 2.8	18.2	224	92	3.22	3.51	-0.19	
18	CDH1	EPD	17 0 3.60					60 2.8	18.2	224	92	3.26	3.57	-0.21	
18	YMT6	EPD	17 0 4.94					77 3.0	24.3	237	91	4.60	4.57	-0.06	

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JUN 1981	STA	PHASE	TIME (UTC)		AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 18	YMT5	IPU	17	0	5.33				89	3.1	26.3	250	74	4.99	4.94	0.06
. 18	YMT4	IPD	17	0	5.80				70	2.9	27.5	243	74	5.46	5.11	0.24
. 18	LSM	EPD	17	0	5.27				75	3.0	27.9	198	74	4.93	5.15	-0.24
. 18	GLR	EPD	17	0	5.25				70	2.9	28.2	30	74	4.91	5.26	-0.27
. 18	EPN	EPD	17	0	5.98				75	3.0	29.2	333	74	5.64	5.59	-0.01
. 18	YMT3	IPD	17	0	5.89				87	3.1	29.9	224	74	5.55	5.45	0.15
. 18	YMT1	EPD	17	0	6.75				78	3.0	34.4	246	74	6.41	6.20	0.08
. 18	YMT2	EPD	17	0	6.80				17	1.7	34.6	232	74	6.46	6.26	0.12
. 18	SDH	EPD	17	0	7.26				53	2.7	39.8	201	74	6.92	7.05	-0.09
. 18	MCY	EPD	17	0	7.64				85	3.1	40.1	152	74	7.30	7.16	0.22
. 18	SPRG	EPD	17	0	8.73				44	2.6	45.6	134	74	8.39	8.03	0.39
. 18	GMR	EPD	17	0	9.57				56	2.8	53.3	42	74	9.23	9.37	-0.04
. 18	JON	EPD	17	0	10.79				49	2.7	60.2	174	74	10.45	10.35	0.09
. 18	SGV	EPD	17	0	13.71				56	2.9	76.2	270	74	13.37	13.09	0.37
. 18	GVN	EPD	17	0	18.23				39	2.7	103.8	271	74	17.89	17.44	0.40
. 18	MTI	EPD4	17	0	21.04				46	2.8	111.4	46	74	20.70	18.80	1.93
. 18	MZP	EPD4	17	0	24.10				30	2.6	133.6	307	74	23.76	22.59	1.41

JUN H = 4 48 27.57 UTC RMS = 0.08 NO = 13 FREE DEPTH SOLUTION  
 . 19 LAT = 36.766 N ERX = 0.2 ERH = 0.3 AVFM = 2.4 W = C  
 . LONG = 115.395 W ERY = 0.2 GAP = 114 AVXM = W = C HAYFORD PEAK  
 . DEPTH = 2.00 KM ERZ = 96.5 NM = WD = C

. 19	SHRG	EPD	4 48 33.55					21	1.9	36.1	144	74	5.98	6.57	0.01	
. 19	SPRG	EPD	4 48 34.20					21	1.9	37.9	258	74	6.63	6.77	-0.10	
. 19	EPR	EPD	4 48 35.93					26	2.1	48.3	23	74	8.36	8.48	-0.10	
. 19	MCY	EPD2	4 48 36.23					39	2.5	52.0	257	74	8.66	9.07	-0.33	
. 19	LDP	EPD	4 48 39.59					30	2.3	69.6	278	74	12.02	12.02	0.08	
. 19	LSM	EPD2	4 48 41.11					29	2.3	78.4	268	74	13.54	13.33	0.19	
. 19	CDH5	EPD	4 48 41.40					34	2.5	83.0	277	74	13.83	14.06	-0.13	
. 19	CDH1	EPD	4 48 41.53					34	2.5	83.0	277	74	13.96	14.13	-0.07	
. 19	YMT6	EPD4	4 48 43.27					42	2.7	90.7	276	74	15.70	15.33	0.28	
. 19	YMT3	EPD	4 48 42.93					22	2.1	90.7	271	74	15.36	15.32	0.10	
. 19	YMT5	EPD4	4 48 44.03					30	2.4	95.6	279	74	16.46	16.18	0.28	
. 19	MTI	EPD4	4 48 45.20					29	2.4	101.6	6	74	17.63	17.19	0.48	
. 19	YMT1	EPD	4 48 44.86					45	2.8	101.6	275	74	17.29	17.12	0.05	
. 19	NPN	EPD	4 48 45.79					34	2.6	106.4	22	74	18.22	18.00	0.02	
. 19	DLM	EPD	4 48 46.47					28	2.4	109.9	32	74	18.90	18.57	0.08	
. 19	BMT	EPD	4 48 48.61					19	2.1	125.2	297	74	21.04	21.17	0.05	

JUN H = 4 51 35.16 UTC RMS = 0.13 NO = 9 FREE DEPTH SOLUTION  
 . 21 LAT = 37.020 N ERX = 0.9 ERH = 1.9 AVFM = 2.0 W = D  
 . LONG = 116.132 W ERY = 1.7 GAP = 223 AVXM = W = C SILENT CANYON - YUCCA FLAT  
 . DEPTH = 4.09 KM ERZ = 5.0 NM = WD = D

. 21	BGB	EPD	4 51 37.01					23	1.9	8.7	283	111	1.85	2.12	-0.20	
. 21	CPX	EPD	4 51 37.67					22	1.9	12.2	146	102	2.51	2.57	-0.03	
. 21	SSP	EPD	4 51 37.58					21	1.8	13.1	216	102	2.42	2.88	-0.38	
. 21	LDP	EPD	4 51 38.05					21	1.8	18.7	190	96	3.69	3.71	0.06	
. 21	CDH5	EPD	4 51 39.57					21	1.9	24.3	223	94	4.41	4.47	0.03	
. 21	YMT6	EPD	4 51 40.63					26	2.1	30.2	233	93	5.47	5.46	-0.08	
. 21	YMT5	EPD	4 51 41.11					26	2.1	31.7	245	93	5.95	5.75	0.20	
. 21	YMT4	EPD	4 51 41.47					26	2.1	33.2	239	93	6.31	5.97	0.23	
. 21	YMT3	EPD	4 51 41.45					26	2.1	35.9	224	92	6.29	6.36	-0.02	

JUN H = 5 33 42.41 UTC RMS = 0.14 NO = 12 FREE DEPTH SOLUTION  
 . 22 LAT = 36.848 N ERX = 0.8 ERH = 1.0 AVFM = 2.3 W = C  
 . LONG = 117.473 W ERY = 0.6 GAP = 198 AVXM = W = A TIN MOUNTAIN  
 . DEPTH = 5.62 KM ERZ = 1.5 NM = WD = D

. 22	TMO	IPU	5 33 44.14					25	2.0	7.5	129	128	1.73	2.18	-0.15	
. 22	GVN	EPD	5 33 46.32					30	2.2	20.7	34	101	3.91	3.88	-0.03	
. 22	MCA	EPD	5 33 47.47					21	1.9	26.0	142	97	5.06	4.95	0.03	
. 22	SGV	EPD	5 33 49.47					31	2.3	42.0	69	94	7.06	7.47	-0.32	
. 22	LCH	EPD	5 33 50.49					25	2.1	45.7	540	94	8.08	8.04	0.12	



## 1981 SGB LOCAL-EVENT DATA REPORT

JUN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	OUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 22	FMT	EPU	5 33 53.39					17 1.8	66.2	110	93	10.98	11.29	-0.07	
. 22	YMT4	EPU	5 33 58.03					35 2.5	91.1	89	92	15.62	15.40	0.11	
. 22	LSM	EPD	5 34 0.63					27 2.4	107.8	96	92	18.22	18.08	0.12	
. 22	SSP	EPD3	5 34 1.79					37 2.7	112.2	86	91	19.38	18.99	0.47	
. 22	BGB	EPD	5 34 1.48					39 2.7	113.0	79	91	19.07	19.05	0.10	
. 22	LUP	EPD	5 34 2.10					26 2.4	116.4	90	91	19.69	19.60	0.17	
. 22	MCY	EPD	5 34 5.21					28 2.5	136.4	99	91	22.80	22.78	0.10	
.....															
JUN H = 9 22 38.47 UTC RMS = 0.12 NO = 4 FREE DEPTH SOLUTION															
. 22 LAT = 37.391 N ERX = ERH = AVFM = 2.0 u = C															
. LONG = 115.624 W ERY = GAP = 151 AVXM = uS = A GROOM LAKE															
. DEPTH = 0.03 KM ERZ = NM = uD = D															
.....															
. 22	GMR	IPU	9 22 41.31					33 2.2	14.5	244	40	2.84	3.18	-0.24	
. 22	TPU	EPU	9 22 43.13					30 2.2	23.8	355	40	4.66	4.82	-0.02	
. 22	GLR	EPD	9 22 46.09					14 1.6	40.9	239	38	7.62	7.55	0.14	
. 22	PRN	IPD	9 22 47.82					24 2.1	50.8	88	38	9.35	9.17	0.06	
.....															
JUN H = 18 31 43.89 UTC RMS = 0.03 NO = 5 FREE DEPTH SOLUTION															
. 22 LAT = 36.747 N ERX = 0.4 ERH = 0.5 AVFM = 1.7 u = C															
. LONG = 116.263 W ERY = 0.3 GAP = 175 AVXM = uS = A LATHROP WELLS															
. DEPTH = 4.26 KM ERZ = 0.6 NM = uD = D															
.....															
. 22	LSM	EPU	18 31 45.04					21 1.8	1.2	226	165	1.15	1.13	-0.01	
. 22	SDH	EPD	18 31 46.52					10 1.2	13.1	211	102	2.63	2.68	-0.01	
. 22	CDH1	IPD	18 31 46.55					21 1.8	13.4	339	102	2.66	2.80	-0.04	
. 22	LUP	EPU	18 31 46.89					15 1.5	14.6	36	100	3.00	3.05	0.03	
. 22	SSP	EPD4	18 31 50.50					22 1.9	20.1	11	96	6.61	4.01	2.67	
. 22	YMT1	EPD	18 31 48.91					22 1.9	26.4	296	94	5.02	4.85	0.04	
.....															
JUN H = 15 17 31.08 UTC RMS = 0.01 NO = 3 FIXED DEPTH SOLUTION															
. 23 LAT = 37.121 N ERX = ERH = AVFM = 1.7 u = C DEPTH CONTROL INADEQUATE															
. LONG = 117.052 W ERY = GAP = 216 AVXM = uS = A MT. JACKSON															
. DEPTH = 5.00 KM ERZ = NM = uD = D															
.....															
. 23	SGV	IPU	15 17 34.20					26 2.0	15.6	173	103	3.12	3.21	0.00	
. 23	GMN	EPU	15 17 36.09					14 1.5	27.1	317	96	5.01	5.17	-0.01	
. 23	GVN	EPD	15 17 36.38					16 1.6	29.0	243	95	5.30	5.22	0.02	
.....															
JUN H = 1 11 48.93 UTC RMS = 0.06 NO = 10 FREE DEPTH SOLUTION															
. 24 LAT = 37.577 N ERX = 0.2 ERH = 0.4 AVFM = 2.0 u = B															
. LONG = 116.457 W ERY = 0.3 GAP = 90 AVXM = uS = A QUARTZITE MOUNTAIN															
. DEPTH = 9.05 KM ERZ = 1.8 NM = uD = C															
.....															
. 24	KRNA	IPD	1 11 53.16					24 2.0	19.5	21	114	4.23	4.11	0.04	
. 24	CTS	IPU	1 11 53.72					20 1.8	25.3	291	108	4.79	4.98	-0.02	
. 24	BLT	EPU	1 11 54.67					19 1.8	31.4	109	104	5.74	5.91	-0.04	
. 24	BMT	IPD	1 11 55.49					23 2.0	36.6	207	102	6.56	6.81	-0.08	
. 24	EPN	EPU	1 11 56.79					26 2.1	41.9	164	100	7.86	7.68	0.12	
. 24	RVE	EPD	1 11 58.64					22 2.0	54.4	25	96	9.71	9.70	0.01	
. 24	GLR	EPD4	1 12 0.56					16 1.7	57.1	137	97	11.63	9.95	1.74	
. 24	BGB	EPD4	1 11 58.87					18 1.9	63.1	161	96	9.94	10.98	-0.97	
. 24	YMT5	EPD	1 12 1.98					28 2.3	75.3	180	95	13.05	12.87	0.18	
. 24	GMN	EPD	1 12 2.11					25 2.2	77.4	247	95	13.18	13.38	-0.05	
. 24	CDH1	EPD4	1 11 59.84					21 2.1	80.4	171	95	10.91	13.71	-2.71	
. 24	SGV	IPD	1 12 3.08					21 2.1	83.5	218	95	14.15	14.24	0.00	
. 24	LUP	EPD4	1 12 4.14					24 2.2	84.2	162	95	15.21	14.38	0.90	
. 24	GVN	EPU	1 12 6.07					29 2.4	101.2	231	94	17.14	16.96	0.11	
.....															

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JUN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JUN H = 15	46	4.73	UTC	RMS =	0.14	NO = 14									FREE DEPTH SOLUTION
25	LAT =	36.477	N	ERX =	0.4	ERH =	0.7	AVFM =	2.2	W = C					
	LONG =	115.887	W	ERY =	0.6	GAP =	136	AVXM =		WS = B					CHARLESTON PEAK
	DEPTH =	9.64	KM	ERZ =	2.9	NM =				WD = C					
.....															
25	JUN	IPU	15 46 8.77					34	2.3	19.8	258	114	4.04	3.95	0.07
25	MCY	IPU	15 46 9.04					41	2.4	21.6	342	112	4.31	4.30	0.08
25	SPRG	IPD	15 46 9.47					34	2.3	25.1	16	109	4.74	4.83	-0.06
25	APK	IPU	15 46 10.72					26	2.1	33.1	122	105	5.99	6.38	-0.12
25	SDH	EPD	15 46 12.52					29	2.2	44.5	295	100	7.79	7.85	-0.02
25	LSM	EPD	15 46 12.76					31	2.3	45.2	310	100	8.03	7.98	0.03
25	LUP	EPD	15 46 13.35					34	2.4	48.8	329	99	8.62	8.67	0.02
25	CDH5	EPD	15 46 14.43					26	2.2	57.3	318	98	9.70	9.92	-0.12
25	CDH1	EPD	15 46 14.56					23	2.1	57.3	318	98	9.83	9.99	-0.06
25	YMT6	EPD	15 46 15.50					18	1.9	62.7	313	97	10.77	10.80	-0.12
25	SHRG	EPD	15 46 15.90					21	2.0	65.7	87	97	11.17	11.38	0.37
25	YMT4	EPD	15 46 15.86					28	2.3	66.3	311	97	11.13	11.41	-0.39
25	YMT5	EPD	15 46 16.63					31	2.4	68.9	313	96	11.90	11.85	0.05
25	YMT1	EPD	15 46 16.95					36	2.5	70.9	306	96	12.22	12.13	-0.05
25	GMR	EPD4	15 46 21.56					20	2.1	95.7	6	94	16.83	16.22	0.70
.....															
JUN H = 7	15	10.96	UTC	RMS =	0.00	NO = 3									FIXED DEPTH SOLUTION
26	LAT =	36.617	N	ERX =		ERH =		AVFM =	1.3	W = C					DEPTH CONTROL INADEQUATE
	LONG =	116.253	W	ERY =		GAP =	213	AVXM =		WS = A					LATHROP WELLS
	DEPTH =	5.00	KM	ERZ =		NM =				WD = D					
.....															
26	SDH	EPD	7 15 12.89					11	1.2	8.2	293	118	1.93	1.97	0.00
26	LSM	EPD	7 15 13.81					11	1.3	13.8	353	105	2.85	2.83	0.00
26	MCY	EPD	7 15 15.78					13	1.5	26.5	79	96	4.82	4.90	0.00
.....															
JUN H = 13	44	32.96	UTC	RMS =	0.02	NO = 6									FREE DEPTH SOLUTION
27	LAT =	36.837	N	ERX =	0.6	ERH =	1.0	AVFM =	1.4	W = C					
	LONG =	116.195	W	ERY =	0.8	GAP =	225	AVXM =		WS = A					LATHROP WELLS
	DEPTH =	5.76	KM	ERZ =	1.1	NM =				WD = D					
.....															
27	LOP	IPU	13 44 34.49					16	1.5	3.1	52	154	1.53	1.61	0.00
27	CDH5	IPD	13 44 35.34					16	1.6	11.3	283	114	2.38	2.47	0.01
27	CDH1	IPD	13 44 35.39					15	1.5	11.3	283	114	2.43	2.54	-0.01
27	LSM	EPD4	13 44 38.80					7	0.9	12.8	213	111	5.84	2.73	3.09
27	YMT6	EPD	13 44 36.69					10	1.2	18.9	277	103	3.73	3.66	-0.02
27	BGB	EPD	13 44 37.23					13	1.4	22.5	352	101	4.27	4.35	0.00
27	YMT5	EPD	13 44 37.54					13	1.4	24.1	286	100	4.58	4.54	0.04
.....															
JUN H = 20	43	20.75	UTC	RMS =	0.10	NO = 16									FREE DEPTH SOLUTION
27	LAT =	36.875	N	ERX =	0.2	ERH =	0.4	AVFM =	2.2	Q = A					
	LONG =	116.194	W	ERY =	0.3	GAP =	73	AVXM =		QS = A					LATHROP WELLS
	DEPTH =	2.18	KM	ERZ =	0.8	NM =				QQ = A					
.....															
27	LOP	IPU0	20 43 21.95					43	2.4	3.3	134	125	1.20	1.18	0.10
27	SSP	IPU0	20 43 22.37					29	2.1	5.9	339	108	1.62	1.66	0.04
27	CDH1	IPU0	20 43 22.95							11.1	262	97	2.20	2.37	-0.08
27	CDH5	IPU0	20 43 22.89					36	2.3	11.1	262	97	2.14	2.31	-0.07
27	CPX	IPU0	20 43 23.47					26	2.0	13.8	64	96	2.72	2.81	-0.07
27	LSM	EPX2	20 43 24.00					28	2.1	16.5	205	95	3.25	3.24	-0.02
27	BGB	IPU0	20 43 24.42					31	2.2	18.3	351	94	3.67	3.66	0.09
27	YMT6	IPU0	20 43 24.42					28	2.1	18.8	264	94	3.67	3.63	-0.05
27	YMT3	IPU0	20 43 25.00					32	2.2	21.8	243	74	4.25	4.11	0.19
27	YMT4	EPU0	20 43 24.95					31	2.2	23.1	262	74	4.20	4.36	-0.27
27	YMT5	IPU1	20 43 25.26					36	2.3	23.3	276	74	4.51	4.41	0.10
27	YMT2	EPX4	20 43 25.79							27.9	249	74	5.04	5.10	-0.14
27	YMT1	IPU0	20 43 26.26					40	2.4	30.0	265	74	5.51	5.46	-0.09
27	MCY	IPU1	20 43 26.42					31	2.2	31.5	139	74	5.67	5.72	0.02
27	GLR	EPX4	20 43 27.95					22	2.0	39.3	24	74	7.20	7.03	0.24
27	SPRG	EPD2	20 43 28.00					25	2.1	39.8	120	74	7.25	7.07	0.21
27	JON	EPD1	20 43 29.26					19	1.9	49.0	170	74	8.51	8.50	0.00
27	FMT	EPX	20 43 30.53							58.3	243	74	9.78	10.04	-0.02
.....															
JUN H = 21	50	4.71	UTC	RMS =	0.13	NO = 4									FREE DEPTH SOLUTION
27	LAT =	36.736	N	ERX =		ERH =		AVFM =	1.4	Q = C					
	LONG =	116.169	W	ERY =		GAP =	302	AVXM =		QS = A					LATHROP WELLS
	DEPTH =	0.35	KM	ERZ =		NM =				QQ = D					
.....															
27	LOP	IPU0	21 50 7.47					13	1.4	13.2	1	40	2.76	2.90	-0.06
27	CDH5	IPU0	21 50 8.32					14	1.5	19.2	316	40	3.61	3.79	-0.08
27	SSP	EPD2	21 50 9.21							21.5	348	40	4.50	4.39	0.19
27	YMT6	EPD3	21 50 9.95					10	1.2	25.1	303	40	5.24	4.81	0.34
.....															

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JUN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JUN H = 23	50	28.76	UTC	RMS = 0.06	NU = 9										FREE DEPTH SOLUTION
27	LAT = 37.155	N		ERX = 0.1	ERM = 0.2			AVFM = 2.1		Q = C					
	LONG = 116.943	W		ERY = 0.2	GAP = 177			AVXM =		WS = B					THIRSTY CANYON
	DEPTH = 4.17	KM		ERZ = 3.4	NM =					QD = C					
.....															
27	SGV	IPD	23 50 32.65					38 2.4	20.9	202	95	3.89	4.03	-0.05	
27	BMT	EPD	23 50 34.21					37 2.4	30.0	62	93	5.45	5.65	-0.02	
27	GVN	EPD	23 50 35.73					29 2.2	39.4	244	92	6.97	6.89	0.03	
27	YMT5	EPD	23 50 37.79					35 2.4	52.1	123	92	9.03	9.06	-0.03	
27	YMT4	EPD	23 50 38.37					35 2.4	54.3	126	91	9.61	9.41	0.10	
27	YMT6	EPD	23 50 38.91					23 2.1	58.2	124	91	10.15	10.01	0.05	
27	FMT	EPD4	23 50 45.27					14 1.6	59.0	166	91	16.51	10.12	6.63	
27	MCA	EPD4	23 50 47.32					13 1.6	63.8	208	91	18.56	10.75	7.74	
27	CDH5	IPU	23 50 39.80					27 2.2	64.6	120	91	11.04	11.04	0.11	
27	SSP	EPD	23 50 40.67					27 2.2	69.4	112	90	11.91	11.59	0.41	
27	LSM	EPD	23 50 41.65					22 2.1	75.5	128	90	12.89	12.57	0.30	
27	LUP	EPD4	23 50 41.88					25 2.2	76.7	116	90	13.12	12.78	0.43	
.....															
JUN H = 2	42	9.32	UTC	RMS = 0.11	NU = 13										FREE DEPTH SOLUTION
28	LAT = 36.967	N		ERX = 0.4	ERM = 0.5			AVFM = 2.3		Q = C					
	LONG = 115.905	W		ERY = 0.5	GAP = 148			AVXM =		WS = C					MERCURY
	DEPTH = 4.45	KM		ERZ = 7.7	NM =					QD = C					
.....															
28	CPX	EPD	2 42 12.29					33 2.2	14.0	253	102	2.97	2.88	0.12	
28	LOP	EPD	2 42 14.21					44 2.5	26.6	242	95	4.89	4.98	-0.02	
28	GLR	EPD	2 42 14.19					36 2.3	27.7	339	94	4.87	5.11	-0.18	
28	BGB	EPD	2 42 14.54					34 2.3	29.8	285	94	5.22	5.52	-0.22	
28	SPRG	EPD	2 42 14.93					30 2.2	31.4	164	94	5.61	5.68	-0.04	
28	MCY	IPD	2 42 15.52					30 2.2	34.2	189	93	6.20	6.15	0.13	
28	CDH5	EPD	2 42 15.96					33 2.3	38.7	252	93	6.64	6.81	-0.08	
28	CDH1	EPD	2 42 16.11					29 2.2	38.7	252	93	6.79	6.88	0.00	
28	LSM	EPD	2 42 16.78					28 2.2	41.4	233	93	7.46	7.27	0.17	
28	GMR	EPD	2 42 16.85					33 2.3	42.4	16	92	7.53	7.53	0.09	
28	EPN	EPD	2 42 17.70					31 2.3	46.3	306	92	8.38	8.31	0.01	
28	YMT5	EPD	2 42 18.12					42 2.5	49.5	261	92	8.80	8.65	0.15	
28	YMT4	EPD	2 42 18.36					42 2.6	50.0	257	92	9.04	8.70	0.23	
28	MTI	EPD4	2 42 26.73					19 2.0	96.7	35	90	17.41	16.02	1.41	
.....															
JUN H = 23	49	3.18	UTC	RMS = 0.19	NU = 21										FREE DEPTH SOLUTION
28	LAT = 36.096	N		ERX = 1.9	ERM = 2.5			AVFM = 2.8		Q = D					
	LONG = 117.696	W		ERY = 1.6	GAP = 261			AVXM =		WS = C					DARWIN
	DEPTH = 0.99	KM		ERZ = 211.1	NM =					QD = D					
.....															
28	PGE	IPU	23 49 13.97					13 1.6	63.2	64	38	10.79	11.06	-0.05	
28	MCA	EPD	23 49 14.97					12 1.5	71.7	31	38	11.79	12.12	-0.41	
28	QSM	EPD	23 49 16.12					12 1.6	76.0	101	38	12.94	12.90	-0.05	
28	TMO	EPD	23 49 17.11					12 1.6	82.8	18	38	13.93	14.32	-0.09	
28	GWV	EPD	23 49 18.97					12 1.6	92.9	84	38	15.79	15.82	0.05	
28	FMT	EPD	23 49 20.16					12 1.6	102.0	54	38	16.98	17.20	0.02	
28	GVN	EPD	23 49 21.03					123 3.7	105.4	17	38	17.85	17.71	0.08	
28	SGV	EPD	23 49 22.77					137 3.8	114.8	31	38	19.59	19.39	0.29	
28	AMR	EPD	23 49 22.28					11 1.6	114.9	73	38	19.10	19.23	-0.13	
28	WCT	EPD	23 49 23.75					11 1.6	123.2	51	38	20.57	20.63	0.10	
28	LCH	EPD	23 49 24.27					116 3.7	126.4	2	38	21.09	21.26	-0.09	
28	YMT2	EPD	23 49 25.86					114 3.7	132.9	55	38	22.68	22.24	0.37	
28	YMT1	EPD	23 49 25.96					12 1.8	134.2	51	38	22.78	22.46	0.19	
28	YMT3	EPD	23 49 26.51					114 3.7	138.4	56	38	23.33	23.13	0.25	
28	GMN	EPD	23 49 26.56					114 3.7	139.2	16	38	23.38	23.48	0.05	
28	YMT4	EPD	23 49 26.66					114 3.7	140.5	53	38	23.48	23.50	-0.13	
28	YMT5	EPD	23 49 27.01					114 3.7	142.5	51	38	23.83	23.86	-0.02	
28	LSM	EPD	23 49 27.34					11 1.7	146.3	61	38	24.16	24.42	-0.28	
28	MGM	EPD	23 49 28.32					122 3.8	150.3	7	38	25.14	25.28	-0.05	
28	LOP	EPD	23 49 29.30					11 1.8	160.7	58	38	26.12	26.88	-0.68	
28	BMT	EPD	23 49 30.57					130 3.9	161.8	35	38	27.39	27.16	0.40	
28	SPRG	EPD4	23 49 33.49					120 3.9	181.8	69	29	30.31	29.55	0.80	

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. 28	CTS	EPU4	23 49 35.39					90	3.7	193.6	27	29	32.21	31.21	1.17	
. 28	KRNA	EPU4	23 49 39.28					91	3.8	217.0	33	29	36.10	34.24	1.79	
.....																
.....																
JUN H = 7 9 42.94 UTC RMS = 0.10 NO = 19 FREE DEPTH SOLUTION																
. 29	LAT = 37.322 N			ERX = 0.2		ERH = 0.3		AVFM = 2.6		u = C		MT. JACKSON				
. 29	LONG = 117.001 W			ERY = 0.2		GAP = 72		AVXM =		ws = C						
. 29	DEPTH = 2.57 KM			ERZ = 113.0		NM =				wd = C						
.....																
. 29	GMN	EPU	7 9 47.19					54	2.7	23.0	264	74	4.25	4.52	-0.12	
. 29	BMT	EPU	7 9 48.74					62	2.8	31.8	48	74	5.80	5.95	0.02	
. 29	SGV	EPD	7 9 49.65					65	2.9	37.9	184	74	6.71	6.81	-0.02	
. 29	CTS	IPD	7 9 50.56					34	2.3	44.4	33	74	7.62	7.94	-0.15	
. 29	MGM	EPU	7 9 51.06					49	2.7	45.8	287	74	8.12	8.21	0.00	
. 29	GVN	EPD	7 9 51.08					43	2.6	46.7	220	74	8.14	8.10	-0.02	
. 29	MZP	EPD	7 9 52.44					35	2.4	53.9	321	74	9.50	9.58	0.16	
. 29	EPN	EPU	7 9 53.84					48	2.7	61.3	101	74	10.90	10.76	0.08	
. 29	WCT	EPU4	7 9 54.23					28	2.3	67.6	150	74	11.29	11.52	-0.07	
. 29	YMT5	EPU	7 9 54.57					57	2.9	67.7	134	74	11.63	11.61	0.02	
. 29	YMT4	EPD	7 9 55.42					57	2.9	70.4	136	74	12.48	12.03	0.34	
. 29	KRNA	EPD	7 9 55.54					33	2.4	72.0	50	74	12.60	12.45	0.08	
. 29	YMT6	EPD	7 9 55.54					34	2.5	73.9	134	74	12.60	12.58	-0.07	
. 29	BGB	EPU	7 9 55.71					29	2.3	75.6	115	74	12.77	12.97	-0.12	
. 29	YMT3	EPD	7 9 56.22					57	2.9	79.2	139	74	13.28	13.42	-0.09	
. 29	CDH5	EPU	7 9 56.41					31	2.4	79.5	130	74	13.47	13.47	0.10	
. 29	CDH1	EPU	7 9 56.52					32	2.4	79.5	130	74	13.58	13.54	0.14	
. 29	LOP	EPU	7 9 58.26					42	2.7	90.5	125	74	15.32	15.39	0.01	
. 29	SDH	EPD	7 9 59.11					30	2.4	95.5	142	74	16.17	16.07	0.14	
. 29	SPRG	EPD	7 10 4.17					56	3.1	126.9	123	74	21.23	21.22	0.04	
.....																
.....																
JUN H = 22 17 50.15 UTC RMS = 0.13 NO = 10 FREE DEPTH SOLUTION																
. 29	LAT = 36.732 N			ERX = 1.9		ERH = 2.5		AVFM = 2.4		u = C		MERCURY				
. 29	LONG = 115.802 W			ERY = 1.6		GAP = 187		AVXM =		ws = B						
. 29	DEPTH = 4.19 KM			ERZ = 4.4		NM =				wd = D						
.....																
. 29	SPRG	EPD	22 17 51.52					38	2.3	4.2	189	134	1.37	1.40	0.00	
. 29	MCY	IPU	22 17 53.05					33	2.2	16.3	242	98	2.90	3.23	-0.25	
. 29	LOP	EPD	22 17 56.32					29	2.2	35.3	293	93	6.17	6.41	-0.16	
. 29	LSM	EPD	22 17 57.54					28	2.2	42.1	271	92	7.39	7.39	-0.02	
. 29	CDH5	EPU	22 17 58.44					36	2.4	48.2	287	92	8.29	8.36	0.03	
. 29	SDH	EPU	22 17 58.67					21	1.9	48.9	259	92	8.52	8.47	0.09	
. 29	YMT3	EPD	22 17 59.78					35	2.4	54.7	276	91	9.63	9.42	0.26	
. 29	GLR	EPD	22 17 59.79					45	2.6	55.3	340	91	9.64	9.61	0.10	
. 29	YMT5	EPD4	22 18 1.05					35	2.4	61.0	288	91	10.90	10.52	0.38	
. 29	YMT1	EPU	22 18 1.71					38	2.5	66.2	282	91	11.56	11.33	0.10	
. 29	GMR	EPD	22 18 1.47					38	2.5	66.9	2	91	11.32	11.52	-0.10	
. 29	TPU	EPU4	22 18 8.30					31	2.5	97.9	8	90	18.15	16.22	2.07	
. 29	MTI	EPU4	22 18 10.54					26	2.4	114.9	24	90	20.39	18.99	1.43	
. 29	GVN	EPD4	22 18 14.14					31	2.6	140.5	282	90	23.99	23.15	0.78	
.....																
.....																
JUN H = 0 1 1.84 UTC RMS = 0.18 NO = 3 FIXED DEPTH SOLUTION																
. 30	LAT = 36.617 N			ERX =		ERH =		AVFM = 1.3		u = C		DEPTH CONTROL INADEQUATE				
. 30	LONG = 116.190 W			ERY =		GAP = 327		AVXM =		ws = B		LATHROP WELLS				
. 30	DEPTH = 5.00 KM			ERZ =		NM =				wd = D						
.....																
. 30	LSM	EPD	0 1 4.69					10	1.2	15.5	331	103	2.85	3.10	-0.27	
. 30	LOP	EPD	0 1 6.74					11	1.3	26.4	4	96	4.90	4.96	0.02	
. 30	CDH5	EPU	0 1 7.29					11	1.3	29.3	337	95	5.45	5.30	0.25	
.....																
.....																
JUN H = 6 29 38.06 UTC RMS = 0.24 NO = 3 FIXED DEPTH SOLUTION																
. 30	LAT = 36.620 N			ERX =		ERH =		AVFM = 1.8		u = C		DEPTH CONTROL INADEQUATE				
. 30	LONG = 115.728 W			ERY =		GAP = 339		AVXM =		ws = B		MERCURY				
. 30	DEPTH = 5.00 KM			ERZ =		NM =				wd = D						
.....																
. 30	MCY	EPU	6 29 41.66					24	2.0	21.4	282	98	3.60	4.08	-0.40	

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JUN 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 30	LOP	EPD	6 29 46.40					19 1.9	47.1	303	93	8.34	8.31	0.10	
. 30	LSM	EPD	6 29 47.05					14 1.6	50.4	285	93	8.99	8.75	0.22	
.....															
. JUN H = 12 6 58.85 UTC RMS = 0.04 NO = 7 FREE DEPTH SOLUTION															
. 30 LAT = 36.612 N ERX = 0.6 ERH = 0.6 AVFM = 1.8 W = C															
. LONG = 116.322 W ERY = 0.3 GAP = 205 AVXM = WS = A LATHROP WELLS															
. DEPTH = 7.63 KM ERZ = 0.8 NM = GC = D															
.....															
. 30	SDH	EPD	12 7 0.63					21 1.8	4.0	339	152	1.78	1.79	0.03	
. 30	LSM	EPD	12 7 1.95					20 1.8	14.9	17	115	3.10	3.15	-0.07	
. 30	JON	EPD	12 7 3.88					20 1.8	27.4	134	103	5.03	5.03	-0.01	
. 30	CDH1	EPD	12 7 3.89					16 1.6	27.6	1	103	5.04	5.16	-0.02	
. 30	LOP	EPD	12 7 4.40					20 1.8	30.2	27	102	5.55	5.65	-0.02	
. 30	MCY	EPD	12 7 4.74					21 1.9	32.7	80	100	5.89	5.95	0.02	
. 30	BGB	EPD	12 7 7.36					17 1.8	48.0	10	97	8.51	8.51	0.08	
.....															

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JUL 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JUL H = 10	31	51.98	UTC	RMS =	0.06	NO =	15								FREE DEPTH SOLUTION
03	LAT =	37.149 N		ERX =	0.2	ERH =	0.3	AVFM =	2.7		W = C				
	LONG =	116.590 W		ERY =	0.2	GAP =	103	AVXM =			WS = C				THIRSTY CANYON
	DEPTH =	4.58 KM		ERZ =	13.5	NM =					WD = C				
.....															
03	YMT5	EPD	10 31 57.46					57	2.7	30.4	156	94	5.48	5.54	-0.06
03	YMT4	EPD4	10 31 58.43					57	2.8	33.8	158	94	6.45	6.07	0.27
03	BGB	EPD	10 31 58.22					42	2.5	34.5	111	94	6.24	6.28	0.04
03	YMT6	EPD	10 31 58.38					57	2.8	36.2	153	93	6.40	6.45	-0.14
03	WCT	EPD	10 31 58.60					49	2.6	39.7	185	93	6.62	6.98	-0.20
03	CDH5	EPD	10 31 58.90					51	2.7	40.2	143	93	6.92	7.07	-0.05
03	CDH1	EPD	10 31 59.03					51	2.7	40.2	143	93	7.05	7.13	0.02
03	SSP	EPD	10 31 59.42					59	2.8	41.4	127	93	7.44	7.47	0.05
03	YMT3	EPD	10 31 59.36					57	2.8	43.2	158	93	7.38	7.55	-0.12
03	SGV	EPD	10 31 59.63					55	2.8	43.5	245	93	7.65	7.71	0.03
03	LOP	EPD	10 32 0.79					52	2.7	49.9	131	92	8.81	8.77	0.12
03	LSM	EPD	10 32 1.25					40	2.5	53.5	148	92	9.27	9.24	0.01
03	BLT	EPD	10 32 1.58					44	2.6	55.6	48	92	9.60	9.72	0.01
03	CTS	EPD	10 32 1.81					38	2.5	57.6	348	92	9.83	10.07	-0.07
03	KRNA	EPD	10 32 3.90					38	2.5	68.3	16	92	11.92	11.83	0.02
03	MCY	EPD	10 32 5.15					43	2.7	77.8	134	91	13.17	13.24	0.01
.....															
JUL H = 0	4	46.34	UTC	RMS =	0.07	NO =	19								FREE DEPTH SOLUTION
04	LAT =	37.327 N		ERX =	0.2	ERH =	0.2	AVFM =	2.8		W = B				
	LONG =	116.296 W		ERY =	0.1	GAP =	78	AVXM =			WS = A				SILENT CANYON - NORTH
	DEPTH =	2.88 KM		ERZ =	1.1	NM =					WD = C				
.....															
04	EPN	EPD	0 4 49.28					96	3.1	12.8	191	101	2.94	2.85	0.03
04	BLT	EPD	0 4 50.64					89	3.1	23.1	42	74	4.30	4.44	-0.01
04	GLR	IPU	0 4 51.50					27	2.1	28.4	120	74	5.16	5.23	0.00
	IS		0 4 55.15										8.81	8.82	-0.01
04	BMT	EPD	0 4 51.95					90	3.1	31.4	261	74	5.61	5.87	-0.09
04	BGB	IPU	0 4 52.15					32	2.3	32.6	169	74	5.81	5.97	-0.08
04	KRNA	EPD	0 4 54.73					76	3.1	46.6	351	74	8.39	8.29	0.03
04	YMT5	EPD	0 4 55.04					95	3.3	49.6	196	74	8.70	8.66	0.04
04	CDH1	IPD	0 4 55.15					33	2.3	51.8	182	74	8.81	9.02	-0.11
04	CTS	EPD	0 4 55.49					70	3.0	52.8	314	74	9.15	9.28	0.04
04	YMT6	IPU4	0 5 6.56					31	2.3	52.9	191	74	20.22	9.15	10.98
04	YMT4	EPD	0 4 55.89					95	3.3	53.0	195	74	9.55	9.19	0.25
04	YMT1	EPD	0 4 56.32					95	3.3	56.5	201	74	9.98	9.74	0.11
04	WCT	IPU	0 4 57.45					25	2.2	66.2	206	74	11.11	11.29	-0.02
04	SGV	EPD	0 4 59.29					85	3.3	75.8	240	74	12.95	12.96	0.08
04	SPRG	EPD	0 5 0.64					70	3.1	82.5	148	74	14.30	13.98	0.35
04	GMN	EPD	0 5 0.78					70	3.1	85.5	268	74	14.44	14.66	-0.07
04	FMT	IPD	0 5 1.00					21	2.1	87.6	209	74	14.66	14.76	0.14
04	MTI	IPU4	0 5 4.45					23	2.2	98.4	67	74	18.11	16.63	1.51
04	GVN	EPD	0 5 3.05					70	3.2	99.7	249	74	16.71	16.70	-0.05
04	MCA	EPD	0 5 5.65					24	2.3	115.6	229	74	19.31	19.17	0.06
.....															
JUL H = 5	2	29.31	UTC	RMS =	0.16	NO =	15								FREE DEPTH SOLUTION
04	LAT =	37.153 N		ERX =	0.4	ERH =	0.7	AVFM =	2.9		W = C				
	LONG =	116.946 W		ERY =	0.6	GAP =	118	AVXM =			WS = B				THIRSTY CANYON
	DEPTH =	9.49 KM		ERZ =	3.4	NM =					WD = C				
.....															
04	SGV	EPD	5 2 33.35					110	3.3	20.6	202	113	4.04	4.20	-0.08
04	BMT	EPD	5 2 34.92					115	3.4	30.3	62	106	5.61	5.84	-0.06
04	GMN	EPD	5 2 35.41					100	3.2	32.3	300	105	6.10	6.14	0.11
04	GVN	EPD	5 2 36.48					89	3.2	39.0	244	101	7.17	6.94	0.17
04	WCT	IPU	5 2 37.55					30	2.3	49.1	145	99	8.24	8.58	-0.18
04	YMT5	EPD	5 2 38.44					110	3.4	52.1	123	98	9.13	9.14	-0.02
04	YMT4	EPD	5 2 39.13					110	3.4	54.4	126	98	9.82	9.48	0.23
04	MGM	EPD	5 2 39.15					75	3.1	58.3	303	97	9.84	10.29	-0.36
04	FMT	IPU	5 2 39.25					23	2.1	58.9	165	97	9.94	10.16	0.02
04	YMT3	EPD	5 2 39.94					110	3.4	62.6	130	97	10.63	10.76	-0.08
04	CDH1	IPD	5 2 40.40					36	2.5	64.7	120	97	11.09	11.17	0.02

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JUL 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
04	BGB	IPU	5 2 40.45					27	2.2	65.1	101	97	11.14	11.31	-0.09	
04	GLR	EPU	5 2 43.45					23	2.1	82.6	86	95	14.14	14.08	0.13	
04	GMR	EPU	5 2 47.35					27	2.4	106.2	79	94	18.04	17.94	0.20	
04	SPRG	EPU	5 2 48.14					112	3.6	113.4	117	94	18.83	19.03	-0.17	
.....																
JUL H = 5 31 55.57 UTC RMS = 0.11 NO = 5 FREE DEPTH SOLUTION																
04 LAT = 37.170 N ERX = 2.4 ERH = 3.4 AVFM = 1.6 Q = D																
LONG = 116.737 W ERY = 2.3 GAP = 199 AVXM = QS = C THIRSTY CANYON																
DEPTH = 29.20 KM ERZ = 5.3 NM = QD = D																
.....																
04	BMT	EPU	5 32 1.35					20	1.8	15.0	33	151	5.78	5.91	0.04	
04	SGV	IPD	5 32 2.90					24	2.0	33.6	231	124	7.33	7.60	-0.18	
04	GMN	EPU	5 32 4.95					13	1.5	48.6	287	112	9.38	9.66	-0.13	
04	GVN	EPU	5 32 6.10					7	1.0	57.0	251	106	10.53	10.52	-0.05	
.....																
JUL H = 5 53 24.22 UTC RMS = 0.06 NO = 6 FREE DEPTH SOLUTION																
04 LAT = 37.154 N ERX = 0.3 ERH = 0.5 AVFM = 1.6 Q = C																
LONG = 116.938 W ERY = 0.4 GAP = 122 AVXM = QS = C THIRSTY CANYON																
DEPTH = 4.35 KM ERZ = 10.6 NM = QD = C																
.....																
04	SGV	EPU	5 53 28.10					30	2.2	21.0	204	96	3.88	4.05	-0.07	
04	BMT	IPU	5 53 29.65					19	1.8	29.6	61	94	5.43	5.58	0.02	
04	GMN	EPU	5 53 30.15					9	1.2	32.8	300	93	5.93	6.10	-0.02	
04	GVN	EPU	5 53 31.35					12	1.4	39.8	245	92	7.13	6.95	0.12	
04	YMT5	IPU	5 53 33.15					20	1.9	51.6	123	92	8.93	8.98	-0.05	
04	YMT4	IPD4	5 53 33.90					9	1.2	53.9	126	92	9.68	9.33	0.24	
04	YMT3	EPD3	5 53 34.69					18	1.9	62.1	131	91	10.47	10.63	-0.10	
	ESD3		5 53 42.88										18.66	18.09	0.57	
.....																
JUL H = 11 25 37.39 UTC RMS = 0.11 NO = 18 FREE DEPTH SOLUTION																
04 LAT = 37.169 N ERX = 0.3 ERH = 0.4 AVFM = 2.6 Q = C																
LONG = 116.940 W ERY = 0.3 GAP = 78 AVXM = QS = B THIRSTY CANYON																
DEPTH = 6.39 KM ERZ = 4.2 NM = QD = C																
.....																
04	SGV	IPD	11 25 41.56						22.4	201	103	4.17	4.33	-0.07		
04	GMN	IPU	11 25 43.15					70	2.9	31.9	297	98	5.76	5.97	-0.06	
	ISU3		11 25 47.60										10.21	9.96	0.26	
04	GVN	EPD	11 25 44.70						40.3	243	96	7.31	7.06	0.19		
04	WCT	IPU	11 25 45.91						50.3	146	95	8.52	8.71	-0.03		
04	YMT5	IPU	11 25 46.69						52.7	125	94	9.30	9.18	0.12		
04	EPN	IPD3	11 25 47.62						55.0	85	94	10.23	9.74	0.44		
	ES 4		11 25 54.50										17.11	16.75	0.36	
04	YMT4	EPD	11 25 47.32					40	2.5	56.3	129	94	9.93	9.74	0.08	
04	CTS	IPD	11 25 47.20					23	2.1	57.3	19	94	9.81	10.04	-0.06	
04	MGM	EPD	11 25 47.40					55	2.8	57.8	301	94	10.01	10.16	-0.06	
04	YMT6	EPD	11 25 47.64						58.9	126	94	10.25	10.13	0.03		
04	FMT	EPU	11 25 47.38						60.5	166	94	9.99	10.37	-0.14		
04	BGB	EPX4	11 25 49.10						65.0	103	93	11.71	11.25	0.54		
04	CDH5	EPD3	11 25 48.66						65.2	122	93	11.27	11.14	0.24		
04	CDH1	EPD	11 25 48.70						65.2	122	93	11.31	11.21	0.21		
04	SSP	IPU	11 25 49.67						69.7	113	93	12.28	12.09	0.28		
04	LSM	EPX	11 25 50.39						76.1	129	93	13.00	12.94	0.05		
04	LDP	EPU	11 25 50.62						77.2	117	93	13.23	13.22	0.10		
04	SDH	EPU	11 25 50.70						79.1	137	93	13.31	13.40	-0.05		
04	KRNA	EPD	11 25 51.28						80.5	38	93	13.89	13.82	0.00		

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JUL 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JUL	H = 16	10 44.28	UTC	RMS =	0.09	NU = 17									FREE DEPTH SOLUTION
05	LAT =	36.611 N		ERX =	0.2	ERH =	0.3	AVFM =	2.1	U = C					
	LONG =	115.756 W		ERY =	0.2	GAP =	118	AVXM =		QS = C					MERCURY
	DEPTH =	0.04 KM		ERZ =	27.1	NM =				WD = C					
.....															
05	SPRG	EPU	16 10 46.30					26	2.0	10.4	333	40	2.02	2.41	-0.35
05	MCY	IPU	16 10 47.96					39	2.4	19.3	287	40	3.68	3.93	-0.16
05	APK	EPD	16 10 51.00					24	2.0	36.2	153	38	6.72	7.03	-0.04
05	JON	IPD	16 10 51.07					20	1.9	36.4	239	38	6.79	6.71	0.07
05	CPX	EPD	16 10 52.15					17	1.7	44.4	323	38	7.87	8.08	-0.17
05	LOP	EPU	16 10 52.45					25	2.1	45.6	306	38	8.17	8.37	-0.12
05	LSM	EPU	16 10 52.95					20	1.9	48.4	287	38	8.67	8.70	-0.05
05	SSP	EPU	16 10 53.75					25	2.1	54.0	310	38	9.47	9.81	-0.26
05	SHRG	IPU4	16 10 53.95					17	1.8	55.0	102	38	9.67	9.88	0.38
05	CDH5	IPU	16 10 54.25					33	2.4	57.3	299	38	9.97	10.14	-0.06
05	CDH1	IPD	16 10 54.30					35	2.4	57.3	299	38	10.02	10.21	-0.08
05	YMT3	EPD	16 10 55.15					32	2.4	61.7	288	38	10.87	10.85	0.07
05	BGB	EPU	16 10 55.20					18	1.9	63.4	318	38	10.92	11.26	-0.26
05	YMT6	IPD	16 10 55.50					27	2.2	64.1	295	38	11.22	11.27	-0.13
05	YMT4	IPU	16 10 56.15					26	2.2	68.3	294	38	11.87	11.96	-0.20
05	YMT5	IPU	16 10 56.65					30	2.3	70.0	297	38	12.37	12.26	0.11
05	YMT1	EPD	16 10 57.25					46	2.7	74.1	291	38	12.97	12.89	-0.05
05	FMT	EPU4	16 10 57.75					20	2.1	91.6	272	38	13.47	15.70	-1.99
05	PRN	EPU	16 11 3.00					29	2.4	108.4	35	38	18.72	18.53	0.07
.....															
JUL	H = 17	36 13.98	UTC	RMS =	0.08	NO = 7									FREE DEPTH SOLUTION
09	LAT =	36.122 N		ERX =	0.3	ERH =	1.5	AVFM =	2.9	U = D					
	LONG =	115.424 W		ERY =	1.5	GAP =	270	AVXM =		QS = C					LAS VEGAS
	DEPTH =	0.06 KM		ERZ =	16.3	NM =				QD = D					
.....															
09	APK	EPD	17 36 18.68					50	2.6	25.7	328	40	4.70	5.29	-0.32
09	SHRG	EPD	17 36 22.28					52	2.7	48.8	30	38	8.30	8.87	0.01
09	JON	EPU	17 36 26.20					56	2.9	70.4	300	38	12.22	12.23	-0.02
09	SPRG	EPU	17 36 26.58					58	2.9	72.2	331	38	12.60	12.60	0.03
09	MCY	EPD	17 36 27.30					65	3.0	76.9	321	38	13.32	13.36	0.04
09	AMR	EPU4	17 36 32.48					60	3.0	99.1	288	38	18.50	16.86	1.63
09	SDH	EPD4	17 36 27.75					51	2.9	100.5	305	38	13.77	17.15	-3.34
09	LSM	EPD2	17 36 31.65					44	2.8	102.4	312	38	17.67	17.49	0.16
09	LUP	EPU4	17 36 31.20					55	3.0	105.0	321	38	17.22	18.02	-0.72
09	SSP	EPU4	17 36 35.15					69	3.2	114.0	321	38	21.17	19.56	1.69
09	CDH1	EPU	17 36 33.35					78	3.3	114.5	316	38	19.37	19.50	-0.03
09	CDH5	EPU4	17 36 32.29					33	2.6	114.5	316	38	18.31	19.43	-1.02
09	YMT3	EPU4	17 36 44.48					65	3.2	115.1	310	38	30.50	19.53	11.02
09	YMT6	EPD4	17 36 37.60					66	3.2	119.9	313	38	23.62	20.33	3.19
09	YMT4	EPU4	17 36 35.99					52	3.0	123.6	312	38	22.01	20.95	0.95
09	BGB	EPU4	17 36 36.00					46	2.9	124.5	325	38	22.02	21.19	0.91
09	YMT5	EPU4	17 36 36.39					70	3.3	126.2	313	38	22.41	21.40	1.01
09	YMT1	EPD4	17 36 37.38					70	3.3	127.9	309	38	23.40	21.64	1.63
09	GLR	EPU4	17 36 37.55					36	2.7	130.8	336	38	23.57	22.15	1.48
09	GMR	EPD4	17 36 38.29					17	2.1	138.0	347	38	24.31	23.36	1.05
	ESD4		17 36 56.28										42.30	39.77	2.53
09	EPN	EPU4	17 36 40.10					71	3.3	145.4	326	38	26.12	24.71	1.35
.....															
JUL	H = 2	42 31.21	UTC	RMS =	0.09	NO = 17									FIXED DEPTH SOLUTION
12	LAT =	37.153 N		ERX =	0.2	ERH =	0.4	AVFM =	2.2	U = C					DEPTH CONTROL INADEQUATE
	LONG =	116.941 W		ERY =	0.3	GAP =	121	AVXM =		QS = B					THIRSTY CANYON
	DEPTH =	5.00 KM		ERZ =	4.4	NM =				WD = C					
.....															
12	SGV	EPU	2 42 35.15					41	2.4	20.7	203	99	3.94	4.01	0.01
12	BMT	EPU	2 42 36.60					29	2.2	30.0	61	95	5.39	5.65	-0.10
12	GMN	EPU	2 42 37.15					23	2.0	32.7	300	95	5.94	6.07	0.01
12	WCT	EPU	2 42 39.30					29	2.2	48.8	145	93	8.09	8.46	-0.21
12	YMT1	IPD	2 42 39.85					40	2.5	49.5	132	93	8.64	8.61	-0.10
12	YMT5	IPU	2 42 40.20					35	2.4	51.8	123	93	8.99	9.01	-0.03
12	YMT4	IPD	2 42 40.75					25	2.1	54.0	126	93	9.54	9.36	0.07
12	EPN	EPD	2 42 41.15					22	2.0	55.3	83	92	9.94	9.77	0.10



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JUL 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 12	YMT2	EPU3	2 42 40.85					20	1.9	57.6	135	92	9.64	9.90	-0.34
. 12	YMT6	EPU	2 42 41.05					25	2.1	57.9	124	92	9.84	9.96	-0.22
. 12	FMT	EPU4	2 42 47.45					10	1.3	58.7	166	92	16.24	10.07	6.40
. 12	YMT3	EPD	2 42 41.65					34	2.4	62.2	131	92	10.44	10.65	-0.16
. 12	CDH5	IPU	2 42 42.15					37	2.5	64.3	120	92	10.94	10.99	0.05
. 12	CDH1	IPD	2 42 42.20					47	2.7	64.3	120	92	10.99	11.06	0.03
. 12	BGB	EPD	2 42 42.40					24	2.1	64.7	101	92	11.19	11.19	0.08
. 12	SSP	EPD	2 42 43.20					40	2.6	69.1	111	92	11.99	11.98	0.09
. 12	LSM	IPU	2 42 44.20					19	2.0	75.2	128	92	12.99	12.77	0.20
. 12	LUP	EPD4	2 42 42.65					24	2.2	76.4	116	92	11.44	13.09	-1.58
. 12	MCY	EPD	2 42 48.35					29	2.4	102.9	122	91	17.14	17.32	-0.10

.....  
 JUL H = 15 47 36.09 UTC RMS = 0.09 NO = 13 FREE DEPTH SOLUTION  
 14 LAT = 37.162 N ERX = 0.3 ERH = 0.5 AVFM = 2.7 Q = B  
 LONG = 117.408 W ERY = 0.4 GAP = 129 AVXM = WS = A MT. JACKSON  
 DEPTH = 2.28 KM ERZ = 1.9 NM = WD = C

. 14	GVN	EPU	15 47 39.73					70	2.9	18.8	162	94	3.64	3.56	0.01	
. 14	GMN	EPD	15 47 39.99					70	2.9	20.2	41	74	3.90	4.06	-0.02	
. 14	LCH	EPU	15 47 40.25					50	2.6	22.7	291	74	4.16	4.33	-0.10	
. 14	MGM	EPU	15 47 41.96					55	2.7	31.9	346	74	5.87	5.96	-0.01	
. 14	SGV	EPU	15 47 42.78					67	2.9	39.0	121	74	6.69	7.00	-0.22	
. 14	PPK	EPD	15 47 45.48					40	2.5	53.1	303	74	9.39	9.35	0.03	
. 14	BMT	EPD	15 47 48.03					62	3.0	69.0	79	74	11.94	12.01	0.10	
. 14	SVP	EPD	15 47 48.65					51	2.6	70.5	330	74	12.56	12.35	0.10	
. 14	YMT1	IPU4	15 47 50.05					42	2.7	85.5	114	74	13.96	14.48	-0.65	
. 14	YMT5	EPU1	15 47 51.23					58	3.0	89.8	109	74	15.14	15.23	-0.09	
. 14	YMT4	EPD	15 47 51.86					58	3.0	91.3	111	74	15.77	15.44	0.21	
. 14	EPN	IPU4	15 48 4.45					29	2.4	96.4	87	74	28.36	16.49	11.81	
. 14	SSP	IPU	15 47 54.25					28	2.4	109.1	104	74	18.16	18.50	-0.27	
.	IS	4	15 48 9.85										33.76	31.50	2.25	
. 14	GWV	EPU	15 47 57.35					27	2.4	126.7	149	74	21.26	21.26	0.07	
. 14	MCY	EPD	15 47 59.65					32	2.6	140.3	113	74	23.56	23.42	0.22	

.....  
 JUL H = 17 8 49.41 UTC RMS = 0.08 NO = 10 FREE DEPTH SOLUTION  
 14 LAT = 37.159 N ERX = 0.3 ERH = 0.4 AVFM = 2.6 Q = C  
 LONG = 117.405 W ERY = 0.3 GAP = 111 AVXM = WS = C MT. JACKSON  
 DEPTH = 4.21 KM ERZ = 5.8 NM = WD = C

. 14	GVN	EPU	17 8 52.99					52	2.6	18.3	162	97	3.58	3.48	0.04	
. 14	GMN	EPD	17 8 53.30					41	2.4	20.3	39	96	3.89	4.06	-0.03	
. 14	LCH	EPU	17 8 53.71					36	2.3	23.1	291	95	4.30	4.37	0.01	
. 14	MGM	EPU	17 8 55.38					35	2.3	32.3	345	93	5.97	6.00	0.05	
. 14	SGV	EPU	17 8 56.18					58	2.8	38.6	121	92	6.77	6.90	-0.05	
. 14	TMO	EPD	17 8 56.19					52	2.7	39.3	180	92	6.78	7.15	-0.07	
. 14	PPK	EPU	17 8 58.72					32	2.3	53.5	304	92	9.31	9.39	-0.09	
. 14	MCA	EPU	17 8 59.29					41	2.6	57.8	169	91	9.88	9.77	0.03	
. 14	BMT	EPD	17 9 1.19					53	2.8	68.8	78	91	11.78	11.96	-0.01	
. 14	SPRG	EPU	17 9 14.65					33	2.7	151.3	110	90	25.24	24.90	0.36	

.....  
 JUL H = 1 41 4.21 UTC RMS = 0.08 NO = 16 FREE DEPTH SOLUTION  
 15 LAT = 36.533 N ERX = 0.2 ERH = 0.3 AVFM = 3.0 Q = B  
 LONG = 116.606 W ERY = 0.2 GAP = 121 AVXM = WS = A CHLORIDE CLIFF  
 DEPTH = 14.59 KM ERZ = 1.3 NM = WD = B

. 15	AMR	IPU	1 41 8.45					70	2.9	19.1	142	126	4.24	4.23	0.00	
. 15	SDH	IPU	1 41 9.60					58	2.8	27.0	63	117	5.39	5.40	0.03	
. 15	YMT3	EPU	1 41 10.50					100	3.2	33.1	32	113	6.29	6.30	0.04	
. 15	YMT1	IPD	1 41 11.15					120	3.4	36.2	11	111	6.94	6.79	0.02	
. 15	LSM	IPU	1 41 11.25					64	2.9	37.6	52	110	7.04	7.00	0.02	
. 15	GWV	IP	1 41 11.40					66	2.9	38.9	189	109	7.19	7.28	-0.01	
. 15	YMT4	IPD	1 41 11.34					74	3.0	39.4	21	109	7.13	7.30	-0.29	
. 15	YMT5	IPU	1 41 12.10					94	3.2	42.7	19	108	7.89	7.84	0.05	
. 15	JUN	IP	1 41 12.55					62	2.9	46.2	103	106	8.34	8.29	0.04	
. 15	LUP	IPU	1 41 13.75					67	3.0	53.0	48	104	9.54	9.50	0.11	

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JUL 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	UJST (KM)	AZI (DEG)	AIN (DEG)	T0BS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 15	MCY	IPU	1 41 14.55					87 3.2	59.4	76	102	10.34	10.43	-0.01	
. 15	SGV	EPD	1 41 15.10					92 3.3	62.6	323	102	10.89	11.00	-0.03	
. 15	CPX	IPU	1 41 15.70					52 2.8	66.1	48	101	11.49	11.50	0.02	
. 15	SPRG	EPD	1 41 16.75					73 3.1	73.5	76	100	12.54	12.67	-0.11	
. 15	BMT	EPD	1 41 18.75					68 3.1	83.3	358	99	14.54	14.45	0.25	
. 15	APK	EPD4	1 41 20.05					50 2.9	95.5	104	98	15.84	16.52	-0.41	
. 15	LCH	IPD	1 41 24.60					38 2.7	121.1	310	96	20.39	20.40	0.07	

JUL H = 2 23 31.11 UTC RMS = 0.10 NO = 12 FREE DEPTH SOLUTION  
 . 15 LAT = 36.523 N ERX = 1.3 ERH = 2.7 AVFM = 2.6 Q = D  
 . LONG = 116.598 W ERY = 2.4 GAP = 234 AVXM = WS = C  
 . DEPTH = 2.12 KM ERZ = 5.5 NM = WD = D

. 15	FMT	IPU	2 23 34.75					38 2.4	20.7	309	93	3.64	3.92	-0.04	
. 15	WCT	EPD	2 23 36.35					53 2.7	30.0	355	74	5.24	5.42	-0.02	
. 15	YMT2	IPU	2 23 36.90					41 2.5	30.8	19	74	5.79	5.58	0.13	
. 15	YMT3	IPD	2 23 37.25					61 2.8	33.7	30	74	6.14	6.05	0.14	
. 15	YMT4	IPD	2 23 38.10					52 2.7	40.2	19	74	6.99	7.15	-0.27	
. 15	YMT6	IPD	2 23 38.40					58 2.8	41.0	25	74	7.29	7.26	-0.06	
. 15	CDH1	EPD	2 23 38.95					65 2.9	45.0	34	74	7.84	7.96	-0.02	
. 15	CDH5	EPD	2 23 38.90					66 2.9	45.0	34	74	7.79	7.89	0.00	
. 15	BGB	IPD	2 23 42.60					39 2.5	66.0	30	74	11.49	11.43	0.14	
. 15	CPX	EPD	2 23 42.35					28 2.3	66.3	47	74	11.24	11.39	-0.12	
. 15	SPRG	EPD	2 23 43.65					42 2.6	73.1	75	74	12.54	12.48	0.09	
. 15	BMT	EPD	2 23 45.55					50 2.8	84.5	357	74	14.44	14.53	0.08	
. 15	GLR	EPD4	2 23 47.05					30 2.4	91.1	35	74	15.94	15.46	0.55	

JUL H = 4 37 16.00 UTC RMS = 0.06 NO = 22 FREE DEPTH SOLUTION  
 . 15 LAT = 36.532 N ERX = 0.2 ERH = 0.2 AVFM = 2.7 Q = B  
 . LONG = 116.607 W ERY = 0.1 GAP = 119 AVXM = WS = A  
 . DEPTH = 11.23 KM ERZ = 0.8 NM = WD = B

. 15	AMR	IPD	4 37 20.00					50 2.6	19.1	141	119	4.00	3.93	0.06	
. 15	FMT	IPU	4 37 19.79					35 2.3	19.4	308	119	3.79	4.05	-0.01	
. 15	SDH	IPU	4 37 21.15					40 2.4	27.2	62	111	5.15	5.19	0.00	
. 15	WCT	EPD	4 37 21.20					53 2.7	28.9	357	110	5.20	5.45	-0.08	
. 15	YMT3	IPD	4 37 22.15					62 2.8	33.3	32	107	6.15	6.14	0.07	
. 15	YMT1	IPD	4 37 22.75					83 3.1	36.3	11	105	6.75	6.64	-0.01	
. 15	LSM	IPU	4 37 22.90					38 2.4	37.8	52	105	6.90	6.86	0.03	
. 15	GWV	IPU	4 37 23.00					35 2.4	38.8	168	104	7.00	7.10	-0.02	
. 15	YMT4	IPD	4 37 23.05					49 2.6	39.6	21	104	7.05	7.17	-0.22	
. 15	YMT6	IPD	4 37 23.25					47 2.6	40.5	27	104	7.25	7.29	-0.13	
. 15	YMT5	IPU	4 37 23.70					60 2.8	42.9	19	103	7.70	7.71	-0.01	
. 15	CDH5	IPD	4 37 23.80					63 2.9	44.7	35	102	7.80	7.93	-0.03	
. 15	CDH1	IPD	4 37 23.95					56 2.8	44.7	35	102	7.95	8.00	0.05	
. 15	JON	IPU	4 37 24.20					51 2.7	46.3	103	102	8.20	8.17	0.03	
. 15	LDP	IPU	4 37 25.30					50 2.7	53.1	48	100	9.30	9.41	-0.03	
. 15	MCY	IPU	4 37 26.20					59 2.9	59.5	76	99	10.20	10.35	-0.06	
. 15	SGV	EPD	4 37 26.85					62 2.9	62.6	323	99	10.85	10.91	0.03	
. 15	BGB	EPD	4 37 27.25					38 2.5	65.5	31	98	11.25	11.41	-0.08	
. 15	CPX	EPD	4 37 27.35					32 2.4	66.2	48	98	11.35	11.43	-0.04	
. 15	SPRG	EPD	4 37 28.60					40 2.6	73.6	76	97	12.60	12.61	0.02	
. 15	BMT	EPD	4 37 30.45					58 2.9	83.4	358	96	14.45	14.40	0.23	
. 15	GLR	EPD	4 37 31.65					30 2.4	90.8	35	96	15.65	15.43	0.30	
. 15	SHRG	EPD4	4 37 37.90					28 2.5	130.1	91	94	21.90	21.85	0.64	

JUL H = 5 12 31.01 UTC RMS = 0.09 NO = 12 FREE DEPTH SOLUTION  
 . 15 LAT = 36.536 N ERX = 0.4 ERH = 0.5 AVFM = 1.9 Q = C  
 . LONG = 116.611 W ERY = 0.3 GAP = 120 AVXM = WS = B  
 . DEPTH = 8.33 KM ERZ = 2.5 NM = WD = C

. 15	FMT	IPU	5 12 34.50					14 1.5	18.9	307	112	3.49	3.76	-0.03	
. 15	AMR	IPD	5 12 34.85					15 1.6	19.7	141	110	3.84	3.82	0.01	
. 15	SDH	EPD	5 12 36.05					11 1.3	27.3	64	104	5.04	5.07	0.01	
. 15	WCT	EPD	5 12 36.30					22 1.9	28.4	357	104	5.29	5.24	0.21	

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JUL 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DI31 (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 15	YMT1	IPD	5 12 37.65					41 2.5	36.0	12	101	6.64	6.47	0.04	
. 15	GNV	EPD	5 12 38.00					18 1.8	39.2	188	100	6.99	7.06	0.01	
. 15	YMT6	IPD	5 12 38.15					24 2.0	40.3	27	99	7.14	7.16	-0.11	
. 15	CDH1	IPD	5 12 38.80					28 2.2	44.5	36	98	7.79	7.89	0.00	
. 15	CDH5	IPD	5 12 38.95					29 2.2	44.5	36	98	7.94	7.82	0.22	
. 15	JON	EPD	5 12 39.20					13 1.5	46.8	103	98	8.19	8.16	0.03	
. 15	SSP	IPD	5 12 40.85					18 1.8	55.6	39	96	9.84	9.82	0.10	
. 15	MCY	EPD	5 12 41.05					27 2.2	59.7	77	96	10.04	10.33	-0.20	
. 15	BGB	IPD4	5 12 38.75					28 2.3	65.3	32	95	7.74	11.33	-3.50	

JUL H = 15 11 34.17 UTC RMS = 0.01 NO = 4 FREE DEPTH SOLUTION  
 . 16 LAT = 37.403 N ERX = ERH = 1.0 AVFM = 2.2 Q = C  
 . LONG = 117.702 W ERY = GAP = 159 AVXM = Q5 = A MAGRUDER MOUNTAIN  
 . DEPTH = 8.37 KM ERZ = NM = QD = D

. 16	PPK	EPU	15 11 38.04					18 1.7	18.3	278	113	3.87	3.86	0.00	
. 16	MGM	IPD	15 11 38.05					41 2.4	18.7	77	113	3.88	3.97	-0.01	
. 16	LCH	EPD4	15 11 36.80					42 2.4	19.3	165	111	2.63	3.93	-1.22	
. 16	GMN	EPU	15 11 41.50					22 2.0	40.8	106	99	7.33	7.46	0.01	
. 16	SGV	EPU	15 11 47.05					26 2.2	75.7	128	95	12.88	12.97	-0.01	
. 16	BMT	EPD4	15 11 50.75					30 2.4	94.6	98	94	16.58	16.17	0.58	
. 16	EPN	EPU4	15 11 56.11					30 2.5	124.0	100	93	21.94	20.97	0.91	

JUL H = 15 15 3.94 UTC RMS = 0.09 NO = 8 FREE DEPTH SOLUTION  
 . 16 LAT = 37.079 N ERX = 0.9 ERH = 1.0 AVFM = 3.4 Q = D  
 . LONG = 116.033 W ERY = 0.6 GAP = 232 AVXM = Q5 = C SILENT CANYON - YUCCA FLAT  
 . DEPTH = 0.51 KM ERZ = 13.2 NM = QD = D

. 16	CPX	EPD	15 15 7.23					120 3.3	16.6	187	40	3.29	3.37	-0.06	
. 16	SSP	IPD	15 15 8.40					139 3.5	23.7	224	40	4.46	4.74	-0.20	
. 16	LDP	IPD	15 15 9.20					118 3.4	27.6	206	40	5.26	5.32	0.01	
. 16	EPN	EPD	15 15 9.80					139 3.5	29.9	300	40	5.86	5.83	-0.03	
. 16	YMT5	IPD	15 15 11.75					120 3.4	42.5	242	38	7.81	7.69	0.12	
. 16	LSM	EPU	15 15 11.85					100 3.3	43.2	210	38	7.91	7.76	0.12	
. 16	MCY	IPD	15 15 12.20					100 3.3	46.7	172	38	8.26	8.36	-0.02	
. 16	YMT1	IPU	15 15 13.05					137 3.6	50.7	240	38	9.11	8.99	-0.01	
. 16	JON	EPD3	15 15 16.65					83 3.2	71.2	185	38	12.71	12.26	0.44	
. 16	SGV	EPD4	15 15 20.01					120 3.6	89.6	263	38	16.07	15.40	0.76	

JUL H = 21 22 7.84 UTC RMS = 0.22 NO = 8 FREE DEPTH SOLUTION  
 . 18 LAT = 35.794 N ERX = 7.1 ERH = 10.1 AVFM = 2.9 Q = D  
 . LONG = 117.931 W ERY = 7.2 GAP = 290 AVXM = Q5 = D LITTLE LAKE  
 . DEPTH = 4.77 KM ERZ = 13.3 NM = QD = D

. 18	QSM	EPD	21 22 24.12					40 2.7	97.8	79	90	16.28	16.21	-0.02	
. 18	PGE	IPD	21 22 24.51					35 2.6	99.3	52	90	16.67	16.45	0.44	
. 18	GNV	EPU0	21 22 27.65					53 3.0	121.7	69	90	19.81	20.10	-0.21	
. 18	GVN	IPU	21 22 31.55					39 2.8	144.0	22	90	23.71	23.72	-0.07	
. 18	AMR	EPU	21 22 32.30					56 3.1	147.3	63	90	24.46	24.26	0.19	
. 18	SGV	IPU0	21 22 32.90					59 3.2	154.4	31	90	25.06	25.42	-0.27	
. 18	LCH	EPD	21 22 34.40					36 2.8	161.9	9	90	26.56	26.63	0.01	
. 18	YMT2	EPU4	21 22 36.70					7 1.4	170.3	50	52	28.86	27.64	1.15	
. 18	SDH	EPD4	21 22 36.90					39 2.9	171.6	57	52	29.06	27.80	1.30	
. 18	YMT1	EPU4	21 22 36.60					94 3.7	172.3	47	52	28.76	27.92	0.71	
. 18	YMT3	EPD4	21 22 37.45					69 3.4	175.5	51	52	29.61	28.29	1.37	
. 18	JON	EPU4	21 22 37.75					46 3.1	179.6	66	52	29.91	28.79	1.11	
. 18	LSM	IPU4	21 22 38.35					33 2.8	182.2	55	52	30.51	29.18	1.31	
. 18	LUP	EPU4	21 22 40.90					49 3.2	197.3	53	52	33.06	31.24	1.90	
. 18	SPRG	EPU	21 22 41.30					53 3.3	215.4	62	52	33.46	33.45	0.04	

## 1981 SGB LOCAL-EVENT DATA REPORT

JUL 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
JUL H = 15			36 30.65 UTC	RMS =	0.08	NO =	11	FREE DEPTH SOLUTION							
21 LAT =			36.724 N	ERX =	0.3	ERH =	0.4	AVFM =	2.0	W = B					
LONG =			116.062 W	ERY =	0.4	GAP =	123	AVXM =		WS = A		LATHROP WELLS			
DEPTH =			1.65 KM	ERZ =	1.4	NM =				WD = C					
.....															
21	MCY	EPU	15 36 32.95					39	2.4	11.3	128	94	2.30	2.38	0.00
21	LUP	IPD	15 36 34.15					21	1.8	17.2	327	92	3.50	3.47	0.11
21	LSM	IPU	15 36 34.15					26	2.0	18.9	275	92	3.50	3.64	-0.16
21	SPRG	EP	15 36 34.95					18	1.7	22.8	98	92	4.30	4.32	0.01
21	CPX	EP	15 36 34.95					13	1.4	22.9	2	92	4.30	4.34	-0.01
21	SDH	EP	15 36 35.50					17	1.7	26.2	251	74	4.85	4.84	0.05
21	SSP	EPD	15 36 35.60					25	2.0	26.3	328	74	4.95	5.07	-0.04
21	CDH5	EP	15 36 35.55					27	2.1	27.4	304	74	4.90	5.03	-0.04
21	CDH1	EP 4	15 36 35.70					28	2.1	27.4	304	74	5.05	5.10	0.04
21	YMT3	EP	15 36 36.55					38	2.4	31.9	283	74	5.90	5.78	0.17
21	YMT6	EP	15 36 37.15					27	2.1	34.0	296	74	6.50	6.14	0.27
21	BGB	EPU4	15 36 36.55					15	1.6	37.8	337	74	5.90	6.87	-0.89
21	YMT2	EP 4	15 36 37.95					11	1.3	38.3	280	74	7.30	6.81	0.41
21	YMT5	EP 4	15 36 38.25					32	2.3	40.0	299	74	7.60	7.15	0.45
21	YMT1	EPU	15 36 38.85					36	2.4	44.0	289	74	8.20	7.77	0.30
.....															
JUL H = 2			31 20.01 UTC	RMS =	0.03	NO =	6	FREE DEPTH SOLUTION							
22 LAT =			37.227 N	ERX =	0.3	ERH =	0.3	AVFM =	1.5	W = B					
LONG =			115.865 W	ERY =	0.2	GAP =	153	AVXM =		WS = A		GROOM LAKE			
DEPTH =			2.26 KM	ERZ =	0.8	NM =				WD = C					
.....															
22	GLR	IPU	2 31 22.80					10	1.2	13.9	257	96	2.79	2.86	-0.01
22	GMR	IPX	2 31 22.90					10	1.2	14.5	35	96	2.89	2.98	0.00
22	BLT	IPU	2 31 26.49					12	1.4	36.4	321	74	6.48	6.63	-0.02
22	BGB	EP	2 31 26.40					10	1.3	38.5	237	74	6.39	6.95	-0.49
22	EPN	IPU	2 31 27.59					13	1.5	40.8	268	74	7.58	7.44	0.08
22	CDH1	EP 4	2 31 29.15					20	1.9	57.3	225	74	9.14	9.94	-0.70
22	CDH5	EP 4	2 31 29.20					22	2.0	57.3	225	74	9.19	9.87	-0.58
22	YMT6	EPU	2 31 31.00					15	1.7	63.1	230	74	10.99	10.84	0.06
22	MCY	EPD	2 31 30.82					7	1.0	63.4	186	74	10.81	10.91	-0.02
.....															
JUL H = 4			7 59.79 UTC	RMS =	0.10	NO =	15	FREE DEPTH SOLUTION							
22 LAT =			37.192 N	ERX =	0.2	ERH =	0.3	AVFM =	2.8	W = C					
LONG =			116.985 W	ERY =	0.2	GAP =	88	AVXM =		WS = C		THIRSTY CANYON			
DEPTH =			3.19 KM	ERZ =	87.0	NM =				WD = C					
.....															
22	SGV	IPX	4 8 3.80					90	3.1	23.7	190	90	4.01	4.16	-0.06
22	GMN	IPX	4 8 4.40					59	2.8	27.2	296	90	4.61	4.73	0.03
22	BMT	EP	4 8 5.40					70	2.9	31.8	71	90	5.61	5.47	0.31
22	YMT1	EPD	4 8 9.15					106	3.4	55.3	133	90	9.36	9.29	-0.06
22	CTS	IPD	4 8 9.15					39	2.5	56.5	24	90	9.36	9.48	0.05
22	LCH	EP	4 8 9.65					41	2.6	59.0	275	90	9.86	9.90	0.04
22	YMT2	EPU	4 8 10.40					36	2.5	63.4	135	90	10.61	10.61	-0.08
22	YMT3	EP	4 8 11.00					91	3.3	68.0	131	90	11.21	11.36	-0.10
22	LSM	EPU	4 8 13.10					50	2.8	80.8	128	90	13.31	13.44	-0.15
22	LUP	IPU	4 8 13.50					55	2.9	81.8	117	90	13.71	13.60	0.19
22	SDH	EPU4	4 8 12.50					48	2.8	83.6	136	90	12.71	13.90	-1.15
22	CPX	EP	4 8 14.40					37	2.6	87.6	109	90	14.61	14.54	0.10
22	AMR	EPU	4 8 16.05					37	2.6	99.2	153	90	16.26	16.43	-0.18
22	MCY	IPU	4 8 17.65					67	3.2	108.5	123	90	17.86	17.94	0.00
22	JON	EP	4 8 18.45					45	2.8	114.7	137	90	18.66	18.95	-0.30
22	SPRG	EPU	4 8 19.25					45	2.9	118.4	118	90	19.46	19.56	-0.07
.....															
JUL H = 12			2 27.66 UTC	RMS =	0.22	NO =	16	FREE DEPTH SOLUTION							
24 LAT =			37.352 N	ERX =	0.6	ERH =	0.7	AVFM =	3.5	W = C					
LONG =			117.704 W	ERY =	0.4	GAP =	136	AVXM =		WS = B		MAGRUDER MOUNTAIN			
DEPTH =			1.94 KM	ERZ =	2.2	NM =				WD = C					
.....															
24	LCH	IPX	12 2 30.05					93	3.1	13.9	159	95	2.39	2.86	-0.39

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JUL 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 24	PPK	IPU	12 2 31.58					120 3.4	19.8	295	93	3.92	3.93	-0.02	
. 24	MGM	IPD	12 2 31.67					120 3.4	20.9	62	93	4.01	4.17	-0.07	
. 24	MZP	IPD	12 2 36.08					125 3.5	48.0	36	74	8.42	8.65	0.01	
. 24	GVN	IPU	12 2 36.79					120 3.5	50.4	140	74	9.15	8.73	0.34	
. 24	TMO	IPD4	12 2 38.87					80 3.2	66.1	157	74	11.21	11.56	-0.04	
. 24	SGV	IPX	12 2 40.03					130 3.6	72.4	125	74	12.37	12.46	0.01	
. 24	TNP	IPD	12 2 43.54					90 3.4	91.7	28	74	15.88	15.66	-0.05	
. 24	CTS	IPU	12 2 43.70					80 3.3	92.9	69	74	16.04	15.85	0.36	
. 24	BMT	IPX	12 2 44.15					100 3.5	94.2	95	74	16.49	16.12	0.55	
. 24	YMT5	IPX	12 2 48.25					140 3.8	122.0	114	74	20.59	20.48	0.12	
. 24	YMT4	IPX	12 2 48.85					100 3.6	123.8	116	74	21.19	20.74	0.34	
. 24	YMT6	IPD	12 2 49.28					105 3.6	127.9	115	74	21.62	21.38	0.15	
. 24	YMT3	EP	12 2 49.55					150 3.9	130.9	119	74	21.89	21.86	0.08	
. 24	CPX	IPX	12 2 53.40					70 3.4	153.9	108	74	25.74	25.64	0.13	
. 24	CPX	IPX	12 2 53.40					70 3.4	153.9	108	74	25.74	25.64	0.13	
. 24	SPRG	IPX4	12 2 57.65					66 3.4	183.8	113	49	29.99	29.70	0.33	
. 24	SPRG	IPX	12 2 57.65					66 3.4	183.8	113	49	29.99	29.70	0.33	

JUL H = 20 47 58.77 UTC RMS = 0.10 NO = 10 FREE DEPTH SOLUTION  
. 24 LAT = 36.712 N ERX = 0.6 ERH = 0.8 AVFM = 2.0 Q = C  
LONG = 116.067 W ERY = 0.6 GAP = 124 AVXM = Q = C  
DEPTH = 0.18 KM ERZ = 24.1 NM = QD = C LATHROP WELLS

. 24	MCY	IPU	20 48 1.02					30 2.1	10.9	121	40	2.25	2.47	-0.14	
. 24	LOP	IPU	20 48 2.51					25 2.0	18.2	330	40	3.74	3.79	0.03	
. 24	LSM	IPU	20 48 2.21					21 1.8	18.7	280	40	3.44	3.76	-0.34	
. 24	SPRG	EPU	20 48 3.35					20 1.8	23.1	95	40	4.58	4.53	0.08	
. 24	CPX	EPU4	20 48 5.32					23 1.9	24.2	3	40	6.55	4.73	1.84	
. 24	SDH	IPU	20 48 3.59					16 1.6	25.3	253	40	4.82	4.87	-0.01	
. 24	CDH1	EP 4	20 48 3.55					25 2.0	27.8	306	40	4.78	5.35	-0.47	
. 24	CDH5	EP 4	20 48 3.65					26 2.1	27.8	306	40	4.88	5.29	-0.31	
. 24	JON	IPD	20 48 4.55					15 1.6	30.3	186	38	5.78	5.69	0.08	
. 24	YMT3	EP	20 48 4.65					37 2.4	31.9	285	38	5.88	5.96	-0.04	
. 24	YMT6	EP	20 48 5.00					26 2.1	34.2	298	38	6.23	6.37	-0.23	
. 24	YMT2	EPU4	20 48 6.52					18 1.8	38.1	282	38	7.75	6.99	0.68	
. 24	YMT4	EP	20 48 5.75					24 2.0	38.3	297	38	6.98	7.06	-0.19	
. 24	BGB	EP 4	20 48 6.70					14 1.6	38.9	338	38	7.93	7.25	0.76	
. 24	YMT5	EP	20 48 6.25					40 2.5	40.3	301	38	7.48	7.40	0.08	

JUL H = 10 45 30.89 UTC RMS = 0.11 NO = 9 FREE DEPTH SOLUTION  
. 27 LAT = 36.705 N ERX = 2.2 ERH = 2.3 AVFM = 1.6 Q = D  
LONG = 115.851 W ERY = 0.6 GAP = 271 AVXM = Q = C  
DEPTH = 0.74 KM ERZ = 20.7 NM = QD = D MERCURY

. 27	MCY	IPU	10 45 33.05					28 2.1	11.0	244	40	2.16	2.38	-0.14	
. 27	LOP	EP	10 45 36.90					18 1.8	32.7	300	38	6.01	6.13	-0.03	
. 27	JON	EP	10 45 37.60					10 1.3	37.1	217	38	6.71	6.67	0.03	
. 27	LSM	EP	10 45 37.75					12 1.4	37.9	276	38	6.86	6.85	-0.01	
. 27	SSP	EP	10 45 38.45					14 1.6	40.9	307	38	7.56	7.53	0.12	
. 27	SDH	EP	10 45 38.85					9 1.2	44.0	261	38	7.96	7.83	0.17	
. 27	CDH5	IPX2	10 45 38.85					20 1.9	45.1	292	38	7.96	8.00	0.06	
. 27	CDH1	IPX	10 45 38.85					19 1.8	45.1	292	38	7.96	8.07	0.00	
. 27	YMT6	EP	10 45 40.00					12 1.5	52.2	289	38	9.11	9.19	-0.16	

JUL H = 20 20 31.86 UTC RMS = 0.16 NO = 16 FREE DEPTH SOLUTION  
. 27 LAT = 36.428 N ERX = 0.5 ERH = 1.9 AVFM = 2.4 Q = C  
LONG = 115.529 W ERY = 1.9 GAP = 123 AVXM = Q = C  
DEPTH = 1.63 KM ERZ = 8.0 NM = QD = C CHARLESTON PEAK

. 27	APK	IPX	20 20 34.50					34 2.2	12.7	199	94	2.64	2.90	0.01	
. 27	SHRG	EP	20 20 37.60					23 2.0	34.5	76	74	5.74	6.32	0.01	
. 27	SPRG	EP	20 20 38.45					31 2.2	38.7	320	74	6.59	6.92	-0.30	
. 27	MCY	IPX	20 20 39.65					53 2.7	46.7	304	74	7.79	8.23	-0.35	
. 27	JON	EP	20 20 40.70					25 2.1	51.5	271	74	8.84	8.94	-0.11	
. 27	LOP	IP	20 20 44.50					30 2.3	74.2	310	74	12.64	12.78	-0.06	

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JUL 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOHS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
27	LSM	EP	20 20 44.15					25 2.2	75.0	297	74	12.29	12.81	-0.53	
27	SDH	EP	20 20 44.95					20 2.0	76.4	288	74	13.09	13.02	0.12	
27	SSP	EP	20 20 46.20					30 2.4	82.7	312	74	14.34	14.24	0.18	
27	CDHS	EP	20 20 46.20					39 2.6	85.3	304	74	14.34	14.46	-0.02	
27	CDH1	EP	20 20 46.35					39 2.6	85.3	304	74	14.49	14.53	0.06	
27	YMT3	EP	20 20 47.05					37 2.6	88.4	297	74	15.19	14.97	0.28	
27	YMT6	EP	20 20 47.40					37 2.6	91.8	301	74	15.54	15.53	-0.08	
27	BGB	EP	20 20 48.05					22 2.1	92.1	317	74	16.19	15.70	0.58	
27	GLR	EP	20 20 48.15					19 2.0	96.1	333	74	16.29	16.29	0.08	
27	YMT5	EP	20 20 48.60					40 2.7	97.8	302	74	16.74	16.55	0.19	
27	YMT1	EP 4	20 20 49.65					51 2.9	101.1	298	74	17.79	17.06	0.61	
27	GMR	EP 4	20 20 49.80					39 2.7	102.8	348	74	17.94	17.41	0.63	
27	FMT	EP 4	20 20 51.85					19 2.1	114.4	282	74	19.99	19.19	1.04	
27	BMT	EP 4	20 20 56.00					28 2.5	137.6	314	74	24.14	23.19	1.12	

JUL H = 0 3 55.71 UTC RMS = 0.09 NO = 9 FREE DEPTH SOLUTION  
 28 LAT = 37.668 N ERX = 0.6 ERH = 2.0 AVFM = 1.8 Q = D  
 LONG = 116.288 W ERY = 1.9 GAP = 268 AVXM = Q = C  
 DEPTH = 13.96 KM ERZ = 6.2 NM = QD = D

28	EPN	IP	0 4 4.93					23 2.0	50.4	184	104	9.22	9.20	-0.04	
28	BMT	EP	0 4 5.15					19 1.9	53.1	217	104	9.44	9.60	0.01	
28	GLR	EP 4	0 4 8.35					10 1.3	57.2	155	102	12.64	10.10	2.61	
28	GMR	EP	0 4 6.00					6 0.9	58.9	129	102	10.29	10.39	0.00	
28	BGB	EP	0 4 7.90					10 1.4	70.1	176	100	12.19	12.21	0.06	
28	SSP	EP	0 4 10.15					13 1.6	82.6	176	98	14.44	14.30	0.22	
28	YMT5	IP 4	0 4 9.75					22 2.1	86.6	190	98	14.04	14.80	-0.75	
28	CDH1	IP	0 4 10.45					21 2.1	89.6	182	98	14.74	15.28	-0.44	
28	CDHS	IP	0 4 10.65					22 2.1	89.6	182	98	14.94	15.21	-0.17	
28	YMT6	IP 4	0 4 10.40					15 1.8	90.4	187	98	14.69	15.36	-0.75	
28	LQP	EP	0 4 11.20					15 1.8	90.9	173	98	15.49	15.55	0.02	
28	YMT1	EP 4	0 4 10.75					31 2.4	92.8	193	97	15.04	15.76	-0.84	
28	SGV	EP	0 4 12.65					16 1.9	100.8	221	97	16.94	17.12	-0.08	
28	MCY	EP 4	0 4 17.15					19 2.1	115.3	165	96	21.44	19.41	2.11	

JUL H = 7 49 9.62 UTC RMS = 0.09 NO = 9 FREE DEPTH SOLUTION  
 28 LAT = 36.637 N ERX = 0.6 ERH = 0.8 AVFM = 1.6 Q = B  
 LONG = 115.950 W ERY = 0.5 GAP = 149 AVXM = Q = A  
 DEPTH = 8.29 KM ERZ = 1.2 NM = QD = C

28	MCY	IP	7 49 11.40					29 2.1	3.0	339	161	1.78	1.88	-0.02	
28	SPRG	IP	7 49 12.60					15 1.5	14.1	63	119	2.98	3.10	-0.09	
28	JUN	EP	7 49 14.50					9 1.1	25.8	212	105	4.88	4.81	0.07	
28	LQP	IPU	7 49 15.30					17 1.7	31.0	321	103	5.68	5.79	-0.03	
28	LSM	IPU	7 49 15.25					13 1.5	31.0	292	102	5.63	5.68	-0.07	
28	SDH	IPU	7 49 15.80					12 1.4	34.7	272	101	6.18	6.25	-0.03	
28	SSP	EP	7 49 16.95					15 1.6	40.0	323	99	7.33	7.30	0.11	
28	YMT3	EP	7 49 17.30					17 1.7	44.5	292	98	7.68	7.81	-0.08	
28	APK	EP 4	7 49 18.00					12 1.5	48.7	136	98	8.38	8.83	-0.18	
28	YMT5	EP	7 49 19.25					18 1.8	53.5	303	97	9.63	9.34	0.29	

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AUG 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	ICAL (SEC)	RES (SEC)	REMARKS
.....															
AUG H = 4 26 40.52 UTC			RMS =	0.10	NO =	17	FREE DEPTH SOLUTION								
01 LAT = 36.707 N			ERX =	0.3	ERH =	0.4	AVFM =	1.8	Q =	A					
LONG = 116.282 W			ERY =	0.3	GAP =	78	AVXM =		QS =	A	LATHROP WELLS				
DEPTH = 6.66 KM			ERZ =	0.8	NM =		WD = A								
.....															
01	LSM	IPU	4 26 42.25					19	1.7	3.7	13	151	1.73	1.66	0.05
01	SDH	IP	4 26 42.45					16	1.6	8.5	216	127	1.93	2.15	-0.19
01	YMT3	IPD	4 26 43.55					30	2.1	14.6	308	112	3.03	3.02	0.06
01	LUP	IPD	4 26 44.35					22	1.9	19.3	32	100	3.83	3.88	0.03
01	YMT2	IPU	4 26 44.55					18	1.7	20.0	296	105	4.03	3.87	0.08
01	YMT6	ID	4 26 44.40					28	2.1	20.0	527	105	3.88	3.89	-0.10
01	YMT4	IP	4 26 44.85					19	1.8	23.2	319	103	4.33	4.41	-0.19
01	SSP	EPU	4 26 45.25					24	2.0	24.8	13	102	4.73	4.83	-0.03
01	YMT5	IP	4 26 45.45					29	2.1	26.2	324	101	4.93	4.91	0.02
01	YMT1	IPD	4 26 45.75					48	2.6	27.3	506	100	5.23	5.05	0.05
01	MCY	IP	4 26 46.00					28	2.1	29.0	100	100	5.48	5.34	0.21
01	CPX	EP	4 26 46.35					7	0.9	32.0	39	99	5.83	5.81	0.04
01	JUN	EP	4 26 46.45					14	1.5	33.7	152	98	5.93	6.02	-0.10
01	BGB	EP	4 26 47.15					13	1.5	37.0	8	97	6.63	6.72	-0.01
01	BGB	EP	4 26 47.15					13	1.5	37.0	8	97	6.63	6.72	-0.01
01	SPRG	EPU	4 26 47.95					15	1.6	42.3	92	96	7.43	7.46	-0.01
01	FMT	EP 4	4 26 47.15					13	1.5	45.0	260	96	6.63	7.87	-1.00
01	SGV	EPU	4 26 53.20					24	2.1	73.6	294	93	12.68	12.60	0.16
.....															
AUG H = 12 37 35.01 UTC			RMS =	0.12	NO =	13	FREE DEPTH SOLUTION								
02 LAT = 37.077 N			ERX =	0.5	ERH =	0.5	AVFM =	1.7	Q =	C					
LONG = 115.905 W			ERY =	0.3	GAP =	146	AVXM =		QS =	B	GROOM LAKE				
DEPTH = 2.26 KM			ERZ =	2.3	NM =		WD = C								
.....															
02	GLR	IPU	12 37 38.30					12	1.3	16.9	323	95	3.29	3.37	-0.01
02	CPX	EP	12 37 38.85					13	1.4	21.1	219	74	3.84	4.04	-0.17
02	BGB	IP	12 37 40.25					14	1.5	29.0	261	74	5.24	5.42	-0.10
02	GMR	IP	12 37 40.60							30.9	23	74	5.59	5.68	0.00
02	SSP	EP	12 37 40.85					19	1.8	32.6	239	74	5.84	6.07	-0.16
02	SSP	EP	12 37 40.85					19	1.8	32.6	239	74	5.84	6.07	-0.16
02	LUP	IP	12 37 41.35					17	1.7	34.0	223	74	6.34	6.22	0.19
02	EPN	EP	12 37 42.30					14	1.6	40.2	292	74	7.29	7.36	-0.13
02	SPRG	EPU	12 37 42.65					15	1.6	43.3	169	74	7.04	7.64	0.02
02	CDH1	EP	12 37 42.30					18	1.8	43.9	237	74	7.29	7.77	-0.38
02	MCY	IPD	12 37 43.15					22	2.0	46.4	186	74	8.14	8.14	0.07
02	LSM	EP 4	12 37 44.20					12	1.5	49.8	221	74	9.19	8.66	0.50
02	YMT5	IPD	12 37 44.55					22	2.0	52.8	248	74	9.54	9.20	0.33
02	YMT4	EPU4	12 37 51.00					11	1.4	54.0	244	74	15.99	9.38	6.50
02	YMT3	IP 4	12 37 45.15					22	2.0	55.4	235	74	10.14	9.57	0.62
02	YMT1	EP 4	12 37 46.70					33	2.4	60.8	246	74	11.69	10.47	1.08
02	YMT2	EP 4	12 37 47.05					12	1.5	60.9	238	74	12.04	10.47	1.49
02	BMT	EPU	12 37 47.25					14	1.7	69.7	289	74	12.24	12.12	0.28
.....															
AUG H = 21 52 1.63 UTC			RMS =	0.03	NO =	4	FREE DEPTH SOLUTION								
02 LAT = 37.222 N			ERX =		ERH =		AVFM =	2.1	Q =	C					
LONG = 117.319 W			ERY =		GAP =	137	AVXM =		QS =	A	MT. JACKSON				
DEPTH = 0.33 KM			ERZ =		NM =		WD = D								
.....															
02	GMN	IPU	21 52 3.93					29	2.1	10.2	31	40	2.30	2.50	-0.05
02	LCH	IPU	21 52 7.14					16	1.6	29.2	273	40	5.51	5.57	0.02
02	SGV	EPU	21 52 8.40					35	2.3	36.9	136	38	6.77	6.86	-0.01
02	BMT	EPD	21 52 12.26					30	2.3	60.1	83	38	10.63	10.77	0.03
02	YMT3	EPU4	21 52 27.85					21	2.1	94.1	121	38	26.22	16.06	10.21
.....															

