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UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Southern Great Basin Seismological Data Report for 1980 and Preliminary Data Analysis

By

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Open-File Report 81--1086

1981

Prepared by the U.S. Geological Survey
for the
Nevada Operations Office
U.S. Department of Energy
(Interagency Agreement DE-A108-78ET44802)

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ABSTRACT

Earthquake data for the calendar year 1980 are presented for earthquakes occurring within and adjacent to the southern Nevada seismograph network. Locations, magnitudes, and selected focal mechanisms for these events and events from prior years of network operation are presented and discussed in relation to the geologic framework of the region. The principal results are that (1) earthquakes concentrate in fault zones having a northeast orientation, (2) fault zones having a northwest orientation are quiescent or nearly so, and (3) no earthquakes have been detected closer than 12 km to the Yucca Mountain nuclear waste repository study area.

Southern Great Basin Seismological Data Report for 1980 and Preliminary Data Analysis

INTRODUCTION

Seismological studies of the Southern Great Basin region are being conducted to assess the seismic and tectonic suitability of the Nevada Test Site (NTS) region for a nuclear waste depository. 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[1/] 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 might be chosen off NTS.

This report presents data relating to earthquakes recorded within the network during calender year 1980. Epicenters of well located earthquakes from the entire monitoring period (August 1978 to December 1980) are also shown in some figures. Preliminary phase readings, locations, and magnitudes of the 1980 earthquakes are given, and some tentative interpretations of activity recorded during this and earlier periods are discussed. Statistical distribution of location errors, hypocenter depths, and the relation of epicenters to the proposed Yucca Mountain site are presented, and a brief discussion of focal mechanisms, and the association between some selected seismic activity and mapped faults is included.

ACKNOWLEDGMENTS

Field work to maintain the network of seismic stations in the Southern Great Basin is conducted under contract by W. J. Johnson and D. Morgan of the Stanwick Corporation. Electronic maintenance and repair of the telemetry and recording system are performed by D. E. Overturf and W. T. Bice. Supplemental

[1/] Data are also received from preexisting stations at Tonopah and Nelson, Nevada, and Leeds, Utah (about 20 miles northeast of St. George, Utah).

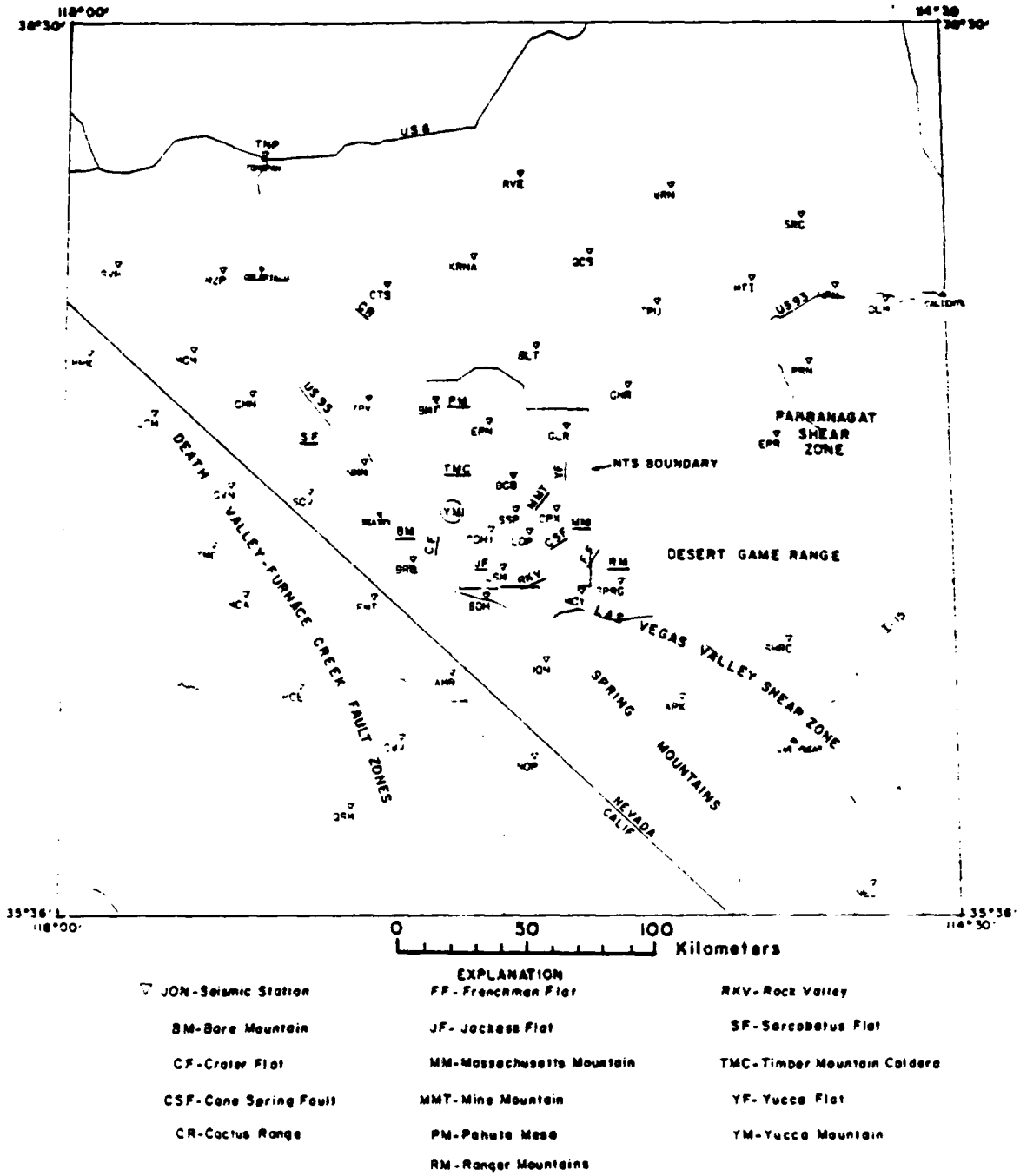
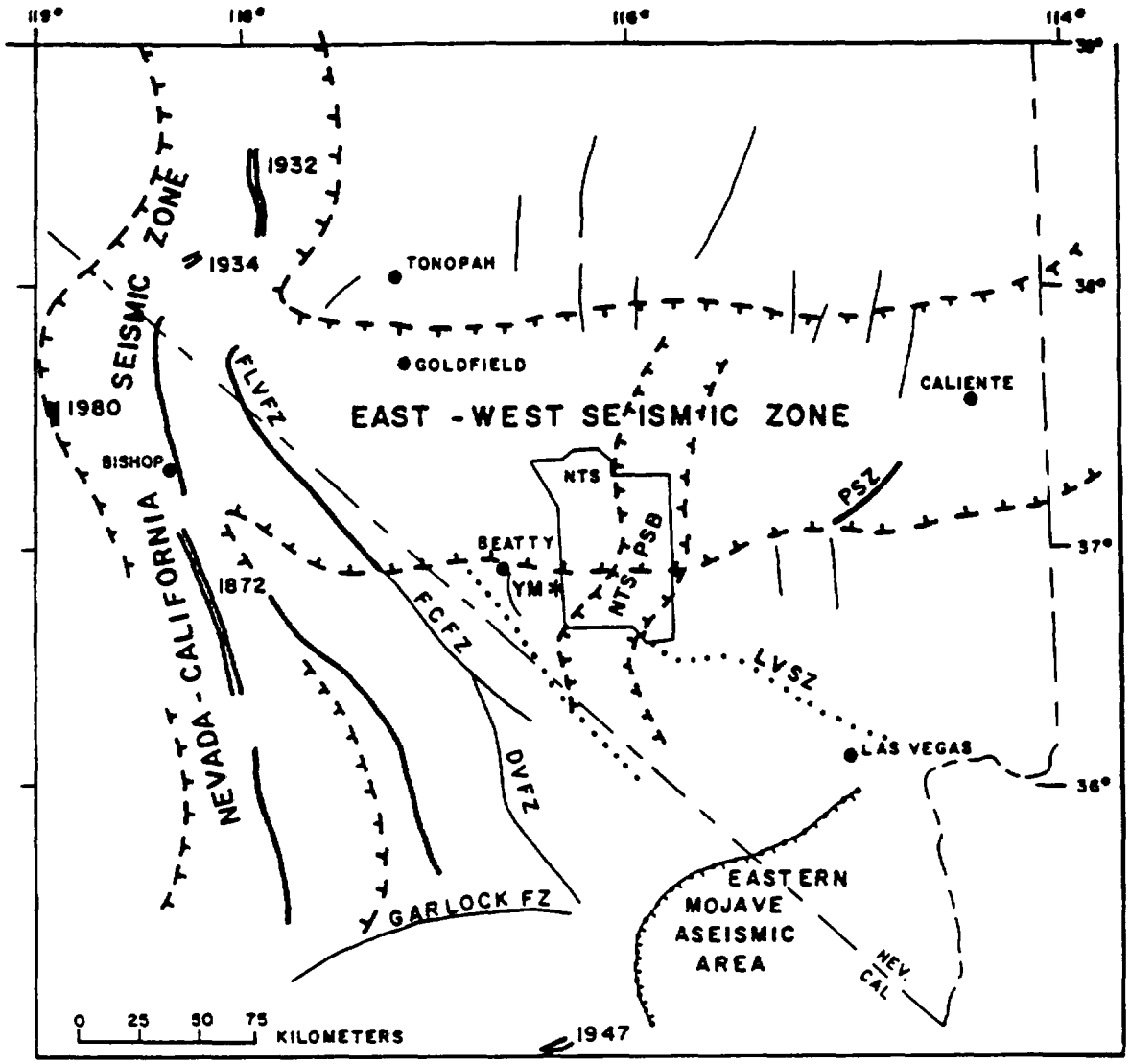


Figure 1.--Locations of seismograph stations in the Southern Great Basin are indicated by triangles. The locations of the proposed nuclear waste storage facility is indicted by the letters YM (Yucca Mountain). The generalized locations of other geographic features are also shown: BM-Bare Mountain; CF-Crater Flat; FF-Frenchman Flat; JF-Jackass Flat; MM-Mine Mountain; RM-Ranger Mountain; SKM-Skull Mountain; TMC-Timber Mountain Cauldera; YF-Yucca Flat.



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

FLVFZ-Fish Lake Valley fault zone

FCFZ-Furnace Creek fault zone

DVFZ-Death Valley fault zone

LVSZ-Las Vegas Valley Shear zone

PSZ-Pahranagat 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.

data were used in this report from stations operated by Sandia Laboratories and the University of Nevada. The Sandia stations at Nelson, Nevada, and Leeds, Utah (NEL and LEE), were operated by personnel at the NTS. The University of Nevada station at Tonopah, Nevada (TNP), is operated by personnel from the University of Nevada Seismological Laboratory at Reno, Nevada.

Financial support of the Southern Great Basin seismicity study is provided by the U.S. Department of Energy's Nevada nuclear waste isolation program.

We acknowledge the assistance of Jean DeWoody, whose drafting work and film reading were essential to the completion of the report.

INSTRUMENTATION

The network is composed of short-period vertical component seismometers (Mark Products L-4C and Geotech S-13) having a 1 Hz natural frequency. Seismometer outputs are amplified and frequency modulated by a Tricom model 642 amp-VCO having a dynamic range of 42 db and relayed by a Repco 810-038 transmitter to a central data collection point from which the data are sent by telephone data channel to Golden, Colorado. Power at each station is supplied by a solar panel (Spectrolab LEC 12V-1.5A) with battery backup. Demodulation of the FM signals is accomplished by Tricom model 643 discriminators whose output serves as input to Develocorder film recorders. A common time base (WWVB) is also recorded on each film. Three film recorders are required to accommodate the data from the network. The magnification of this system is shown on figure 3, where the curves correspond to the type of seismometer employed. At about 15 Hz the response peak is produced by the roll-off in response of the Develocorder galvanometers. From 15 Hz to 30 Hz the response decreases at 6 db/octave, and above 30 Hz the response decreases at 18 db/octave. These response curves are drawn for a nominal amplifier gain setting of 48 db. The actual operating gains and seismometer types at each station are given in appendix A. The gains are normally 84 to 108 db depending on the background noise at each site.

Two sets of 3-component seismometers are also operated at the surface and subsurface of drill hole UE25a-3 (Stations CDH-1, CDH-5). The downhole seismometer is at 1055 m elevation and the surface instrument is at 1387 m. These seismometers are Mark Product L-1-3DS with a 4.5 Hz natural frequency. Data from one horizontal and one vertical seismometer are recorded continuously with the network data. The six uphole and downhole components have been intermittently recorded on magnetic tape as part of an experiment to study the differences between surface and subsurface ground motion.

Station calibrations are conducted irregularly at present, but average every 3 months. The calibration procedure is conducted in two steps. First, the electronics are checked separately by connecting an oscillator of known voltage across the amplifier input and comparing this voltage with the output of the discriminator in Golden. The input and output voltage should be equal, and adjustments are performed as necessary to maintain proper voltage levels. In the second step, a pulse of known voltage and sign is applied across the seismometer calibration coils. This procedure permits a check of station polarity and, in principle, permits an absolute system calibration; at

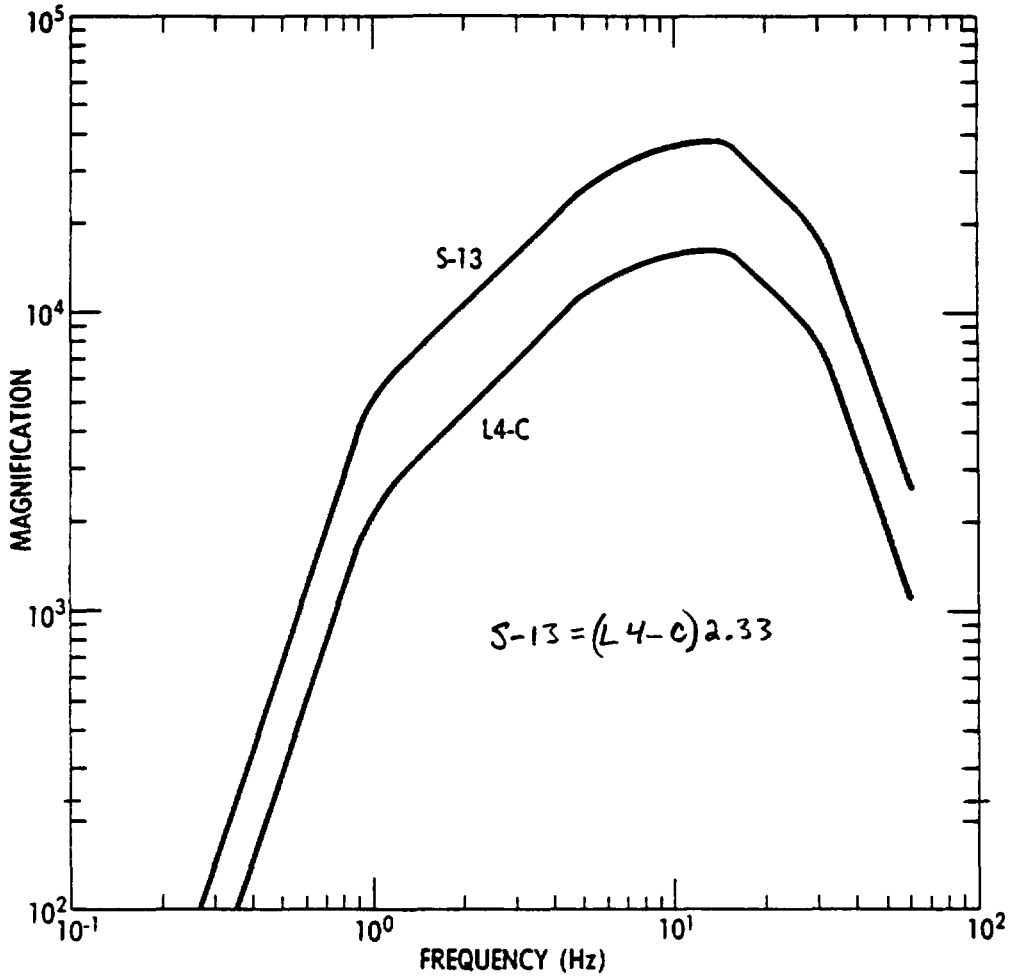


Figure 3.--Magnification curves for the network system with either L4-C or S-13 seismometers when reading the develocorder film on a 20X film viewer normal amplifier gain of 48 db. Actual operating gains are given in table 1.

present, however, only station polarities and relative changes in station magnification are checked. Records of station visits and services performed are kept in Golden and Las Vegas.

MAGNITUDE DETERMINATION

Table 1 shows a comparison of magnitudes determined from the coda duration using the equation of Lee and others (1972) (see appendix B, this report) with Richter magnitudes reported by the University of California at Berkeley, California Institute of Technology at Pasadena and the U.S. Geological Survey. This comparison was possible for earthquakes in the magnitude 3 to 4 range and shows that duration magnitude is adequate for events of this size. In the future this comparison will be conducted at lower magnitude ranges by computing Richter magnitude from the network earthquake amplitudes.

EARTHQUAKE DATA AND ANALYSIS

Earthquakes in this study were located using the HYPO71 computer program (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 epicentral solution resulted. The P/S velocity ratio of 1.75 used is supported by other data from this region. During the monitoring period, 762 earthquakes were located, and of these, 356 occurred during 1980 (appendix C). The magnitudes of the events range from 0 to 4.0, and the depths of well-located earthquakes range from surface focus to 15-20 km (fig. 4). More than half of the earthquakes have standard errors in the horizontal location of less than 1.0 km (fig. 5), and the same proportion have a standard error in the depth of less than 2.5 km (fig. 6). The overall quality (Q) of the earthquake locations, as defined in appendix D, is as follows:

Q	Number	Percent
A	5	1.4
B	89	25.0
C	212	59.6
D	50	14.0
TOTAL	356	100.0

Improvement in the accuracy of locations is expected as the quality of data becomes sufficient to perform simultaneous velocity inversion or station corrections and earthquake locations.

Recent seismicity located by this network in the Southern Great Basin is depicted on figures 7-10. Several important features of the recent seismicity are apparent (figs. 7, 8). First, certain areas of the NTS are the principal sources of earthquake activity within the network. These areas include Pahute Mesa, Yucca Flat, the Frenchman Flat area between Massachusetts Mountain and Ranger Mountain, Jackass Flats, and the Rock Valley area (fig. 1). Second, outside of the NTS area seismicity is presently more diffuse, with the exception of a swarm of several hundred earthquakes that occurred from July to December 1979 near the Pahranagat shear zone about 80 km east of NTS (fig. 9) Third, there are zones of relative quiescence in various parts of the NTS region; included in these relatively quiet areas are Yucca Mountain, Timber Mountain Caldera, parts of the Furnace Creek and Death Valley fault zones, the

TABLE 1

COMPARISON OF M_{LD} (Duration Magnitude) WITH REPORTED M[1]/

DATE	TIME	LATITUDE (°N.)	LONGITUDE (°W.)	DURATION M_{LD}	REPORTED M[2]/	DIFF
11/29/78	08:34	37.25°	116.50°	3.1	3.3 (GS)	-0.2
08/12/79	11:31	37.26°	115.06°	3.9	3.6 (GS)	0.3
08/16/79	03:37	37.25°	115.05°	3.3	3.7 (GS)	-0.4
12/25/79	04:17	37.27°	117.06°	4.1	4.2 (BRK)	-0.1
					3.9 (PAS)	0.2
01/15/80	20:28	36.18°	117.56°	3.8	3.7 (PAS)	0.1
					3.9 (BRK)	-0.1
04/02/80	18:20	36.86°	115.96°	3.4	3.2 (PAS)	0.2

1/ Reported M_L taken from USGS Preliminary Determination of Epicenters Monthly Listings.

2/ GS--M_{b-Lg} from the U.S. National Seismograph Network.

BRK--A University of California at Berkeley M_L.

PAS--A California Institute of Technology M_L.

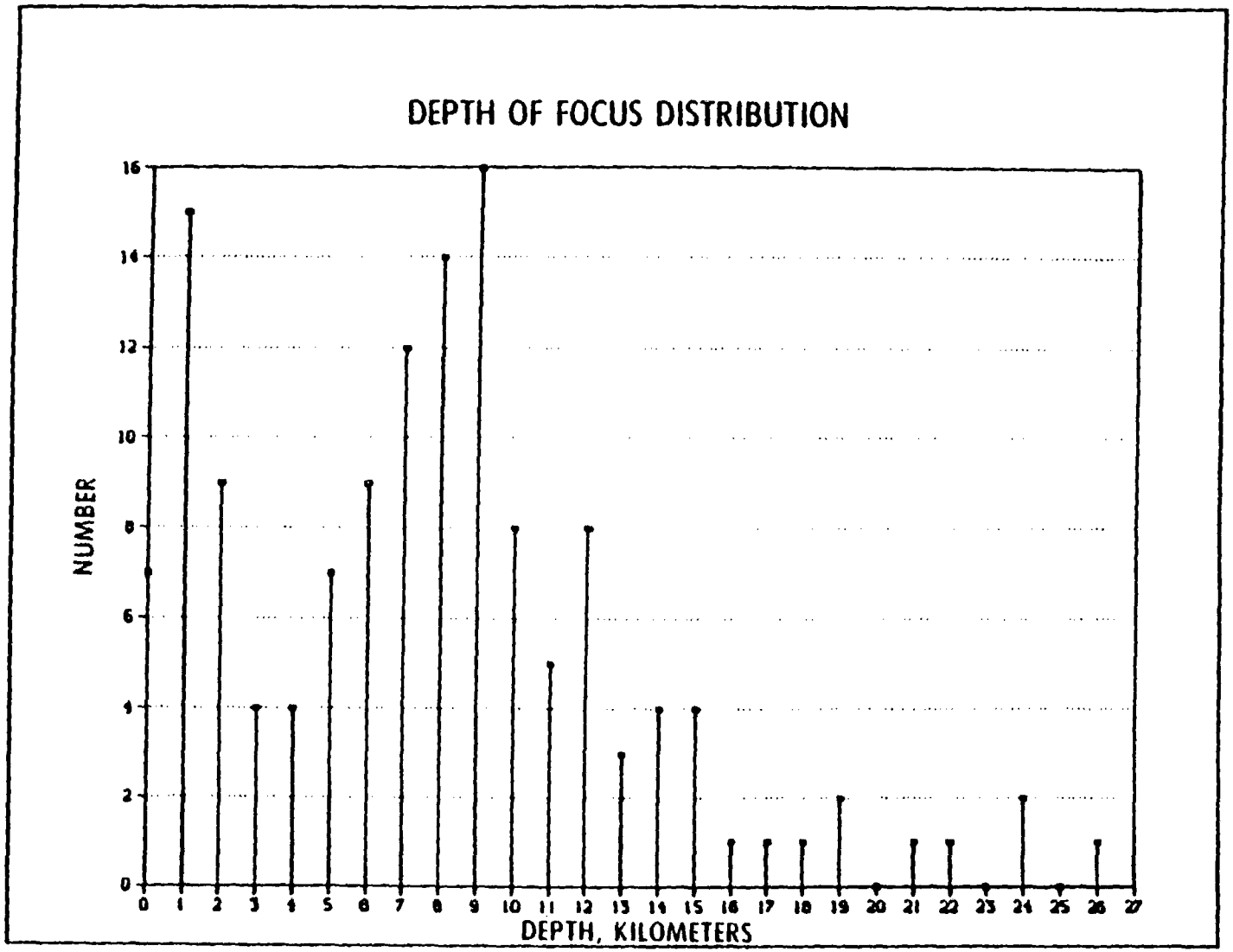


Figure 4.--Depth-of-focus histogram for earthquakes with A and B quality locations (1980).

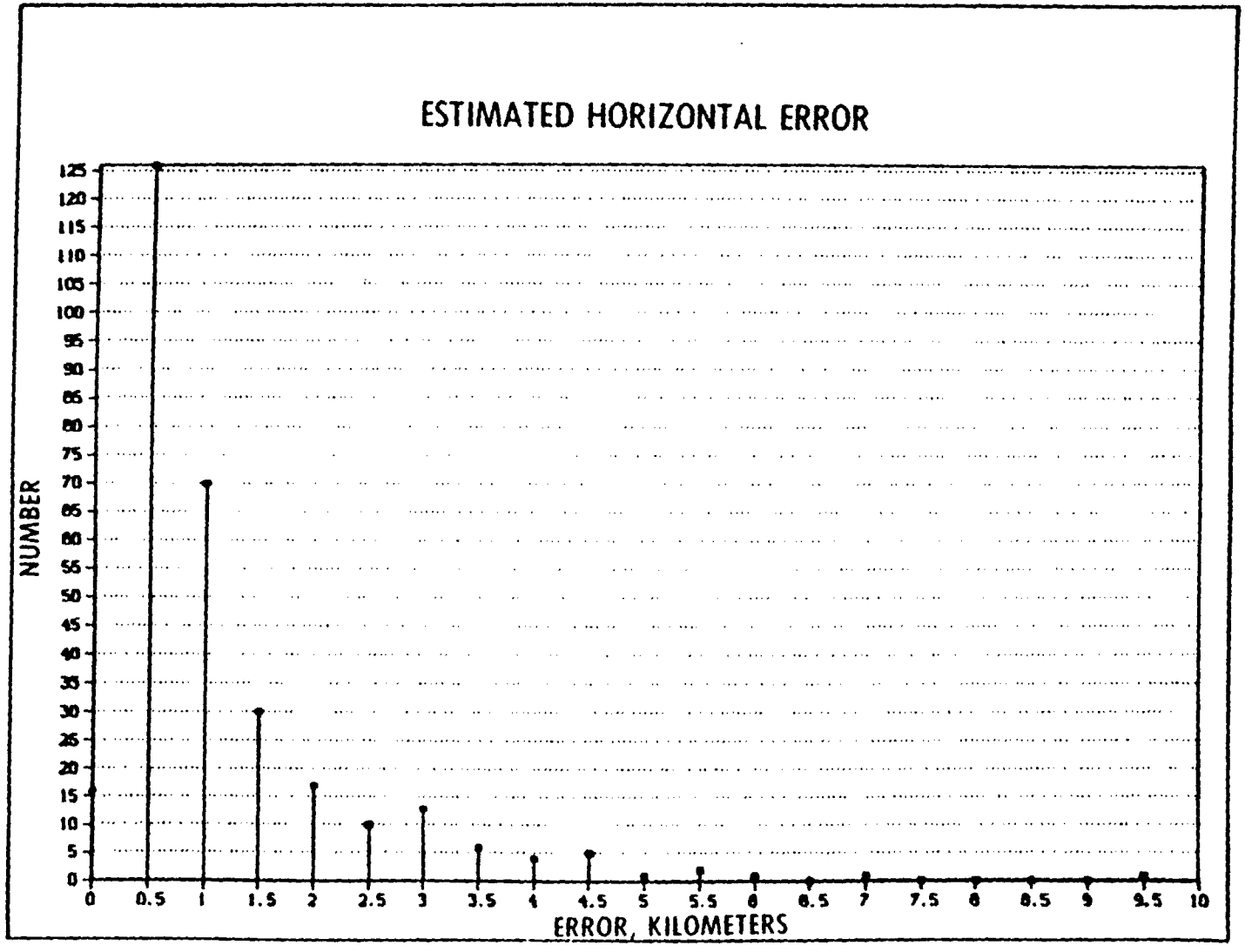


Figure 5.--Horizontal-error histogram for earthquakes with A,B, and C quality locations (1980).

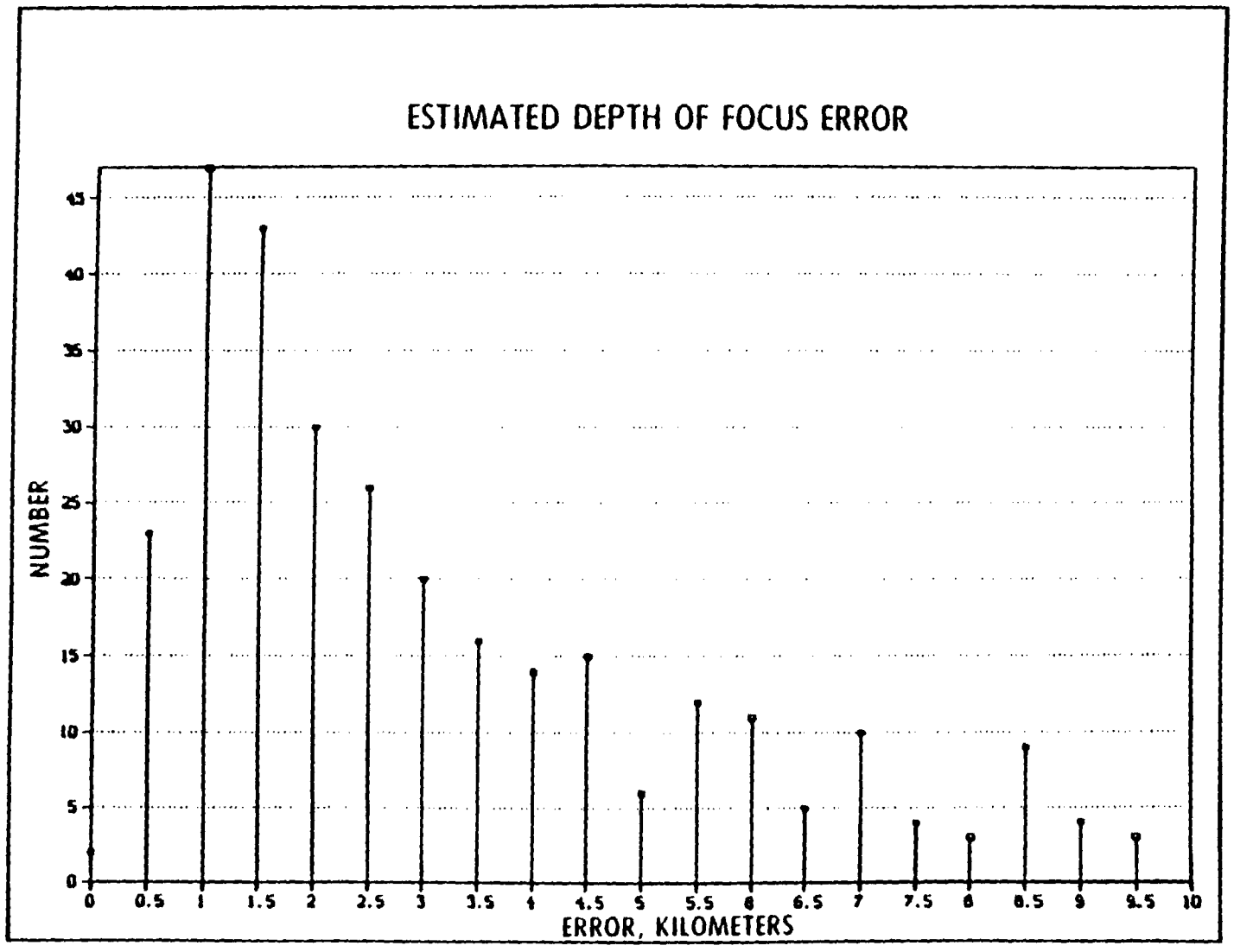


Figure 6.--Depth-error historgram for earthquakes with A, B, and C quality locations that do not have restrained depths (1980).

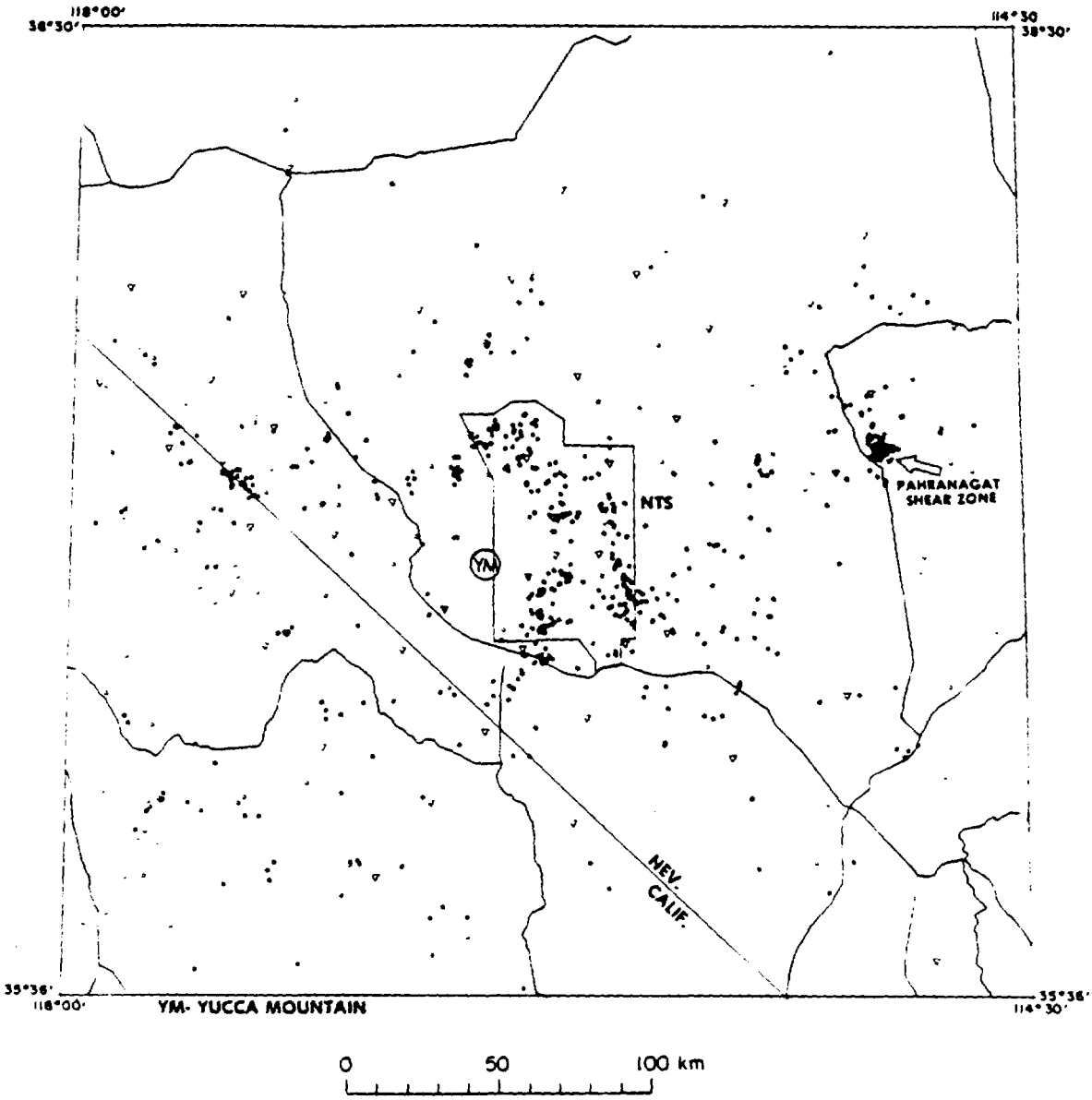


Figure 7.--SGB epicenters from August 1, 1978 through December 31, 1980. The location of the proposed nuclear waste storage facility is indicated by the letters YM (Yucca Mountain).

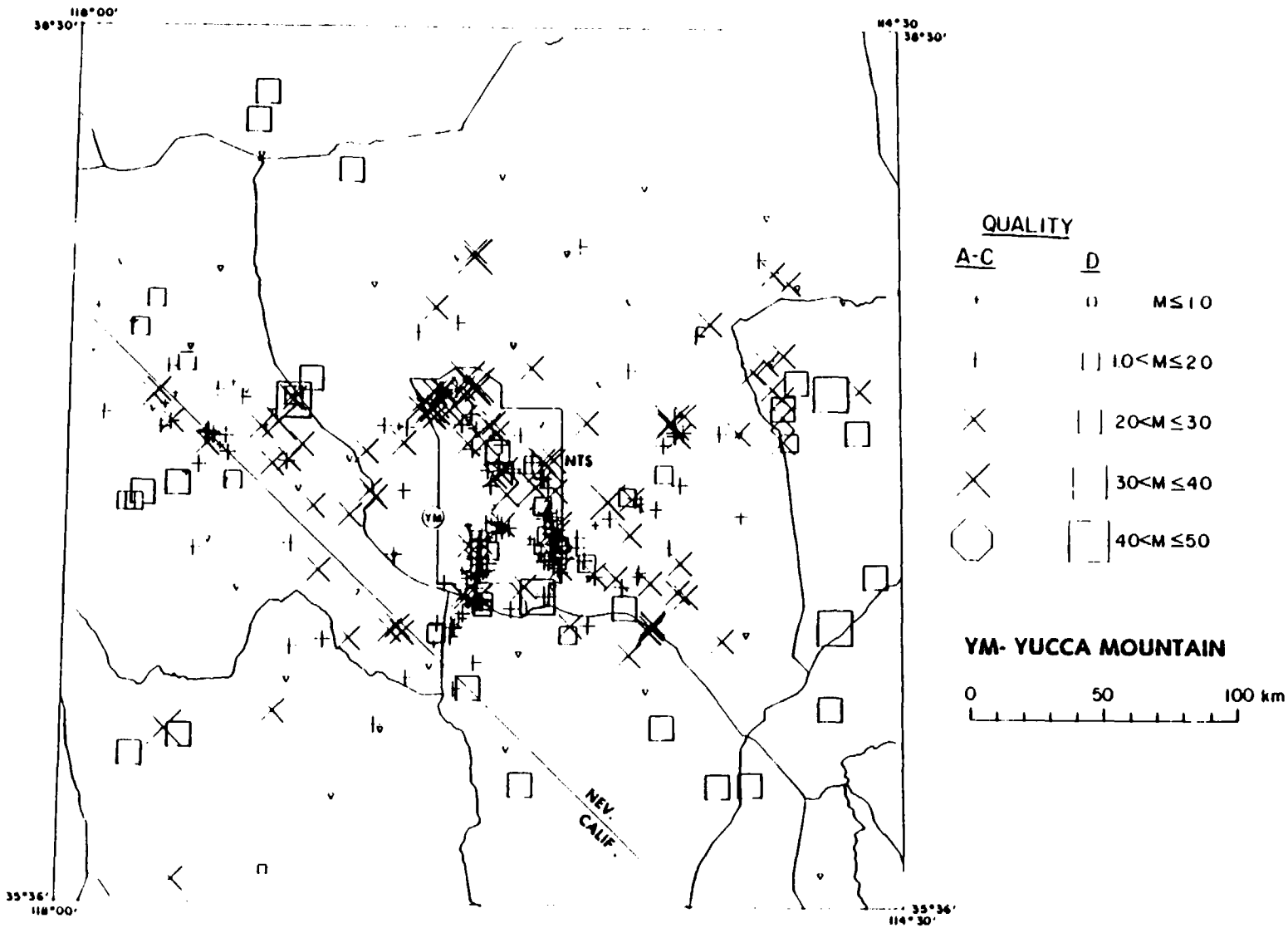
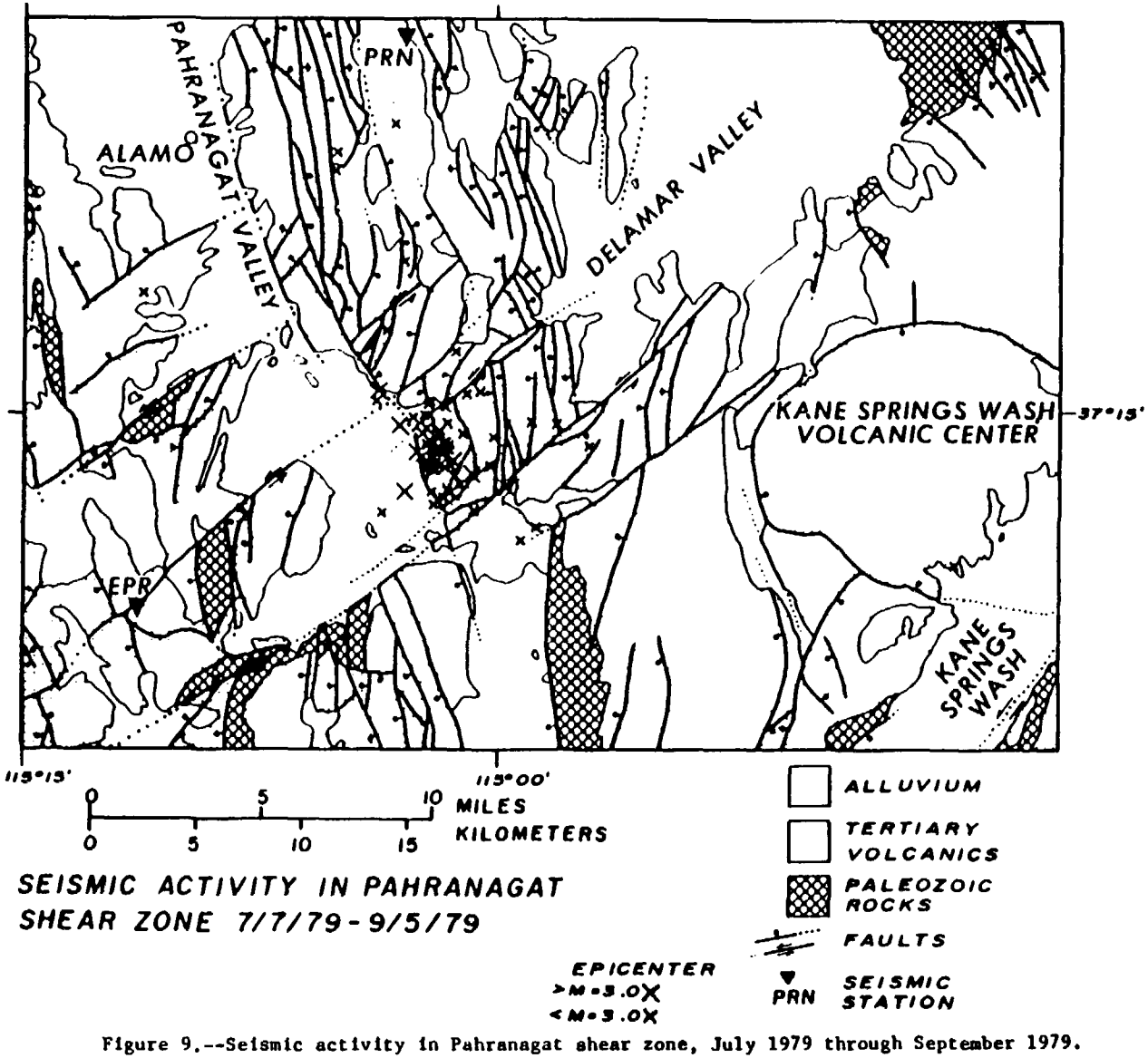


Figure 8.--SGB epicenters from January 1, 1980 through December 31, 1980 plotted with epicenter quality and magnitude as parameters. The location of the proposed nuclear waste storage facility is indicated by the letters YM (Yucca Mountain).



SEISMIC ACTIVITY IN PAHRANAGAT SHEAR ZONE 7/7/79-9/5/79

Figure 9.--Seismic activity in Pahranagat shear zone, July 1979 through September 1979.

Spring Mountains, the Las Vegas Valley zone, most of the Desert Game Range, and the Cactus Range area southeast of Tonopah. A large area of roughly 6000 km^2 that is bounded by stations RVE, BLT, GMR, MTI, SRG, and WRN is relatively quiescent it contained about 6-7 earthquakes during the monitoring period. A large area between Goldfield and Tonopah appears to be aseismic, although station density there is low. Fourth, the existence of the postulated east-west seismic belt appears to be supported by the network data, although its boundaries are poorly defined, especially to the west.

The earthquake swarm (fig. 9) that occurred in the area of the Pahranagat shear zone in 1979 is a good example of bursts of seismic activity of a type noted elsewhere in the Southern Great Basin. The main shock, magnitude about 3.9, occurred on Aug. 12; it was followed by five other events ranging from 3.2 to 3.7 magnitude during the next 48 hours. The main shock was preceded by about one-half hour by a magnitude 2.9 event and by four other smaller events during the previous month. During the 48 hours when the five large shocks occurred, smaller events occurred at the rate of about one every one-half to 2 hours. The rate then decreased somewhat until about Aug. 20, after which activity was more sporadic during the rest of the year. Relatively little activity was noted in the Pahranagat area during 1980. As shown on figure 9, the larger events were essentially confined to a structural block between two strands of the northeast-trending Pahranagat shear-zone system. The smaller events, though tending to cluster near and northeast of the larger events, were more widely diffused within the faulted volcanic terrain. No surface faulting of Holocene age, and probably none of middle Quaternary age, is present in the Pahranagat area (Ekren and others, 1977). However, the linear aspect of the topography at many places in the area suggests that fault movement affecting surface rocks could have occurred during early Quaternary time, or that relatively continuous small structural disturbances have resulted in preserving the lineaments through very small incremental movements. The activity in the Pahranagat area is reminiscent, though more swarm-like, of earthquakes that have occurred near the Yucca-Frenchman shear zone (fig. 9) at NTS. Some of this activity has been described by Carr (1974) and Fischer and others (1972). At NTS this activity seems to be concentrated where northeast-striking shear zones intersect the northwest-trending Yucca-Frenchman shear and flexure zone; activity is much lower on the northeast side of that zone where fault trends are oriented north-northwesterly instead of northeast. In Rock Valley, in southern NTS, detailed study of a strand of the northeast-trending Rock Valley fault zone has shown (Szabo and others, 1981, p. 19, 21, fig. 9) the likelihood that relatively small earthquakes may have caused surface movements of a few inches to a foot or so at a time, and that the small scarps formed may have been obliterated in a few thousand years. The same process may be occurring in the Pahranagat shear zone and on other northeast-trending fault zones in the Southern Great Basin.

Other examples of swarm-type activity have been noted in the region in the past, but the history of the activity is not as well documented as is the case with the new seismic net. Some examples of precurrent network swarms include activity on a portion of the Rock Valley fault system near U.S. Highway 95 in June 1975 (Rogers and others, 1977, p. 61), and in the Pahroc area about 30 miles west of Caliente (Bayer, 1972, fig. 5). Seismic activity in the Pahroc area has diminished greatly; that in southern Rock Valley continues, but at a lower rate.

Figure 10 shows the 1980 seismicity in the Yucca Mountain area in more detail. Epicenters of "D" quality are omitted. Yucca Mountain itself is notable for the lack of seismicity, as quantified in figure 11 where N/A, (number of earthquakes per unit area) is shown in annuli, each 1 km wide, as a function of annulus distance from YM. This figure emphasizes the lack of seismicity within 12 km of YM at the current network detection level threshold (about M = 1.5-2.0).

Figure 10 also shows the relationships between major fault zones and earthquake locations. Sections of the Mine Mountain, Cane Spring, and Rock Valley fault zones appear to be active. In addition other smaller faults (not shown) that have trends similar to those of the major zones are active. The focal mechanisms indicate predominantly normal faulting on northeast-striking fault planes. The inferred least principal stress axis is approximately northwest, in agreement with other studies of Basin and Range tectonics (Carr, 1974; Thompson and Burke, 1973) The data used for these and the following focal mechanism determinations are shown in figure 12 and are also given in the local event data report (appendix D).

Figure 13 shows the location and focal mechanism for the largest event, M=4.1, recorded during the total monitoring period (August 1978 through December 1980). Although it was located in an alluvium-covered area of Sarcobatus Flat (fig. 1) where no faults have been mapped, associated aftershock locations and the focal mechanism indicate that the event probably occurred on a north-striking fault with right-lateral strike-slip motion. This mechanism is also consistent with a northwest-oriented axis of least principal stress. The existence of both strike-slip and normal faulting in the study region implies that the intermediate and greatest principal stresses are about equal in magnitude and that either may be vertically oriented.

Also indicated on figure 13 is an area of persistent seismicity on a system of northeast-trending faults near the Nevada-California border. This area of activity was detected in a study by Papanek and Hamilton (1972). Similar patterns are present at other locations near the Furnace Creek-Fish Lake Valley fault system.

DISCUSSION

A significant portion of the total number of earthquakes in the southern Great Basin appear to occur in association with northeast-trending shear zones such as the Pahranagat and southern NTS areas. Activity on Yucca Flat and Pahute Mesa occurs on north-trending fault zones, but most of it probably results from stress release associated with nuclear events (Hamilton and others, 1971; Rogers and others, 1977). The moderate-sized earthquake on Sarcobatus Flats, discussed earlier, is also probably associated with a north-trending fault. Whereas more data need to be analyzed to clearly demonstrate the greater seismic hazard of north- to northeast-trending faults, this conclusion is tentatively valid and is supported by the orientation of the stress field (Carr, 1974). Another tentative and somewhat conflicting conclusion that might be made at this point is that the northeast-trending faults yield relatively often in fairly small earthquakes and that the north-trending faults are potentially more of a hazard seismically, as they may yield more infrequently, but with larger events. Ryall and Priestley (1975)

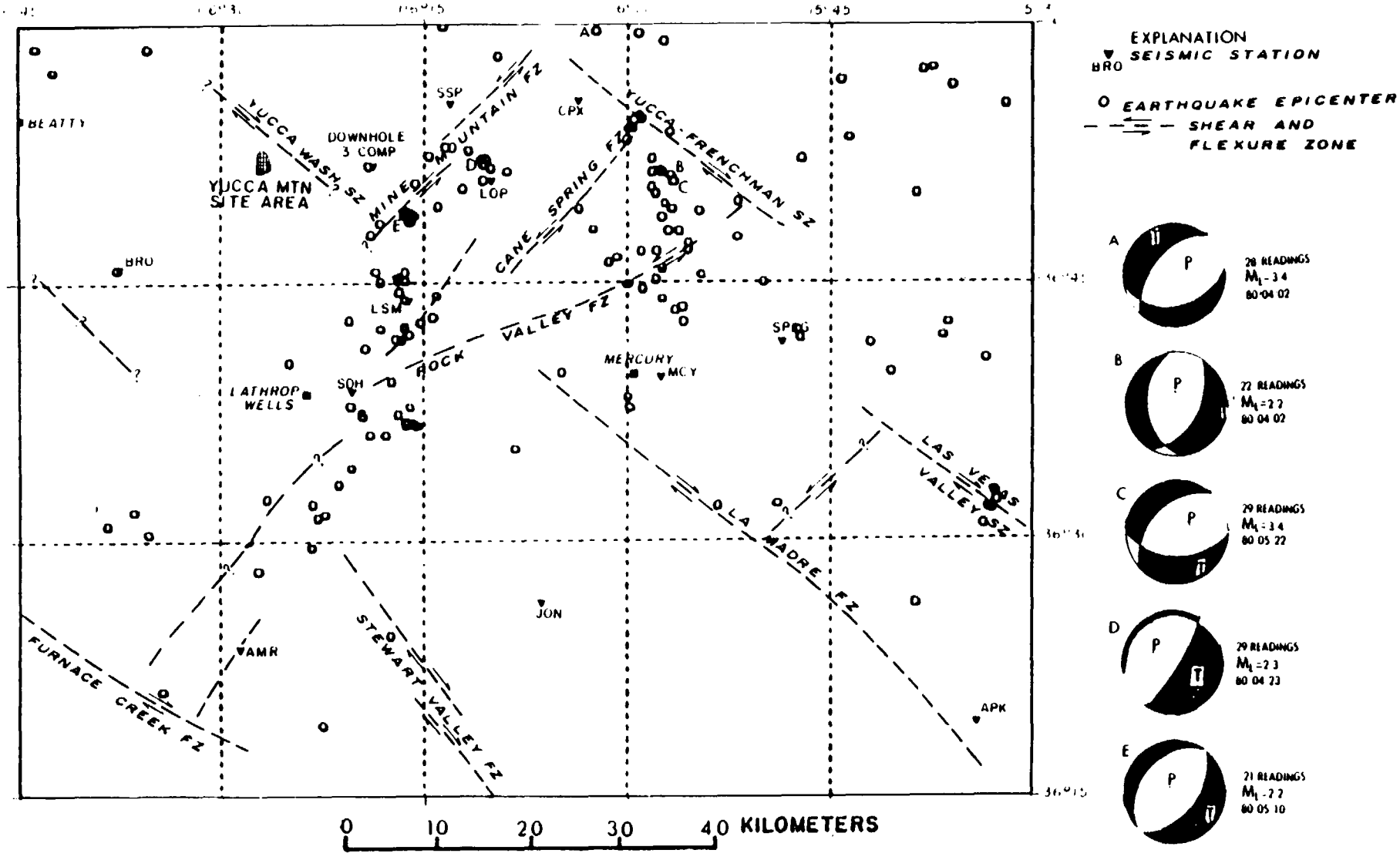


Figure 10.--A, B, and C quality epicenters near the Yucca Mountain site area.

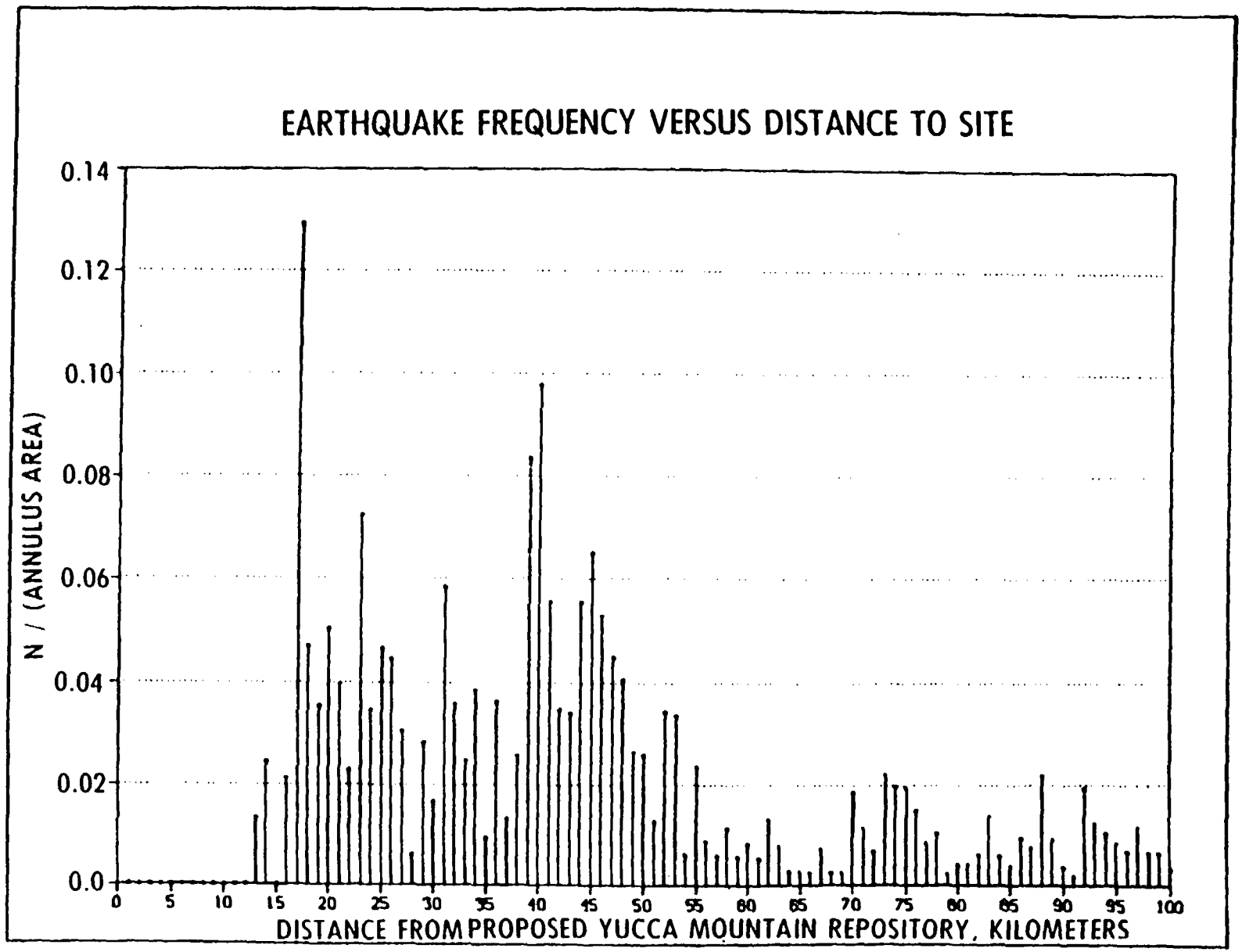


Figure 11.--Number of earthquakes per unit area in ring annuli centered at Yucca Mountain versus distance to the annulus mid-point (R).

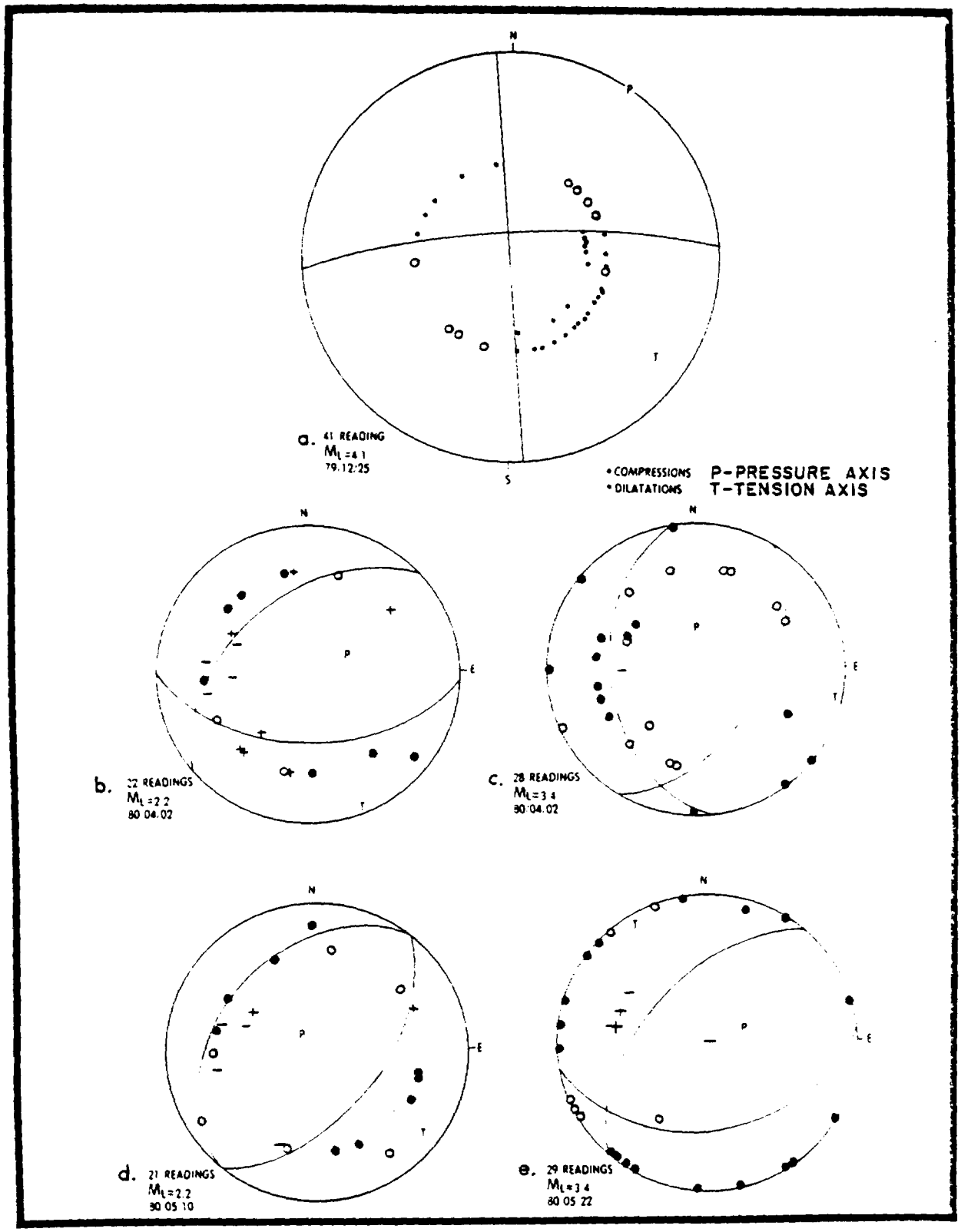


Figure 12.--First motion directions and inferred local mechanisms for selected earthquakes.

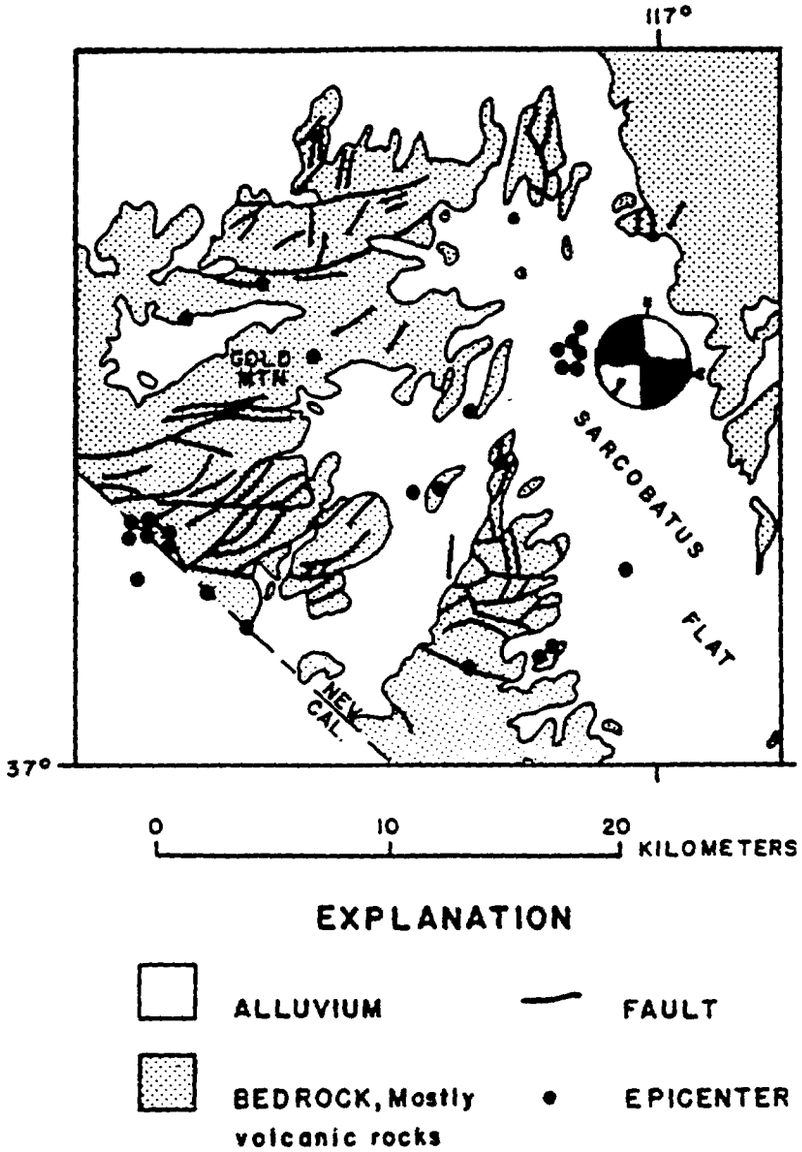


Figure 13.--Location of epicenters (12/25/79-12/31/80) showing the focal mechanism for the M_L = 4.1 earthquake in the Gold Mountain-Sarcobatus Flat area.

have suggested that magnitude may be limited upward on northeast-trending faults in a portion of the Nevada-California seismic zone (fig. 2).

The seismic hazard at Yucca Mountain is ambiguous because, although no earthquakes have been detected there, faults do exist on and adjacent to Yucca Mountain that have north-south orientation and, therefore, should have potential for slip. Several questions remain to be answered. Are the Yucca Mountain faults unstressed because of previous prehistoric slip or the existence of a shear stress shadow zone due to slip on nearby faults? Are the Yucca Mountain faults less active because of some undetected differences in basement rock or mechanical properties relative to surrounding faults? Do buried intrusive rocks associated with several caldera and volcanic centers around Yucca Mountain somehow act as a buttress or lower the stress acting on Yucca Mountain faults? Continued analysis of data collected by the seismic network, studies of earthquake source parameters, seismic recurrence studies, studies of fault stress patterns, and other related geologic and geophysical studies will provide a better basis for answering these questions.

SUMMARY

1) Three hundred and fifty-six earthquakes have been located during the 1980 calendar year. None of these events occurred closer than 12 km to Yucca Mountain, which is being explored for a nuclear waste repository.
2) The magnitudes of earthquakes within the network recorded to date varies between 0 and 4.0. A significant number of events below the magnitude 1.5-2.0 level, however, could not be located.
3) The earthquakes are occurring on faults of northeast to north orientation.
4) Several major fault zones with a northwest orientation are quiescent or nearly so: Death Valley-Furnace Creek fault zone, Las Vegas Valley shear zone, and faults in the Spring Mountains. Large portions of the Desert Game Range and Southern Timber Mountain caldera and an area northwest of the NTS are also relatively quiescent.

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Appendix A: Station Codes, Location, Instrumentation, and Polarity Reversal

STATION CODE		PERIOD OF OPERATION	LATITUDE	LONGITUDE	ELEVATION	SEISMOMETER	GAIN
CODE	STATION	(DAY/MONTH/YEAR)	(DEG MINUTES)	(DEG MINUTES)	(METERS)	MODEL	(DB)
AMR	Amargosa, Cal.	24/07/78-present	36 23.86 N	116 28.65 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	114 13.66 W	1720	L-4C	84
BLT	Belted Range, Nev.	30/05/79-present	37 27.68 N	116 08.09 W	1820	L-4C	84
BMT	Black Mountains, Nev.	26/02/80-present	37 17.02 N	116 32.02 W	1920	L-4C	84
BNO	Bare Mountains, Nev.	28/11/78-present	36 45.76 N	116 37.52 W	920	L-4C	84
CDH1	Calico Hills, Nev.	01/02/80-present	36 51.62 N	116 19.05 W	1387	L-1-30S (vert.)	90
CDH5	Calico Hills, Nev.	01/02/80-present	36 51.62 N	116 19.05 W	1055	L-1-30S (horiz.)	108
CP4	CP-1, Nev.	--/--/77-01/03/80*	36 55.75 N	116 03.50 W	1285	NGC-21 to 5/8/80 L-4C 5/8/80-pr.	84
CTS	Cactus Peak, Nev.	24/04/79-present	37 38.40 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 12.65 N	116 19.42 W	2285	S-13 to 25/4/80 L-4C 25/4/80-pr.	84
EPR	East Pahranagat Rge, 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 Mountains, Nev.	13/07/79-present*	37 18.01 N	117 15.58 W	2155	L-4C	84
GRR	Groom Range, Nev.	23/01/79-present	37 20.03 N	115 46.27 W	1580	L-4C	84
GRV	Greenwater Valley, Cal.	28/11/78-present	37 00.09 N	117 29.55 W	1190	L-4C	84
GWV	Greenwater Valley, Cal.	24/07/78-present	36 11.20 N	116 40.24 W	1540	L-4C	84
JOH	Johnnie, Nev.	24/07/78-present*	36 26.39 N	116 06.18 W	920	L-4C	84
KWN	Kawich Range, Nev.	30/05/79-23/04/80	37 42.37 N	116 23.07 W	2570	L-4C	84
KRN4	Kawich Range, Nev.	23/04/80-present	37 45.00 N	116 22.83 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	Lee, 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 Mtn, Nev.	13/12/79-present	36 44.34 N	116 16.31 W	1160	S-13	84
LSM	Little Skull Mtn, 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
MCE	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 39.20 N	115 57.73 W	1285	S-13	84
MGM	Meadow Mountains, Nev.	13/07/79-present*	37 26.47 N	117 29.79 W	2100	L-4C	84

* This station location has been found to be incorrect. Correction will be made in the data report for 1981.

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	1500	L-4C	84
NOP	Nopah Range, Cal.	26/07/78-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 Rg, Nev.	08/06/79-present*	37 39.16 N	116 56.22 W	1650	L-4C	84
PGE	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 56.43 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
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-present	38 01.18 N	116 11.51 W	2290	L-4C	84
SDH	Striped Hills, Nev.	26/07/78-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	Seegam 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
SVP	Silver Peak Range, Nev.	13/07/79-present*	37 42.90 N	117 48.05 W	2620	L-4C	84
TMO	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-present	38 04.92 N	117 15.08 W	1951	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 38.95 W	1915	L-4C	84
WRN	Worthington Mts., Nev.	08/06/79-present	37 58.90 N	115 35.30 W	1760	L-4C	84

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

*POLARITY REVERSALS

CODE	STATION	PERIOD OF REVERSE POLARITY (DAY/MONTH/YEAR)
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
EPR	East Pahranagat Range, Nev	10/12/79 to 20/2/80
GLR	Groom 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	Jonnie, Nev.	1/11/78 to 22/2/79
LCH	Last Chance Range, Nev.	28/6/79 to 29/8/79
MGM	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	Snoshone 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

Appendix B: Input Parameters to HYPO71

APPENDIX B

HYPOCENTER PARAMETERS FOR LOCAL EVENTS ARE COMPUTED BY PROGRAM HYPO71 (LEE AND LAHR, 1975). THE PROVISIONAL CRUSTAL MODEL EMPLOYED IS:

DEPTH TO TOP OF LAYER (KM)	P-WAVE VELOCITY (KM/SEC)
0.0	3.8
1.7	6.15
24.0	7.7
46.0	8.1

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 = 1.75 (P/S VELOCITY RATIO)

HYPOCENTER SOLUTIONS FOR LOCAL EARTHQUAKES AR. DESIGNATED EITHER "FIXED DEPTH SOLUTION,"OR "FREE DEPTH SOLUTION." ALL COMPUTATIONS, EXCEPT THOSE DESIGNATED "PROBABLE BLAST," ALLOW THE DEP H TO GO FREE FROM THE STARTING DEPTH IF THE DATA ARE OF SUFFICIENTLY GOOD QUALITY; IF NOT, THE DEPTH REMAINS FIXED AT THE STARTING VALUE, ZTR, THE NOMINAL DEPTH FOR THE SPECIFIC SOURCE AREA.

TELESEISMS ARE DESIGNATED "TELESEISMIC SOLUTIC THE HYPOCENTER PARAMETERS ARE TAKEN FROM THE USGS PUBLICATION, "PR IMINARY DETERMINATION OF EPICENTERS, MONTHLY LISTING." CALCULATED TRAVEL-TIMES AND DERIVATIVES ARE DETERMINED FROM LINEAR INTERPOLATION OF JEFFREYS-BULLEN TRAVEL-TIME TABLE ENTRIES.

THE P/S RATIO WAS REVISED FROM THE VALUE 1.78 USED IN THE 1979 DATA REPORT TO THE CURRENT VALUE OF 1.75. THE CURRENT VALUE WAS OBTAINED BY PERFORMING A LEAST-SQUARES ANALYSIS OF S-P AND P-ORIGIN TIMES FOR APPROXIMATELY 100 A AND B QUALITY EARTHQUAKE SOLUTIONS CHOSEN FROM THE CATALOGUE OF SOUTHERN GREAT BASIN EVENTS FROM AUGUST 1978, TO JUNE 1980. THE SOLUTION WAS OBTAINED BY TREATING BOTH P-O and S-P TIMES AS RANDOM VARIABLES.

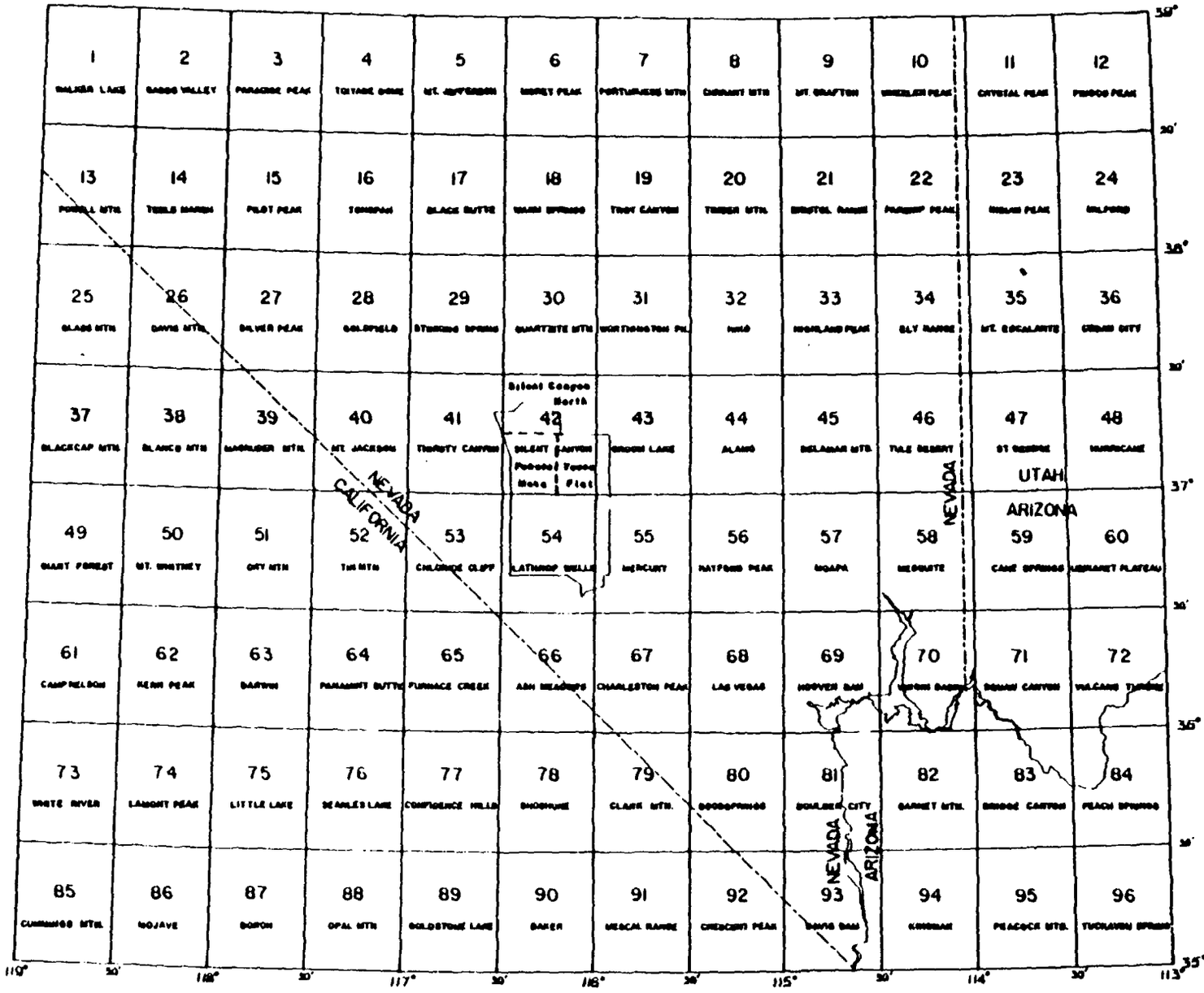

Figure C1.Geographic regions used to identify earthquake locations, appendix C.