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AUG 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
AUG H = 16 56 10.62 UTC				RMS =	0.24	NO =	11	FREE DEPTH SOLUTION							
. 05 LAT = 35.319 N				ERX =	3.1	ERH =	11.4	AVFM =	3.4	u =	D				
. LONG = 116.612 W				ERY =	11.0	GAP =	292	AVXM =		uS =	D				
. DEPTH = 6.13 KM				ERZ =	4.0	NM =				uO =	D				
.....															
. 05	GLV	EPD	16 56 27.20					87	3.3	96.5	357	92	16.58	16.32	0.34
. 05	PGE	EPD4	16 56 31.69					88	3.4	121.5	340	92	21.07	20.45	0.83
. 05	APK	EPD	16 56 34.68					55	3.1	145.4	40	91	24.06	24.52	-0.19
. 05	FMT	EPD	16 56 34.87					85	3.5	147.4	354	91	24.25	24.50	-0.01
. 05	MCA	EPD	16 56 36.21					85	3.5	159.4	338	52	25.59	25.92	-0.41
. 05	YMT2	EPD4	16 56 38.85					36	2.8	163.2	4	52	28.23	26.58	1.57
. 05	YMT3	EPD	16 56 37.15					83	3.5	164.0	6	52	26.53	26.68	-0.10
. 05	SPRG	IPD	16 56 37.84					70	3.4	168.9	25	52	27.22	27.36	-0.11
. 05	YMT5	IPD	16 56 38.99					100	3.7	175.9	5	52	28.37	28.28	0.09
. 05	TMD	EPD	16 56 39.31					80	3.6	179.9	337	52	28.69	28.98	0.00
. 05	CPX	EPD4	16 56 42.14					50	3.2	185.7	16	52	31.52	29.52	2.02
. 05	SHRG	EPD	16 56 40.10					90	3.7	186.0	45	52	29.48	29.65	0.42
. 05	SGV	IPD	16 56 40.46					62	3.4	188.3	348	52	29.84	29.92	0.00
. 05	GVN	EPD	16 56 41.98					85	3.7	198.0	341	52	31.36	31.00	0.30
. 05	LCH	IPD	16 56 46.23					47	3.3	232.1	336	52	35.61	35.51	0.18
. 05	GMR	EPD	16 56 46.86					85	3.8	236.0	19	52	36.24	36.04	0.30
.....															
AUG H = 11 25 30.81 UTC				RMS =	0.08	NO =	12	FREE DEPTH SOLUTION							
. 06 LAT = 36.835 N				ERX =	0.2	ERH =	0.4	AVFM =	1.9	u =	C				
. LONG = 116.179 W				ERY =	0.4	GAP =	140	AVXM =		uS =	B	LATHROP WELLS			
. DEPTH = 4.49 KM				ERZ =	3.2	NM =				uO =	C				
.....															
. 06	CDH5	IPD	11 25 33.49					17	1.6	12.7	283	104	2.68	2.61	0.16
. 06	CDH1	IPD	11 25 33.49					17	1.6	12.7	283	104	2.68	2.68	0.09
. 06	CPX	IPD	11 25 33.79					18	1.7	15.3	46	101	2.98	3.09	-0.08
. 06	YMT6	EPD3	11 25 34.29					30	2.2	20.3	278	97	3.48	3.85	-0.47
. 06	YMT3	IPD	11 25 34.75					37	2.3	21.3	256	96	3.94	4.00	-0.02
. 06	BGB	IPD	11 25 35.03					22	1.9	23.0	349	96	4.22	4.40	-0.11
. 06	YMT4	IPD	11 25 35.25					25	2.0	24.5	278	95	4.44	4.55	-0.23
. 06	YMT5	IPD	11 25 35.56					31	2.2	25.5	286	95	4.75	4.74	0.01
. 06	YMT2	IPD	11 25 35.94					16	1.6	27.7	259	94	5.13	5.04	0.00
. 06	SPRG	IPD	11 25 37.30					15	1.6	36.5	115	93	6.49	6.51	0.01
. 06	GLR	EPD	11 25 38.25					13	1.5	43.0	20	92	7.44	7.59	-0.09
. 06	BMT	EP	11 25 42.10					22	2.0	64.8	320	92	11.29	11.30	0.15
. 06	GMR	EP	11 25 42.29					15	1.7	66.2	33	91	11.48	11.41	0.17
.....															



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AUG 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
AUG H = 18 57 48.10 UTC				RMS =	0.16	NO =	7	FREE DEPTH SOLUTION							
06 LAT = 36.629 N				ERX =	1.0	ERH =	2.4	AVFM =	2.5	U = D					
LONG = 116.257 W				ERY =	2.2	GAP =	220	AVXM =		QS = C		LATHROP WELLS			
DEPTH = 2.14 KM				ERZ =	240.3	NM =				WD = D					
.....															
06	YMT3	EPX2	18 57 52.35					51	2.6	22.3	322	74	4.25	4.18	0.12
06	YMT4	EPD	18 57 53.61					46	2.6	31.5	327	74	5.51	5.72	-0.32
06	YMT5	EPD	18 57 54.20					52	2.7	34.6	330	74	6.10	6.26	-0.16
06	CPX	EP	18 57 54.87					25	2.1	38.0	28	74	6.77	6.78	0.02
06	SPRG	EPD	18 57 55.28					32	2.3	40.7	80	74	7.18	7.22	0.00
06	SGV	IPU	18 58 1.75					37	2.5	79.4	299	74	13.65	13.58	0.16
06	BMT	EPD	18 58 2.17					32	2.4	80.4	335	74	14.07	13.87	0.37
.....															
AUG H = 9 39 48.09 UTC				RMS =	0.10	NO =	12	FREE DEPTH SOLUTION							
07 LAT = 37.157 N				ERX =	0.3	ERH =	0.4	AVFM =	2.2	U = C					
LONG = 116.323 W				ERY =	0.3	GAP =	132	AVXM =		QS = C		SILENT CANYON - PAHUTE MESA			
DEPTH = 0.02 KM				ERZ =	16.4	NM =				WD = C					
.....															
07	BGB	IPU	9 39 51.37					41	2.4	15.7	147	40	3.28	3.41	-0.06
07	GLR	IPD	9 39 53.27					25	2.0	27.5	80	40	5.18	5.35	-0.10
07	YMT5	IPD	9 39 54.10					45	2.5	31.0	202	38	6.01	5.93	0.08
07	BMT	IPU	9 39 54.12					4	0.4	31.9	296	38	6.03	6.24	-0.04
07	CDH1	EPD	9 39 54.08					25	2.0	33.0	179	38	5.99	6.25	-0.16
07	YMT6	IPD	9 39 54.52					44	2.5	34.0	192	38	6.43	6.36	-0.02
07	YMT4	EPD	9 39 54.88					41	2.5	34.3	199	38	6.79	6.44	0.24
07	CPX	EPD	9 39 54.12					23	2.0	34.7	137	38	6.03	6.52	-0.46
07	YMT3	EP	9 39 55.65					53	2.7	41.8	191	38	7.56	7.62	-0.01
07	YMT2	IPU	9 39 56.21					27	2.1	43.7	199	38	8.12	7.93	0.11
07	GMR	EPD	9 39 57.61					25	2.1	52.8	68	38	9.52	9.51	0.11
07	SGV	IPD	9 39 59.88					43	2.6	66.0	253	38	11.79	11.66	0.22
07	SPRG	EPD	9 40 0.20					28	2.3	68.9	138	38	12.11	12.05	0.08
.....															
AUG H = 18 57 51.65 UTC				RMS =	0.17	NO =	4	FIXED DEPTH SOLUTION							
07 LAT = 36.862 N				ERX =		ERH =		AVFM =	2.0	U = C		DEPTH CONTROL INADEQUATE			
LONG = 116.353 W				ERY =		GAP =	172	AVXM =		QS = B		LATHROP WELLS			
DEPTH = 5.00 KM				ERZ =		NM =				WD = D					
.....															
07	CDH1	IPU	18 57 52.89					22	1.8	3.2	93	149	1.24	1.43	-0.10
07	YMT6	IPD	18 57 53.25					46	2.5	4.6	265	137	1.60	1.52	-0.02
07	BGB	EPD	18 57 56.21					24	2.0	22.5	30	98	4.56	4.34	0.30
07	GLR	EPD	18 57 59.81					17	1.8	47.9	39	93	8.16	8.39	-0.17
07	GMR	EPD	18 58 3.35					21	2.0	73.6	45	92	11.70	12.61	-0.81
.....															
AUG H = 0 16 8.74 UTC				RMS =	0.11	NO =	7	FREE DEPTH SOLUTION							
16 LAT = 36.712 N				ERX =	0.5	ERH =	0.8	AVFM =	1.3	U = B					
LONG = 116.325 W				ERY =	0.5	GAP =	110	AVXM =		QS = A		LATHROP WELLS			
DEPTH = 1.92 KM				ERZ =	1.8	NM =				WD = B					
.....															
16	LSM	IPD	0 16 10.24					14	1.4	5.6	56	103	1.50	1.39	0.09
16	SDH	EPD	0 16 10.31					9	1.1	7.5	189	99	1.57	1.70	-0.08
16	YMT2	EPD	0 16 12.19					10	1.2	16.4	300	94	3.45	3.20	0.17

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AUG 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 16	LOP	EPD	0 16 12.57					12 1.4	21.1	42	93	3.83	4.12	-0.21	
. 16	YMT5	EPU	0 16 13.16					18 1.7	23.7	331	74	4.42	4.49	-0.06	
. 16	YMT1	EPD	0 16 13.46					4 0.4	24.0	311	74	4.72	4.50	0.09	
.		ESU4	0 16 27.35									18.61	7.92	10.69	
. 16	MCY	EPU	0 16 14.69					15 1.6	32.9	100	74	5.95	5.96	0.07	
.....															
. AUG H = 11 24 8.60 UTC RMS = 0.02 NO = 4 FREE DEPTH SOLUTION															
. 16 LAT = 36.500 N ERX = ERH = AVFM = 2.2 Q = C															
. LONG = 116.302 W ERY = GAP = 174 AVXM = WS = A LATHROP WELLS															
. DEPTH = 1.54 KM ERZ = NM = WD = D															
.....															
. 16	JUN	IPU4	11 24 14.39					31 2.2	19.0	110	92	5.79	3.61	2.16	
. 16	AMR	EP	11 24 12.20					31 2.2	19.1	234	92	3.60	3.59	-0.01	
. 16	LSM	EPU	11 24 13.56					35 2.3	26.8	6	74	4.96	4.97	-0.03	
. 16	MCY	EPU4	11 24 13.30						35.3	59	74	4.70	6.38	-1.61	
.		IPD	11 24 19.38									10.78	10.78	0.00	
. 16	YMT6	EP	11 24 16.00					34 2.3	40.9	347	74	7.40	7.26	0.05	
. 16	SPRG	EPU4	11 24 14.53					23 2.0	49.1	64	74	5.93	8.61	-2.65	
.....															
. AUG H = 2 9 17.04 UTC RMS = 0.08 NO = 20 FREE DEPTH SOLUTION															
. 23 LAT = 37.157 N ERX = 0.2 ERH = 0.3 AVFM = 2.7 Q = C															
. LONG = 116.942 W ERY = 0.2 GAP = 80 AVXM = WS = B THIRSTY CANYON															
. DEPTH = 5.87 KM ERZ = 3.1 NM = WD = C															
.....															
. 23	SGV	EPU	2 9 21.07					74 2.9	21.1	202	102	4.03	4.11	0.02	
. 23	BMT	EPD	2 9 22.51					67 2.9	29.8	62	98	5.47	5.64	0.01	
. 23	GMN	EPU	2 9 22.91					55 2.7	32.4	299	97	5.87	6.05	-0.03	
. 23	GVN	EPD	2 9 24.20					56 2.8	39.6	244	95	7.16	6.94	0.16	
. 23	WCT	EPU	2 9 25.23					55 2.8	49.2	145	94	8.19	8.53	-0.18	
. 23	YMT1	EPD	2 9 25.71					54 2.8	49.9	132	94	8.67	8.67	-0.13	
. 23	YMT5	EPU4	2 9 26.08					53 2.8	52.0	123	94	11.04	9.07	1.98	
. 23	YMT4	EPD	2 9 26.79					53 2.8	54.3	126	94	9.75	9.41	0.23	
. 23	EPN	EPD	2 9 26.90					53 2.8	55.2	83	94	9.86	9.77	0.03	
. 23	TNO	EPU4	2 9 33.64					26 2.2	57.0	227	93	16.60	10.03	6.87	
. 23	YMT2	EPU	2 9 27.34					53 2.8	58.0	135	93	10.30	9.96	0.26	
. 23	YMT6	EPU	2 9 27.22					53 2.8	58.2	125	93	10.18	10.02	0.08	
. 23	CTS	EPD	2 9 27.11					35 2.4	58.7	19	93	10.07	10.25	-0.01	
. 23	FMT	EPU	2 9 26.83					35 2.4	59.2	166	93	9.79	10.15	-0.12	
. 23	YMT3	EPD	2 9 27.62					58 2.9	62.6	131	93	10.58	10.71	-0.07	
. 23	CDH1	EPD	2 9 28.26					42 2.6	64.6	121	93	11.22	11.10	0.22	
. 23	BGB	EPD	2 9 28.33					45 2.7	64.8	102	93	11.29	11.21	0.16	
. 23	SSP	EPU	2 9 28.95					49 2.8	69.3	112	93	11.91	12.02	-0.02	
. 23	LOP	EPU	2 9 30.08					52 2.8	76.7	116	92	13.04	13.13	-0.01	
. 23	SDH	EPU	2 9 30.16					55 2.9	78.2	137	92	13.12	13.25	-0.08	
. 23	BLT	EPU	2 9 30.75					34 2.5	81.1	64	92	13.71	13.88	-0.04	
. 23	MCY	EPD	2 9 34.41					70 3.2	103.2	122	92	17.37	17.36	0.10	
.....															
. AUG H = 18 43 30.29 UTC RMS = 0.08 NO = 9 FREE DEPTH SOLUTION															
. 25 LAT = 38.615 N ERX = 0.6 ERH = 2.7 AVFM = 3.1 Q = D															
. LONG = 117.111 W ERY = 2.7 GAP = 281 AVXM = WS = C															
. DEPTH = 6.14 KM ERZ = 1.6 NM = WD = D															
.....															
. 25	TNP	EPU	18 43 40.97					50 2.7	59.9	189	94	10.68	10.46	-0.06	
. 25	CTS	EPU	18 43 49.11					53 3.0	111.6	162	92	18.82	18.86	0.12	
. 25	KRNA	EPD	18 43 49.96					55 3.0	116.3	147	92	19.67	19.63	-0.04	
. 25	SVP	EPU	18 43 50.28					50 2.9	116.8	211	92	19.99	19.85	0.02	
. 25	QCS	EPU	18 43 53.80					50 3.0	140.7	132	91	23.51	23.60	-0.06	
. 25	GMN	EPU3	18 43 55.04					44 2.9	146.6	185	91	24.75	24.60	0.29	
. 25	BLT	EPD	18 43 55.63					54 3.1	152.8	145	52	25.34	25.43	0.04	
. 25	BGB	EPD3	18 44 1.05					54 3.3	191.6	156	52	30.76	30.38	0.46	
. 25	YMT5	EPD	18 44 1.95					55 3.3	199.2	163	52	31.66	31.27	0.39	
. 25	CDH1	EPD	18 44 2.89					47 3.2	207.0	160	52	32.60	32.27	0.42	
. 25	MCA	EPU4	18 44 4.54					44 3.2	218.9	184	52	34.25	33.55	0.62	

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AUG 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
AUG H = 4 10 21.17 UTC			RMS =	0.23	NO =	5	FREE DEPTH SOLUTION								
26 LAT = 36.718 N			ERX =	2.0	ERH =	2.5	AVFM =	0.7	Q = C						
LONG = 117.327 W			ERY =	1.5	GAP =	171	AVXM =	QS = B		TIN MOUNTAIN					
DEPTH = 1.75 KM			ERZ =	4.7	NM =	WD = 0									
.....															
26	MCA	EPD1	4 10 23.00						8.8	152	96	1.83	1.77	-0.01	
26	TMO	EPU1	4 10 23.49						12.0	323	95	2.32	2.69	-0.07	
		IS 2	4 10 24.80									3.63	4.09	-0.45	
26	GVN	EPU0	4 10 27.14						31.4	358	74	5.97	5.65	0.26	
26	SGV	EPU4	4 10 29.59			6	0.8		39.3	42	74	8.42	7.07	1.44	
		IS 4	4 10 30.98									9.81	11.94	-2.12	
26	PGE	EPD4	4 10 24.21						47.2	150	74	3.04	8.43	-5.16	
26	FMT	EPD4	4 10 29.79			3	0.3		49.8	100	74	8.62	8.67	0.20	
26	BRD	EPU2	4 10 31.54			6	0.9		62.9	86	74	10.37	10.78	-0.29	
26	YMT1	EPU4	4 10 35.05						72.8	78	74	13.88	12.45	1.31	
.....															
AUG H = 5 18 34.83 UTC			RMS =	0.04	NO =	6	FREE DEPTH SOLUTION								
26 LAT = 36.693 N			ERX =	0.4	ERH =	0.5	AVFM =	1.9	Q = B						
LONG = 116.051 W			ERY =	0.3	GAP =	144	AVXM =	QS = A		LATHROP WELLS					
DEPTH = 1.65 KM			ERZ =	1.4	NM =	WD = C									
.....															
26	MCY	EPU	5 18 36.68			25	2.0		8.7	114	95	1.85	1.94	-0.01	
26	LSM	EPU	5 18 38.65			21	1.8		20.4	285	92	3.82	3.90	-0.10	
26	LUP	EPU	5 18 38.82			21	1.8		20.6	330	92	3.99	4.04	0.03	
26	SDH	EPU	5 18 39.66			20	1.8		26.2	258	74	4.83	4.84	0.03	
26	JUN	EPD	5 18 40.05			20	1.8		28.5	189	74	5.22	5.19	0.02	
26	CDH1	EPD	5 18 40.26			20	1.8		30.1	308	74	5.43	5.55	-0.02	
.....															
AUG H = 16 10 5.30 UTC			RMS =	0.09	NO =	5	FREE DEPTH SOLUTION								
26 LAT = 36.369 N			ERX =	1.7	ERH =	1.9	AVFM =	2.3	Q = C						
LONG = 117.608 W			ERY =	0.8	GAP =	255	AVXM =	QS = B		DARWIN					
DEPTH = 22.89 KM			ERZ =	0.6	NM =	WD = 0									
.....															
26	MCA	EPD3	16 10 14.22			29	2.2		42.6	43	117	8.92	8.11	0.73	
26	PGE	EPD	16 10 14.47			29	2.2		48.7	93	115	9.17	9.33	0.06	
26	TMO	EPU	16 10 14.73			29	2.2		51.6	20	114	9.43	9.84	-0.11	
26	GVN	EPU	16 10 18.42			34	2.5		74.1	19	63	13.12	12.95	0.11	
26	FMT	EPD4	16 10 21.05			29	2.3		80.1	68	63	15.75	13.86	2.13	
26	GSM	EPD	16 10 19.11			29	2.3		80.2	124	63	13.81	13.79	-0.07	
26	SGV	EPD4	16 10 21.24			33	2.5		85.2	37	63	15.94	14.72	1.31	
.....															
AUG H = 16 37 39.56 UTC			RMS =	0.15	NO =	6	FREE DEPTH SOLUTION								
26 LAT = 36.669 N			ERX =	1.1	ERH =	1.5	AVFM =	2.1	Q = B						
LONG = 116.242 W			ERY =	1.0	GAP =	100	AVXM =	QS = B		LATHROP WELLS					
DEPTH = 7.70 KM			ERZ =	3.4	NM =	WD = B									
.....															
26	LSM	EPU	16 37 41.82			30	2.1		8.4	341	132	2.26	2.26	-0.02	
26	SDH	EPD	16 37 41.72			30	2.1		8.9	253	130	2.16	2.31	-0.11	
26	LUP	EPD	16 37 43.93			28	2.1		21.7	18	107	4.37	4.30	0.16	
26	MCY	EP	16 37 44.01						25.0	92	104	4.45	4.74	-0.21	
26	JON	EPU	16 37 44.98			25	2.0		28.3	154	102	5.42	5.18	0.24	
26	SSP	EP 4	16 37 47.36						28.5	4	103	7.80	5.46	2.43	
26	YMT1	EPD	16 37 45.59			30	2.2		32.8	309	100	6.03	5.94	-0.04	
.....															
AUG H = 9 30 18.19 UTC			RMS =	0.09	NO =	6	FREE DEPTH SOLUTION								
27 LAT = 37.248 N			ERX =	1.1	ERH =	1.5	AVFM =	0.4	Q = C						
LONG = 115.929 W			ERY =	1.0	GAP =	156	AVXM =	QS = B		GROOM LAKE					
DEPTH = 6.63 KM			ERZ =	4.1	NM =	WD = C									
.....															
27	GMR	EPU0	9 30 21.55			2	-0.2		16.9	56	109	3.36	3.49	-0.03	
27	TPU	IPU0	9 30 26.37			5	0.7		46.7	32	95	8.18	8.33	-0.01	
		IS 4	9 30 34.56									16.37	14.00	2.37	
27	CDH5	EPD0	9 30 27.60						55.2	219	94	9.41	9.51	-0.01	3.20 0.0
		IS 4	9 30 41.36									23.17	16.10	7.07	

# 1981 SGB LOCAL-EVENT DATA REPORT

AUG 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 27	QCS	EPD0	9 30 28.22					5 0.7	57.7	1	94	10.03	10.10	-0.05	
. 27	BMT	EPD4	9 30 30.00						63.7	274	94	11.81	11.13	0.65	
. 27	MTI	EPU0	9 30 31.27						75.1	51	93	13.08	12.84	0.27	
. 27	NPN	EPU0	9 30 35.00						98.5	63	92	16.81	16.68	-0.09	
.		IS 4	9 30 46.00									27.81	28.89	-1.08	

## 1981 SGB LOCAL-EVENT DATA REPORT

SEP 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
SEP H = 0 3 18.73 UTC				RMS = 0.22	NO = 3									FIXED DEPTH SOLUTION	
. 01 LAT = 37.655 N				ERX =	ERH =	AVFM = 2.3		Q = C	DEPTH CONTROL INADEQUATE						
. LONG = 115.651 W				ERY =	GAP = 249	AVXM =		QS = B	WORTHINGTON PEAK						
. DEPTH = 5.00 KM				ERZ =	NM =			QD = D							
.....															
. 01	TPU	EPU	0 3 20.09				34	2.2	5.5	178	133	1.36	1.80	-0.30	
. 01	MTI	EPU	0 3 24.93				27	2.1	33.4	86	95	6.20	6.07	0.16	
. 01	GMR	EPU	0 3 25.47				29	2.2	37.1	197	94	6.74	6.68	0.16	
. 01	CPX	EPU4	0 3 37.12				23	2.2	88.0	204	91	18.39	14.90	3.53	
. 01	YMT6	EPU4	0 3 39.57				38	2.7	110.8	217	90	20.84	18.31	2.44	
. 01	YMT4	EPU4	0 3 40.15				35	2.6	112.7	219	90	21.42	18.62	2.69	
.....															
SEP H = 16 19 36.38 UTC				RMS = 0.12	NO = 11									FREE DEPTH SOLUTION	
. 01 LAT = 37.421 N				ERX = 0.4	ERH = 0.6	AVFM = 2.3		Q = C							
. LONG = 117.334 W				ERY = 0.4	GAP = 156	AVXM =		QS = B	MT. JACKSON						
. DEPTH = 4.83 KM				ERZ = 2.8	NM =			QD = C							
.....															
. 01	MGM	EPD	16 19 39.43				30	2.1	14.6	279	104	3.05	3.15	-0.01	
. 01	GMN	EPD	16 19 39.24				31	2.2	14.9	154	104	2.86	3.21	-0.21	
. 01	LCH	EPU	16 19 42.58				30	2.2	34.6	233	94	6.20	6.24	0.03	
. 01	GVN	EPD	16 19 44.68				27	2.2	46.5	181	93	8.30	8.05	0.18	
	ESD		16 19 50.22									13.84	13.88	-0.04	
. 01	SVP	EPU	16 19 45.84				30	2.3	52.6	308	92	9.46	9.41	-0.06	
. 01	SGV	EPU4	16 19 45.47				30	2.3	55.6	151	92	9.09	9.68	-0.51	
. 01	BMT	EPD	16 19 47.30				31	2.3	62.8	104	92	10.92	10.98	0.11	
. 01	YMT1	EPD	16 19 52.49				32	2.5	95.4	131	91	16.11	16.07	-0.09	
. 01	YMT5	EPU	16 19 52.79				33	2.5	97.3	127	91	16.41	16.43	-0.02	
. 01	LSM	EPU4	16 19 57.22				23	2.3	120.9	129	90	20.84	19.95	0.86	
. 01	LOP	EPD1	16 19 56.90				24	2.3	121.3	121	90	20.52	20.02	0.57	
. 01	SDH	EPU	16 19 56.92				25	2.4	123.5	134	90	20.54	20.39	0.19	
.....															
SEP H = 3 51 51.93 UTC				RMS = 0.11	NO = 7									FREE DEPTH SOLUTION	
. 07 LAT = 37.341 N				ERX = 1.0	ERH = 1.6	AVFM = 2.2		Q = C							
. LONG = 115.021 W				ERY = 1.3	GAP = 206	AVXM =		QS = B	ALAMO						
. DEPTH = 1.75 KM				ERZ = 2.8	NM =			QD = D							
.....															
. 07	PRN	IPU	3 51 53.87				64	2.8	7.8	341	97	1.94	1.82	-0.01	
. 07	NPN	IPU	3 51 58.58				53	2.7	35.4	12	74	6.65	6.46	-0.03	
. 07	DLM	IPU	3 51 59.12				20	1.9	38.6	40	74	7.19	7.00	-0.06	
. 07	MTI	EPU	3 51 59.69				23	2.0	43.4	329	74	7.76	7.74	0.05	
. 07	GMR	EPU	3 52 3.25				20	2.0	66.5	269	74	11.32	11.50	-0.06	
. 07	GLR	IPU	3 52 7.39				16	1.9	89.7	260	74	15.46	15.25	0.28	
. 07	BGB	EPU4	3 52 11.95				18	2.0	112.2	253	74	20.02	18.97	1.13	
. 07	YMT6	IPU	3 52 14.32				23	2.3	134.1	246	74	22.39	22.40	-0.11	
.....															
SEP H = 18 46 11.78 UTC				RMS = 0.39	NO = 12									FIXED DEPTH SOLUTION	
. 09 LAT = 38.717 N				ERX = 2.5	ERH = 10.9	AVFM = 3.0		Q = D	DEPTH CONTROL INADEQUATE						
. LONG = 117.072 W				ERY = 10.6	GAP = 276	AVXM =		QS = D							
. DEPTH = 5.00 KM				ERZ = 7.8	NM =			QD = D							
.....															
. 09	TNP	EPU	18 46 23.70				46	2.7	71.7	190	92	11.92	12.37	-0.71	
. 09	HCR	EPD	18 46 24.72				46	2.7	77.3	134	92	12.94	13.30	-0.26	
. 09	MZP	EPU4	18 46 32.17				40	2.7	116.1	194	90	20.39	19.18	1.45	
. 09	CTS	EPU	18 46 31.92				48	2.9	121.6	166	90	20.14	20.07	0.24	
. 09	KRNA	EPU	18 46 32.61				50	3.0	124.2	151	90	20.83	20.50	0.27	
. 09	SVP	EPD	18 46 33.04				50	3.0	126.3	210	90	21.26	21.16	0.00	
. 09	MGM	EPU	18 46 35.92				54	3.1	146.5	195	90	24.14	24.12	0.12	
. 09	GMN	EPD	18 46 37.73				53	3.1	156.2	186	90	25.95	26.02	0.08	
. 09	BLT	EPD	18 46 38.49				52	3.1	160.4	149	90	26.71	26.39	0.45	
. 09	PPK	EPD	18 46 38.89				51	3.1	160.9	207	90	27.11	26.47	0.63	
. 09	BMT	EPU	18 46 38.87				56	3.2	163.5	167	90	27.09	26.89	0.37	
. 09	TPU	EPU4	18 46 41.49				50	3.1	175.5	135	52	29.71	28.47	1.39	
. 09	GMR	EPU	18 46 42.36				48	3.2	191.4	143	52	30.58	30.44	0.25	
. 09	GLR	EPD4	18 46 43.72				47	3.1	192.3	151	52	31.94	30.51	1.50	

## 1981 SGB LOCAL-EVENT DATA REPORT

SEP 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
09	MTI	EPD	18 46 42.61					47 3.2	195.4	126	52	30.83	30.94	-0.08	
09	NPN	EPD	18 46 46.24					46 3.2	221.2	122	52	34.46	34.28	-0.02	
09	PRN	EPD	18 46 47.23					48 3.3	229.4	129	52	35.45	35.28	0.05	

SEP H = 1 1 55.34 UTC RMS = 0.19 NO = 4 FREE DEPTH SOLUTION  
 12 LAT = 36.767 N ERX = ERH = 4 AVFM = 1.3 u = C  
 LONG = 116.275 W ERY = GAP = 173 AVXM = uS = B LATRQP WELLS  
 DEPTH = 36.18 KM ERZ = NM = uD = D

12	LSM	EPD	1 2 1.58					9 1.0	3.0	177	174	6.24	6.03	0.19	
12	LOP	EPD	1 2 1.89					9 1.1	13.6	45	155	6.55	6.53	0.10	
12	SDH	EPD	1 2 1.74					8 1.0	14.7	203	153	6.40	6.43	0.01	
12	SSP	IPU	1 2 1.83					13 1.4	18.2	16	148	6.49	6.91	-0.34	
12	YMT1	IPD4	1 2 6.32					14 1.5	24.6	293	138	10.98	7.18	3.67	
12	MCY	IPU4	1 2 56.94					14 1.5	30.3	113	130	61.60	7.73	53.95	
		ISU4	1 2 11.72									16.38	13.08	3.30	

SEP H = 21 23 35.32 UTC RMS = 0.29 NO = 9 FREE DEPTH SOLUTION  
 12 LAT = 35.995 N ERX = 2.4 ERH = 5.1 AVFM = 3.7 u = D  
 LONG = 116.753 W ERY = 4.4 GAP = 202 AVXM = uS = D CONFIDENCE HILLS  
 DEPTH = 13.30 KM ERZ = 6.0 NM = uD = D

12	QSM	IPU0	21 23 38.56						10.9	252	140	3.24	3.09	0.05	
		ISU	21 23 40.72									5.40	5.45	-0.05	
12	GWV	IPU4	21 23 42.13					150 3.6	22.5	19	120	6.81	4.76	2.13	
12	PGE	EPD	21 23 43.79					95 3.3	48.3	324	104	8.47	8.75	-0.06	
12	FMT	IPU4	21 23 48.42					88 3.3	71.5	558	99	13.10	12.28	1.06	
12	JON	EPD	21 23 47.69					142 3.7	76.5	50	98	12.37	13.05	-0.69	
12	SDH	EPD	21 23 49.68					140 3.7	81.2	27	98	14.36	13.84	0.56	
12	MCA	EPD	21 23 47.99					90 3.3	86.6	327	97	12.67	14.55	-1.96	
12	YMT2	EPD	21 23 57.60					154 3.8	90.9	15	97	22.28	15.41	6.79	
12	YMT3	EPD	21 23 51.56					159 3.9	93.1	19	97	16.24	15.75	0.54	
12	LSM	EPD	21 23 51.25					139 3.7	93.2	28	97	15.93	15.79	0.12	
12	YMT1	EPD	21 23 47.18					138 3.8	97.3	12	97	11.86	16.46	-4.74	
12	YMT4	EPD	21 23 52.42					158 3.9	100.3	16	96	17.10	16.97	0.02	
12	MCY	EPD	21 23 51.29					159 3.6	102.5	44	96	15.97	17.33	-1.28	
12	TMD	EPD	21 23 50.51					105 3.5	107.4	527	96	15.19	18.30	-2.82	
12	LOP	EPD	21 23 54.71					136 3.8	108.8	29	96	19.39	18.43	1.04	
12	APK	EPD	21 23 49.79					161 3.9	111.9	71	96	14.47	19.14	-4.40	
12	SGV	EPD	21 23 53.55					158 3.9	112.2	347	96	18.23	18.96	-0.64	
12	SPRG	EPD	21 23 52.15					158 3.9	114.9	48	96	16.83	19.32	-2.46	

SEP H = 4 56 47.55 UTC RMS = 0.03 NO = 9 FREE DEPTH SOLUTION  
 15 LAT = 37.012 N ERX = 0.2 ERH = 0.2 AVFM = 1.7 u = B  
 LONG = 116.384 W ERY = 0.2 GAP = 116 AVXM = uS = A SILENT CANYON - PAHUTE MESA  
 DEPTH = 5.09 KM ERZ = 1.7 NM = uD = C

15	YMT5	EPD	4 56 50.49					30 2.1	14.0	206	106	2.94	2.92	0.01	
15	BGB	EPD	4 56 50.50					8 1.0	14.2	78	106	2.95	3.03	0.00	
15	YMT6	EPD	4 56 50.89					11 1.3	17.1	186	102	3.34	3.36	-0.12	
15	YMT4	EPD	4 56 51.56					30 2.1	17.3	200	102	4.01	3.41	0.49	
15	SSP	EPD	4 56 51.17					25 2.0	17.6	123	102	3.62	3.64	0.06	
15	CDH5	IPD	4 56 50.94					10 1.2	17.8	160	101	3.39	3.46	0.03	
15	CDH1	IPU	4 56 50.96					6 0.7	17.8	160	101	3.41	3.53	-0.02	
15	YMT1	EPD	4 56 51.79					30 2.2	21.8	216	98	4.24	4.11	-0.01	
15	LUP	EPD	4 56 52.45					25 2.0	26.1	132	97	4.90	4.91	0.06	
15	BMT	EPD	4 56 54.34					25 2.1	38.1	322	94	6.79	6.96	0.00	

SEP H = 6 17 26.60 UTC RMS = 0.05 NO = 11 FREE DEPTH SOLUTION  
 15 LAT = 37.017 N ERX = 0.3 ERH = 0.3 AVFM = 1.7 u = B  
 LONG = 116.384 W ERY = 0.2 GAP = 106 AVXM = uS = A SILENT CANYON - PAHUTE MESA  
 DEPTH = 8.57 KM ERZ = 1.5 NM = uD = B

15	BGB	EPD	6 17 29.79					8 1.0	14.1	81	121	3.19	3.23	0.04	
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## 1981 SGB LOCAL-EVENT DATA REPORT

SEP 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 15	YMT5	EPD	6 17 29.80				25	2.0	14.6	205	119	3.20	3.22	-0.02	
. 15	YMT6	IPD	6 17 30.29				10	1.2	17.7	186	114	3.69	3.63	-0.03	
. 15	SSP	EPD	6 17 30.34				28	2.1	17.9	125	114	3.74	3.86	-0.04	
. 15	CDH1	IPU	6 17 30.26				5	0.6	18.4	161	113	3.66	3.78	-0.02	
. 15	CDH5	EPD	6 17 30.17				13	1.4	18.4	161	113	3.57	3.71	-0.04	
. 15	YMT1	EPD	6 17 30.95				29	2.1	22.3	215	109	4.35	4.33	-0.11	
. 15	EPN	EPD	6 17 31.24				28	2.1	22.5	14	109	4.64	4.60	-0.02	
. 15	LUP	EPD	6 17 31.62				29	2.1	26.4	133	106	5.02	5.08	0.02	
. 15	YMT2	EPD	6 17 31.88				15	1.6	27.2	199	105	5.28	5.07	0.13	
. 15	BMT	EPD	6 17 33.41				27	2.1	37.6	322	101	6.81	6.96	0.02	

SEP H = 6 44 49.54 UTC RMS = 0.07 NO = 12 FREE DEPTH SOLUTION  
 . 15 LAT = 37.014 N ERX = 0.4 ERH = 0.4 AVFM = 1.8 u = C  
 . LONG = 116.381 W ERY = 0.2 GAP = 106 AVXM = uS = B SILENT CANYON - PAHUTE MESA  
 . DEPTH = 6.78 KM ERZ = 2.4 NM = uD = C

. 15	BGB	IPD	6 44 52.58				7	0.9	13.9	79	114	3.04	3.07	0.04	
. 15	YMT5	EPD	6 44 52.56				37	2.3	14.4	207	113	3.02	3.07	-0.05	
. 15	YMT6	IPD	6 44 52.92				10	1.2	17.4	167	108	3.38	3.48	-0.20	
. 15	SSP	EPD	6 44 53.18				27	2.1	17.6	124	109	3.64	3.70	0.02	
. 15	YMT4	EPD	6 44 53.39				24	2.0	17.6	201	108	3.85	3.53	0.20	
. 15	CDH1	IPU	6 44 53.01				6	0.7	18.0	162	108	3.47	3.62	-0.06	
. 15	CDH5	IPD	6 44 52.98				13	1.4	18.0	162	108	3.44	3.55	-0.02	
. 15	YMT1	EPD	6 44 53.80				37	2.3	22.2	216	104	4.26	4.23	-0.16	
. 15	EPN	EPD	6 44 54.15				29	2.1	22.8	13	104	4.61	4.56	-0.01	
. 15	YMT3	EPD	6 44 54.19				35	2.3	25.3	186	102	4.65	4.71	-0.01	
. 15	LUP	EPD	6 44 54.49				30	2.2	26.1	133	102	4.95	4.96	0.07	
. 15	BMT	EPD	6 44 56.37				24	2.0	38.0	322	97	6.83	6.98	0.02	

SEP H = 7 52 48.50 UTC RMS = 0.05 NU = 9 FREE DEPTH SOLUTION  
 . 15 LAT = 37.014 N ERX = 0.3 ERH = 0.3 AVFM = 1.6 u = C  
 . LONG = 116.383 W ERY = 0.2 GAP = 117 AVXM = uS = B SILENT CANYON - PAHUTE MESA  
 . DEPTH = 4.83 KM ERZ = 2.5 NM = uD = C

. 15	BGB	EPD	7 52 51.38				6	0.7	14.1	79	105	2.88	2.99	-0.03	
. 15	YMT5	EPD	7 52 51.50				30	2.1	14.3	206	104	3.00	2.96	0.04	
. 15	YMT6	IPU	7 52 51.92				8	1.0	17.4	186	100	3.42	3.40	-0.07	
. 15	SSP	EPD	7 52 52.14				25	2.0	17.6	124	101	3.64	3.63	0.09	
. 15	CDH5	IPU	7 52 51.93				10	1.2	18.0	161	100	3.43	3.48	0.05	
. 15	CDH1	IPU	7 52 51.96				6	0.7	18.0	161	100	3.46	3.55	0.01	
. 15	YMT1	EPD	7 52 52.72				30	2.2	22.1	216	97	4.22	4.15	-0.07	
. 15	LUP	EPD	7 52 53.41				25	2.0	26.1	133	96	4.91	4.92	0.07	
. 15	BMT	EPD	7 52 55.29				25	2.1	38.0	322	94	6.79	6.94	0.02	

SEP H = 4 15 55.18 UTC RMS = 0.06 NO = 12 FREE DEPTH SOLUTION  
 . 16 LAT = 37.013 N ERX = 0.2 ERH = 0.3 AVFM = 1.9 u = B  
 . LONG = 116.386 W ERY = 0.2 GAP = 109 AVXM = uS = A SILENT CANYON - PAHUTE MESA  
 . DEPTH = 5.84 KM ERZ = 1.7 NM = uD = C

. 16	YMT5	IPU	4 15 58.12				28	2.1	14.0	205	109	2.94	2.96	-0.02	
. 16	YMT4	IPU	4 15 58.91				22	1.9	17.3	199	105	3.73	3.44	0.18	
. 16	SSP	IPU	4 15 58.78				24	2.0	17.8	123	105	3.60	3.69	-0.02	
. 16	YMT1	IPU	4 15 59.38				37	2.3	21.8	216	101	4.20	4.13	-0.06	
. 16	EPN	IPD	4 15 59.79				21	1.9	23.0	14	101	4.61	4.57	-0.02	
. 16	YMT3	IPU	4 15 59.69				28	2.1	25.1	185	99	4.51	4.65	-0.09	
. 16	LUP	IPU	4 16 0.11				19	1.8	26.3	132	99	4.93	4.96	0.05	
. 16	YMT2	EPD	4 16 0.09				13	1.5	26.7	199	98	4.91	4.90	-0.07	
. 16	LSM	EPD	4 16 1.05				20	1.8	31.9	162	97	5.87	5.76	0.09	
. 16	BMT	IPU	4 16 1.98				20	1.9	37.9	322	96	6.80	6.94	0.03	
. 16	MCY	EPD	4 16 4.48				24	2.1	54.3	136	94	9.30	9.42	-0.04	
. 16	SGV	IPU	4 16 5.12				25	2.1	57.6	267	93	9.94	10.01	0.02	

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SEP 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
SEP H = 11 8 23.41 UTC				RMS =	0.05	NU =	7	FREE DEPTH SOLUTION							
16 LAT = 37.014 N				ERX =	0.4	ERH =	0.5	AVFM =	1.7	U =	C				
LONG = 116.390 W				ERY =	0.2	GAP =	160	AVXM =		US =	B	SILENT CANYON - PAHUTE MESA			
DEPTH = 7.16 KM				ERZ =	3.3	NM =				WD =	C				
.....															
16	SSP	IPU	11 8 27.12					19	1.8	18.2	123	109	3.71	3.82	-0.03
16	YMT1	IPU	11 8 27.72					34	2.3	21.7	215	105	4.31	4.17	0.01
16	EPN	IPD	11 8 28.07					23	1.9	23.0	15	105	4.60	4.61	-0.02
16	LUP	IPU	11 8 28.41					8	1.0	26.6	132	102	5.00	5.06	0.02
16	LSM	EPU	11 8 29.38					19	1.8	32.1	161	100	5.97	5.82	0.12
16	SDH	EPU	11 8 30.50					11	1.4	41.1	174	97	7.09	7.25	-0.13
16	MCY	EPU	11 8 32.88					21	2.0	54.7	136	95	9.47	9.49	0.06
.....															
SEP H = 4 59 24.88 UTC				RMS =	0.08	NU =	14	FREE DEPTH SOLUTION							
21 LAT = 37.015 N				ERX =	0.2	ERH =	0.3	AVFM =	2.0	U =	B				
LONG = 116.379 W				ERY =	0.2	GAP =	118	AVXM =		US =	A	SILENT CANYON - PAHUTE MESA			
DEPTH = 6.48 KM				ERZ =	1.5	NM =				WD =	C				
.....															
21	BGB	IPU	4 59 27.78					26	2.0	13.7	79	113	2.90	3.02	-0.05
21	YMT5	IPD	4 59 27.94					38	2.3	14.5	207	111	3.06	3.07	-0.01
21	YMT6	IPU	4 59 28.38					30	2.1	17.5	187	107	3.50	3.48	-0.07
21	YMT4	IPU	4 59 28.71					30	2.1	17.7	201	107	3.83	3.54	0.18
21	CDH5	IPD	4 59 28.42					31	2.2	18.0	162	106	3.54	3.54	0.10
21	CDH1	IPU	4 59 28.46					18	1.7	18.0	162	107	3.58	3.61	0.07
21	YMT3	IPU	4 59 29.45					30	2.2	25.4	186	101	4.57	4.71	-0.09
21	YMT2	IPD	4 59 29.79					23	1.9	27.1	200	100	4.91	4.99	-0.16
21	CPX	EPU	4 59 30.36					14	1.5	30.3	108	99	5.48	5.55	-0.04
21	WCT	IPD	4 59 30.60					22	1.9	33.1	222	98	5.72	5.94	-0.06
21	BMT	IPU	4 59 31.70					28	2.2	38.1	322	97	6.82	6.99	0.00
21	FMT	IPD	4 59 34.19					16	1.7	54.8	221	94	9.31	9.45	0.10
21	SGV	IPU	4 59 34.99					32	2.3	58.3	266	94	10.11	10.12	0.08
21	SPRG	EPU	4 59 35.61					17	1.8	62.0	125	94	10.73	10.66	0.10
21	GMR	EPU4	4 59 36.49					16	1.8	64.5	57	94	11.61	11.14	0.56
.....															
SEP H = 5 16 17.78 UTC				RMS =	0.06	NU =	11	FREE DEPTH SOLUTION							
21 LAT = 37.014 N				ERX =	0.4	ERH =	0.7	AVFM =	1.2	U =	C				
LONG = 116.383 W				ERY =	0.6	GAP =	223	AVXM =		US =	B	SILENT CANYON - PAHUTE MESA			
DEPTH = 4.29 KM				ERZ =	4.1	NM =				WD =	D				
.....															
21	BGB	EPU	5 16 20.69					8	1.0	14.0	79	101	2.91	2.97	0.02
21	YMT5	IPD	5 16 20.73					12	1.3	14.4	206	101	2.95	2.94	0.00
21	YMT6	IPD2	5 16 21.15					10	1.2	17.4	186	98	3.37	3.39	-0.11
21	YMT4	EPD4	5 16 21.61					9	1.1	17.6	200	98	3.83	3.44	0.28
21	SSP	IPU	5 16 21.29					8	1.0	17.7	124	98	3.51	3.62	-0.03
21	CDH1	IPU	5 16 21.21					6	0.7	18.1	161	97	3.43	3.54	-0.02
21	CDH5	IPD	5 16 21.19					13	1.4	18.1	161	97	3.41	3.47	0.03
21	YMT1	IPU	5 16 21.96					13	1.4	22.1	216	95	4.18	4.15	-0.10
21	YMT3	EPU	5 16 22.52					15	1.6	25.4	186	94	4.74	4.65	0.14
21	LUP	IPU	5 16 22.59					10	1.2	26.2	133	94	4.81	4.92	-0.03
21	YMT2	EPU	5 16 22.82					8	1.0	27.0	200	94	5.04	4.92	0.04
21	LSM	EPU	5 16 23.64					10	1.2	32.0	162	93	5.86	5.75	0.09
.....															
SEP H = 9 35 40.43 UTC				RMS =	0.09	NU =	19	FREE DEPTH SOLUTION							
23 LAT = 37.109 N				ERX =	0.2	ERH =	0.3	AVFM =	1.9	U =	B				
LONG = 117.077 W				ERY =	0.3	GAP =	121	AVXM =		US =	A	MT. JACKSON			
DEPTH = 8.60 KM				ERZ =	1.0	NM =				WD =	B				
.....															
23	SGV	IPD	9 35 43.58					20	1.8	14.7	164	119	3.15	3.28	-0.05
23	GVN	IPD4	9 35 49.78					26	2.1	26.4	243	105	9.35	4.91	4.38
23	GMN	IPU	9 35 45.58					24	2.0	26.7	323	106	5.15	5.23	0.07
23	BMT	IPD	9 35 48.13					23	2.0	42.9	63	99	7.70	7.81	0.06
23	LCH	EPU	9 35 49.52					25	2.1	52.5	285	97	9.09	9.20	-0.04
23	YMT1	IPU	9 35 50.21					20	1.9	56.4	120	97	9.78	9.78	-0.13
23	YMT5	IPU	9 35 50.85					21	2.0	60.2	113	96	10.42	10.42	0.00



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SEP 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 23	YMT4	IPD	9 35 51.39				20	1.9	61.9	116	96	10.96	10.68	0.17	
. 23	YMT2	EPD	9 35 51.48				23	2.1	63.9	124	96	11.05	10.96	0.01	
. 23	CTS	IPD	9 35 52.08				7	1.1	68.3	27	95	11.65	11.84	-0.03	
. 23	YMT3	IPD	9 35 52.02				25	2.2	69.3	121	95	11.59	11.82	-0.18	
. 23	SSP	IPU	9 35 54.01				30	2.4	79.1	105	95	13.58	13.63	0.03	
. 23	LSM	EPD	9 35 54.28				23	2.1	82.5	120	94	13.85	13.99	-0.16	
. 23	SDH	IPU	9 35 54.52				22	2.1	83.5	128	94	14.09	14.14	-0.01	
. 23	LOP	EPD	9 35 54.83				25	2.2	85.7	109	94	14.40	14.63	-0.15	
. 23	CPX	EPD	9 35 56.39				21	2.1	93.1	102	94	15.96	15.74	0.25	
. 23	BLT	IPD	9 35 56.26				12	1.6	94.2	64	94	15.85	16.03	-0.05	
. 23	AMR	IPU	9 35 56.62				13	1.7	95.5	146	94	16.19	16.01	0.17	
.	ISU4		9 36 10.50									30.07	27.39	2.67	
. 23	MCY	EPD	9 35 58.89				20	2.1	111.1	117	93	18.46	18.65	-0.12	
. 23	JON	IPU	9 35 59.38				10	1.5	114.3	130	93	18.95	19.11	-0.17	

SEP H = 2 24 42.72 UTC RMS = 0.00 NO = 4 FREE DEPTH SOLUTION  
 . 24 LAT = 37.223 N ERX = ERH = AVFM = 1.5 Q = C  
 . LONG = 116.909 W ERY = GAP = 206 AVXM = QS = A THIRSTY CANYON  
 . DEPTH = 20.27 KM ERZ = NM = QD = D

. 24	BMT	IPU4	2 24 56.22				10	1.2	24.3	74	130	13.50	5.80	7.87	
. 24	SGV	IPU	2 24 48.89				21	1.9	29.0	202	125	6.17	6.26	0.00	
. 24	GMN	IPU	2 24 49.41				9	1.2	32.3	285	122	6.69	6.84	0.00	
. 24	GVN	EPD	2 24 51.28				10	1.3	45.7	238	113	8.56	8.50	0.00	
. 24	YMT5	EPD	2 24 52.61				16	1.7	54.2	132	110	9.89	9.89	0.00	

SEP H = 2 35 55.04 UTC RMS = 0.14 NO = 24 FREE DEPTH SOLUTION  
 . 24 LAT = 37.196 N ERX = 0.3 ERH = 0.4 AVFM = 2.3 Q = C  
 . LONG = 116.980 W ERY = 0.3 GAP = 89 AVXM = QS = B THIRSTY CANYON  
 . DEPTH = 2.96 KM ERZ = 4.4 NM = QD = C

. 24	SGV	IPU	2 35 59.48				55	2.7	24.3	191	74	4.44	4.57	-0.04	
. 24	GMN	EPD	2 35 59.99				51	2.6	27.4	295	74	4.95	5.21	-0.11	
. 24	GVN	IPU	2 36 1.68				30	2.2	38.8	236	74	6.64	6.79	-0.21	
. 24	WCT	IPU	2 36 4.27				27	2.2	54.7	145	74	9.23	9.41	-0.02	
. 24	YMT1	IPU	2 36 4.70				59	2.9	55.3	133	74	9.66	9.54	-0.01	
. 24	CTS	IPD	2 36 4.68				20	1.9	55.9	24	74	9.64	9.78	0.03	
.	ISD		2 36 11.42									16.38	16.44	-0.06	
. 24	EPN	IPU	2 36 5.41				41	2.6	58.3	38	74	10.37	10.26	0.06	
. 24	LCH	EPD	2 36 5.49				21	2.0	59.4	274	74	10.45	10.27	0.27	
. 24	YMT2	EPD	2 36 6.02				23	2.1	63.4	136	74	10.98	10.04	0.06	
. 24	FMT	IPU	2 36 5.68				20	2.0	64.3	164	74	10.64	10.97	-0.08	
. 24	YMT3	IPD	2 36 6.61				40	2.6	68.0	132	74	11.57	11.57	0.05	
. 24	BGB	IPU	2 36 7.13				27	2.2	69.1	105	74	12.09	11.90	0.27	
. 24	CDH5	EPD	2 36 7.05				37	2.5	69.7	122	74	12.01	11.86	0.25	
. 24	CDH1	IPU	2 36 7.12				20	2.0	69.7	122	74	12.08	11.93	0.25	
. 24	SSP	IPD4	2 36 6.75				123	3.6	74.1	114	74	11.71	12.77	-0.98	
. 24	LSM	EPD	2 36 8.59				30	2.4	80.7	129	74	13.55	13.67	-0.14	
. 24	LOP	IPU	2 36 8.96				32	2.4	81.6	118	74	13.92	13.93	0.07	
. 24	BLT	EPD	2 36 8.95				21	2.1	82.4	67	74	13.91	14.08	-0.04	
. 24	GLR	EPD4	2 36 9.95				19	2.0	85.4	90	74	14.91	14.49	0.49	
. 24	AMR	EPD	2 36 11.90				21	2.1	99.4	153	74	16.86	16.62	0.23	
. 24	GMR	EPD	2 36 13.47				21	2.2	108.3	82	74	18.43	18.23	0.30	
. 24	MCY	EPD	2 36 13.29				41	2.7	108.4	123	74	18.25	18.19	0.14	
. 24	JON	EPD	2 36 13.92				24	2.3	114.7	137	74	18.88	19.15	-0.28	
. 24	GWV	EPD	2 36 14.24				23	2.3	115.3	166	74	19.20	19.38	-0.10	
. 24	SPRG	EPD	2 36 14.83				25	2.3	118.3	118	74	19.79	19.79	0.03	

SEP H = 17 59 43.61 UTC RMS = 0.16 NO = 6 FREE DEPTH SOLUTION  
 . 25 LAT = 37.892 N EPX = 1.3 ERH = 1.9 AVFM = 2.3 Q = C  
 . LONG = 116.919 W ERY = 1.4 GAP = 162 AVXM = QS = C STINKING SPRING  
 . DEPTH = 0.00 KM ERZ = 270.0 NM = QD = C

. 25	CTS	IPU	17 59 49.27				40	2.4	31.2	147	38	5.66	6.06	-0.23	
. 25	TNP	IPU	17 59 50.39				45	2.6	33.7	309	38	6.78	6.48	0.03	

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SEP 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 25	MZP	IPU4	17 59 51.79					21 1.9	46.0	243	38	8.18	8.58	-0.15	
. 25	KRNA	IPU	17 59 52.94					40 2.5	50.4	109	38	9.33	9.21	0.05	
. 25	HCR	IPU	17 59 53.89					22 2.0	57.0	48	38	10.28	10.29	0.09	
. 25	GMN	EPU4	17 59 56.06					25 2.2	72.2	205	38	12.45	12.79	-0.19	
. 25	BLT	IPU	17 59 57.85					19 2.0	83.7	123	38	14.24	14.59	-0.22	
. 25	EPN	IPU	17 59 59.98					43 2.7	91.8	145	38	16.37	16.00	0.31	
.....															
SEP H = 10 48 53.16 UTC RMS = 0.11 NO = 8 FREE DEPTH SOLUTION															
. 26	LAT = 36.707 N			ERX =	2.7	ERH =	4.1	AVFM =	1.7	Q = D		MERCURY			
. 26	LONG = 115.653 W			ERY =	5.1	GAP =	273	AVXM =		QS = C					
. 26	DEPTH = 0.07 KM			ERZ =	48.3	NM =				QD = D					
.....															
. 26	SPRG	IPU0	10 48 55.72					19 1.7	14.0	264	40	2.56	3.01	-0.42	
. 26	CPX	EPU0	10 49 1.17					10 1.3	43.5	305	38	8.01	7.94	0.11	
. 26	APK	EPU4	10 48 57.89					14 1.6	43.6	171	38	4.73	8.24	-3.23	
. 26	SHRG	EPU4	10 48 58.69					17 1.8	49.9	117	38	5.53	9.05	-2.93	
. 26	CDH5	IPU	10 49 3.83					24 2.1	61.7	286	38	10.68	10.84	-0.06	
. 26	CDH1	EPU	10 49 3.92					13 1.6	61.7	286	38	10.76	10.90	-0.04	
. 26	BGB	EPU	10 49 4.12					14 1.6	63.0	306	38	10.97	11.19	-0.14	
. 26	YMT3	IPU0	10 49 5.13					21 2.0	68.3	277	38	11.97	11.91	0.11	
. 26	YMT6	EPU	10 49 5.52					17 1.8	69.1	284	38	12.36	12.07	0.21	
. 26	GMR	EPU	10 49 5.41					12 1.5	70.3	351	38	12.25	12.35	0.00	
. 26	YMT5	EPU4	10 49 6.63					21 2.0	74.5	287	38	13.47	12.99	0.48	
.....															
SEP H = 17 32 35.85 UTC RMS = 0.21 NO = 20 FIXED DEPTH SOLUTION															
. 28	LAT = 37.691 N			ERX =	0.5	ERH =	1.1	AVFM =	2.6	Q = C		DEPTH CONTROL INADEQUATE			
. 28	LONG = 117.413 W			ERY =	1.0	GAP =	154	AVXM =		QS = B		GOLDFIELD			
. 28	DEPTH = 5.00 KM			ERZ =	1.5	NM =				QD = C					
.....															
. 28	MZP	IPU	17 32 37.21					27 2.0	2.9	69	154	1.36	1.66	-0.06	
. 28	MGM	IPD	17 32 40.89					33 2.3	28.7	195	96	5.04	5.42	-0.30	
. 28	SVP	IPU	17 32 42.48					37 2.4	34.3	274	95	6.63	6.43	0.08	
. 28	GMN	IPU	17 32 43.51					50 2.7	45.5	163	93	7.66	8.15	-0.35	
. 28	LCH	IPU	17 32 45.48					28 2.2	54.7	202	92	9.63	9.51	0.19	
. 28	CTS	IPU2	17 32 45.76					26 2.2	66.8	94	92	9.41	10.58	-0.50	
. 28	GVN	IPU	17 32 48.78					32 2.4	76.8	175	92	12.93	12.98	-0.11	
. 28	SGV	IPU	17 32 50.29					33 2.5	85.7	157	91	14.44	14.58	-0.05	
. 28	TMO	EPU4	17 32 53.06					22 2.2	98.3	180	91	17.21	16.76	0.74	
. 28	EPN	IPU	17 32 54.44					62 3.1	109.9	119	90	18.59	18.18	0.35	
. 28	BLT	EPU2	17 32 54.83					27 2.4	116.3	102	90	18.96	19.22	-0.11	
. 28	YMT1	IPU	17 32 56.18					80 3.4	121.7	140	90	20.33	20.09	0.11	
. 28	WCT	IPU	17 32 55.83					39 2.7	121.8	145	90	19.98	20.11	0.03	
. 28	BGB	EPU	17 32 56.88					42 2.8	127.6	125	90	21.03	21.05	0.06	
. 28	YMT6	IPU	17 32 57.41					51 3.0	128.6	136	90	21.56	21.22	0.25	
. 28	FMT	EPU	17 32 57.18					26 2.4	129.6	154	90	21.33	21.37	0.19	
. 28	CDH5	EPU	17 32 57.96					39 2.8	134.0	134	90	22.11	22.08	0.12	
. 28	CDH1	EPU	17 32 58.01					22 2.3	134.0	134	90	22.16	22.08	0.17	
. 28	GLR	IPU	17 32 58.22					28 2.5	135.1	114	90	22.37	22.27	0.17	
. 28	LOP	EPU	17 32 59.73					38 2.8	144.3	130	90	23.88	23.77	0.19	
. 28	LSM	EPU	17 32 59.71					49 3.0	146.3	136	90	23.86	24.09	-0.25	
.....															
SEP H = 17 48 31.15 UTC RMS = 0.26 NO = 18 FIXED DEPTH SOLUTION															
. 28	LAT = 37.714 N			ERX =	0.8	ERH =	1.4	AVFM =	2.5	Q = C		DEPTH CONTROL INADEQUATE			
. 28	LONG = 117.402 W			ERY =	1.2	GAP =	178	AVXM =		QS = B		GOLDFIELD			
. 28	DEPTH = 5.00 KM			ERZ =	1.6	NM =				QD = C					
.....															
. 28	MZP	IPU	17 48 32.69					23 1.9	2.2	133	159	1.54	1.62	0.17	
. 28	MGM	IPU	17 48 36.60					28 2.1	31.5	195	95	5.45	5.87	-0.32	
. 28	SVP	IPU	17 48 37.96					34 2.3	35.2	270	94	6.81	6.59	0.12	
. 28	GMN	IPU3	17 48 38.94					28 2.2	47.7	165	93	7.79	8.51	-0.57	
. 28	CTS	IPU	17 48 41.26					19 1.9	60.0	96	92	10.11	10.45	-0.17	
. 28	GVN	IPU	17 48 44.58					28 2.3	79.3	176	92	13.43	13.39	-0.01	
. 28	BMT	IPU	17 48 44.88					41 2.6	82.2	126	92	13.73	14.13	-0.23	
. 28	SGV	IPU	17 48 45.79					51 2.9	87.7	158	91	14.64	14.90	-0.17	
. 28	KRNA	IPU	17 48 46.29					28 2.3	90.2	88	91	15.14	15.40	-0.32	

## 1981 SGB LOCAL-EVENT DATA REPORT

SEP 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
. 28	EPN	IPU	17 48 49.92					54	3.0	110.3	120	90	18.77	18.24	0.48	
. 28	BLT	IPU4	17 48 51.11					21	2.2	115.9	103	90	19.96	19.14	0.95	
. 28	YMT1	IPD	17 48 51.53					62	3.1	123.0	141	90	20.38	20.30	-0.05	
. 28	WCT	EPU	17 48 51.21					35	2.6	123.3	146	90	20.06	20.35	-0.12	
. 28	WCT	IPU	17 48 51.22					31	2.5	123.3	146	90	20.07	20.35	-0.11	
. 28	BGB	IPU4	17 48 53.22					33	2.6	128.2	126	90	22.07	21.15	1.00	
. 28	FMT	EPU	17 48 52.69					24	2.4	131.5	155	90	21.54	21.68	0.10	
. 28	CDH5	IPU	17 48 53.65					37	2.7	135.0	135	90	22.50	22.25	0.35	
. 28	CDH1	EPU	17 48 53.68					21	2.2	135.0	135	90	22.53	22.25	0.38	
. 28	SSP	IPD4	17 48 54.15					32	2.6	136.7	130	90	23.00	22.53	0.56	
. 28	LOP	IPD	17 48 55.44					31	2.6	145.2	131	90	24.29	23.92	0.46	
. 28	LSM	IPD	17 48 55.86					35	2.7	147.4	137	90	24.71	24.28	0.42	
. 28	GMR	EPU4	17 48 56.44					28	2.6	150.2	106	90	25.29	24.73	0.66	

SEP H = 18 18 59.98 UTC RMS = 0.13 NO = 7 FREE DEPTH SOLUTION  
 . 28 LAT = 37.702 N ERX = 1.8 EXH = 2.8 AVFM = 2.3 W = D  
 . LONG = 117.385 W ERY = 2.2 GAP = 229 AVXM = W = C GOLDFIELD  
 . DEPTH = 6.23 KM ERZ = 2.4 NM = WD = D

. 28	MZP	IPU	18 19 1.52					27	2.0	0.2	142	178	1.54	1.75	0.03	
. 28	MGM	IPU	18 19 5.42					30	2.2	30.6	199	98	5.44	5.76	-0.22	
. 28	SVP	IPU	18 19 6.93					37	2.4	36.7	272	97	6.95	6.85	-0.01	
. 28	GMN	IPD	18 19 7.93					35	2.4	46.0	166	95	7.95	8.25	-0.15	
. 28	LCH	EPU	18 19 9.88					26	2.2	56.9	204	94	9.90	9.87	0.12	
. 28	GVN	IPU	18 19 13.32					32	2.4	77.9	177	93	13.34	13.16	0.13	
. 28	SGV	IPU	18 19 14.65					49	2.8	85.9	159	92	14.67	14.61	0.15	

## 1981 SGB LOCAL-EVENT DATA REPORT

OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	U1ST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
OCT H = 20 17 30.65 UTC RMS = 0.15 NO = 26 05 LAT = 37.133 N ERX = 0.3 ERH = 0.3 AVFM = w = C LONG = 116.213 W ERY = 0.2 GAP = 76 AVXM = 2.2 wS = B DEPTH = 4.65 KM ERZ = 2.0 NM = 13 wD = C															
FREE DEPTH SOLUTION															
SILENT CANYON - YUCCA FLAT															
05	BGB	IPD0	20 17 33.12						10.7	187	110	2.47	2.45	0.10	
05	EPN	IPU0	20 17 33.48						13.3	312	105	2.83	2.98	-0.21	
05	GLR	IPD0	20 17 34.14						18.8	67	99	3.49	3.68	-0.13	
05	SSP	IPU0	20 17 34.93						23.1	181	97	4.28	4.51	-0.15	
		S 4	20 17 37.21									6.56	7.57	-1.01	
05	CPX	IPU0	20 17 35.35	1751	14	2.1			26.6	148	95	4.70	4.90	-0.17	
		S 4	20 17 38.17									7.52	8.33	-0.81	
05	LUP	IPD0	20 17 36.31	2054	15				31.2	173	94	5.66	5.75	-0.01	
		S 4	20 17 39.71									9.06	9.69	-0.63	
05	CDH1	IPU0	20 17 36.17						31.7	197	94	5.52	5.75	-0.13	
05	CDH5	IPU0	20 17 36.19						31.7	197	94	5.54	5.68	-0.05	
05	YMT5	IPU0	20 17 36.72						33.7	219	94	6.07	6.09	-0.02	
05	YMT6	IPD0	20 17 36.91						34.9	209	94	6.26	6.23	-0.06	
05	YMT4	IPU0	20 17 37.38						38.2	214	93	6.73	6.78	-0.16	
05	BLT	EPD4	20 17 37.15	1953	13	2.1			39.5	12	93	6.50	7.12	-0.49	
		S 4	20 17 41.77									11.12	11.95	-0.83	
05	BMT	IPU0	20 17 38.10						41.9	293	93	7.45	7.57	0.05	
05	YMT1	IPD0	20 17 38.24						42.0	222	93	7.59	7.38	0.08	
05	LSM	EPD1	20 17 38.26	1405	17	1.8			44.0	187	93	7.61	7.70	-0.11	
		S 4	20 17 43.49									12.84	13.19	-0.35	
05	GMR	IPD0	20 17 38.71						45.1	60	93	8.06	7.97	0.19	
05	WCT	EPD1	20 17 39.71						52.8	224	92	9.06	9.10	0.12	
		S 4	20 17 46.50									15.85	15.29	0.56	
05	SDH	EPU1	20 17 40.23	1196	16	2.2			55.3	192	92	9.58	9.51	0.10	
		S 4	20 17 47.15									16.50	16.20	0.30	
05	MCY	EPD1	20 17 40.58						56.9	157	92	9.93	9.83	0.18	
05	SPRG	EPU1	20 17 41.31	1196	18	2.1			60.6	144	92	10.66	10.42	0.27	
		S 4	20 17 48.45									17.80	17.77	0.03	
05	KRNA	IPU0	20 17 42.62	1678	16	2.2			69.1	348	92	11.97	11.95	-0.05	
		S 4	20 17 51.08									20.43	20.56	-0.13	
05	CTS	IPU0	20 17 43.21	2052	15				73.7	322	91	12.56	12.69	0.04	
		S 4	20 17 51.54									20.89	21.41	-0.52	
05	FMT	EPU1	20 17 43.34	968	13	2.2			74.5	223	91	12.69	12.63	0.30	
		S 4	20 17 52.67									22.02	21.19	0.83	
05	SGV	IPD0	20 17 43.67	2027	15				74.8	257	91	13.02	12.79	0.32	
		S 4	20 17 52.67									22.02	21.72	0.30	
05	JON	EPU1	20 17 44.00	820	18	2.1			77.6	173	91	13.35	13.12	0.22	
		S 4	20 17 53.83									23.18	22.45	0.73	
05	GMN	EPU1	20 17 46.82	729	17	2.3			94.7	281	90	16.17	15.71	0.61	
		S 4	20 17 57.70									27.05	26.60	0.45	
05	GVN	IPU3	20 17 48.04	1735	14	2.5			101.5	262	90	17.39	16.80	0.53	
		S 4	20 18 0.31									29.66	28.83	0.83	
05	MCA	EPX4	20 17 49.07	805	14	2.4			109.3	241	90	18.42	18.08	0.26	
		S 4	20 18 2.45									31.80	31.06	0.74	
05	MGM	EPU4	20 17 50.85	591	16	2.5			118.8	287	90	20.20	19.62	0.67	
		S 4	20 18 5.17									34.52	33.40	1.12	
05	HCR	EPU4	20 17 51.32	949	16	2.6			123.7	351	90	20.67	20.42	0.34	
		S 4	20 18 6.40									35.75	34.76	0.99	
OCT H = 20 42 6.80 UTC RMS = 0.05 NO = 9															
05 LAT = 37.147 N ERX = 0.2 ERH = 0.2 AVFM = w = B															
LONG = 116.214 W ERY = 0.2 GAP = 124 AVXM = 0.9 wS = A															
DEPTH = 5.82 KM ERZ = 0.8 NM = 5 wD = C															
FREE DEPTH SOLUTION															
SILENT CANYON - YUCCA FLAT															
05	BGB	IPU0	20 42 9.42	769	13	1.0			12.1	186	113	2.62	2.74	-0.05	
		S 3	20 42 11.41									4.61	4.56	0.05	
05	EPN	IPU0	20 42 9.74	307	15	0.6			12.3	308	114	2.94	2.88	-0.01	
		S 2	20 42 11.87									5.07	5.04	0.03	
05	GLR	EPD0	20 42 10.44	174	19	0.9			18.4	72	104	3.64	3.65	0.05	
		S 3	20 42 12.83									6.03	6.13	-0.10	
05	CDH5	EPU0	20 42 12.58	680	12	1.2			33.1	196	96	5.78	5.93	-0.05	
		S 2	20 42 16.80									10.00	9.97	0.03	
05	YMT5	EPU0	20 42 13.12	235	11	1.0			34.9	218	96	6.32	6.28	0.04	
		S 4	20 42 17.14									10.34	10.74	-0.40	

## 1981 SGO LOCAL-EVENT DATA REPORT

UCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XVAG	DUR	FMAG	LIST (KM)	AZI (DEG)	AIN (DEG)	IOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
UCT H = 21	12	4.17	UTC	RMS =	0.05	NU =	10	FREE DEPTH SOLUTION							
05	LAT =	37.143 N		ERX =	0.2	ERH =	0.3	AVFM =	1.6	WS =	B				
	LONG =	116.216 W		ERY =	0.2	GAP =	121	AVXM =	1.0	WS =	A	SILENT CANYON - YUCCA FLAT			
	DEPTH =	4.67 KM		ERZ =	1.0	NM =	6	WD =	C						
.....															
05	BGB	IPU0	21 12	6.66	840	14	1.1	****	1.3	11.7	185	108	2.49	2.61	-0.03
		S 2	21 12	8.50									4.33	4.32	0.01
05	EPN	IPU0	21 12	7.04	299	20	0.7	****	2.0	12.5	310	107	2.87	2.85	-0.04
		S 2	21 12	9.18									5.01	4.98	0.03
05	GLR	IPU0	21 12	7.77	169	19	0.8			18.7	70	99	3.60	3.66	0.01
		S 4	21 12	9.68									5.51	6.14	-0.62
05	LOP	EPX1	21 12	9.98	152	26	0.8			32.3	172	94	5.81	5.92	-0.02
		S 4	21 12	15.15									10.98	9.98	1.00
05	CDH1	EPU1	21 12	10.13	339	15	1.2			32.6	196	94	5.96	5.90	0.16
		S 4	21 12	13.92									9.75	9.92	-0.17
05	CDH5	EPU1	21 12	9.81	740	14	1.2			32.6	196	94	5.64	5.83	-0.09
		S 3	21 12	13.88									9.71	9.80	-0.09
05	YMT5	EPU0	21 12	10.38						34.4	218	94	6.21	6.19	0.02
		S 4	21 12	15.17									11.00	10.59	0.41
.....															
.....															
UCT H = 21	31	19.90	UTC	RMS =	0.04	NU =	9	FREE DEPTH SOLUTION							
05	LAT =	37.144 N		ERX =	0.1	ERH =	0.2	AVFM =		WS =	B				
	LONG =	116.218 W		ERY =	0.1	GAP =	121	AVXM =	0.9	WS =	A	SILENT CANYON - YUCCA FLAT			
	DEPTH =	5.28 KM		ERZ =	0.7	NM =	3	WD =	C						
.....															
05	BGB	IPU0	21 31	22.44	371	14	0.7			11.8	184	111	2.54	2.66	-0.03
		S 3	21 31	24.39									4.49	4.40	0.09
05	EPN	IPU0	21 31	22.83	446	23	0.9			12.2	310	111	2.93	2.84	0.03
		S 2	21 31	24.82									4.92	4.97	-0.04
05	GLR	IPU0	21 31	23.54						18.8	71	101	3.64	3.70	0.01
		S 2	21 31	26.11									6.21	6.21	0.00
05	CDH1	EPX0	21 31	25.76	210	15	1.0			32.7	196	95	5.86	5.92	0.04
		S 4	21 31	30.39									10.49	9.95	0.54
05	CDH5	EPU0	21 31	25.62						32.7	196	95	5.72	5.85	-0.03
		S 2	21 31	29.68									9.78	9.83	-0.05
.....															

## 1981 SGB LOCAL-EVENT DATA REPORT

OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
UCT H = 1 24 4.95 UTC				RMS = 0.08	NO = 5	FREE DEPTH SOLUTION									
06 LAT = 37.167 N				ERX = 10.5	ERH = 11.0	AVFM = 1.7	W = D								
LONG = 117.362 W				ERY = 3.2	GAP = 205	AVXM =	WS = D	MT. JACKSON							
DEPTH = 3.43 KM				ERZ = 257.5	NM =		WD = D								
.....															
06	LCH	IPD0	1 24 9.78				17	1.7	26.4	287	91	4.83	4.91	0.01	
06	TMO	EPD3	1 24 11.63						40.3	186	90	6.68	6.86	0.12	
06	PPK	EPD4	1 24 8.61						56.3	301	90	3.66	9.45	-5.80	
06	MCA	EPD3	1 24 14.94				14	1.6	58.0	173	90	9.99	9.73	0.18	
		S 2	1 24 21.61									16.66	16.78	-0.12	
06	SVP	EPD2	1 24 17.06						72.2	327	90	12.11	12.04	-0.04	
06	QSM	EPD4	1 24 45.61						140.4	162	90	40.66	23.14	17.43	
06	SHRG	EPD4	1 24 42.72						210.2	110	52	37.77	33.02	5.34	
.....															
UCT H = 21 24 0.28 UTC				RMS = 0.05	NO = 4	FIXED DEPTH SOLUTION									
06 LAT = 36.647 N				ERX =	ERH =	AVFM = 2.3	W = C	DEPTH CONTROL INADEQUATE							
LONG = 115.219 W				ERY =	GAP = 244	AVXM =	WS = A	MAYFORD PEAK							
DEPTH = 5.00 KM				ERZ =	NM =		WD = D								
.....															
06	SHRG	EPD0	21 24 3.11						16.8	160	102	2.83	3.41	0.01	
		S 4	21 24 51.31									51.05	4.83	46.20	
06	APK	EPD0	21 24 8.68				30	2.3	48.3	221	93	8.40	8.72	-0.05	
06	SPRG	EPD0	21 24 9.37				30	2.3	53.0	276	93	9.09	9.18	-0.06	
06	MCY	EPD1	21 24 11.68				30	2.3	66.4	271	92	11.40	11.38	0.11	
06	JUN	EPD4	21 24 9.35				30	2.4	82.5	254	92	9.07	13.91	-4.85	
06	SSP	EPD4	21 24 18.01				29	2.4	94.4	289	91	17.73	16.09	1.72	
.....															
UCT H = 2 28 15.90 UTC				RMS = 0.05	NO = 7	FREE DEPTH SOLUTION									
07 LAT = 37.133 N				ERX = 0.3	ERH = 0.6	AVFM = 1.2	W = C								
LONG = 117.338 W				ERY = 0.5	GAP = 189	AVXM =	WS = B	MT. JACKSON							
DEPTH = 5.81 KM				ERZ = 2.0	NM =		WD = D								
.....															
07	GVN	EPD1	2 28 18.91				12	1.3	14.6	182	108	3.01	2.94	0.02	
		S 0	2 28 21.03									5.13	5.12	0.01	
07	GMN	EPD4	2 28 22.38				4	0.4	19.8	20	103	6.48	4.03	2.61	
07	LCH	EPD4	2 28 21.88				6	1.0	29.7	292	97	5.98	5.47	0.59	
		S 2	2 28 25.09									9.19	9.22	-0.02	
07	SGV	EPD0	2 28 21.64				8	1.0	31.9	122	97	5.74	5.85	-0.01	
		S	2 28 25.76									9.86	9.85	0.02	
07	MCA	EPD1	2 28 25.28				10	1.3	54.0	175	93	9.38	9.16	0.14	
		S 3	2 28 31.48									15.58	15.81	-0.22	
07	WCT	EPD4	2 28 36.94						73.7	121	92	21.04	12.51	8.70	
07	FMT	EPD4	2 28 48.37						74.0	138	92	32.47	12.56	20.15	
07	YMT1	EPD4	2 28 39.36						78.4	113	92	23.46	13.31	10.03	
07	SPRG	EPD4	2 28 60.57				14	1.9	144.7	110	91	44.67	24.11	20.60	
.....															

## 1981 SGB LOCAL-EVENT DATA REPORT

OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN' (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
OCT H = 12 54 2.91 UTC				RMS =	0.13	NO =	7	FREE DEPTH SOLUTION							
. 07 LAT = 37.098 N				ERX =	0.7	ERH =	0.9	AVFM =	1.1	Q =	C				
. LONG = 116.158 W				ERY =	0.6	GAP =	160	AVXM =		QS =	B	SILENT CANYON - YUCCA FLAT			
. DEPTH = 4.64 KM				ERZ =	2.3	NM =				WD =	C				
.....															
. 07	BGB	EPU0	12 54	4.98				15	1.5	9.1	223	114	2.07	2.22	-0.07
.		S 0	12 54	6.51									3.60	3.66	-0.06
. 07	GLR	EPD0	12 54	6.02				4	0.4	16.8	48	100	3.11	3.35	-0.17
.		S 0	12 54	8.60									5.69	5.61	0.08
. 07	EPN	EPU0	12 54	7.02				13	1.4	19.5	311	98	4.11	3.98	0.08
. 07	CDH1	EPD4	12 54	9.16				8	1.0	30.0	208	94	6.25	5.48	0.87
.		S 0	12 54	11.96									9.05	9.20	-0.15
. 07	CDH5	EPU4	12 54	10.00				6	0.8	30.0	208	94	7.09	5.41	1.78
.		S 0	12 54	12.24									9.33	9.08	0.25
. 07	LSM	EPU4	12 54	14.00				9	1.2	41.1	194	93	11.09	7.22	3.85
. 07	JON	EPD4	12 54	7.45						73.2	176	91	4.54	12.41	-7.88
.....															
OCT H = 12 19 27.23 UTC				RMS =	0.07	NO =	4	FIXED DEPTH SOLUTION							
. 08 LAT = 38.012 N				ERX =		ERH =		AVFM =	3.0	Q =	C	DEPTH CONTROL INADEQUATE			
. LONG = 113.225 W				ERY =		GAP =	337	AVXM =		QS =	A				
. DEPTH = 5.00 KM				ERZ =		NM =				WD =	D				
.....															
. 08	DLM	EPD4	12 19	49.93				23	2.3	140.7	251	90	22.70	23.19	-0.74
. 08	NPN	EPD3	12 19	52.67				39	2.9	156.0	255	90	25.44	25.66	-0.43
. 08	SRG	IPD0	12 19	54.24				55	3.2	162.7	265	90	27.01	26.76	0.03
.		S 4	12 20	12.75									45.52	46.14	-0.62
. 08	MTI	EPU4	12 19	57.52				36	2.9	184.1	258	52	30.29	29.49	0.83
.		S 0	12 20	17.52									50.29	50.38	-0.09
. 08	EPR	EPU4	12 19	59.49				41	3.0	196.9	242	52	32.26	31.08	1.21
.		S 0	12 20	20.37									53.14	53.11	0.04
. 08	WRN	EPU4	12 19	61.74				33	2.9	207.6	269	52	34.51	32.55	1.92
.		S 4	12 20	23.59									56.36	55.74	0.62
. 08	TPU	EPD4	12 19	62.91				28	2.8	218.2	258	52	35.68	33.95	1.87
.		S 4	12 20	25.57									58.34	57.82	0.52
. 08	GMR	EPD2	12 19	63.82				41	3.2	236.8	251	52	36.59	36.26	0.43
.		S 4	12 20	30.26									63.03	61.83	1.20
. 08	SHRG	EPU4	12 19	65.68				29	2.9	239.3	226	52	38.45	36.59	2.45
.		S	12 20	30.29									63.06	61.57	1.49
. 08	GLF	EPU4	12 19	70.19				32	3.1	262.6	250	52	42.96	39.53	3.50
.		S 4	12 20	37.51									70.28	67.48	2.80
. 08	SPRG	EPU4	12 19	72.51				39	3.3	271.6	237	52	45.28	40.64	4.68
. 08	FMT	EPD4	12 19	60.00				41	3.6	350.0	244	52	52.77	50.64	2.37
.....															
OCT H = 2 27 30.33 UTC				RMS =	0.05	NO =	10	FREE DEPTH SOLUTION							
. 09 LAT = 36.786 N				ERX =	0.4	ERH =	0.6	AVFM =	1.2	Q =	C				
. LONG = 115.982 W				ERY =	0.5	GAP =	238	AVXM =		QS =	A	MERCURY			
. DEPTH = 10.97 KM				ERZ =	0.8	NM =				WD =	D				
.....															
. 09	MCY	EPU0	2 27	33.62				10	1.2	14.0	173	128	3.29	3.34	0.04
.		S 0	2 27	35.88									5.55	5.57	-0.01
. 09	LDP	EPU0	2 27	34.17				8	1.0	18.2	294	121	3.84	3.99	-0.07
.		S 4	2 27	37.60									7.27	6.69	0.58
. 09	LSM	EPU0	2 27	35.35						26.4	259	111	5.02	5.09	-0.08
.		S 0	2 27	39.05									8.72	8.73	-0.01
. 09	CDH5	EPD0	2 27	35.97				13	1.5	31.0	285	108	5.64	5.77	-0.03
.		S 0	2 27	40.01									9.68	9.70	-0.02
. 09	CDH1	EPD0	2 27	36.17				9	1.1	31.0	285	108	5.84	5.84	0.10
.		S 2	2 27	40.27									9.94	9.82	0.12
. 09	SDH	EPU0	2 27	36.70						35.4	244	105	6.37	6.46	-0.05
.....															

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.....															
OCT H = 3 26 59.95			UTC	RMS =	0.08	NO =	9	FREE DEPTH SOLUTION							
09 LAT = 36.158 N				ERX =	1.0	ERH =	1.7	AVFM =	2.1	W = C					
LONG = 114.988 W				ERY =	1.4	GAP =	277	AVXM =		WS = B		HOOVER DAM			
DEPTH = 12.02 KM				ERZ =	1.0	NM =				WD = D					
.....															
09	SHRG	EPD0	3 26 66.96					23	2.0	41.3	339	105	7.01	7.56	0.05
		S 4	3 27 15.47										15.52	11.91	3.61
09	SPRG	EPD0	3 26 76.05							94.7	309	96	16.10	16.04	0.09
09	MCY	EPD1	3 26 77.31					23	2.2	103.8	303	95	17.36	17.51	-0.07
09	NUP	EPD0	3 26 77.47							105.0	268	95	17.52	17.64	-0.03
09	JUN	EPD4	3 26 77.12							105.0	287	95	17.17	17.63	-0.47
		S 2	3 27 30.00										30.05	30.16	-0.11
09	EPR	EPD0	3 26 78.95							113.6	351	95	19.00	19.11	-0.09
09	LUP	EPD2	3 26 82.09					19	2.1	131.0	306	94	22.14	22.01	0.22
09	LSM	EPD0	3 26 82.06							132.2	299	52	22.11	22.04	0.06
09	SDH	EPD1	3 26 81.88							132.7	294	52	21.93	22.08	-0.11
09	SSP	EPD4	3 26 84.39							139.3	308	52	24.44	23.17	1.35
09	CDH1	EPD4	3 26 84.06							142.4	303	52	24.11	23.41	0.81
09	GLR	EPD4	3 26 85.14							147.8	321	52	25.19	24.11	1.16
.....															
OCT H = 15 11 58.91			UTC	RMS =	0.08	NO =	7	FREE DEPTH SOLUTION							
09 LAT = 37.338 N				ERX =	0.9	ERH =	1.1	AVFM =	1.9	W = C					
LONG = 114.729 W				ERY =	0.6	GAP =	247	AVXM =		WS = B		DELMAR MOUNTAINS			
DEPTH = 9.89 KM				ERZ =	1.3	NM =				WD = D					
.....															
09	PRN	EPD0	15 11 64.63					22	1.9	29.4	285	107	5.72	5.56	0.04
09	DLM	EPD0	15 11 64.85							29.7	358	107	5.94	5.67	0.02
		S 4	15 12 8.54										9.63	10.12	-0.49
09	NPN	EPD1	15 11 66.17							39.5	332	102	7.26	7.18	-0.13
		S 0	15 12 11.54										12.63	12.64	-0.01
09	EPR	EPD4	15 11 68.48					18	1.8	44.7	245	100	9.57	7.94	1.65
		S 1	15 12 12.42										13.51	13.54	-0.03
09	MTI	EPD3	15 11 69.79							61.0	308	97	10.88	10.61	0.30
		S 4	15 12 17.96										19.05	18.09	0.95
09	SRG	EPD4	15 11 70.00							67.4	334	97	11.09	11.67	-0.60
09	GMR	EPD4	15 11 75.84							92.4	270	95	16.93	15.70	1.33
09	SHRG	EPD4	15 11 76.52							100.0	202	94	17.61	16.94	1.26
09	WKN	EPD4	15 11 77.75							104.1	313	94	18.84	17.64	1.16
09	GLR	EPD4	15 11 79.32							115.3	262	94	20.41	19.38	1.10
09	LOP	EPD4	15 11 82.73							138.7	247	52	23.82	23.21	0.69
09	CDH1	EPD0	15 11 83.50							150.8	249	52	24.59	24.70	-0.01
.....															