LOCAL HYPOCENTER SUMMARY

1980	ORIGIN TIME (UTC)	LAT	LONG	DEPTH* (KM)	AVFM	AVXM	GEOGRAPHIC REGION
JAN 06	4 22 18.99	36.52 N	116.38 W	3.9 F	1.4		LATHROP WELLS
08	15 11 59.33	37.30 N	117.63 W	4.3 F	2.3		MAGRUDER MOUNTAIN
08	16 6 8.32	37.30 N	117.63 W	3.4 F	2.1		MAGRUDER MOUNTAIN
08	16 38 1.38	36.93 N	116.06 W	8.1 F	1.6		LATHROP WELLS
08	16 51 2.09	36.75 N	115.83 W	5.9 F	1.7		MERCURY
09	4 34 22.03	37.20 N	116.35 W	0.0 F	1.6		SILENT CANYON - PAHUTE MESA
09	19 6 20.07	37.15 N	117.39 W	8.3 F	1.6		MT. JACKSON
11	11 36 26.44	36.86 N	116.15 W	12.0 F	1.4		LATHROP WELLS
11	21 46 32.24	37.57 N	114.31 W	2.8 F	2.5		ELY RANGE
11	23 21 44.79	36.82 N	116.28 W	5.0 D	1.1		LATHROP WELLS
12	11 40 59.69	36.82 N	116.27 W	1.0 F	1.5		LATHROP WELLS
12	19 13 26.40	36.82 N	116.27 W	4.9 F	1.5		LATHROP WELLS
13	4 40 59.81	36.81 N	116.27 W	1.2 F	1.1		LATHROP WELLS
13	4 44 44.07	36.82 N	116.26 W	1.6 F			LATHROP WELLS
13	7 14 23.54	36.82 N	116.26 W	1.9 F	1.4		LATHROP WELLS
13	7 48 51.59	37.00 N	117.31 W	5.0 D	1.1		MT. JACKSON
14	2 4 33.01	37.23 N	115.46 W	17.6 F	1.9		ALAMO
15	8 49 53.36	37.28 N	117.07 W	1.3 F	2.1		MT. JACKSON
15	12 21 21.49	37.07 N	116.05 W	5.3 F	1.4		SILENT CANYON - YUCCA FLAT
15	14 21 11.09	37.53 N	116.37 W	11.3 F	1.1		QUARTZITE MOUNTAIN
15	20 28 21.96	36.18 N	117.57 W	1.2 F	3.8		DARWIN
16	17 58 42.77	37.29 N	117.06 W	4.7 F	1.7		MT. JACKSON
20	19 4 53.68	36.88 N	116.20 W	5.0 D	1.2		LATHROP WELLS
21	20 46 45.06	37.14 N	114.97 W	0.2 F	1.6		DELAMAR MOUNTAINS
23	23 50 24.65	37.20 N	115.48 W	2.4 F	2.4		ALAMO
24	0 34 1.37	37.16 N	115.46 W	9.4 F	1.8		ALAMO
24	8 59 41.12	37.13 N	115.51 W	15.7 F	1.7		GROOM LAKE
25	11 40 11.18	36.60 N	116.32 W	10.9 F	0.9		LATHROP WELLS

26	3 7 10.79	36.72 N	116.24 W	5.1 F	1.6	LATHROP WELLS
26	3 27 52.12	36.49 N	116.39 W	23.7 F	1.5	ASH MEADOWS
28	17 22 21.39	37.22 N	117.85 W	13.6 F	1.6	MAGRUDER MOUNTAIN
28	18 4 1.63	36.73 N	116.27 W	2.1 F	1.9	LATHROP WELLS
30	0 33 5.53	37.16 N	117.43 W	7.7 F	1.3	MT. JACKSON
30	9 2 29.46	36.79 N	115.86 W	7.7 F	1.3	MERCURY
30	11 31 7.47	36.49 N	115.26 W	12.3 F	2.4	LAS VEGAS
30	14 26 32.66	36.62 N	116.28 W	7.6 F	1.4	LATHROP WELLS
31	14 20 48.27	37.28 N	117.64 W	1.0 F	2.4	MAGRUDER MOUNTAIN
FEB 01	15 47 49.59	37.57 N	117.89 W	1.6 F	1.0	SILVER PEAK
02	4 49 35.59	37.16 N	117.41 W	13.1 F	1.8	MT. JACKSON
02	7 37 9.77	36.82 N	116.23 W	9.4 F	1.0	LATHROP WELLS
04	5 56 34.14	36.59 N	116.26 W	6.7 F	1.3	LATHROP WELLS
04	14 5 54.79	37.17 N	115.46 W	9.3 F	1.9	ALAMO
04	16 21 18.68	36.63 N	116.33 W	2.3 F	2.2	LATHROP WELLS
05	4 36 15.08	37.07 N	116.20 W	7.9 F	1.2	SILENT CANYON - YUCCA FLAT
06	5 56 15.97	37.18 N	116.58 W	10.0 F	1.2	THIRSTY CANYON
06	6 49 16.34	37.19 N	116.61 W	20.7 F	0.8	THIRSTY CANYON
06	9 0 55.46	36.66 N	116.29 W	0.6 F	1.8	LATHROP WELLS
06	11 49 14.86	36.62 N	116.32 W	1.3 F	1.2	LATHROP WELLS
17	2 42 24.53	37.16 N	116.10 W	11.1 F	1.1	SILENT CANYON - YUCCA FLAT
19	23 42 50.66	37.39 N	117.51 W	23.9 F	1.3	MAGRUDER MOUNTAIN
20	1 41 32.91	37.74 N	115.10 W	21.0 F	1.3	HIKO
20	2 52 52.34	37.28 N	117.27 W	8.8 F	1.1	MT. JACKSON
21	4 44 18.52	36.92 N	117.75 W	17.7 F	2.0	DRY MOUNTAIN
21	4 52 0.85	36.92 N	117.72 W	1.6 F	1.6	DRY MOUNTAIN
22	3 37 52.71	37.38 N	115.65 W	10.5 F	1.9	GROOM LAKE
24	5 56 24.61	36.47 N	116.45 W	9.0 F	0.7	ASH MEADOWS
24	16 23 56.93	37.02 N	117.50 W	16.4 F	0.9	MAGRUDER MOUNTAIN
24	20 36 57.56	37.25 N	117.60 W	7.4 F	0.8	MAGRUDER MOUNTAIN
26	4 5 27.29	37.18 N	117.17 W	10.7 F	0.7	MT. JACKSON
28	12 27 18.82	36.78 N	117.47 W	8.3 F	1.7	TIN MOUNTAIN
28	19 3 48.17	37.18 N	117.19 W	7.2 F	2.2	MT. JACKSON

MAR	01	7	36	12.56	37.26	N	115.62	W	8.7 F	1.6	GROOM LAKE
	03	3	18	50.52	37.52	N	117.74	W	8.7 F	0.9	SILVER PEAK
	03	16	59	55.12	37.50	N	116.54	W	7.4 F	1.9	STINKING SPRING
	06	7	45	28.85	35.72	N	117.15	W	1.9 F		SEARLES LAKE
	07	16	50	7.41	37.33	N	117.31	W	9.5 F	0.6	MT. JACKSON
	07	18	12	11.50	37.79	N	115.86	W	12.1 F	2.0	WORTHINGTON PEAK
	08	18	4	15.47	37.51	N	115.35	W	12.7 F	1.0	HIKO
	12	10	28	47.73	37.24	N	117.15	W	12.3 F	0.4	MT. JACKSON
	14	1	34	20.90	36.54	N	116.44	W	11.7 F	1.6	LATHROP WELLS
	14	11	12	39.75	37.19	N	116.67	W	17.2 F	1.9	THIRSTY CANYON
	14	20	52	51.80	36.60	N	116.30	W	10.9 F	1.2	LATHROP WELLS
	15	3	39	48.97	37.52	N	117.75	W	13.3 F		SILVER PEAK
	15	4	46	24.85	36.81	N	116.01	W	0.6 F	3.2	LATHROP WELLS
	17	19	17	16.03	36.36	N	116.57	W	4.3 F	1.6	FURNACE CREEK
	18	12	56	49.51	37.78	N	117.00	W	1.8 F	2.2	STINKING SPRING
	19	4	24	52.94	37.37	N	117.59	W	21.6 F	1.3	MAGRUDER MOUNTAIN
	22	3	5	53.94	37.28	N	117.56	W	6.3 F	0.9	MAGRUDER MOUNTAIN
	25	22	48	44.44	37.60	N	117.64	W	2.5 F	1.8	SILVER PEAK
	26	3	13	7.09	36.86	N	116.17	W	5.0 D		LATHROP WELLS
	26	5	15	43.73	37.17	N	117.61	W	11.1 F	1.3	MAGRUDER MOUNTAIN
	27	20	1	7.02	37.12	N	117.36	W	6.6 F	1.0	MT. JACKSON
	28	2	8	43.78	36.32	N	116.38	W	6.1 F	2.0	ASH MEADOWS
	28	21	3	36.82	36.71	N	116.27	W	7.1 F	1.2	LATHROP WELLS
	31	13	3	56.96	36.86	N	116.18	W	8.4 F	1.7	LATHROP WELLS
APR	02	14	15	12.07	36.86	N	116.32	W	34.0 F	0.8	LATHROP WELLS
	02	17	56	29.83	36.90	N	116.00	W	8.9 F	1.5	MERCURY
	02	18	13	5.50	36.83	N	115.99	W	9.6 F	1.5	MERCURY
	02	18	20	41.43	36.86	N	115.96	W	0.9 F	3.4	MERCURY
	02	21	14	53.76	36.87	N	115.97	W	6.1 F	2.2	MERCURY
	03	2	18	9.70	36.90	N	115.99	W	9.1 F	1.6	MERCURY
	03	6	40	43.78	36.84	N	115.97	W	11.2 F	1.7	MERCURY
	03	15	22	35.79	36.86	N	115.96	W	8.5 F	1.7	MERCURY
	03	17	15	13.42	36.86	N	115.97	W	5.5 F	1.8	MERCURY

03	23 47 9.66	37.04 N	116.19 W	6.0 F	2.3	SILENT CANYON - YUCCA FLAT
04	18 0 48.84	36.94 N	115.60 W	19.0 F	1.6	MERCURY
05	2 27 44.95	36.85 N	115.94 W	8.6 F	2.1	MERCURY
05	2 29 6.43	36.85 N	115.96 W	3.0 F	1.4	MERCURY
05	17 29 58.94	36.82 N	115.91 W	13.1 F	1.0	MERCURY
08	1 35 20.86	36.55 N	116.35 W	5.4 F	1.6	LATHROP WELLS
08	2 11 31.66	36.85 N	115.95 W	0.0 F	1.9	MERCURY
10	7 39 21.84	37.28 N	117.06 W	6.3 F	1.2	MT. JACKSON
11	9 48 1.29	36.98 N	116.59 W	5.0 D	1.7	CHLORIDE CLIFF
14	13 54 23.50	37.18 N	116.29 W	12.5 F	2.0	SILENT CANYON - PAHUTE MESA
14	16 55 4.66	37.16 N	117.42 W	4.9 F	1.2	MT. JACKSON
15	10 24 43.67	37.50 N	117.71 W	7.0 F	1.7	SILVER PEAK
15	12 42 51.95	36.53 N	115.89 W	5.0 D	2.3	MERCURY
15	12 44 55.55	36.82 N	115.94 W	10.0 F	1.6	MERCURY
15	21 30 2.10	36.91 N	115.99 W	0.0 F	1.6	MERCURY
16	11 25 35.88	37.21 N	115.47 W	1.7 F	3.3	ALAMO
16	21 41 27.76	37.21 N	115.48 W	0.1 F	2.3	ALAMO
21	2 27 39.35	37.30 N	116.35 W	2.9 F	2.4	SILENT CANYON - NORTH
23	4 8 40.82	36.87 N	116.18 W	3.4 F	2.3	LATHROP WELLS
23	5 24 30.13	36.82 N	116.26 W	2.4 F	1.9	LATHROP WELLS
23	16 43 20.07	37.30 N	117.38 W	6.0 F	1.6	MT. JACKSON
24	6 2 27.66	36.82 N	116.27 W	2.8 F	1.6	LATHROP WELLS
24	6 2 59.68	36.82 N	116.27 W	2.9 F	1.5	LATHROP WELLS
24	7 20 49.72	36.82 N	116.27 W	3.4 F	1.5	LATHROP WELLS
25	3 48 37.94	36.01 N	116.09 W	0.3 F	2.5	ASH MEADOWS
25	10 40 30.33	37.32 N	116.30 W	3.8 F	3.1	SILENT CANYON - NORTH
26	2 13 7.25	36.82 N	116.27 W	4.2 F	1.3	LATHROP WELLS
27	13 1 55.13	37.05 N	117.45 W	1.1 F	1.7	MT. JACKSON
29	4 12 47.91	36.83 N	115.86 W	8.1 F	1.5	MERCURY
29	17 53 31.79	36.82 N	116.27 W	3.4 F	1.3	LATHROP WELLS
30	9 33 59.44	36.64 N	116.00 W	12.4 F	1.7	MERCURY
MAY 02	7 38 28.30	36.82 N	116.27 W	3.6 F	1.4	LATHROP WELLS
03	10 31 18.71	36.46 N	117.06 W	14.6 F	1.7	PANAMINT BUTTE

	08	11	36	39.05	37.16	N	117.41	W	7.2	F	1.8	MT. JACKSON
	10	11	3	32.82	36.81	N	116.27	W	2.3	F	2.2	LATHROP WELLS
	11	9	28	54.08	36.57	N	116.34	W	7.9	F	1.7	LATHROP WELLS
	13	2	33	41.84	36.82	N	116.06	W	17.3	F	1.0	LATHROP WELLS
	14	8	33	31.96	36.84	N	116.20	W	8.0	F	1.5	LATHROP WELLS
	15	1	30	38.60	36.50	N	115.90	W	5.0	D	1.4	MERCURY
	16	16	49	8.20	37.07	N	116.06	W	8.6	F	1.9	SILENT CANYON - YUCCA FLAT
	18	1	43	11.44	36.82	N	116.27	W	9.3	F	1.3	LATHROP WELLS
	18	17	56	25.58	36.93	N	116.01	W	33.9	F	1.2	LATHROP WELLS
	19	4	16	35.37	37.08	N	117.07	W	1.7	F	2.9	MT. JACKSON
	22	13	0	0.80	36.99	N	116.04	W	1.9	F	3.4	LATHROP WELLS
JUN	03	9	4	28.41	36.89	N	116.00	W	4.8	F	1.6	LATHROP WELLS
	04	19	54	35.79	37.58	N	116.47	W	8.7	F	2.1	QUARTZITE MOUNTAIN
	06	19	43	17.18	36.89	N	115.73	W	1.1	F	1.4	MERCURY
	07	2	8	55.22	36.92	N	116.97	W	22.2	F	2.1	CHLORIDE CLIFF
	07	12	0	32.82	36.61	N	116.27	W	9.5	F	1.7	LATHROP WELLS
	07	12	1	41.23	36.61	N	116.26	W	7.3	F	1.3	LATHROP WELLS
	07	12	21	54.15	36.61	N	116.26	W	3.2	F	1.1	LATHROP WELLS
	08	11	40	6.68	37.34	N	114.94	W	4.7	F	2.3	DELAMAR MOUNTAINS
	09	7	53	32.73	36.78	N	115.98	W	5.0	D	2.1	MERCURY
	10	15	19	5.31	37.15	N	117.34	W	5.0	D	1.8	MT. JACKSON
	15	1	17	38.62	36.80	N	116.04	W	1.4	F	1.3	LATHROP WELLS
	18	17	57	11.63	36.70	N	115.61	W	0.8	F	2.0	MERCURY
	19	2	33	21.71	36.71	N	116.25	W	1.0	F	1.6	LATHROP WELLS
	19	4	4	8.48	36.53	N	116.37	W	6.3	F	1.4	LATHROP WELLS
	20	20	40	58.00	36.67	N	116.42	W	6.3	F	1.3	LATHROP WELLS
JUL	03	2	52	10.37	36.87	N	116.18	W	8.5	F	1.1	LATHROP WELLS
	03	21	15	42.35	36.32	N	114.94	W	0.1	F	2.3	HOOVER DAM
	04	7	3	2.98	36.70	N	116.28	W	5.8	F	1.4	LATHROP WELLS
	04	8	21	39.57	36.81	N	116.69	W	2.4	F	1.7	CHLORIDE CLIFF
	05	13	26	8.26	36.76	N	116.63	W	7.8	F	1.6	CHLORIDE CLIFF
	07	15	13	14.81	36.74	N	115.82	W	8.5	F	1.6	MERCURY
	09	0	36	58.89	36.86	N	118.42	W	0.7	F	2.6	MT. WHITNEY

09	2	13	48.05	37.25	N	115.00	W	4.5	F	2.9	DELAMAR MOUNTAINS
09	15	5	50.64	36.85	N	116.16	W	11.9	F	1.4	LATHROP WELLS
11	13	22	4.54	36.74	N	116.28	W	5.0	D	2.1	LATHROP WELLS
11	13	26	9.66	36.76	N	116.26	W	8.4	F	1.2	LATHROP WELLS
11	13	37	58.35	36.75	N	116.27	W	7.1	F	1.7	LATHROP WELLS
11	14	53	1.66	36.75	N	116.25	W	7.8	F	1.3	LATHROP WELLS
11	15	10	21.77	37.70	N	115.04	W	0.5	F	2.2	HIKO
12	17	10	19.80	36.70	N	116.28	W	5.0	D	2.0	LATHROP WELLS
13	13	58	20.32	37.40	N	115.20	W	3.8	F	2.4	ALAMO
13	16	2	10.52	36.80	N	115.94	W	7.6	F	1.9	MERCURY
13	16	51	6.91	36.76	N	115.96	W	20.2	F	2.0	MERCURY
14	2	18	23.08	36.78	N	115.96	W	5.0	D	1.5	MERCURY
14	2	51	48.27	36.80	N	115.94	W	6.7	F	1.8	MERCURY
14	2	57	15.16	36.75	N	115.97	W	23.3	F	1.8	MERCURY
14	12	4	29.19	37.11	N	116.20	W	17.0	F	2.1	SILENT CANYON - YUCCA FLAT
14	12	12	42.13	37.09	N	116.19	W	1.6	F	1.7	SILENT CANYON - YUCCA FLAT
14	12	44	29.66	37.04	N	116.14	W	1.0	F	1.5	SILENT CANYON - YUCCA FLAT
14	16	42	50.21	36.80	N	115.95	W	9.6	F	1.3	MERCURY
15	12	3	20.98	36.73	N	115.96	W	26.0	F	1.1	MERCURY
15	14	23	33.58	36.79	N	115.93	W	13.7	F	1.2	MERCURY
15	23	16	16.39	36.89	N	116.82	W	4.0	F	2.4	CHLORIDE CLIFF
16	6	37	39.48	36.20	N	115.51	W	1.1	F	2.4	CHARLESTON PEAK
17	14	16	3.12	36.76	N	115.91	W	1.3	F	1.3	MERCURY
17	22	3	14.17	37.17	N	115.27	W	5.0	D	1.5	ALAMO
18	12	13	41.73	37.09	N	116.18	W	1.5	F	2.3	SILENT CANYON - YUCCA FLAT
18	15	18	52.62	36.75	N	116.30	W	10.9	F	1.2	LATHROP WELLS
18	15	39	43.85	36.76	N	116.31	W	7.3	F	1.0	LATHROP WELLS
19	10	1	46.27	36.87	N	116.18	W	9.5	F	1.0	LATHROP WELLS
19	21	49	34.21	36.90	N	115.18	W	12.8	F	1.8	HAYFORD PEAK
19	21	49	4.36	37.39	N	114.47	W	5.0	D	2.5	TULE DESERT
20	1	49	59.30	37.03	N	116.02	W	5.0	D	1.3	SILENT CANYON - YUCCA FLAT
20	9	7	54.80	37.02	N	116.01	W	14.3	F	1.8	SILENT CANYON - YUCCA FLAT

20	9 47 19.60	37.02 N	116.00 W	9.6 F	1.8	SILENT CANYON - YUCCA FLAT
20	23 4 18.78	36.71 N	116.30 W	5.7 F	1.2	LATHROP WELLS
21	2 8 41.81	36.78 N	116.06 W	2.0 F	0.7	LATHROP WELLS
21	4 7 59.95	37.08 N	116.19 W	5.0 D	1.7	SILENT CANYON - YUCCA FLAT
22	10 50 14.89	36.95 N	115.64 W	14.5 F	2.4	MERCURY
22	14 11 43.26	36.66 N	115.73 W	9.8 F	1.9	MERCURY
22	20 0 48.32	37.14 N	115.34 W	0.0 F	2.0	ALAMO
22	20 28 14.09	36.96 N	115.62 W	5.0 F	2.0	MERCURY
23	10 3 50.68	36.70 N	115.79 W	2.1 F	3.0	MERCURY
23	10 5 49.09	36.66 N	115.67 W	15.5 F	1.9	MERCURY
23	13 18 49.19	37.04 N	115.50 W	21.1 F	2.0	GROOM LAKE
24	11 39 43.31	37.05 N	116.24 W	7.2 F	1.8	SILENT CANYON - YUCCA FLAT
25	20 30 50.30	37.25 N	116.47 W	2.2 F	3.4	SILENT CANYON - NORTH
25	21 14 11.08	37.26 N	116.47 W	1.6 F	3.4	SILENT CANYON - NORTH
25	23 10 40.35	37.26 N	116.49 W	0.7 F	4.1	SILENT CANYON - NORTH
26	5 0 4.28	37.23 N	116.31 W	23.4 F	1.4	SILENT CANYON - NORTH
17	22 3 14.17	37.17 N	115.27 W	5.0 D	1.5	ALAMO
26	17 19 57.67	36.70 N	115.65 W	0.4 F	2.2	MERCURY
26	18 33 7.57	36.96 N	115.65 W	6.0 F	2.0	MERCURY
27	9 42 9.04	36.65 N	115.25 W	1.0 F	2.2	HAYFORD PEAK
27	13 50 28.09	36.92 N	115.53 W	20.1 F	1.7	MERCURY
28	5 0 29.67	36.91 N	115.98 W	1.6 F	1.6	MERCURY
28	14 48 46.81	37.17 N	115.42 W	5.0 D	1.9	ALAMO
28	18 55 55.98	36.72 N	115.94 W	0.1 F	1.6	MERCURY
28	19 38 10.83	37.23 N	115.42 W	0.9 F	2.7	ALAMO
31	3 48 9.89	36.70 N	115.79 W	9.1 F	2.0	MERCURY
31	19 22 16.60	37.07 N	116.00 W	2.1 F	3.3	SILENT CANYON - YUCCA FLAT
31	19 26 15.98	37.06 N	116.00 W	0.9 F	3.9	SILENT CANYON - YUCCA FLAT
AUG 06	3 42 4.24	37.05 N	116.13 W	0.6 F	1.6	SILENT CANYON - YUCCA FLAT
06	9 37 34.49	37.25 N	116.48 W	8.1 F	2.7	SILENT CANYON - NORTH
07	3 21 59.24	36.44 N	115.64 W	10.6 F	2.2	CHARLESTON PEAK
07	9 53 37.18	37.31 N	116.29 W	1.6 F	2.2	SILENT CANYON - NORTH
08	9 51 35.85	37.13 N	116.18 W	0.2 F	2.0	SILENT CANYON - YUCCA FLAT

09	2 21 21.90	36.54 N	116.39 W	1.4 F	1.6	LATHROP WELLS
09	2 21 40.57	36.62 N	116.27 W	9.7 F	1.3	LATHROP WELLS
11	8 14 29.97	37.15 N	117.39 W	12.2 F	1.3	MT. JACKSON
11	8 19 44.69	37.11 N	116.31 W	1.6 F	1.2	SILENT CANYON - PAHUTE MESA
12	4 53 13.94	36.49 N	116.81 W	0.2 F	2.1	FURNACE CREEK
14	8 20 27.36	36.33 N	116.24 W	1.8 F	1.7	ASH MEADOWS
15	8 59 59.92	36.20 N	116.70 W	5.0 D	1.6	FURNACE CREEK
15	18 15 37.34	36.01 N	115.27 W	0.3 F	2.8	LAS VEGAS
15	23 9 49.90	36.48 N	116.92 W	5.7 F	2.0	FURNACE CREEK
17	17 48 9.14	36.99 N	117.54 W	0.1 F	2.6	DRY MOUNTAIN
18	8 0 42.67	37.17 N	115.19 W	4.0 F	2.4	ALAMO
19	8 33 4.44	36.91 N	115.99 W	9.4 F	1.5	MERCURY
20	11 58 16.22	36.71 N	115.60 W	7.8 F	2.0	MERCURY
20	18 5 20.23	36.82 N	116.27 W	0.5 F	1.3	LATHROP WELLS
21	3 24 2.88	37.22 N	116.47 W	1.8 F	2.6	SILENT CANYON - NORTH
21	12 30 47.79	36.81 N	115.96 W	1.8 F	1.0	MERCURY
22	1 11 2.12	36.51 N	116.44 W	8.9 F	1.4	LATHROP WELLS
23	3 37 51.05	37.13 N	117.02 W	3.0 F	2.3	MT. JACKSON
24	10 34 23.72	36.77 N	116.02 W	9.7 F	0.9	LATHROP WELLS
24	11 40 9.15	36.88 N	116.22 W	5.0 D	1.0	LATHROP WELLS
24	23 7 2.35	36.63 N	116.00 W	9.0 F	1.7	MERCURY
25	8 7 48.75	37.31 N	116.44 W	10.4 F	2.0	SILENT CANYON - NORTH
25	8 9 30.03	37.31 N	116.44 W	11.8 F	1.9	SILENT CANYON - NORTH
25	8 32 35.88	37.31 N	116.44 W	8.7 F	1.9	SILENT CANYON - NORTH
25	9 27 4.38	37.31 N	116.43 W	11.6 F	2.5	SILENT CANYON - NORTH
25	13 32 25.71	37.31 N	116.44 W	14.6 F	1.8	SILENT CANYON - NORTH
25	15 12 22.09	37.31 N	116.44 W	10.3 F	1.7	SILENT CANYON - NORTH
26	1 0 10.17	37.31 N	116.44 W	13.6 F	1.7	SILENT CANYON - NORTH
26	1 28 56.47	37.31 N	116.43 W	15.2 F	1.9	SILENT CANYON - NORTH
26	2 40 29.08	37.30 N	116.45 W	14.2 F	1.8	SILENT CANYON - NORTH
26	10 15 44.92	37.30 N	116.43 W	14.8 F	1.8	SILENT CANYON - NORTH
26	11 18 13.83	36.41 N	116.29 W	1.1 F	1.3	ASH MEADOWS
26	11 18 58.51	36.81 N	116.31 W	5.0 D	1.2	LATHROP WELLS

	28	2	10	26.29	36.74	N	115.98	W	5.0	D	1.6	MERCURY
	28	17	12	28.53	36.80	N	116.01	W	2.1	F	1.5	LATHROP WELLS
	29	5	1	30.09	36.98	N	116.73	W	6.0	F	2.1	CHLORIDE CLIFF
	29	5	54	32.24	36.84	N	115.97	W	6.8	F	1.2	MERCURY
	29	20	48	3.44	36.09	N	117.71	W	0.8	F	2.8	DARWIN
	30	19	18	6.73	37.12	N	117.42	W	8.9	F	2.3	MT. JACKSON
SEP	03	1	31	17.90	37.19	N	117.57	W	6.9	F	2.0	MAGRUDER MOUNTAIN
	03	1	31	18.04	37.20	N	117.57	W	4.1	F	2.2	MAGRUDER MOUNTAIN
	05	5	11	50.84	36.71	N	116.34	W	5.3	F	0.9	LATHROP WELLS
	05	11	42	38.18	36.84	N	116.26	W	1.2	F	1.0	LATHROP WELLS
	11	14	59	59.92	36.97	N	116.16	W	0.1	F	2.7	LATHROP WELLS
	11	20	58	3.06	36.59	N	116.14	W	9.6	F	1.8	LATHROP WELLS
	11	22	19	6.33	36.63	N	116.34	W	6.0	F	2.1	LATHROP WELLS
	12	2	21	33.64	36.74	N	115.43	W	0.3	F	3.0	MAYFORD PEAK
	12	7	41	56.44	37.29	N	115.00	W	2.8	F	2.8	ALAMO
	13	5	54	25.67	37.13	N	116.32	W	9.4	F	2.3	SILENT CANYON - PAHUTE MESA
	13	10	48	38.14	37.55	N	115.84	W	0.1	F	2.3	WORTHINGTON PEAK
	13	14	58	18.67	37.16	N	115.44	W	0.1	F	2.6	ALAMO
	14	14	19	17.87	36.82	N	115.95	W	9.4	F	1.9	MERCURY
	17	4	48	40.51	38.05	N	116.22	W	0.3	F	2.4	WARM SPRINGS
	18	11	13	46.73	36.98	N	116.58	W	6.7	F	1.8	CHLORIDE CLIFF
	19	18	0	43.94	36.71	N	116.94	W	1.0	F	2.7	CHLORIDE CLIFF
	19	18	0	47.59	36.39	N	117.01	W	5.0	D	2.9	PANAMINT BUTTE
	22	17	22	51.58	37.24	N	116.47	W	8.8	F	3.0	SILENT CANYON - NORTH
	22	19	6	49.32	36.89	N	116.81	W	0.5	F	2.3	CHLORIDE CLIFF
	22	21	28	40.70	37.25	N	116.53	W	8.6	F	2.6	THIRSTY CANYON
	23	12	28	28.49	36.91	N	115.82	W	12.2	F	1.8	MERCURY
	24	6	17	23.99	36.59	N	115.66	W	9.2	F	2.1	MERCURY
	25	16	5	0.85	37.06	N	116.06	W	1.1	F	3.0	SILENT CANYON - YUCCA FLAT
	26	18	59	49.48	36.70	N	116.44	W	0.7	F	1.2	LATHROP WELLS
	27	9	18	46.38	36.66	N	115.96	W	5.0	D	2.2	MERCURY
	28	15	6	14.46	36.89	N	115.95	W	0.3	F	1.5	MERCURY
	29	21	25	53.93	36.85	N	116.01	W	0.1	F	1.7	LATHROP WELLS

OCT	02	1	48	14.38	37.27	N	117.06	W	0.3	F	3.3	MT. JACKSON
	02	6	13	40.91	36.99	N	115.99	W	5.4	F	2.0	MERCURY
	02	20	15	51.33	36.53	N	114.78	W	5.0	D	3.1	MOAPA
	02	20	16	1.15	37.17	N	114.99	W	9.7	F	2.7	DELAMAR MOUNTAINS
	03	5	25	3.67	37.22	N	116.34	W	1.1	F	2.6	SILENT CANYON - NORTH
	03	11	50	55.40	37.34	N	115.92	W	5.3	F	1.4	GROOM LAKE
	03	17	52	6.10	37.31	N	114.67	W	2.0	F	2.1	DELAMAR MOUNTAINS
	03	17	52	41.63	36.73	N	115.82	W	5.0	D	1.3	MERCURY
	04	2	23	47.91	35.68	N	117.52	W	0.9	F	2.7	LITTLE LAKE
	06	19	40	31.20	37.28	N	117.06	W	6.8	F	2.1	MT. JACKSON
	08	21	45	54.05	37.30	N	114.79	W	5.6	F	3.3	DELAMAR MOUNTAINS
	09	2	19	22.11	36.77	N	115.94	W	1.7	F	2.0	MERCURY
	09	10	3	39.02	36.78	N	115.93	W	2.9	F	1.6	MERCURY
	12	2	47	41.28	37.20	N	117.12	W	2.7	F	3.5	MT. JACKSON
	12	5	40	44.28	36.84	N	115.64	W	7.3	F	2.6	MERCURY
	12	14	52	14.97	37.06	N	117.14	W	5.0	D	2.3	MT. JACKSON
	12	16	27	31.22	37.42	N	116.14	W	36.1	F	2.0	SILENT CANYON - NORTH
	13	10	57	31.83	37.26	N	116.45	W	9.6	F	2.1	SILENT CANYON - NORTH
	13	14	52	15.51	37.07	N	117.08	W	5.8	F	1.8	MT. JACKSON
	13	16	27	24.22	37.49	N	115.37	W	6.1	F	2.0	ALAMO
	15	4	53	22.88	37.22	N	115.00	W	1.8	F	2.6	ALAMO
	15	12	21	51.66	37.31	N	116.38	W	9.9	F	1.9	SILENT CANYON - NORTH
	15	12	29	7.43	37.24	N	116.40	W	5.0	D	2.3	SILENT CANYON - NORTH
	17	19	21	35.21	35.86	N	117.49	W	0.5	F	2.4	SEARLES LAKE
	17	19	21	51.47	36.80	N	117.06	W	19.8	F	1.6	TIN MOUNTAIN
	19	0	33	9.83	37.37	N	116.19	W	0.4	F	2.6	SILENT CANYON - NORTH
	20	11	36	8.03	37.27	N	117.00	W	14.3	F	2.1	MT. JACKSON
	20	11	41	37.94	37.32	N	116.35	W	4.6	F	2.4	SILENT CANYON - NORTH
	21	4	1	54.71	36.69	N	115.70	W	7.4	F	2.5	MERCURY
	23	1	32	15.47	36.26	N	114.80	W	10.3	F	2.8	HOOVER DAM
	23	2	31	19.56	37.46	N	116.27	W	2.8	F	2.1	SILENT CANYON - NORTH
	24	13	27	47.05	36.98	N	115.96	W	6.6	F	2.5	MERCURY
	24	19	25	38.89	37.08	N	115.96	W	9.5	F	2.6	GROOM LAKE

	24	19	27	45.10	37.08 N	116.01 W	8.6	F	2.4	SILENT CANYON - YUCCA FLAT
	25	0	27	40.59	38.20 N	117.23 W	0.6	F	2.8	TONOPAH
	25	0	30	59.69	37.75 N	116.31 W	0.7	F	3.7	QUARTZITE MOUNTAIN
	25	1	6	46.30	37.34 N	114.92 W	0.3	F	2.8	DELAMAR MOUNTAINS
	27	13	22	51.35	36.80 N	116.32 W	3.7	F	2.4	LATHROP WELLS
	27	20	2	28.83	36.01 N	115.14 W	0.6	F	2.7	LAS VEGAS
	31	0	40	33.42	36.73 N	115.93 W	0.8	F	2.5	MERCURY
	31	18	11	9.65	37.19 N	116.18 W	0.0	F	2.1	SILENT CANYON - YUCCA FLAT
	31	18	11	49.28	37.17 N	116.20 W	7.5	F	2.3	SILENT CANYON - YUCCA FLAT
	31	18	15	51.35	37.20 N	116.24 W	13.9	F	2.1	SILENT CANYON - YUCCA FLAT
	31	18	40	57.63	37.14 N	116.25 W	9.0	F	2.4	SILENT CANYON - PAHUTE MESA
	31	18	43	4.45	37.20 N	116.22 W	8.1	F	2.4	SILENT CANYON - NORTH
	31	19	18	13.53	37.05 N	116.16 W	12.2	F	2.4	SILENT CANYON - YUCCA FLAT
	31	19	46	11.39	37.16 N	116.22 W	7.4	F		SILENT CANYON - YUCCA FLAT
NOV	02	23	59	35.63	37.34 N	116.98 W	9.2	F	2.1	THIRSTY CANYON
	03	2	17	27.19	37.53 N	115.31 W	14.7	F	2.1	NIKO
	03	3	30	26.85	36.63 N	116.27 W	22.5	F	2.2	LATHROP WELLS
	03	9	10	25.01	36.63 N	116.02 W	11.2	F	3.3	LATHROP WELLS
	03	14	8	37.68	36.66 N	116.08 W	12.7	F	2.4	LATHROP WELLS
	04	6	49	50.88	37.67 N	114.97 W	1.3	F	2.8	HIGHLAND PEAK
	04	7	39	51.16	36.24 N	117.12 W	1.9	F	2.7	PANAMINT BUTTE
	04	8	6	38.42	36.65 N	116.10 W	20.9	F	2.2	LATHROP WELLS
	05	9	46	15.77	37.14 N	115.00 W	1.5	F	2.4	ALAMO
	06	5	52	31.89	36.80 N	115.99 W	1.8	F	1.6	MERCURY
	06	10	41	21.81	36.71 N	115.93 W	2.8	F	1.5	MERCURY
	08	22	27	17.61	37.18 N	115.83 W	0.2	F	2.1	GROOM LAKE
	09	2	25	29.36	36.13 N	116.15 W	5.0	D	2.6	ASH MEADOWS
	09	7	8	45.67	37.77 N	116.31 W	3.7	D	2.8	QUARTZITE MOUNTAIN
	09	13	58	35.97	36.77 N	116.01 W	5.0	D	1.8	LATHROP WELLS
	11	1	43	51.42	36.74 N	116.23 W	5.0	D	1.6	LATHROP WELLS
	11	8	33	4.01	37.30 N	116.47 W	4.8	D	2.8	SILENT CANYON - NORTH
	11	11	4	59.01	37.28 N	116.51 W	9.0	F	2.3	THIRSTY CANYON
	11	12	36	12.92	36.70 N	116.27 W	5.0	D	2.0	LATHROP WELLS

	12	9	44	44.54	37.31	N	116.43	W	12.1	F	2.2	SILENT CANYON - NORTH
	13	19	7	44.57	37.00	N	116.23	W	5.0	D	1.8	LATHROP WELLS
	14	17	10	26.79	37.08	N	116.00	W	1.8	F	3.2	SILENT CANYON - YUCCA FLAT
	14	17	15	35.51	37.09	N	115.97	W	0.8	F	4.3	GROOM LAKE
	19	3	15	8.81	37.13	N	116.59	W	16.1	F	2.3	THIRSTY CANYON
	19	8	43	56.49	37.22	N	115.64	W	5.0	D	2.4	GROOM LAKE
	19	9	2	41.18	36.61	N	116.25	W	9.1	F	1.8	LATHROP WELLS
	20	2	50	17.27	37.80	N	116.31	W	9.3	F	1.8	QUARTZITE MOUNTAIN
	21	3	52	55.46	37.47	N	116.88	W	2.8	F	2.4	THIRSTY CANYON
	21	3	35	28.53	37.40	N	115.07	W	5.0	D	2.3	ALAMO
	22	4	58	53.67	36.51	N	116.59	W	9.8	F	2.2	CHLORIDE CLIFF
	22	19	16	25.92	36.51	N	116.64	W	5.7	F	2.3	CHLORIDE CLIFF
	22	22	6	32.31	36.53	N	115.81	W	9.4	F	1.9	MERCURY
	23	1	11	44.51	37.17	N	114.68	W	4.6	F	2.1	DELAMAR MOUNTAINS
	23	2	57	24.19	36.53	N	115.55	W	0.4	F	2.3	MERCURY
	23	4	48	28.60	36.53	N	115.55	W	0.3	F	2.3	MERCURY
	23	12	13	22.72	36.54	N	115.54	W	8.8	F	2.2	MERCURY
	23	15	15	28.22	36.56	N	115.51	W	4.8	F	1.8	MERCURY
	25	0	38	31.11	36.68	N	115.56	W	7.4	F	2.3	MERCURY
	26	4	7	5.81	37.09	N	117.33	W	2.6	F	1.9	MT. JACKSON
	26	11	12	45.06	36.16	N	117.51	W	5.0	D	2.4	DARWIN
	26	11	24	33.94	37.51	N	116.34	W	5.0	D	1.9	QUARTZITE MOUNTAIN
	27	10	15	13.36	36.44	N	115.56	W	4.5	F	2.0	CHARLESTON PEAK
	27	22	2	2.34	36.87	N	116.24	W	6.3	F	1.6	LATHROP WELLS
	28	11	8	20.10	36.86	N	115.94	W	1.1	F	1.6	MERCURY
	29	4	56	53.57	36.76	N	116.27	W	3.5	F	1.6	LATHROP WELLS
	29	5	21	31.05	36.87	N	115.79	W	5.0	D	0.9	MERCURY
	29	9	17	14.53	36.71	N	116.27	W	9.4	F	1.2	LATHROP WELLS
	30	6	0	56.01	36.24	N	116.48	W	8.9	F	2.1	ASH MEADOWS
DEC	01	23	16	11.90	36.67	N	115.33	W	3.1	F	2.5	HAYFORD PEAK
	02	6	31	2.93	36.77	N	115.91	W	3.9	F	1.8	MERCURY
	04	0	40	35.65	38.29	N	117.20	W	6.4	F	3.0	TONOPAH
	06	6	46	35.11	37.37	N	115.13	W	5.2	F	2.6	ALAMO

08	20	5	13.69	36.79	N	115.48	W	5.0	D	1.5	HAYFORD PEAK
10	19	34	47.37	38.21	N	117.23	W	0.1	F	2.7	TONOPAH
10	21	44	33.13	36.69	N	114.61	W	9.0	F	3.0	MOAPA
14	0	21	40.52	37.39	N	116.06	W	1.7	F	2.2	SILENT CANYON - NORTH
14	6	5	58.21	37.11	N	116.75	W	4.4	F	2.5	THIRSTY CANYON
14	11	12	55.09	36.53	N	116.61	W	6.7	F	2.1	CHLORIDE CLIFF
15	2	34	46.54	36.63	N	115.41	W	0.4	F	2.6	HAYFORD PEAK
16	21	17	40.96	37.20	N	115.82	W	5.0	D	2.1	GROOM LAKE
17	7	28	51.47	37.03	N	116.21	W	5.9	F	2.3	SILENT CANYON - YUCCA FLAT
17	15	23	52.35	37.33	N	116.29	W	0.8	F	3.4	SILENT CANYON - NORTH
17	15	25	45.47	37.35	N	116.33	W	2.2	F	3.4	SILENT CANYON - NORTH
17	15	51	31.42	37.34	N	116.33	W	19.3	F	3.8	SILENT CANYON - NORTH
17	16	1	18.40	36.94	N	115.74	W	2.5	F	3.8	MERCURY
18	0	30	11.80	38.04	N	116.83	W	7.3	F	2.6	BLACK BUTTE
19	14	47	32.92	36.32	N	116.31	W	0.1	F	2.3	ASH MEADOWS
19	19	10	33.96	36.95	N	116.71	W	6.7	F	2.2	CHLORIDE CLIFF
20	0	38	2.82	38.37	N	117.38	W	0.9	F	3.5	TONOPAH
20	0	47	54.10	36.53	N	115.56	W	0.8	F	2.4	MERCURY
20	1	46	16.86	36.53	N	115.55	W	1.3	F	2.6	MERCURY
20	6	24	27.71	36.75	N	116.00	W	6.0	F	2.0	LATHROP WELLS
20	18	18	43.36	36.51	N	115.56	W	1.7	F	2.4	MERCURY
20	18	32	26.54	36.54	N	115.56	W	0.9	F	2.2	MERCURY
21	14	54	45.53	37.43	N	115.00	W	3.9	F	2.5	DELAMAR MOUNTAINS
21	22	13	45.41	36.78	N	116.23	W	0.4	F	1.2	LATHROP WELLS
22	1	34	17.36	36.55	N	115.55	W	9.8	F	2.1	MERCURY
22	1	35	26.88	37.00	N	115.44	W	0.1	F	1.5	ALAMO
22	11	42	55.02	37.32	N	116.30	W	1.7	F	2.3	SILENT CANYON - NORTH
22	14	42	25.17	37.22	N	114.71	W	12.3	F	3.1	DELAMAR MOUNTAINS
23	1	14	4.59	36.75	N	116.01	W	2.1	F	1.4	LATHROP WELLS
23	9	5	26.41	36.96	N	117.68	W	0.3	F	3.0	DRY MOUNTAIN
25	17	35	58.97	37.37	N	116.39	W	12.4	F	2.9	SILENT CANYON - NORTH
26	3	21	46.63	36.66	N	115.20	W	5.0	D	2.5	HAYFORD PEAK
26	7	1	18.15	36.65	N	115.44	W	18.7	F	2.5	HAYFORD PEAK

28	8	46	30.82	36.69 N	116.32 W	3.7 F	1.9	LATHROP WELLS
30	12	9	23.94	36.61 N	116.26 W	5.0 D	1.5	LATHROP WELLS
30	19	45	27.57	37.32 N	115.05 W	1.7 F	2.2	ALAMO

Appendix D: Hypocenters, Phase Readings, Durations, and First Motion Directions for 1980 Earthquakes

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 - GROUND DISPLACEMENT OF PHASE, IN MILLIMICRONS (MU)
AMPLITUDES REPORTED WITH S PHASES ARE MAXIMUM SURFACE-WAVE DISPLACEMENTS

PER - PERIOD OF PHASE, IN SECONDS

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:

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.....................................................................
.  DATE  ORIGIN TIME      RMS   NO   MB            TYPE OF SOLUTION  .
.          LATITUDE       ERX   ERH  M       Q                      .
.          LONGITUDE      ERY   GAP  AVFM    QS    GEOGRAPHIC LOCATION.
.          DEPTH          ERZ   NM   AVXM    QD                     .
.....................................................................
.   PHASE DATA                                                      .
.        .                                                          .
.        .                                                          .
.....................................................................
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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
MURDOCK (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	RMS	ERH	ERZ
A	<0.15	<1.0	<2.0
B	<0.30	<2.5	<5.0
C	<0.50	<5.0	
D	OTHERS		

QD	NO	GAP	DERR (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

JAN 1980	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 = 4 22 18.99 UTC	RMS = 0.06	NO = 6										FREE DEPTH SOLUTION			
06 LAT = 36.523 N	ERX = 0.2	ERH = 0.3	AVFM = 1.4	Q = C											
LONG = 116.381 W	ERY = 0.3	GAP = 110	AVXM =	QS = C								LATHROP WELLS			
DEPTH = 3.91 KM	ERZ = 5.8	NM =		QD = C											
06	SDM	IPU4	4 22 21.25				11	1.3	14.1	16	100	2.26	2.68	-0.42	
06	AMR	EPU	4 22 22.00				24	1.9	16.2	211	98	3.01	3.02	-0.01	
06	LSM	EPD	4 22 23.37						25.9	22	95	4.38	4.57	-0.20	
06	JON	EPU	4 22 23.70				7	0.9	26.6	110	95	4.71	4.69	0.01	
06	BRO	EPU	4 22 24.99						34.4	321	94	6.00	5.95	0.04	
06	LOP	EPD	4 22 26.12						41.4	28	93	7.13	7.09	0.03	
06	CPX	EPU4	4 22 27.85						53.5	33	92	8.86	9.05	-0.20	
06	BGB	EP	4 22 28.90						58.7	14	92	9.91	9.91	0.05	
06	SGV	EP 4	4 22 32.40						77.2	311	92	13.41	12.91	0.49	
06	TPU	EPD4	4 22 42.58						136.5	28	53	23.59	22.27	1.32	
06	QCS	EP 4	4 22 43.45						144.2	17	53	24.46	23.26	1.20	
JAN H = 15 11 59.33 UTC	RMS = 0.08	NO = 8										FREE DEPTH SOLUTION			
08 LAT = 37.297 N	ERX = 0.5	ERH = 0.6	AVFM = 2.3	Q = B											
LONG = 117.625 W	ERY = 0.3	GAP = 104	AVXM =	QS = A								MAGRUDER MOUNTAIN			
DEPTH = 4.28 KM	ERZ = 1.0	NM =		QD = B											
08	LCM	IPD	15 12 0.98				38	2.3	7.2	196	113	1.65	1.61	0.04	
08	MGM	IPD	15 12 2.80				33	2.2	19.6	35	98	3.47	3.57	-0.10	
08	PPK	IPU	15 12 4.34				33	2.3	28.8	300	95	5.01	5.06	-0.05	
08	SVP	IPU	15 12 7.92						48.9	341	93	8.59	8.32	0.12	
08	MZP	IPD	15 12 7.61				12	1.5	49.6	26	93	8.28	8.43	0.04	
08	LSM	EPU	15 12 21.20				32	2.6	135.4	117	53	21.87	22.09	-0.22	
08	LOP	EPD	15 12 21.91				31	2.6	138.6	111	53	22.58	22.50	0.08	
08	CPX	EPU	15 12 22.81						145.1	106	53	23.48	23.35	0.13	
08	GMR	IPD	15 12 26.27				21	2.3	164.4	89	53	26.94	25.85	1.09	
JAN H = 16 6 8.32 UTC	RMS = 0.06	NO = 6										FREE DEPTH SOLUTION			
08 LAT = 37.298 N	ERX = 0.5	ERH = 0.7	AVFM = 2.1	Q = B											
LONG = 117.625 W	ERY = 0.4	GAP = 104	AVXM =	QS = A								MAGRUDER MOUNTAIN			
DEPTH = 3.39 KM	ERZ = 1.4	NM =		QD = B											
08	LCM	IPD	16 6 9.93				26	2.0	7.3	195	106	1.61	1.58	0.03	
08	MGM	IPD	16 6 11.80				18	1.7	19.6	36	95	3.48	3.55	-0.07	
08	PPK	IPU	16 6 13.32				18	1.7	28.7	300	94	5.00	5.03	-0.03	
08	SVP	IPU	16 6 16.85						48.8	341	92	8.53	8.30	0.08	
08	LSM	IPD	16 6 30.64				27	2.5	135.5	117	53	22.32	22.19	0.13	
08	LCP	EPU	16 6 30.75				26	2.4	138.7	111	53	22.43	22.59	-0.17	
08	QCS	EPU	16 6 34.65						159.9	71	53	26.33	25.35	0.98	
JAN H = 16 38 1.38 UTC	RMS = 0.70	NO = 5										FREE DEPTH SOLUTION			
08 LAT = 36.930 N	ERX = 1.2	ERH = 1.6	AVFM = 1.6	Q = D											
LONG = 116.060 W	ERY = 1.0	GAP = 139	AVXM =	QS = D								LATHROP WELLS			
DEPTH = 8.12 KM	ERZ = 0.9	NM =		QD = D											
08	CPX	EPU	16 38 3.15				17	1.6	0.2	141	178	1.77	1.49	0.28	
08	LOP	IPU	16 38 3.85				16	1.6	12.8	229	119	2.47	2.70	-0.23	
08	LSM	IPU4	16 38 5.22				17	1.7	28.4	222	103	3.84	5.10	-1.26	
08	GLR	EPU	16 38 7.80						30.1	7	103	6.42	5.36	1.21	
08	SPRG	IPD4	16 38 0.11				15	1.6	34.5	140	101	******	6.06	-7.33	
08	GMR	IPU	16 38 9.42						51.6	30	97	8.04	8.81	-0.77	
08	TPU	IPU	16 38 14.65						83.2	26	94	13.27	13.93	-0.66	
08	NPN	EPU4	16 38 20.91						127.8	51	53	19.53	20.72	-1.19	
08	SPG	EPU4	16 38 23.00						137.4	40	53	21.62	21.96	-0.34	
JAN H = 16 51 2.09 UTC	RMS = 0.09	NO = 8										FREE DEPTH SOLUTION			
08 LAT = 36.750 N	ERX = 0.8	ERH = 1.0	AVFM = 1.7	Q = C											
LONG = 115.833 W	ERY = 0.6	GAP = 152	AVXM =	QS = B								MERCURY			
DEPTH = 5.92 KM	ERZ = 2.3	NM =		QD = C											
08	SPRG	IPD	16 51 3.74				15	1.5	6.6	161	127	1.65	1.66	-0.01	
08	LOP	IPD	16 51 7.55				16	1.7	32.0	291	98	5.46	5.60	-0.14	
08	LSM	IPD	16 51 8.95				19	1.8	39.2	268	96	6.86	6.77	0.09	
08	JCN	EP	16 51 9.40						42.1	215	96	7.31	7.23	0.08	MESSY FILM
08	SDM	EP	16 51 10.00						46.6	256	95	7.91	7.97	-0.06	MESSY FILM
08	GLR	EPD	16 51 11.40						52.5	342	95	9.31	8.91	0.55	
08	GMR	IPU	16 51 13.03						65.0	5	94	10.94	10.94	-0.00	
08	TPU	EPU	16 51 18.10						96.2	10	93	16.01	16.02	-0.01	
08	QCS	EPD4	16 51 21.85						113.2	356	92	19.76	18.77	0.99	

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JAN   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
1980                (UTC)       (MU) (SEC)                    (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

. 08    NPN  EPU4  16 51 24.50                                127.9   38   53   22.41  20.95  1.46
. 08    SRG  EPU4  16 51 26.60                                142.8   28   53   24.51  22.88  1.63
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. JAN H =  4 34 22.03 UTC  RMS =  0.15  NO =  5                                FREE DEPTH SOLUTION
.  09 LAT =  37.196 N      ERX =   1.2  ERH =   1.6   AVFM =   1.6  Q = C
.    LONG = 116.351 W      ERY =   1.1  GAP = 140     AVXM =        QS = B     SILENT CANYON - PAHUTE MESA
.   DEPTH =   0.04 KM      ERZ =   1.9  NM =                        QD = D
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. 09    EPN  IPU    4 34 22.65                                  3.1   51   91    0.62   0.82 -0.20
. 09    BGB  EPU    4 34 26.25                        19  1.8  20.7  148   38    4.22   4.06  0.21    NO S-WAVES
. 09    GLR  EP 4   4 34 27.20                                29.6   89   38    5.17   5.50 -0.18    NO S-WAVES
. 09    BLT  EP     4 34 28.52                                35.1   33   38    6.49   6.40  0.09    NO S-WAVES
. 09    CPX  EP     4 34 29.00                                39.5  139   38    6.97   7.11 -0.14    NO S-WAVES
. 09    NMN  EPU    4 34 29.85                        12  1.4  43.5  253   38    7.82   7.76  0.06    NO S-WAVES
. 09    LSM  EP 4   4 34 32.19                        12  1.5  51.2  172   38   10.16   9.03  1.13    NO S-WAVES
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. JAN H = 19  6 20.07 UTC  RMS =  0.04  NO =  8                                FREE DEPTH SOLUTION
.  09 LAT =  37.154 N      ERX =   0.2  ERH =   0.3   AVFM =   1.6  Q = B
.    LONG = 117.393 W      ERY =   0.2  GAP = 122     AVXM =        QS = A     MT. JACKSON
.   DEPTH =   8.33 KM      ERZ =   1.4  NM =                        QD = C
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. 09    GVN  EPO   19  6 23.48                        21  1.8  17.5  165  112    3.41   3.41  0.00
.            ISU4  19  6 25.70                                                    5.63   5.96 -0.33
. 09    LCH  EPU4  19  6 24.19                        15  1.6  24.3  292  106    4.12   4.46 -0.34
.            ISU4  19  6 27.05                                                    6.98   7.81 -0.83
. 09    MGM  EPU   19  6 25.93                        10  1.2  33.2  344  102    5.86   5.86 -0.00
.            ISD4  19  6 30.14                                                   10.07  10.26 -0.19
. 09    SGV  IPU   19  6 26.62                        18  1.8  37.3  121  100    6.55   6.52  0.03
.            ISD4  19  6 31.68                                                   11.61  11.41  0.20
. 09    TWO  EPU   19  6 26.80                        30  2.2  38.7  182  100    6.73   6.74 -0.01
. 09    NMN  EPU   19  6 28.80                        18  1.8  51.7   99   97    8.73   8.83 -0.10
.            ESD4  19  6 35.70                                                   15.63  15.45  0.18
. 09    PPK  EP    19  6 29.40                         8  1.1  54.7  304   97    9.33   9.32  0.01
. 09    MCA  EP 4  19  6 30.00                        14  1.6  57.0  170   97    9.93   9.68  0.25    GOOD S-WAVE
.            ISU4  19  6 36.75                                                   16.68  16.94 -0.26
. 09    BRO  EPU   19  6 33.60                        11  1.5  80.9  122   95   13.53  13.55 -0.03
. 09    BGB  EP    19  6 37.50                                104.4   97   94   17.43  17.36  0.12
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. JAN H = 11 36 26.44 UTC  RMS =  0.25  NO =  7                                FREE DEPTH SOLUTION
.  11 LAT =  36.856 N      ERX =   2.5  ERH =   3.2   AVFM =   1.4  Q = C
.    LONG = 116.149 W      ERY =   2.0  GAP = 175     AVXM =        QS = C     LATHROP WELLS
.   DEPTH =  11.98 KM      ERZ =   2.6  NM =                        QD = C
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. 11    LOP  IPD   11 36 28.75                        11  1.2   1.7  264  172    2.31   2.14  0.17
.            ES    11 36 30.47                                                    4.03   3.74  0.28
. 11    SSP  IPD   11 36 29.15                                 9.9  321  138    2.71   2.72 -0.02
. 11    CPX  IPD   11 36 29.58                                11.4   45  134    3.14   2.90  0.24
.            ESU   11 36 31.00                                                    4.56   5.08 -0.52
. 11    LSM  IPD4  11 36 25.19                        15  1.5  17.0  220  123  ******   3.61 -4.86
.            ES    11 36 32.55                                                    6.11   6.31 -0.21

. 11    BGB  EPU   11 36 30.80                                21.4  341  117    4.36   4.23  0.18
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. JAN H = 21 46 32.24 UTC  RMS =  0.11  NO =  5                                FREE DEPTH SOLUTION
.  11 LAT =  37.573 N      ERX =  12.9  ERH =  13.0   AVFM =   2.5  Q = D
.    LONG = 114.306 W      ERY =   1.8  GAP = 317     AVXM =        QS = D
.   DEPTH =   2.75 KM      ERZ =  32.7  NM =                        QD = D
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. 11    OLM  EPU   21 46 38.72                                38.4  275   92    6.48   6.61 -0.13
. 11    NPN  IPU   21 46 41.80                                56.5  279   90    9.56   9.53  0.02
. 11    PRN  EPU   21 46 43.73                        33  2.4  68.3  254   90   11.49  11.46  0.02
. 11    SRG  EPU   21 46 44.88                                75.5  297   90   12.64  12.63  0.01
. 11    MTI  EP    21 46 46.65                                86.2  278   90   14.41  14.37  0.24
. 11    EPR  EPU4  21 46 46.75                        41  2.7  90.0  240   90   14.51  14.98 -0.47
. 11    TPU  EPU4  21 46 52.30                               118.7  272   90   20.06  19.66  0.40
. 11    QCS  EPU4  21 46 56.15                               143.7  279   53   23.91  23.31  0.59
. 11    SPRG EPU4  21 46 58.28                               165.5  234   53   26.04  26.14 -0.10
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. JAN H = 23 21 44.79 UTC  RMS =  0.10  NO =  5                                FIXED DEPTH SOLUTION
.  11 LAT =  36.818 N      ERX =   1.9  ERH =   2.3   AVFM =   1.1  Q = D     DEPTH CONTROL INADEQUATE
.    LONG = 116.276 W      ERY =   1.4  GAP = 192     AVXM =        QS = C     LATHROP WELLS
.   DEPTH =   5.00 KM      ERZ =   5.6  NM =                        QD = D
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. 11    LSM  IPD   23 21 46.65                        11  1.2   8.8  178  113    1.86   1.89 -0.03
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JAN 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.		ES	23 21 48.15									3.36	3.31	0.05	
. 11	LOP	IPU	23 21 46.71				8	1.0	10.5	67	110	1.92	2.15	-0.23	
.		ES	23 21 48.65									3.86	3.76	0.10	
. 11	BGB	EPU	23 21 49.20						24.8	10	98	4.41	4.42	0.04	

. JAN H = 11 40 59.69 UTC RMS = 0.05 NO = 9 FREE DEPTH SOLUTION
. 12 LAT = 36.817 N ERX = 0.2 ERH = 0.3 AVFM = 1.5 Q = B
. LONG = 116.268 W ERY = 0.2 GAP = 109 AVXM = QS = A LATHROP WELLS
. DEPTH = 1.04 KM ERZ = 0.4 NM = QD = B

. 12	LSM	IPD4	11 41 1.42				27	2.0	8.7	182	38	1.73	1.90	-0.17	
. 12	LCP	IPD	11 41 1.73				22	1.8	9.8	66	38	2.04	2.08	-0.04	
. 12	SSP	IPU	11 41 2.20						12.7	20	38	2.51	2.55	-0.04	
. 12	SDM	IPD4	11 41 3.20						20.1	196	38	3.51	3.76	-0.24	
. 12	CPX	EPD4	11 41 3.44				12	1.4	22.4	56	38	3.75	4.13	-0.37	
.		ES	11 41 6.77									7.08	7.22	-0.14	
. 12	BGB	IPD	11 41 4.20						24.7	8	38	4.51	4.51	0.06	
. 12	MCX	IPU	11 41 5.24				7	0.9	30.5	126	38	5.55	5.45	0.10	
.		ES	11 41 9.80									10.11	9.54	0.57	
. 12	BRO	EPD	11 41 5.45						32.5	259	38	5.76	5.77	-0.01	
.		ISD	11 41 9.79									10.10	10.10	0.00	
. 12	SPRG	IPD	11 41 7.27						43.1	109	38	7.58	7.50	0.08	
. 12	AMR	EPD	11 41 8.32						50.1	202	38	8.63	8.64	-0.00	

. JAN H = 19 13 26.40 UTC RMS = 0.10 NO = 9 FREE DEPTH SOLUTION
. 12 LAT = 36.816 N ERX = 0.5 ERH = 0.6 AVFM = 1.5 Q = B
. LONG = 116.273 W ERY = 0.4 GAP = 110 AVXM = QS = B LATHROP WELLS
. DEPTH = 4.93 KM ERZ = 2.6 NM = QD = B

. 12	LSM	IPD	19 13 28.29						8.6	179	114	1.89	1.86	0.03	
. 12	LCP	IP	19 13 28.48				24	1.9	10.4	66	109	2.08	2.13	-0.05	
. 12	SSP	IPU	19 13 28.90				23	1.9	13.0	22	105	2.50	2.54	-0.05	
. 12	SDM	IPD	19 13 29.85				12	1.4	19.8	197	100	3.45	3.62	-0.17	
. 12	CPX	EPU	19 13 30.16				15	1.6	22.9	57	99	3.76	4.11	-0.36	
. 12	BGB	EPD	19 13 30.85				20	1.8	24.9	9	98	4.45	4.44	0.05	
. 12	MCX	IPU	19 13 31.90				6	0.8	30.9	125	96	5.50	5.40	0.09	
. 12	BRO	EP	19 13 32.04				9	1.2	32.0	259	96	5.64	5.58	0.06	VERY E
. 12	SPRG	IPD	19 13 34.00						43.6	108	94	7.60	7.46	0.14	
. 12	TPU	EPD4	19 13 45.10						103.6	32	92	18.70	17.22	1.48	
. 12	QCS	EPU4	19 13 46.14						110.3	17	92	19.74	18.30	1.44	

. JAN H = 4 40 59.81 UTC RMS = 0.04 NO = 8 FREE DEPTH SOLUTION
. 13 LAT = 36.813 N ERX = 0.2 ERH = 0.2 AVFM = 1.1 Q = B
. LONG = 116.268 W ERY = 0.2 GAP = 108 AVXM = QS = A LATHROP WELLS
. DEPTH = 1.16 KM ERZ = 0.5 NM = QD = B

. 13	LSM	IPU	4 41 1.62						8.3	182	38	1.81	1.81	-0.00	
. 13	LCP	IPD	4 41 1.97						10.0	63	38	2.06	2.10	-0.04	
. 13	SSP	IPU	4 41 2.35				15	1.5	13.1	20	38	2.54	2.60	-0.06	
.		ISD	4 41 4.35									4.54	4.55	-0.01	
. 13	SDM	EPD4	4 41 3.30				6	0.8	19.7	199	38	3.49	3.66	-0.18	
. 13	CPX	EPD4	4 41 3.60						22.6	56	38	3.79	4.15	-0.36	
. 13	BGB	EPD	4 41 4.35				10	1.2	25.2	8	38	4.54	4.55	0.03	
. 13	MCX	EPU	4 41 5.20						30.3	125	38	5.39	5.39	-0.00	
. 13	BRO	EP	4 41 5.55				6	0.8	32.4	260	38	5.74	5.73	0.00	VERY E
. 13	SPRG	EPD	4 41 7.38						43.0	108	38	7.57	7.46	0.11	

. JAN H = 4 44 44.07 UTC RMS = 0.01 NO = 6 FREE DEPTH SOLUTION
. 13 LAT = 36.820 N ERX = 0.0 ERH = 0.1 AVFM = Q = C
. LONG = 116.263 W ERY = 0.1 GAP = 132 AVXM = QS = C LATHROP WELLS
. DEPTH = 1.64 KM ERZ = 13.5 NM = QD = B

. 13	LSM	EPD4	4 44 45.60						9.1	185	38	1.53	1.84	-0.31	
. 13	LCP	EPD	4 44 45.93						9.3	66	38	1.86	1.87	-0.01	
. 13	SSP	EPU	4 44 46.42						12.3	19	38	2.35	2.36	-0.01	
. 13	SDM	EPD4	4 44 47.35						20.6	199	38	3.28	3.71	-0.43	
. 13	BGB	EPD	4 44 48.35						24.3	7	38	4.28	4.32	0.01	
. 13	MCX	EPU	4 44 49.38						30.4	127	38	5.31	5.30	0.01	
. 13	BRO	EPD	4 44 49.60						33.0	259	38	5.73	5.73	-0.00	
. 13	SPRG	EPD	4 44 51.40						42.8	109	38	7.33	7.33	0.00	

. JAN H = 7 14 23.54 UTC RMS = 0.15 NO = 4 FREE DEPTH SOLUTION
. 13 LAT = 36.815 N ERX = 0.7 ERH = 0.9 AVFM = 1.4 Q = C

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 JAN   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
 1980                (UTC)       (MU) (SEC)                   (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

.    LONG = 116.261 W       ERY =   0.6  GAP = 107     AVXM =        QS = C     LATHROP WELLS
.   DEPTH =   1.87 KM       ERZ =  46.7  NM =                        QD = B
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. 13    LSM  IPU     7 14 25.26                        15  1.5    8.4  186   91    1.72   1.73  -0.00
. 13    LCP  IPD     7 14 25.49                        20  1.8    9.5   62   91    1.95   1.89   0.06
. 13    SSP  EPU     7 14 25.95                        21  1.8   12.8   17   90    2.41   2.44  -0.03
.            ISU     7 14 27.70                                                    4.16   4.27  -0.11
. 13    SDH  EPD     7 14 26.89                         9  1.1   20.0  200   90    3.35   3.60  -0.25
. 13    CPX  EPU     7 14 27.25                        10  1.2   22.1   55   90    3.71   3.94  -0.23
. 13    GGB  EPD     7 14 27.95                        11  1.3   25.0    7   90    4.41   4.41   0.05
. 13    MCX  IPU     7 14 28.96                              29.9  126   90    5.42   5.21   0.21
. 13    BRO  EP      7 14 29.39                         7  0.9   33.0  260   90    5.85   5.72   0.14
. 13    TPU  EPD4    7 14 42.20                              103.2   32   90   18.66  17.13   1.53
. 13    QCS  EPD     7 14 43.00                              110.1   16   90   19.46  18.26   1.21
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. JAN H =  7 48 51.54 UTC  RMS =  0.42  NO =  6                                FIXED DEPTH SOLUTION
.  13 LAT =  37.003 N      ERX =   1.5  ERH =   4.0   AVFM =   1.1  Q = D     DEPTH CONTROL INADEQUATE
.    LONG = 117.307 W      ERY =   3.7  GAP = 189     AVXM =        QS = C     MT. JACKSON
.   DEPTH =   5.00 KM      ERZ =   3.2  NM =                        QD = D
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. 13    GVN  IPU     7 48 52.42                        13  1.4    3.1  267  143    0.83   1.15  -0.33
.            ES      7 48 54.10                                                    2.51   2.02   0.49
. 13    SGV  EPU     7 48 55.30                         7  0.9   24.6   96   98    3.71   4.39  -0.68
.            ES      7 48 59.68                                                    8.09   7.68   0.41
. 13    MCA  EPU4    7 49  5.65                              39.5  177   95   14.06   6.79   7.26
. 13    BRO  EP      7 49  2.60                              66.4  114   93   11.01  11.16  -0.15
.            ES      7 49 11.35                                                   19.76  19.53   0.23
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. JAN H =  2  4 33.01 UTC  RMS =  0.08  NO = 10                                FREE DEPTH SOLUTION
.  14 LAT =  37.228 N      ERX =   0.2  ERH =   0.3   AVFM =   1.9  Q = B
.    LONG = 115.456 W      ERY =   0.2  GAP = 102     AVXM =        QS = A     ALAMO
.   DEPTH =  17.56 KM      ERZ =   1.7  NM =                        QD = B
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. 14    EPR  IPU     2  4 38.19                        36  2.3   24.9  105  124    5.18   5.18  -0.00
. 14    GMR  IPU     2  4 38.89                        13  1.5   30.3  293  119    5.88   5.93  -0.05
. 14    PRN  IPD     2  4 40.86                        14  1.6   41.1   61  112    7.85   7.53   0.31
. 14    TPU  IPU     2  4 41.00                        21  1.9   45.1  338  110    7.99   8.14  -0.16
.            ISD     2  4 47.33                                                   14.32  14.25   0.07
. 14    GLR  EPD4    2  4 42.52                              49.9  266  108    9.51   8.88   0.78
.            ISD     2  4 48.40                                                   15.39  15.28   0.11
. 14    MTI  EPU4    2  4 41.96                        21  2.0   52.3   18  107    8.95   9.25  -0.10
.            ESD     2  4 48.80                                                   15.79  15.84  -0.05
. 14    NPN  EPU     2  4 44.30                        19  1.9   65.8   44  104   11.29  11.37  -0.08
. 14    SPRG EPD4    2  4 47.02                              67.1  206  104   14.01  11.57   2.43
.            ISU     2  4 53.25                                                   20.24  20.25  -0.02
. 14    SRG  EPU     2  4 47.00                              80.3   25   53   13.99  13.62   0.36
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. JAN H =  8 49 53.36 UTC  RMS =  0.21  NO = 19                                FREE DEPTH SOLUTION
.  15 LAT =  37.280 N      ERX =   0.5  ERH =   0.6   AVFM =   2.1  Q = C
.    LONG = 117.070 W      ERY =   0.4  GAP =  89     AVXM =        QS = B     MT. JACKSON
.   DEPTH =   1.29 KM      ERZ =   1.3  NM =                        QD = C
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. 15    SGV  IPU     8 49 59.19                        35  2.3   33.4  174   38    5.83   5.87  -0.04
. 15    GVN  EPD     8 50  0.20                        30  2.2   39.3  218   38    6.84   6.83   0.01
. 15    CTS  IPD     8 50  1.92                        14  1.6   50.2   37   38    8.56   8.60  -0.04
. 15    MZP  IPU     8 50  2.38                        23  2.0   54.2  329   38    9.02   9.25  -0.04
. 15    EPN  EP      8 50  4.89                        36  2.5   66.7   96   38   11.53  11.28   0.25
.            ISU     8 50 13.25                                                   19.89  19.74   0.15
. 15    BRO  EPU     8 50  4.85                        19  1.9   69.8  145   38   11.49  11.78  -0.30
. 15    MCA  EP      8 50  6.00                        24  2.1   72.6  195   38   12.64  12.25   0.39
.            ISD     8 50 14.48                                                   21.12  21.43  -0.31
. 15    FMT  IPU     8 50  5.81                        16  1.8   75.7  160   38   12.45  12.75  -0.20
. 15    PRK  IPU4    8 50  4.68                        22  2.1   75.9  282   38   11.32  12.77  -1.45
. 15    SVP  EPU     8 50  7.16                        24  2.2   80.6  307   38   13.80  13.55   0.10
. 15    SSP  EP      8 50  7.62                        28  2.3   65.4  118   38   14.26  14.32  -0.06
. 15    LSM  IPD     8 50  8.91                        30  2.4   93.1  130   38   15.55  15.57  -0.02
. 15    LCP  EPD     8 50  8.89                        27  2.3   93.2  121   38   15.53  15.58  -0.06
. 15    SDH  EPU     8 50  9.19                        20  2.1   96.0  137   38   15.83  16.04  -0.22
. 15    CPX  EP      8 50 10.40                        18  2.0   98.1  113   38   17.04  16.38   0.66
. 15    GMR  EP      8 50 13.29                        13  1.8  115.3   87   38   19.93  19.19   0.74
. 15    GCS  EPU     8 50 12.35                        19  2.1  115.5   62   38   18.99  19.22  -0.23
. 15    MTI  EPU     8 50 20.40                        25  2.5  164.9   75   30   27.04  26.27   0.97
. 15    SRG  EPU4    8 50 24.25                              189.0   69   30   30.69  29.39   1.49
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. JAN H = 12 21 21.49 UTC  RMS =  0.02  NO =  5                                FREE DEPTH SOLUTION
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JAN   STA  PHASE    TIME       AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
1980               (UTC)      (MU) (SEC)                   (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

. 15 LAT =  37.066 N      ERX =   0.6  ERH =   1.0   AVFM =   1.4  Q = D                                  .
.   LONG = 116.050 W      ERY =   0.8  GAP = 141     AVXM =         QS = C     SILENT CANYON - YUCCA FLAT  .
.  DEPTH =   5.31 KM      ERZ =   8.5  NM =                         QD = D                                  .
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. 15   GLR  IPU   12 21 24.23                                  15.1   11  105    2.74   2.88   0.00       .
. 15   CPX  IPD4  12 21 23.92                          10  1.2  15.2  183  105    2.43   2.90  -0.48       .
. 15   BGB  EP    12 21 24.50                          12  1.3  16.1  259  104    3.01   3.04   0.02       .
. 15   SSP  EPD   12 21 25.35                          16  1.6  21.6  224  100    3.86   3.92  -0.07       .
. 15   LOP  IPU4  12 21 25.79                          16  1.6  25.7  204   98    4.30   4.57  -0.28       .
. 15   GMR  EPD4  12 21 28.25                                   38.7   40   96    6.76   6.68   0.08       .
. 15   LSM  EPU   12 21 28.61                          12  1.4  41.3  209   95    7.12   7.09   0.02       .
. 15   SPRG EPU   12 21 29.44                                   46.5  152   95    7.95   7.94   0.01       .
. 15   SDH  EPD4  12 21 36.67                                   53.2  209   94   15.18   9.03   6.15       .
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. JAN H = 14 21 11.09 UTC  RMS =  0.07  NO =  8                                   FREE DEPTH SOLUTION      .
.  15 LAT =  37.533 N      ERX =   0.2  ERH =   0.4   AVFM =   1.1  Q = B                                  .
.    LONG = 116.374 W      ERY =   0.4  GAP =  79     AVXM =         QS = A     QUARTZITE MOUNTAIN          .
.   DEPTH =  11.28 KM      ERZ =   1.0  NM =                         QD = B                                  .
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. 15   KRN  IPD   14 21 15.09                                  19.5   10  117    4.00   3.91   0.09       .
. 15   BLT  EP 4  14 21 15.11                                  22.6  111  114    4.02   4.36  -0.34       .
. 15   CTS  EPU   14 21 17.00                                  33.2  291  107    5.91   5.98  -0.07       .
. 15   EPN  IPD   14 21 17.50                                  35.7  173  106    6.41   6.36   0.05       .
. 15   QCS  EPD   14 21 19.42                                  48.1   57  102    8.33   8.33   0.00       .
. 15   GLR  EPD4  14 21 19.25                                  48.7  140  101    8.16   8.42  -0.11       .
. 15   GMR  IPU   14 21 20.95                           8  1.1  57.8  112  100    9.86   9.88  -0.02       .
. 15   LCP  EPD   14 21 24.15                                  77.5  166   97   13.06  13.06   0.00       .
. 15   SGV  EPD   14 21 25.30                                  84.6  224   97   14.21  14.20   0.02       .
. 15   GVN  EPD   14 21 28.60                                 104.2  236   53   17.51  17.34   0.17       .
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. JAN H = 20 28 21.96 UTC  RMS =  0.04  NO =  8                                   FREE DEPTH SOLUTION      .
.  15 LAT =  36.179 N      ERX =   0.9  ERH =   1.0   AVFM =   3.8  Q = C                                  .
.    LONG = 117.567 W      ERY =   0.5  GAP = 242     AVXM =         QS = B     DARWIN                      .
.   DEPTH =   1.16 KM      ERZ =   4.5  NM =                         QD = D                                  .
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. 15   MCA  IPD4  20 28 31.00                         128  3.5  58.1   26   38    9.04   9.90  -0.86       .
. 15   QSM  IPU   20 28 33.35                         117  3.5  67.2  111   38   11.39  11.39  -0.01       .
. 15   TPO  IPD4  20 28 32.95                         165  3.8  71.0   12   38   10.99  12.00  -1.01       .
. 15   GVN  IPD4  20 28 37.15                         169  3.9  93.5   12   38   15.19  15.66  -0.47       .
. 15   SGV  IPD4  20 28 38.55                         180  4.0 101.1   28   38   16.59  16.90  -0.31       .
. 15   AMR  IPU   20 28 38.79                         130  3.7 101.1   76   38   16.83  16.90  -0.08       .
. 15   BRO  IPU4  20 28 39.50                         124  3.7 106.4   52   38   17.54  17.76  -0.22       .
. 15   LCM  IPD4  20 28 40.24                                 117.4  356   38   18.28  19.55  -1.27       .
. 15   NPN  IPD   20 28 42.00                         176  4.0 120.5   34   38   20.04  20.05  -0.01       .
. 15   SDH  IPU   20 28 42.29                         120  3.7 121.8   65   38   20.33  20.27   0.06       .
. 15   NGP  IPU   20 28 43.11                          99  3.6 127.3   93   38   21.15  21.17  -0.02       .
. 15   LSM  IPD4  20 28 44.13                          99  3.6 131.6   62   38   22.17  21.87   0.30       .
. 15   JON  IPU   20 28 44.40                         110  3.7 134.6   78   38   22.44  22.36   0.08       .
. 15   MGM  EPU4  20 28 44.30                                 140.2    3   30   22.34  23.09  -0.75       .
. 15   PPK  EPD4  20 28 42.40                                 141.7  348   30   20.44  23.28  -2.84       .
. 15   LOP  IPU4  20 28 46.25                         158  4.0 146.1   59   30   24.29  23.85   0.44       .
. 15   SSP  IPD4  20 28 46.29                                 146.3   56   30   24.33  23.88   0.45       .
. 15   MCX  IPD4  20 28 47.05                          54  3.1 151.0   69   30   25.09  24.48   0.60       .
. 15   BGB  IPU4  20 28 46.10                                 153.1   52   30   24.14  24.76  -0.58       .
. 15   CPX  IPU4  20 28 47.76                         138  4.0 158.6   58   30   25.80  25.47   0.33       .
. 15   EPN  IPD4  20 28 48.50                                 159.8   44   30   26.54  25.63   0.90       .
. 15   SPRG IPU4  20 28 48.89                         125  3.9 167.7   70   30   26.93  26.66   0.27       .
. 15   MZP  EPD4  20 28 49.20                                 169.7    6   30   27.24  26.91   0.52       .
. 15   SVP  EPD   20 28 49.30                                 171.7  353   30   27.34  27.18   0.01       .
. 15   CTS  EPD4  20 28 50.60                          75  3.5 178.6   25   30   28.64  28.08   0.56       .
. 15   GLR  IPD4  20 28 50.69                          97  3.7 178.9   51   30   28.73  28.11   0.77       .
. 15   APK  IPU   20 28 50.22                         101  3.8 179.9   85   30   28.26  28.24   0.02       .
. 15   BLT  EPU4  20 28 52.50                         114  3.9 191.3   42   30   30.54  29.72   0.82       .
. 15   KRN  IPU4  20 28 53.67                         153  4.2 202.0   33   30   31.71  31.11   0.60       .
. 15   GMR  IPU4  20 28 54.22                         148  4.2 205.2   51   30   32.26  31.53   0.73       .
. 15   TNP  IPD4  20 28 55.07                         157  4.3 213.5    8   30   33.11  32.60   0.51       .
. 15   SHRG IPU4  20 28 56.31                                 219.6   81   30   34.35  33.40   1.00       .
. 15   QCS  EPU   20 28 56.80                                 229.5   40   30   34.84  34.69   0.15       .
. 15   TPU  EPU   20 28 57.10                                 233.0   47   30   35.14  35.13   0.01       .
. 15   EPR  IPU4  20 28 58.40                         190  4.5 239.4   63   30   36.44  35.97   0.47       .
. 15   PRN  IPU4  20 29  1.21                         133  4.3 262.8   59   30   39.25  39.00   0.25       .
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. JAN H = 17 58 42.77 UTC  RMS =  0.13  NO = 12                                   FREE DEPTH SOLUTION      .
.  16 LAT =  37.292 N      ERX =   0.4  ERH =   0.6   AVFM =   1.7  Q = C                                  .
.    LONG = 117.055 W      ERY =   0.5  GAP = 144     AVXM =         QS = C     MT. JACKSON                 .
.   DEPTH =   4.74 KM      ERZ =   8.3  NM =                         QD = C                                  .
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JAN 1980	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	NMN	IPU	17 58 48.05				27	2.1	31.5	138	96	5.28	5.49	-0.21	
.		ISU	17 58 52.49									9.72	9.61	0.11	
. 16	SGV	EPU	17 58 48.49				25	2.0	34.5	177	95	5.72	5.99	-0.27	
.		ISU4	17 58 52.70									9.93	10.47	-0.55	
. 16	GVN	EPD4	17 58 49.50				22	2.0	41.1	218	94	6.73	7.05	-0.33	
.		ISU	17 58 55.20									12.43	12.34	0.08	
. 16	MGM	IPU	17 58 49.99				13	1.5	42.5	293	94	7.22	7.28	-0.06	
.		ISU	17 58 55.27									12.50	12.73	-0.23	
. 16	LCH	EPU	17 58 51.59				18	1.8	52.9	263	93	8.82	8.97	-0.15	
.		ISU	17 58 58.60									15.83	15.69	0.14	
. 16	MZP	EPU	17 58 51.79				10	1.3	53.9	327	93	9.02	9.13	0.08	
.		ESU4	17 58 58.40									15.63	15.64	-0.01	
. 16	TMO	EP 4	17 58 53.00				20	2.0	62.4	210	93	10.23	10.52	-0.29	
. 16	BRO	EPU4	17 58 54.10				9	1.3	70.1	147	93	11.33	11.76	-0.43	
. 16	MCA	EP	17 58 55.30				13	1.6	74.2	196	92	12.53	12.43	0.10	VERY E
. 16	FMT	EPU4	17 58 55.05				9	1.3	76.4	161	92	12.28	12.79	-0.41	
. 16	PPK	EPD4	17 58 55.95				15	1.8	76.9	281	92	13.18	12.87	0.31	
.		ESD4	17 59 5.62									22.85	22.53	0.32	
. 16	BGB	EPD	17 58 55.95				16	1.8	78.7	111	92	13.18	13.16	0.07	
. 16	SSP	EPD	17 58 56.89				26	2.3	84.8	119	92	14.12	14.15	-0.03	
. 16	SDH	EPU4	17 58 58.35						96.0	138	92	15.58	15.97	-0.40	