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OCT H = 12 21 55.91 UTC RMS = 0.15 NU = 6 FREE DEPTH SOLUTION															
10	LA1	=	37.131 N	ERX =	5.1	ERH =	6.0	AVFM =	1.2	W =	D				
10	LONG	=	117.455 W	ERY =	3.2	GAP =	286	AVXM =		WS =	D				MT. JACKSON
10	DEPTH	=	9.45 KM	ERZ =	14.9	NM =				WD =	D				
10	GMN	IPD1	12 21 60.67					9 1.1	25.6	43	109	4.76	5.10	-0.18	
10	S 1		12 22 4.47									8.56	8.46	0.10	
10	SGV	IPU0	12 21 63.30					9 1.2	41.1	114	101	7.39	7.41	0.07	
10	S 1		12 22 8.28									12.37	12.52	-0.15	
10	WCT	IPD2	12 21 69.98						82.8	117	95	14.07	14.02	0.22	
10	YMT1	EPD2	12 21 71.19						88.1	110	95	15.28	14.91	0.24	
10	YMT6	EPD4	12 21 62.70						98.3	108	94	6.79	16.57	-9.87	
OCT H = 14 47 53.53 UTC RMS = 0.09 NU = 29 FREE DEPTH SOLUTION															
13	LA1	=	37.061 N	ERX =	0.2	ERH =	0.3	AVFM =	3.8	W =	B				
13	LONG	=	116.951 W	ERY =	0.2	GAP =	142	AVXM =		WS =	A				THIRTY CANYON
13	DEPTH	=	7.69 KM	ERZ =	1.5	NM =				WD =	C				
13	WCT	IPU	14 48 0.55						41.5	136	98	7.02	7.32	-0.14	
13	YMT1	IPD	14 48 1.42					250 4.1	44.0	122	97	7.89	7.75	0.01	
13	FMT	EPU	14 48 1.98					160 3.7	49.2	162	96	8.45	8.56	0.13	
13	TMD	IPD	14 48 2.09					160 3.7	49.7	235	97	8.56	8.87	-0.02	
13	YMT6	IPU	14 48 2.80						53.6	115	96	9.27	9.30	-0.12	
13	MCA	IPD	14 48 2.89					170 3.8	54.4	213	96	9.35	9.26	0.02	
13	EPN	IPD	14 48 4.10						58.3	73	95	10.57	10.29	0.21	
13	HGB	IPD	14 48 4.87					125 3.5	64.4	92	95	11.34	11.17	0.25	
13	SSP	IPU	14 48 5.31						66.9	103	95	11.78	11.64	0.21	
13	CTS	IPD	14 48 5.29						69.0	17	94	11.76	11.95	-0.03	
13	LSM	IPU	14 48 5.39						70.1	121	94	11.85	11.97	-0.14	
13	SDH	IPU	14 48 5.71						71.5	130	94	12.18	12.17	0.04	
13	LOP	IPU	14 48 6.05						73.4	108	94	12.52	12.62	-0.02	
13	PGE	IPU	14 48 7.17					160 3.8	79.7	187	94	13.64	13.67	0.18	
13	GLR	IPD	14 48 7.63					150 3.8	84.4	80	94	14.09	14.34	-0.18	
13	AMR	EPU	14 48 7.98						85.0	150	93	14.45	14.31	0.13	
13	BLT	IPD	14 48 8.23						87.1	58	93	14.70	14.86	-0.03	
13	KRNA	IPU	14 48 9.16						90.8	34	93	15.63	15.51	0.05	
13	MCY	IPU	14 48 9.98						98.6	117	93	16.45	16.63	-0.10	
13	GWV	IPU	14 48 10.42						100.2	166	93	16.89	16.94	0.03	
13	JUN	IPU	14 48 10.50						102.4	132	93	16.97	17.16	-0.20	
13	GMR	IPD	14 48 12.02					150 3.9	109.0	74	93	18.49	18.38	0.21	
13	GCS	IPD	14 48 13.80						120.6	49	92	20.27	20.33	-0.03	
13	QSM	IPU	14 48 14.08					240 4.3	121.8	177	92	20.55	20.27	0.19	
13	NOP	IPU	14 48 14.23						125.8	145	92	20.70	20.98	-0.19	
13	TPU	IPD	14 48 15.29						130.2	62	92	21.76	21.90	-0.01	
13	HCR	IPD	14 48 16.58						137.9	19	92	23.05	23.16	-0.03	
13	MTI	IPD	14 48 20.05						163.6	65	52	26.52	26.58	-0.04	
13	SRG	IPD	14 48 23.70						189.8	61	52	30.17	29.98	-0.03	
13	DLM	IPD4	14 48 23.65						205.2	73	52	30.11	31.97	-2.11	

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OCT H = 14 51 57.92 UTC			RMS = 0.11	NU = 17	FREE DEPTH SOLUTION										
13	LAT =	37.064 N	ERX = 0.3	ERH = 0.4	AVFM = 2.1	Q = C									
	LONG =	116.948 W	ERY = 0.3	GAP = 94	AVXM =	WS = B	THIRSTY CANYON								
	DEPTH =	4.83 KM	ERZ = 2.0	NM =		WD = C									

13	SGV	IPD0	14 51 60.32					33	2.2	11.9	219	108	2.40	2.62	-0.13
		S 0	14 52 2.26										4.34	4.32	0.01
13	GVN	EPD0	14 51 64.29					27	2.1	35.8	259	94	6.37	6.32	-0.01
		S 2	14 52 9.15										11.23	10.91	0.32
13	BMT	IPD0	14 51 64.34							36.2	48	94	6.42	6.66	-0.07
		S 4	14 52 10.04										12.12	11.09	1.03
13	GMN	IPC0	14 51 64.62					26	2.1	38.1	313	94	6.70	6.96	-0.11
		S 0	14 52 9.70										11.78	11.64	0.14
13	WCT	EPU2	14 51 64.86							41.6	137	93	6.94	7.28	-0.18
		S 0	14 52 10.22										12.30	12.18	0.12
13	YMT1	IPU0	14 51 65.63							44.0	122	93	7.71	7.72	-0.14
		S 0	14 52 11.46										13.54	13.42	0.12
13	YMT5	IPD0	14 51 66.18							47.7	113	93	6.26	8.34	-0.09
		S 0	14 52 12.23										14.31	14.27	0.04
13	FMT	IPU1	14 51 66.18							49.5	162	93	8.26	8.57	-0.07
13	TMD	EPD4	14 51 68.08							50.1	235	93	10.16	8.91	1.55
		S 4	14 52 15.07										17.15	14.72	2.42
13	YMT2	woy0	14 51 66.89							51.6	127	92	8.97	8.93	-0.04
		S 4	14 52 15.09										17.17	15.41	1.76
13	MCA	EPU2	14 51 67.45							54.9	213	92	9.53	9.30	0.15
		S 4	14 52 14.58										16.66	16.04	0.62
13	EPN	IPD1	14 51 68.30							57.9	73	92	10.38	10.20	0.12
13	CDH1	IPU4	14 51 68.73							60.5	112	92	10.81	10.43	0.47

OCT H = 14 56 14.17 UTC			RMS = 0.11	NU = 13	FREE DEPTH SOLUTION										
13	LAT =	37.064 N	ERX = 0.2	ERH = 0.4	AVFM = 2.1	Q = B									
	LONG =	116.947 W	ERY = 0.3	GAP = 94	AVXM =	WS = A	THIRSTY CANYON								
	DEPTH =	1.20 KM	ERZ = 1.7	NM =		WD = C									

13	SGV	IPD1	14 56 16.53							12.0	220	91	2.36	2.55	-0.10
		S 4	14 56 17.46										3.29	4.20	-0.91
13	GVN	EPD0	14 56 20.58					28	2.2	35.9	259	74	6.41	6.41	-0.06
		S 2	14 56 25.42										11.25	11.06	0.19
13	BMT	EPD0	14 56 20.67							36.1	48	74	6.50	6.72	-0.05
		S 4	14 56 26.32										12.15	11.20	0.95
13	GMN	EPU2	14 56 20.95							38.2	313	74	6.78	7.04	-0.12
13	WCT	EPU2	14 56 21.08					27	2.1	41.5	137	74	6.91	7.35	-0.28
		S 0	14 56 26.44										12.27	12.29	-0.02
13	YMT1	IPU1	14 56 21.86							44.0	122	74	7.71	7.78	-0.20
		S 4	14 56 28.30										14.13	13.53	0.60
13	YMT4	EPD1	14 56 23.04							49.3	117	74	8.87	8.67	0.09
		S 0	14 56 29.28										15.11	15.01	0.10
13	YMT2	EP 2	14 56 23.47					23	2.0	51.6	127	74	9.30	8.99	0.22
		S 4	14 56 31.32										17.15	15.52	1.63
13	YMT6	EPD4	14 56 24.17							53.4	115	74	10.00	9.31	0.60
		S 4	14 56 31.99										17.82	16.07	1.74
13	YMT3	EPU4	14 56 30.16							56.8	123	74	15.99	9.84	6.20
13	EPN	EPD1	14 56 24.60					23	2.1	57.8	73	74	10.43	10.26	0.10
		S 4	14 56 32.47										18.30	17.65	0.64
13	LCH	EPD1	14 56 25.50							65.1	287	74	11.33	11.28	0.13

OCT H = 15 8 16.46 UTC			RMS = 0.12	NU = 16	FREE DEPTH SOLUTION										
13	LAT =	37.064 N	ERX = 0.2	ERH = 0.4	AVFM = 2.1	Q = C									
	LONG =	116.954 W	ERY = 0.4	GAP = 94	AVXM =	WS = B	THIRSTY CANYON								
	DEPTH =	4.19 KM	ERZ = 3.9	NM =		WD = C									

13	SGV	IPD0	15 8 18.85							11.6	217	104	2.39	2.54	-0.06
		S 4	15 8 20.58										4.12	4.19	-0.07
13	GVN	EPD0	15 8 22.83							35.3	259	93	6.37	6.23	0.08
		S 2	15 8 27.63										11.17	10.75	0.41

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. 13	RMT	EPD0	15 8 22.85						36.6	48	92	6.39	6.72	-0.16	.
.		S 4	15 8 28.69									12.23	11.19	1.03	.
. 13	GMN	EPD0	15 8 23.17						37.7	314	92	6.71	6.89	-0.04	.
. 13	WCT	IPU1	15 8 23.39						41.9	136	92	6.93	7.34	-0.25	.
.		S 2	15 8 28.75									12.29	12.27	0.02	.
. 13	YMT1	IPU1	15 8 24.17				29	2.2	44.5	122	92	7.71	7.79	-0.21	.
.		S 1	15 8 30.01									13.55	13.54	0.01	.
. 13	FMT	EPD1	15 8 24.74						49.6	162	92	8.28	8.59	-0.07	.
. 13	YMT6	EPD1	15 8 25.95						54.0	115	91	9.49	9.32	0.07	.
.		S 4	15 8 33.62									17.16	16.10	1.06	.
. 13	MCA	EPD1	15 8 25.95				20	1.9	54.6	212	91	9.49	9.25	0.16	.
.		S 4	15 8 33.20									16.74	15.96	0.78	.
. 13	EPN	EPD1	15 8 26.85						58.4	73	91	10.39	10.28	0.04	.
.		S 0	15 8 34.36									17.90	17.69	0.21	.
. 13	CDH1	EP 2	15 8 27.08						61.0	112	91	10.62	10.51	0.20	.
.		S 1	15 8 34.27									17.81	17.81	0.00	.

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UCT H = 19 51 12.36 UTC RMS = 0.10 NU = 44 FREE DEPTH SOLUTION  
. 13 LAT = 37.058 N ERX = 0.1 ERH = 0.2 AVFM = 3.5 W = B  
. LONG = 116.952 W ERY = 0.2 GAP = 45 AVXM = WS = A THIRSTY CANYON  
. DEPTH = 6.46 KM ERZ = 0.7 NM = WD = B

. 13	SGV	IPD	19 51 14.82				170	3.6	11.2	220	119	2.46	2.61	-0.06	.
. 13	GVN	IPD	19 51 18.80				150	3.6	35.3	260	97	6.44	6.26	0.12	.
. 13	BMT	IPD	19 51 19.10				150	3.6	36.9	47	97	6.74	6.80	0.11	.
. 13	GMN	IPU	19 51 19.20				125	3.5	38.3	314	97	6.84	7.01	-0.01	.
. 13	WCT	IPU	19 51 19.41						41.4	136	96	7.05	7.27	-0.06	.
. 13	YMT1	IPU	19 51 20.14				140	3.6	43.9	121	96	7.78	7.72	-0.07	.
. 13	YMT5	IPD	19 51 20.80						47.8	112	95	8.44	8.38	0.06	.
. 13	FMT	IPU	19 51 20.75						49.0	162	95	8.39	8.51	0.13	.
. 13	TMO	IPD	19 51 20.87						49.4	235	95	8.51	8.81	0.00	.
. 13	YMT4	IPU	19 51 21.30						50.4	118	95	8.94	8.78	0.05	.
. 13	YMT2	IPD4	19 51 21.85						51.4	126	95	9.49	8.91	0.51	.
. 13	YMT6	IPU4	19 51 21.12						53.6	114	94	8.76	9.28	-0.61	.
. 13	MCA	IPD	19 51 21.61						54.1	213	94	9.25	9.19	-0.02	.
. 13	YMT3	IPU	19 51 22.00						56.7	122	94	9.64	9.76	-0.07	.
. 13	EPN	IPD	19 51 22.92				120	3.5	58.5	73	94	10.56	10.31	0.20	.
. 13	MGM	IPU	19 51 23.60						64.3	311	94	11.24	11.22	0.12	.
. 13	HGB	IPD	19 51 23.21						64.5	92	94	10.85	11.17	-0.24	.
. 13	LCH	EPD	19 51 23.35						64.8	288	94	10.99	11.16	-0.09	.
. 13	SSP	IPU	19 51 24.14						67.0	103	93	11.78	11.64	0.22	.
. 13	CIS	IPD	19 51 24.07						69.3	17	93	11.71	11.99	-0.10	.
. 13	LSM	EPD	19 51 24.16				110	3.5	70.1	120	93	11.80	11.96	-0.17	.
. 13	SDH	IPU	19 51 24.47				105	3.4	71.4	130	93	12.11	12.15	0.01	.
. 13	LUP	EPD	19 51 24.72				120	3.5	73.4	108	93	12.36	12.61	-0.17	.
. 13	PGE	IPU	19 51 25.80						79.4	187	93	13.44	13.61	0.05	.
. 13	MZP	IPU	19 51 26.08						80.8	332	93	13.72	13.95	0.01	.
. 13	CPX	EPD	19 51 26.10						81.1	100	93	13.74	13.77	0.00	.
. 13	GLR	IPD	19 51 26.58						84.5	79	93	14.22	14.36	-0.07	.
. 13	AMR	IPU	19 51 26.72				120	3.6	84.9	150	93	14.36	14.27	0.08	.
. 13	BLT	IPD	19 51 27.04						87.3	57	93	14.68	14.89	-0.08	.
. 13	KRNA	IPD	19 51 27.90						91.1	34	92	15.54	15.55	-0.08	.
. 13	PPK	EPD	19 51 28.18						94.1	296	92	15.82	16.00	-0.18	.
. 13	MCY	EPD	19 51 28.87				110	3.6	98.6	117	92	16.51	16.62	-0.03	.
. 13	GWV	IPU	19 51 29.35				120	3.6	100.0	165	92	16.99	16.89	0.18	.
. 13	JUN	IPU	19 51 29.35				105	3.5	102.3	132	92	16.99	17.15	-0.17	.
. 13	SVP	EPD	19 51 30.32						104.7	314	92	17.96	17.88	-0.03	.
. 13	GMR	IPD	19 51 30.88						109.2	74	92	18.52	18.41	0.21	.
. 13	SPRG	EPD	19 51 30.81						109.6	112	92	18.45	18.40	0.08	.
. 13	QSM	IPU	19 51 32.72						121.5	176	92	20.36	20.22	0.05	.
. 13	NUP	IPU	19 51 33.01						125.6	145	92	20.65	20.95	-0.21	.
. 13	TPU	IPD	19 51 34.18						130.5	62	92	21.82	21.94	0.02	.
. 13	HCR	IPD	19 51 35.55						138.2	19	92	23.19	23.21	0.07	.
. 13	APK	EPD	19 51 37.15						147.9	124	91	24.79	24.94	0.12	.
. 13	EPR	IPD	19 51 38.01						157.4	86	52	25.65	25.87	-0.20	.
. 13	MTI	EPD	19 51 39.03						163.8	65	52	26.67	26.74	-0.03	.
. 13	SHRG	EPD4	19 51 40.15						171.8	111	52	27.79	27.79	0.60	.

## 1981 SGB LOCAL-EVENT DATA REPORT

OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
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OCT H = 2 33 11.83 UTC			RMS = 0.08	NO = 11	FREE DEPTH SOLUTION										
14	LAT = 37.061 N	ERX = 0.2	ERH = 0.4	AVFM = 1.5	W = B										
	LONG = 116.942 W	ERY = 0.3	GAP = 147	AVXM =	WS = A	THIRSTY CANYON									
	DEPTH = 4.60 KM	ERZ = 1.6	NM =		WD = C										

14	SGV	IPD0	2 33 14.22						11.9	222	107	2.39	2.61	-0.13	
		S 0	2 33 16.16									4.33	4.32	0.02	
14	BMT	EPD0	2 33 18.29				13	1.5	36.1	47	93	6.46	6.64	0.00	
14	GVN	IPD0	2 33 18.20						36.3	260	93	6.37	6.39	-0.07	
		S 0	2 33 22.99									11.16	11.02	0.14	
14	WCT	EPD0	2 33 18.78						41.0	137	93	6.95	7.18	-0.06	
14	YMT1	EPD0	2 33 19.53						43.4	122	93	7.70	7.61	-0.04	
		S 4	2 33 26.16									14.33	13.24	1.09	
14	YMT5	EPD0	2 33 20.13						47.0	113	92	8.30	8.24	0.06	
14	YMT4	EPD3	2 33 20.72						48.8	116	92	8.89	8.50	0.28	
		S 4	2 33 27.43									15.60	14.72	0.88	
14	FMT	EPD0	2 33 20.12						48.9	163	92	8.29	8.48	0.05	
14	YMT2	EPD4	2 33 21.18						51.0	127	92	9.35	8.83	0.45	
14	YMT3	EPD0	2 33 21.40						56.2	123	92	9.57	9.67	-0.05	
		S 2	2 33 28.79									16.96	16.45	0.51	

OCT H = 3 11 42.08 UTC			RMS = 0.08	NO = 13	FREE DEPTH SOLUTION										
14	LAT = 37.064 N	ERX = 0.2	ERH = 0.3	AVFM = 2.1	W = B										
	LONG = 116.953 W	ERY = 0.2	GAP = 94	AVXM =	WS = A	THIRSTY CANYON									
	DEPTH = 0.52 KM	ERZ = 0.6	NM =		WD = C										

14	SGV	IPD0	3 11 44.59				32	2.2	11.6	218	40	2.51	2.58	0.02	
		S 4	3 11 45.78									3.70	4.26	-0.55	
14	GVN	EPD1	3 11 48.63						35.4	259	38	6.55	6.43	0.06	
		S 1	3 11 53.46									11.38	11.10	0.29	
14	BMT	EPD0	3 11 48.83						36.6	48	38	6.75	6.90	0.03	
		S 4	3 11 54.54									12.46	11.50	0.96	
14	GMN	EPD1	3 11 48.99						37.8	314	38	6.91	7.09	-0.03	
14	WCT	EPD1	3 11 49.19						41.9	136	38	7.11	7.51	-0.24	
14	YMT1	EPD0	3 11 49.97						44.4	122	38	7.89	7.96	-0.20	
		S 0	3 11 55.95									13.87	13.84	0.04	
14	YMT5	EPD0	3 11 50.56						48.1	112	38	8.48	8.60	-0.11	
		S 2	3 11 56.68									14.60	14.70	-0.10	
14	TMO	EPD4	3 11 52.57						49.7	235	38	10.49	9.03	1.76	
14	MCA	EPD0	3 11 51.54						54.6	212	38	9.46	9.44	-0.06	
14	YMT3	EPD2	3 11 52.16				24	2.1	57.2	122	38	10.08	10.02	0.11	
		S 0	3 11 59.23									17.15	17.05	0.11	

OCT H = 4 31 59.02 UTC			RMS = 0.10	NO = 26	FREE DEPTH SOLUTION										
14	LAT = 37.064 N	ERX = 0.2	ERH = 0.3	AVFM = 2.6	W = B										
	LONG = 116.951 W	ERY = 0.2	GAP = 63	AVXM =	WS = A	THIRSTY CANYON									
	DEPTH = 5.33 KM	ERZ = 1.0	NM =		WD = C										

14	SGV	IPD0	4 31 61.44				52	2.6	11.7	218	111	2.42	2.62	-0.11	
		S 0	4 32 3.33									4.31	4.32	-0.01	
14	GVN	EPD0	4 31 65.36						35.5	259	95	6.34	6.28	0.00	
		S 4	4 32 10.22									11.20	10.84	0.36	
14	BMT	IPD0	4 31 65.55						36.4	48	95	6.53	6.70	0.00	
		S 4	4 32 10.97									11.95	11.16	0.79	
14	GMN	IPD0	4 31 65.77				46	2.6	37.9	314	95	6.75	6.93	-0.03	
		S 2	4 32 10.90									11.88	11.59	0.29	
14	WCT	IPD1	4 31 66.00						41.8	136	94	6.98	7.32	-0.18	
		S 4	4 32 11.70									12.68	12.25	0.43	
14	YMT1	IPD1	4 31 66.78						44.3	122	94	7.76	7.76	-0.13	
14	YMT5	IPD1	4 31 67.33						47.9	113	93	8.31	8.39	-0.08	
		S 0	4 32 13.43									14.41	14.35	0.06	
14	TMO	EPD0	4 31 67.69						49.8	235	93	8.67	8.87	0.10	
		S 4	4 32 16.79									17.77	14.66	3.11	
14	YMT2	EPD0	4 31 68.19						51.9	127	93	9.17	8.97	0.12	
		S 4	4 32 15.06									16.04	15.48	0.56	

## 1981 SGB LOCAL-EVENT DATA REPORT

OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SFC)	ICAL (SEC)	RES (SEC)	REMARKS
. 14	MCA	EPD0	4 31 68.29						54.7	212	93	9.27	9.28	-0.09	.
.		S 4	4 32 15.70									16.68	16.00	0.68	.
. 14	LCH	EPD2	4 31 69.87						64.7	287	92	10.85	11.14	-0.21	.
.		S 4	4 32 19.98									20.96	18.91	2.05	.
. 14	CTS	EPD0	4 31 70.68						68.7	17	92	11.66	11.88	-0.04	.
. 14	LSM	EPD0	4 31 71.03						70.4	121	92	12.01	11.99	0.00	.
.		S 1	4 32 19.71									20.69	20.53	0.16	.
. 14	SDH	EPD1	4 31 71.09						71.7	130	92	12.07	12.19	-0.08	.
.		S 4	4 32 20.41									21.39	20.78	0.61	.
. 14	LOP	EPD0	4 31 71.69						73.5	108	92	12.67	12.62	0.13	.
.		S 4	4 32 21.64									22.62	21.45	1.17	.
. 14	PGE	EPD1	4 31 72.73						80.1	187	92	13.71	13.71	0.22	.
. 14	AMR	EPD0	4 31 73.38						85.4	150	92	14.36	14.35	0.00	.
. 14	GWV	EPD0	4 31 75.98						100.6	166	91	16.96	16.99	0.05	.
. 14	JUN	EPD2	4 31 76.03						102.6	132	91	17.01	17.20	-0.20	.
. 14	SVP	EPD2	4 31 77.30						104.3	314	91	18.28	17.82	0.35	.
. 14	QSM	EPD2	4 31 79.63						122.2	177	91	20.61	20.33	0.19	.
.		S 4	4 32 37.73									38.71	34.92	3.79	.
. 14	NUP	EPD0	4 31 79.92						126.1	145	90	20.90	20.81	0.18	.

OCT H = 8 45 46.49 UTC RMS = 0.11 NO = 41  
 14 LAT = 37.060 N ERX = 0.1 ERH = 0.2 AVFM = 3.4 W = R  
 LONG = 116.950 W ERY = 0.1 GAP = 34 AVXM = GS = A  
 DEPTH = 5.59 KM ERZ = 1.0 NM = WD = C

## FREE DEPTH SOLUTION

## THIRSTY CANYON

. 14	SGV	IPD1	8 45 48.87						11.4	220	114	2.38	2.59	-0.11	.
.		S 4	8 45 49.84									3.35	4.27	-0.92	.
. 14	GVN	IPD0	8 45 52.82						35.5	259	95	6.33	6.28	0.00	.
.		S 4	8 45 57.64									11.15	10.83	0.32	.
. 14	BMT	IPD0	8 45 53.02						36.7	48	95	6.53	6.74	-0.04	.
.		S 0	8 45 57.81									11.32	11.24	0.08	.
. 14	GMN	IPD1	8 45 53.23						38.2	314	95	6.74	6.99	-0.10	.
.		S 2	8 45 58.37									11.88	11.69	0.19	.
. 14	WCT	IPD1	8 45 53.41						41.4	136	94	6.92	7.27	-0.19	.
.		S 4	8 45 59.20									12.71	12.15	0.56	.
. 14	FMT	IPD0	8 45 54.73						49.1	162	94	8.24	8.52	-0.04	.
.		S 2	8 46 0.47									13.98	14.15	-0.17	.
. 14	TM0	EPD1	8 45 55.01						49.6	235	94	8.52	8.84	-0.02	.
.		S 4	8 46 6.55									20.06	14.61	5.45	.
. 14	YMT6	EPD0	8 45 55.85					95 3.3	53.5	115	93	9.36	9.26	0.01	.
. 14	MCA	EPD0	8 45 55.71						54.4	213	93	9.22	9.22	-0.08	.
.		S 4	8 46 3.14									16.65	15.91	0.74	.
. 14	YMT3	IPD2	8 45 55.99					122 3.5	56.8	122	93	9.50	9.77	-0.22	.
.		S 4	8 46 3.59									17.10	16.63	0.47	.
. 14	EPN	IPD1	8 45 56.96						58.3	73	93	10.47	10.26	0.15	.
.		S 3	8 46 4.47									17.98	17.65	0.33	.
. 14	BGB	IPD1	8 45 57.73						64.4	92	93	11.24	11.14	0.18	.
.		S 2	8 46 5.64									19.15	18.91	0.24	.
. 14	LCH	EPD2	8 45 57.79						64.9	287	93	11.30	11.17	0.21	.
.		S 4	8 46 6.57									20.08	18.96	1.12	.
. 14	CTS	IPD0	8 45 58.18						69.1	17	92	11.69	11.94	-0.08	.
.		S 1	8 46 6.45									19.96	20.13	-0.17	.
. 14	LSM	EPD0	8 45 58.39						70.1	120	92	11.90	11.94	-0.06	.
.		S 0	8 46 6.92									20.43	20.46	-0.03	.
. 14	SDH	IPD0	8 45 58.52						71.4	130	92	12.03	12.14	-0.07	.
.		S 4	8 46 7.67									21.18	20.69	0.49	.
. 14	LOP	IPD0	8 45 59.11						73.4	108	92	12.62	12.59	0.11	.
.		S 4	8 46 9.10									22.61	21.40	1.22	.
. 14	PGE	EPD1	8 45 60.16						79.6	187	92	13.67	13.64	0.25	.
. 14	CPX	EPD4	8 45 60.93						81.0	100	92	14.44	13.75	0.72	.
. 14	AMR	EPD0	8 45 60.78						85.0	150	92	14.29	14.28	0.00	.
. 14	BLT	EPD0	8 45 61.14						87.1	57	92	14.65	14.85	-0.07	.
. 14	KRNA	IPD0	8 45 62.04						90.9	34	92	15.55	15.51	-0.03	.
.		S 4	8 46 14.21									27.72	26.64	1.08	.
. 14	MCY	EPD0	8 45 63.06						98.6	117	92	16.57	16.61	0.04	.
.		S 4	8 46 15.38									28.89	28.27	0.63	.
. 14	GWV	EPD0	8 45 63.34						100.1	166	92	16.85	16.92	0.02	.

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OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 14	SVP	EPD1	8 45 64.67						104.6	314	92	18.18	17.87	0.20	.
. 14	SPRG	EPD0	8 45 64.91						109.5	112	91	18.42	18.39	0.07	.
.		S 4	8 46 20.66									34.17	31.39	2.78	.
. 14	TNP	EPD2	8 45 66.09						115.8	348	91	19.60	19.56	-0.23	.
.		S 4	8 46 23.92									37.43	33.91	3.52	.
. 14	QSM	EPD1	8 45 66.96						121.7	177	91	20.47	20.25	0.13	.
. 14	NOP	EPD0	8 45 67.34						125.7	145	91	20.65	20.97	-0.02	.
. 14	HCR	EPD0	8 45 69.60						138.0	19	91	23.11	23.19	0.02	.
.		S 4	8 46 29.49									43.00	39.49	3.51	.
. 14	WRN	EPD3	8 45 72.99						158.0	50	90	26.50	26.00	0.47	.
.		S 4	8 46 32.96									46.47	44.52	1.95	.
. 14	MTI	EPD0	8 45 73.25						163.6	65	52	26.76	26.79	0.00	.
.		S 4	8 46 35.32									48.83	45.76	3.07	.
. 14	SHRG	EPD1	8 45 73.69						171.7	111	52	27.20	27.86	-0.07	.
.		S 4	8 46 36.26									49.77	46.64	3.13	.
. 14	PRN	EPD0	8 45 74.66						173.1	77	52	28.17	28.00	0.05	.
. 14	SRG	EPD1	8 45 76.80						189.8	61	52	30.31	30.19	-0.10	.
. 14	NPN	EPD3	8 45 76.62						190.0	70	52	30.13	30.21	-0.29	.
. 14	DLM	EPD4	8 45 78.42						205.2	73	52	31.93	32.18	-0.50	.

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OCT H = 9 15 15.95 UTC	RMS = 0.17	NO = 40	FREE DEPTH SOLUTION		
. 14 LAT = 37.067 N	ERX = 0.2	ERH = 0.3	AVFM = 3.4	W = C	
. LONG = 116.954 W	ERY = 0.2	GAP = 35	AVXM =	WS = B	THIRSTY CANYON
. DEPTH = 5.56 KM	ERZ = 1.8	NM =		WD = C	

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. 14	SGV	IPD0	9 15 18.35						11.8	216	113	2.40	2.64	-0.15	.
.		S 2	9 15 19.95									4.00	4.36	-0.36	.
. 14	GVN	IPD1	9 15 22.28						35.3	258	95	6.33	6.25	0.02	.
.		S 1	9 15 26.70									10.75	10.79	-0.04	.
. 14	BMT	IPD0	9 15 22.50						36.4	49	95	6.55	6.70	0.02	.
. 14	GMN	IPD0	9 15 22.71						37.5	314	95	6.76	6.87	0.04	.
. 14	WCT	IPD1	9 15 22.90						42.2	136	94	6.95	7.38	-0.28	.
.		S 1	9 15 28.27									12.32	12.35	-0.03	.
. 14	TMD	EPD0	9 15 24.48						49.8	234	94	8.53	8.87	-0.04	.
.		S 0	9 15 31.01									15.06	14.65	0.41	.
. 14	FMT	IPD0	9 15 24.21				96 3.3		49.9	162	94	8.26	8.64	-0.14	.
.		S 0	9 15 30.51									14.56	14.37	0.19	.
. 14	YMT4	IPD0	9 15 24.77						50.0	116	94	8.82	8.71	0.00	.
.		S 0	9 15 31.11									15.16	15.08	0.06	.
. 14	YMT6	EPD0	9 15 25.26						54.1	115	93	9.31	9.35	-0.13	.
.		S 4	9 15 32.56									16.61	16.15	0.46	.
. 14	MCA	IPD0	9 15 25.18						54.8	212	93	9.23	9.29	-0.15	.
.		S 0	9 15 32.18									16.23	16.03	0.20	.
. 14	LCH	EPD1	9 15 27.12						64.3	287	93	11.17	11.08	0.17	.
.		S 4	9 15 36.23									20.28	18.80	1.48	.
. 14	SSP	IPD0	9 15 27.65						67.3	104	93	11.70	11.69	0.09	.
.		S 2	9 15 36.28									20.33	19.85	0.48	.
. 14	CTS	IPD0	9 15 27.63						68.5	17	92	11.68	11.85	0.00	.
.		S 4	9 15 35.91									19.96	19.97	-0.01	.
. 14	LSP	EPD2	9 15 27.67						70.7	121	92	11.72	12.05	-0.35	.
.		S 4	9 15 35.89									19.94	20.63	-0.69	.
. 14	SDH	IPD1	9 15 28.00						72.1	130	92	12.05	12.25	-0.16	.
.		S 1	9 15 37.11									21.16	20.88	0.27	.
. 14	LDP	IPD0	9 15 28.59						75.9	109	92	12.64	12.67	0.04	.
.		S 4	9 15 37.03									21.08	21.54	-0.46	.
. 14	PGF	EPD1	9 15 29.66						80.3	187	92	13.71	13.75	0.17	.
.		S 4	9 15 39.92									23.97	23.14	0.83	.
. 14	GLR	IPD1	9 15 30.05						84.5	80	92	14.10	14.35	-0.19	.
. 14	AMR	EPD0	9 15 30.26						85.7	150	92	14.31	14.40	-0.10	.
.		S 4	9 15 38.90									22.95	24.65	-1.70	.
. 14	BLT	EPD0	9 15 30.60						86.9	58	92	14.65	14.83	-0.05	.
. 14	KRNA	IPD0	9 15 31.53						90.5	34	92	15.58	15.44	0.07	.
. 14	MCY	EPD0	9 15 32.48						99.2	117	92	16.53	16.71	-0.10	.
.		S 0	9 15 44.58									28.63	28.43	0.20	.
. 14	JUN	EPD2	9 15 32.87						103.0	132	92	16.92	17.26	-0.35	.
.		S 4	9 15 46.57									30.62	29.53	1.09	.
. 14	SPRG	EPD0	9 15 34.40						110.1	112	91	18.45	18.48	0.00	.
.		S 4	9 15 50.13									34.18	31.54	2.64	.

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UCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 14	TNP	IPU1	9 15 35.56						115.1	348	91	19.61	19.43	-0.10	.
.		S 4	9 15 53.45									37.50	33.69	3.80	.
. 14	QCS	EPU2	9 15 36.39						120.4	50	91	20.44	20.29	0.18	.
.		S 4	9 15 54.72									38.77	34.65	4.12	.
. 14	QSM	EPU0	9 15 36.39						122.4	176	91	20.44	20.37	-0.02	.
.		S 4	9 15 54.56									38.61	34.99	3.62	.
. 14	NUP	EPU1	9 15 36.73						126.5	145	91	20.78	21.09	-0.22	.
.		S 4	9 15 54.96									39.01	35.91	3.10	.
. 14	HCR	EPD0	9 15 39.05						137.4	19	90	23.10	22.64	0.55	.
.		S 4	9 15 59.00									43.05	38.56	4.49	.
. 14	APK	EPD4	9 15 41.33						148.6	124	90	25.38	24.46	1.19	.
.		S 4	9 15 59.79									43.84	41.37	2.47	.
. 14	EPR	EPD0	9 15 42.11				90	3.6	157.5	86	90	26.16	25.92	0.26	.
.		S 4	9 16 5.91									49.96	44.28	5.68	.
. 14	SHRG	EPD4	9 15 44.41						172.2	111	52	28.46	27.94	1.11	.
. 14	SRG	EPU4	9 15 46.32						189.7	62	52	30.37	30.18	-0.03	.
. 14	NPH	EPD4	9 15 46.09						190.1	70	52	30.14	30.22	-0.29	.
. 14	DLM	EPD4	9 15 47.92						205.3	73	52	31.97	32.20	-0.48	.

. OCT H = 12 28 46.07 UTC RMS = 0.09 NU = 24  
 . 14 LAT = 37.058 N ERH = 0.2 ERH = 0.3 AVFM = 2.3 W = B FREE DEPTH SOLUTION  
 . LONG = 116.959 W ERY = 0.2 GAP = 89 AVXM = WS = A THIRSTY CANYON  
 . DEPTH = 6.58 KM ERZ = 0.9 NM = WD = B

. 14	SGV	IPD0	12 28 48.52				39	2.3	10.7	217	120	2.45	2.56	-0.03	.
.		S 4	12 28 49.61									3.54	4.23	-0.69	.
. 14	GVN	EPU0	12 28 52.36						34.7	260	98	6.29	6.16	0.07	.
.		S 4	12 28 57.30									11.23	10.64	0.59	.
. 14	BMT	IPD0	12 28 52.69				31	2.2	37.4	48	97	6.62	6.88	-0.09	.
.		S 1	12 28 57.60									11.53	11.47	0.06	.
. 14	WCT	IPU1	12 28 53.11						41.8	135	96	7.04	7.34	-0.15	.
.		S 1	12 28 58.48									12.41	12.29	0.12	.
. 14	YMT5	IPD1	12 28 54.45						48.4	112	95	8.38	8.48	-0.10	.
.		S 0	12 29 0.52									14.45	14.50	-0.05	.
. 14	YMT6	EPD2	12 28 55.71						54.1	114	94	9.64	9.37	0.18	.
.		S 4	12 29 3.02									16.95	16.18	0.77	.
. 14	EPN	IPD0	12 28 56.60						59.1	73	94	10.53	10.41	0.06	.
.		S 2	12 29 4.20									18.13	17.90	0.23	.
. 14	LCH	EPD4	12 28 58.08						64.2	288	94	12.01	11.07	1.02	.
. 14	BGB	IPD2	12 28 57.41						65.2	92	94	11.34	11.27	0.14	.
.		S 1	12 29 5.32									19.25	19.14	0.11	.
. 14	SSP	EPU0	12 28 57.85						67.6	103	94	11.78	11.74	0.12	.
.		S 4	12 29 6.67									20.60	19.93	0.66	.
. 14	CTS	EPD1	12 28 57.79						69.6	17	93	11.72	12.02	-0.13	.
.		S 4	12 29 5.81									19.74	20.27	-0.53	.
. 14	LSM	EPD0	12 28 58.12						70.6	120	93	12.05	12.04	-0.02	.
.		S 1	12 29 6.59									20.52	20.63	-0.11	.
. 14	SDH	EPU0	12 28 58.20						71.9	130	93	12.13	12.22	-0.05	.
. 14	GLR	EPD4	12 28 58.49						85.2	79	93	12.42	14.46	-1.97	.
. 14	BLT	EPD1	12 28 61.01						87.9	58	93	14.94	14.98	0.09	.
. 14	KRNA	EPD0	12 28 61.71						91.6	34	92	15.64	15.62	-0.05	.
.		S 1	12 29 12.94									26.87	26.82	0.05	.
. 14	GwV	EPD3	12 28 63.31						100.1	165	92	17.24	16.91	0.40	.
. 14	SVP	EPD4	12 28 63.72						104.2	314	92	17.65	17.81	-0.27	.
. 14	TNP	EPD1	12 28 65.79						115.9	349	92	19.72	19.57	-0.12	.
.		S 4	12 29 23.60									37.53	33.93	3.60	.
. 14	QSM	EPU4	12 28 67.17						121.5	176	92	21.10	20.22	0.78	.
. 14	NUP	EPD0	12 28 67.02						126.0	145	92	20.95	21.01	0.03	.
. 14	HCR	EPD1	12 28 69.40						138.4	20	92	23.33	23.25	0.16	.

. OCT H = 15 51 33.80 UTC RMS = 0.09 NU = 24  
 . 14 LAT = 37.066 N ERH = 0.2 ERH = 0.2 AVFM = 2.1 W = B FREE DEPTH SOLUTION  
 . LONG = 116.953 W ERY = 0.2 GAP = 63 AVXM = WS = A THIRSTY CANYON  
 . DEPTH = 4.30 KM ERZ = 1.3 NM = WD = C

. 14	SGV	IPD0	15 51 36.14				38	2.3	11.8	217	105	2.34	2.57	-0.14	.
.		S 0	15 51 38.07									4.27	4.24	0.03	.

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. 14	GVN	EPD0	15 51 40.13						35.4	258	93	6.33	6.25	0.02	.
.		S 4	15 51 45.09									11.29	10.79	0.50	.
. 14	RMT	EPD0	15 51 40.30						36.4	48	93	6.50	6.69	-0.01	.
.		S 4	15 51 45.57									11.77	11.14	0.63	.
. 14	GMN	EPU0	15 51 40.60				15	1.6	37.7	314	93	6.80	6.89	0.07	.
. 14	WCT	IPU2	15 51 40.71						42.0	136	92	6.91	7.35	-0.27	.
.		S 1	15 51 46.05									12.25	12.29	-0.03	.
. 14	YMT5	EPD1	15 51 42.06						48.1	113	92	8.26	8.42	-0.15	.
.		S 1	15 51 48.11									14.31	14.39	-0.08	.
. 14	FMT	EPD0	15 51 42.20						49.7	162	92	8.40	8.61	0.04	.
. 14	YMT4	EPU0	15 51 42.59						49.8	116	92	8.79	8.67	0.01	.
.		S 0	15 51 48.96									15.16	15.02	0.14	.
. 14	YMT6	EPD1	15 51 43.03						53.9	115	92	9.23	9.32	-0.18	.
. 14	YMT3	EPD0	15 51 43.51				35	2.4	57.3	123	92	9.71	9.85	-0.08	.
.		S 1	15 51 50.77									16.97	16.75	0.22	.
. 14	MGM	EPU4	15 51 43.59						63.7	311	91	9.79	11.11	-1.23	.
. 14	LCH	EP 4	15 51 45.57						64.5	287	91	11.77	11.10	0.76	.
. 14	BGB	IPD1	15 51 45.05						64.5	93	91	11.25	11.16	0.18	.
. 14	CTS	EPU0	15 51 45.52						68.6	17	91	11.72	11.86	0.03	.
.		S 1	15 51 53.72									19.92	19.99	-0.07	.
. 14	LSM	EP 0	15 51 45.85						70.5	121	91	12.05	12.02	0.01	.
.		S 1	15 51 54.35									20.55	20.59	-0.03	.
. 14	SDH	EPU1	15 51 45.84						71.9	130	91	12.04	12.23	-0.14	.
. 14	LOP	EPU1	15 51 46.56						73.7	109	90	12.76	12.29	0.56	.
. 14	MCY	EPD1	15 51 50.56						99.0	117	90	16.76	16.40	0.44	.
. 14	GWV	EPU2	15 51 50.99						100.7	166	90	17.19	16.68	0.59	.
. 14	JON	EPD4	15 51 51.90						102.8	132	90	18.10	17.02	1.07	.
.		S 4	15 52 4.35									30.55	29.12	1.43	.
. 14	SPRG	EPD4	15 51 52.95						109.9	112	90	19.15	18.18	1.01	.
. 14	GCS	EPD4	15 51 54.73						120.4	50	90	20.93	19.88	1.09	.
. 14	QSM	EPD4	15 51 54.87						122.3	176	90	21.07	20.19	0.79	.
. 14	NUP	EP 4	15 51 55.98						126.3	145	90	22.18	20.84	1.44	.
. 14	HCR	EPD4	15 51 57.56						137.5	19	90	23.76	22.65	1.20	.

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OCT H = 22 23 10.30 UTC	RMS = 0.11	NO = 36	FREE DEPTH SOLUTION		
. 14 LAT = 37.054 N	ERX = 0.2	ERH = 0.2	AVFM = 2.4	Q = B	
. LONG = 116.957 W	ERY = 0.2	GAP = 72	AVXM =	QS = A	THIRSTY CANYON
. DEPTH = 5.64 KM	ERZ = 0.7	NM =		QD = B	

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. 14	SGV	IPD0	22 23 12.59				55	2.6	10.5	220	116	2.29	2.46	-0.09	.
.		S 0	22 23 14.34									4.04	4.06	-0.02	.
. 14	GVN	IPD1	22 23 16.59				32	2.3	34.8	260	96	6.29	6.17	0.06	.
.		S 4	22 23 21.46									11.16	10.65	0.51	.
. 14	BMT	IPD2	22 23 16.79				40	2.5	37.6	47	95	6.49	6.88	-0.23	.
.		S 4	22 23 22.44									12.14	11.48	0.66	.
. 14	WCT	IPU2	22 23 17.16						41.4	135	95	6.86	7.26	-0.24	.
.		S 0	22 23 22.53									12.23	12.14	0.09	.
. 14	YMT5	IPD2	22 23 18.52				24	2.1	48.0	111	94	8.22	8.41	-0.19	.
.		S 2	22 23 24.52									14.22	14.38	-0.16	.
. 14	FMT	IPU0	22 23 18.46						48.7	161	94	8.16	8.45	-0.05	.
.		S 1	22 23 24.27									13.97	14.03	-0.07	.
. 14	TMO	EPU0	22 23 18.85						48.8	235	94	8.55	8.70	0.14	.
.		S 4	22 23 25.52									15.22	14.37	0.84	.
. 14	YMT4	IPU0	22 23 19.08						49.7	115	94	8.78	8.65	0.01	.
.		S 4	22 23 25.74									15.44	14.99	0.45	.
. 14	MCA	EPU0	22 23 19.42						53.5	213	93	9.12	9.08	-0.04	.
.		S 4	22 23 26.89									16.59	15.67	0.92	.
. 14	YMT6	EPU0	22 23 19.75						53.8	114	93	9.45	9.30	0.06	.
.		S 0	22 23 26.26									15.96	16.06	-0.10	.
. 14	YMT3	IPD2	22 23 19.85				40	2.5	57.0	121	93	9.55	9.80	-0.20	.
.		S 2	22 23 27.25									16.95	16.67	0.28	.
. 14	EPN	IPD0	22 23 20.72						59.0	73	93	10.42	10.39	-0.03	.
. 14	CDH5	EPU1	22 23 20.48						60.9	111	93	10.18	10.43	-0.15	.
.		S 0	22 23 28.00									17.70	17.66	0.03	.
. 14	CDH1	EPU1	22 23 20.54						60.9	111	93	10.24	10.50	-0.16	.
.		S 0	22 23 28.12									17.82	17.78	0.04	.
. 14	MGM	EPD4	22 23 21.00						64.3	312	93	10.70	11.21	-0.42	.
.		S 4	22 23 30.00									19.70	19.01	0.69	.



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.	14	LCH	EPU4	22 23 21.81					64.6	288	93	11.51	11.11	0.47	.
.	.	.	S 4	22 23 30.59								20.29	18.87	1.42	.
.	14	SSP	EPD0	22 23 21.92					67.3	102	93	11.62	11.68	0.01	.
.	.	.	S 2	22 23 30.52								20.22	19.84	0.38	.
.	14	SDH	EPUP	22 23 22.26					71.5	129	92	11.96	12.15	-0.16	.
.	.	.	S 2	22 23 31.29								20.99	20.72	0.27	.
.	14	PGE	EPD2	22 23 23.89					78.9	187	92	13.59	13.53	0.28	.
.	14	MZP	EPD0	22 23 24.10					81.0	332	92	13.80	13.98	0.05	.
.	.	.	S 4	22 23 34.23								23.93	23.50	0.43	.
.	14	AMR	EPD0	22 23 24.59					84.7	149	92	14.29	14.24	0.04	.
.	.	.	S 4	22 23 36.49								26.19	24.36	1.83	.
.	14	MCY	EPD0	22 23 26.93					98.8	116	92	16.63	16.65	0.06	.
.	.	.	S 4	22 23 39.12								28.82	28.33	0.49	.
.	14	JON	EPU4	22 23 27.92					102.3	132	92	17.62	17.15	0.46	.
.	.	.	S 4	22 23 40.80								30.50	29.34	1.16	.
.	14	SPRG	EP 4	22 23 29.48					109.8	111	91	19.18	18.43	0.77	.
.	14	TNP	EPU3	22 23 29.91					116.4	349	91	19.61	19.65	-0.31	.
.	.	.	S 4	22 23 47.85								37.55	34.06	3.49	.
.	14	NDP	EP 1	22 23 31.29					125.5	145	91	20.99	20.93	0.14	.
.	14	HCR	EPD0	22 23 33.52					138.8	19	91	23.22	23.31	-0.01	.
.	.	.	S 4	22 23 53.28								42.98	39.71	3.26	.
.	14	EPR	EPD0	22 23 36.42					157.9	85	90	26.12	25.98	0.16	.
.	14	WRN	EPD0	22 23 36.76					158.9	50	90	26.46	26.14	0.28	.
.	.	.	S 4	22 23 56.48								46.18	44.76	1.42	.
.	14	PRN	EPD1	22 23 38.49					173.8	77	52	28.19	28.09	-0.02	.

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 . UCT H = 2 23 49.33 UTC RMS = 0.21 NU = 39 FREE DEPTH SOLUTION  
 . 15 LAT = 37.065 N ERX = 0.2 ERH = 0.4 AVFM = 2.6 WS = B  
 . LONG = 116.946 W ERY = 0.3 GAP = 50 AVXM = WS = B THIRSTY CANYON  
 . DEPTH = 7.35 KM ERZ = 2.0 NM = WD = B  
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.	15	SGV	IPD0	2 23 51.67					12.1	220	120	2.34	2.82	-0.38	.
.	.	.	S 4	2 23 52.95								3.62	4.66	-1.04	.
.	15	BMT	IPD0	2 23 55.73					36.0	48	99	6.40	6.67	-0.10	.
.	.	.	S 4	2 24 1.47								12.14	11.11	1.03	.
.	15	GVN	IPD0	2 23 55.64					36.0	259	99	6.31	6.39	-0.14	.
.	.	.	S 0	2 24 0.40								11.07	11.04	0.04	.
.	15	GMN	IPU1	2 23 55.97					38.2	313	98	6.64	7.01	-0.22	.
.	.	.	S 1	2 24 1.09								11.76	11.73	0.04	.
.	15	WCT	IPU2	2 23 56.21			45 2.6	41.6	137	97		6.88	7.31	-0.27	.
.	.	.	S 0	2 24 1.76								12.43	12.23	0.20	.
.	15	YMT5	IPD1	2 23 57.55				47.5	113	96		8.22	8.36	-0.13	.
.	.	.	S 3	2 24 3.65								14.32	14.29	0.03	.
.	15	YMT4	IPU0	2 23 58.09				49.3	117	96		8.76	8.62	0.04	.
.	.	.	S 3	2 24 4.85								15.52	14.92	0.60	.
.	15	FMT	IPU1	2 23 57.52				49.5	163	96		8.19	8.60	-0.17	.
.	.	.	S 4	2 24 3.28								13.95	14.30	-0.35	.
.	15	TMO	EPD1	2 23 58.20				50.3	235	96		8.87	8.97	0.20	.
.	.	.	S 1	2 24 4.72								15.39	14.83	0.56	.
.	15	YMT6	EPD1	2 23 58.48				53.4	115	95		9.15	9.26	-0.19	.
.	.	.	S 4	2 24 6.16								16.83	15.98	0.85	.
.	15	MCA	EPD2	2 23 58.55				55.1	213	95		9.22	9.35	-0.21	.
.	.	.	S 2	2 24 5.98								16.65	16.13	0.52	.
.	15	YMT3	IPU2	2 23 58.78				56.8	123	95		9.45	9.78	-0.28	.
.	.	.	S 4	2 24 6.69								17.36	16.65	0.72	.
.	15	EPN	IPD1	2 23 59.71			42 2.6	57.7	73	95		10.38	10.19	0.13	.
.	.	.	S 0	2 24 7.07								17.74	17.53	0.21	.
.	15	BGB	EPD2	2 23 60.52				63.9	93	95		11.19	11.08	0.19	.
.	.	.	S 0	2 24 8.46								19.13	18.81	0.32	.
.	15	MGM	EPD0	2 23 60.34				64.2	311	95		11.01	11.21	-0.11	.
.	.	.	S 0	2 24 8.53								19.20	19.01	0.19	.
.	15	LCH	EPD0	2 23 60.37				65.1	287	94		11.04	11.22	-0.10	.
.	.	.	S 2	2 24 8.75								19.42	19.06	0.37	.
.	15	CTS	IPD0	2 23 60.86				68.5	17	94		11.53	11.85	-0.15	.
.	.	.	S 4	2 24 9.12								19.79	19.98	-0.19	.
.	15	MZP	IPU2	2 23 63.11				80.4	331	94		13.78	13.90	0.12	.
.	15	GLR	IPU0	2 23 63.44				83.8	80	93		14.11	14.25	-0.07	.

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UCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 15	BLT	EPD0	2 23 63.85						86.4	58	93	14.52	14.75	-0.10	.
. 15	PPK	EPD4	2 23 65.90						94.3	295	93	16.57	16.03	0.53	.
. 15	JON	EPD3	2 23 66.21				36	2.6	102.3	133	93	16.88	17.16	-0.28	.
. 15	SVP	EPD1	2 23 67.40						104.6	314	93	18.07	17.87	0.10	.
. 15	GMR	EPD2	2 23 67.70						108.5	74	92	18.37	18.28	0.19	.
. 15	SPRG	EPD0	2 23 67.72						109.3	112	92	18.39	18.36	0.06	.
.		S 4	2 24 23.77									34.44	31.35	3.10	.
. 15	TNP	EPD2	2 23 68.77						115.4	348	92	19.44	19.48	-0.31	.
.		S 4	2 24 26.66									37.33	33.78	3.55	.
. 15	NUP	EPD0	2 23 70.16						125.9	146	92	20.83	21.00	-0.08	.
. 15	TPU	EPD4	2 23 71.55						129.6	62	92	22.22	21.80	0.56	.
.		S 4	2 24 27.35									38.02	37.04	0.99	.
. 15	HCR	EPD0	2 23 72.27						137.3	19	92	22.94	23.07	-0.03	.
.		S 4	2 24 32.05									42.72	39.29	3.43	.
. 15	APK	EPD4	2 23 74.60						147.9	124	52	25.27	24.87	0.67	.
. 15	WRN	EPD1	2 23 75.71						157.3	50	52	26.38	25.87	0.47	.

. OCT M = 4 21 9.43 UTC RMS = 0.10 NO = 33  
 . 15 LAT = 37.057 N ERX = 0.2 ERH = 0.3 AVFM = 4.0 W = B FREE DEPTH SOLUTION  
 . LONG = 116.955 W ERY = 0.3 GAP = 42 AVXM = W = A THIRSTY CANYON  
 . DEPTH = 7.90 KM ERZ = 1.0 NM = W = B

. 15	SGV	IPD0	4 21 12.04				197	3.8	10.9	219	126	2.61	2.70	0.00	.
. 15	GVN	IPD2	4 21 15.90						35.0	260	100	6.47	6.25	0.16	.
. 15	GMN	IPU0	4 21 16.28						38.2	315	99	6.85	7.03	-0.03	.
. 15	WCT	IPU0	4 21 16.58						41.5	135	98	7.15	7.31	-0.01	.
. 15	YMT5	IPD0	4 21 17.83				191	3.9	48.0	112	97	8.40	8.44	-0.04	.
. 15	YMT4	IPU2	4 21 18.47						49.6	115	97	9.04	8.66	0.25	.
. 15	YMT6	IPU0	4 21 18.84						53.7	114	96	9.41	9.33	-0.01	.
. 15	YMT3	IPU0	4 21 19.15						57.0	122	96	9.72	9.83	-0.06	.
. 15	EPN	IPD2	4 21 20.07						58.8	73	96	10.64	10.37	0.20	.
. 15	CDH5	IPD0	4 21 19.82						60.8	111	95	10.39	10.45	0.04	.
. 15	CDH1	IPU0	4 21 19.89						60.8	111	95	10.46	10.52	0.04	.
. 15	MGM	IPU0	4 21 20.66						64.2	312	95	11.23	11.22	0.10	.
. 15	LCH	EPD1	4 21 20.41				188	3.9	64.6	288	95	10.98	11.15	-0.09	.
. 15	SSP	IPU2	4 21 21.32						67.2	103	95	11.89	11.69	0.28	.
. 15	LSM	IPU2	4 21 21.30				194	4.0	70.3	120	95	11.87	11.99	-0.15	.
.		S 0	4 21 30.00									20.57	20.54	0.02	.
. 15	SDH	IPU0	4 21 21.66						71.5	130	94	12.23	12.18	0.09	.
.		S 2	4 21 30.00									20.57	20.75	-0.18	.
. 15	LUP	IPU0	4 21 21.98						73.6	108	94	12.55	12.66	-0.03	.
. 15	PGE	EPD1	4 21 23.10						79.2	187	94	13.67	13.59	0.29	.
. 15	GLR	IPD0	4 21 23.70						84.8	79	94	14.27	14.42	-0.08	.
. 15	KRNA	IPD0	4 21 25.09						91.5	34	93	15.66	15.61	-0.02	.
. 15	PPK	EPD1	4 21 25.30						93.9	296	93	15.87	15.98	-0.12	.
. 15	MCY	IPU1	4 21 25.92						98.8	116	93	16.49	16.65	-0.09	.
. 15	JON	IPU1	4 21 26.54						102.4	132	93	17.11	17.17	-0.07	.
. 15	SVP	IPU0	4 21 27.41						104.6	314	93	17.98	17.88	-0.01	.
. 15	GMR	IPD3	4 21 28.05						109.5	74	93	18.62	18.46	0.26	.
. 15	SPRG	EPD1	4 21 27.70						109.8	112	93	18.27	18.43	-0.14	.
. 15	TNP	IPU1	4 21 29.14						116.1	348	93	19.71	19.61	-0.17	.
. 15	NUP	IPU0	4 21 30.29						125.6	145	92	20.86	20.96	-0.01	.
. 15	HCR	EPD0	4 21 32.59						138.4	19	92	23.16	23.26	-0.01	.
.		S 4	4 21 51.71									42.28	39.62	2.66	.
. 15	EPR	IPD4	4 21 35.73						157.7	85	52	26.30	25.76	0.56	.
. 15	WRN	EPD4	4 21 35.14						158.6	50	52	25.71	25.98	-0.31	.
. 15	SHRG	EPD4	4 21 37.72						171.9	111	52	28.29	27.67	1.21	.
.		S 4	4 21 58.82									49.39	46.30	3.09	.
. 15	PRN	EPD1	4 21 37.61				230	4.5	173.6	77	52	28.18	27.83	0.23	.
. 15	DLM	EPD3	4 21 41.48						205.7	73	52	32.05	32.02	-0.22	.

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OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
OCT H = 7 19 5.16			UTC	RMS =	0.16	NU = 20	FREE DEPTH SOLUTION								
15 LAT = 37.059 N				ERX =	0.3	ERH = 0.5	AVFM =	2.0	W = B		THIRSTY CANYON				
LONG = 116.960 W				ERY =	0.4	GAP = 68	AVXM =		WS = B						
DEPTH = 8.50 KM				ERZ =	2.4	NM =			WD = B						
.....															
15	SGV	IPU2	7 19 7.56					31 2.2	10.7	217	128	2.40	2.74	-0.25	
		S 4	7 19 10.84									5.68	4.53	1.15	
15	GVN	EPD0	7 19 11.53					24 2.0	34.6	259	101	6.37	6.21	0.11	
		S 4	7 19 16.30									11.14	10.71	0.43	
15	BMT	IPU1	7 19 11.78					19 1.8	37.4	48	101	6.62	6.93	-0.14	
		S 2	7 19 17.10									11.94	11.56	0.38	
15	GMN	EPD0	7 19 11.98					17 1.7	37.8	315	101	6.82	6.98	-0.01	
		S 0	7 19 16.97									11.81	11.67	0.14	
15	WCT	IPU2	7 19 12.12					25 2.1	41.9	135	99	6.96	7.40	-0.27	
		S 1	7 19 17.84									12.68	12.37	0.31	
15	YMT1	EPU2	7 19 12.93					26 2.1	44.6	121	98	7.77	7.87	-0.23	
		S 2	7 19 18.76									13.60	13.68	-0.08	
15	TMO	EPD4	7 19 13.28						48.8	235	98	8.12	8.76	-0.34	
15	YMT4	EPD4	7 19 13.64					23 2.0	50.1	115	97	8.48	8.77	-0.40	
		S 3	7 19 20.69									15.53	15.18	0.35	
15	EPN	EPD0	7 19 15.64						59.1	73	96	10.48	10.44	-0.02	
		S 0	7 19 23.15									17.99	17.96	0.04	
15	CDH5	EPD4	7 19 19.77						61.3	111	96	14.61	10.53	4.18	
		S 1	7 19 23.11									17.95	17.83	0.12	
15	CDH1	EP 4	7 19 15.01						61.3	111	96	9.85	10.60	-0.65	
		S 0	7 19 23.16									18.00	17.95	0.05	
15	LCH	EPU4	7 19 14.96					14 1.6	64.2	288	96	9.80	11.08	-1.20	
		S 4	7 19 25.55									20.39	18.81	1.58	
15	CTS	EPD1	7 19 16.78					19 1.9	69.5	17	95	11.62	12.04	-0.25	
		S 4	7 19 24.87									19.71	20.30	-0.59	
15	LSM	EPD4	7 19 17.64					23 2.1	70.7	120	95	12.48	12.08	0.39	
		S 0	7 19 25.83									20.67	20.68	-0.01	
15	SDH	EPD0	7 19 17.30						71.9	130	95	12.14	12.25	-0.07	
		S 4	7 19 26.55									21.39	20.89	0.51	
15	LDP	EPD1	7 19 17.89					21 2.0	74.1	108	95	12.73	12.74	0.07	
		S 4	7 19 27.57									22.41	21.65	0.76	
15	AMR	EPD2	7 19 19.23						85.2	149	94	14.07	14.34	-0.28	
15	KRNA	EPD4	7 19 21.62						91.6	34	94	16.46	15.63	0.76	
15	TNP	EPD4	7 19 25.46						115.9	349	93	20.30	19.57	0.46	
15	GCS	EPU4	7 19 27.20						121.4	50	93	22.04	20.46	1.61	
		S 4	7 19 32.43									27.27	34.93	-7.66	
15	HCR	EPD4	7 19 29.30						138.4	20	92	24.14	23.26	0.98	
		S 4	7 19 34.83									29.67	39.61	-9.94	
.....															
OCT H = 7 22 50.19			UTC	RMS =	0.15	NU = 32	FREE DEPTH SOLUTION								
15 LAT = 37.069 N				ERX =	0.2	ERH = 0.3	AVFM =	2.1	W = B		THIRSTY CANYON				
LONG = 116.949 W				ERY =	0.2	GAP = 64	AVXM =		WS = A						
DEPTH = 7.93 KM				ERZ =	0.9	NM =			WD = B						
.....															
15	SGV	IPU2	7 22 52.56					32 2.2	12.3	217	122	2.37	2.89	-0.43	
		S 0	7 22 54.96									4.77	4.79	-0.01	
15	GVN	EPD0	7 22 56.50					28 2.1	35.8	258	100	6.31	6.37	-0.12	
		S 2	7 23 1.32									11.13	11.00	0.13	
15	BMT	IPD0	7 22 56.70					28 2.2	35.9	49	100	6.51	6.67	0.01	
		S 2	7 23 1.55									11.36	11.12	0.25	
15	GMN	EPU1	7 22 56.90					26 2.1	37.6	313	100	6.71	6.93	-0.07	
		S 0	7 23 1.92									11.73	11.60	0.13	
15	WCT	IPU2	7 22 57.15					25 2.1	42.1	137	98	6.96	7.42	-0.29	
		S 3	7 23 2.88									12.69	12.41	0.29	
15	YMT1	IPU1	7 22 57.94						44.5	123	98	7.75	7.83	-0.21	
		S 2	7 23 3.46									13.27	13.62	-0.34	
15	YMT5	EPD1	7 22 58.49						48.0	113	97	8.30	8.44	-0.14	
		S 0	7 23 4.60									14.41	14.44	-0.03	
15	FMT	EP 4	7 22 57.70					23 2.0	50.1	162	97	7.51	8.70	-0.95	
		S 4	7 23 5.80									15.61	14.47	1.14	
15	YMT6	EPU2	7 22 59.83					24 2.1	53.9	116	96	9.64	9.34	0.21	
		S 0	7 23 6.33									16.14	16.13	0.01	

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OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 15	MCA	EPD2	7 22 59.47												
.		S 3	7 23 6.75												
. 15	CDH1	EPD0	7 22 60.56						60.8	112	95	10.37	10.52	-0.05	
.		S 0	7 23 8.04									17.85	17.82	0.03	
. 15	LCH	EP 0	7 22 61.25						64.6	286	95	11.06	11.15	0.00	
. 15	SSP	EPD1	7 22 61.95						67.0	104	95	11.76	11.66	0.19	
.		S 4	7 23 11.34									21.15	19.80	1.35	
. 15	CTS	EPU0	7 22 61.87				20	2.0	68.1	17	95	11.68	11.80	0.05	
.		S 2	7 23 9.86									19.67	19.89	-0.22	
. 15	LSM	EPU0	7 22 62.30						70.5	121	95	12.11	12.04	0.06	
.		S 0	7 23 10.82									20.63	20.62	0.02	
. 15	SDH	EPU2	7 22 62.11						72.0	131	94	11.92	12.26	-0.29	
.		S 4	7 23 11.43									21.24	20.89	0.35	
. 15	LOP	EPU4	7 22 62.23						73.6	109	94	12.04	12.65	-0.52	
.		S 4	7 23 12.79									22.60	21.49	1.11	
. 15	PGF	EPU2	7 22 64.10						80.7	187	94	13.91	13.83	0.31	
.		S 4	7 23 14.34									24.15	23.27	0.88	
. 15	AMR	EPD0	7 22 64.64						85.8	150	94	14.45	14.43	0.01	
. 15	BLT	EPU1	7 22 64.68						86.4	58	94	14.49	14.76	-0.14	
. 15	MCY	EPD2	7 22 67.05						98.9	117	93	16.66	16.68	0.26	
.		S 4	7 23 20.14									29.95	28.39	1.57	
. 15	GWV	EPU0	7 22 67.35						101.1	166	93	17.16	17.08	0.16	
. 15	GMR	EPD4	7 22 68.94						108.6	74	93	18.75	18.32	0.54	
. 15	SPRG	EPU4	7 22 69.72						109.8	112	93	19.53	18.44	1.13	
.		S 4	7 23 23.87									33.68	31.48	2.21	
. 15	TPU	EPD4	7 22 73.09						129.7	63	92	22.90	21.81	1.23	
. 15	HCR	EPD4	7 22 73.50						136.9	19	92	23.31	23.01	0.39	
. 15	WRN	EPU4	7 22 76.75						157.3	50	52	26.56	25.81	0.72	

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OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
OCT 11 = 18 43 12.67 UTC			RMS =	0.09	NU =	42	FREE DEPTH SOLUTION								
15 LAT = 37.058 N			ERX =	0.1	ERH =	0.2	AVFM =	2.3	W = B						
LONG = 116.955 W			ERY =	0.2	GAP =	52	AVXM =		QS = A		THIRSTY CANYON				
DEPTH = 5.12 KM			ERZ =	0.7	NM =				WD = C						
.....															
15	SGV	IPD0	18 43 14.97						10.9	219	112	2.30	2.48	-0.09	
		S 0	18 43 16.80									4.13	4.09	0.04	
15	GVN	IPD0	18 43 18.94				34	2.3	35.0	260	94	6.27	6.19	0.02	
		S 4	18 43 23.67									11.00	10.69	0.32	
15	BMT	IPD1	18 43 19.18						37.2	48	94	6.51	6.82	-0.14	
		S 0	18 43 24.07									11.40	11.37	0.03	
15	GMN	IPU1	18 43 19.34				34	2.3	38.1	315	94	6.67	6.96	-0.14	
		S 0	18 43 24.43									11.76	11.65	0.12	
15	WCT	IPU3	18 43 19.57				34	2.3	41.6	135	94	6.90	7.28	-0.22	
		S 2	18 43 25.13									12.46	12.18	0.29	
15	YMT1	IPU2	18 43 20.37						44.3	121	93	7.70	7.76	-0.18	
		S 0	18 43 26.12									13.45	13.48	-0.03	
15	YMT5	IPD2	18 43 20.93				32	2.3	48.0	112	93	8.26	8.41	-0.14	
		S 0	18 43 27.07									14.40	14.38	0.03	
15	FMT	IPU1	18 43 20.88						49.0	161	93	8.21	8.49	-0.04	
15	TMO	EPU4	18 43 20.71				28	2.2	49.1	235	93	8.04	8.75	-0.41	
		S 4	18 43 27.76									15.09	14.46	0.64	
15	YMT4	EPU0	18 43 21.49						49.7	115	93	8.82	8.66	0.06	
		S 2	18 43 27.99									15.32	14.99	0.33	
15	YMT2	EP 0	18 43 21.74				31	2.3	51.8	126	93	9.07	8.95	0.04	
		S 2	18 43 28.37									15.70	15.45	0.25	
15	YMT6	EPD0	18 43 22.04				31	2.3	53.8	114	93	9.37	9.30	-0.02	
		S 4	18 43 29.21									16.54	16.06	0.48	
15	YMT3	EP 1	18 43 22.35						57.1	122	92	9.68	9.81	-0.08	
15	EPN	IPU0	18 43 23.11						58.8	73	92	10.44	10.34	0.04	
		S 2	18 43 30.75									16.08	17.79	0.29	
15	CDH5	EPD1	18 43 22.90						60.9	111	92	10.23	10.43	-0.09	
		S 4	18 43 31.22									18.55	17.66	0.89	
15	CDH1	EPU0	18 43 23.15						60.9	111	92	10.48	10.50	0.09	
		S 2	18 43 30.74									18.07	17.78	0.29	
15	MGM	IPD0	18 43 23.77				27	2.2	64.2	312	92	11.10	11.18	0.01	
		S 4	18 43 32.26									19.59	18.96	0.63	
15	CTS	IPU1	18 43 24.36				28	2.3	69.5	17	92	11.69	12.00	-0.14	
		S 0	18 43 32.83									20.16	20.24	-0.07	
15	LSM	EPD1	18 43 24.59						70.3	120	92	11.92	11.98	-0.08	
		S 0	18 43 33.28									20.61	20.53	0.09	
15	SDH	EPU1	18 43 24.68						71.6	130	92	12.01	12.17	-0.11	
		S 4	18 43 33.99									21.32	20.74	0.59	
15	LUP	EPD0	18 43 25.29						73.7	108	92	12.62	12.65	0.06	
		S 4	18 43 35.23									22.56	21.49	1.08	
15	MZP	EPD0	18 43 26.43						80.8	332	92	13.76	13.94	0.06	
15	BLT	EPU0	18 43 27.38						87.6	57	92	14.71	14.94	-0.09	
15	KRNA	EPU0	18 43 28.27						91.4	34	91	15.60	15.59	-0.05	
		S 4	18 43 39.90									27.23	26.77	0.46	
15	MCY	EPD1	18 43 29.49						98.8	116	91	16.82	16.66	0.24	
		S 4	18 43 42.34									29.67	28.35	1.32	
15	JON	EPD2	18 43 29.64				24	2.2	102.5	132	91	16.97	17.18	-0.22	
		S 4	18 43 43.20									30.53	29.40	1.14	
15	SVP	EPU4	18 43 30.21						104.5	314	91	17.54	17.85	-0.42	
		S 4	18 43 45.16									32.49	30.72	1.77	
15	SPRG	EPD0	18 43 31.16						109.8	112	91	18.49	18.44	0.08	
		S 4	18 43 45.55									32.88	31.48	1.40	
15	TNP	EPD4	18 43 32.95						116.0	348	90	20.28	19.17	0.85	
		S 4	18 43 50.07									37.40	33.24	4.17	
15	QSM	EPD1	18 43 33.19						121.5	176	90	20.52	20.05	0.38	
		S 4	18 43 47.96									35.29	34.45	0.85	
15	NUP	EPD1	18 43 33.46						125.7	145	90	20.79	20.75	0.14	
		S 4	18 43 49.51									36.84	35.32	1.52	
15	TPU	EPU4	18 43 34.93						130.8	62	90	22.26	21.57	0.84	
15	WRN	EPU0	18 43 39.15				14	2.0	158.5	50	90	26.48	26.08	0.36	
15	PRN	EPU3	18 43 40.78						173.6	77	52	28.11	28.11	-0.12	
.....															

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OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
OCT	H =	22 56	13.87	UTC	RMS =	0.02	NU =	3							FIXED DEPTH SOLUTION
15	LAT =	38.100	N		ERX =		ERH =		AVFM =		Q =	C			DEPTH CONTROL INADEQUATE
	LONG =	117.177	W		ERY =		GAP =	260	AVXM =		QS =	A			TUNUPAH
	DEPTH =	5.00	KM		ERZ =		NM =				WD =	D			
.....															
15	TNP	EPD0	22 56 15.77						4.1	241	143	1.90	1.65	-0.02	
15	MZP	EPD4	22 56 24.44						47.8	202	93	10.57	8.58	2.23	
15	CTS	EPD0	22 56 24.68						63.2	141	92	10.81	10.98	0.00	
15	SVP	EPD0	22 56 26.18						69.5	232	92	12.31	12.15	0.04	
15	MGM	EPD4	22 56 29.24						78.3	201	92	15.37	13.48	1.98	
15	GMN	EPD4	22 56 24.88						89.0	185	91	11.01	15.23	-4.08	
15	PPK	IPD4	22 56 25.70						98.6	221	91	11.83	16.72	-4.91	
15	GVN	EPD4	22 56 36.45						122.7	187	90	22.58	20.26	2.25	
.....															
OCT	H =	5 9	13.56	UTC	RMS =	0.14	NU =	24							FREE DEPTH SOLUTION
16	LAT =	37.052	N		ERX =	0.2	ERH =	0.5	AVFM =	2.0	Q =	B			
	LONG =	116.946	W		ERY =	0.4	GAP =	144	AVXM =		QS =	A			THIRSTY CANYON
	DEPTH =	5.22	KM		ERZ =	1.5	NM =				WD =	C			
.....															
16	SGV	IPD0	5 9 15.69						11.0	225	112	2.13	2.50	-0.28	
		S 0	5 9 17.61									4.05	4.12	-0.07	
16	GVN	IPD1	5 9 19.70				25	2.1	35.7	261	95	6.14	6.31	-0.23	
		S 0	5 9 24.61									11.05	10.89	0.16	
16	RMT	EPD4	5 9 19.88						37.1	46	95	6.32	6.80	-0.31	
		S 4	5 9 25.61									12.05	11.33	0.72	
16	WCT	IPD2	5 9 20.25						40.5	135	94	6.69	7.11	-0.26	
		S 0	5 9 25.55									11.99	11.88	0.11	
16	YMT5	IPD1	5 9 21.61						47.0	111	93	8.05	8.24	-0.19	
		S 0	5 9 27.69									14.13	14.09	0.04	
16	FMT	EPD0	5 9 21.57				22	2.0	48.1	162	93	8.01	8.35	-0.10	
		S 0	5 9 27.45									13.89	13.86	0.03	
16	YMT4	EPD1	5 9 22.24						48.6	115	93	8.68	8.48	0.08	
		S 3	5 9 28.80									15.24	14.70	0.54	
16	TMO	EPD4	5 9 25.24						49.4	236	93	11.68	8.81	3.17	
16	MCA	EPD2	5 9 22.96				21	2.0	53.8	214	93	9.40	9.13	0.19	
		S 4	5 9 29.95									16.39	15.75	0.64	
16	EPN	IPD1	5 9 23.78				20	1.9	58.2	72	93	10.22	10.25	-0.09	
		S 4	5 9 32.14									18.58	17.62	0.96	
16	CDH1	EPD4	5 9 24.57						59.8	111	92	11.01	10.33	0.78	
		S 4	5 9 30.79									17.23	17.49	-0.26	
16	BGB	IPD0	5 9 24.56						64.0	91	92	11.00	11.07	0.01	
		S 0	5 9 32.45									18.89	18.79	0.10	
16	LCH	EPD0	5 9 24.90						65.6	288	92	11.34	11.28	0.14	
		S 2	5 9 33.18									19.62	19.15	0.47	
16	LSM	EPD4	5 9 25.81						69.2	120	92	12.25	11.81	0.42	
		S 0	5 9 33.86									20.30	20.23	0.07	
16	SDH	EPD0	5 9 25.36						70.5	130	92	11.80	12.00	-0.16	
		S 4	5 9 34.66									21.10	20.45	0.65	
16	LUP	EPD0	5 9 25.97						72.7	108	92	12.41	12.48	0.01	
		S 4	5 9 35.85									22.29	21.21	1.08	
16	PGE	EPD4	5 9 27.21						78.7	188	92	13.65	13.50	0.37	
		S 4	5 9 36.86									23.30	22.70	0.60	
16	MZP	EPD4	5 9 27.15						81.8	332	92	13.59	14.10	-0.27	
		S 4	5 9 37.09									23.53	23.70	-0.17	
16	KRNA	EPD4	5 9 28.85						91.5	33	92	15.29	15.61	-0.39	
		S 4	5 9 40.18									26.62	26.81	-0.19	
16	MCY	EPD2	5 9 30.16						97.8	116	91	16.60	16.48	0.19	
		S 0	5 9 41.75									28.19	28.05	0.14	
16	GMR	EPD0	5 9 31.88						108.9	73	91	18.32	18.36	0.06	
16	HCR	EPD4	5 9 37.41						138.7	19	90	23.85	22.86	1.08	
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OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
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.....  
 OCT H = 1 47 42.43 UTC RMS = 0.09 NO = 27 FREE DEPTH SOLUTION  
 16 LAT = 37.066 N ERX = 0.2 ERH = 0.2 AVFM = 2.1 Q = B  
 LONG = 116.961 W ERY = 0.2 GAP = 66 AVXM = WS = A THIRSTY CANYON  
 DEPTH = 0.79 KM ERZ = 0.4 NM = WD = C  
 .....

16	SGV	IPD0	1 47 44.80					34	2.2	11.3	214	40	2.37	2.48	-0.02
		S 4	1 47 46.17										3.74	4.08	-0.34
16	GVN	EPD0	1 47 48.83					27	2.1	34.7	258	38	6.40	6.26	0.08
		S 4	1 47 53.69										11.26	10.80	0.45
16	BMT	EPD1	1 47 49.02					27	2.1	37.0	49	38	6.59	6.91	-0.15
		S 2	1 47 54.26										11.83	11.53	0.30
16	WCT	IPU4	1 47 49.40					22	2.0	42.6	136	38	6.97	7.57	-0.44
		S 0	1 47 55.04										12.61	12.67	-0.06
16	YMT1	EPU4	1 47 49.96							45.2	121	38	7.53	8.03	-0.63
		S 0	1 47 56.49										14.06	13.95	0.11
16	FMT	EPD4	1 47 49.03							50.0	161	38	6.60	8.78	-1.95
16	YMT4	EPD0	1 47 51.38							50.6	116	38	8.95	8.92	-0.08
		S 0	1 47 57.95										15.52	15.45	0.07
16	MCA	EPD0	1 47 51.81					25	2.1	54.4	212	38	9.38	9.35	-0.05
		S 4	1 47 58.88										16.45	16.12	0.32
16	YMT6	EPU1	1 47 52.14					21	2.0	54.7	115	38	9.71	9.57	0.05
		S 2	1 47 58.73										16.30	16.51	-0.22
16	YMT3	EPU4	1 47 53.17							58.0	122	38	10.74	10.09	0.70
		S 0	1 47 59.56										17.13	17.16	-0.03
16	EPN	EPD0	1 47 52.94							59.0	74	38	10.51	10.51	-0.06
		S 0	1 48 0.57										18.14	18.08	0.06
16	MGM	EPD3	1 47 53.28							63.1	311	38	10.85	11.14	-0.21
		S 4	1 48 2.49										20.06	18.90	1.16
16	LCH	EPD4	1 47 54.27							63.7	287	38	11.84	11.10	0.81
		S 4	1 48 2.08										19.65	18.85	0.80
16	BGB	EPD0	1 47 53.74					19	1.9	65.3	93	38	11.31	11.41	-0.03
		S 0	1 48 1.86										19.43	19.38	0.05
16	SSP	EPD4	1 47 53.34							67.9	103	38	10.91	11.91	-0.93
		S 4	1 48 2.06										19.63	20.24	-0.61
16	CTS	EPD2	1 47 54.13					20	2.0	68.8	18	38	11.70	12.02	-0.15
		S 0	1 48 2.84										20.41	20.27	0.14
16	LSM	EPD2	1 47 54.88					24	2.1	71.2	121	38	12.45	12.26	0.17
		S 4	1 48 2.90										20.47	20.99	-0.53
16	SDH	EPU4	1 47 54.50					21	2.0	72.5	130	38	12.07	12.45	-0.34
		S 1	1 48 3.86										21.43	21.22	0.20
16	LOP	EPD1	1 47 55.12							74.5	108	38	12.69	12.90	-0.13
		S 4	1 48 5.06										22.63	21.92	0.71
16	PGE	EP 4	1 47 55.77							80.1	187	38	13.34	13.85	-0.29
		S 4	1 48 6.33										23.90	23.31	0.59
16	AMR	EP 0	1 47 57.04							86.0	150	38	14.61	14.57	0.03
16	KRNA	EPU0	1 47 58.11							91.0	35	38	15.68	15.64	-0.03
		S 4	1 48 9.75										27.32	26.87	0.45
16	MCY	EPD0	1 47 59.30							99.7	117	38	16.87	16.92	0.03
		S 2	1 48 11.41										28.98	28.80	0.18
16	GMR	EPU1	1 47 61.06							109.8	74	38	18.63	18.62	0.11
16	SPRG	EPU4	1 47 66.55							110.7	112	38	24.12	18.69	5.46
16	HCR	EPD4	1 47 66.62							137.7	20	38	24.19	23.25	1.03

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 OCT H = 2 33 40.95 UTC RMS = 0.10 NO = 16 FREE DEPTH SOLUTION  
 16 LAT = 36.529 N ERX = 0.3 ERH = 0.4 AVFM = 1.3 Q = B  
 LONG = 115.820 W ERY = 0.2 GAP = 134 AVXM = WS = A MERCURY  
 DEPTH = 9.39 KM ERZ = 1.4 NM = WD = D  
 .....