. JAN H = 19 4 53.68 UTC RMS = 0.00 NO = 3 FIXED DEPTH SOLUTION
. 20 LAT = 36.876 N ERX = ERH = AVFM = 1.2 Q = C DEPTH CONTROL INADEQUATE
. LONG = 116.196 W ERY = GAP = 147 AVXM = QS = A LATHROP WELLS
. DEPTH = 5.00 KM ERZ = NM = QD = D

. 20	LOP	EP	19 4 54.87				14	1.4	3.5	133	140	1.19	1.19	-0.00	
. 20	LSM	EPU	19 4 56.79				7	0.9	16.6	204	102	3.11	3.11	0.00	
. 20	BGB	EP	19 4 57.00						18.2	351	101	3.32	3.37	0.00	

. JAN H = 20 46 45.06 UTC RMS = 0.30 NO = 4 FREE DEPTH SOLUTION
. 21 LAT = 37.140 N ERX = ERH = AVFM = 1.6 Q = D
. LONG = 114.972 W ERY = GAP = 276 AVXM = QS = C DELAMAR MOUNTAINS
. DEPTH = 0.23 KM ERZ = NM = QD = D

. 21	EPR	IPU	20 46 48.86				23	1.9	19.3	280	38	3.80	3.79	0.01	
. 21	PRN	EPU	20 46 50.24				10	1.2	30.5	347	38	5.18	5.61	-0.43	
. 21	NPN	EPD	20 46 55.10						57.0	3	38	10.04	9.93	0.11	
. 21	WRN	EPD	20 47 4.30						108.1	330	38	19.24	18.24	1.00	

. JAN H = 23 50 24.65 UTC RMS = 0.28 NO = 25 FREE DEPTH SOLUTION
. 23 LAT = 37.199 N ERX = 0.6 ERH = 0.8 AVFM = 2.4 Q = C
. LONG = 115.477 W ERY = 0.6 GAP = 62 AVXM = QS = B ALAMO
. DEPTH = 2.40 KM ERZ = 3.2 NM = QD = C

. 23	EPR	IPU	23 50 29.01				74	3.0	26.0	97	92	4.36	4.58	-0.22	
. 23	GMR	IPU4	23 50 29.30				37	2.4	30.1	300	91	4.65	5.25	-0.60	
. 23	PRN	IPD	23 50 32.39				36	2.4	44.4	59	90	7.74	7.56	0.18	
. 23	TPU	EPD	23 50 32.23				51	2.7	47.6	341	90	7.58	8.09	-0.51	
. 23	GLR	IPU	23 50 32.95						48.0	270	90	8.30	8.16	0.30	
. 23	MTI	EPU	23 50 33.70				33	2.4	56.0	19	90	9.05	9.46	-0.21	
. 23	CPX	IPU	23 50 34.69				33	2.4	59.7	240	90	10.04	10.07	-0.02	
. 23	SPRG	IPD	23 50 34.85				30	2.3	63.4	208	90	10.20	10.66	-0.45	
. 23	BLT	EPD	23 50 35.45				29	2.3	65.2	297	90	10.80	10.95	-0.15	
. 23	BGB	EP	23 50 36.15				39	2.6	69.1	255	90	11.50	11.59	-0.03	
. 23	NPN	EPU	23 50 36.25						69.4	44	90	11.60	11.64	-0.04	
. 23	LOP	IPU	23 50 36.96				44	2.7	72.4	236	90	12.31	12.12	0.19	
. 23	SSP	EPD	23 50 36.80				41	2.6	72.6	245	90	12.15	12.16	0.00	
. 23	EPN	IPU	23 50 37.70						75.2	271	90	13.05	12.58	.48	
. 23	DLM	EPU	23.50 38.10				28	2.3	79.4	55	90	13.45	13.27	0.18	
. 23	SHRG	EPU	23 50 38.70						82.2	160	90	14.05	13.72	0.39	
. 23	SRG	EPU	23 50 38.90						84.0	25	90	14.25	14.02	0.24	
. 23	WRN	EPD	23 50 39.34				38	2.6	87.5	354	90	14.69	14.57	0.12	
. 23	SDH	EPU	23 50 40.85				26	2.3	98.3	231	90	16.20	16.34	-0.13	
. 23	JON	EPU	23 50 41.40				30	2.4	101.1	214	90	16.75	16.79	-0.03	
. 23	BRO	EP	23 50 44.05				26	2.4	113.1	245	90	19.40	18.74	0.66	VERY E
. 23	NMN	EP	23 50 44.80				41	2.8	120.0	264	90	20.15	19.86	0.30	
.		ISU4	23 50 58.95									34.30	34.75	-0.44	
. 23	CTS	EPD	23 50 45.20				4	0.8	120.9	294	90	20.55	20.02	0.54	
. 23	AMR	EPU	23 50 45.34				25	2.4	125.8	225	90	21.29	20.81	0.49	
. 23	NCP	EPU	23 50 46.49						133.3	207	53	21.84	22.00	-0.15	
. 23	SGV	EPU	23 50 48.55				41	2.8	140.4	260	53	23.90	22.91	0.99	

JAN 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	UUN	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
JAN H = 0 34 1.37 UTC				RMS = 0.06	NO = 8							FREE DEPTH SOLUTION			
24 LAT = 37.162 N				ERX = 0.4	ERH = 0.6			AVFM = 1.8		Q = C					
LONG = 115.456 W				ERY = 0.4	GAP = 123			AVXM =		QS = B		ALAMO			
DEPTH = 9.35 KM				ERZ = 3.1	NM =					QD = C					
24	EPR	IPU	0 34 5.80				31	2.2	24.0	88	109	4.43	4.45	-0.02	
24	GMR	EPD4	0 34 6.26				13	1.5	33.8	304	103	4.89	6.00	-1.11	
24	PRN	IPU	0 34 9.30				13	1.5	45.1	53	100	7.93	7.80	0.13	
24	GLR	EPD	0 34 9.80						50.0	275	99	8.43	8.58	0.00	
24	TPU	EPD4	0 34 9.50				16	1.7	52.0	341	99	8.13	8.91	-0.77	
24	MTI	IPU4	0 34 10.70				16	1.7	59.4	16	98	9.33	10.09	-0.56	
24	CPX	IPU	0 34 11.50						59.5	244	97	10.13	10.11	0.02	
24	SPRG	EPD	0 34 11.65						60.7	211	97	10.28	10.31	-0.02	
24	BLT	EPU4	0 34 12.60						68.7	299	96	11.23	11.60	-0.37	
24	NPN	EPU	0 34 13.38				16	1.8	71.3	40	96	12.01	12.01	0.01	
24	LCP	EPD4	0 34 13.70						71.9	242	96	12.33	12.12	0.21	
24	EPN	EP	0 34 14.42				11	1.5	77.2	274	96	13.05	12.97	0.08	VERY E
24	SRG	EPU	0 34 15.80				26	2.3	87.0	23	95	14.43	14.55	-0.12	
24	WRN	EPD4	0 34 16.36				15	1.8	91.7	353	95	14.99	15.32	-0.33	
24	SDH	EP 4	0 34 17.80						97.3	234	95	16.43	16.22	0.21	VERY E
24	JCN	EP 4	0 34 18.20						98.8	216	94	16.83	16.46	0.37	VERY E
24	NPN	EPU4	0 34 22.30						121.4	266	53	20.93	19.77	1.16	
JAN H = 8 59 41.12 UTC				RMS = 0.04	NO = 5							FREE DEPTH SOLUTION			
24 LAT = 37.132 N				ERX = 0.5	ERH = 1.2			AVFM = 1.7		Q = C					
LONG = 115.505 W				ERY = 1.1	GAP = 232			AVXM =		QS = B		GROOM LAKE			
DEPTH = 15.72 KM				ERZ = 0.8	NM =					QD = D					
24	EPR	IPU	8 59 46.70				24	2.0	28.6	82	117	5.58	5.55	0.03	
24	GMR	IPD	8 59 47.22				12	1.4	32.6	314	114	6.10	6.14	-0.04	
24	PRN	IPD4	8 59 50.29				9	1.2	50.6	53	106	9.17	8.90	0.27	
24	TPU	EPD	8 59 50.61				15	1.7	54.1	346	105	9.49	9.44	0.05	
24	MTI	EPD4	8 59 51.55				15	1.7	63.9	19	103	10.43	10.99	-0.36	
24	NPN	EPU	8 59 54.10						76.6	41	101	12.98	13.02	-0.04	
24	SRG	EPD	8 59 56.43				25	2.2	91.8	25	53	15.31	15.31	0.00	
JAN H = 11 40 11.18 UTC				RMS = 0.01	NO = 5							FREE DEPTH SOLUTION			
25 LAT = 36.603 N				ERX = 0.4	ERH = 0.5			AVFM = 0.9		Q = C					
LONG = 116.316 W				ERY = 0.2	GAP = 204			AVXM =		QS = A		LATHROP WELLS			
DEPTH = 10.94 KM				ERZ = 0.3	NM =					QD = D					
25	SDH	IPU4	11 40 13.55				7	0.8	5.1	338	153	2.37	2.15	0.22	
		ISU	11 40 14.95									3.77	3.76	0.01	
25	LSM	IPU	11 40 14.50				10	1.2	15.6	15	122	3.32	3.33	-0.02	
25	JCN	IPU	11 40 16.08				5	0.6	26.3	133	110	4.90	4.90	-0.00	
		ESU	11 40 19.75									8.57	8.57	-0.01	
25	LCP	EPU	11 40 16.81						30.9	25	107	5.63	5.61	0.02	
JAN H = 3 7 10.79 UTC				RMS = 0.09	NO = 10							FREE DEPTH SOLUTION			
26 LAT = 36.717 N				ERX = 0.3	ERH = 0.5			AVFM = 1.6		Q = A					
LONG = 116.239 W				ERY = 0.3	GAP = 65			AVXM =		QS = A		LATHROP WELLS			
DEPTH = 5.13 KM				ERZ = 1.6	NM =					QD = A					
26	LSM	IPU	3 7 12.21						3.8	310	138	1.42	1.24	0.18	
26	SDH	IPD	3 7 12.99				14	1.5	11.9	228	108	2.20	2.38	-0.17	
26	LCP	IPD	3 7 13.90				25	2.0	16.5	23	103	3.11	3.10	0.02	
26	SSP	IPU	3 7 14.91				26	2.0	23.2	4	99	4.12	4.16	-0.04	
		ISD4	3 7 17.98									7.19	7.28	-0.09	
26	CPX	IPD	3 7 15.69				14	1.5	28.5	34	97	4.90	5.02	-0.12	
26	JCN	EPU	3 7 16.61				11	1.3	33.1	158	96	5.82	5.76	0.07	
		ISD4	3 7 20.95									10.16	10.08	0.09	
26	BRO	EPU	3 7 16.85				11	1.3	34.9	278	96	6.06	6.06	0.00	
		ISU4	3 7 22.05									11.26	10.61	0.66	
26	BGB	EPD	3 7 16.95				13	1.5	35.6	2	96	6.16	6.17	0.04	
26	SPRG	IPU	3 7 17.42				13	1.5	38.4	94	95	6.63	6.63	0.00	
26	AMK	EP	3 7 17.94				10	1.3	41.2	211	95	7.15	7.08	0.07	
26	NPN	EPD	3 7 22.30				19	1.9	65.6	308	93	11.51	11.03	0.48	
26	TPU	IPU4	3 7 30.53				17	2.0	111.6	26	92	19.74	18.51	1.23	
26	MTI	EPD4	3 7 34.67						136.7	39	53	23.88	22.18	1.91	
JAN H = 3 27 52.12 UTC				RMS = 0.06	NO = 5							FREE DEPTH SOLUTION			
26 LAT = 36.494 N				ERX = 0.9	ERH = 1.5			AVFM = 1.5		Q = C					
LONG = 116.389 W				ERY = 1.2	GAP = 112			AVXM =		QS = B		ASH MEADOWS			
DEPTH = 23.66 KM				ERZ = 1.1	NM =					QD = D					

JAN 1980	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	APR	EPD	3 27 56.69				29	2.1	13.2	215	150	4.57	4.59	-0.02	
. 26	SDH	IPU4	3 27 55.61				15	1.5	17.4	15	143	3.49	4.97	-1.48	
. 26	JON	EPU	3 27 58.10				11	1.3	26.4	143	131	5.98	5.97	0.00	
. 26	LSM	EP 4	3 27 57.60						29.1	21	128	5.48	6.32	-0.84	VERY E
. 26	BRO	EPU	3 27 59.45				6	0.8	36.5	325	122	7.33	7.31	0.02	
. 26	LOP	EPD	3 27 60.41				15	1.6	44.6	26	53	8.29	8.39	-0.11	
. 26	CPX	EPU	3 27 62.20						56.6	32	53	10.08	9.95	0.13	
. 26	BGB	EPU4	3 27 63.40						62.0	13	53	11.28	10.66	0.67	
. 26	NMN	EP 4	3 27 66.00						75.5	330	53	13.88	12.41	1.47	
. 26	SGV	EPD4	3 27 67.05						78.9	313	53	14.93	12.85	2.08	
. 26	TPU	EPU4	3 27 76.82						139.7	28	53	24.70	20.75	3.94	
. 26	QCS	EPD4	3 27 78.50						147.4	17	53	26.38	21.75	4.62	

. JAN H = 17 22 21.39 UTC RMS = 0.07 NO = 5 FREE DEPTH SOLUTION
. 28 LAT = 37.217 N ERX = 1.8 ERH = 2.5 AVFM = 1.6 Q = C
. LONG = 117.854 W ERY = 1.7 GAP = 209 AVXM = QS = B MAGRUDER MOUNTAIN
. DEPTH = 13.63 KM ERZ = 3.6 NM = QD = D

. 28	LCH	EPU	17 22 25.30				19	1.8	18.4	84	124	3.91	3.95	-0.04	
.		ISU4	17 22 29.00									7.61	6.92	0.69	
. 28	PPK	EPD	17 22 25.99				11	1.3	23.8	348	118	4.60	4.70	-0.10	
.		ISU	17 22 29.69									8.30	8.22	0.08	
. 28	MGM	EP 4	17 22 27.49				12	1.4	40.3	52	107	6.10	7.19	-1.09	VERY E
. 28	GVN	EPD4	17 22 30.75				17	1.8	51.3	118	103	9.36	8.93	0.43	
. 28	TWO	EP	17 22 31.80				16	1.7	60.5	139	101	10.41	10.38	0.03	VERY E
. 28	NMN	EP	17 22 37.10				13	1.7	93.3	99	97	15.71	15.64	0.07	VERY E

. JAN H = 18 4 1.63 UTC RMS = 0.10 NO = 8 FREE DEPTH SOLUTION
. 28 LAT = 36.734 N ERX = 0.6 ERH = 0.7 AVFM = 1.9 Q = B
. LONG = 116.273 W ERY = 0.5 GAP = 116 AVXM = QS = A LATHROP WELLS
. DEPTH = 2.09 KM ERZ = 0.9 NM = QD = B

. 28	LSM	IPU	18 4 2.10						0.5	16	159	0.47	0.53	-0.06	
. 28	LOP	EP	18 4 4.54				33	2.2	16.3	35	91	2.91	3.01	-0.10	
. 28	SSP	EPD	18 4 5.60				33	2.2	21.7	13	90	3.97	3.88	0.09	
.		ISU	18 4 8.36									6.73	6.79	-0.06	
. 28	MCX	EP 4	18 4 9.20						26.7	109	90	7.57	4.70	2.87	
. 28	BRO	EPD	18 4 7.00				12	1.4	31.6	276	90	5.37	5.49	-0.12	
. 28	BGB	EPU	18 4 7.60				21	1.9	33.9	7	90	5.97	5.87	0.15	
. 28	AMR	EP 4	18 4 8.05				16	1.7	41.5	206	90	6.42	7.09	-0.68	VERY E
. 28	SPRG	EPD	18 4 8.77				16	1.7	41.7	96	90	7.14	7.14	0.00	
. 28	QSM	EPD	18 4 18.52						100.7	212	90	16.89	16.72	0.17	
. 28	TPU	EPD4	18 4 21.55						111.4	30	90	19.92	18.46	1.46	
. 28	MTI	EPD	18 4 25.05						137.2	40	53	23.42	22.54	1.08	

. JAN H = 0 33 5.53 UTC RMS = 0.09 NO = 6 FREE DEPTH SOLUTION
. 30 LAT = 37.155 N ERX = 0.8 ERH = 1.0 AVFM = 1.3 Q = B
. LONG = 117.426 W ERY = 0.6 GAP = 138 AVXM = QS = A MT. JACKSON
. DEPTH = 7.69 KM ERZ = 1.9 NM = QD = C

. 30	GVN	IPU	0 33 9.10				16	1.6	18.5	156	109	3.57	3.53	0.04	
. 30	LCH	IPD	0 33 9.60				9	1.1	21.6	294	106	4.07	4.00	0.07	
. 30	MGM	EPD	0 33 11.15				7	0.9	32.4	349	101	5.62	5.72	-0.10	
. 30	SGV	IPU	0 33 12.22				10	1.3	39.9	119	99	6.69	6.92	-0.23	
. 30	NMN	IPU4	0 33 14.40				12	1.5	54.6	99	96	8.87	9.29	-0.42	
. 30	EPN	EPU	0 33 22.00						98.1	86	94	16.47	16.33	0.14	
. 30	LOP	EPU	0 33 24.90						116.9	107	53	19.37	19.34	0.02	

. JAN H = 9 2 29.46 UTC RMS = 0.01 NO = 5 FREE DEPTH SOLUTION
. 30 LAT = 36.793 N ERX = 0.1 ERH = 0.2 AVFM = 1.3 Q = C
. LONG = 115.865 W ERY = 0.2 GAP = 293 AVXM = QS = A MERCURY
. DEPTH = 7.72 KM ERZ = 0.7 NM = QD = D

. 30	MCX	EPD	9 2 33.05				8	1.0	18.9	217	109	3.59	3.60	-0.00	
. 30	LOP	EP	9 2 34.45				9	1.1	27.9	284	103	4.99	4.99	-0.00	
.		ISD4	9 2 37.31									7.85	8.74	-0.89	
. 30	SSP	EP 4	9 2 35.45						34.8	295	100	5.99	6.09	-0.10	
. 30	LSM	EPU	9 2 35.90				16	1.7	36.8	261	100	6.44	6.43	0.02	
.		ISU	9 2 40.70									11.24	11.25	-0.00	
. 30	SDH	EP	9 2 37.25						45.4	249	98	7.79	7.80	-0.01	VERY E

. JAN H = 11 31 7.47 UTC RMS = 0.02 NO = 7 FREE DEPTH SOLUTION
. 30 LAT = 36.485 N ERX = 0.7 ERH = 0.7 AVFM = 2.4 Q = B

JAN 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
LONG = 115.256 W			ERY = 0.3	GAP = 161			AVXM =			QS = A		LAS VEGAS			
DEPTH = 12.29 KM			ERZ = 1.6	NM =						QD = C					
30	SHRG	IPU	11 31 10.12				26	2.0	9.3	76	141	2.65	2.70	-0.01	
30	APK	IPU	11 31 13.63						33.9	237	108	6.16	6.14	0.01	
30	SPRG	EPU4	11 31 16.40				27	2.2	54.7	295	101	8.93	9.41	-0.49	
30	CPX	EPU4	11 31 21.90				22	2.1	87.0	305	97	14.43	14.61	-0.18	
30	NCP	EPU	11 31 22.50				16	1.9	89.7	244	97	15.03	15.05	-0.02	
		ISD4	11 31 33.31									25.84	26.33	-0.49	
30	LCP	IPD	11 31 22.79				32	2.5	91.2	297	97	15.32	15.28	0.03	
30	LSM	IPD	11 31 23.36				62	3.0	95.2	287	96	15.89	15.93	-0.04	LONG CODA
30	SDM	IPD	11 31 23.98				24	2.2	98.5	280	96	16.51	16.46	0.05	
30	SSP	IPU	11 31 24.00				35	2.6	98.9	300	96	16.53	16.53	-0.01	
30	EPN	IPD4	11 31 28.87						125.0	310	53	21.40	19.96	1.44	
30	GBV	EPU4	11 31 29.49				27	2.5	131.3	255	53	22.02	20.77	1.15	
30	NMN	EPU4	11 31 33.35				29	2.6	154.3	295	53	25.88	23.76	2.12	
30	SGV	IPU4	11 31 35.21				26	2.5	168.0	289	53	27.74	25.54	2.20	

JAN H = 14 26 32.66 UTC			RMS = 0.03	NO = 5								FREE DEPTH SOLUTION			
30 LAT = 36.623 N			ERX = 1.0	ERH = 1.2			AVFM =	1.4	Q = C						
LONG = 116.281 W			ERY = 0.7	GAP = 217			AVXM =			QS = B		LATHROP WELLS			
DEPTH = 7.58 KM			ERZ = 2.2	NM =						QD = D					
30	SDM	IPU	14 26 34.40				9	1.1	5.7	296	140	1.74	1.74	0.01	
30	LSM	IPU	14 26 35.32				31	2.2	12.9	4	117	2.66	2.68	-0.01	
30	LCP	EP	14 26 37.55				12	1.4	27.6	22	103	4.89	4.95	-0.05	
30	AMR	EP 4	14 26 39.30						30.4	215	101	6.64	5.39	1.26	VERY E
30	SSP	EP	14 26 38.68				9	1.2	34.0	10	100	6.02	5.96	0.06	VERY E
30	CPX	EP 4	14 26 37.43						39.3	30	99	4.77	6.82	-2.05	VERY E
30	SPRG	EP	14 26 40.05						42.9	79	98	7.39	7.40	-0.00	VERY E

JAN H = 14 20 48.27 UTC			RMS = 0.10	NO = 17								FREE DEPTH SOLUTION			
31 LAT = 37.279 N			ERX = 0.3	ERH = 0.3			AVFM =	2.4	Q = C						
LONG = 117.644 W			ERY = 0.2	GAP = 122			AVXM =			QS = C		MAGRUDER MOUNTAIN			
DEPTH = 0.96 KM			ERZ = 5.8	NM =						QD = B					
31	LCM	IP	14 20 49.61				28	2.0	4.9	183	38	1.34	1.31	0.03	
31	MGM	IP	14 20 52.20				22	1.9	22.2	36	38	3.93	4.12	-0.19	
31	PPK	IPU	14 20 53.36				23	2.0	28.5	305	38	5.09	5.13	-0.04	
31	GMN	IPU4	14 20 55.26				42	2.5	34.2	86	38	6.99	6.06	0.93	
31	SVP	IP	14 20 57.16				25	2.1	50.3	344	38	8.89	8.69	0.05	
31	MZP	IPD	14 20 57.11				17	1.8	52.2	26	38	8.84	8.99	0.04	
31	SGV	IPU	14 20 58.90				32	2.4	63.6	121	38	10.63	10.85	-0.23	
31	NMN	IPD	14 21 1.15				35	2.5	76.5	107	38	12.88	12.95	-0.07	
31	CTS	EPU	14 21 3.60				18	2.0	90.5	64	38	15.33	15.23	0.10	
31	TNP	IPD	14 21 4.70				34	2.5	96.7	23	38	16.43	16.23	0.20	
31	FMT	EPD4	14 21 5.35				26	2.3	104.7	133	38	17.08	17.53	-0.36	
31	BRO	IPD	14 21 6.10				24	2.3	107.3	122	38	17.83	17.95	-0.12	
31	EPN	EPD	14 21 8.18						117.4	94	38	19.91	19.60	0.31	
31	KRN	EP 4	14 21 9.55				37	2.7	125.1	68	38	21.28	20.85	0.43	
31	BGB	EPU	14 21 9.54				33	2.6	128.6	102	38	21.27	21.41	-0.09	
31	BLT	EPU	14 21 10.85				26	2.4	135.1	81	30	22.59	22.47	0.10	
31	LSM	EP	14 21 10.75				49	3.0	136.1	116	30	22.48	22.59	-0.11	
31	LCP	EP	14 21 11.60				34	2.7	139.5	110	30	23.33	23.04	0.29	
31	AMR	EPD	14 21 12.05				23	2.4	143.1	133	30	23.78	23.50	0.27	
31	GLR	EPU	14 21 12.20				27	2.5	144.7	94	30	23.93	23.71	0.37	
31	OCS	EPD4	14 21 15.55				23	2.4	162.1	70	30	27.28	25.98	1.30	
31	GMR	EPU4	14 21 15.92						166.2	88	30	27.65	26.50	1.15	
31	TPU	EPD4	14 21 18.07				33	2.8	180.3	78	30	29.80	28.34	1.46	

FEB H = 15 47 49.59 UTC			RMS = 0.13	NO = 5								FREE DEPTH SOLUTION			
01 LAT = 37.569 N			ERX = 2.1	ERH = 2.2			AVFM =	1.0	Q = C						
LONG = 117.890 W			ERY = 0.8	GAP = 200			AVXM =			QS = B		SILVER PEAK			
DEPTH = 1.64 KM			ERZ = 3.2	NM =						QD = D					
01	PPK	IPD	15 47 52.55				8	1.0	15.9	186	38	2.96	2.95	0.01	
01	SVP	IPU	15 47 53.00				10	1.2	18.0	26	38	3.41	3.29	-0.03	
		ISU	15 47 55.50									5.91	6.02	-0.11	
01	MGM	IPU4	15 47 56.12				6	0.8	37.6	112	38	6.53	6.47	0.06	
		ISU	15 48 0.86									11.27	11.33	-0.06	
01	LCM	EP 4	15 47 58.15				7	1.0	42.9	150	38	8.56	7.34	1.23	VERY E
01	MZP	EP 4	15 47 57.70						47.1	72	38	8.11	8.02	0.29	
		ISD	15 48 3.65									14.06	13.70	0.36	
01	NMN	EPU4	15 48 8.61						109.4	120	38	19.02	18.15	0.87	

1980	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 = 4 49 35.59 UTC			RMS = 0.02	NO = 5								FREE DEPTH SOLUTION			
02 LAT = 37.158 N			ERX = 0.1	ERH = 0.2				AVFM = 1.8		Q = C					
LONG = 117.410 W			ERY = 0.2	GAP = 145				AVXM =		QS = 4		MT. JACKSON			
DEPTH = 13.13 KM			ERZ = 1.2	NM =						QD = D					
02	GVN	EPD	4 49 39.48				22	1.9	18.3	161	123	3.89	3.90	-0.01	
02	LCH	EP	4 49 40.10				17	1.7	22.7	292	118	4.51	4.51	-0.00	
02	SGV	IPD	4 49 42.58				17	1.7	38.9	120	107	6.99	6.95	0.04	
02	NMN	EPD	4 49 44.79				18	1.8	53.3	99	102	9.20	9.22	-0.02	
		ISU4	4 49 51.63									16.04	16.14	-0.10	
02	TPK	EP 4	4 49 45.40				19	1.9	55.2	77	102	9.81	9.52	0.29	
		ES	4 49 52.25									16.66	16.65	0.00	
02	MCA	EPD4	4 49 53.15				13	1.6	57.7	168	101	17.56	9.92	7.64	
02	BRO	EPD4	4 49 56.60						82.5	122	98	21.01	13.89	7.12	
02	BGB	EPD4	4 49 53.45						105.9	97	53	17.86	17.39	0.51	
FEB H = 7 37 9.77 UTC			RMS = 0.04	NO = 5								FREE DEPTH SOLUTION			
02 LAT = 36.823 N			ERX = 1.1	ERH = 1.3				AVFM = 1.0		Q = C					
LONG = 116.233 W			ERY = 0.6	GAP = 141				AVXM =		QS = 8		LATHROP WELLS			
DEPTH = 9.38 KM			ERZ = 2.4	NM =						QD = D					
02	LCP	IPD	7 37 11.89				15	1.5	6.8	59	141	2.12	2.08	0.03	
		ISU4	7 37 12.88									3.11	3.65	-0.54	
02	LSM	EP	7 37 12.15				8	1.0	9.9	200	131	2.38	2.43	-0.05	
		ISD4	7 37 13.25									3.48	4.25	-0.77	
02	SDH	EPD	7 37 13.85				4	0.4	21.8	205	110	4.08	4.12	-0.04	
02	BGB	EPD	7 37 14.13				11	1.3	23.9	1	109	4.36	4.44	-0.04	
02	BRO	EP	7 37 16.10						35.6	259	103	6.33	6.28	0.05	
FEB H = 5 56 34.14 UTC			RMS = 0.03	NO = 5								FREE DEPTH SOLUTION			
04 LAT = 36.593 N			ERX = 1.4	ERH = 3.0				AVFM = 1.3		Q = D					
LONG = 116.255 W			ERY = 2.7	GAP = 284				AVXM =		GS = C		LATHROP WELLS			
DEPTH = 6.68 KM			ERZ = 1.0	NM =						QD = D					
04	SDH	IPU	5 56 36.25				8	1.0	9.4	308	121	2.11	2.11	0.01	
		ISU4	5 56 36.85									2.71	3.69	-0.97	
04	LSM	IPD	5 56 37.20				25	2.0	16.2	355	108	3.06	3.12	-0.06	
04	LCP	EP	5 56 39.45				12	1.4	30.0	15	100	5.31	5.30	0.02	
		ISD4	5 56 43.30									9.16	9.27	-0.11	
04	BRO	EPD	5 56 40.72				7	1.0	38.0	300	98	6.58	6.59	-0.00	
04	BGB	EPU	5 56 42.55						49.4	3	96	8.41	8.42	0.04	VERY E
FEB H = 14 5 54.79 UTC			RMS = 0.01	NO = 5								FREE DEPTH SOLUTION			
04 LAT = 37.173 N			ERX = 0.1	ERH = 0.2				AVFM = 1.9		Q = C					
LONG = 115.458 W			ERY = 0.1	GAP = 119				AVXM =		GS = A		ALAMO			
DEPTH = 9.29 KM			ERZ = 0.8	NM =						QD = D					
04	EPR	IPU	14 5 59.26				39	2.4	24.1	91	108	4.47	4.48	-0.00	
04	GMR	IPU4	14 5 59.60				30	2.2	33.0	303	103	4.81	5.86	-1.05	
04	PRN	IPD4	14 6 2.66				26	2.1	44.5	54	100	7.87	7.70	0.17	
04	GLR	IPD	14 6 3.18				8	1.1	49.7	273	99	8.39	8.54	0.01	
04	MTI	EPD4	14 6 4.17				22	2.0	58.2	16	98	9.38	9.90	-0.32	
04	CPX	IPU4	14 6 5.11				11	1.4	59.8	243	97	10.32	10.16	0.16	
04	SPRG	IPU	14 6 5.25				16	1.8	61.7	210	97	10.46	10.46	-0.00	
04	BGB	EPD4	14 6 6.66				18	1.9	70.0	258	96	11.87	11.81	0.11	
04	NPN	EPU	14 6 6.68				24	2.1	70.4	41	96	11.89	11.87	0.02	
04	SPG	EPU	14 6 9.15						85.9	24	95	14.36	14.38	-0.02	
FEB H = 16 21 18.68 UTC			RMS = 0.11	NO = 17								FREE DEPTH SOLUTION			
04 LAT = 36.625 N			ERX = 0.3	ERH = 0.4				AVFM = 2.2		Q = B					
LONG = 116.326 W			ERY = 0.3	GAP = 127				AVXM =		QS = B		LATHROP WELLS			
DEPTH = 2.30 KM			ERZ = 2.5	NM =						QD = B					
04	SDH	IPU	16 21 19.49						2.5	335	114	0.81	0.79	0.02	
04	LSM	IPU	16 21 21.09						13.6	21	93	2.41	2.56	-0.15	NOISE
04	AMR	IPD	16 21 23.54				28	2.1	28.5	208	91	4.86	4.99	-0.13	
04	LOP	IPD	16 21 23.69						29.1	29	91	5.01	5.09	-0.08	NOISE
04	BRO	IPU	16 21 23.80				25	2.0	30.8	300	91	5.12	5.37	-0.25	
04	SSP	IPU	16 21 24.55				38	2.4	34.7	16	90	5.87	5.99	-0.12	
04	FMT	EPU4	16 21 25.16						40.5	272	90	6.48	6.94	-0.36	
04	CPX	IPD	16 21 25.61				34	2.3	41.3	35	90	6.93	7.07	-0.14	
04	BGB	IPD	16 21 26.60				35	2.4	46.7	11	90	7.92	7.94	0.03	
04	SPRG	EPD	16 21 26.69				34	2.4	46.8	81	90	8.01	7.96	0.05	
04	GMV	EPU	16 21 29.55				24	2.1	57.6	212	90	9.87	9.72	0.05	

1980	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	NMN	IPD	16 21 30.00				33	2.4	67.0	319	90	11.32	11.24	0.08	
04	GLR	EPD	16 21 30.10						69.4	23	90	11.42	11.64	-0.07	
04	PGE	EPU4	16 21 30.30				17	1.8	73.0	245	90	11.62	12.22	-0.60	
04	SGV	IPU	16 21 31.25						74.4	302	90	12.57	12.45	0.12	
04	USM	EPD	16 21 33.40				18	1.9	87.9	214	90	14.72	14.64	0.08	VERY E
04	GMR	EPD	16 21 34.45				31	2.4	92.9	32	90	15.77	15.46	0.31	
04	TPO	EPD	16 21 35.16				22	2.2	98.7	282	90	16.48	16.41	0.07	
04	GVN	IPD	16 21 35.69				29	2.4	99.9	295	90	17.01	16.59	0.42	

FEB H = 4 36 15.08 UTC RMS = 0.12 NO = 5 FREE DEPTH SOLUTION
05 LAT = 37.074 N ERX = 0.7 ERH = 1.2 AVFM = 1.2 Q = C
LONG = 116.198 W ERY = 0.9 GAP = 93 AVXM = QS = B SILENT CANYON - YUCCA FLAT
DEPTH = 7.89 KM ERZ = 3.2 NM = QD = D

05	BGB	IPD	4 36 16.63				14	1.4	4.9	213	146	1.55	1.70	-0.10	
05	EPN	IPD	4 36 18.55						19.1	324	109	3.47	3.63	-0.16	
05	CPX	EPD	4 36 18.92						20.4	142	108	3.84	3.82	0.01	
05	GLR	EPU4	4 36 18.68						21.2	49	107	3.60	3.95	-0.20	
		ESU	4 36 21.85									6.77	6.65	0.12	
05	LCP	EP 4	4 36 20.00				9	1.1	24.6	174	105	4.92	4.48	0.44	
05	BLT	EP 4	4 36 23.70						43.3	7	98	8.62	7.47	1.15	VERY E
05	GMR	EP 4	4 36 24.18				7	1.0	47.6	53	98	9.10	8.15	0.94	
05	TPK	IPU4	4 36 25.11						58.0	292	96	10.03	9.84	0.19	
		ESU	4 36 32.46									17.38	17.22	0.16	

FEB H = 5 56 15.97 UTC RMS = 0.01 NO = 5 FREE DEPTH SOLUTION
06 LAT = 37.184 N ERX = 0.1 ERH = 0.2 AVFM = 1.2 Q = C
LONG = 116.579 W ERY = 0.2 GAP = 146 AVXM = QS = A THIRSTY CANYON
DEPTH = 10.02 KM ERZ = 1.1 NM = QD = D

06	TPK	IPU	5 56 20.19				11	1.3	22.1	295	112	4.22	4.21	0.01	
06	EPN	IPU	5 56 20.30						22.9	81	111	4.33	4.33	0.00	NOISE
06	NMN	IPU	5 56 20.48				10	1.2	24.1	242	110	4.51	4.52	-0.01	
06	BGB	EPU4	5 56 22.02						35.1	117	104	6.05	6.23	-0.13	
06	SSP	EP 4	5 56 23.80				7	1.0	43.0	132	101	7.83	7.48	0.35	
06	LOP	EPD	5 56 24.83				9	1.2	51.7	135	99	8.86	8.87	-0.02	
06	LSM	EP	5 56 25.61						56.4	151	99	9.64	9.62	0.02	VERY E

FEB H = 6 49 16.34 UTC RMS = 0.00 NO = 5 FREE DEPTH SOLUTION
06 LAT = 37.190 N ERX = 0.1 ERH = 0.1 AVFM = 0.8 Q = C
LONG = 116.612 W ERY = 0.1 GAP = 196 AVXM = QS = A THIRSTY CANYON
DEPTH = 20.65 KM ERZ = 0.2 NM = QD = D

06	TPK	IPU	6 49 21.13				5	0.6	19.2	297	136	4.79	4.79	0.00	
		ISU4	6 49 24.33									7.99	8.38	-0.39	
06	NMN	IPU	6 49 21.46				7	0.9	22.0	237	132	5.12	5.12	0.00	
		ISU	6 49 25.29									8.95	8.95	-0.00	
06	EPN	IPD4	6 49 24.49						25.7	84	127	8.15	5.58	2.57	
06	BGB	EPU4	6 49 23.05						38.1	116	117	6.71	7.29	-0.53	
06	LOP	EP	6 49 26.06				7	1.0	54.3	133	110	9.72	9.72	0.00	
06	LSM	EP	6 49 26.69						58.5	149	108	10.35	10.36	-0.00	

FEB H = 9 0 55.46 UTC RMS = 0.23 NO = 12 FREE DEPTH SOLUTION
06 LAT = 36.655 N ERX = 0.5 ERH = 0.8 AVFM = 1.8 Q = B
LONG = 116.289 W ERY = 0.6 GAP = 130 AVXM = QS = B LATHROP WELLS
DEPTH = 0.64 KM ERZ = 1.6 NM = QD = B

06	SCM	IPU	9 0 55.81				18	1.7	4.5	256	98	0.35	1.21	-0.86	
06	LSM	IPD	9 0 57.42						9.4	9	38	1.96	2.10	-0.14	
06	LOP	IPU	9 1 0.23				24	2.0	24.6	26	38	4.77	4.57	0.20	
06	SSP	IPU	9 1 0.95						30.6	12	38	5.49	5.54	-0.06	
06	BRO	IPU4	9 1 0.20				17	1.7	32.3	292	38	4.74	5.83	-1.09	
06	AMR	EPD4	9 0 59.90				13	1.5	33.1	210	38	4.44	5.95	-1.51	
06	CPX	IPU	9 1 2.05						36.7	34	38	6.59	6.53	0.05	
06	BGB	IPD	9 1 2.94				21	1.9	42.8	7	38	7.48	7.53	-0.00	
06	SPRG	IPD	9 1 3.00						43.1	84	38	7.54	7.58	-0.04	
06	GWV	EP 4	9 1 6.95				18	1.6	62.3	213	38	11.49	10.70	0.69	
06	GLR	EPD	9 1 6.90						65.0	22	38	11.44	11.15	0.44	
06	NMN	EP	9 1 6.81						66.7	315	38	11.35	11.42	-0.08	
06	TPK	IPU	9 1 9.29						82.1	326	38	13.83	13.92	-0.09	
06	GMR	EPD4	9 1 11.36				20	2.0	88.3	31	38	15.90	14.93	0.97	
06	USM	EPU	9 1 11.30						92.6	214	38	15.84	15.62	0.22	
06	GVN	EP	9 1 12.09						101.6	292	38	16.63	17.09	-0.46	
06	TPU	EPU4	9 1 16.72				20	2.2	119.8	25	38	21.26	20.04	1.21	
06	PRN	EPU4	9 1 19.72						138.3	53	30	24.26	22.96	1.30	

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      STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
 1980                (UTC)      (MU) (SEC)                    (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

. 06    MTI  EPD4   9  1 20.61                                144.9   39   30   25.15  23.81  1.54
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. FEB M = 11 49 14.46 UTC  RMS =  0.06  NO =  7                                FREE DEPTH SOLUTION
.  06 LAT =  36.621 N      ERX =   0.5  ERM =   0.6   AVFM =   1.2  Q = B
.    LONG = 116.325 W      ERY =   0.4  GAP = 180     AVXM =         QS = A    LATHROP WELLS
.   DEPTH =   1.34 KM      ERZ =   0.5  NM =                         QD = C
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. 06    SOM  IPD    11 49 15.70                          9  1.0    2.9  337  115    0.84   0.84  -0.01
. 06    LSM  IPU    11 49 17.48                                    13.9   20   38    2.62   2.69  -0.07
. 06    AMR  EPD    11 49 19.86                                    28.2  208   38    5.00   5.01  -0.01
. 06    LOP  EPU    11 49 20.10                         18  1.5   29.4   29   38    5.24   5.21   0.02
. 06    BRU  IPU    11 49 20.13                          8  1.0   31.1  300   38    5.27   5.48  -0.21
. 06    FMT  IPD    11 49 21.85                         10  1.3   40.6  273   38    6.99   7.03   0.05
. 06    BGB  IPD    11 49 22.93                                    47.0   11   38    8.07   8.07   0.04
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. FEB M =  2 42 24.53 UTC  RMS =  0.04  NO =  5                                FREE DEPTH SOLUTION
.  17 LAT =  37.163 N      ERX =   1.4  ERM =   1.7   AVFM =   1.1  Q = C
.    LONG = 116.103 W      ERY =   0.8  GAP = 213     AVXM =         QS = B    SILENT CANYON - YUCCA FLAT
.   DEPTH =  11.13 KM      ERZ =   2.3  NM =                         QD = D
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. 17    GLR  IPD     2 42 26.87                          7  0.9    8.6   62  140    2.34   2.49   0.00
. 17    BGB  IPD4    2 42 28.54                         14  1.5   17.8  218  119    4.01   3.65   0.41
. 17    SSP  EPD4    2 42 29.47                                    28.3  201  109    4.94   5.22  -0.28
. 17    LOP  EP      2 42 30.80                          9  1.2   34.8  189  106    6.27   6.22   0.05
.            ISD     2 42 35.34                                                     10.81  10.88  -0.07
. 17    GMR  IPD4    2 42 31.41                                    35.1   57  106    6.88   6.26   0.61
. 17    CDHS IPD     2 42 31.30                          8  1.1   38.6  210  104    6.77   6.82  -0.06
.            ISD     2 42 36.55                                                     12.02  11.94   0.07

. 17    LSM  EP 4    2 42 33.52                                    49.4  198  101    8.99   8.53   0.45   NOISE
.            ISU4    2 42 40.15                                                     15.62  14.93   0.68
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. FEB M = 23 42 50.66 UTC  RMS =  0.21  NO =  5                                FREE DEPTH SOLUTION
.  19 LAT =  37.390 N      ERX =   3.2  ERM =   3.9   AVFM =   1.3  Q = D
.    LONG = 117.510 W      ERY =   2.3  GAP = 157     AVXM =         QS = C    MAGRUDER MOUNTAIN
.   DEPTH =  23.93 KM      ERZ =   1.7  NM =                         QD = D
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. 19    MGM  EP     23 42 54.71                         11  1.2    5.8   12  166    4.05   4.18  -0.12
.            ISD    23 42 58.20                                                      7.54   7.31   0.23
. 19    LCM  EPU    23 42 55.66                         11  1.3   21.1  215  138    5.0[illegible]   5.39  -0.38
.            ESD    23 43  0.32                                                      9.[illegible]   9.43   0.24
. 19    GMN  IPD4   23 42 51.45                         11  1.3   24.3  114  133    0.[illegible]   5.76  -4.96
. 19    MZP  IPU4   23 43  4.55                                    36.3   18   53   13.6   7.29   6.79
. 19    GVN  EP 4   23 42 55.23                         12  1.4   45.6  161   53    4.57   8.50  -3.93
.            ISD4   23 42 58.15                                                      7.49  14.87  -7.38
. 19    SGV  EPU    23 43  1.30                                    62.1  137   53   10.64  10.64   0.00
. 19    NMN  IPU4   23 43  3.71                                    70.4  119   53   13.05  11.71   1.34
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. FEB M =  1 41 32.91 UTC  RMS =  0.07  NO =  8                                FREE DEPTH SOLUTION
.  20 LAT =  37.744 N      ERX =   0.4  ERM =   0.5   AVFM =   1.3  Q = B
.    LONG = 115.103 W      ERY =   0.3  GAP = 128     AVXM =         QS = A    MIKO
.   DEPTH =  20.98 KM      ERZ =   0.8  NM =                         QD = B
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. 20    SRG  IPD     1 41 37.35                         20  1.8   15.7   11  142    4.44   4.45  -0.01
.            ES      1 41 40.68                                                      7.77   7.79  -0.02
. 20    MTI  IPU     1 41 37.42                          9  1.1   16.7  244  140    4.51   4.56   0.15
.            ES      1 41 40.50                                                      7.59   7.63  -0.04
. 20    NPN  IPU4    1 41 36.75                          9  1.1   17.8  125  139    3.84   4.67  -0.83
.            ES 4    1 41 40.10                                                      7.19   8.17  -0.98
. 20    DLM  EPD     1 41 39.81                          9  1.2   35.5  115  119    6.90   6.95  -0.05
.            ISU     1 41 45.16                                                     12.25  12.16   0.09
. 20    PRN  EPU     1 41 40.10                         11  1.3   37.7  173  118    7.19   7.25  -0.06
.            ESD     1 41 45.55                                                     12.64  12.69  -0.05
. 20    WRN  EP 4    1 41 36.65                                    50.2  302  111    3.74   9.11  -5.37
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. FEB M =  2 52 52.34 UTC  RMS =  0.08  NO =  7                                FREE DEPTH SOLUTION
.  20 LAT =  37.277 N      ERX =   0.5  ERM =   0.8   AVFM =   1.1  Q = B
.    LONG = 117.275 W      ERY =   0.6  GAP =  90     AVXM =         QS = A    MT. JACKSON
.   DEPTH =   8.77 KM      ERZ =   1.3  NM =                         QD = B
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. 20    GMN  IPD     2 52 53.99                         10  1.1    3.0   28  160    1.65   1.68  -0.03
. 20    MGM  IPU     2 52 57.31                          7  0.9   26.8  313  105    4.97   4.86   0.11
.            ISD     2 53  0.73                                                      8.39   8.51  -0.12
. 20    GVN  EPD     2 52 57.87                         10  1.2   31.1  191  103    5.53   5.54  -0.01
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DAY	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	LCH	EP	2 52 58.29				9	1.2	33.3	262	102	5.95	5.89	0.06	
20	NMN	EP	2 53 0.15						46.0	118	99	7.81	7.93	-0.11	
		ISO	2 53 6.30									13.96	13.87	0.09	
20	MZP	EPU4	2 53 7.09						48.0	349	99	14.75	8.25	6.70	
20	GLR	EPD4	2 53 11.45						112.0	94	94	19.51	18.60	1.07	

FEB H = 4 44 18.52 UTC RMS = 0.08 NO = 6 FREE DEPTH SOLUTION
21 LAT = 36.924 N ERX = 0.8 ERH = 1.1 AVFM = 2.0 Q = D
LONG = 117.751 W ERY = 0.7 GAP = 220 AVXM = QS = C DRY MOUNTAIN
DEPTH = 17.68 KM ERZ = 5.5 NM = QD = D

21	TMO	EPD	4 44 24.81				23	2.0	33.2	113	116	6.29	6.37	-0.08
21	LCH	EP 4	4 44 23.99				19	1.8	35.7	15	115	5.47	6.73	-1.26
21	GVN	EPU4	4 44 25.15				22	1.9	37.3	77	114	6.63	6.97	-0.34
21	MCA	EPD	4 44 27.75				21	2.0	51.9	126	108	9.23	9.19	0.04
21	PPK	EP	4 44 28.68				14	1.6	57.5	346	106	10.16	10.06	0.10
21	MGM	EPU	4 44 29.16						61.7	21	105	10.64	10.72	-0.08
21	SGV	EPU	4 44 29.60				19	1.9	64.3	84	104	11.08	11.12	-0.04
		ES	4 44 38.05									19.53	19.47	0.06
21	NMN	EPU4	4 44 33.27				16	1.8	84.8	78	53	14.75	14.20	0.55
21	BRU	EPD4	4 44 36.23				15	1.6	102.0	100	53	17.71	16.44	1.27
21	QSM	EPD4	4 44 41.95				22	2.3	132.5	143	53	23.43	20.40	3.03
21	BGB	EPD4	4 44 40.95				24	2.4	136.2	85	53	22.43	20.87	1.61
21	SPRG	EPD4	4 44 48.56						175.1	98	53	30.04	25.93	4.11

FEB H = 4 52 0.85 UTC RMS = 0.03 NO = 5 FREE DEPTH SOLUTION
21 LAT = 36.924 N ERX = 4.6 ERH = 4.7 AVFM = 1.6 Q = D
LONG = 117.717 W ERY = 1.0 GAP = 307 AVXM = QS = C DRY MOUNTAIN
DEPTH = 1.58 KM ERZ = 3.7 NM = QD = D

21	TMO	EPU	4 52 6.16				18	1.7	30.5	115	38	5.31	5.34	-0.03
21	GVN	EPU	4 52 6.82				15	1.6	34.5	75	38	5.97	5.98	-0.01
21	LCH	EPD4	4 52 5.54				15	1.6	35.1	10	38	4.69	6.08	-1.39
21	MCA	EPD	4 52 9.30				18	1.6	49.5	128	38	8.45	8.43	0.02
21	PPK	EP 4	4 52 9.56				10	1.3	58.3	343	38	8.71	9.85	-1.14
21	SGV	EPU	4 52 11.24				13	1.6	61.3	84	38	10.39	10.35	0.04
		ES	4 52 18.95									18.10	18.11	-0.01
21	NMN	EP 4	4 52 25.22						81.9	78	38	24.37	13.70	10.67
21	BRO	EPD4	4 52 17.75				14	1.8	99.1	100	38	16.90	16.49	0.41
21	BGB	EPD4	4 52 23.33						133.2	85	38	22.45	22.04	0.46

FEB H = 3 37 52.71 UTC RMS = 0.10 NO = 6 FREE DEPTH SOLUTION
22 LAT = 37.378 N ERX = 0.5 ERH = 1.0 AVFM = 1.9 Q = C
LONG = 115.652 W ERY = 0.9 GAP = 152 AVXM = QS = B GROOM LAKE
DEPTH = 10.45 KM ERZ = 2.0 NM = QD = C

22	GMR	IPU4	3 37 54.70				30	2.1	11.6	245	129	1.99	2.75	-0.76
22	GLR	IPD	3 37 59.37				10	1.3	38.0	238	103	6.66	6.70	0.12
22	BLT	EPD	3 38 0.23						43.7	282	102	7.52	7.60	-0.08
22	MTI	IPU4	3 38 0.19				22	2.0	47.2	45	101	7.48	8.16	-0.48
		ISO	3 38 6.70									13.99	13.92	0.07
22	EPR	EPU4	3 38 0.51				19	1.9	47.4	119	101	7.80	8.19	-0.39
22	PRN	IPU	3 38 1.70				21	2.0	53.5	87	100	8.99	9.16	-0.17
		ISU	3 38 8.70									15.99	16.03	-0.04
22	CPX	EPU4	3 38 2.97						61.5	216	98	10.26	10.46	-0.20
22	EPN	IPU4	3 38 3.68						62.2	253	98	10.97	10.57	0.40
22	BGB	EP 4	3 38 2.70				20	2.0	63.5	234	98	9.99	10.78	-0.74
		ESD4	3 38 11.62									18.91	18.78	0.13
22	NPN	EPU4	3 38 6.15				25	2.2	70.2	64	97	13.44	11.86	1.58
22	LCP	EP 4	3 38 5.64				16	1.8	74.0	218	97	12.93	12.47	0.46
22	NMN	EPD	3 38 10.89				18	2.0	108.6	252	53	18.18	18.01	0.18

FEB H = 5 56 24.61 UTC RMS = 0.03 NO = 6 FREE DEPTH SOLUTION
24 LAT = 36.472 N ERX = 0.5 ERH = 0.6 AVFM = 0.7 Q = B
LONG = 116.454 W ERY = 0.3 GAP = 177 AVXM = QS = A ASH MEADOWS
DEPTH = 8.98 KM ERZ = 0.5 NM = QD = C

24	AMR	EPD	5 56 26.80				7	0.8	8.4	192	134	2.19	2.21	-0.02
		ISU	5 56 29.46									3.85	3.86	-0.01
24	SDH	EP 4	5 56 28.44				5	0.6	21.9	28	109	3.83	4.12	-0.29
		ISU	5 56 31.85									7.24	7.20	0.04
24	LSM	EPD	5 56 30.52						33.9	29	103	5.91	5.99	-0.08
		ESD4	5 56 35.81									11.20	10.48	0.72
24	GWV	EP 4	5 56 36.05						37.1	212	101	11.44	6.51	4.83	VERY E
		ES	5 56 36.20									11.59	11.56	0.02

1980	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	MCX	EP	5 56 32.59						46.2	64	99	7.98	7.96	0.01	VERY E
. 24	LOP	EP 4	5 56 32.90						49.6	31	99	8.29	8.50	-0.21	VERY E

. FEB H = 16 23 56.93 UTC RMS = 0.13 NO = 5 FREE DEPTH SOLUTION
. 24 LAT = 37.023 N ERX = 1.6 ERH = 1.8 AVFM = 0.9 Q = C
. LONG = 117.502 W ERY = 0.9 GAP = 170 AVXM = QS = B MAGRUDER MOUNTAIN
. DEPTH = 16.37 KM ERZ = 4.3 NM = QD = D

. 24	GVN	EPU	16 24 0.75				6	0.7	14.4	100	137	3.82	3.75	0.07
.		ISU	16 24 3.56									6.63	6.56	0.06
. 24	TMO	EPU4	16 24 2.86				8	1.0	25.6	161	121	5.93	5.18	0.75
.		ESU	16 24 5.88									8.95	9.06	-0.11
. 24	LCM	EP 4	16 24 1.89				7	0.9	26.8	331	120	4.96	5.34	-0.39
.		ES	16 24 6.30									9.37	9.35	0.02
. 24	MCA	EPU4	16 24 6.40				7	1.0	46.1	155	108	9.47	8.23	1.24
.		ESU	16 24 11.90									14.97	14.39	0.57

. FEB H = 20 36 57.56 UTC RMS = 0.02 NO = 5 FREE DEPTH SOLUTION
. 24 LAT = 37.249 N ERX = 0.7 ERH = 0.8 AVFM = 0.8 Q = C
. LONG = 117.598 W ERY = 0.2 GAP = 133 AVXM = QS = A MAGRUDER MOUNTAIN
. DEPTH = 7.41 KM ERZ = 1.4 NM = QD = D

. 24	LCM	EPU	20 36 59.18				9	1.1	4.6	250	145	1.62	1.61	0.01
. 24	MGM	EPU	20 37 1.79				3	0.2	23.2	23	105	4.23	4.24	-0.01
.		ESU4	20 37 4.71									7.15	7.41	-0.26
. 24	GMN	EPU	20 37 2.98						30.5	79	101	5.42	5.41	0.01
. 24	GVN	EP	20 37 3.76				8	1.1	35.7	140	99	6.20	6.23	-0.03
.		ESU4	20 37 8.39									10.83	10.90	-0.07
. 24	SGV	EPD	20 37 7.50						58.4	121	96	9.94	9.90	0.04

. FEB H = 4 5 27.29 UTC RMS = 0.04 NO = 5 FREE DEPTH SOLUTION
. 26 LAT = 37.185 N ERX = 0.3 ERH = 0.6 AVFM = 0.7 Q = C
. LONG = 117.173 W ERY = 0.4 GAP = 141 AVXM = QS = B MT. JACKSON
. DEPTH = 10.72 KM ERZ = 2.2 NM = QD = D

. 26	GMN	EPU	4 5 30.49				4	0.4	14.9	329	123	3.20	3.22	-0.01
. 26	GVN	EPU	4 5 32.05				6	0.8	25.3	216	110	4.76	4.74	0.03
. 26	SGV	EPU4	4 5 32.38						25.9	151	110	5.0[illegible]	4.82	0.28
. 26	NMN	EPU	4 5 33.29				7	0.9	33.6	110	106	6.0	6.02	-0.01
. 26	MGM	IPU	4 5 34.45						40.4	315	103	7.1[illegible]	7.08	0.[illegible]
. 26	LCM	EP	4 5 34.66						42.5	277	102	7.37	7.42	-0.04	VERY E
. 26	MCA	EPU4	4 5 44.70						60.3	189	99	17.41	10.28	7.14
. 26	BRO	EPD4	4 5 39.18						67.6	134	98	11.89	11.45	0.44

. FEB H = 12 27 18.82 UTC RMS = 0.05 NO = 7 FREE DEPTH SOLUTION
. 28 LAT = 36.776 N ERX = 0.5 ERH = 0.7 AVFM = 1.7 Q = C
. LONG = 117.468 W ERY = 0.4 GAP = 212 AVXM = QS = A TIN MOUNTAIN
. DEPTH = 8.33 KM ERZ = 0.9 NM = QD = D

. 28	TMO	IPU	12 27 20.70						6.3	58	140	1.88	1.89	-0.01
. 28	MCA	IPU	12 27 22.93						21.9	130	108	4.11	4.08	0.03
. 28	GVN	IPD	12 27 23.80				17	1.7	27.4	24	104	4.98	4.94	0.04
. 28	SGV	EPU	12 27 26.45						45.0	60	99	7.63	7.75	-0.12
. 28	LCM	EP	12 27 27.90				13	1.5	53.4	343	97	9.08	9.10	-0.02
. 28	NMN	EPU	12 27 30.19				18	1.9	67.1	60	96	11.37	11.31	0.06
. 28	BRO	EPD	12 27 31.42						75.2	91	95	12.60	12.63	-0.03
. 28	BGB	EPD	12 27 38.40						114.3	75	53	19.58	18.95	0.68

. FEB H = 19 3 48.17 UTC RMS = 0.04 NO = 7 FREE DEPTH SOLUTION
. 28 LAT = 37.181 N ERX = 0.3 ERH = 0.3 AVFM = 2.2 Q = B
. LONG = 117.191 W ERY = 0.2 GAP = 125 AVXM = QS = A MT. JACKSON
. DEPTH = 7.17 KM ERZ = 1.7 NM = QD = C

. 28	GMN	IPU	19 3 51.05				51	2.6	14.6	335	112	2.88	2.89	-0.01
. 28	GVN	EPD	19 3 52.54				42	2.5	24.1	214	103	4.37	4.37	0.00
. 28	SGV	IPU	19 3 52.90				41	2.4	26.3	148	102	4.73	4.72	0.01
. 28	NMN	IPU	19 3 54.26				36	2.4	34.9	109	99	6.09	6.10	-0.01
. 28	MGM	IPU	19 3 54.95				32	2.3	39.6	317	98	6.78	6.85	-0.07
. 28	LCM	EPU4	19 3 55.10						41.0	278	98	6.93	7.08	-0.14
. 28	BMT	IPU4	19 3 56.79				39	2.5	59.4	79	95	8.62	10.06	-1.83
. 28	MZP	EPU	19 3 58.25				11	1.4	60.1	344	95	10.08	10.17	0.10
. 28	BRO	IPU4	19 3 59.50				22	2.1	68.5	133	95	11.33	11.52	-0.19

LOCAL-EVENT DATA REPORT

1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 28	PPK	EP 4	19 3 59.87				12	1.5	69.1	293	95	11.70	11.63	0.08	
. 28	FMT	IPU4	19 3 59.70				23	2.1	70.4	149	95	11.53	11.84	-0.21	
. 28	SVP	EPD4	19 4 1.70						80.2	318	94	13.53	13.42	-0.04	
. 28	BGD	IPD4	19 4 2.95						87.1	101	94	14.78	14.54	0.29	NOISE
. 28	PGE	EPD	19 4 3.70				17	1.9	93.0	173	93	15.53	15.51	0.02	
. 28	GMR	EPD4	19 4 9.55				27	2.4	127.0	82	53	21.38	20.71	0.67	

. MAR H = 7 36 12.56 UTC RMS = 0.04 NO = 5 FREE DEPTH SOLUTION
. 01 LAT = 37.256 N ERX = 0.5 ERH = 0.7 AVFM = 1.6 Q = D
. LONG = 115.622 W ERY = 0.5 GAP = 134 AVXM = QS = C GROOM LAKE
. DEPTH = 8.70 KM ERZ = 10.5 NM = QD = D

. 01	GMR	IPU4	7 36 15.24						15.8	303	115	2.68	3.18	-0.50	
. 01	GLK	EPD	7 36 18.70						35.7	260	101	6.14	6.27	0.02	
. 01	EPR	EPU4	7 36 19.12						39.8	104	100	6.56	6.93	-0.37	
. 01	CPX	EP 4	7 36 21.88						53.1	227	98	9.32	9.07	0.25	
. 01	PRN	EPD	7 36 21.65				16	1.7	53.4	72	98	9.09	9.12	-0.03	
. 01	MFI	EP	7 36 21.92				10	1.3	56.0	33	97	9.36	9.53	0.03	
. 01	BGB	EP	7 36 22.45				14	1.6	59.0	246	97	9.89	10.02	-0.08	
. 01	SPRG	EP	7 36 23.50						64.5	195	96	10.94	10.91	0.03	
. 01	LOP	EPU4	7 36 25.17						65.9	227	96	12.61	11.12	1.48	
. 01	BMT	EP 4	7 36 29.00						80.9	272	95	16.44	13.56	2.48	

. MAR H = 3 18 50.52 UTC RMS = 0.00 NO = 5 FREE DEPTH SOLUTION
. 03 LAT = 37.520 N ERX = 0.1 ERH = 0.1 AVFM = 0.9 Q = C
. LONG = 117.738 W ERY = 0.0 GAP = 180 AVXM = QS = A SILVER PEAK
. DEPTH = 8.66 KM ERZ = 0.4 NM = QD = D

. 03	PPK	EPD	3 18 54.05				6	0.7	18.2	235	112	3.53	3.53	-0.01	
.		ISD	3 18 56.71									6.19	6.18	0.00	
. 03	SVP	IPU	3 18 54.85				12	1.4	22.4	346	108	4.33	4.17	0.01	
.		ES	3 18 58.68									7.56	7.56	-0.00	
. 03	MGM	IPU4	3 18 54.38				4	0.4	23.1	112	108	3.86	4.28	-0.43	
. 03	LCH	EP	3 18 56.31				7	0.9	32.7	166	103	5.79	5.79	-0.00	
.		ESD4	3 18 0.10									-50.42	10.13	-60.55	
. 03	NMN	EP 4	3 19 7.37						95.0	121	94	16.55	15.85	0.70	

. MAR H = 16 59 55.12 UTC RMS = 0.09 NO = 12 FREE DEPTH SOLUTION
. 03 LAT = 37.500 N ERX = 0.3 ERH = 0.7 AVFM = 1.9 Q = C
. LONG = 116.539 W ERY = 0.7 GAP = 85 AVXM = QS = C STINKING SPRING
. DEPTH = 7.36 KM ERZ = 6.2 NM = QD = C

. 03	CTS	IPD	16 59 59.24				13	1.4	22.6	313	105	4.12	4.15	-0.04	NOISE
. 03	KRN	IPU	16 60 0.39						29.1	38	102	5.27	5.18	0.09	NOISE
. 03	BLT	EPU	16 60 1.21				17	1.7	36.0	97	99	6.09	6.28	-0.19	NOISE
. 03	NMN	EP	16 60 4.09				25	2.1	52.7	208	96	8.97	8.98	-0.01	
. 03	BGB	EPD	16 60 5.04				17	1.8	58.3	152	96	9.92	9.87	0.09	
. 03	GMN	EP	16 60 6.40				10	1.4	67.6	251	95	11.28	11.38	-0.11	
. 03	GMR	EPU	16 60 6.84				20	2.0	70.4	105	95	11.72	11.84	-0.13	
. 03	SGV	EP	16 60 7.30				22	2.1	72.4	217	95	12.18	12.16	0.01	
. 03	MGM	EP 4	16 60 9.05				16	1.8	84.9	266	94	13.93	14.20	-0.27	
. 03	GVN	EP	16 60 10.14				23	2.2	90.2	232	94	15.02	15.06	-0.04	
. 03	FMT	EPD	16 60 11.42				21	2.1	97.9	193	93	16.30	16.30	0.10	
. 03	LCH	EP	16 60 12.35				14	1.8	102.5	253	93	17.23	17.05	0.18	
. 03	TMO	EPU4	16 60 13.55				20	2.1	109.1	225	93	18.43	18.12	0.30	
. 03	SVP	EP 4	16 60 14.75				18	2.0	114.0	282	93	19.63	18.91	0.56	
. 03	MCA	EP	16 60 14.30				20	2.1	115.3	215	93	19.18	19.13	0.05	
. 03	PPK	EP 4	16 60 16.19						121.3	266	53	21.07	19.95	1.12	

. MAR H = 7 45 28.85 UTC RMS = 0.05 NO = 10 FREE DEPTH SOLUTION
. 06 LAT = 35.720 N ERX = 1.0 ERH = 2.8 AVFM = Q = D
. LONG = 117.146 W ERY = 2.6 GAP = 281 AVXM = QS = C SEARLES LAKE
. DEPTH = 1.93 KM ERZ = 1.0 NM = QD = D

. 06	GSM	IPD	7 45 35.22						37.1	43	90	6.37	6.38	-0.01	
. 06	GMV	IPD	7 45 40.19						67.2	40	90	11.34	11.28	-0.04	
. 06	PGE	IPD	7 45 40.58						70.1	6	90	11.73	11.76	-0.03	
. 06	AMN	IPU4	7 45 45.10						96.5	39	90	16.25	16.05	0.20	
. 06	NCP	EPU4	7 45 44.92						100.5	63	90	16.07	16.69	-0.62	
. 06	MCA	IPD	7 45 46.05						103.7	353	90	17.20	17.21	-0.01	
. 06	FMT	EPD	7 45 46.65						107.3	18	90	17.60	17.79	0.11	
. 06	TMO	IPD4	7 45 48.85						122.7	349	90	20.00	20.30	-0.30	
. 06	SCM	IPU4	7 45 50.55						125.8	35	90	21.70	20.81	0.89	
. 06	SGV	EPU4	7 45 51.69						140.3	4	53	22.84	22.95	-0.11	

1986	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
06	LOP	IPU	7 45 53.55						153.5	35	53	24.70	24.67	0.03	
06	NMN	EPU	7 45 53.50						153.8	11	53	24.65	24.71	-0.06	
06	SPRG	EPU4	7 45 54.09						161.7	48	53	25.24	25.73	-0.49	
06	CPX	EPU	7 45 55.09						165.9	36	53	26.24	26.28	-0.04	
06	LCH	EP	7 45 56.22						173.9	345	53	27.37	27.32	0.05	
06	SHRG	EP	7 45 59.50						199.3	64	53	30.65	30.62	0.08	
06	MZP	EP 4	7 46 3.90						220.8	355	53	35.05	33.41	1.83	

MAR H = 16 50 7.41 UTC RMS = 0.01 NO = 6 FREE DEPTH SOLUTION
07 LAT = 37.326 N ERX = 0.2 ERH = 0.2 AVFM = 0.6 Q = B
LONG = 117.315 W ERY = 0.1 GAP = 171 AVXM = QS = A MT. JACKSON
DEPTH = 9.49 KM ERZ = 0.4 NM = QD = C

07	GMN	EPU	16 50 9.40			6	0.7	5.7	120	147	1.99	1.99	0.00	
07	MGM	EPD	16 50 11.34			4	0.4	20.5	309	112	3.93	3.94	-0.01	
07	LCH	EP	16 50 12.49					31.1	251	105	5.58	5.58	0.00	
07	GVN	EP	16 50 13.79			6	0.8	36.1	184	103	6.38	6.36	0.02	
07	GVN	EP	16 50 13.75					36.1	184	103	6.34	6.36	-0.02	
		ISU	16 50 18.53								11.12	11.13	-0.01	

MAR H = 18 12 11.50 UTC RMS = 0.03 NO = 6 FREE DEPTH SOLUTION
07 LAT = 37.789 N ERX = 0.5 ERH = 0.6 AVFM = 2.0 Q = B
LONG = 115.658 W ERY = 0.4 GAP = 162 AVXM = QS = A WORTHINGTON PEAK
DEPTH = 12.09 KM ERZ = 0.8 NM = QD = C

07	QCS	IPU	18 12 13.86			18	1.7	5.6	246	154	2.36	2.35	0.01	
07	TPU	IPU4	18 12 15.55			28	2.1	27.5	138	112	4.05	5.14	-1.09	
07	WRN	EPD	18 12 17.32			18	1.8	31.9	48	109	5.82	5.83	-0.00	
07	BLT	EPU	18 12 19.10			20	1.9	43.8	214	104	7.60	7.68	-0.08	
07	GMR	IPU4	18 12 20.00			18	1.8	51.1	171	102	8.50	8.83	-0.33	
07	GLR	EP	18 12 22.80					66.9	192	99	11.30	11.37	0.08	VERY E
07	NPN	EPD4	18 12 25.90			20	2.0	82.6	101	97	14.40	13.89	0.51	
07	PRN	EPD	18 12 25.45			22	2.1	83.0	121	97	13.95	13.96	-0.00	
07	EPR	EPD4	18 12 27.88					90.9	139	97	16.38	15.23	1.15	
07	CPX	EPD	18 12 27.70			17	1.9	97.1	191	96	16.20	16.23	-0.03	
07	DLM	EPD4	18 12 29.28			17	1.9	100.8	102	53	17.78	16.82	0.96	
07	SPRG	EPU4	18 12 32.50			27	2.4	121.6	178	53	21.00	19.53	1.48	VERY E
07	GVN	EPD4	18 12 39.28			24	2.4	157.8	236	53	27.78	24.23	3.55	

MAR H = 18 4 15.47 UTC RMS = 0.05 NO = 5 FREE DEPTH SOLUTION
08 LAT = 37.510 N ERX = 0.6 ERH = 1.5 AVFM = 1.0 Q = D
LONG = 115.348 W ERY = 1.4 GAP = 129 AVXM = QS = C HIKO
DEPTH = 12.69 KM ERZ = 5.1 NM = QD = D

08	MTI	IPD	18 4 19.35			10	1.2	19.7	20	121	3.88	4.04	0.04	
		ISU	18 4 22.20								6.73	6.72	0.01	
08	TPU	EPD	18 4 20.75			7	0.9	28.6	292	112	5.28	5.35	-0.07	
08	PRN	EPD	18 4 20.80			10	1.2	28.7	113	112	5.33	5.37	-0.03	
08	GMR	EP	18 4 23.00			5	0.7	42.3	242	105	7.53	7.46	0.07	VERY E

MAR H = 10 28 47.73 UTC RMS = 0.08 NO = 6 FREE DEPTH SOLUTION
12 LAT = 37.239 N ERX = 0.6 ERH = 0.9 AVFM = 0.4 Q = B
LONG = 117.146 W ERY = 0.6 GAP = 175 AVXM = QS = A MT. JACKSON
DEPTH = 12.33 KM ERZ = 1.3 NM = QD = C

12	GMN	IPU	10 28 50.59			4	0.4	12.2	304	133	2.86	3.03	-0.17	
		ISU	10 28 53.10								5.37	5.30	0.07	
12	SGV	EP	10 28 53.35					30.3	161	110	5.62	5.58	0.04	
		ESD	10 28 57.43								9.70	9.77	-0.07	
12	GVN	EP 4	10 28 54.39					31.6	214	109	6.66	5.78	0.88	
12	NMN	IPU4	10 28 52.73					33.9	121	108	5.00	6.14	-1.14	
		ISD	10 28 58.52								10.79	10.75	0.04	
12	MGM	IPU	10 28 54.62					38.4	306	106	6.89	6.84	0.05	

MAR H = 1 34 20.90 UTC RMS = 0.10 NO = 7 FREE DEPTH SOLUTION
14 LAT = 36.541 N ERX = 1.6 ERH = 1.7 AVFM = 1.6 Q = C
LONG = 116.443 W ERY = 0.5 GAP = 155 AVXM = QS = B LATHROP WELLS
DEPTH = 11.74 KM ERZ = 4.8 NM = QD = C

14	SDH	IPU4	1 34 23.45			13	1.4	14.9	39	126	2.55	3.31	-0.76	
14	AMR	EPD	1 34 24.39					16.1	190	124	3.49	3.47	0.01	
14	BRO	EPU4	1 34 27.20					29.5	326	110	6.30	5.44	0.86	
		ESU	1 34 30.30								9.40	9.52	-0.12	

1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	A/I (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
14	JCN	IPU4	1 34 25.86				10	1.2	32.4	110	108	4.96	5.88	-0.92	
14	CDH1	IPU	1 34 27.60				29	2.2	37.2	17	106	6.70	6.62	0.07	
		ISU	1 34 33.71									12.81	11.59	1.22	
14	CDH5	IPU	1 34 27.62				14	1.6	37.2	17	106	6.72	6.62	0.09	
		ESD	1 34 32.58									11.68	11.59	0.09	
14	LOP	EPD	1 34 28.29				13	1.5	42.6	35	104	7.39	7.47	-0.09	
14	BGB	EPD	1 34 31.15						58.4	19	100	10.25	9.99	0.31	

MAR H = 11 12 39.75 UTC RMS = 0.06 NO = 8 FREE DEPTH SOLUTION
14 LAT = 37.190 N ERX = 0.3 ERH = 0.5 AVFM = 1.9 Q = B
LONG = 116.674 W ERY = 0.3 GAP = 108 AVXM = QS = B THIRSTY CANYON
DEPTH = 17.22 KM ERZ = 2.5 NM = QD = B

14	EPN	IPD	11 12 46.30						31.2	85	117	6.55	6.04	0.51	
14	BGB	EPU	11 12 47.55						43.1	113	110	7.80	7.81	0.04	
14	BRO	EP 4	11 12 52.28						47.6	175	108	12.53	8.50	4.03	
		ESU	11 12 54.60									14.85	14.88	-0.03	
14	CDH5	EPU4	11 12 47.90				18	1.8	48.4	139	108	8.15	8.63	-0.48	
		ISU4	11 12 53.97									14.22	15.10	-0.88	
14	CDH1	IPU4	11 12 47.45				21	1.9	48.4	139	108	8.20	8.63	-0.43	
14	SSP	IPD	11 12 48.70						50.0	126	108	8.95	8.88	0.08	
14	CTS	EPD	11 12 48.60						50.2	355	108	8.85	8.90	-0.05	
14	GWN	EPD	11 12 49.20						53.4	283	107	9.45	9.41	0.04	
14	BLT	EPD4	11 12 57.95						56.5	58	106	18.20	9.98	8.32	
14	LOP	EPD	11 12 50.00						58.5	130	105	10.25	10.20	0.06	
14	LSM	IPD	11 12 50.35						61.5	144	104	10.60	10.67	-0.07	
14	FMT	EPD4	11 12 56.02						61.8	189	104	16.27	10.72	5.66	
14	CPX	IPD4	11 12 41.55						61.9	118	104	1.80	10.74	-8.93	

MAR H = 20 52 51.80 UTC RMS = 0.05 NO = 6 FREE DEPTH SOLUTION
14 LAT = 36.603 N ERX = 1.2 ERH = 1.3 AVFM = 1.2 Q = C
LONG = 116.296 W ERY = 0.5 GAP = 185 AVXM = QS = B LATHROP WELLS
DEPTH = 10.89 KM ERZ = 1.5 NM = QD = D

14	SDH	IPU	20 52 54.06						6.1	321	149	2.26	2.21	0.05	
14	LSM	EPU	20 52 54.95						15.3	8	123	3.15	3.28	-0.13	
14	JCN	EPU	20 52 56.50				6	0.8	25.0	136	111	4.70	4.70	0.00	
14	CDH1	IPU	20 52 57.06				16	1.6	28.6	356	109	5.26	5.25	0.01	
14	CDH5	EP	20 52 57.10				12	1.4	28.6	356	109	5.30	5.25	0.05	
14	LOP	EP	20 52 57.29				7	0.9	30.2	22	108	5.49	5.49	0.00	

MAR H = 3 39 48.97 UTC RMS = 0.12 NO = 6 FREE DEPTH SOLUTION
15 LAT = 37.516 N ERX = 0.5 ERH = 0.8 AVFM = Q = B
LONG = 117.748 W ERY = 0.6 GAP = 122 AVXM = QS = B SILVER PEAK
DEPTH = 13.33 KM ERZ = 2.1 NM = QD = B

15	PPK	IPD	3 39 52.65						17.2	235	126	3.68	3.77	-0.09	
		ESD	3 39 55.58									6.61	6.59	0.02	
15	SVP	EP	3 39 53.47						22.6	348	118	4.50	4.50	-0.15	
		ESU	3 39 57.20									8.23	8.14	0.09	
15	MGM	EPU4	3 39 52.89						23.7	111	117	3.92	4.67	-0.75	
		ES	3 39 57.05									8.08	8.18	-0.09	
15	LCH	EP	3 39 55.12						32.5	164	110	6.15	5.97	0.18	
15	NMN	EPD4	3 40 5.50						95.6	120	97	16.53	16.01	0.53	

MAR H = 4 46 24.85 UTC RMS = 0.10 NO = 15 FREE DEPTH SOLUTION
15 LAT = 36.807 N ERX = 0.3 ERH = 0.4 AVFM = 3.2 Q = C
LONG = 116.012 W ERY = 0.3 GAP = 83 AVXM = QS = C LATHROP WELLS
DEPTH = 0.57 KM ERZ = 120.3 NM = QD = C

15	CPX	IPU4	4 46 27.52				114	3.3	14.2	343	38	2.67	2.89	-0.22	
15	LCP	IPU	4 46 27.80				114	3.3	14.8	291	38	2.95	3.00	-0.05	
15	SPRG	IPU4	4 46 28.61				101	3.2	22.0	125	38	3.76	4.16	-0.40	
15	SSP	IPD	4 46 29.09						22.6	305	38	4.24	4.26	-0.02	
15	LSM	IPD	4 46 29.30				91	3.1	24.4	252	38	4.45	4.55	-0.10	
15	CDH5	IPU4	4 46 29.80				121	3.4	27.9	232	38	4.95	5.12	-0.17	
15	CDH1	IPU	4 46 29.89				169	3.7	27.9	232	38	5.04	5.12	-0.08	
15	BGB	IPU4	4 46 30.34				119	3.4	32.0	323	38	5.49	5.80	-0.26	
15	SDH	IPD4	4 46 30.60				109	3.3	34.2	238	38	5.75	6.15	-0.40	
15	JCN	IPD	4 46 32.25				88	3.2	41.5	191	38	7.40	7.34	0.06	
15	GLR	IPU4	4 46 31.97				69	3.0	43.6	359	38	7.12	7.67	-0.40	
15	EPN	IPD4	4 46 33.82						53.0	329	38	8.97	9.21	-0.24	
15	BRO	EPD	4 46 34.40				48	2.7	55.0	265	38	9.55	9.52	0.03	
15	AMR	IPD	4 46 35.50				89	3.2	61.4	222	38	10.65	10.57	0.08	
15	GWR	EPU	4 46 35.50				84	3.2	62.3	20	38	10.65	10.71	-0.06	

1980	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	APK	EPU	4 46 36.16				52	2.8	66.8	144	38	11.31	11.44	-0.13	
. 15	BLT	EP 4	4 46 36.70				83	3.2	73.4	351	38	11.85	12.53	-0.68	
. 15	NOP	EPD	4 46 37.89				53	2.8	76.4	189	38	13.04	13.00	0.04	
. 15	NMN	IPU4	4 46 38.35				81	3.2	78.0	293	38	13.50	13.27	0.23	
. 15	SHNG	EPU4	4 46 38.60				51	2.8	83.6	114	38	13.75	14.18	-0.38	
. 15	EPR	EPD	4 46 39.20				126	3.6	83.7	61	38	14.35	14.20	0.15	
. 15	GWV	EPD	4 46 40.35				90	3.4	90.7	221	38	15.50	15.33	0.07	
. 15	SGV	EPD4	4 46 41.20				97	3.4	93.0	282	30	16.35	15.70	0.65	
. 15	TPU	EPD	4 46 40.60				77	3.2	94.3	20	38	15.75	15.91	-0.16	
. 15	PGE	EPU4	4 46 43.34				47	2.8	107.1	242	38	18.49	18.00	0.49	
. 15	PRN	EPU4	4 46 43.40				99	3.5	108.4	52	38	18.55	18.21	0.34	
. 15	CTS	EPD	4 46 43.96				56	3.0	112.1	326	38	19.11	18.81	0.30	
. 15	MTI	EPU	4 46 44.41				70	3.2	116.7	34	38	19.56	19.57	0.19	
. 15	GVN	EP 4	4 46 45.57				82	3.4	120.5	280	38	20.72	20.19	0.53	
. 15	GMN	EPD4	4 46 45.90				58	3.1	123.7	296	38	21.05	20.70	0.35	
. 15	TMO	EPD4	4 46 46.51				60	3.1	124.6	270	38	21.66	20.84	0.82	
. 15	NPN	EPU4	4 46 47.59				78	3.4	133.9	45	38	22.74	22.35	0.39	
. 15	SRG	EPU4	4 46 49.25				117	3.8	145.8	35	30	24.40	23.94	0.46	
. 15	MGM	EPU4	4 46 50.25				64	3.3	149.6	298	30	25.40	24.44	0.96	
. 15	LCH	EP 4	4 46 50.68				58	3.2	153.1	288	30	25.83	24.90	0.93	
. 15	PPK	EPU4	4 46 54.55				55	3.2	182.0	292	30	29.70	28.64	1.06	
. 15	SVP	EPU4	4 46 55.31				75	3.5	187.9	302	30	30.46	29.42	0.89	

. MAR H = 19 17 16.03 UTC RMS = 0.10 NO = 12 FREE DEPTH SOLUTION
. 17 LAT = 36.357 N ERX = 0.4 ERH = 0.5 AVFM = 1.6 Q = B
. LONG = 116.571 W ERY = 0.3 GAP = 111 AVXM = QS = B FURNACE CREEK
. DEPTH = 4.25 KM ERZ = 4.3 NM = QD = B

. 17	AMN	IPU	19 17 18.15				18	1.7	9.8	62	107	2.12	2.01	0.11	
. 17	GWV	IP	19 17 19.87				23	1.9	20.9	205	97	3.84	3.78	-0.04	
. 17	FMT	IPU4	19 17 21.35				16	1.7	36.5	329	94	5.32	6.30	-0.88	
. 17	SDM	EPD	19 17 22.39				11	1.3	38.2	33	94	6.36	6.58	-0.22	
. 17	JCN	EPU	19 17 23.40				16	1.7	43.0	78	94	7.37	7.35	0.02	
. 17	BRO	EPU	19 17 23.45				10	1.3	45.3	354	93	7.42	7.73	-0.31	
. 17	NOP	EPU	19 17 23.80				7	1.0	45.4	124	93	7.77	7.74	0.02	
. 17	LSM	IP	19 17 24.55						50.2	32	93	8.52	8.52	-0.00	
. 17	CDM1	EPU	19 17 25.81						60.3	22	92	9.78	10.17	-0.39	
. 17	CDM5	EP	19 17 26.00				26	2.2	60.3	22	92	9.97	10.17	-0.20	
. 17	LCP	EP 4	19 17 27.39				18	1.9	65.9	33	92	11.36	11.09	0.27	
. 17	SSP	EPU	19 17 28.00				18	1.9	70.5	27	92	11.97	11.83	0.14	
. 17	MCA	EP 4	19 17 27.49				11	1.5	71.4	297	92	11.46	11.97	-0.51	
. 17	SPRG	EPD4	19 17 29.61				15	1.8	77.8	61	92	13.58	13.02	0.56	
. 17	SGV	EP	19 17 29.69				13	1.6	80.6	329	92	13.66	13.47	0.18	
. 17	NMN	EP 4	19 17 31.35				12	1.6	83.3	345	92	15.32	13.91	1.40	
. 17	GVN	EPD	19 17 32.55				14	1.8	99.4	316	91	16.52	16.53	-0.01	

. MAR H = 12 56 49.51 UTC RMS = 0.13 NO = 8 FREE DEPTH SOLUTION
. 18 LAT = 37.775 N ERX = 1.1 ERH = 1.6 AVFM = 2.2 Q = D
. LONG = 116.998 W ERY = 1.2 GAP = 292 AVXM = QS = C STINKING SPRING
. DEPTH = 1.80 KM ERZ = 175.0 NM = QD = D

. 18	BMT	IPU4	12 57 0.09				23	2.1	68.3	143	90	10.58	11.46	-1.28	
.		ISD	12 57 10.12									20.61	20.75	-0.14	
. 18	NMN	IPU	12 57 2.59				20	2.0	78.7	168	90	13.08	13.15	-0.07	
. 18	SGV	EP	12 57 4.30				22	2.1	88.2	182	90	14.79	14.69	0.10	
. 18	GVN	EPD4	12 57 5.09				20	2.1	91.1	200	90	15.58	15.17	0.41	
. 18	BGB	EP	12 57 7.21						106.5	140	90	17.70	17.67	0.07	
. 18	CDM1	IPU	12 57 9.09				32	2.6	118.1	149	90	19.58	19.55	0.02	
.		ESD4	12 57 25.14									35.63	34.22	1.41	
. 18	CDM5	IPU	12 57 9.10				27	2.4	118.1	149	90	19.59	19.55	0.03	
.		ESI	12 57 24.60									35.09	34.22	0.87	
. 18	GMR	EPD	12 57 9.19				19	2.1	118.9	114	90	19.68	19.69	-0.01	

. MAR H = 4 24 52.94 UTC RMS = 0.03 NO = 5 FREE DEPTH SOLUTION
. 19 LAT = 37.374 N ERX = 0.4 ERH = 0.6 AVFM = 1.3 Q = C
. LONG = 117.586 W ERY = 0.5 GAP = 129 AVXM = QS = A MAGRUDER MOUNTAIN
. DEPTH = 21.56 KM ERZ = 0.6 NM = QD = D

. 19	MGM	IPU	4 24 57.08						10.9	47	152	4.14	4.11	0.03	
.		ISU4	4 24 59.62									6.68	7.19	-0.51	
. 19	LCH	IPD4	4 24 55.24				13	1.4	16.4	199	142	2.30	4.60	-2.31	
. 19	PPK	EP	4 24 59.05				6	0.8	29.0	281	125	6.11	6.10	0.01	VERY E
.		ISU4	4 24 3.00									-49.94	10.67	-60.62	
. 19	GMN	EPU	4 24 59.10						30.1	106	124	6.16	6.25	-0.09	
.		ISD4	4 24 3.63									-49.31	10.94	-60.25	
. 19	GVN	EP	4 25 1.58				7	1.0	46.7	152	114	8.64	8.62	0.01	VERY E
. 19	BMT	EPD	4 25 8.35				18	2.0	93.9	96	53	15.41	15.00	0.00	

1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	QUK	EMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
MAR H = 3 5 53.94 UTC			RMS = 0.05	NO = 5								FREE DEPTH SOLUTION			
22 LAT = 37.284 N			ERX = 0.3	ERH = 0.4			AVFM =	0.9	Q = C						
LONG = 117.556 W			ERY = 0.2	GAP = 210			AVXM =		QS = A			MAGRUDER MOUNTAIN			
DEPTH = 6.29 KM			ERZ = 1.6	NM =					QD = D						
22	LCM	IPD	3 5 56.06			11	1.2	9.8	236	118		2.12	2.13	-0.01	
22	MGM	EP 4	3 5 57.90			5	0.6	18.2	17	105		3.96	3.42	0.55	
		ISD4	3 5 0.80									-53.14	5.98	-59.11	
22	GMN	EPU	3 5 58.62			5	0.6	26.4	86	100		4.68	4.71	-0.02	
		ISU4	3 5 2.60									-51.34	8.23	-59.57	
22	GVN	IPU	3 6 0.40			8	1.1	36.7	149	97		6.46	6.36	0.10	
		ES	3 6 4.99									11.05	11.13	-0.08	
22	NMN	EPU	3 6 5.62					69.3	109	94		11.68	11.65	0.04	
MAR H = 22 48 44.44 UTC			RMS = 0.04	NO = 6								FREE DEPTH SOLUTION			
25 LAT = 37.600 N			ERX = 0.2	ERH = 0.3			AVFM =	1.8	Q = D						
LONG = 117.643 W			ERY = 0.3	GAP = 194			AVXM =		QS = C			SILVER PEAK			
DEPTH = 2.47 KM			ERZ = 6.9	NM =					QD = D						
25	MGM	IPU	22 48 48.29			15	1.6	21.9	144	92		3.85	3.92	-0.07	
25	MZP	EPU	22 48 48.75					25.5	64	92		4.31	4.51	-0.01	
25	PPK	IPD	22 48 49.69			14	1.5	30.3	230	92		5.25	5.28	-0.03	
25	LCM	IPU4	22 48 51.16			17	1.7	40.6	180	90		6.72	6.95	-0.23	
25	GMN	EPU	22 48 52.52			7	1.0	47.5	134	90		8.08	8.08	-0.00	
25	GVN	EPU	22 49 56.49			23	2.1	71.6	158	90		12.05	11.99	0.06	
25	SGV	EPU	22 48 59.08			22	2.1	87.5	142	90		14.64	14.58	0.06	
25	NMN	EPU4	22 49 0.19			26	2.3	93.1	128	90		15.75	15.50	0.25	
MAR H = 3 13 7.09 UTC			RMS = 0.13	NO = 5								FIXED DEPTH SOLUTION			
26 LAT = 36.859 N			ERX = 0.5	ERH = 0.7			AVFM =		Q = C			DEPTH CONTROL INADEQUATE			
LONG = 116.169 W			ERY = 0.4	GAP = 114			AVXM =		QS = A			LATHROP WELLS			
DEPTH = 5.00 KM			ERZ = 1.1	NM =					QD = D						
26	LCP	IPD	3 13 8.36					0.6	165	172		1.27	0.99	0.28	
		ISD4	3 13 10.00									2.91	1.73	1.18	
26	SSP	EPU	3 13 8.82					8.5	329	114		1.73	1.86	-0.13	
26	CPX	EP 4	3 13 10.65					12.5	52	106		3.56	2.47	1.09	
		ESD	3 13 11.40									4.31	4.32	-0.01	
26	USM	IPU	3 13 10.10					16.2	214	102		3.01	3.04	-0.03	
		ISU	3 13 12.35									5.26	5.32	-0.06	
MAR H = 5 15 43.73 UTC			RMS = 0.11	NO = 5								FREE DEPTH SOLUTION			
26 LAT = 37.174 N			ERX = 0.8	ERH = 1.6			AVFM =	1.3	Q = C						
LONG = 117.612 W			ERY = 1.4	GAP = 188			AVXM =		QS = B			MAGRUDER MOUNTAIN			
DEPTH = 11.11 KM			ERZ = 2.6	NM =					QD = D						
26	LCM	IPU	5 15 46.09			12	1.3	7.4	335	144		2.36	2.36	-0.00	
26	GVN	EPU	5 15 49.55			10	1.2	30.7	129	108		5.82	5.58	0.25	
26	GMN	EPU4	5 15 48.45					34.2	66	106		4.72	6.13	-1.41	
		ISD	5 15 54.42									10.69	10.73	-0.04	
26	PPK	EP	5 15 50.49					38.3	317	104		6.76	6.78	-0.01	
26	SGV	EPD	5 15 53.13					55.8	113	100		9.40	9.55	-0.15	
26	NMN	IPD4	5 15 55.20					71.3	98	98		11.47	12.05	-0.58	
26	BMT	EPD4	5 15 57.45					96.5	83	96		13.72	16.12	-2.79	
MAR H = 20 1 7.02 UTC			RMS = 0.01	NO = 5								FREE DEPTH SOLUTION			
27 LAT = 37.117 N			ERX = 0.1	ERH = 0.2			AVFM =	1.0	Q = C						
LONG = 117.364 W			ERY = 0.2	GAP = 126			AVXM =		QS = A			MT. JACKSON			
DEPTH = 6.58 KM			ERZ = 0.7	NM =					QD = D						
27	GVN	IPD4	20 1 9.46			8	1.0	12.9	172	113		2.44	2.62	-0.18	
27	GVN	IPD4	20 1 9.46					12.9	172	113		2.44	2.62	-0.18	
		ISU	20 1 11.00									4.58	4.58	0.00	
27	GMN	EPD	20 1 11.10					22.3	24	103		4.08	4.08	0.01	
27	LCM	EP	20 1 12.05					28.4	297	100		5.03	5.03	-0.00	VERY E
27	SGV	IPD	20 1 12.84			7	0.9	33.1	117	99		5.82	5.80	0.02	
		ESU	20 1 17.14									10.12	10.15	-0.03	
MAR H = 2 8 43.78 UTC			RMS = 0.03	NO = 4								FREE DEPTH SOLUTION			
28 LAT = 36.324 N			ERX = 0.1	ERH = 0.2			AVFM =	2.0	Q = B						

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      STA  PHASE     TIME        AMP  PER   XMAG  QUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
 1980                (UTC)       (MU) (SEC)                    (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

.    LONG = 116.375 W        ERY =   0.1  GAP = 103      AVXM =          QS = A      ASH MEADOWS
.   DEPTH =   6.06 KM        ERZ =   1.0  NM =                           QD = B
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. 28    APM  IPU    2  8 46.23                          29  2.1   12.0  313  112    2.45   2.45   0.00
. 28    JCN  IPD    2  8 48.71                          25  2.0   27.6   62   99    4.93   4.89   0.04
. 28    NCP  IPU    2  8 49.00                          11  1.3   29.6  137   99    5.22   5.22   0.01
. 28    GWV  IPU    2  8 49.24                          29  2.2   30.6  240   98    5.46   5.38   0.02
. 28    LSM  EPU    2  8 51.85                                    46.9   11   95    8.07   8.02   0.05
. 28    MCX  IPU4   2  8 52.72                          27  2.2   50.4   43   95    8.94   8.58   0.36
. 28    LOP  EPD    2  8 54.15                                    61.7   18   94   10.37  10.41  -0.03
. 28    SPRG IPD    2  8 54.70                          24  2.1   65.2   51   94   10.92  10.98  -0.06
. 28    CPX  EPU    2  8 55.95                          22  2.1   72.8   23   93   12.17  12.22  -0.05
. 28    GVN  EPD    2  9  2.85                          23  2.3  114.5  311   92   19.07  19.00   0.08
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. MAR H = 21  3 36.82 UTC  RMS =  0.01  NO =  6                                  FREE DEPTH SOLUTION
.  28 LAT =  36.706 N       ERX =   0.1  ERM =   0.1    AVFM =   1.2  Q = B
.    LONG = 116.273 W       ERY =   0.1  GAP = 126      AVXM =        QS = A      LATHROP WELLS
.   DEPTH =   7.14 KM       ERZ =   0.3  NM =                         QD = B
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. 28    LSM  IP    21  3 38.30                                     3.6    1  150    1.48   1.49  -0.01
. 28    SDM  IPD   21  3 38.91                           5  0.6    8.9  221  124    2.09   2.08   0.00

. 28    CDM5 IPU   21  3 40.15                          18  1.7   17.6  347  108    3.33   3.35  -0.02
. 28    CDM1 IPU   21  3 40.19                                    17.6  347  108    3.37   3.35   0.02
. 28    LOP  EPU   21  3 40.39                          10  1.2   18.9   30  107    3.57   3.56   0.01   VERY E
. 28    JON  EPU   21  3 42.65                                    33.2  153  100    5.83   5.83  -0.00
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. MAR H = 13  3 56.96 UTC  RMS =  0.05  NO =  7                                  FREE DEPTH SOLUTION
.  31 LAT =  36.863 N       ERX =   0.3  ERM =   0.5    AVFM =   1.7  Q = B
.    LONG = 116.178 W       ERY =   0.4  GAP = 147      AVXM =        QS = A      LATHROP WELLS
.   DEPTH =   8.35 KM       ERZ =   0.8  NM =                         QD = C
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. 31    LOP  IPD   13  3 58.54                          24  1.9    1.4  135  170    1.58   1.55   0.03
. 31    SSP  IPD   13  3 59.03                                     7.7  333  134    2.07   2.06   0.01
. 31    CDM1 IPU   13  3 59.60                          35  2.3   12.4  269  120    2.64   2.66  -0.02
. 31    CDM5 EPU4  13  3 59.49                           8  1.0   12.4  269  120    2.53   2.66  -0.13
. 31    CPX  IPU4  13  3 59.40                                    13.0   56  119    2.44   2.74  -0.30   VERY E
. 31    LSM  IP    13  4  0.15                                    16.1  211  114    3.19   3.20  -0.01
. 31    BGB  IPU4  13  4  0.55                                    19.9  347  110    3.59   3.77  -0.13
. 31    SDM  EPD4  13  4  1.89                          10  1.2   28.0  211  104    4.93   5.04  -0.11
. 31    MCX  EPD   13  4  2.15                          20  1.8   28.4  144  104    5.19   5.10   0.09
. 31    SPRG IPU   13  4  3.47                          13  1.5   37.9  120  100    6.51   6.61  -0.10
. 31    GLR  IPU4  13  4  0.55                          17  1.7   40.0   21  100    3.59   6.94  -3.20
. 31    JON  EPU   13  4  5.17                          11  1.4   47.5  172   98    8.21   8.15   0.06
. 31    GVN  EP 4  13  4 14.92                          19  2.1  104.9  278   94   17.96  17.44   0.52   VERY E
. 31    GMN  EP 4  13  4 15.25                                   107.7  297   94   18.29  17.89   0.40   VERY E
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. APR H = 14 15 12.07 UTC  RMS =  0.06  NO =  4                                  FREE DEPTH SOLUTION
.  02 LAT =  36.862 N       ERX =         ERM =          AVFM =   0.8  Q = C
.    LONG = 116.319 W       ERY =         GAP = 291      AVXM =        QS = A      LATHROP WELLS
.   DEPTH =  33.98 KM       ERZ =         NM =                         QD = D
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. 02    CDM5 EP    14 15 17.50                           4  0.3    0.2  141  180    5.43   5.37   0.06
. 02    CDM1 IPU   14 15 17.55                           9  1.0    0.2  141  180    5.48   5.37   0.11
. 02    SSP  EP 4  14 15 18.58                           4  0.4   11.4   52  158    6.51   5.65   0.86
. 02    LOP  EP    14 15 17.79                                    13.5   94  154    5.72   5.77  -0.05
. 02    LSM  IPD   14 15 17.85                          13  1.4   14.3  163  153    5.78   5.81  -0.03
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. APR H = 17 56 29.83 UTC  RMS =  0.14  NO =  7                                  FREE DEPTH SOLUTION
.  02 LAT =  36.897 N       ERX =   1.0  ERM =   1.2    AVFM =   1.5  Q = C
.    LONG = 115.999 W       ERY =   0.7  GAP = 150      AVXM =        QS = C      MERCURY
.   DEPTH =   8.90 KM       ERZ =   6.3  NM =                         QD = C
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. 02    LOP  IPU   17 56 33.00                          15  1.5   15.8  253  116    3.17   3.19  -0.02
. 02    SSP  EPD   17 56 33.61                          12  1.4   19.8  279  111    3.78   3.80  -0.01
. 02    BGB  EPU   17 56 34.39                          10  1.2   25.7  308  106    4.56   4.70  -0.14
. 02    MCY  IPU   17 56 34.55                          14  1.5   26.3  173  106    4.72   4.79  -0.07
. 02    CDM5 EPU2  17 56 35.30                          23  2.0   28.7  262  105    5.47   5.17   0.30
. 02    LSM  IPU2  17 56 35.60                                    30.0  234  104    5.77   5.37   0.40
. 02    SDM  EP 4  17 56 37.59                                    41.2  227  100    7.76   7.15   0.61   VERY E
. 02    GMR  EPU   17 56 38.81                                    52.6   23   98    8.98   8.98   0.00
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. APR H = 18 13  5.50 UTC  RMS =  0.14  NO =  7                                  FREE DEPTH SOLUTION
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1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 02 LAT = 36.832 N				ERX = 2.2	ERH = 3.0		AVFM =		1.5	Q = D					
. LONG = 115.993 W				ERY = 1.9	GAP = 214		AVXM =			QS = C		MERCURY			
. DEPTH = 9.57 KM				ERZ = 9.1	NM =					QD = D					
. 02	LCP	IPU	18 13 8.76				12	1.3	15.8	279	118	3.26	3.24	0.02	
. 02	MCY	EPD	18 13 9.24				11	1.3	19.1	172	114	3.74	3.72	0.02	
. 02	SSP	EP	18 13 9.85				16	1.6	22.6	297	110	4.35	4.25	0.10	
. 02	LSM	IPU	18 13 10.00						26.9	248	107	4.50	4.92	-0.42	
. 02	CDH1	IPU	18 13 10.69						29.1	276	106	5.39	5.26	0.13	
. 02	CDH5	EPD	18 13 10.90				16	1.6	29.1	276	106	5.40	5.26	0.14	
. 02	BGB	EP	18 13 10.70						31.0	318	105	5.20	5.56	-0.35	

. APR M = 18 20 41.43 UTC				RMS = 0.27	NO = 44							FREE DEPTH SOLUTION			
. 02 LAT = 36.855 N				ERX = 0.4	ERH = 0.5		AVFM =		3.4	Q = C					
. LONG = 115.957 W				ERY = 0.4	GAP = 55		AVXM =			QS = B		MERCURY			
. DEPTH = 0.88 KM				ERZ = 3.7	NM =					QD = C					
. 02	CPX	IPU0	18 20 43.76				128	3.4	12.2	312	38	2.33	2.51	-0.18	
. 02	LCP	IPU	18 20 44.90				127	3.4	18.8	270	38	3.47	3.58	-0.11	
. 02	MCY	IPU0	18 20 45.19				140	3.5	21.4	181	38	3.76	4.00	-0.25	
. 02	SPRG	IPU	18 20 45.45				120	3.4	22.1	144	38	4.02	4.12	-0.10	
. 02	SSP	IPD	18 20 45.85				163	3.6	24.6	289	38	4.42	4.52	-0.11	
. 02	LSM	IPD	18 20 46.79				185	3.8	30.9	245	38	5.36	5.55	-0.19	
. 02	BGB	IPU	18 20 46.80				132	3.5	31.6	310	38	5.37	5.66	-0.29	
. 02	CDH5	IPU	18 20 46.89				116	3.4	32.2	271	38	5.46	5.75	-0.29	
. 02	CDH1	IPD	18 20 46.90				152	3.6	32.2	271	38	5.47	5.75	-0.28	
. 02	GLR	IPU	18 20 47.95				101	3.3	38.6	352	38	6.52	6.80	-0.29	
. 02	SDH	IPD	18 20 48.50				81	3.1	41.2	236	38	7.07	7.22	-0.15	
. 02	JON	IPD	18 20 49.85				77	3.1	47.9	196	38	8.42	8.30	0.11	
. 02	EPN	IPD	18 20 50.10						51.6	321	38	8.67	8.91	-0.24	
. 02	GMR	IPD	18 20 51.06				110	3.4	55.7	17	38	9.63	9.58	0.05	
. 02	BRO	IPD	18 20 51.99				79	3.1	60.5	260	38	10.56	10.37	0.19	
. 02	APK	IPD	18 20 53.29				52	2.8	68.5	150	38	11.86	11.67	0.19	
. 02	AMR	IPD	18 20 53.15				101	3.4	68.7	222	38	11.72	11.69	0.03	
. 02	BLT	IPD	18 20 52.85				93	3.3	69.2	347	38	11.42	11.77	-0.35	
. 02	BMT	IPD	18 20 54.59				117	3.5	70.0	313	38	13.16	11.90	1.26	
. 02	EPR	IPD	18 20 54.61				140	3.7	76.9	63	38	13.18	13.03	0.15	
. 02	FMT	IPU	18 20 54.65				84	3.2	77.2	252	38	13.22	13.08	0.14	
. 02	NMN	IPU	18 20 55.10				107	3.5	80.7	288	38	13.67	13.64	0.03	
. 02	SHRG	IPU0	18 20 54.80				89	3.3	81.5	118	38	13.37	13.77	-0.40	
. 02	NCP	IPD	18 20 55.41				66	3.1	82.5	192	38	13.98	13.94	0.04	
. 02	TPU	IPD	18 20 55.92				98	3.4	87.6	18	38	14.49	14.77	-0.28	
. 02	SGV	IPU	18 20 57.65				124	3.7	96.9	279	38	16.22	16.28	-0.06	
. 02	GWV	IPD	18 20 57.93				103	3.5	97.9	221	38	16.50	16.44	0.06	
. 02	PRN	IPD0	18 20 58.79				91	3.4	101.3	53	38	17.36	16.99	0.37	
. 02	GCS	EPD	18 20 58.60				91	3.4	101.4	2	38	17.17	17.01	0.16	
. 02	MTI	IPU	18 20 59.66				90	3.4	109.5	34	38	18.23	18.33	-0.11	
. 02	CTS	EPD	18 21 0.18				56	3.0	110.7	322	38	18.75	18.52	0.22	
. 02	PGE	IPU	18 21 0.80				83	3.4	114.0	241	38	19.37	19.06	0.31	
. 02	GVN	IPU	18 21 2.40				98	3.5	124.6	278	38	20.97	20.78	0.19	
. 02	GMN	IPD0	18 21 2.79				59	3.1	125.9	293	38	21.36	21.00	0.36	
. 02	NPN	IPU0	18 21 2.81				103	3.6	126.6	46	38	21.38	21.10	0.28	
. 02	GSM	IPD0	18 21 3.35						128.1	220	38	21.92	21.36	0.56	
. 02	WRN	IPU	18 21 3.01				107	3.6	129.3	15	38	21.58	21.54	0.04	
. 02	TMO	IPU0	18 21 3.45				74	3.3	129.6	268	38	22.02	21.60	0.42	
. 02	RVE	EPD	18 21 4.37						131.0	351	38	22.94	21.82	1.12	
.		ESU	18 21 18.80									37.37	38.18	-0.81	
. 02	SPG	IPD0	18 21 4.89				141	3.9	138.5	35	30	23.46	22.93	0.52	
. 02	MGM	EPD	18 21 6.95				89	3.6	151.6	295	30	25.52	24.63	0.89	
. 02	LCM	IPU	18 21 7.55				67	3.3	156.3	286	30	26.12	25.24	0.88	
. 02	MZP	IPU	18 21 7.65				55	3.2	157.5	307	30	26.22	25.40	0.82	

. APR M = 21 14 53.76 UTC				RMS = 0.08	NO = 14							FREE DEPTH SOLUTION			
. 02 LAT = 36.868 N				ERX = 0.3	ERH = 0.4		AVFM =		2.2	Q = B					
. LONG = 115.970 W				ERY = 0.2	GAP = 55		AVXM =			QS = A		MERCURY			
. DEPTH = 6.10 KM				ERZ = 1.8	NM =					QD = B					
. 02	CPX	IPU	21 14 55.90				47	2.5	10.3	311	116	2.14	2.20	-0.06	
. 02	LCP	IPU	21 14 57.05				42	2.4	17.6	265	105	3.29	3.31	-0.02	
. 02	MCY	IPU4	21 14 57.30				44	2.5	22.9	178	102	3.54	4.15	-0.61	
. 02	SPRG	IPU4	21 14 56.47				44	2.5	24.1	143	101	2.71	4.34	-1.63	
. 02	BGB	IPU	21 14 58.95				31	2.2	29.6	309	99	5.19	5.23	-0.04	
. 02	LSM	IPD	21 14 59.29				29	2.2	30.5	242	99	5.53	5.36	0.17	
. 02	CDH5	IPU4	21 14 58.96				52	2.7	30.9	266	98	5.20	5.44	-0.24	
. 02	GLR	EPU	21 15 0.10				16	1.7	37.0	353	97	6.34	6.41	-0.07	
. 02	JON	IPD4	21 15 1.49				21	1.9	49.0	194	95	8.14	8.35	-0.21	
. 02	EPN	IPU4	21 15 2.59						49.6	321	95	8.83	8.46	0.38	
. 02	GMR	IPD	21 15 3.20				22	2.0	54.6	19	95	9.44	9.27	0.17	
. 02	BRO	EPD4	21 15 4.40				18	1.8	59.6	259	94	10.64	10.07	0.57	

1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 02	BLT	IPU	21 15 5.04				21	2.0	67.4	348	94	11.28	11.34	-0.06	
. 02	BMT	EP 4	21 14 59.71				51	2.8	68.1	313	94	5.95	11.44	-5.49	VERY E
. 02	AMR	EPU	21 15 5.30				17	1.8	69.0	221	94	11.54	11.59	-0.05	
. 02	APK	EP	21 15 5.59						70.4	150	94	11.83	11.83	0.00	VERY E
. 02	FMT	EP 4	21 15 7.10				19	2.0	76.5	251	93	13.34	12.81	0.53	
. 02	EPR	EP	21 15 6.75				33	2.4	77.3	64	93	12.99	12.95	0.04	VERY E
. 02	NMN	EP 4	21 15 6.00				32	2.4	79.1	287	93	12.24	13.23	-0.99	VERY E
. 02	SMRG	EP	21 15 7.68				14	1.7	83.3	119	93	13.92	13.92	0.01	VERY E
. 02	NOP	EPU	21 15 7.65						83.7	191	93	13.89	13.99	-0.10	
. 02	TPU	EPU	21 15 8.17				24	2.2	86.6	19	93	14.41	14.46	-0.05	
. 02	GMV	EPU4	21 15 10.55				22	2.2	98.3	220	93	16.79	16.35	0.44	
. 02	PRN	EPU4	21 15 10.95				26	2.3	101.4	54	93	17.19	16.85	0.34	
. 02	MTI	EP	21 15 11.90				23	2.2	109.0	35	92	18.14	18.09	0.05	
. 02	GVN	EPU4	21 15 15.20				30	2.5	123.2	277	53	21.44	20.32	1.12	
. 02	GMN	EPD4	21 15 15.21				18	2.1	124.2	293	53	21.45	20.46	0.99	
. 02	TMO	EPD4	21 15 15.90				20	2.2	128.5	267	53	22.14	21.01	1.13	
. 02	QSM	EPU4	21 15 15.46						128.5	219	53	21.70	21.01	0.69	
. 02	MGM	EPU4	21 15 19.59				24	2.4	149.7	295	53	25.83	23.76	2.07	

. APR H = 2 18 9.70 UTC RMS = 0.05 NO = 9 FREE DEPTH SOLUTION
. 03 LAT = 36.897 N ERX = 0.4 ERH = 0.5 AVFM = 1.6 Q = C
. LONG = 115.995 W ERY = 0.2 GAP = 177 AVXM = QS = B MERCURY
. DEPTH = 9.11 KM ERZ = 2.9 NM = QD = C

. 03	LOP	IPD	2 18 13.00				21	1.8	16.1	253	116	3.30	3.26	0.04	
. 03	SSP	EPU	2 18 13.59				22	1.9	20.2	279	111	3.89	3.86	0.03	
. 03	BGB	IPU	2 18 14.32				13	1.4	26.0	307	107	4.62	4.75	-0.13	
. 03	MCY	IPU	2 18 14.50				18	1.7	26.3	174	106	4.80	4.80	-0.01	
. 03	CDH5	EP	2 18 14.89				31	2.2	29.1	262	105	5.19	5.24	-0.05	
. 03	CDH1	EPU	2 18 14.91						29.1	262	105	5.21	5.24	-0.03	
. 03	LSM	EP	2 18 15.49						30.3	235	104	5.79	5.44	0.35	VERY E
. 03	GLR	EP	2 18 15.66				5	0.6	33.6	356	103	5.96	5.95	0.01	
. 03	EPN	EPU	2 18 17.68						45.7	320	99	7.98	7.89	0.09	VERY E

. APR H = 6 40 43.78 UTC RMS = 0.04 NO = 6 FREE DEPTH SOLUTION
. 03 LAT = 36.841 N ERX = 0.4 ERH = 0.6 AVFM = 1.7 Q = C
. LONG = 115.970 W ERY = 0.5 GAP = 160 AVXM = QS = B MERCURY
. DEPTH = 11.18 KM ERZ = 2.9 NM = QD = C

. 03	LCP	IPU	6 40 47.37				26	2.0	17.7	275	120	3.59	3.64	-0.05	
. 03	MCY	IPU	6 40 47.75				23	1.9	19.9	178	117	3.97	3.96	0.01	
. 03	SSP	EPU	6 40 48.40				25	2.0	24.0	293	113	4.62	4.57	0.05	
. 03	LSM	EP 4	6 40 49.62				13	1.5	29.3	247	109	5.84	5.36	0.48	
. 03	CDH5	IPU	6 40 49.35				25	2.0	31.1	274	108	5.57	5.64	-0.07	
. 03	CDH1	IPD	6 40 49.40						31.1	274	108	5.62	5.64	-0.02	
. 03	BGB	IPU4	6 40 49.30				13	1.5	31.7	313	107	5.52	5.74	-0.22	
. 03	SDH	EP 4	6 40 51.25				12	1.4	39.5	237	104	7.47	6.96	0.52	
. 03	GLR	EP 4	6 40 51.10						40.0	354	104	7.32	7.04	0.28	
. 03	JON	IPU4	6 40 52.39				12	1.4	46.1	195	102	8.61	8.01	0.60	
. 03	GMR	IPD	6 40 53.59				9	1.2	57.4	18	100	9.81	9.82	-0.01	

. APR H = 15 22 35.79 UTC RMS = 0.06 NO = 9 FREE DEPTH SOLUTION
. 03 LAT = 36.857 N ERX = 0.3 ERH = 0.4 AVFM = 1.7 Q = B
. LONG = 115.961 W ERY = 0.2 GAP = 125 AVXM = QS = A MERCURY
. DEPTH = 8.50 KM ERZ = 1.2 NM = QD = B

. 03	CPX	IPU	15 22 38.28				20	1.8	11.7	313	122	2.49	2.59	-0.09	
. 03	LCP	EPU	15 22 39.40				19	1.8	18.4	269	112	3.61	3.55	0.06	
. 03	MCY	EPD	15 22 39.81				20	1.8	21.7	180	108	4.02	4.06	-0.04	
. 03	SPRG	IPD	15 22 40.00				20	1.8	22.6	143	108	4.21	4.20	0.01	
. 03	BGB	IPU	15 22 41.31				11	1.3	31.1	310	103	5.52	5.53	-0.00	
. 03	CDH5	IPU	15 22 41.36				23	2.0	31.7	271	103	5.57	5.64	-0.06	
. 03	CDH1	IPD	15 22 41.45				34	2.3	31.7	271	103	5.66	5.64	0.03	
. 03	GLR	EP	15 22 42.56						38.3	352	100	6.77	6.68	0.09	
. 03	SDH	EPU4	15 22 43.25						41.0	235	100	7.46	7.12	0.35	
. 03	JON	EPU4	15 22 44.42				9	1.2	48.0	195	98	8.63	8.24	0.39	
. 03	GMR	EPD2	15 22 45.60						55.5	18	97	9.81	9.45	0.36	
. 03	BMT	EP 4	15 22 49.80						69.5	313	96	14.01	11.70	2.31	
. 03	NMN	EP 4	15 22 50.70						80.2	288	95	14.91	13.44	1.47	

. APR H = 17 15 13.42 UTC RMS = 0.17 NO = 12 FREE DEPTH SOLUTION
. 03 LAT = 36.855 N ERX = 0.5 ERH = 0.7 AVFM = 1.8 Q = C
. LONG = 115.970 W ERY = 0.5 GAP = 100 AVXM = QS = B MERCURY
. DEPTH = 5.47 KM ERZ = 4.3 NM = QD = C

1980	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	CPX	IPU	17 15 15.60				25	2.0	11.3	316	110	2.18	2.31	-0.13	
. 03	LOP	IPU0	17 15 16.70				22	1.9	17.6	270	103	3.29	3.28	-0.01	
. 03	MCY	IPD	17 15 17.20				25	2.0	21.5	178	101	3.78	3.91	-0.13	
. 03	SPRG	IPU	17 15 17.26				20	1.8	22.9	141	100	3.84	4.14	-0.30	
. 03	SSP	EPU	17 15 17.79						23.5	289	100	4.37	4.22	0.15	
. 03	BGB	IPD	17 15 18.79				11	1.3	30.6	311	97	5.37	5.37	-0.00	
. 03	CDMS	IPD	17 15 18.80				34	2.3	31.0	271	97	5.38	5.43	-0.05	
. 03	CDMI	IPU	17 15 18.79				38	2.4	31.0	271	97	5.37	5.43	-0.06	
. 03	GLR	EP 0	17 15 20.00						38.4	354	96	6.58	6.63	-0.05	
. 03	SDM	EP	17 15 20.50						40.3	235	96	7.08	6.93	0.15	
. 03	JON	IPU4	17 15 21.71				12	1.5	47.6	194	95	8.29	8.12	0.17	
. 03	GMR	IPU	17 15 23.00				7	1.0	56.0	18	94	9.58	9.47	0.10	
. 03	EPR	EP 2	17 15 27.55						77.9	64	93	14.13	13.04	1.09	
. 03	SHRG	EP	17 15 27.70						82.6	116	93	14.28	13.80	0.48	

. APR H = 23 47 9.66 UTC RMS = 0.02 NO = 6 FREE DEPTH SOLUTION
. 03 LAT = 37.040 N ERX = 0.3 ERH = 0.3 AVFM = 2.3 Q = B
. LONG = 116.187 W ERY = 0.1 GAP = 169 AVXM = QS = A SILENT CANYON - YUCCA FLAT
. DEPTH = 6.04 KM ERZ = 0.4 NM = QD = C

. 03	BGB	IPD	23 47 10.99				31	2.1	3.6	267	146	1.33	1.33	0.00	
. 03	SSP	IPU	23 47 12.30				37	2.3	13.0	192	110	2.64	2.60	0.04	
. 03	LOP	EPU	23 47 13.43				33	2.2	20.7	175	103	3.77	3.79	-0.02	
. 03	EPN	EPD	23 47 13.79						22.8	328	101	4.13	4.14	-0.00	
. 03	CDMS	IPD	23 47 13.84				42	2.5	23.0	210	101	4.18	4.17	0.01	
. 03	BLT	EP	23 47 17.69				29	2.2	47.0	6	95	8.03	8.03	0.00	

. APR H = 18 0 48.84 UTC RMS = 0.29 NO = 8 FREE DEPTH SOLUTION
. 04 LAT = 36.939 N ERX = 2.2 ERH = 3.5 AVFM = 1.6 Q = C
. LONG = 115.599 W ERY = 2.8 GAP = 159 AVXM = QS = C MERCURY
. DEPTH = 18.99 KM ERZ = 3.5 NM = QD = C

. 04	SPRG	IPU2	18 0 55.50						33.0	215	118	6.66	6.43	0.22	
. 04	MCY	IPU2	18 0 56.63				15	1.6	44.7	226	112	7.79	8.15	-0.37	
. 04	EPR	IPU0	18 0 57.02						44.7	55	112	8.19	8.16	0.02	
. 04	LCP	EPU0	18 0 57.60				11	1.4	51.5	259	109	8.76	9.20	-0.44	
. 04	BGB	EPU	18 0 59.95						57.0	281	107	11.11	10.05	1.06	
. 04	CDMS	IPU0	18 0 59.56				17	1.8	64.6	262	105	10.72	11.24	-0.52	
. 04	JCN	EP	18 1 1.32						71.4	219	104	12.48	12.30	0.18	VERY E
. 04	SDM	EP 0	18 1 1.30						73.5	244	53	12.46	12.61	-0.16	VERY E

. APR H = 2 27 44.95 UTC RMS = 0.05 NO = 7 FREE DEPTH SOLUTION
. 05 LAT = 36.846 N ERX = 0.3 ERH = 0.7 AVFM = 2.1 Q = C
. LONG = 115.944 W ERY = 0.6 GAP = 112 AVXM = QS = B MERCURY
. DEPTH = 8.60 KM ERZ = 4.4 NM = QD = C

. 05	CPX	IPU4	2 27 47.30				38	2.3	13.7	312	119	2.35	2.87	-0.52	
. 05	LCP	IPU4	2 27 48.40				40	2.4	20.0	273	110	3.45	3.80	-0.35	
. 05	MCY	IPU4	2 27 48.60				38	2.4	20.6	185	110	3.65	3.89	-0.24	
. 05	SPRG	IPU	2 27 48.85				33	2.2	20.7	145	109	3.90	3.91	-0.01	
. 05	LSM	IPD	2 27 50.60						31.6	248	103	5.65	5.62	0.03	
. 05	BGB	IPU4	2 27 50.30				31	2.2	33.1	310	102	5.35	5.85	-0.49	
. 05	CDMS	IPU4	2 27 50.31						33.4	273	102	5.36	5.90	-0.53	
. 05	CDMI	IPD4	2 27 50.39						33.4	273	102	5.44	5.90	-0.45	
. 05	GLR	EP 4	2 27 51.45				16	1.7	39.7	350	100	6.50	6.91	-0.41	
. 05	SDM	EPD0	2 27 52.18				38	2.4	41.7	238	100	7.23	7.23	0.00	
. 05	JCN	IPD4	2 27 52.25				23	2.0	47.3	198	99	7.30	8.13	-0.82	
. 05	EPN	EPU0	2 27 53.90						53.0	320	98	8.95	9.05	-0.09	
. 05	GMR	IPD	2 27 54.60				22	2.0	56.2	16	97	9.65	9.57	0.09	
. 05	BRO	EPU4	2 27 55.60				17	1.8	61.6	251	97	10.65	10.43	0.23	
. 05	AMR	EP 4	2 27 57.40				16	1.8	68.8	224	96	12.45	11.60	0.86	
. 05	BLT	EPU4	2 27 56.26				22	2.1	70.3	346	96	11.31	11.85	-0.53	
. 05	BMT	EP 4	2 27 58.10				35	2.5	71.5	313	96	13.15	12.03	1.13	
. 05	EPR	EPU4	2 27 58.30						76.3	62	95	13.35	12.81	0.54	
. 05	FMT	EPD4	2 27 59.10				10	1.4	78.1	253	95	14.15	13.10	1.05	
. 05	SHRG	EP 4	2 27 59.00				15	1.8	80.0	118	95	14.05	13.41	0.64	
. 05	NCP	EPU4	2 27 59.00						81.9	193	95	14.05	13.71	0.34	
. 05	NMN	EPU	2 27 58.70				30	2.4	82.1	288	95	13.75	13.75	0.01	
. 05	PPN	EPU4	2 28 2.20				21	2.1	100.9	52	94	17.25	16.80	0.45	
. 05	MTI	EPU	2 28 3.15				23	2.2	109.7	33	94	18.20	18.22	-0.02	
. 05	PGE	EP 4	2 28 4.76				16	1.9	114.6	241	53	19.81	18.96	0.85	VERY E
. 05	MCA	EP 4	2 28 5.72				23	2.3	121.5	260	53	20.77	19.86	0.92	VERY E
. 05	GVN	EPD4	2 28 6.20				30	2.5	125.9	278	53	21.25	20.43	0.83	
. 05	GMN	EPU4	2 28 6.48						127.4	293	53	21.53	20.62	0.91	
. 05	WSH	EPU4	2 28 6.90						128.2	220	53	21.95	20.73	1.23	
. 05	IMO	EPD4	2 28 7.10				20	2.2	130.8	268	53	22.15	21.06	1.09	
. 05	LCH	EPD4	2 28 11.10						157.7	266	53	26.15	24.55	1.60	

1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DOR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 05	MZP	EPU4	2 28 12.00						159.0	307	53	27.05	24.73	2.33	

APR H = 2 29 6.43 UTC RMS = 0.11 NO = 5 FREE DEPTH SOLUTION
05 LAT = 36.854 N ERX = 0.2 ERH = 0.4 AVFM = 1.4 Q = D
LONG = 115.961 W ERY = 0.3 GAP = 189 AVXM = QS = C MERCURY
DEPTH = 3.04 KM ERZ = 5.6 NM = QD = D

. 05	CPX	IPU	2 29 8.60				15	1.5	12.0	314	97	2.17	2.32	-0.14	
. 05	LCP	IPU0	2 29 9.81				19	1.8	18.4	270	94	3.38	3.35	0.03	
. 05	MCY	EPD0	2 29 10.23				16	1.6	21.4	180	94	3.80	3.83	-0.03	
. 05	SPRG	EPU	2 29 10.40				14	1.5	22.3	143	94	3.97	3.99	-0.02	
. 05	LSM	EP 4	2 29 12.29				10	1.2	30.5	245	93	5.86	5.32	0.54	VERY E
. 05	SDH	EP	2 29 13.69				7	1.0	40.9	236	92	7.26	7.00	0.26	VERY E

APR H = 17 29 58.94 UTC RMS = 0.02 NO = 5 FREE DEPTH SOLUTION
05 LAT = 36.818 N ERX = 0.3 ERH = 0.5 AVFM = 1.0 Q = C
LONG = 115.912 W ERY = 0.4 GAP = 193 AVXM = QS = A MERCURY
DEPTH = 13.08 KM ERZ = 1.1 NM = QD = D

. 05	SPRG	EPD	17 30 2.59				5	0.6	16.5	146	126	3.65	3.65	0.00	
. 05	CPX	IPU	17 30 2.79						18.0	313	124	3.85	3.84	0.01	
. 05	CDH5	EPU	17 30 5.49				7	0.9	36.5	277	108	6.55	6.58	-0.03	
.		ISD	17 30 10.45									11.51	11.52	-0.01	
. 05	CDH1	IPD	17 30 5.56				11	1.3	36.5	277	108	6.62	6.58	0.04	

APR H = 1 35 20.86 UTC RMS = 0.23 NO = 11 FREE DEPTH SOLUTION
08 LAT = 36.555 N ERX = 0.8 ERH = 1.2 AVFM = 1.6 Q = C
LONG = 116.355 W ERY = 0.8 GAP = 92 AVXM = QS = C LATHROP WELLS
DEPTH = 5.38 KM ERZ = 5.9 NM = QD = B

. 08	SDH	IPU	1 35 22.71				13	1.4	10.1	9	112	1.85	2.12	-0.28	
. 08	AMR	EPU	1 35 25.00				20	1.8	20.5	211	101	4.14	3.74	0.40	
. 08	JCN	IPU	1 35 25.12				10	1.2	26.0	120	98	4.26	4.62	-0.36	
. 08	BRO	EPD	1 35 26.45						33.4	314	97	5.59	5.81	-0.23	
. 08	CDH1	IPD	1 35 26.88				19	1.8	34.0	6	96	6.02	5.92	0.10	
. 08	CDH5	EPU	1 35 26.92				21	1.9	34.0	6	96	6.06	5.92	0.14	
. 08	MCY	IPD	1 35 27.16				14	1.6	37.1	71	96	6.30	6.41	-0.12	
. 08	LCP	EPD	1 35 27.49				11	1.3	37.2	27	96	6.63	6.43	0.20	
. 08	FMT	EPD	1 35 27.45						39.1	284	96	6.59	6.73	-0.15	
. 08	SSP	EPU	1 35 28.40				15	1.6	42.8	17	95	7.54	7.34	0.19	
. 08	CPX	EPD	1 35 29.38						49.2	33	94	8.52	8.38	0.14	

APR H = 2 11 31.66 UTC RMS = 0.18 NO = 16 FREE DEPTH SOLUTION
08 LAT = 36.852 N ERX = 0.5 ERH = 0.6 AVFM = 1.9 Q = C
LONG = 115.947 W ERY = 0.4 GAP = 127 AVXM = QS = B MERCURY
DEPTH = 0.02 KM ERZ = 1.9 NM = QD = C

. 08	CPX	IPU0	2 11 34.21				23	1.9	13.1	311	38	2.55	2.83	-0.27	
. 08	LCP	IPU0	2 11 35.30				29	2.1	19.6	271	38	3.64	3.89	-0.25	
. 08	MCY	IPU0	2 11 35.55				27	2.1	21.1	184	38	3.89	4.14	-0.24	
. 08	SPRG	IPU	2 11 35.80				20	1.8	21.4	145	38	4.14	4.18	-0.03	
. 08	SSP	IPD0	2 11 36.39				26	2.0	25.5	289	38	4.73	4.85	-0.12	
. 08	LSM	EP	2 11 37.48						31.6	247	38	5.82	5.83	-0.01	
. 08	BCB	IPU4	2 11 37.27						32.4	310	38	5.61	5.97	-0.36	
. 08	CDH1	EPD	2 11 37.32				41	2.5	33.0	272	38	5.66	6.07	-0.41	
. 08	CDH5	EPU4	2 11 37.12				34	2.3	33.0	272	38	5.46	6.07	-0.61	
. 08	GLR	EPU4	2 11 38.48						39.1	351	38	6.82	7.05	-0.23	
. 08	SDH	EPU	2 11 39.20				12	1.4	41.8	237	38	7.54	7.49	0.05	
. 08	JCN	IPU	2 11 40.34				13	1.5	47.8	197	38	8.68	8.47	0.21	
. 08	EPN	EPD	2 11 41.00						52.4	320	38	9.34	9.21	0.13	
. 08	GMR	IPD	2 11 41.59						55.7	16	38	9.93	9.76	0.17	
. 08	BRO	EPU4	2 11 42.73						61.3	261	38	11.07	10.67	0.40	
. 08	BLT	EP	2 11 43.45						69.7	346	38	11.79	12.03	-0.23	
.		ES	2 11 51.54									19.88	21.05	-1.16	
. 08	BMT	EP 4	2 11 45.13				14	1.7	70.8	313	38	13.44	12.21	1.23	
. 08	NMN	EPD0	2 11 45.90				20	2.0	61.6	288	38	14.24	13.97	0.28	
. 08	TPU	EPU	2 11 46.60						87.7	18	38	14.94	14.95	-0.01	
. 08	GWV	EP	2 11 48.75						98.2	221	38	17.09	16.67	0.42	
.		ES	2 12 1.10									29.44	29.18	0.26	
. 08	CTS	EP 4	2 11 51.15						111.5	322	38	19.49	18.83	0.67	
.		ES 4	2 12 2.50									30.84	32.95	-2.10	

1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	EMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. APR H = 7 39 21.84 UTC				RMS = 0.04	NO = 5										FREE DEPTH SOLUTION
. 10 LAT = 37.285 N				ERX = 0.6	ERH = 0.9			AVFM =	1.2	Q = D					
. LONG = 117.059 W				ERY = 0.7	GAP = 202			AVXM =		QS = C					MT. JACKSON
. DEPTH = 6.29 KM				ERZ = 5.0	NM =					QD = D					
. 10	GRN	EPU	7 39 25.19				5	0.6	17.8	275	105	3.35	3.35	-0.01	
. 10	NMN	IPU0	7 39 27.28				6	0.8	31.2	137	99	5.44	5.48	-0.04	
. 10	SGV	EPD	7 39 27.81				11	1.5	33.8	176	98	5.97	5.90	0.06	
. 10	GVN	EPD0	7 39 25.75				7	1.0	40.3	219	97	6.91	6.95	-0.04	
. 10	MGM	EP	7 39 29.15				6	0.8	42.4	254	96	7.31	7.29	0.02	
. 10	BMT	EP 4	7 39 26.60				18	1.8	46.6	90	96	6.76	7.97	-1.22	
. 10	CDH5	EPD4	7 39 35.55				22	2.1	81.1	126	93	13.71	13.56	0.15	
. 10	CDH1	IPD4	7 39 35.64						81.1	126	93	13.80	13.56	0.24	
. APR H = 9 48 1.29 UTC				RMS = 0.04	NO = 4										FIXED DEPTH SOLUTION
. 11 LAT = 36.976 N				ERX =	ERH =			AVFM =	1.7	Q = C					DEPTH CONTROL INADEQUATE
. LONG = 116.592 W				ERY =	GAP = 320			AVXM =		QS = A					CHLORIDE CLIFF
. DEPTH = 5.00 KM				ERZ =	NM =					QD = D					
. 11	CDH5	IPU	9 48 6.11				13	1.5	27.7	118	97	4.82	4.88	-0.07	
. 11	CDH1	IPD	9 48 6.23				23	2.0	27.7	118	97	4.94	4.88	0.05	
. 11	BGB	EP	9 48 7.08						33.2	78	96	5.79	5.77	0.01	
.		ESU	9 48 11.40									10.11	10.10	0.00	
. APR H = 13 54 23.50 UTC				RMS = 0.31	NO = 15										FREE DEPTH SOLUTION
. 14 LAT = 37.184 N				ERX = 1.1	ERH = 1.3			AVFM =	2.0	Q = C					
. LONG = 116.289 W				ERY = 0.7	GAP = 118			AVXM =		QS = C					SILENT CANYON - PAHUTE MESA
. DEPTH = 12.54 KM				ERZ = 5.5	NM =					QD = B					
. 14	BGB	IPU	13 54 26.89						17.1	161	124	3.39	3.67	-0.28	
. 14	BMT	IPU	13 54 28.78				27	2.1	24.4	297	115	5.28	4.71	0.57	
. 14	SSP	IPU	13 54 29.00				24	2.0	29.4	168	111	5.50	5.46	0.05	
. 14	BLT	IPD	13 54 29.49				17	1.7	33.7	24	108	5.99	6.12	-0.13	
. 14	CPX	EPU	13 54 29.80				13	1.5	34.9	144	108	6.30	6.31	-0.01	
. 14	CDH1	IPD	13 54 29.64				57	2.8	36.0	184	107	6.14	6.47	-0.33	
. 14	CDH5	IPD	13 54 29.80				36	2.4	36.0	184	107	6.30	6.47	-0.17	
. 14	LCP	EPD	13 54 30.40				23	2.0	38.1	164	106	6.90	6.80	0.10	
. 14	NMN	IPD	13 54 31.49				23	2.0	48.4	256	103	7.99	8.42	-0.43	
. 14	LSM	EPD	13 54 32.59						49.4	178	103	9.09	8.57	0.52	
. 14	SDH	EPD	13 54 33.75				11	1.4	59.9	184	100	10.25	10.25	0.00	
. 14	CTS	IPU	13 54 34.10						63.7	323	100	10.60	10.87	-0.26	
. 14	MCY	EPD	13 54 34.99				19	1.9	64.8	153	100	11.49	11.04	0.45	
. 14	SPRG	EPU	13 54 35.66				18	1.9	69.1	142	99	12.16	11.73	0.43	
. 14	SGV	EPD	13 54 35.07				21	2.0	69.8	251	99	11.57	11.84	-0.27	
. APR H = 16 55 4.66 UTC				RMS = 0.05	NO = 6										FREE DEPTH SOLUTION
. 14 LAT = 37.162 N				ERX = 0.5	ERH = 0.6			AVFM =	1.2	Q = C					
. LONG = 117.420 W				ERY = 0.3	GAP = 189			AVXM =		QS = B					MT. JACKSON
. DEPTH = 4.90 KM				ERZ = 4.1	NM =					QD = D					
. 14	GVN	IPU	16 55 8.15				14	1.5	19.1	159	100	3.49	3.50	-0.02	
. 14	GRN	IPD	16 55 8.46				5	0.6	20.9	43	99	3.80	3.79	0.00	
. 14	LCH	EP 4	16 55 9.10				6	0.8	21.8	292	99	4.44	3.93	0.50	
. 14	MGM	EP	16 55 10.20				6	0.8	31.7	348	96	5.54	5.54	-0.00	
. 14	SGV	IPD2	16 55 11.57				10	1.3	39.9	120	95	6.91	6.85	0.05	
. 14	NMN	EPU	16 55 13.76				10	1.3	54.2	100	93	9.10	9.19	-0.09	
. 14	MCA	EPU4	16 55 20.50						58.4	168	93	15.84	9.86	5.98	
. 14	FMT	EPU4	16 55 22.30						81.4	135	92	17.64	13.60	4.04	
. 14	CDH1	EPU	16 55 21.98				27	2.4	103.7	109	92	17.32	17.22	0.09	
. APR H = 10 24 43.67 UTC				RMS = 0.05	NO = 5										FREE DEPTH SOLUTION
. 15 LAT = 37.503 N				ERX = 0.5	ERH = 0.6			AVFM =	1.7	Q = D					
. LONG = 117.709 W				ERY = 0.4	GAP = 97			AVXM =		QS = C					SILVER PEAK
. DEPTH = 6.96 KM				ERZ = 7.1	NM =					QD = D					
. 15	PPK	IPU	10 24 47.29				12	1.4	19.5	244	106	3.62	3.65	-0.03	
. 15	MGM	IPU	10 24 47.40				10	1.2	20.0	110	106	3.73	3.72	0.01	
. 15	SVP	IPD	10 24 48.19				18	1.7	24.9	341	103	4.52	4.49	0.03	
. 15	LCH	EPU	10 24 49.10				10	1.2	30.3	170	100	5.43	5.35	0.07	
. 15	MZP	EPU	10 24 49.99				6	0.8	36.1	53	97	6.22	6.29	-0.08	
. 15	NMN	EPD4	10 24 59.80						91.8	121	93	16.13	15.31	0.82	
. 15	BMT	EPD4	10 25 0.79				21	2.1	106.8	103	93	17.12	17.75	-0.63	
. 15	KRN	IPD4	10 25 5.57				26	2.4	121.4	79	53	21.90	20.27	1.63	
. 15	BRO	EPD5	10 25 5.12						126.6	130	53	21.45	20.69	0.77	
. 15	EPN	IPU4	10 25 6.01						126.7	105	53	22.34	20.70	1.64	

1980	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	CDH1	IPU4	10 25 7.77				51	2.6	142.6	120	53	28.10	22.76	1.34	
. 15	CDH5	IPD4	10 25 8.06						142.6	120	53	24.39	22.76	1.63	
. 15	LSM	EPU4	10 25 9.91						153.3	124	53	26.24	24.15	2.09	

. APR H = 12 42 51.95 UTC RMS = 0.04 NO = 3 FIXED DEPTH SOLUTION
. 15 LAT = 36.533 N ERX = ERH = AVFM = 2.3 Q = C DEPTH CONTROL INADEQUATE
. LONG = 115.888 W ERY = GAP = 307 AVXM = QS = A MERCURY
. DEPTH = 5.00 KM ERZ = NM = QD = D

. 15	CDH5	IPU	12 43 0.85				29	2.2	52.8	313	94	8.90	8.96	-0.06	
. 15	CDH1	IPD	12 43 0.96				36	2.4	52.8	313	94	9.01	8.96	0.05	
. 15	GMR	EPD	12 43 6.87						89.5	7	92	14.92	14.91	0.01	

. APR H = 12 44 55.55 UTC RMS = 0.19 NO = 4 FREE DEPTH SOLUTION
. 15 LAT = 36.820 N ERX = ERH = AVFM = 1.6 Q = C
. LONG = 115.945 W ERY = GAP = 250 AVXM = QS = B MERCURY
. DEPTH = 9.95 KM ERZ = NM = QD = D

. 15	MCY	IPU	12 44 59.15				25	2.0	17.6	185	117	3.60	3.54	0.06	
. 15	LCP	IPU0	12 44 59.05				19	1.8	20.2	281	113	3.50	3.92	-0.43	
. 15	SSP	EP	12 45 0.75				22	1.9	27.1	296	108	5.20	4.96	0.24	
. 15	SDM	EP	12 45 2.50				10	1.3	40.1	241	102	6.95	7.02	-0.07	
. 15	JCN	EPD4	12 45 3.60				10	1.3	44.5	199	101	8.05	7.71	0.33	

. APR H = 21 30 2.10 UTC RMS = 0.10 NO = 8 FREE DEPTH SOLUTION
. 15 LAT = 36.905 N ERX = 0.3 ERH = 0.5 AVFM = 1.6 Q = B
. LONG = 115.992 W ERY = 0.3 GAP = 123 AVXM = QS = A MERCURY
. DEPTH = 0.04 KM ERZ = 0.7 NM = QD = B

. 15	CPX	IPU	21 30 3.60				20	1.8	6.5	294	90	1.50	1.70	-0.20	
. 15	LOP	IPU	21 30 5.47				21	1.8	16.6	250	38	3.37	3.39	-0.03	
. 15	SSP	EPD	21 30 6.23						20.3	276	38	4.13	3.99	0.13	
. 15	BGB	IPU	21 30 6.77						25.6	305	38	4.67	4.86	-0.19	
. 15	MCY	EPU4	21 30 4.80				18	1.7	27.1	174	38	2.70	5.11	-2.41	
. 15	SPRG	IPD	21 30 7.45				12	1.4	28.5	145	38	5.35	5.34	0.01	
. 15	CDH1	EP	21 30 7.57				29	2.2	29.4	260	38	5.47	5.48	-0.01	
. 15	CDH5	EP	21 30 7.60				23	2.0	29.4	260	38	5.50	5.48	0.02	
. 15	LSM	EP 4	21 30 8.20				10	1.2	31.0	234	38	6.10	5.74	0.36	VERY E
. 15	SCM	EP 4	21 30 10.00				7	1.0	42.2	227	38	7.90	7.56	0.34	VERY E
. 15	GMR	IPU	21 30 11.25						51.5	22	38	9.15	9.07	0.08	
. 15	BRO	EPD4	21 30 19.32						58.7	254	38	17.22	10.23	6.98	

. APR H = 11 25 35.88 UTC RMS = 0.08 NO = 16 FREE DEPTH SOLUTION
. 16 LAT = 37.208 N ERX = 0.2 ERH = 0.3 AVFM = 3.3 Q = C
. LONG = 115.469 W ERY = 0.2 GAP = 86 AVXM = QS = C ALAMO
. DEPTH = 1.70 KM ERZ = 5.5 NM = QD = C

. 16	EPR	IPU	11 25 40.46				156	3.6	25.4	100	38	4.58	4.49	0.09	
. 16	GMR	IPU4	11 25 40.70						30.2	298	38	4.82	5.27	-0.45	
. 16	PRN	IPD	11 25 43.24						43.2	59	38	7.36	7.38	-0.03	
. 16	GLR	IPU	11 25 44.16				57	2.8	48.7	269	38	8.28	8.28	-0.00	
. 16	MTI	IPD	11 25 45.07						54.9	18	38	9.19	9.27	-0.09	
. 16	CPX	IPD	11 25 46.06				104	3.4	60.9	239	38	10.18	10.25	-0.07	
. 16	SPRG	IPU4	11 25 46.19				119	3.5	64.6	208	38	10.31	10.85	-0.55	
. 16	BLT	IPU	11 25 46.80				99	3.4	65.4	295	38	10.92	10.99	-0.07	
. 16	BGB	IPU4	11 25 47.35						70.0	254	38	11.47	11.74	-0.28	
. 16	LCP	IPD	11 25 48.23				97	3.4	73.5	238	38	12.35	12.31	0.04	
. 16	SSP	IPU	11 25 48.19				111	3.5	73.7	245	38	12.31	12.33	-0.02	
. 16	QCS	IPU	11 25 48.30				83	3.2	73.7	328	38	12.42	12.33	0.08	
. 16	MCY	IPU4	11 25 48.05				123	3.6	74.9	216	38	12.17	12.53	-0.36	
. 16	EPN	IPD2	11 25 48.86						75.9	271	38	12.98	12.69	0.28	
. 16	SPRG	EPU4	11 25 49.00				90	3.3	82.9	160	38	13.12	13.83	-0.72	
. 16	CDH1	IPU4	11 25 49.71						84.8	243	38	13.83	14.14	-0.32	
. 16	CDH5	IPU4	11 25 49.79				103	3.5	84.8	243	38	13.90	14.14	-0.25	
. 16	LSM	IPD	11 25 50.60						88.4	234	38	14.72	14.73	-0.01	
. 16	KPN	IPU4	11 25 52.04						94.4	306	38	16.16	15.71	0.45	
. 16	BMT	IPU4	11 25 53.55				105	3.5	94.9	275	38	17.67	15.79	1.88	
. 16	APK	EPD	11 25 52.29						99.0	185	38	16.41	16.46	-0.05	
. 16	SCM	IPU	11 25 52.32				85	3.3	99.5	231	38	16.44	16.53	-0.09	
. 16	JCN	EPD	11 25 52.60				77	3.3	102.3	214	38	16.92	16.99	-0.07	
. 16	RVE	EPU4	11 25 54.61				31	2.5	110.4	325	38	18.73	18.31	0.42	
. 16	BRO	IPU4	11 25 55.36.						114.2	244	38	19.48	18.92	0.56	
. 16	NMN	EPD4	11 25 56.17				100	3.6	120.8	263	38	20.29	19.99	0.29	
. 16	CTS	EPU4	11 25 56.26				63	3.2	121.2	273	38	20.38	20.06	0.32	
. 16	AMR	EPU	11 25 56.95				86	3.4	127.0	225	38	21.07	21.01	0.06	

1980	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	FMT	IPU4	11 25 58.07						132.7	242	38	22.19	21.93	0.26	
. 16	NCP	IPU	11 25 58.10				46	2.9	134.5	207	30	22.22	22.22	-0.01	

. APR M = 21 41 27.76 UTC RMS = 0.30 ND = 28 FREE DEPTH SOLUTION
. 16 LAT = 37.208 N ERX = 0.5 ERM = 0.7 AVFM = 2.3 Q = C
. LONG = 115.476 W ERY = 0.5 GAP = 63 AVXM = QS = C ALAMO
. DEPTH = 0.06 KM ERZ = 5.2 NM = QD = C

. 16	EPR	IPU	21 41 32.38						26.1	100	38	4.62	4.93	-0.31	
. 16	GMR	IPU4	21 41 32.65				41	2.5	29.7	298	38	4.89	5.51	-0.62	
. 16	PRN	IPD	21 41 35.67						43.8	60	38	8.11	7.81	0.29	
. 16	TPU	EPU	21 41 35.57						46.7	341	38	7.81	8.28	-0.47	
. 16	GLR	IPD	21 41 36.46						48.1	269	38	8.70	8.51	0.19	
. 16	CPX	IPD	21 41 38.08				32	2.4	60.3	239	38	10.32	10.49	-0.17	
. 16	SPRG	IPD4	21 41 38.28				29	2.3	64.2	207	38	10.52	11.14	-0.62	
. 16	BLT	EPU	21 41 38.70				25	2.2	64.8	296	38	10.94	11.23	-0.29	
. 16	NPN	IPU	21 41 39.93						68.7	44	38	12.17	11.86	0.31	
. 16	BGB	EPD4	21 41 40.56				31	2.4	69.4	254	38	12.80	11.98	0.82	
. 16	LCP	EPU	21 41 40.10				35	2.5	73.0	237	38	12.34	12.56	-0.22	
. 16	SSP	IPD	21 41 40.26				35	2.5	73.1	245	38	12.50	12.57	-0.07	
. 16	QCS	EPD	21 41 40.55				19	1.9	73.3	328	38	12.79	12.62	0.17	
. 16	MCY	IPU4	21 41 40.15				43	2.7	74.5	216	38	12.39	12.80	-0.41	
. 16	EPN	EPU	21 41 40.35						75.2	271	38	12.59	12.92	-0.33	
. 16	SMRG	IPD	21 41 42.00				20	2.0	83.1	160	38	14.24	14.21	0.03	
. 16	CDH1	IPD	21 41 42.03						84.2	243	38	14.27	14.38	-0.12	
. 16	CDH5	IPD	21 41 42.15				45	2.7	84.2	243	38	14.39	14.38	0.00	
. 16	LSM	EPD2	21 41 43.10				17	1.9	87.9	234	38	15.34	14.98	0.36	
. 16	BMT	IPU	21 41 44.60						94.3	275	38	16.84	16.02	0.82	
. 16	APK	EP	21 41 44.50						98.9	185	38	16.74	16.78	-0.04	
. 16	SDH	EPU	21 41 44.36				24	2.2	99.0	231	38	16.60	16.78	-0.18	
. 16	JCN	IPU	21 41 44.81				23	2.2	101.9	213	38	17.05	17.26	-0.21	
. 16	BRO	EPD	21 41 47.46						113.6	244	38	19.70	19.16	0.54	
. 16	NMN	EP	21 41 48.60						120.1	263	38	20.84	20.22	0.62	
. 16	AMR	IPU	21 41 49.39						126.5	225	38	21.63	21.27	0.36	
. 16	FMT	IPD	21 41 50.19				23	2.3	132.1	242	38	22.43	22.17	0.26	
. 16	SGV	IPU	21 41 52.06				41	2.8	140.6	260	30	24.30	23.39	0.91	
. 16	GWV	IPU	21 41 54.00						155.7	223	30	26.24	25.34	0.90	
. 16	GMN	EP	21 41 54.15						158.5	274	30	26.39	25.71	0.68	
. 16	GVN	EP 4	21 41 55.50						167.5	262	30	27.74	26.88	0.86	
.		ES	21 42 15.70									47.94	47.04	0.90	
. 16	PGE	EPD4	21 41 56.58						170.9	236	30	28.82	27.32	1.50	
. 16	MGM	EP	21 41 57.25						181.0	278	30	29.49	28.63	0.86	

. APR M = 2 27 39.35 UTC RMS = 0.15 ND = 23 FREE DEPTH SOLUTION
. 21 LAT = 37.295 N ERX = 0.3 ERM = 0.4 AVFM = 2.4 Q = C
. LONG = 116.346 W ERY = 0.3 GAP = 77 AVXM = QS = C SILENT CANYON - NORTH
. DEPTH = 2.86 KM ERZ = 7.5 NM = QD = B

. 21	EPN	IPD	2 27 41.38						9.2	167	98	2.03	1.86	0.17	
. 21	BMT	IPU3	2 27 43.30				54	2.7	16.7	266	94	3.95	3.07	0.88	
. 21	BLT	IPD3	2 27 43.50				40	2.4	26.3	45	93	4.15	4.63	-0.48	
. 21	BGB	IPU	2 27 44.48				36	2.3	30.4	160	92	5.13	5.30	-0.17	
. 21	GLR	EP 4	2 27 44.40						31.0	110	92	5.05	5.40	-0.36	
. 21	SSP	IPU	2 27 46.56						42.6	165	92	7.21	7.28	-0.08	
. 21	CPX	EPU4	2 27 47.05				32	2.3	46.0	143	91	7.70	8.17	-0.47	
. 21	NMN	IPD	2 27 47.69				38	2.5	46.2	240	91	8.34	8.19	0.15	
. 21	CDH1	IPD	2 27 47.26				68	3.0	46.3	177	91	7.91	8.21	-0.30	
. 21	CDH5	IPD	2 27 47.42				55	2.8	46.3	177	91	8.07	8.21	-0.14	
. 21	CTS	IPU	2 27 47.99				24	2.1	50.9	319	91	8.64	8.64	-0.00	
. 21	GMR	EP	2 27 48.16				29	2.2	51.2	85	91	8.81	8.68	0.13	
. 21	LCP	EPU	2 27 47.80				40	2.5	51.4	162	91	8.45	8.72	-0.28	
. 21	LSM	EP 4	2 27 50.15						62.0	174	90	10.80	10.44	0.36	
. 21	BRO	IPD	2 27 50.10						64.1	203	90	10.75	10.77	-0.02	
. 21	QCS	IPU	2 27 50.20				20	2.0	64.8	36	90	10.85	10.89	-0.04	
. 21	SGV	IPD	2 27 51.21				36	2.5	70.2	240	90	11.86	11.77	0.09	
. 21	MCY	EPD	2 27 52.65				39	2.6	78.1	154	90	13.50	13.06	0.24	
. 21	GMN	IPU	2 27 52.75				19	2.0	81.0	270	90	13.40	13.52	-0.12	
. 21	SPRG	EPD	2 27 53.20				32	2.4	82.0	144	90	13.85	13.69	0.16	
. 21	FMT	IPD	2 27 53.05						82.3	206	90	13.70	13.73	-0.03	
. 21	GVN	IPU	2 27 55.20				36	2.6	94.4	250	90	15.85	15.70	0.15	
. 21	JCN	EPU	2 27 55.64				23	2.2	97.3	167	90	16.29	16.18	0.11	
. 21	MGM	IPU	2 27 56.44						103.1	279	90	17.09	17.12	-0.03	
. 21	MTI	EP	2 27 56.48						104.8	66	90	17.13	17.25	-0.13	
. 21	LCH	EPD	2 27 58.86				23	2.3	115.6	267	90	19.51	19.14	0.37	
. 21	SRG	EPU	2 28 1.04				43	2.9	130.4	60	90	21.69	21.55	0.14	
. 21	NPN	EPD4	2 28 1.44						130.8	72	90	22.09	21.62	0.47	