16	SPRG	EPU0	2 33 44.75					11	1.3	18.3	3	116	3.80	3.79	0.04
		S 0	2 33 47.36										6.41	6.43	-0.02
16	MCY	EPU0	2 33 44.84					14	1.5	19.4	319	114	3.89	3.97	0.00
		S 0	2 33 47.67										6.72	6.65	0.07
16	JON	EPU0	2 33 45.97					7	0.9	27.2	249	107	5.02	5.08	-0.07
		S 4	2 33 49.08										8.13	8.70	-0.57
16	APK	EP 2	2 33 46.71							32.0	137	105	5.76	6.21	-0.18
		S 2	2 33 51.62										10.67	10.15	0.52

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OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
16	LSM	EPU1	2 33 49.29					10 1.3	46.8	300	99	8.34	8.23	0.09	
		S 0	2 33 54.98									14.03	14.11	-0.08	
16	LOP	EPD0	2 33 49.30					9 1.2	47.6	319	99	8.35	8.48	-0.04	
		S 2	2 33 55.54									14.59	14.36	0.23	
16	SDH	EP 0	2 33 49.40					9 1.2	48.1	286	99	8.45	8.43	0.06	
		S 3	2 33 55.57									14.62	14.35	0.28	
16	NOP	EP 4	2 33 52.38					9 1.2	53.6	214	98	11.43	9.29	2.23	
		S 0	2 33 56.70									15.75	15.74	0.01	
16	SSP	EP 4	2 33 52.29						56.5	321	98	11.34	9.99	1.43	
		S 4	2 33 58.84									17.89	16.95	0.94	
16	YMT3	EPD0	2 33 51.36					15 1.7	60.1	298	97	10.41	10.35	0.11	
		S 0	2 33 58.62									17.67	17.62	0.05	
16	YMT1	EP 4	2 33 56.44						72.8	300	96	15.49	12.44	2.92	
		S 4	2 34 2.91									21.96	21.49	0.47	

OCT H = 13 37 38.39 UTC RMS = 0.08 NO = 9 FREE DEPTH SOLUTION  
 16 LAT = 38.241 N ERX = 0.3 ERH = 1.0 AVFM = 3.2 Q = C  
 LONG = 116.592 W ERY = 0.9 GAP = 202 AVXM = Q8 = B BLACK BUTTE  
 DEPTH = 1.79 KM ERZ = 2.3 NM = QD = D

16	HCR	IPD0	13 37 41.17					105 3.2	13.8	94	94	2.78	2.95	-0.08	
		S 0	13 37 43.23									4.84	4.89	-0.05	
16	TNP	IPD0	13 37 48.81						57.6	252	74	10.42	10.12	0.03	
		S 1	13 37 56.11									17.72	17.77	-0.05	
16	KRNA	IPU0	13 37 48.83						58.6	161	74	10.44	10.30	0.07	
		S 1	13 37 56.04									17.65	17.73	-0.08	
16	CTS	EPU2	13 37 49.91						66.0	190	74	11.52	11.48	0.22	
		S 4	13 37 56.42									18.03	19.34	-1.30	
16	QCS	EPU0	13 37 52.06						79.3	132	74	13.67	13.65	0.06	
		S 0	13 38 1.63									23.24	23.29	-0.04	

OCT H = 1 12 1.48 UTC RMS = 0.17 NO = 25 FREE DEPTH SOLUTION  
 17 LAT = 37.051 N ERX = 0.2 ERH = 0.4 AVFM = 1.9 Q = B  
 LONG = 116.952 W ERY = 0.3 GAP = 88 AVXM = Q8 = B THIRSTY CANYON  
 DEPTH = 7.35 KM ERZ = 1.0 NM = QD = B

17	SGV	EP 4	1 12 3.90						10.6	223	124	2.42	2.60	-0.09	
		S 0	1 12 5.73									4.25	4.30	-0.05	
17	GVN	EPD0	1 12 7.71					23 2.0	35.2	261	99	6.23	6.26	-0.09	
		S 3	1 12 12.53									11.05	10.81	0.24	
17	BMT	EPU2	1 12 7.96					21 1.9	37.5	47	99	6.48	6.90	-0.25	
		S 2	1 12 13.19									11.71	11.52	0.19	
17	GMN	EPD3	1 12 8.16					20 1.9	38.9	315	98	6.68	7.12	-0.29	
		S 0	1 12 13.40									11.92	11.92	0.01	
17	WCT	EPU2	1 12 8.21					15 1.6	40.8	135	97	6.73	7.20	-0.31	
		S 2	1 12 13.66									12.18	12.03	0.15	
17	YMT1	EPU2	1 12 8.98					28 2.2	43.6	120	97	7.50	7.68	-0.31	
		S 1	1 12 14.92									13.44	13.36	0.08	
17	YMT5	EPU1	1 12 9.62					15 1.6	47.5	111	96	6.14	8.35	-0.21	
		S 0	1 12 15.72									14.24	14.27	-0.03	
17	TMO	EPU1	1 12 10.17					17 1.8	48.9	236	96	8.69	8.76	0.24	
		S 4	1 12 15.58									14.10	14.46	-0.36	
17	YMT4	EP 0	1 12 10.15					21 1.9	49.1	115	96	6.67	8.59	-0.03	
		S 4	1 12 16.77									15.29	14.87	0.42	
17	YMT3	EP 2	1 12 10.89					26 2.2	56.4	121	95	9.41	9.73	-0.27	
		S 3	1 12 18.24									16.76	16.55	0.21	
17	EPN	EPD0	1 12 11.82					17 1.8	58.7	72	95	10.34	10.35	-0.07	
		S 1	1 12 19.48									18.00	17.81	0.19	
17	CDH1	EP 4	1 12 12.66						60.3	111	95	11.18	10.43	0.85	
17	BGB	EPD0	1 12 12.60					15 1.7	64.5	91	94	11.12	11.17	0.03	
		S 2	1 12 20.69									19.21	18.97	0.24	
17	LCH	EP 4	1 12 13.01						65.1	288	94	11.53	11.21	0.40	
		S 3	1 12 20.90									19.42	19.04	0.38	
17	LSM	EPD4	1 12 13.77					21 2.0	69.7	120	94	12.29	11.90	0.37	
		S 0	1 12 21.89									20.41	20.38	0.03	
17	CTS	EPU3	1 12 13.08					20 2.0	70.1	17	94	11.60	12.12	-0.35	
		S 4	1 12 22.34									20.86	20.44	0.42	



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. 17	LUP	EP 2	1 12 14.24					21	2.0	73.2	107	94	12.76	12.58	0.26	
.		S 4	1 12 23.89									22.41	21.37	1.04		

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OCT H = 17	59 50.46 UTC	RMS = 0.10	NO = 24	FREE DEPTH SOLUTION											
. 17	LAT = 36.440 N	ERX = 0.2	ERH = 0.3	AVFM = 2.4	Q = B										
.	LONG = 116.937 W	ERY = 0.2	GAP = 78	AVXM =	QS = A	FURNACE CREEK									
.	DEPTH = 7.99 KM	ERZ = 0.9	NM =		QD = B										

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. 17	PGE	IPD0	17 59 53.74					34	2.2	15.4	229	116	3.28	3.40	0.09	
.		S 0	17 59 55.85										5.39	5.44	-0.06	
. 17	FMT	EPD0	17 59 55.05					35	2.3	26.2	33	104	4.59	4.89	-0.06	0.70
.		S 0	17 59 58.47										8.01	7.95	0.06	
. 17	GWV	IPU1	17 59 56.96					34	2.3	36.9	140	100	6.50	6.70	-0.12	1.40
.		S 1	18 0 1.98										11.52	11.32	0.20	
. 17	MCA	IPU4	17 59 56.61					31	2.2	38.5	307	99	6.15	6.69	-0.62	
.		S 1	18 0 2.08										11.62	11.58	0.04	
. 17	AMR	IPU0	17 59 57.84					33	2.3	41.8	97	98	7.38	7.30	0.06	1.80
.		S 1	18 0 2.81										12.35	12.50	-0.16	
. 17	WCT	EPD0	17 59 58.70					35	2.4	47.9	35	97	8.24	8.35	0.05	1.70
.		S 3	18 0 4.83										14.37	14.00	0.37	
. 17	QSM	EPD0	17 59 59.59					34	2.4	53.1	173	96	9.13	9.11	-0.08	
.		S 0	18 0 6.14										15.68	15.74	-0.06	
. 17	YMT2	EPD4	17 59 59.75					40	2.5	55.7	47	96	9.29	9.63	-0.42	1.80
.		S 0	18 0 6.98										16.52	16.61	-0.09	
. 17	TMO	EPD4	17 59 60.06							58.5	314	96	9.60	10.30	-0.41	
.		S 0	18 0 7.73										17.27	17.11	0.16	
. 17	YMT1	EPD1	17 59 60.88					46	2.7	58.6	39	96	10.42	10.11	0.17	
.		S 0	18 0 7.91										17.45	17.52	-0.07	
. 17	SGV	EP 0	17 59 60.86					43	2.6	60.6	352	95	10.40	10.52	-0.04	1.90
.		S 1	18 0 8.18										17.72	17.84	-0.12	
. 17	LSM	EPD1	17 59 62.29					37	2.5	68.1	61	95	11.83	11.64	0.16	
.		S 4	18 0 10.90										20.44	19.94	0.49	
. 17	GVN	EPD1	17 59 62.59					36	2.5	72.1	330	94	12.13	12.23	-0.16	
.		S 4	18 0 11.77										21.31	21.02	0.29	
. 17	NOP	EPD2	17 59 63.47					32	2.4	78.5	116	94	13.01	13.30	-0.20	
.		S 1	18 0 13.16										22.70	22.58	0.11	
. 17	GMN	EPD4	17 59 66.40					34	2.5	99.7	343	93	15.94	16.98	-0.89	
.		S 2	18 0 19.06										28.60	28.78	-0.18	

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OCT H = 21	16 4.15 UTC	RMS = 0.12	NO = 20	FREE DEPTH SOLUTION											
. 17	LAT = 36.442 N	ERX = 0.4	ERH = 0.6	AVFM = 2.1	Q = B										
.	LONG = 116.954 W	ERY = 0.4	GAP = 84	AVXM =	QS = A	FURNACE CREEK									
.	DEPTH = 12.74 KM	ERZ = 1.4	NM =		QD = B										

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. 17	PGE	IPD0	21 16 7.66					20	1.8	14.4	224	132	3.51	3.70	0.03	
. 17	FMT	EPD1	21 16 9.02					22	1.9	27.0	36	114	4.87	5.26	-0.14	
. 17	MCA	IPU2	21 16 10.55					22	1.9	37.2	308	107	6.40	6.66	-0.33	
. 17	GWV	EPD2	21 16 10.88					27	2.1	58.0	138	107	6.73	7.05	-0.24	1.40
. 17	AMR	IPU0	21 16 11.75					18	1.8	43.3	96	105	7.60	7.70	-0.11	
. 17	WCT	EPD1	21 16 12.69					23	2.0	48.7	37	103	8.54	8.61	0.09	
. 17	QSM	EPD1	21 16 13.64					23	2.0	53.4	172	102	9.49	9.29	0.11	
. 17	YMT2	IPU2	21 16 14.30					31	2.3	56.8	48	101	10.15	9.91	0.16	1.50
. 17	TMO	EPD0	21 16 14.16					22	2.0	57.3	315	101	10.01	10.23	0.09	
. 17	YMT1	EPD0	21 16 14.62					33	2.4	59.5	40	101	10.47	10.36	-0.02	1.80
. 17	SDH	EPD1	21 16 14.57					17	1.8	59.6	66	101	10.42	10.36	0.10	
. 17	SGV	EPD2	21 16 14.82					26	2.2	60.3	353	100	10.67	10.58	0.19	1.70
. 17	YMT4	EP 4	21 16 15.12					25	2.2	65.1	44	100	10.97	11.28	-0.42	1.10
. 17	YMT6	EPD0	21 16 15.82					21	2.0	67.5	47	99	11.67	11.64	-0.06	
. 17	YMT5	EPD1	21 16 15.97					25	2.2	67.6	41	99	11.82	11.70	0.12	0.80
. 17	LSM	EPD1	21 16 16.24					27	2.2	69.4	61	99	12.09	11.94	0.13	
. 17	GVN	EP 0	21 16 16.25					26	2.2	71.2	331	99	12.10	12.18	-0.13	
. 17	JON	EPD2	21 16 16.91					19	2.0	76.3	90	98	12.76	13.02	-0.26	
. 17	NOP	EPD0	21 16 17.70							79.9	116	98	13.55	13.61	0.03	
. 17	SSP	EPD2	21 16 18.88					22	2.1	84.8	51	97	14.73	14.62	0.19	
. 17	LCH	EP 2	21 16 21.92							107.6	325	96	17.77	18.18	-0.32	

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OCT H = 0 51 33.21 UTC RMS = 0.15 NO = 26 FREE DEPTH SOLUTION															
18 LAT = 37.066 N ERX = 0.2 ERH = 0.3 AVFM = 1.9 U = B															
LONG = 116.956 W ERY = 0.3 GAP = 63 AVXM = WS = B THIRSTY CANYON															
DEPTH = 7.84 KM ERZ = 2.0 NM = WD = B															
18	SGV	IPD2	0 51 35.49						11.6	216	123	2.28	2.79	-0.42	
	S 4		0 51 36.95									3.74	4.62	-0.88	
18	GVN	EPD0	0 51 39.52				20	1.9	35.1	258	100	6.31	6.26	-0.01	
	S 4		0 51 44.37									11.16	10.81	0.35	
18	BMT	EPD0	0 51 39.77				18	1.8	36.6	49	100	6.56	6.78	-0.05	
	S 1		0 51 44.68									11.47	11.30	0.16	
18	GMN	EPU2	0 51 39.95				15	1.6	37.4	314	99	6.74	6.89	-0.01	
	S 0		0 51 44.74									11.53	11.53	0.00	
18	YMT1	IPU3	0 51 40.91				27	2.1	44.8	122	97	7.70	7.89	-0.32	0.90
	S 2		0 51 46.73									13.52	13.71	-0.19	
18	YMT5	IPU2	0 51 41.50				18	1.8	48.5	113	97	8.29	8.52	-0.23	
	S 2		0 51 47.64									14.43	14.56	-0.14	
18	TMO	EPU3	0 51 41.56						49.6	234	97	8.35	8.87	-0.22	
	S 4		0 51 47.71									14.50	14.65	-0.15	
18	FMT	EPU3	0 51 41.40						49.9	162	97	8.19	8.68	-0.25	
18	YMT4	EPU0	0 51 42.03				19	1.9	50.2	116	97	8.82	8.77	-0.06	
	S 1		0 51 48.64									15.43	15.19	0.24	
18	MCA	EPU2	0 51 42.76				16	1.7	54.7	212	96	9.55	9.30	0.17	
	S 1		0 51 49.49									16.28	16.04	0.24	
18	YMT3	EPD3	0 51 42.77				24	2.1	57.7	123	96	9.56	9.93	-0.33	0.70
	S 2		0 51 50.40									17.19	16.90	0.29	
18	EPN	EPU4	0 51 43.17				18	1.8	58.6	74	96	9.96	10.34	-0.44	
	S 0		0 51 50.96									17.75	17.79	-0.04	
18	BGB	EPD1	0 51 44.50				18	1.9	64.9	93	95	11.29	11.24	0.13	
	S 0		0 51 52.39									19.18	19.08	0.09	
18	CTS	EP 0	0 51 44.89				18	1.9	68.6	17	95	11.66	11.88	-0.03	
	S 4		0 51 53.61									20.40	20.03	0.37	
18	LSM	EP 0	0 51 45.27				19	1.9	70.9	121	94	12.06	12.10	-0.06	
	S 1		0 51 53.83									20.62	20.72	-0.10	
18	LDP	EPU0	0 51 45.89				22	2.1	74.1	109	94	12.68	12.73	0.03	
	S 4		0 51 55.36									22.15	21.63	0.52	
18	GWV	EPU1	0 51 50.39						100.9	165	93	17.18	17.06	0.20	
OCT H = 0 18 9.48 UTC RMS = 0.06 NO = 10 FREE DEPTH SOLUTION															
19 LAT = 36.617 N ERX = 0.3 ERH = 0.4 AVFM = 1.5 U = B															
LONG = 116.252 W ERY = 0.3 GAP = 146 AVXM = WS = A LATHROP WELLS															
DEPTH = 5.12 KM ERZ = 1.3 NM = WD = C															
19	SDH	IPU0	0 18 11.42				14	1.5	8.3	292	119	1.94	1.99	-0.01	
19	LSM	IPU0	0 18 12.27				20	1.8	13.7	352	106	2.79	2.83	-0.06	
19	YMT3	EPU0	0 18 13.82				10	1.2	23.6	323	98	4.34	4.38	0.01	
19	JON	IPU0	0 18 13.85				9	1.1	23.8	146	97	4.37	4.39	-0.03	
19	MCY	EPU0	0 18 14.33				17	1.7	26.4	79	97	4.85	4.88	0.04	
19	LDP	EP 0	0 18 14.56				16	1.6	27.3	16	96	5.08	5.12	0.04	
19	YMT2	EPU0	0 18 14.85				14	1.5	27.9	312	96	5.37	5.07	0.21	
19	AMR	EP 4	0 18 15.47						31.5	219	95	5.99	5.59	0.39	
19	YMT4	EP 3	0 18 15.17				14	1.5	32.8	327	95	5.69	5.91	-0.34	
19	YMT1	EP 0	0 18 15.99				15	1.6	36.0	317	94	6.51	6.41	-0.04	
19	YMT5	EP 0	0 18 15.90				14	1.5	36.0	330	94	6.42	6.45	-0.04	
19	WCT	EP 4	0 18 19.37						38.7	300	94	8.89	6.81	3.23	
19	SPRG	EP 4	0 18 17.97				11	1.4	40.5	78	94	8.49	7.15	1.36	
19	BGB	EP 4	0 18 19.73				14	1.6	46.7	3	93	10.25	8.26	2.06	
19	GWV	EP 4	0 18 28.84						60.8	218	92	19.36	10.51	8.92	
OCT H = 1 43 47.73 UTC RMS = 0.14 NO = 23 FREE DEPTH SOLUTION															
19 LAT = 37.065 N ERX = 0.2 ERH = 0.4 AVFM = 1.8 U = B															
LONG = 116.953 W ERY = 0.3 GAP = 63 AVXM = WS = B THIRSTY CANYON															
DEPTH = 7.83 KM ERZ = 3.0 NM = WD = B															
19	SGV	IPD2	1 43 50.00				23	1.9	11.7	217	123	2.27	2.80	-0.44	
	S 4		1 43 51.43									3.70	4.63	-0.93	

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. 19	GVN	EPD0	1 43 53.99					19 1.8	35.4	259	100	6.26	6.31	-0.11	
.		S 1	1 43 58.73									11.00	10.89	0.11	
. 19	BMT	EP 4	1 43 54.81					18 1.8	36.5	48	100	7.08	6.76	0.49	
.		S 4	1 43 59.51									11.78	11.27	0.51	
. 19	GMN	EP 1	1 43 54.43						37.8	314	99	6.70	6.96	-0.11	
.		S 0	1 43 59.50									11.77	11.64	0.13	
. 19	WCT	EPD2	1 43 54.64					18 1.8	41.9	136	98	6.91	7.38	-0.31	
.		S 0	1 44 0.17									12.44	12.35	0.09	
. 19	YMT1	EP 3	1 43 55.33						44.4	122	98	7.60	7.83	-0.36	
.		S 1	1 44 1.18									13.45	13.60	-0.15	
. 19	YMT5	WPU1	1 43 55.98					17 1.8	48.1	113	97	8.25	8.45	-0.20	
.		S 0	1 44 2.20									14.47	14.46	0.01	
. 19	FMT	EP 4	1 43 60.56						49.6	162	97	12.83	8.63	4.44	
.		S 4	1 44 3.28									15.55	14.35	1.20	
. 19	YMT4	EPD0	1 43 56.59						49.8	116	97	8.86	8.71	0.04	
.		S 1	1 44 2.93									15.20	15.08	0.12	
. 19	MCA	EP 4	1 43 57.93						54.7	212	96	10.20	9.30	0.82	
.		S 4	1 44 4.14									16.41	16.04	0.37	
. 19	YMT3	EP 1	1 43 57.34						57.3	123	96	9.61	9.87	-0.21	
.		S 3	1 44 4.75									17.02	16.79	0.23	
. 19	EPN	EPD1	1 43 58.28						58.3	73	96	10.55	10.30	0.19	
. 19	CDH1	EP 4	1 43 57.62						60.9	112	95	9.89	10.53	-0.54	
. 19	BGB	EPD1	1 43 58.95						64.5	93	95	11.22	11.18	0.12	
.		S 0	1 44 6.77									19.04	18.99	0.05	
. 19	SSP	EP 4	1 43 60.10						67.2	103	95	12.37	11.68	0.77	
.		S 1	1 44 7.74									20.01	19.84	0.17	
. 19	CTS	EPD0	1 43 59.39						68.7	17	95	11.66	11.90	-0.07	
.		S 0	1 44 7.77									20.04	20.05	-0.01	
. 19	LSM	EPD4	1 43 59.16						70.5	121	94	11.43	12.03	-0.62	
.		S 0	1 44 8.35									20.62	20.61	0.01	
. 19	PGE	EP 4	1 43 62.26						80.1	187	94	14.53	13.73	1.02	
. 19	GWV	EP 1	1 43 64.83						100.6	165	93	17.10	17.01	0.17	

OCT H = 18 34 48.34 UTC RMS = 0.10 NO = 20  
 . 19 LAT = 37.286 N ERX = 0.2 ERH = 0.2 AVFM = 1.5 Q = B FREE DEPTH SOLUTION  
 LONG = 116.317 W ERY = 0.2 GAP = 74 AVXM = QS = A  
 DEPTH = 5.31 KM ERZ = 0.9 NM = WD = B SILENT CANYON - NORTH

. 19	EPN	EPD0	18 34 50.52					29 2.1	8.0	184	124	2.18	2.23	-0.11	
.		S 0	18 34 52.20									3.86	3.92	-0.06	
. 19	BLT	EP 4	18 34 52.92						27.8	38	97	4.58	5.22	-0.51	
.		S 0	18 34 57.14									8.80	8.71	0.09	
. 19	GLR	EP 0	18 34 53.47					10 1.2	28.3	110	97	5.13	5.22	-0.02	
.		S 1	18 34 57.05									8.71	8.80	-0.09	
. 19	BGB	EPD1	18 34 53.48					15 1.6	28.6	164	97	5.14	5.34	-0.11	
.		S 1	18 34 57.63									9.29	8.99	0.30	
. 19	BMT	EP 1	18 34 53.77					17 1.7	29.1	270	96	5.43	5.51	0.09	
.		S 0	18 34 57.49									9.15	9.14	0.02	
. 19	SSP	EP 1	18 34 55.88						41.0	168	94	7.54	7.41	0.21	
.		S 4	18 35 1.80									13.46	12.53	0.93	
. 19	YMT5	20	18 34 56.21					14 1.6	44.7	196	94	7.87	7.86	0.01	
.		S 0	18 35 1.87									13.53	13.45	0.09	
. 19	YMT6	EP 4	18 34 57.19					10 1.3	48.0	189	93	8.65	8.37	0.40	
.		S 4	18 35 3.27									14.93	14.46	0.47	
. 19	YMT4	EP 0	18 34 56.82					11 1.4	48.1	194	93	8.48	8.40	-0.02	
.		S 0	18 35 2.95									14.61	14.54	0.07	
. 19	GMR	EPD4	18 34 57.32						48.7	84	93	8.98	8.56	0.52	
.		S 4	18 35 3.67									15.33	14.47	0.86	
. 19	LOP	EP 0	18 34 57.08						49.7	164	93	8.74	8.75	0.07	
.		S 4	18 35 3.96									15.62	14.82	0.80	
. 19	KRNA	EP 0	18 34 57.26					11 1.4	50.9	354	93	8.92	8.99	-0.14	
.		S 1	18 35 3.96									15.62	15.50	0.12	
. 19	CTS	EPD1	18 34 57.62						54.8	319	93	9.28	9.61	-0.16	
. 19	YMT3	EP 4	18 34 61.77					15 1.7	55.9	189	93	13.43	9.63	3.85	
.		S 4	18 35 5.28									16.94	16.38	0.56	
. 19	LSM	EP 0	18 34 58.73						60.7	176	93	10.39	10.42	-0.04	
.		S 4	18 35 6.86									18.52	17.85	0.68	

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19	QCS	EP 0	18 34 59.51						64.2	34	92	11.17	11.14	0.06	
19	TPU	44	18 34 56.65						69.0	59	92	18.31	11.92	6.53	
		S 4	18 35 9.09									20.75	20.15	0.61	
19	SDH	EP 4	18 34 64.34						71.1	182	92	16.00	12.09	3.95	
		S 4	18 35 9.70									21.36	20.60	0.76	
.....															
OCT H = 23 30 44.56 UTC RMS = 0.20 NO = 4 FREE DEPTH SOLUTION															
19 LAT = 36.937 N ERX = ERH = 0.5 AVFM = 0.5 Q = C															
LONG = 116.086 W ERY = GAP = 271 AVXM = QS = B LATHROP WELLS															
DEPTH = 0.23 KM ERZ = NM = QD = D															
19	LOP	EPD3	23 30 46.83						11.8	218	40	2.27	2.69	-0.34	
19	YMT3	EPD2	23 30 50.72					5 0.6	33.4	240	38	6.16	6.21	0.00	
19	YMT2	EPD3	23 30 52.25					2 -0.1	39.3	245	38	7.69	7.16	0.44	
19	BMT	EPD3	23 30 55.63					6 0.9	62.9	308	36	11.07	11.23	0.01	
.....															
OCT H = 0 53 6.05 UTC RMS = 0.07 NO = 10 FREE DEPTH SOLUTION															
20 LAT = 38.538 N ERX = 0.3 ERH = 0.9 AVFM = 3.2 Q = C															
LONG = 116.690 W ERY = 0.9 GAP = 269 AVXM = QS = A															
DEPTH = 0.52 KM ERZ = 0.7 NM = QD = D															
20	HCR	IPU2	0 53 13.13						40.5	147	38	7.08	7.50	-0.32	
20	TNP	IPU4	0 53 17.78						68.5	222	38	11.73	12.04	-0.58	
20	KRNA	IPU0	0 53 22.00						92.6	163	38	15.95	15.96	-0.08	
20	CTS	EPD0	0 53 22.65						97.9	182	38	16.60	16.81	-0.03	
20	QCS	IPU0	0 53 24.67						109.1	142	38	18.62	18.63	0.02	3.30
		S 4	0 53 38.96									32.91	31.81	1.11	
20	MZP	EPD0	0 53 24.95					71 3.2	111.1	213	38	18.90	19.05	0.09	
		S 4	0 53 41.15									35.10	32.16	2.94	
20	WRN	IPU0	0 53 25.59					70 3.2	114.5	123	38	19.54	19.48	0.03	
		S 0	0 53 39.41									33.36	33.37	-0.01	
20	BLT	IPU1	0 53 27.55						127.4	157	38	21.50	21.59	0.05	
		S 2	0 53 42.78									36.73	36.69	0.04	
20	BMT	EPD0	0 53 29.43						139.3	178	38	23.38	23.60	-0.05	
		S 4	0 53 47.73									41.68	40.07	1.61	
20	GMN	EPD4	0 53 30.24						146.3	200	38	24.19	24.73	-0.38	
		S 4	0 53 51.35									45.30	42.02	3.28	
20	EPN	EPD4	0 53 30.99						150.4	168	38	24.94	25.43	-0.55	
		S 4	0 53 51.48									45.43	43.60	1.84	
20	SRG	EPD4	0 53 31.73						159.7	117	38	25.68	26.80	-1.34	
		S 4	0 53 53.23									47.18	46.20	0.98	
20	YMT4	EPD4	0 53 35.66						186.8	174	29	29.61	30.31	-0.80	
		S 4	0 54 1.29									55.24	52.01	3.23	
.....															
OCT H = 5 12 44.71 UTC RMS = 0.08 NO = 25 FREE DEPTH SOLUTION															
20 LAT = 37.041 N ERX = 0.3 ERH = 0.3 AVFM = 3.5 Q = B															
LONG = 115.172 W ERY = 0.1 GAP = 147 AVXM = QS = A ALAMO															
DEPTH = 0.22 KM ERZ = 1.0 NM = QD = C															
20	EPR	IPD0	5 12 47.71					122 3.4	14.3	355	40	3.00	3.04	-0.01	
20	PRN	IPD0	5 12 52.51					136 3.5	42.1	15	38	7.80	7.71	-0.02	
20	SHRG	IPU0	5 12 54.71						59.5	179	38	10.00	10.58	0.02	
		S 4	5 13 5.00									20.29	17.06	3.21	
20	GMR	EPD1	5 12 55.45						62.3	301	38	10.74	11.02	-0.18	
20	SPRG	EPD1	5 12 56.50						68.6	236	38	11.79	11.97	-0.14	
20	NPN	EPD0	5 12 57.33						71.1	17	38	12.62	12.46	-0.04	
20	MTI	EPD1	5 12 57.22						71.1	353	38	12.51	12.44	0.10	
20	DLM	EPD2	5 12 58.05						73.6	32	38	13.34	12.86	0.21	
20	TPU	IPU1	5 12 57.67						75.6	326	38	12.96	13.24	-0.14	
		S 4	5 13 7.89									23.18	22.41	0.78	
20	GLR	EPD1	5 12 58.16						77.2	283	38	13.45	13.41	0.12	
		S 1	5 13 7.58									22.87	22.61	0.07	
20	CPX	EPD2	5 12 58.65						79.5	261	38	13.94	13.76	0.22	
		S 4	5 13 9.01									24.30	23.47	0.83	
20	MCY	EPD0	5 12 58.74						82.0	239	38	14.03	14.16	-0.05	

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. 20	APK	EPU1	5 12 59.74						87.7	204	38	15.03	15.38	-0.07	
.		S 4	5 13 11.16									26.45	25.84	0.62	
. 20	LOP	EPU2	5 12 60.43						91.1	257	38	15.72	15.72	0.08	
. 20	SRG	EPD2	5 12 60.84						93.8	6	38	16.13	16.16	-0.25	
. 20	BGB	EPD2	5 12 60.98						93.9	270	38	16.27	16.19	0.16	
.		S 4	5 13 13.98									29.27	27.55	1.73	
. 20	SSP	EPD4	5 12 58.13						94.0	262	38	13.42	16.27	-2.77	
.		S 4	5 13 13.46									28.75	27.69	1.07	
. 20	BLT	EPU1	5 12 61.26						97.5	300	38	16.55	16.78	-0.10	
.		S 4	5 13 14.86									30.15	28.48	1.68	
. 20	EPN	EPU1	5 12 62.87						104.1	281	38	18.16	17.97	0.14	
. 20	SDH	EPU1	5 12 63.65						112.9	247	38	18.94	19.14	-0.15	
.		S 4	5 13 19.76									35.05	32.66	2.40	
. 20	YMT4	EPU2	5 12 64.67				128	3.7	115.5	260	38	19.96	19.60	0.26	
.		S 4	5 13 21.70									36.99	33.70	3.30	
. 20	KRNA	EPU1	5 12 67.35						132.1	306	38	22.64	22.46	0.12	
.		S 4	5 13 24.90									40.19	38.52	1.67	
. 20	NOP	EPU4	5 12 67.57						134.0	221	38	22.86	22.55	0.41	
.		S 4	5 13 24.96									40.25	38.40	1.85	
. 20	CTS	EPU0	5 12 70.43						153.8	296	38	25.72	25.95	-0.06	
. 20	HCR	EPU4	5 12 72.97						173.1	320	29	28.26	28.80	-0.45	
.		S 4	5 13 36.79									52.08	49.09	2.99	
. 20	GMN	EPD3	5 12 74.95						187.5	279	29	30.24	30.67	-0.28	
.		S 4	5 12 1.60									-43.11	52.19	-95.30	
. 20	MZP	EPU0	5 12 77.86						209.0	291	29	33.15	33.47	-0.08	
.		S 4	5 12 6.20									-38.51	56.83	-95.34	
. 20	MGM	EPU4	5 12 77.45						211.1	282	29	32.74	33.68	-0.84	
.		S 4	5 12 7.91									-36.80	57.44	-94.23	
. 20	TNP	EPU4	5 12 78.62						214.5	303	29	33.91	34.07	-0.43	

OCT M = 9 28 53.03 UTC RMS = 0.10 NO = 11 FREE DEPTH SOLUTION  
 . 20 LAT = 37.029 N ERX = 0.5 ERH = 0.6 AVFM = 2.3 Q = C  
 . LONG = 115.166 W ERY = 0.3 GAP = 148 AVXM = QS = B ALAMO  
 . DEPTH = 5.47 KM ERZ = 2.7 NM = QD = C

. 20	EPR	EP 0	9 28 56.10						37	2.3	15.6	353	105	3.07	3.16	-0.07
. 20	PRN	EPU4	9 28 60.32						43.1	14	94	7.29	7.64	-0.46		
. 20	SHRG	EPU0	9 28 62.56						58.3	179	93	9.53	10.13	-0.01		
. 20	GMR	EPU4	9 28 63.32						63.5	302	93	10.29	10.96	-0.57		
.		S 4	9 29 11.34									18.31	18.57	-0.26		
. 20	SPRG	EPU1	9 28 64.53				27	2.2	68.4	237	92	11.50	11.69	-0.15		
.		S 4	9 29 13.55									20.52	19.93	0.59		
. 20	MTI	EPU0	9 28 65.40						72.4	352	92	12.37	12.41	0.00		
. 20	DLM	EPD0	9 28 66.10						74.3	31	92	13.07	12.76	0.07		
. 20	TPU	EPU4	9 28 65.63						76.9	326	92	12.60	13.22	-0.47		
. 20	MCY	EPD2	9 28 66.59						82.0	240	92	13.56	13.91	-0.26		
. 20	LUP	EPD1	9 28 68.60						91.4	258	92	15.57	15.52	0.13		
. 20	SSP	EPD1	9 28 69.15						94.4	263	92	16.12	16.10	0.11		
. 20	SRG	EPU0	9 28 69.41						95.0	5	92	16.38	16.11	0.06		
. 20	LSM	EPD2	9 28 70.64						103.8	252	91	17.61	17.43	0.17		
. 20	EPN	EPD4	9 28 70.19						104.9	281	91	17.16	17.86	-0.75		
. 20	WRN	EPD2	9 28 71.86						112.1	341	91	18.83	18.91	-0.12		
. 20	SDH	EPU4	9 28 72.37						113.0	248	91	19.34	18.91	0.47		
. 20	KRNA	EPU4	9 28 75.82						133.3	306	90	22.79	21.98	0.74		
. 20	BMT	EPD4	9 28 76.18						134.4	282	90	23.15	22.15	1.17		

OCT M = 19 10 4.05 UTC RMS = 0.10 NO = 11 FREE DEPTH SOLUTION  
 . 22 LAT = 37.065 N ERX = 0.3 ERH = 0.5 AVFM = 2.1 Q = C  
 . LONG = 116.946 W ERY = 0.4 GAP = 95 AVXM = QS = B THIRSTY CANYON  
 . DEPTH = 4.86 KM ERZ = 3.0 NM = QD = C

. 22	SGV	IPD0	19 10 6.54						45	2.5	12.1	219	108	2.49	2.65	-0.07
. 22	GVN	EPD0	19 10 10.49						30	2.2	36.0	259	94	6.44	6.35	0.03
. 22	BMT	IPD0	19 10 10.51						33	2.3	36.0	48	94	6.46	6.62	0.00
. 22	GMN	IPU1	19 10 10.74								38.1	313	94	6.69	6.96	-0.12
. 22	WCT	EPU0	19 10 11.08								41.6	137	93	7.03	7.28	-0.09

## 1981 SGB LOCAL-EVENT DATA REPORT

OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 22	YMT5	IPD0	19 10 12.37					26 2.1	47.6	113	93	8.32	8.33	-0.01	
. 22	YMT4	EPD2	19 10 13.02					20 1.9	49.3	117	93	8.97	8.59	0.27	
. 22	FMT	IPU0	19 10 12.43					18 1.8	49.5	163	93	8.38	8.58	0.04	
. 22	YMT2	EPU4	19 10 13.47						51.6	127	92	9.42	8.92	0.41	
. 22	MCA	EPU4	19 10 13.95					22 2.0	55.1	213	92	9.90	9.33	0.49	
. 22	YMT3	EPD0	19 10 13.69					31 2.3	56.8	123	92	9.64	9.77	-0.08	
. 22	EPN	EPD1	19 10 14.44					34 2.4	57.7	73	92	10.39	10.17	0.16	
. 22	MGM	EPD0	19 10 15.21					19 1.9	64.2	311	92	11.16	11.18	0.06	
. 22	LCH	EPD4	19 10 16.95						65.0	287	92	12.90	11.19	1.79	
. 22	LSM	EPU4	19 10 16.62					25 2.2	70.0	121	92	12.57	11.94	0.61	
. 22	PGE	EPU4	19 10 20.86						80.2	188	91	16.81	13.74	3.28	

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OCT H = 23 35 29.41 UTC RMS = 0.15 NO = 9 FREE DEPTH SOLUTION

. 22 LAT = 35.433 N ERX = 1.1 ERH = 2.4 AVFM = 3.6 W = C

. LONG = 118.191 W ERY = 2.1 GAP = 310 AVXM = WS = B

. DEPTH = 5.36 KM ERZ = 1.6 NM = WD = D

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. 22	QSM	EPU0	23 35 51.49					105 3.6	133.5	64	90	22.08	22.02	-0.02	3.30
.		S 1	23 36 7.05									37.64	37.80	-0.16	
. 22	PGE	EPD0	23 35 53.02						143.7	45	90	23.61	23.67	0.16	
.		S 4	23 36 9.29									39.88	40.11	-0.22	
. 22	MCA	EPD4	23 35 53.94						157.9	31	52	24.53	25.81	-1.36	
.		S 4	23 36 13.85									44.44	44.27	0.17	
. 22	GMV	EPU4	23 35 54.87						160.9	59	90	25.46	26.47	-0.92	
.		S 1	23 36 14.88									45.47	45.12	0.35	
. 22	TMO	EPU1	23 35 56.46						167.9	25	52	27.05	27.52	-0.17	
.		S 0	23 36 15.96									46.55	46.55	0.00	
. 22	FMT	EPU4	23 35 56.26						184.8	44	52	26.85	29.43	-2.33	
.		S 4	23 36 20.69									51.28	49.91	1.37	
. 22	AMR	EPD4	23 35 56.86						188.4	55	52	27.45	29.82	-2.37	
.		S 4	23 36 23.10									53.69	51.01	2.69	
. 22	GVN	IPU4	23 35 60.83						190.1	24	52	31.42	30.07	1.30	
.		S 4	23 36 22.86									53.45	51.52	1.94	
. 22	NOP	EPU4	23 35 59.84						199.8	67	52	30.43	31.33	-0.81	
. 22	SGV	EPD1	23 35 60.77						201.0	31	52	31.36	31.62	-0.17	
.		S 4	23 36 26.45									57.04	53.92	3.12	
. 22	LCH	EPU1	23 35 61.59						205.8	14	52	32.18	32.22	0.04	
. 22	WCT	EPD2	23 35 61.19						206.4	43	52	31.76	32.19	-0.25	
. 22	SDH	EPD4	23 35 62.01						214.5	51	52	32.60	33.25	-0.60	
. 22	JON	EPD4	23 35 62.65						219.2	59	52	33.24	33.81	-0.57	
. 22	PPK	EPU4	23 35 61.18						222.7	7	52	31.77	34.47	-2.70	
.		S 4	23 36 7.66									38.25	58.96	-20.70	
. 22	GMN	EPD2	23 35 64.03						223.4	22	52	34.62	34.64	0.13	
.		S 4	23 36 7.36									37.95	58.98	-21.02	
. 22	YMT5	EPD1	23 35 63.96						225.5	44	52	34.55	34.73	-0.17	
.		S 4	23 36 32.94									63.53	59.39	4.15	
. 22	YMT6	EPU1	23 35 64.07						225.7	45	52	34.66	34.70	-0.12	
. 22	CDH1	EPD1	23 35 64.95						231.4	47	52	35.54	35.49	0.15	
. 22	LOP	EPD4	23 35 65.71						241.0	49	52	36.30	36.79	-0.40	
.		S 4	23 36 10.87									41.46	62.77	-21.31	
. 22	SSP	EPD4	23 35 66.05						242.7	47	52	36.64	37.09	-0.36	
. 22	BMT	EPD4	23 35 67.46						247.8	34	52	38.05	37.77	0.45	
.		S 4	23 36 35.27									65.86	64.30	1.57	
. 22	EPN	EPU4	23 35 73.17						259.3	40	52	43.76	39.26	4.44	
. 22	CTS	EPD4	23 35 75.74						279.6	28	52	46.33	41.78	4.73	
. 22	KRNA	EPU4	23 35 79.93						303.2	32	52	50.52	44.82	5.63	

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OCT H = 6 16 45.15 UTC RMS = 0.10 NU = 9 FREE DEPTH SOLUTION

. 23 LAT = 37.705 N ERX = 0.5 ERH = 0.6 AVFM = 1.9 W = C

. LONG = 115.148 W ERY = 0.3 GAP = 126 AVXM = WS = B MIKU

. DEPTH = 5.18 KM ERZ = 2.5 NM = WD = C

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. 23	MTI	EPD1	6 16 47.52					15 1.5	11.5	254	111	2.37	2.56	-0.17	
.		S 0	6 16 49.54									4.39	4.33	0.05	
. 23	NPN	EPU0	6 16 49.15					19 1.8	19.5	107	100	4.00	3.84	-0.06	
.		S 1	6 16 51.90									6.75	6.93	-0.19	

## 1981 SGB LOCAL-EVENT DATA REPORT

OCT 1981	STA	PHASE	TIME (UTC)	AMP (NU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
23	SRG	EPD1	6 16 49.28					31 2.2	20.9	20	100	4.13	4.06	-0.16	.
		S 0	6 16 52.55									7.40	7.33	0.07	.
23	PRN	EPD0	6 16 51.53					29 2.2	34.2	165	95	6.38	6.19	0.07	.
		S 4	6 16 56.85									11.70	10.78	0.91	.
23	DLM	EPD0	6 16 52.28					15 1.6	37.7	107	94	7.13	6.81	0.07	.
		S 0	6 16 57.29									12.14	12.06	0.07	.
23	TPU	EPD4	6 16 53.72						45.6	256	93	8.57	8.13	0.58	.
23	WKN	EPD4	6 16 60.51						49.5	308	93	15.36	8.72	6.59	.
23	EPR	EPD4	6 16 56.63						59.6	183	92	11.48	10.28	1.22	.
23	GMR	EPD4	6 16 57.49						68.9	233	92	12.34	11.83	0.60	.
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OCT H = 1 45 14.20 UTC RMS = 0.10 NO = 35															
24 LAT = 37.071 N ERX = 0.1 ERH = 0.2 AVFM = 2.0 J = B FREE DEPTH SOLUTION															
LONG = 116.952 W ERY = 0.1 GAP = 120 AVXM = J = A THIRSTY CANYON															
DEPTH = 7.37 KM ERZ = 0.7 NM = J = B															
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24	SGV	IPU2	1 45 16.57					31 2.2	12.2	216	120	2.37	2.84	-0.38	.
		S 0	1 45 18.98									4.78	4.70	0.08	.
24	GVN	EPD0	1 45 20.56					20 1.9	35.6	257	99	6.36	6.32	-0.02	.
		S 0	1 45 25.10									10.90	10.91	-0.01	.
24	BMT	EPD0	1 45 20.63					18 1.8	36.0	49	99	6.43	6.67	-0.07	.
		S 4	1 45 26.06									11.86	11.12	0.74	.
24	WCT	EPD3	1 45 21.15					16 1.7	42.4	137	97	6.95	7.45	-0.34	.
		S 0	1 45 26.67									12.47	12.47	0.00	.
24	YMT1	EPD2	1 45 21.92					36 2.4	44.8	123	97	7.72	7.87	-0.28	.
		S 4	1 45 28.16									13.96	13.69	0.27	.
24	YMT5	EPD2	1 45 22.45					16 1.8	48.3	113	96	6.25	8.49	-0.24	.
		S 1	1 45 28.53									14.33	14.51	-0.18	.
24	YMT4	EPD0	1 45 23.02					24 2.1	50.1	117	96	8.82	8.75	-0.04	.
		S 4	1 45 29.76									15.56	15.15	0.41	.
24	FMT	EPD2	1 45 22.43						50.3	162	96	8.23	8.73	-0.26	.
24	YMT2	EPD2	1 45 23.52					24 2.1	52.4	127	96	9.32	9.08	0.16	.
		S 4	1 45 30.26									16.06	15.67	0.39	.
24	MCA	EP 0	1 45 23.74					17 1.8	55.3	212	95	9.54	9.39	0.07	.
		S 0	1 45 30.40									16.20	16.19	0.01	.
24	YMT3	EPD3	1 45 23.78					25 2.1	57.6	123	95	9.58	9.92	-0.29	.
		S 0	1 45 30.98									16.78	16.88	-0.10	.
24	EPN	EPD0	1 45 24.58					18 1.8	58.1	74	95	10.38	10.26	0.06	.
		S 4	1 45 32.19									17.99	17.64	0.35	.
24	CDH5	EPD0	1 45 24.57					32 2.4	61.2	112	95	10.37	10.50	-0.03	.
		S 1	1 45 32.01									17.81	17.78	0.03	.
24	CDH1	EPD0	1 45 24.68					25 2.1	61.2	112	95	10.48	10.56	0.02	.
		S 0	1 45 32.10									17.90	17.89	0.01	.
24	BGR	EPD1	1 45 25.45					19 1.9	64.5	93	94	11.25	11.18	0.15	.
		S 0	1 45 33.20									19.00	18.98	0.02	.
24	SSP	EPD0	1 45 25.92					20 2.0	67.3	104	94	11.72	11.70	0.10	.
		S 4	1 45 35.07									20.87	19.87	1.00	.
24	CTS	EPD0	1 45 25.72					15 1.7	68.0	17	94	11.52	11.78	-0.09	.
		S 1	1 45 34.20									20.00	19.86	0.14	.
24	LSM	EPD3	1 45 26.59					21 2.0	70.8	121	94	12.39	12.08	0.29	.
		S 0	1 45 34.86									20.66	20.69	-0.03	.
24	LUP	EPD1	1 45 26.94					21 2.0	73.9	109	94	12.74	12.69	0.13	.
		S 2	1 45 35.51									21.31	21.57	-0.26	.
24	AMR	EPD1	1 45 28.83						86.1	150	93	14.63	14.47	0.15	.
24	MCY	EPD2	1 45 31.13						99.3	117	93	16.93	16.73	0.28	.
		S 4	1 45 44.14									29.94	28.47	1.47	.
24	GKV	EPD1	1 45 31.46						101.3	166	93	17.26	17.12	0.22	.
24	GMR	EPD1	1 45 32.24						108.9	74	93	18.04	18.35	-0.21	.
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## 1981 SGB LOCAL-EVENT DATA REPORT

DDT	STA	PHASE	TIME	AMP	PER	XMAG	DUR	FMAG	DIST	AZ	AIH	TUBS	TICAL	RES	REMARKS
1981			(UTC)	(MU)	(SEC)				(KM)	(DEG)	(DEG)	(SEC)	(SEC)	(SEC)	

OCT H = 16	29	10.77	UTC	RMS =	0.02	NU =	5	FREE DEPTH SOLUTION							
24 LAT =	37.825	N		ERX =	0.0	ERH =	0.0	AVFM =	2.2	Q =	C				
LONG =	115.531	W		ERY =	0.0	GAP =	98	AVXM =		QS =	A	WURTHINGTON PEAK			
DEPTH =	0.21	KM		ERZ =	0.1	NM =				QD =	U				

24	KRN	IPD0	16 29 14.58					28	2.1	18.1	344	40	3.81	3.79	-0.02
24	MTI	EPD0	16 29 16.16					30	2.2	28.1	126	40	5.39	5.42	-0.01
24	QCS	EP 4	16 29 18.00					27	2.1	34.5	259	38	7.23	6.57	0.69
24	SRG	EPD0	16 29 18.63					37	2.4	41.2	81	38	7.86	7.60	0.03
24	NPN	EPD4	16 29 21.42					26	2.2	55.7	110	38	10.65	9.97	0.47
24	GMR	EPD0	16 29 21.08					24	2.1	58.5	201	38	10.31	10.39	0.01
24	DLM	EPD4	16 29 24.47					21	2.0	74.0	109	38	13.70	12.94	0.50
24	KRNA	EPD4	16 29 24.38					24	2.2	75.3	263	38	13.61	13.21	0.32
24	EPR	EP 4	16 29 25.13					34	2.5	78.9	157	38	14.36	13.66	0.71
24	HCR	EPD0	16 29 26.55							91.5	300	38	15.78	15.86	0.00

OCT H = 16	56	14.78	UTC	RMS =	0.08	NU =	11	FREE DEPTH SOLUTION							
24 LAT =	36.715	N		ERX =	0.4	ERH =	0.6	AVFM =	1.0	Q =	C				
LONG =	116.287	W		ERY =	0.4	GAP =	249	AVXM =		QS =	A	LATHRUP WELLS			
DEPTH =	9.40	KM		ERZ =	0.5	NM =				QD =	D				

24	LSP	IPD0	16 56 16.73					9	1.0	3.0	25	162	1.95	2.02	-0.09
		S 0	16 56 18.28										3.50	3.49	0.01
24	CDH5	EP 0	16 56 18.11					9	1.1	16.3	350	118	3.33	3.47	-0.04
		S 0	16 56 20.48										5.70	5.76	-0.06
24	CDH1	EP 1	16 56 18.36					6	0.7	16.3	350	119	3.58	3.54	0.14
		S 1	16 56 20.87										6.09	5.89	0.20
24	LUP	IPD1	16 56 18.58					8	1.0	18.8	35	115	3.80	3.96	-0.08
		S 0	16 56 21.40										6.62	6.64	-0.02
24	YMT2	EP 4	16 56 19.36							19.2	294	114	4.58	3.89	0.61
24	SSP	EP 0	16 56 19.52							24.1	15	110	4.74	4.84	-0.02
		S 4	16 56 23.31										8.53	8.14	0.39
24	MCY	EPD0	16 56 20.31					8	1.0	29.6	102	105	5.53	5.54	0.07
		S 0	16 56 24.15										9.37	9.33	0.04

OCT H = 21	34	46.13	UTC	RMS =	0.09	NU =	25	FREE DEPTH SOLUTION							
24 LAT =	37.063	N		ERX =	0.2	ERH =	0.3	AVFM =	3.4	Q =	B				
LONG =	116.949	W		ERY =	0.3	GAP =	94	AVXM =		QS =	A	THIRSTY CANYON			
DEPTH =	5.64	KM		ERZ =	1.2	NM =				QD =	C				

24	SGV	IPD0	21 34 48.68					96	3.1	11.7	219	113	2.55	2.63	0.00
24	GVN	IPD0	21 34 52.49							35.7	259	95	6.36	6.30	-0.01
24	BMT	EPD0	21 34 52.68							36.4	48	95	6.55	6.70	0.02
24	GMN	EPD0	21 34 52.93							38.1	314	95	6.80	6.97	-0.02
24	WCT	IPD0	21 34 53.17							41.6	136	95	7.04	7.29	-0.09
24	YMT1	IPD0	21 34 53.98					116	3.4	44.1	122	94	7.85	7.73	-0.01



## 1981 SGB LOCAL-EVENT DATA REPORT

OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
24	YMT5	IPU0	21 34 54.48						47.7	112	94	8.35	8.36	-0.01	
24	YMT4	IPU2	21 34 55.06						49.4	116	94	8.93	8.62	0.20	
24	YMT2	EPU4	21 34 54.29						51.6	127	93	8.16	8.94	-0.86	
24	YMT6	IPD1	21 34 55.33						53.5	115	93	9.20	9.26	-0.15	
24	YMT3	IPU3	21 34 55.53				129	3.6	56.9	123	93	9.40	9.78	-0.33	
24	EPN	EPD1	21 34 56.59				113	3.4	58.1	73	93	10.46	10.23	0.17	
24	CDH5	IPU0	21 34 56.38						60.5	112	93	10.25	10.38	-0.03	
24	CDH1	IPU0	21 34 56.45						60.5	112	93	10.32	10.45	-0.03	
24	MGM	IPU0	21 34 57.26						64.2	311	93	11.13	11.19	0.03	
24	BGB	IPD1	21 34 57.33						64.2	92	93	11.20	11.11	0.17	
24	SSP	EPU1	21 34 57.85				112	3.5	66.8	103	93	11.72	11.60	0.19	
24	LSM	IPU1	21 34 57.91				113	3.5	70.1	121	92	11.78	11.95	-0.19	
24	SDH	IPU0	21 34 58.26				112	3.5	71.5	130	92	12.13	12.16	0.01	
24	LOP	IPU1	21 34 58.49				112	3.5	73.3	108	92	12.36	12.59	-0.15	
24	GLR	IPD1	21 35 0.21						84.2	80	92	14.08	14.30	-0.15	
24	AMR	IPU1	21 35 0.55				110	3.5	85.1	150	92	14.42	14.31	0.10	
24	BLT	EPU0	21 35 0.72				110	3.5	86.8	58	92	14.59	14.81	-0.09	
24	MCY	IPU1	21 35 2.81				108	3.5	98.6	117	92	16.68	16.61	0.15	
24	JON	IPU1	21 35 3.12				107	3.5	102.4	132	92	16.99	17.15	-0.18	
24	GMR	IPD1	21 35 4.51				65	3.1	108.8	74	92	18.38	18.34	0.14	

OCT H = 22 18 30.61 UTC RMS = 0.09 NO = 10 FREE DEPTH SOLUTION  
 25 LAT = 37.001 N ERX = 0.4 ERH = 0.5 AVFM = 1.6 Q = C  
 LONG = 117.503 W ERY = 0.3 GAP = 175 AVXM = QS = B MAGRUDER MOUNTAIN  
 DEPTH = 7.04 KM ERZ = 2.4 NM = QD = C

25	GVN	IPD0	22 18 33.49				19	1.7	14.3	90	113	2.88	2.96	-0.14	
		S 4	22 18 34.64									4.03	5.17	-1.14	
25	TMO	EPU1	22 18 34.86				12	1.4	23.4	159	104	4.25	4.65	-0.09	
		S 0	22 18 38.10									7.49	7.43	0.06	
25	LCH	EP 0	22 18 35.85				10	1.2	28.9	334	101	5.24	5.36	-0.04	
		S 0	22 18 39.71									9.10	9.03	0.07	
25	GMN	EP 1	22 18 37.59						39.6	33	97	6.98	7.23	-0.10	
		S 2	22 18 43.09									12.48	12.11	0.38	
25	SGV	EPD0	22 18 38.04				19	1.8	42.0	93	97	7.43	7.49	0.03	
		S 0	22 18 43.34									12.73	12.66	0.07	
25	MCA	EP 1	22 18 38.31				15	1.6	44.0	153	96	7.70	7.55	0.08	
		S 4	22 18 44.05									13.44	13.04	0.40	

OCT H = 1 25 8.32 UTC RMS = 0.05 NO = 8 FREE DEPTH SOLUTION  
 26 LAT = 36.749 N ERX = 0.2 ERH = 0.3 AVFM = 1.1 Q = C  
 LONG = 116.192 W ERY = 0.2 GAP = 105 AVXM = QS = C LATHROP WELLS  
 DEPTH = 0.39 KM ERZ = 16.2 NM = QD = B

26	LSM	IPD0	1 25 9.98				16	1.6	7.3	262	40	1.66	1.79	-0.15	
26	LOP	EPU0	1 25 10.92				9	1.1	11.9	11	40	2.60	2.68	-0.01	
26	CDH5	EP 0	1 25 11.59				9	1.1	16.7	318	40	3.27	3.36	0.00	
26	CDH1	EP 0	1 25 11.68				8	1.0	16.7	318	40	3.36	3.43	0.02	
26	SDH	EP 0	1 25 11.79				5	0.6	17.4	229	40	3.47	3.48	0.02	
26	YMT3	EPD0	1 25 12.32				12	1.4	20.0	282	40	3.99	3.93	0.12	
26	MCY	EPD0	1 25 12.67				9	1.1	22.7	115	40	4.35	4.43	-0.01	
26	YMT2	EP 4	1 25 13.87						26.4	279	40	5.55	5.01	0.46	
26	BGB	EPU4	1 25 19.00						32.2	354	38	10.68	6.12	4.63	
26	JON	EPU0	1 25 14.79				7	0.9	35.2	167	38	6.47	6.44	0.01	

OCT H = 4 50 28.60 UTC RMS = 0.09 NO = 7 FREE DEPTH SOLUTION  
 26 LAT = 36.755 N ERX = 0.5 ERH = 0.8 AVFM = 1.0 Q = B  
 LONG = 116.235 W ERY = 0.5 GAP = 104 AVXM = QS = A LATHROP WELLS  
 DEPTH = 4.16 KM ERZ = 1.6 NM = QD = B

26	LSM	EPU0	4 50 29.97				11	1.2	3.8	243	137	1.37	1.33	0.02	
26	LOP	EPU0	4 50 31.14				8	1.0	12.5	29	103	2.54	2.71	-0.10	
26	CDH5	EPU0	4 50 31.25				6	0.7	13.8	326	100	2.65	2.78	-0.03	
26	CDH1	IPU0	4 50 31.35				10	1.2	13.6	328	100	2.75	2.85	0.00	
26	SDH	EPD1	4 50 31.44				5	0.6	15.3	217	99	2.84	3.02	-0.15	

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OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	W/I (LEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
.	26	YMT3	IPD1	4	50	31.85		9	1.1	16.1	283	98	3.25	3.16	0.14	.
.	26	SSP	EPU4	4	50	33.48				18.4	4	96	4.88	3.81	1.14	.
.	26	YMT2	EP 4	4	50	33.40		9	1.1	22.5	279	95	4.80	4.19	0.53	.
.	26	MCY	EPU0	4	50	33.53		8	1.0	26.5	113	94	4.93	4.88	0.12	.
.....																
.	OCT H = 15 18 14.87 UTC			RMS =	0.00	NO =	3	FIXED DEPTH SOLUTION								.
.	26	LAT =	37.734 N	ERX =		ERH =		AVFM =	0.6	W =	C	DEPTH CONTROL INADEQUATE				.
.		LONG =	116.628 W	ERY =		GAP =	223	AVXM =		WS =	A	SLINKING SPRING				.
.		DEPTH =	5.00 KM	ERZ =		NM =				WD =	D					.
.	26	CTS	EPD0	15	17	77.44		5	0.6	12.2	225	109	2.57	2.74	0.00	.
.		S 4	15 18 18.72										3.85	4.39	-0.54	.
.	26	KRNA	EP 0	15	17	79.25		4	0.4	22.0	88	98	4.38	4.31	0.00	.
.		S 4	15 18 20.20										5.33	7.49	-2.16	.
.	26	BMT	EP 4	15	17	79.20		5	0.7	50.1	182	93	4.33	8.91	-4.41	.
.		S 4	15 18 20.35										5.48	14.94	-9.46	.
.	26	EPN	EP 4	15	17	91.02		6	0.9	63.7	155	92	10.15	11.14	4.95	.
.		S 0	15 18 34.03										19.16	19.16	0.00	.
.....																
.	OCT H = 15 23 26.46 UTC			RMS =	0.08	NO =	4	FREE DEPTH SOLUTION								.
.	26	LAT =	37.665 N	ERX =		ERH =		AVFM =	0.8	W =	C	WORTHINGTON PEAK				.
.		LONG =	115.633 W	ERY =		GAP =	175	AVXM =		WS =	A					.
.		DEPTH =	1.11 KM	ERZ =		NM =				WD =	D					.
.	26	TPU	EPU2	15	23	28.23		6	0.7	6.8	192	91	1.77	1.74	0.17	.
.		S 2	15 23 29.07										2.61	2.73	-0.13	.
.	26	WRN	EPD0	15	23	33.00		5	0.7	35.4	6	74	6.54	6.51	-0.02	.
.		S 4	15 23 35.42										8.96	11.20	-2.25	.
.	26	SRG	EPD0	15	23	36.42		8	1.1	55.3	64	74	9.96	9.73	0.01	.
.		S 4	15 23 40.66										14.20	17.02	-2.82	.
.....																
.	OCT H = 0 24 14.17 UTC			RMS =	0.13	NO =	38	FREE DEPTH SOLUTION								.
.	27	LAT =	37.068 N	ERX =	0.2	ERH =	0.2	AVFM =	2.2	W =	B	THIRSTY CANYON				.
.		LONG =	116.947 W	ERY =	0.2	GAP =	64	AVXM =		WS =	A					.
.		DEPTH =	7.73 KM	ERZ =	1.0	NM =				WD =	B					.
.	27	SGV	IPD2	0	24	16.47		47	2.5	12.3	218	121	2.30	2.87	-0.49	.
.		S 1	0 24 18.84										4.67	4.78	-0.09	.
.	27	BMT	IPU0	0	24	20.67		25	2.1	35.9	48	100	6.50	6.66	0.01	.
.		S 2	0 24 25.45										11.28	11.09	0.19	.
.	27	GVN	EPD1	0	24	20.43		33	2.3	36.0	258	99	6.26	6.40	-0.20	.
.		S 1	0 24 25.33										11.16	11.05	0.11	.
.	27	GMN	EPU2	0	24	20.78				37.9	513	99	6.61	6.98	-0.22	.
.		S 0	0 24 25.88										11.71	11.67	0.03	.
.	27	WCT	IPU3	0	24	21.07		26	2.1	41.8	137	98	6.90	7.36	-0.31	.
.		S 4	0 24 27.11										12.94	12.32	0.62	.
.	27	YMT1	EPU2	0	24	21.87		44	2.6	44.2	123	97	7.70	7.78	-0.21	.
.		S 0	0 24 27.70										13.53	13.53	0.00	.

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OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TCBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
. 27	YMT5	IPD1	0 24 22.41					34	2.4	47.7	113	97	8.24	8.39	-0.16	
.		S 0	0 24 28.51										14.34	14.35	-0.02	
. 27	YMT4	EPU0	0 24 22.97					27	2.2	49.5	117	97	6.80	8.65	0.03	
.		S 4	0 24 29.55										15.38	14.99	0.39	
. 27	FMT	EPU2	0 24 22.39						49.8	163	96		8.22	8.66	-0.20	
. 27	TMO	EPU0	0 24 22.99						50.4	235	96		8.82	9.00	0.12	
.		S 2	0 24 29.54										15.37	14.87	0.49	
. 27	YMT2	EPU0	0 24 23.17					30	2.3	51.8	127	96	9.00	8.99	-0.07	
.		S 0	0 24 29.56										15.39	15.51	-0.12	
. 27	YMT6	EPD2	0 24 23.83					25	2.1	53.6	116	96	9.66	9.29	0.27	
.		S 4	0 24 31.01										16.84	16.04	0.79	
. 27	MCA	EPU1	0 24 23.58					27	2.2	55.3	213	96	9.41	9.39	-0.07	
.		S 2	0 24 30.65										16.48	16.20	0.28	
. 27	YMT3	IPU4	0 24 23.63					36	2.4	57.0	123	96	9.40	9.83	-0.32	
.		S 4	0 24 31.47										17.30	16.72	0.58	
. 27	EPN	EPU3	0 24 24.13						57.7	74	96		9.96	10.20	-0.30	
.		S 4	0 24 32.18										18.01	17.54	0.47	
. 27	CDH5	EPU1	0 24 24.32					42	2.6	60.5	112	95	10.15	10.40	-0.15	
.		S 1	0 24 31.84										17.67	17.61	0.05	
. 27	CDH1	EPD0	0 24 24.57					29	2.3	60.5	112	95	10.40	10.47	0.03	
.		S 0	0 24 31.97										17.80	17.73	0.06	
. 27	BGB	EPD1	0 24 25.35					31	2.3	64.0	93	95	11.18	11.10	0.16	
.		S 0	0 24 33.01										18.84	18.84	0.00	
. 27	LCH	EPD4	0 24 24.91						64.9	287	95		10.74	11.19	-0.37	
.		S 1	0 24 33.42										19.25	19.00	0.25	
. 27	SSP	EPD1	0 24 25.93						66.7	104	95		11.76	11.61	0.23	
.		S 4	0 24 33.58										19.41	19.72	-0.31	
. 27	CTS	IPU0	0 24 25.74					21	2.0	68.2	17	95	11.57	11.82	-0.08	
.		S 0	0 24 34.08										19.91	19.91	-0.01	
. 27	LSM	EPU0	0 24 26.20					2	0.0	70.2	121	94	12.03	11.99	0.02	
.		S 0	0 24 34.77										20.60	20.53	0.07	
. 27	LOP	EPD4	0 24 27.33					32	2.4	73.3	109	94	13.16	12.60	0.64	
.		S 4	0 24 36.45										22.28	21.41	0.87	
. 27	AMR	EPD0	0 24 28.55						85.5	150	93		14.38	14.38	-0.02	
. 27	KRNA	EPU0	0 24 29.71						90.0	34	93		15.54	15.38	0.09	
.		S 4	0 24 41.07										26.90	26.41	0.48	
. 27	GMV	EPD2	0 24 31.02						100.9	166	93		16.85	17.04	-0.12	
.		S 4	0 24 43.99										29.82	29.01	0.81	
. 27	JON	EPU4	0 24 31.94						102.6	133	93		17.77	17.20	0.56	
. 27	GMR	EPU4	0 24 33.08					23	2.2	108.4	74	93	18.91	18.28	0.72	
. 27	QSM	EPD4	0 24 35.20						122.5	177	92		21.03	20.39	0.55	
. 27	HCR	EPD4	0 24 38.16						137.0	19	92		24.01	23.03	1.07	
.		S 4	0 24 56.81										42.64	39.22	3.41	

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OCT H = 0 26 24.57 UTC	RMS = 0.11	NO = 7	FREE DEPTH SOLUTION			
. 27 LAT = 36.605 N	ERX = 0.2	ERH = 0.3	AVFM = 1.9	Q = B		
. LONG = 115.612 W	ERY = 0.3	GAP = 142	AVXM =	QS = A	MERCURY	
. DEPTH = 32.46 KM	ERZ = 0.7	NM =		QD = C		

.....

. 27	SPRG	IPU0	0 26 31.25					23	1.9	20.2	299	140	6.68	6.46	0.24	
.		S 4	0 26 37.52										12.95	11.00	1.95	
. 27	MCY	EPD4	0 26 33.81						31.9	281	121		9.24	7.62	1.70	
.		S 2	0 26 37.62										13.05	12.89	0.16	
. 27	SHRG	EPD2	0 26 33.00						42.4	105	106		8.43	8.93	0.09	
.		S 0	0 26 38.87										14.30	14.26	0.04	
. 27	JON	EPU0	0 26 33.90						47.7	247	98		9.33	9.42	-0.10	
. 27	LOP	EPU0	0 26 35.13						56.8	299	92		10.56	10.77	-0.13	
.		S 4	0 26 39.88										15.31	18.28	-2.97	
. 27	EPR	EPU4	0 26 39.28						73.1	31	90		14.71	12.47	2.26	
.		S 0	0 26 45.86										21.29	21.29	0.00	
. 27	GMR	EPD4	0 26 41.23						82.1	350	90		16.66	13.62	3.14	

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OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
OCT H = 0 27 12.80 UTC			RMS = 0.34	NU = 5	FREE DEPTH SOLUTION										
27 LAT = 36.792 N			ERX = 2.6	ERH = 4.1	AVFM = 2.0	Q = D									
LONG = 115.316 W			ERY = 3.2	GAP = 140	AVXM =	WS = C	HAYFORD PEAK								
DEPTH = 9.57 KM			ERZ = 49.2	NM =		WD = D									
.....															
27	SHRG	EPU	0 27 18.74						35.0	156	103	5.94	6.47	0.06	
27	EPR	EPU0	0 27 20.40						43.3	15	100	7.60	7.71	-0.10	
27	SPRG	IPU	0 27 20.29			24	2.0		45.4	256	100	7.49	8.04	-0.52	
		S 0	0 27 26.54									13.74	13.69	0.04	
27	APK	EPU4	0 27 26.09						57.4	204	98	13.29	10.26	3.30	
27	MCY	EPD4	0 27 22.82						59.6	256	97	10.02	10.32	-0.22	
		S 4	0 27 27.96									15.16	17.51	-2.35	
27	CPX	EPD2	0 27 25.34						67.6	283	96	12.54	11.62	0.94	
27	LOP	EPU4	0 27 34.71						76.3	275	96	21.91	13.11	8.87	
27	LSM	EPU4	0 27 33.14						85.6	266	95	20.34	14.50	5.81	
.....															
OCT H = 0 27 48.66 UTC			RMS = 0.05	NU = 4	FIXED DEPTH SOLUTION										
27 LAT = 37.292 N			ERX =	ERH =	AVFM = 1.9	Q = C	DEPTH CONTROL INADEQUATE								
LONG = 115.854 W			ERY =	GAP = 243	AVXM =	WS = A	GROOM LAKE								
DEPTH = 5.00 KM			ERZ =	NM =		WD = D									
.....															
27	EPR	EPU3	0 27 59.00						60.8	103	92	10.34	10.47	-0.11	
27	SPRG	IPU0	0 27 60.04			19	1.9		66.5	177	92	11.38	11.39	0.03	
27	MCY	EPU3	0 27 60.55						70.7	188	92	11.89	12.07	-0.09	
27	JON	EPD4	0 27 74.50						97.2	193	91	25.84	16.31	9.52	
27	DLM	EPU0	0 27 66.64						104.7	71	91	17.98	17.71	0.03	
27	SHRG	EPU4	0 27 71.00						107.4	145	91	22.34	18.12	4.81	
.....															
OCT H = 3 16 8.22 UTC			RMS = 0.15	NU = 22	FREE DEPTH SOLUTION										
27 LAT = 36.184 N			ERX = 0.9	ERH = 1.0	AVFM = 2.6	Q = C									
LONG = 117.631 W			ERY = 0.5	GAP = 267	AVXM =	WS = D	DARWIN								
DEPTH = 2.90 KM			ERZ = 3.0	NM =		WD = D									
.....															
27	PGE	IPU1	3 16 17.28			28	2.2		54.0	70	74	9.06	9.47	-0.19	
		S 4	3 16 23.65									15.43	15.82	-0.39	
27	MCA	IPD3	3 16 18.05			35	2.4		60.4	31	74	9.83	10.19	-0.43	
		S 4	3 16 25.11									16.89	17.55	-0.66	
27	TMO	EPD2	3 16 20.22						71.8	16	74	12.00	12.44	-0.14	
		S 0	3 16 29.19									20.97	20.76	0.22	
27	QSM	EPU1	3 16 20.73			45	2.7		72.9	109	74	12.51	12.29	0.13	
		S 1	3 16 29.34									21.12	21.18	-0.05	
27	GMV	IPU0	3 16 22.87			36	2.5		86.4	90	74	14.65	14.68	0.06	
		S 1	3 16 33.34									25.12	24.96	0.16	
27	FMT	EPU4	3 16 23.76			27	2.3		91.7	57	74	15.54	15.43	0.35	
		S 2	3 16 33.88									25.66	25.98	-0.31	
27	SGV	EPU2	3 16 25.81			49	2.9		103.5	31	74	17.59	17.45	0.23	
		S 2	3 16 37.70									29.48	29.69	-0.21	
27	AMR	EPU0	3 16 25.93			37	2.6		106.6	77	74	17.71	17.79	-0.09	
		S 4	3 16 40.65									32.43	30.44	1.99	
27	WCT	EPD0	3 16 26.87						112.5	53	74	18.65	18.81	0.00	
		S 4	3 16 41.06									32.84	31.89	0.95	
27	YMT2	EPD2	3 16 28.47						122.6	57	74	20.25	20.46	-0.29	
		S 4	3 16 44.49									36.27	35.13	1.15	
27	YMT1	EPD4	3 16 29.60			45	2.9		123.6	53	74	21.38	20.65	0.60	
		S 4	3 16 44.13									35.91	35.54	0.37	
27	SDH	EP 4	3 16 28.82						126.8	66	74	20.60	21.15	-0.50	
		S 0	3 16 44.28									36.06	36.09	-0.03	
27	YMT3	IPD2	3 16 29.71			45	2.9		128.2	59	74	21.49	21.37	0.17	
		S 0	3 16 44.59									36.37	36.46	-0.09	
27	GMN	IPU4	3 16 31.39						128.3	15	74	23.17	21.61	1.71	
		S 4	3 16 45.72									37.50	36.70	0.81	
27	YMT4	EPU4	3 16 30.44						130.1	54	74	22.22	21.72	0.40	
		S 4	3 16 46.20									37.98	37.32	0.66	
27	YMT5	EPD4	3 16 30.63						132.0	53	74	22.41	22.05	0.36	
		S 4	3 16 46.41									38.19	37.71	0.48	

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OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
27	NOP	EP00	3 16 30.29					33	2.6	133.1	93	74	22.07	22.16	0.01	
		S 4	3 16 48.49										40.27	37.73	2.54	
27	LSM	EPD2	3 16 31.14					42	2.9	136.5	63	74	22.92	22.73	0.17	
		S 4	3 16 48.21										39.99	38.91	1.08	
27	CDH1	EPD4	3 16 31.80					37	2.8	139.6	57	74	23.58	23.30	0.39	
		S 2	3 16 48.13										39.91	39.67	0.24	
27	CDH5	S4	3 16 31.99						139.6	57	74		23.77	23.23	0.64	
		S 1	3 16 47.82										39.60	39.55	0.05	
27	BMT	EP04	3 16 35.17						150.5	36	74		26.95	25.24	1.89	
		S 4	3 16 52.26										44.04	42.86	1.18	
27	EPN	S2	3 16 35.38						163.5	46	49		27.16	27.23	-0.13	
		S 4	3 16 55.76										47.54	46.67	0.87	
27	CTS	EPD4	3 16 38.71						182.3	26	49		30.49	29.55	1.11	
		S 4	3 16 59.83										51.61	50.24	1.37	
.....																
OCT H = 6 40 55.86 UTC RMS = 0.00 NO = 3																
27 LAT = 36.961 N ERX = ERH = AVFM = Q = C FIXED DEPTH SOLUTION																
LONG = 117.154 W ERY = GAP = 183 AVXM = QS = A DEPTH CONTROL INADEQUATE																
DEPTH = 5.00 KM ERZ = NM = WD = D TIN MOUNTAIN																
.....																
27	GVN	EP00	6 40 59.25						17.3	285	101		3.39	3.34	0.00	
		S 4	6 40 4.09										-51.77	5.81	-57.57	
27	GMN	EP03	6 41 2.78						38.8	346	94		6.92	7.07	0.00	
27	YMT1	EPD3	6 41 5.82						57.0	102	92		9.96	9.83	0.00	
27	YMT3	EP04	6 41 9.64						69.0	106	92		13.78	11.75	2.08	
.....																
OCT H = 15 24 14.17 UTC RMS = 0.09 NO = 3																
27 LAT = 37.520 N ERX = ERH = AVFM = 0.7 Q = C FIXED DEPTH SOLUTION																
LONG = 116.535 W ERY = GAP = 189 AVXM = QS = A DEPTH CONTROL INADEQUATE																
DEPTH = 5.00 KM ERZ = NM = QD = D SINKING SPRING																
.....																
27	BMT	IPD0	15 24 19.34					6	0.8	28.0	200	96	5.17	5.33	0.01	
		S 4	15 24 20.43										6.26	8.83	-2.57	
27	KRNA	EP00	15 24 19.60					3	0.2	28.1	29	96	5.43	5.30	0.06	
27	EPN	EP01	15 24 21.15					8	1.1	38.8	151	94	6.98	7.10	-0.18	
		S 4	15 24 24.40										10.23	12.24	-2.01	
.....																
OCT H = 5 9 56.41 UTC RMS = 0.11 NO = 19																
28 LAT = 37.000 N ERX = 0.2 ERH = 0.3 AVFM = 1.2 Q = B FREE DEPTH SOLUTION																
LONG = 116.193 W ERY = 0.3 GAP = 148 AVXM = QS = A SILENT CANYON - YUCCA FLAT																
DEPTH = 8.05 KM ERZ = 0.7 NM = QD = C																
.....																
28	BGB	EP01	5 9 58.27					8	1.0	5.3	324	148	1.86	2.12	-0.18	
		S 1	5 9 59.97										3.56	3.49	0.08	
28	CPX	EP 0	5 9 59.53						14.5	122	117		3.12	3.15	0.00	
28	LDP	EP00	5 9 59.86						16.3	172	115		3.45	3.50	0.03	
		S 4	5 10 2.65										6.24	5.86	0.39	
28	CDH5	EP02	5 9 59.81					12	1.4	19.0	216	111	3.40	3.78	-0.26	
		S 2	5 10 2.47										6.06	6.29	-0.23	
28	CDH1	EPD2	5 9 59.87					14	1.5	19.0	216	111	3.46	3.85	-0.29	
		S 0	5 10 2.90										6.49	6.41	0.08	
28	YMT6	EP01	5 9 60.98					7	0.9	24.5	230	106	4.57	4.65	-0.17	
		S 1	5 10 4.58										8.17	8.10	0.07	
28	YMT5	EP 1	5 9 61.15						25.8	244	105		4.74	4.90	-0.16	
		S 0	5 10 4.75										8.34	8.38	-0.04	
28	EPN	EP 2	5 9 61.87						26.5	334	105		5.46	5.20	0.20	
		S 0	5 10 5.49										9.06	8.99	0.09	
28	LSM	EP 1	5 9 62.06					9	1.1	29.7	194	103	5.65	5.46	0.17	
		S 2	5 10 5.96										9.55	9.37	0.18	
28	YMT3	EPD1	5 9 62.05						30.6	220	102		5.64	5.58	0.11	
		S 2	5 10 6.12										9.71	9.46	0.26	
28	YMT1	EP04	5 9 63.17					11	1.3	34.0	242	101	6.76	6.16	0.47	
		S 4	5 10 7.64										11.23	10.76	0.47	
28	YMT2	EP 4	5 9 62.25					9	1.2	35.2	227	100	5.84	6.32	-0.56	
		S 1	5 10 7.46										11.05	10.95	0.10	

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OCT 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	IOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
28	SDH	EPD4	5 9 63.00						41.4	198	99	6.59	7.31	-0.68	
28	MCY	EP 4	5 9 64.31						42.8	151	98	7.90	7.58	0.40	
		S 4	5 10 10.19									13.78	12.83	0.95	
.....															
OCT H = 15 8 46.04 UTC RMS = 0.04 NO = 4 FREE DEPTH SOLUTION															
28	LAT =	37.955 N		ERX =		ERH =		AVFM =	0.7	Q = C					
	LONG =	117.091 W		ERY =		GAP =	200	AVXM =		QS = A					GOLDFIELD
	DEPTH =	14.02 KM		ERZ =		NM =				WD = D					
.....															
28	TNP	EP 0	15 8 50.60						18.0	321	128	4.56	4.30	-0.01	
28	MZP	EP 4	15 8 52.86						38.2	222	109	6.82	7.33	-0.26	
28	CTS	EP 4	15 8 56.36					6 0.8	46.2	136	106	10.32	8.45	2.04	
28	HCR	EP 0	15 8 57.47						65.2	62	101	11.43	11.50	0.02	
28	KRNA	EP 4	15 8 58.60						67.0	111	101	12.56	11.78	0.72	
28	GMN	EPD4	15 8 61.09						74.2	192	99	15.05	12.97	2.23	
		S 4	15 9 9.54									23.50	21.92	1.58	
28	BMT	EP 4	15 8 62.74					4 0.6	84.3	152	98	16.70	14.59	2.28	
28	BLT	EP 0	15 8 63.08						100.2	122	97	17.04	17.09	0.09	
28	QCS	EPD0	15 8 63.87						105.4	101	96	17.83	17.93	-0.07	
.....															
OCT H = 1 47 41.92 UTC RMS = 0.14 NO = 18 FREE DEPTH SOLUTION															
29	LAT =	36.859 N		ERX =	0.3	ERH =	0.5	AVFM =	1.3	Q = B					
	LONG =	116.181 W		ERY =	0.4	GAP =	123	AVXM =		QS = A					LATHROP WELLS
	DEPTH =	8.17 KM		ERZ =	0.6	NM =				QD = B					
.....															
29	LOP	EPD2	1 47 43.59					12 1.3	1.3	111	171	1.67	1.91	-0.16	
		S 0	1 47 45.05									3.13	3.12	0.01	
29	SSP	EP 2	1 47 44.62					13 1.4	8.1	336	137	2.70	2.50	0.28	
29	CDH5	EPD4	1 47 44.24					12 1.3	12.1	271	122	2.32	2.78	-0.36	
		S 4	1 47 45.99									4.07	4.58	-0.51	
29	CDH1	EPD4	1 47 44.33					11 1.3	12.1	271	123	2.41	2.85	-0.34	
		S 4	1 47 46.02									4.10	4.70	-0.61	
29	LSM	EPD4	1 47 44.75					14 1.5	15.5	212	116	2.83	3.27	-0.46	
		S 1	1 47 47.83									5.91	5.63	0.28	
29	YMT6	EP 0	1 47 45.91					10 1.2	19.9	270	110	3.99	3.93	-0.03	
		S 3	1 47 48.52									6.60	6.88	-0.28	
29	BGB	EPD0	1 47 46.03						20.3	348	110	4.11	4.12	0.07	
		S 0	1 47 48.91									6.99	6.91	0.08	
29	YMT3	EPD0	1 47 46.18					12 1.4	22.0	249	108	4.26	4.23	0.08	
		S 4	1 47 50.62									8.70	7.15	1.55	
29	YMT4	EP 2	1 47 46.43						24.0	272	106	4.51	4.60	-0.20	
		S 1	1 47 49.93									8.01	8.05	-0.05	
29	YMT5	EPD1	1 47 46.52					10 1.2	24.7	280	106	4.60	4.72	-0.12	
		S 2	1 47 49.75									7.83	8.08	-0.25	
29	SDH	EP 4	1 47 48.44						27.5	211	104	6.52	5.09	1.46	
		S 4	1 47 56.02									14.10	8.64	5.45	
29	YMT2	EP 0	1 47 47.24					11 1.3	28.2	253	104	5.32	5.21	0.03	
		S 1	1 47 50.89									8.97	9.05	-0.08	
29	YMT1	EPD2	1 47 47.55						30.9	269	102	5.63	5.67	-0.17	
		S 2	1 47 52.17									10.25	9.92	0.33	
29	SPRG	EP 0	1 47 48.66						37.9	119	100	6.74	6.79	-0.03	
		S 4	1 47 54.81									12.89	11.57	1.32	
29	JON	EP 4	1 47 52.10						47.0	171	97	10.18	8.19	1.98	
.....															
OCT H = 13 50 59.97 UTC RMS = 0.18 NO = 13 FREE DEPTH SOLUTION															
29	LAT =	36.590 N		ERX =	0.3	ERH =	0.4	AVFM =	1.2	Q = C					
	LONG =	116.214 W		ERY =	0.2	GAP =	79	AVXM =		QS = B					LATHROP WELLS
	DEPTH =	1.58 KM		ERZ =	1.4	NM =				QD = C					
.....															
29	SDH	IPD1	13 50 62.10					8 1.0	12.7	299	93	2.13	2.58	-0.41	
29	LSM	IPD0	13 50 63.04					12 1.3	17.5	342	92	3.07	3.40	-0.35	
		S 2	13 51 5.48									5.51	5.85	-0.34	
29	JUN	IPD0	13 50 63.49					9 1.1	19.4	149	92	3.52	3.67	-0.16	
		S 0	13 51 6.31									6.34	6.30	0.05	
29	MCY	EPD1	13 50 64.39					12 1.4	23.9	70	92	4.42	4.51	-0.01	
		S 0	13 51 7.72									7.75	7.58	0.17	

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29	LOP	EPD2	13 50 65.52				10	1.2	29.6	8	74	5.55	5.54	0.09	
		S 0	13 51 9.41									9.44	9.34	0.11	
29	AMR	EPD3	13 50 65.78						31.6	228	74	5.81	5.66	0.14	
		S 1	13 51 9.88									9.91	9.69	0.22	
29	YMT6	EPD2	13 50 65.82						34.4	330	74	5.85	6.20	-0.43	
		S 4	13 51 9.85									9.88	10.75	-0.87	
29	WCT	EP 0	13 50 67.27						43.2	301	74	7.30	7.60	-0.14	
		S 4	13 51 13.12									13.15	12.73	0.42	

OCT H = 17 49 33.75 UTC RMS = 0.08 NO = 8 FREE DEPTH SOLUTION  
 29 LAT = 38.005 N ERX = 0.4 ERH = 0.8 AVFM = 2.1 Q = C  
 LONG = 115.183 W ERY = 0.7 GAP = 238 AVXM = Q5 = A  
 DEPTH = 9.90 KM ERZ = 1.3 NM = QD = D

29	SRG	IPU0	17 49 37.77				36	2.3	17.0	143	119	4.02	3.73	0.06	
		S 0	17 49 40.49									6.74	6.76	-0.03	
29	WRN	EP 1	17 49 40.22				19	1.8	35.7	266	104	6.47	6.60	-0.18	
		S 0	17 49 45.18									11.43	11.36	0.06	
29	MTI	EP 0	17 49 40.52				23	2.0	37.3	192	103	6.77	6.82	-0.02	
		S 0	17 49 45.32									11.57	11.60	-0.04	
29	NPN	EPU0	17 49 42.01				24	2.0	44.7	151	101	8.26	8.03	0.02	
		S 4	17 49 48.36									14.61	14.08	0.52	
29	DLM	EP 4	17 49 45.28						59.1	139	98	11.53	10.35	0.92	
29	TPU	EP 0	17 49 44.30						60.5	223	98	10.55	10.61	0.08	
29	PRN	EP 4	17 49 46.61				28	2.3	67.4	170	97	12.86	11.64	1.10	
		S 4	17 49 54.53									20.78	20.11	0.67	
29	GMR	EPU4	17 49 51.20				17	1.9	90.8	215	95	17.45	15.44	2.11	
29	EPR	EPU4	17 49 63.90						92.9	180	95	30.15	15.72	14.45	
29	HCR	EP 4	17 49 69.64						112.7	283	94	35.89	19.09	16.89	

OCT H = 6 42 59.82 UTC RMS = 0.12 NO = 11 FREE DEPTH SOLUTION  
 30 LAT = 37.076 N ERX = 0.8 ERH = 0.9 AVFM = 2.0 Q = C  
 LONG = 116.224 W ERY = 0.3 GAP = 183 AVXM = Q5 = A  
 DEPTH = 7.05 KM ERZ = 0.8 NM = QD = D

30	BGB	IPD1	6 43 1.49				18	1.7	4.3	184	150	1.67	1.89	-0.15	
		S 0	6 43 3.00									3.18	3.10	0.07	
30	SSP	EPD1	6 43 3.26						16.8	178	111	3.44	3.59	-0.08	
		S 4	6 43 6.66									6.84	6.01	0.83	
30	EPN	EPU1	6 43 3.51				22	1.9	17.7	330	110	3.69	3.78	-0.15	
		S 0	6 43 6.47									6.65	6.57	0.08	
30	GLR	EP 4	6 43 4.73						22.9	53	104	4.91	4.41	0.56	
		S 4	6 43 7.61									7.79	7.42	0.36	
30	LOP	IPD0	6 43 4.65				30	2.2	25.1	168	103	4.83	4.82	0.09	
		S 4	6 43 9.33									9.51	8.11	1.40	
30	YMT6	EPU1	6 43 5.16						29.0	214	101	5.34	5.32	-0.07	
		S 0	6 43 9.18									9.36	9.25	0.11	
30	YMT1	EPD2	6 43 6.32				32	2.3	36.7	228	98	6.50	6.56	-0.19	
		S 4	6 43 11.78									11.96	11.43	0.52	
30	LSM	EPD1	6 43 6.68						37.5	187	98	6.86	6.69	0.15	
		S 4	6 43 12.01									12.19	11.47	0.71	
30	YMT2	EPU4	6 43 5.09				27	2.1	39.7	216	97	5.27	7.02	-1.84	
		S 4	6 43 12.76									12.94	12.14	0.79	
30	MCY	EPU1	6 43 8.88				21	2.0	51.6	153	95	9.06	8.99	0.15	
		S 4	6 43 16.98									17.16	15.23	1.92	

OCT H = 12 27 55.98 UTC RMS = 0.12 NO = 19 FREE DEPTH SOLUTION  
 30 LAT = 37.252 N ERX = 0.3 ERH = 0.4 AVFM = 2.2 Q = B  
 LONG = 117.588 W ERY = 0.3 GAP = 92 AVXM = Q5 = A  
 DEPTH = 7.98 KM ERZ = 0.6 NM = QD = B

30	LCH	IPD0	12 27 58.01				26	2.0	5.6	250	146	2.03	2.08	0.03	
		S 0	12 27 59.41									3.43	3.41	0.02	
30	MGM	EPU2	12 27 60.15				27	2.1	22.5	21	108	4.17	4.53	-0.27	
		S 1	12 28 3.35									7.37	7.59	-0.22	

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. 30	GMN	IPU3	12 27 61.24				22	1.9	29.6	80	103	5.26	5.65	-0.25	
.		S 1	12 28 5.55									9.57	9.41	0.16	
. 30	PPK	EPD2	12 27 62.10				27	2.1	34.3	304	101	6.12	6.33	-0.22	
.		S 1	12 28 7.07									11.09	10.85	0.24	
. 30	GVN	IPU4	12 27 61.27				15	1.6	35.4	142	100	5.29	6.30	-1.08	
.		S 0	12 28 6.69									10.71	10.88	-0.17	
. 30	TMO	EPU4	12 27 68.40						52.1	162	97	12.42	9.28	3.44	
.		S 4	12 28 17.70									21.72	15.35	6.36	
. 30	MZP	EPD0	12 27 65.20				22	2.0	53.0	20	96	9.22	9.45	0.01	
.		S 1	12 28 11.90									15.92	15.75	0.17	
. 30	SVP	IPU1	12 27 65.79				27	2.2	54.7	340	96	9.81	9.78	-0.09	
.		S 4	12 28 13.41									17.43	16.92	0.51	
. 30	SGV	EPU1	12 27 65.85				37	2.5	57.8	121	96	9.87	10.07	-0.11	
.		S 4	12 28 14.27									18.29	17.07	1.22	
. 30	MCA	EP 1	12 27 68.39				22	2.1	72.4	158	94	12.41	12.17	0.16	
.		S 4	12 28 17.65									21.67	20.95	0.72	
. 30	BMT	EPU0	12 27 70.20				32	2.4	83.6	88	94	14.22	14.38	0.01	
.		S 4	12 28 21.20									25.22	24.30	0.92	
. 30	CTS	IPU0	12 27 70.87				22	2.1	88.5	60	94	14.89	15.11	-0.05	
.		S 4	12 28 21.84									25.86	25.54	0.32	
. 30	TNP	EPU4	12 27 74.15				25	2.3	97.7	20	93	18.17	16.61	1.28	
.		S 4	12 28 26.17									30.19	28.87	1.32	
. 30	WCT	EPD0	12 27 72.62				27	2.3	99.6	121	93	16.64	16.74	0.06	
.		S 4	12 28 25.59									29.61	28.35	1.26	
. 30	YMT1	EPU4	12 27 72.63						104.1	115	93	16.65	17.49	-0.97	
.		S 4	12 28 31.83									35.85	30.13	5.72	
. 30	YMT5	EPD0	12 27 74.25				29	2.4	108.2	111	93	18.27	18.20	0.06	
.		S 4	12 28 29.95									33.97	31.13	2.84	
. 30	YMT4	EP 4	12 27 75.56						109.8	113	93	19.58	18.44	1.03	
.		S 4	12 28 32.56									36.58	31.72	4.85	
. 30	YMT2	EP 4	12 27 76.70						111.1	118	93	20.72	18.62	2.02	
.		S 4	12 28 31.87									35.89	31.97	3.92	
. 30	KRNA	EPU1	12 27 76.42				29	2.5	119.9	63	93	20.44	20.23	0.14	
.		S 4	12 28 34.18									38.20	34.71	3.49	

OCT H = 19 42 24.39 UTC RMS = 1.89 NO = 5  
 . 30 LAT = 37.750 N ERX = 5.1 ERH = 11.8 AVFM = 1.9 W = D  
 . LONG = 115.351 W ERY = 10.6 GAP = 248 AVXM = US = D  
 . DEPTH = 5.00 KM ERZ = 282.5 NM = UD = D

FIXED DEPTH SOLUTION  
 DEPTH CONTROL INADEQUATE  
 HIKO

. 30	MTI	EPD4	19 42 41.99				22	1.9	10.7	140	112	17.60	2.43	15.20	
.		S 4	19 42 49.24									24.85	4.10	20.75	
. 30	NPN	EP 3	19 42 31.67						38.1	106	94	7.28	6.85	0.22	
.		S 4	19 42 33.00									8.61	12.07	-3.46	
. 30	PRN	EP 0	19 42 31.24						46.4	145	93	6.85	8.17	-1.43	
.		S 4	19 42 33.30									8.91	14.17	-5.26	
. 30	DLM	EP 3	19 42 40.32						56.3	106	92	15.93	9.82	5.86	
. 30	GMR	EP 3	19 42 34.64						59.3	219	92	10.25	10.27	0.08	
. 30	EPR	EP 3	19 42 37.68						66.1	167	92	13.29	11.33	1.98	
.		S 4	19 42 45.47									21.08	19.34	1.74	

OCT H = 20 15 47.91 UTC RMS = 0.27 NO = 6  
 . 30 LAT = 37.520 N ERX = 0.2 ERH = 0.5 AVFM = 1.4 W = C  
 . LONG = 115.248 W ERY = 0.4 GAP = 159 AVXM = US = C  
 . DEPTH = 2.99 KM ERZ = 2.5 NM = UD = C

FREE DEPTH SOLUTION  
 HIKO

. 30	PRN	EPU0	20 15 52.07				21	1.8	21.5	126	74	4.16	4.10	-0.07	
.		S 3	20 15 54.04									6.13	7.22	-1.09	
. 30	NPN	EP 3	20 15 54.36				11	1.3	31.2	62	74	6.45	5.71	0.52	
.		S 2	20 15 57.91									10.00	10.13	-0.13	
. 30	TPU	EP 3	20 15 54.84				7	0.9	36.7	285	74	6.93	6.67	0.40	
.		S 1	20 15 59.09									11.18	11.16	0.01	
. 30	SRG	EP 4	20 15 63.79						43.3	21	74	15.88	7.68	7.98	
. 30	DLM	EP 4	20 15 60.18						45.9	78	74	12.27	8.13	3.88	
. 30	SHRG	EPD4	20 15 57.84						112.9	176	74	9.93	19.01	-8.49	
.		S 4	20 16 13.23									25.32	31.50	-6.18	



## 1981 SGB LOCAL-EVENT DATA REPORT

NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
NOV H =	5 50 30.40	UTC	RMS =	0.12	NO =	6									FREE DEPTH SOLUTION
02 LAT =	35.932 N		ERX =	2.4	ERH =	6.7		AVFM =	3.0	W =	D				
LONG =	117.043 W		ERY =	6.2	GAP =	268		AVXM =		WS =	D				SEARLES LAKE
DEPTH =	15.77 KM		ERZ =	6.0	NM =					WD =	D				
.....															
02	QSM	IPD0	5 50 34.48				47	2.5	16.2	77	134	4.08	3.97	0.02	
02	GWV	IPD4	5 50 39.88				60	2.8	43.8	50	109	9.48	8.10	1.46	
02	AMR	EPD1	5 50 42.81				67	3.0	72.7	45	101	12.41	12.47	-0.07	
02	MCA	EPD0	5 50 44.28				41	2.6	82.3	345	100	13.88	13.92	-0.12	
02	SDH	EPD4	5 50 48.40				61	3.1	101.3	39	98	18.00	17.14	0.90	
02	JON	EPD0	5 50 47.52				62	3.1	101.6	56	98	17.12	17.15	-0.04	
02	WCT	EPD2	5 50 47.83				39	2.7	102.5	21	98	17.43	17.31	0.28	
02	YMT1	EPD2	5 50 49.75				80	3.3	112.1	24	97	19.35	18.91	0.31	
02	LSM	EPD4	5 50 48.75				61	3.1	113.2	38	97	18.35	19.07	-0.74	
02	MCY	EPD4	5 50 48.78				61	3.1	126.4	50	52	18.38	20.95	-2.49	
02	LOP	EPD4	5 50 53.72				61	3.2	128.9	37	52	23.32	21.38	2.02	
.....															
NOV H =	1 39 42.22	UTC	RMS =	0.12	NO =	29									FREE DEPTH SOLUTION
05 LAT =	36.034 N		ERX =	0.4	ERH =	0.5		AVFM =	2.7	W =	C				
LONG =	117.697 W		ERY =	0.3	GAP =	266		AVXM =		WS =	A				DARWIN
DEPTH =	6.03 KM		ERZ =	0.5	NM =					WD =	D				
.....															
05	PGE	IPU1	1 39 53.37				39	2.5	66.6	58	93	11.15	11.54	-0.17	
		S 4	1 40 0.68									18.46	19.35	-0.89	
05	QSM	EPD0	1 39 55.05				40	2.6	75.1	96	93	12.83	12.66	0.08	
		S 0	1 40 4.00									21.78	21.80	-0.02	
05	MCA	IPU3	1 39 54.91				34	2.5	77.7	29	92	12.69	13.02	-0.41	
		S 2	1 40 4.72									22.50	22.40	0.10	
05	TMO	EP 2	1 39 57.07				27	2.3	89.5	17	92	14.85	15.32	-0.17	
		S 4	1 40 7.66									25.44	25.68	-0.24	
05	GWV	EPD0	1 39 58.14				36	2.6	93.9	80	92	15.92	15.91	0.09	
		S 4	1 40 8.50									26.28	27.07	-0.79	
05	FMT	EPD1	1 39 59.83				26	2.3	106.4	51	92	17.61	17.83	0.02	
		S 4	1 40 11.65									29.43	30.08	-0.65	
05	GVN	EPD0	1 39 60.98				39	2.7	112.0	16	92	18.76	18.71	-0.01	
		S 2	1 40 14.44									32.22	32.10	0.12	
05	AMR	EPD0	1 39 61.75						117.1	70	92	19.53	19.52	0.00	
		S 0	1 40 15.51									33.29	33.39	-0.10	
05	SGV	EPD1	1 39 62.52				47	2.9	120.8	30	92	20.30	20.29	0.09	
		S 0	1 40 16.84									34.62	34.55	0.07	
05	WCT	EPD3	1 39 63.56				37	2.7	127.7	49	91	21.34	21.29	0.21	
		S 3	1 40 17.88									35.66	36.13	-0.47	
05	LCH	EPD2	1 39 64.34				35	2.7	133.4	2	91	22.12	22.31	-0.11	
		S 4	1 40 21.16									38.94	38.02	0.92	
05	YMT2	EPD4	1 39 65.45				44	2.9	137.1	53	91	23.23	22.84	0.31	3.10
		S 4	1 40 21.83									39.61	39.20	0.41	
05	YMT1	EPD2	1 39 65.58						138.8	49	91	23.36	23.14	0.09	
		S 4	1 40 21.37									39.15	39.78	-0.63	
05	NOP	EPD0	1 39 65.22						139.4	86	91	23.00	23.20	-0.11	
		S 4	1 40 23.83									41.61	39.52	2.09	
05	SDH	EPD3	1 39 65.69				27	2.5	139.6	61	91	23.47	23.25	0.26	
		S 4	1 40 22.20									39.98	39.69	0.29	
05	GMN	EPD0	1 39 66.52						145.9	16	91	24.30	24.49	-0.05	
		S 4	1 40 25.59									43.37	41.63	1.74	
05	YMT5	EP 2	1 39 66.94				45	3.0	147.0	49	91	24.72	24.51	0.21	
		S 0	1 40 24.00									41.78	41.92	-0.14	
05	LSM	EPD0	1 39 67.17				44	2.9	149.9	58	52	24.95	24.90	0.02	
		S 0	1 40 24.83									42.61	42.62	-0.01	
05	JON	EPD0	1 39 67.16				31	2.6	150.2	73	52	24.94	24.90	0.02	
		S 2	1 40 24.56									42.34	42.60	-0.26	
05	LOP	EP 2	1 39 69.22						164.6	56	52	27.00	26.93	0.15	
		S 4	1 40 29.78									47.56	45.91	1.65	
05	SSP	EPD1	1 39 69.54						165.3	53	52	27.32	27.10	0.30	
		S 4	1 40 28.63									46.41	46.20	0.21	
05	BMT	EPD4	1 39 70.96				39	2.9	167.5	34	52	28.74	27.41	1.50	
		S 4	1 40 31.74									49.52	46.58	2.94	

## 1981 SGB LOCAL-EVENT DATA REPORT

NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 05	MCY	EPD4	1 39 69.88					41 3.0	170.7	66	52	27.66	27.61	0.13	3.70
		S 4	1 40 30.91									48.69	47.07	1.62	
. 05	BGB	EPD4	1 39 71.45					39 2.9	172.5	50	52	29.23	27.94	1.37	
		S 1	1 40 30.70									48.48	47.63	0.85	
. 05	EPN	EPD4	1 39 72.94					38 2.9	179.6	43	52	30.72	28.98	1.68	
		S 4	1 40 34.42									52.20	49.66	2.54	
. 05	CTS	EP 4	1 39 75.42						199.9	26	52	33.20	31.49	1.88	