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      STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
1980                (UTC)       (MU) (SEC)                   (KM) (DEG)(DEG)   (SEC)  (SEC) (SEC)

. APR H =  4  8 40.82 UTC  RMS =  0.27  NO = 30                                FREE DEPTH SOLUTION
.  23 LAT =  36.868 N       ERX =   0.5  ERH =   0.7   AVFM =   2.3  Q = B
.    LONG = 116.175 W       ERY =   0.5  GAP =  45     AVXM =        QS = B    LATHROP WELLS
.   DEPTH =   3.36 KM       ERZ =   1.7  NM =                      QD = A
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. 23    LOP  IPDO   4  8 42.10                        49  2.5    1.7  156  147    1.28   0.80   0.48
. 23    SSP  IPD    4  8 42.60                        48  2.5    7.4  329  105    1.78   1.60   0.18
. 23    CPX  IPD    4  8 43.00                        38  2.3   12.4   57   98    2.18   2.39  -0.22
. 23    CDHS IPU    4  8 43.03                        50  2.6   12.7  266   98    2.21   2.44  -0.23
. 23    CDHI IPD    4  8 43.12                        67  2.8   12.7  266   98    2.30   2.44  -0.14
. 23    LSM  IPD    4  8 43.81                              16.7  211   96    2.99   3.08  -0.10
. 23    BGB  IPU    4  8 44.07                        32  2.2   19.4  346   95    3.25   3.53  -0.28
. 23    SDH  EPD    4  8 45.51                              28.6  211   93    4.69   5.02  -0.33
. 23    MCY  IPD    4  8 45.79                        41  2.5   29.7  140   93    4.97   5.20  -0.23
. 23    SPRG IPU    4  8 47.13                        34  2.3   37.9  121   93    6.31   6.52  -0.22
. 23    GLR  EP     4  8 47.05                        10  1.3   39.4   21   92    6.23   6.76  -0.54
. 23    EPN  IPU4   4  8 44.34                              40.7  341   92    3.52   6.97  -3.45
. 23    BRO  EPU    4  8 47.51                              41.8  254   92    6.69   7.16  -0.48
. 23    JCN  IPU    4  8 48.80                        26  2.1   47.9  172   92    7.98   8.15  -0.18
. 23    BMT  IPU4   4  8 51.13                        38  2.5   56.1  325   92   10.31   9.48   0.83
. 23    AMR  EP     4  8 51.00                        17  1.8   58.6  207   92   10.18   9.90   0.28
. 23    FMT  IPD    4  8 50.86                        18  1.8   59.5  245   92   10.04  10.04  -0.01

. 23    NMN  IPU    4  8 51.24                        36  2.5   61.9  292   92   10.42  10.43  -0.02
. 23    BLT  EPD    4  8 51.80                        29  2.3   66.0    3   91   10.98  11.09  -0.11
. 23    SGV  EPD    4  8 53.89                        35  2.5   77.4  279   91   13.07  12.96   0.11
. 23    APK  EP     4  8 54.70                              81.2  139   91   13.88  13.57   0.30
. 23    GWV  EPU    4  8 55.91                        20  2.0   87.7  210   90   15.09  14.61   0.48
. 23    EPR  IPU    4  8 56.94                              94.1   69   90   16.12  15.66   0.46
. 23    PGE  EPD    4  8 57.33                              98.3  234   90   16.51  16.34   0.17
. 23    CTS  EPD    4  8 57.32                        20  2.1   98.6  330   90   16.50  16.39   0.11
. 23    SHRG IPD    4  8 57.29                        20  2.1   99.7  114   90   16.47  16.56  -0.09
. 23    MCA  EPD    4  8 57.83                        26  2.3  101.6  256   90   17.01  16.88   0.13
. 23    GVN  EPU    4  8 58.30                        31  2.5  105.1  278   90   17.48  17.44   0.03
. 23    GMN  IPD    4  8 58.81                        20  2.1  107.7  296   90   17.99  17.86   0.12
. 23    TMO  IPD    4  8 59.36                        21  2.2  110.3  266   90   18.54  18.28   0.26
. 23    PRN  EP     4  9  0.50                        26  2.4  116.6   59   90   19.68  19.31   0.37
. 23    MGM  IPU    4  9  3.18                              133.5  298   53   22.36  21.92   0.43
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. APR H =  5 24 30.13 UTC  RMS =  0.08  NO = 10                                FREE DEPTH SOLUTION
.  23 LAT =  36.815 N       ERX =   0.3  ERH =   0.4   AVFM =   1.9  Q = C
.    LONG = 116.263 W       ERY =   0.3  GAP =  98     AVXM =        QS = C    LATHROP WELLS
.   DEPTH =   2.40 KM       ERZ =   5.5  NM =                      QD = B
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. 23    CDHS IPU4   5 24 31.48                        40  2.4    7.0  316   97    1.     1.50  -0.15
. 23    CDHI IPD    5 24 31.58                        49  2.5    7.0  316   97    1.     1.50  -0.05
. 23    LSM  IPU    5 24 31.85                              8.5  186   96    1.72   1.74  -0.02
. 23    LCP  IPD    5 24 32.12                        31  2.1    9.5   63   95    1.99   1.91   0.08
. 23    SSP  IPU    5 24 32.59                        31  2.2   12.8   18   93    2.46   2.44   0.02
. 23    SDH  IPD    5 24 33.68                              20.0  200   92    3.55   3.61  -0.06
. 23    CPX  IPD    5 24 33.94                        19  1.8   22.2   55   92    3.81   3.96  -0.15
. 23    BGB  EPD    5 24 34.61                        17  1.7   24.9    7   92    4.48   4.41   0.07
. 23    BRO  EPD    5 24 35.80                        11  1.3   32.9  260   91    5.67   5.71  -0.04
. 23    JCN  IPU    5 24 37.70                        15  1.6   44.0  161   90    7.57   7.51   0.06
. 23    EPN  EPU4   5 24 39.06                              44.6  353   90    8.93   7.61   1.32
. 23    FMT  EPU    5 24 38.74                        13  1.5   50.1  247   90    8.61   8.49   0.11
. 23    BMT  EPU4   5 24 40.86                        21  2.0   57.3  335   90   10.73   9.67   1.06
. 23    NMN  EPU4   5 24 40.35                        21  2.0   57.6  301   90   10.22   9.72   0.49
. 23    SGV  EPU4   5 24 42.35                        21  2.0   71.0  285   90   12.22  11.90   0.32
. 23    GVN  EPU4   5 24 47.00                        22  2.2   98.4  282   90   16.87  16.36   0.51
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. APR H = 16 43 20.07 UTC  RMS =  0.05  NO =  8                                FREE DEPTH SOLUTION
.  23 LAT =  37.302 N       ERX =   0.2  ERH =   0.4   AVFM =   1.6  Q = B
.    LONG = 117.380 W       ERY =   0.3  GAP = 125     AVXM =        QS = B    MT. JACKSON
.   DEPTH =   5.97 KM       ERZ =   2.4  NM =                      QD = B
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. 23    GMN  IPU   16 43 22.25                         8  1.0   10.6   91  114    2.18   2.23  -0.05
. 23    MGM  IPU   16 43 23.56                         7  0.9   18.6  326  100    3.49   3.46   0.03
. 23    LCM  IPU   16 43 24.49                        10  1.2   24.9  253  100    4.42   4.46  -0.04
. 23    GVN  EPD   16 43 25.95                        14  1.5   33.5  174   98    5.88   5.84   0.04
. 23    NMN  IPD   16 43 29.59                        15  1.7   55.6  116   95    9.52   9.41   0.11
. 23    BMT  EPD4  16 43 31.40                        17  1.9   75.0   92   93   11.33  12.57  -1.24
. 23    CDHS EPD   16 43 37.58                        22  2.2  106.4  117   92   17.51  17.67  -0.16
. 23    CDHI IPD   16 43 37.71                        25  2.3  106.4  117   92   17.64  17.67  -0.03
.              ISDQ 16 43 50.95                                                   30.88  30.92  -0.04
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. APR H =  6  2 27.66 UTC  RMS =  0.04  NO =  7                                FREE DEPTH SOLUTION
.  24 LAT =  36.817 N       ERX =   0.4  ERH =   0.4   AVFM =   1.6  Q = B
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1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
LONG = 116.274 W			ERY = 0.2	GAP = 124		AVXM =				GS = B		LATHROP WELLS			
DEPTH = 2.83 KM			ERZ = 3.1	NM =						GD = B					
24	CDH1	IPD	6 2 29.04					20	1.8	6.1	321	103	1.38	1.37	0.01
24	CDH5	IPD	6 2 29.05					15	1.5	6.1	321	103	1.39	1.37	0.02
24	LSM	EPD	6 2 29.44					20	1.8	8.7	179	99	1.78	1.78	-0.00
24	LCP	IPU	6 2 29.63					11	1.2	10.3	67	97	1.97	2.05	-0.07
24	SDM	EPD	6 2 31.19							19.9	197	93	3.53	3.60	-0.07
24	BGB	EP	6 2 32.06							24.8	10	93	4.40	4.39	0.01
24	MCY	EPU	6 2 33.40							32.8	122	92	5.74	5.69	0.05

APR H = 6 2 59.68 UTC RMS = 0.05 NO = 7 FREE DEPTH SOLUTION
24 LAT = 36.817 N ERX = 0.4 ERH = 0.5 AVFM = 1.5 Q = B
LONG = 116.274 W ERY = 0.3 GAP = 124 AVXM = GS = B LATHROP WELLS
DEPTH = 2.91 KM ERZ = 3.3 NM = GD = B

24	CDH5	IPU	6 3 1.04					17	1.6	6.2	321	104	1.36	1.38	-0.02
24	CDH1	EP	6 3 1.12					25	1.9	6.2	321	104	1.44	1.38	0.06
24	LSM	EPD	6 3 1.44					25	2.0	8.7	179	99	1.76	1.78	-0.02
24	LCP	IPD	6 3 1.65					12	1.3	10.4	67	98	1.97	2.05	-0.08
24	SDM	IPD	6 3 3.21							19.9	197	94	3.53	3.59	-0.06
24	BGB	IPD	6 3 4.08					8	1.0	24.9	10	93	4.40	4.40	0.00
24	MCY	IPD	6 3 5.42					8	1.1	32.8	122	92	5.74	5.69	0.06

APR H = 7 20 49.72 UTC RMS = 0.07 NO = 8 FREE DEPTH SOLUTION
24 LAT = 36.817 N ERX = 0.5 ERH = 0.6 AVFM = 1.5 Q = B
LONG = 116.271 W ERY = 0.3 GAP = 122 AVXM = QS = B LATHROP WELLS
DEPTH = 3.45 KM ERZ = 3.1 NM = QD = B

24	CDH5	IPU	7 20 51.10					17	1.6	6.4	320	109	1.38	1.43	-0.05
24	CDH1	IPD	7 20 51.18					25	1.9	6.4	320	109	1.46	1.43	0.03
24	LSM	EPU	7 20 51.60					34	2.2	8.6	180	103	1.88	1.79	0.09
24	LCP	IPD	7 20 51.64					11	1.2	10.2	66	101	1.92	2.04	-0.11
24	SSP	IPU	7 20 52.19					10	1.2	12.9	21	99	2.47	2.48	-0.00
24	SDM	IPU	7 20 53.23							19.9	197	95	3.51	3.60	-0.09
24	BGB	EP	7 20 54.22					8	1.0	24.9	9	94	4.50	4.41	0.10
24	MCY	IPU	7 20 55.39							32.6	122	93	5.67	5.65	0.02

APR H = 3 48 37.94 UTC RMS = 0.44 NO = 22 FREE DEPTH SOLUTION
25 LAT = 36.010 N ERX = 1.1 ERH = 2.8 AVFM = 2.5 Q = D
LONG = 116.091 W ERY = 2.5 GAP = 234 AVXM = QS = C ASH MEADOWS
DEPTH = 0.30 KM ERZ = 8.1 NM = QD = D

25	JCN	IPD	3 48 45.85					36	2.4	47.7	359	38	7.91	8.40	-0.49
25	AMR	EPU	3 48 47.00					37	2.5	55.1	321	38	9.06	9.60	-0.54
25	GNV	IPU	3 48 47.35					44	2.6	55.7	291	38	9.41	9.71	-0.29
25	MCY	IPU	3 48 50.00							73.2	9	38	12.06	12.55	-0.49
25	SDM	EPU	3 48 50.65					26	2.2	73.9	343	38	12.71	12.66	0.05
25	SPRG	IPU	3 48 51.35					63	3.0	80.0	18	38	13.41	13.65	-0.24
25	LSM	EP	3 48 52.20					18	1.9	82.5	349	38	14.26	14.05	0.21
25	FMT	IPD	3 48 53.36					20	2.1	93.3	319	38	15.42	15.80	-0.38
25	LCP	EPU	3 48 53.92					36	2.6	93.9	356	38	15.98	15.91	0.07
25	CDH1	EPD	3 48 53.96					68	3.1	96.5	348	38	16.02	16.33	-0.31
25	CDH5	EPD	3 48 54.33					46	2.8	96.5	348	38	16.39	16.33	0.06
25	SHRG	EPU	3 48 54.53					24	2.2	100.4	57	38	16.59	16.96	-0.37
25	CPX	IPD	3 48 55.24					32	2.5	102.0	2	38	17.30	17.22	0.08
25	BGB	IPU	3 48 57.46					27	2.4	114.7	354	38	19.52	19.29	0.23
25	NMN	EPU	3 49 0.81					28	2.5	135.5	331	30	22.87	22.67	0.20
25	SGV	EPD	3 49 0.90					33	2.6	136.8	322	30	22.96	22.84	0.12
25	BMT	EPU	3 49 3.20					37	2.8	146.8	344	30	25.26	24.13	1.13
25	TMO	IPD	3 49 2.25							147.5	307	30	24.31	24.22	0.09
25	GMR	EP	3 49 2.83					21	2.3	149.7	11	30	24.89	24.51	0.38
25	EPR	EPU	3 49 3.59					35	2.7	151.9	32	30	25.65	24.81	0.85
25	GVN	IPD	3 49 4.49					30	2.6	157.1	314	30	26.55	25.47	1.08
25	BLT	IPU	3 49 5.05					32	2.7	161.1	359	30	27.11	26.00	1.12

APR H = 10 40 30.33 UTC RMS = 0.11 NO = 23 FREE DEPTH SOLUTION
25 LAT = 37.319 N ERX = 0.3 ERH = 0.4 AVFM = 3.1 Q = C
LONG = 116.304 W ERY = 0.2 GAP = 74 AVXM = QS = B SILENT CANYON - NORTH
DEPTH = 3.78 KM ERZ = 4.9 NM = QD = C

25	EPM	IPU	10 40 32.70					133	3.4	11.8	169	101	2.37	2.30	0.06
25	BMT	IPUA	10 40 35.46					97	3.2	20.8	259	96	5.13	3.75	1.38
25	BLT	IPD	10 40 34.25					89	3.1	21.7	43	96	3.92	3.90	0.01
25	GLR	IPU	10 40 35.32							28.6	118	94	4.99	5.02	-0.03

1980	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	BGB	IPU	10 40 35.87						31.9	168	94	5.54	5.56	-0.02	
. 25	SSP	IPD	10 40 37.80				122	3.5	44.4	170	93	7.47	7.58	-0.11	
. 25	KRNA	IPU	10 40 38.50				87	3.2	48.3	352	93	8.17	8.22	-0.05	
. 25	CPX	EPD	10 40 38.59				82	3.1	48.5	153	93	8.26	8.24	0.01	
. 25	CDM1	EPD	10 40 38.80				97	3.3	50.9	181	92	8.47	8.64	-0.18	
. 25	CDM5	IPU	10 40 38.82				77	3.1	50.9	181	92	8.49	8.64	-0.16	
. 25	CTS	IPU	10 40 39.26				55	2.8	51.6	314	92	8.93	8.75	0.18	
. 25	NMN	IPD	10 40 39.40				93	3.3	52.8	240	92	9.07	8.95	0.12	
. 25	BRO	IPD	10 40 41.67						68.1	205	92	11.34	11.43	-0.10	
. 25	SGV	IPD	10 40 42.99				91	3.3	74.8	240	92	12.66	12.52	0.13	
. 25	SDM	IPU	10 40 42.89				61	3.0	74.8	182	92	12.56	12.53	0.03	
. 25	SPRG	EPD	10 40 44.21				76	3.2	82.1	148	91	13.88	13.72	0.15	
. 25	GMN	EPU	10 40 44.40				64	3.0	84.8	269	91	14.07	14.16	-0.09	
. 25	GVN	IPD	10 40 46.91				65	3.1	98.7	249	91	16.58	16.43	0.15	
. 25	JCN	EPU	10 40 46.95				51	2.9	99.2	170	91	16.62	16.50	0.11	
. 25	EPR	EPD4	10 40 47.99				95	3.4	100.6	100	91	17.66	16.73	0.93	
. 25	AMR	EPU2	10 40 48.05				57	3.0	103.4	188	91	17.72	17.19	0.53	
. 25	MZP	EPU	10 40 47.46				43	2.8	104.4	294	91	17.13	17.36	-0.23	
. 25	MGM	IPU	10 40 47.96				60	3.1	106.5	277	90	17.63	17.67	-0.04	
. 25	MCA	IPU	10 40 49.28				40	2.7	114.5	229	90	18.95	18.97	-0.03	
. 25	LCH	IPD	10 40 50.50				45	2.9	119.5	266	90	20.17	19.79	0.38	
. 25	PGE	EP	10 40 51.50						127.4	212	90	21.17	21.06	0.10	
. 25	APK	EPU4	10 40 52.90				29	2.5	128.6	150	53	22.57	21.25	1.31	
. 25	SMRG	EPD4	10 40 54.31				51	3.0	136.6	131	53	23.98	22.28	1.69	
. 25	PPK	IPD4	10 40 54.60				45	2.9	142.5	275	53	24.27	23.06	1.21	

. APR H = 2 13 7.25 UTC RMS = 0.07 NO = 8 FREE DEPTH SOLUTION
. 26 LAT = 36.815 N ERX = 0.5 ERH = 0.6 AVFM = 1.3 Q = B
. LONG = 116.275 W ERY = 0.3 GAP = 126 AVXM = QS = B LATHROP WELLS
. DEPTH = 4.20 KM ERZ = 2.3 NM = QD = B

. 26	CDM5	IPU	2 13 8.65				15	1.5	6.4	323	116	1.40	1.48	-0.08	
. 26	CDM1	IPD	2 13 8.73				20	1.8	6.4	323	116	1.48	1.48	0.00	
. 26	LSM	IPU	2 13 9.10						8.4	178	109	1.85	1.79	0.06	
. 26	LCP	IPU	2 13 9.23				11	1.2	10.5	65	105	1.98	2.12	-0.14	
. 26	SSP	EP	2 13 10.00				9	1.1	13.2	22	102	2.75	2.55	0.20	
. 26	SDM	IPU	2 13 10.79						19.6	197	98	3.54	3.57	-0.02	
. 26	BGB	EP	2 13 11.71						25.1	10	96	4.46	4.46	0.00	
. 26	MCY	EPU	2 13 12.95				7	0.9	32.7	121	95	5.70	5.68	0.02	

. APR H = 13 1 55.13 UTC RMS = 0.08 NO = 4 FREE DEPTH SOLUTION
. 27 LAT = 37.052 N ERX = ERH = AVFM = 1.7 Q = C
. LONG = 117.451 W ERY = GAP = 195 AVXM = QS = A MT. JAL SON
. DEPTH = 1.10 KM ERZ = NM = QD = D

. 27	GVN	IPU	13 1 57.35				28	2.1	11.2	120	38	2.22	2.29	-0.08	
. 27	LCH	EP 4	13 1 59.60				15	1.6	26.7	319	38	4.47	4.83	-0.36	
. 27	GMN	EP	13 2 0.81						32.3	32	38	5.68	5.73	-0.06	
. 27	SGV	EP 4	13 2 2.06				21	1.9	38.1	102	38	6.93	6.67	0.26	
. 27	NMN	EP	13 2 4.91				16	1.7	56.3	87	38	9.78	9.64	0.14	
. 27	PPK	IPU	13 2 5.06				9	1.2	58.0	316	38	9.93	9.91	0.02	

. APR H = 4 12 47.91 UTC RMS = 0.03 NO = 7 FREE DEPTH SOLUTION
. 29 LAT = 36.827 N ERX = 0.2 ERH = 0.4 AVFM = 1.5 Q = C
. LONG = 115.864 W ERY = 0.3 GAP = 153 AVXM = QS = B MERCURY
. DEPTH = 8.08 KM ERZ = 2.2 NM = QD = C

. 29	SPRG	EPU	4 12 51.00				15	1.5	15.5	162	114	3.09	3.10	-0.01	
. 29	MCY	IPU	4 12 51.74				21	1.8	20.3	205	108	3.83	3.82	0.00	
. 29	CPX	IPU	4 12 51.75				10	1.2	20.7	303	108	3.84	3.88	-0.04	
. 29	LCP	IPU	4 12 52.90				15	1.6	27.2	276	104	4.99	4.90	0.08	
. 29	SSP	EPU4	4 12 53.95				15	1.6	33.4	289	101	6.04	5.88	0.15	
. 29	LSM	EPD4	4 12 54.79						37.6	255	100	6.88	6.56	0.31	
. 29	BGB	EP 4	4 12 54.59						40.0	306	99	6.68	6.93	-0.26	
. 29	CDM5	IPD	4 12 54.88				20	1.9	40.6	275	99	6.97	7.04	-0.07	
. 29	CDM1	IPU	4 12 54.96				27	2.1	40.6	275	99	7.05	7.04	0.01	
. 29	SDM	EPD4	4 12 56.37				8	1.1	46.9	245	98	8.46	8.05	0.41	
. 29	JCN	EPU4	4 12 56.50				7	1.0	48.0	206	98	8.59	8.22	0.36	
. 29	GMN	IPU	4 12 57.59						56.9	8	97	9.68	9.66	0.02	

. APR H = 17 53 31.79 UTC RMS = 0.06 NO = 9 FREE DEPTH SOLUTION
. 29 LAT = 36.817 N ERX = 0.4 ERH = 0.4 AVFM = 1.3 Q = B
. LONG = 116.273 W ERY = 0.2 GAP = 124 AVXM = QS = B LATHROP WELLS
. DEPTH = 3.37 KM ERZ = 2.1 NM = QD = B

1980	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	CDH5	IPU2	17 53 33.12				19	1.7	6.2	321	108	1.33	1.41	-0.08	
29	CDH1	IPD	17 53 33.22				25	1.9	6.2	321	108	1.43	1.41	0.02	
29	LSM	IPD	17 53 33.60						8.7	179	103	1.81	1.79	0.02	
29	LCP	IPD	17 53 33.80				15	1.5	10.3	66	101	2.01	2.05	-0.04	
29	SSP	IPU	17 53 34.20				13	1.4	12.9	22	98	2.41	2.48	-0.06	
29	SDH	EPU	17 53 35.34				6	0.8	19.9	197	95	3.55	3.60	-0.05	
29	BGB	EP	17 53 36.30				6	0.8	24.8	9	94	4.51	4.40	0.11	
29	MCY	IPU	17 53 37.50				19	1.8	32.7	122	93	5.71	5.68	0.04	
29	JCN	EPD3	17 53 39.60				6	0.8	44.5	160	92	7.81	7.60	0.21	

APR H = 9 33 59.44 UTC RMS = 0.07 ND = 11 FREE DEPTH SOLUTION
30 LAT = 36.639 N ERX = 0.4 ERH = 0.5 AVFM = 1.7 Q = B
LONG = 115.999 W ERY = 0.3 GAP = 133 AVXM = QS = A MERCURY
DEPTH = 12.44 KM ERZ = 1.0 NM = QD = B

30	MCY	IPU	9 34 1.79				24	1.9	4.2	53	160	2.35	2.31	0.03	
30	SPRG	IPU	9 34 3.20				12	1.4	18.0	70	122	3.76	3.79	-0.04	
30	JCN	IPD	9 34 4.08				17	1.7	24.0	203	115	4.63	4.64	-0.01	
30	LSM	IPU	9 34 4.51				42	2.5	26.8	295	113	5.07	5.06	0.01	
30	LCP	EP	9 34 4.68				15	1.6	28.2	328	112	5.24	5.28	-0.04	
30	SDH	IPU	9 34 4.96				15	1.6	30.3	271	110	5.51	5.60	-0.08	
30	CPX	EPU	9 34 5.49						32.6	351	109	6.04	5.94	0.10	
30	SSP	EP	9 34 6.06				12	1.4	37.3	328	107	6.62	6.67	-0.06	
30	CDH5	IPU	9 34 6.06				12	1.4	37.6	311	106	6.62	6.72	-0.10	
30	CDH1	IPD	9 34 6.17				20	1.9	37.6	311	106	6.73	6.72	0.01	
30	BMT	EPD4	9 34 15.36						85.9	326	97	15.91	14.43	1.48	
30	NMN	EPU	9 34 14.45						87.9	304	97	15.00	14.76	0.25	

MAY H = 7 38 28.30 UTC RMS = 0.10 ND = 9 FREE DEPTH SOLUTION
02 LAT = 36.817 N ERX = 0.7 ERH = 0.8 AVFM = 1.4 Q = B
LONG = 116.268 W ERY = 0.4 GAP = 120 AVXM = QS = B LATHROP WELLS
DEPTH = 3.56 KM ERZ = 3.8 NM = QD = B

02	CDH1	IPD	7 38 29.78				27	2.0	6.5	318	109	1.48	1.47	0.01	
02	LSM	IPD	7 38 30.00				31	2.1	8.6	182	104	1.70	1.79	-0.09	
02	LCP	IPD	7 38 30.29				15	1.5	9.9	65	102	1.99	2.00	-0.01	
02	SSP	IPU	7 38 30.76				15	1.5	12.8	20	99	2.46	2.46	0.00	
02	SDH	IPD	7 38 31.80				5	0.6	20.0	198	96	3.50	3.62	-0.12	
02	CPX	EP	7 38 32.16				7	0.9	22.5	56	95	3.86	4.02	-0.16	
02	BGB	IPD	7 38 32.75				7	0.9	24.8	8	95	4.45	4.40	0.05	
02	MCY	IPD	7 38 33.99				19	1.8	32.3	122	93	5.69	5.61	0.08	
02	JCN	EPD	7 38 36.10				7	1.0	44.3	161	92	7.80	7.57	0.23	

MAY H = 10 31 18.71 UTC RMS = 0.13 ND = 12 FREE DEPTH SOLUTION
03 LAT = 36.458 N ERX = 0.7 ERH = 1.2 AVFM = 1.7 Q = C
LONG = 117.056 W ERY = 1.0 GAP = 136 AVXM = QS = B PANAMINT BUTTE
DEPTH = 14.61 KM ERZ = 2.2 NM = QD = C

03	PGE	IPD	10 31 22.04				8	1.0	12.2	184	138	3.33	3.30	0.03	
03	GWV	EP 4	10 31 36.55				12	1.4	45.9	131	106	17.84	8.11	9.73	
03	TMO	EPD	10 31 27.41						49.7	321	105	8.70	8.72	-0.02	
03	BRO	EP 2	10 31 27.46						51.2	49	104	8.75	8.95	-0.20	
03	AMR	EPU3	10 31 27.54						52.6	97	104	8.83	9.17	-0.34	
03	SGV	EPU3	10 31 29.09				14	1.6	58.0	2	103	10.38	10.03	0.35	
		ISU4	10 31 36.00									17.29	17.54	-0.26	
03	NMN	EPU2	10 31 31.25				9	1.3	72.2	17	100	12.54	12.29	0.25	
03	LSM	EPD3	10 31 32.35				29	2.3	76.7	66	100	13.64	13.01	0.63	
03	CDH1	IPD	10 31 32.13				22	2.1	79.6	56	99	13.42	13.47	-0.05	
03	CDH5	EPU	10 31 32.12				17	1.9	79.6	56	99	13.41	13.47	-0.06	
03	LCP	EPU	10 31 34.06				14	1.7	90.7	61	98	15.35	15.25	0.09	
03	SSP	EPU0	10 31 34.34				17	1.9	91.0	55	98	15.63	15.30	0.33	
03	BMT	EPU	10 31 35.79						102.7	27	53	17.08	16.83	0.25	
03	EPN	EPU3	10 31 37.20				13	1.7	106.3	38	53	18.49	17.30	1.19	

MAY H = 11 36 39.05 UTC RMS = 0.05 ND = 10 FREE DEPTH SOLUTION
08 LAT = 37.165 N ERX = 0.2 ERH = 0.3 AVFM = 1.8 Q = B
LONG = 117.413 W ERY = 0.2 GAP = 129 AVXM = QS = A MT. JACKSON
DEPTH = 7.17 KM ERZ = 1.6 NM = QD = C

08	GVN	IPU	11 36 42.68				20	1.8	19.2	161	107	3.63	3.61	0.03	
08	GMN	IPU	11 36 42.79				10	1.2	20.2	42	106	3.74	3.77	-0.02	
08	LCH	IPU	11 36 43.10				14	1.5	22.2	293	105	4.05	4.08	-0.03	
08	MGM	IPU2	11 36 44.75				10	1.2	31.5	349	100	5.70	5.56	0.14	
08	SGV	IPU	11 36 45.81				22	2.0	39.5	121	98	6.76	6.84	-0.07	

1980	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	NMN	IPU	11 36 48.10				22	2.0	53.7	100	96	9.05	9.12	-0.07	
. 08	BMT	EPD2	11 36 50.85				22	2.1	79.1	80	94	11. 0	13.25	-1.45	
. 08	BRO	IPD	11 36 52.95						83.1	123	94	13.90	13.90	0.01	
. 08	CDH1	IPU	11 36 56.13				32	2.5	103.2	109	93	17.08	17.16	-0.07	
. 08	CDHS	EP	11 36 56.20				26	2.3	103.2	109	93	17.15	17.16	-0.00	
. 08	BGB	EPD	11 36 56.77						106.3	98	93	17.72	17.66	0.06	

. MAY H = 11 3 32.82 UTC RMS = 0.13 NO = 16 FREE DEPTH SOLUTION
. 10 LAT = 36.809 N ERX = 0.2 ERH = 0.3 AVFM = 2.2 Q = C
. LONG = 116.268 W ERY = 0.2 GAP = 84 AVXM = QS = C LATHROP WELLS
. DEPTH = 2.28 KM ERZ = 5.5 NM = QD = B

. 10	CDHS	IPU2	11 3 34.14				49	2.5	7.2	322	96	1.32	1.54	-0.21	
. 10	CDH1	IPD2	11 3 34.18				59	2.7	7.2	322	96	1.36	1.54	-0.17	
. 10	LSM	IPU2	11 3 33.79						7.7	183	95	0.97	1.62	-0.64	
. 10	LCP	IPD	11 3 34.75				46	2.5	10.3	61	94	1.93	2.03	-0.09	
. 10	SDH	IPD	11 3 36.21				21	1.8	19.2	199	92	3.39	3.47	-0.08	
. 10	CPX	IPD4	11 3 36.49				26	2.0	22.9	54	92	3.67	4.09	-0.41	
. 10	BGB	IPD2	11 3 37.23						25.7	8	91	4.41	4.53	-0.12	
. 10	MCY	IPU	11 3 38.35				48	2.6	31.8	121	90	5.53	5.53	0.01	
. 10	BRO	EPD4	11 3 38.21				18	1.8	32.3	261	90	5.39	5.61	-0.21	
. 10	SPRG	IPU	11 3 40.14				29	2.2	42.9	107	90	7.32	7.32	0.00	
. 10	JON	IPU	11 3 40.32				35	2.4	43.5	160	90	7.50	7.43	0.08	
. 10	GLR	EP	11 3 41.22						48.7	27	90	8.40	8.28	0.13	
. 10	AMR	EPD	11 3 41.26				20	1.9	49.2	202	90	8.44	8.35	0.09	
. 10	NMN	IPU4	11 3 43.10				31	2.3	57.6	302	90	10.28	9.72	0.57	
. 10	BMT	EPU4	11 3 43.50				32	2.3	57.8	336	90	10.68	9.74	0.94	
. 10	SGV	EPD	11 3 44.81				29	2.3	70.8	286	90	11.99	11.86	0.13	
. 10	BLT	EP 2	11 3 45.00				20	2.0	73.4	9	90	12.18	12.28	-0.10	VERY E
. 10	NCP	EPU0	11 3 45.40				20	2.0	76.2	172	90	12.58	12.75	-0.16	
. 10	APK	IPD4	11 3 37.91				25	2.2	82.5	131	90	5.09	13.76	-8.67	
. 10	GVN	EPU4	11 3 49.60				28	2.4	98.1	283	90	16.78	16.31	0.47	
. 10	CTS	EP 4	11 3 50.32						100.8	336	90	17.50	16.74	0.76	VERY E
. 10	TMO	IPD4	11 3 50.70				19	2.0	101.8	270	90	17.88	16.90	0.99	
. 10	EPR	EPU4	11 3 50.59						104.2	67	90	17.77	17.30	0.48	
. 10	KRNA	EP 4	11 3 50.93				21	2.1	104.9	355	90	18.11	17.41	0.70	VERY E
. 10	SMRG	EPU	11 3 50.40				13	1.7	105.0	109	90	17.58	17.43	0.16	
. 10	MGM	EPU0	11 3 54.52				22	2.3	129.8	303	90	21.70	21.46	0.24	
. 10	LCH	EPD4	11 3 55.10				19	2.1	131.6	291	90	22.28	21.75	0.54	

. MAY H = 9 28 54.08 UTC RMS = 0.02 NO = 7 FREE DEPTH SOLUTION
. 11 LAT = 36.571 N ERX = 0.2 ERH = 0.3 AVFM = 1.7 Q = B
. LONG = 116.339 W ERY = 0.1 GAP = 148 AVXM = QS = A LATHROP WELLS
. DEPTH = 7.94 KM ERZ = 0.5 NM = QD = C

. 11	SDH	IPD	9 28 56.15				10	1.2	8.2	1	130	2.07	2.07	0.00	
. 11	LSM	IPD	9 28 57.75						19.5	18	109	3.67	3.70	-0.03	
. 11	AMR	EPD	9 28 58.28						22.8	212	106	4.20	4.20	0.00	
. 11	CDHS	IPD	9 28 59.73				17	1.7	32.1	3	101	5.65	5.68	-0.02	
. 11	CDH1	IPU	9 28 59.76				27	2.1	32.1	3	101	5.68	5.68	0.01	
. 11	BRO	EP 4	9 28 59.58						33.2	310	101	5.50	5.86	-0.35	
. 11	LCP	EPD	9 29 0.25				13	1.5	34.9	26	101	6.17	6.12	0.05	
. 11	MCY	IPU	9 29 0.23				21	1.9	35.2	73	100	6.15	6.16	-0.01	
. 11	FMT	EPD4	9 29 1.53						40.1	281	99	7.45	6.95	0.50	

. MAY H = 2 33 41.84 UTC RMS = 0.07 NO = 6 FREE DEPTH SOLUTION
. 13 LAT = 36.821 N ERX = 0.7 ERH = 1.1 AVFM = 1.0 Q = C
. LONG = 116.060 W ERY = 0.8 GAP = 223 AVXM = QS = B LATHROP WELLS
. DEPTH = 17.32 KM ERZ = 1.3 NM = QD = D

. 13	LCP	IPU	2 33 45.36				6	0.7	10.3	291	148	3.52	3.46	0.05	
. 13	SSP	EPU3	2 33 46.76				6	0.8	18.2	309	132	4.92	4.30	0.61	
. 13	MCY	IPU	2 33 46.29				13	1.4	19.7	154	130	4.45	4.49	-0.04	
. 13	LSM	EP 3	2 33 46.90						21.0	244	128	5.06	4.65	0.41	VERY E
. 13	CDH1	IPD	2 33 46.80				17	1.7	23.4	281	125	4.96	4.96	-0.00	
. 13	CDHS	IPU	2 33 46.75				5	0.6	23.4	281	125	4.91	4.96	-0.05	
. 13	JON	EP 3	2 33 49.67						42.5	185	111	7.83	7.73	0.10	VERY E

. MAY H = 8 33 31.96 UTC RMS = 0.06 NO = 6 FREE DEPTH SOLUTION
. 14 LAT = 36.640 N ERX = 0.7 ERH = 0.9 AVFM = 1.5 Q = B
. LONG = 116.203 W ERY = 0.5 GAP = 142 AVXM = QS = A LATHROP WELLS
. DEPTH = 7.96 KM ERZ = 1.4 NM = QD = C

. 14	LCP	IPU	8 33 33.53				19	1.7	3.5	64	154	1.57	1.60	-0.03	
. 14	SSP	EPU	8 33 34.22				18	1.7	9.5	352	126	2.26	2.24	0.02	

1980	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	LSM	IPD	8 33 34.71				31	2.2	12.8	209	118	2.75	2.69	0.06	
14	SDH	EPD	8 33 36.35				7	0.9	24.8	209	105	4.39	4.51	-0.12	
14	MCY	IPU	8 33 37.15				18	1.7	29.2	133	103	5.19	5.22	-0.03	
14	JON	EPU	8 33 39.86				6	0.8	45.3	169	98	7.90	7.79	0.11	

MAY H = 1 30 38.60 UTC RMS = 0.11 NO = 8 — FIXED DEPTH SOLUTION
15 LAT = 36.504 N ERX = 1.2 ERH = 1.6 AVFM = 1.4 Q = D — DEPTH CONTROL INADEQUATE
LONG = 115.896 W ERY = 1.1 GAP = 229 AVXM = QS = C — MERCURY
DEPTH = 5.00 KM ERZ = 7.8 NM = QD = D

15	MCY	IPU	1 30 41.59				26	2.0	18.5	341	101	3.29	3.40	-0.12	
15	JON	IPD	1 30 42.21				9	1.1	19.9	249	100	3.61	3.63	-0.03	
15	SPRG	EPD	1 30 42.60				12	1.4	22.4	20	99	4.00	4.04	-0.05	
15	LSM	EP 0	1 30 45.97				9	1.2	42.6	308	95	7.37	7.29	0.07	
15	SDH	EPU	1 30 45.76						42.6	292	95	7.16	7.30	-0.14	
15	LCP	EPU0	1 30 46.51				12	1.4	45.8	326	94	7.91	7.82	0.09	
15	CDH1	IPU0	1 30 48.02						54.6	316	94	9.42	9.25	0.17	
15	CDH5	IPU3	1 30 48.05						54.6	316	94	9.45	9.25	0.20	
15	BRO	EPU3	1 30 51.55						71.3	294	93	12.95	11.96	0.99	

MAY H = 16 49 8.20 UTC RMS = 0.09 NO = 8 — FREE DEPTH SOLUTION
16 LAT = 37.074 N ERX = 0.9 ERH = 1.0 AVFM = 1.9 Q = C
LONG = 116.055 W ERY = 0.4 GAP = 162 AVXM = QS = B — SILENT CANYON - YUCCA FLAT
DEPTH = 8.64 KM ERZ = 3.8 NM = QD = C

16	BGB	IPD	16 49 11.46				17	1.6	15.9	255	115	3.26	3.19	0.07	
16	CPX	IPD0	16 49 11.24						16.1	181	115	3.04	3.23	-0.18	
16	SSP	EPU0	16 49 12.24						22.1	221	108	4.04	4.12	-0.08	
16	LCP	EPU	16 49 13.19				24	2.0	26.4	202	105	4.99	4.80	0.19	
16	CDH5	IPU0	16 49 13.95				26	2.1	33.3	225	102	5.75	5.89	-0.14	
16	CDH1	IPU0	16 49 13.99				32	2.3	33.3	225	102	5.79	5.89	-0.10	
16	LSM	EP 4	16 49 16.75						41.9	207	100	8.55	7.27	1.29	
16	BLT	EPU0	16 49 15.67						43.5	351	99	7.47	7.53	-0.05	
		ISD4	16 49 21.27									13.07	13.17	-0.10	
16	SPRG	EPD	16 49 16.40				12	1.5	47.5	153	99	8.20	8.16	0.04	

MAY H = 1 43 11.44 UTC RMS = 0.38 NO = 9 — FREE DEPTH SOLUTION
18 LAT = 36.819 N ERX = 2.5 ERH = 3.1 AVFM = 1.3 Q = C
LONG = 116.273 W ERY = 1.9 GAP = 123 AVXM = QS = C — LATHROP WELLS
DEPTH = 9.30 KM ERZ = 5.9 NM = QD = B

18	CDH1	IPD	1 43 13.63				23	1.9	6.0	319	145	2.19	1.99	0.20	
18	CDH5	IPU	1 43 13.60				17	1.6	6.0	319	145	2.16	1.99	0.17	
18	LSM	EP 3	1 43 13.45				9	1.1	8.9	179	133	2.01	2.30	-0.29	
18	LCP	IPD	1 43 13.63				11	1.2	10.2	68	129	2.19	2.46	-0.27	
18	SSP	IPU0	1 43 14.11				7	0.9	12.7	23	123	2.67	2.79	-0.12	
18	SDH	IPU	1 43 15.27						20.1	197	112	3.83	3.87	-0.03	
18	BGB	EPU3	1 43 16.90						24.6	10	108	5.46	4.55	0.92	
18	MCY	IPD	1 43 17.60				12	1.4	32.9	122	104	6.16	5.84	0.32	
18	EPN	EPU1	1 43 17.56						44.0	354	100	6.12	7.62	-1.50	

MAY H = 17 56 25.58 UTC RMS = 0.27 NO = 8 — FREE DEPTH SOLUTION
18 LAT = 36.930 N ERX = 2.2 ERH = 3.6 AVFM = 1.2 Q = D
LONG = 116.009 W ERY = 2.9 GAP = 204 AVXM = QS = C — LATHROP WELLS
DEPTH = 33.89 KM ERZ = 4.3 NM = QD = D

18	CPX	IPU	17 56 31.01				5	0.5	4.4	268	171	5.43	5.40	0.03	
18	LCP	EPU3	17 56 32.11				11	1.3	16.5	239	149	6.53	5.94	0.59	
18	SSP	EPU4	17 56 33.19				6	0.8	18.7	268	145	7.61	6.10	1.52	
		ISD	17 56 37.17									11.59	10.67	0.92	
18	BGB	EPD	17 56 32.28						22.9	301	139	6.70	6.43	0.28	
18	CDH1	EP	17 56 32.25				19	1.8	28.6	254	131	6.67	6.96	-0.28	
18	CDH5	EP	17 56 32.48				9	1.1	28.6	254	131	6.90	6.96	-0.05	
18	MCY	EPU	17 56 32.45				13	1.5	30.1	172	130	6.87	7.11	-0.23	
18	LSM	EP 4	17 56 34.00				11	1.3	31.7	228	128	8.42	7.26	1.16	
18	SPRG	IPD	17 56 32.89				7	0.9	31.7	146	128	7.31	7.27	0.05	

MAY H = 4 16 35.37 UTC RMS = 0.43 NO = 31 — FREE DEPTH SOLUTION
19 LAT = 37.076 N ERX = 0.7 ERH = 1.0 AVFM = 2.9 Q = C
LONG = 117.074 W ERY = 0.4 GAP = 64 AVXM = QS = C — MT. JACKSON
DEPTH = 1.74 KM ERZ = 3.3 NM = QD = C

1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 19	SGV	IPU	4 16 38.00				100	3.2	11.2	161	90	2.63	2.17	0.46	
. 19	NMN	IPU	4 16 39.33				87	3.1	22.7	89	90	3.96	4.05	-0.09	
. 19	GVN	IPD	4 16 40.29				103	3.2	25.3	251	90	4.92	4.47	0.45	
. 19	GMN	IPU	4 16 40.39				43	2.5	29.8	326	90	5.02	5.20	-0.18	
. 19	TMO	IPD	4 16 41.89				38	2.4	42.3	225	90	6.52	7.23	-0.71	
. 19	GRO	IPU4	4 16 43.40						53.0	131	90	8.03	8.97	-0.94	
. 19	BMT	IPD3	4 16 42.89				73	3.0	53.2	64	90	7.52	9.00	-1.48	
. 19	LCH	EPU	4 16 44.40				46	2.6	53.9	289	90	9.03	9.11	-0.08	
. 19	FMT	IPU	4 16 43.84						55.1	152	90	8.47	9.32	-0.85	
. 19	MGM	IPU	4 16 44.70				51	2.7	55.2	317	90	9.33	9.32	0.01	
. 19	EPN	IPD	4 16 47.25				87	3.2	68.4	77	90	11.88	11.48	0.40	
. 19	CTS	IPD	4 16 47.14				42	2.6	69.7	26	90	11.77	11.69	0.08	
. 19	CDH5	IPD4	4 16 46.49				71	3.1	71.5	110	90	11.12	11.97	-0.85	
. 19	CDH1	IPD	4 16 46.58				104	3.4	71.5	110	90	11.21	11.97	-0.76	
. 19	MZP	EPU	4 16 47.70				27	2.3	74.5	336	90	12.33	12.46	-0.13	
. 19	BGB	IPD	4 16 47.42						75.4	93	90	12.05	12.60	-0.56	
. 19	SSP	IPU	4 16 48.76				64	3.0	78.0	102	90	13.39	13.03	0.36	
. 19	LSM	EPD	4 16 48.90				71	3.1	80.7	118	90	13.53	13.47	0.05	
. 19	SDH	IPU	4 16 49.06				43	2.7	81.2	126	90	13.69	13.55	0.14	
. 19	PPK	EPD	4 16 49.55						83.5	298	90	14.18	13.92	0.26	
. 19	LCP	EPU	4 16 49.45				63	3.0	84.4	107	90	14.08	14.07	0.01	
. 19	CPX	EPU	4 16 50.55				56	2.9	91.9	100	90	15.18	15.29	-0.11	
. 19	AMR	IPU	4 16 51.05				45	2.8	92.4	145	90	15.68	15.38	0.30	
. 19	BLT	IPD	4 16 50.80				52	2.9	93.6	63	90	15.43	15.57	-0.14	
. 19	KRNA	IPD	4 16 51.29				49	2.8	96.7	39	90	15.92	16.08	-0.16	
. 19	GNV	EPU4	4 16 53.19						105.1	160	90	17.82	17.45	0.37	
. 19	MCY	EPD	4 16 53.59						109.3	115	90	18.22	18.12	0.10	
. 19	JCN	IPU	4 16 53.90				47	2.9	111.8	129	90	18.53	18.53	-0.00	
. 19	TNP	IPU	4 16 54.05						112.3	353	90	18.68	18.62	0.06	
. 19	SPRG	IPU	4 16 55.38				59	3.1	120.4	111	90	20.01	19.94	0.07	
. 19	GSM	EPD4	4 16 56.37				37	2.7	124.6	172	90	21.00	20.62	0.38	
. 19	NCP	IPD	4 16 57.60				46	2.9	133.7	142	90	22.23	22.09	0.14	
. 19	APK	IPD	4 16 43.10						158.2	122	53	7.73	25.29	-17.56	
. 19	EPR	IPU	4 17 2.59				74	3.5	168.1	87	53	27.22	26.58	0.64	
. 19	SHRG	EPU	4 17 5.17						182.6	110	53	29.80	28.47	1.33	
. 19	PRN	IPU	4 17 4.60				39	3.0	183.4	78	53	29.23	28.57	0.66	

. MAY H = 13 0 0.80 UTC RMS = 0.17 ND = 28 FREE DEPTH SOLUTION
. 22 LAT = 36.991 N ERX = 0.3 ERH = 0.5 AVFM = 3.4 Q = B
. LONG = 116.040 W ERY = 0.3 GAP = 49 AVXM = GS = B LATHROP WELLS
. DEPTH = 1.89 KM ERZ = 1.4 NM = GD = B

. 22	CPX	IPU	13	0	2.20				7.1	193	92	1.40	1.52	-0.12	BAD CODA LEN
. 22	BGB	IPU	13	0	3.88		166	3.6	17.5	287	90	3.08	3.20	-0.12	
. 22	SSP	IPD	13	0	4.08		186	3.7	17.5	245	90	3.28	3.20	0.08	
. 22	LCP	IPU	13	0	4.34		166	3.6	19.0	217	90	3.54	3.44	0.09	
. 22	CDH1	IPD	13	0	5.80		32	2.2	28.7	240	90	5.00	5.02	-0.02	
. 22	CDH5	IPD	13	0	5.86		20	1.8	28.7	240	90	5.06	5.02	0.04	
. 22	LSM	IPU	13	0	6.69		208	3.9	34.8	216	90	5.89	6.01	-0.13	
. 22	EPN	IPU	13	0	6.94		176	3.7	35.3	314	90	6.14	6.09	0.04	
. 22	MCY	IPU	13	0	7.02		193	3.8	37.2	169	90	6.22	6.41	-0.19	
. 22	SPRG	IPU	13	0	7.51				38.9	148	90	6.71	6.68	0.03	BAD CODA LEN
. 22	GMR	IPU	13	0	8.27		172	3.8	44.9	32	90	7.47	7.65	-0.18	
. 22	SDH	IPU	13	0	8.55		113	3.4	46.7	215	90	7.75	7.95	-0.20	
. 22	BLT	IPU	13	0	9.42		122	3.5	52.8	351	90	8.62	8.94	-0.32	
. 22	BMT	IPU4	13	0	11.35				54.6	306	90	10.55	9.22	1.32	BAD CODA LEN
. 22	BRO	IPD	13	0	10.45		130	3.6	58.0	244	90	9.65	9.79	-0.14	
. 22	JCN	IPU	13	0	11.26		126	3.5	61.5	185	90	10.46	10.35	0.11	
. 22	NMN	IPU	13	0	12.59				70.0	276	90	11.79	11.73	0.06	BAD CODA LEN
. 22	AMR	IPU	13	0	13.73		118	3.5	76.5	210	90	12.93	12.79	0.14	
. 22	FMT	EPD	13	0	13.42		104	3.4	76.6	239	90	12.62	12.81	-0.20	
. 22	EPR	IPU	13	0	14.24				78.4	75	90	13.44	13.10	0.34	BAD CODA LEN
. 22	APK	IPD	13	0	15.31				85.4	151	90	14.51	14.24	0.27	BAD CODA LEN
. 22	SGV	IPU	13	0	15.57				88.3	269	90	14.77	14.72	0.05	BAD CODA LEN
. 22	KRNA	IPD0	13	0	15.74		124	3.6	89.4	340	90	14.94	14.89	0.04	
. 22	CTS	IPD2	13	0	16.89		93	3.4	94.2	320	90	16.09	15.67	0.41	
. 22	SHRG	IPU	13	0	16.50				95.8	124	90	15.70	15.92	-0.23	BAD CODA LEN
. 22	GMN	EPD	13	0	19.79				113.7	258	90	18.99	18.84	0.14	BAD CODA LEN
. 22	GSM	IPD0	13	0	23.64		82	3.4	135.9	213	53	22.84	22.38	0.45	
. 22	MGM	EPU	13	0	23.70				138.6	291	53	22.90	22.74	0.16	BAD CODA LEN
. 22	MZP	EPD0	13	0	24.32				142.7	303	53	23.52	23.27	0.24	BAD CODA LEN
. 22	LCH	EPU4	13	0	25.30				145.4	281	53	24.50	23.62	0.88	BAD CODA LEN

. JUN H = 9 4 28.41 UTC RMS = 0.09 ND = 8 FREE DEPTH SOLUTION
. 03 LAT = 36.886 N ERX = 0.5 ERH = 0.6 AVFM = 1.6 Q = C
. LONG = 116.001 W ERY = 0.4 GAP = 150 AVXM = GS = C LATHROP WELLS
. DEPTH = 4.81 KM ERZ = 9.7 NM = GD = C

1980	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	SSP	IPU	9 4 32.16				27	2.1	19.8	283	100	5.75	3.62	0.13	.
. 03	MCY	IPU	9 4 32.45				20	1.8	25.2	172	97	4.44	4.48	-0.04	.
. 03	BGB	IPU	9 4 32.45				17	1.7	26.3	310	97	4.54	4.65	-0.12	.
. 03	CDM1	EPD	9 4 33.40				17	1.7	28.3	264	97	4.99	4.99	-0.00	.
. 03	CDM5	EP 4	9 4 34.09				5	0.6	28.3	264	97	5.68	4.99	0.69	.
. 03	GLR	EPU4	9 4 34.10				14	1.5	34.8	356	95	5.69	6.03	-0.34	.
.		FS	9 4 38.95									10.54	10.56	-0.02	.
. 03	EPN	EP 2	9 4 36.50				20	1.9	46.3	322	94	8.09	7.90	0.18	.
. 03	GMR	IPU	9 4 37.60				8	1.1	53.7	22	93	9.19	9.10	0.08	.
. 03	BLT	EPU	9 4 39.05				12	1.5	64.9	349	93	10.64	10.92	-0.29	.

. JUN H = 19 54 35.79 UTC RMS = 0.20 ND = 13 FREE DEPTH SOLUTION .
. 04 LAT = 37.584 N ERX = 0.7 ERH = 1.0 AVFM = 2.1 Q = C .
. LONG = 116.465 W ERY = 0.7 GAP = 97 AVXM = QS = B QUARTZITE MOUNTAIN .
. DEPTH = 8.74 KM ERZ = 2.4 NM = QD = C .

. 04	KRMA	IPD	19 54 39.61				27	2.1	19.8	22	111	3.82	3.79	0.04	.
. 04	CTS	IPU	19 54 40.09				16	1.6	23.8	285	107	4.30	4.40	-0.09	.
. 04	BLT	IPU	19 54 41.10				25	2.0	32.3	115	103	5.31	5.73	-0.41	.
. 04	BMT	IPDO	19 54 41.91				28	2.1	33.9	190	102	6.12	5.99	0.13	.
. 04	EPN	IPU	19 54 43.18				27	2.1	43.0	163	100	7.39	7.43	-0.04	.
. 04	GLR	IPUO	19 54 46.25				18	1.8	58.3	137	97	10.46	9.90	0.56	.
. 04	NMN	IPDO	19 54 46.32				28	2.2	64.0	209	96	10.53	10.83	-0.30	.
. 04	BGB	EPD4	19 54 49.11				22	2.0	64.2	161	96	13.32	10.86	2.47	.
. 04	GMR	EPD4	19 54 45.27				18	1.9	67.4	114	96	9.48	11.37	-1.89	.
. 04	TPU	IPD3	19 54 47.07				17	1.8	72.1	88	96	11.28	12.13	-0.85	.
. 04	GMN	EPUO	19 54 48.78						77.1	246	95	12.99	12.94	0.05	.
. 04	SGV	IPDO	19 54 49.58				27	2.3	83.7	217	95	13.79	14.01	-0.22	.
. 04	GVN	EPDO	19 54 52.60				25	2.3	101.2	230	94	16.81	16.84	-0.03	.
. 04	LCH	IPUO	19 54 54.58				19	2.1	111.6	250	94	18.79	18.54	0.25	.
. 04	SPRG	EPU	19 54 54.79				25	2.3	114.7	149	53	19.00	18.97	0.04	.
. 04	SVP	IPD4	19 54 56.25				20	2.1	118.8	277	53	20.46	19.50	0.97	.

. JUN H = 19 43 17.18 UTC RMS = 0.19 ND = 12 FREE DEPTH SOLUTION .
. 06 LAT = 36.888 N ERX = 1.2 ERH = 1.4 AVFM = 1.4 Q = C .
. LONG = 115.727 W ERY = 0.6 GAP = 203 AVXM = QS = B MERCURY .
. DEPTH = 1.12 KM ERZ = 1.9 NM = QD = D .

. 06	SPRG	EP	19 43 21.02				28	2.1	22.8	199	38	3.94	4.17	-0.33	.
. 06	CPX	EPD	19 43 22.41				14	1.5	29.6	279	38	5.23	5.32	-0.09	.
. 06	MCY	IPU	19 43 22.91				26	2.1	32.7	220	38	5.73	5.79	-0.06	.
. 06	LCP	EPU	19 43 24.06				13	1.5	39.4	264	38	6.88	6.88	0.00	.
. 06	GLR	EPD	19 43 24.56				10	1.3	43.1	323	38	7.38	7.48	-0.10	.
. 06	SSP	EP 3	19 43 25.25				12	1.4	44.0	275	38	8.07	7.62	0.45	.
. 06	BGB	EP 0	19 43 25.22				10	1.3	47.5	290	38	8.04	8.20	-0.16	.
. 06	GMR	EP 0	19 43 25.97				12	1.5	49.6	356	38	8.79	8.54	0.25	.
. 06	CDM1	EPUO	19 43 26.23				11	1.4	52.7	267	38	9.05	9.04	0.01	.
. 06	CDM5	EPU4	19 43 32.18				1	-0.7	52.7	267	38	15.00	9.04	5.96	.
. 06	JCN	EPU	19 43 27.66				21	2.0	60.0	214	38	10.48	10.23	0.25	.
. 06	SCM	EPD2	19 43 27.95				10	1.3	60.8	244	38	10.77	10.36	0.41	.
.		ISUO	19 43 35.50									18.32	18.12	0.19	.

. JUN H = 2 8 55.22 UTC RMS = 0.13 ND = 4 FREE DEPTH SOLUTION .
. 07 LAT = 36.923 N ERX = ERH = AVFM = 2.1 Q = C .
. LONG = 116.966 W ERY = GAP = 162 AVXM = QS = A CHLORIDE CLIFF .
. DEPTH = 22.16 KM ERZ = NM = QD = D .

. 07	FMT	EPU4	2 9 9.95						35.7	152	121	14.73	7.07	7.66	.
. 07	TMO	EPUO	2 9 3.25				23	2.0	41.3	252	117	8.03	7.87	0.16	.
. 07	MCA	IPU	2 9 2.94				21	1.9	41.3	222	117	7.72	7.87	-0.16	.
. 07	PGE	EPD4	2 9 5.78				17	1.8	64.3	188	53	10.56	11.10	-0.55	.
. 07	LSM	EPU4	2 9 17.56				29	2.3	65.4	108	53	22.34	11.25	11.09	.
. 07	EPN	IPUO	2 9 6.62				26	2.2	65.8	61	53	11.40	11.29	0.10	.
. 07	LCP	EPU4	2 9 10.25				29	2.3	71.8	96	53	15.03	12.07	2.95	.
. 07	CTS	EPUO	2 9 8.57				19	2.0	82.4	15	53	13.35	13.46	-0.11	.
. 07	MCY	IPD4	2 9 13.94				23	2.2	94.3	108	53	18.72	15.00	3.71	.
. 07	BLT	IPD4	2 9 13.05				19	2.0	95.1	51	53	17.83	15.10	2.72	.
. 07	QSM	EPD4	2 9 10.00				24	2.3	106.6	175	53	14.78	16.60	-1.82	.

. JUN H = 12 0 32.82 UTC RMS = 0.03 ND = 7 FREE DEPTH SOLUTION .
. 07 LAT = 36.613 N ERX = 0.2 ERH = 0.2 AVFM = 1.7 Q = B .
. LONG = 116.271 W ERY = 0.2 GAP = 156 AVXM = QS = A LATHROP WELLS .
. DEPTH = 9.51 KM ERZ = 0.5 NM = QD = C .

. 07	SCM	IPU	12 0 34.94				16	1.6	7.0	301	141	2.12	2.12	0.00	.

1980	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	LSM	IPU2	12 0 35.78				36	2.3	14.0	360	121	2.96	2.99	-0.03	
07	JCN	IPU	12 0 37.37				13	1.4	24.4	142	109	4.55	4.53	0.02	
07	CDH1	EPD	12 0 37.42				13	1.5	27.8	351	106	5.10	5.05	0.05	
07	CDH5	EPD4	12 0 41.26						27.8	351	106	8.44	5.05	3.39	
07	MCY	IPU	12 0 37.90				26	2.1	28.2	79	106	5.08	5.11	-0.03	
07	LCP	EPU3	12 0 37.98				15	1.6	28.3	19	106	5.16	5.14	0.02	
07	BRO	EPU	12 0 39.11						35.8	298	103	6.29	6.31	-0.02	

JUN H = 12 1 41.23 UTC RMS = 0.04 NO = 8 FREE DEPTH SOLUTION
07 LAT = 36.614 N ERX = 0.2 ERH = 0.3 AVFM = 1.3 Q = B
LONG = 116.262 W ERY = 0.2 GAP = 153 AVXM = QS = A LATHROP WELLS
DEPTH = 7.31 KM ERZ = 0.8 NM = QD = C

07	SDH	IPU	12 1 43.14				9	1.1	7.6	297	130	1.91	1.93	-0.02	
07	LSM	IPU0	12 1 44.04				27	2.0	13.8	356	114	2.81	2.80	0.01	
07	JCN	IPU	12 1 45.63				7	0.9	24.1	144	104	4.40	4.38	0.02	
07	MCY	IPU	12 1 46.10				16	1.6	27.4	79	102	4.87	4.90	-0.03	
07	CDH1	EPD	12 1 46.20				12	1.4	27.7	350	102	4.97	4.96	0.01	
07	LCP	EPD0	12 1 46.30				9	1.1	27.9	18	102	5.07	4.99	0.08	
07	BRO	EPD	12 1 47.55				10	1.3	36.4	297	99	6.32	6.34	-0.02	
07	SPRG	EPU	12 1 48.33				9	1.2	41.4	78	98	7.10	7.15	-0.05	

JUN H = 12 21 54.15 UTC RMS = 0.02 NO = 4 FREE DEPTH SOLUTION
07 LAT = 36.612 N ERX = ERH = AVFM = 1.1 Q = C
LONG = 116.259 W ERY = GAP = 154 AVXM = QS = A LATHROP WELLS
DEPTH = 3.19 KM ERZ = NM = QD = D

07	SDH	EPD	12 21 55.82				9	1.1	8.0	298	102	1.67	1.68	-0.01	
07	LSM	IPD	12 21 56.83				6	0.7	14.2	355	97	2.68	2.67	0.01	
07	JCN	EPU	12 21 58.37				19	1.8	23.7	144	94	4.22	4.21	0.02	
07	MCY	EPU	12 21 58.90				6	0.8	27.1	78	93	4.75	4.77	-0.02	

JUN H = 11 40 6.68 UTC RMS = 0.17 NO = 8 FREE DEPTH SOLUTION
08 LAT = 37.337 N ERX = 4.1 ERH = 4.5 AVFM = 2.3 Q = D
LONG = 114.942 W ERY = 1.8 GAP = 277 AVXM = QS = C DELAMAR MOUNTAINS
DEPTH = 4.66 KM ERZ = 3.3 NM = QD = D

08	PRN	IPU	11 40 9.11				25	2.0	12.3	309	105	2.43	2.42	0.01	
08	BLT	EPU	11 40 24.22						106.5	277	92	17.54	17.69	-0.15	
08	MCY	EPD	11 40 25.68				24	2.3	117.7	230	91	19.00	19.51	-0.51	
		ISO	11 40 41.05									34.37	34.15	0.23	
08	LCP	EP	11 40 26.75						121.4	244	91	20.07	20.11	-0.04	VERY E
08	EPN	EPD	11 40 27.38						123.3	264	91	20.70	20.42	0.29	
08	LSM	EPU	11 40 28.84				35	2.7	135.7	241	53	22.16	22.08	0.08	
08	JCN	EPD	11 40 30.00						143.6	226	53	23.32	23.11	0.22	

JUN H = 7 53 32.73 UTC RMS = 0.05 NO = 6 FIXED DEPTH SOLUTION
09 LAT = 36.780 N ERX = 0.4 ERH = 0.9 AVFM = 2.1 Q = C DEPTH CONTROL INADEQUATE
LONG = 115.983 W ERY = 0.8 GAP = 155 AVXM = QS = C MERCURY
DEPTH = 5.00 KM ERZ = 7.0 NM = QD = C

09	MCY	IPU	7 53 35.30				44	2.5	13.2	172	105	2.57	2.58	-0.01	
09	LCP	IPU	7 53 36.15				31	2.2	18.5	297	101	3.42	3.40	0.02	
09	LSM	IPU	7 53 37.40						26.2	260	98	4.67	4.65	0.02	
09	SSP	IPU	7 53 37.39				33	2.3	26.5	307	97	4.66	4.70	-0.04	
09	HGB	EPD2	7 53 38.55				23	2.0	36.0	323	95	5.85	6.23	-0.38	
09	GLR	EPD4	7 53 40.07				16	1.7	46.7	356	94	7.34	7.96	-0.62	
09	GMR	EPD	7 53 43.57				16	1.8	64.3	17	93	10.84	10.82	0.02	
09	PRN	EPD4	7 53 52.55				20	2.1	108.3	50	92	19.82	17.97	1.85	
09	KRNA	EPD4	7 53 52.75				19	2.1	113.3	342	92	20.02	18.79	1.23	
09	CTS	EP 0	7 53 52.65						116.0	325	92	19.92	19.24	0.68	

JUN H = 15 19 5.31 UTC RMS = 0.03 NO = 6 FIXED DEPTH SOLUTION
10 LAT = 37.150 N ERX = 0.2 ERH = 0.4 AVFM = 1.8 Q = C DEPTH CONTROL INADEQUATE
LONG = 117.341 W ERY = 0.4 GAP = 190 AVXM = QS = B MT. JACKSON
DEPTH = 5.00 KM ERZ = 2.9 NM = QD = D

10	GMN	IPD	15 19 8.66				12	1.4	18.2	23	101	3.35	3.36	-0.00	
10	LCH	IPU	15 19 10.35				17	1.7	29.8	269	97	5.04	5.06	-0.02	
10	MGM	IPU	15 19 11.40				15	1.6	35.1	337	96	6.09	6.09	0.01	
10	NMN	IPU	15 19 13.30				24	2.1	47.1	99	94	7.99	8.03	-0.04	
10	PPK	EP 3	15 19 15.30				11	1.4	58.8	301	93	9.99	9.93	0.06	VERY E
10	BMT	EPU4	15 19 15.95						73.2	78	93	10.64	12.27	-1.63	

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      STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
 1980                (UTC)      (MU) (SEC)                   (KM) (DEG)(DEG)   (SEC)  (SEC) (SEC)

. 10    BGB  EPU   15 19 21.95                      23  2.2   99.8   97   92   16.64  16.59  0.05                 .
. 10    GMR  EP 3  15 19 28.88                      19  2.2  140.9   82   53   23.57  22.72  0.85   VERY E        .
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. JUN H =  1 17 30.62 UTC  RMS =  0.37  NO = 10                                  FREE DEPTH SOLUTION                 .
.  15 LAT =  36.801 N      ERX =   1.4  ERH =   2.2   AVFM =   1.3  Q = C                                            .
.    LONG = 116.342 W      ERY =   1.7  GAP = 125     AVXM =        QS = C     LATHROP WELLS                       .
.   DEPTH =   1.39 KM      ERZ =   3.9  NM =                        QD = C                                            .
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. 15    LOP  IPU    1 17 40.88                      13  1.4   12.6  298   38    2.26   2.47  -0.21                 .
. 15    CPX  IPU2   1 17 40.62                      11  1.3   14.3  354   38    2.00   2.74  -0.74                 .
. 15    MCY  EPD    1 17 41.26                      18  1.7   17.0  155   38    2.64   3.18  -0.54                 .
.            ISU    1 17 43.84                                                   5.22   5.57  -0.35                 .
. 15    SSP  EPU    1 17 43.20                       8  1.0   20.9  311   38    4.58   3.81   0.77   VERY E        .
. 15    LSM  EP     1 17 42.76                       8  1.0   21.6  252   38    4.14   3.93   0.22   VERY E        .
. 15    SPRG EP     1 17 43.12                      10  1.2   24.0  120   38    4.50   4.31   0.19                 .
. 15    CDM1 EPU    1 17 42.96                      12  1.4   25.4  285   38    4.34   4.55  -0.21                 .
. 15    BGB  EP     1 17 44.12                      10  1.2   31.1  328   38    5.50   5.47   0.03   VERY E        .
. 15    SDH  EP     1 17 44.60                            31.6  237   38    5.98   5.55   0.44   VERY E        .
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. JUN H = 17 57 11.63 UTC  RMS =  0.10  NO = 16                                  FREE DEPTH SOLUTION                 .
.  18 LAT =  36.698 N      ERX =   0.2  ERH =   0.4   AVFM =   2.0  Q = C                                            .
.    LONG = 115.613 W      ERY =   0.3  GAP = 119     AVXM =        QS = B     MERCURY                             .
.   DEPTH =   0.84 KM      ERZ =   4.0  NM =                        QD = C                                            .
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. 18    SPRG IPU   17 57 14.90                      24  2.0   17.8  269   38    3.27   3.43  -0.15                 .
. 18    MCY  EPU   17 57 17.13                      35  2.3   31.7  263   38    5.50   5.69  -0.18                 .
. 18    SMRG EPU   17 57 19.63                      19  1.8   46.0  118   38    8.00   8.01  -0.01                 .
. 18    CPX  IPD   17 57 19.83                      16  1.7   47.5  303   38    8.20   8.25  -0.05                 .
. 18    JCN  IPD   17 57 20.79                      17  1.8   52.6  237   38    9.16   9.08   0.08                 .
. 18    LOP  EPU   17 57 20.74                      21  2.0   52.7  289   38    9.11   9.10   0.02                 .
. 18    LSM  EP 4  17 57 22.20                      16  1.7   59.3  274   38   10.57  10.17   0.40   VERY E        .
. 18    SSP  IPD   17 57 21.96                      23  2.1   59.9  295   38   10.33  10.26   0.07                 .
. 18    EPR  EPU   17 57 22.67                      24  2.1   64.4   36   38   11.04  11.01   0.04                 .
. 18    SDH  EP    17 57 22.45                      15  1.7   65.3  265   38   11.22  11.15   0.07   VERY E        .
. 18    CDM1 EPD   17 57 22.30                      17  1.8   65.7  286   38   11.27  11.20   0.07                 .
. 18    GLR  IPD   17 57 22.38                      16  1.8   66.4  327   38   11.25  11.33  -0.08                 .
. 18    BGB  EPD   17 57 22.91                      18  1.9   66.7  304   38   11.28  11.38  -0.09                 .

. 18    GMR  EP    17 57 23.71                      20  2.0   72.0  349   38   12.08  12.24  -0.15                 .
. 18    PRN  EPD2  17 57 27.62                      20  2.1   93.1   32   38   15.99  15.67   0.32                 .
. 18    TPU  EPU4  17 57 29.98                      19  2.0  100.7  358   38   18.35  16.90   1.45                 .
. 18    BMT  EP 4  17 57 29.50                      31  2.5  104.8  306   38   17.87  17.57   0.31                 .
.            EPU3  17 57 42.70                                                  31.07  30.74   0.33                 .
. 18    MTI  EPD4  17 57 30.86                      23  2.2  112.6   15   38   19.23  18.85   0.39                 .
. 18    NPN  IPD4  17 57 32.80                      21  2.2  121.6   29   38   21.17  20.31   0.87                 .
. 18    SGV  EP    17 57 33.65                      29  2.5  130.8  284   38   22.02  21.79   0.23                 .
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. JUN H =  2 33 21.71 UTC  RMS =  0.13  NO = 12                                  FREE DEPTH SOLUTION                 .
.  19 LAT =  36.712 N      ERX =   0.4  ERH =   0.6   AVFM =   1.6  Q = B                                            .
.    LONG = 116.254 W      ERY =   0.5  GAP = 104     AVXM =        QS = A     LATHROP WELLS                       .
.   DEPTH =   1.02 KM      ERZ =   0.8  NM =                        QD = B                                            .
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. 19    LSM  IPU    2 33 22.64                      17  1.6    3.3  332  107    0.93   0.92   0.01                 .
. 19    SDH  IPD4   2 33 22.80                      16  1.6   10.5  225   38    1.09   2.21  -1.11                 .
. 19    CDM1 IPU    2 33 24.96                      16  1.6   17.4  341   38    3.25   3.32  -0.06                 .
. 19    CDM5 EP 4   2 33 26.05                       7  0.9   17.4  341   38    4.34   3.32   1.03   VERY E        .
. 19    LOP  IPD    2 33 24.94                      21  1.8   17.5   26   38    3.23   3.35  -0.11                 .
. 19    SSP  EP 3   2 33 26.42                      27  2.1   23.8    8   38    4.71   4.37   0.35   VERY E        .
. 19    MCY  IPU    2 33 26.47                      26  2.1   26.7  102   38    4.76   4.83  -0.07                 .
. 19    CPX  EPD    2 33 27.03                      16  1.6   29.7   36   38    5.32   5.33  -0.00                 .
. 19    JCN  IPU    2 33 27.35                      12  1.4   33.1  156   38    5.64   5.88  -0.24                 .
. 19    BRD  EP     2 33 27.64                       9  1.2   33.6  280   38    5.93   5.96  -0.03   VERY E        .
. 19    BGB  EP     2 33 28.14                      16  1.7   36.2    4   38    6.43   6.38   0.05   VERY E        .
. 19    SPRG EPD    2 33 28.76                      20  1.9   39.8   93   38    7.05   6.97   0.08                 .
. 19    BMT  EP     2 33 30.03                      11  1.4   47.6  260   38    8.32   8.22   0.10   VERY E        .
. 19    NPN  EP 4   2 33 34.50                      19  1.9   64.8  309   38   12.79  11.03   1.76   VERY E        .
. 19    APK  EP     2 33 34.63                      14  1.7   74.9  126   38   12.92  12.67   0.25   VERY E        .
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. JUN H =  4  4  8.48 UTC  RMS =  0.09  NO =  6                                  FREE DEPTH SOLUTION                 .
.  19 LAT =  36.526 N      ERX =   0.2  ERH =   0.4   AVFM =   1.4  Q = C                                            .
.    LONG = 116.372 W      ERY =   0.3  GAP = 107     AVXM =        QS = B     LATHROP WELLS                       .
.   DEPTH =   6.27 KM      ERZ =   3.7  NM =                        QD = C                                            .
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. 19    SDH  IPU3   4  4 10.74                      11  1.3   13.6   13  119    2.26   2.67  -0.44                 .
. 19    AMR  EP C   4  4 11.64                      16  1.6   16.9  213  106    3.16   3.21  -0.06   VERY E        .
. 19    JCN  IPU    4  4 13.18                      11  1.3   26.0  112  100    4.70   4.64   0.06                 .
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1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	AMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 19	BPU	EP 0	4 4 14.58				9	1.2	34.7	319	98	6.10	6.04	0.06	VERY E
. 19	CDH1	IPU	4 4 14.93				11	1.3	37.4	8	97	6.45	6.48	-0.03	
. 19	MCY	IPD2	4 4 15.26				18	1.8	39.6	68	97	6.78	6.84	-0.06	
. 19	SPRG	EPD4	4 4 17.90				9	1.2	53.7	70	95	9.42	9.11	0.30	

. JUN H = 20 40 59.00 UTC RMS = 0.06 NO = 6 FREE DEPTH SOLUTION
. 20 LAT = 36.673 N ERX = 0.4 ERH = 1.5 AVFM = 1.3 Q = C
. LONG = 116.416 W ERY = 1.5 GAP = 184 AVXM = QS = B LATHROP WELLS
. DEPTH = 6.29 KM ERZ = 4.5 NM = QD = D

. 20	SDH	IPU	20 40 59.92				12	1.3	7.6	114	125	1.82	1.82	-0.01	
. 20	LSM	IPD	20 41 0.96						14.8	60	109	2.96	2.88	0.08	
. 20	BRO	IPU	20 41 1.91				8	1.0	21.2	298	103	3.91	3.88	0.02	
. 20	CDH1	IPD	20 41 2.01				10	1.2	22.5	23	102	4.01	4.09	-0.09	
. 20	LCP	EPD	20 41 3.28				13	1.5	29.9	48	99	5.28	5.27	0.01	
. 20	SSP	IPU2	20 41 3.87				15	1.6	33.0	32	98	5.87	5.77	0.09	

. JUL H = 2 52 10.37 UTC RMS = 0.10 NO = 7 FREE DEPTH SOLUTION
. 03 LAT = 36.868 N ERX = 1.0 ERH = 1.1 AVFM = 1.1 Q = C
. LONG = 116.181 W ERY = 0.5 GAP = 152 AVXM = QS = B LATHROP WELLS
. DEPTH = 8.46 KM ERZ = 4.7 NM = QD = C

. 03	CDH5	EPU	2 52 12.91				4	0.4	12.2	266	121	2.54	2.65	-0.11	
. 03	CDH1	IPD	2 52 13.05				10	1.2	12.2	266	121	2.68	2.65	0.03	
. 03	LSM	EP	2 52 13.76						16.5	209	114	3.39	3.27	0.12	very e
. 03	BGB	EPD	2 52 14.07				10	1.2	19.3	348	111	3.70	3.68	0.07	
. 03	SDH	EP	2 52 15.40						28.4	210	104	5.03	5.11	-0.08	very e
. 03	MCY	IPU	2 52 15.65				13	1.5	30.1	140	103	5.28	5.38	-0.10	
. 03	JON	EP	2 52 18.79						48.1	172	98	8.42	8.25	0.17	very e

. JUL H = 21 15 42.35 UTC RMS = 0.15 NO = 10 FREE DEPTH SOLUTION
. 03 LAT = 36.319 N ERX = 2.5 ERH = 3.1 AVFM = 2.3 Q = D
. LONG = 114.943 W ERY = 2.0 GAP = 252 AVXM = QS = C HOOVER DAM
. DEPTH = 0.07 KM ERZ = 11.8 NM = QD = D

. 03	MCY	EPD	21 15 59.07				31	2.5	98.9	293	38	16.72	16.78	-0.05	
. 03	JON	EP 2	21 16 0.42						104.9	277	38	18.07	17.75	0.32	
. 03	NCP	EP	21 16 1.02				23	2.2	110.9	259	38	18.67	18.71	-0.04	VERY E
. 03	PRN	EPU	21 16 2.78				26	2.4	121.2	355	38	20.43	20.39	0.04	
. 03	LCP	IPD4	21 16 4.83				24	2.3	124.7	298	38	22.48	20.96	1.52	
. 03	SDH	EP.	21 16 4.10				21	2.2	130.2	286	38	21.75	21.86	-0.10	VERY E
. 03	GMH	EPD	21 16 4.86				20	2.2	134.7	327	38	22.51	22.60	-0.09	
. 03	OLM	EPD	21 16 6.07				22	2.3	144.0	7	30	23.72	23.83	-0.10	
. 03	NPN	EPD	21 16 6.63				22	2.3	148.0	0	30	24.28	24.35	-0.07	
. 03	MTI	EPD	21 16 7.63				24	2.4	153.5	349	30	25.28	25.07	0.42	
. 03	BLT	EP 4	21 16 13.06				8	1.5	165.4	320	30	30.71	26.61	4.10	VERY E
. 03	SRG	EPD2	21 16 10.71				32	2.7	173.9	356	30	28.36	27.71	0.66	

. JUL H = 7 3 2.98 UTC RMS = 0.09 NO = 12 FREE DEPTH SOLUTION
. 04 LAT = 36.695 N ERX = 0.3 ERH = 0.4 AVFM = 1.4 Q = A
. LONG = 116.278 W ERY = 0.3 GAP = 68 AVXM = QS = A LATHROP WELLS
. DEPTH = 5.84 KM ERZ = 1.2 NM = QD = A

. 04	LSM	IPD	7 3 4.54				15	1.5	5.0	6	135	1.56	1.45	0.11	
. 04	SDH	IPD	7 3 4.69				13	1.4	7.7	225	122	1.71	1.80	-0.09	
. 04	CDH1	IPU	7 3 6.43				12	1.4	18.7	349	103	3.45	3.48	-0.03	
. 04	CDH5	EP	7 3 6.35				10	1.2	18.7	349	103	3.37	3.48	-0.11	
. 04	LCP	IPD	7 3 6.63				15	1.6	20.3	29	102	3.65	3.72	-0.07	
. 04	SSP	EPD	7 3 7.47				18	1.7	26.1	12	99	4.49	4.65	-0.16	
. 04	MCY	IPU	7 3 8.14				21	1.9	28.4	97	99	5.16	5.03	0.13	
. 04	BPO	EPU	7 3 8.52				8	1.0	32.0	284	98	5.54	5.59	-0.05	
.		ISU	7 3 12.89									9.91	9.79	0.12	
. 04	JCN	IPU	7 3 8.68				11	1.3	32.3	151	98	5.70	5.65	0.05	
. 04	AMR	EP	7 3 9.38				11	1.3	37.4	208	97	6.40	6.46	-0.07	VERY E
. 04	BGB	EPD	7 3 9.56				11	1.3	38.4	7	96	6.58	6.63	0.00	

. JUL H = 8 21 39.57 UTC RMS = 0.17 NO = 14 FREE DEPTH SOLUTION
. 04 LAT = 36.808 N ERX = 0.5 ERH = 0.7 AVFM = 1.7 Q = C
. LONG = 116.688 W ERY = 0.5 GAP = 98 AVXM = QS = C CHLORIDE CLIFF
. DEPTH = 2.40 KM ERZ = 15.4 NM = QD = B

. 04	BPO	IPU	8 21 41.09						7.5	132	96	1.52	1.58	-0.06	
. 04	FMT	IPU	8 21 43.17						20.4	204	92	3.60	3.67	0.03	

1980	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	NMN	IPU	8 21 44.91				17	1.7	32.5	339	91	5.34	5.64	-0.30	
. 04	CDH1	IPD	8 21 45.17						33.6	80	91	5.60	5.81	-0.21	
. 04	CDHS	EPD3	8 21 45.17						33.6	80	91	5.60	5.81	-0.21	
. 04	SCH	IPU	8 21 45.76				10	1.3	36.1	120	91	6.19	6.22	-0.03	
. 04	SGV	IPU	8 21 45.85				16	1.7	36.2	302	91	6.28	6.25	0.03	
. 04	LSM	IPD	8 21 46.27				13	1.5	37.9	102	90	6.70	6.51	0.19	
. 04	SSP	EP	8 21 46.97				20	1.9	43.8	73	90	7.40	7.47	-0.07	VERY E
. 04	LCP	EP	8 21 47.79				18	1.8	46.7	84	90	8.22	7.95	0.27	VERY E
. 04	BGB	IPD	8 21 47.62						48.3	58	90	8.05	8.21	-0.11	
. 04	BMT	EP	8 21 49.55				16	1.7	54.5	15	90	9.98	9.22	0.36	
. 04	EPN	EPU	8 21 49.23				19	1.9	55.5	36	90	9.66	9.38	0.28	
. 04	MCY	IPU	8 21 50.78				19	1.9	66.8	104	90	11.21	11.22	-0.01	

. JUL H = 13 26 8.26 UTC RMS = 0.23 NO = 6 FREE DEPTH SOLUTION
. 05 LAT = 36.764 N ERX = 1.5 ERH = 2.8 AVFM = 1.6 Q = C
. LONG = 116.627 W ERY = 2.4 GAP = 106 AVXM = QS = C CHLORIDE CLIFF
. DEPTH = 7.77 KM ERZ = 3.0 NM = QD = B

. 05	BRO	IPU	13 26 9.70				13	1.4	0.2	141	178	1.44	1.43	0.01	
. 05	FMT	IPD	13 26 11.68				10	1.2	19.4	224	108	3.42	3.66	-0.14	
. 05	SDH	EPD4	13 26 23.06						29.0	117	102	14.80	5.17	9.63	
. 05	CDH1	IPD	13 26 13.75				16	1.6	29.6	69	102	5.49	5.27	0.22	
. 05	LSM	EP 4	13 26 17.05				17	1.7	31.8	95	101	8.79	5.62	3.17	VERY
. 05	NMN	IPU4	13 26 19.26				22	2.0	39.0	334	99	11.00	6.78	4.22	
. 05	LOP	IPU2	13 26 14.03				16	1.7	42.2	76	98	5.77	7.29	-1.52	
. 05	SGV	EP	13 26 15.89				18	1.8	43.4	304	98	7.63	7.48	0.15	
. 05	BGB	IPD	13 26 16.12				14	1.6	46.8	50	98	7.86	8.02	-0.11	
. 05	CPX	IPU4	13 26 14.22				11	1.4	53.9	70	97	5.96	9.18	-3.22	
. 05	BMT	IPD4	13 26 14.74				12	1.5	58.2	8	96	6.48	9.87	-3.79	
. 05	MCY	IPU4	13 26 13.41				18	1.9	60.5	101	96	5.15	10.24	-5.09	
. 05	GVN	IPD4	13 26 17.66				17	1.8	69.0	292	95	9.40	11.61	-2.21	
. 05	NCP	EPU4	13 26 26.81						82.4	149	94	18.55	13.79	4.76	

. JUL H = 15 13 14.81 UTC RMS = 0.16 NO = 6 FREE DEPTH SOLUTION
. 07 LAT = 36.741 N ERX = 4.7 ERH = 5.0 AVFM = 1.6 Q = D
. LONG = 115.821 W ERY = 1.7 GAP = 192 AVXM = QS = D MERCURY
. DEPTH = 8.52 KM ERZ = 7.2 NM = QD = D

. 07	MCY	IPD	15 13 17.95				22	1.9	15.4	235	116	3.14	3.10	0.04	
. 07	LCP	EP	15 13 20.37				14	1.5	33.4	292	102	6.16	5.90	0.27	
. 07	LSM	EP 4	15 13 22.52						40.3	270	100	7.71	7.00	0.71	
. 07	SSP	EPD4	15 13 20.86				12	1.4	40.9	300	100	6.05	7.10	-1.05	
. 07	JCN	EPD	15 13 22.05						41.9	217	100	7.24	7.25	-0.01	
. 07	CDH1	IPU	15 13 22.76				12	1.5	46.2	287	99	7.95	7.95	-0.00	
. 07	BGB	IPD	15 13 22.92				15	1.7	49.0	312	98	8.11	8.40	-0.23	
. 07	GMR	EP 4	15 13 24.47				12	1.5	66.0	4	96	9.66	11.13	-1.47	
. 07	MTI	IPD	15 13 33.71				18	2.0	114.7	25	53	18.90	18.98	0.12	

. JUL H = 0 36 58.89 UTC RMS = 0.32 NO = 6 FREE DEPTH SOLUTION
. 09 LAT = 36.861 N ERX = 15.6 ERH = 22.9 AVFM = 2.6 Q = D
. LONG = 118.420 W ERY = 16.8 GAP = 335 AVXM = QS = D
. DEPTH = 0.72 KM ERZ = 9.9 NM = QD = D

. 09	TMO	IPU	0 37 14.49				21	2.1	90.5	94	38	15.60	15.28	0.32	
. 09	MCA	EP	0 37 16.00				22	2.2	104.4	103	38	17.11	17.53	-0.42	
.		ESD	0 37 29.45									30.56	30.68	-0.11	
. 09	BRO	IPU	0 37 24.95				28	2.6	160.6	94	30	26.06	25.83	0.23	
. 09	EPN	IPD	0 37 28.31				33	2.8	190.7	78	30	29.42	29.74	-0.32	
. 09	LSM	IPD4	0 37 27.29				34	2.9	192.2	94	30	28.40	29.94	-1.54	
. 09	SSP	IPU	0 37 29.85				34	2.9	196.4	88	30	30.96	30.48	0.48	

. JUL H = 2 13 48.05 UTC RMS = 0.48 NO = 19 FREE DEPTH SOLUTION
. 09 LAT = 37.252 N ERX = 2.3 ERH = 3.2 AVFM = 2.9 Q = D
. LONG = 114.999 W ERY = 2.3 GAP = 189 AVXM = QS = C DELAMAR MOUNTAINS
. DEPTH = 4.53 KM ERZ = 4.5 NM = QD = D

. 09	PRN	IPU	2 13 50.79				94	3.1	17.8	345	100	2.74	3.29	-0.54	
. 09	NPN	IPD	2 13 55.74				81	3.1	44.8	7	94	7.69	7.65	0.04	
. 09	DLM	EPD	2 13 56.04				40	2.5	45.5	30	94	7.99	7.77	0.22	
. 09	MTI	IPU	2 13 56.37				64	2.9	53.0	333	93	8.52	8.98	-0.26	
. 09	GMR	IPU	2 13 58.71				49	2.8	69.1	279	92	10.86	11.59	-0.93	
. 09	SRG	IPD	2 13 59.99				84	3.2	70.2	355	92	11.94	11.78	0.16	
. 09	GLR	EPD	2 14 2.46				79	3.2	90.6	265	92	14.41	15.10	-0.54	
. 09	NPN	IPU4	2 14 4.95						96.3	327	92	16.90	16.02	0.88	
. 09	JCS	IPU	2 14 5.61				29	2.4	99.3	305	92	17.56	16.51	1.05	
. 09	ELT	IPD	2 14 5.70				39	2.7	103.2	283	92	17.65	17.15	0.50	
. 09	MCY	IPU	2 14 4.96				71	3.2	107.9	253	92	16.91	17.91	-1.00	
. 09	MCM	IPU	2 14 6.68				44	2.9	111.6	[illegible]	91	18.63	18.50	0.13	

JUL 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	QUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 09	LCP	IPU	2 14 7.22				42	2.8	112.9	247	91	19.17	18.72	0.45	
. 09	SSP	IPU	2 14 7.35				47	2.9	114.3	251	91	19.30	18.96	0.34	
. 09	EPN	IPD	2 14 8.16				67	3.2	117.7	268	91	20.11	19.51	0.60	
. 09	CDH1	IPD	2 14 8.84						125.0	250	91	20.79	20.70	0.09	
. 09	LSM	IPD	2 14 9.18				54	3.0	126.8	243	53	21.13	20.94	0.19	
. 09	JCN	EPD	2 14 9.60				34	2.7	133.5	228	53	21.55	21.82	-0.27	
. 09	KRNA	IPD	2 14 9.89				45	2.9	134.1	294	53	21.84	21.89	-0.05	
. 09	MCP	IPU	2 14 14.12				35	2.8	161.8	220	53	26.07	25.49	0.58	

. JUL H = 15 5 50.64 UTC RMS = 0.10 NO = 6 FREE DEPTH SOLUTION
. 09 LAT = 36.348 N ERX = 1.1 ERH = 1.4 AVFM = 1.4 Q = B
. LONG = 116.178 W ERY = 0.9 GAP = 81 AVXM = QS = B LATHROP WELLS
. DEPTH = 11.91 KM ERZ = 1.9 NM = QD = A

. 09	LCP	IPD	15 5 52.79				16	1.5	1.2	56	174	2.15	2.12	0.03	
. 09	SSP	IPU	15 5 53.26				15	1.5	9.2	337	140	2.62	2.65	-0.03	
. 09	CDH1	IPD	15 5 53.89				8	1.0	12.5	276	131	3.25	3.02	0.23	
. 09	LSM	EPD	15 5 53.77				14	1.5	14.7	215	127	3.13	3.30	-0.17	
. 09	BGR	EPU	15 5 54.76						21.5	348	117	4.12	4.24	-0.07	
. 09	MCY	EPD	15 5 55.91				17	1.7	28.3	137	111	5.27	5.26	0.01	

. JUL H = 13 22 4.54 UTC RMS = 0.22 NO = 23 FIXED DEPTH SOLUTION
. 11 LAT = 36.741 N ERX = 0.5 ERH = 0.7 AVFM = 2.1 Q = B DEPTH CONTROL INADEQUATE
. LONG = 116.280 W ERY = 0.5 GAP = 59 AVXM = QS = B LATHROP WELLS
. DEPTH = 5.00 KM ERZ = 1.2 NM = QD = A

. 11	LSM	IPD	13 22 5.96				44	2.4	0.7	105	170	1.42	0.99	0.42	
. 11	SDH	IPU	13 22 6.86				19	1.7	11.8	206	107	2.32	2.35	-0.03	
. 11	CDH5	EPD3	13 22 6.93				13	1.4	13.7	346	105	2.39	2.65	-0.26	VERY E
. 11	CDH1	IPU	13 22 6.97				29	2.1	13.7	346	105	2.43	2.65	-0.22	
. 11	LCP	IPU	13 22 7.51				36	2.3	16.1	38	103	2.97	3.03	-0.06	
. 11	SSP	IPD	13 22 8.10				41	2.4	21.2	15	99	3.56	3.84	-0.28	
. 11	MCY	EPU	13 22 9.77				47	2.6	29.7	107	97	5.23	5.21	0.01	
. 11	BRD	EPU	13 22 9.65				18	1.7	30.9	275	96	5.11	5.41	-0.31	VERY E
. 11	BGB	IPD	13 22 10.10				22	1.9	33.3	8	96	5.56	5.79	-0.19	VERY E
. 11	JCN	IPU	13 22 10.90				20	1.9	36.9	155	95	6.36	6.38	-0.03	
. 11	SPRG	IPU	13 22 11.64				37	2.4	42.4	97	95	7.10	7.26	-0.16	
. 11	FMT	FPU	13 22 12.08				15	1.6	46.0	256	94	7.54	7.85	-0.21	VERY E
. 11	GLR	EP	13 22 14.35				14	1.6	56.0	25	93	9.81	9.47	0.48	VERY E
. 11	NMN	IPD	13 22 14.76				38	2.5	61.1	308	93	10.22	10.30	-0.08	
. 11	BMT	EPU	13 22 15.90				38	2.5	64.3	339	93	11.36	10.83	0.13	
. 11	SGV	IPU	13 22 16.52				34	2.4	72.2	292	93	11.98	12.11	-0.13	
. 11	APK	IPU	13 22 17.83				33	2.4	78.6	126	92	13.29	13.15	0.14	
. 11	GMR	EPD	13 22 18.07				12	1.6	79.9	35	92	13.53	13.36	0.17	VERY E
. 11	PGE	EPD	13 22 18.53						82.8	238	92	13.99	13.83	0.16	VERY E
. 11	TMO	EPU	13 22 21.70						101.0	274	92	17.16	16.78	0.37	
. 11	SHRG	EPD	13 22 21.86				25	2.3	104.0	105	92	17.32	17.28	0.09	
. 11	MGN	EPD	13 22 26.57				26	2.4	133.2	306	53	22.03	21.73	0.30	
. 11	LCH	IPD	13 22 26.62				27	2.5	133.5	294	53	22.08	21.77	0.31	
. 11	MZP	IPD4	13 22 28.65				26	2.5	144.7	317	53	24.11	23.22	1.07	

. JUL H = 13 26 9.66 UTC RMS = 0.08 NO = 7 FREE DEPTH SOLUTION
. 11 LAT = 36.756 N ERX = 0.5 ERH = 0.7 AVFM = 1.2 Q = A
. LONG = 116.282 W ERY = 0.5 GAP = 73 AVXM = QS = A LATHROP WELLS
. DEPTH = 8.37 KM ERZ = 1.2 NM = QD = A

. 11	LSM	IPD	13 26 11.24				15	1.5	2.1	153	165	1.58	1.58	0.00	
. 11	CDH5	EPU	13 26 12.20				5	0.6	12.0	345	121	2.54	2.62	-0.08	
. 11	CDH1	IPU	13 26 12.22				13	1.4	12.0	345	121	2.56	2.62	-0.06	
. 11	SDH	EPU	13 26 12.55						13.2	202	119	2.89	2.78	0.11	
. 11	LCP	IPD	13 26 12.95				15	1.5	15.0	43	116	3.19	3.04	0.15	
. 11	SSP	IPU4	13 26 15.24						19.6	17	110	5.58	3.74	1.84	
. 11	MCY	IPU	13 26 15.00				12	1.4	30.5	110	103	5.34	5.43	-0.09	
. 11	BRD	EP	13 26 15.09				8	1.0	30.6	271	103	5.43	5.45	-0.02	
. 11	JON	EP 4	13 26 21.25						38.5	155	100	11.59	6.72	4.87	

. JUL H = 13 37 58.35 UTC RMS = 0.25 NO = 17 FREE DEPTH SOLUTION
. 11 LAT = 36.752 N ERX = 0.5 ERH = 0.8 AVFM = 1.7 Q = B
. LONG = 116.273 W ERY = 0.6 GAP = 66 AVXM = QS = B LATHROP WELLS
. DEPTH = 7.14 KM ERZ = 1.7 NM = QD = A

. 11	LSM	IPD	13 37 59.40				39	2.3	1.5	174	167	1.55	1.36	0.19	
. 11	CDH1	IPU	13 38 0.90				16	1.6	12.6	342	115	2.45	2.61	-0.15	
. 11	CDH5	EP 3	13 38 0.77				4	0.4	12.6	342	115	2.42	2.61	-0.18	VERY
.		ISU	13 38 2.66									4.31	4.56	-0.25	

JUL 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 11	SDM	IPD	13 38	0.79			14	1.5	13.2	206	114	2.44	2.69	-0.25	
. 11	LOP	IPU	13 38	1.47			28	2.1	14.7	40	112	3.12	2.92	0.20	
. 11	SSP	IPD	13 38	1.56					19.8	14	106	3.21	3.70	-0.49	
. 11	MCY	IPU	13 38	3.63			33	2.3	29.6	110	101	5.03	5.25	0.04	
. 11	BRO	EPD	13 38	3.61					31.4	272	100	5.26	5.54	-0.28	
.		ISU	13 38	8.40								10.05	9.70	0.36	
. 11	BGB	IPU	13 38	4.03			9	1.2	32.0	7	100	5.68	5.63	0.11	
. 11	JCN	IPU	13 38	4.83			14	1.6	37.9	156	98	6.48	6.58	-0.09	
. 11	SPRG	EPU	13 38	5.53			14	1.6	42.0	99	98	7.18	7.24	-0.06	
.		ESD	13 38	11.39								13.04	12.66	0.38	
. 11	FMT	EPD4	13 38	12.33					46.9	255	97	13.98	8.02	6.06	
. 11	NMN	EP	13 38	8.77			20	1.9	60.7	307	95	10.42	10.27	0.16	
. 11	BMT	EP 2	13 38	10.10			22	2.0	63.3	339	95	11.75	10.69	0.66	
. 11	SGV	EPD	13 38	10.57			22	2.1	72.3	291	94	12.22	12.13	0.09	

. JUL H = 14 53 1.66 UTC RMS = 0.10 NO = 8 FREE DEPTH SOLUTION
. 11 LAT = 36.752 N ERX = 0.6 ERH = 0.8 AVFM = 1.3 Q = A
. LONG = 116.281 W ERY = 0.5 GAP = 73 AVXM = QS = A LATHROP WELLS
. DEPTH = 7.75 KM ERZ = 1.3 NM = QD = A

. 11	LSM	IPD	14 53	3.13			29	2.1	1.7	151	167	1.47	1.46	0.01	
. 11	CDHS	EP 3	14 53	4.15			5	0.6	12.5	345	118	2.49	2.63	-0.14	
. 11	CDH1	IPU	14 53	4.15			17	1.6	12.5	345	118	2.49	2.63	-0.14	
. 11	SDM	EP	14 53	4.47			7	0.9	12.9	203	117	2.81	2.69	0.12	
. 11	LOP	IPD	14 53	4.76			17	1.6	15.2	42	113	3.10	3.03	0.07	
. 11	SSP	EP 4	14 53	2.43					20.0	16	108	0.77	3.76	-2.99	
. 11	MCY	IPU	14 53	6.92			16	1.6	30.2	109	102	5.26	5.36	-0.11	
. 11	BRO	EPD	14 53	7.06					30.8	272	102	5.40	5.45	-0.06	
. 11	BGB	EPU	14 53	7.42			16	1.7	32.1	9	101	5.76	5.66	0.14	
. 11	JCN	EP 4	14 53	10.55			5	0.7	38.1	155	99	8.89	6.63	2.25	

. JUL H = 15 10 21.77 UTC RMS = 0.21 NO = 11 FREE DEPTH SOLUTION
. 11 LAT = 37.698 N ERX = 0.6 ERH = 0.9 AVFM = 2.2 Q = C
. LONG = 115.041 W ERY = 0.7 GAP = 117 AVXM = QS = B MIKO
. DEPTH = 0.51 KM ERZ = 1.5 NM = QD = C

. 11	MPN	IPU	15 10	23.92			22	1.9	10.5	119	38	2.15	2.30	-0.15	
. 11	MTI	IPD	15 10	25.35			23	1.9	20.5	263	38	3.58	3.94	-0.15	
. 11	SRG	IPU	15 10	25.64			35	2.3	20.6	353	38	3.87	3.95	-0.07	
. 11	DLM	IPU	15 10	27.22			12	1.4	28.6	111	38	5.45	5.24	0.21	
.		ISU	15 10	31.10								9.33	9.18	0.16	
. 11	PRN	IPD	15 10	27.48			28	2.1	32.3	181	38	5.71	5.85	-0.13	
. 11	TPU	EPU	15 10	30.99			16	1.7	54.6	259	38	9.22	9.47	-0.25	
. 11	BLT	EPU	15 10	39.46			25	2.3	100.1	255	38	17.69	16.87	0.82	
.		ESU	15 10	51.44								29.67	29.52	0.15	
. 11	KRNA	EPD	15 10	41.96			27	2.4	118.2	273	38	20.19	19.82	0.37	
.		ESD4	15 10	55.42								33.65	34.69	-1.04	
. 11	SPRG	EP 4	15 10	44.60			24	2.3	130.6	211	38	22.83	21.84	1.00	
. 11	LOP	EP 4	15 10	45.53			25	2.4	136.9	227	30	23.76	22.80	0.96	NOISY
. 11	BMT	EPU4	15 10	47.79			29	2.5	139.7	251	30	26.02	23.17	2.45	VERY E
. 11	MCY	EPU4	15 10	46.17			39	2.8	141.1	215	30	24.40	23.35	1.06	
. 11	LSM	EPU	15 10	47.42			39	2.8	152.5	226	30	25.65	24.83	0.82	NOISY

. JUL H = 17 10 19.80 UTC RMS = 0.15 NO = 19 FIXED DEPTH SOLUTION
. 12 LAT = 36.696 N ERX = 0.4 ERH = 0.5 AVFM = 2.0 Q = B DEPTH CONTROL INADEQUATE
. LONG = 116.284 W ERY = 0.3 GAP = 58 AVXM = QS = B LATHROP WELLS
. DEPTH = 5.00 KM ERZ = 1.5 NM = QD = A

. 12	LSM	IPD	17 10	21.20			32	2.2	4.9	13	130	1.40	1.35	0.06	
. 12	SDM	IPD	17 10	21.39			18	1.7	7.4	220	118	1.59	1.69	-0.10	
. 12	CDH1	IPU	17 10	23.04			34	2.3	18.4	351	101	3.24	3.40	-0.16	
. 12	CDHS	EP	17 10	23.38			17	1.7	18.4	351	101	3.58	3.40	0.18	
. 12	LOP	IPD	17 10	23.36			21	1.8	20.4	31	100	3.56	3.71	-0.15	
. 12	SSP	IPD	17 10	24.29			18	1.7	26.0	13	98	4.49	4.62	-0.13	
. 12	MCY	IPU	17 10	24.87			28	2.1	29.1	98	97	5.07	5.11	-0.04	
. 12	BRO	IPU	17 10	25.23			25	2.0	31.3	284	96	5.43	5.48	-0.05	
. 12	JCN	IPU	17 10	25.41			12	1.4	32.8	150	96	5.61	5.71	-0.10	
. 12	AMR	EPD	17 10	26.16					37.3	247	95	6.36	6.44	-0.07	
. 12	BGB	IPU	17 10	26.22			28	2.2	38.2	8	95	6.42	6.59	-0.12	
. 12	SPRG	IPU	17 10	26.97			29	2.2	42.5	90	95	7.17	7.28	-0.10	
. 12	FMT	EPU	17 10	27.61			26	2.1	44.6	262	94	7.81	7.63	0.28	
. 12	GLR	EPU	17 10	30.23			17	1.8	60.7	23	93	10.43	10.23	0.35	
. 12	NMN	EPD	17 10	30.46			29	2.3	63.9	312	93	10.66	10.76	-0.10	
. 12	MCP	EP	17 10	30.55			11	1.4	64.2	169	93	10.75	10.80	-0.05	
. 12	GMV	EP 4	17 10	31.89			11	1.4	66.3	211	93	12.09	11.15	0.94	
. 12	SGV	EPD	17 10	32.30			32	2.4	73.9	295	93	12.50	12.38	0.13	

JUL 1980	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	APK	EPD	17 10 32.82				19	2.0	76.1	123	93	13.02	12.75	0.28	
. 12	GMR	EPD	17 10 34.02				19	2.0	84.2	33	92	14.22	14.06	0.16	
. 12	TPU	EPD4	17 10 39.80				25	2.3	115.5	29	92	20.00	19.16	0.85	
. 12	PRN	EPU3	17 10 42.82				33	2.6	135.1	54	53	23.02	21.98	1.04	

. JUL H = 13 58 20.82 UTC RMS = 0.35 NO = 11 FREE DEPTH SOLUTION
. 13 LAT = 37.399 N ERX = 1.9 ERH = 2.5 AVFM = 2.4 Q = C
. LONG = 115.197 W ERY = 1.7 GAP = 146 AVXM = QS = C ALAMO
. DEPTH = 3.81 KM ERZ = 20.4 NM = QD = C

. 13	PRN	IPD	13 58 23.14				36	2.3	13.0	86	100	2.32	2.50	-0.19	
. 13	MTI	EPU	13 58 25.75				23	2.0	31.5	348	94	4.93	5.48	-0.36	
. 13	NPN	IPU	13 58 27.30				21	1.9	36.3	39	93	6.48	6.26	0.21	
. 13	CLM	EP	13 58 29.24						46.5	61	93	8.42	7.92	0.49	
. 13	GMR	EP 4	13 58 28.45				15	1.7	51.4	262	92	7.63	8.72	-1.09	
. 13	SRG	EPU	13 58 30.13				28	2.2	54.8	12	92	9.31	9.27	0.04	
. 13	GLR	EPD	13 58 32.99						76.1	253	92	12.17	12.74	-0.43	
. 13	BLT	EP	13 58 35.32				35	2.5	83.4	275	91	14.50	13.92	0.57	
. 13	BGB	EP 4	13 58 38.63						100.0	246	91	17.81	16.63	1.23	
. 13	EPN	EPU	13 58 38.33				47	2.8	102.0	258	91	17.51	16.96	0.54	
. 13	SSP	IPD4	13 58 39.40				32	2.5	104.9	240	91	18.58	17.43	1.14	
. 13	LCP	IPU4	13 58 39.67				29	2.4	105.4	235	91	18.85	17.52	1.33	
. 13	MCY	EPU4	13 58 37.53				47	2.8	106.5	220	91	16.71	17.70	-0.99	
. 13	KRNA	EPD	13 58 39.13						111.6	290	90	18.31	18.49	-0.19	
.		ISD4	13 58 52.04									31.22	32.36	-1.14	
. 13	CDHI	EP	13 58 40.68						116.2	239	90	19.86	19.25	0.60	
. 13	LSM	EPU	13 58 40.40				46	2.9	120.5	233	90	19.58	19.94	-0.36	

. JUL H = 16 2 10.52 UTC RMS = 0.16 NO = 17 FREE DEPTH SOLUTION
. 13 LAT = 36.799 N ERX = 0.7 ERH = 0.8 AVFM = 1.9 Q = C
. LONG = 115.937 W ERY = 0.5 GAP = 172 AVXM = QS = B MERCURY
. DEPTH = 7.57 KM ERZ = 3.5 NM = QD = C

. 13	MCY	IPD	16 2 13.57						15.4	188	112	3.05	3.05	0.01	
. 13	LCP	IPU	16 2 14.51				39	2.4	21.4	287	106	3.99	3.97	0.02	
. 13	SSP	IPU	16 2 15.65				31	2.2	28.7	299	102	5.13	5.12	0.02	
. 13	LSM	EPD	16 2 15.76				44	2.5	30.6	257	101	5.24	5.42	-0.18	
. 13	CDHS	IPU	16 2 16.40				7	0.9	34.6	281	100	5.88	6.06	-0.18	
. 13	CDHI	IPD	16 2 16.51						34.6	281	100	5.99	6.06	-0.07	
. 13	BGB	IPU	16 2 16.55				13	1.5	37.0	316	99	6.33	6.45	-0.07	
. 13	SCH	EPU	16 2 17.47				31	2.3	39.7	245	99	6.95	6.88	0.08	
. 13	JCN	EPU	16 2 18.07				23	2.0	42.5	200	98	7.55	7.34	0.22	
. 13	GLR	IPD	16 2 18.00				10	1.3	45.0	351	98	7.48	7.73	-0.10	
. 13	EPN	IPD	16 2 20.43				30	2.3	57.5	323	96	9.91	9.75	0.17	
. 13	GMR	EP	16 2 20.76						61.1	14	96	10.24	10.34	-0.10	
. 13	BRO	EP	16 2 21.05				11	1.4	61.5	266	96	10.53	10.40	0.13	
. 13	BLT	EPU	16 2 22.85				23	2.1	75.6	347	95	12.33	12.68	-0.34	
.		ISD4	16 2 33.35									22.83	22.18	0.65	
. 13	NOP	EPD	16 2 23.34				24	2.2	76.9	195	94	12.82	12.90	-0.07	
.		ISU2	16 2 32.60									22.08	22.57	-0.49	
. 13	TPU	EP	16 2 26.55						93.0	16	94	16.03	15.51	0.53	

. JUL H = 16 51 6.91 UTC RMS = 0.00 NO = 4 FREE DEPTH SOLUTION
. 13 LAT = 36.763 N ERX = ERH = AVFM = 2.0 Q = C
. LONG = 115.957 W ERY = GAP = 234 AVXM = QS = A MERCURY
. DEPTH = 20.21 KM ERZ = NM = QD = D

. 13	MCY	IPU	16 51 10.86				24	1.9	11.2	182	150	3.95	3.95	-0.00	
. 13	LCP	IPU	16 51 11.90				20	1.8	21.3	298	132	4.99	4.99	0.00	
. 13	LSM	EPU	16 51 12.78				29	2.2	28.2	265	124	5.87	5.87	-0.00	
. 13	SSP	IPU	16 51 12.95						29.4	308	123	6.04	6.04	0.00	

. JUL H = 2 18 23.08 UTC RMS = 0.03 NO = 3 FIXED DEPTH SOLUTION
. 14 LAT = 36.780 N ERX = ERH = AVFM = 1.5 Q = C DEPTH CONTROL INADEQUATE
. LONG = 115.964 W ERY = GAP = 245 AVXM = QS = A MERCURY
. DEPTH = 5.00 KM ERZ = NM = QD = D

. 14	MCY	IPU	2 18 25.65				16	1.6	13.1	179	106	2.57	2.56	0.01	
. 14	LCP	IPU	2 18 26.75				10	1.2	20.0	294	100	3.67	3.65	0.02	
. 14	LSM	EPU	2 18 27.94				15	1.6	27.9	261	97	4.86	4.92	-0.05	

. JUL H = 2 51 48.27 UTC RMS = 0.18 NO = 11 FREE DEPTH SOLUTION

LOCAL-EVENT DATA REPORT

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JUL   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN   TOBS   TCAL  RES   REMARKS
1980               (UTC)       (MU) (SEC)                   (KM) (DEG)(DEG) (SEC)  (SEC) (SEC)

. 14 LAT =  36.803 N      ERX =   1.3  ERH =   1.5   AVFM =   1.8  Q = D                                  .
.   LONG = 115.990 W      ERY =   0.7  GAP = 196     AVXM =         QS = C     MERCURY                   .
.  DEPTH =   6.70 KM      ERZ =   6.2  NM =                         QD = D                               .
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. 14    MCY  IPD    2 51 51.34                        38  2.3   15.8  187  109    3.07   3.06   0.01     .
. 14    LOP  IPU    2 51 52.27                        27  2.1   21.1  286  104    4.00   3.88   0.12     .
. 14    SSP  IPU    2 51 53.50                              28.3  299  101    5.23   5.02   0.21     .
. 14    LSM  IPU    2 51 53.16                        39  2.4   30.5  256  100    4.89   5.37  -0.48     .
. 14    CDH5 IPU    2 51 54.16                         6  0.8   34.3  281   99    5.89   5.99  -0.09     .
. 14    CDH1 IPD    2 51 54.21                        13  1.5   34.3  281   99    5.94   5.99  -0.04     .
. 14    BGB  IPU    2 51 54.55                        13  1.5   36.5  315   98    6.28   6.35  -0.02     .
. 14    SCH  EPU4   2 51 55.60                        22  2.0   39.6  244   97    7.33   6.85   0.48     .
. 14    JON  EP     2 51 55.75                        19  1.8   42.9  200   97    7.48   7.37   0.11     .
. 14    GLR  EP     2 51 55.60                              44.5  351   97    7.33   7.64  -0.15     .
. 14    EPN  EPD    2 51 57.96                        30  2.3   57.0  323   95    9.69   9.65   0.04     .
. 14    BRO  EP     2 51 58.80                        13  1.6   61.3  266   95   10.53  10.36   0.18     .
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. JUL H =  2 57 15.16 UTC  RMS =  0.02  NO =  4                                  FREE DEPTH SOLUTION       .
. 14 LAT =  36.753 N      ERX =         ERH =         AVFM =   1.8  Q = C                                 .
.   LONG = 115.965 W      ERY =         GAP = 229     AVXM =         QS = A     MERCURY                   .
.  DEPTH =  23.29 KM      ERZ =         NM =                         QD = D                               .
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. 14    MCY  IPD    2 57 19.46                        23  1.9   10.2  179  156    4.30   4.31  -0.01     .
. 14    LOP  IPU    2 57 20.49                        18  1.7   21.3  302  137    5.33   5.33  -0.00     .
. 14    LSM  EPU    2 57 21.23                        19  1.8   27.5  267  129    6.07   6.08  -0.01     .
. 14    SSP  IPU    2 57 21.55                              29.6  310  127    6.39   6.35   0.05     .
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. JUL H = 12  4 29.19 UTC  RMS =  0.05  NO =  5                                  FREE DEPTH SOLUTION       .
. 14 LAT =  37.108 N      ERX =   2.4  ERH =   2.6   AVFM =   2.1  Q = D                                  .
.   LONG = 116.199 W      ERY =   1.0  GAP = 200     AVXM =         QS = C     SILENT CANYON - YUCCA FLAT .
.  DEPTH =  17.01 KM      ERZ =   3.8  NM =                         QD = D                               .
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. 14    EPN  IPU   12  4 33.21                        40  2.4   16.2  317  135    4.02   4.03  -0.01     .
. 14    SSP  EPU   12  4 33.80                        22  1.9   20.3  185  128    4.61   4.53   0.08     .
. 14    LOP  EP    12  4 34.69                        22  1.9   28.3  174  119    5.50   5.60  -0.10     .
. 14    LSM  EP    12  4 36.78                        27  2.1   41.4  189  111    7.59   7.55   0.04     .
. 14    MCY  EPU   12  4 38.66                        22  2.0   53.8  157  106    9.47   9.46   0.01     .
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. JUL H = 12 12 42.13 UTC  RMS =  0.06  NO =  9                                  FREE DEPTH SOLUTION       .
. 14 LAT =  37.094 N      ERX =   0.3  ERH =   0.4   AVFM =   1.7  Q = C                                 .
.   LONG = 116.188 W      ERY =   0.2  GAP = 108     AVXM =         QS = C     SILENT CANYON - YUCCA FLAT .
.  DEPTH =   1.62 KM      ERZ =  81.5  NM =                         QD = B                               .
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. 14    BGB  IPD   12 12 43.52                        29  2.1    7.1  210   38    1.39   1.53  -0.09     .
. 14    EPN  EPU   12 12 45.44                        24  2.0   18.0  318   38    3.31   3.30   0.01     .
. 14    SSP  EPU   12 12 45.75                              18.9  188   38    3.62   3.44   0.17     .
. 14    GLR  IPU   12 12 45.46                        29  2.1   19.2   52   38    3.33   3.48  -0.01     .
. 14    LOP  EP    12 12 47.33                        22  1.9   26.6  176   38    5.20   4.70   0.50     .
. 14    CDH1 EPU2  12 12 46.70                        15  1.6   28.3  204   38    4.57   4.98  -0.41     .
. 14    CDH5 EPU3  12 12 46.70                         3  0.2   28.3  204   38    4.57   4.98  -0.41     .
. 14    LSM  EP    12 12 49.07                        24  2.0   40.1  191   38    6.94   6.88   0.05     .
. 14    MCY  EPU   12 12 50.94                        23  2.0   52.0  157   38    8.81   8.82  -0.02     .
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. JUL H = 12 44 29.66 UTC  RMS =  0.05  NO =  4                                  FREE DEPTH SOLUTION       .
. 14 LAT =  37.039 N      ERX =         ERH =         AVFM =   1.5  Q = C                                 .
.   LONG = 116.139 W      ERY =         GAP = 187     AVXM =         QS = A     SILENT CANYON - YUCCA FLAT .
.  DEPTH =   1.01 KM      ERZ =         NM =                         QD = D                               .
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. 14    BGB  IPD   12 44 31.30                        29  2.1    7.9  269   38    1.64   1.78  -0.09     .
. 14    GLR  IPD   12 44 33.38                        15  1.6   20.8   31   38    3.72   3.87  -0.00     .
. 14    CDH1 EPD   12 44 34.35                        29  2.1   25.5  219   38    4.69   4.63   0.05     .
. 14    CDH5 EPU   12 44 34.35                         3  0.2   25.5  219   38    4.69   4.63   0.05     .
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. JUL H = 16 42 50.21 UTC  RMS =  0.10  NO =  9                                  FREE DEPTH SOLUTION       .
. 14 LAT =  36.799 N      ERX =   0.9  ERH =   1.0   AVFM =   1.3  Q = C                                 .
.   LONG = 115.950 W      ERY =   0.5  GAP = 192     AVXM =         QS = B     MERCURY                   .
.  DEPTH =   9.57 KM      ERZ =   1.9  NM =                         QD = D                               .
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. 14    MCY  IPD   16 42 53.20                        14  1.5   15.3  184  119    2.99   3.17  -0.18     .
.            ISU   16 42 55.60                                                    5.59   5.55   0.04     .
. 14    LOP  IPD   16 42 54.25                         8  1.0   20.4  287  112    4.04   3.92   0.12     .
. 14    SSP  EPU   16 42 55.29                              27.7  300  107    5.08   5.05   0.03     .
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JUL 1980	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	LSM	EPU	16 42 55.45				9	1.1	29.5	257	106	5.24	5.33	-0.09	
. 14	CDH1	IPD	16 42 56.12				14	1.5	33.5	282	104	5.91	5.96	-0.05	
. 14	BGB	EPU	16 42 56.56				15	1.6	36.3	317	103	6.35	6.39	0.01	
. 14	JON	EP	16 42 57.70						42.2	199	101	7.49	7.33	0.16	
. 14	GLR	EPD	16 42 57.80				10	1.3	44.8	352	100	7.59	7.75	-0.01	

. JUL H = 12 3 20.98 UTC RMS = 0.11 NO = 6 FREE DEPTH SOLUTION
. 15 LAT = 36.734 N ERX = 1.2 ERH = 2.9 AVFM = 1.1 Q = C
. LONG = 115.957 W ERY = 2.6 GAP = 157 AVXM = QS = C MERCURY
. DEPTH = 26.05 KM ERZ = 2.5 NM = QD = C

. 15	MCY	IPD	12 3 25.75				7	0.8	8.1	183	158	4.77	4.54	0.23	
.		ISU	12 3 28.91									7.93	7.94	-0.01	
. 15	SPRG	EPU	12 3 25.81				13	1.4	13.9	109	144	4.83	4.91	-0.08	
. 15	LOP	EPU	12 3 26.60						23.0	305	125	5.62	5.75	-0.13	
. 15	LSM	EP	12 3 27.30						28.1	271	116	6.32	6.33	-0.00	
. 15	SSP	EPU	12 3 27.83						31.5	312	111	6.85	6.73	0.12	

. JUL H = 14 23 33.58 UTC RMS = 0.05 NO = 6 FREE DEPTH SOLUTION
. 15 LAT = 36.788 N ERX = 0.3 ERH = 0.5 AVFM = 1.2 Q = C
. LONG = 115.925 W ERY = 0.5 GAP = 195 AVXM = QS = A MERCURY
. DEPTH = 13.69 KM ERZ = 0.9 NM = QD = D

. 15	MCY	IPU	14 23 37.06				7	0.9	14.5	193	131	3.48	3.45	0.03	
.		ISU	14 23 39.60									6.02	6.04	-0.02	
. 15	SPRG	EPU	14 23 37.05				14	1.5	14.7	136	131	3.47	3.48	-0.01	
. 15	LOP	EPU	14 23 38.07						22.9	289	119	4.49	4.57	-0.08	
. 15	SSP	EP	14 23 39.25						30.3	300	112	5.67	5.66	0.01	
. 15	LSM	EP	14 23 39.49						31.5	260	112	5.91	5.84	0.07	

. JUL H = 23 16 16.39 UTC RMS = 0.22 NO = 11 FREE DEPTH SOLUTION
. 15 LAT = 36.895 N ERX = 1.3 ERH = 1.5 AVFM = 2.4 Q = C
. LONG = 116.820 W ERY = 0.8 GAP = 124 AVXM = QS = C CHLORIDE CLIFF
. DEPTH = 3.96 KM ERZ = 32.5 NM = QD = C

. 15	NMN	IPU	23 16 20.02				38	2.4	20.6	0	97	3.63	3.73	-0.10	
. 15	SGV	IPU	23 16 20.35				40	2.4	21.2	297	96	3.96	3.82	0.13	
. 15	BRO	IPU	23 16 20.30				27	2.1	22.7	130	96	3.[illegible]	4.07	-0.16	
. 15	FMT	EPD	23 16 21.20				33	2.3	28.6	173	95	4.[illegible]	5.01	-0.11	
. 15	CDH1	IPU	23 16 24.18				34	2.4	44.9	95	93	7.[illegible]	7.67	0.12	
. 15	BMT	EPU1	23 16 24.41				42	2.6	50.1	31	93	8.02	8.50	-0.48	
. 15	SDH	EPD	23 16 25.23				24	2.1	51.1	123	93	8.84	8.68	0.16	
. 15	LSM	IPD	23 16 25.40				41	2.5	51.9	109	93	9.01	8.80	0.21	
. 15	SSP	EPD	23 16 25.52				41	2.5	53.7	86	92	9.13	9.09	0.03	
. 15	BGB	IPU	23 16 26.03				31	2.3	55.0	73	92	9.64	9.31	0.37	
. 15	EPN	EPD4	23 16 26.70				41	2.6	56.6	51	92	10.31	9.56	0.75	
. 15	LOP	EPD	23 16 26.64				35	2.4	58.3	94	92	10.25	9.85	0.40	

. JUL H = 6 37 39.48 UTC RMS = 0.22 NO = 14 FREE DEPTH SOLUTION
. 16 LAT = 36.199 N ERX = 1.8 ERH = 2.6 AVFM = 2.4 Q = D
. LONG = 115.506 W ERY = 1.8 GAP = 245 AVXM = QS = C CHARLESTON PEAK
. DEPTH = 1.07 KM ERZ = 2.1 NM = QD = D

. 16	APK	IPU	6 37 42.10				30	2.1	14.7	335	38	2.62	2.86	-0.24	
. 16	NOP	EPD	6 37 49.32				30	2.3	58.7	262	38	9.84	10.02	-0.18	
.		ISO	6 37 57.23									17.75	17.53	0.22	
. 16	JON	EPU	6 37 49.57				28	2.2	59.9	296	38	10.09	10.22	-0.12	
. 16	SPRG	IPU4	6 37 49.50				29	2.2	61.2	334	38	10.02	10.44	-0.42	
. 16	MCY	IPU	6 37 50.44				44	2.6	65.6	321	38	10.96	11.15	-0.19	
. 16	SDH	EPU	6 37 54.40				20	2.0	89.5	304	38	14.92	15.04	-0.12	
. 16	LSM	IPU	6 37 54.92				42	2.7	91.0	311	38	15.44	15.28	0.16	
. 16	LOP	IPD	6 37 55.38				33	2.5	93.7	321	38	15.90	15.73	0.18	
. 16	CDH1	IPU	6 37 56.79				21	2.1	103.3	315	38	17.31	17.27	0.04	
. 16	GWV	EPD	6 37 57.14				31	2.5	104.7	269	38	17.66	17.51	0.05	
.		ESO2	6 38 9.67									30.19	30.82	-0.62	
. 16	BGB	EP	6 37 58.66						113.2	325	38	19.18	18.89	0.34	
. 16	GLR	EPD	6 37 59.75				24	2.3	120.0	338	38	20.27	20.00	0.43	
. 16	PRN	EPD	6 38 2.50				34	2.7	140.1	17	30	23.02	23.09	-0.07	

. JUL H = 14 16 3.12 UTC RMS = 0.10 NO = 9 FREE DEPTH SOLUTION
. 17 LAT = 36.757 N ERX = 0.5 ERH = 0.8 AVFM = 1.3 Q = C
. LONG = 115.909 W ERY = 0.7 GAP = 184 AVXM = QS = A MERCURY

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JUL   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
1980               (UTC)       (MU) (SEC)                   (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

.   DEPTH =   1.28 KM       ERZ =   1.2  NM =                        QD = D                                .
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. 17    SPRG IPU   14 16  5.38                          9  1.1   11.3  128   38    2.26   2.28  -0.02     .
. 17    MCY  EPU   14 16  5.46                         16  1.6   11.6  204   38    2.34   2.33   0.01     .
.            ISD   14 16  7.15                                                     4.03   4.07  -0.05     .
. 17    LOP  IPU   14 16  7.41                          6  0.8   25.5  295   38    4.29   4.58  -0.30     .
. 17    LSM  EPD   14 16  8.90                         10  1.2   32.5  266   38    5.78   5.73   0.05     .
. 17    SSP  EPU   14 16  9.07                                     33.3  304   38    5.95   5.86   0.09     .
. 17    CDHS IPU   14 16  9.68                         12  1.4   38.2  287   38    6.56   6.66  -0.10     .
. 17    CDH1 EPD   14 16 10.00                         15  1.6   38.2  287   38    6.88   6.66   0.22     .

. 17    SDH  EP    14 16 10.19                                     40.3  252   38    7.07   7.00   0.07     .
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. JUL H = 22  3 14.17 UTC  RMS =  0.16  NO =  4                                  FIXED DEPTH SOLUTION       .
.  17 LAT =  37.170 N      ERX =         ERH =          AVFM =    1.5  Q = C    DEPTH CONTROL INADEQUATE   .
.    LONG = 115.270 W      ERY =         GAP = 213      AVXM =         QS = B    ALAMO                      .
.   DEPTH =   5.00 KM      ERZ =         NM =                          QD = D                               .
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. 17    EPR  EPU   22  3 15.86                                      7.4   91  117    1.69   1.70  -0.01     .
. 17    SPRG IPU   22  3 26.49                         12  1.5   71.4  222   93   12.32  11.98   0.34     .
. 17    MCY  IPD4  22  3 27.30                         16  1.8   83.6  228   92   13.13  13.96  -0.83     .
.            ISU4  22  3 30.22                                                    16.05  24.43  -8.38     .
. 17    BGB  EPU4  22  3 32.66                         12  1.6   86.4  260   92   18.49  14.41   4.13     .
. 17    LOP  EP 4  22  3 30.91                          7  1.1   87.2  246   92   16.74  14.55   2.19     .
.            ESD4  22  3 34.02                                                    19.85  25.46  -5.61     .
. 17    JON  EP    22  3 32.12                                    110.0  223   92   17.95  18.25  -0.30     .
. 17    SDH  EPD   22  3 32.60                                    111.6  239   92   18.43  18.51  -0.08     .
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. JUL H = 12 13 41.73 UTC  RMS =  0.27  NO = 10                                  FREE DEPTH SOLUTION        .
.  18 LAT =  37.087 N      ERX =   1.1  ERH =   1.4   AVFM =    2.3  Q = C                               .
.    LONG = 116.181 W      ERY =   0.9  GAP =  94     AVXM =         QS = C    SILENT CANYON - YUCCA FLAT .
.   DEPTH =   1.49 KM      ERZ = 340.5  NM =                         QD = C                               .
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. 18    BGB  IPD4  12 13 43.15                         45  2.5    6.8  218   38    1.42   1.51  -0.03     .
. 18    SSP  IPU   12 13 45.38                                     18.2  191   38    3.65   3.36   0.29     .
. 18    EPN  IPU   12 13 45.04                         60  2.8   19.0  316   38    3.31   3.49  -0.17     .
. 18    GLR  EPU   12 13 45.03                         36  2.3   19.2   49   38    3.30   3.51  -0.06     .
. 18    LOP  EPD4  12 13 46.44                         44  2.5   25.8  177   38    4.71   4.59   0.12     .
.              4   12 13  0.00                                                                              .
. 18    CDHS EPU   12 13 46.17                         21  1.9   27.9  206   38    4.44   4.93  -0.49     .
. 18    CDH1 IPD   12 13 46.23                         35  2.3   27.9  206   38    4.50   4.93  -0.43     .
. 18    BMT  IPU   12 13 49.46                         17  1.7   38.2  305   38    7.73   6.61   0.73     .
. 18    LSM  EPD   12 13 48.30                         47  2.6   39.4  192   38    6.57   6.80  -0.23     .
. 18    BLT  EPD   12 13 48.77                         35  2.4   41.8    6   38    7.04   7.19  -0.15     .
. 18    MCY  IPD4  12 13 50.42                         43  2.6   51.0  158   38    8.69   8.69   0.00     .
.              4   12 13  0.00                                                                              .
. 18    SPRG EPU   12 13 51.25                         18  1.8   54.7  143   38    9.52   9.29   0.23     .
. 18    NPN  EPD   12 13 51.24                         18  1.8   56.7  269   38    9.51   9.61  -0.10     .
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. JUL H = 15 18 52.62 UTC  RMS =  0.04  NO =  6                                  FREE DEPTH SOLUTION        .
.  18 LAT =  36.751 N      ERX =   0.6  ERH =   0.6   AVFM =    1.2  Q = B                               .
.    LONG = 116.304 W      ERY =   0.3  GAP = 160     AVXM =         QS = A    LATHROP WELLS              .
.   DEPTH =  10.92 KM      ERZ =   1.1  NM =                         QD = C                               .
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. 18    LSM  IPD   15 18 54.60                         13  1.4    3.2  114  163    1.98   2.02  -0.05     .
. 18    SDH  EP    15 18 55.45                                     12.0  194  130    2.83   2.86  -0.03     .
.            ESD   15 18 57.66                                                     5.04   5.00   0.04     .
. 18    CDH1 IPU   15 18 55.50                         12  1.3   12.2  355  129    2.88   2.88  -0.01     .
. 18    LOP  IPD   15 18 56.17                          8  1.0   16.8   47  120    3.55   3.49   0.06     .
.            ESD4  15 18 59.63                                                     7.01   6.11   0.90     .
. 18    SSP  EPU4  15 18 59.92                                     20.8   22  115    7.30   4.07   3.22     .
. 18    MCY  IPU   15 18 58.36                          9  1.2   32.1  108  107    5.74   5.80  -0.06     .
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. JUL H = 15 39 43.85 UTC  RMS =  0.00  NO =  4                                  FREE DEPTH SOLUTION        .
.  18 LAT =  36.761 N      ERX =         ERH =          AVFM =    1.0  Q = C                               .
.    LONG = 116.309 W      ERY =         GAP = 229      AVXM =         QS = A    LATHROP WELLS              .
.   DEPTH =   7.30 KM      ERZ =         NM =                          QD = D                               .
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. 18    LSM  IPD   15 39 45.40                          9  1.1    4.1  127  148    1.55   1.55  -0.00     .
. 18    CDH1 EPU   15 39 46.24                          8  1.0   11.0  356  119    2.39   2.38   0.01     .
. 18    LOP  EPD   15 39 47.01                                     16.3   51  110    3.16   3.16  -0.00     .
.            ESU   15 39 49.38                                                     5.53   5.53  -0.00     .
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JUL 1980	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 1 46.27 UTC			RMS = 0.07	NO = 8											FREE DEPTH SOLUTION
19 LAT = 36.868 N			ERX = 0.5	ERH = 0.6		AVFM = 1.0				Q = B					
LONG = 116.180 W			ERY = 0.3	GAP = 152		AVXM =				QS = A		LATHROP WELLS			
DEPTH = 9.51 KM			ERZ = 0.7	NM =						QD = C					
19	LCP	EPD	10 1 48.06				6	0.7	1.9	144	168	1.79	1.75	0.04	
19	SSP	EPU	10 1 48.35				7	0.8	7.2	332	140	2.08	2.14	-0.06	
		ESD	10 1 49.96									3.69	3.74	-0.06	
19	CDH1	EPD	10 1 49.30				9	1.1	12.3	266	125	2.73	2.75	-0.03	
19	LSM	EP	10 1 49.75				8	1.0	16.5	210	117	3.48	3.34	0.14	
		ESU	10 1 52.04									5.77	5.84	-0.08	
19	BGB	EPD	10 1 50.02				11	1.3	19.3	347	113	3.75	3.76	0.04	
19	MCY	IPD	10 1 51.60						30.0	140	105	5.33	5.40	-0.08	
JUL H = 21 49 34.21 UTC			RMS = 0.01	NO = 4											FREE DEPTH SOLUTION
19 LAT = 36.896 N			ERX =	ERH =		AVFM = 1.8				Q = C					
LONG = 115.179 W			ERY =	GAP = 265		AVXM =				QS = A		MAYFORD PEAK			
DEPTH = 12.77 KM			ERZ =	NM =						QD = D					
19	SMRG	EPD	21 49 41.85						43.7	177	105	7.64	7.69	-0.00	
19	MCY	IPDQ	21 49 46.32				20	2.0	74.6	249	99	12.11	12.62	-0.51	
19	LCP	EPU	21 49 49.04				12	1.6	88.2	267	97	14.83	14.81	0.02	
19	SSP	EPD	21 49 49.72				13	1.7	92.7	272	97	15.51	15.53	-0.02	
19	LSM	EPD	21 49 50.75				15	1.8	99.1	260	53	16.54	16.54	0.00	
JUL H = 21 49 4.36 UTC			RMS = 0.45	NO = 3											FIXED DEPTH SOLUTION
19 LAT = 37.394 N			ERX =	ERH =		AVFM = 2.5				Q = D		DEPTH CONTROL INADEQUATE			
LONG = 114.473 W			ERY =	GAP = 327		AVXM =				QS = C					
DEPTH = 5.00 KM			ERZ =	NM =						QD = D					
19	NPN	IPUO	21 49 12.45				37	2.4	50.1	305	94	8.09	8.52	-0.43	
19	PRN	IPDO	21 49 12.95				37	2.4	51.1	272	94	8.59	8.68	-0.10	
19	MTI	EPDO	21 49 17.98				36	2.5	77.4	294	92	13 62	12.95	0.87	
JUL H = 1 49 59.30 UTC			RMS = 0.06	NO = 3											FIXED DEPTH SOLUTION
20 LAT = 37.025 N			ERX =	ERH =		AVFM = 1.3				Q = C		DEPTH CONTROL INADEQUATE			
LONG = 116.019 W			ERY =	GAP = 235		AVXM =				QS = A		SILE CANYON - YUCCA FLAT			
DEPTH = 5.00 KM			ERZ =	NM =						QD = D					
20	BGB	EP	1 50 2.75				13	1.4	13.6	274	101	3.4.	3.43	0.08	
20	GLR	EPD	1 50 2.70				8	1.0	19.4	0	100	3.40	3.55	0.00	
20	CDH1	EPU	1 50 4.83				11	1.3	32.2	236	96	5.53	5.62	-0.09	
JUL H = 9 7 54.80 UTC			RMS = 0.03	NO = 9											FREE DEPTH SOLUTION
20 LAT = 37.021 N			ERX = 0.3	ERH = 0.4		AVFM = 1.8				Q = C					
LONG = 116.009 W			ERY = 0.3	GAP = 156		AVXM =				QS = B		SILENT CANYON - YUCCA FLAT			
DEPTH = 14.32 KM			ERZ = 2.1	NM =						QD = C					
20	BGB	EPD	9 7 58.93				20	1.8	19.6	275	124	4.13	4.17	0.01	
20	GLR	IPD	9 7 58.85				14	1.5	19.8	358	124	4.05	4.20	-0.00	
20	SSP	EPD	9 7 59.18				18	1.7	21.5	240	122	4.38	4.43	-0.05	
20	LCP	EPU	9 7 59.54				24	2.0	23.3	217	120	4.74	4.68	0.05	
20	CDH1	EPD	9 8 0.97				14	1.5	32.8	237	112	6.07	6.08	-0.01	
20	LSM	EPU	9 8 1.96				27	2.1	39.1	217	108	7.16	7.04	0.11	
20	MCY	EPD	9 8 1.91				26	2.1	40.1	174	108	7.11	7.20	-0.09	
20	SPRG	EPD	9 8 2.05				14	1.6	40.4	154	108	7.25	7.25	0.00	
20	JCN	EPD	9 8 5.89				19	1.9	65.0	187	101	11.09	11.13	-0.04	
JUL H = 9 47 19.60 UTC			RMS = 0.03	NO = 7											FREE DEPTH SOLUTION
20 LAT = 37.017 N			ERX = 0.3	ERH = 0.5		AVFM = 1.8				Q = C					
LONG = 116.004 W			ERY = 0.4	GAP = 158		AVXM =				QS = B		SILENT CANYON - YUCCA FLAT			
DEPTH = 9.56 KM			ERZ = 3.7	NM =						QD = C					
20	BGB	EPD	9 47 23.42				20	1.8	20.1	277	113	3.82	3.87	-0.00	
20	GLR	IPD	9 47 23.35				14	1.5	20.3	356	112	3.75	3.90	-0.00	
20	SSP	EPD	9 47 23.18				23	1.9	21.7	242	111	3.58	4.11	-0.53	
20	LCP	EPU	9 47 24.03				24	2.0	23.2	219	110	4.43	4.35	0.08	
20	CDH1	EPD	9 47 25.42				14	1.5	32.9	238	104	5.82	5.86	-0.04	
20	LSM	EPU	9 47 26.47				28	2.2	39.0	218	102	6.87	6.83	0.04	
20	MCY	EPD	9 47 26.43				23	2.0	39.6	175	102	6.83	6.92	-0.09	

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 JUL   STA  PHASE    TIME        AMP  PER   XMAG  QUK  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
 1980                (UTC)       (MU) (SEC)                    (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

. 20    SPRG EPU    9 47 26.56                        15  1.6   39.8  154  102    6.96   6.95  0.01                .
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. JUL H = 23  4 18.78 UTC  RMS =  0.10  NO =  6                                   FREE DEPTH SOLUTION                 .
.  20 LAT =  36.706 N      ERX =   2.1  ERH =   2.3   AVFM =   1.2  Q = C                                            .
.    LONG = 116.303 W      ERY =   0.9  GAP = 191     AVXM =        QS = B      LATHROP WELLS                       .
.   DEPTH =   5.69 KM      ERZ =   2.5  NM =                        QD = D                                            .
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. 20    LSM  IP     23  4 20.00                        11  1.2    4.6   37  136    1.22   1.39 -0.18                .
. 20    SDM  IPD    23  4 20.52                                   7.4  205  122    1.74   1.74 -0.01                .
.            ISD    23  4 21.90                                                      3.12   3.05  0.07                .
. 20    LOP  EP     23  4 22.51                                  20.4   36  102    3.73   3.74 -0.02                .
.            ISU    23  4 25.49                                                      6.71   6.55  0.16                .
. 20    JCN  EP     23  4 24.76                                  34.5  149   97    5.98   6.00 -0.02                .
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. JUL H =  2  8 41.81 UTC  RMS =  0.51  NO =  4                                   FREE DEPTH SOLUTION                 .
.  21 LAT =  36.782 N      ERX =        ERH =         AVFM =   0.7  Q = D                                            .
.    LONG = 116.057 W      ERY =        GAP = 165     AVXM =        QS = D      LATHROP WELLS                       .
.   DEPTH =   2.01 KM      ERZ =        NM =                       QD = D                                            .
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. 21    LOP  EPU    2  8 43.92                         6  0.7   12.7  309   92    2.11   2.42 -0.31                .
. 21    MCY  EP     2  8 44.19                         7  0.9   15.8  147   91    2.38   2.93 -0.55                .
. 21    LSM  EP     2  8 45.50                                  19.7  256   90    3.69   3.56  0.13                .
.            ESU4   2  8 50.00                                                      8.19   6.23  1.96                .
. 21    SPRG EP     2  8 46.94                         5  0.6   24.2  114   90    5.13   4.29  0.84                .
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. JUL H =  4  7 59.95 UTC  RMS =  0.34  NO =  8                                   FIXED DEPTH SOLUTION                .
.  21 LAT =  37.078 N      ERX =   2.2  ERH =   2.6   AVFM =   1.7  Q = C       DEPTH CONTROL INADEQUATE            .
.    LONG = 116.191 W      ERY =   1.4  GAP = 107     AVXM =        QS = C      SILENT CANYON - YUCCA FLAT          .
.   DEPTH =   5.00 KM      ERZ =   6.6  NM =                        QD = B                                            .
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. 21    BGB  IPD    4  8  1.37                        15  1.5    5.5  217  126    1.42   1.43  0.05                .
. 21    SSP  EPD    4  8  2.73                        23  1.9   17.1  188  102    2.78   3.19 -0.41                .
. 21    EPN  EPU    4  8  3.24                        25  2.0   19.2  322  100    3.29   3.53 -0.23                .
. 21    GLR  EPD    4  8  3.38                        27  2.1   20.5   49  100    3.43   3.73 -0.15                .
. 21    LOP  EP     4  8  4.98                        20  1.8   24.9  175   98    5.03   4.43  0.60                .
. 21    CDH1 EP     4  8  4.45                        15  1.6   26.6  205   97    4.50   4.71 -0.21                .
. 21    BMT  EPU2   4  8  7.60                         7  1.0   38.1  307   95    7.65   6.56  0.69                .
. 21    LSM  EPD4   4  8  9.31                        22  1.9   38.3  191   95    9.36   6.60  2.77                .
. 21    MCY  EP     4  8  8.72                        21  2.0   50.5  156   94    8.77   8.57  0.20                .
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. JUL H = 10 50 14.89 UTC  RMS =  0.10  NO =  6                                   FREE DEPTH SOLUTION                 .
.  22 LAT =  36.954 N      ERX =   0.7  ERH =   0.9   AVFM =   2.4  Q = C                                            .
.    LONG = 115.635 W      ERY =   0.5  GAP = 122     AVXM =        QS = B      MERCURY                             .
.   DEPTH =  14.55 KM      ERZ =   2.0  NM =                        QD = C                                            .
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. 22    MCY  IPU   10 50 22.75                        45  2.6   43.7  222  107    7.86   7.77  0.09                .
. 22    GMR  IPU   10 50 22.71                        45  2.6   43.8  344  107    7.82   7.78  0.04                .
. 22    LSM  IPU4  10 50 27.12                        33  2.4   61.7  247  102   12.23  10.60  1.63                .
. 22    SPRG EPU   10 50 26.15                              65.8  139  101   11.26  11.26  0.05                .
. 22    EPN  EP 4  10 50 32.65                        34  2.4   67.7  295  101   17.76  11.56  6.20                .
. 22    JCN  EPD2  10 50 26.56                        18  1.9   70.8  216  100   11.67  12.06 -0.38                .