NOV H = 8 42 49.53 UTC RMS = 0.08 NO = 10 FREE DEPTH SOLUTION  
 . 05 LAT = 37.155 N ERX = 0.6 ERH = 0.8 AVFM = 1.8 Q = C  
 LONG = 115.070 W ERY = 0.5 GAP = 266 AVXM = WS = A ALAMO  
 DEPTH = 5.82 KM ERZ = 0.9 NM = WD = D

. 05	EPR	EPD0	8 42 51.97					23 1.9	10.4	278	117	2.44	2.40	0.06	
		S 0	8 42 53.57									4.04	4.07	-0.03	
. 05	PRN	EPD0	8 42 54.77					22 1.9	28.0	4	98	5.24	5.20	-0.08	
		S 0	8 42 58.68									9.15	9.10	0.05	
. 05	NPN	EP 3	8 42 59.98						56.5	12	93	10.45	9.84	0.39	
		S 1	8 43 6.66									17.13	17.19	-0.06	
. 05	DLM	EPD4	8 42 60.84						58.0	30	93	11.31	10.11	0.95	
		S 4	8 43 8.08									18.55	17.71	0.83	
. 05	MTI	EPD4	8 42 60.54						60.6	343	93	11.01	10.49	0.55	
		S 0	8 43 7.34									17.81	17.88	-0.07	
. 05	GMR	EPD0	8 42 60.72					14 1.7	65.3	288	93	11.19	11.26	0.03	
		S 3	8 43 8.68									19.15	19.09	0.06	
. 05	WRN	EP 0	8 42 66.87						102.5	334	92	17.34	17.35	-0.06	

NOV H = 1 14 2.10 UTC RMS = 0.11 NO = 6 FREE DEPTH SOLUTION  
 . 06 LAT = 37.034 N ERX = 2.1 ERH = 2.2 AVFM = 2.2 Q = D  
 LONG = 114.887 W ERY = 0.6 GAP = 190 AVXM = WS = C DELAMAR MOUNTAINS  
 DEPTH = 0.37 KM ERZ = 186.2 NM = WD = D

. 06	EPR	EPD2	1 14 7.40					40 2.4	30.5	299	38	5.30	5.76	-0.44	
. 06	PRN	EP 1	1 14 10.21					36 2.4	43.8	341	38	8.11	7.96	0.04	
. 06	SHRG	EPD0	1 14 12.71					22 2.0	63.5	202	38	10.61	11.19	0.01	
. 06	DLM	EPD2	1 14 13.31					21 2.0	64.8	12	38	11.21	11.42	-0.45	
. 06	NPN	EPD2	1 14 14.55					23 2.1	68.8	356	38	12.45	12.05	0.19	
. 06	MTI	EP 4	1 14 16.73					28 2.3	79.0	334	38	14.63	13.70	0.97	
. 06	GMR	EPD0	1 14 16.73					19 2.0	85.2	293	38	14.63	14.72	0.02	
. 06	SPRG	EP 4	1 14 18.84					21 2.1	90.5	245	38	16.74	15.50	1.28	
. 06	TPU	EPD4	1 14 19.17					22 2.1	92.6	313	38	17.07	15.98	1.23	
. 06	SRG	EPD4	1 14 19.65					35 2.6	95.4	350	38	17.55	16.39	0.95	
. 06	GLR	EP 4	1 14 20.54						102.2	280	38	18.44	17.44	1.07	
. 06	MCY	EP 4	1 14 21.10					31 2.5	104.5	247	38	19.00	17.79	1.30	
. 06	WRN	EPD4	1 14 23.87					24 2.3	122.1	329	38	21.77	20.74	0.99	

NOV H = 6 52 30.23 UTC RMS = 0.14 NO = 16 FREE DEPTH SOLUTION  
 . 06 LAT = 37.500 N ERX = 1.1 ERH = 1.1 AVFM = 2.0 Q = C  
 LONG = 118.036 W ERY = 0.3 GAP = 269 AVXM = WS = B SILVER PEAK  
 DEPTH = 5.25 KM ERZ = 1.9 NM = WD = D

. 06	PPK	IPD0	6 52 33.29						14.1	126	107	3.06	3.03	0.02	
		S 0	6 52 35.27									5.04	5.20	-0.16	
. 06	SVP	IPD0	6 52 36.39					17 1.7	31.6	41	96	6.16	6.00	0.05	
		S 0	6 52 40.67									10.44	10.45	-0.01	
. 06	LCH	IPD0	6 52 38.08					19 1.8	45.3	131	94	7.85	7.99	-0.06	
		S 4	6 52 42.70									12.47	13.52	-1.05	
. 06	MGM	IPD4	6 52 38.27					19 1.9	48.2	98	93	8.04	8.58	-0.45	
		S 4	6 52 43.66									13.43	14.52	-1.09	
. 06	MZP	EPD1	6 52 40.61						61.8	69	92	10.38	10.86	-0.24	
. 06	GVN	EPD1	6 52 44.25					21 2.1	82.8	132	92	14.02	13.95	0.01	
		S 1	6 52 54.18									23.95	23.96	-0.01	
. 06	SGV	EPD0	6 52 48.03					26 2.3	106.1	123	91	17.80	17.91	-0.01	
		S 0	6 53 0.78									30.55	30.46	0.09	
. 06	CTS	EPD0	6 52 49.80						117.0	81	91	19.57	19.75	-0.01	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TQBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
06	BMT	EPD0	6 52 51.29				21	2.2	125.5	101	90	21.06	20.70	0.53	
06	WCT	EPU0	6 52 54.57						147.9	122	90	24.34	24.35	0.15	
06	KRNA	EPD1	6 52 55.31						148.8	80	90	25.08	24.49	0.52	
06	YMT1	EP 2	6 52 55.78						151.9	118	90	25.55	25.00	0.42	
06	YMT5	EPU0	6 52 56.04						155.6	115	90	25.81	25.60	0.21	

NOV H = 21 12 24.41 UTC RMS = 0.07 NO = 9 FREE DEPTH SOLUTION  
 06 LAT = 37.115 N ERX = 0.2 ERH = 0.3 AVFM = 1.6 W = B  
 LONG = 117.337 W ERY = 0.2 GAP = 113 AVXM = WS = A MT. JACKSON  
 DEPTH = 8.88 KM ERZ = 1.1 NM = WD = B

06	GVN	EPD0	21 12 27.32				16	1.6	12.7	182	124	2.91	2.87	-0.02	
		S 0	21 12 29.40									4.99	5.01	-0.02	
06	GMN	EP 0	21 12 28.63				11	1.3	21.6	18	111	4.22	4.45	-0.08	
		S 1	21 12 31.91									7.50	7.36	0.14	
06	LCH	EP 4	21 12 30.83						30.6	296	104	6.42	5.70	0.81	
		S 0	21 12 34.00									9.59	9.60	-0.01	
06	SGV	IPU0	21 12 30.03				20	1.8	30.9	119	104	5.62	5.78	-0.06	
		S 0	21 12 34.13									9.72	9.72	0.00	
06	TMO	EPU4	21 12 33.39						35.0	190	102	8.98	6.55	2.73	
06	MCA	EP 2	21 12 33.61						52.1	175	97	9.20	8.90	0.22	
		S 0	21 12 39.84									15.43	15.36	0.08	
06	FMT	EP 4	21 12 48.77						72.5	137	95	24.36	12.35	12.25	

NOV H = 13 26 13.58 UTC RMS = 0.10 NO = 18 FREE DEPTH SOLUTION  
 07 LAT = 36.370 N ERX = 0.6 ERH = 0.7 AVFM = 2.6 W = C  
 LONG = 117.916 W ERY = 0.4 GAP = 245 AVXM = WS = A DARWIN  
 DEPTH = 0.41 KM ERZ = 0.6 NM = WD = D

07	MCA	EPU2	13 26 24.37				32	2.4	64.8	62	38	10.79	11.11	-0.40	
		S 4	13 26 32.02									18.44	19.14	-0.69	
07	TMO	EPU1	13 26 24.95				32	2.4	66.3	43	38	11.37	11.76	-0.09	
		S 0	13 26 33.25									19.67	19.59	0.08	
07	PGE	IPU1	13 26 26.61				30	2.4	76.3	92	38	13.03	13.32	-0.06	
		S 3	13 26 36.32									22.74	22.39	0.35	
07	GVN	EPD1	13 26 28.48				34	2.5	86.8	36	38	14.90	14.81	0.03	
		S 4	13 26 40.03									26.45	25.43	1.02	
07	LCH	EPU0	13 26 30.41						98.9	14	38	18.83	16.90	0.01	
		S 4	13 26 43.04									29.46	28.76	0.70	
07	SGV	EPU0	13 26 31.30				47	2.8	104.1	49	38	17.72	17.77	0.04	
		S 0	13 26 43.72									30.14	30.23	-0.09	
07	QSM	EPU1	13 26 31.51				38	2.7	104.4	115	38	17.93	17.64	0.20	
		S 0	13 26 43.91									30.33	30.31	0.02	
07	GNV	EPU3	13 26 33.23				31	2.5	113.7	100	38	19.65	19.33	0.40	
		S 4	13 26 48.62									35.04	32.92	2.12	
07	PPK	EPD4	13 26 30.76						117.2	0	38	17.18	19.95	-2.78	
		S 0	13 26 47.66									34.08	34.14	-0.06	
07	WCT	EPU3	13 26 34.19				30	2.5	124.5	68	38	20.61	20.98	-0.21	
		S 1	13 26 49.22									35.64	35.60	0.05	
07	MGM	EP 0	13 26 34.79						124.6	17	38	21.21	21.21	0.09	
07	AMR	EPD2	13 26 35.16				36	2.7	129.4	89	38	21.58	21.71	-0.14	
		S 1	13 26 50.58									37.00	37.14	-0.14	
07	SVP	EPU4	13 26 39.89				33	2.7	149.6	4	38	26.31	25.38	0.82	
07	BMT	EPU4	13 26 40.20				36	2.8	152.1	48	38	26.62	25.70	1.09	
		S 4	13 26 58.58									45.00	43.66	1.34	

NOV H = 6 9 42.75 UTC RMS = 0.13 NO = 27 FREE DEPTH SOLUTION  
 08 LAT = 36.335 N ERX = 0.2 ERH = 0.2 AVFM = 2.2 W = C  
 LONG = 115.968 W ERY = 0.2 GAP = 123 AVXM = WS = B CHARLESTON PEAK  
 DEPTH = 5.31 KM ERZ = 2.6 NM = WD = C

08	JON	IPU1	6 9 45.85				27	2.1	16.8	314	103	3.10	3.27	-0.19	
		S 0	6 9 48.26									5.51	5.61	-0.11	
08	NOP	IPD1	6 9 47.61				27	2.1	28.3	216	96	4.86	5.13	-0.19	
		S 1	6 9 51.53									8.78	8.63	0.15	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 08	APK	EPD0	6 9 49.23					32 2.3	35.4	93	95	6.48	6.63	0.11	
.		S 0	6 9 53.58									10.83	10.88	-0.05	
. 08	MCY	IPU1	6 9 49.03					34 2.3	36.3	1	95	6.28	6.48	-0.13	
.		S 0	6 9 53.62									10.87	10.95	-0.08	
. 08	SPRG	IPU0	6 9 50.12					23 2.0	42.3	20	94	7.37	7.45	-0.06	
.		S 0	6 9 55.42									12.67	12.69	-0.03	
. 08	AMR	pe4	6 9 51.14					20 1.9	45.9	279	93	8.39	7.94	0.44	
.		S 4	6 9 56.81									14.06	13.59	0.47	
. 08	SDH	IPU1	6 9 50.84					26 2.1	47.8	316	93	8.09	8.31	-0.19	
.		S 2	6 9 56.64									13.89	14.14	-0.26	
. 08	LSM	IPU1	6 9 51.73					31 2.3	52.6	329	93	8.98	9.10	-0.15	
.		S 0	6 9 58.45									15.70	15.60	0.09	
. 08	LUP	EPD0	6 9 53.21					30 2.3	60.3	343	93	10.46	10.47	0.06	
.		S 4	6 10 1.14									18.39	17.77	0.61	
. 08	YMT3	EPU0	6 9 53.55					30 2.3	64.0	322	92	10.80	10.93	-0.09	
.		S 1	6 10 1.55									18.80	18.61	0.19	
. 08	GNV	EP 0	6 9 54.01					22 2.0	65.2	255	92	11.26	11.24	0.10	
.		S 1	6 10 1.79									19.04	19.08	-0.04	
. 08	YMT2	EP 1	6 9 54.32					32 2.4	68.0	317	92	11.57	11.60	-0.11	
.		S 4	6 10 3.93									21.18	19.97	1.20	
. 08	SSP	EPD0	6 9 54.76					22 2.1	69.2	341	92	12.01	12.00	0.09	
.		S 0	6 10 3.29									20.54	20.38	0.16	
. 08	YMT6	EPU0	6 9 54.71					24 2.1	70.0	326	92	11.96	11.94	-0.07	
.		S 4	6 10 4.45									21.70	20.57	1.13	
. 08	SHRG	EP 4	6 9 55.95					25 2.2	75.3	76	92	13.20	12.90	0.89	
.		S 4	6 10 4.79									22.04	21.04	0.99	
. 08	YMT5	EP 0	6 9 55.71						76.2	325	92	12.96	12.98	-0.03	
.		S 2	6 10 5.20									22.45	22.20	0.25	
. 08	YMT1	EP 4	6 9 56.39					30 2.4	76.3	319	92	13.64	12.97	0.54	
.		S 4	6 10 9.18									26.43	22.40	4.03	
. 08	WCT	EPU4	6 9 56.13					22 2.1	77.8	311	92	13.38	13.17	0.37	
.		S 4	6 10 6.20									23.45	22.25	1.20	
. 08	BGB	EP 2	6 9 56.83					24 2.2	81.4	343	92	14.08	13.91	0.25	
.		S 1	6 10 6.54									23.79	23.64	0.14	
. 08	GSM	EPU4	6 9 58.61					25 2.2	90.8	243	92	15.86	15.21	0.55	
.		S 4	6 10 10.06									27.31	26.17	1.14	
. 08	GMR	EP 4	6 9 62.43						112.2	9	91	19.68	18.90	0.87	
. 08	BMT	EPU4	6 9 62.80						121.4	330	91	20.05	20.52	-0.31	
.		S 4	6 10 18.87									36.12	34.80	1.31	

NOV H = 14 42 2.62 UTC RMS = 0.16 NO = 21 FREE DEPTH SOLUTION  
. 08 LAT = 37.057 N ERX = 0.3 ERH = 0.6 AVFM = 2.4 J = C  
LONG = 116.954 W ERY = 0.5 GAP = 84 AVXM = WS = 8 THIRSTY CANYON  
DEPTH = 4.27 KM ERZ = 2.3 NM = WD = C

. 08	SGV	IPD0	14 42 4.90					47 2.5	10.9	220	106	2.28	2.44	-0.07	
. 08	GVN	EPU0	14 42 8.97					38 2.4	35.1	260	93	6.35	6.20	0.09	
. 08	BMT	IPD0	14 42 9.21					42 2.5	37.2	47	93	6.59	6.81	-0.05	
. 08	GMN	EPU0	14 42 9.33					30 2.2	38.3	315	93	6.71	6.98	-0.12	
. 08	WCT	IPU0	14 42 9.52					31 2.3	41.4	135	92	6.90	7.25	-0.19	
. 08	YMT1	IPU0	14 42 10.28					50 2.7	44.1	121	92	7.66	7.72	-0.20	
. 08	YMT5	IPD0	14 42 10.91					35 2.4	47.9	112	92	8.29	8.38	-0.09	
. 08	FMT	EP4	14 42 10.81						48.9	161	92	8.19	8.47	-0.04	
. 08	YMT4	EPU1	14 42 11.46					36 2.4	49.5	115	92	8.84	8.63	0.10	
. 08	YMT2	EP	14 42 11.63					38 2.5	51.6	126	92	9.01	8.92	0.00	
. 08	YMT6	EP	14 42 12.10						53.7	114	92	9.48	9.28	0.11	
. 08	MCA	EPD4	14 42 12.70					30 2.3	53.9	213	92	10.08	9.14	0.86	
. 08	YMT3	EPU3	14 42 12.11					36 2.4	56.9	122	91	9.49	9.78	-0.25	
. 08	EPN	EPD0	14 42 13.12					34 2.4	58.7	73	91	10.50	10.33	0.11	
. 08	MGM	EPD4	14 42 12.93					31 2.3	64.3	312	91	10.31	11.21	-0.81	
. 08	BGB	EPD0	14 42 13.92					25 2.2	64.7	92	91	11.30	11.19	0.19	
. 08	LCH	EPU3	14 42 14.00					31 2.3	64.7	288	91	11.38	11.14	0.32	
. 08	CTS	EPD0	14 42 14.32					25 2.2	69.6	17	91	11.70	12.02	-0.15	
. 08	LSM	EPD	14 42 14.53					38 2.5	70.2	120	91	11.91	11.96	-0.07	
. 08	SDH	EPU1	14 42 14.63					27 2.2	71.4	130	91	12.01	12.14	-0.10	
. 08	BLT	EP	14 42 17.54						87.6	57	90	14.92	14.54	0.51	
. 08	KRNA	EPD	14 42 18.23					31 2.4	91.4	34	90	15.61	15.17	0.37	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
. 08	MCY	EPD	14 42 19.43					39	2.7	98.7	116	90	16.81	16.35	0.54	
. 08	WRN	EPD4	14 42 29.27					31	2.7	158.5	50	90	26.65	26.08	0.53	
. 08	PRN	EPD	14 42 30.77					34	2.8	173.5	77	52	28.15	28.18	-0.16	

NOV H = 0 24 55.06 UTC RMS = 0.23 NO = 33 FREE DEPTH SOLUTION  
 . 09 LAT = 37.025 N ERX = 0.4 ERH = 0.6 AVFM = 2.0 Q = 8  
 . LONG = 116.215 W ERY = 0.4 GAP = 84 AVXM = Q8 = 8  
 . DEPTH = 4.56 KM ERZ = 0.9 NM = QD = A SILENT CANYON - YUCCA FLAT

. 09	BGB	IPU0	0 24 56.38					25	1.9	1.8	321	161	1.32	1.36	0.05	
.		S 2	0 24 57.01										1.95	2.19	-0.23	
. 09	SSP	EP 0	0 24 57.36					27	2.0	11.1	182	109	2.30	2.59	-0.21	
.		S 4	0 24 59.72										4.66	4.30	0.37	
. 09	CPX	EPD2	0 24 58.39							17.7	127	99	3.33	3.47	-0.11	
.		S 2	0 25 1.44										6.38	5.89	0.50	
. 09	LOP	EPD0	0 24 58.58					33	2.2	19.5	167	98	3.52	3.84	-0.23	
.		S 2	0 25 1.55										6.49	6.42	0.07	
. 09	EPN	EPD4	0 24 59.83					27	2.1	23.1	335	96	4.77	4.54	0.17	
. 09	YMT6	IPD0	0 24 59.52					23	1.9	25.1	222	95	4.46	4.63	-0.25	
.		S 1	0 25 3.07										8.01	8.07	-0.05	
. 09	YMT5	IPU0	0 24 59.60					18	1.7	25.5	236	95	4.54	4.75	-0.20	
.		S 0	0 25 3.17										8.11	8.12	0.00	
. 09	GLR	EPD2	0 24 59.80					17	1.7	26.1	42	95	4.74	4.85	-0.04	
. 09	YMT4	EPD0	0 24 60.08							27.5	230	95	5.02	5.05	-0.13	
.		S 3	0 25 3.96										8.90	8.82	0.09	
. 09	YMT3	IPD0	0 24 60.44					31	2.2	31.7	213	94	5.38	5.68	-0.25	
.		S 3	0 25 4.72										9.66	9.63	0.03	
. 09	LSM	EPD2	0 24 60.94					26	2.1	32.1	189	94	5.88	5.76	0.10	
.		S 0	0 25 5.08										10.02	9.89	0.13	
. 09	YMT1	EPD0	0 24 61.09					41	2.5	33.8	236	93	6.03	6.06	-0.15	
.		S 0	0 25 5.95										10.89	10.58	0.31	
. 09	YMT2	EP 0	0 24 61.24					27	2.1	35.8	222	93	6.18	6.36	-0.25	
.		S 0	0 25 6.09										11.03	11.01	0.03	
. 09	SDH	EPD	0 24 62.70					16	1.7	43.6	195	93	7.64	7.61	0.07	
.		S 3	0 25 8.74										13.68	12.95	0.74	
. 09	WCT	EP 0	0 24 62.63					19	1.8	44.9	235	92	7.57	7.82	-0.08	
.		S 0	0 25 8.59										13.53	13.10	0.44	
. 09	MCY	EP 3	0 24 63.47					28	2.2	46.2	151	92	8.41	8.09	0.40	
.		S 4	0 25 8.87										13.61	13.70	0.11	
. 09	BMT	EPD	0 24 63.49					21	1.9	47.8	307	92	8.43	8.53	0.07	
.		S 2	0 25 10.20										15.14	14.30	0.84	
. 09	SPRG	EPD3	0 24 64.39							51.6	135	92	9.33	8.95	0.42	
.		S 4	0 25 11.37										16.31	15.25	1.06	
. 09	GMR	EPD4	0 24 65.05					15	1.7	52.2	49	92	9.99	9.12	0.97	
. 09	JON	EP 2	0 24 66.48							65.7	171	92	11.42	11.19	0.22	
.		S 4	0 25 12.88										17.82	19.15	-1.33	
. 09	SGV	EP 0	0 24 67.44							72.9	266	91	12.38	12.50	-0.02	
.		S 4	0 25 16.24										21.18	21.21	-0.03	
. 09	KRNA	EP 4	0 24 74.11					14	1.7	80.8	350	91	19.05	13.86	5.13	
.		S 0	0 25 19.48										24.42	23.82	0.61	

NOV H = 3 34 37.33 UTC RMS = 0.25 NO = 27 FREE DEPTH SOLUTION  
 . 09 LAT = 37.107 N ERX = 0.4 ERH = 0.6 AVFM = 2.1 Q = 8  
 . LONG = 117.068 W ERY = 0.5 GAP = 101 AVXM = Q8 = 8 M. JACKSON  
 . DEPTH = 9.36 KM ERZ = 2.1 NM = QD = 8

. 09	SGV	IPU0	3 34 40.19					41	2.4	14.3	167	122	2.86	3.29	-0.35	
.		S 2	3 34 42.52										5.19	5.48	-0.29	
. 09	GVN	EPD0	3 34 42.27					21	1.9	27.1	244	107	4.94	5.04	-0.17	
.		S 0	3 34 46.35										9.02	8.73	0.29	
. 09	GMN	EPD4	3 34 41.36					21	1.9	27.4	322	107	4.03	5.37	-1.19	
. 09	BMT	EPD0	3 34 44.71					25	2.1	42.3	62	101	7.38	7.73	-0.18	
.		S 0	3 34 50.43										13.10	12.93	0.17	
. 09	WCT	EPD0	3 34 46.08					21	2.0	52.6	132	98	8.75	9.14	-0.23	
.		S 2	3 34 52.85										15.52	15.35	0.17	
. 09	LCH	EP 4	3 34 45.14					30	2.3	53.4	285	98	7.81	9.35	-1.47	
.		S 0	3 34 53.50										16.17	15.86	0.31	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
. 09	MCA	EPU3	3 34 46.67					21	2.0	54.3	200	98	9.34	9.27	-0.01	
.		S 0	3 34 53.26									15.93	15.99	-0.06		
. 09	YMT1	EPU0	3 34 46.88					36	2.4	55.7	120	98	9.55	9.66	-0.25	
.		S 0	3 34 54.10									16.77	16.75	0.02		
. 09	FMT	EPD2	3 34 47.10					21	2.0	57.9	154	97	9.77	10.00	0.01	
.		S 4	3 34 53.70									16.37	16.68	-0.31		
. 09	YMT5	EPD0	3 34 47.48					24	2.1	59.4	113	97	10.15	10.30	-0.16	
.		S 0	3 34 54.89									17.56	17.62	-0.06		
. 09	YMT4	IPD4	3 34 48.16					23	2.1	61.1	116	97	10.85	10.56	0.16	
.		S 0	3 34 56.22									18.89	18.24	0.64		
. 09	YMT2	EPD2	3 34 48.18							63.1	124	97	10.85	10.85	-0.08	
.		S 4	3 34 56.63									19.30	18.68	0.61		
. 09	YMT6	EPD2	3 34 48.72							65.2	115	96	11.39	11.20	0.10	
.		S 0	3 34 57.01									19.68	19.30	0.37		
. 09	CTS	EPD0	3 34 48.65					20	2.0	68.1	26	96	11.32	11.83	-0.34	
.		S 4	3 34 56.96									19.63	19.93	-0.30		
. 09	YMT3	IPD0	3 34 48.82							68.5	121	96	11.49	11.71	-0.17	
.		S 0	3 34 57.53									20.20	19.93	0.26		
. 09	LSM	EPD0	3 34 51.16					30	2.4	81.7	120	95	13.83	13.67	-0.07	
.		S 0	3 35 1.49									24.16	23.76	0.40		
. 09	SDH	EPD2	3 34 51.28					18	1.9	82.8	128	95	13.95	14.03	-0.04	
. 09	LOP	EPD2	3 34 51.94					29	2.4	84.9	109	95	14.61	14.50	0.18	
.		S 4	3 35 3.12									25.79	24.67	1.12		

NOV H = 15 48 16.57 UTC RMS = 0.29 NO = 32 FREE DEPTH SOLUTION  
 . 09 LAT = 36.529 N ERX = 1.9 ERH = 2.1 AVFM = 3.3 Q = C  
 LONG = 117.973 W ERY = 0.8 GAP = 260 AVXM = Q8 = B DRY MOUNTAIN  
 DEPTH = 0.05 KM ERZ = 1.6 NM = QD = D

. 09	TMO	EPU1	15 48 26.86						59.0	59	38	10.29	10.65	-0.06		
.		S	15 48 33.98									17.41	17.70	-0.29		
. 09	MCA	EPU0	15 48 27.26					79	3.1	63.3	78	38	10.69	10.95	-0.34	
.		S 0	15 48 35.12									18.55	18.86	-0.31		
. 09	GVN	IPU0	15 48 30.13							76.9	47	38	13.56	13.28	0.22	
.		S 4	15 48 38.67									22.10	22.80	-0.70		
. 09	PGE	EPU0	15 48 30.71					76	3.2	83.8	104	38	14.14	14.60	-0.24	
.		S 0	15 48 41.46									24.89	24.59	0.30		
. 09	SGV	IPU0	15 48 33.29					108	3.5	97.8	59	38	16.72	16.82	-0.01	
.		S 0	15 48 45.20									28.63	28.60	0.03		
. 09	PPK	EP 4	15 48 30.88					87	3.4	99.7	3	38	14.31	17.19	-2.89	
.		S 4	15 48 45.73									29.16	29.42	-0.26		
. 09	FMT	EPU0	15 48 34.46					71	3.2	107.5	83	38	17.89	18.29	-0.16	
.		S 0	15 48 47.30									30.73	30.87	-0.14		
. 09	QSM	EPD0	15 48 36.47					71	3.2	117.4	122	38	19.90	19.82	-0.01	
.		S 0	15 48 50.57									34.00	34.04	-0.04		
. 09	GWV	EPU	15 48 37.11					64	3.2	122.8	108	38	20.54	20.88	-0.26	
.		S 0	15 48 52.79									36.22	35.57	0.64		
. 09	WCT	EPU	15 48 37.34					52	3.0	123.8	76	38	20.77	20.93	0.00	
.		S 1	15 48 52.93									36.36	35.51	0.85		
. 09	YMT1	EPU0	15 48 39.28					105	3.6	134.0	74	38	22.71	22.62	-0.04	
.		S 3	15 48 55.65									39.08	38.91	0.17		
. 09	AMR	EPD	15 48 39.14					65	3.2	135.0	96	38	22.57	22.70	-0.14	
.		S 2	15 48 55.31									38.74	38.84	-0.10		
. 09	YMT2	EP 3	15 48 39.69					92	3.5	136.0	78	38	23.12	22.94	0.10	
.		S 2	15 48 56.18									39.61	39.36	0.25		
. 09	MZP	EP 2	15 48 40.53					56	3.1	140.2	22	38	23.96	23.88	0.32	
.		S 0	15 48 57.22									40.65	40.43	0.22		
. 09	YMT5	EPD2	15 48 40.21					98	3.6	141.8	73	38	23.64	23.93	-0.29	
.		S 2	15 48 57.99									41.42	40.92	0.50		
. 09	BMT	EPU0	15 48 41.03					74	3.4	144.9	55	38	24.46	24.61	0.02	
.		S 0	15 48 59.39									42.62	41.79	1.03		
. 09	SDH	EPD	15 48 41.13					54	3.1	146.8	85	38	24.56	24.69	-0.09	
.		S 0	15 48 59.28									42.71	42.15	0.56		
. 09	LSM	EPD4	15 48 41.67					78	3.5	153.9	81	38	25.10	25.85	-0.77	
.		S 4	15 49 1.89									45.32	44.24	1.08		
. 09	LOP	EPD4	15 48 43.27					75	3.5	165.3	77	29	26.70	27.76	-0.98	3.10
.		S 4	15 49 4.72									48.15	47.33	0.82		

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
. 09	CTS	EPD0	15 48 43.61					64	3.3	167.2	42	29	27.04	28.04	-0.83	4.60
.		S 4	15 49 5.41									48.84	47.66	1.18		
. 09	TNP	EP 4	15 48 47.75					63	3.4	184.9	21	29	31.18	30.32	0.59	
.		S 4	15 49 11.35									54.78	52.31	2.47		
. 09	KRNA	EP 4	15 48 47.64					74	3.6	195.3	46	29	31.07	31.67	-0.67	
.		S 4	15 49 12.08									55.51	54.28	1.23		

NOV H = 15 45 38.99 UTC RMS = 0.44 NO = 21 FREE DEPTH SOLUTION  
 10 LAT = 37.267 N ERX = 1.6 ERH = 1.8 AVFM = 2.5 Q = D  
 LONG = 115.024 W ERY = 0.9 GAP = 218 AVXM = Q = C ALAMO  
 DEPTH = 5.14 KM ERZ = 6.3 NM = QD = D

. 10	PRN	EPD0	15 45 42.10					56	2.7	15.7	351	104	3.11	3.20	-0.20	
.		S 2	15 45 44.57										5.58	5.68	-0.09	
. 10	EPR	IPD0	15 45 42.28					56	2.7	18.1	233	101	3.29	3.56	-0.24	
.		S 3	15 45 44.92										5.93	6.05	-0.12	
. 10	NPN	IPD0	15 45 47.19					51	2.7	43.4	10	94	8.20	7.72	0.28	
.		S 0	15 45 53.24										14.25	13.56	0.70	
. 10	DLM	EPD4	15 45 48.27					34	2.4	45.2	34	93	9.28	8.03	1.01	
.		S 4	15 45 55.42										16.43	14.15	2.28	
. 10	MTI	EPD	15 45 47.35					40	2.5	50.5	334	93	8.36	8.83	-0.44	
.		S 4	15 45 54.82										15.83	15.06	0.78	
. 10	GMR	EPUI	15 45 49.63					37	2.5	66.7	276	92	10.64	11.48	-0.74	
.		S 4	15 45 56.49										17.50	19.46	-1.96	
. 10	TPU	EPD2	15 45 49.68					14	1.7	66.9	304	92	10.69	11.58	-0.75	
.		S 0	15 45 58.53										19.54	19.56	-0.02	
. 10	SRG	EP 4	15 45 50.56					48	2.7	68.3	357	92	11.57	11.77	-0.41	
.		S 4	15 45 59.26										20.27	20.49	-0.22	
. 10	SHRG	EPD4	15 45 54.70					35	2.5	85.5	188	92	15.71	14.56	1.75	
.		S 4	15 46 7.27										28.28	23.88	4.40	
. 10	GLR	EP 2	15 45 53.13					35	2.5	88.6	265	92	14.14	15.01	-0.80	
.		S 4	15 46 4.80										25.81	25.56	0.26	
. 10	WRN	EPUI	15 45 54.43					21	2.1	93.7	328	91	15.44	15.91	-0.50	
.		S	15 46 6.64										27.65	27.27	0.38	
. 10	SPRG	EP 2	15 45 55.40					36	2.6	94.6	228	91	16.41	15.95	0.50	
.		S	15 46 6.85										27.86	27.22	0.64	
. 10	QCS	EP 4	15 45 56.01							96.5	305	91	17.02	16.40	0.65	
. 10	BLT	EP 4	15 45 56.75					41	2.7	100.2	284	91	17.76	16.98	0.91	
.		S 4	15 46 7.24										28.25	28.82	-0.57	
. 10	MCY	EP 2	15 45 57.46					41	2.7	107.2	231	91	18.47	18.03	0.53	
.		S 3	15 46 10.66										31.67	30.69	0.99	
. 10	BGB	EP 4	15 45 59.75							109.9	257	91	20.76	18.55	2.30	
. 10	LOP	EP 4	15 45 58.67					40	2.7	111.6	246	91	19.68	18.81	0.95	
.		S 4	15 46 10.66										31.67	32.03	-0.36	
. 10	SSP	EP 4	15 45 59.24							112.8	250	91	20.25	19.10	1.24	
.		S 2	15 46 11.90										32.91	32.52	0.40	
. 10	EPN	EP 4	15 45 58.65							115.6	267	91	19.66	19.59	0.01	
.		S 4	15 46 11.39										32.40	33.60	-1.20	
. 10	LSM	4	15 45 59.74					38	2.7	125.7	242	90	20.75	20.74	0.00	
.		S 4	15 46 16.45										37.46	35.49	1.97	
. 10	KRNA	EPUI	15 45 61.06					37	2.7	130.9	294	90	22.07	21.59	0.42	
.		S 4	15 46 15.71										36.72	37.03	-0.31	
. 10	CTS	EPD	15 45 64.91							156.6	286	90	25.92	25.76	0.33	
.		S 4	15 46 24.37										45.38	43.76	1.62	
. 10	HCR	EPUI	15 45 65.86					33	2.7	164.2	311	90	26.87	27.00	-0.04	
.		S 4	15 46 26.58										47.59	46.02	1.57	

NOV H = 23 42 19.57 UTC RMS = 0.17 NO = 28 FREE DEPTH SOLUTION  
 10 LAT = 37.069 N ERX = 0.2 ERH = 0.3 AVFM = 2.1 Q = C  
 LONG = 116.951 W ERY = 0.2 GAP = 64 AVXM = Q = B THIRSTY CANYON  
 DEPTH = 4.62 KM ERZ = 1.9 NM = QD = C

. 10	SGV	IPD2	23 42 21.75					40	2.4	12.1	217	106	2.18	2.65	-0.37	
.		S 0	23 42 23.75										4.18	4.37	-0.19	
. 10	GVN	IPU0	23 42 25.84					32	2.3	35.6	258	93	6.27	6.29	-0.07	
.		S 2	23 42 30.62										11.05	10.85	0.20	

## 1981 SGB LOCAL-EVENT DATA REPORT

NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS3
10	BMT	EPD0	23 42 26.05				23	2.0	36.1	49	93	6.48	6.63	0.02	
		S 3	23 42 31.08									11.51	11.05	0.46	
10	GMN	EP 3	23 42 25.94				23	2.0	37.5	313	93	6.37	6.86	-0.34	
		S 0	23 42 31.03									11.46	11.47	-0.01	
10	YMT1	IPU3	23 42 27.17				35	2.4	44.6	122	93	7.60	7.80	-0.33	
		S 4	23 42 33.72									14.15	13.57	0.59	
10	YMT5	IPD2	23 42 27.78				26	2.1	48.1	113	92	8.21	8.42	-0.21	
		S 2	23 42 33.82									14.25	14.40	-0.15	
10	FMT	EP 3	23 42 27.69				22	2.0	50.1	162	92	8.12	8.66	-0.30	
		S 2	23 42 33.86									14.29	14.40	-0.11	
10	YMT2	EP 2	23 42 28.46				32	2.3	52.2	127	92	8.89	9.02	-0.21	
		S 4	23 42 38.70									19.13	15.56	3.57	
10	MCA	EP 0	23 42 29.07				21	2.0	55.2	212	92	9.50	9.35	0.08	
		S 1	23 42 35.89									16.32	16.12	0.20	
10	EPN	EP 1	23 42 29.99				17	1.8	58.1	74	92	10.42	10.22	0.14	
		S 4	23 42 37.89									18.32	17.59	0.74	
10	BGB	EPD1	23 42 30.75				21	2.0	64.4	93	92	11.18	11.14	0.12	
		S 0	23 42 38.62									19.05	18.91	0.14	
10	SSP	EPU0	23 42 31.21				24	2.1	67.1	104	92	11.64	11.66	0.07	
		S 3	23 42 39.88									20.31	19.80	0.52	
10	CTS	EPD0	23 42 31.20				16	1.8	68.2	17	92	11.63	11.79	0.01	
		S 1	23 42 39.30									19.73	19.87	-0.14	
10	LSM	EP 0	23 42 31.64				27	2.2	70.6	121	91	12.07	12.03	0.02	
		S 2	23 42 40.09									20.52	20.61	-0.09	
10	LOP	EP 0	23 42 32.24				26	2.2	73.7	109	91	12.67	12.65	0.10	
		S 4	23 42 42.05									22.48	21.50	0.99	
10	AMR	EPD0	23 42 34.03				17	1.9	85.8	150	91	14.46	14.42	0.03	
		S 4	23 42 46.45									26.88	24.68	2.20	
10	PPK	EP 4	23 42 36.15						93.7	295	90	16.58	15.54	1.04	
		S 4	23 42 48.01									28.44	26.58	1.86	
10	GWV	EPU0	23 42 36.64						101.1	166	90	17.07	16.74	0.41	
		S 4	23 42 51.51									31.94	28.49	3.46	
10	QSM	EPD4	23 42 40.48				19	2.1	122.7	177	90	20.91	20.25	0.57	

NOV H = 1 34 19.40 UTC RMS = 0.12 NO = 25 FREE DEPTH SOLUTION  
 11 LAT = 37.067 N ERX = 0.2 ERH = 0.3 AVFM = 1.8 Q = B  
 LONG = 116.952 W ERY = 0.2 GAP = 64 AVXM = QS = B THIRSTY CANYON  
 DEPTH = 7.67 KM ERZ = 2.8 NM = QD = B

11	SGV	IPU2	1 34 21.60				22	1.9	12.0	217	122	2.20	2.82	-0.53	
11	GVN	EPD0	1 34 25.67				20	1.9	35.6	258	99	6.27	6.33	-0.12	
		S 1	1 34 30.44									11.04	10.92	0.12	
11	BMT	EPU0	1 34 25.90				12	1.4	36.2	49	99	6.50	6.71	-0.04	
		S 4	1 34 31.18									11.78	11.19	0.59	
11	GMN	EP 1	1 34 26.05				12	1.4	37.6	313	99	6.65	6.93	-0.13	
		S 4	1 34 30.79									11.39	11.60	-0.20	
11	YMT1	IPD2	1 34 27.06				19	1.8	44.5	122	97	7.66	7.83	-0.30	
		S 0	1 34 33.01									13.61	13.62	-0.01	
11	FMT	EPD3	1 34 27.53				17	1.8	49.9	162	96	8.13	8.67	-0.30	
11	MCA	EP 3	1 34 29.14				17	1.8	55.0	212	96	9.74	9.34	0.32	
		S 0	1 34 35.58									16.18	16.12	0.06	
11	EPN	EP 0	1 34 29.81				16	1.7	58.1	74	95	10.41	10.27	0.08	
		S 2	1 34 37.28									17.88	17.66	0.22	
11	CDH1	EP 1	1 34 29.71				23	2.1	60.9	112	95	10.31	10.53	-0.12	
		S 0	1 34 37.15									17.75	17.84	-0.09	
11	BGB	EPU2	1 34 30.62				23	2.1	64.4	93	95	11.22	11.17	0.13	
		S 0	1 34 38.36									18.96	18.96	0.00	
11	SSP	EPU0	1 34 31.09				20	2.0	67.1	104	95	11.69	11.68	0.09	
		S 4	1 34 39.83									20.43	19.83	0.60	
11	CTS	EPD0	1 34 31.06				15	1.7	68.4	17	94	11.66	11.85	-0.02	
		S 0	1 34 39.38									19.98	19.97	0.01	
11	LSM	EP 1	1 34 31.31				24	2.1	70.6	121	94	11.91	12.04	-0.15	
		S 0	1 34 39.95									20.55	20.62	-0.07	
11	LOP	EP 0	1 34 32.06				25	2.2	73.7	109	94	12.66	12.66	0.08	
		S 4	1 34 41.91									22.51	21.52	0.99	
11	KRNA	EP 1	1 34 35.00						90.3	34	93	15.60	15.43	0.10	
11	GWV	EP 0	1 34 36.50				4	0.7	100.9	166	93	17.10	17.05	0.13	
		S 0	1 34 48.47									29.07	29.02	0.05	



## 1981 SGB LOCAL-EVENT DATA REPORT

NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
NOV H = 6			49 13.72 UTC	RMS =	0.13	NU = 14			FREE DEPTH SOLUTION						
11 LAT = 37.044 N			ERX =	0.4	ERH = 0.4	AVFM =	1.1	Q = B	SILENT CANYON - YUCCA FLAT						
LONG = 116.166 W			ERY =	0.2	GAP = 105	AVXM =		QS = A							
DEPTH = 1.83 KM			ERZ =	1.3	NM =			QD = C							
.....															
11	SSP	EPU0	6 49 16.47				10	1.2	14.0	199	94	2.75	3.00	-0.17	
		S 4	6 49 18.33									4.61	4.99	-0.38	
11	CPX	EP 0	6 49 16.76						16.1	142	93	3.04	3.19	-0.12	
11	LOP	EPU0	6 49 17.79				10	1.2	21.1	180	93	4.07	4.12	0.03	
		S 1	6 49 20.88									7.16	6.91	0.25	
11	GLR	EPU1	6 49 17.90				6	0.8	21.7	37	92	4.18	4.17	0.07	
		S 0	6 49 20.80									7.08	7.02	0.06	
11	EPN	EPU1	6 49 18.17				9	1.1	23.5	323	92	4.45	4.65	-0.27	
		S 4	6 49 22.15									8.43	8.06	0.37	
11	CDH1	EPU1	6 49 18.01				8	1.0	24.4	213	74	4.29	4.62	-0.23	
		S 0	6 49 21.42									7.70	7.73	-0.03	
11	LSM	EPU4	6 49 20.37				8	1.1	35.1	196	74	6.65	6.29	0.33	
		S 1	6 49 24.51									10.79	10.80	-0.01	
11	YMT1	EPU1	6 49 20.77				12	1.4	38.6	237	74	7.05	6.88	0.03	
		S 4	6 49 26.10									12.36	11.99	0.39	
11	MCY	IPD0	6 49 21.84				7	1.0	46.2	157	74	8.12	8.13	0.06	
11	BMT	EPU4	6 49 23.30						50.2	302	74	9.58	8.97	0.77	
		S 0	6 49 28.93									15.21	15.05	0.15	
11	JON	EPU1	6 49 25.26				10	1.4	67.3	175	74	11.54	11.49	0.04	
		S 4	6 49 34.70									20.98	19.67	1.31	
.....															
NOV H = 20			15 52.19 UTC	RMS =	0.15	NO = 9			FREE DEPTH SOLUTION						
11 LAT = 37.081 N			ERX =	0.6	ERH = 0.8	AVFM =	1.6	Q = C	SILENT CANYON - YUCCA FLAT						
LONG = 116.084 W			ERY =	0.5	GAP = 106	AVXM =		QS = B							
DEPTH = 0.45 KM			ERZ =	2.4	NM =			QD = C							
.....															
11	GLR	EPU2	20 15 54.81				13	1.4	14.3	24	40	2.62	3.03	-0.35	
11	SSP	EPU2	20 15 56.14				19	1.8	21.1	215	40	3.95	4.30	-0.28	
11	EPN	EP 0	20 15 57.45				14	1.5	25.9	305	40	5.26	5.16	0.03	
11	LOP	EPD1	20 15 57.14				20	1.8	26.3	196	40	4.95	5.11	-0.09	
		S 2	20 16 0.60									8.41	8.60	-0.20	
11	CDH1	EPU3	20 15 57.82				18	1.8	32.2	220	38	5.63	6.03	-0.30	
		S 4	20 16 2.95									10.76	10.14	0.62	
11	GMR	EPU0	20 15 59.37				11	1.4	39.4	45	38	7.18	7.25	0.02	
11	MCY	EP 1	20 15 60.83				12	1.5	47.8	167	38	8.64	8.56	0.16	
		S 4	20 16 8.57									16.38	14.50	1.88	
11	SPRG	pu1	20 15 61.16				15	1.7	49.5	150	38	8.97	8.81	0.18	
		S 4	20 16 8.72									16.53	15.02	1.50	
.....															
NOV H = 20			24 30.86 UTC	RMS =	0.06	NO = 5			FREE DEPTH SOLUTION						
11 LAT = 37.043 N			ERX =	0.9	ERH = 1.1	AVFM =	1.5	Q = C	SILENT CANYON - YUCCA FLAT						
LONG = 116.039 W			ERY =	0.6	GAP = 172	AVXM =		QS = B							
DEPTH = 1.89 KM			ERZ =	2.1	NM =			QD = D							
.....															
11	GLR	EPU1	20 24 34.13				13	1.4	17.5	6	93	3.27	3.46	-0.12	
11	SSP	EPD0	20 24 34.92				14	1.5	20.7	231	93	4.06	4.12	0.01	
11	LOP	EP 0	20 24 35.32				16	1.6	23.9	209	74	4.46	4.59	-0.05	
11	EPN	EP 0	20 24 36.95				11	1.3	31.7	307	74	6.09	5.98	0.05	
11	CDH1	EPU4	20 24 37.31				17	1.7	32.0	231	74	6.45	5.85	0.70	
11	GMR	EP 0	20 24 38.03						40.1	36	74	7.17	7.20	0.06	
.....															
NOV H = 20			37 16.02 UTC	RMS =	0.10	NO = 11			FREE DEPTH SOLUTION						
11 LAT = 37.076 N			ERX =	0.4	ERH = 0.5	AVFM =	2.4	Q = C	SILENT CANYON - YUCCA FLAT						
LONG = 116.079 W			ERY =	0.2	GAP = 107	AVXM =		QS = C							
DEPTH = 0.43 KM			ERZ =	13.4	NM =			QD = C							
.....															
11	GLR	EPD3	20 37 18.60				49	2.6	14.8	22	40	2.58	3.11	-0.46	
11	CPX	EPU1	20 37 19.16				47	2.5	16.3	172	40	3.14	3.34	-0.17	
11	SSP	EPD4	20 37 19.89				33	2.2	20.8	217	40	3.87	4.26	-0.32	

## 1991 SGE LOCAL-EVENT DATA REPORT

NOV 1981	SIA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XNAG	DUR	FMAG	DIST (KM)	AZI (DEG)	ALN (DEG)	TOPS (SEC)	TCAL (SEC)	RFS (SEC)	REMARKS
NOV E = 6 49 13.72 UTC RMS = 0.13 NU = 14 11 LAT = 37.044 N EPX = 0.4 ERH = 0.4 AVFM = 1.1 w = 0 LONG = 116.166 W ERY = 0.2 GAP = 105 AVXM = JS = A DEPTH = 1.83 KM ERZ = 1.3 NR = WD = C FREE DEPTH SOLUTION SILENT CANYON - YUCCA FLAT															
11	SSP	EPD0	6 49 16.47				10	1.2	14.0	199	94	2.75	3.00	-0.17	
		S 4	6 49 16.33									4.61	4.99	-0.38	
11	CPX	EP 6	6 49 16.76						16.1	142	93	3.04	3.19	-0.12	
11	LOF	EPD0	6 49 17.79				10	1.2	21.1	180	93	4.07	4.12	0.03	
		S 1	6 49 20.86									7.16	6.91	0.25	
11	BLF	EPD1	6 49 17.96				6	0.8	21.7	37	92	4.16	4.17	0.07	
		S 0	6 49 20.90									7.08	7.02	0.06	
11	EPF	EPD1	6 49 18.17				9	1.1	23.5	223	92	4.45	4.65	-0.27	
		S 4	6 49 22.15									8.43	8.06	0.37	
11	CPH1	EPD1	6 49 18.01				2	1.0	24.4	213	74	4.29	4.62	-0.23	
		S 0	6 49 21.42									7.70	7.73	-0.03	
11	LSM	EPD4	6 49 20.37				6	1.1	33.1	196	74	6.65	6.29	0.33	
		S 1	6 49 24.51									10.79	10.80	-0.01	
11	YPT1	EPD1	6 49 20.77				12	1.4	38.6	237	74	7.05	6.28	0.63	
		S 4	6 49 26.10									12.38	11.99	0.39	
11	PEY	EPD0	6 49 21.84				7	1.0	46.2	157	74	8.12	8.13	0.00	
11	ERT	EPD4	6 49 23.30						50.2	302	74	9.38	8.97	0.77	
		S 6	6 49 26.93									15.21	15.05	0.15	
11	JUP	EPD1	6 49 25.26				10	1.4	67.3	175	74	11.54	11.49	0.04	
		S 4	6 49 34.70									20.98	19.67	1.31	
NOV E = 21 29 55.46 UTC RMS = 0.13 NU = 10 11 LAT = 37.285 N EPX = 0.3 ERH = 0.5 AVFM = 1.4 w = 8 LONG = 116.619 W ERY = 0.3 GAP = 100 AVXM = JS = B DEPTH = 3.92 KM ERZ = 3.0 NR = WD = B FREE DEPTH SOLUTION SILENT CANYON - NORTH															
11	BLF	EPD1	21 29 57.36				11	1.2	9.6	179	107	1.90	2.19	-0.22	
		S 2	21 29 58.93									3.47	3.62	-0.15	
11	GSF	EPD0	21 29 59.70				9	1.1	22.6	76	94	4.24	4.32	0.02	
		S 4	21 30 3.51									8.05	7.22	0.63	
11	BLT	EPD0	21 29 59.80				7	0.9	23.7	337	94	4.34	4.53	-0.06	
		S 0	21 30 2.97									7.51	7.53	-0.02	
11	EPF	EPD0	21 29 60.73				10	1.6	28.2	254	93	5.27	5.36	-0.15	
		S 0	21 30 4.85									9.39	9.27	0.12	
11	CPH1	EPD0	21 29 64.66				13	1.5	34.1	209	91	9.20	9.40	-0.10	
		S 4	21 30 11.13									15.67	15.90	-0.23	
11	YPT1	EPD0	21 29 66.77				16	1.8	65.9	223	90	11.31	11.02	0.15	
		S 4	21 30 15.79									20.33	19.08	1.25	
11	PEY	EPD0	21 29 67.41				14	1.7	69.4	176	90	11.95	11.59	0.44	
		S 1	21 30 16.14									20.68	19.68	1.00	

## 1981 SGB LOCAL-EVENT DATA REPORT

NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
NOV H = 15	23	2.60	UTC	RMS =	0.12	NU = 12									FREE DEPTH SOLUTION
12	LAT =	37.424 N		ERX =	0.3	ERH =	0.5	AVFM =	2.3	W = C					
12	LONG =	117.332 W		ERY =	0.4	GAP =	73	AVXM =		WS = C					MT. JACKSON
12	DEPTH =	0.35 KM		ERZ =	17.5	NM =				WD = C					
12	MLM	EPD0	15 23	5.65				30	2.1	14.7	276	40	5.05	5.24	-0.10
12	GMN	IPU2	15 23	5.60				31	2.2	15.2	155	40	5.00	3.34	-0.18
12	MZP	EPD1	15 23	8.51				26	2.1	31.0	352	40	5.91	6.07	0.08
12	LCH	EPD1	15 23	9.17				27	2.1	34.9	233	38	6.57	6.52	0.14
12	GVN	EPD1	15 23	11.03				34	2.4	46.9	181	36	8.43	8.34	0.04
12	PPK	EP 1	15 23	11.93				34	2.4	50.9	270	38	9.33	9.19	0.13
12	SGV	EPD1	15 23	12.20						52.5	308	38	9.60	9.61	-0.12
12	SGV	IPU1	15 23	12.26						55.9	152	38	9.66	9.95	-0.19
12	CIS	EPD0	15 23	13.03				28	2.2	59.5	64	38	10.43	10.61	0.00
12	BMT	EPD2	15 23	13.85						62.8	104	38	11.25	11.19	0.23
12	TNP	EP 4	15 23	16.61						73.7	8	38	14.01	12.92	0.82
12	MCA	EP 4	15 23	17.62				31	2.4	86.2	177	38	15.02	14.61	0.33
12	YMT1	EPD0	15 23	18.92				33	2.5	95.5	132	38	16.32	16.30	-0.11
12	FMT	EP 0	15 23	19.33						100.0	150	38	16.73	17.01	-0.04
NOV H = 21	28	10.36	UTC	RMS =	0.07	NU = 14									FREE DEPTH SOLUTION
12	LAT =	37.079 N		ERX =	0.2	ERH =	0.3	AVFM =	2.5	W = C					
12	LONG =	116.081 W		ERY =	0.2	GAP =	106	AVXM =		WS = C					SILENT CANYON - YUCCA FLAT
12	DEPTH =	4.27 KM		ERZ =	2.2	NM =				WL = C					
12	GLI	EPD3	21 28	12.81				56	2.7	14.5	23	100	2.45	2.97	-0.45
12	GLI	EPD3	21 28	16.66				56	2.7	16.7	172	98	2.77	3.31	-0.51
12	GLI	EPD4	21 28	15.94				56	2.7	21.1	216	96	3.87	4.17	-0.22
12	GLI	EPD2	21 28	14.95				53	2.7	26.2	197	94	4.54	4.91	-0.24
12	GLI	EPD0	21 28	15.45				55	2.7	26.3	305	94	5.07	5.06	-0.64
12	GLI	EPD0	21 28	22.04						32.2	221	93	2.94	5.76	-2.72
12	GLI	EPD0	21 28	13.30				23	2.0	32.2	221	93	2.85	5.83	-2.88
12	GLI	EPD0	21 28	17.15				30	2.2	37.8	230	92	6.74	6.70	0.00
12	GLI	EPD0	21 28	23.71						38.8	239	92	15.35	11.61	1.74
12	GLI	EPD0	21 28	17.27						39.4	44	92	6.94	7.04	0.05
12	GLI	EPD0	21 28	23.10									12.74	11.88	0.87

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	U1ST (KM)	AZI (DEG)	AIN (DEG)	T0BS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 11	LOP	EPU1	20 37 20.88					40 2.4	25.8	198	40	4.86	5.03	-0.09	
. 11	EPN	EPD0	20 37 21.36					46 2.5	26.6	305	40	5.34	5.29	-0.02	
. 11	CDH1	EPU1	20 37 21.77					35 2.3	32.0	222	38	5.75	6.00	-0.15	
.		S 4	20 37 26.58									10.56	10.09	0.47	
. 11	GMR	EPD0	20 37 23.22					32 2.3	39.6	44	38	7.20	7.28	0.02	
. 11	LSM	EPU4	20 37 25.25					30 2.2	41.1	205	38	9.23	7.43	1.78	
. 11	BLT	EPD0	20 37 24.21					27 2.2	45.3	355	38	8.19	8.26	0.06	
. 11	YMT1	EPU2	20 37 24.73					44 2.6	47.0	238	38	8.71	8.40	0.17	
. 11	MCY	EPU1	20 37 24.53					37 2.4	47.1	167	38	8.51	8.44	0.15	
. 11	SPRG	EPU0	20 37 24.72					30 2.3	48.7	150	38	8.70	8.69	0.04	
. 11	SDH	EP 4	20 37 26.24					28 2.2	53.0	206	38	10.22	9.36	0.90	
. 11	BMT	EP 4	20 37 27.37						55.4	295	38	11.35	9.97	1.55	
. 11	JUN	pd1	20 37 28.33					28 2.3	70.6	182	38	12.31	12.18	0.11	

NOV H = 20 50 5.90 UTC RMS = 0.07 NO = 5 FREE DEPTH SOLUTION  
 . 11 LAT = 37.119 N ERX = 3.1 ERH = 3.6 AVFM = 1.4 Q = D  
 . LONG = 116.169 W ERY = 1.9 GAP = 211 AVXM = Q = C SILENT CANYON - YUCCA FLAT  
 . DEPTH = 1.08 KM ERZ = 3.7 NM = QD = D

. 11	GLR	EPU	20 50 8.76					11 1.3	16.1	56	90	2.86	2.93	-0.01	
. 11	EPN	EPU4	20 50 12.41					12 1.3	17.4	308	90	6.51	3.14	3.30	
. 11	SSP	EPD3	20 50 9.41					16 1.6	22.0	192	90	3.51	3.92	-0.34	
. 11	LOP	EP 1	20 50 11.08					14 1.5	29.4	180	90	5.18	5.18	0.08	
. 11	CDH1	EP 2	20 50 11.63						31.6	205	74	5.73	5.82	0.01	
. 11	GMR	EPU3	20 50 13.35						42.6	56	74	7.45	7.65	-0.10	

NOV H = 21 29 55.46 UTC RMS = 0.13 NO = 10 FREE DEPTH SOLUTION  
 . 11 LAT = 37.285 N ERX = 0.3 ERH = 0.5 AVFM = 1.4 Q = B  
 . LONG = 116.019 W ERY = 0.3 GAP = 100 AVXM = Q = B SILENT CANYON - NORTH  
 . DEPTH = 3.98 KM ERZ = 3.0 NM = QD = B

. 11	GLR	IPU1	21 29 57.36					11 1.2	9.6	179	107	1.90	2.19	-0.22	
.		S 2	21 29 58.93									3.47	3.62	-0.15	
. 11	GMR	IPD0	21 29 59.70					9 1.1	22.6	76	94	4.24	4.32	0.02	
.		S 4	21 30 3.51									8.05	7.22	0.83	
. 11	BLT	10	21 29 59.80					7 0.9	23.7	337	94	4.34	4.53	-0.06	
.		S 0	21 30 2.97									7.51	7.53	-0.02	
. 11	EPN	EPD0	21 29 60.73					16 1.6	28.2	254	93	5.27	5.36	-0.15	
.		S 0	21 30 4.85									9.39	9.27	0.12	
. 11	CDH1	EP 0	21 29 64.66					13 1.5	54.1	209	91	9.20	9.40	-0.10	
.		S 4	21 30 11.13									15.67	15.90	-0.23	
. 11	YMT1	EPU0	21 29 66.77					16 1.8	65.9	223	90	11.31	11.02	0.15	
.		S 4	21 30 15.79									20.33	19.08	1.25	
. 11	MCY	EPU0	21 29 67.41					14 1.7	69.4	176	90	11.95	11.59	0.44	
.		S 1	21 30 16.14									20.68	19.68	1.00	

NOV H = 2 24 45.31 UTC RMS = 0.08 NO = 15 FREE DEPTH SOLUTION  
 . 12 LAT = 37.081 N ERX = 0.3 ERH = 0.4 AVFM = 2.6 Q = C  
 . LONG = 116.075 W ERY = 0.2 GAP = 107 AVXM = Q = C SILENT CANYON - YUCCA FLAT  
 . DEPTH = 0.80 KM ERZ = 10.6 NM = QD = C

. 12	GLR	EPD1	2 24 48.06					61 2.7	14.1	21	40	2.75	2.91	-0.09	
.		S 4	2 24 52.54									7.23	4.86	2.37	
. 12	BGB	IPD0	2 24 48.26					62 2.8	14.4	251	40	2.95	3.03	0.00	
.		S 4	2 24 51.96									6.65	5.05	1.60	
. 12	CPX	IPU4	2 24 48.35					62 2.6	16.9	174	40	3.04	3.36	-0.29	
.		S 4	2 24 52.25									6.94	5.69	1.25	
. 12	SSP	IPD1	2 24 49.44					61 2.8	21.6	216	40	4.13	4.31	-0.10	
.		S 4	2 24 53.50									8.19	7.23	0.96	
. 12	LOP	EPU1	2 24 50.15					60 2.8	26.5	198	40	4.64	5.08	-0.15	
.		S 4	2 24 53.50									8.19	8.54	-0.35	
. 12	EPN	EPU0	2 24 50.64					60 2.8	26.6	304	40	5.33	5.21	0.06	
.		S 4	2 24 52.55									7.24	9.02	-1.77	
. 12	CDH5	EP 4	2 24 48.27						32.7	221	38	2.96	5.97	-2.91	
. 12	CDH1	EPD4	2 24 48.26					37 2.4	32.7	221	38	2.95	6.04	-2.99	
.		S 4	2 24 53.22									7.91	10.16	-2.25	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
12	YMT6	EPD0	2 24 52.22					43 2.5	38.4	230	38	6.91	6.92	-0.09	
12	GMR	EPD0	2 24 52.41					36 2.4	38.9	44	38	7.10	7.09	0.11	
		S 4	2 24 58.62									13.31	11.95	1.36	
12	YMT5	EPD2	2 24 52.27					46 2.6	39.4	239	38	6.96	7.13	-0.16	
12	YMT4	EPD0	2 24 52.86					42 2.5	41.2	235	38	7.57	7.39	0.07	
		S 4	2 25 2.07									16.76	12.83	3.93	
12	LSM	EPD4	2 24 55.25						41.8	205	38	9.94	7.47	2.45	
		S 4	2 25 7.62									22.31	12.81	9.51	
12	YMT3	EPD0	2 24 53.19					56 2.8	44.3	223	38	7.88	7.86	0.07	
		S 4	2 25 4.47									19.16	13.36	5.80	
12	BLT	EPD0	2 24 53.20					30 2.2	44.7	355	38	7.89	8.09	-0.06	
		S 4	2 24 59.67									14.36	13.60	0.76	
12	MCY	EPD0	2 24 53.75					55 2.8	47.6	168	38	8.44	8.45	0.08	
		S 4	2 25 1.72									16.41	14.31	2.10	
12	YMT1	EPD1	2 24 53.99					57 2.8	47.7	238	38	8.68	8.43	0.12	
		S 4	2 25 1.72									16.41	14.64	1.77	
12	SPRG	EPD0	2 24 53.90						49.0	151	38	8.59	8.67	-0.05	
		S 4	2 25 1.85									16.54	14.77	1.77	
12	BMT	EPD4	2 24 56.49						55.5	294	38	11.18	9.91	1.44	
		S 4	2 25 6.73									21.42	16.65	4.77	
12	JON	EPD0	2 24 57.48					41 2.6	71.2	182	38	12.17	12.21	-0.05	

NOV H = 15 23 2.60 UTC RMS = 0.12 NO = 12 FREE DEPTH SOLUTION  
 12 LAT = 37.424 N ERX = 0.3 ERH = 0.5 AVFM = 2.3 Q = C  
 LONG = 117.332 W ERY = 0.4 GAP = 73 AVXM = QS = C MT. JACKSON  
 DEPTH = 0.35 KM ERZ = 17.5 NM = WD = C

12	MGM	EPD0	15 23 5.65					30 2.1	14.7	276	40	3.05	3.24	-0.10	
12	GMN	IPD2	15 23 5.60					31 2.2	15.2	155	40	3.00	3.34	-0.18	
12	MZP	EPD1	15 23 8.51					26 2.1	31.0	352	40	5.91	6.07	0.08	
12	LCH	EPD1	15 23 9.17					27 2.1	34.9	233	38	6.57	6.52	0.14	
12	GVN	EPD1	15 23 11.03					34 2.4	46.9	181	38	8.43	8.34	0.04	
12	PPK	EP 1	15 23 11.93					34 2.4	50.9	270	38	9.33	9.19	0.13	
12	SVP	EPD1	15 23 12.20						52.5	308	38	9.60	9.61	-0.12	
12	SGV	IPD1	15 23 12.26						55.9	152	38	9.66	9.95	-0.19	
12	CTS	EPD0	15 23 13.03					28 2.2	59.5	64	38	10.43	10.61	0.00	
12	BMT	EPD2	15 23 13.85						62.8	104	38	11.25	11.19	0.23	
12	TNP	EP 4	15 23 16.61						73.7	8	38	14.01	12.92	0.82	
12	MCA	EP 4	15 23 17.62					31 2.4	86.2	177	38	15.02	14.61	0.33	
12	YMT1	EPD0	15 23 18.92					33 2.5	95.5	132	38	16.32	16.30	-0.11	
12	FMT	EP 0	15 23 19.33						100.0	150	38	16.73	17.01	-0.04	

NOV H = 21 28 10.36 UTC RMS = 0.07 NO = 14 FREE DEPTH SOLUTION  
 12 LAT = 37.079 N ERX = 0.2 ERH = 0.3 AVFM = 2.5 Q = C  
 LONG = 116.081 W ERY = 0.2 GAP = 106 AVXM = QS = B SILENT CANYON - YUCCA FLAT  
 DEPTH = 4.27 KM ERZ = 2.2 NM = WD = C

12	BGB	IPD0	21 28 13.22					50 2.6	13.8	251	101	2.86	2.93	0.01	
		S 4	21 28 15.91									5.55	4.88	0.67	
12	GLR	EPD3	21 28 12.81					56 2.7	14.5	23	100	2.45	2.97	-0.45	COLLAPSE/
		S 4	21 28 16.66									6.30	4.96	1.34	AFTERSHOCK
12	CPX	EPD4	21 28 13.13					56 2.7	16.7	172	98	2.77	3.31	-0.51	
		S 0	21 28 15.98									5.62	5.60	0.02	
12	SSP	EPD2	21 28 14.23					56 2.7	21.1	216	96	3.87	4.17	-0.22	
		S 4	21 28 18.43									8.07	6.99	1.08	
12	LOP	EPD2	21 28 14.95					53 2.7	26.2	197	94	4.59	4.91	-0.24	
		S 4	21 28 20.79									10.43	8.27	2.17	
12	EPN	EPD0	21 28 15.43					55 2.7	26.3	305	94	5.07	5.06	-0.04	
		S 4	21 28 22.04									11.68	8.75	2.94	
12	CDH5	EP 4	21 28 13.30						32.2	221	93	2.94	5.76	-2.72	
12	CDH1	EPD4	21 28 13.21					23 2.0	32.2	221	93	2.85	5.83	-2.88	
12	YMT6	EPD0	21 28 17.15					30 2.2	37.8	230	92	6.79	6.70	0.00	
		S 4	21 28 23.71									13.35	11.61	1.74	
12	YMT5	EP 0	21 28 17.27						38.8	239	92	6.91	6.90	0.01	
		S 4	21 28 25.48									15.12	11.81	3.32	
12	GMR	EPD0	21 28 17.35					39 2.5	39.4	44	92	6.99	7.04	0.05	
		S 4	21 28 23.10									12.74	11.88	0.87	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
12	YMT4	EPD1	21 28 17.72					47 2.6	40.6	234	92	7.36	7.17	0.08	
		S 4	21 28 27.26									16.90	12.45	4.45	
12	LSM	EPX4	21 28 18.98					36 2.4	41.4	204	92	8.62	7.27	1.33	
		S 4	21 28 24.92									14.56	12.47	2.09	
12	BLT	EP 0	21 28 18.21					27 2.1	44.9	355	92	7.85	7.98	0.00	
		S 4	21 28 25.46									15.10	13.42	1.68	
12	YMT1	EPD1	21 28 18.85					66 2.9	47.1	238	92	8.49	8.21	0.15	
		S 4	21 28 28.31									17.95	14.26	3.69	
12	MCY	EPD0	21 28 18.65					61 2.9	47.5	167	92	8.29	8.31	0.07	
		S 4	21 28 25.82									15.46	14.07	1.40	
12	SPRG	EPD0	21 28 18.80					37 2.4	49.1	150	92	8.44	8.55	-0.08	
		S 4	21 28 27.22									16.86	14.58	2.29	
12	SDH	EP 4	21 28 22.32						53.3	205	92	11.96	9.20	2.80	

NOV H = 0 47 53.84 UTC RMS = 0.09 NO = 10 FREE DEPTH SOLUTION  
 13 LAT = 36.814 N ERX = 0.4 ERH = 0.5 AVFM = 1.5 Q = C  
 LONG = 117.481 W ERY = 0.3 GAP = 206 AVXM = Q = A TIN MOUNTAIN  
 DEPTH = 7.94 KM ERZ = 0.7 NM = QD = D

13	TMO	IPD2	0 47 55.65					12 1.3	6.6	99	142	1.81	2.34	-0.23	
		S 0	0 47 57.38									3.54	3.49	0.05	
13	GVN	EP 0	0 47 58.41					17 1.7	24.2	31	105	4.57	4.52	-0.01	
		S 0	0 48 1.55									7.71	7.84	-0.13	
13	MCA	EP 0	0 47 58.54					13 1.4	25.7	136	104	4.70	4.64	-0.02	
		S 2	0 48 2.12									8.28	8.07	0.21	
13	SGV	EPD0	0 47 61.63						44.1	65	98	7.79	7.85	0.04	
		S 0	0 48 7.15									13.31	13.26	0.05	
13	LCH	EP 0	0 47 62.32					14 1.6	49.0	342	97	8.48	8.61	-0.05	
		S 0	0 48 8.55									14.71	14.59	0.12	

NOV H = 21 16 42.57 UTC RMS = 0.08 NO = 10 FREE DEPTH SOLUTION  
 13 LAT = 37.208 N ERX = 0.5 ERH = 0.6 AVFM = 2.3 Q = C  
 LONG = 114.775 W ERY = 0.3 GAP = 199 AVXM = Q = B DELAMAR MOUNTAINS  
 DEPTH = 9.48 KM ERZ = 2.7 NM = QD = D

13	PRN	EPD2	21 16 48.97					43 2.5	32.9	312	104	6.40	6.08	0.20	
		S 0	21 16 53.13									10.56	10.61	-0.04	
13	EPR	EPD1	21 16 49.09					40 2.5	36.8	263	102	6.52	6.67	-0.13	
		S 0	21 16 53.98									11.41	11.37	0.04	
13	DLM	IPU0	21 16 50.65					26 2.1	44.2	4	100	8.08	7.95	-0.11	
		S 0	21 16 56.57									14.00	14.02	-0.01	
13	NPN	EPD1	21 16 51.78					28 2.2	51.4	344	99	9.21	9.07	-0.07	
		S 0	21 16 58.54									15.97	15.88	0.10	
13	MTI	EP 4	21 16 54.77					23 2.1	68.1	320	96	12.20	11.76	0.48	
		S 4	21 17 3.99									21.42	20.05	1.37	
13	SRG	EP 4	21 16 56.98					31 2.4	79.2	341	95	14.41	13.56	0.63	
		S 4	21 17 7.45									24.88	23.57	1.32	
13	SHRG	EP 4	21 16 57.12					23 2.2	85.1	203	95	14.55	14.53	0.61	
		S 0	21 17 6.47									23.90	23.84	0.06	
13	GMR	EPD0	21 16 57.73					25 2.2	89.4	279	95	15.16	15.21	0.05	
		S 4	21 17 11.80									29.23	25.84	3.39	
13	WRN	EP 4	21 16 62.44					24 2.3	111.9	320	94	19.87	18.90	0.93	
		S 4	21 17 15.80									33.23	32.39	0.85	

NOV H = 5 45 52.69 UTC RMS = 0.08 NO = 16 FREE DEPTH SOLUTION  
 14 LAT = 36.618 N ERX = 0.2 ERH = 0.3 AVFM = 1.9 Q = B  
 LONG = 116.410 W ERY = 0.2 GAP = 110 AVXM = Q = A LATHROP WELLS  
 DEPTH = 3.81 KM ERZ = 1.2 NM = QD = B

14	SDH	EPD0	5 45 54.34						7.1	65	113	1.65	1.72	-0.02	
14	LSM	IPU0	5 45 56.11					29 2.1	18.2	42	95	3.42	3.51	-0.11	
		S 0	5 45 58.67									5.98	6.03	-0.05	
14	YMT3	IPU1	5 45 56.07					28 2.1	18.7	360	94	3.38	3.57	-0.14	
		S 4	5 45 59.26									6.57	6.02	0.55	
14	YMT2	EP 0	5 45 56.42						19.7	340	94	3.73	3.73	-0.07	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 14	AMR	EPU0	5 45 57.26					19 1.8	25.2	193	93	4.57	4.55	0.01	
. 14	YMT6	EPU2	5 45 57.35					20 1.8	26.6	1	93	4.66	4.88	-0.31	
. 14	WCT	EP 1	5 45 57.57					17 1.7	27.3	315	92	4.88	4.96	0.08	
.		S 1	5 46 0.98									8.29	8.21	0.09	
. 14	YMT4	EPU4	5 45 57.36						27.7	352	92	4.67	5.07	-0.51	
.		S 4	5 46 2.19									9.50	8.86	0.64	
. 14	YMT1	IPU0	5 45 57.85					28 2.1	28.1	338	92	5.16	5.13	-0.09	
.		S 0	5 46 1.60									8.91	8.99	-0.08	
. 14	YMT5	IPD1	5 45 58.18					25 2.0	31.3	353	92	5.49	5.68	-0.19	
.		S 3	5 46 2.72									10.03	9.72	0.32	
. 14	FMT	EPU0	5 45 58.27					18 1.8	33.1	274	92	5.58	5.90	-0.08	
.		S 4	5 46 3.14									10.45	9.68	0.77	
. 14	JON	EP 4	5 45 62.73						33.9	126	92	10.04	6.01	4.02	
. 14	SSP	EP 4	5 45 60.98						38.1	27	92	8.29	6.93	1.45	
.		S 4	5 46 5.62									12.93	11.71	1.23	
. 14	MCY	EPD0	5 45 59.82					26 2.1	40.3	83	91	7.13	7.14	0.08	
.		S 4	5 46 6.62									13.93	12.07	1.87	
. 14	BGB	EPD1	5 45 61.32					19 1.9	49.3	19	90	8.63	8.32	0.39	
.		S 2	5 46 7.51									14.82	14.09	0.74	
. 14	SPRG	EP 4	5 45 63.08						54.3	81	90	10.39	9.14	1.29	

NOV H = 12 13 38.62 UTC RMS = 0.08 NO = 16 FREE DEPTH SOLUTION  
 . 14 LAT = 36.613 N ERX = 0.2 ERH = 0.3 AVFM = 1.9 W = C  
 . LONG = 116.443 W ERY = 0.2 GAP = 134 AVXM = WS = B LATHROP WELLS  
 . DEPTH = 7.22 KM ERZ = 2.1 NM = WD = C

. 14	YMT2	EPD1	12 13 42.66					26 2.0	19.5	349	107	4.04	3.80	0.16	
.		S 4	12 13 44.77									6.15	6.64	-0.48	
. 14	YMT3	IPD0	12 13 42.30					29 2.1	19.5	8	107	3.68	3.81	-0.07	
.		S 2	12 13 44.84									6.22	6.42	-0.20	
. 14	LSM	EPD3	12 13 42.34					21 1.8	20.7	47	106	3.72	4.01	-0.31	
.		S 4	12 13 44.90									6.28	6.90	-0.61	
. 14	AMR	EP 0	12 13 43.17						24.1	187	103	4.55	4.45	0.09	
.		S 1	12 13 46.17									7.55	7.63	-0.08	
. 14	WCT	EP 0	12 13 43.21					18 1.7	25.8	320	103	4.59	4.78	-0.03	
.		S 4	12 13 47.07									8.45	7.90	0.55	
. 14	YMT6	EPD2	12 13 43.55					19 1.8	27.4	7	102	4.93	5.08	-0.23	
.		S 4	12 13 48.03									9.41	8.84	0.58	
. 14	YMT1	EPU4	12 13 43.20					30 2.2	27.7	344	102	4.58	5.13	-0.67	
.		S 1	12 13 47.76									9.14	8.99	0.15	
. 14	YMT4	EPD3	12 13 43.58					20 1.8	28.0	359	101	4.96	5.20	-0.34	
.		S 4	12 13 47.31									8.69	9.08	-0.38	
. 14	CDH1	EPU4	12 13 47.57						29.6	22	101	8.95	5.48	3.58	
.		S 4	12 13 54.75									16.13	9.19	6.94	
. 14	FMT	EP 4	12 13 44.44						30.2	276	100	5.82	5.49	0.57	
.		S 4	12 13 49.01									10.39	8.98	1.42	
. 14	YMT5	EPU0	12 13 44.42					23 2.0	31.7	358	100	5.80	5.80	0.01	
.		S 4	12 13 51.23									12.61	9.91	2.70	
. 14	JON	EP 4	12 13 47.82						36.0	122	98	9.20	6.40	2.79	
.		S 2	12 13 49.74									11.12	10.97	0.16	
. 14	LOP	EPD1	12 13 44.99					19 1.8	36.3	43	98	6.37	6.62	-0.16	
.		S 4	12 13 50.42									11.80	11.18	0.63	
. 14	SSP	EP 4	12 13 46.90						40.0	30	98	8.28	7.28	1.08	
.		S 0	12 13 50.98									12.36	12.31	0.05	
. 14	MCY	IPD0	12 13 46.15					21 1.9	43.4	83	97	7.53	7.66	-0.05	
.		S 4	12 13 52.85									14.23	12.96	1.27	
. 14	BGB	EPU0	12 13 47.50					20 1.9	50.9	22	96	8.94	8.97	0.06	
.		S 4	12 13 53.29									14.67	15.20	-0.53	

NOV H = 14 17 6.44 UTC RMS = 0.06 NO = 7 FREE DEPTH SOLUTION  
 . 14 LAT = 37.712 N ERX = 0.2 ERH = 0.4 AVFM = 1.3 Q = B  
 . LONG = 115.149 W ERY = 0.3 GAP = 126 AVXM = WS = A HIKO  
 . DEPTH = 4.55 KM ERZ = 1.9 NM = WD = C

. 14	MTI	IPU0	14 17 8.87					9 1.1	11.6	250	107	2.43	2.54	-0.09	
. 14	NPN	EPD0	14 17 10.53					7 0.9	19.9	109	98	4.09	3.89	-0.01	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 14	SRG	EPD0	14 17 10.59					14 1.5	20.2	21	97	4.15	3.94	-0.01	
. 14	PRN	EPD0	14 17 12.90					13 1.5	35.0	165	93	6.46	6.31	0.03	
. 14	DLM	EPD0	14 17 13.56					7 1.0	38.1	108	93	7.12	6.86	0.01	
. 14	TPU	EP 0	14 17 14.56					14 1.6	45.7	255	92	8.12	8.13	0.13	
. 14	EPR	EP 4	14 17 22.24						60.4	183	92	15.80	10.40	5.42	
. 14	GMR	EP 0	14 17 18.19					14 1.7	69.2	233	91	11.75	11.89	-0.04	
. 14	BLT	EPD4	14 17 22.87					15 1.8	89.7	253	90	16.43	14.88	1.68	
. 14	GLR	EP 3	14 17 22.86					6 1.0	95.6	233	90	16.42	15.84	0.65	

NOV H = 20 17 44.89 UTC RMS = 0.09 NO = 15 FREE DEPTH SOLUTION  
 . 14 LAT = 37.513 N ERX = 1.2 ERH = 1.3 AVFM = 2.5 u = C  
 . LONG = 114.525 W ERY = 0.5 GAP = 281 AVXM = uS = B HIGHLAND PEAK  
 . DEPTH = 8.33 KM ERZ = 0.8 NM = uD = D

. 14	DLM	IPU0	20 17 49.39					25 2.0	21.5	299	109	4.50	4.32	-0.06	
. 14	NPN	IPU0	20 17 52.63					19 1.8	39.5	293	100	7.74	7.81	-0.06	
. 14	PRN	IPD2	20 17 53.21					18 1.8	47.8	256	98	7.32	7.15	-0.04	
. 14	SRG	IPU1	20 17 56.14					62 2.9	63.0	311	96	11.95	12.58	-0.63	
. 14	MTI	EPD0	20 17 56.76					20 2.0	68.5	285	95	8.32	8.44	-0.24	
. 14	EPR	EPD1	20 17 56.98					28 2.3	70.0	237	95	13.57	14.64	-1.07	
. 14	TPU	EP 3	20 17 61.99					17 1.9	99.8	276	93	11.25	10.93	0.10	
. 14	WRN	EP 4	20 17 63.81					54 3.0	107.2	299	93	17.00	19.07	-2.07	
. 14	GMR	EPD0	20 17 63.70					23 2.2	112.1	260	93	11.87	11.79	0.11	
. 14	QCS	EP 4	20 17 67.42					9 1.5	126.1	283	93	19.79	20.11	-0.32	
. 14	GLR	EPD0	20 17 67.72					50 3.0	136.6	255	92	12.09	11.98	0.13	
. 14	BLT	EPD4	20 17 69.00					42 2.9	141.3	269	92	20.02	20.46	-0.44	
. 14	SPRG	EP 0	20 17 69.03					49 3.0	145.9	231	52	17.10	16.95	0.29	
. 14	MCY	EPD1	20 17 70.53					46 3.0	158.9	234	52	29.29	28.75	0.55	
. 14	BGB	EPD1	20 17 70.78					46 3.0	159.9	251	52	18.92	18.13	0.75	
. 14	EPN	EP 0	20 17 71.47					40 2.9	162.6	258	52	32.82	31.07	1.75	
. 14	KRNA	EPD0	20 17 71.92					47 3.1	165.7	279	52	22.53	21.22	1.35	3.30
. 14	GLR	EP 4	20 17 71.92									37.53	36.23	1.30	
. 14	BLT	EPD4	20 17 71.92									22.83	22.84	0.06	
. 14	GLR	EP 4	20 17 71.92									40.08	38.94	1.14	
. 14	GLR	EP 4	20 17 71.92									32.97	32.11	0.86	
. 14	GLR	EP 4	20 17 71.92									24.11	23.68	0.57	3.40
. 14	GLR	EP 4	20 17 71.92									41.13	40.26	0.87	
. 14	GLR	EP 4	20 17 71.92									24.14	24.19	-0.02	
. 14	GLR	EP 4	20 17 71.92									42.62	41.31	1.31	
. 14	GLR	EP 4	20 17 71.92									25.64	25.86	-0.14	
. 14	GLR	EP 4	20 17 71.92									46.87	44.09	2.79	
. 14	GLR	EP 4	20 17 71.92									25.89	26.09	-0.12	
. 14	GLR	EP 4	20 17 71.92									46.22	44.48	1.74	
. 14	GLR	EP 4	20 17 71.92									26.58	26.58	-0.06	
. 14	GLR	EP 4	20 17 71.92									47.48	45.55	1.93	
. 14	GLR	EP 4	20 17 71.92									27.03	26.90	0.07	3.50
. 14	GLR	EP 4	20 17 71.92									47.48	46.11	1.37	

NOV H = 20 24 4.28 UTC RMS = 0.03 NO = 4 FREE DEPTH SOLUTION  
 . 14 LAT = 37.532 N ERX = ERH = AVFM = 2.1 u = C  
 . LONG = 114.467 W ERY = GAP = 330 AVXM = uS = A  
 . DEPTH = 8.45 KM ERZ = NM = uD = D

. 14	DLM	IPU0	20 24 9.44					24 2.0	25.4	289	106	5.16	4.92	0.00	
. 14	NPN	EPD0	20 24 12.28					23 2.0	43.6	288	99	8.01	7.80	-0.01	
. 14	PRN	EPD4	20 24 13.30					31 2.3	53.4	255	97	9.03	9.34	-0.43	
. 14	MTI	EP 4	20 24 17.15					24 2.1	72.9	283	95	12.88	12.52	0.39	
. 14	EPR	EP 4	20 24 18.07					29 2.3	75.4	238	95	13.79	12.87	0.95	
. 14	TPU	EP 0	20 24 21.97					22 2.2	104.7	274	93	17.69	17.75	0.08	
. 14	WRN	EPD4	20 24 24.40					20 2.1	110.6	297	93	20.13	18.68	1.40	
. 14	GMR	EP 0	20 24 23.92						117.6	259	93	19.65	19.77	-0.02	
. 14	SHKG	EP 4	20 24 27.09						129.5	208	93	22.81	21.72	1.69	
. 14	GLR	EP 4	20 24 28.48						142.2	255	92	24.20	23.74	0.53	



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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
NOV H = 4 33 55.06 UTC RMS = 0.12 NO = 12												FREE DEPTH SOLUTION			
15 LAT = 37.563 N ERX = 0.2 ERH = 0.5 AVFM = 1.0 W = B															
LONG = 115.201 W ERY = 0.4 GAP = 134 AVXM = WS = A												HIKO			
DEPTH = 10.73 KM ERZ = 1.1 NM = WD = B															
.....															
15	MTI	IPU1	4 33 58.28					10	1.2	14.1	333	127	3.22	3.38	-0.13
		S 0	4 34 0.75										5.69	5.73	-0.04
15	PRN	EPU2	4 33 59.41					12	1.4	21.9	142	115	4.35	4.46	-0.24
		S 2	4 34 3.12										6.06	7.84	0.22
15	NPN	EPD0	4 33 60.22					9	1.1	25.4	67	112	5.16	5.02	-0.07
		S 1	4 34 4.22										9.16	8.94	0.21
15	SRG	EP 4	4 33 64.02					12	1.4	37.3	18	104	8.96	6.87	1.87
		S 0	4 34 7.16										12.10	12.12	-0.03
15	TPU	EP 1	4 33 62.34						39.8	277	103		7.28	7.33	0.09
		S 0	4 34 7.36										12.30	12.29	0.01
15	DLM	EPU0	4 33 62.78					9	1.2	41.1	83	103	7.72	7.49	-0.02
		S 1	4 34 8.17										13.11	13.23	-0.13
15	EPR	EPU4	4 33 63.49					11	1.4	43.8	178	102	8.43	7.83	0.62
15	GMR	EPU4	4 33 65.19						56.5	243	99		10.13	9.92	0.31
15	WRN	EP 1	4 33 65.35					1	-0.7	57.6	324	99	10.29	10.13	0.11
.....															
NOV H = 14 30 19.96 UTC RMS = 0.13 NO = 35												FREE DEPTH SOLUTION			
15 LAT = 37.062 N ERX = 0.2 ERH = 0.2 AVFM = 2.1 W = C															
LONG = 116.955 W ERY = 0.2 GAP = 55 AVXM = WS = B												THIRSTY CANYON			
DEPTH = 4.42 KM ERZ = 2.0 NM = WD = C															
.....															
15	SGV	IPD0	14 30 22.25					38	2.3	11.3	218	106	2.29	2.51	-0.14
		S 3	14 30 23.74										3.78	4.14	-0.37
15	GVN	EPD1	14 30 26.20					35	2.3	35.2	259	93	6.24	6.21	-0.03
		S 3	14 30 30.98										11.02	10.72	0.30
15	BMT	EPU0	14 30 26.50					29	2.2	36.8	48	93	6.54	6.75	-0.04
		S 4	14 30 31.82										11.86	11.26	0.60
15	GMN	EPU0	14 30 26.59					21	1.9	37.8	314	93	6.63	6.91	-0.13
		S 0	14 30 31.60										11.64	11.55	0.08
15	YMT1	EPU1	14 30 27.65					34	2.3	44.5	121	92	7.69	7.78	-0.22
		S 1	14 30 33.43										13.47	13.53	-0.06
15	YMT5	EPD1	14 30 28.18					24	2.1	48.2	112	92	8.22	8.42	-0.21
		S 2	14 30 34.28										14.32	14.40	-0.09
15	FMT	EPU1	14 30 28.13					23	2.0	49.4	162	92	8.17	8.56	-0.15
		S 2	14 30 34.16										14.20	14.23	-0.03
15	YMT4	EPU0	14 30 28.75					22	2.0	49.9	116	92	8.79	8.68	0.00
		S 1	14 30 35.23										15.27	15.03	0.24
15	YMT2	EP 1	14 30 28.81					29	2.2	52.0	126	92	8.85	8.99	-0.22
		S 0	14 30 35.52										15.56	15.51	0.05
15	YMT6	EPD4	14 30 29.75					25	2.1	54.0	115	92	9.79	9.32	0.37
		S 0	14 30 36.14										16.18	16.10	0.08
15	MCA	EP 1	14 30 29.27					22	2.0	54.4	212	92	9.31	9.21	0.01
		S 0	14 30 36.03										16.07	15.89	0.18
15	YMT3	EPU2	14 30 29.41					32	2.3	57.3	122	92	9.45	9.84	-0.34
		S 0	14 30 36.85										16.89	16.74	0.14
15	EPN	EPD0	14 30 30.37					26	2.2	58.6	73	92	10.41	10.31	0.04
		S 4	14 30 38.59										18.63	17.73	0.90
15	CDH1	EPU4	14 30 31.21						61.0	112	92		11.25	10.51	0.83
15	BGB	EPC1	14 30 31.16					22	2.0	64.7	92	91	11.20	11.19	0.09
		S 0	14 30 38.97										19.01	18.99	0.01
15	CTS	EP 0	14 30 31.61					22	2.1	69.0	17	91	11.65	11.93	-0.11
		S 0	14 30 40.18										20.22	20.11	0.11
15	LSM	EPU0	14 30 31.98					27	2.2	70.5	120	91	12.02	12.02	-0.02
		S 1	14 30 40.50										20.54	20.58	-0.04
15	SDH	EPU1	14 30 31.93					20	2.0	71.8	130	91	11.97	12.21	-0.20
		S 4	14 30 41.35										21.39	20.81	0.57
15	LGP	EPU1	14 30 32.63					26	2.2	73.8	108	91	12.67	12.66	0.08
		S 4	14 30 42.64										22.08	21.52	0.56
15	AMR	EP 2	14 30 34.54						85.3	150	90		14.58	14.18	0.39
15	KRNA	EPU1	14 30 35.52					24	2.2	91.0	34	90	15.56	15.09	0.39
		S 4	14 30 46.20										26.24	25.93	0.31

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15	GWV	EP 0	14 30 36.74						100.4	165	90	16.78	16.63	0.22	
15	TNP	EPU2	14 30 39.39						115.6	348	90	19.43	19.09	0.07	
15	QCS	EPU4	14 30 40.49						120.8	50	90	20.53	19.94	0.62	
15	QSM	EP 4	14 30 40.98						122.0	176	90	21.02	20.13	0.79	
15	HCR	EPU4	14 30 43.97						137.9	19	90	24.01	22.72	1.38	

NOV H = 8 4 26.73 UTC RMS = 0.09 NO = 13 FREE DEPTH SOLUTION  
 16 LAT = 37.512 N ERX = 0.7 ERH = 0.8 AVFM = 2.8 W = C  
 LONG = 114.566 W ERY = 0.3 GAP = 278 AVXM = WS = b  
 DEPTH = 5.68 KM ERZ = 2.9 NM = QD = D HIGHLAND PEAK

16	DLM	IPU0	8 4 30.67						53	2.6	18.5	304	103	3.94	3.72	-0.03
		S 4	8 4 32.46											5.73	6.79	-1.06
16	NPN	EPD0	8 4 33.45						46	2.6	36.3	296	96	6.72	6.57	-0.06
		S 4	8 4 37.73											11.00	11.59	-0.59
16	PRN	IPD2	8 4 34.51						68	3.0	44.3	255	94	7.78	7.83	-0.17
		S 4	8 4 39.68											12.95	13.59	-0.64
16	SRG	EPU0	8 4 37.45						61	2.9	60.4	313	93	10.72	10.48	0.02
		S 0	8 4 44.94											18.21	18.29	-0.08
16	MTI	EPU2	8 4 38.17						42	2.6	65.0	286	93	11.44	11.20	0.27
		S 2	8 4 45.97											19.24	19.10	0.14
16	EPR	EPU0	8 4 38.26						51	2.8	66.9	235	93	11.53	11.46	0.09
		S 0	8 4 46.19											19.46	19.56	-0.10
16	WRN	EPU4	8 4 45.27						43	2.8	104.1	300	92	18.54	17.62	0.88
		S 4	8 4 57.51											30.78	30.19	0.59
16	GMR	EPU0	8 4 44.93						42	2.8	108.5	260	92	18.20	18.28	0.01
		S 4	8 4 58.25											31.52	31.10	0.42
16	QCS	EPU4	8 4 48.04						39	2.7	122.6	283	91	21.31	20.65	0.69
		S 4	8 5 1.54											34.81	35.25	-0.44
16	SHRG	EPD4	8 4 47.57						35	2.7	123.4	205	91	20.84	20.74	0.69
		S 4	8 5 2.05											35.32	34.45	0.87
16	GLR	EPD1	8 4 49.05						33	2.6	133.1	255	91	22.32	22.27	0.12
		S 4	8 5 6.01											39.28	37.95	1.32
16	BLT	EPU0	8 4 49.79						29	2.5	137.6	269	91	23.06	23.09	0.10
		S 4	8 5 7.34											40.61	39.26	1.35
16	SPRG	EPU3	8 4 50.32						39	2.8	143.0	231	90	23.59	23.55	0.07
		S 4	8 5 8.75											42.02	40.22	1.80
16	BGB	EPD4	8 4 52.06								156.4	250	90	25.33	25.73	-0.32
		S 4	8 5 13.80											47.07	43.87	3.20
16	KRNA	EPD4	8 4 52.92						41	2.9	162.1	279	90	26.19	26.66	-0.54
		S 4	8 5 13.64											46.91	45.71	1.20
16	HCR	EPD4	8 4 55.84						42	3.0	182.9	296	52	29.11	29.38	-0.18
		S 4	8 5 19.50											52.77	50.08	2.69

NOV H = 3 18 8.14 UTC RMS = 0.09 NO = 7 FREE DEPTH SOLUTION  
 17 LAT = 37.520 N ERX = 1.1 ERH = 1.3 AVFM = 1.8 W = C  
 LONG = 114.610 W ERY = 0.7 GAP = 283 AVXM = WS = B  
 DEPTH = 9.05 KM ERZ = 1.9 NM = WD = D HIGHLAND PEAK

17	DLM	IPU0	3 18 11.71						13	1.4	14.9	310	121	3.57	3.38	-0.06
		S 0	3 18 14.35											6.21	6.22	0.00
17	NPN	EPD0	3 18 14.53						20	1.8	32.5	297	103	6.39	6.04	0.14
		S 0	3 18 18.83											10.69	10.69	0.00
17	PRN	EPD0	3 18 15.56						23	2.0	40.9	252	100	7.42	7.34	-0.04
		S 3	3 18 20.63											12.49	12.76	-0.27
17	SRG	EPU4	3 18 21.11						17	1.8	57.0	315	97	12.97	9.98	2.77
		S 4	3 18 26.32											18.18	17.44	0.74
17	MTI	EPD4	3 18 19.44								61.1	287	97	11.30	10.61	0.72
		S 4	3 18 26.82											18.68	18.09	0.59
17	EPR	EPD4	3 18 20.14								64.3	233	96	12.00	11.08	0.94
		S 0	3 18 27.12											18.98	18.91	0.07
17	WRN	EPU4	3 18 26.63								100.3	301	94	18.49	17.01	1.44
		S 4	3 18 38.05											29.91	29.16	0.76
17	GMR	EP 4	3 18 26.75								104.9	259	94	18.61	17.72	0.99
17	SHRG	EP 4	3 18 33.87								122.7	203	93	25.73	20.62	5.70
		S 4	3 18 43.98											35.84	34.25	1.59

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
NOV H =	0	45	15.71	UTC	RMS =	0.10	NU =	10	FREE DEPTH SOLUTION						
18 LAT =	37.203	N			ERX =	0.9	ERH =	1.2	AVFM =	1.9	Q =	C			
LONG =	114.760	W			ERY =	0.7	GAP =	262	AVXM =		QS =	B	DELAMAR MOUNTAINS		
DEPTH =	9.27	KM			EPZ =	3.8	NM =				QD =	D			
.....															
18	PRN	EPD0	0 45 22.18					26	2.1	34.3	311	103	6.47	6.30	0.05
		S 1	0 45 26.48										10.77	10.97	-0.20
18	EPR	IPD0	0 45 22.47					23	2.0	38.0	264	102	6.76	6.86	-0.08
		S 1	0 45 27.47										11.76	11.70	0.06
18	DLM	EPD0	0 45 23.94					15	1.6	44.8	2	100	8.23	8.03	-0.05
		S 0	0 45 29.90										14.19	14.16	0.03
18	NPN	EPD0	0 45 25.16					17	1.8	52.3	343	98	9.45	9.23	0.01
		S 1	0 45 31.98										16.27	16.14	0.13
18	MTI	EP 4	0 45 28.19					18	1.9	69.5	319	96	12.48	11.97	0.54
		S 4	0 45 37.42										21.71	20.41	1.30
18	SRG	EP 2	0 45 29.46					21	2.1	80.2	340	95	13.75	13.73	-0.20
		S 4	0 45 40.44										24.73	23.85	0.88
18	SHRG	EPD4	0 45 30.99					14	1.7	85.1	204	95	15.28	14.52	1.35
		S 4	0 45 39.96										24.25	23.83	0.42
18	GMR	EPD0	0 45 31.16					17	1.9	90.8	279	94	15.45	15.44	0.12
		S 4	0 45 43.87										28.16	26.22	1.94
18	WRN	EP 4	0 45 36.19						113.3	320	93		20.48	19.11	1.33
		S 4	0 45 50.96										35.25	32.75	2.50
.....															
NOV H =	18	39	43.66	UTC	RMS =	0.10	NO =	12	FREE DEPTH SOLUTION						
18 LAT =	37.236	N			ERX =	0.2	ERH =	0.5	AVFM =	1.7	Q =	C			
LONG =	115.408	W			ERY =	0.5	GAP =	178	AVXM =		QS =	B	ALAMU		
DEPTH =	9.21	KM			EPZ =	2.0	NM =				QD =	C			
.....															
18	EPR	EPD0	18 39 47.92					25	2.0	21.0	111	112	4.26	4.20	0.08
		S 1	18 39 50.71										7.05	7.15	-0.10
18	GMR	EPD1	18 39 49.70					14	1.5	34.0	289	103	6.04	6.27	-0.13
		S 1	18 39 54.32										10.66	10.56	0.10
18	PRN	EPD0	18 39 50.44					19	1.8	37.0	59	102	6.78	6.74	-0.08
		S 1	18 39 55.26										11.60	11.72	-0.13
18	MTI	EPD0	18 39 52.59					18	1.8	50.4	14	98	8.93	8.89	0.07
		S 1	18 39 58.93										15.27	15.15	0.12
18	NPN	EPD0	18 39 54.79					12	1.5	62.3	42	97	11.13	10.84	0.08
		S 4	18 40 1.48										17.82	18.89	-1.07
18	DLM	EP 4	18 39 56.77						72.1	55	96		13.11	12.44	0.42
		S 1	18 40 5.48										21.82	21.70	0.12
18	WRN	EPD0	18 39 58.10					15	1.8	84.3	349	95	14.44	14.42	-0.02
		S 1	18 40 8.25										24.59	24.73	-0.14
.....															
NOV H =	10	10	43.89	UTC	RMS =	0.11	NO =	16	FREE DEPTH SOLUTION						
19 LAT =	37.307	N			ERX =	0.3	ERH =	0.5	AVFM =	3.7	Q =	C			
LONG =	115.076	W			ERY =	0.4	GAP =	171	AVXM =		QS =	B	ALAMU		
DEPTH =	5.33	KM			EPZ =	4.7	NM =				QD =	C			
.....															
19	PRN	IPD3	10 10 45.80					149	3.5	11.4	12	112	1.91	2.55	-0.76
19	EPR	IPD0	10 10 47.43							18.2	213	102	3.54	3.57	-0.01
19	NPN	IPD4	10 10 50.91							40.3	18	94	7.02	7.22	-0.41
		S 0	10 10 56.61										12.72	12.70	0.02
19	MTI	EPD2	10 10 51.51							44.6	337	94	7.62	7.88	-0.23
		S 1	10 10 57.40										13.51	13.43	0.08
19	DLM	EPD1	10 10 51.94							44.7	42	94	8.05	7.94	-0.14
		S 2	10 10 58.11										14.22	14.00	0.22
19	TPU	EPD0	10 10 54.35							60.5	303	93	10.46	10.55	0.05
		S 0	10 11 1.59										17.70	17.80	-0.10
19	GMR	EPD0	10 10 54.50							61.7	273	93	10.61	10.67	0.04
		S 0	10 11 2.03										18.14	18.07	0.07
19	SRG	EPD0	10 10 55.06							63.9	1	92	11.17	11.04	-0.09
		S 0	10 11 3.07										19.18	19.26	-0.08
19	GLR	EPD4	10 10 58.66							84.3	262	92	14.77	14.32	0.52
		S 4	10 11 8.64										24.75	24.37	0.39

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. 19	WRH	EPD2	10 10 58.56						87.5	329	92	14.67	14.91	-0.28	.
.		S 4	10 11 11.83									27.94	25.57	2.37	.
. 19	SHRG	EPD4	10 10 59.31						89.3	185	92	15.42	15.17	0.84	.
. 19	GCS	EPD2	10 10 59.35						90.2	305	92	15.46	15.38	0.11	.
. 19	SPRG	EPD4	10 10 60.16						94.2	224	92	16.27	15.89	0.41	.
. 19	BLT	EPD2	10 10 60.11						94.7	282	92	16.22	16.09	0.27	.
. 19	HGB	EPD4	10 10 62.25						106.5	254	91	18.36	17.99	0.45	.
. 19	LOP	EPD4	10 10 63.04						109.2	243	91	19.15	18.43	0.80	.
. 19	SSP	EP 4	10 10 63.19						110.0	247	91	19.30	18.63	0.75	.
.		S 4	10 11 16.77									32.88	31.73	1.15	.
. 19	EPN	EPD4	10 10 63.39						111.1	265	91	19.50	18.85	0.59	.
. 19	LSM	EPD4	10 10 65.31						123.7	239	91	21.42	20.68	0.72	.
.		S 4	10 11 21.30									37.41	35.39	2.02	.
. 19	KHNA	EPD4	10 10 64.55						124.9	293	91	20.66	21.05	-0.46	.
. 19	YMT6	EPD4	10 10 66.20						128.1	247	90	22.31	21.13	1.09	.
. 19	YMT5	EPD4	10 10 66.58						130.6	250	90	22.69	21.53	1.16	.
. 19	YMT4	EPD4	10 10 66.86						131.6	248	90	22.97	21.70	1.16	.
. 19	YMT3	EPD4	10 10 66.67				126	3.8	132.0	244	90	22.78	21.77	1.06	.
. 19	SUH	EPD4	10 10 67.47						134.2	237	90	23.58	22.12	1.50	.
. 19	YMT2	EP 4	10 10 67.88						138.0	245	90	23.99	22.74	1.17	.
. 19	YMT1	EPD4	10 10 67.93						138.5	249	90	24.04	22.83	1.08	.
. 19	BMT	EPD4	10 10 68.05						139.2	269	90	24.16	22.93	1.40	.
.		S 4	10 11 26.60									42.71	38.92	3.79	.
. 19	CTS	EPD4	10 10 69.35						150.9	285	90	25.46	24.84	0.79	.
. 19	NMN	EPD4	10 10 70.53						156.7	261	90	26.64	25.77	0.92	.
. 19	HCR	EPD0	10 10 70.07						157.9	311	90	26.18	25.97	0.30	.
. 19	AMR	EP 4	10 10 71.35						160.3	231	52	27.46	26.22	1.23	.
. 19	FMT	EPD4	10 10 71.97						168.6	244	52	28.08	27.36	0.96	.
. 19	SGV	IPD4	10 10 73.08						177.6	258	52	29.19	28.63	0.65	.
. 19	GRV	LP 4	10 10 75.13						189.1	229	52	31.24	30.09	1.23	.
. 19	GMN	EP 4	10 10 75.62						193.6	270	52	31.73	30.81	1.07	.
. 19	GVN	EPD4	10 10 76.34						204.0	260	52	32.45	31.86	0.54	.
. 19	TGF	EPD4	10 10 76.49						207.6	294	52	32.60	32.56	-0.23	.
. 19	MCA	EPD4	10 10 77.19						209.4	250	52	33.30	32.41	0.81	.
. 19	MGM	EPD4	10 10 78.85						214.8	274	52	34.96	33.52	1.53	.

NOV H = 19 56 31.33 UTC RMS = 0.12 NO = 11 FREE DEPTH SOLUTION  
 . 19 LAT = 36.660 N ERX = 0.4 ERH = 0.6 AVFM = 2.1 W = R  
 . LONG = 116.600 W ERY = 0.4 GAP = 154 AVXM = WS = A CHLORIDE CLIFF  
 . DEPTH = 14.25 KM ERZ = 1.8 NM = WD = C

. 19	YMT2	EP 3	19 56 34.74				28	2.1	17.4	37	129	3.41	4.05	-0.72	.
.		S 4	19 56 40.01									8.68	7.06	1.61	.
. 19	YMT3	EPD4	19 56 33.21				43	2.5	22.0	50	122	1.88	4.66	-2.74	.
.		S 1	19 56 39.33									8.00	7.89	0.11	.
. 19	YMT1	EPD3	19 56 35.27				36	2.3	22.4	17	122	3.94	4.74	-0.94	.
.		S 0	19 56 39.68									8.35	8.33	0.01	.
. 19	YMT4	EP 3	19 56 37.48				18	1.7	26.4	30	117	6.15	5.33	0.70	.
.		S 2	19 56 40.46									9.13	9.31	-0.18	.
. 19	YMT6	EP 4	19 56 34.81				20	1.8	28.1	38	116	3.48	5.56	-2.17	.
.		S 4	19 56 40.50									9.17	9.66	-0.49	.
. 19	YMT5	EP 4	19 56 38.44				16	1.6	29.5	26	115	7.11	5.81	1.30	.
.		S 0	19 56 41.34									10.01	9.93	0.08	.
. 19	LSM	EPD4	19 56 35.95				64	2.8	30.6	73	114	4.62	5.91	-1.32	.
.		S 4	19 56 42.24									10.91	10.14	0.76	.
. 19	AMR	EP 0	19 56 37.28				18	1.7	31.2	159	113	5.95	5.92	0.02	.
.		S 4	19 56 45.56									14.23	10.14	4.09	.
. 19	LOP	EP 2	19 56 39.27				34	2.3	44.2	61	107	7.94	8.12	-0.10	.
.		S 4	19 56 42.70									11.37	13.74	-2.38	.
. 19	SSP	EP 4	19 56 38.35				29	2.2	45.0	49	106	7.02	8.32	-1.22	.
.		S 4	19 56 43.47									12.14	14.09	-1.95	.
. 19	NMN	EPD4	19 56 39.76				23	2.0	50.6	337	104	8.43	9.08	-0.60	.
.		S 1	19 56 46.94									15.61	15.43	0.17	.
. 19	JUN	EPD4	19 56 42.75				12	1.5	50.8	119	104	11.42	8.98	2.42	.
.		S 4	19 56 48.96									17.63	15.38	2.25	.
. 19	SGV	EPD3	19 56 41.06				28	2.2	52.5	313	104	9.73	9.39	0.42	.
.		S 0	19 56 47.15									15.82	15.91	-0.09	.

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. 19	RGB	EP04	19 56 39.97				29	2.2	53.5	38	104	8.64	9.58	-0.87	.
.		S 4	19 56 44.77									13.44	16.25	-2.81	.
. 19	MCY	EP04	19 56 44.07						57.0	90	103	12.74	10.04	2.77	.
.		S 4	19 56 50.04									18.71	17.04	1.67	.
. 19	SPRG	EP 4	19 56 46.33						70.8	87	100	15.00	12.23	2.80	.
.		S 4	19 56 54.07									22.74	20.86	1.88	.
. 19	GLR	EP 2	19 56 45.33						79.2	41	99	14.00	13.63	0.44	.
.		S 4	19 56 48.72									17.39	23.18	-5.80	.
. 19	GMR	EP 4	19 56 47.84						105.1	45	97	16.51	17.82	-1.21	.
.		S 4	19 56 53.05									21.72	30.30	-8.58	.
.....															
. NOV H = 21 44 20.42 UTC RMS = 0.15 NO = 31 FREE DEPTH SOLUTION .															
. 19 LAT = 37.058 N ERX = 0.2 ERH = 0.3 AVFM = 2.4 W = B .															
. LONG = 116.953 W ERY = 0.3 GAP = 70 AVXM = W S = B THIRSTY CANYON .															
. DEPTH = 6.66 KM ERZ = 2.0 NM = W D = B .															
. 19	SGV	IPD0	21 44 22.66				45	2.5	11.1	220	120	2.24	2.62	-0.28	.
.		S 4	21 44 23.81									3.39	4.32	-0.93	.
. 19	GVN	EPD0	21 44 26.70				42	2.5	35.2	260	98	6.28	6.25	-0.03	1.20
.		S 2	21 44 31.53									11.11	10.79	0.32	.
. 19	BMT	EPD0	21 44 26.97				36	2.4	37.0	48	97	6.55	6.81	-0.09	1.40
.		S 0	21 44 31.85									11.43	11.36	0.07	.
. 19	GMN	EPD1	21 44 27.07				30	2.2	38.2	315	97	6.65	7.00	-0.20	.
.		S 0	21 44 32.28									11.86	11.72	0.14	.
. 19	YMT1	IPU1	21 44 28.09				47	2.6	44.1	121	96	7.67	7.75	-0.21	1.50
.		S 4	21 44 33.56									13.14	13.47	-0.33	.
. 19	YMT5	IPD0	21 44 28.63				30	2.3	47.8	112	95	8.21	8.40	-0.18	0.70
.		S 1	21 44 34.78									14.36	14.36	0.01	.
. 19	TMD	EP 0	21 44 29.02				28	2.2	49.3	235	95	8.60	8.80	0.10	.
.		S 4	21 44 34.60									14.18	14.54	-0.36	.
. 19	YMT2	EP 2	21 44 29.58				27	2.2	51.6	126	95	9.16	8.95	0.14	1.40
.		S 4	21 44 36.85									16.43	15.43	1.00	.
. 19	YMT6	EPD1	21 44 29.87				35	2.4	53.6	114	95	9.45	9.29	0.07	0.50
.		S 1	21 44 36.74									16.32	16.04	0.29	.
. 19	EPN	EPD1	21 44 30.83				29	2.3	58.6	73	94	10.41	10.32	0.03	.
.		S 1	21 44 38.47									18.05	17.75	0.30	.
. 19	CDH1	EPD4	21 44 31.62						60.7	111	94	11.20	10.48	0.82	.
.		S 4	21 44 39.05									18.63	17.75	0.88	.
. 19	MGM	EPD0	21 44 31.47						64.3	311	94	11.05	11.21	-0.07	.
.		S 2	21 44 39.87									19.45	19.02	0.43	.
. 19	RGB	IPD1	21 44 31.61				29	2.3	64.6	92	94	11.19	11.18	0.09	.
.		S 0	21 44 39.51									19.09	18.99	0.10	.
. 19	SSP	EPD0	21 44 32.04				30	2.3	67.0	103	94	11.62	11.65	0.05	0.90
.		S 4	21 44 41.48									21.06	19.79	1.28	.
. 19	CTS	EPD0	21 44 32.05				30	2.3	69.4	17	93	11.63	12.00	-0.20	.
.		S 3	21 44 40.44									20.02	20.23	-0.20	.
. 19	LSM	EP 4	21 44 31.71				40	2.6	70.2	120	93	11.29	11.97	-0.69	1.40
.		S 1	21 44 40.96									20.54	20.50	0.05	.
. 19	SDH	EPD0	21 44 32.41				23	2.1	71.4	130	93	11.99	12.15	-0.12	.
.		S 4	21 44 40.95									20.53	20.71	-0.18	.
. 19	LUP	EPD1	21 44 33.06				37	2.5	73.5	108	93	12.64	12.62	0.10	1.40
.		S 4	21 44 42.90									22.48	21.45	1.03	.
. 19	GLP	EPD4	21 44 33.18						84.6	79	93	12.76	14.37	-1.54	.
.		S 4	21 44 44.40									23.98	24.46	-0.46	.
. 19	AMR	EP 0	21 44 34.63						84.9	150	93	14.21	14.27	-0.07	.
.		S 4	21 44 45.77									25.35	24.42	0.93	.
. 19	BLT	EPD0	21 44 35.11						87.4	57	93	14.69	14.91	-0.08	.
. 19	KRNA	EP 0	21 44 35.98				26	2.3	91.3	34	93	15.56	15.57	-0.07	.
.		S 0	21 44 47.24									26.82	26.74	0.08	.
. 19	HCR	EP 2	21 44 43.72				28	2.5	138.2	19	92	23.30	23.22	0.17	.
.		S 4	21 45 2.38									41.96	39.55	2.41	.

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.....															
NOV	H = 21	40 53.48	UTC	RMS =	0.13	NO = 31									FREE DEPTH SOLUTION
19	LAT =	37.054 N		ERX =	0.2	ERH =	0.3	AVFM =	3.8	U = B					
	LONG =	116.952 W		ERY =	0.2	GAP =	60	AVXM =		US = A					THIRSTY CANYON
	DEPTH =	2.57 KM		ERZ =	0.9	NM =				WD = C					
.....															
19	SGV	IPD	21 40 55.77					199	3.8	10.8	222	100	2.29	2.38	0.00
19	NMN	EPD	21 40 55.85							12.2	76	99	2.37	2.59	-0.18
19	GVN	IPU	21 40 59.88					185	3.8	35.3	260	74	6.40	6.24	0.10
19	BMT	IPD	21 40 60.22					170	3.7	37.2	47	74	6.74	6.83	0.08
19	GMN	IPU	21 40 60.35					185	3.8	38.6	315	74	6.87	7.05	-0.03
19	WCT	IPU	21 40 60.48							41.0	135	74	7.00	7.20	-0.04
19	FMT	IPU	21 40 61.70							48.5	161	74	8.22	8.42	0.04
19	TMO	EPD	21 40 62.10							49.2	236	74	8.62	8.77	0.15
19	YMT6	IPU	21 40 62.73							53.3	114	74	9.25	9.23	-0.08
19	MCA	EPX4	21 40 61.70							53.8	213	74	8.22	9.13	-0.99
19	YMT3	IPU	21 40 63.15					140	3.6	56.4	122	74	9.67	9.71	0.01
19	EPN	IPD	21 40 64.00					190	3.9	58.6	72	74	10.52	10.32	0.14
19	CDH1	IPD4	21 40 64.35							60.4	111	74	10.87	10.43	0.54
19	BGB	IPD	21 40 64.80							64.5	92	74	11.32	11.16	0.24
19	MGM	IPU	21 40 64.68					140	3.6	64.7	312	74	11.20	11.28	0.01
19	LCH	IPU4	21 40 67.23					150	3.7	65.0	288	74	13.75	11.20	2.63
19	SSP	IPU	21 40 65.16					180	3.9	66.8	102	74	11.68	11.61	0.15
19	CTS	IPD	21 40 65.25					130	3.6	69.8	17	74	11.77	12.06	-0.12
19	LSM	IPU	21 40 65.29					180	3.9	69.8	120	74	11.81	11.91	-0.12
19	SDH	IPU	21 40 65.12					180	3.9	71.1	130	74	11.64	12.10	-0.42
19	LUP	EPU	21 40 65.91					180	3.9	73.2	108	74	12.43	12.58	-0.07
19	MZP	IPD4	21 40 59.93					165	3.8	81.3	332	74	6.45	14.03	-7.34
19	AMR	IPU	21 40 67.88							84.4	150	74	14.40	14.20	0.19
19	GLR	IPD4	21 40 67.21							84.6	79	74	13.73	14.37	-0.57
19	BLT	IPD	21 40 68.23							87.5	57	74	14.75	14.93	-0.05
19	KRNA	IPD	21 40 69.18							91.5	34	74	15.70	15.61	0.02
19	MCY	IPU	21 40 69.86					180	4.0	98.4	116	74	16.38	16.58	-0.12
19	JON	IPU	21 40 70.48							102.0	132	74	17.00	17.09	-0.11
19	GMR	IPD1	21 40 71.99							109.3	74	74	18.51	18.42	0.19
19	TNP	IPU	21 40 73.13							116.5	348	74	19.65	19.66	-0.24
19	GCS	IPD1	21 40 74.00					120	3.7	121.1	49	74	20.52	20.41	0.14
19	NUP	IPU	21 40 74.20							125.2	145	74	20.72	20.88	-0.07
19	TPU	IPD	21 40 75.22							130.7	62	74	21.74	21.96	-0.09
19	HCR	IPD	21 40 76.08					125	3.8	138.6	19	74	22.60	23.28	-0.59
19	MTI	EPD	21 40 80.00							163.9	65	49	26.52	27.15	-0.60
19	PRN	IPD	21 40 81.60							173.3	77	49	28.12	28.34	-0.34
.....															
NOV	H = 21	56 52.48	UTC	RMS =	0.15	NO = 30									FREE DEPTH SOLUTION
19	LAT =	37.063 N		ERX =	0.2	ERH =	0.3	AVFM =	2.1	U = B					
	LONG =	116.951 W		ERY =	0.2	GAP =	69	AVXM =		US = A					THIRSTY CANYON
	DEPTH =	9.27 KM		ERZ =	0.9	NM =				WD = B					
.....															
19	SGV	IPD2	21 56 54.82					34	2.2	11.6	219	128	2.34	2.93	-0.50
	S 0		21 56 57.29										4.81	4.86	-0.05
19	GVN	EPD0	21 56 58.79					28	2.1	35.5	259	102	6.31	6.37	-0.13
	S 2		21 57 3.56										11.08	11.00	0.07
19	BMT	EPD2	21 56 59.34					16	1.7	36.5	48	102	6.86	6.80	0.23
	S 2		21 57 4.06										11.58	11.34	0.24
19	GMN	EPU1	21 56 59.16							38.0	314	102	6.68	7.04	-0.21
	S 0		21 57 4.22										11.74	11.78	-0.04
19	YMT1	EP 2	21 56 60.19					38	2.4	44.2	122	100	7.71	7.82	-0.24
	S 0		21 57 6.06										13.58	13.60	-0.02
19	YMT5	EPU2	21 56 60.73					26	2.1	47.9	112	99	8.25	8.45	-0.20
	S 1		21 57 6.81										14.33	14.45	-0.12
19	TMO	EP 2	21 56 61.44							49.8	235	99	8.96	8.93	0.32
	S 0		21 57 7.46										14.98	14.76	0.21
19	EPN	EPD0	21 56 62.87					21	2.0	58.2	73	97	10.39	10.30	0.02
	S 3		21 57 10.57										18.09	17.72	0.37
19	CDH1	EP 4	21 56 63.67							60.7	112	97	11.19	10.52	0.77
19	BGB	IPD0	21 56 63.65							64.3	93	96	11.17	11.18	0.07
	S 2		21 57 11.75										19.27	18.97	0.29

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	1UBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 19	SSP	EPD1	21 56 64.20					22 2.0	66.9	103	96	11.72	11.67	0.13	
.		S 0	21 57 12.28									19.80	19.82	-0.02	
. 19	CIS	EPD0	21 56 64.13					20 2.0	68.8	17	96	11.65	11.94	-0.12	
.		S 2	21 57 12.73									20.25	20.12	0.13	
. 19	LSM	EPD1	21 56 64.38					27 2.2	70.3	121	96	11.90	12.01	-0.14	1.10
.		S 2	21 57 12.85									20.37	20.58	-0.21	
. 19	SDH	EPD1	21 56 64.52					23 2.1	71.6	130	96	12.04	12.22	-0.14	
.		S 0	21 57 13.40									20.92	20.82	0.10	
. 19	LUP	EPD1	21 56 65.16					27 2.2	73.5	108	96	12.68	12.65	0.11	
.		S 4	21 57 14.59									22.11	21.49	0.62	
. 19	AMR	EPD0	21 56 66.89						85.2	150	95	14.41	14.35	0.04	
. 19	KRNA	EP 0	21 56 68.03						90.7	34	94	15.55	15.50	-0.02	
.		S 0	21 57 19.10									26.62	26.62	0.00	
. 19	HCR	EP 4	21 56 76.14						137.7	19	93	23.66	23.14	0.61	

NOV H = 22 1 54.59 UTC RMS = 0.10 NO = 31 FREE DEPTH SOLUTION  
 . 19 LAT = 37.060 N ERX = 0.1 ERH = 0.2 AVFM = 2.5 W = B  
 . LONG = 116.955 W ERY = 0.2 GAP = 69 AVXM = W = A THIRSTY CANYON  
 . DEPTH = 5.76 KM ERZ = 0.8 NM = W = B

. 19	SGV	IPD1	22 1 56.92					56 2.7	11.1	218	115	2.33	2.56	-0.13	
.		S 0	22 1 58.83									4.24	4.22	0.03	
. 19	GVN	IPD1	22 1 60.91					42 2.5	35.1	259	96	6.32	6.21	0.05	1.10
.		S 4	22 2 5.71									11.12	10.73	0.39	
. 19	BMT	EPD0	22 1 61.14					46 2.6	37.0	48	96	6.55	6.80	-0.07	1.70
.		S 2	22 2 6.14									11.55	11.34	0.22	
. 19	GMN	IPU0	22 1 61.34					40 2.5	38.0	315	95	6.75	6.95	-0.05	0.90
.		S 2	22 2 6.10									11.51	11.63	-0.12	
. 19	YMT1	IFU1	22 1 62.33					68 3.0	44.3	121	94	7.74	7.77	-0.16	
.		S 2	22 2 7.85									13.26	13.51	-0.25	
. 19	YMT5	IPU1	22 1 62.88					43 2.6	48.1	112	94	8.29	8.42	-0.12	
.		S 0	22 2 9.05									14.46	14.39	0.07	
. 19	TMO	EP 0	22 1 63.18						49.3	235	94	8.59	8.79	0.11	
.		S 4	22 2 9.72									15.13	14.51	0.62	
. 19	EPN	IPD0	22 1 65.11					38 2.5	58.7	73	93	10.52	10.33	0.14	1.00
.		S 2	22 2 12.27									17.68	17.76	-0.08	
. 19	CDH1	EPD4	22 1 65.91						60.9	111	93	11.32	10.50	0.92	
.		S 4	22 2 13.66									19.07	17.79	1.28	
. 19	MGM	EPD0	22 1 65.70					30 2.3	64.0	311	93	11.11	11.16	0.04	
.		S 4	22 2 14.20									19.61	18.93	0.68	
. 19	BGR	IPD1	22 1 65.87					39 2.5	64.8	92	93	11.28	11.20	0.16	0.30
.		S 2	22 2 13.80									19.21	19.02	0.19	
. 19	SSP	EPD0	22 1 66.30					40 2.6	67.2	103	93	11.71	11.67	0.12	0.80
.		S 4	22 2 14.97									20.38	19.82	0.56	
. 19	CIS	EPD0	22 1 66.32					30 2.3	69.3	17	93	11.73	11.97	-0.07	0.10
.		S 0	22 2 14.71									20.12	20.18	-0.06	
. 19	LSM	EPD0	22 1 66.54					45 2.7	70.4	120	93	11.95	11.99	-0.06	1.60
.		S 0	22 2 15.19									20.60	20.55	0.06	
. 19	SDH	EPD1	22 1 66.62					24 2.1	71.6	130	92	12.03	12.18	-0.11	0.70
.		S 1	22 2 15.22									20.63	20.77	-0.13	
. 19	LUP	EPD0	22 1 67.29					44 2.7	73.7	108	92	12.70	12.65	0.14	1.20
.		S 4	22 2 17.03									22.44	21.49	0.95	
. 19	GLR	IPU0	22 1 68.83					33 2.5	84.7	79	92	14.24	14.39	-0.08	
. 19	AMR	EPD0	22 1 68.87					30 2.4	85.1	150	92	14.28	14.30	-0.03	
.		S 4	22 2 20.10									25.51	24.47	1.04	
. 19	BLT	EPD1	22 1 69.53					40 2.6	87.4	58	92	14.94	14.91	0.17	
.		S 4	22 2 22.95									26.36	25.27	3.09	
. 19	KRNA	EPD0	22 1 70.26					35 2.5	91.2	34	92	15.67	15.56	0.05	0.20
.		S 2	22 2 21.52									26.93	26.72	0.22	
. 19	HCR	EPD0	22 1 77.76					32 2.6	138.1	19	91	23.17	23.21	0.05	
.		S 4	22 2 34.46									39.87	39.54	0.33	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
NOV H = 23	1	42.55	UTC	RMS =	0.09	NO = 18									FREE DEPTH SOLUTION
19 LAT =	37.061	N		ERX =	0.2	ERH =	0.3	AVFM =	1.9	W = B					
LONG =	116.957	W		ERY =	0.2	GAP =	68	AVXM =		WS = A					THIRSTY CANYON
DEPTH =	6.03	KM		ERZ =	1.0	NM =				WD = B					
.....															
19	SGV	IPD1	23 1	44.90				32	2.2	11.1	217	117	2.35	2.57	-0.13
		S 0	23 1	46.80									4.25	4.24	0.01
19	GVN	EPD1	23 1	48.83				21	1.9	34.9	259	96	6.28	6.19	0.03
		S 4	23 1	53.62									11.07	10.69	0.38
19	BMT	EP 0	23 1	49.14				14	1.6	37.1	48	96	6.59	6.82	-0.06
		S 1	23 1	54.03									11.48	11.37	0.11
19	GMN	EPD0	23 1	49.28				18	1.8	37.8	315	96	6.73	6.92	-0.04
		S 1	23 1	54.26									11.71	11.58	0.13
19	YMT1	EP 4	23 1	50.09				31	2.3	44.5	121	95	7.54	7.81	-0.40
		S 1	23 1	56.27									13.72	13.58	0.14
19	YMT5	EP 0	23 1	50.90				18	1.8	48.3	112	94	8.35	8.46	-0.11
		S 0	23 1	57.10									14.55	14.46	0.09
19	MGM	EP 4	23 1	53.13						63.8	311	93	10.58	11.13	-0.46
19	BGF	EPD4	23 1	53.11				15	1.7	65.0	92	93	10.56	11.24	-0.60
		S 0	23 2	1.68									19.13	19.08	0.05
19	CTS	EPD0	23 1	54.28				19	1.9	69.3	17	93	11.73	11.97	-0.07
		S 0	23 2	2.64									20.09	20.18	-0.09
19	LSM	EPD2	23 1	54.84				23	2.1	70.6	120	93	12.29	12.03	0.24
		S 0	23 2	3.23									20.68	20.61	0.07
19	LUP	EP 1	23 1	55.01				26	2.2	73.9	108	93	12.46	12.69	-0.15
		S 4	23 2	4.71									22.16	21.56	0.60
19	GLR	EPD1	23 1	56.75						84.9	80	92	14.20	14.42	-0.15
19	AMR	EP 0	23 1	56.89						85.3	150	92	14.34	14.33	0.00
.....															
.....															
NOV H = 1	31	45.35	UTC	RMS =	0.08	NO = 17									FREE DEPTH SOLUTION
20 LAT =	36.527	N		ERX =	0.2	ERH =	0.3	AVFM =	1.7	W = B					
LONG =	115.817	W		ERY =	0.2	GAP =	134	AVXM =		WS = A					MERCURY
DEPTH =	8.73	KM		ERZ =	1.1	NM =				WD = C					
.....															
20	SPRG	EPD0	1 31	48.99				13	1.4	18.6	2	113	3.64	3.79	-0.12
		S 0	1 31	51.81									6.46	6.43	0.04
20	MCY	EPD0	1 31	49.21				24	2.0	19.8	319	112	3.86	3.99	-0.04
		S 0	1 31	52.01									6.66	6.68	-0.01
20	JUN	EPD1	1 31	50.31				13	1.5	27.4	249	105	4.96	5.07	-0.12
		S 0	1 31	53.99									6.64	6.69	-0.05
20	APK	EPD0	1 31	51.22				16	1.6	31.7	137	104	5.87	6.12	0.02
		S 4	1 31	55.97									10.62	10.01	0.62
20	LSM	EP 4	1 31	53.07				18	1.8	47.1	300	98	7.72	8.27	-0.57
		S 2	1 31	59.31									13.96	14.18	-0.22
20	LUP	EPD1	1 31	53.68				20	1.9	48.0	319	98	8.33	8.52	-0.11
		S 1	1 31	59.91									14.56	14.43	0.13
20	SDH	EPD0	1 31	53.69				11	1.4	48.4	286	98	8.34	8.46	-0.08
		S 1	1 31	59.93									14.58	14.41	0.18
20	NUP	EPD1	1 31	54.62				13	1.5	53.5	214	97	9.27	9.26	0.10
		S 0	1 32	1.02									15.67	15.69	-0.01
20	SHRG	EPD4	1 31	56.12				14	1.6	59.4	92	96	10.77	10.35	1.01
		S 4	1 32	3.35									16.00	16.69	1.32
20	BGB	EP 1	1 31	57.11				13	1.6	67.5	327	96	11.76	11.69	0.16
		S 0	1 32	5.30									19.95	19.84	0.11
20	YMT1	EP 4	1 31	58.75				20	2.0	73.2	300	95	13.40	12.49	0.79
		S 4	1 32	7.26									21.91	21.57	0.34
20	GWV	EP 4	1 31	64.75						85.4	244	94	19.40	14.54	4.95
		S 2	1 32	10.40									25.05	24.72	0.34
20	FMT	EP 4	1 31	61.01						87.0	278	94	15.66	14.69	1.21
		S 4	1 32	10.53									25.18	24.71	0.48
.....															



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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RFS (SEC)	REMARKS
.....															
NOV H = 4 10 51.45 UTC				RMS =	0.07	NO =	7					FREE DEPTH SOLUTION			
20 LAT = 36.263 N				ERX =	0.8	ERH =	1.3	AVFM =	1.4	W =	D				
LONG = 115.417 W				ERY =	1.1	GAP =	246	AVXM =		WS =	C	LAS VEGAS			
DEPTH = 9.08 KM				ERZ =	9.0	NM =				WD =	D				
.....															
20	SHRG	EPD0	4 10 57.41						35.7	41	102	5.96	6.55	0.00	
20	SPRG	EPD2	4 10 61.67					14 1.6	59.4	324	97	10.22	10.27	-0.02	
20	JUN	EPD0	4 10 62.33					14 1.6	64.6	288	96	10.88	11.05	-0.18	
20	MCY	EPD0	4 10 62.75					19 1.9	65.9	312	96	11.30	11.34	0.04	
20	NOF	EPD4	4 10 62.42					8 1.2	67.8	257	96	10.97	11.58	-0.52	
20	SDH	EPD0	4 10 67.06					4 0.7	92.8	297	94	15.61	15.65	0.00	
20	LSM	EPD0	4 10 67.32						93.2	305	94	15.87	15.72	0.13	
20	LDP	EPD0	4 10 67.63					8 1.3	93.9	314	94	16.18	15.96	0.30	
.....															
NOV H = 4 20 58.67 UTC				RMS =	0.10	NO =	8					FREE DEPTH SOLUTION			
20 LAT = 37.668 N				ERX =	0.3	ERH =	0.4	AVFM =	1.6	W =	C				
LONG = 115.049 W				ERY =	0.3	GAP =	104	AVXM =		WS =	C	HIKU			
DEPTH = 1.08 KM				ERZ =	123.9	NM =				WD =	C				
.....															
20	NPN	EPD0	4 20 60.70					19 1.7	10.0	100	90	2.03	1.90	-0.07	
	S 1		4 21 2.37									3.70	3.60	0.10	
20	MTI	EPD1	4 20 61.91					14 1.5	19.8	273	90	3.24	3.55	-0.28	
	S 0		4 21 4.79									6.13	6.02	0.10	
20	SRG	EPD0	4 20 63.07					24 2.0	23.8	356	90	4.40	4.24	-0.05	
	S 4		4 21 6.94									8.28	7.62	0.66	
20	DLF	EPD1	4 20 63.92					9 1.1	28.2	104	90	5.26	4.99	0.02	
	S 2		4 21 7.65									8.98	8.96	0.03	
20	PRN	EPD4	4 20 64.15					20 1.8	29.0	180	90	5.48	5.12	0.25	
	S 0		4 21 7.68									9.02	8.95	0.06	
20	WRN	EPD4	4 20 69.11						58.9	306	74	10.44	10.33	0.07	
20	GMR	EPD4	4 20 70.98						73.9	240	74	12.31	12.73	-0.32	
.....															
NOV H = 6 42 16.94 UTC				RMS =	0.14	NO =	12					FREE DEPTH SOLUTION			
20 LAT = 37.851 N				ERX =	1.0	ERH =	1.2	AVFM =	2.4	W =	C				
LONG = 114.536 W				ERY =	0.7	GAP =	244	AVXM =		WS =	B	HIGHLAND PEAK			
DEPTH = 7.26 KM				ERZ =	1.5	NM =				WD =	D				
.....															
20	DLF	IPD0	6 42 23.28					29 2.2	32.5	213	100	6.34	6.02	0.08	
	S 0		6 42 27.61									10.67	10.71	-0.04	
20	NPN	IPD2	6 42 24.34					26 2.1	41.6	238	97	7.40	7.45	-0.26	
	S 4		6 42 29.18									12.24	13.10	-0.86	
20	SRG	EPD4	6 42 24.99					42 2.5	46.9	274	96	8.05	8.31	-0.48	
	S 4		6 42 29.67									12.73	14.58	-1.85	
20	PRN	EPD2	6 42 28.83					41 2.6	67.0	223	94	11.89	11.52	0.25	
	S 0		6 42 36.93									19.99	19.91	0.08	
20	MTI	EP 1	6 42 28.37					27 2.2	67.7	253	94	11.43	11.65	-0.19	
	S 4		6 42 34.62									17.68	19.87	-2.19	
20	WRN	EPD4	6 42 33.32					31 2.4	93.7	279	93	16.38	15.92	0.42	
	S 1		6 42 44.35									27.41	27.29	0.12	
20	FPR	EPD4	6 42 33.88					36 2.6	95.1	217	93	16.94	16.05	0.91	
	S 4		6 42 45.45									28.51	27.42	1.10	
20	TPU	EPD1	6 42 34.20						101.9	254	93	17.26	17.28	0.12	4.00
	S 4		6 42 47.40									30.46	29.32	1.15	
20	GMR	EP 4	6 42 36.73					29 2.5	123.2	242	92	19.79	20.69	-0.80	
	S 1		6 42 52.01									35.07	35.21	-0.14	
20	BLT	EP 1	6 42 41.10					27 2.5	145.8	254	92	24.16	24.40	-0.11	
	S 4		6 42 59.18									42.24	41.50	0.74	
20	GLR	EP 1	6 42 41.61					24 2.4	149.6	241	52	24.67	24.82	-0.08	
	S 2		6 42 59.56									42.62	42.33	0.29	
20	SHRG	EP 4	6 42 45.25						159.2	200	52	28.31	26.10	2.80	
	S 4		6 43 4.73									47.79	43.62	4.17	
20	KRNA	EP 4	6 42 44.24					27 2.6	162.8	266	52	27.30	26.63	0.60	
	S 4		6 43 4.45									47.51	45.66	1.85	
20	HCR	EP 4	6 42 45.99						172.1	284	52	29.05	27.84	1.30	
	S 4		6 43 6.21									49.27	47.46	1.81	
20	EPN	EPD4	6 42 46.89						173.1	246	52	29.95	28.03	1.86	
	S 4		6 43 6.76									49.82	48.04	1.79	
.....															

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
.....																
NOV H = 9 6 3.87 UTC RMS = 0.14 NO = 29												FREE DEPTH SOLUTION				
20 LAT = 37.064 N ERX = 0.2 ERH = 0.3 AVFM = 1.8 W = B																
LONG = 116.955 W ERY = 0.2 GAP = 63 AVXM = WS = A												THIRSTY CANYON				
DEPTH = 4.54 KM ERZ = 1.3 NM = WD = C																
.....																
20	SGV	IPD0	9 6 6.12					27	2.0	11.4	217	107	2.25	2.53	-0.19	
		S 0	9 6 8.02										4.15	4.18	-0.03	
20	GVN	EPD0	9 6 10.12					18	1.8	35.2	259	93	6.25	6.21	-0.02	
		S 1	9 6 14.84										10.97	10.72	0.25	
20	BMT	EPD0	9 6 10.35					19	1.8	36.7	48	93	6.48	6.74	-0.09	
		S 0	9 6 15.23										11.36	11.23	0.13	
20	GMN	EPD0	9 6 10.50					14	1.6	37.7	314	93	6.63	6.89	-0.11	
		S 1	9 6 15.51										11.64	11.52	0.12	
20	YMT1	EPD1	9 6 11.53					23	2.0	44.6	122	92	7.66	7.80	-0.27	
		S 2	9 6 17.71										13.84	13.56	0.28	
20	YMT5	EP 1	9 6 12.08					18	1.8	48.2	112	92	8.21	8.44	-0.23	
		S 1	9 6 18.29										14.42	14.43	-0.01	
20	FMT	EPD1	9 6 12.02							49.6	162	92	8.15	8.59	-0.20	
		S 4	9 6 19.20										15.33	14.27	1.06	
20	YMT4	EP 4	9 6 12.17					20	1.9	49.9	116	92	8.30	8.69	-0.50	
		S 0	9 6 19.06										15.19	15.05	0.14	
20	YMT2	EP 0	9 6 12.79					21	2.0	52.1	126	92	8.92	9.01	-0.17	
		S 4	9 6 19.90										16.03	15.54	0.49	
20	YMT6	EP 4	9 6 13.73					16	1.7	54.0	115	92	9.86	9.34	0.43	
		S 4	9 6 20.72										16.85	16.12	0.73	
20	MCA	EPD4	9 6 13.97					12	1.5	54.5	212	92	10.10	9.23	0.79	
		S 0	9 6 19.97										16.10	15.92	0.18	
20	YMT3	EP 1	9 6 13.45					21	2.0	57.4	122	92	9.58	9.86	-0.23	
		S 0	9 6 20.72										16.85	16.77	0.08	
20	EPN	EPD1	9 6 14.28							58.6	73	92	10.41	10.31	0.05	
		S 0	9 6 21.74										17.87	17.72	0.15	
20	CDH1	EP 4	9 6 15.13							61.1	112	92	11.26	10.53	0.83	
20	BGR	EPD1	9 6 15.09					14	1.6	64.7	93	92	11.22	11.19	0.11	
		S 0	9 6 22.90										19.03	19.00	0.03	
20	SSP	EPD2	9 6 15.65					18	1.9	67.3	103	92	11.78	11.69	0.17	
		S 3	9 6 23.54										19.67	19.85	-0.18	
20	CTS	EPD0	9 6 15.46					14	1.7	68.9	17	91	11.59	11.90	-0.14	
		S 1	9 6 23.88										20.01	20.07	-0.05	
20	LSM	EP 3	9 6 16.13					18	1.9	70.6	121	91	12.26	12.03	0.21	
		S 0	9 6 24.47										20.60	20.61	-0.01	
20	LUP	EPD2	9 6 16.58					18	1.9	73.8	108	91	12.71	12.67	0.12	
		S 4	9 6 25.97										22.10	21.53	0.57	
20	KRNA	EP 4	9 6 20.13							90.9	34	90	16.26	15.08	1.12	
		S 1	9 6 30.67										26.80	25.90	0.90	
.....																
NOV H = 1 50 56.41 UTC RMS = 0.10 NO = 8												FREE DEPTH SOLUTION				
21 LAT = 36.444 N ERX = 0.6 ERH = 0.8 AVFM = 1.7 W = B																
LONG = 117.018 W ERY = 0.6 GAP = 112 AVXM = WS = A												PANAMINT BUTTE				
DEPTH = 16.34 KM ERZ = 1.6 NM = WD = B																
.....																
21	PGE	IP 0	1 50 60.02					19	1.7	11.4	202	146	3.61	3.82	0.01	
21	FMT	EP 0	1 50 62.15					10	1.2	30.5	45	117	5.74	6.03	-0.05	
21	MCA	EPD0	1 50 62.64					13	1.5	32.7	314	115	6.23	6.19	-0.04	
21	GWV	EP 2	1 50 64.02					25	2.1	42.3	132	110	7.61	7.89	-0.20	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 21	AMR	EP 0	1 50 65.17				10	1.3	49.1	96	107	8.76	8.76	-0.01	
. 21	WCT	EP 3	1 50 65.93				14	1.6	52.2	42	106	9.52	9.31	0.38	
. 21	TMO	EP 4	1 50 66.58				15	1.7	53.2	319	106	10.17	9.72	0.76	
. 21	QSM	EP 1	1 50 66.27				17	1.8	54.7	166	105	9.86	9.64	0.14	
. 21	SGV	IP 4	1 50 67.48				21	2.0	59.7	359	104	11.07	10.60	0.56	
. 21	SDH	EP 4	1 50 68.19				12	1.5	64.9	70	103	11.78	11.32	0.50	
. 21	GVN	EP 0	1 50 68.27				19	1.9	68.4	335	102	11.86	11.83	-0.03	

NOV H = 4 44 19.77 UTC RMS = 0.15 NU = 35 FREE DEPTH SOLUTION  
 . 21 LAT = 37.065 N ERX = 0.2 ERH = 0.2 AVFM = 1.9 Q = C  
 . LONG = 116.956 W ERY = 0.2 GAP = 63 AVXM = Q = B THIRSTY CANYON  
 . DEPTH = 1.99 KM ERZ = 0.6 NM = Q = C

. 21	SGV	IPD0	4 44 22.08				25	2.0	11.5	216	96	2.31	2.47	-0.07	
.		S 1	4 44 23.87									4.10	4.08	0.03	
. 21	NMN	EPD0	4 44 22.03				21	1.8	12.4	82	96	2.26	2.61	-0.29	
.		S 1	4 44 24.02									4.25	4.37	-0.12	
. 21	GVN	EPD0	4 44 25.99				22	1.9	35.1	259	74	6.22	6.24	-0.08	
.		S 1	4 44 30.79									11.02	10.78	0.25	
. 21	BMT	EPD0	4 44 26.25				18	1.8	36.7	49	74	6.48	6.77	-0.12	
.		S 1	4 44 31.46									11.69	11.29	0.40	
. 21	GMN	EP 0	4 44 26.41				14	1.6	37.6	314	74	6.64	6.91	-0.11	
.		S 2	4 44 31.43									11.66	11.55	0.11	
. 21	YMT1	EPD1	4 44 27.46				31	2.3	44.7	122	74	7.69	7.86	-0.29	
.		S 0	4 44 33.57									13.80	13.66	0.15	
. 21	YMT5	EP 1	4 44 28.04				19	1.9	48.3	112	74	8.27	8.49	-0.22	
.		S 3	4 44 34.11									14.34	14.52	-0.18	
. 21	FMT	EPD1	4 44 27.94				15	1.7	49.7	162	74	8.17	8.65	-0.23	
.		S 2	4 44 34.09									14.32	14.38	-0.05	
. 21	YMT4	EP 0	4 44 28.50				20	1.9	50.0	116	74	8.73	8.75	-0.12	
.		S 0	4 44 35.06									15.29	15.15	0.14	
. 21	YMT2	EP 4	4 44 30.02				18	1.8	52.2	126	74	10.25	9.07	1.11	
.		S 4	4 44 36.18									16.41	15.64	0.78	
. 21	YMT6	EP 4	4 44 29.48				18	1.8	54.1	115	74	9.71	9.39	0.23	
.		S 4	4 44 36.61									16.84	16.22	0.63	
. 21	MCA	EP 4	4 44 30.00				14	1.6	54.5	212	74	10.23	9.28	0.87	
.		S 0	4 44 35.85									16.08	16.01	0.08	
. 21	YMT3	EP 3	4 44 29.83				23	2.1	57.5	122	74	10.06	9.92	0.20	
.		S 4	4 44 37.21									17.44	16.87	0.58	
. 21	EPN	EP 0	4 44 30.16						58.6	74	74	10.39	10.35	-0.02	
. 21	CDH1	EP 4	4 44 31.00						61.2	112	74	11.23	10.58	0.75	
. 21	BGB	EPD1	4 44 30.97				15	1.7	64.8	93	74	11.20	11.24	0.04	
.		S 4	4 44 38.64									18.87	19.09	-0.21	
. 21	SSP	EPD2	4 44 31.56				21	2.0	67.4	103	74	11.79	11.74	0.13	
.		S 2	4 44 39.63									19.86	19.94	-0.08	
. 21	CTS	EPD1	4 44 31.37				18	1.9	68.8	17	74	11.60	11.93	-0.15	
.		S 4	4 44 39.39									19.62	20.11	-0.48	
. 21	LSM	EP 0	4 44 31.79				21	2.0	70.7	121	74	12.02	12.09	-0.08	
.		S 2	4 44 40.35									20.58	20.70	-0.12	
. 21	SDH	EPD1	4 44 31.76						72.1	130	74	11.99	12.29	-0.25	
.		S 1	4 44 41.03									21.26	20.94	0.33	
. 21	LOP	EPD1	4 44 32.49				24	2.1	73.9	108	74	12.72	12.72	0.08	
.		S 2	4 44 41.86									22.09	21.62	0.47	
. 21	GLR	EPD1	4 44 33.82						84.7	80	74	14.05	14.42	-0.30	
. 21	KRNA	EP 1	4 44 35.40						90.8	34	74	15.63	15.52	0.04	
.		S 1	4 44 46.81									27.04	26.67	0.38	
. 21	GWV	EPD2	4 44 36.91						100.7	165	74	17.14	17.04	0.18	
. 21	QSM	EPD4	4 44 40.79						122.2	176	74	21.02	20.36	0.57	

NOV H = 18 44 19.81 UTC RMS = 0.12 NU = 47 FREE DEPTH SOLUTION  
 . 21 LAT = 37.066 N ERX = 0.1 ERH = 0.2 AVFM = 2.1 Q = B  
 . LONG = 116.949 W ERY = 0.1 GAP = 63 AVXM = Q = A THIRSTY CANYON  
 . DEPTH = 0.13 KM ERZ = 0.3 NM = Q = C

. 21	NMN	IPD0	18 44 22.34				25	2.0	11.8	82	40	2.53	2.68	-0.10	
.		S 1	18 44 24.49									4.68	4.49	0.19	

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. 21	SGV	IPD0	18 44 22.45					36 2.3	11.9	218	40	2.64	2.72	0.01	
.		S 4	18 44 23.98									4.17	4.49	-0.32	
. 21	GVN	EPD0	18 44 26.36					24 2.0	35.7	258	38	6.55	6.56	-0.07	
.		S 1	18 44 31.17									11.36	11.32	0.03	
. 21	BMT	EPD0	18 44 26.56					28 2.2	36.2	48	38	6.75	6.92	0.00	
.		S 4	18 44 31.97									12.16	11.54	0.62	
. 21	GMN	EPD1	18 44 26.69					24 2.0	37.9	313	38	6.88	7.18	-0.15	
.		S 0	18 44 31.82									12.01	12.03	-0.02	
. 21	WCT	IPU1	18 44 27.05					26 2.1	41.8	137	38	7.24	7.59	-0.19	
.		S 0	18 44 32.56									12.75	12.70	0.05	
. 21	YMT1	IPU1	18 44 27.81					33 2.3	44.3	122	38	8.00	8.02	-0.15	
.		S 1	18 44 33.68									13.87	13.94	-0.07	
. 21	YMT5	IPD0	18 44 28.38					28 2.2	47.9	113	38	8.57	8.65	-0.08	
.		S 2	18 44 34.43									14.62	14.79	-0.17	
. 21	YMT4	EPD0	18 44 28.92					26 2.1	49.6	117	38	9.11	8.91	0.09	
.		S 3	18 44 35.66									15.85	15.42	0.43	
. 21	FMT	EPD1	18 44 28.27					23 2.0	49.7	162	38	8.46	8.87	-0.17	
.		S 4	18 44 34.13									14.32	14.75	-0.43	
. 21	TMD	EPD0	18 44 28.67						50.1	235	38	8.86	9.17	-0.01	
.		S 0	18 44 35.11									15.30	15.17	0.13	
. 21	YMT2	EP 2	18 44 28.88					30 2.3	51.9	127	38	9.07	9.23	-0.25	
.		S 4	18 44 36.23									16.42	15.93	0.49	
. 21	YMT6	EPD1	18 44 29.60					23 2.0	53.7	115	38	9.79	9.55	0.15	
.		S 4	18 44 36.97									17.16	16.49	0.67	
. 21	MCA	EP 1	18 44 29.20					21 2.0	55.0	213	38	9.39	9.58	-0.27	
.		S 0	18 44 36.27									16.46	16.51	-0.05	
. 21	YMT3	EPD2	18 44 29.61					28 2.2	57.1	123	38	9.80	10.08	-0.23	
.		S 4	18 44 37.60									17.79	17.15	0.64	
. 21	EPN	EPD0	18 44 30.47					24 2.1	58.0	74	38	10.66	10.49	0.11	
.		S 1	18 44 38.11									18.30	18.03	0.27	
. 21	CDH1	EPD4	18 44 31.35						60.7	112	38	11.54	10.74	0.90	
.		S 4	18 44 39.10									19.29	18.19	1.10	
. 21	MGM	EP 0	18 44 31.18					20 2.0	63.9	311	38	11.37	11.41	0.05	
.		S 3	18 44 39.67									19.66	19.36	0.50	
. 21	BGB	EPD2	18 44 31.31					22 2.0	64.2	93	38	11.50	11.38	0.20	
.		S 1	18 44 39.11									19.30	19.32	-0.02	
. 21	LCH	EP 2	18 44 31.39					22 2.0	64.7	287	38	11.58	11.40	0.25	
.		S 4	18 44 39.67									19.86	19.36	0.49	
. 21	SSP	EPD1	18 44 31.79					24 2.1	66.9	104	38	11.98	11.89	0.17	
.		S 4	18 44 40.99									21.18	20.19	0.99	
. 21	CTS	EPD1	18 44 31.63					20 2.0	68.5	17	38	11.82	12.11	-0.12	
.		S 2	18 44 39.97									20.16	20.41	-0.26	
. 21	LSM	EPD0	18 44 32.03					26 2.2	70.3	121	38	12.22	12.25	-0.05	
.		S 1	18 44 40.77									20.96	20.98	-0.02	
. 21	SDH	EPD1	18 44 32.13					19 1.9	71.7	131	38	12.32	12.46	-0.10	
.		S 3	18 44 41.46									21.65	21.24	0.41	
. 21	LGP	EPD1	18 44 32.73					23 2.1	73.5	109	38	12.92	12.87	0.12	
.		S 4	18 44 42.20									22.39	21.88	0.51	
. 21	PGE	EP 1	18 44 33.76					23 2.1	80.2	187	38	13.95	14.01	0.16	
.		S 4	18 44 42.35									22.54	23.58	-1.04	
. 21	BLT	EPD0	18 44 34.77						86.7	58	38	14.96	15.05	0.04	
. 21	KRNA	EPD0	18 44 35.54						90.4	34	38	15.73	15.68	-0.02	
.		S 0	18 44 46.76									26.95	26.94	0.01	
. 21	MCY	EP 1	18 44 36.82						98.8	117	38	17.01	16.90	0.18	
.		S 4	18 44 49.77									29.96	28.77	1.19	
. 21	GWV	EPD0	18 44 37.00					22 2.2	100.7	166	38	17.19	17.27	0.00	
.		S 4	18 44 49.78									29.97	29.40	0.57	
. 21	JUN	EP 4	18 44 37.86						102.6	133	38	18.05	17.46	0.58	
.		S 4	18 44 50.81									31.00	29.87	1.13	
. 21	OSM	EP 2	18 44 40.65						122.3	177	38	20.84	20.61	0.14	
.		S 2	18 44 55.02									35.21	35.39	-0.18	

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NOV H = 22 29 16.74 UTC RMS = 0.06 NU = 8 21 LAT = 37.541 N ERX = 0.5 ERH = 0.6 AVFM = 2.3 J = C LONG = 114.658 W ERY = 0.3 GAP = 245 AVXM = JS = A DEPTH = 1.73 KM ERZ = 1.1 NM = WD = D															
													FREE DEPTH SOLUTION		
													HIGHLAND PEAK		
21	DLM	IP 0	22 29 19.29					27 2.0	10.2	315	95	2.55	2.28	0.02	
		S 0	22 29 21.02									4.28	4.33	-0.05	
21	NPN	IPU0	22 29 22.11					27 2.1	27.6	297	74	5.37	5.20	-0.04	
		S 0	22 29 26.00									9.26	9.24	0.02	
21	PRN	EPD4	22 29 23.12					38 2.4	37.7	247	74	6.38	6.80	-0.54	
		S 0	22 29 28.56									11.82	11.83	-0.01	
21	SRG	EP 0	22 29 26.13					34 2.4	52.4	316	74	9.39	9.22	-0.05	
		S 4	22 29 33.32									16.58	16.15	0.43	
21	MTI	EP 4	22 29 26.98						56.4	286	74	10.24	9.84	0.43	
		S 4	22 29 34.79									18.05	16.78	1.27	
21	TPU	EP 4	22 29 32.16					25 2.2	87.8	275	74	15.42	15.04	0.52	
		S 4	22 29 43.03									26.29	25.49	0.80	
21	WRN	EP 4	22 29 34.00					25 2.3	95.5	301	74	17.26	16.25	0.97	
21	GMR	EP 2	22 29 34.01					25 2.3	101.2	257	74	17.27	17.15	0.22	
		S 4	22 29 46.87									30.13	29.16	0.98	
21	SHRG	EP 0	22 29 36.89					26 2.4	123.2	201	74	20.15	20.74	0.00	
		S 4	22 29 52.39									35.65	34.46	1.19	
NOV H = 23 59 49.92 UTC RMS = 0.13 NO = 44 21 LAT = 37.061 N ERX = 0.1 ERH = 0.2 AVFM = 2.2 J = B LONG = 116.952 W ERY = 0.2 GAP = 63 AVXM = JS = A DEPTH = 5.71 KM ERZ = 0.8 NM = WD = C															
													FREE DEPTH SOLUTION		
													THIRSTY CANYON		
21	SGV	IPD1	23 59 52.29					28 2.1	11.4	219	114	2.37	2.60	-0.14	
		S 0	23 59 54.18									4.26	4.29	-0.03	
21	NMN	IPD3	23 59 52.21					36 2.3	12.1	80	113	2.29	2.68	-0.33	
		S 2	23 59 54.59									4.67	4.49	0.18	
21	GVN	EPD0	23 59 56.25					30 2.2	35.4	259	96	6.33	6.27	0.01	
		S 4	24 0 1.01									11.09	10.82	0.28	
21	BMT	IPD1	23 59 56.35					32 2.3	36.7	48	96	6.43	6.74	-0.14	
		S 4	24 0 1.87									11.95	11.24	0.71	
21	GMN	IPU2	23 59 56.53					24 2.0	38.1	314	95	6.61	6.96	-0.20	
		S 0	24 0 1.66									11.74	11.65	0.09	
21	YMT1	IPU1	23 59 57.63						44.2	122	94	7.71	7.75	-0.16	
21	YMT5	IPD1	23 59 58.20					28 2.2	47.9	112	94	8.28	8.39	-0.10	
		S 0	24 0 4.38									14.46	14.34	0.12	
21	FMT	IPU0	23 59 58.19					23 2.0	49.3	162	94	8.27	8.54	-0.03	
		S 2	24 0 3.96									14.04	14.20	-0.15	
21	YMT4	EPU0	23 59 58.75						49.6	116	94	8.83	8.64	0.08	
		S 4	24 0 5.35									15.43	14.96	0.47	
21	TMO	EP 0	23 59 58.47						49.6	235	94	8.55	8.84	0.01	
		S 0	24 0 4.57									14.65	14.61	0.05	
21	MCA	EPD1	23 59 59.10					24 2.1	54.4	213	93	9.18	9.23	-0.13	
		S 2	24 0 6.10									16.18	15.92	0.26	
21	YMT3	EPU3	23 59 59.43					34 2.4	57.0	122	93	9.51	9.80	-0.24	
		S 4	24 0 7.41									17.49	16.67	0.82	
21	EPN	EPD0	23 59 60.32					30 2.3	58.3	73	93	10.40	10.27	0.07	
		S 0	24 0 7.72									17.80	17.67	0.13	
21	CDH1	EPU4	23 59 61.19						60.7	112	93	11.27	10.47	0.90	
		S 4	24 0 8.81									18.89	17.74	1.16	
21	MGM	EP 1	23 59 60.85					26 2.2	64.1	311	93	10.93	11.17	-0.15	
		S 1	24 0 9.07									19.15	18.95	0.20	
21	BGB	EPD1	23 59 61.14					27 2.2	64.5	92	93	11.22	11.16	0.15	
		S 0	24 0 8.80									18.88	18.94	-0.06	
21	CTS	EPD2	23 59 61.43					24 2.1	69.0	17	93	11.51	11.93	-0.25	
		S 2	24 0 9.80									19.88	20.11	-0.22	
21	LSM	EPD0	23 59 61.85					34 2.4	70.2	121	93	11.93	11.97	-0.06	
		S 1	24 0 10.61									20.69	20.50	0.19	
21	SDH	EPU1	23 59 61.93						71.6	130	92	12.01	12.17	-0.11	
		S 4	24 0 11.15									21.23	20.74	0.49	
21	LUP	EPD0	23 59 62.56					32 2.4	73.5	108	92	12.64	12.62	0.11	
		S 2	24 0 11.20									21.28	21.43	-0.15	

## 1981 3GB LOCAL-EVENT DATA REPORT

NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 21	GLR	pd2	23 59 63.99					23 2.1	84.4	80	92	14.07	14.34	-0.20	
.		S 2	24 0 14.07									24.15	24.40	-0.25	
. 21	AMR	EPD0	23 59 64.34						85.1	150	92	14.42	14.31	0.11	
. 21	BLT	EPD0	23 59 64.63						87.1	58	92	14.71	14.85	-0.01	
.		S 4	24 0 15.79									25.87	25.18	0.70	
. 21	KRNA	EPD1	23 59 65.36					25 2.2	90.9	34	92	15.44	15.50	-0.13	
.		S 3	24 0 16.91									26.99	26.63	0.37	
. 21	GWV	EPD2	23 59 67.09					22 2.2	100.3	165	92	17.17	16.94	0.31	
.		S 4	24 0 19.62									29.70	28.83	0.87	
. 21	QCS	EPD2	23 59 70.44						120.6	49	91	20.52	20.33	0.23	
.		S 1	24 0 24.70									34.78	34.71	0.07	
. 21	QSM	EPD1	23 59 70.38						121.9	176	91	20.46	20.28	0.10	
.		S 1	24 0 24.82									34.90	34.83	0.08	
. 21	HCR	EP 0	23 59 72.95						137.9	19	91	23.03	23.17	-0.04	
.		S 4	24 0 31.65									41.73	39.46	2.27	

NOV H = 12 50 12.29 UTC RMS = 0.10 NO = 7 FREE DEPTH SOLUTION  
 . 22 LAT = 37.146 N ERX = 0.5 ERH = 0.7 AVFM = 1.4 Q = B  
 . LONG = 117.522 W ERY = 0.6 GAP = 176 AVXM = QS = A MAGRUDER MOUNTAIN  
 . DEPTH = 1.57 KM ERZ = 1.9 NM = QD = C

. 22	LCH	IPU2	12 50 14.88					15 1.5	14.9	312	93	2.59	3.02	-0.35	
.		S 0	12 50 17.31									5.02	5.03	-0.01	
. 22	GVN	EPD0	12 50 16.56					14 1.5	22.6	135	92	4.27	4.21	0.00	
.		S 4	12 50 20.59									8.30	7.30	1.00	
. 22	GMN	EP 4	12 50 16.04					9 1.1	28.9	54	74	3.75	5.52	-1.62	
.		S 0	12 50 21.39									9.10	9.18	-0.08	
. 22	MGM	EP 4	12 50 15.21						32.9	4	74	2.92	6.15	-3.14	
.		S 4	12 50 23.02									10.73	10.36	0.37	
. 22	TMD	EP 4	12 50 21.20						39.1	165	74	8.91	7.19	2.02	
. 22	PPK	EP 0	12 50 20.59						46.2	312	74	8.30	8.26	0.03	
.		S 2	12 50 26.78									14.49	14.15	0.34	
. 22	SGV	EPD0	12 50 20.65					13 1.5	47.2	113	74	8.36	8.37	0.08	
.		S 3	12 50 27.11									14.82	14.16	0.66	

NOV H = 18 27 10.41 UTC RMS = 0.17 NO = 15 FREE DEPTH SOLUTION  
 . 22 LAT = 37.245 N ERX = 0.3 ERH = 0.5 AVFM = 1.9 Q = C  
 . LONG = 115.489 W ERY = 0.4 GAP = 143 AVXM = QS = B ALAMO  
 . DEPTH = 12.78 KM ERZ = 1.9 NM = QD = C

. 22	GMR	EPD3	18 27 15.06					21 1.9	26.8	291	114	4.65	5.36	-0.61	
.		S 1	18 27 19.18									8.77	8.99	-0.22	
. 22	EPR	EPD2	18 27 15.64					26 2.1	28.2	108	113	5.27	5.50	-0.22	
.		S 2	18 27 20.03									9.62	9.37	0.24	
. 22	TPU	EPD4	18 27 18.35					16 1.7	42.3	340	105	7.94	7.80	0.27	
.		S 0	18 27 23.43									13.02	13.10	-0.09	
. 22	PRN	IPD0	18 27 18.40					23 2.0	42.9	65	105	7.99	7.80	0.07	
.		S 3	18 27 23.66									13.25	13.54	-0.30	
. 22	GLR	EPD4	18 27 19.17					15 1.6	47.2	264	104	8.76	8.46	0.36	
.		S 1	18 27 24.82									14.41	14.35	0.05	
. 22	MTI	EPD1	18 27 19.43					20 1.9	51.5	22	102	9.02	9.18	-0.13	
.		S 1	18 27 26.25									15.84	15.64	0.20	
. 22	BGB	EP 4	18 27 22.71					15 1.7	69.6	251	99	12.30	12.09	0.28	
.		S 1	18 27 31.02									20.61	20.55	0.06	
. 22	EPN	EP 3	18 27 23.06					21 2.0	74.1	267	98	12.65	12.95	-0.36	
.		S 1	18 27 32.79									22.38	22.25	0.13	
. 22	WRN	EP 2	18 27 24.76					17 1.9	82.2	354	98	14.35	14.13	0.17	
.		S 0	18 27 34.69									24.28	24.24	0.04	

NOV H = 22 23 48.73 UTC RMS = 0.07 NO = 8 FREE DEPTH SOLUTION  
 . 22 LAT = 36.669 N ERX = 0.3 ERH = 0.4 AVFM = 1.4 Q = B  
 . LONG = 116.326 W ERY = 0.2 GAP = 128 AVXM = QS = A LATHROP WELLS  
 . DEPTH = 2.60 KM ERZ = 0.5 NM = QD = B

. 22	SDH	EPD0	22 23 49.62					11 1.2	2.8	202	133	0.89	1.01	-0.08	
.		S 0	22 23 50.42									1.69	1.66	0.03	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
22	LSM	EPD4	22 23 50.13				18	1.7	9.2	31	102	1.40	2.02	-0.64	
		S 0	22 23 52.21									3.48	3.49	-0.01	
22	YMT3	EPD0	22 23 51.80				19	1.7	15.1	330	97	3.07	2.99	0.13	
		S 4	22 23 55.16									6.43	5.03	1.40	
22	YMT2	EP 4	22 23 53.01				9	1.1	19.1	313	74	4.28	3.65	0.56	
		S 4	22 23 56.14									7.41	6.37	1.04	
22	YMT6	EPD0	22 23 52.93						22.1	342	74	4.20	4.16	-0.05	
		S 4	22 23 58.02									9.29	7.27	2.02	
22	LGP	EPD4	22 23 52.85				13	1.4	25.0	35	74	4.12	4.73	-0.53	
		S 0	22 23 56.61									7.88	7.95	-0.07	
22	WCT	EPD4	22 23 55.30						30.1	297	74	6.57	5.42	1.31	
		S 4	22 24 0.03									11.30	9.00	2.30	
22	JON	EPD0	22 23 54.49				10	1.2	32.4	142	74	5.76	5.77	-0.02	
		S 4	22 23 59.21									10.48	9.89	0.60	
22	MCY	EPD4	22 23 54.86				12	1.4	32.6	91	74	6.13	5.88	0.33	
		S 0	22 23 58.70									9.97	9.92	0.05	
22	BGB	EP 4	22 23 57.01						41.9	12	74	8.28	7.48	0.88	

NOV H = 22 51 26.24 UTC RMS = 0.08 NO = 10 FREE DEPTH SOLUTION  
 22 LAT = 37.325 N ERX = 0.3 ERH = 0.5 AVFM = 1.4 Q = C  
 LONG = 115.906 W ERY = 0.4 GAP = 145 AVXM = QS = B GROOM LAKE  
 DEPTH = 4.61 KM ERZ = 2.4 NM = QD = C

22	GMR	IP 0	22 51 28.81				10	1.2	12.0	85	106	2.57	2.63	0.03	
		S 4	22 51 30.09									3.85	4.33	-0.48	
22	GLR	IPD1	22 51 29.47				10	1.2	17.1	215	100	3.23	3.40	-0.11	
		S 1	22 51 31.78									5.54	5.70	-0.17	
22	TPU	EP 0	22 51 33.02				17	1.7	38.5	36	93	6.78	6.97	-0.05	
		S 4	22 51 39.03									12.79	11.68	1.11	
22	EPN	EP 4	22 51 33.07				19	1.8	39.0	252	93	6.83	7.12	-0.36	
		S 0	22 51 38.58									12.34	12.28	0.05	
22	BGB	EP 2	22 51 33.59				10	1.3	42.8	222	93	7.35	7.62	-0.20	
		S 0	22 51 39.16									12.92	12.90	0.02	
22	QCS	EP 4	22 51 35.48				4	0.5	49.1	359	92	9.24	8.69	0.57	
		S 4	22 51 42.01									15.77	14.81	0.96	
22	LGP	EP 3	22 51 35.82				18	1.8	57.2	204	92	9.58	9.96	-0.30	
		S 4	22 51 43.70									17.46	16.90	0.56	
22	BMT	EP 4	22 51 37.91				7	1.1	65.7	266	92	11.67	11.45	0.39	
		S 4	22 51 46.47									20.23	19.29	0.94	
22	LSM	EP 4	22 51 39.03				13	1.6	72.7	207	91	12.84	12.37	0.45	
		S 0	22 51 47.39									21.15	21.18	-0.03	
22	MCY	EP 1	22 51 38.96				13	1.6	73.8	184	91	12.72	12.58	0.22	
		S 4	22 51 48.14									21.90	21.38	0.52	
22	YMT3	EP 4	22 51 39.27				14	1.7	74.7	217	91	13.03	12.68	0.40	
		S 4	22 51 48.23									21.99	21.59	0.40	

NOV H = 1 0 26.77 UTC RMS = 0.09 NO = 43 FREE DEPTH SOLUTION  
 23 LAT = 37.064 N ERX = 0.1 ERH = 0.1 AVFM = 2.1 Q = B  
 LONG = 116.950 W ERY = 0.1 GAP = 63 AVXM = QS = A THIRSTY CANYON  
 DEPTH = 0.08 KM ERZ = 0.2 NM = QD = C

23	SGV	IPD0	1 0 29.43				30	2.1	11.8	219	40	2.66	2.69	0.06	
		S 0	1 0 31.26									4.49	4.45	0.04	
23	NMN	IPD0	1 0 29.40				18	1.7	11.9	81	40	2.63	2.70	-0.01	
		S 3	1 0 31.51									4.74	4.53	0.22	
23	GVN	EPD0	1 0 33.33				23	2.0	35.6	259	38	6.56	6.56	-0.06	
		S 2	1 0 38.17									11.40	11.32	0.08	
23	BMT	IPD1	1 0 33.42				39	2.4	36.4	48	38	6.65	6.96	-0.13	
		S 0	1 0 38.43									11.66	11.61	0.06	
23	GMN	IPD0	1 0 33.73						38.0	314	38	6.96	7.21	-0.10	
		S 0	1 0 38.78									12.01	12.08	-0.07	
23	WCT	IPU1	1 0 34.04				26	2.1	41.7	136	38	7.27	7.57	-0.14	
		S 1	1 0 39.59									12.82	12.68	0.15	
23	YMT5	IPU0	1 0 35.37				28	2.2	47.8	113	38	8.60	8.65	-0.04	
		S 1	1 0 41.48									14.71	14.79	-0.07	
23	FMT	IPU0	1 0 35.33				23	2.0	49.5	162	38	8.56	8.85	-0.04	
		S 4	1 0 41.93									15.16	14.72	0.45	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	T0BS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 23	YMT4	EPU0	1 0 35.71					22 2.0	49.5	116	38	8.94	8.91	-0.07	
.		S 0	1 0 42.23									15.46	15.42	0.05	
. 23	MCA	EPD0	1 0 36.29					19 1.9	54.8	213	38	9.52	9.55	-0.11	
.		S 0	1 0 43.23									16.46	16.47	-0.01	
. 23	YMT3	IPU1	1 0 36.59					36 2.4	57.0	123	38	9.82	10.07	-0.20	
.		S 0	1 0 43.90									17.13	17.14	-0.01	
. 23	EPN	IPD1	1 0 37.53					35 2.4	58.1	73	38	10.76	10.51	0.19	
.		S 0	1 0 44.84									18.07	18.07	0.00	
. 23	CDH1	EP 4	1 0 37.81					12 1.5	60.6	112	38	11.04	10.74	0.41	
.		S 0	1 0 44.92									16.15	16.19	-0.03	
. 23	MGM	EPD1	1 0 38.20					20 2.0	64.1	311	38	11.43	11.44	0.09	
.		S 1	1 0 46.29									19.52	19.41	0.12	
. 23	BGB	IPD2	1 0 38.31					27 2.2	64.3	93	38	11.54	11.39	0.23	
.		S 1	1 0 45.97									19.20	19.35	-0.14	
. 23	LCH	EP 2	1 0 38.32					22 2.0	64.8	287	38	11.55	11.43	0.20	
.		S 4	1 0 46.88									20.11	19.41	0.70	
. 23	SSP	EPU1	1 0 38.77					23 2.1	66.9	103	38	12.00	11.89	0.19	
.		S 4	1 0 46.54									19.77	20.20	-0.43	
. 23	CTS	EPD0	1 0 38.70					21 2.0	68.7	17	38	11.93	12.15	-0.05	
.		S 0	1 0 47.19									20.42	20.49	-0.07	
. 23	LSM	EPD0	1 0 39.03					28 2.3	70.2	121	38	12.26	12.24	0.00	
.		S 0	1 0 47.69									20.92	20.97	-0.05	
. 23	LOP	EP 2	1 0 39.72					33 2.4	73.4	108	38	12.95	12.88	0.16	
.		S 4	1 0 49.23									22.46	21.88	0.58	
. 23	GLR	IPU0	1 0 41.26					31 2.4	84.2	80	38	14.49	14.58	-0.01	
.		S 0	1 0 51.52									24.75	24.81	-0.06	
. 23	KRNA	EPU1	1 0 42.61					30 2.4	90.6	34	38	15.84	15.73	0.05	
.		S 4	1 0 53.30									26.53	27.01	-0.48	
. 23	GNV	EPD2	1 0 44.25					28 2.4	100.5	166	38	17.48	17.25	0.32	
.		S 2	1 0 56.01									29.24	29.36	-0.11	
. 23	GSM	EPU2	1 0 47.70					25 2.4	122.1	177	38	20.93	20.58	0.26	
.		S 0	1 1 2.08									35.31	35.35	-0.03	
. 23	HCR	EPU4	1 0 50.70					21 2.3	137.6	19	38	23.93	23.38	0.65	
.		S 2	1 1 6.76									39.99	39.82	0.18	

NOV H = 3 18 48.94 UTC RMS = 0.11 NO = 37 FREE DEPTH SOLUTION  
. 23 LAT = 37.055 N ERX = 0.1 ERH = 0.2 AVFM = 2.1 Q = B  
LONG = 116.960 W ERY = 0.2 GAP = 62 AVXM = US = A THIRSTY CANYON  
DEPTH = 2.38 KM ERZ = 0.6 NM = UD = C

. 23	SGV	IPD0	3 18 51.18					33 2.2	10.4	218	99	2.24	2.29	0.04	
.		S 4	3 18 52.52									3.58	3.77	-0.19	
. 23	NMN	IPD2	3 18 51.23					33 2.2	13.0	77	97	2.29	2.71	-0.38	
.		S 0	3 18 53.60									4.66	4.56	0.10	
. 23	GVN	IPU2	3 18 55.31					27 2.1	34.5	260	74	6.37	6.13	0.18	
.		S 4	3 19 0.00									11.06	10.58	0.48	
. 23	BMT	EPD1	3 18 55.51					27 2.1	37.8	48	74	6.57	6.92	-0.18	
.		S 4	3 19 0.88									11.94	11.55	0.39	
. 23	GMN	EPU0	3 18 55.71					22 1.9	38.1	316	74	6.77	6.97	-0.05	
.		S 4	3 19 1.46									12.52	11.66	0.86	
. 23	YMT5	IPU1	3 18 57.21					27 2.2	48.3	111	74	8.27	8.47	-0.20	
.		S 2	3 19 3.27									14.33	14.48	-0.15	
. 23	FMT	IPU1	3 18 57.07					22 2.0	48.8	161	74	8.13	8.48	-0.11	
.		S 1	3 19 3.27									14.33	14.09	0.24	
. 23	YMT4	EPU0	3 18 57.72					25 2.1	49.9	115	74	8.78	8.71	-0.04	
.		S 1	3 19 4.17									15.23	15.09	0.14	
. 23	MCA	EPU0	3 18 58.06					20 1.9	53.4	212	74	9.12	9.08	-0.04	
.		S 3	3 19 4.99									16.05	15.66	0.39	
. 23	YMT3	EPU3	3 18 58.42					27 2.2	57.2	121	74	9.48	9.86	-0.33	
.		S 0	3 19 5.83									16.89	16.77	0.12	
. 23	EPN	EPD0	3 18 59.45					25 2.1	59.3	73	74	10.51	10.45	0.00	
.		S 1	3 19 7.09									18.15	17.97	0.18	
. 23	CDH1	EP 4	3 18 60.25						61.1	111	74	11.31	10.56	0.85	
. 23	MGM	EPU0	3 18 59.99						64.1	312	74	11.05	11.19	-0.05	
.		S 3	3 19 8.21									19.27	18.98	0.29	
. 23	LCH	EPD4	3 18 60.38						64.3	288	74	11.44	11.08	0.44	
.		S 4	3 19 8.92									19.98	18.82	1.16	



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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
23	BGB	EPD0	3 18 60.19				23	2.1	65.2	92	74	11.25	11.30	0.03	
		S 0	3 19 8.09									19.15	19.18	-0.03	
23	CTS	EPD1	3 18 60.68						70.0	17	74	11.74	12.19	-0.19	
		S 4	3 19 10.01									21.07	20.40	0.67	
23	LSM	EPU0	3 18 60.93				24	2.1	70.5	120	74	11.99	12.03	-0.06	
		S 0	3 19 9.53									20.59	20.61	-0.02	
23	SDH	EPU1	3 18 60.91						71.7	129	74	11.97	12.20	-0.19	
		S 4	3 19 9.45									20.51	20.80	-0.29	
23	LDP	EPD0	3 18 61.55				25	2.2	74.0	107	74	12.61	12.71	-0.02	
		S 4	3 19 11.08									22.14	21.60	0.54	
23	AMR	EP 1	3 18 63.39						84.9	149	74	14.45	14.28	0.16	
23	GLR	EPU1	3 18 63.16						85.3	79	74	14.22	14.50	-0.21	
		S 4	3 19 13.97									25.03	24.68	0.35	
23	BLT	EP 3	3 18 64.10						88.1	57	74	15.16	15.04	0.25	
23	KRNA	EP 0	3 18 64.59						91.9	34	74	15.65	15.69	-0.11	
		S 0	3 19 15.87									26.93	26.95	-0.02	
23	MCY	EP 0	3 18 65.61						99.1	116	74	15.67	16.71	0.04	
		S 3	3 19 17.84									28.90	28.43	0.47	
23	GVV	EPD0	3 18 65.71						99.7	165	74	16.77	16.87	-0.02	
		S 4	3 19 18.42									29.48	28.71	0.77	
23	GMR	EPU2	3 18 67.53						110.0	74	74	18.59	18.55	0.14	
23	WCS	EPU4	3 18 69.88						121.7	49	74	20.94	20.51	0.46	
23	HCR	EP 0	3 18 72.16						138.8	19	74	23.22	23.33	-0.02	

NOV H = 4 35 57.67 UTC RMS = 0.08 NO = 9 FREE DEPTH SOLUTION  
 23 LAT = 36.812 N ERX = 0.9 EPH = 1.1 AVFM = 2.0 Q = D  
 LONG = 117.778 W ERY = 0.7 GAP = 222 AVXM = US = C DRY MOUNTAIN  
 DEPTH = 4.90 KM ERZ = 16.0 NM = QD = D

23	TMO	EPU1	4 35 63.45				21	1.9	33.0	91	95	5.78	6.15	-0.07	
23	GVN	EPU1	4 35 65.52				22	2.0	44.2	62	93	7.85	7.67	0.11	
23	MCA	EPU0	4 35 65.91				18	1.8	48.0	112	93	8.24	8.18	-0.02	
23	LCH	EPU0	4 35 66.03				20	1.9	48.4	14	93	8.36	8.48	-0.04	
23	SGV	EPU0	4 35 69.43				26	2.2	69.1	74	92	11.76	11.87	-0.02	
23	PPK	EPD0	4 35 69.68						69.2	350	92	12.01	11.94	0.06	
23	GMN	EP 3	4 35 69.59						71.2	40	92	11.92	12.33	-0.26	
23	PGE	EP 0	4 35 71.47				20	2.0	81.9	129	91	13.80	14.01	0.01	
23	FMT	EP 1	4 35 72.95				17	1.9	91.3	102	91	15.28	15.38	0.14	
23	WCT	EPD4	4 35 75.15				18	2.0	102.8	91	91	17.48	17.24	0.40	

NOV H = 6 14 42.11 UTC RMS = 0.08 NO = 21 FREE DEPTH SOLUTION  
 23 LAT = 37.337 N ERX = 0.1 EPH = 0.2 AVFM = 2.4 Q = B  
 LONG = 115.561 W ERY = 0.2 GAP = 86 AVXM = US = A GROOM LAKE  
 DEPTH = 0.50 KM ERZ = 0.4 NM = QD = C

23	GMR	IPU0	6 14 45.75				42	2.4	18.6	269	40	3.64	3.77	-0.04	
		S 0	6 14 48.40									6.29	6.28	0.00	
23	TPU	IPU1	6 14 47.79				40	2.4	30.7	345	38	5.67	5.90	-0.08	
		S 4	6 14 52.34									10.23	9.84	0.38	
23	EPR	EP 0	6 14 49.05				40	2.5	38.1	119	38	6.93	6.97	-0.01	
		S 4	6 14 54.69									12.58	11.88	0.69	
23	GLR	EP 0	6 14 49.85				38	2.4	43.3	249	38	7.73	7.83	-0.03	
		S 2	6 14 54.99									12.88	13.27	-0.40	
23	MTI	EP 0	6 14 50.33				38	2.4	45.5	34	38	8.22	8.22	0.02	
		S 3	6 14 56.44									14.33	14.01	0.32	
23	PRN	EPD0	6 14 50.46				38	2.5	45.9	80	38	8.35	8.28	-0.05	
		S 4	6 14 56.96									14.85	14.36	0.49	
23	BLT	EPU0	6 14 51.35				36	2.4	52.2	288	38	9.23	9.37	-0.01	
		S 4	6 14 58.48									16.36	15.80	0.56	
23	NPN	EPU1	6 14 53.99				34	2.4	65.4	58	38	11.88	11.47	0.19	
		S 0	6 15 2.15									20.04	19.98	0.06	
23	BGB	EP 1	6 14 54.12						67.8	241	38	12.01	11.89	0.20	
		S 4	6 15 3.15									21.04	20.19	0.84	
23	EPN	EPU3	6 14 54.75				33	2.4	69.0	259	38	12.64	12.19	0.39	
		S 4	6 15 5.05									22.93	20.94	1.99	
23	WRN	EPD0	6 14 54.74				34	2.4	71.6	358	38	12.63	12.51	0.08	
		S 4	6 15 3.94									21.83	21.46	0.37	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
23	SRG	EP04	6 14 55.05					31 2.4	74.6	36	38	12.93	12.97	-0.25	
		S 0	6 15 4.60									22.48	22.55	-0.06	
23	LOP	EP 4	6 14 55.86					32 2.4	76.0	225	38	13.74	13.21	0.62	
		S 4	6 15 5.23									23.11	22.45	0.66	
23	DLM	EP01	6 14 55.95					32 2.4	78.6	68	38	13.84	13.64	-0.06	
		S 2	6 15 6.27									24.16	23.75	0.40	
23	MCY	EP01	6 14 56.24					32 2.4	83.0	205	38	14.13	14.26	-0.06	
		S 0	6 15 6.42									24.30	24.25	0.05	
23	KRNA	EP 4	6 14 57.41					31 2.4	85.1	302	38	15.29	14.75	0.47	
		S 4	6 15 8.13									26.02	25.34	0.67	
23	LSM	EP 2	6 14 58.09					31 2.4	91.7	224	38	15.98	15.64	0.31	
		S 4	6 15 11.30									29.18	26.78	2.41	

NOV H = 6 28 13.18 UTC RMS = 0.10 NO = 11 FREE DEPTH SOLUTION  
23 LAT = 37.320 N ERX = 0.3 ERH = 0.5 AVFM = 1.7 W = C  
LONG = 115.564 W ERY = 0.4 GAP = 164 AVXM = QS = B GROOM LAKE  
DEPTH = 1.05 KM ERZ = 2.8 NM = WD = C

23	GMR	EP02	6 28 16.24					16 1.6	18.4	275	90	3.06	3.33	-0.17	
		S 2	6 28 18.90									5.72	5.52	0.20	
23	TPU	EP 1	6 28 18.92					16 1.7	32.6	347	74	5.74	6.09	-0.20	
		S 0	6 28 23.38									10.20	10.17	0.04	
23	GLR	EPD2	6 28 20.79						42.4	252	74	7.61	7.59	0.10	
		S 4	6 28 26.60									13.42	12.85	0.57	
23	PRN	EP 4	6 28 20.82					20 1.9	46.5	78	74	7.64	8.27	-0.75	
		S 0	6 28 27.54									14.36	14.34	0.02	
23	MTI	EP 4	6 28 21.03						47.3	33	74	7.85	8.40	-0.51	
		S 2	6 28 27.70									14.52	14.30	0.22	
23	BGB	EP 1	6 28 24.71						66.7	242	74	11.53	11.60	0.01	
23	EPN	EP 1	6 28 25.03						68.4	260	74	11.85	11.99	-0.19	
23	WRN	EP 4	6 28 25.29						73.5	358	74	12.11	12.71	-0.64	
		S 4	6 28 34.36									21.16	21.81	-0.63	
23	DLM	EP 4	6 28 26.72						79.6	66	74	13.54	13.69	-0.40	
		S 1	6 28 36.89									23.71	23.84	-0.13	
23	KRNA	EP 1	6 28 28.06						65.9	303	74	14.88	14.78	0.03	
		S 4	6 28 38.88									25.70	25.39	0.31	