. 22    PRN  IPU   10 50 27.12                        27  2.2   72.2   46  100   12.23  12.29 -0.06                .
. 22    NOP  EP    10 50 31.68                        33  2.5  102.8  207   53   16.79  16.84 -0.05                .
. 22    KRNA EPD4  10 50 31.45                        32  2.5  110.2  323   53   16.56  17.81 -1.25                .
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. JUL H = 14 11 43.26 UTC  RMS =  0.62  NO =  6                                   FREE DEPTH SOLUTION                 .
.  22 LAT =  36.663 N      ERX =   4.2  ERH =   9.5   AVFM =   1.9  Q = D                                            .
.    LONG = 115.730 W      ERY =   9.5  GAP = 170     AVXM =        QS = D      MERCURY                             .
.   DEPTH =   9.84 KM      ERZ =  24.5  NM =                        QD = C                                            .
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. 22    MCY  IPU   14 11 47.87                        21  1.8   20.8  269  113    4.61   3.99  0.62                .
. 22    LOP  EPU   14 11 51.30                        18  1.8   44.4  298  101    6.94   7.70  0.34                .
.            ESO   14 11 55.62                                                     12.36  13.48 -1.12                .
. 22    LSM  EPU   14 11 52.23                        19  1.9   49.2  280  100    8.97   8.46  0.51                .
.            ESD   14 11 58.09                                                     14.83  14.80  0.03                .
. 22    SPRG EPD   14 11 51.69                        22  2.0   54.4  109   99    8.63   9.29 -0.61                .
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. JUL H = 20  0 48.32 UTC  RMS =  2.56  NO =  4                                   FREE DEPTH SOLUTION                 .
.  22 LAT =  37.135 N      ERX =        ERH =         AVFM =   2.0  Q = D                                            .
.    LONG = 115.340 W      ERY =        GAP = 222     AVXM =        QS = D      ALAMO                               .
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 JUL   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
 1980                (UTC)       (MU) (SEC)                     (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

.   DEPTH =   0.03 KM      ERZ =        NM =                          QD = D
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. 22    PRN  EPD   20  0 56.32                          49  2.6   39.6   40   38    8.00   7.14   0.86
. 22    GMR  EPD   20  0 52.00                          49  2.7   44.2  300   38    3.68   7.88  -4.21
. 22    BGB  EPD   20  1  0.62                          41  2.6   79.7  262   38   12.30  13.65  -1.31
.            ESU4  20  1 18.20                                                     29.88  23.81   6.07
. 22    NPN  EPD   20  1 16.57                           2  0.2  131.6  267   38   28.25  22.09   6.15
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. JUL H = 20 28 14.09 UTC  RMS =  0.05  NO =  4                                   FREE DEPTH SOLUTION
.  22 LAT =  36.956 N      ERX =        ERH =          AVFM =   2.0  Q = C
.    LONG = 115.623 W      ERY =        GAP = 120      AVXM =        QS = A      MERCURY
.   DEPTH =   5.00 KM      ERZ =        NM =                         QD = D
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. 22    GMR  EPU   20 28 21.62                          24  2.0   43.9  342   94    7.53   7.51   0.02
. 22    MCY  IPU   20 28 21.67                          44  2.6   44.6  223   94    7.58   7.62  -0.04
. 22    LCP  EPD4  20 28 25.18                          20  1.9   49.9  257   94   11.09   8.48   2.61
. 22    LSM  EPU4  20 28 25.98                          32  2.4   62.8  247   93   11.89  10.57   1.32
. 22    CDM1 EPD4  20 28 27.34                          26  2.2   62.8  260   93   13.25  10.59   2.66
. 22    SHRG EPD   20 28 25.10                          20  2.0   65.3  140   93   11.01  10.98   0.08
. 22    PRN  EPU   20 28 26.00                          18  1.9   71.3   45   93   11.91  11.96  -0.05
. 22    BRO  EPU4  20 28 30.35                           5  0.8   91.9  256   92   16.26  15.31   0.95
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. JUL H = 10  3 50.68 UTC  RMS =  0.15  NO = 29                                   FREE DEPTH SOLUTION
.  23 LAT =  36.704 N      ERX =   0.6  ERH =   0.7    AVFM =   3.0  Q = C
.    LONG = 115.791 W      ERY =   0.4  GAP = 181      AVXM =        QS = B      MERCURY
.   DEPTH =   2.08 KM      ERZ =   1.3  NM =                         QD = D
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. 23    MCY  IPU   10  3 53.63                          93  3.1   16.0  253   91    2.95   2.95  -0.01
. 23    CPX  EPD3  10  3 57.26                          89  3.1   34.5  316   90    6.58   5.96   0.61
. 23    LCP  IPU   10  3 57.12                          82  3.1   37.5  296   90    6.44   6.45  -0.01
. 23    JCN  IPU   10  3 57.46                          79  3.1   40.5  224   90    6.78   6.93  -0.16
. 23    LSM  IPU   10  3 58.00                          90  3.2   43.1  275   90    7.32   7.37  -0.05
. 23    SSP  IPU   10  3 58.43                                    45.4  303   90    7.75   7.73   0.02
. 23    SDM  IPU   10  3 58.97                          52  2.7   49.3  262   90    8.29   8.37  -0.08
. 23    CDM1 EPD   10  3 59.04                          64  2.9   50.1  290   90    8.36   8.50  -0.14
. 23    CDMS EPD   10  3 59.10                          40  2.5   50.1  290   90    8.42   8.50  -0.08
. 23    BGB  EPU   10  3 59.60                          83  3.2   53.7  314   90    8.92   9.09  -0.12
. 23    GLR  EPD   10  4  0.35                          75  3.1   58.6  340   90    9.67   9.87  -0.06
. 23    SHRG IPU4  10  3 57.05                          78  3.1   61.1  111   90    6.37  10.28  -3.86
. 23    GMR  IPU4  10  3 53.67                          86  3.2   69.9    1   90    2.99  11.72  -8.74
. 23    AMR  IPD   10  4  2.50                          59  2.9   69.9  241   90   11.82  11.72   0.09
. 23    NCP  EPU4  10  4  2.61                          62  3.0   71.7  207   90   11.93  12.00  -0.08
. 23    EPN  EPD   10  4  3.34                         105  3.4   73.8  320   90   12.66  12.36   0.30
. 23    BRO  EPD   10  4  3.20                          49  2.8   74.8  275   90   12.52  12.52  -0.00
. 23    FMT  EPD   10  4  5.50                          45  2.7   88.6  265   90   14.82  14.75   0.16

. 23    BLT  EPU   10  4  5.35                          58  3.0   89.4  340   90   14.67  14.89  -0.23
. 23    GNV  EPD   10  4  7.03                          58  3.0   97.6  234   90   16.35  16.22   0.03
. 23    NPN  EPD4  10  4 10.00                          59  3.0  100.6  295   90   19.32  16.72   2.60
. 23    TPU  EPU   10  4  7.45                          58  3.0  100.8    7   90   16.77  16.74   0.02
. 23    PRN  IPU3  10  4  8.12                          80  3.3  102.1   40   90   17.44  16.96   0.48
. 23    SGV  EPD4  10  4 15.00                                   115.0  286   90   24.32  19.05   5.27
. 23    MTI  EP 4  10  4  7.55                          57  3.1  117.4   23   90   16.87  19.43  -2.37
. 23    QCS  EPU4  10  4 11.00                          45  2.9  118.6  355   90   20.32  19.63   0.68
.            ESD4  10  4 25.92                                                     35.24  34.36   0.87
. 23    PGE  EPD   10  4 11.03                          40  2.8  120.8  251   90   20.35  20.00   0.35
. 23    QSM  EPU   10  4 11.65                          46  2.9  126.8  230   90   20.97  20.97  -0.00
. 23    KANA EPU   10  4 11.85                          56  3.1  127.3  336   90   21.17  21.06   0.11
. 23    NPN  EPD4  10  4 12.70                          67  3.2  129.8   36   90   22.02  21.45   0.57
. 23    CTS  EPU   10  4 12.90                          41  2.8  132.9  321   90   22.22  21.97   0.25
.            ESD   10  4 29.05                                                     38.37  38.45  -0.08
. 23    MCA  EPD   10  4 12.46                          43  2.9  133.3  267   90   21.78  22.02  -0.25
. 23    DLM  EPD   10  4 13.15                          44  2.9  136.9   43   53   22.47  22.50  -0.03
. 23    TPO  IPD   10  4 14.55                          44  2.9  144.7  274   53   23.87  23.51   0.35
. 23    SPG  EPD4  10  4 15.20                          88  3.5  145.6   26   53   24.52  23.63   0.89
. 23    GMN  EPU   10  4 14.25                          59  3.2  146.5  297   53   23.57  23.74  -0.18
. 23    MGM  EPD   10  4 18.07                          47  3.1  172.3  298   53   27.39  27.09   0.30
. 23    LCM  EPD4  10  4 19.21                          43  3.0  175.4  290   53   28.53  27.50   1.03
.            ISU4  10  4 42.50                                                     51.82  48.12   3.70
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. JUL H = 10  5 49.09 UTC  RMS =  0.09  NO =  4                                   FREE DEPTH SOLUTION
.  23 LAT =  36.663 N      ERX =        ERH =          AVFM =   1.9  Q = C
.    LONG = 115.674 W      ERY =        GAP = 175      AVXM =        QS = A      MERCURY
.   DEPTH =  15.55 KM      ERZ =        NM =                         QD = D
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. 23    MCY  IPU   10  5 54.30                          25  2.0   25.7  270  119    5.21   5.13   0.08
. 23    LCP  EPU   10  5 57.60                          19  1.9   48.8  296  106    8.51   8.62  -0.11
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JUL 1980	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	SHRG	EPD	10 5 57.77				18	1.8	49.7	111	106	8.68	8.75	-0.02	
23	LSM	EPU	10 5 58.68				22	2.0	54.1	279	105	9.59	9.43	0.16	
23	GMR	IPU4	10 5 54.34						74.9	353	101	5.25	12.74	-7.49	

JUL H = 13 18 49.19 UTC RMS = 0.23 NO = 5 FREE DEPTH SOLUTION
23 LAT = 37.036 N ERX = 1.5 ERH = 6.2 AVFM = 2.0 Q = D
LONG = 115.502 W ERY = 6.0 GAP = 108 AVXM = QS = D GROOM LAKE
DEPTH = 21.06 KM ERZ = 8.3 NM = QD = D

23	GMR	EPU	13 18 56.80				27	2.1	40.8	324	116	7.61	7.72	-0.11	
23	PRN	EPD4	13 19 1.55						57.5	44	109	12.36	10.23	2.13	
		ESD	13 19 7.34									18.15	17.91	0.24	
23	MCY	EPU4	13 18 56.97				24	2.1	58.4	225	109	7.78	10.36	-2.59	
23	LCP	EP	13 19 0.50				22	2.0	62.6	251	53	11.31	10.99	0.31	
23	SHRG	EPD	13 19 0.55				17	1.8	66.6	152	53	11.36	11.50	-0.09	
23	LSM	EPU	13 19 1.45				20	2.0	76.1	244	53	12.26	12.74	-0.48	

JUL H = 11 39 43.31 UTC RMS = 0.04 NO = 9 FREE DEPTH SOLUTION
24 LAT = 37.045 N ERX = 0.3 ERH = 0.3 AVFM = 1.8 Q = B
LONG = 116.241 W ERY = 0.1 GAP = 146 AVXM = QS = A SILENT CANYON - YUCCA FLAT
DEPTH = 7.20 KM ERZ = 0.4 NM = QD = C

24	BGB	IPU	11 39 44.63				27	2.0	1.4	125	168	1.32	1.37	0.00	
24	SSP	IPU	11 39 46.10				27	2.0	13.5	171	114	2.79	2.74	0.05	
24	EPN	EPD	11 39 47.07				30	2.2	20.1	339	106	3.76	3.75	0.00	
24	CDH1	IPU	11 39 47.28				18	1.7	21.6	198	105	3.97	3.99	-0.02	
24	CDH5	IPU	11 39 47.25				5	0.6	21.6	198	105	3.94	3.99	-0.05	
		ESU	11 39 50.27									6.96	6.98	-0.02	
24	LCP	EPD	11 39 47.35				22	1.9	22.2	163	105	4.04	4.08	-0.04	
24	GLR	EPD4	11 39 47.40				15	1.6	26.2	49	102	4.09	4.71	-0.47	
24	LSM	EP	11 39 49.35				28	2.1	34.1	185	100	6.04	5.97	0.07	
24	MCY	EPU	11 39 51.73				27	2.2	49.3	150	97	8.42	8.42	0.00	

JUL H = 20 30 50.30 UTC RMS = 0.11 NO = 26 FREE DEPTH SOLUTION
25 LAT = 37.254 N ERX = 0.2 ERH = 0.3 AVFM = 3.4 Q = C
LONG = 116.474 W ERY = 0.2 GAP = 48 AVXM = QS = C SILENT CANYON - NORTH
DEPTH = 2.22 KM ERZ = 5.8 NM = QD = C

25	EPN	IP	20 30 53.02						14.1	109	92	2.72	2.64	0.07	
25	BGB	IPU	20 30 55.95				179	3.7	32.5	138	90	5.65	5.64	0.06	
25	BLT	IPD	20 30 56.72						37.8	53	90	6.42	6.50	-0.08	
25	GLR	EPD	20 30 57.05				93	3.2	41.0	99	90	6.75	7.01	-0.12	
25	SSP	IPD	20 30 57.63				241	4.0	43.0	148	90	7.33	7.35	-0.03	
25	CDH5	EPU	20 30 58.06						45.9	162	90	7.76	7.82	-0.06	
25	CDH1	IPU	20 30 58.12				142	3.6	45.9	162	90	7.82	7.82	0.00	
25	CTS	IPD	20 30 58.55				130	3.5	48.2	332	90	8.25	8.19	0.05	
25	LCP	EPD	20 30 59.00				145	3.6	52.1	148	90	8.70	8.83	-0.13	
25	KRMA	IPD	20 30 59.61				150	3.7	55.6	9	90	9.31	9.40	-0.09	
25	SGV	IPD4	20 31 4.11				59	2.9	58.2	239	90	13.81	9.81	4.00	
25	LSM	IPD	20 31 0.34				220	4.0	60.0	163	90	10.04	10.10	-0.07	
25	SCM	EPD	20 31 1.57				118	3.5	68.7	170	90	11.27	11.52	-0.25	
25	FMT	EPD	20 31 2.50				97	3.4	73.4	202	90	12.20	12.29	0.00	
25	QCS	EPU	20 31 3.03				127	3.6	75.4	41	90	12.73	12.61	0.12	
25	MCY	IPD	20 31 3.96				215	4.1	80.0	145	90	13.66	13.36	0.29	
25	GVN	IPD	20 31 4.07				51	2.8	82.2	250	90	13.77	13.71	0.06	
25	TPU	EPD	20 31 4.07				101	3.4	82.8	62	90	13.77	13.81	-0.04	
25	MGM	EPD	20 31 5.62				47	2.8	93.0	283	90	15.32	15.47	-0.16	
25	MZP	EPU	20 31 5.80				46	2.8	94.4	302	90	15.50	15.70	-0.02	
25	AMP	EPU	20 31 6.36				115	3.6	95.1	180	90	16.06	15.81	0.24	
25	JCN	EPU	20 31 6.22				115	3.6	96.3	160	90	15.92	16.01	-0.09	
25	LCM	EPU	20 31 7.60				33	2.5	104.2	269	90	17.30	17.29	0.00	
25	GWV	IPU	20 31 10.45				110	3.6	119.8	188	90	20.15	19.83	0.22	
25	SVP	EPU	20 31 11.72				51	3.0	128.0	294	90	21.42	21.16	0.11	
25	NOP	IPU4	20 31 12.68				137	3.9	128.3	167	90	22.38	21.21	1.17	
25	PPK	EPU	20 31 12.03				40	2.8	128.5	279	90	21.73	21.24	0.48	
25	DLM	EPU	20 31 16.12				89	3.6	158.5	76	53	25.62	25.29	0.53	

JUL H = 21 14 11.08 UTC RMS = 0.13 NO = 24 FREE DEPTH SOLUTION
25 LAT = 37.255 N ERX = 0.3 ERH = 0.4 AVFM = 3.4 Q = C
LONG = 116.470 W ERY = 0.2 GAP = 51 AVXM = QS = C SILENT CANYON - NORTH
DEPTH = 1.64 KM ERZ = 136.3 NM = QD = C

25	EPN	IPD	21 14 13.50						13.8	109	38	2.42	2.60	-0.19	
25	MGB	IPD	21 14 16.72				130	3.5	32.4	138	38	5.64	5.63	0.06	

JUL 1980	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	BLT	IPD	21 14 17.70				182	3.8	37.5	52	38	6.62	6.46	0.16	
. 25	GLR	EPD	21 14 17.86				108	3.3	40.6	99	38	6.78	6.97	-0.05	
. 25	SSP	IPD	21 14 18.39				170	3.7	42.9	149	38	7.31	7.35	-0.04	
. 25	CCH1	EPD	21 14 18.70				86	3.2	45.9	163	38	7.62	7.83	-0.21	
. 25	CTS	EPU	21 14 19.30				170	3.8	48.3	332	38	8.22	8.22	-0.00	
. 25	LCP	EPD	21 14 19.88				172	3.8	52.0	149	38	8.80	8.82	-0.03	
. 25	KRNA	IPD	21 14 20.48				180	3.8	55.5	8	38	9.40	9.38	0.01	
. 25	LSM	EPD	21 14 21.16				170	3.8	60.0	163	38	10.08	10.11	-0.04	
. 25	SDH	EPU	21 14 22.58				105	3.4	68.7	170	38	11.50	11.53	-0.04	
. 25	QCS	EPU	21 14 23.42				162	3.8	75.1	41	38	12.34	12.57	-0.23	
. 25	MCY	EPD	21 14 24.76				175	3.9	79.9	146	38	13.68	13.36	0.32	
. 25	TPU	EPU	21 14 25.00				98	3.4	82.4	62	38	13.92	13.76	0.15	
. 25	GVN	IPU	21 14 24.90				45	2.7	82.5	250	38	13.82	13.78	0.03	
. 25	MGM	EPD	21 14 26.49				43	2.7	93.3	283	38	15.41	15.54	-0.13	
. 25	MZP	EPU	21 14 26.65				41	2.7	94.7	301	38	15.57	15.75	0.00	
. 25	AMR	EPU	21 14 27.08				105	3.5	95.2	180	38	16.00	15.84	0.15	
. 25	JCN	EPU	21 14 27.10				107	3.5	96.3	160	38	16.02	16.01	0.00	
. 25	TMO	EPU	21 14 27.28				88	3.4	97.3	239	38	16.20	16.18	0.01	
. 25	LCH	EPD	21 14 28.71				29	2.4	104.5	269	38	17.63	17.36	0.26	
. 25	TNP	EPD	21 14 29.72						113.0	324	38	18.64	18.74	-0.10	
. 25	GWV	EPU	21 14 31.23				109	3.6	119.9	189	38	20.15	19.87	0.18	
. 25	SVP	EPU	21 14 32.59				53	3.0	128.3	293	38	21.51	21.22	0.14	
. 25	NCP	EPU4	21 14 33.47				117	3.7	128.3	167	38	22.39	21.22	1.16	
. 25	PPK	IPU4	21 14 32.80				34	2.6	128.8	278	38	21.72	21.31	0.40	
. 25	SRG	EPD	21 14 35.00				117	3.8	142.0	61	30	23.92	23.21	0.70	

. JUL H = 23 10 40.35 UTC RMS = 0.33 NO = 15 FREE DEPTH SOLUTION
. 25 LAT = 37.262 N ERX = 0.9 ERH = 1.2 AVFM = 4.1 Q = C
. LONG = 116.491 W ERY = 0.7 GAP = 62 AVXM = QS = C SILENT CANYON - NORTH
. DEPTH = 0.69 KM ERZ = 12.2 NM = QD = C

. 25	BGB	IPD	23 10 46.26				354	4.3	34.1	137	38	5.91	6.11	-0.16	
. 25	BLT	IPU4	23 10 49.60				360	4.4	38.6	55	38	9.25	6.84	2.41	
. 25	SSP	IPU	23 10 47.74				353	4.4	44.5	147	38	7.39	7.80	-0.42	
. 25	CTS	EPD4	23 10 53.16				338	4.4	46.8	334	38	12.81	8.18	4.63	
. 25	CCH1	IPD	23 10 48.08				189	3.8	47.1	161	38	7.73	8.22	-0.50	
. 25	CPX	IPD	23 10 50.09				192	3.9	53.3	134	38	9.74	9.23	0.50	
. 25	LCP	IPU	23 10 50.00				350	4.4	53.6	148	38	9.65	9.28	0.37	
. 25	KRNA	EPU	23 10 49.56				340	4.4	55.1	10	38	9.21	9.52	-0.31	
. 25	LSM	IPU	23 10 50.95				373	4.5	61.2	161	38	10.60	10.51	0.09	
. 25	SDH	EPU	23 10 51.53				280	4.3	69.7	169	38	11.18	11.90	-0.72	
. 25	FMT	EPU	23 10 52.42				188	3.9	73.6	200	38	12.07	12.53	-0.36	
. 25	QCS	EPU4	23 10 57.45				345	4.5	75.8	42	38	17.10	12.89	4.21	
. 25	GVN	EPD	23 10 53.89				136	3.7	81.0	249	38	13.54	13.73	-0.19	
. 25	MCY	IPD4	23 10 55.90				370	4.6	81.6	145	38	15.55	13.82	1.73	
. 25	MGM	IPU4	23 10 58.10				112	3.5	91.2	283	38	17.75	15.39	2.36	
. 25	MZP	IPU4	23 10 58.20				82	3.3	92.7	302	38	17.85	15.63	2.41	
. 25	AMR	EPU4	23 10 58.47				290	4.4	95.9	179	38	18.12	16.15	1.97	
. 25	JCN	EPU	23 10 56.60				288	4.4	97.5	159	38	16.25	16.42	-0.17	
. 25	LCH	IPD4	23 10 59.45				67	3.1	102.7	268	38	19.10	17.26	1.84	
. 25	TNP	IPU	23 10 59.13				361	4.6	111.4	325	38	18.78	18.67	0.11	
. 25	GWV	EPU4	23 11 1.25				299	4.5	120.4	188	38	20.90	20.13	0.67	
. 25	SVP	EPD	23 11 1.83				99	3.6	126.3	293	38	21.48	21.09	0.24	
. 25	PPK	EPU	23 11 1.85				76	3.3	126.8	278	38	21.50	21.19	0.31	
. 25	NCP	EPU4	23 11 3.00				317	4.6	129.4	166	38	22.65	21.60	1.05	
. 25	NPN	EPD	23 11 4.48				206	4.3	144.1	72	30	24.13	23.70	0.42	

. JUL H = 5 0 4.28 UTC RMS = 0.06 NO = 4 FREE DEPTH SOLUTION
. 26 LAT = 37.231 N ERX = ERH = AVFM = 1.4 Q = C
. LONG = 116.309 W ERY = GAP = 161 AVXM = QS = A SILENT CANYON - NORTH
. DEPTH = 23.42 KM ERZ = NM = QD = D

. 26	LCP	EPD4	5 0 14.10				11	1.4	43.6	163	53	9.82	8.29	1.52	
. 26	NMN	EPD	5 0 13.27				14	1.6	48.2	250	53	8.99	8.88	0.10	
. 26	GMR	IPD	5 0 13.30				13	1.5	49.0	76	53	9.02	9.00	0.02	
. 26	LSM	IPU	5 0 13.93				14	1.6	54.7	177	53	9.65	9.73	-0.08	
. 26	GMN	EP	5 0 17.86				6	1.0	84.6	275	53	13.58	13.62	-0.04	

. JUL H = 22 3 14.17 UTC RMS = 0.16 NO = 4 FIXED DEPTH SOLUTION
. 17 LAT = 37.170 N ERX = ERH = AVFM = 1.5 Q = C DEPTH CONTROL INADEQUATE
. LONG = 115.270 W ERY = GAP = 213 AVXM = QS = B ALAMO
. DEPTH = 5.00 KM ERZ = NM = QD = D

. 17	EFR	EPU	22 3 15.86						7.4	91	117	1.69	1.70	-0.01	
. 17	SPRG	IPU	22 3 26.49				12	1.5	71.4	222	93	12.32	11.98	0.34	
. 17	MCY	IPD4	22 3 27.30				16	1.5	83.6	228	92	13.13	13.96	-0.83	

JUL 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
		ISU4	22 3 30.22									16.05	20.43	-4.38	
17	BGU	EPU4	22 3 32.66				12	1.6	86.4	260	92	18.49	14.41	4.13	
17	LCP	EP 4	22 3 30.91				7	1.1	87.2	246	92	16.74	14.55	2.19	
		ESD4	22 3 34.02									19.85	25.46	-5.61	
17	JCN	EP	22 3 32.12						110.0	223	92	17.95	18.25	-0.30	
17	SDM	EPD	22 3 32.60						111.6	239	92	18.43	18.51	-0.08	

JUL H = 17 19 57.67 UTC RMS = 0.10 NO = 11 FREE DEPTH SOLUTION
26 LAT = 36.702 N ERX = 0.5 ERH = 1.0 AVFM = 2.2 Q = C
LONG = 115.650 W ERY = 0.8 GAP = 170 AVXM = QS = C MERCURY
DEPTH = 0.41 KM ERZ = 122.5 NM = QD = C

JUL 1980	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	MCY	EPU4	17 20 1.20				45	2.5	28.2	261	38	3.53	5.21	-1.68	
26	LCP	EPU	17 20 6.21				33	2.3	49.1	290	38	8.54	8.61	-0.07	
26	SHRG	IPU	17 20 6.28				27	2.2	49.4	116	38	8.61	8.66	-0.00	
26	JCN	EPD	17 20 6.59				24	2.1	49.8	234	38	8.92	8.72	0.19	
26	LSM	IPU	17 20 7.15				40	2.5	55.7	274	38	9.48	9.67	-0.20	
26	SSP	EPU	17 20 7.56				38	2.5	56.4	296	38	9.89	9.79	0.09	
26	SDM	EPU	17 20 8.02				37	2.5	61.8	264	38	10.35	10.66	-0.32	
26	CDMI	EPU	17 20 8.13				29	2.3	62.1	286	38	10.46	10.71	-0.26	
26	CDMS	EPD	17 20 8.26				24	2.1	62.1	286	38	10.59	10.71	-0.13	
26	BGB	EPU	17 20 8.62				30	2.3	63.5	306	38	10.95	10.95	0.05	
26	GLR	EP 4	17 20 10.08				31	2.3	64.2	329	38	12.41	11.05	1.50	
26	GMR	EPD4	17 20 1.65				45	2.7	71.0	351	38	3.98	12.16	-8.18	
26	ACP	EPD	17 20 11.50				23	2.1	78.0	215	38	13.83	13.30	0.53	
26	BRO	EPU	17 20 12.59				21	2.1	87.4	274	38	14.92	14.83	0.09	
26	PRN	IPU4	17 20 7.18				27	2.3	94.7	34	38	9.51	16.02	-6.52	
26	SGV	EPD4	17 20 23.71				6	1.1	127.2	284	38	26.04	21.30	4.74	

JUL H = 18 33 7.57 UTC RMS = 0.43 NO = 5 FREE DEPTH SOLUTION
26 LAT = 36.960 N ERX = 0.2 ERH = 0.2 AVFM = 2.0 Q = D
LONG = 115.654 W ERY = 0.1 GAP = 126 AVXM = QS = C MERCURY
DEPTH = 5.99 KM ERZ = 5.8 NM = QD = D

JUL 1980	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	GMR	IPU	18 33 15.39				29	2.2	42.7	346	96	7.82	7.34	0.48	
26	MCY	IPU	18 33 15.29				29	2.2	43.0	220	96	7.72	7.39	0.33	
26	LCP	EPU4	18 33 18.79				18	1.8	47.2	256	95	11.22	8.06	3.15	
26	LSM	IPU4	18 33 19.73				27	2.2	60.3	246	94	12.16	10.19	1.97	
26	SHRG	EPU	18 33 18.84				30	2.3	67.4	139	94	11.27	11.34	-0.03	
26	BLT	EPU4	18 33 18.30						70.1	323	94	10.73	11.77	-1.04	
26	JCN	EPD	18 33 18.62				15	1.7	70.3	215	94	11.05	11.81	-0.76	
26	SDM	EPD4	18 33 20.70				13	1.6	70.3	240	94	13.13	11.81	1.32	
26	PRN	EPU	18 33 19.58				20	2.0	73.1	47	93	12.01	12.26	-0.25	

JUL H = 9 42 9.04 UTC RMS = 0.41 NO = 8 FREE DEPTH SOLUTION
27 LAT = 36.648 N ERX = 1.9 ERH = 2.6 AVFM = 2.2 Q = C
LONG = 115.249 W ERY = 1.8 GAP = 140 AVXM = QS = C HAYFORD PEAK
DEPTH = 1.04 KM ERZ = 572.9 NM = QD = C

JUL 1980	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	SHRG	EPU	9 42 12.30						18.0	152	38	3.26	3.42	-0.11	
27	MCY	IPU	9 42 19.22				38	2.5	63.8	271	38	10.18	10.86	-0.68	
27	JCN	EPU	9 42 23.07				18	1.9	80.0	253	38	14.03	13.49	0.54	
27	LCP	EPU	9 42 22.71				23	2.2	85.1	286	38	13.67	14.33	-0.66	
27	PRN	EPU	9 42 23.64				22	2.1	86.0	12	38	14.60	14.48	0.12	
27	GMR	IPU4	9 42 19.28				36	2.6	89.2	329	38	10.24	14.99	-4.74	
27	LSM	IPU	9 42 23.63				27	2.3	92.0	276	38	14.59	15.44	-0.85	
27	SDM	EPD	9 42 24.54				15	1.8	97.5	270	38	15.50	16.34	-0.84	
27	CDMI	EPD	9 42 25.68				21	2.1	98.2	284	38	16.64	16.46	0.18	
27	NCP	EPU4	9 42 28.07				18	2.0	99.5	235	38	19.03	16.68	2.36	

JUL H = 13 50 28.09 UTC RMS = 0.00 NO = 4 FREE DEPTH SOLUTION
27 LAT = 36.921 N ERX = ERH = AVFM = 1.7 Q = C
LONG = 115.534 W ERY = GAP = 136 AVXM = QS = A MERCURY
DEPTH = 20.06 KM ERZ = NM = QD = D

JUL 1980	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	LCP	IPD	13 50 38.19				16	1.7	57.0	262	108	10.10	10.10	-0.00	
27	SHRG	IPD	13 50 38.19						57.3	144	108	10.10	10.15	0.00	
27	PRN	EPD	13 50 40.00				12	1.5	68.9	39	53	11.91	11.91	0.00	
27	LSM	EPD	13 50 40.00				17	1.8	68.9	253	53	11.91	11.91	0.00	

JUL H = 5 0 29.67 UTC RMS = 0.10 NO = 10 FREE DEPTH SOLUTION
28 LAT = 36.907 N ERX = 0.8 ERH = 0.8 AVFM = 1.6 Q = C

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JUL   STA  PHASE    TIME       AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN   TOBS   TCAL  RES   REMARKS
1980               (UTC)      (MU) (SEC)                   (KM) (DEG)(DEG) (SEC)  (SEC) (SEC)

.   LONG = 115.983 W      ERY =   0.4  GAP = 182     AVXM =        QS = A     MERCURY
.  DEPTH =   1.61 KM      ERZ =   1.3  NM =                        QD = D
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. 28   LCP  EPD    5  0 32.72                        23  1.9   17.5  250   38    3.05   3.21  -0.16
. 28   HGB  EPU    5  0 34.16                        17  1.7   26.2  304   38    4.49   4.63  -0.09
. 28   MCY  EPU    5  0 34.33                        21  1.9   27.3  176   38    4.66   4.81  -0.15

. 28   CDH1 EPU4   5  0 35.40                        14  1.5   30.3  260   38    5.73   5.29   0.44
. 28   CDHS EP 4   5  0 35.36                              30.3  260   38    5.69   5.29   0.40
. 28   LSM  EPD    5  0 35.29                        21  1.9   31.8  234   38    5.62   5.54   0.08
. 28   GLR  EPU    5  0 35.20                        13  1.5   32.6  355   38    5.53   5.67   0.01
. 28   SDH  EPU    5  0 37.17                        13  1.5   43.0  228   38    7.50   7.36   0.14
. 28   EPN  EPU    5  0 37.57                        21  1.9   45.6  318   38    7.90   7.79   0.11
. 28   GMR  EPU4   5  0 34.37                        22  2.0   51.0   22   38    4.70   8.66  -3.96
. 28   JCN  EPU    5  0 38.75                        12  1.5   52.9  192   38    9.08   8.98   0.10
.          ESU    5  0 45.37                                                   15.70  15.71  -0.01
. 28   GWV  EPU    5  0 45.96                         5  0.9  100.9  218   38   16.29  16.78  -0.59
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. JUL H = 14 48 46.81 UTC  RMS =  0.07  NO =  3                                FIXED DEPTH SOLUTION
.  28 LAT =  37.173 N      ERX =        ERM =        AVFM =   1.9  Q = C      DEPTH CONTROL INADEQUATE
.    LONG = 115.422 W      ERY =        GAP = 280    AVXM =        QS = A     ALAMO
.   DEPTH =   5.00 KM      ERZ =        NM =                       QD = D
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. 28   MCY  EPD4  14 49  2.58                        22  2.1   74.4  220   93   15.77  12.46   3.30
. 28   LCP  EP    14 48 59.30                        15  1.7   75.2  242   93   12.49  12.59  -0.11
. 28   SMRG EP    14 48 59.80                              77.9  162   92   12.99  13.03   0.01   VERY E
.          ESD4   14 49  2.70                                                   15.89  22.72  -6.83
. 28   LSM  EPD   14 49  1.86                        15  1.8   89.7  238   92   15.05  14.95   0.10
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. JUL H = 18 55 55.98 UTC  RMS =  0.08  NO =  6                                FREE DEPTH SOLUTION
.  28 LAT =  36.723 N      ERX =   1.7  ERM =   1.9  AVFM =   1.6  Q = C
.    LONG = 115.941 W      ERY =   0.8  GAP = 250    AVXM =        QS = B     MERCURY
.   DEPTH =   0.14 KM      ERZ =   1.4  NM =                        QD = D
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. 28   MCY  IPU   18 55 57.72                        21  1.8    7.0  196   38    1.74   1.82  -0.08
. 28   LCP  EPD   18 56  0.84                        17  1.7   24.9  306   38    4.86   4.73   0.13
. 28   LSM  EPU   18 56  1.37                        18  1.7   29.6  273   38    5.39   5.49  -0.10
. 28   JCN  EPD   18 56  2.35                        11  1.3   34.6  205   38    6.37   6.30   0.07
.          ESU   18 56  7.00                                                   11.02  11.02  -0.00
. 28   SDH  EPD   18 56  2.57                        11  1.3   36.5  256   38    6.59   6.61  -0.02
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. JUL H = 19 38 10.83 UTC  RMS =  0.15  NO = 20                                FREE DEPTH SOLUTION
.  28 LAT =  37.228 N      ERX =   0.4  ERM =   0.6  AVFM =   2.7  Q = C
.    LONG = 115.416 W      ERY =   0.4  GAP = 153    AVXM =        QS = C     ALAMO
.   DEPTH =   0.88 KM      ERZ =   6.8  NM =                        QD = C
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. 28   PRN  EPU4  19 38 26.70                        36  2.4   38.0   59   38   15.87   6.70   9.17
. 28   TPU  IPU   19 38 18.66                        38  2.5   46.6  334   38    7.83   8.10  -0.27
. 28   MTI  EP    19 38 19.55                        37  2.4   51.3   14   38    8.72   8.87   0.05
. 28   NPN  IPD   19 38 21.57                        35  2.4   63.3   42   38   10.74  10.82  -0.08
. 28   BLT  EPU   19 38 22.23                        53  2.8   68.8  292   38   11.40  11.71  -0.31
. 28   DLM  IPD   19 38 23.20                        25  2.2   73.1   55   38   12.37  12.41  -0.04
. 28   LOP  EPD   19 38 24.23                        55  2.9   78.8  238   38   13.40  13.33   0.07
. 28   SRG  IPU   19 38 24.30                              78.8   23   38   13.47  13.33   0.13
. 28   SSP  IPD   19 38 24.20                        57  2.9   78.9  245   38   13.37  13.35   0.01
. 28   MCY  IPU   19 38 24.17                        71  3.1   79.6  218   38   13.34  13.46  -0.12
. 28   EPN  EPU   19 38 25.00                        72  3.1   80.6  269   38   14.17  13.63   0.54
. 28   NRN  EPU   19 38 25.32                        25  2.2   85.0  350   38   14.49  14.34   0.15
. 28   LSM  EPD   19 38 26.60                        73  3.2   93.6  235   38   15.77  15.74   0.03
. 28   KRNA EPU   19 38 28.07                        48  2.9  103.1  304   38   17.24  17.28  -0.05
. 28   SDH  EPU   19 38 28.55                        47  2.8  104.6  232   38   17.72  17.53   0.18
. 28   JCN  EPU   19 38 28.75                        46  2.8  106.9  215   38   17.92  17.90   0.02
. 28   RVE  EPU   19 38 29.70                        25  2.3  111.4  322   38   18.87  18.64   0.23
. 28   CTS  EPU   19 38 31.77                        33  2.6  124.7  291   38   20.94  20.79   0.15
. 28   AMR  EPD   19 38 33.52                        47  2.9  132.0  226   38   22.69  21.98   0.70
. 28   NCP  EPU   19 38 34.01                        46  2.9  138.8  208   30   23.18  22.96   0.22
. 28   GWV  EPU4  19 38 37.90                        42  2.9  161.1  224   30   27.07  25.96   1.11
. 28   TNP  EPU   19 38 40.00                        49  3.2  185.0  301   30   29.17  28.97   0.20
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. JUL H =  3 48  9.89 UTC  RMS =  0.12  NO = 14                                FREE DEPTH SOLUTION
.  31 LAT =  36.696 N      ERX =   0.5  ERM =   0.6  AVFM =   2.0  Q = B
.    LONG = 115.787 W      ERY =   0.4  GAP = 109    AVXM =        QS = A     MERCURY
.   DEPTH =   9.09 KM      ERZ =   1.0  NM =                        QD = B
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JUL 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	AMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
31	SPRG	IPD	3 48 11.60				30	2.1	2.0	265	167	1.71	1.69	0.02	
31	MCY	IPU	3 48 13.01				38	2.3	16.1	256	116	3.12	3.25	-0.14	
31	LCP	EPU	3 48 16.52				20	1.9	38.3	297	101	6.63	6.69	-0.07	
31	JCN	EP	3 48 17.00				16	1.7	40.1	225	101	7.11	6.98	0.12	
31	LSM	IPU	3 48 17.47				30	2.2	43.6	276	100	7.58	7.55	0.03	
31	SSP	IPD	3 48 17.92				17	1.8	46.2	303	99	8.03	7.96	0.07	
31	SCM	EPD	3 48 18.40				12	1.5	49.6	264	99	8.51	8.51	-0.00	
31	CCM1	EPU	3 48 18.45				21	2.0	50.8	291	98	8.56	8.70	-0.14	
31	BGB	EPU	3 48 19.33				30	2.3	54.6	314	98	9.44	9.32	0.17	
31	SHRG	EPD	3 48 20.15				18	1.9	60.4	111	97	10.26	10.24	0.06	
31	GMR	EPU	3 48 21.70				22	2.1	70.8	1	96	11.81	11.93	-0.13	
31	NOP	EPU	3 48 21.90						71.0	208	96	12.01	11.96	0.04	
		ESU	3 48 30.60									20.71	20.94	-0.23	
31	BRO	EPU	3 48 22.83				18	1.9	75.3	276	96	12.94	12.66	0.28	
31	NPN	EPU4	3 48 32.30				26	2.4	130.3	35	53	22.41	20.95	1.46	
31	SRG	EPU4	3 48 35.25				33	2.7	146.3	26	53	25.36	23.03	2.33	

JUL H = 19 22 16.60 UTC RMS = 0.37 NO = 9 — FREE DEPTH SOLUTION
31 LAT = 37.067 N ERX = 1.8 ERH = 2.4 AVFM = 3.3 Q = C
LONG = 116.001 W ERY = 1.6 GAP = 146 AVXM = QS = C — SILENT CANYON - YUCCA FLAT
DEPTH = 2.06 KM ERZ = 6.9 NM = QD = C

31	GMR	EPD	19 22 22.58						36.0	35	90	5.98	6.21	-0.22	
31	BLT	EPD	19 22 23.40						45.4	345	90	6.80	7.73	-0.93	
31	TPU	EPD	19 22 28.03				89	3.3	67.4	28	90	11.43	11.31	0.12	
31	KRNA	EPD	19 22 30.00						83.0	336	90	13.40	13.84	-0.44	
31	CTS	EPU	19 22 32.20						90.4	315	90	15.60	15.05	0.56	
31	PRN	EPD	19 22 31.85				85	3.3	92.5	66	90	15.25	15.39	-0.14	
31	NPN	EPU	19 22 35.95				79	3.3	114.5	55	90	19.35	18.97	0.39	
31	GWV	EPU	19 22 35.60						114.6	212	90	19.00	18.98	-0.08	
31	SRG	EPU4	19 22 37.78						122.5	42	90	21.18	20.27	0.92	
31	TNP	EPD	19 22 41.83						155.7	316	53	25.23	24.94	0.29	

JUL H = 19 26 15.98 UTC RMS = 0.34 NO = 16 — FREE DEPTH SOLUTION
31 LAT = 37.057 N ERX = 1.0 ERH = 1.4 AVFM = 3.9 Q = C
LONG = 116.002 W ERY = 0.9 GAP = 122 AVXM = QS = C — SILENT CANYON - YUCCA FLAT
DEPTH = 0.88 KM ERZ = 21.7 NM = QD = C

31	BLT	EPD	19 26 23.40				167	3.7	46.4	345	38	7.42	8.06	-0.64	COLLAPSE
31	BRO	EPU	19 26 26.94						64.4	240	38	10.96	11.00	-0.04	
31	TPU	EPD	19 26 28.10				190	3.9	68.4	27	38	12.12	11.64	0.48	
31	JCN	EPU	19 26 27.62				172	3.8	69.1	187	38	11.64	11.76	-0.12	
31	NPN	EPD	19 26 28.00				182	3.9	72.6	272	38	12.02	12.33	-0.30	
31	QCS	EPU4	19 26 30.70						79.2	6	38	14.72	13.41	1.31	
31	FMT	EPU	19 26 29.82						83.4	236	38	13.84	14.08	-0.14	
31	KRNA	EPD	19 26 29.98						83.9	336	38	14.00	14.16	-0.16	
31	AMR	EPU	19 26 30.10				160	3.8	84.5	210	38	14.12	14.26	-0.14	
31	CTS	EPD	19 26 31.80						91.1	315	38	15.82	15.34	0.48	
31	PRN	EPU	19 26 31.80						93.0	65	38	15.82	15.65	0.17	
31	MTI	EPU	19 26 31.40						94.3	43	38	15.42	15.86	-0.24	
31	NCP	IPU	19 26 33.49				217	4.2	104.0	187	38	17.51	17.43	0.08	
31	GWV	EPD	19 26 35.65				174	4.0	113.6	212	38	19.67	19.00	0.57	
31	GVN	EPU	19 26 36.45				166	4.0	119.5	267	38	20.47	19.95	0.52	
31	MCA	EPU4	19 26 37.20						122.7	248	38	21.22	20.47	0.75	
31	DLM	EPD4	19 26 38.70						127.5	61	38	22.72	21.25	1.47	
31	OSM	EPU	19 26 39.30						143.9	213	30	23.32	23.63	-0.30	
31	PPK	EPD	19 26 44.20				146	4.1	174.0	284	30	28.22	27.54	0.68	

AUG H = 3 42 4.24 UTC RMS = 0.18 NO = 5 — FREE DEPTH SOLUTION
06 LAT = 37.052 N ERX = 0.7 ERH = 0.9 AVFM = 1.6 Q = C
LONG = 116.133 W ERY = 0.5 GAP = 156 AVXM = QS = B — SILENT CANYON - YUCCA FLAT
DEPTH = 0.61 KM ERZ = 1.6 NM = QD = D

06	BGB	IPU	3 42 5.95				17	1.6	8.6	259	38	1.71	1.97	-0.21	
06	GLR	IPD	3 42 7.60				13	1.4	19.3	32	38	3.56	3.71	-0.00	
06	LGP	EPD	3 42 8.68				16	1.6	22.2	188	38	4.44	4.19	0.25	
06	EPN	EPU	3 42 8.70						24.7	317	38	4.46	4.60	-0.14	
		ESU	3 42 12.39									8.15	8.04	0.11	
06	BMT	EPD4	3 42 13.41						43.9	306	38	9.17	7.71	1.06	
06	EPR	EP 4	3 42 15.30						85.1	81	38	11.06	14.42	-3.36	

AUG H = 9 37 34.49 UTC RMS = 0.16 NO = 13 — FREE DEPTH SOLUTION
06 LAT = 37.253 N ERX = 0.5 ERH = 0.7 AVFM = 2.7 Q = B
LONG = 116.483 W ERY = 0.5 GAP = 75 AVXM = QS = B — SILENT CANYON - NORTH

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AUG   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
1980               (UTC)       (MU) (SEC)                   (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

.   DEPTH =   8.08 KM      FRZ =   1.6  NM =                          GD = A
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. 06    BPT  IPD    9 37 36.88                          76  2.9    5.6  307  142    2.39   1.79   0.20
. 06    EPN  IPD    9 37 37.26                         100  3.2   14.8  107  115    2.77   2.99  -0.23
. 06    BGS  EPU    9 37 40.00                          53  2.7   33.0  136  101    5.51   5.82  -0.26
. 06    NPN  IPD    9 37 40.55                          59  2.8   35.4  237  101    6.06   6.20  -0.14
. 06    BLT  EPU    9 37 41.07                          53  2.7   38.5   53  100    6.58   6.70  -0.13
. 06    GLR  EPU4   9 37 43.30                          34  2.3   41.8   98   99    8.81   7.22   1.73
. 06    CTS  EPD    9 37 42.77                          35  2.4   48.0  333   98    8.28   8.22   0.05
. 06    LCP  EPD    9 37 43.71                          45  2.6   52.4  148   97    9.22   8.94   0.27
. 06    KRNA EPD    9 37 43.98                          55  2.8   55.9    9   97    9.49   9.50  -0.01
. 06    SGV  EPD    9 37 44.17                          55  2.8   57.4  238   96    9.68   9.75  -0.07
. 06    LSM  EPD    9 37 44.82                          60  2.9   60.1  162   96   10.33  10.18   0.15
. 06    GMR  EP     9 37 45.45                          35  2.4   63.8   82   96   10.96  10.77   0.19
.            ESU4   9 38  1.17                                                     26.68  18.85   7.83
. 06    GMN  EPU    9 37 46.13                          34  2.4   69.0  274   95   11.64  11.63   0.01
. 06    MCY  EPD4   9 37 49.50                          44  2.7   80.4  145   95   15.01  13.47   1.54
. 06    GVN  EPU    9 37 48.15                          37  2.6   81.3  250   95   13.66  13.62   0.04
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. AUG H =  3 21 59.24 UTC  RMS =  0.17  NO = 16                                   FREE DEPTH SOLUTION
.  07 LAT =  36.438 N      ERX =   0.6  ERM =   0.9   AVFM =   2.2  Q = B
.    LONG = 115.644 W      ERY =   0.7  GAP =  87     AVXM =        QS = B      CHAL ESTON PEAK
.   DEPTH =  10.57 KM      ERZ =   1.3  NM =                        QD = B
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. 07    APK  IPD    3 22  2.66                          39  2.4   14.6  154  123    3.42   3.15   0.26
. 07    SPRG IPU    3 22  5.02                          35  2.3   32.0  333  106    5.78   5.76   0.01
. 07    MCY  IPU    3 22  5.87                          49  2.6   37.8  311  104    6.63   6.67  -0.04
. 07    JON  IPU    3 22  6.44                          27  2.1   41.1  270  103    7.20   7.20  -0.00
. 07    SHRG EPU    3 22  6.57                          23  2.0   44.4   80  102    7.33   7.73  -0.35
. 07    NOP  EPU    3 22  8.70                          26  2.2   57.2  233   99    9.46   9.76  -0.30
. 07    LSM  IPU    3 22 10.46                          46  2.7   65.3  301   98   11.22  11.08   0.14
. 07    LCP  EPU    3 22 10.51                          32  2.4   65.8  315   98   11.27  11.14   0.12
. 07    SDM  IPU    3 22 10.46                          23  2.1   66.3  290   98   11.22  11.23  -0.01
. 07    AMR  EPU    3 22 11.80                          28  2.3   74.6  267   97   12.56  12.56  -0.01
. 07    CDM1 EPU    3 22 12.06                          26  2.2   76.3  308   97   12.82  12.85  -0.03
. 07    CDMS EPD    3 22 12.03                           9  1.3   76.3  308   97   12.79  12.85  -0.06
. 07    BGB  EPU    3 22 13.20                          25  2.2   84.6  322   96   13.96  14.18  -0.17
. 07    BRD  EPD    3 22 15.20                          21  2.1   94.9  292   95   15.96  15.85   0.11
. 07    GMR  EPD    3 22 16.27                          22  2.2  100.1  354   95   17.03  16.69   0.34
. 07    BPT  EP 4   3 22 20.95                          25  2.4  122.8  320   53   21.71  19.84   1.47
. 07    NPN  EPD3   3 22 21.00                          27  2.4  126.7  304   53   21.76  20.35   1.41
.            ESU    3 22 34.90                                                     35.66  35.61   0.05
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. AUG H =  9 53 37.18 UTC  RMS =  0.13  NO = 11                                   FREE DEPTH SOLUTION
.  07 LAT =  37.312 N      ERX =   0.5  ERM =   0.6   AVFM =   2.2  Q = C
.    LONG = 116.290 W      ERY =   0.4  GAP = 118     AVXM =        QS = B      SILENT CANYON - NORTH
.   DEPTH =   1.57 KM      ERZ =   2.3  NM =                        QD = C
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. 07    EPN  IPU    9 53 39.37                          60  2.7   11.3  195   38    2.19   2.22  -0.03
. 07    BLT  EP     9 53 41.00                          37  2.3   21.5   40   38    3.82   3.88  -0.06
. 07    BGB  EPU    9 53 42.32                          26  2.1   31.0  170   38    5.14   5.42  -0.23
. 07    GMR  EP     9 53 45.10                          21  1.9   46.1   87   38    7.92   7.88   0.04
. 07    KRNA EPU    9 53 45.48                          22  2.0   49.2  351   38    8.30   8.38  -0.08
.            ESU2   9 53 51.43                                                     14.25  14.67  -0.42
. 07    CDM1 EPU    9 53 45.50                          23  2.0   50.2  183   38    8.32   8.55  -0.23
. 07    LCP  EPD    9 53 45.85                          27  2.2   52.0  168   38    8.67   8.84  -0.17
. 07    CTS  EPU    9 53 46.27                          19  1.9   52.9  313   38    9.09   8.99   0.10
. 07    LSM  EP     9 53 48.15                          35  2.4   63.7  179   38   10.97  10.73   0.24
. 07    MCY  EP     9 53 50.33                          33  2.4   77.9  158   38   13.15  13.05   0.10
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. AUG H =  9 51 35.85 UTC  RMS =  0.20  NO =  4                                   FREE DEPTH SOLUTION
.  08 LAT =  37.131 N      ERX =         ERM =         AVFM =   2.0  Q = C
.    LONG = 116.182 W      ERY =         GAP = 221     AVXM =        QS = B      SILENT CANYON - YUCCA FLAT
.   DEPTH =   0.16 KM      ERZ =         NM =                        QD = D
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. 08    BPT  EPD    9 51 42.48                          37  2.4   35.5  298   38    6.63   6.45  -0.22
. 08    LSM  EPD    9 51 43.60                                        44.2  190   38    7.75   7.86  -0.11
. 08    MCY  EPU    9 51 45.72                                        55.6  159   38    9.87   9.72   0.15
. 08    SDM  EPU4   9 51 42.69                           9  1.2   55.6  195   38    6.84   9.72  -2.88
. 08    NPN  EPD4   9 51 46.20                          30  2.3   56.8  264   38   10.35   9.91   0.43
. 08    JCN  EPU4   9 51 45.19                          12  1.6   77.0  175   38    9.34  13.19  -3.85
. 08    GVN  EPU    9 51 53.79                          25  2.3  104.2  262   38   17.94  17.61   0.33
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. AUG H =  2 21 21.90 UTC  RMS =  0.03  NO =  4                                   FREE DEPTH SOLUTION
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AUG   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
1980               (UTC)       (MU) (SEC)                   (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

. 09 LAT = 36.536 N      ERX =        ERH =        AVFM =   1.6  Q = C                                          .
.   LONG = 116.387 W     ERY =        GAP = 267    AVXM =        QS = A     LATHROP WELLS                       .
.  DEPTH =   1.39 KM     ERZ =        NM =                       QD = D                                          .
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. 09    SCH  EPU    2 21 24.37                      12  1.3   12.9   20   38    2.47   2.52  -0.05                .
. 09    LSM  EPU    2 21 26.38                      22  1.9   24.8   25   38    4.48   4.45   0.03                .
. 09    JCN  EPU    2 21 26.82                      12  1.4   27.6  113   38    4.92   4.91   0.01                .
. 09    MCY  EPU    2 21 28.92                      20  1.9   40.5   70   38    7.02   7.00   0.01                .
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. AUG H =  2 21 40.57 UTC  RMS =  0.05  NO =  5                                   FREE DEPTH SOLUTION                .
. 09 LAT = 36.616 N      ERX =   1.5  ERH =   1.6  AVFM =   1.3  Q = C                                            .
.   LONG = 116.271 W     ERY =   0.7  GAP = 156    AVXM =        QS = B     LATHROP WELLS                       .
.  DEPTH =   9.74 KM     ERZ =   3.8  NM =                       QD = D                                          .
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. 09    SCH  EPU    2 21 42.66                       9  1.1    6.8  299  143    2.09   2.13  -0.04                .
. 09    LSM  EPD    2 21 43.60                      15  1.5   13.6  360  123    3.03   2.96   0.07                .
. 09    JCN  EPU    2 21 45.17                      10  1.2   24.7  142  109    4.60   4.58   0.01                .
.           ESU     2 21 48.63                                                   8.06   8.02   0.03                .
. 09    MCY  EPU    2 21 45.63                      10  1.2   28.1   80  107    5.06   5.12  -0.06                .
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. AUG H =  8 14 29.97 UTC  RMS =  0.32  NO =  8                                   FREE DEPTH SOLUTION                .
. 11 LAT = 37.152 N      ERX =   1.5  ERH =   2.0  AVFM =   1.3  Q = C                                            .
.   LONG = 117.392 W     ERY =   1.3  GAP = 127    AVXM =        QS = C     MT. JACKSON                         .
.  DEPTH =  12.18 KM     ERZ =   6.4  NM =                       QD = B                                          .
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. 11    GVN  EPU    8 14 33.70                      17  1.7   17.3  165  123    3.73   3.66   0.07                .
. 11    GMN  EP     8 14 34.47                       7  0.9   20.2   35  119    4.50   4.08   0.43                .
.           ESU     8 14 37.01                                                   7.04   7.14  -0.09                .
. 11    LCH  EPD    8 14 34.46                      12  1.4   24.5  292  114    4.49   4.70  -0.20                .
. 11    MGM  EPU    8 14 36.04                       8  1.1   33.4  344  108    6.07   6.06   0.02                .
.           ESD     8 14 40.80                                                  10.83  10.60   0.23                .
. 11    SGV  EPU    8 14 36.95                      12  1.4   37.2  121  106    6.98   6.64   0.35                .

. 11    BMT  EPD    8 14 42.17                                    77.6   79   98   12.20  13.08  -1.28                .
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. AUG H =  8 19 44.69 UTC  RMS =  0.23  NO = 11                                   FREE DEPTH SOLUTION                .
. 11 LAT = 37.115 N      ERX =   1.2  ERH =   1.5  AVFM =   1.2  Q = C                                            .
.   LONG = 116.306 W     ERY =   0.7  GAP = 149    AVXM =        QS = B     SILENT CANYON - PAHUTE MESA         .
.  DEPTH =   1.56 KM     ERZ =   2.3  NM =                       QD = C                                          .
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. 11    BGB  IPU    8 19 47.05                      11  1.3   11.0  141   38    2.36   2.17   0.23                .
. 11    EPN  EPU    8 19 46.69                       2 -0.2   11.1  352   38    2.00   2.19  -0.19                .
. 11    BMT  IPU    8 19 50.45                      11  1.3   27.5  313   38    5.76   4.86   0.50                .
.           ISD     8 19 54.89                                                  10.20   9.20   0.99                .
. 11    CDH1 IPU    8 19 49.75                       9  1.1   28.3  182   38    5.06   4.98   0.09                .
.           ES      8 19 53.10                                                   8.41   8.71  -0.30                .
. 11    CDH5 EPD    8 19 49.73                                    28.3  182   38    5.04   4.98   0.06                .
. 11    LCP  EPD    8 19 50.21                      17  1.7   31.5  157   38    5.52   5.49   0.02                .
. 11    NMN  EP     8 19 52.40                      10  1.3   45.7  265   38    7.71   7.81  -0.10                .
.           ESU     8 19 58.26                                                  13.57  13.67  -0.10                .
. 11    MCY  EP     8 19 54.64                      19  1.9   58.9  149   38    9.95   9.96  -0.01                .
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. AUG H =  4 53 13.94 UTC  RMS =  0.17  NO = 19                                   FREE DEPTH SOLUTION                .
. 12 LAT = 36.487 N      ERX =   0.4  ERH =   0.6  AVFM =   2.1  Q = C                                            .
.   LONG = 116.809 W     ERY =   0.4  GAP =  67    AVXM =        QS = B     FURNACE CREEK                       .
.  DEPTH =   0.21 KM     ERZ =   1.1  NM =                       QD = C                                          .
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. 12    FMT  IPD    4 53 16.97                      40  2.4   17.2    9   38    3.03   3.45  -0.32                .
. 12    PGE  EPD    4 53 19.00                      32  2.2   27.6  236   38    5.06   5.16  -0.09                .
. 12    AMR  IPU    4 53 19.64                      17  1.7   31.7  108   38    5.70   5.81  -0.11                .
. 12    BRO  IPD    4 53 19.96                      26  2.1   34.7   28   38    6.02   6.31  -0.29                .
. 12    GWV  IPU    4 53 20.41                      19  1.8   35.6  159   38    6.47   6.44  -0.07                .
. 12    SDH  EPD4   4 53 22.22                      13  1.5   45.7   67   38    8.28   8.09   0.19                .
. 12    LSM  EPD    4 53 23.53                      26  2.2   55.6   40   38    9.59   9.71  -0.11                .
. 12    GSM  EPD    4 53 24.25                      30  2.3   58.1  185   38   10.31  10.11   0.21                .
. 12    SGV  EPD    4 53 24.42                      34  2.4   58.4  340   38   10.48  10.15   0.33                .
.           ESD     4 53 31.62                                                  17.68  17.76  -0.08                .
. 12    CDH1 EPD    4 53 24.37                      31  2.3   60.4   47   38   10.43  10.48  -0.05                .
. 12    CDH5 EP     4 53 24.37                            60.4   47   38   10.43  10.48  -0.05                .
.           FSU2    4 53 32.36                                                  18.42  18.35   0.08                .
. 12    JCN  EP     4 53 25.10                            63.5   95   38   11.16  10.99   0.18                .
. 12    TMU  EPD    4 53 24.96                      28  2.2   64.2  303   38   11.02  11.09  -0.07                .
. 12    NMN  EPU4   4 53 26.18                      33  2.4   65.9  359   38   12.24  11.38   0.67                .
.           ESU     4 53 33.88                                                  19.94  19.91   0.03                .
. 12    LCP  EPD    4 53 26.17                      20  2.0   70.4   55   38   12.23  12.10   0.13                .
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AUG 1980	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	NOP	EPD	4 53 25.98				14	1.7	71.2	124	38	12.04	12.23	-0.19	
. 12	GVN	EPD4	4 53 27.35						74.4	320	38	13.41	12.75	0.66	
. 12	HGB	EPD	4 53 27.87				32	2.4	80.2	40	38	13.93	13.70	0.28	
. 12	BMT	EPU	4 53 30.15						91.8	16	38	16.21	15.58	0.23	
.		ESU4	4 53 40.14									26.20	27.96	-1.76	

. AUG H = 8 20 27.36 UTC RMS = 0.05 NO = 7 FREE DEPTH SOLUTION
. 14 LAT = 36.329 N ERX = 0.3 ERH = 0.3 AVFM = 1.7 Q = C
. LONG = 116.238 W ERY = 0.2 GAP = 129 AVXM = QS = C ASH MEADOWS
. DEPTH = 1.83 KM ERZ = 66.8 NM = QD = C

. 14	JON	IPD	8 20 30.51				14	1.5	17.2	44	90	3.15	3.16	-0.00
. 14	AMR	EPD	8 20 31.35				17	1.7	22.6	290	90	3.99	4.02	-0.03
. 14	NCP	EPU	8 20 31.54				15	1.6	23.6	161	90	4.18	4.18	-0.00
. 14	SCH	EP 2	8 20 33.85				12	1.4	36.3	346	90	6.49	6.25	0.24
. 14	MCY	EPU	8 20 34.91				22	2.0	44.4	34	90	7.55	7.57	-0.02
. 14	LSM	EPU	8 20 35.25				21	1.9	45.6	356	90	7.89	7.77	0.12
. 14	LCP	EPD	8 20 37.26				14	1.6	58.6	6	90	9.90	9.89	0.02
. 14	BGB	EPD2	8 20 41.00				19	2.0	78.7	1	90	13.64	13.15	0.55
. 14	NMN	EPU4	8 20 46.39						98.3	328	90	19.03	16.33	2.70
. 14	GMR	EPD4	8 20 48.15						119.0	20	90	20.79	19.71	1.08

. AUG H = 8 59 59.92 UTC RMS = 0.02 NO = 3 FIXED DEPTH SOLUTION
. 15 LAT = 36.203 N ERX = ERH = AVFM = 1.6 Q = C DEPTH CONTROL INADEQUATE
. LONG = 116.700 W ERY = GAP = 288 AVXM = QS = A FURNACE CREEK
. DEPTH = 5.00 KM ERZ = NM = QD = D

. 15	SDH	EPD	9 0 9.85						58.8	33	93	9.93	9.94	-0.00
. 15	MCY	EPD4	9 0 9.17						83.5	52	92	9.25	13.94	-4.69
. 15	LCH	IPU	9 0 22.83				10	1.6	142.4	324	53	22.91	22.92	-0.01
. 15	PPK	EPU	9 0 26.90						173.3	322	53	26.98	26.94	0.04

. AUG H = 18 15 37.34 UTC RMS = 0.47 NO = 19 FREE DEPTH SOLUTION
. 15 LAT = 36.007 N ERX = 2.6 ERH = 4.5 AVFM = 2.8 Q = D
. LONG = 115.274 W ERY = 3.6 GAP = 253 AVXM = QS = C LAS VEGAS
. DEPTH = 0.31 KM ERZ = 3.9 NM = QD = D

. 15	APK	EPD	18 15 44.71				45	2.6	43.9	322	38	7.37	7.78	-0.41
. 15	SHRG	EPD	18 15 46.40				40	2.5	56.2	11	38	9.06	9.78	-0.67
.		ISD	18 15 54.60									17.26	17.02	0.24
. 15	NOP	EP	18 15 50.60				32	2.4	80.3	280	38	13.26	13.69	-0.43
. 15	JON	EPU	18 15 52.30				31	2.4	88.7	303	38	14.96	15.06	-0.10
. 15	MCY	EPD	18 15 53.33				54	2.9	95.4	320	38	15.99	16.15	-0.15
. 15	AMR	EPD	18 15 57.97				33	2.6	116.3	292	38	20.63	19.55	1.08
. 15	SDH	EPD	18 15 58.01				34	2.6	119.0	307	38	20.67	19.98	0.69
. 15	LSM	EP	18 15 57.68				47	2.9	120.9	312	38	20.34	20.29	0.05
. 15	LCP	EPD	18 15 58.30				36	2.7	123.5	320	38	20.96	20.72	0.24
. 15	CPX	EPU4	18 16 7.35						124.1	326	38	30.01	20.82	9.20
. 15	GNV	EPD	18 15 58.42				36	2.7	127.3	279	38	21.08	21.35	-0.36
. 15	EPR	EPD4	18 16 0.30				60	3.1	129.1	3	38	22.96	21.64	1.33
. 15	CDH1	EPU	18 15 59.56				39	2.8	133.1	315	38	22.22	22.29	-0.06
. 15	CDH5	EPU	18 15 59.43				37	2.7	133.1	315	38	22.09	22.29	-0.19
. 15	QSM	EPD	18 16 0.67				52	3.1	143.8	268	30	23.33	23.75	-0.42
. 15	BRO	EPU	18 16 2.50				45	3.0	147.4	305	30	25.16	24.21	0.95
. 15	GMR	EPU	18 16 2.90				47	3.0	153.8	343	30	25.56	25.04	0.52
.		ESD4	18 16 23.50									46.16	43.82	2.34
. 15	PRN	EPU	18 16 3.32				62	3.3	156.6	7	30	25.98	25.41	0.57
. 15	DLM	EPD	18 16 6.76				36	2.9	183.7	15	30	29.42	28.93	0.49
. 15	NPN	EPD	18 16 7.03				46	3.1	185.1	9	30	29.69	29.11	0.59
. 15	GVN	EPU4	18 16 13.50						215.7	301	30	36.16	33.08	3.08

. AUG H = 23 9 49.90 UTC RMS = 0.21 NO = 15 FREE DEPTH SOLUTION
. 15 LAT = 36.481 N ERX = 0.6 ERH = 0.8 AVFM = 2.0 Q = C
. LONG = 116.918 W ERY = 0.5 GAP = 78 AVXM = QS = C FURNACE CREEK
. DEPTH = 5.71 KM ERZ = 8.0 NM = QD = C

. 15	PGE	IPD	23 9 53.66				30	2.2	19.8	222	102	3.76	3.65	0.12
. 15	FMT	IPD	23 9 53.23				30	2.2	21.5	35	101	3.33	3.91	-0.48
. 15	MCA	FPD	23 9 56.27				30	2.2	37.4	300	96	6.37	6.47	-0.10
. 15	GNV	EPU	23 9 56.85				22	2.0	39.5	146	96	6.95	6.81	0.04
. 15	BRO	IPD	23 9 56.95				25	2.1	40.7	40	96	7.05	7.01	0.05
. 15	AMR	IPU	23 9 56.83				13	1.5	40.9	103	96	6.93	7.03	-0.10
. 15	SDH	EPD4	23 9 59.75				12	1.5	55.0	71	94	9.85	9.31	0.54
. 15	IPO	EPU	23 9 59.50				27	2.2	56.7	309	94	9.60	9.60	0.00

AUG 1980	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	QSM	EPU	23 9 59.40				27	2.2	57.4	176	94	9.50	9.71	-0.21	
15	LSM	EPU	23 10 1.20				29	2.3	64.5	64	94	11.30	10.86	0.45	
15	NMN	EPD	23 10 1.60				24	2.1	67.1	8	95	11.70	11.28	0.42	
		ISU	23 10 9.62									19.72	19.75	-0.02	
15	GVN	EPU4	23 10 2.70				25	2.2	69.1	327	93	12.80	11.60	1.20	
15	JCN	EPD	23 10 2.19				13	1.6	73.1	94	93	12.29	12.26	0.03	
15	LCP	EP 4	23 10 3.60				23	2.1	78.8	58	93	13.90	13.18	0.72	
15	NOP	EPD	23 10 2.90				16	1.8	79.1	120	93	13.00	13.24	-0.23	
15	MCY	EPD	23 10 5.11				28	2.3	87.8	77	93	15.21	14.65	0.57	
15	APK	EPU	23 10 10.45						121.8	98	92	20.55	20.18	0.37	

AUG H = 17 48 9.14 UTC RMS = 0.13 NO = 17 FREE DEPTH SOLUTION
17 LAT = 36.990 N ERX = 0.6 ERM = 0.9 AVFM = 2.6 Q = D
LONG = 117.536 W ERY = 0.6 GAP = 187 AVXM = QS = C DRY MOUNTAIN
DEPTH = 0.09 KM ERZ = 7.0 NM = QD = D

17	GVN	IPU	17 48 12.55				59	2.7	17.3	86	38	3.41	3.50	-0.09
17	LCM	IPD	17 48 14.33				51	2.6	28.9	340	38	5.19	5.38	-0.19
17	GMN	IPD	17 48 16.74				38	2.4	42.3	36	38	7.60	7.57	0.03
17	MGM	EPD	17 48 18.00				51	2.7	50.2	4	38	8.86	8.85	0.01
17	PPK	IPD	17 48 19.47				46	2.7	58.6	326	38	10.33	10.21	0.12
17	NMN	EPU	17 48 20.12				53	2.8	64.7	81	38	10.98	11.21	-0.23
17	HZP	EPD	17 48 22.80				47	2.8	80.0	10	38	13.66	13.70	0.15
17	SVP	EPD	17 48 23.56				43	2.7	83.8	344	38	14.42	14.31	-0.04
17	SCM	EPD	17 48 28.27				22	2.2	113.6	110	38	19.13	19.15	-0.02
17	AMR	EP	17 48 28.30				24	2.3	115.5	125	38	19.16	19.46	-0.30
17	LSM	EPD	17 48 28.72				40	2.7	116.1	104	38	19.58	19.56	0.01
17	SSP	EPD	17 48 29.09				35	2.6	117.5	94	38	19.95	19.80	0.15
17	GNV	EPD	17 48 29.33				23	2.3	118.1	139	38	20.19	19.89	0.20
17	LCP	EPD	17 48 29.90				32	2.6	122.9	97	38	20.76	20.68	0.08
17	JCN	IPD	17 48 32.65				25	2.4	141.9	115	30	23.51	23.55	-0.04
17	MCY	EPU	17 48 33.26				41	2.9	145.2	105	30	24.12	23.97	0.15
17	NOP	EP	17 48 34.82						156.5	128	30	25.68	25.44	0.24

AUG H = 8 0 42.67 UTC RMS = 0.12 NO = 4 FREE DEPTH SOLUTION
18 LAT = 37.170 N ERX = ERM = AVFM = 2.4 Q = C
LONG = 115.158 W ERY = GAP = 131 AVXM = QS = A ALAMO
DEPTH = 4.01 KM ERZ = NM = QD = D

18	EPR	IPD	8 0 43.50				63	2.7	0.2	141	176	0.83	0.83	0.01
18	PPN	IPD4	8 0 48.26				45	2.5	29.0	25	95	5.59	5.08	0.51
18	GMR	EPU	8 0 51.75				30	2.3	54.8	299	92	9.08	9.27	-0.19
18	NPN	EPD	8 0 52.47				29	2.3	58.0	23	92	9.80	9.79	0.01
18	GLR	EPU	8 0 55.05				29	2.3	73.7	273	92	12.38	12.35	0.18

AUG H = 8 33 4.44 UTC RMS = 0.17 NO = 9 FREE DEPTH SOLUTION
19 LAT = 36.910 N ERX = 1.3 ERM = 1.4 AVFM = 1.5 Q = C
LONG = 115.986 W ERY = 0.7 GAP = 181 AVXM = QS = B MERCURY
DEPTH = 9.42 KM ERZ = 4.3 NM = QD = D

19	LCP	EPD	8 33 7.67				14	1.5	17.3	249	116	3.23	3.46	-0.23
		ES	8 33 10.50									6.06	6.05	0.01
19	SSP	EPU	8 33 8.47				9	1.1	20.8	275	111	4.03	3.98	0.05
19	OGS	EPU	8 33 9.09				19	1.8	25.8	303	107	4.65	4.74	-0.04
19	MCY	IPU	8 33 9.32				13	1.5	27.6	176	106	4.88	5.02	-0.14
19	CDH1	EP	8 33 10.90				15	1.6	30.1	260	105	6.46	5.41	1.05
19	LSM	EP	8 33 10.39				12	1.4	31.8	233	104	5.95	5.68	0.27
		ESD	8 33 14.38									9.94	9.94	0.00
19	GLR	EPD	8 33 10.01				17	1.7	32.3	355	104	5.57	5.75	-0.04

AUG H = 11 58 16.22 UTC RMS = 0.09 NO = 17 FREE DEPTH SOLUTION
20 LAT = 36.711 N ERX = 0.2 ERM = 0.4 AVFM = 2.0 Q = B
LONG = 115.604 W ERY = 0.3 GAP = 132 AVXM = QS = A MERCURY
DEPTH = 7.81 KM ERZ = 1.6 NM = QD = C

20	SPRG	IPU	11 58 19.83				33	2.2	18.5	264	110	3.61	3.53	0.08
20	MCY	IPU	11 58 21.96				24	2.0	32.5	260	101	5.64	5.73	-0.10
20	SHRG	EPD	11 58 24.10				23	2.0	46.2	120	98	7.88	7.93	-0.00
20	LCP	EPU	11 58 25.20				17	1.8	52.8	288	97	8.98	8.99	-0.02
20	JCN	EPD	11 58 25.51				12	1.5	53.9	236	97	9.29	9.17	0.12
		ESU	11 58 32.30									16.08	16.04	0.04
20	LSM	EPU	11 58 26.34				19	1.9	59.8	273	96	10.12	10.13	-0.01
20	SSP	IPD	11 58 26.44				15	1.8	59.8	293	96	10.22	10.13	0.09
		ISD	11 58 34.50									18.28	17.73	0.55

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AUG   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN   TOBS   TCAL  RES   REMARKS
1980                (UTC)       (MU) (SEC)                    (KM) (DEG)(DEG) (SEC)  (SEC) (SEC)

. 20   GLR  EPD   11 58 27.00                        28  2.3   65.6  326   95   10.78  11.06 -0.14

. 20   CDH5 EPD4  11 58 27.05                        17  1.8   65.8  285   95   10.83  11.11 -0.28
. 20   CDH1 EPD   11 58 27.15                        27  2.2   65.8  285   95   10.93  11.11 -0.18
. 20   SDH  EPD   11 58 27.42                        11  1.4   66.0  264   95   11.20  11.14  0.06
. 20   BGB  EPD   11 58 27.18                        31  2.3   66.4  303   95   10.96  11.20 -0.19
. 20   GMR  EPD   11 58 28.25                        24  2.1   70.8  348   95   12.03  11.90  0.13
. 20   AMR  EP    11 58 30.62                              85.3  246   94   14.40  14.26  0.14
. 20   BRO  EPD   11 58 31.56                        20  2.1   91.5  274   94   15.34  15.26  0.07
. 20   BMT  EPD4  11 58 35.57                        28  2.4  104.4  308   93   19.35  17.36  1.59
. 20   NMN  EPD   11 58 35.43                        27  2.4  115.8  291   53   19.21  19.19  0.01
. 20   SGV  EPD   11 58 38.00                        25  2.4  131.0  283   53   21.78  21.17  0.61
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. AUG H = 18  5 20.23 UTC  RMS =  0.37  NO =  4                                FREE DEPTH SOLUTION
.  20 LAT =  36.817 N      ERX =        ERH =        AVFM =    1.3  Q = D
.    LONG = 116.273 W      ERY =        GAP = 124    AVXM =         QS = C    LATHROP WELLS
.   DEPTH =   0.52 KM      ERZ =        NM =                        QD = D
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. 20   CDH1 EP 3  18  5 22.05                        20  1.8    6.2  321   38    1.82   1.61  0.21
. 20   LSM  IPD   18  5 21.85                        14  1.5    8.6  179   38    1.62   2.00 -0.37
. 20   LOP  EPU2  18  5 22.70                         9  1.1   10.3   66   38    2.47   2.28  0.19
. 20   SSP  EPD4  18  5 27.53                         6  0.7   13.0   22   38    7.30   2.71  4.59
. 20   SDH  EP 3  18  5 26.10                              19.8  197   38    5.87   3.82  2.05
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. AUG H =  3 24  2.88 UTC  RMS =  0.29  NO =  9                                FREE DEPTH SOLUTION
.  21 LAT =  37.221 N      ERX =   1.2  ERH =   1.7  AVFM =    2.6  Q = C
.    LONG = 116.466 W      ERY =   1.2  GAP =  80    AVXM =         QS = C    SILENT CANYON - NORTH
.   DEPTH =   1.75 KM      ERZ =   8.9  NM =                        QD = B
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. 21   BMT  EPU    3 24  5.02                                9.2  319   90    2.14   1.84 -0.10
. 21   BGB  EPU4   3 24  8.84                        74  3.0   29.4  134   90    5.96   5.12  0.88
. 21   NMN  EPU4   3 24  7.15                              38.9  244   90    4.27   6.03 -1.76
. 21   BLT  EPD    3 24 10.13                        32  2.3   39.7   48   90    7.25   6.80  0.45
. 21   GLR  EPU    3 24  9.20                        48  2.6   39.9   93   90    6.32   6.83 -0.37
. 21   CDH1 EPU    3 24 10.45                        42  2.5   42.1  162   90    7.57   7.20  0.36
. 21   SGV  EPU    3 24 12.60                              56.9  242   90    9.72   9.61  0.11
. 21   GMR  EPU4   3 24 15.00                        52  2.8   62.9   79   90   12.12  10.57  1.55
. 21   QCS  EPU    3 24 15.88                        26  2.2   77.8   39   90   13.00  12.99  0.00
.           ESU    3 24 26.85                                                   23.97  22.74  1.23
. 21   GVN  EPU4   3 24 17.60                              81.6  253   90   14.72  13.63  1.09
. 21   SPRG EPU    3 24 16.10                        43  2.7   82.7  135   90   13.22  13.80 -0.58
. 21   NPN  EP     3 24 26.25                        45  2.9  143.6   71   53   23.37  23.40 -0.03
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. AUG H = 12 30 47.79 UTC  RMS =  0.03  NO =  4                                FREE DEPTH SOLUTION
.  21 LAT =  36.812 N      ERX =        ERH =        AVFM =    1.0  Q = C
.    LONG = 115.958 W      ERY =        GAP = 257    AVXM =         QS = A    MERCURY
.   DEPTH =   1.79 KM      ERZ =        NM =                        QD = D
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. 21   MCY  EPD   12 30 50.87                         9  1.1   16.6  181   90    3.08   3.06  0.03
.           ISU   12 30 53.10                                                    5.31   5.35 -0.04
. 21   SPRG EPD4  12 30 56.10                              18.6  134   90    8.31   3.38  4.93
. 21   LOP  EPU   12 30 51.25                         6  0.8   19.2  284   90    3.46   3.48 -0.02
.           ESD4  12 30 53.69                                                    5.90   6.09 -0.19
. 21   LSM  EP    12 30 52.90                         9  1.1   29.1  254   90    5.11   5.08  0.03
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. AUG H =  1 11  2.12 UTC  RMS =  0.10  NO =  6                                FREE DEPTH SOLUTION
.  22 LAT =  36.505 N      ERX =   1.1  ERH =   1.6  AVFM =    1.4  Q = D
.    LONG = 116.445 W      ERY =   1.1  GAP = 288    AVXM =         QS = C    LATHROP WELLS
.   DEPTH =   8.87 KM      ERZ =   6.3  NM =                        QD = D
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. 22   AMR  EPU4   1 11  9.50                              12.2  192  123    7.38   2.68  4.70
. 22   SDH  EPD    1 11  5.60                        13  1.4   18.3   32  113    3.48   3.56 -0.08
. 22   LSM  EPD    1 11  7.55                        12  1.4   30.2   31  104    5.43   5.41  0.02
.           ESU    1 11 11.68                                                    9.56   9.47  0.09
. 22   JCN  EPD    1 11  7.99                        11  1.3   31.5  103  103    5.77   5.61  0.16
. 22   MCY  EP     1 11 10.00                              46.6   68   99    7.88   8.02 -0.14
.           ESU    1 11 16.10                                                   13.98  14.03 -0.05
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. AUG H =  3 37 51.05 UTC  RMS =  0.09  NO = 13                                FREE DEPTH SOLUTION
.  23 LAT =  37.126 N      ERX =   0.2  ERH =   0.4  AVFM =    2.3  Q = C
.    LONG = 117.018 W      ERY =   0.3  GAP = 146    AVXM =         QS = C    MT. JACKSON
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AUG 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
DEPTH = 2.98 KM			ERZ = 7.3 NM =							QD = C					
23	SGV	IPU	3 37 54.03				44	2.5	16.2	184	95	2.98	2.99	-0.01	
23	NMN	IPU	3 37 54.24				35	2.3	18.5	106	94	3.19	3.37	-0.18	
23	GWN	EPU	3 37 56.06				30	2.2	28.8	312	93	5.01	5.05	-0.03	
23	GVN	EPD	3 37 56.62				32	2.3	32.0	244	92	5.57	5.56	0.02	
23	BMT	EPU4	3 37 57.00				42	2.5	46.4	68	92	5.95	7.91	-2.36	
23	BRU	EPD	3 37 59.95				24	2.1	53.4	139	91	8.90	9.05	-0.15	
23	CDHS	EPU	3 38 2.62				23	2.1	69.0	115	90	11.57	11.57	-0.00	
23	CDHI	EPD	3 38 2.55				30	2.3	69.0	115	90	11.50	11.57	-0.07	
23	BGB	EPU	3 38 3.03				30	2.3	71.0	98	90	11.98	11.99	0.14	
23	SSP	IPU	3 38 3.75				23	2.1	74.6	107	90	12.70	12.49	0.22	
		ESD	3 38 12.90									21.85	21.85	0.00	
23	LSM	EPU	3 38 4.49				24	2.2	79.2	123	90	13.44	13.23	0.21	
23	SDH	EPD	3 38 4.49				33	2.4	80.8	131	90	13.44	13.48	-0.04	
23	LOP	EP 3	3 38 5.12						81.5	112	90	14.07	13.61	0.46	
23	MCY	EPD	3 38 9.05				26	2.3	107.3	119	90	18.00	17.81	0.20	
23	NOP	EPD4	3 38 14.38						135.2	145	53	23.33	22.18	1.15	
AUG H = 10 34 23.72 UTC			RMS = 0.14	NO = 6								FREE DEPTH SOLUTION			
24 LAT = 36.769 N			ERX = 1.2	ERH = 1.8		AVFM = 0.9				Q = C					
LONG = 116.023 W			ERY = 1.3	GAP = 209		AVXM =				QS = B		LATHROP WELLS			
DEPTH = 9.69 KM			ERZ = 3.1	NM =						QD = D					
24	MCY	EPD	10 34 26.54				8	1.0	13.1	155	123	2.82	2.88	-0.05	
		ISU	10 34 28.79									5.07	5.03	0.04	
24	LOP	EPD	10 34 26.95				6	0.7	16.0	306	118	3.23	3.28	-0.05	
		ESU	10 34 29.45									5.73	5.74	-0.01	
24	LSM	EP	10 34 28.47				9	1.1	22.5	261	111	4.75	4.24	0.51	
		ESU	10 34 31.01									7.29	7.42	-0.13	
AUG H = 11 40 9.15 UTC			RMS = 0.33	NO = 8								FIXED DEPTH SOLUTION			
24 LAT = 36.880 N			ERX = 1.8	ERH = 2.2		AVFM = 1.0				Q = C		DEPTH CONTROL INADEQUATE			
LONG = 116.224 W			ERY = 1.3	GAP = 115		AVXM =				QS = C		LATHROP WELLS			
DEPTH = 5.00 KM			ERZ = 4.7	NM =						QD = B					
24	SSP	EP	11 40 10.69				7	0.8	5.0	5	129	1.54	1.36	0.18	
24	LOP	EPD	11 40 10.15				8	1.0	5.8	120	125	1.00	1.46	-0.46	
		ESD	11 40 11.85									2.70	2.56	0.14	
24	CDHI	IPU	11 40 11.26				11	1.2	8.7	255	114	2.11	1.87	0.24	
24	CDHS	EP	11 40 11.30						8.7	255	114	2.15	1.87	0.28	
24	LSM	EP	11 40 11.95				7	0.9	16.2	195	102	2.80	3.05	-0.25	
24	BGB	EP	11 40 12.10				11	1.3	17.5	359	101	2.95	3.25	-0.25	
24	MCY	EP	11 40 16.29						33.6	136	96	7.14	5.85	1.29	
AUG H = 23 7 2.35 UTC			RMS = 0.20	NO = 11								FREE DEPTH SOLUTION			
24 LAT = 36.629 N			ERX = 0.9	ERH = 1.3		AVFM = 1.7				Q = C					
LONG = 115.997 W			ERY = 0.9	GAP = 138		AVXM =				QS = B		MERCURY			
DEPTH = 9.01 KM			ERZ = 2.4	NM =						QD = C					
24	MCY	IPD	23 7 4.19				25	1.9	4.8	40	150	1.84	1.84	0.00	
24	SPRG	EPU	23 7 5.83				18	1.7	18.2	67	113	3.48	3.56	-0.08	
24	JON	IPD	23 7 6.74				10	1.2	23.0	204	109	4.39	4.29	0.10	
24	LSM	IPU	23 7 7.20				23	1.9	27.5	296	106	4.85	4.98	-0.13	
24	LOP	IPU	23 7 7.56				12	1.4	29.3	329	105	5.21	5.27	-0.05	
24	SDH	EPD	23 7 7.74				9	1.1	30.6	273	104	5.39	5.48	-0.08	
24	CDHI	IPU	23 7 8.90				19	1.8	38.5	312	101	6.55	6.73	-0.17	
24	CDHS	EP	23 7 8.83				13	1.5	38.5	312	101	6.48	6.73	-0.24	
24	GMR	EPU	23 7 16.20				15	1.8	80.8	14	95	13.85	13.54	0.31	
24	NMN	EPD	23 7 17.55				17	1.9	88.8	304	95	15.20	14.83	0.37	
24	SGV	EPU	23 7 19.59				19	2.0	100.4	293	94	17.24	16.72	0.53	
AUG H = 8 7 48.75 UTC			RMS = 0.08	NO = 16								FREE DEPTH SOLUTION			
25 LAT = 37.312 N			ERX = 0.2	ERH = 0.3		AVFM = 2.0				Q = B					
LONG = 116.437 W			ERY = 0.2	GAP = 93		AVXM =				QS = A		SILENT CANYON - NORTH			
DEPTH = 10.48 KM			ERZ = 1.5	NM =						QD = B					
25	BMT	IPU4	8 7 52.11				26	2.0	9.1	250	136	3.36	2.45	0.50	
25	EPH	IPU	8 7 51.96				33	2.2	10.8	137	122	3.21	3.18	0.03	
25	RLT	EPD	8 7 54.47				12	1.4	31.5	58	106	5.72	5.68	0.04	
25	BGB	EPD	8 7 55.09				33	2.3	35.7	149	104	6.34	6.33	0.06	
25	GLR	EPU4	8 7 55.15				25	2.1	39.3	109	103	6.40	6.90	-0.35	
25	RMN	EPD	8 7 56.07				22	2.0	42.4	233	102	7.32	7.40	-0.08	
25	CTS	IPU	8 7 56.49				12	1.4	44.4	325	101	7.74	7.72	0.02	

AUG 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.		ISD	8 8 2.21									13.46	13.51	-0.05	
. 25	SSP	EP	8 7 56.80				25	2.1	47.1	156	101	8.05	8.15	-0.10	
. 25	CCM1	EPU	8 7 57.65				25	2.1	51.2	168	100	8.90	8.81	0.09	
. 25	LCP	EP	8 7 58.26				24	2.1	56.2	155	99	9.51	9.60	-0.09	
. 25	GMR	EPD	8 7 58.82				20	1.9	59.1	88	99	10.07	10.07	-0.01	
. 25	BRO	EPD	8 7 59.29				19	1.9	63.2	195	98	10.54	10.73	-0.19	
. 25	SGV	EPD	8 7 59.64				25	2.2	64.4	235	95	10.89	10.92	-0.03	
. 25	LSM	EP 4	8 8 0.70				25	2.2	65.3	167	98	11.95	11.06	0.89	
. 25	GMN	EPD	8 8 0.97				15	1.7	72.9	269	97	12.22	12.29	-0.08	
. 25	MCY	EP	8 8 2.91				27	2.3	83.7	150	96	14.16	14.03	0.13	
. 25	GVN	EPD	8 8 3.54				32	2.4	87.4	247	96	14.79	14.64	0.15	
. 25	MCA	EP	8 8 6.49				19	2.1	105.2	226	95	17.74	17.51	0.22	