NOV H = 9 5 10.29 UTC RMS = 0.16 NO = 13 FREE DEPTH SOLUTION  
23 LAT = 36.681 N ERX = 1.2 ERH = 1.3 AVFM = 2.3 W = D  
LONG = 117.806 W ERY = 0.7 GAP = 254 AVXM = QS = C DRY MOUNTAIN  
DEPTH = 9.64 KM ERZ = 6.4 NM = WD = D

23	TMO	EPD0	9 5 17.04					22 1.9	38.1	69	102	6.75	7.08	-0.03	
		S 1	9 5 22.12									11.83	11.59	0.24	
23	MCA	EP01	9 5 18.29					27 2.2	47.0	94	99	8.00	8.10	-0.18	
		S 0	9 5 24.13									13.84	13.99	-0.15	
23	GVN	EPD2	9 5 19.91					31 2.3	54.6	49	96	9.62	9.43	0.13	
		S 1	9 5 26.25									15.96	16.23	-0.26	
23	LCH	EP01	9 5 21.25					30 2.3	63.1	13	97	10.96	10.93	0.11	
		S 0	9 5 28.80									18.51	18.55	-0.04	
23	PGE	EPD1	9 5 22.97					25 2.2	75.8	119	96	12.68	13.07	-0.17	
		S 0	9 5 32.37									22.08	21.97	0.11	
23	SGV	EP02	9 5 23.68					36 2.5	76.6	64	96	13.39	13.14	0.34	
		S 0	9 5 32.72									22.43	22.32	0.11	
23	GMN	EP04	9 5 24.19					27 2.3	84.2	35	95	13.90	14.49	-0.44	
		S 4	9 5 35.66									25.37	24.52	0.85	
23	WCT	EP04	9 5 28.49					24 2.3	106.1	83	94	18.20	17.80	0.57	
		S 4	9 5 40.94									30.65	30.16	0.49	
23	BMT	EP 4	9 5 31.49					27 2.4	123.0	57	93	21.20	20.79	0.58	
		S 3	9 5 46.08									35.79	35.27	0.52	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
NOV H = 18	26	4.10	UTC	RMS =	0.10	NO =	16								FREE DEPTH SOLUTION
23	LAT =	37.013	N	ERX =	0.3	ERH =	0.3	AVFM =	1.4	Q =	B				
	LONG =	116.360	W	ERY =	0.2	GAP =	100	AVXM =		QS =	A				SILENT CANYON - PAHUTE MESA
	DEPTH =	8.26	KM	ERZ =	0.9	NM =				QD =	B				
.....															
23	BGB	EPU0	18 26	6.92				16	1.6	12.1	77	124	2.82	2.93	-0.04
		S 0	18 26	8.93									4.83	4.88	-0.05
23	YMT5	EPD0	18 26	7.35				9	1.1	15.2	213	117	3.25	3.29	-0.05
		S 0	18 26	9.66									5.56	5.63	-0.08
23	SSP	EPU0	18 26	7.60				8	1.0	16.0	128	116	3.50	3.56	0.02
23	CDH1	EPD4	18 26	6.96				5	0.6	17.4	167	114	2.86	3.62	-0.66
		S 4	18 26	8.99									4.89	6.02	-1.13
23	YMT6	EPD0	18 26	7.78				11	1.3	17.6	193	113	3.68	3.60	-0.02
		S 2	18 26	10.70									6.60	6.31	0.28
23	EPN	EPU0	18 26	8.75				16	1.6	22.5	8	108	4.65	4.58	0.00
		S 3	18 26	12.37									8.27	7.94	0.32
23	YMT1	IPD0	18 26	8.73				23	1.9	23.2	220	107	4.63	4.46	0.03
23	LUP	EPD0	18 26	8.80				15	1.6	24.7	136	106	4.70	4.79	-0.02
		S 4	18 26	12.79									8.69	8.06	0.62
23	LSM	EPD1	18 26	9.72				15	1.6	31.3	166	102	5.62	5.73	-0.13
		S 1	18 26	14.15									10.05	9.83	0.22
23	BMT	EP 0	18 26	11.18						39.3	320	100	7.08	7.21	0.03
		S 0	18 26	16.12									12.02	12.04	-0.03
23	SDH	EP 2	18 26	11.12						40.9	177	99	7.02	7.24	-0.18
.....															
NOV H = 19	10	13.53	UTC	RMS =	0.09	NO =	19								FREE DEPTH SOLUTION
23	LAT =	37.067	N	ERX =	0.1	ERH =	0.2	AVFM =	1.9	Q =	B				
	LONG =	116.948	W	ERY =	0.2	GAP =	95	AVXM =		QS =	A				THIRSTY CANYON
	DEPTH =	0.42	KM	ERZ =	0.3	NM =				QD =	C				
.....															
23	NMN	EPD0	19 10	16.04						11.7	82	40	2.51	2.60	-0.04
		S 0	19 10	17.93									4.40	4.36	0.04
23	SGV	IPD0	19 10	16.12				30	2.1	12.1	218	40	2.59	2.68	0.00
		S 1	19 10	17.97									4.44	4.42	0.02
23	GVN	EPD1	19 10	20.09				17	1.7	35.8	258	38	6.56	6.52	-0.02
		S 1	19 10	24.83									11.30	11.25	0.05
23	BMT	EP 0	19 10	20.25				18	1.8	36.1	48	38	6.72	6.84	0.05
		S 4	19 10	25.66									12.13	11.41	0.73
23	GMN	EPU0	19 10	20.41				18	1.8	37.9	313	38	6.88	7.13	-0.10
		S 0	19 10	25.48									11.95	11.93	0.02
23	YMT1	EPU1	19 10	21.48				32	2.3	44.2	122	38	7.95	7.95	-0.13
		S 2	19 10	27.68									14.15	13.83	0.32
23	YMT5	EPU0	19 10	22.05				15	1.6	47.8	113	38	8.52	8.58	-0.06
		S 2	19 10	28.06									14.53	14.67	-0.14
23	FMT	EPU1	19 10	21.99						49.7	162	38	8.46	8.82	-0.12
		S 3	19 10	28.61									15.08	14.66	0.42
23	MCA	EPD0	19 10	23.09				16	1.7	55.1	213	38	9.56	9.54	-0.06
		S 0	19 10	30.01									16.48	16.44	0.04
23	BGB	EPU2	19 10	25.05						64.2	93	38	11.52	11.31	0.29
		S 0	19 10	32.79									19.26	19.20	0.06
.....															
NOV H = 23	29	51.18	UTC	RMS =	0.11	NO =	13								FREE DEPTH SOLUTION
23	LAT =	37.236	N	ERX =	0.6	ERH =	0.8	AVFM =	2.0	Q =	C				
	LONG =	115.008	W	ERY =	0.5	GAP =	215	AVXM =		QS =	B				ALAMO
	DEPTH =	2.63	KM	ERZ =	2.5	NM =				QD =	D				
.....															
23	EPR	IPD0	23 29	54.53				32	2.2	17.5	245	74	3.35	3.43	-0.07
		S 0	23 29	57.04									5.86	5.84	0.02
23	PRN	EPU0	23 29	54.88				32	2.2	19.4	349	74	3.70	3.78	-0.20
		S 0	23 29	57.69									6.51	6.66	-0.16
23	NPN	EPD0	23 29	59.64				22	2.0	46.7	8	74	8.46	8.26	-0.01
		S 0	23 30	5.70									14.52	14.48	0.04
23	DLM	EP 1	23 29	60.01				20	1.9	47.5	30	74	8.83	8.40	0.18
		S 0	23 30	6.02									14.84	14.80	0.04
23	MTI	EP 1	23 29	60.43				19	1.9	54.3	334	74	9.25	9.46	-0.18
		S 0	23 30	7.35									16.17	16.12	0.04

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	IOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 23	GMR	EP 2	23 29 63.11				15	1.7	68.5	279	74	11.93	11.79	0.24	
.		S 4	23 30 10.87									19.69	19.99	-0.30	
. 23	SHG	EPD2	23 29 63.96						72.0	356	74	12.78	12.36	0.20	
.		S 0	23 30 12.81									21.63	21.52	0.11	
. 23	SHRG	EP 4	23 29 65.73						82.2	189	74	14.55	14.02	1.12	
.		S 4	23 30 15.51									24.33	22.97	1.36	

NOV H = 12 14 50.20 UTC RMS = 0.15 NO = 9 FREE DEPTH SOLUTION  
 . 24 LAT = 37.839 N ERX = 1.2 ERH = 1.6 AVFM = 2.7 W = D  
 . LONG = 114.546 W ERY = 1.1 GAP = 294 AVXM = US = C HIGHLAND PEAK  
 . DEPTH = 9.81 KM ERZ = 8.1 NM = WD = 0

. 24	DLM	IPD0	12 14 56.34				44	2.5	31.0	213	106	6.14	5.85	0.04	
.		S 4	12 14 59.74									9.54	10.44	-0.89	
. 24	NPN	IPD2	12 14 57.39				51	2.7	40.2	239	102	7.19	7.30	-0.31	
.		S 4	12 15 2.14									11.94	12.84	-0.89	
. 24	SRG	EPD4	12 14 58.04				56	2.8	46.2	276	100	7.84	8.25	-0.62	
.		S 4	12 15 2.87									12.67	14.48	-1.81	
. 24	PRN	EPD2	12 14 61.87				55	2.8	65.4	223	97	11.67	11.31	0.25	
.		S 0	12 15 9.71									19.51	19.54	-0.03	
. 24	MTI	EP 2	12 14 61.39				46	2.7	66.5	254	97	11.19	11.49	-0.27	
.		S 4	12 15 10.33									20.13	19.60	0.53	
. 24	WRN	EPD1	12 14 66.16				38	2.6	93.0	280	95	15.96	15.84	0.08	3.00
.		S 1	12 15 17.45									27.25	27.16	0.10	
. 24	EPR	EPD4	12 14 66.87				50	2.9	93.5	217	95	16.67	15.82	0.88	
.		S 4	12 15 19.61									29.41	27.02	2.40	
. 24	TPU	EP 4	12 14 66.66				42	2.7	100.7	255	94	16.46	17.11	-0.51	3.40
.		S 4	12 15 20.46									30.26	29.03	1.24	
. 24	QCS	EP 4	12 14 70.91				31	2.5	121.0	266	93	20.71	20.40	0.35	3.10
.		S 0	12 15 24.96									34.76	34.83	-0.06	
. 24	GMR	EPD2	12 14 70.82				39	2.7	121.9	243	93	20.62	20.48	0.24	
.		S 4	12 15 26.19									35.99	34.85	1.14	
. 24	SHRG	EP 4	12 14 77.90				38	2.8	157.6	200	52	27.70	25.64	2.65	
.		S 4	12 15 37.66									47.46	42.84	4.63	

NOV H = 20 49 29.95 UTC RMS = 0.12 NO = 21 FREE DEPTH SOLUTION  
 . 24 LAT = 37.064 N ERX = 0.2 ERH = 0.3 AVFM = 1.9 W = B  
 . LONG = 116.949 W ERY = 0.2 GAP = 63 AVXM = US = A THIRSTY CANYON  
 . DEPTH = 4.39 KM ERZ = 1.5 NM = WD = C

. 24	NMN	IPD0	20 49 32.23				17	1.6	11.8	81	105	2.28	2.57	-0.24	
.		S 2	20 49 34.34									4.39	4.30	0.08	
. 24	SGV	IPD0	20 49 32.34				36	2.3	11.8	219	105	2.39	2.58	-0.10	
.		S 0	20 49 34.18									4.23	4.26	-0.03	
. 24	GVN	EPD0	20 49 36.26				27	2.1	35.7	259	93	6.31	6.29	-0.05	
.		S 1	20 49 41.02									11.07	10.87	0.20	
. 24	BMT	EPD0	20 49 36.40						36.3	48	93	6.45	6.67	-0.06	
.		S 0	20 49 41.29									11.34	11.12	0.22	
. 24	GMN	EPU1	20 49 36.60				15	1.6	38.1	314	93	6.65	6.95	-0.15	
.		S 0	20 49 41.71									11.76	11.62	0.13	
. 24	YMT1	EPU0	20 49 37.70				30	2.2	44.1	122	92	7.75	7.73	-0.11	
.		S 0	20 49 43.56									13.61	13.43	0.17	
. 24	YMT5	EPU0	20 49 38.25				25	2.1	47.7	113	92	8.30	8.36	-0.06	
.		S 1	20 49 44.32									14.37	14.29	0.08	
. 24	FMT	EPU0	20 49 38.23				20	1.9	49.4	162	92	8.28	8.56	-0.05	
.		S 4	20 49 46.73									16.78	14.23	2.55	
. 24	MCA	EPD0	20 49 39.30				21	2.0	54.8	213	92	9.35	9.28	-0.02	
.		S 0	20 49 46.10									16.15	16.01	0.14	
. 24	BGB	EPD1	20 49 41.03				15	1.7	64.2	93	91	11.08	11.11	0.05	
.		S 1	20 49 48.84									18.89	18.85	0.03	
. 24	CTS	EPU0	20 49 41.57				16	1.8	68.7	17	91	11.62	11.88	-0.09	
.		S 2	20 49 49.81									19.86	20.02	-0.16	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
NOV H = 4 2 49.58 UTC RMS = 0.14 NO = 31												FREE DEPTH SOLUTION			
25 LAT = 37.064 N ERX = 0.1 ERH = 0.2 AVFM = 2.4 W = B															
LONG = 116.952 W ERY = 0.2 GAP = 63 AVXM = WS = A												THIRSTY CANYON			
DEPTH = 4.68 KM ERZ = 1.0 NM = WD = C															
.....															
25	SGV	IPD0	4 2 52.00					44 2.5	11.6	218	108	2.42	2.57	-0.06	
		S 0	4 2 53.72									4.14	4.24	-0.10	
25	NMN	IPD0	4 2 51.90						12.0	81	107	2.32	2.61	-0.25	
		S 0	4 2 53.75									4.17	4.39	-0.22	
25	GVN	IPD0	4 2 55.88					36 2.4	35.5	259	94	6.30	6.26	-0.02	
		S 1	4 3 0.30									10.72	10.81	-0.09	
25	BMT	IPD0	4 2 56.08					40 2.5	36.5	48	94	6.50	6.70	-0.04	
		S 0	4 3 0.92									11.34	11.17	0.16	
25	GMN	IPU0	4 2 56.25					33 2.3	37.9	314	93	6.67	6.93	-0.11	
		S 0	4 3 1.26									11.68	11.59	0.09	
25	YMT5	IPU0	4 2 57.87					38 2.5	47.9	112	92	8.29	8.39	-0.10	
		S 4	4 3 3.74									14.16	14.35	-0.19	
25	FMT	IPU0	4 2 57.90					37 2.4	49.5	162	92	8.32	8.57	-0.01	
		S 4	4 3 3.67									14.09	14.24	-0.16	
25	TMD	EPU0	4 2 58.23					29 2.2	49.8	235	92	8.65	8.86	0.09	
		S 4	4 3 4.10									14.52	14.63	-0.12	
25	YMT6	EPD0	4 2 58.99					36 2.4	53.8	115	92	9.41	9.29	0.02	
		S 1	4 3 5.64									16.06	16.04	0.01	
25	MCA	EPD0	4 2 58.82					29 2.2	54.6	212	92	9.24	9.26	-0.10	
		S 0	4 3 5.78									16.20	15.97	0.23	
25	EPN	IPD1	4 2 60.03					37 2.5	58.3	73	92	10.45	10.26	0.13	
		S 2	4 3 7.67									18.09	17.64	0.44	
25	CDH1	EPD4	4 2 60.86					19 1.9	60.8	112	92	11.28	10.48	0.90	
		S 4	4 3 8.68									19.10	17.75	1.35	
25	MGM	EPU0	4 2 60.62					33 2.4	64.0	311	92	11.04	11.15	-0.02	
		S 1	4 3 8.80									19.22	18.91	0.31	
25	BGB	IPD2	4 2 60.83					34 2.4	64.4	93	92	11.25	11.14	0.19	
		S 1	4 3 8.52									18.94	18.91	0.02	
25	SSP	IPU1	4 2 61.34					35 2.5	67.0	103	92	11.76	11.64	0.20	
		S 4	4 3 8.78									19.20	19.77	-0.57	
25	CTS	EPD0	4 2 61.18					34 2.4	68.8	17	92	11.60	11.89	-0.12	
		S 2	4 3 9.54									19.96	20.04	-0.08	
25	LSM	EPD0	4 2 61.58						70.3	121	92	12.00	11.99	-0.01	
25	LOP	IPD1	4 2 62.28						73.6	108	91	12.70	12.62	0.15	
		S 4	4 3 10.76									21.18	21.45	-0.28	
25	PGE	EP 2	4 2 62.88						80.0	187	91	13.30	13.70	-0.19	
		S 0	4 3 12.90									23.32	23.05	0.26	
25	AMR	EPU0	4 2 63.97						85.3	150	91	14.39	14.34	0.03	
.....															
NOV H = 3 46 29.51 UTC RMS = 0.11 NO = 26												FREE DEPTH SOLUTION			
26 LAT = 37.467 N ERX = 0.1 ERH = 0.2 AVFM = 2.0 W = B															
LONG = 117.600 W ERY = 0.2 GAP = 71 AVXM = WS = A												MAGRUDER MOUNTAIN			
DEPTH = 4.48 KM ERZ = 1.2 NM = WD = B															
.....															
26	MGM	EPU0	3 46 31.64					8 1.0	9.6	107	112	2.13	2.36	-0.14	
		S 0	3 46 33.37									3.86	3.88	-0.02	
26	LCH	EPD1	3 46 34.11					27 2.1	26.1	189	95	4.60	4.86	-0.18	
		S 0	3 46 37.65									8.14	8.18	-0.04	
26	PPK	EPU1	3 46 34.82					19 1.8	27.6	261	94	5.31	5.18	0.12	
		S 0	3 46 38.35									8.84	8.87	-0.03	
26	MZP	EPU0	3 46 35.32					21 1.9	32.2	36	94	5.81	6.04	0.01	
		S 0	3 46 39.43									9.92	9.93	-0.01	
26	SVP	IPU0	3 46 35.81					31 2.2	32.8	327	94	6.30	6.18	0.01	
		S 3	3 46 40.02									10.51	10.76	-0.25	
26	GMN	IPU2	3 46 35.67					13 1.5	35.3	122	93	6.16	6.50	-0.19	
		S 1	3 46 40.58									11.07	10.87	0.20	
26	GVN	EPU0	3 46 39.05					18 1.8	56.5	156	92	9.54	9.67	-0.19	
		S 3	3 46 46.32									16.81	16.64	0.17	
26	SGV	EPD1	3 46 41.90					27 2.3	73.8	137	91	12.39	12.64	-0.16	
		S 1	3 46 50.90									21.39	21.45	-0.06	
26	TNP	EPD4	3 46 43.24						76.1	26	91	13.73	13.09	0.37	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
26	CTS	EPD0	3 46 43.12				26	2.2	80.0	75	91	13.61	13.72	0.06	
		S 2	3 46 52.88									23.37	23.17	0.20	
26	NMN	EPD0	3 46 43.32				26	2.2	81.5	122	91	13.81	13.88	-0.02	
		S 4	3 46 52.73									23.22	23.64	-0.42	
26	MCA	EP 0	3 46 45.39				18	2.0	95.2	163	90	15.88	15.78	0.02	
		S 1	3 46 56.85									27.34	27.12	0.22	
26	YMT1	EPD1	3 46 49.08				20	2.1	117.0	126	90	19.57	19.32	0.12	
		S 1	3 47 3.37									33.86	33.26	0.60	
26	YMT5	EPD0	3 46 49.54				20	2.2	119.7	122	90	20.03	19.77	0.26	
		S 4	3 47 4.57									35.06	33.80	1.26	
26	YMT4	EPD1	3 46 50.13				19	2.1	121.9	123	90	20.62	20.12	0.39	
		S 4	3 47 5.10									35.59	34.59	1.00	
26	YMT3	EPD1	3 46 50.90				18	2.1	129.8	126	90	21.39	21.41	0.03	
		S 4	3 47 7.25									37.74	36.53	1.21	
26	LDP	EPD1	3 46 53.70						144.2	118	90	24.19	23.75	0.52	

NOV H = 1 15 39.64 UTC RMS = 0.10 NO = 9 FREE DEPTH SOLUTION  
 28 LAT = 37.681 N ERX = 0.4 ERH = 0.5 AVFM = 1.9 W = B  
 LONG = 114.904 W ERY = 0.3 GAP = 152 AVXM = WS = A HIGHLAND PEAK  
 DEPTH = 1.94 KM ERZ = 1.2 NM = WD = C

28	NPN	IPD0	1 15 41.05				23	1.9	4.2	223	112	1.41	1.29	-0.09	
28	DLM	EPD1	1 15 43.46				16	1.6	16.8	120	94	3.82	3.40	0.17	
		S 0	1 15 45.84									6.20	6.25	-0.05	
28	SRG	EPD4	1 15 44.43				29	2.1	26.6	327	74	4.79	5.02	-0.45	
		S 0	1 15 48.54									8.90	8.97	-0.07	
28	MTI	EPD0	1 15 45.63				18	1.8	32.5	269	74	5.99	5.95	0.07	
		S 0	1 15 49.88									10.24	10.13	0.11	
28	PRN	EPD0	1 15 45.81				25	2.0	33.0	203	74	6.17	6.02	0.03	
		S 1	1 15 49.98									10.34	10.50	-0.16	
28	WRN	EP 1	1 15 51.74						68.9	299	74	12.10	11.92	0.14	
		S 4	1 16 1.68									22.04	20.45	1.59	

NOV H = 10 11 20.54 UTC RMS = 0.08 NO = 17 FREE DEPTH SOLUTION  
 29 LAT = 36.785 N ERX = 0.2 ERH = 0.2 AVFM = 1.4 W = B  
 LONG = 116.120 W ERY = 0.2 GAP = 90 AVXM = WS = A LATHROP WELLS  
 DEPTH = 12.03 KM ERZ = 0.7 NM = WD = B

29	LUP	IPD0	10 11 23.38				20	1.8	8.8	331	145	2.84	2.97	-0.05	
		S 4	10 11 25.09									4.55	4.94	-0.39	
29	LSM	IPD2	10 11 23.88				15	1.5	14.5	250	129	3.34	3.48	-0.15	
		S 0	10 11 26.51									5.97	5.98	-0.01	
29	CPX	EP 0	10 11 24.40				9	1.1	17.2	20	124	3.86	3.86	0.03	
		S 0	10 11 27.02									6.48	6.54	-0.06	
29	SSP	EPD0	10 11 24.62				14	1.5	17.9	331	124	4.08	4.13	0.03	
		S 0	10 11 27.62									7.08	6.92	0.16	
29	YMT3	EPD0	10 11 25.58				17	1.7	26.0	271	113	5.04	5.06	0.03	
		S 4	10 11 29.58									9.04	8.57	0.47	
29	YMT6	EPD1	10 11 25.68				10	1.2	26.6	288	113	5.14	5.19	-0.14	
		S 0	10 11 29.52									8.98	9.03	-0.05	
29	SPRG	EPD0	10 11 26.08				11	1.3	29.5	110	111	5.54	5.64	-0.07	
		S 0	10 11 30.15									9.61	9.60	0.01	
29	BGB	EP 0	10 11 26.26				14	1.5	29.7	341	111	5.72	5.77	0.03	
		S 4	10 11 30.73									10.19	9.73	0.46	
29	YMT5	EPD0	10 11 26.71				12	1.4	32.3	293	109	6.17	6.10	0.07	
		S 0	10 11 31.06									10.52	10.43	0.09	
29	JON	EPD0	10 11 27.42				9	1.2	38.3	176	106	6.88	6.93	-0.06	
		S 2	10 11 32.61									12.07	11.86	0.21	

NOV H = 16 39 55.62 UTC RMS = 0.08 NO = 28 FREE DEPTH SOLUTION  
 30 LAT = 36.495 N ERX = 0.1 ERH = 0.2 AVFM = 2.1 W = B  
 LONG = 116.306 W ERY = 0.1 GAP = 62 AVXM = WS = A ASH MEADOWS  
 DEPTH = 9.28 KM ERZ = 0.6 NM = WD = B

30	SDH	IPD0	16 39 59.11				26	2.0	16.9	350	117	3.49	3.54	-0.01	
		S 2	16 40 1.42									5.80	5.99	-0.19	

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NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
30	AMR	IPU1	16 39 59.23				23	1.9	18.5	234	114	3.61	3.71	-0.11	
		S 0	16 40 2.03									6.41	6.36	0.05	
30	JON	IPU0	16 39 59.50				26	2.0	19.2	109	114	3.88	3.85	0.02	
		S 4	16 40 2.83									7.21	6.60	0.60	
30	LSM	IPD0	16 39 60.70				31	2.2	27.3	6	107	5.08	5.14	-0.08	
		S 0	16 40 4.41									8.79	8.82	-0.03	
30	YMT3	EP 0	16 39 61.74				39	2.4	33.7	344	103	6.12	6.12	0.04	
		S 0	16 40 5.96									10.34	10.39	-0.05	
30	YMT2	EPD0	16 39 62.18				44	2.5	35.9	334	102	6.56	6.47	0.00	
		S 1	16 40 6.91									11.29	11.21	0.08	
30	MCY	EPU0	16 39 62.08				35	2.3	35.9	59	102	6.46	6.52	0.02	
		S 0	16 40 6.70									11.08	11.01	0.07	
30	YMT6	EP 0	16 39 62.97				24	2.0	41.2	348	100	7.35	7.35	-0.09	
		S 1	16 40 8.07									12.45	12.71	-0.27	
30	LOP	EPD0	16 39 63.04				34	2.3	41.7	17	100	7.42	7.53	-0.03	
		S 1	16 40 8.55									12.93	12.74	0.18	
30	NOP	EPD1	16 39 63.04				20	1.9	43.0	161	100	7.42	7.59	-0.08	
		S 4	16 40 9.07									13.45	12.82	0.62	
30	WCT	EP 0	16 39 63.20				24	2.0	43.7	319	100	7.58	7.70	0.04	
		S 4	16 40 9.08									13.46	12.89	0.56	
30	YMT1	EPU3	16 39 63.84				39	2.5	44.4	333	100	8.22	7.86	0.23	
		S 0	16 40 9.27									13.65	13.66	-0.01	
30	FMT	EPU0	16 39 63.30				18	1.8	45.2	291	99	7.68	7.95	-0.04	
		S 4	16 40 9.68									14.06	13.19	0.87	
30	YMT5	EPD0	16 39 63.77				24	2.1	46.6	344	99	8.15	8.25	-0.11	
		S 4	16 40 10.10									14.48	14.11	0.37	
30	GWV	EPD0	16 39 63.99				21	1.9	47.4	224	99	8.37	8.41	0.04	
		S 1	16 40 9.97									14.35	14.24	0.11	
30	SPRG	EPD0	16 39 64.26				22	2.0	49.6	64	99	8.64	8.71	-0.04	
		S 4	16 40 11.20									15.58	14.84	0.74	
30	BGB	EP 0	16 39 66.16						60.6	7	97	10.54	10.58	0.04	
		S 0	16 40 13.55									17.93	17.95	-0.02	

NOV H = 17 43 52.90 UTC RMS = 0.10 NO = 13  
 30 LAT = 36.417 N ERX = 0.4 ERH = 0.5 AVFM = 1.5 Q = C  
 LONG = 117.198 W ERY = 0.2 GAP = 195 AVXM = GS = A  
 DEPTH = 6.51 KM ERZ = 1.1 NM = QD = D

FREE DEPTH SOLUTION

PANAMINT BUTTE

30	PGE	IPU0	17 43 55.79				14	1.5	14.1	122	113	2.89	3.11	0.01	
		S 0	17 43 57.80									4.90	4.94	-0.03	
30	MCA	EPU0	17 43 57.68				13	1.5	26.7	344	100	4.78	4.76	-0.06	
		S 1	17 44 1.28									8.38	8.28	0.10	
30	FMT	EPD3	17 43 60.11						45.0	57	95	7.21	7.85	-0.40	
		S 0	17 44 5.91									13.01	13.02	-0.01	
30	GWV	EPU1	17 43 62.08				14	1.6	53.8	118	94	9.18	9.40	-0.13	
		S 3	17 44 9.18									16.28	15.93	0.35	
30	QSM	EP 0	17 43 62.90				18	1.8	58.2	149	94	10.00	9.93	-0.02	
		S 1	17 44 10.16									17.26	17.13	0.13	
30	SGV	EPD1	17 43 64.10						64.3	13	94	11.20	11.11	0.16	
		S 0	17 44 11.75									18.85	18.84	0.01	
30	GVN	EPD2	17 43 63.94				10	1.4	66.1	349	93	11.04	11.26	-0.27	
		S 4	17 44 12.57									19.67	19.35	0.32	

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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	IOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
DEC H = 23 6 48.54 UTC RMS = 0.10 NO = 46 02 LAT = 37.062 N ERX = 0.1 ERH = 0.1 AVFM = 2.8 W = B LONG = 116.952 W ERY = 0.1 GAP = 52 AVXM = WS = A DEPTH = 0.42 KM ERZ = 0.2 NM = WD = C															
FREE DEPTH SOLUTION															
THIRSTY CANYON															
02	SGV	IPD0	23 6 51.10				78	3.0	11.5	219	40	2.56	2.58	0.07	
		S 3	23 6 52.60									4.06	4.26	-0.20	
02	NMN	IPD0	23 6 51.10				66	2.8	12.1	80	40	2.56	2.66	-0.06	
		S 4	23 6 53.57									5.03	4.47	0.56	
02	GVN	IPD0	23 6 55.01				64	2.9	35.4	259	38	6.47	6.46	-0.05	1.70
		S 2	23 6 59.82									11.28	11.14	0.13	
02	BMT	IPD0	23 6 55.33				69	2.9	36.6	48	38	6.79	6.93	0.03	1.10
		S 0	23 7 0.22									11.66	11.56	0.12	
02	GMN	IPU0	23 6 55.46				66	2.9	38.0	314	38	6.92	7.15	-0.08	1.40
		S 0	23 7 0.53									11.99	11.97	0.02	
02	YMT1	IPU0	23 6 56.52				77	3.1	44.2	122	38	7.98	7.95	-0.10	1.90
		S 2	23 7 2.14									13.60	13.82	-0.22	
02	YMT5	IPU0	23 6 57.10				61	2.9	47.9	112	38	8.56	8.59	-0.03	1.00
		S 4	23 7 2.92									14.38	14.69	-0.31	
02	FMT	IPU0	23 6 57.00				58	2.8	49.3	162	38	8.46	8.75	-0.05	1.00
		S 1	23 7 3.36									14.82	14.56	0.26	
02	TMD	EPU0	23 6 57.32				45	2.6	49.6	235	38	8.78	9.04	0.03	0.60
		S 4	23 7 3.08									14.54	14.95	-0.42	
02	MCA	EPU0	23 6 57.97				53	2.8	54.5	213	38	9.43	9.44	-0.09	
		S 0	23 7 4.82									16.28	16.28	0.00	
02	YMT3	EP 0	23 6 58.55				66	3.0	57.0	122	38	10.01	10.01	0.05	0.90
		S 0	23 7 5.76									17.22	17.03	0.19	
02	EPN	EP 0	23 6 59.06				61	2.9	58.3	73	38	10.52	10.48	-0.02	0.50
		S 1	23 7 6.50									17.96	18.02	-0.06	
02	CDH1	EP 2	23 6 59.28				45	2.6	60.7	112	38	10.74	10.68	0.16	1.00
		S 0	23 7 6.80									18.26	18.09	0.17	
02	MGM	EPU0	23 6 59.81				57	2.9	64.1	311	38	11.27	11.37	-0.01	0.40
		S 4	23 7 7.65									19.11	19.29	-0.18	
02	BGB	IPD2	23 6 60.03				46	2.7	64.5	92	38	11.49	11.36	0.20	0.50
		S 1	23 7 7.73									19.19	19.30	-0.11	
02	CTS	IPU0	23 6 60.47				48	2.7	69.0	17	38	11.93	12.12	-0.03	
		S 2	23 7 8.87									20.33	20.44	-0.11	
02	LSM	EPD0	23 6 60.74				64	3.0	70.3	121	38	12.20	12.18	0.00	1.50
		S 0	23 7 9.38									20.84	20.86	-0.03	
02	SDH	EPU0	23 6 60.82				47	2.7	71.6	130	38	12.28	12.38	-0.06	
		S 1	23 7 9.49									20.95	21.10	-0.15	
02	LOP	EPU2	23 6 61.52				65	3.0	73.5	108	38	12.98	12.82	0.23	1.50
		S 4	23 7 11.17									22.63	21.79	0.84	
02	MZP	EP 0	23 6 62.44						80.5	332	38	13.90	14.10	0.04	
		S 4	23 7 12.71									24.17	23.70	0.47	
02	GLR	EPD0	23 6 62.90				41	2.7	84.4	80	38	14.36	14.54	-0.12	
02	AMR	EPU0	23 6 63.14				39	2.6	85.2	150	38	14.60	14.52	0.07	
		S 2	23 7 13.21									24.67	24.84	-0.18	
02	BLT	EP 1	23 6 63.63				51	2.8	87.1	58	38	15.09	15.05	0.17	
		S 4	23 7 14.93									26.39	25.52	0.87	
02	KRNA	EPD0	23 6 64.36				51	2.9	90.8	34	38	15.82	15.70	0.05	1.40
		S 4	23 7 15.88									27.34	26.97	0.37	
02	MCY	EPU4	23 6 65.68				65	3.1	98.8	117	38	17.14	16.84	0.38	1.90
		S 4	23 7 17.71									29.17	28.66	0.50	
02	GwV	EPU0	23 6 65.62				40	2.7	100.3	165	38	17.08	17.15	0.01	
		S 4	23 7 17.28									28.74	29.19	-0.46	
02	SVP	EP 1	23 6 66.59				41	2.7	104.4	314	38	18.05	18.04	-0.10	
		S 4	23 7 20.25									31.71	31.04	0.67	
02	QCS	EPD2	23 6 69.29				36	2.7	120.6	49	38	20.75	20.52	0.26	1.70
		S 3	23 7 23.93									35.39	35.03	0.35	
02	QSM	EP 1	23 6 69.20				39	2.7	121.9	176	38	20.66	20.48	0.09	
		S 0	23 7 23.67									35.13	35.17	-0.05	
02	HCR	EPD1	23 6 71.67				34	2.7	137.8	19	38	23.13	23.35	-0.13	
		S 4	23 7 28.75									40.21	39.77	0.44	



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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
.....																
DEC H = 3			36 49.88	UTC	RMS =	0.11	NO = 57	FREE DEPTH SOLUTION								
03 LAT =			37.066 N	ERX =	0.1	ERH =	0.1	AVFM =	2.5	u =	B					
LONG =			116.951 W	ERY =	0.1	GAP =	0.3	AVXM =		WS =	A	THIRSTY CANYON				
DEPTH =			0.19 KM	ERZ =	0.2	NM =				WD =	C					
.....																
03	SGV	IPD0	3 36 52.48					59	2.7	11.8	218	40	2.60	2.68	0.01	
		S 0	3 36 54.30										4.42	4.43	-0.01	
03	NMN	IPD0	3 36 52.44					49	2.6	12.0	82	40	2.56	2.70	-0.08	
		S 1	3 36 54.58										4.70	4.52	0.18	
03	GVN	EPD0	3 36 56.37					43	2.5	35.5	258	38	6.49	6.52	-0.09	1.20
		S 1	3 37 1.20										11.32	11.26	0.07	
03	BMT	IPD0	3 36 56.67					45	2.6	36.4	48	38	6.79	6.93	0.03	1.70
		S 0	3 37 1.54										11.66	11.56	0.10	
03	GMN	IPU0	3 36 56.82					34	2.3	37.8	314	38	6.94	7.15	-0.06	
		S 1	3 37 1.85										11.97	11.98	0.00	
03	WCT	IPU1	3 36 57.08					29	2.2	41.9	136	38	7.20	7.59	-0.23	
		S 0	3 37 2.60										12.72	12.71	0.02	
03	YMT1	IPU0	3 36 57.88					64	2.9	44.4	122	38	8.00	8.03	-0.16	1.60
		S 1	3 37 3.68										13.80	13.95	-0.15	
03	YMT5	IPU0	3 36 58.44					40	2.5	48.0	113	38	8.56	8.66	-0.10	
		S 0	3 37 4.62										14.74	14.81	-0.06	
03	FMT	IPU0	3 36 58.37					36	2.4	49.7	162	38	8.49	8.86	-0.13	0.30
		S 2	3 37 4.95										15.07	14.74	0.33	
03	YMT4	EPU1	3 36 58.97					44	2.6	49.8	116	38	9.09	8.92	0.07	1.30
		S 0	3 37 5.35										15.47	15.44	0.04	
03	TMD	EPD0	3 36 58.65					30	2.3	49.9	235	38	8.77	9.13	-0.06	
		S 0	3 37 5.24										15.36	15.11	0.26	
03	YMT2	EP 0	3 36 59.20							52.0	127	38	9.32	9.24	0.00	
03	YMT6	EP 1	3 36 59.58					37	2.5	53.8	115	38	9.70	9.56	0.05	0.40
		S 0	3 37 6.36										16.48	16.51	-0.02	
03	MCA	EP 0	3 36 59.33					40	2.5	54.8	212	38	9.45	9.55	-0.17	
		S 0	3 37 6.35										16.47	16.46	0.02	
03	YMT3	EPU2	3 36 59.62					44	2.6	57.2	123	38	9.74	10.09	-0.29	1.00
		S 0	3 37 7.07										17.19	17.17	0.03	
03	EPN	IPD1	3 36 60.60					37	2.5	58.2	74	38	10.72	10.50	0.16	0.80
		S 0	3 37 7.97										18.09	18.06	0.03	
03	CDH1	EPU1	3 36 60.31					30	2.3	60.9	112	38	10.43	10.75	-0.21	0.50
		S 0	3 37 8.13										18.25	18.21	0.05	
03	MGM	EP 0	3 36 61.08							63.8	311	38	11.20	11.38	-0.08	
		S 1	3 37 9.19										19.31	19.30	0.01	
03	BGB	EPD2	3 36 61.39					30	2.3	64.4	93	38	11.51	11.40	0.20	0.90
		S 0	3 37 9.23										19.35	19.35	0.00	
03	LCH	EP 4	3 36 61.63							64.6	287	38	11.75	11.37	0.47	
		S 1	3 37 9.40										19.52	19.30	0.22	
03	SSP	EPU1	3 36 61.82					35	2.5	67.1	103	38	11.94	11.90	0.12	0.70
		S 2	3 37 9.89										20.01	20.21	-0.20	
03	CTS	EPD0	3 36 61.76					23	2.1	68.6	17	38	11.88	12.11	-0.05	
		S 2	3 37 10.15										20.27	20.42	-0.14	
03	LSM	EPD0	3 36 62.07					39	2.6	70.5	121	38	12.19	12.26	-0.08	1.40
		S 0	3 37 10.80										20.92	21.00	-0.07	
03	SDH	EPU0	3 36 62.18					30	2.3	71.8	130	38	12.30	12.47	-0.12	
		S 3	3 37 11.56										21.68	21.25	0.44	
03	LOP	EPU0	3 36 62.56					39	2.6	73.6	109	38	12.68	12.89	-0.12	1.20
		S 4	3 37 12.31										22.43	21.90	0.53	
03	GLR	EPD0	3 36 64.25							84.3	80	38	14.37	14.58	-0.13	
		S 3	3 37 15.04										25.16	24.80	0.36	
03	AMR	EP 3	3 36 64.73							65.5	150	38	14.85	14.62	0.22	
		S 4	3 37 15.51										25.63	25.02	0.62	
03	KRNA	EPD1	3 36 65.68					31	2.4	90.5	34	38	15.80	15.69	0.04	
		S 2	3 37 17.18										27.30	26.95	0.35	
03	MCY	EP 1	3 36 66.85					39	2.7	98.9	117	38	16.97	16.92	0.14	0.90
		S 2	3 37 19.04										29.16	28.79	0.37	
03	JUN	EPU0	3 36 67.29							102.7	133	38	17.41	17.46	-0.06	
		S 4	3 37 20.65										30.77	29.88	0.90	
03	SVP	EP 1	3 36 67.97							104.2	314	38	18.09	18.05	-0.06	
03	GMR	EPD3	3 36 68.62							108.9	74	38	18.74	18.61	0.24	
.....																

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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
DEC	H	=	7 22 48.13	UTC	RMS	=	0.08	NO	=	17	FREE DEPTH SOLUTION				
04	LAT	=	37.618 N	ERX	=	0.1	ERH	=	0.2	AVFM	=	2.0	W	=	B
	LONG	=	115.861 W	ERY	=	0.1	GAP	=	71	AVXM	=		WS	=	A
	DEPTH	=	7.22 KM	ERZ	=	0.8	NM	=					WD	=	C
.....															
04	QCS	IPU0	7 22 51.77					12	1.3	17.3	344	111	3.64	3.65	0.02
		S 0	7 22 54.29										6.16	6.19	-0.03
04	TPU	EPU0	7 22 51.88					24	2.0	18.8	94	109	3.75	3.88	0.01
		S 0	7 22 54.53										6.40	6.39	0.01
04	BLT	EPD4	7 22 52.79					20	1.8	27.6	237	102	4.66	5.24	-0.45
		S 1	7 22 56.75										8.62	8.74	-0.12
04	GMR	EPU2	7 22 53.81					21	1.9	32.5	166	100	5.68	5.98	-0.20
		S 3	7 22 58.65										10.52	10.05	0.47
04	WRN	EPU1	7 22 56.36					26	2.1	47.0	31	96	8.23	8.34	-0.15
		S 1	7 23 2.36										14.23	14.33	-0.10
04	KRNA	EP 1	7 22 56.78					25	2.1	47.7	287	96	6.65	8.51	0.07
		S 0	7 23 2.79										14.66	14.66	0.00
04	GLR	EPU0	7 22 56.54					23	2.0	48.5	197	96	8.41	8.52	-0.04
		S 0	7 23 2.71										14.58	14.45	0.13
04	MTI	EPD0	7 22 57.31					26	2.1	52.4	83	95	9.18	9.17	0.04
		S 4	7 23 4.31										16.18	15.62	0.56
04	EPN	EPD1	7 22 58.81					29	2.3	60.7	222	95	10.68	10.68	-0.06
		S 0	7 23 6.56										18.43	18.36	0.07
04	SRG	EPU0	7 22 61.41					32	2.4	75.7	67	94	13.28	12.98	0.08
		S 4	7 23 11.22										23.09	22.52	0.51
04	NPN	EPU4	7 22 61.74					25	2.2	81.7	87	93	13.61	13.95	-0.55
		S 4	7 23 13.31										25.18	24.21	0.97
04	HCR	EPD0	7 22 62.66					23	2.2	85.0	324	93	14.53	14.56	0.06
		S 4	7 23 13.65										25.52	24.75	0.77
.....															
DEC	H	=	13 43 37.64	UTC	RMS	=	0.14	NO	=	21	FREE DEPTH SOLUTION				
05	LAT	=	37.621 N	ERX	=	0.2	ERH	=	0.3	AVFM	=	1.9	W	=	B
	LONG	=	115.870 W	ERY	=	0.2	GAP	=	69	AVXM	=		WS	=	A
	DEPTH	=	7.35 KM	ERZ	=	1.3	NM	=					WD	=	C
.....															
05	QCS	IPU0	13 43 41.24					12	1.3	16.8	346	112	3.60	3.58	0.05
		S 0	13 43 43.79										6.15	6.07	0.09
05	TPU	EPD1	13 43 41.39					24	2.0	19.6	95	108	3.75	4.01	-0.12
		S 0	13 43 44.15										6.51	6.62	-0.11
05	BLT	IPU2	13 43 42.36					17	1.7	27.1	235	103	4.72	5.17	-0.31
		S 0	13 43 46.16										8.52	8.61	-0.09
05	GMR	EPD1	13 43 43.41					20	1.8	33.0	165	100	5.77	6.07	-0.19
		S 2	13 43 48.09										10.45	10.20	0.25
05	KRNA	EPU0	13 43 45.96					21	1.9	46.8	267	96	8.32	8.37	-0.12
		S 1	13 43 52.23										14.59	14.43	0.16
05	WRN	EP 1	13 43 45.94					23	2.0	47.1	32	96	8.30	8.37	-0.10
		S 1	13 43 51.86										14.22	14.38	-0.15
05	GLR	EPD1	13 43 46.17					18	1.8	48.6	196	96	8.53	8.54	0.07
		S 1	13 43 52.25										14.61	14.48	0.13
05	MTI	EPU0	13 43 46.83					23	2.0	53.1	83	96	9.19	9.29	-0.07
		S 2	13 43 53.72										16.08	15.84	0.24
05	EPN	EPD0	13 43 48.35					26	2.2	60.4	222	95	10.71	10.63	0.02
		S 0	13 43 55.99										18.35	18.28	0.07
05	SRG	EPU4	13 43 51.37					24	2.2	76.4	68	94	13.73	13.08	0.43
		S 2	13 44 0.65										23.01	22.75	0.26
05	NPN	EP 3	13 43 52.26					20	2.0	82.5	88	93	14.62	14.08	0.33
		S 4	13 44 2.66										25.02	24.43	0.59
05	HCR	EP 3	13 43 52.38							84.2	324	93	14.74	14.44	0.39
		S 4	13 44 2.95										25.31	24.55	0.77
.....															

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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
DEC H = 2 51 55.52 UTC				RMS =	0.08	NO =	9	FREE DEPTH SOLUTION							
07	LAT = 37.771 N			ERX =	0.4	ERH =	0.5	AVFM =	1.4	W = B					
	LONG = 115.102 W			ERY =	0.3	GAP =	138	AVXM =		WS = A		HIKO			
	DEPTH = 1.77 KM			ERZ =	1.7	NM =				WD = C					
.....															
07	SRG	EPD0	2 51 58.40					19	1.7	12.7	14	94	2.88	2.68	-0.02
		S 0	2 52 0.45										4.93	4.96	-0.03
07	MTI	EPD0	2 51 59.17					11	1.3	18.4	235	93	3.65	3.63	0.05
		S 0	2 52 1.67										6.15	6.15	0.00
07	NPN	EPD0	2 51 59.65					11	1.3	19.6	132	93	4.13	3.86	0.06
		S 2	2 52 2.29										6.77	6.96	-0.20
07	DLM	EPD1	2 51 62.60					8	1.1	36.9	120	74	7.08	6.72	0.11
		S 4	2 52 7.83										12.31	11.92	0.39
07	PRN	EPU1	2 51 62.73					17	1.7	40.7	174	74	7.21	7.28	-0.20
		S 0	2 52 8.08										12.56	12.66	-0.10
.....															
DEC H = 20 58 53.22 UTC				RMS =	0.11	NO =	21	FIXED DEPTH SOLUTION							
07	LAT = 37.026 N			ERX =	0.2	ERH =	0.5	AVFM =	1.6	W = B		DEPTH CONTROL INADEQUATE			
	LONG = 116.227 W			ERY =	0.4	GAP =	128	AVXM =		WS = A		SILENT CANYON - YUCCA FLAT			
	DEPTH = 5.00 KM			ERZ =	0.5	NM =				WD = B					
.....															
07	BGB	IPD1	20 58 54.70					16	1.5	1.4	357	166	1.48	1.41	0.15
		S 0	20 58 55.48										2.26	2.27	-0.01
07	SSP	IPU3	20 58 55.47					16	1.6	11.2	176	112	2.25	2.62	-0.29
		S 1	20 58 57.51										4.29	4.35	-0.06
07	CPX	EP 0	20 58 56.69					8	1.0	18.6	125	100	3.47	3.63	-0.12
		S 0	20 58 59.39										6.17	6.15	0.02
07	LOP	EPU2	20 58 56.74					16	1.6	19.7	164	100	3.52	3.89	-0.29
		S 2	20 59 0.03										6.81	6.52	0.29
07	YMT6	EP 0	20 58 57.75					12	1.4	24.4	220	97	4.53	4.53	-0.08
		S 0	20 59 1.04										7.82	7.89	-0.07
07	YMT5	EP 0	20 58 57.78					12	1.4	24.7	235	97	4.56	4.62	-0.05
		S 0	20 59 1.14										7.92	7.89	0.03
07	LSM	EPU2	20 58 59.17					18	1.8	32.0	187	95	5.95	5.75	0.18
		S 0	20 59 2.97										9.75	9.87	-0.12
07	YMT1	EP 0	20 58 59.30					19	1.8	33.0	235	95	6.08	5.93	0.03
		S 2	20 59 3.81										10.59	10.36	0.24
07	YMT2	EP 0	20 58 59.56					16	1.7	35.2	221	94	6.34	6.25	0.01
		S 1	20 59 4.12										10.90	10.83	0.07
07	MCY	EP 1	20 58 61.43					21	1.9	46.8	150	93	8.21	8.18	0.11
		S 2	20 59 7.28										14.06	13.86	0.20
07	JON	EPU0	20 58 64.41					11	1.4	65.9	170	92	11.19	11.22	-0.04
		S 4	20 59 13.14										19.92	19.21	0.71
.....															
DEC H = 8 24 48.73 UTC				RMS =	0.08	NO =	11	FREE DEPTH SOLUTION							
08	LAT = 37.070 N			ERX =	0.5	ERH =	0.5	AVFM =	1.4	W = B					
	LONG = 116.378 W			ERY =	0.2	GAP =	106	AVXM =		WS = A		SILENT CANYON - PAHUTE MESA			
	DEPTH = 1.53 KM			ERZ =	1.5	NM =				WD = C					
.....															
08	BGB	EPD1	8 24 51.51					9	1.1	13.8	105	93	2.78	2.90	-0.03
		S 0	8 24 53.79										5.06	4.82	0.25
08	EPN	EPU0	8 24 52.29					17	1.6	16.7	17	92	3.56	3.50	0.00
		S 0	8 24 54.95										6.22	6.09	0.13
08	YMT5	EPD3	8 24 52.44					8	1.0	20.2	200	92	3.71	3.90	-0.19
		S 1	8 24 55.62										6.89	6.68	0.22
08	SSP	EPD0	8 24 52.87					10	1.2	21.4	139	92	4.14	4.26	-0.03
		S 1	8 24 55.90										7.17	7.14	0.03
08	YMT4	EP 0	8 24 53.43					8	1.0	23.5	196	91	4.70	4.45	0.14
		S 4	8 24 57.33										8.60	7.80	0.80
08	YMT1	EPD2	8 24 53.73					18	1.7	27.5	209	74	5.00	5.09	-0.21
		S 1	8 24 57.94										9.21	8.92	0.29
08	LOP	EPU0	8 24 54.26					14	1.5	30.4	142	74	5.53	5.66	-0.05
		S 4	8 24 58.71										9.98	9.55	0.43
08	YMT3	EPD0	8 24 54.44					12	1.4	31.5	185	74	5.71	5.71	0.05
		S 4	8 24 59.15										10.42	9.68	0.74

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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
08	YMT2	EPD0	8 24 54.71				12	1.4	32.9	197	74	5.98	5.95	-0.05	
		S 4	8 24 59.76									11.03	10.31	0.72	
08	BMT	EPD0	8 24 54.84						33.6	115	74	6.11	6.29	0.00	
		S 4	8 24 59.82									11.09	10.46	0.63	
08	LSM	EPD2	8 24 55.74				13	1.5	37.8	166	74	7.01	6.75	0.24	
		S 2	8 25 0.60									11.87	11.58	0.29	

DEC H = 8 25 12.11 UTC RMS = 0.17 NO = 7 FREE DEPTH SOLUTION  
 08 LAT = 35.602 N ERX = 1.4 ERH = 2.6 AVFM = 1.8 Q = D  
 LONG = 116.308 W ERY = 2.1 GAP = 295 AVXM = Q = C SHOSHUNE  
 DEPTH = 24.15 KM ERZ = 254.5 NM = QD = D

08	NOP	EPD0	8 25 22.57				17	1.8	60.1	13	90	10.46	10.65	-0.09	
		S 1	8 25 30.07									17.96	18.05	-0.09	
08	QSM	EPD	8 25 23.45				16	1.8	64.8	309	90	11.34	11.33	-0.08	
		S 3	8 25 31.85									19.74	19.53	0.21	
08	GWV	EP 2	8 25 24.62				20	2.0	72.7	333	90	12.51	12.48	0.11	
		S 3	8 25 33.48									21.37	21.21	0.17	
08	AMR	EP 4	8 25 28.01						89.6	350	90	15.90	14.93	0.97	
08	JON	EPD2	8 25 28.37				15	1.8	94.8	11	90	16.26	15.69	0.57	
08	SDH	EPD4	8 25 32.59						115.9	359	62	20.48	18.72	1.81	
08	MCY	EPD4	8 25 33.24				11	1.6	121.7	15	62	21.13	19.52	1.70	
08	LSM	EP 4	8 25 34.48				10	1.6	126.4	1	62	22.37	20.08	2.27	

DEC H = 12 34 56.00 UTC RMS = 0.11 NO = 9 FREE DEPTH SOLUTION  
 08 LAT = 37.658 N ERX = 0.3 ERH = 0.3 AVFM = 1.7 Q = B  
 LONG = 115.067 W ERY = 0.2 GAP = 100 AVXM = Q = A HIKO  
 DEPTH = 1.86 KM ERZ = 1.0 NM = QD = C

08	NPN	EPD2	12 34 58.22				18	1.7	11.5	93	95	2.22	2.48	-0.48	
		S 0	12 35 0.51									4.51	4.61	-0.10	
08	MTI	EPD0	12 34 59.38				15	1.5	18.3	277	93	3.38	3.61	-0.20	
		S 0	12 35 2.23									6.23	6.12	0.10	
08	SRG	EPD1	12 34 60.95				24	2.0	24.9	360	74	4.95	4.75	-0.02	
		S 0	12 35 4.59									8.59	8.49	0.09	
08	PRN	EPD4	12 34 61.55				18	1.7	27.9	177	74	5.55	5.20	0.23	
		S 0	12 35 5.14									9.14	9.09	0.05	
08	DLM	EP 0	12 34 61.67				12	1.4	29.5	101	74	5.67	5.52	-0.10	
		S 1	12 35 5.99									9.99	9.86	0.12	

DEC H = 15 52 41.50 UTC RMS = 0.14 NO = 16 FREE DEPTH SOLUTION  
 09 LAT = 36.552 N ERX = 0.8 ERH = 0.8 AVFM = 2.7 Q = C  
 LONG = 117.796 W ERY = 0.4 GAP = 242 AVXM = Q = A DRY MOUNTAIN  
 DEPTH = 0.22 KM ERZ = 0.7 NM = QD = D

09	TMO	EPD0	15 52 49.52				35	2.4	44.6	51	38	8.02	8.27	0.05	
		S 0	15 52 55.17									13.67	13.62	0.04	
09	MCA	IPD0	15 52 49.74				48	2.7	47.3	77	38	8.24	8.31	-0.16	
		S 0	15 52 55.78									14.28	14.35	-0.08	
09	GVN	EPD4	15 52 52.91				56	2.9	64.2	39	38	11.41	11.18	0.17	
		S 0	15 53 0.59									19.09	19.22	-0.13	
09	PGE	EPD0	15 52 53.38				46	2.7	69.2	109	38	11.88	12.19	-0.10	
		S 0	15 53 2.07									20.57	20.48	0.09	
09	LCH	EPD4	15 52 54.30				45	2.7	76.9	10	38	12.80	13.36	-0.48	
		S 0	15 53 4.34									22.84	22.71	0.13	
09	SGV	EPD2	15 52 55.94				60	3.0	83.1	55	38	14.44	14.40	0.13	
		S 1	15 53 6.18									24.68	24.47	0.21	
09	GMN	EPD1	15 52 57.76				37	2.6	95.8	30	38	16.26	16.58	-0.17	
		S 1	15 53 9.86									28.36	28.09	0.26	
09	PPK	EPD4	15 52 57.64						97.5	354	38	16.14	16.79	-0.67	
09	MGM	EP 3	15 52 58.54				38	2.6	102.2	15	38	17.04	17.61	-0.48	
09	QSM	EP 0	15 52 59.46				41	2.7	105.7	128	38	17.96	17.89	-0.03	
		S 1	15 53 12.56									31.06	30.75	0.31	
09	GWV	EP 1	15 52 59.85				39	2.7	108.8	112	38	18.35	18.57	-0.14	
		S 4	15 53 13.81									32.31	31.61	0.69	

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.....															
DEC H = 0 49 18.55 UTC				RMS =	0.07	NO = 12						FREE DEPTH SOLUTION			
10 LAT = 37.384 N				ERX =	0.2	ERH = 0.2		AVFM = 1.8	Q = B						
LONG = 115.332 W				ERY =	0.2	GAP = 110		AVXM =	US = A	ALAMO					
DEPTH = 11.19 KM				ERZ =	1.2	NM =			WD = C						
.....															
10	PKN	EPD0	0 49 23.66					26 2.0	25.1	84	113	5.11	4.98	0.01	
		S 0	0 49 27.21									8.66	8.71	-0.06	
10	EPR	EPD0	0 49 23.80					23 1.9	27.1	152	111	5.25	5.24	0.03	
10	MTI	EPD0	0 49 24.67					19 1.8	33.0	9	107	6.12	6.19	-0.04	
		S 0	0 49 29.09									10.54	10.53	0.01	
10	GMR	EPD0	0 49 25.60					14 1.6	39.3	262	104	7.05	7.18	-0.04	
		S 0	0 49 30.63									12.08	12.11	-0.04	
10	NPN	EPU0	0 49 27.09					19 1.8	46.0	49	102	8.54	8.26	0.07	
		S 3	0 49 33.47									14.92	14.49	0.43	
10	DLM	EPU1	0 49 28.92					17 1.8	58.0	65	99	10.37	10.20	-0.08	
		S 2	0 49 36.18									17.63	17.87	-0.24	
10	WRN	EPD0	0 49 30.82					15 1.7	70.1	341	98	12.27	12.16	0.07	
.....															
DEC H = 1 28 12.17 UTC				RMS =	0.07	NO = 6						FREE DEPTH SOLUTION			
10 LAT = 36.702 N				ERX =	0.5	ERH = 0.7		AVFM = 1.3	Q = C						
LONG = 116.127 W				ERY =	0.5	GAP = 112		AVXM =	US = B	LATHROP WELLS					
DEPTH = 5.99 KM				ERZ =	4.4	NM =			WD = C						
.....															
10	LSM	IPU1	1 28 14.92					13 1.4	13.7	288	110	2.75	2.86	-0.13	
10	MCY	IPU0	1 28 15.30					14 1.5	15.4	107	108	3.13	3.16	0.06	
10	LOP	EPD0	1 28 15.66					12 1.3	17.2	348	106	3.49	3.53	0.05	
10	YMT3	IPU0	1 28 17.09					13 1.5	27.1	290	99	4.92	4.96	0.01	
10	SPRG	EP1	1 28 17.22						28.4	92	98	5.05	5.21	-0.13	
10	JON	EPU0	1 28 17.47					7 0.9	29.2	176	98	5.30	5.28	0.01	
10	YMT2	IPD4	1 28 14.67					13 1.5	33.2	286	97	2.50	5.95	-3.53	
.....															
DEC H = 2 25 9.86 UTC				RMS =	0.08	NO = 8						FREE DEPTH SOLUTION			
10 LAT = 37.075 N				ERX =	1.2	ERH = 1.3		AVFM = 1.1	Q = C						
LONG = 116.150 W				ERY =	0.6	GAP = 305		AVXM =	US = B	SILENT CANYON - YUCCA FLAT					
DEPTH = 20.63 KM				ERZ =	0.6	NM =			WD = D						
.....															
10	BGB	EP0	2 25 14.00					26 2.0	8.0	239	159	4.14	4.16	0.06	
		S 0	2 25 16.83									6.97	6.98	-0.01	
10	SSP	EP0	2 25 14.89					5 0.6	17.7	200	140	5.03	5.06	0.05	
10	LOP	EPU2	2 25 15.34					6 0.8	24.6	184	130	5.48	5.76	-0.20	
		S 2	2 25 19.42									9.56	9.71	-0.15	
10	LSM	EPU0	2 25 17.48					6 0.8	38.8	196	117	7.62	7.57	0.03	
		S 0	2 25 22.92									13.06	12.97	0.09	
10	YMT1	EPU0	2 25 17.95					8 1.1	41.7	234	116	8.09	8.00	-0.04	
.....															
DEC H = 23 30 53.17 UTC				RMS =	0.12	NO = 37						FREE DEPTH SOLUTION			
10 LAT = 37.056 N				ERX =	0.1	ERH = 0.2		AVFM = 2.4	Q = B						
LONG = 116.955 W				ERY =	0.2	GAP = 62		AVXM =	US = A	THIRSTY CANYON					
DEPTH = 4.65 KM				ERZ =	0.9	NM =			WD = C						
.....															
10	SGV	IPD0	23 30 55.45					59 2.7	10.7	220	109	2.28	2.43	-0.06	
		S 0	23 30 57.14									3.97	4.00	-0.03	
10	NMN	IPD1	23 30 55.44					45 2.5	12.5	77	106	2.27	2.69	-0.38	
		S 1	23 30 57.59									4.42	4.52	-0.10	
10	GVN	EPD0	23 30 59.47					40 2.5	35.0	260	94	6.30	6.18	0.06	
		S 4	23 31 4.36									11.19	10.67	0.52	
10	BMT	EP 0	23 30 59.69					43 2.5	37.4	47	93	6.52	6.84	-0.15	
		S 0	23 31 4.65									11.48	11.41	0.07	
10	GMN	IPU0	23 30 59.90					34 2.3	38.3	315	93	6.73	6.98	-0.11	
		S 0	23 31 5.02									11.85	11.69	0.16	
10	YMT1	IPU1	23 30 60.81					58 2.8	44.1	121	93	7.64	7.73	-0.22	
		S 0	23 31 6.66									13.49	13.44	0.04	
10	YMT5	IPU1	23 30 61.42					40 2.5	47.9	111	92	8.25	8.39	-0.14	
		S 0	23 31 7.57									14.40	14.35	0.05	

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. 10	FMT	IPU0	23 30 61.36				27	2.2	48.8	161	92	8.19	8.45	-0.03	
.		S 2	23 31 7.67									14.50	14.05	0.45	
. 10	TMO	EP4	23 30 62.45				18	1.8	49.0	235	92	9.28	8.73	0.85	
.		S 4	23 31 9.37									16.20	14.41	1.78	
. 10	MCA	EPD0	23 30 62.44				36	2.4	53.7	213	92	9.27	9.11	0.08	
.		S 4	23 31 9.63									16.46	15.71	0.75	
. 10	YMT3	EP2	23 30 62.71				50	2.7	56.9	122	92	9.54	9.79	-0.20	
.		S 1	23 31 10.08									16.91	16.65	0.26	
. 10	EPN	EP0	23 30 63.46				38	2.5	58.9	73	92	10.29	10.35	-0.13	
.		S 0	23 31 11.04									17.87	17.81	0.06	
. 10	CDH1	EPD1	23 30 63.38				31	2.3	60.8	111	92	10.21	10.48	-0.17	
.		S 0	23 31 10.98									17.81	17.75	0.05	
. 10	MGM	EP0	23 30 64.20				31	2.3	64.3	312	92	11.03	11.21	-0.09	
.		S 4	23 31 12.70									19.53	19.01	0.52	
. 10	BGB	IPD1	23 30 64.42				29	2.3	64.8	92	92	11.25	11.21	0.12	
.		S 0	23 31 12.31									19.14	19.03	0.11	
. 10	CTS	EPD0	23 30 64.86				33	2.4	69.7	17	92	11.69	12.04	-0.19	
.		S 1	23 31 13.56									20.39	20.30	0.08	
. 10	LSM	EP0	23 30 65.11				40	2.6	70.2	120	92	11.94	11.96	-0.05	
.		S 0	23 31 13.76									20.59	20.49	0.10	
. 10	SDH	EPU1	23 30 65.15				30	2.3	71.4	130	91	11.98	12.14	-0.13	
.		S 0	23 31 13.90									20.73	20.70	0.03	
. 10	LOP	EPD0	23 30 65.79				40	2.6	73.6	108	91	12.62	12.63	0.06	
.		S 4	23 31 15.28									22.11	21.47	0.64	
. 10	AMR	EPU0	23 30 67.48				29	2.4	84.7	150	91	14.31	14.25	0.05	
. 10	BLT	EP1	23 30 68.06						87.7	57	91	14.89	14.96	0.06	
. 10	KRNA	EPD0	23 30 68.74				28	2.3	91.6	34	90	15.57	15.20	0.30	
.		S 0	23 31 20.02									26.85	26.11	0.74	
. 10	GWV	EPU0	23 30 69.97				24	2.2	99.7	165	90	16.80	16.52	0.36	
. 10	QSM	EP 4	23 30 73.81				26	2.4	121.2	176	90	20.64	20.01	0.53	
.		S 4	23 31 28.82									35.65	34.38	1.27	
. 10	QCS	EP 4	23 30 73.78				28	2.4	121.3	49	90	20.61	20.02	0.61	
. 10	HCR	EPD3	23 30 76.35				30	2.6	138.6	19	90	23.18	22.84	0.43	
.		S 4	23 31 33.69									40.52	38.90	1.62	

DEC H = 4 4 37.77 UTC RMS = 0.22 NO = 30 FREE DEPTH SOLUTION  
 . 11 LAT = 37.068 N ERX = 0.3 ERH = 0.5 AVFM = 2.0 W = C  
 . LONG = 116.952 W ERY = 0.4 GAP = 64 AVXM = WS = B  
 . DEPTH = 4.84 KM ERZ = 1.9 NM = WD = C THIRSTY CANYON

. 11	NMN	IPD1	4 4 39.88						12.0	83	108	2.11	2.62	-0.46	
.		S 0	4 4 42.10									4.33	4.40	-0.07	
. 11	SGV	IPD0	4 4 40.00						12.0	216	108	2.23	2.64	-0.32	
.		S 0	4 4 42.18									4.41	4.36	0.05	
. 11	GVN	EPD0	4 4 43.89				32	2.3	35.5	258	94	6.12	6.27	-0.21	
.		S 0	4 4 48.82									11.05	10.82	0.22	
. 11	BMT	EPD0	4 4 44.14				29	2.2	36.2	49	94	6.37	6.66	-0.12	
.		S 0	4 4 49.15									11.38	11.09	0.29	
. 11	GMN	EPU0	4 4 44.40				19	1.8	37.5	313	94	6.63	6.86	-0.08	
. 11	YMT5	EPU1	4 4 45.87				23	2.0	48.2	113	93	8.10	8.44	-0.34	
.		S 2	4 4 52.09									14.32	14.42	-0.11	
. 11	TMO	EPU4	4 4 47.63						50.0	234	93	9.86	8.90	1.26	
.		S 2	4 4 53.16									15.39	14.70	0.68	
. 11	FMT	EP2	4 4 45.74				18	1.8	50.0	162	93	7.97	8.66	-0.45	
.		S 0	4 4 52.32									14.55	14.39	0.15	
. 11	MCA	EPU1	4 4 47.23				17	1.8	55.1	212	92	9.46	9.33	0.05	
.		S 0	4 4 54.15									16.38	16.09	0.29	
. 11	YMT3	EP1	4 4 47.59				25	2.1	57.5	123	92	9.82	9.87	0.00	
.		S 0	4 4 54.68									16.91	16.79	0.11	
. 11	BGB	EPD2	4 4 48.89				21	2.0	64.5	93	92	11.12	11.16	0.04	
.		S 2	4 4 57.06									19.31	18.94	0.37	
. 11	CTS	EPU0	4 4 49.40				17	1.8	68.3	17	92	11.63	11.81	-0.01	
.		S 2	4 4 57.77									20.00	19.90	0.09	
. 11	LSM	EP4	4 4 49.25				26	2.2	70.7	121	92	11.48	12.04	-0.58	
.		S 3	4 4 58.21									20.44	20.62	-0.19	
. 11	SDH	EPU1	4 4 49.64				20	2.0	72.1	131	92	11.87	12.25	-0.35	
.		S 3	4 4 59.12									21.35	20.89	0.46	

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. 11	LOP	EP1	4	4	50.29				30	2.3	73.8	109	92	12.52	12.66	-0.07	
.		S 3	4	4	59.76									21.99	21.52	0.47	
. 11	AMR	EPD0	4	4	51.99					85.8	150	91	14.22	14.42	-0.21		
. 11	KRNA	EPU1	4	4	53.30					90.3	34	91	15.53	15.41	0.05		
.		S 4	4	5	8.54									30.77	26.46	4.30	
. 11	HCR	EP3	4	4	61.00					137.1	19	90	23.23	22.60	0.71		
.....																	
. DEC H = 16 54 36.76 UTC RMS = 0.69 NO = 4																	
. 11	LAT =	36.788 N			ERX =		ERH =		AVFM =	1.4	Q = D		FIXED DEPTH SOLUTION				
.	LONG =	116.941 W			ERY =		GAP =	325	AVXM =		WS = D		DEPTH CONTROL INADEQUATE				
.	DEPTH =	5.00 KM			ERZ =		NM =				QD = D		CHLORIDE CLIFF				
.....																	
. 11	SSP	EP 3	16	54	47.18				9	1.3	66.2	77	92	10.42	11.51	-1.01	
. 11	BGB	EP 3	16	54	51.38				14	1.7	69.4	66	92	14.62	11.95	2.74	
.		S 4	16	54	53.68									16.92	20.30	-3.39	
. 11	LOP	EPU4	16	54	56.02				8	1.2	69.5	84	92	19.26	11.96	7.38	
.		S 0	16	54	57.36									20.60	20.31	0.29	
. 11	EPN	EP 0	16	54	49.11				10	1.4	72.5	49	92	12.35	12.58	-0.29	
.		S 4	16	54	52.21									15.45	21.62	-6.17	
. 11	CPX	EP4	16	54	44.52				10	1.4	80.6	79	92	7.76	13.68	-5.89	
.....																	
. DEC H = 0 19 49.45 UTC RMS = 0.31 NO = 15																	
. 12	LAT =	36.825 N			ERX =	0.7	ERH =	1.2	AVFM =	2.2	Q = C		FREE DEPTH SOLUTION				
.	LONG =	116.626 W			ERY =	1.0	GAP =	126	AVXM =		WS = C		CHLORIDE CLIFF				
.	DEPTH =	1.40 KM			ERZ =	3.9	NM =				QD = B						
.....																	
. 12	WCT	IPU0	0	19	49.80				27	2.0	3.6	181	101	0.35	1.03	-0.52	
.		S 0	0	19	50.57									1.12	1.48	-0.36	
. 12	YMT1	EPU0	0	19	51.53				42	2.4	9.3	70	93	2.08	2.01	-0.06	
.		S 0	0	19	53.41									3.96	3.66	0.30	
. 12	YMT2	EP1	0	19	52.43				22	1.9	13.4	109	92	2.98	2.69	0.20	
.		S 1	0	19	54.81									5.36	4.74	0.61	
. 12	YMT4	EPU0	0	19	52.83				32	2.2	16.3	74	92	3.38	3.22	0.05	
. 12	YMT5	EPU0	0	19	52.81				33	2.2	17.4	62	91	3.36	3.43	-0.07	
. 12	YMT3	EPU2	0	19	52.93				41	2.4	19.6	102	91	3.48	3.74	-0.22	
. 12	YMT6	ep0	0	19	53.30				33	2.2	20.1	79	91	3.85	3.85	-0.10	
. 12	FMT	EPD0	0	19	53.80						24.7	214	90	4.35	4.38	0.20	
.		S 1	0	19	57.04									7.59	7.09	0.50	
. 12	LSM	ep0	0	19	55.55				23	2.0	32.9	107	74	6.10	5.96	0.11	
.		S 4	0	20	0.79									11.34	10.23	1.10	
. 12	SGV	EPU1	0	19	56.19				31	2.3	40.2	296	74	6.74	7.23	-0.41	
.		S 1	0	20	1.84									12.39	12.21	0.17	
.....																	
. DEC H = 1 20 6.77 UTC RMS = 0.15 NO = 11																	
. 13	LAT =	38.397 N			ERX =	2.6	ERH =	4.1	AVFM =	4.3	Q = D		FREE DEPTH SOLUTION				
.	LONG =	117.921 W			ERY =	3.1	GAP =	279	AVXM =		WS = C		PILOT PEAK				
.	DEPTH =	10.97 KM			ERZ =	1.1	NM =				QD = D						
.....																	
. 13	SVP	IPX	1	20	20.07					76.4	172	97	13.30	13.34	-0.16		
. 13	PPK	IPU	1	20	25.12					107.7	179	95	18.35	18.25	0.09		
. 13	MGM	IPU4	1	20	26.41					112.4	161	94	19.64	19.07	0.66		
. 13	HCR	EPU	1	20	28.68				201	4.2	131.2	98	94	21.91	22.10	-0.10	
. 13	CTS	EPU	1	20	29.19				201	4.2	133.3	128	94	22.41	22.41	0.17	
. 13	NMN	IPU	1	20	34.79				155	4.1	175.5	146	52	28.02	27.78	0.29	
. 13	BLT	EPU	1	20	35.92				194	4.4	187.9	123	52	29.15	29.45	-0.17	
. 13	EPN	EPU	1	20	36.92				193	4.4	192.4	133	52	30.15	30.13	-0.04	
. 13	YMT1	EPU	1	20	39.27				191	4.4	210.9	144	52	32.50	32.24	0.13	
. 13	WCT	EPU	1	20	39.21				151	4.2	211.6	147	52	32.44	32.29	0.30	
. 13	BGB	IPU4	1	20	39.82				149	4.2	212.2	135	52	33.05	32.54	0.59	
. 13	GLR	IPU4	1	20	40.19				150	4.2	213.9	128	52	33.42	32.69	0.80	
. 13	YMT6	EPU	1	20	39.92				150	4.2	217.0	142	52	33.15	33.02	0.04	
. 13	TPU	EPU	1	20	39.69				150	4.2	218.0	114	52	32.92	33.33	-0.27	
. 13	FMT	EPU	1	20	40.19				149	4.2	219.6	153	52	33.42	33.33	0.33	
. 13	CDH1	EPU	1	20	40.41				149	4.3	221.6	140	52	33.64	33.67	0.07	
. 13	GMR	EPU	1	20	40.53					222.8	122	52	33.76	33.87	-0.01		

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13	LSM	EPU	1 20 42.28						234.5	142	52	35.51	35.26	0.22	
13	MCY	EPU	1 20 45.52				184	4.6	259.0	138	52	38.75	38.44	0.39	

DEC H = 23 17 37.78 UTC RMS = 0.33 NO = 38 FREE DEPTH SOLUTION															
15 LAT = 37.150 N ERX = 0.4 ERH = 0.5 AVFM = 2.1 Q = C															
LONG = 116.937 W ERY = 0.4 GAP = 78 AVXM = Q = C THIRSTY CANYON															
DEPTH = 5.71 KM ERZ = 3.5 NM = QD = C															

15	NMN	IPU0	23 17 40.14				33	2.2	13.0	126	111	2.36	2.82	-0.42	
		S 0	23 17 42.42									4.64	4.74	-0.11	
15	SGV	IPD0	23 17 41.45				31	2.2	20.5	204	102	3.67	4.01	-0.26	
		S 0	23 17 44.34									6.56	6.71	-0.15	
15	GMN	IPU0	23 17 43.47				21	1.9	33.2	300	96	5.69	6.17	-0.33	
		S 0	23 17 48.38									10.60	10.29	0.30	
15	GVN	EPD0	23 17 44.42				30	2.2	39.6	245	95	6.64	6.94	-0.37	
		S 0	23 17 49.86									12.08	11.98	0.10	
15	WCT	IPU0	23 17 45.70				19	1.9	48.3	145	94	7.92	8.39	-0.31	
		S 2	23 17 52.11									14.33	14.07	0.26	
15	YMT1	IPD0	23 17 46.28				36	2.4	49.0	132	94	8.50	8.53	-0.17	
15	YMT5	EPU0	23 17 46.59				24	2.1	51.3	123	94	8.81	8.94	-0.13	
		S 3	23 17 53.01									15.23	15.28	-0.06	
15	YMT4	EP4	23 17 47.31						53.5	126	93	9.53	9.28	0.14	
15	EPN	EP4	23 17 47.51				21	2.0	54.9	83	93	9.73	9.72	-0.05	
		S 2	23 17 54.52									16.74	16.72	0.01	
15	TMO	EP4	23 17 48.56						56.7	228	93	10.78	10.00	1.08	
		S 3	23 17 54.84									17.06	16.58	0.48	
15	YMT6	EPD0	23 17 47.77						57.4	124	93	9.99	9.88	0.01	
		S 4	23 17 56.58									18.80	17.06	1.74	
15	FMT	EPU0	23 17 47.35				23	2.1	58.3	166	93	9.57	10.01	-0.21	
		S 4	23 17 54.18									16.40	16.71	-0.31	
15	CTS	EP4	23 17 49.05						59.3	18	93	11.27	10.35	1.09	
		S 0	23 17 55.80									18.02	17.41	0.61	
15	YMT3	IPD0	23 17 48.09				31	2.3	61.7	131	93	10.31	10.57	-0.21	
		S 2	23 17 56.52									18.74	17.99	0.75	
15	MCA	EPD3	23 17 48.58						63.5	209	93	10.80	10.71	0.01	
		S 0	23 17 56.28									18.50	18.45	0.05	
15	CDH1	EPD0	23 17 48.60				24	2.1	63.8	120	93	10.82	10.98	-0.06	
		S 0	23 17 56.66									18.88	18.60	0.28	
15	BGB	EP4	23 17 48.39				26	2.2	64.3	101	93	10.61	11.12	-0.44	
		S 0	23 17 56.54									18.76	18.88	-0.12	
15	LSM	EPU1	23 17 50.66				24	2.2	74.6	128	92	12.88	12.69	0.17	
		S 2	23 18 0.21									22.43	21.73	0.70	
15	LOP	EP	23 17 50.50				26	2.2	75.9	116	92	12.72	13.01	-0.22	
		S 2	23 18 0.52									22.74	22.12	0.62	
15	SDH	EPU1	23 17 50.63						77.3	136	92	12.85	13.11	-0.22	
		S 2	23 18 0.48									22.70	22.34	0.35	
15	BLT	EP 3	23 17 51.15						81.1	63	92	13.37	13.88	-0.33	
15	GLR	EP 2	23 17 51.62				22	2.1	81.8	86	92	13.84	13.91	-0.01	
		S 4	23 18 2.49									24.71	23.67	1.04	
15	KRNA	EPD0	23 17 51.64						82.1	37	92	13.86	14.08	-0.30	
		S 2	23 18 2.62									24.84	24.20	0.64	
15	QCS	EPD2	23 17 56.94				23	2.3	113.4	53	91	19.16	19.14	0.04	
15	QSM	EPU2	23 17 59.99						131.6	177	91	22.21	21.86	0.26	
		S	23 18 16.00									38.22	37.53	0.69	

DEC H = 6 19 24.02 UTC RMS = 0.10 NO = 13 FREE DEPTH SOLUTION															
17 LAT = 37.382 N ERX = 0.2 ERH = 0.4 AVFM = 2.0 Q = B															
LONG = 115.323 W ERY = 0.3 GAP = 109 AVXM = Q = A ALAMO															
DEPTH = 16.19 KM ERZ = 1.3 NM = QD = B															

17	PRN	EPD0	6 19 29.47				25	2.0	24.4	84	123	5.45	5.25	0.09	
		S 1	6 19 33.09									9.07	9.18	-0.10	
17	EPR	EPU1	6 19 29.58				33	2.3	26.6	153	121	5.56	5.52	0.06	
		S 4	6 19 33.66									9.64	9.41	0.23	
17	MTI	EPD1	6 19 30.51				24	2.0	33.0	8	115	6.49	6.48	0.04	
		S 1	6 19 35.27									11.25	11.04	0.22	



## 1981 SGB LOCAL-EVENT DATA REPORT

DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
17	TPU	EPD0	6 19 31.20					19 1.8	38.0	311	112	7.18	7.31	0.01	
		S 2	6 19 36.17									12.15	12.26	-0.11	
17	GMR	EPD0	6 19 31.42					19 1.8	40.0	262	111	7.40	7.55	-0.05	
		S 2	6 19 36.70									12.68	12.74	-0.06	
17	NPN	ep0	6 19 32.39					22 2.0	45.5	49	109	8.37	8.40	-0.23	
		S 2	6 19 38.72									14.70	14.72	-0.01	
17	DLM	EPD4	6 19 33.99					18 1.8	57.3	64	105	9.97	10.26	-0.54	
17	SRG	ep4	6 19 34.07					29 2.3	59.9	22	104	10.05	10.65	-0.81	
		S 4	6 19 41.95									17.93	18.58	-0.65	
17	WRN	ep2	6 19 36.67					22 2.1	70.5	341	102	12.65	12.36	0.26	
		S 2	6 19 45.22									21.20	21.20	0.00	

DEC H = 14 13 36.37 UTC RMS = 0.23 NO = 17 FREE DEPTH SOLUTION  
 19 LAT = 36.763 N ERX = 0.5 ERH = 0.5 AVFM = 1.8 Q = B  
 LONG = 116.283 W ERY = 0.3 GAP = 113 AVXM = QS = B LATHROP WELLS  
 DEPTH = 0.84 KM ERZ = 0.4 NM = QD = B

19	LSM	IPD0	14 13 37.08					27 2.0	2.7	161	126	0.71	0.88	-0.20	
		S 2	14 13 37.91									1.54	1.55	-0.01	
19	SDH	EPD0	14 13 38.85					15 1.5	14.0	201	40	2.48	2.82	-0.30	
		S 0	14 13 41.25									4.88	4.75	0.13	
19	LOP	EPU2	14 13 38.88					23 1.9	14.4	45	40	2.51	3.01	-0.43	
		S 2	14 13 41.35									4.98	5.02	-0.04	
19	YMT6	EPD2	14 13 39.33						15.2	314	40	2.96	3.04	-0.17	
		S 0	14 13 41.91									5.54	5.35	0.19	
19	SSP	EPD2	14 13 39.95					20 1.8	18.8	18	40	3.58	3.84	-0.18	
		S 1	14 13 43.14									6.77	6.43	0.34	
19	YMT5	EPD4	14 13 40.76						21.4	314	40	4.39	4.14	0.25	
19	CPX	EPD4	14 13 41.85					17 1.7	27.5	48	40	5.48	5.15	0.36	
		S 2	14 13 45.45									9.08	8.75	0.33	
19	BGB	EP 2	14 13 41.93					23 2.0	30.9	9	38	5.56	5.81	-0.17	
		S 2	14 13 46.30									9.93	9.79	0.14	
19	JON	EPD0	14 13 43.27					14 1.6	39.3	156	38	6.90	7.02	-0.13	
		S 0	14 13 48.86									12.49	12.01	0.48	
19	SPRG	EPU1	14 13 44.00					17 1.7	43.0	100	38	7.63	7.68	-0.02	
		S 3	14 13 50.20									13.83	13.07	0.76	

DEC H = 18 21 50.40 UTC RMS = 0.21 NO = 13 FREE DEPTH SOLUTION  
 19 LAT = 37.321 N ERX = 0.5 ERH = 0.9 AVFM = 1.8 Q = C  
 LONG = 115.446 W ERY = 0.7 GAP = 146 AVXM = QS = B ALAMO  
 DEPTH = 19.36 KM ERZ = 2.3 NM = QD = C

19	EPR	IPU0	18 21 56.39					21 1.9	28.6	126	124	5.99	6.07	-0.06	
		S 3	18 22 1.15									10.75	10.35	0.41	
19	GMR	EPU2	18 21 56.79					16 1.6	28.9	273	124	6.39	6.17	0.32	
		S 0	18 22 0.65									10.25	10.38	-0.13	
19	TPU	EPU0	18 21 57.48					13 1.5	36.2	330	118	7.08	7.27	-0.05	
		S 0	18 22 2.88									12.48	12.20	0.28	
19	PRN	EPU0	18 21 57.85					22 1.9	36.3	75	117	7.45	7.19	0.14	
		S 0	18 22 2.69									12.29	12.51	-0.22	
19	MTI	EPU1	18 21 58.18					20 1.9	42.3	21	114	7.78	8.08	-0.27	
		S 2	18 22 3.68									13.28	13.76	-0.48	
19	NPN	EP 2	18 21 61.24						58.1	51	108	10.84	10.51	0.12	
19	WRN	EP 3	18 21 63.24						74.4	350	104	12.84	13.08	-0.28	
		S 2	18 22 12.91									22.51	22.43	0.08	

DEC H = 20 46 33.22 UTC RMS = 0.19 NO = 32 FREE DEPTH SOLUTION  
 19 LAT = 37.284 N ERX = 0.3 ERH = 0.3 AVFM = 2.2 Q = C  
 LONG = 116.445 W ERY = 0.2 GAP = 59 AVXM = QS = B SILENT CANYON - NORTH  
 DEPTH = 5.06 KM ERZ = 2.1 NM = QD = C

19	EPN	IPU0	20 46 36.09					38 2.3	13.3	126	108	2.87	2.99	-0.19	
		S 0	20 46 38.51									5.29	5.22	0.07	
19	BMT	EPD0	20 46 36.50					32 2.2	17.8	270	102	3.28	3.69	-0.24	
		S 0	20 46 39.05									5.83	6.02	-0.20	

## 1981 SGB LOCAL-EVENT DATA REPORT

DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
19	BGB	EPU1	20 46 38.97					35 2.3	33.5	145	95	5.75	6.12	-0.29	
		S 2	20 46 43.43									10.21	10.32	-0.11	
19	BLT	EPD2	20 46 39.41					18 1.8	36.0	52	94	6.19	6.55	-0.23	
		S 2	20 46 44.87									11.65	10.97	0.68	
19	NMN	IPD0	20 46 40.20					28 2.2	40.1	236	94	6.98	7.15	-0.12	
		S 0	20 46 45.44									12.22	12.14	0.08	
19	YMT5	EPU0	20 46 40.73					29 2.2	42.9	181	93	7.51	7.57	-0.06	
		S 0	20 46 46.10									12.88	12.94	-0.06	
19	YMT6	EPU0	20 46 41.45					20 1.9	47.4	176	93	8.23	8.26	-0.12	
		S 2	20 46 47.79									14.57	14.28	0.29	
19	CTS	IPU0	20 46 41.57					23 2.0	48.2	329	93	8.35	8.54	-0.02	
		S 0	20 46 47.72									14.50	14.32	0.18	
19	YMT1	EPD1	20 46 41.77					45 2.6	48.4	189	93	8.55	8.43	-0.01	
		S 1	20 46 47.98									14.76	14.64	0.12	
19	KRNA	EPU0	20 46 42.29					21 2.0	51.0	7	93	9.07	9.02	-0.02	
		S 0	20 46 48.96									15.64	15.54	0.10	
19	LOP	EPU1	20 46 42.12					31 2.3	53.7	153	93	8.90	9.40	-0.42	
		S 0	20 46 49.61									16.39	15.94	0.45	
19	WCT	EPD1	20 46 42.69					18 1.8	57.0	197	92	9.47	9.78	-0.16	
		S 4	20 46 49.77									16.55	16.46	0.09	
19	GMR	EPD2	20 46 43.60					20 1.9	60.0	85	92	10.38	10.39	0.09	
		S 4	20 46 51.05									17.83	17.59	0.24	
19	SGV	IPD0	20 46 43.81					32 2.4	62.1	237	92	10.59	10.74	-0.06	
		S 0	20 46 51.69									18.47	18.21	0.25	
19	FMT	EPD2	20 46 46.09					22 2.1	77.5	203	92	12.87	13.13	-0.02	
		S 4	20 46 55.27									22.05	22.03	0.01	
19	GVN	EPD1	20 46 47.64					29 2.4	85.8	249	92	14.42	14.44	-0.08	
		S 2	20 46 58.18									24.96	24.80	0.16	
19	MCA	EPD2	20 46 50.47					24 2.2	102.6	227	91	17.25	17.07	0.10	
		S 3	20 47 3.28									30.06	29.32	0.74	
19	HCR	EP 3	20 46 51.11						105.4	0	91	17.89	17.88	0.10	

DEC H = 19 3 59.24 UTC RMS = 0.32 NO = 34  
 20 LAT = 36.725 N ERX = 0.5 ERH = 0.7 AVFM = 2.3 W = C  
 LONG = 115.698 W ERY = 0.5 GAP = 84 AVXM = W = C  
 DEPTH = 7.37 KM ERZ = 2.5 NM = W = B

FREE DEPTH SOLUTION

MERCURY

20	SPRG	IPD0	19 3 61.56					30 2.1	10.6	251	124	2.32	2.53	-0.19	
		S 0	19 4 3.49									4.25	4.28	-0.04	
20	CPX	IPU0	19 3 65.92					21 1.9	39.1	305	98	6.68	6.98	-0.28	
		S 0	19 4 11.39									12.15	11.89	0.25	
20	LOP	EPU0	19 3 66.74					34 2.3	44.3	289	97	7.50	7.90	-0.32	
		S 0	19 4 12.99									13.75	13.37	0.37	
20	APK	EPD1	19 3 67.25					25 2.1	46.4	166	97	8.01	8.44	-0.17	
		S 0	19 4 13.23									13.99	13.98	0.01	
20	LSM	EPU0	19 3 67.81					38 2.5	51.4	272	96	8.57	8.94	-0.39	
		S 0	19 4 14.86									15.62	15.32	0.30	
20	SHRG	EPD1	19 3 68.19					18 1.8	54.4	117	95	8.95	9.52	0.01	
		S 1	19 4 15.36									16.12	15.27	0.84	
20	SDH	EPU1	19 3 68.85					25 2.1	57.9	261	95	9.61	9.97	-0.32	
		S 0	19 4 17.03									17.79	16.98	0.80	
20	BGB	EPU0	19 3 68.86					30 2.3	58.6	306	95	9.62	10.22	-0.52	
		S 0	19 4 16.96									17.72	17.34	0.38	
20	EPR	EPD3	19 3 70.56					35 2.5	67.0	43	94	11.32	11.50	-0.16	
		S 3	19 4 19.42									20.18	19.63	0.54	
20	GMR	EPU1	19 3 70.76						67.8	354	94	11.52	11.69	-0.07	
20	YMT5	EPU0	19 3 70.91					29 2.3	70.2	286	94	11.67	12.02	-0.35	
		S 0	19 4 19.85									20.61	20.56	0.05	
20	YMT1	EPD0	19 3 71.97					46 2.7	75.5	281	94	12.73	12.85	-0.25	
		S 0	19 4 21.71									22.47	22.19	0.28	
20	EPN	EPD2	19 3 72.35					27 2.3	77.8	314	94	13.11	13.44	-0.40	
		S 0	19 4 22.11									22.87	23.09	-0.22	
20	FMT	EPD0	19 3 75.25					25 2.3	97.1	264	93	16.01	16.32	-0.08	
		S 2	19 4 27.68									28.44	27.50	0.94	
20	BMT	EP 2	19 3 76.77						104.7	306	93	17.53	17.79	-0.10	
20	NMN	EPD1	19 3 77.24						107.4	292	93	18.00	18.09	-0.05	
		S 1	19 4 30.77									31.53	30.86	0.67	

## 1981 SGB LOCAL-EVENT DATA REPORT

DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 20	SGV	IPD0	19 3 79.60					30 2.5	122.3	283	92	20.36	20.53	-0.09	
.		S 1	19 4 35.16									35.92	34.96	0.96	
. 20	MCA	EP 2	19 3 82.73					32 2.6	141.7	267	92	23.49	23.43	-0.03	
.		S 4	19 3 0.43									-58.81	40.21	-99.02	
. 20	GVN	EPD4	19 3 84.28						149.8	282	52	25.04	24.70	0.28	
.		S 4	19 3 2.61									-56.63	42.33	-98.97	
. 20	GMN	EPD3	19 3 83.92						153.0	295	52	24.68	25.40	-0.58	

DEC H = 7 14 17.46 UTC RMS = 0.15 NO = 19 FREE DEPTH SOLUTION  
 . 21 LAT = 37.183 N ERX = 0.3 ERH = 0.4 AVFM = 2.1 Q = B  
 . LONG = 117.388 W ERY = 0.3 GAP = 113 AVXM = Q = A MI. JACKSON  
 . DEPTH = 9.01 KM ERZ = 1.2 NM = QD = B

. 21	GMN	IPD0	7 14 21.02					21 1.8	17.3	41	117	3.56	3.81	-0.11	
.		S 0	7 14 23.66									6.20	6.26	-0.07	
. 21	GVN	IPU0	7 14 21.42					27 2.1	20.6	169	111	3.96	4.03	-0.13	
.		S 0	7 14 24.47									7.01	6.99	0.02	
. 21	LCH	EPD0	7 14 21.89					26 2.0	23.7	284	109	4.43	4.63	-0.13	
.		S 0	7 14 25.33									7.87	7.79	0.08	
. 21	MGM	EP 2	7 14 23.12					15 1.6	30.2	341	105	5.66	5.78	-0.03	
.		S 0	7 14 27.44									9.98	9.73	0.25	
. 21	SGV	IPU0	7 14 24.25					30 2.2	38.8	125	101	6.79	7.02	-0.15	
.		S 0	7 14 29.52									12.06	11.86	0.20	
. 21	NMN	EPD0	7 14 26.33					27 2.2	51.9	103	98	8.87	9.12	-0.20	
.		S 0	7 14 33.26									15.80	15.51	0.29	
. 21	PPK	ep3	7 14 26.81						53.4	300	98	9.35	9.42	-0.09	
. 21	MCA	EPD2	7 14 27.98					22 2.0	60.1	171	96	10.52	10.20	0.24	
.		S 4	7 14 34.86									17.40	17.58	-0.18	
. 21	CTS	EPD	7 14 30.84						78.7	48	95	13.38	13.54	0.01	
.		S 4	7 14 40.42									22.96	22.86	0.10	
. 21	WCT	EPD0	7 14 30.93					21 2.1	80.5	123	95	13.47	13.64	-0.01	
.		S 0	7 14 41.26									23.80	23.04	0.75	
. 21	YMT1	ep0	7 14 31.86					37 2.6	84.8	116	94	14.40	14.38	-0.11	
.		S 4	7 14 43.27									25.81	24.81	1.00	
. 21	YMT5	EPD1	7 14 32.37					23 2.2	89.0	111	94	14.91	15.09	-0.18	
.		S 0	7 14 43.69									26.23	25.80	0.43	

DEC H = 16 44 56.49 UTC RMS = 0.11 NO = 16 FREE DEPTH SOLUTION  
 . 22 LAT = 37.254 N ERX = 0.4 ERH = 0.5 AVFM = 3.5 Q = B  
 . LONG = 115.034 W ERY = 0.2 GAP = 154 AVXM = Q = A ALAMO  
 . DEPTH = 1.41 KM ERZ = 1.4 NM = QD = C

. 22	EPR	IPD0	16 44 59.71						16.6	235	92	3.22	3.27	-0.04	
. 22	PRN	IPD0	16 44 60.02					145 3.5	17.0	355	92	3.53	3.39	0.02	
.		S 0	16 45 2.53									6.04	6.00	0.04	
. 22	NPN	EPD0	16 44 64.62						45.1	11	74	8.13	8.05	-0.13	
.		S 1	16 45 10.75									14.26	14.12	0.14	
. 22	DLM	EPD1	16 44 64.98						47.0	34	74	8.49	8.37	-0.14	
.		S 1	16 45 11.26									14.77	14.75	0.02	
. 22	MTI	EPD0	16 44 65.49						51.5	336	74	9.00	9.06	-0.03	
.		S 2	16 45 12.68									16.19	15.44	0.74	
. 22	GMR	EPD0	16 44 67.86						66.0	278	74	11.37	11.44	0.03	
.		S 4	16 45 16.10									19.61	19.39	0.22	
. 22	TPU	EPD1	16 44 68.10						67.0	306	74	11.61	11.67	0.08	
.		S 0	16 45 17.27									20.78	19.71	1.06	
. 22	SRG	EPD0	16 44 68.89						69.8	358	74	12.40	12.07	0.11	
.		S 2	16 45 17.93									21.44	21.01	0.43	
. 22	SHRG	EPD0	16 44 70.34						83.9	187	74	13.85	14.36	0.08	
. 22	SPRG	EPD0	16 44 72.00						92.9	228	74	15.51	15.74	-0.20	
. 22	WRN	EPD4	16 44 73.16						94.5	329	74	16.67	16.10	0.52	
. 22	CPX	EP 4	16 44 73.56						97.7	248	74	17.07	16.52	0.57	
. 22	BLT	EP 4	16 44 73.97						99.7	285	74	17.48	16.97	0.64	
. 22	LDP	EP	16 44 74.97						110.1	246	74	18.48	18.64	-0.08	

## 1981 SGB LOCAL-EVENT DATA REPORT

DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (JEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
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DEC H = 19	11	59.37	UTC	RMS = 0.04	NO = 8	FREE DEPTH SOLUTION										
22	LAT = 36.739 N	ERX = 0.3	ERH = 0.5	AVFM = 1.7	W = C											
	LONG = 115.689 W	ERY = 0.5	GAP = 185	AVXM =	WS = A	MERCURY										
	DEPTH = 5.50 KM	ERZ = 1.3	NM =		WD = D											
22	SPRG	IPD0	19 11 61.93						14	1.5	11.9	245	112	2.56	2.58	0.01
22	MCY	EPU1	19 11 64.05						25	2.0	25.9	251	98	4.68	4.81	-0.05
22	LOP	EPD1	19 11 67.16						19	1.8	44.6	287	94	7.79	7.92	-0.05
22	JON	EPD	19 11 67.94						16	1.7	49.8	228	93	8.57	8.60	-0.03
22	SSP	EP 3	19 11 68.37								51.6	294	93	9.00	9.14	-0.05
22	LSM	EPD1	19 11 68.44						20	1.9	52.2	270	93	9.07	9.04	0.01
22	SDH	EP 1	19 11 69.56						10	1.3	59.0	260	93	10.19	10.12	0.11
22	EPR	EPU	19 11 70.56						16	1.8	65.4	43	93	11.19	11.21	0.00

DEC H = 0	32	19.09	UTC	RMS = 0.24	NO = 52	FREE DEPTH SOLUTION										
23	LAT = 36.727 N	ERX = 0.3	ERH = 0.4	AVFM = 2.2	W = B											
	LONG = 115.689 W	ERY = 0.2	GAP = 75	AVXM =	WS = B	MERCURY										
	DEPTH = 7.15 KM	ERZ = 1.3	NM =		WD = B											
23	SPRG	IPD0	0 32 21.56						31	2.2	11.4	251	121	2.47	2.63	-0.13
	S 0		0 32 23.49											4.40	4.44	-0.04
23	MCY	IPD0	0 32 23.39						39	2.4	25.5	253	103	4.30	4.79	-0.41
	S 3		0 32 26.97											7.88	8.06	-0.18
23	CPX	IPU0	0 32 25.94						28	2.2	39.7	305	97	6.85	7.06	-0.18
	S 0		0 32 31.39											12.30	12.03	0.28
23	LOP	IPU0	0 32 26.70						29	2.2	45.0	288	96	7.61	8.00	-0.31
	S 0		0 32 32.84											13.75	13.55	0.20
23	APK	ep0	0 32 27.06						26	2.1	46.4	167	96	7.97	8.44	-0.20
	S 0		0 32 33.04											13.95	13.98	-0.03
23	JON	IPD0	0 32 27.31						26	2.1	48.9	229	96	8.22	8.48	-0.27
	S 0		0 32 34.14											15.05	14.52	0.53
23	SSP	IPU1	0 32 27.94						25	2.1	52.1	295	95	8.65	9.24	-0.30
	S 2		0 32 34.92											15.83	15.66	0.18
23	LSM	ep2	0 32 27.86						29	2.2	52.2	272	95	8.77	9.06	-0.31
	S 0		0 32 34.87											15.78	15.53	0.26
23	SHRG	EPD1	0 32 28.18						24	2.1	53.8	117	95	9.09	9.42	0.26
	S 2		0 32 35.35											16.26	15.10	1.16
23	CDH1	IPD1	0 32 28.68						25	2.1	58.0	285	95	9.59	10.05	-0.36
	S 0		0 32 36.12											17.03	17.02	0.02
23	SDH	EPU1	0 32 28.82						20	1.9	58.7	261	95	9.73	10.10	-0.33
	S 0		0 32 36.79											17.70	17.20	0.50
23	BGB	IPU0	0 32 28.85						29	2.3	59.1	306	95	9.76	10.30	-0.46
	S 0		0 32 36.76											17.67	17.47	0.20
23	GLR	EPD0	0 32 28.97								60.0	331	95	9.88	10.38	-0.43
	S 4		0 32 37.84											18.75	17.63	1.12
23	YMT3	EPU0	0 32 29.85						35	2.4	64.8	276	94	10.76	11.08	-0.27
	S 4		0 32 38.90											19.81	18.86	0.95
23	YMT6	ep0	0 32 30.12						26	2.2	65.5	283	94	11.03	11.22	-0.28
	S 4		0 32 39.07											19.98	19.33	0.65
23	EPR	EPD0	0 32 30.55						32	2.4	66.4	42	94	11.46	11.39	0.09
	S 4		0 32 39.25											20.16	19.44	0.72
23	GMR	EPU1	0 32 30.64						22	2.1	67.7	354	94	11.55	11.66	-0.01
	S 0		0 32 38.96											19.87	19.77	0.10
23	YMT4	EPU2	0 32 30.74								69.7	283	94	11.65	11.93	-0.39
23	YMT5	EPU0	0 32 30.96						26	2.2	70.9	286	94	11.87	12.13	-0.26
	S 4		0 32 40.80											21.71	20.75	0.97
23	YMT1	EPU0	0 32 31.88						34	2.5	76.2	281	94	12.79	12.96	-0.30
	S 4		0 32 40.88											21.79	22.39	-0.60
23	EPN	EPD1	0 32 32.56						24	2.2	78.2	314	93	13.47	13.51	-0.10
	S 1		0 32 42.09											23.00	23.20	-0.20
23	NOP	EP 1	0 32 32.05						26	2.2	78.5	212	93	12.96	13.28	-0.23
	S 0		0 32 42.06											22.97	22.56	0.41
23	AMR	EPD1	0 32 32.44						20	2.0	79.2	242	93	13.35	13.36	-0.01
	S 1		0 32 42.25											23.16	22.85	0.31
23	WCT	EPU1	0 32 33.20						26	2.3	84.0	275	93	14.11	14.19	0.08
	S 0		0 32 43.49											24.40	23.99	0.41

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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 23	PRN	EP 2	0 32 35.19					30 2.4	94.4	37	93	16.10	15.98	0.00	
.		S 4	0 32 47.08									27.99	27.53	0.46	
. 23	FMT	EPD0	0 32 35.39					22 2.2	97.9	264	93	16.30	16.45	0.09	
.		S 0	0 32 47.21									28.12	27.72	0.40	
. 23	BMT	EPU3	0 32 36.93						105.2	306	92	17.84	17.88	0.13	
.		S 3	0 32 49.64									30.55	30.28	0.27	
. 23	NMN	EPD0	0 32 37.22						108.0	291	92	18.13	18.20	-0.02	
. 23	SGV	EPU2	0 32 39.51						123.0	283	92	20.42	20.65	-0.14	
.		S 4	0 32 55.67									36.58	35.15	1.43	
. 23	PGE	EPD3	0 32 41.17						130.3	251	92	22.08	21.90	0.40	
. 23	CTS	EPU2	0 32 42.07						138.2	318	92	22.98	23.19	-0.04	
. 23	GVN	EPU2	0 32 43.99						150.5	282	52	24.90	24.81	0.03	
. 23	GMN	EPD1	0 32 44.48						153.6	294	52	25.39	25.50	0.04	

DEC H = 1 8 31.55 UTC RMS = 0.16 NO = 14 FREE DEPTH SOLUTION  
 . 23 LAT = 37.337 N ERX = 0.3 ERH = 0.6 AVFM = 1.9 Q = C  
 . LONG = 115.477 W ERY = 0.5 GAP = 126 AVXM = QS = B ALAMO  
 . DEPTH = 6.52 KM ERZ = 4.5 NM = QD = C

. 23	GMR	EPD2	1 8 35.92					21 1.9	26.1	269	101	4.37	4.93	-0.46	
.		S 0	1 8 39.75									8.20	8.27	-0.06	
. 23	EPR	EPU	1 8 37.28					23 2.0	31.8	126	98	5.73	5.79	-0.03	
.		S 4	1 8 42.89									11.34	9.86	1.49	
. 23	TPU	EPD3	1 8 37.23						33.4	333	98	5.68	6.18	-0.35	
.		S 0	1 8 41.91									10.36	10.32	0.04	
. 23	PRN	EPD4	1 8 38.63					26 2.1	38.6	78	97	7.08	6.91	0.05	
.		S 2	1 8 43.97									12.42	12.03	0.40	
. 23	MTI	EPU2	1 8 38.58					24 2.0	41.8	26	96	7.03	7.44	-0.38	
.		S 4	1 8 45.17									13.62	12.68	0.95	
. 23	GLR	EPD1	1 8 40.38					16 1.7	50.3	252	95	8.83	8.81	0.09	
.		S 0	1 8 46.70									15.15	14.95	0.21	
. 23	NPN	EPU2	1 8 42.22					22 2.0	59.2	54	94	10.67	10.29	0.17	
.		S 3	1 8 49.81									18.26	17.95	0.31	
. 23	DLM	EPU2	1 8 44.12						71.7	65	93	12.57	12.34	-0.02	
. 23	KRNA	EPD0	1 8 47.22						91.6	299	92	15.67	15.62	-0.01	
.		S 3	1 8 56.58									27.03	26.82	0.21	

DEC H = 7 14 19.76 UTC RMS = 0.31 NO = 26 FREE DEPTH SOLUTION  
 . 23 LAT = 37.227 N ERX = 0.3 ERH = 0.4 AVFM = 2.4 Q = B  
 . LONG = 116.358 W ERY = 0.3 GAP = 42 AVXM = QS = C SILENT CANYON - NORTH  
 . DEPTH = 0.23 KM ERZ = 0.4 NM = QD = A

. 23	EPN	IPD0	7 14 20.46					56 2.6	3.3	115	127	0.70	1.10	-0.46	
. 23	BGB	EPD0	7 14 24.00					49 2.6	24.0	151	40	4.24	4.77	-0.45	
.		S 0	7 14 27.90									8.14	8.01	0.12	
. 23	BMT	EPD0	7 14 24.57					34 2.3	26.3	284	40	4.81	5.25	-0.28	
.		S 0	7 14 28.56									8.80	8.69	0.10	
. 23	BLT	EPU1	7 14 26.05					29 2.2	35.1	36	38	6.29	6.65	-0.23	
.		S 0	7 14 31.35									11.59	11.15	0.44	
. 23	SSP	EP	7 14 26.47						35.7	160	38	6.71	6.80	-0.01	
. 23	YMT5	EPD0	7 14 26.54					32 2.3	37.5	193	38	6.78	6.93	-0.16	
.		S 0	7 14 32.35									12.59	11.86	0.73	
. 23	YMT6	EPU1	7 14 27.26					30 2.2	41.1	186	38	7.50	7.48	-0.08	
. 23	LOP	EP 2	7 14 27.57					42 2.5	44.7	158	38	7.81	8.18	-0.29	
.		S 4	7 14 34.65									14.89	13.85	1.04	
. 23	GMR	EP 2	7 14 29.37						53.3	77	38	9.61	9.56	0.15	
.		S 4	7 14 36.11									16.35	16.17	0.17	
. 23	WCT	EPD0	7 14 29.15					29 2.2	53.9	206	38	9.39	9.53	0.02	
.		S 4	7 14 37.24									17.48	16.01	1.46	
. 23	LSM	EPU1	7 14 29.82					39 2.5	54.6	172	38	10.06	9.67	0.37	
.		S 4	7 14 37.63									17.87	16.57	1.30	
. 23	KRNA	EPD0	7 14 29.86					26 2.2	57.1	358	38	10.10	10.25	-0.22	
.		S 4	7 14 38.13									18.37	17.65	0.72	
. 23	CTS	EPD1	7 14 29.76					27 2.2	57.7	326	38	10.00	10.34	-0.17	
.		S 0	7 14 37.45									17.69	17.39	0.30	
. 23	SGV	EPD1	7 14 31.25					42 2.6	65.9	246	38	11.49	11.60	-0.02	
.		S 2	7 14 40.01									20.25	19.68	0.57	

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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	Fmag	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 23	QCS	EPU2	7 14 32.14					26 2.2	71.6	33	38	12.38	12.59	-0.18	
.		S 3	7 14 41.59									21.83	21.48	0.35	
. 23	SPRG	ep	7 14 33.11						76.7	140	38	13.35	13.28	0.09	
. 23	EPR	EP 2	7 14 37.90						104.2	94	38	18.14	17.77	0.39	
. 23	MCR	EPU0	7 14 38.71				31 2.5		111.9	356	38	18.95	19.18	-0.14	
.		S 2	7 14 53.35									33.59	32.64	0.94	

DEC H = 22 8 42.47 UTC RMS = 0.25 NO = 22 FREE DEPTH SOLUTION  
 . 23 LAT = 36.716 N ERX = 0.5 ERH = 0.7 AVFM = 1.7 Q = 8  
 . LONG = 115.698 W ERY = 0.5 GAP = 74 AVXM = Q = 8  
 . DEPTH = 7.05 KM ERZ = 1.7 NM = QD = 8 MERCURY

. 23	SPRG	IPD0	22 8 44.68				16 1.6		10.2	256	123	2.21	2.46	-0.21	
.		S 0	22 8 46.66									4.19	4.15	0.04	
. 23	MCY	EPU1	22 8 46.64				25 2.0		24.3	256	103	4.17	4.60	-0.35	
.		S 0	22 8 50.31									7.84	7.74	0.10	
. 23	CPX	EPD0	22 8 49.17				9 1.2		39.7	307	97	6.70	7.07	-0.34	
. 23	LUP	EP 0	22 8 49.92				22 2.0		44.6	290	96	7.45	7.94	-0.41	
.		S 1	22 8 56.29									13.82	13.44	0.38	
. 23	APK	EP 4	22 8 50.68				15 1.6		45.4	166	96	8.21	8.27	0.21	
.		S 0	22 8 56.18									13.71	13.69	0.02	
. 23	JON	EPD1	22 8 50.47				16 1.7		47.4	230	96	8.00	8.24	-0.25	
.		S 2	22 8 56.56									14.09	14.11	-0.02	
. 23	LSM	EPD1	22 8 51.20				23 2.0		51.4	273	95	8.73	8.93	-0.22	
.		S 0	22 8 58.01									15.54	15.30	0.24	
. 23	SHRG	EPD1	22 8 51.59				16 1.7		54.0	116	95	9.12	9.45	0.26	
.		S 3	22 8 58.49									16.02	15.15	0.87	
. 23	SDH	EPU0	22 8 52.30				15 1.7		57.7	262	95	9.83	9.93	-0.06	
.		S 0	22 8 59.94									17.47	16.91	0.56	
. 23	GLR	EP	22 8 52.71				12 1.5		60.7	332	94	10.24	10.50	-0.19	
.		S 1	22 9 0.70									18.23	17.83	0.40	
. 23	EPR	EPD2	22 8 53.93				15 1.7		67.9	42	94	11.46	11.63	-0.15	
.		S 4	22 9 2.38									19.91	19.85	0.06	
. 23	GMR	EP 3	22 8 54.41				15 1.7		68.9	355	94	11.94	11.85	0.19	
.		S 3	22 9 2.80									20.33	20.10	0.23	
. 23	PRN	EP 3	22 8 58.76				20 2.1		95.9	37	93	16.29	16.23	-0.06	
.		S 4	22 9 10.23									27.76	27.95	-0.19	

DEC H = 9 44 40.50 UTC RMS = 0.22 NO = 25 FREE DEPTH SOLUTION  
 . 25 LAT = 36.719 N ERX = 0.4 ERH = 0.5 AVFM = 1.6 Q = 8  
 . LONG = 116.024 W ERY = 0.3 GAP = 98 AVXM = Q = 8  
 . DEPTH = 4.08 KM ERZ = 2.1 NM = QD = 8 LATHROP WELLS

. 25	MCY	IPU0	9 44 42.14				24 1.9		8.4	139	111	1.64	1.99	-0.27	
.		S 0	9 44 43.83									3.33	3.26	0.07	
. 25	SPRG	ep2	9 44 44.07				13 1.4		19.4	98	95	3.57	3.73	-0.12	
.		S 0	9 44 46.81									6.31	6.32	-0.01	
. 25	LUP	IPU0	9 44 43.98				21 1.8		19.7	320	95	3.48	3.87	-0.31	
.		S 0	9 44 47.23									6.73	6.48	0.25	
. 25	LSM	EPD1	9 44 44.40				25 2.0		22.3	276	94	3.90	4.18	-0.29	
.		S 0	9 44 47.34									6.84	7.18	-0.33	
. 25	CPX	EP 3	9 44 44.80				12 1.4		23.6	353	94	4.30	4.41	-0.08	
.		S 0	9 44 48.20									7.76	7.49	0.27	
. 25	SDH	EPD0	9 44 45.53				14 1.5		29.2	254	93	5.03	5.28	-0.20	
.		S 0	9 44 49.81									9.31	8.95	0.36	
. 25	CDH1	EPD0	9 44 45.06				12 1.4		30.5	301	93	5.16	5.56	-0.29	
.		S 0	9 44 49.89									9.39	9.33	0.06	
. 25	JON	EPD0	9 44 46.03				15 1.6		31.8	193	93	5.53	5.66	-0.14	
.		S 0	9 44 50.45									9.95	9.70	0.25	
. 25	YMT3	ep1	9 44 46.67				23 2.0		35.3	282	92	6.17	6.27	-0.05	
.		S 3	9 44 51.43									10.93	10.64	0.30	
. 25	BGB	EPD0	9 44 47.63				16 1.7		39.8	333	92	7.13	7.13	0.08	
. 25	YMT5	EPD1	9 44 48.19				12 1.4		43.2	297	92	7.69	7.62	0.08	
.		S 1	9 44 53.71									13.21	13.02	0.19	
. 25	GLR	EPU1	9 44 49.80				13 1.5		53.3	1	91	9.30	9.28	0.09	
.		S 0	9 44 56.24									15.74	15.75	0.00	

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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
25	NOP	EPD3	9 44 51.80				15	1.7	66.6	190	90	11.30	11.13	0.27	
		S 1	9 45 0.27									19.77	18.87	0.90	
.....															
DEC H = 15 22 22.28 UTC RMS = 0.29 NU = 18 FREE DEPTH SOLUTION															
25	LAT =	36.714 N		ERX =	0.7	ERH =	1.2	AVFM =	1.8	Q =	B				
	LONG =	115.699 W		ERY =	0.9	GAP =	114	AVXM =		QS =	B	MERCURY			
	DEPTH =	8.89 KM		ERZ =	1.7	NM =				QD =	B				
.....															
25	SPRG	EPD0	15 22 24.67				15	1.5	10.1	257	131	2.39	2.62	-0.20	
		S 0	15 22 26.64									4.36	4.43	-0.07	
25	MCY	EPD0	15 22 26.59				28	2.1	24.2	256	108	4.31	4.67	-0.28	
		S 0	15 22 30.30									8.02	7.84	0.18	
25	LOP	EPD1	15 22 29.72				20	1.9	44.6	290	99	7.44	7.98	-0.46	
		S 1	15 22 35.94									13.66	13.51	0.15	
25	JON	EPD1	15 22 30.58				13	1.5	47.3	230	98	8.30	8.25	0.04	
		S 1	15 22 36.53									14.25	14.13	0.13	
25	LSM	EPD1	15 22 30.94				18	1.8	51.3	273	98	8.66	8.95	-0.31	
		S 0	15 22 38.01									15.73	15.34	0.39	
25	SHRG	EPD1	15 22 31.80				25	2.1	54.0	116	97	9.52	9.48	0.63	
25	CDH1	ep2	15 22 31.86				15	1.7	57.5	286	97	9.58	10.00	-0.32	
		S 1	15 22 39.54									17.26	16.93	0.33	
25	SDH	EPD1	15 22 32.00				13	1.6	57.6	262	97	9.72	9.95	-0.19	
		S 2	15 22 39.92									17.64	16.94	0.70	
25	BGB	EP 2	15 22 32.12				19	1.9	59.2	307	97	9.84	10.34	-0.42	
		S 0	15 22 39.88									17.60	17.55	0.05	
25	EPR	EPD1	15 22 33.93						68.0	42	96	11.65	11.68	-0.01	
		S 4	15 22 43.56									21.28	19.94	1.34	
.....															
DEC H = 5 42 55.37 UTC RMS = 0.14 NO = 28 FREE DEPTH SOLUTION															
26	LAT =	37.176 N		ERX =	0.3	ERH =	0.3	AVFM =	2.2	Q =	B				
	LONG =	117.380 W		ERY =	0.2	GAP =	169	AVXM =		QS =	A	MT. JACKSON			
	DEPTH =	6.06 KM		ERZ =	1.3	NM =				QD =	C				
.....															
26	GMN	IPD0	5 42 58.74				21	1.8	17.5	38	106	3.37	3.67	-0.15	
		S 0	5 43 1.34									5.97	6.01	-0.05	
26	GVN	EPD0	5 42 59.04				26	2.0	19.6	170	103	3.67	3.74	-0.13	
		S 0	5 43 1.99									6.62	6.50	0.12	
26	MGM	IPD0	5 42 61.15				16	1.6	31.2	341	98	5.78	5.85	0.02	
		S 0	5 43 5.26									9.89	9.84	0.04	
26	SGV	IPD0	5 42 61.84				34	2.3	37.7	125	96	6.47	6.79	-0.23	
		S 0	5 43 6.84									11.47	11.46	0.01	
26	NMN	EPD1	5 42 63.93						51.1	102	94	8.56	8.94	-0.33	
		S 0	5 43 10.48									15.11	15.20	-0.09	
26	MCA	EPD1	5 42 65.60				18	1.8	59.2	171	93	10.23	10.01	0.14	
		S 4	5 43 12.46									17.09	17.26	-0.17	
26	BMT	EP 2	5 42 66.38				29	2.3	66.3	80	93	11.01	11.55	-0.38	
		S 0	5 43 15.32									19.95	19.46	0.48	
26	CTS	EPD0	5 42 68.58				21	2.1	78.8	47	93	13.21	13.52	-0.14	
		S 1	5 43 18.69									23.32	22.83	0.49	
26	YMT1	EPD0	5 42 69.57				34	2.5	83.8	115	92	14.20	14.19	-0.13	
		S 4	5 43 20.65									25.28	24.49	0.78	
26	YMT5	EPD0	5 42 70.08				21	2.1	88.0	110	92	14.71	14.91	-0.21	
		S 4	5 43 20.71									25.34	25.50	-0.17	
26	YMT4	ep3	5 42 70.65				27	2.3	89.6	113	92	15.28	15.15	0.02	
		S 0	5 43 21.64									26.27	26.09	0.18	
26	YMT3	EPD0	5 42 71.29				30	2.4	96.5	117	92	15.92	16.22	-0.25	
		S 1	5 43 23.42									28.05	27.65	0.40	
26	CDH1	EPD0	5 42 72.13				27	2.3	100.9	110	92	16.76	17.01	-0.15	
26	BGB	EPD0	5 42 72.71						103.6	99	92	17.34	17.52	-0.10	
26	KRNA	EP 4	5 42 73.17						108.5	55	92	17.80	18.37	-0.65	
26	LSM	EPD1	5 42 73.76				23	2.2	109.8	116	92	18.39	18.41	-0.04	
26	SDH	EP 3	5 42 73.80						110.0	122	92	18.43	18.42	0.05	
26	LUP	EPD4	5 42 74.72				28	2.4	113.7	108	92	19.35	19.16	0.27	
		S 4	5 43 29.16									33.79	32.63	1.16	
26	BLT	EPD1	5 42 75.10						116.6	73	92	19.73	19.66	0.20	
26	GLR	EP 2	5 42 75.67						121.0	89	92	20.30	20.29	0.07	
		S 3	5 43 30.55									35.16	34.58	0.59	

## 1981 SGB LOCAL-EVENT DATA REPORT

DEC	STA	PHASE	TIME	AMP	PER	XMAG	DUR	FMAG	DIST	AZI	AIN	TQBS	TCAL	RES	REMARKS
1981			(UTC)	(MU)	(SEC)				(KM)	(DEG)	(DEG)	(SEC)	(SEC)	(SEC)	

DEC H = 6	4	10.27	UTC	KMS = 0.27	NO = 26	FREE DEPTH SOLUTION									
26 LAT = 37.898 N				ERX = 0.5	ERH = 0.9	AVFM = 2.8	Q = D								
LONG = 117.513 W				ERY = 0.8	GAP = 229	AVXM =	QS = C	SILVER PEAK							
DEPTH = 5.14 KM				ERZ = 8.3	NM =		WD = D								

26	MZP	EPU1	6	4	14.67				24.7	152	98	4.40	4.84	-0.21	
		S 3	6	4	17.90							7.63	7.87	-0.24	
26	SVP	EPU0	6	4	16.54		45	2.6	32.5	231	95	6.27	6.15	0.01	
		S 0	6	4	20.78							10.51	10.70	-0.20	
26	MGM	IPU0	6	4	18.95		39	2.5	50.8	178	93	8.68	9.00	-0.24	
		S 0	6	4	24.88							14.61	15.24	-0.63	
26	PPK	IPU0	6	4	21.56		39	2.5	62.9	214	92	11.29	10.92	0.36	
		S 4	6	4	29.63							19.36	18.68	0.67	
26	GMN	IPU0	6	4	22.08		49	2.8	70.1	161	92	11.81	12.15	-0.19	
		S 3	6	4	30.61							20.34	20.52	-0.18	
26	CTS	IPU0	6	4	22.72		50	2.8	74.3	111	92	12.45	12.79	-0.18	
		S 4	6	4	31.55							21.28	21.58	-0.31	
26	LCH	IPU0	6	4	23.04		37	2.5	74.6	189	92	12.77	12.75	0.10	
		S 0	6	4	32.21							21.94	21.66	0.28	
26	GVN	EPU0	6	4	27.27		61	3.1	100.7	171	91	17.00	16.87	0.07	
		S 0	6	4	39.67							29.40	28.95	0.45	
26	KRNA	EPD0	6	4	27.57		47	2.8	101.4	100	91	17.30	17.21	0.01	
		S 3	6	4	40.03							29.76	29.55	0.20	
26	BMT	EPU1	6	4	27.47		62	3.1	102.6	132	91	17.20	17.45	-0.09	
		S 1	6	4	40.11							29.84	29.55	0.28	
26	NMN	EPU1	6	4	28.57		55	3.0	109.6	146	91	18.30	18.45	-0.10	
		S 0	6	4	41.98							31.71	31.46	0.24	
26	SGV	EPU0	6	4	28.93		68	3.2	110.3	157	91	18.66	18.58	0.16	
		S 0	6	4	41.75							31.48	31.62	-0.15	
26	BLT	EP 2	6	4	32.19		45	2.9	131.0	111	90	21.92	21.61	0.44	
		S 2	6	4	48.23							37.96	36.73	1.23	
26	WCT	EPU0	6	4	34.29		50	3.0	145.7	147	90	24.02	24.00	0.17	
		S 3	6	4	51.71							41.44	40.77	0.67	

DEC H = 17	29	44.36	UTC	RMS = 0.10	NO = 39	FREE DEPTH SOLUTION									
26 LAT = 36.725 N				ERX = 0.2	ERH = 0.2	AVFM = 2.9	Q = B								
LONG = 115.708 W				ERY = 0.1	GAP = 73	AVXM =	QS = A	MERCURY							
DEPTH = 8.64 KM				ERZ = 0.4	NM =		WD = B								

26	SPRG	IPD0	17	29	46.89		68	2.8	9.7	249	131	2.53	2.54	0.02	
		S 0	17	29	48.56							4.20	4.29	-0.10	
26	MCY	IPD1	17	29	48.76		65	2.8	23.7	253	108	4.40	4.58	-0.10	
		S 0	17	29	52.20							7.84	7.70	0.14	
26	CPX	IPU0	17	29	51.24		52	2.7	38.4	306	100	6.88	6.89	0.01	
		S 0	17	29	56.17							11.81	11.74	0.07	
26	LOP	IPU0	17	29	52.06		76	3.0	43.4	289	99	7.70	7.78	-0.01	
		S 4	17	29	58.02							13.66	13.17	0.48	
26	APK	EPU3	17	29	52.35		56	2.8	46.6	165	98	7.99	8.50	-0.25	
		S 0	17	29	58.56							14.20	14.08	0.12	
26	JON	IPD0	17	29	52.64		51	2.7	47.4	228	98	8.28	8.27	0.00	
		S 4	17	29	59.29							14.93	14.16	0.77	
26	LSM	IPU0	17	29	53.17		63	2.9	50.5	272	98	8.81	8.80	-0.02	
		S 4	17	29	59.91							15.55	15.09	0.46	
26	SSP	IPU1	17	29	53.24		60	2.9	50.6	296	98	8.88	9.03	-0.07	
		S 2	17	30	0.04							15.68	15.30	0.38	
26	SHRG	EPU0	17	29	53.38		54	2.8	55.2	116	97	9.02	9.68	-0.07	
		S 4	17	30	0.66							16.30	15.54	0.75	
26	CDH1	IPD0	17	29	54.03		56	2.8	56.4	285	97	9.67	9.81	-0.05	
		S 4	17	30	1.60							17.24	16.61	0.63	
26	SDH	EPU0	17	29	54.16		48	2.7	57.0	261	97	9.80	9.84	0.00	
		S 4	17	30	2.02							17.66	16.75	0.91	
26	BGB	IPU3	17	29	54.19		60	2.9	57.8	307	97	9.83	10.12	-0.21	
		S 4	17	30	2.11							17.75	17.16	0.58	
26	GLR	EPU4	17	29	54.25		61	2.9	59.4	332	96	9.89	10.31	-0.35	
		S 0	17	30	1.94							17.58	17.51	0.07	
26	YMT3	EPU0	17	29	55.18		82	3.2	63.1	276	96	10.82	10.82	0.04	
		S 4	17	30	3.36							19.00	18.42	0.57	



## 1981 SGB LOCAL-EVENT DATA REPORT

DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 26	YMT6	EPD1	17 29 55.31					54 2.8	63.8	283	96	10.95	10.97	-0.11	
.		S 4	17 30 3.93									19.57	18.91	0.65	
. 26	EPR	EPD0	17 29 55.91					75 3.1	67.7	43	95	11.55	11.63	-0.06	
.		S 4	17 30 4.92									20.56	19.85	0.71	
. 26	GMR	EPD1	17 29 55.85					60 2.9	67.8	355	95	11.49	11.70	-0.11	
.		S 0	17 30 4.29									19.93	19.83	0.10	
. 26	YMT4	ep3	17 29 55.87						68.1	283	95	11.51	11.68	-0.28	
.		S 4	17 30 5.15									20.79	20.16	0.63	
. 26	YMT5	EPU0	17 29 56.22					49 2.8	69.2	286	95	11.86	11.89	-0.03	
.		S 4	17 30 5.21									20.85	20.33	0.52	
. 26	YMT2	ep0	17 29 56.28					80 3.2	69.5	276	95	11.92	11.87	-0.03	
.		S 4	17 30 5.39									21.03	20.44	0.59	
. 26	YMT1	EPU0	17 29 57.13					84 3.2	74.6	281	95	12.77	12.71	-0.07	
.		S 4	17 30 7.03									22.67	21.95	0.71	
. 26	EPN	EPD1	17 29 57.70					56 2.9	77.1	315	95	13.34	13.35	-0.07	
.		S 0	17 30 7.39									23.03	22.93	0.09	
. 26	NOP	EPD0	17 29 57.35					50 2.8	77.3	211	95	12.99	13.11	-0.04	
.		S 4	17 30 7.38									23.02	22.27	0.75	
. 26	AMR	EPU4	17 29 57.93					50 2.8	77.6	242	95	13.57	13.10	0.46	
.		S 4	17 30 7.39									23.03	22.42	0.61	
. 26	PRN	EP 0	17 29 60.55					70 3.2	95.7	38	94	16.19	16.20	-0.13	
.		S 4	17 30 11.79									27.43	27.90	-0.47	
. 26	TPU	EP 1	17 29 61.01						97.8	3	94	16.65	16.63	0.16	
.		S 4	17 30 13.65									29.29	28.20	1.09	
. 26	GWV	EPU2	17 29 62.21					43 2.8	104.9	235	93	17.85	17.70	0.22	
.		S 4	17 30 15.40									31.04	30.14	0.90	
. 26	MTI	EPD2	17 29 63.47					50 2.9	112.5	20	93	19.11	18.93	0.20	
.		S 3	17 30 16.99									32.63	32.32	0.30	
. 26	NPN	EPD4	17 29 64.64					49 2.9	123.6	34	93	20.28	20.78	-0.71	
.		S 3	17 30 20.59									36.23	35.89	0.34	
. 26	DLM	EP 4	17 29 66.02					46 2.9	130.2	41	93	21.66	21.87	-0.46	
.		S 0	17 30 22.26									37.90	37.82	0.08	
. 26	WRN	EP 2	17 29 67.63					45 2.9	139.9	4	92	23.27	23.43	-0.21	
.		S 0	17 30 24.60									40.24	40.14	0.10	

DEC H = 11 57 18.59 UTC RMS = 0.09 NU = 22 FREE DEPTH SOLUTION  
 28 LAT = 36.528 N ERX = 0.2 ERH = 0.3 AVFM = 2.1 W = B  
 LONG = 116.129 W ERY = 0.2 GAP = 109 AVXM = WS = A LATHROP WELLS  
 DEPTH = 5.28 KM ERZ = 0.9 NM = WD = B

. 28	JON	IPU1	11 57 20.67					26 2.0	10.1	167	114	2.08	2.23	-0.16	
.		S 0	11 57 22.45									3.86	3.83	0.03	
. 28	MCY	IPD0	11 57 22.55					33 2.2	21.0	45	100	3.96	4.02	0.02	
.		S 4	11 57 25.95									7.36	6.74	0.63	
. 28	SDH	IPU2	11 57 22.58					20 1.8	22.8	305	99	3.99	4.26	-0.22	
.		S 4	11 57 25.24									6.65	7.21	-0.55	
. 28	LSM	EPU1	11 57 23.35					34 2.3	26.8	331	97	4.76	4.92	-0.17	
.		S 0	11 57 27.04									8.45	8.44	0.01	
. 28	SPRG	EPU0	11 57 24.71					26 2.1	34.0	57	95	6.12	6.11	0.05	
.		S 4	11 57 29.81									11.22	10.39	0.83	
. 28	AMR	EP 1	11 57 24.71						34.1	245	95	6.12	6.02	0.09	
. 28	LGP	EPU0	11 57 25.06					26 2.1	36.3	355	95	6.47	6.58	-0.02	
.		S 0	11 57 29.80									11.21	11.11	0.10	
. 28	CDH1	EPD0	11 57 25.65					21 1.9	40.5	335	94	7.06	7.19	-0.03	
.		S 0	11 57 30.74									12.15	12.13	0.03	
. 28	YMT6	EPU1	11 57 26.22					21 1.9	44.1	326	94	7.63	7.73	-0.19	
.		S 0	11 57 31.79									13.20	13.38	-0.17	
. 28	NOP	EPD0	11 57 26.15					23 2.0	44.5	183	94	7.56	7.75	-0.09	
.		S 4	11 57 32.69									14.10	13.09	1.01	
. 28	SSP	EP 2	11 57 26.35					29 2.2	44.7	350	94	7.76	8.02	-0.18	
.		S 0	11 57 32.18									13.59	13.58	0.02	
. 28	YMT5	EPD0	11 57 27.37					26 2.1	50.3	325	93	8.78	8.78	0.01	
.		S 0	11 57 33.56									14.97	15.01	-0.03	
. 28	WCT	EP 1	11 57 27.43					23 2.0	53.2	303	93	8.84	9.18	-0.17	
.		S 4	11 57 34.70									16.11	15.42	0.69	
. 28	BGB	EPD1	11 57 28.34					30 2.3	57.2	351	93	9.75	9.98	-0.14	
.		S 4	11 57 36.27									17.68	16.92	0.76	

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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUN	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
28	GNV	EP 4	11 57 29.55						61.6	232	92	10.96	10.65	0.39	
		S 4	11 57 37.35									18.76	18.08	0.69	
28	GLR	EP 1	11 57 31.46				20	2.0	75.1	8	92	12.87	12.83	0.12	

DEC H = 22 45 42.46 UTC RMS = 0.08 ND = 34 FREE DEPTH SOLUTION  
 28 LAT = 37.222 N ERX = 0.2 ERH = 0.2 AVFM = 4.0 U = B  
 LONG = 114.928 W ERY = 0.1 GAP = 173 AVXM = WS = A  
 DEPTH = 5.27 KM ERZ = 0.7 NM = UD = C  
 DELAMAR MOUNTAINS

28	PRN	IPU0	22 45 47.01						212	3.9	23.2	332	98	4.55	4.41	0.02	Alamo
28	EPR	EPD2	22 45 46.54						210	3.9	23.7	256	98	4.08	4.45	-0.35	Felt at
28	DLM	IPD0	22 45 50.81						205	3.9	45.8	21	94	8.35	8.12	-0.02	
28	NPN	IPD0	22 45 51.12						212	4.0	17.8	359	93	8.66	8.43	0.02	
28	MTI	EPD0	22 45 52.72								59.0	329	93	10.26	10.22	0.07	
28	SRG	EPD1	22 45 55.60								74.3	350	92	13.14	12.74	0.18	
28	GMR	EPD3	22 45 54.99								75.8	279	92	12.53	12.96	-0.33	
28	TPU	IPU1	22 45 55.35								76.7	304	92	12.89	13.18	-0.15	
28	SHRG	EPD0	22 45 55.88								82.1	194	92	13.42	14.01	0.00	
28	GLR	EPD0	22 45 58.68								96.7	269	91	16.22	16.35	-0.06	
28	SPRG	EPD4	22 45 58.47								97.9	233	91	16.01	16.49	-0.45	
28	WRN	EPD0	22 45 59.80								102.5	325	91	17.34	17.35	-0.05	
28	CPX	EP 0	22 45 60.02								105.3	252	91	17.56	17.70	-0.11	
28	GCS	EP 0	22 45 60.48								106.3	305	91	18.02	18.00	0.05	
28	BLT	EPD2	22 45 60.61								109.6	285	91	18.15	18.52	-0.24	
		S 4	22 46 14.99											32.53	31.45	1.08	
28	MCY	IPU2	22 45 60.71								111.2	236	91	18.25	18.66	-0.33	
28	APK	EP 4	22 45 61.41								115.5	210	91	18.95	19.66	-0.44	
28	BGB	EPD1	22 45 61.91						188	4.1	117.3	260	91	19.45	19.76	-0.23	
28	LDP	EPD0	22 45 62.18								117.6	250	91	19.72	19.80	0.00	
28	SSP	EP 0	22 45 62.49								119.3	254	91	20.03	20.16	-0.05	
28	EPN	EPD0	22 45 63.36								123.9	270	90	20.90	20.45	0.39	
28	CDH1	EPD1	22 45 64.17								130.0	252	90	21.71	21.44	0.37	
28	LSM	EP 0	22 45 64.26								131.1	246	90	21.80	21.62	0.16	
28	JON	EPD0	22 45 65.06								136.1	230	90	22.60	22.43	0.16	
28	YMT6	EPD3	22 45 65.70								137.4	253	90	23.24	22.65	0.50	
		S 4	22 46 24.19											41.73	38.89	2.85	
28	YMT5	EPD2	22 45 66.08								140.3	255	90	23.62	23.11	0.51	
28	YMT3	IPU2	22 45 65.95						296	4.6	140.5	250	90	23.49	23.15	0.39	
28	KRNA	IPU2	22 45 66.28								140.6	294	90	23.82	23.17	0.58	
28	YMT4	EPD1	22 45 66.20								141.2	254	90	23.74	23.26	0.37	
28	YMT1	EPD0	22 45 67.11								148.2	254	90	24.65	24.40	0.12	
28	BMT	EPD0	22 45 67.72								152.4	273	90	25.26	25.09	0.34	
28	WCT	EPD0	22 45 68.34								158.5	252	52	25.93	26.06	0.03	
		S 4	22 46 29.34											46.88	44.29	2.59	
28	NUP	EP 0	22 45 69.02								163.4	222	52	26.56	26.68	-0.03	
28	AMR	EPD2	22 45 69.64								165.5	236	52	27.18	26.89	0.28	
		S 4	22 46 31.49											49.03	46.00	3.03	
28	CTS	EPD0	22 45 69.60								166.3	287	52	27.14	27.26	0.05	
		S 4	22 46 31.92											49.46	46.33	3.13	
28	HCR	EPD0	22 46 10.66								174.0	310	52	28.20	28.28	0.01	
		S 4	22 46 33.32											50.86	48.21	2.65	
28	FMT	EPD4	22 46 11.34								177.1	249	52	28.88	28.45	0.67	
		S 4	22 46 32.42											49.96	48.24	1.72	
28	SGV	IPU0	22 46 12.49								188.9	262	52	30.03	30.09	0.03	
28	GMN	EPD2	22 46 14.69								206.9	272	52	32.23	32.53	-0.14	
		S 4	22 46 43.67											61.21	55.36	5.85	
28	PGE	EP 4	22 46 16.00								214.0	243	52	33.54	33.36	0.40	
		S 4	22 46 43.99											61.53	56.67	4.86	
28	GSM	EPD2	22 46 16.47								222.7	231	52	34.01	34.21	-0.28	
		S 4	22 46 45.18											62.72	58.65	4.08	
28	THP	EP 4	22 46 27.17								223.4	295	52	44.71	34.59	9.85	
28	MGM	EPD2	22 46 17.58								229.0	276	52	35.12	35.35	-0.14	
		S 4	22 46 45.59											63.13	60.29	2.84	

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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
DEC H = 0 41 25.03 UTC				RMS =	0.20	NO =	29	FREE DEPTH SOLUTION							
29 LAT = 37.193 N				ERX =	0.5	ERH =	0.6	AVFM =	3.2	Q =	C				
LONG = 114.882 W				ERY =	0.4	GAP =	182	AVXM =		QS =	B	DELAMAR MOUNTAINS			
DEPTH = 5.52 KM				ERZ =	1.8	NM =				WD =	D				
.....															
29	EPR	EPD2	0 41 29.42					77	3.0	27.2	264	97	4.39	5.02	-0.52
		S 4	0 41 32.66										7.63	8.55	-0.93
29	PRN	EPD2	0 41 29.97					91	3.1	28.0	328	97	4.94	5.19	-0.37
		S 1	0 41 33.98										8.95	9.08	-0.13
29	DLM	EPD0	0 41 33.75							47.5	15	94	8.72	8.40	0.07
		S 4	0 41 40.50										15.47	14.79	0.68
29	NPN	EPD2	0 41 34.08							51.2	355	93	9.05	8.98	-0.15
		S 4	0 41 41.43										16.40	15.72	0.67
29	MTI	EPU1	0 41 36.19							63.8	327	93	11.16	11.01	0.18
		S 4	0 41 44.80										19.77	18.78	0.99
29	SRG	EPU0	0 41 38.70							78.2	348	92	13.67	13.37	0.07
		S 4	0 41 49.11										24.08	23.24	0.83
29	SHRG	ep1	0 41 38.08							80.3	198	92	13.05	13.70	-0.07
		S 4	0 41 48.11										23.08	22.42	0.65
29	GMR	EPU4	0 41 37.96							80.4	281	92	12.93	13.71	-0.69
		S 0	0 41 48.33										23.30	23.28	0.02
29	TPU	IPD3	0 41 38.63							81.9	304	92	13.60	14.03	-0.29
		S 4	0 41 49.45										24.42	23.74	0.67
29	SPRG	EPU4	0 41 41.24							99.5	236	92	16.21	16.76	-0.52
		S 1	0 41 53.75										28.72	28.60	0.11
29	WRN	EPU0	0 41 43.34							107.5	324	91	18.31	18.16	0.11
		S 4	0 41 56.86										31.83	31.12	0.70
29	QCS	EPU0	0 41 43.82							111.5	305	91	18.79	18.64	-0.03
		S 4	0 41 57.86										32.83	32.17	0.65
29	MCY	EP 3	0 41 43.62							113.0	239	91	18.59	18.95	-0.29
		S 0	0 41 57.21										32.18	32.27	-0.10
29	BLT	EP 2	0 41 44.01							114.6	286	91	18.98	19.33	-0.23
		S 4	0 41 58.42										33.39	32.84	0.55
29	LOP	EPU4	0 41 44.52							120.5	252	91	19.49	20.27	-0.70
		S 4	0 41 59.98										34.95	34.52	0.43
29	BGB	EPU4	0 41 44.87							120.9	262	91	19.84	20.34	-0.42
		S 0	0 41 59.60										34.57	34.64	-0.07
29	SSP	EPU4	0 41 45.15							122.5	256	91	20.12	20.68	-0.48
		S 2	0 42 0.00										34.97	35.22	-0.25
29	EPN	EPD4	0 41 46.15							128.0	271	91	21.12	21.62	-0.57
		S 1	0 42 2.24										37.21	37.08	0.13
29	JON	EPD1	0 41 48.01							137.4	233	90	22.98	22.64	0.32
		S 3	0 42 4.33										39.30	38.74	0.56
29	YMT6	EPU0	0 41 48.56							140.5	255	90	23.53	23.16	0.28
29	SDH	EP 4	0 41 49.34							143.4	245	90	24.31	23.61	0.73
		S 3	0 42 5.94										40.91	40.31	0.60
29	YMT3	EP 3	0 41 48.43					95	3.6	143.4	252	90	23.40	23.62	-0.18
		S 4	0 42 7.71										42.68	40.31	2.37
29	YMT5	ep0	0 41 49.01							143.7	257	90	23.98	23.67	0.30
		S 4	0 42 7.01										41.98	40.48	1.49
29	KRNA	EPU1	0 41 49.40							145.7	295	90	24.37	24.00	0.30
		S 2	0 42 7.19										42.16	41.15	1.00
29	CTS	EP 0	0 41 52.77							171.2	287	52	27.74	27.86	0.04
29	HCR	EPD1	0 41 53.78							179.2	310	52	28.75	28.92	-0.09
.....															
DEC H = 9 16 13.40 UTC				RMS =	0.11	NU =	27	FREE DEPTH SOLUTION							
29 LAT = 37.193 N				ERX =	0.3	ERH =	0.4	AVFM =	2.8	Q =	C				
LONG = 114.875 W				ERY =	0.3	GAP =	218	AVXM =		QS =	A	DELAMAR MOUNTAINS			
DEPTH = 8.79 KM				ERZ =	0.6	NM =				WD =	D				
.....															
29	EPR	EPD4	9 16 17.78					79	3.0	27.8	264	105	4.38	5.22	-0.83
		S 0	9 16 22.33										8.93	8.90	0.03
29	PRN	IPU3	9 16 18.33					77	3.0	28.3	327	105	4.93	5.35	-0.54
		S 4	9 16 22.38										8.98	9.35	-0.37
29	DLM	EPU0	9 16 22.14					42	2.5	47.3	15	98	8.74	8.43	0.06
		S 0	9 16 28.16										14.76	14.84	-0.09

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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 29	NPN	EPU0	9 16 22.60					41 2.5	51.3	354	98	9.20	9.05	-0.06	
.		S 0	9 16 29.31									15.91	15.83	0.08	
. 29	MTI	EPU3	9 16 24.11					42 2.6	64.2	327	96	10.71	11.10	-0.37	
.		S 0	9 16 32.42									19.02	18.94	0.08	
. 29	SRG	EPU1	9 16 27.12					58 2.9	78.4	347	95	13.72	13.42	0.07	
.		S 4	9 16 37.27									23.67	23.33	0.54	
. 29	GMR	EP 1	9 16 26.94						81.0	281	95	13.54	13.84	-0.20	
.		S 1	9 16 36.74									23.34	23.49	-0.15	
. 29	TPU	EPU4	9 16 26.98					47 2.8	82.4	304	94	13.58	14.13	-0.42	
.		S 4	9 16 38.07									24.67	23.93	0.74	
. 29	SPRG	ep0	9 16 30.28						100.0	236	94	16.88	16.86	0.05	
.		S 4	9 16 43.90									30.50	28.77	1.73	
. 29	GLR	EP 3	9 16 30.14						101.5	270	94	16.74	17.13	-0.32	
.		S 1	9 16 42.73									29.33	29.17	0.16	
. 29	WRN	EPU2	9 16 31.43						107.8	324	93	18.03	18.23	-0.24	
.		S 4	9 16 46.26									32.86	31.24	1.61	
. 29	QCS	EP 0	9 16 32.35						112.0	305	93	18.95	18.94	0.04	
.		S 4	9 16 46.65									33.25	32.33	0.92	
. 29	MCY	EPU1	9 16 32.21					44 2.8	113.5	239	93	18.81	19.04	-0.16	
.		S 4	9 16 46.63									33.23	32.43	0.80	
. 29	BLT	EPD0	9 16 32.75						115.2	286	93	19.35	19.43	0.04	
.		S 4	9 16 46.84									33.44	33.01	0.43	
. 29	LOP	EP 0	9 16 33.69					44 2.8	121.1	252	93	20.29	20.37	0.00	
.		S 4	9 16 49.25									35.85	34.69	1.16	
. 29	BGB	EP 2	9 16 34.04						121.5	262	93	20.64	20.44	0.27	
.		S 2	9 16 48.00									34.60	34.82	-0.23	
. 29	EPN	EPU0	9 16 35.30					47 2.9	128.6	271	93	21.90	21.72	0.11	
.		S 0	9 16 50.67									37.27	37.25	0.02	
. 29	JON	EPU1	9 16 36.46						137.9	233	93	23.06	22.94	0.11	
.		S 1	9 16 52.70									39.30	39.24	0.06	
. 29	KRNA	EPD0	9 16 37.77						146.3	295	52	24.37	24.36	-0.06	
.		S 0	9 16 55.25									41.85	41.78	0.07	

DEC H = 10 42 52.55 UTC RMS = 0.20 NO = 15 FREE DEPTH SOLUTION  
 . 29 LAT = 37.192 N ERX = 0.8 ERH = 1.2 AVFM = 2.5 W = C  
 . LONG = 114.922 W ERY = 0.8 GAP = 216 AVXM = QS = B  
 . DEPTH = 2.07 KM ERZ = 4.1 NM = WD = D DELAMAR MOUNTAINS

. 29	EPR	EPD1	10 42 56.83					59 2.8	23.6	264	74	4.28	4.46	-0.16	
.		S 3	10 43 0.02									7.47	7.59	-0.12	
. 29	PRN	IPU1	10 42 57.31					48 2.6	26.4	335	74	4.76	4.94	-0.31	
.		S 1	10 43 1.36									8.81	8.66	0.15	
. 29	DLM	EPU0	10 42 61.37						48.7	19	74	8.82	8.62	-0.05	
.		S 1	10 43 8.13									15.58	15.17	0.41	
. 29	NPN	EPU1	10 42 61.52					49 2.7	51.1	359	74	8.97	9.00	-0.24	
.		S 1	10 43 8.20									15.65	15.75	-0.10	
. 29	MTI	EP 0	10 42 63.15					30 2.3	62.1	330	74	10.60	10.76	-0.13	
.		S 4	10 43 11.83									19.28	18.34	0.93	
. 29	GMR	EP 1	10 42 65.72					23 2.1	76.9	282	74	13.17	13.18	0.09	
.		S 4	10 43 15.44									22.89	22.37	0.52	
. 29	SKG	EP 4	10 42 65.57					47 2.7	77.7	350	74	13.02	13.31	-0.52	
.		S 0	10 43 15.74									23.19	23.14	0.04	
. 29	TPU	EPD4	10 42 66.40						79.0	305	74	13.85	13.59	0.39	
. 29	SPRG	ep2	10 42 69.21					29 2.4	96.5	235	74	16.66	16.30	0.39	
.		S 4	10 43 21.29									28.74	27.81	0.92	
. 29	GLR	EPU4	10 42 69.45						97.3	270	74	16.90	16.46	0.50	
.		S 0	10 43 20.78									28.23	28.03	0.20	
. 29	WRN	EP 4	10 42 70.81					24 2.3	105.6	326	74	18.26	17.87	0.34	
.		S 4	10 43 23.96									31.41	30.63	0.77	
. 29	QCS	EP 4	10 42 71.49					27 2.4	108.7	306	74	18.94	18.41	0.56	
.		S 4	10 43 24.61									32.06	31.43	0.63	
. 29	MCY	EPD3	10 42 71.43					36 2.6	109.8	238	74	18.88	18.47	0.48	
.		S 4	10 43 26.33									33.78	31.45	2.33	
. 29	LOP	EPD4	10 42 73.84					34 2.6	117.1	251	74	21.29	19.73	1.64	
.		S 4	10 43 29.17									36.62	33.60	3.01	
. 29	BGB	EP 4	10 42 73.58					30 2.5	117.3	262	74	21.03	19.78	1.32	
.		S 4	10 43 29.16									36.61	33.69	2.92	

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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (NM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
29	EPN	EPD4	10 42 74.82					35	2.7	124.5	271	74	22.27	21.06	1.15	
		S 4	10 43 31.50										38.95	36.11	2.83	
29	JON	EPD4	10 42 75.78						134.5	232	74	23.23	22.40	0.81		
		S 4	10 43 31.77										39.22	38.33	0.89	
29	KRNA	EPD1	10 42 76.66					31	2.6	142.5	295	74	24.11	23.93	0.10	
		S 4	10 43 34.79										42.24	41.04	1.19	

DEC H = 0 5 12.82 UTC RMS = 0.12 NO = 26 FREE DEPTH SOLUTION  
 30 LAT = 37.194 N ERX = 0.3 ERH = 0.4 AVFM = 3.7 Q = C  
 LONG = 114.903 W ERY = 0.3 GAP = 214 AVXM = Q = B  
 DELAMAR MOUNTAINS  
 DEPTH = 5.81 KM ERZ = 4.0 NM = QD = D

30	FPR	IPD2	0 5 17.31			186	3.8	25.3	264	99		4.49	4.72	-0.22	
30	PRN	IPU1	0 5 17.79			185	3.8	26.9	331	98		4.97	5.02	-0.17	
30	DLM	EPD0	0 5 21.61					47.9	18	94		8.79	8.47	0.07	
		S 0	0 5 27.67									14.85	14.91	-0.06	
30	NPN	EPD0	0 5 21.89			113	3.4	50.9	357	94		9.07	8.94	-0.09	
		S 0	0 5 28.52									15.70	15.65	0.04	
30	MTI	EPU1	0 5 23.51					62.7	329	93		10.69	10.83	-0.11	
		S 4	0 5 32.31									19.49	18.47	1.02	
30	SRG	EPU1	0 5 26.48					77.7	349	92		13.66	13.29	0.15	
		S 2	0 5 36.21									23.39	23.11	0.28	
30	GMR	EPU4	0 5 25.82					78.5	281	92		13.00	13.41	-0.31	
		S 0	0 5 35.59									22.77	22.75	0.02	
30	TPU	EPU0	0 5 26.38					80.2	305	92		13.56	13.76	-0.06	
		S 4	0 5 33.89									21.07	23.29	-2.22	
30	SPRG	EPU0	0 5 29.30					98.0	235	92		16.48	16.51	0.00	
		S 4	0 5 41.73									28.91	28.18	0.73	
30	GLR	EPU0	0 5 29.49					98.9	270	92		16.67	16.70	0.04	
		S 1	0 5 41.20									28.38	28.44	-0.06	
30	WRN	EPU2	0 5 30.64			106.3	325	92				17.82	17.96	-0.19	
		S 4	0 5 44.51									31.69	30.79	0.90	
30	QCS	EPD1	0 5 31.55			109.9	305	92				18.73	18.58	0.18	
		S 4	0 5 46.15									33.33	31.72	1.61	
30	MCY	EPU0	0 5 31.48			111.4	238	92				18.66	18.69	0.04	
		S 4	0 5 46.34									33.52	31.83	1.69	
30	BLT	EPD4	0 5 32.22			112.7	286	92				19.40	19.03	0.50	
		S 4	0 5 46.63									33.81	32.31	1.49	
30	LOP	EPU1	0 5 32.85			118.7	251	91				20.03	19.97	0.13	
		S 4	0 5 47.64									34.82	34.02	0.80	
30	BGB	EPD0	0 5 32.76			119.0	262	91				19.94	20.03	-0.01	
		S 2	0 5 47.28									34.46	34.11	0.34	
30	EPN	EP 4	0 5 33.55			126.1	271	91				20.73	21.31	-0.64	
		S 4	0 5 50.07									37.25	36.54	0.71	
30	CDH1	EPD1	0 5 34.87			131.2	254	91				22.05	21.95	0.20	
		S 4	0 5 52.11									39.29	37.36	1.92	
30	LSM	EPU1	0 5 34.97			131.9	248	91				22.15	22.02	0.11	
		S 4	0 5 51.11									38.29	37.68	0.61	
30	JON	EP 0	0 5 35.47			135.9	232	91				22.65	22.62	0.02	
		S 4	0 5 52.31									39.49	38.70	0.79	
30	YMT6	EPU3	0 5 36.45			120	3.8	138.7	254	91		23.63	23.12	0.42	
		S 4	0 5 53.81									40.99	39.69	1.30	
30	KRNA	EPU0	0 5 37.08			143.9	295	91				24.26	24.14	0.04	
		S 2	0 5 54.03									41.21	41.41	-0.20	

DEC H = 9 56 29.40 UTC RMS = 0.09 NO = 17 FREE DEPTH SOLUTION  
 30 LAT = 37.213 N ERX = 0.3 ERH = 0.3 AVFM = 2.4 Q = B  
 LONG = 114.906 W ERY = 0.2 GAP = 177 AVXM = Q = A  
 DELAMAR MOUNTAINS  
 DEPTH = 11.10 KM ERZ = 1.3 NM = QD = C

30	PRN	EPU3	9 56 33.96			47	2.6	25.0	329	113		4.56	4.96	-0.52	
		S 0	9 56 38.01									8.61	8.68	-0.07	
30	EPR	EPU4	9 56 33.61			52	2.7	25.4	259	112		4.21	4.98	-0.75	
		S 4	9 56 36.83									7.43	8.48	-1.05	
30	DLM	EPU0	9 56 38.01			29	2.2	46.0	19	102		8.61	8.28	0.07	
		S 0	9 56 43.99									14.59	14.59	-0.01	

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DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	CUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 30	NPN	EPD2	9 56 38.09					38 2.5	48.9	357	101	8.69	8.72	-0.24	
.	.	S 1	9 56 44.81									15.41	15.27	0.14	
. 30	MTI	EP 0	9 56 40.03					28 2.2	60.9	328	99	10.63	10.62	0.04	
.	.	S 4	9 56 48.48									19.08	18.10	0.98	
. 30	SRG	EPD2	9 56 42.44					38 2.6	75.6	349	97	13.04	13.02	-0.20	
.	.	S 4	9 56 52.92									23.52	22.65	0.87	
. 30	GMR	EPD4	9 56 42.20					31 2.4	77.9	280	97	12.80	13.37	-0.48	
.	.	S 4	9 56 51.50									22.10	22.70	-0.60	
. 30	SHRG	ep0	9 56 42.73					21 2.1	81.7	196	96	13.33	14.00	-0.08	
.	.	S 0	9 56 52.38									22.98	22.94	0.04	
. 30	GLR	EPU0	9 56 46.06					25 2.3	98.7	269	95	16.66	16.72	0.01	
.	.	S 1	9 56 57.76									28.36	28.46	-0.10	
. 30	SPRG	ep4	9 56 45.63					32 2.5	98.9	234	95	16.23	16.71	-0.45	
.	.	S 1	9 56 58.04									28.64	28.52	0.12	
. 30	WRN	EP 4	9 56 47.86					25 2.3	104.5	325	95	18.46	17.71	0.71	
.	.	S 4	9 57 0.27									30.87	30.35	0.51	
. 30	QCS	EP 4	9 56 48.40					24 2.3	108.5	305	95	19.00	18.40	0.63	
.	.	S 4	9 57 1.64									32.24	31.41	0.83	
. 30	BLT	EPU0	9 56 48.23					21 2.2	112.0	285	94	18.83	18.94	0.02	
. 30	MCY	EPD4	9 56 47.82					31 2.5	112.3	237	94	18.42	18.88	-0.38	
.	.	S 2	9 57 1.84									32.44	32.15	0.29	
. 30	LOP	EPD1	9 56 49.29					31 2.5	119.2	250	94	19.89	20.08	-0.11	
.	.	S 0	9 57 3.68									34.28	34.20	0.08	
. 30	CDH1	EPD1	9 56 51.19					24 2.4	131.6	253	94	21.79	22.04	-0.15	
.	.	S 4	9 57 8.90									39.50	37.52	1.98	
. 30	YMT6	ep4	9 56 53.37					25 2.4	139.1	254	52	23.97	23.02	0.86	
. 30	KRNA	EPU4	9 56 53.85						142.9	294	52	24.45	23.70	0.68	
.	.	S 4	9 57 11.02									41.62	40.64	0.98	

DEC H = 10 46 55.46 UTC RMS = 0.15 NO = 20 FREE DEPTH SOLUTION  
 . 30 LAT = 37.169 N ERX = 0.6 ERH = 0.7 AVFM = 2.3 WS = C  
 . LONG = 114.859 W ERY = 0.5 GAP = 226 AVXM = QD = A  
 . DEPTH = 9.78 KM ERZ = 1.8 NM = QD = D DELAMAR MOUNTAINS

. 30	EPR	EPU3	10 46 60.24					50 2.6	29.1	270	107	4.78	5.47	-0.66	
.	.	S 0	10 47 4.75									9.29	9.31	-0.02	
. 30	PRN	EPU3	10 46 60.77					44 2.5	31.3	327	105	5.31	5.86	-0.66	
.	.	S 1	10 47 5.54									10.08	10.22	-0.14	
. 30	DLM	EPD0	10 46 64.59					22 2.0	49.6	12	99	9.13	8.82	0.07	
.	.	S 0	10 47 11.04									15.58	15.50	0.08	
. 30	NPN	EPD1	10 46 65.10					29 2.2	54.1	353	98	9.64	9.52	-0.09	
.	.	S 3	10 47 12.46									17.00	16.64	0.37	
. 30	MTI	EPD2	10 46 67.28					25 2.2	67.2	327	97	11.82	11.60	0.25	
.	.	S 1	10 47 15.41									19.95	19.79	0.16	
. 30	SRG	EPD1	10 46 69.39					33 2.5	81.2	347	95	13.93	13.91	-0.19	
.	.	S 0	10 47 19.60									24.14	24.16	-0.01	
. 30	GMR	EP 2	10 46 69.28					21 2.1	82.9	283	95	13.82	14.16	-0.24	
.	.	S 4	10 47 19.11									23.65	24.05	-0.39	
. 30	SPRG	ep1	10 46 72.40					25 2.3	99.8	238	94	16.94	16.83	0.15	
.	.	S 4	10 47 24.58									29.12	28.72	0.40	
. 30	GLR	EPD2	10 46 72.53						102.9	272	94	17.07	17.38	-0.23	
.	.	S 0	10 47 25.09									29.63	29.59	0.04	
. 30	WRN	EP 0	10 46 74.27					24 2.3	110.8	324	94	18.81	18.72	0.05	
.	.	S 4	10 47 28.13									32.67	32.08	0.59	
. 30	MCY	EPU0	10 46 74.41					29 2.5	113.3	240	94	18.95	19.03	0.00	
.	.	S 2	10 47 28.16									32.70	32.41	0.29	
. 30	QCS	EPU1	10 46 74.62					26 2.4	114.7	305	94	19.16	19.38	-0.19	
.	.	S 4	10 47 29.18									33.72	33.09	0.64	
. 30	BGB	EP 4	10 46 76.83					26 2.4	122.5	263	93	21.37	20.62	0.83	
.	.	S 4	10 47 31.28									35.82	35.12	0.70	

## 1981 SGB LOCAL-EVENT DATA REPORT

DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
DEC H = 16	9	12.94	UTC	RMS =	0.16	NO = 20									FREE DEPTH SOLUTION
30 LAT =	37.198	N		ERX =	0.5	ERH = 0.5	AVFM =	2.9	W = C						
LONG =	114.929	W		ERY =	0.3	GAP = 174	AVXM =		WS = B						DELAMAR MOUNTAINS
DEPTH =	5.40	KM		ERZ =	4.4	NM =			WD = C						
.....															
30	EPR	EPD0	16 9 17.12				79	3.0	23.1	262	99	4.18	4.36	-0.16	
		S 0	16 9 20.33									7.39	7.42	-0.03	
30	PRN	IPU0	16 9 17.62				81	3.0	25.5	335	98	4.68	4.78	-0.22	
		S 2	16 9 21.08									8.14	8.38	-0.24	
30	DLM	EPD1	16 9 21.46				48	2.7	48.2	20	93	8.52	8.52	-0.25	
		S 0	16 9 28.14									15.20	14.99	0.21	
30	NPN	EPD0	16 9 21.78				72	3.0	50.4	359	93	8.84	8.85	-0.22	
		S 0	16 9 28.51									15.57	15.50	0.07	
30	MTI	EPD1	16 9 23.48				42	2.6	61.2	330	93	10.54	10.58	-0.01	
		S 4	16 9 32.17									19.23	18.03	1.20	
30	GMR	EPD0	16 9 25.71				52	2.8	76.2	281	92	12.77	13.03	-0.16	
		S 4	16 9 35.92									22.98	22.11	0.88	
30	SRG	EPD4	16 9 25.93				76	3.2	76.9	351	92	12.99	13.15	-0.38	
		S 4	16 9 36.46									23.52	22.87	0.65	
30	TPU	EPU1	16 9 26.21						78.1	305	92	13.27	13.41	0.00	
		S 4	16 9 36.39									23.45	22.70	0.75	
30	SHRG	EPU0	16 9 25.99				29	2.3	79.6	195	92	13.05	13.60	0.04	
		S 4	16 9 36.11									23.17	22.25	0.92	
30	SPRG	EPD1	16 9 29.26				49	2.8	96.4	234	92	16.32	16.25	0.10	
		S 4	16 9 41.61									28.67	27.73	0.94	
30	GLR	EPD4	16 9 29.57				43	2.7	96.7	270	92	16.63	16.33	0.37	
		S 1	16 9 41.03									28.09	27.81	0.29	
30	WRN	EPU1	16 9 30.85				49	2.9	104.6	326	91	17.91	17.70	0.17	
		S 0	16 9 43.32									30.38	30.33	0.05	
30	QCS	EPD0	16 9 31.10				44	2.8	107.8	306	91	18.16	18.24	-0.05	
		S 4	16 9 45.64									32.70	31.13	1.57	
30	MCY	EPU0	16 9 31.31				55	3.0	109.7	237	91	18.37	18.42	0.03	
		S 4	16 9 45.61									32.67	31.36	1.31	
30	BLT	EP 3	16 9 31.79						110.4	287	91	18.85	18.65	0.33	
		S 4	16 9 45.51									32.57	31.67	0.90	
30	CDH1	EPU4	16 9 35.09				47	2.9	129.2	253	90	22.15	21.31	0.94	
		S 4	16 9 51.21									38.27	36.26	2.01	
30	KRNA	EPU1	16 9 36.55				46	3.0	141.7	295	90	23.61	23.34	0.20	
		S 4	16 9 54.38									41.44	40.03	1.41	
.....															
.....															
DEC H = 16	44	0.19	UTC	RMS =	0.09	NO = 13									FREE DEPTH SOLUTION
30 LAT =	37.385	N		ERX =	0.4	ERH = 0.5	AVFM =	2.1	W = B						
LONG =	115.229	W		ERY =	0.3	GAP = 90	AVXM =		WS = B						ALAMO
DEPTH =	8.62	KM		ERZ =	2.2	NM =			WD = B						
.....															
30	PRN	EPU0	16 44 3.72				36	2.3	16.1	81	117	3.53	3.46	-0.06	
30	EPR	EPU0	16 44 4.87				39	2.4	24.3	171	107	4.68	4.67	0.03	
30	MTI	EPU0	16 44 6.19				28	2.1	32.6	353	103	6.00	6.02	0.01	
30	NPN	EPU0	16 44 7.55				25	2.1	39.4	41	100	7.36	7.13	0.02	
30	TPU	EPU0	16 44 8.00				27	2.1	44.4	303	99	7.81	7.99	-0.04	
30	GMR	EPU1	16 44 8.45				22	2.0	48.3	263	98	8.26	8.55	-0.19	
30	DLM	EPU0	16 44 9.29				23	2.0	49.8	61	98	9.10	8.82	0.03	
30	SRG	EP 4	16 44 9.85				25	2.1	57.0	14	97	9.66	9.96	-0.52	
30	GLR	EPD2	16 44 12.84				18	1.9	72.9	254	95	12.65	12.49	0.23	
30	WRN	EPD0	16 44 12.82				19	1.9	73.4	334	95	12.63	12.64	-0.05	
30	QCS	EPU2	16 44 13.23						74.1	305	95	13.04	12.78	0.29	
30	KRNA	EPU1	16 44 18.87				22	2.2	109.0	291	93	18.68	18.46	0.15	
30	CDH1	ep1	16 44 18.95						112.9	239	93	18.76	18.98	-0.12	
30	HCR	EPD2	16 44 23.68						142.0	312	92	23.49	23.83	-0.26	
.....															

## 1981 SGB LOCAL-EVENT DATA REPORT

DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
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.....															
DEC H = 3			18 33.51	UTC	RMS =	0.15	NO = 28	FREE DEPTH SOLUTION							
31	LAT =	37.257	N	ERX =	0.3	ERH =	0.3	AVFM =	2.7	Q =	B				
	LONG =	115.020	W	ERY =	0.2	GAP =	155	AVXM =		WS =	A	ALAMO			
	DEPTH =	5.56	KM	ERZ =	2.0	NM =				WD =	C				
.....															

31	PRN	IPU	3 18 36.80					60	2.7	16.9	351	104	3.29	3.41	-0.24
		S 0	3 18 39.60										6.09	6.03	0.06
31	EPR	IPD2	3 18 36.49					66	2.8	17.7	236	103	2.96	3.50	-0.51
		S 4	3 18 38.52										5.01	5.96	-0.95
31	NPN	EPD0	3 18 41.63					56	2.8	44.5	10	94	8.12	7.90	0.01
		S 1	3 18 47.53										14.02	13.87	0.15
31	DLM	EPD2	3 18 41.65					41	2.5	46.1	33	94	8.14	8.16	-0.28
		S 0	3 18 47.98										14.47	14.39	0.08
31	MTI	EPD4	3 18 42.04					44	2.6	51.6	334	93	8.53	9.03	-0.47
		S 1	3 18 49.07										15.56	15.39	0.17
31	GMR	EPD3	3 18 44.66					51	2.8	67.1	277	93	11.15	11.55	-0.31
		S 1	3 18 53.27										19.76	19.59	0.17
31	TPU	EPD1	3 18 44.96					54	2.8	67.8	305	92	11.45	11.73	-0.14
		S 4	3 18 52.83										19.32	19.82	-0.50
31	SRG	EPD0	3 18 45.71					56	2.9	69.5	357	92	12.20	11.96	0.02
		S 4	3 18 54.75										21.24	20.83	0.41
31	SHRG	EP 1	3 18 47.43					34	2.5	84.4	188	92	13.92	14.37	0.13
		S 0	3 18 57.03										23.57	23.57	0.00
31	GLR	EP 2	3 18 48.35					32	2.5	88.8	266	92	14.84	15.05	-0.14
		S 0	3 18 59.05										25.54	25.61	-0.07
31	SPRG	EPD1	3 18 48.95					40	2.7	94.0	228	92	15.44	15.86	-0.39
		S 2	3 19 0.75										27.24	27.06	0.17
31	WRN	EPD3	3 18 49.97					33	2.5	94.8	328	92	16.46	16.10	0.32
		S 0	3 19 1.05										27.54	27.59	-0.06
31	QCS	EPD4	3 18 48.42							97.4	306	92	14.91	16.55	-1.61
		S 4	3 19 2.38										28.87	28.25	0.62
31	BLT	EP 0	3 18 50.48					32	2.5	100.7	284	92	16.97	17.07	0.02
		S 0	3 19 2.51										29.00	28.97	0.02
31	MCY	EPD4	3 18 50.93					45	2.8	106.7	232	91	17.42	17.94	-0.44
		S 4	3 19 4.76										31.25	30.54	0.71
31	LOP	EP 4	3 18 52.91							111.3	246	91	19.40	18.78	0.70
		S 0	3 19 5.51										32.00	31.97	0.03
31	SSP	EPD2	3 18 52.26					37	2.7	112.7	251	91	18.75	19.08	-0.25
		S 4	3 19 6.75										33.24	32.48	0.75
31	CDH1	EPD3	3 18 54.35							123.4	249	91	20.84	20.68	0.26
		S 4	3 19 9.96										36.45	35.19	1.25
31	KRNA	EPD2	3 18 55.93					35	2.7	131.6	294	91	22.42	22.14	0.20
		S 0	3 19 11.63										38.12	37.98	0.13
31	HCR	EP 1	3 18 60.30							165.3	311	52	26.79	27.14	-0.26
		S 4	3 19 20.14										46.63	46.25	0.37
.....															

.....															
DEC H = 13			10 23.79	UTC	RMS =	0.10	NO = 15	FREE DEPTH SOLUTION							
31	LAT =	35.987	N	ERX =	0.6	ERH =	0.6	AVFM =	2.4	Q =	C				
	LONG =	117.271	W	ERY =	0.5	GAP =	266	AVXM =		WS =	B	SEARLES LAKE			
	DEPTH =	6.30	KM	ERZ =	4.3	NM =				WD =	D				
.....															

31	GSM	EPD3	13 10 29.93					38	2.4	36.4	94	97	6.14	6.40	-0.35
		S 0	13 10 34.87										11.08	11.09	-0.01
31	PGE	EPD0	13 10 31.43					30	2.2	44.2	25	95	7.64	7.89	-0.03
		S 0	13 10 36.89										13.10	13.12	-0.02
31	GWV	EPD0	13 10 33.88					31	2.3	58.4	68	94	10.09	10.14	0.03
		S 0	13 10 40.99										17.20	17.21	-0.01
31	MCA	EPD0	13 10 36.12					29	2.3	73.3	359	93	12.33	12.30	-0.05
		S 2	13 10 45.16										21.37	21.17	0.20
31	FMT	EPD2	13 10 38.12					24	2.2	84.8	31	92	14.33	14.32	0.25
		S 4	13 10 48.50										24.71	24.08	0.63
31	AMR	EPD4	13 10 37.35							84.9	58	92	13.56	14.28	-0.73
31	NOP	EPD1	13 10 40.90					27	2.3	102.0	81	92	17.11	17.10	0.10
		S 4	13 10 54.00										30.21	29.08	1.13
31	SGV	EPD3	13 10 42.92					32	2.5	112.3	11	92	19.13	18.91	0.31
		S 0	13 10 55.96										32.17	32.18	-0.01
.....															



1981 SGB LOCAL-EVENT DATA REPORT

DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TUSS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS	
. 31	LSM	EP 1	13 10 44.10					32	2.6	122.5	47	92	20.31	20.47	-0.18	
.		S 4	13 10 57.46									33.67	35.04	-1.37		
. 31	LOP	EPU2	13 10 46.56					29	2.5	138.0	46	91	22.77	23.12	-0.27	
. 31	MCY	EPD1	13 10 47.05					33	2.7	139.4	58	91	23.26	23.26	0.08	
. 31	SPRG	EPD4	13 10 49.76							153.0	59	52	25.97	25.30	0.70	

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1981 SGB LOCAL-BLAST DATA REPORT

NOV 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
NOV H = 21	1	45.86	UTC	RMS =	0.29	NO =	5								
05 LAT =	36.856	N		ERX =	4.6	ERH =	7.6	AVFM =	1.9	u =	D				
LONG =	116.494	W		ERY =	6.0	GAP =	134	AVXM =		US =	D	YUCCA MOUNTAIN			
DEPTH =	0.00	KM		ERZ =	6.0	NM =		uD =	D						
.....															
05	YMT1	IPU0	21 1 46.74					45 2.4	3.1	264	111	0.88	0.86	-0.12	
		S 4	21 1 49.05									3.19	1.70	1.49	
05	YMT4	IPU4	21 1 45.13					17 1.6	4.0	74	107	*****	1.11	-1.95	BLAST
05	YMT5	IPD4	21 1 46.57					22 1.8	5.9	38	103	0.71	1.60	-0.89	
		S 1	21 1 48.83									2.97	2.73	0.23	
05	YMT2	IPU4	21 1 46.36					23 1.9	7.9	173	40	0.50	1.96	-1.54	
		S 4	21 1 48.37									2.51	3.49	-0.98	
05	YMT6	IPU1	21 1 46.18					20 1.8	8.0	88	40	0.32	2.00	-1.77	YUCCA MT
		S 0	21 1 49.37									3.51	3.57	-0.06	
05	YMT3	IPU4	21 1 46.18					30 2.1	10.7	136	40	0.32	2.42	-2.06	
		S 0	21 1 50.06									4.20	4.06	0.14	
05	LSM	EPU4	21 1 49.04					15 1.6	23.6	123	40	3.18	4.63	-1.48	
		S 4	21 1 53.25									7.39	7.96	-0.57	
05	SSP	EPD4	21 1 49.40						25.7	73	40	3.54	5.18	-1.57	
		S 4	21 1 54.03									8.17	8.73	-0.56	
05	SDH	EP 4	21 1 49.54						27.2	149	40	3.68	5.23	-1.51	
05	LOP	EPD4	21 1 49.54						29.1	90	40	3.68	5.68	-1.93	
		S 4	21 1 54.64									8.78	9.58	-0.80	
.....															
.....															
NOV H = 20	15	14.79	UTC	RMS =	0.17	NO =	6								
13 LAT =	36.838	N		ERX =	2.0	ERH =	3.5	AVFM =	1.8	u =	C				
LONG =	116.447	W		ERY =	2.8	GAP =	91	AVXM =		US =	C	YUCCA MOUNTAIN			
DEPTH =	0.00	KM		ERZ =	4.0	NM =		uD =	B						
.....															
13	YMT4	EP 3	20 15 15.07					32 2.2	3.1	353	112	0.28	0.88	-0.71	BLAST ON
		S 4	20 15 18.53									3.74	1.69	2.04	
13	YMT6	EPU0	20 15 16.18					19 1.7	4.4	59	105	1.39	1.21	0.09	YUCCA MT
		S 4	20 15 20.66									5.87	2.22	3.65	
13	YMT3	EPD1	20 15 16.26					28 2.0	6.5	150	40	1.47	1.72	-0.20	BLAST
		S 4	20 15 20.46									5.67	2.85	2.82	
13	YMT5	EPD2	20 15 16.63					27 2.0	6.7	355	102	1.84	1.80	0.04	
13	YMT2	EP 2	20 15 17.02					8 1.0	6.7	209	40	2.23	1.76	0.39	
		S 4	20 15 20.01									5.22	3.14	2.08	
13	YMT1	EPU0	20 15 16.79					28 2.1	7.5	283	40	2.00	1.90	-0.04	
		S 4	20 15 20.95									6.16	3.46	2.68	
13	WCT	EP 4	20 15 17.06						16.8	252	40	2.27	3.46	-1.03	
.....															

1981 SGR LOCAL-BLAST DATA REPORT

DEC 1981	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.....															
DEC H =	19	49	33.20	UTC	RMS =	0.19	NO =	9							
01	LAT =	36.838	N	ERX =	0.3	ERH =	0.6	AVFM =	2.1	W =	B				
	LONG =	116.439	W	ERY =	0.5	GAP =	129	AVXM =		WS =	B				YUCCA MOUNTAIN
	DEPTH =	0.00	KM	ERZ =	0.6	NM =				WD =	B				
.....															
01	YMT4	EP00	19 49 33.95				29	2.1	3.3	341	111	0.75	0.92	-0.29	YUCCA MT
		S 0	19 49 34.75									1.55	1.77	-0.22	
01	YMT6	EP 3	19 49 33.65						3.9	54	107	0.45	1.06	-0.71	BLAST
01	YMT5	EP03	19 49 35.21				21	1.8	6.8	349	101	2.01	1.83	0.17	
		S 4	19 49 37.74									4.54	3.14	1.40	
01	YMT2	EPD1	19 49 35.07				26	2.0	7.1	214	40	1.87	1.81	-0.03	
		S 0	19 49 36.21									3.01	3.24	-0.23	
01	YMT1	EP04	19 49 35.01				42	2.4	8.1	282	40	1.81	2.02	-0.34	
		S 0	19 49 37.12									3.92	3.68	0.24	
01	CDH1	EP 4	19 49 36.46						11.1	77	40	3.26	2.57	0.78	
01	WCT	EP01	19 49 36.83						17.5	253	40	3.63	3.57	0.22	
		S 4	19 49 40.27									7.07	5.83	1.24	
01	LOP	EP 4	19 49 36.70						24.3	86	40	5.50	4.87	0.71	
		S 0	19 49 41.44									8.24	8.18	0.05	
.....															
DEC H =	23	21	20.05	UTC	RMS =	0.79	NO =	8							
09	LAT =	36.815	N	ERX =	7.2	ERH =	8.1	AVFM =	2.2	W =	D				
	LONG =	116.519	W	ERY =	3.7	GAP =	211	AVXM =		WS =	D				YUCCA MOUNTAIN
	DEPTH =	0.00	KM	ERZ =	3.9	NM =				WD =	D				
.....															
09	YMT1	EPD0	23 21 21.71				41	2.4	4.3	348	105	1.66	1.17	0.36	
		S 4	23 21 28.04									7.99	2.23	5.77	
09	YMT2	EPD0	23 21 21.83				24	1.9	4.6	137	103	1.78	1.23	0.47	
		S 4	23 21 22.53									2.48	2.25	0.24	
09	YMT4	EP03	23 21 20.64				35	2.2	8.2	47	40	0.59	2.05	-1.57	BLAST AT
		S 4	23 21 21.42									1.37	3.69	-2.32	
09	YMT3	EP00	23 21 21.66				37	2.3	10.1	108	40	1.61	2.33	-0.67	YUCCA MT
		S 4	23 21 26.44									6.39	3.89	2.50	
09	YMT5	EPD0	23 21 21.89				26	2.0	10.9	32	40	1.84	2.52	-0.66	
		S 1	23 21 25.34									5.29	4.31	0.98	
09	YMT6	EP00	23 21 21.78				29	2.1	11.3	65	40	1.73	2.54	-0.90	
		S 0	23 21 25.59									5.54	4.50	1.04	
.....															
DEC H =	21	55	0.03	UTC	RMS =	0.37	NO =	6							
22	LAT =	36.776	N	ERX =	5.2	ERH =	8.1	AVFM =	1.6	W =	D				
	LONG =	116.413	W	ERY =	6.3	GAP =	272	AVXM =		WS =	D				YUCCA MOUNTAIN
	DEPTH =	0.00	KM	ERZ =	1.1	NM =				WD =	D				
.....															
22	YMT2	EP 0	21 55 2.14				19	1.7	6.4	279	40	2.11	1.71	0.32	YUCCA MT
22	YMT6	EPD0	21 55 2.75				11	1.2	9.1	5	40	2.72	2.19	0.44	
22	YMT4	EP 2	21 55 1.86				16	1.6	10.5	341	40	1.83	2.44	-0.72	BLAST AT
22	YMT3	EP00	21 55 0.00				21	1.8	1.2	7	131	*****	0.42		HOLE G-3
22	YMT1	IPD0	21 55 2.88				25	2.0	13.4	310	40	2.85	2.91	-0.19	
22	YMT5	IPD0	21 55 3.23				15	1.5	14.0	345	40	3.20	3.06	0.14	
.....															
DEC H =	23	6	48.80	UTC	RMS =	0.09	NO =	6							
23	LAT =	36.822	N	ERX =	0.2	ERH =	0.3	AVFM =	1.6	W =	B				
	LONG =	116.462	W	ERY =	0.2	GAP =	95	AVXM =		WS =	A				YUCCA MOUNTAIN
	DEPTH =	0.00	KM	ERZ =	0.4	NM =				WD =	B				
.....															
23	YMT2	EP00	23 6 50.06				20	1.7	4.5	206	103	1.26	1.22	-0.04	YUCCA MT
23	YMT4	EP00	23 6 50.05				14	1.4	5.0	11	104	1.25	1.35	-0.21	BLAST AT
23	YMT3	EP00	23 6 50.35				19	1.7	6.0	130	100	1.55	1.59	0.00	HOLE G-3
23	YMT6	EP00	23 6 50.67				15	1.5	6.6	52	40	1.87	1.75	0.03	
23	YMT1	EP01	23 6 50.79				26	2.0	6.9	300	40	1.99	1.81	0.05	
23	YMT5	EP 0	23 6 51.11				14	1.5	8.5	5	40	2.31	2.12	0.18	
.....															

## **APPENDIX E**

1981 teleseismic and regional events recorded by the digital system

# 1981 TELESEISMS AND REGIONAL EVENTS

The following teleseismic and regional earthquakes were recorded by the SGB digital system and the data archived.

DATE (UTC)			ORIGIN TIME			GEOGRAPHIC COORDINATES		MAG
YR	MO	DA	HR	MIN	SEC	LAT	LONG	
*81	10	08	12	19	27.2	38.01N	113.22W	3.0ML
*81	10	20	5	03	06.1	38.54N	116.69W	3.2ML
*81	10	22	23	35	29.41	35.43N	118.19W	3.6ML
*81	11	14	20	24	04.3	37.53N	114.47W	2.1ML
81	12	10	09	33	20.2	37.428N	118.463W	3.5ML
81	12	11	13	51	27.8	37.377N	118.458W	2.9ML
81	12	24	5	33	21.5	29.956S	177.701W	6.1MB
81	12	26	17	05	32.8	29.812S	177.854W	6.3MB

The teleseismic locations were taken from the U.S. Geological Survey preliminary determination of epicenters reports No. 50-81 and 52-81. The regional events were located using the SGB network. The regional events with asterisks preceding the dates were also included in the local hypocenter listing for 1981.

Beginning in early February, 1982, all digitally recorded regional and teleseismic events have been routinely archived.