. AUG H = 8 9 30.03 UTC RMS = 0.03 NO = 5 FREE DEPTH SOLUTION
. 25 LAT = 37.309 N ERX = 0.4 ERH = 0.7 AVFM = 1.9 Q = C
. LONG = 116.441 W ERY = 0.5 GAP = 190 AVXM = QS = A SILENT CANYON - NORTH
. DEPTH = 11.75 KM ERZ = 1.0 NM = QD = D

. 25	EPN	IPU	8 9 33.30				29	2.1	14.8	135	126	3.27	3.30	-0.03	
.		ESU	8 9 35.83									5.80	5.78	0.02	
. 25	BLT	EP	8 9 35.85						31.9	58	108	5.82	5.81	0.01	
. 25	CTS	IPU	8 9 37.84						44.5	326	103	7.81	7.77	0.03	
.		ISD	8 9 43.61									13.58	13.60	-0.03	
. 25	SSP	EP 4	8 9 44.05				15	1.6	47.0	155	102	14.02	8.18	5.84	
. 25	MCY	EP 4	8 9 45.78				20	2.0	83.6	149	97	15.75	14.04	1.70	

. AUG H = 8 32 35.88 UTC RMS = 0.18 NO = 13 FREE DEPTH SOLUTION
. 25 LAT = 37.311 N ERX = 0.5 ERH = 0.8 AVFM = 1.9 Q = B
. LONG = 116.445 W ERY = 0.5 GAP = 93 AVXM = QS = B SILENT CANYON - NORTH
. DEPTH = 8.73 KM ERZ = 3.8 NM = QD = B

. 25	BMT	EPD4	8 32 35.33				30	2.1	8.4	249	133	******	2.18	-3.12	
. 25	EPN	IPU	8 32 38.98				32	2.2	15.2	135	117	3.10	3.09	0.01	
. 25	BLT	EP	8 32 41.51				12	1.4	32.2	59	103	5.63	5.71	-0.08	
. 25	BGB	EPU	8 32 41.95				26	2.1	35.9	147	101	6.07	6.31	-0.18	
. 25	NPN	IPD	8 32 43.11				22	2.0	41.8	232	100	7.23	7.24	-0.01	
. 25	CTS	IPU	8 32 43.56						44.2	326	99	7.68	7.63	0.06	
.		ISD	8 32 49.24									13.36	13.35	0.02	
. 25	SSP	EPU	8 32 44.60						47.3	155	99	8.72	8.13	0.59	
. 25	LCP	EP	8 32 45.30						56.4	154	97	9.42	9.59	-0.16	
. 25	GMR	EPD	8 32 45.91				20	1.9	59.8	88	97	10.03	10.15	-0.12	
. 25	BRO	EPD	8 32 46.40				19	1.9	62.9	195	97	10.5[illegible]	10.64	-0.12	
. 25	SGV	EPD	8 32 46.72				18	1.9	63.7	235	96	10.8	10.78	0.07	
. 25	GMN	EPD4	8 32 47.22				4	0.6	72.2	269	96	11.[illegible]	12.15	-0.81	
. 25	MCY	EP	8 32 50.35				26	2.3	83.9	149	95	14.4[illegible]	14.04	0.33	
. 25	GVN	EPD	8 32 50.34				27	2.3	86.7	247	95	14.46	14.50	-0.04	

. AUG H = 9 27 4.38 UTC RMS = 0.11 NO = 15 FREE DEPTH SOLUTION
. 25 LAT = 37.306 N ERX = 0.3 ERH = 0.4 AVFM = 2.5 Q = B
. LONG = 116.432 W ERY = 0.3 GAP = 92 AVXM = QS = A SILENT CANYON - NORTH
. DEPTH = 11.64 KM ERZ = 1.1 NM = QD = B

. 25	BMT	IPU	9 27 7.78				71	2.9	9.4	254	139	3.40	2.63	0.37	
. 25	EPN	IPU	9 27 7.60				70	2.9	14.0	137	127	3.22	3.19	0.03	
. 25	BLT	EPU	9 27 10.15				18	1.8	31.4	57	108	5.77	5.72	0.04	
. 25	BGB	EPU	9 27 10.50				69	2.9	34.9	149	106	6.12	6.26	-0.09	
. 25	GLR	EPU	9 27 10.97				43	2.5	38.6	108	105	6.59	6.84	-0.11	
. 25	NPN	IPD	9 27 11.79				68	2.9	42.4	234	104	7.41	7.45	-0.04	
.		IS 4	9 27 40.66									36.28	13.03	23.24	
. 25	CTS	IPU	9 27 12.21				12	1.4	45.2	325	103	7.83	7.88	-0.06	
. 25	SSP	EPD2	9 27 13.15				30	2.2	46.4	156	102	8.77	8.07	0.69	
.		ESD	9 27 18.40									14.02	14.13	-0.11	
. 25	LCP	EPD	9 27 13.86				28	2.2	55.4	155	100	9.48	9.51	-0.04	
. 25	GMR	EPU	9 27 14.45				43	2.6	58.7	87	100	10.07	10.03	0.03	
. 25	BRO	EPD	9 27 14.83				31	2.3	62.7	196	99	10.45	10.69	-0.24	
. 25	SGV	EPD	9 27 15.36				68	3.0	64.4	236	99	10.98	10.95	0.02	
.		ESD4	9 27 52.28									47.90	19.17	28.73	
. 25	LSM	EP 4	9 27 16.24				30	2.3	64.6	167	99	11.86	10.98	0.88	
. 25	MCY	EPD	9 27 18.52				32	2.4	82.9	150	97	14.14	13.93	0.21	
. 25	GVN	EPU	9 27 19.10				51	2.9	87.6	247	97	14.72	14.69	0.02	
. 25	MCA	EPU	9 27 22.07				34	2.6	105.1	226	53	17.69	17.43	0.26	
. 25	NPN	EPD4	9 27 27.89				2[illegible]	2.5	137.7	74	53	23.51	21.66	1.85	
. 25	QSM	EPU4	9 27 29.89				14	2.0	153.8	195	53	25.51	23.76	1.75	

AUG 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	QUP	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
AUG H = 13 32 25.71 UTC			RMS = 0.09	NO = 12								FREE DEPTH SOLUTION			
25 LAT = 37.311 N			ERX = 0.5	ERH = 0.4				AVFM = 1.8		Q = B					
LONG = 116.435 W			ERY = 0.3	GAP = 93				AVXM =		QS = A		SILENT CANYON - NORTH			
DEPTH = 14.59 KM			ERZ = 1.1	NM =						QD = A					
25	BMT	EPU	13 32 29.31				21	1.8	9.3	251	146	3.60	3.00	0.20	
25	EPN	IPU	13 32 29.16				29	2.1	14.6	137	133	3.45	3.56	-0.11	
25	BLT	EPD	13 32 31.60						31.4	58	113	5.89	5.88	0.00	
25	BGB	EPU	13 32 32.00				19	1.8	35.5	149	111	6.29	6.50	-0.16	
25	GLR	EPD	13 32 32.58				12	1.4	39.0	108	109	6.87	7.04	-0.03	
25	NMN	IPD	13 32 33.29				15	1.6	42.5	233	107	7.58	7.59	-0.01	
25	CTS	IPU	13 32 33.66						44.7	325	107	7.95	7.92	0.03	
		ESD	13 32 39.46									13.75	13.86	-0.11	
25	SSP	EPU2	13 32 34.71				17	1.8	46.9	156	106	9.00	8.28	0.72	
25	LOP	EP	13 32 35.38				18	1.8	56.0	155	103	9.67	9.70	-0.03	
25	GMR	EPD	13 32 35.95				16	1.7	58.9	88	103	10.24	10.16	0.08	
25	SGV	EPD	13 32 36.92				18	1.9	64.5	235	102	11.11	11.05	0.06	
25	MCY	EP 4	13 32 40.80				25	2.2	83.4	150	99	15.09	14.08	1.00	
25	GVN	EPD	13 32 40.50				21	2.1	87.6	247	98	14.79	14.75	0.04	
AUG H = 15 12 22.09 UTC			RMS = 0.08	NO = 13								FREE DEPTH SOLUTION			
25 LAT = 37.309 N			ERX = 0.2	ERH = 0.3				AVFM = 1.7		Q = B					
LONG = 116.439 W			ERY = 0.2	GAP = 93				AVXM =		QS = A		SILENT CANYON - NORTH			
DEPTH = 10.29 KM			ERZ = 1.4	NM =						QD = B					
25	BMT	EPU	15 12 25.50				22	1.8	8.9	251	137	3.41	2.42	0.60	
25	EPN	IPU	15 12 25.25				29	2.1	14.7	136	122	3.16	3.14	0.02	
25	BLT	EPU	15 12 27.80				8	1.0	31.7	58	106	5.71	5.71	0.01	
25	BGB	EPU	15 12 28.15				20	1.9	35.5	148	104	6.06	6.29	-0.18	
25	GLR	EPD	15 12 28.80				14	1.6	39.3	108	103	6.71	6.89	-0.03	
25	NMN	EPD	15 12 29.48				17	1.7	42.2	233	102	7.39	7.35	0.04	VERY E
25	CTS	IPU	15 12 29.85				7	1.0	44.6	325	101	7.76	7.75	0.02	
		ESD	15 12 35.59									13.50	13.56	-0.05	
25	LOP	EP 3	15 12 31.95				17	1.8	56.0	154	99	9.86	9.56	0.30	
25	GMR	EPD	15 12 32.22				14	1.6	59.2	87	98	10.13	10.09	0.05	
25	BRO	EPU	15 12 32.74				29	2.3	62.9	195	98	10.65	10.68	-0.02	
25	SGV	EPD	15 12 33.03						64.1	235	98	10.94	10.87	0.07	
		ESD	15 12 41.19									19.01	19.03	-0.02	
25	APK	EPU4	15 12 41.12				16	2.0	134.2	145	53	19.03	21.34	-2.31	
AUG H = 1 0 10.17 UTC			RMS = 0.12	NO = 10								FREE DEPTH SOLUTION			
26 LAT = 37.307 N			ERX = 0.4	ERH = 0.6				AVFM = 1.7		Q = B					
LONG = 116.435 W			ERY = 0.4	GAP = 92				AVXM =		QS = A		SILENT CANYON - NORTH			
DEPTH = 13.58 KM			ERZ = 1.8	NM =						QD = B					
26	BMT	EPU	1 0 13.65						9.1	253	145	3.48	2.85	0.23	
26	EPN	IPU	1 0 13.52				29	2.1	14.3	136	132	3.35	3.42	-0.07	
26	BLT	EPD	1 0 16.06				8	1.0	31.7	57	111	5.89	5.86	0.02	
26	BGB	EPD	1 0 16.65						35.1	148	109	6.48	6.39	0.14	
26	GLR	EPU	1 0 16.84						38.9	108	108	6.67	6.98	-0.16	
26	NMN	EPD	1 0 17.68						42.2	234	106	7.51	7.50	0.01	
26	CTS	IPU	1 0 18.17				7	1.0	45.0	325	105	8.00	7.93	0.07	
		ESD	1 0 23.90									13.73	13.87	-0.14	
26	SSP	EP 4	1 0 20.80				16	1.7	46.6	156	105	10.63	8.17	2.45	
26	LOP	EP 4	1 0 21.90				16	1.7	55.6	155	102	11.73	9.60	2.12	
26	SGV	EPD	1 0 21.26				19	1.9	64.2	236	101	11.09	10.97	0.11	
		ESU	1 0 29.12									18.95	19.20	-0.26	
26	MCY	EP 4	1 0 25.21				24	2.2	83.1	150	98	15.04	14.00	1.04	
AUG H = 1 28 56.47 UTC			RMS = 0.11	NO = 12								FREE DEPTH SOLUTION			
26 LAT = 37.309 N			ERX = 0.4	ERH = 0.5				AVFM = 1.9		Q = B					
LONG = 116.432 W			ERY = 0.3	GAP = 93				AVXM =		QS = A		SILENT CANYON - NORTH			
DEPTH = 15.23 KM			ERZ = 1.5	NM =						QD = B					
26	BMT	EPU	1 29 0.15				26	2.0	9.4	252	147	3.68	3.10	0.17	VERY E
26	EPN	IPU	1 29 0.01				33	2.2	14.3	138	135	3.54	3.60	-0.07	
26	BLT	EPD	1 29 2.45				12	1.4	31.3	57	114	5.98	5.91	0.07	
26	BGB	EPU	1 29 2.80						35.2	149	112	6.33	6.49	-0.12	
26	GLR	EPU	1 29 3.28						38.7	108	110	6.81	7.03	-0.08	
26	NMN	IPD	1 29 4.11				23	2.0	42.6	233	108	7.64	7.63	0.00	
26	CTS	IPU	1 29 4.53				12	1.4	44.9	325	107	8.06	7.99	0.06	
		ESD	1 29 10.30									13.83	13.99	-0.16	
26	SSP	EPU	1 29 4.47				22	2.0	46.7	156	107	8.00	8.27	-0.27	
26	LOP	EPD	1 29 6.25				21	2.0	55.7	155	104	9.78	9.68	0.09	
26	BPO	EPD	1 29 7.32						63.1	176	102	10.65	10.84	0.00	
26	SGV	EPD	1 29 7.67				19	1.9	64.6	236	102	11.20	11.09	0.11	

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AUG   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
1980                (UTC)       (MU) (SEC)                    (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

. 26   LSM  EP 4   1 29  8.99                          25  2.2   64.9  167  102   12.52  11.13  1.38
. 26   MCA  EPU    1 29 14.44                                   105.3  226   53   17.97  17.11  0.86
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. AUG H =  2 40 29.08 UTC  RMS =  0.12  NO =  9                                   FREE DEPTH SOLUTION
.  26 LAT =  37.298 N      ERX =   0.6  ERH =   0.8   AVFM =   1.8  Q = B
.    LONG = 116.455 W      ERY =   0.6  GAP = 138     AVXM =        QS = A       SILENT CANYON - NORTH
.   DEPTH =  14.22 KM      ERZ =   1.1  NM =                        QD = C
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. 26   BMT  EPU    2 40 32.25                                    7.1  257  152    3.17   2.77   0.00
. 26   EPN  EPU    2 40 32.50                          29  2.1   14.9  129  132    3.42   3.56  -0.14
.           ESU    2 40 35.48                                                      6.40   6.23   0.17
. 26   BGB  EPD    2 40 35.55                          21  1.9   35.2  145  110    6.47   6.44   0.08
. 26   NMN  EPD    2 40 36.17                                    40.2  233  108    7.09   7.21  -0.12
. 26   GLR  EPD    2 40 36.08                          13  1.5   40.3  106  108    7.00   7.23  -0.08
. 26   CTS  EPU    2 40 37.14                           8  1.1   44.9  328  106    8.06   7.94   0.12
.           ESD    2 40 42.93                                                     13.85  13.89  -0.04
. 26   SGV  EPD    2 40 40.28                          16  1.8   62.2  236  102   11.20  10.67   0.53
. 26   PRN  EP 4   2 40 50.70                          21  2.2  125.0   84   53   21.62  19.76   1.86
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. AUG H = 10 15 44.92 UTC  RMS =  0.08  NO =  8                                   FREE DEPTH SOLUTION
.  26 LAT =  37.302 N      ERX =   0.3  ERH =   1.0   AVFM =   1.8  Q = C
.    LONG = 116.433 W      ERY =   0.9  GAP = 210     AVXM =        QS = A       SILENT CANYON - NORTH
.   DEPTH =  14.80 KM      ERZ =   1.4  NM =                        QD = D
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. 26   BMT  EPU   10 15 48.38                          21  1.8    9.2  257  147    3.46   3.02   0.04
. 26   BGB  EPD   10 15 51.27                          24  2.0   34.5  148  111    6.35   6.37   0.03

. 26   GLR  EPD   10 15 51.69                          13  1.5   38.5  107  109    6.77   6.98  -0.06
. 26   NMN  EPD   10 15 52.43                          13  1.5   42.1  234  108    7.51   7.53  -0.02
. 26   BPO  EPU   10 15 55.65                          25  2.1   62.3  196  102   10.73  10.70   0.03
. 26   SGV  EPD   10 15 55.94                          14  1.6   64.1  236  102   11.02  10.99   0.03
.           ESD   10 16  4.00                                                     19.08  19.24  -0.16
. 26   GVN  EPD   10 15 59.82                          21  2.1   87.4  248   99   14.90  14.72   0.18
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. AUG H = 11 18 13.83 UTC  RMS =  0.04  NO =  7                                   FREE DEPTH SOLUTION
.  26 LAT =  36.410 N      ERX =   0.2  ERH =   0.3   AVFM =   1.3  Q = B
.    LONG = 116.291 W      ERY =   0.2  GAP = 107     AVXM =        QS = A       ASH MEADOWS
.   DEPTH =   1.13 KM      ERZ =   0.7  NM =                        QD = C
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. 26   AMR  EPU   11 18 16.95                          11  1.3   16.5  265   38    3.1    3.15  -0.03
. 26   JCN  IPU   11 18 17.04                          11  1.3   17.2   79   38    3.2    3.27  -0.06
. 26   SDH  EPD   11 18 18.65                           5  0.6   26.4  351   38    4.82   4.77   0.05
. 26   NOP  EPU   11 18 19.81                          10  1.2   33.7  158   38    5.98   5.95   0.03
. 26   LSM  EPU   11 18 20.33                          16  1.7   36.5    3   38    6.50   6.41   0.09
.           ESU   11 18 25.03                                                     11.20  11.21  -0.02
. 26   MCY  EPD   11 18 20.89                          16  1.7   40.6   47   38    7.06   7.07  -0.01
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. AUG H = 11 18 58.51 UTC  RMS =  0.07  NO =  3                                   FIXED DEPTH SOLUTION
.  26 LAT =  36.807 N      ERX =        ERH =         AVFM =   1.2  Q = C         DEPTH CONTROL INADEQUATE
.    LONG = 116.305 W      ERY =        GAP = 212     AVXM =        QS = A       LATHROP WELLS
.   DEPTH =   5.00 KM      ERZ =        NM =                        QD = D
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. 26   TMO  EP    11 19 14.90                           7  1.2   98.4  270   92   16.39  16.37   0.02
. 26   NPN  EPD   11 19 22.93                           8  1.5  153.5   52   53   24.42  24.37   0.05
. 26   OLM  EP    11 19 24.20                           5  1.1  164.9   57   53   25.69  25.85  -0.16
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. AUG H =  2 10 26.29 UTC  RMS =  0.11  NO =  3                                   FIXED DEPTH SOLUTION
.  28 LAT =  36.744 N      ERX =        ERH =         AVFM =   1.6  Q = C         DEPTH CONTROL INADEQUATE
.    LONG = 115.981 W      ERY =        GAP = 223     AVXM =        QS = A       MERCURY
.   DEPTH =   5.00 KM      ERZ =        NM =                        QD = D
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. 28   MCY  IPU    2 10 28.25                          16  1.6    9.3  170  112    1.96   1.98  -0.01
. 28   LOP  EPD    2 10 30.21                                   20.6  306  100    3.92   3.75   0.17
. 28   LSM  EP     2 10 30.76                          15  1.6   26.0  269   98    4.47   4.61  -0.14
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. AUG H = 17 12 28.53 UTC  RMS =  0.19  NO = 10                                   FREE DEPTH SOLUTION
.  28 LAT =  36.801 N      ERX =   0.5  ERH =   0.7   AVFM =   1.5  Q = C
.    LONG = 116.008 W      ERY =   0.5  GAP =  94     AVXM =        QS = C       LATHROP WELLS
.   DEPTH =   2.14 KM      ERZ =  23.8  NM =                        QD = C
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. 28   CPX  EPU   17 12 31.07                          12  1.3   14.9  342   92    2.54   2.77  -0.23
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AUG 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
28	LOP	EPU	17 12 31.30				20	1.8	15.4	292	92	2.77	2.86	-0.09	
28	MCY	EPU	17 12 31.24				25	2.0	16.0	165	92	2.71	2.96	-0.25	
28	LSM	EP	17 12 32.81				29	2.0	24.5	254	90	4.28	4.34	-0.06	
28	UGB	EPU	17 12 34.39				18	1.8	32.8	323	90	5.86	5.68	0.23	
28	SDH	EP	17 12 34.60						34.2	240	90	6.07	5.91	0.16	
28	JCN	EPU	17 12 35.82				8	1.1	41.0	192	90	7.29	7.02	0.27	
28	BRO	EPU4	17 12 45.50				7	1.0	55.3	266	90	16.97	9.34	7.63	
28	GMR	EPU	17 12 39.29				16	1.8	62.8	20	90	10.76	10.56	0.20	
28	NMN	EPU	17 12 41.30				12	1.6	78.6	293	90	12.77	13.13	-0.36	
28	SMRG	EPU	17 12 42.39				8	1.2	83.0	113	90	13.86	13.85	0.05	

AUG H = 5 1 30.09 UTC RMS = 0.11 NO = 17 FREE DEPTH SOLUTION
29 LAT = 36.978 N ERX = 0.2 ERH = 0.4 AVFM = 2.1 Q = C
LONG = 116.730 W ERY = 0.4 GAP = 89 AVXM = QS = B CHLORIDE CLIFF
DEPTH = 6.04 KM ERZ = 2.6 NM = QD = C

29	NMN	IPU	5 1 32.74				32	2.2	13.8	326	109	2.65	2.72	-0.07
29	BRO	EPU	5 1 34.60				23	1.9	25.7	159	100	4.51	4.59	-0.07
29	SGV	EPU	5 1 34.90				28	2.1	26.9	271	100	4.81	4.78	0.03
29	EPN	IPD	5 1 37.82				29	2.2	44.6	54	96	7.73	7.65	0.09
29	BGB	EPD	5 1 37.85				32	2.3	45.2	82	96	7.76	7.74	0.07
29	SSP	IPD	5 1 38.07				34	2.4	45.9	97	96	7.98	7.86	0.13
29	LSM	IPD	5 1 38.34				34	2.4	48.7	123	95	8.25	8.31	-0.05
29	SDH	IPD	5 1 38.69				20	1.9	50.9	137	95	8.60	8.65	-0.05
29	LOP	EPU	5 1 39.05				27	2.2	52.0	105	95	8.96	8.84	0.13
29	GVN	EPU	5 1 39.34				25	2.1	54.6	273	95	9.25	9.25	0.00
29	GMN	EPU	5 1 39.87				16	1.7	59.1	307	94	9.78	9.99	-0.20
29	MCA	EPU	5 1 40.50				18	1.9	61.3	233	94	10.41	10.34	0.07
29	GLR	EPD4	5 1 40.69				19	1.9	67.9	69	94	10.60	11.42	-0.67
29	MCY	IPU	5 1 42.91				31	2.4	77.0	117	93	12.82	12.90	-0.07
29	JCN	EPD	5 1 43.56				13	1.6	81.9	137	93	13.47	13.69	-0.22
29	LCH	EP	5 1 44.75				25	2.2	86.4	289	93	14.66	14.41	0.25
29	GMR	EPU	5 1 45.61				24	2.2	93.9	65	93	15.52	15.63	-0.11
29	MZP	EPD	5 1 46.25				22	2.2	98.9	324	93	16.16	16.45	-0.10

AUG H = 5 54 32.24 UTC RMS = 0.06 NO = 5 FREE DEPTH SOLUTION
29 LAT = 36.835 N ERX = 1.3 ERH = 1.5 AVFM = 1.2 Q = C
LONG = 115.965 W ERY = 0.6 GAP = 218 AVXM = QS = B MERCURY
DEPTH = 6.82 KM ERZ = 4.2 NM = QD = D

29	CPX	EPD	5 54 34.96				10	1.2	13.3	321	113	2.72	2.69	0.03
29	LOP	EPD	5 54 35.59				7	0.9	18.2	277	107	3.35	3.44	-0.09
29	MCY	IPD	5 54 35.85				11	1.3	19.3	179	106	3.61	3.60	0.01
		ESU	5 54 38.55									6.31	6.30	0.01
29	LSM	EP	5 54 37.53				11	1.3	29.4	249	100	5.29	5.21	0.08

AUG H = 20 48 3.44 UTC RMS = 0.19 NO = 10 FREE DEPTH SOLUTION
29 LAT = 36.094 N ERX = 2.3 ERH = 3.0 AVFM = 2.8 Q = D
LONG = 117.707 W ERY = 1.9 GAP = 262 AVXM = QS = C DARWIN
DEPTH = 0.79 KM ERZ = 8.3 NM = QD = D

29	PGE	IPU	20 48 14.28				49	2.7	64.2	64	38	10.84	10.98	-0.14
29	MCA	EPU4	20 48 14.30				49	2.8	72.4	32	38	10.86	12.31	-1.45
29	QSM	EPU	20 48 16.45				46	2.7	77.0	101	38	13.01	13.05	-0.04
29	TMO	EPD	20 48 17.30				44	2.7	83.3	19	38	13.86	14.09	-0.23
29	FMT	EPD	20 48 20.50				43	2.8	102.9	54	38	17.06	17.27	-0.12
29	GVN	IPD	20 48 21.35				50	2.9	105.8	18	38	17.91	17.75	0.16
29	SGV	EPU	20 48 23.04				52	3.0	115.5	32	38	19.60	19.32	0.28
29	BRO	EPD	20 48 23.80				42	2.8	122.1	53	38	20.36	20.40	-0.04
29	LCH	EPU	20 48 24.43				45	2.9	126.7	2	38	20.99	21.13	-0.15
29	NMN	EPU	20 48 26.25				44	2.9	135.3	36	30	22.81	22.53	0.28
29	CDH1	EPD	20 48 28.36				46	3.0	150.7	56	30	24.92	24.54	0.38
29	BGB	EPD4	20 48 31.12				48	3.1	168.8	52	30	27.68	26.88	0.85

AUG H = 19 18 6.73 UTC RMS = 0.08 NO = 6 FREE DEPTH SOLUTION
30 LAT = 37.123 N ERX = 0.7 ERH = 1.0 AVFM = 2.3 Q = C
LONG = 117.417 W ERY = 0.8 GAP = 148 AVXM = QS = B MT. JACKSON
DEPTH = 8.90 KM ERZ = 4.0 NM = QD = C

30	GVN	IPU	19 19 9.85				35	2.3	15.0	154	117	3.12	3.08	0.04
30	LCH	EPU	19 19 11.10				32	2.2	23.9	301	109	4.37	4.42	-0.05
30	GMN	EPD	19 18 11.10				34	2.3	24.1	35	107	4.37	4.46	-0.09
30	MGM	EPU	19 19 13.16				35	2.3	36.0	349	102	6.43	6.33	0.10
30	SGV	IPU	19 18 13.42				38	2.4	37.6	115	101	6.69	6.59	0.10

AUG 1980	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	NMN	EPU	19 18 15.75				35	2.4	53.5	95	98	9.02	9.12	-0.10	

SEP H = 1 31 17.90 UTC RMS = 0.04 NO = 7 — FREE DEPTH SOLUTION
03 LAT = 37.192 N ERX = 0.4 ERH = 0.5 AVFM = 2.0 Q = B
LONG = 117.571 W ERY = 0.3 GAP = 169 AVXM = QS = A — MAGRUDER MOUNTAIN
DEPTH = 6.89 KM ERZ = 1.1 NM = QD = C

03	LCH	IPU	1 31 19.86				23	1.9	8.3	305	126	1.96	1.97	-0.01
03	MGM	EPD	1 31 23.00				16	1.6	28.4	13	101	5.10	5.06	0.04
03	GVN	EPD	1 31 23.13				24	2.0	29.3	136	100	5.23	5.20	0.03
03	GMN	EPU	1 31 23.22				22	1.9	30.1	67	100	5.32	5.33	-0.01
03	PPK	IPD	1 31 24.71				20	1.9	39.5	311	98	6.81	6.84	-0.03
03	SGV	IPU	1 31 27.00				22	2.0	53.3	116	96	9.10	9.06	0.04
03	NMN	EPU	1 31 29.20				26	2.2	68.1	100	94	11.30	11.45	-0.15
03	MCY	IPD	1 31 43.60				31	2.7	155.0	112	53	25.70	24.38	1.32

SEP H = 1 31 18.04 UTC RMS = 0.09 NO = 11 — FREE DEPTH SOLUTION
03 LAT = 37.195 N ERX = 0.4 ERH = 0.6 AVFM = 2.2 Q = B
LONG = 117.567 W ERY = 0.4 GAP = 165 AVXM = QS = A — MAGRUDER MOUNTAIN
DEPTH = 4.13 KM ERZ = 1.6 NM = QD = C

03	LCH	IPU	1 31 19.86				23	1.9	8.4	302	109	1.82	1.78	0.04
03	MGM	EPD	1 31 23.00				16	1.6	28.1	13	95	4.96	4.94	0.03
03	GVN	EPD	1 31 23.13				24	2.0	29.3	137	95	5.09	5.13	-0.04
03	GMN	EPU	1 31 23.22				22	1.9	29.7	67	95	5.18	5.20	-0.02
03	PPK	IPD	1 31 24.71				20	1.9	39.6	310	94	6.67	6.81	-0.13
03	TMO	EPD4	1 31 25.40				23	2.0	45.5	162	93	7.36	7.76	-0.39
03	SGV	IPU	1 31 27.00				22	2.0	53.1	116	93	8.96	9.00	-0.04
03	NMN	EPU4	1 31 29.20				26	2.2	67.8	101	92	11.16	11.38	-0.22
03	CTS	EPU4	1 31 43.67						89.4	56	92	25.63	14.91	10.73
03	BRO	IPD	1 31 34.10				21	2.1	96.6	120	91	16.06	16.07	-0.01
03	CDH1	EPD	1 31 37.60				21	2.2	117.3	108	91	19.56	19.45	0.12
03	SSP	EPU	1 31 38.50				33	2.6	123.6	104	90	20.46	20.45	0.02
03	LSM	EPD	1 31 39.10				39	2.8	125.9	114	90	21.06	20.83	0.24
03	LOP	EPU	1 31 39.80				30	2.5	130.2	107	53	21.76	21.42	0.34
03	MCY	EPD4	1 31 43.57				34	2.7	154.8	112	53	25.53	24.62	0.91

SEP H = 5 11 50.84 UTC RMS = 0.11 NO = 8 — FREE DEPTH SOLUTION
05 LAT = 36.714 N ERX = 1.1 ERH = 1.2 AVFM = 0.9 Q = C
LONG = 116.342 W ERY = 0.4 GAP = 190 AVXM = QS = B — LATHROP WELLS
DEPTH = 5.34 KM ERZ = 2.0 NM = QD = D

05	LSM	IPD	5 11 52.64				11	1.2	6.9	66	122	1.80	1.64	0.16
05	SDH	IPU	5 11 52.65				5	0.6	7.6	178	119	1.81	1.74	0.07
		ESD	5 11 53.79									2.95	3.05	-0.10
05	CDH5	EP	5 11 53.80				6	0.7	16.4	8	104	2.96	3.09	-0.13
		ESD	5 11 56.07									5.23	5.41	-0.18
05	CDH1	EPU	5 11 54.06				9	1.1	16.4	8	104	3.22	3.09	0.13
05	LOP	EPU	5 11 54.91						22.0	45	100	4.07	3.99	0.09
05	MCY	EPU	5 11 56.80						34.4	100	96	5.96	5.98	-0.02

SEP H = 11 42 38.18 UTC RMS = 0.10 NO = 4 — FREE DEPTH SOLUTION
05 LAT = 36.845 N ERX = ERH = AVFM = 1.0 Q = C
LONG = 116.261 W ERY = GAP = 198 AVXM = QS = A — LATHROP WELLS
DEPTH = 1.20 KM ERZ = NM = QD = D

05	LOP	EPD	11 42 39.98				9	1.1	8.4	83	38	1.80	1.82	-0.02
05	SSP	EPU	11 42 40.19				7	0.9	9.7	23	38	2.01	2.03	-0.02
05	LSM	EPU	11 42 40.71				8	1.0	11.8	185	38	2.53	2.37	0.16
		ESD	11 42 42.21									4.03	4.15	-0.11

SEP H = 14 59 59.92 UTC RMS = 0.20 NO = 19 — FREE DEPTH SOLUTION
11 LAT = 36.967 N ERX = 0.6 ERH = 0.7 AVFM = 2.7 Q = B
LONG = 116.161 W ERY = 0.4 GAP = 135 AVXM = QS = B — LATHROP WELLS
DEPTH = 0.11 KM ERZ = 1.1 NM = QD = B

11	SSP	IPU	15 0 1.40				90	3.1	6.9	229	38	1.48	1.80	-0.32
11	BGH	IPU	15 0 1.78				75	2.9	9.8	323	38	1.84	2.28	-0.37
11	LOP	EPU	15 0 2.60				76	2.9	12.5	182	38	2.68	2.72	-0.04
11	CDH1	EPD4	15 0 3.12				44	2.5	18.3	230	38	3.20	3.65	-0.45

SEP 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
11	CDH5	EPD	15 0 3.30						18.3	230	38	3.38	3.65	-0.27	
11	LSM	EPU	15 0 4.87				87	3.1	27.1	201	38	4.95	5.09	-0.14	
11	GLR	EPU	15 0 5.03				73	3.0	28.8	26	38	5.11	5.36	-0.10	
11	EPN	EPU	15 0 5.65				92	3.2	31.0	332	38	5.73	5.72	0.01	
11	SDH	EPU	15 0 6.70				47	2.6	39.0	204	38	6.78	7.02	-0.24	
		ESU	15 0 12.00									******	******	-0.21	
11	SPRG	EPD4	15 0 8.35				52	2.7	43.6	134	38	8.43	7.78	0.65	
11	BMT	EPU4	15 0 9.83				45	2.6	48.3	317	38	9.91	8.53	0.98	
11	GMR	EPU	15 0 9.34				40	2.5	53.5	40	38	9.42	9.37	0.04	
11	BLT	EPU2	15 0 9.90				41	2.5	54.9	2	38	9.98	9.61	0.37	
		ISU	15 0 16.87									******	******	0.13	
11	JCN	EPU	15 0 10.46				41	2.6	58.7	175	38	10.54	10.23	0.31	
11	NPN	EPU	15 0 10.65				40	2.5	59.8	282	38	10.73	10.41	0.32	
11	SGV	EPU	15 0 13.37						77.5	271	38	13.45	13.29	0.16	
		ESU4	15 0 20.62									******	******	-2.56	
11	CTS	EPU	15 0 15.42				27	2.3	89.9	326	38	15.50	15.30	0.20	
11	QCS	EPU4	15 0 16.80				30	2.4	91.5	14	38	16.88	15.56	1.32	
		ESU	15 0 26.95									******	******	-0.20	
11	GVN	EPU	15 0 18.08						105.2	272	38	18.16	17.79	0.37	
		ESU	15 0 31.30									******	******	0.25	
11	PRN	EPU4	15 0 19.80				45	2.8	110.1	64	38	19.88	18.59	1.29	
11	MTI	EPU4	15 0 17.00				36	2.6	111.4	45	38	17.08	18.80	-1.52	
11	TPO	EPD4	15 0 19.68				41	2.7	112.5	261	38	19.76	18.98	0.78	

SEP M = 20 58 3.06 UTC RMS = 0.30 NO = 7 FREE DEPTH SOLUTION
11 LAT = 36.589 N ERX = 2.4 ERH = 2.7 AVFM = 1.8 Q = C
LONG = 116.138 W ERY = 1.3 GAP = 143 AVXM = QS = C LATHROP WELLS
DEPTH = 9.63 KM ERZ = 9.7 NM = QD = C

11	JCN	IPD	20 58 6.45				18	1.7	16.8	169	117	3.39	3.40	-0.01	
11	SDH	IPU4	20 58 7.94				17	1.7	19.0	289	114	4.88	3.71	1.17	
11	LSM	EPU	20 58 7.38				29	2.1	20.5	324	112	4.32	3.94	0.38	
11	LCP	IPD	20 58 7.71				25	2.0	29.5	355	106	4.65	5.33	-0.68	
11	SPRG	IPU	20 58 8.84				13	1.5	31.6	68	105	5.78	5.66	0.12	
11	CDH1	EPD	20 58 9.06				17	1.7	34.1	332	104	6.00	6.05	-0.05	
11	SSP	EPU3	20 58 8.92				20	1.9	38.0	349	102	5.86	6.66	-0.80	
11	NCP	EPD	20 58 11.85				23	2.0	51.2	181	99	8.79	8.77	0.02	

SEP M = 22 19 6.33 UTC RMS = 0.11 NO = 10 FREE DEPTH SOLUTION
11 LAT = 36.631 N ERX = 0.5 ERH = 0.6 AVFM = 2.1 Q = B
LONG = 116.340 W ERY = 0.4 GAP = 103 AVXM = QS = A LATHROP WELLS
DEPTH = 5.99 KM ERZ = 1.0 NM = QD = B

11	SDH	IPD	22 19 7.44				27	2.0	1.6	5	163	1.11	1.18	-0.08	
11	LSM	IPD	22 19 9.06				52	2.6	13.4	27	109	2.73	2.66	0.07	
11	CDH1	IPU	22 19 10.95				25	2.0	25.5	4	100	4.62	4.56	0.06	
11	CDH5	EPD	22 19 11.00				22	1.9	25.5	4	100	4.67	4.56	0.11	
11	AMR	EPD	22 19 11.38				27	2.1	28.6	205	99	5.05	5.05	-0.00	
11	LCP	EPD	22 19 11.13				39	2.4	29.2	32	99	4.80	5.15	-0.35	
11	BRO	EPU	22 19 11.50				22	1.9	29.4	300	99	5.17	5.18	-0.02	
11	JCN	IPU	22 19 11.62				26	2.1	30.0	135	99	5.29	5.28	0.00	
11	SSP	EPD4	22 19 11.64				39	2.4	34.4	18	97	5.31	5.99	-0.68	
11	FMT	EPU	22 19 13.00				25	2.1	39.3	271	96	6.67	6.78	-0.01	
11	BGB	EPD3	22 19 14.45				20	1.9	46.2	13	95	8.12	7.90	0.26	

SEP M = 2 21 33.64 UTC RMS = 0.09 NO = 15 FREE DEPTH SOLUTION
12 LAT = 36.741 N ERX = 0.2 ERH = 0.3 AVFM = 3.0 Q = C
LONG = 115.433 W ERY = 0.1 GAP = 170 AVXM = QS = C MAYFORD PEAK
DEPTH = 0.30 KM ERZ = 5.7 NM = QD = C

12	APK	EPU	2 21 42.15				40	2.5	48.5	195	38	8.51	8.52	-0.02	
12	EPR	IPD	2 21 42.81				78	3.1	52.3	25	38	9.17	9.14	0.03	
12	LCP	EPD	2 21 45.15				85	3.2	66.7	281	38	11.51	11.49	0.02	
12	JCN	EPU	2 21 45.35				56	2.9	68.6	241	38	11.71	11.80	-0.09	
12	GMR	EPD	2 21 45.90				69	3.1	72.3	335	38	12.26	12.40	-0.14	
12	GLR	EPU	2 21 45.95				57	2.9	72.7	314	38	12.31	12.47	-0.01	
12	SSP	IPU4	2 21 47.00				87	3.3	73.0	286	38	13.36	12.51	0.85	
12	LSM	EPU	2 21 46.50				90	3.3	74.9	270	38	12.86	12.83	0.03	
12	BGB	EPD	2 21 46.66				58	2.9	78.1	295	38	13.22	13.34	-0.07	
12	CDH1	EPU	2 21 47.30				45	2.7	80.0	280	38	13.66	13.65	0.01	
12	CDH1	EPU	2 21 47.32						80.0	280	38	13.68	13.65	0.03	
12	CDH5	EPU	2 21 47.30						80.0	280	38	13.66	13.65	0.01	
12	PRN	EPD	2 21 47.50						81.4	25	38	13.86	13.87	-0.02	
12	SDH	EPD	2 21 47.75				56	2.9	81.6	263	38	14.11	13.90	0.20	
12	NPN	EPD4	2 21 53.73				64	3.1	110.3	24	38	20.09	18.58	1.51	
12	OLM	EPD4	2 21 54.10				36	2.6	114.1	33	38	20.46	19.19	1.27	

SEP 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
.		ESD4	2 22 9.17									35.53	33.58	1.95	
. 12	KRNA	EPD	2 21 57.36				68	3.3	140.0	323	30	23.72	23.26	0.46	
.		ESD	2 22 15.20									41.56	40.70	0.86	
. 12	CTS	EPU4	2 21 59.30				46	3.0	152.0	311	30	25.66	24.82	0.84	
.		ESU4	2 22 18.95									45.31	43.43	1.88	
. 12	OSM	EPU2	2 21 59.47						154.9	236	30	25.83	25.18	0.64	
. 12	TPO	EPU4	2 22 0.30				43	3.0	176.4	272	30	26.66	27.98	-1.32	
.		ESD4	2 23 18.37									104.73	48.96	55.76	

. SEP H = 7 41 56.44 UTC RMS = 0.15 NO = 19 FREE DEPTH SOLUTION
. 12 LAT = 37.286 N ERX = 0.6 ERM = 0.9 AVFM = 2.8 Q = C
. LONG = 115.003 W ERY = 0.7 GAP = 193 AVXM = QS = B ALAMO
. DEPTH = 2.83 KM ERZ = 1.2 NM = QD = D

. 12	PRN	IPU	7 41 59.10				80	3.0	14.0	343	95	2.66	2.64	0.01	
. 12	NPN	IPU	7 42 3.55				66	2.9	41.1	8	92	7.11	7.04	0.07	
. 12	DLM	EPD	7 42 3.60				45	2.6	42.5	33	92	7.16	7.26	-0.11	
. 12	MTI	IPU	7 42 4.70				54	2.8	49.5	331	91	8.26	8.41	0.05	
. 12	TPU	EPD	7 42 7.57				50	2.8	67.3	302	90	11.13	11.29	-0.17	
. 12	GMR	EPU	7 42 7.45				51	2.8	68.3	274	90	11.01	11.46	-0.46	
. 12	GLR	EPU	7 42 11.35				40	2.7	90.6	264	90	14.91	15.09	-0.03	
. 12	QCS	EPD4	7 42 13.80				48	2.8	96.9	303	90	17.36	16.10	1.25	
. 12	BLT	EPD	7 42 14.00				40	2.7	102.1	281	90	17.56	16.96	0.60	
. 12	LCP	EPD	7 42 15.70				50	2.9	114.1	245	90	19.26	18.91	0.35	
. 12	SSP	EPD	7 42 15.30				52	3.0	115.3	250	90	18.86	19.10	-0.24	
. 12	EPN	EPD	7 42 16.00				71	3.2	117.4	266	90	19.56	19.44	0.12	
. 12	LSM	EPD	7 42 17.58				55	3.1	128.3	242	90	21.14	21.21	-0.07	
. 12	KRNA	EPD	7 42 18.45				45	2.9	132.3	293	53	22.01	21.82	0.19	
.		ISU	7 42 34.50									38.06	38.18	-0.13	
. 12	JON	EPD	7 42 18.73				36	2.7	135.8	226	53	22.29	22.28	0.01	
. 12	SDM	EPD	7 42 18.90				35	2.7	138.5	239	53	22.46	22.63	-0.17	
.		ESD	7 42 36.85									40.41	39.61	0.80	
. 12	BRO	IPU	7 42 21.40				34	2.7	155.7	248	53	24.96	24.86	0.10	
. 12	FMT	IPU	7 42 24.00				33	2.8	173.6	246	53	27.56	27.19	0.47	

. SEP H = 5 54 25.67 UTC RMS = 0.19 NO = 11 FREE DEPTH SOLUTION
. 13 LAT = 37.134 N ERX = 0.9 ERM = 1.0 AVFM = 2.3 Q = C
. LONG = 116.325 W ERY = 0.5 GAP = 162 AVXM = QS = B SILENT CANYON - PAHUTE MESA
. DEPTH = 9.43 KM ERZ = 2.8 NM = QD = C

. 13	EPN	IPU	5 54 28.06				60	2.7	8.9	1	134	2.39	2.32	0.08	
. 13	BGB	IPU	5 54 28.49				26	2.0	13.7	141	121	2.82	2.94	-0.07	
. 13	GLR	EPU	5 54 30.49				32	2.2	28.3	75	106	4.82	5.12	-0.15	
. 13	CPX	IPD	5 54 31.85				27	2.1	32.9	134	104	6.18	5.85	0.33	
. 13	LCP	EPU	5 54 31.54				57	2.8	34.1	156	103	5.87	6.04	-0.17	
. 13	BLT	EPD	5 54 32.78				21	1.9	40.1	25	101	7.11	6.99	0.12	
.		ISD	5 54 38.07									12.40	12.24	0.17	
. 13	LSM	EPU4	5 54 31.57				53	2.7	44.1	174	100	5.90	7.63	-1.73	
. 13	NMN	IPU4	5 54 31.80				30	2.2	44.2	262	100	6.13	7.65	-1.52	
. 13	GMR	EPU	5 54 34.50				26	2.1	54.0	66	98	8.83	9.22	-0.39	
. 13	CTS	EPU3	5 54 37.38				17	1.8	66.4	328	97	11.71	11.23	0.49	
.		ESU	5 54 45.26									19.59	19.65	-0.05	
. 13	JON	EPU	5 54 39.03				25	2.2	79.5	166	96	13.36	13.35	0.02	

. SEP H = 10 48 38.14 UTC RMS = 0.34 NO = 9 FREE DEPTH SOLUTION
. 13 LAT = 37.555 N ERX = 1.4 ERM = 1.8 AVFM = 2.3 Q = C
. LONG = 115.835 W ERY = 1.1 GAP = 95 AVXM = QS = C NORTHINGTON PEAK
. DEPTH = 0.12 KM ERZ = 15.1 NM = QD = C

. 13	TPU	EPU	10 48 41.06				35	2.3	17.3	71	38	2.92	3.50	-0.57	
. 13	QCS	EPU	10 48 42.77				19	1.8	24.7	343	38	4.63	4.69	-0.06	
. 13	GMR	IPD	10 48 42.89				24	2.0	25.2	167	38	4.75	4.77	-0.02	
. 13	BLT	EPD	10 48 43.65				42	2.5	28.5	249	38	5.51	5.31	0.20	
. 13	EPN	EPD	10 48 47.68				37	2.5	57.5	229	38	9.54	10.02	-0.48	
. 13	BGB	EPU	10 48 50.23				26	2.2	67.1	211	38	12.09	11.59	0.55	
.		ESD	10 49 0.35									22.21	20.20	2.02	
. 13	PRN	EPU4	10 48 44.15				42	2.6	71.3	103	38	6.01	12.28	-6.27	
. 13	EPR	EPU4	10 48 46.35				32	2.4	71.7	127	38	8.21	12.33	-4.12	
. 13	CPX	EPU4	10 48 54.75				32	2.4	72.2	196	38	16.61	12.43	4.19	
.		ISD4	10 49 7.33									29.19	21.75	7.45	
. 13	SRG	EPD4	10 48 53.55				37	2.5	76.8	62	38	15.41	13.16	2.25	
. 13	NPN	EPU	10 48 52.00				42	2.7	80.0	82	38	13.86	13.69	0.17	
. 13	DLM	EP	10 48 55.30				20	2.1	97.0	87	38	17.16	16.45	0.72	
. 13	LSM	EPU4	10 48 51.65				30	2.4	98.5	203	38	13.51	16.70	-3.18	
.		ISD4	10 49 1.91									23.77	29.22	-5.45	

SEP 1980	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 = 14 58 18.67 UTC			RMS = 0.21	NO = 11									FREE DEPTH SOLUTION		
13 LAT = 37.162 N			ERX = 0.7	ERH = 1.0				AVFM = 2.6		Q = C					
LONG = 115.440 W			ERY = 0.8	GAP = 128				AVXM =		QS = B		ALAMO			
DEPTH = 0.07 KM			ERZ = 1.9	NM =						QD = C					
13	EPR	IPU	14 58 22.95				50	2.6	22.5	88	38	4.28	4.35	-0.07	
13	GMR	EPU4	14 58 25.41				29	2.2	35.1	303	38	9.74	6.39	3.35	
13	PRN	IPU	14 58 26.65				70	3.0	44.0	52	38	7.98	7.85	0.13	
13	TPU	EPD	14 58 27.50				49	2.7	52.6	339	38	8.83	9.24	-0.41	
13	NPN	IPU	14 58 30.88				49	2.8	70.4	39	38	12.21	12.13	0.08	
13	EPN	EPD	14 58 32.16				38	2.6	78.7	274	38	13.49	13.48	0.01	
13	OLM	EPU4	14 58 30.80				36	2.5	79.3	52	38	12.13	13.58	-1.45	
13	QCS	EPU	14 58 32.00				29	2.3	79.4	328	38	13.33	13.59	-0.27	
		ESU	14 58 42.70									24.03	23.79	0.24	
13	CDMS	EPD4	14 58 34.33				24	2.2	85.0	247	38	15.66	14.51	1.15	
		ESU	14 58 43.85									25.18	25.38	-0.21	
13	SRG	EPD	14 58 33.73				55	2.9	86.5	22	38	15.06	14.75	0.31	
13	SDM	IPD	14 58 35.55				37	2.6	98.4	234	38	16.88	16.70	0.18	
13	JON	EPU2	14 58 36.22				33	2.5	99.6	216	38	17.55	16.88	0.66	
13	CTS	EPD4	14 58 40.90				29	2.5	125.6	295	38	22.23	21.11	1.12	
SEP H = 14 19 17.87 UTC			RMS = 0.09	NO = 7									FREE DEPTH SOLUTION		
14 LAT = 36.825 N			ERX = 1.1	ERH = 1.1				AVFM = 1.9		Q = C					
LONG = 115.954 W			ERY = 0.3	GAP = 133				AVXM =		QS = C		MERCURY			
DEPTH = 9.42 KM			ERZ = 6.7	NM =						QD = C					
14	LOP	EPU	14 19 21.60				31	2.2	19.4	280	113	3.73	3.76	-0.03	
14	LSM	EPU4	14 19 23.72				35	2.3	30.0	251	105	5.85	5.39	0.45	
14	CDM1	EPU	14 19 23.70						32.7	277	104	5.83	5.82	0.00	
		ESU2	14 19 28.00									10.13	10.19	-0.07	
14	BGB	EPU	14 19 24.09				12	1.4	34.0	314	103	6.22	6.02	0.24	
		ESU	14 19 28.30									10.43	10.45	-0.02	
14	JCN	EPU4	14 19 26.75				15	1.6	44.8	197	100	8.88	7.75	1.13	
14	GMR	EPU	14 19 27.78				15	1.7	58.7	16	98	9.91	9.98	-0.08	
14	APK	IPD	14 19 29.01				21	2.0	65.6	149	97	11.14	11.09	0.04	
SEP H = 4 48 40.51 UTC			RMS = 0.60	NO = 13									FREE DEPTH SOLUTION		
17 LAT = 38.046 N			ERX = 2.7	ERH = 6.3				AVFM = 2.4		Q = D					
LONG = 116.222 W			ERY = 5.7	GAP = 236				AVXM =		QS = D		WARM SPRINGS			
DEPTH = 0.34 KM			ERZ = 5.8	NM =						QD = D					
17	KRNA	IPD	4 48 46.89				33	2.3	35.7	203	38	6.38	6.43	-0.05	
17	QCS	IPU	4 48 47.51				22	2.0	40.9	139	38	7.00	7.28	-0.28	
17	CTS	IPD	4 48 50.62				24	2.1	63.2	225	38	10.11	10.91	-0.80	
17	BLT	EPU	4 48 51.20				27	2.2	65.3	173	38	10.69	11.25	-0.56	
17	TPU	EPD	4 48 52.20				30	2.3	70.3	134	38	11.69	12.06	-0.37	
17	BMT	EPU	4 48 56.21				44	2.7	89.0	198	38	15.70	15.10	0.20	
		ESU	4 49 8.13									27.62	27.12	0.50	
17	GLR	IPD	4 48 57.51				27	2.3	95.7	169	38	17.00	16.19	0.96	
17	SPG	EPU	4 48 58.78				40	2.7	103.0	100	38	18.27	17.37	0.90	
17	BGB	EPU	4 48 59.39				32	2.5	111.9	180	38	19.38	18.82	0.61	
		ESD	4 49 12.15									31.64	32.85	-1.21	
17	NPN	EPU	4 49 0.40				37	2.7	119.3	206	38	19.89	20.04	-0.15	
		ESU	4 49 16.71									36.20	35.07	1.13	
SEP H = 11 13 46.73 UTC			RMS = 0.09	NO = 8									FREE DEPTH SOLUTION		
18 LAT = 36.977 N			ERX = 1.9	ERH = 2.2				AVFM = 1.8		Q = D					
LONG = 116.579 W			ERY = 1.1	GAP = 233				AVXM =		QS = C		CHLORIDE CLIFF			
DEPTH = 6.68 KM			ERZ = 10.1	NM =						QD = D					
18	CDM1	IPD	11 13 51.35				15	1.6	26.7	119	101	4.62	4.77	-0.15	
18	CDMS	EPD	11 13 51.45						26.7	119	101	4.72	4.77	-0.05	
		ESD4	11 13 53.05									6.32	8.35	-2.03	
18	DGB	EPU	11 13 52.55				23	2.0	32.0	78	99	5.82	5.62	0.25	
18	BMT	IPU	11 13 53.10				8	1.1	34.2	7	99	6.37	5.98	-0.00	
		ISU4	11 13 55.85									9.12	11.16	-2.04	
18	EPN	EPD4	11 13 54.70				24	2.0	34.7	41	98	7.97	6.06	1.91	
18	LSM	EPU	11 13 53.50				22	1.9	38.1	134	98	6.77	6.60	0.17	
		ISU4	11 13 57.07									10.34	11.55	-1.20	
18	LOP	IPU	11 13 53.50				25	2.1	39.2	110	97	6.77	6.77	0.00	
18	SCH	EPD4	11 13 57.45				20	1.9	42.6	150	97	10.72	7.34	3.39	
18	CPX	EPD	11 13 54.55				20	1.9	46.7	97	96	7.82	7.98	-0.16	
18	MCY	EPD	11 13 57.60				23	2.1	65.3	122	94	11.07	11.00	0.08	

SEP 1980	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 = 18 0 43.94 UTC RMS = 0.06 NO = 7												FREE DEPTH SOLUTION			
19 LAT = 36.711 N ERX = 0.2 ERH = 0.3 AVFM = 2.7 Q = B															
LONG = 116.941 W ERY = 0.3 GAP = 155 AVXM = QS = A												CHLORIDE CLIFF			
DEPTH = 1.00 KM ERZ = 0.8 NM = QD = C															
19	FMT	IPU	18 0 46.70					64	2.8	16.5	119	38	2.76	3.19	-0.32
19	BRO	EPD	18 0 49.09					60	2.8	28.8	79	38	5.15	5.18	-0.03
19	PGE	IPD	18 0 51.26					59	2.8	41.8	196	38	7.32	7.29	0.04
19	TMO	EPD	18 0 51.42					58	2.8	42.9	284	38	7.48	7.48	0.00
19	SDH	EPU	18 0 53.25					38	2.5	54.4	98	38	9.31	9.34	-0.03
		ISU	18 1 0.42										16.48	16.34	0.14
19	NOP	EPU	18 0 59.90					41	2.7	95.9	132	38	15.96	16.09	-0.12
SEP H = 18 0 47.59 UTC RMS = 0.49 NO = 9												FIXED DEPTH SOLUTION			
19 LAT = 36.389 N ERX = 8.6 ERH = 14.0 AVFM = 2.9 Q = D												DEPTH CONTROL INADEQUATE			
LONG = 117.005 W ERY = 11.0 GAP = 230 AVXM = QS = D												PANAMINT BUTTE			
DEPTH = 5.00 KM ERZ = 188.6 NM = QD = D															
19	MCA	EPD	18 0 54.43					47	2.6	37.9	319	95	6.84	6.53	0.31	SAME AS ABOV
19	AMR	EPU	18 0 55.26					35	2.4	47.6	89	94	7.67	8.12	-0.45
19	SGV	IPU	18 0 57.95					80	3.2	65.7	358	93	10.36	11.05	-0.69
19	GVN	IPD4	18 0 58.27					82	3.2	74.3	336	93	10.68	12.45	-1.77
19	LSM	EPD	18 1 0.79					74	3.1	76.2	59	93	13.20	12.76	0.44
19	NPN	EPD	18 1 0.63					60	3.0	78.5	12	92	13.04	13.14	-0.09
19	JON	EPU	18 1 0.61					29	2.3	81.1	86	92	13.02	13.56	-0.53
19	LOP	EPD	18 1 3.47					47	2.8	91.0	55	92	15.88	15.16	0.72
19	SSP	EPD	18 1 3.67					46	2.8	92.1	50	92	16.08	15.34	0.75
19	BGB	IPU4	18 1 5.11					63	3.1	100.0	44	92	17.52	16.63	0.94
19	LCH	EPD4	18 1 2.87					42	2.8	109.9	329	92	15.28	18.24	-2.96
19	SPRG	EPD	18 1 6.45					65	3.1	112.4	72	92	18.86	18.64	0.22
19	GMR	EPD4	18 1 13.72					48	3.0	151.9	46	53	26.13	24.16	1.97
SEP H = 17 22 51.58 UTC RMS = 0.14 NO = 14												FREE DEPTH SOLUTION			
22 LAT = 37.245 N ERX = 0.4 ERH = 0.6 AVFM = 3.0 Q = A															
LONG = 116.474 W ERY = 0.4 GAP = 77 AVXM = QS = A												SILENT CANYON - NORTH			
DEPTH = 8.75 KM ERZ = 1.4 NM = QD = A															
22	BMT	EPD	17 22 54.14					139	3.4	6.8	309	139	2.56	2.00	0.16
22	EPN	IPD	17 22 54.30					126	3.4	13.8	104	119	2.72	2.89	-0.17
22	BGB	EPD	17 22 56.95					90	3.1	31.7	136	103	5.37	5.64	-0.22
22	NPN	EPD	17 22 57.72					93	3.2	35.6	239	102	6.14	6.25	-0.11
22	BLT	EPD	17 22 58.38					82	3.1	38.4	51	101	6.80	6.71	0.09
22	GLR	EPU4	17 22 57.70					63	2.9	40.8	97	100	6.12	7.09	-0.82
22	SSP	EPU	17 22 58.91					91	3.2	42.1	147	100	7.33	7.30	0.03
22	CDH1	EPD	17 22 59.40					47	2.6	44.9	162	99	7.82	7.74	0.08
22	CDHS	EPD	17 22 59.40					40	2.5	44.9	162	99	7.82	7.74	0.08
22	CTS	EPU	17 23 0.06					60	2.9	49.2	333	98	8.48	8.44	0.05
22	KANA	EPU	17 23 1.06					89	3.2	56.7	8	97	9.48	9.64	-0.16
22	SGV	EPD	17 23 1.44					74	3.1	57.6	239	97	9.86	9.79	0.07
22	GMN	EPU	17 23 2.90					46	2.7	69.9	275	96	11.32	11.78	-0.46
22	QCS	EPD	17 23 4.54					36	2.5	76.2	40	95	12.96	12.79	0.17
22	MCY	EPD4	17 23 6.12					54	2.9	79.1	145	95	14.54	13.27	1.27
22	GVN	EPU	17 23 5.40					67	3.1	81.8	251	95	13.82	13.71	0.11
22	PPN	EPU4	17 23 13.56					57	3.1	127.5	82	53	21.98	20.63	1.35
SEP H = 19 6 49.32 UTC RMS = 0.14 NO = 10												FREE DEPTH SOLUTION			
22 LAT = 36.895 N ERX = 0.6 ERH = 0.8 AVFM = 2.3 Q = C															
LONG = 116.813 W ERY = 0.5 GAP = 110 AVXM = QS = B												CHLORIDE CLIFF			
DEPTH = 0.51 KM ERZ = 2.2 NM = QD = C															
22	NPN	IPD	19 6 53.15					38	2.4	20.6	359	38	3.83	3.95	-0.12
22	SGV	EPU	19 6 53.44					39	2.4	21.7	296	38	4.12	4.13	-0.01
22	BRO	EPU	19 6 53.38					28	2.1	22.3	131	38	4.06	4.22	-0.16
22	FMT	EPU	19 6 54.40					27	2.1	28.5	174	38	5.08	5.23	-0.05
22	CDHS	EPU	19 6 57.15					26	2.1	44.4	95	38	7.83	7.81	0.02
22	CDH1	IPU	19 6 57.26					27	2.1	44.4	95	38	7.94	7.81	0.13
		ESU	19 7 3.10										13.78	13.67	0.11
22	GVN	EPU	19 6 58.10					30	2.3	48.6	284	38	8.78	8.50	0.28
22	LSM	EPU4	19 6 53.45					43	2.6	51.3	110	38	4.13	8.95	-4.82
22	SSP	EPU4	19 6 57.55					42	2.6	53.1	86	38	8.23	9.24	-1.01
22	BGB	EPU	19 6 59.13					25	2.1	54.5	73	38	9.81	9.46	0.40
22	EPN	EPU	19 6 59.30					42	2.6	56.1	51	38	9.98	9.72	0.26
22	LCP	EPU4	19 6 54.55					38	2.5	57.8	95	38	5.23	9.99	-4.76
22	GMR	EPU4	19 7 8.00					22	2.2	104.7	62	38	18.68	17.62	1.06

SEP 1980	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	QCS	EPD4	19 7 12.22	28					125.3	39	38	22.90	20.98	1.92	
		ESU4	19 7 29.20									39.66	36.71	3.17	

SEP H = 21 28 40.70 UTC RMS = 0.09 NO = 6 FREE DEPTH SOLUTION
22 LAT = 37.249 N ERX = 0.7 ERH = 1.0 AVFM = 2.6 Q = C
LONG = 116.527 W ERY = 0.7 GAP = 140 AVXM = QS = B THIRSTY CANYON
DEPTH = 8.65 KM ERZ = 1.5 NM = QD = C

22	BMT	EPU	21 28 42.80			64	2.8	3.9	351	154	2.10	1.72	-0.02	
22	EPN	EPD4	21 28 43.00			77	3.0	18.4	102	112	2.30	3.57	-1.27	
22	NMN	EPD	21 28 46.35			63	2.8	31.9	234	103	5.65	5.66	-0.02	
22	BGB	EPD	21 28 46.94			59	2.8	35.4	131	102	6.24	6.23	0.06	
22	CTS	EPU	21 28 48.75			21	1.9	46.8	338	99	8.05	8.05	-0.00	
22	CDH1	EPU	21 28 48.55			37	2.4	47.0	157	99	7.85	8.08	-0.23	
22	SGV	EPD	21 28 50.00			37	2.5	53.9	237	98	9.30	9.19	0.11	
22	LCP	EPD4	21 28 51.11			29	2.2	54.2	144	97	10.41	9.24	1.17	

SEP H = 12 28 28.49 UTC RMS = 0.86 NO = 9 FREE DEPTH SOLUTION
23 LAT = 36.907 N ERX = 11.0 ERH = 14.0 AVFM = 1.8 Q = D
LONG = 115.816 W ERY = 8.7 GAP = 230 AVXM = QS = D MERCURY
DEPTH = 12.22 KM ERZ = 27.0 NM = QD = D

23	CPX	IPU	12 28 33.07			15	1.6	21.8	276	117	4.58	4.30	0.28	
23	SPRG	EPU	12 28 34.00			23	1.9	23.6	179	115	5.51	4.58	0.94	
23	MCY	IPD	12 28 33.95			22	1.9	30.2	206	110	5.46	5.56	-0.10	
23	LCP	EPU	12 28 34.00			14	1.5	31.9	259	109	5.51	5.83	-0.31	
23	BGB	EPD	12 28 35.90			16	1.7	39.4	292	105	7.41	7.00	0.47	
23	LSM	IPU	12 28 36.06			20	1.9	44.8	245	104	7.57	7.84	-0.26	
23	CDH5	EPD	12 28 36.15					45.0	263	104	7.66	7.88	-0.21	
23	CDH1	EPU	12 28 36.23			13	1.5	45.0	263	104	7.74	7.88	-0.13	
23	APK	EPU	12 28 34.00			21	2.0	68.7	162	99	5.51	11.65	-6.14	

SEP H = 6 17 23.99 UTC RMS = 0.35 NO = 8 FREE DEPTH SOLUTION
24 LAT = 36.593 N ERX = 3.5 ERH = 5.3 AVFM = 2.1 Q = D
LONG = 115.663 W ERY = 3.9 GAP = 270 AVXM = QS = D MERCURY
DEPTH = 9.23 KM ERZ = 6.1 NM = QD = D

24	SPRG	EPD2	6 17 28.10			22	1.9	17.2	310	115	4.11	3.43	0.69	
24	MCY	EPU4	6 17 34.97			30	2.2	27.9	286	106	10.98	5.05	5.93	
24	CPX	EPU	6 17 32.50			17	1.8	51.3	317	99	8.51	8.79	-0.27	
24	LSM	EPU	6 17 33.40			27	2.2	56.8	287	98	9.41	9.67	-0.25	
24	SDH	EPD4	6 17 30.03			35	2.4	60.7	275	97	6.04	10.30	-4.26	
24	CDH1	EPD	6 17 35.55			21	2.0	65.6	297	97	11.56	11.09	0.48	
24	BGB	EP	6 17 35.40			23	2.1	70.5	314	96	11.41	11.89	-0.42	
24	GMR	EPD	6 17 37.75			22	2.1	82.7	353	95	13.76	13.86	-0.10	
24	BMT	EPU4	6 17 43.42			20	2.1	109.1	315	94	19.43	18.13	0.91	
		ESD	6 17 56.55								32.56	32.43	0.14	
24	NMN	EPD4	6 17 43.98			24	2.3	116.5	298	53	19.99	19.14	0.85	
24	MTI	EPU	6 17 44.26					125.1	16	53	20.27	20.27	0.21	

SEP H = 16 5 0.85 UTC RMS = 0.27 NO = 12 FREE DEPTH SOLUTION
25 LAT = 37.057 N ERX = 1.0 ERH = 1.3 AVFM = 3.0 Q = C
LONG = 116.060 W ERY = 0.8 GAP = 98 AVXM = QS = C SILENT CANYON - YUCCA FLAT
DEPTH = 1.10 KM ERZ = 325.1 NM = QD = C

25	CPX	EPD	16 5 3.39			26	2.0	14.3	179	38	2.54	2.80	-0.25	
25	BGB	EPD	16 5 3.57					15.1	262	38	2.72	2.92	-0.15	
25	GLR	EPD	16 5 3.37					16.2	14	38	2.52	3.11	-0.44	
25	SSP	EPU	16 5 4.50			216	3.9	20.3	224	38	3.65	3.78	-0.13	COLLAP
25	LCP	EPU	16 5 5.37			305	4.2	24.5	203	38	4.52	4.46	0.06	
25	EPN	EPU	16 5 6.25			212	3.9	29.2	307	38	5.40	5.22	0.18	
25	CDH1	EPU	16 5 6.35			45	2.5	31.7	226	38	5.50	5.62	-0.12	
25	GMR	EPD	16 5 8.00			65	2.9	40.0	40	38	7.15	6.98	0.17	
25	BLT	EPU2	16 5 9.25			240	4.0	45.3	352	38	8.40	7.84	0.56	
25	JCN	EPU2	16 5 15.00			22	2.1	69.6	183	38	12.15	11.64	0.52	
25	EPR	EPD3	16 5 15.00			26	2.2	78.7	81	38	14.15	13.27	0.89	
25	PPN	EPU	16 5 17.40			60	3.0	97.7	67	38	16.55	16.37	0.18	
25	MZP	EPU4	16 5 25.44			11	1.7	137.2	301	30	24.59	22.70	2.08	

SEP H = 18 59 49.48 UTC RMS = 0.07 NO = 5 FREE DEPTH SOLUTION
26 LAT = 36.096 N ERX = 0.6 ERH = 1.3 AVFM = 1.2 Q = D
LONG = 116.445 W ERY = 1.2 GAP = 174 AVXM = QS = C LATHROP WELLS

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SEP   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
1980               (UTC)       (MU) (SEC)                   (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

.   DEPTH =   0.66 KM      ERZ = 154.4  NM =                        QD = D
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. 26    SDM  IPU   18 59 51.86                          7  0.9   11.1  121   38    2.38   2.37   0.01
. 26    LSM  IPU   18 59 52.64                         14  1.5   14.2   73   38    3.16   3.20  -0.04
. 26    BRO  EPU   18 59 52.86                         13  1.4   17.7  295   38    3.38   3.45  -0.07
. 26    CDH1 EPU4  18 59 55.82                          6  0.8   21.5   32   38    6.34   4.06   2.28

. 26    LOP  EPU   18 59 54.94                         15  1.6   30.3   55   38    5.46   5.50  -0.04
. 26    SGV  EPU   18 60  0.13                          6  0.9   61.2  301   38   10.65  10.52   0.13
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. SEP H =  9 18 46.38 UTC  RMS =  7.56  NO =  5                          FIXED DEPTH SOLUTION
.  27 LAT =  36.663 N      ERX =   6.5  ERH =  16.4   AVFM =   2.2  Q = D   DEPTH CONTROL INADEQUATE
.    LONG = 115.964 W      ERY =  15.0  GAP = 182     AVXM =        QS = D   MERCURY
.   DEPTH =   5.00 KM      ERZ =   8.7  NM =                       QD = D
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. 27    MCY  EPU    9 18 42.94                         38  2.3    0.2  141  177  ******   0.99  -4.42
.            ISU    9 19  0.46                                                  14.08   1.72  12.36
. 27    LOP  EPU    9 18 44.73                         29  2.2   27.9  319   97  ******   4.92  -6.57
.            ESU4   9 19  2.27                                                  15.89   8.62   7.28
. 27    LSM  EPD    9 18 45.00                         33  2.3   28.8  287   97  ******   5.06  -6.44
.            ESU    9 19  1.35                                                  14.97   8.86   6.11
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. SEP H = 15  6 14.46 UTC  RMS =  0.22  NO =  4                          FREE DEPTH SOLUTION
.  28 LAT =  36.893 N      ERX =         ERH =        AVFM =   1.5  Q = C
.    LONG = 115.948 W      ERY =         GAP = 251    AVXM =        QS = B   MERCURY
.   DEPTH =   0.31 KM      ERZ =         NM =                    QD = D
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. 28    CPX  EPU   15  6 16.80                         11  1.3   10.6  292   38    2.34   2.37  -0.03
. 28    LCP  EPD   15  6 18.15                         14  1.5   20.1  258   38    3.69   3.90  -0.21
. 28    MCY  EPD   15  6 19.23                         15  1.6   25.7  183   38    4.77   4.82  -0.05
. 28    LSM  EPD   15  6 21.14                         14  1.5   33.6  239   38    6.68   6.10   0.58
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. SEP H = 21 25 53.93 UTC  RMS =  0.27  NO =  5                          FREE DEPTH SOLUTION
.  29 LAT =  36.853 N      ERX =   4.0  ERH =   4.9   AVFM =   1.7  Q = D
.    LONG = 116.008 W      ERY =   2.8  GAP = 197     AVXM =        QS = C   LATHROP WELLS
.   DEPTH =   0.06 KM      ERZ = 595.9  NM =                       QD = D
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. 29    CPX  EPD   21 25 56.08                         11  1.2    9.5  332   38    2.15   2.23  -0.09
. 29    LCP  EPU   21 25 56.46                         28  2.1   14.2  270   30    2.53   3.00  -0.47
. 29    SSP  EPD   21 25 58.40                         26  2.0   20.4  293   38    4.47   4.00   0.47
. 29    MCY  EPD   21 25 58.13                         22  1.9   21.7  169   38    4.20   4.21  -0.02
. 29    SPRG IPU4  21 26  1.55                         10  1.2   25.1  135   38    7.62   4.76   2.85
. 29    LSM  EPD   21 25 59.06                         28  2.1   26.7  242   38    5.13   5.04   0.09
. 29    CDH1 FPU4  21 26  1.44                         13  1.5   27.6  272   38    7.51   5.18   2.33
. 29    BGB  EPU4  21 26  1.20                         12  1.4   28.3  316   38    7.27   5.30   2.02
. 29    GLR  EPU4  21 26  4.20                         13  1.5   38.4  359   38   10.27   6.93   3.48
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. OCT H =  1 48 14.38 UTC  RMS =  0.09  NO = 20                          FREE DEPTH SOLUTION
.  02 LAT =  37.271 N      ERX =   0.4  ERH =   0.5   AVFM =   3.3  Q = D
.    LONG = 117.058 W      ERY =   0.2  GAP = 199     AVXM =        QS = C   MT. JACKSON
.   DEPTH =   0.27 KM      ERZ =   6.0  NM =                       QD = D
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. 02    KPMA IPD    1 48 28.07                         62  3.0   80.1   48   38   13.69  13.67   0.02
. 02    CDH5 EPD    1 48 28.07                         49  2.8   80.1  125   38   13.69  13.67   0.02
. 02    SSP  IPU    1 48 28.80                         91  3.3   84.0  117   38   14.42  14.30   0.12
. 02    BLT  EPD4   1 48 28.94                         68  3.1   84.5   76   38   14.56  14.38   0.18
. 02    TNP  IPU    1 48 29.80                        100  3.4   91.1  351   38   15.42  15.46  -0.04
. 02    LSM  IPU    1 48 29.85                         90  3.4   91.6  130   38   15.47  15.54  -0.07
. 02    LCP  IPU    1 48 30.00                         90  3.4   91.7  120   38   15.62  15.56   0.06
. 02    GLR  EPU    1 48 29.75                         70  3.1   92.7   95   38   15.37  15.73  -0.21
. 02    SDM  IPU    1 48 30.45                         80  3.3   94.5  137   38   16.07  16.02   0.05
. 02    CPX  EPU    1 48 30.56                         59  3.0   96.7  113   38   16.18  16.37  -0.19
. 02    AMR  EPU    1 48 33.00                         67  3.2  110.1  152   38   18.62  18.55   0.07
. 02    RVE  EPD    1 48 33.35                         57  3.0  113.0   43   38   18.97  19.01  -0.04
. 02    GMR  EPU    1 48 33.50                         67  3.2  114.3   87   38   19.12  19.24  -0.12
. 02    OCS  EPD    1 48 33.87                         56  3.0  115.1   61   38   19.49  19.36   0.13
. 02    MCY  EPU    1 48 34.20                         86  3.4  119.7  125   38   19.82  19.95  -0.13
. 02    SPRG EPU    1 48 35.84                         84  3.4  128.3  120   38   21.46  21.51  -0.05
. 02    TPU  EPU    1 48 36.20                         68  3.3  130.2   73   38   21.82  21.81   0.01
. 02    NCP  FPU    1 48 39.25                         70  3.3  150.5  147   30   24.87  24.62   0.25
. 02    EPR  EPU4   1 48 41.40                         92  3.6  166.6   94   30   27.02  26.71   0.31
. 02    PRH  EPU    1 48 42.65                         87  3.6  178.7   65   30   28.27  28.29  -0.02
. 02    NPN  EPD    1 48 44.75                         75  3.6  192.3   77   30   30.37  30.05   0.32
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OCT 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
02	DLM	EPD	1 48 46.65				50	3.3	208.7	80	30	32.27	32.19	0.08	

OCT H = 6 13 40.91 UTC RMS = 0.17 NO = 13 — FREE DEPTH SOLUTION
02 LAT = 36.989 N ERX = 0.7 ERH = 0.8 AVFM = 2.0 Q = B
LONG = 115.987 W ERY = 0.4 GAP = 93 AVXM = QS = B — MERCURY
DEPTH = 5.40 KM ERZ = 4.6 NM = QD = B

02	CPX	IPU	6 13 42.94				16	1.6	9.2	224	115	2.03	1.99	0.04
02	SSP	IPD	6 13 44.94				36	2.3	21.8	251	100	4.03	3.95	0.07
02	LOP	EPD	6 13 44.90				37	2.3	22.0	227	100	3.99	3.98	0.01
02	BGB	EPU	6 13 44.85				21	1.9	22.1	284	100	3.94	4.00	-0.02
02	GLR	EPU	6 13 44.77				16	1.6	23.5	353	99	3.86	4.23	-0.22
02	SPRG	EPU	6 13 47.11				15	1.6	36.3	154	96	6.20	6.29	-0.10
02	MCY	EPU	6 13 47.17				41	2.5	36.4	177	96	6.26	6.30	-0.04
02	LSM	IPD	6 13 47.46				35	2.3	37.6	223	96	6.55	6.50	0.05
02	EPN	EPU	6 13 47.80				35	2.4	39.0	310	96	6.89	6.73	0.16
02	GMR	EPD	6 13 48.15				14	1.6	42.8	27	95	7.24	7.34	-0.10
02	SDM	EPD	6 13 49.12				21	1.9	49.4	219	94	8.21	8.40	-0.19
02	BMT	EPU4	6 13 52.35				23	2.1	58.6	304	94	11.44	9.90	1.14
02	JCN	EPU	6 13 51.50				20	1.9	61.8	190	94	10.59	10.42	0.17
02	PRN	EPD	6 13 57.30				20	2.1	95.2	61	92	16.39	15.86	0.53

OCT H = 20 15 51.33 UTC RMS = 0.36 NO = 16 — FIXED DEPTH SOLUTION
02 LAT = 36.527 N ERX = 6.2 ERH = 6.8 AVFM = 3.1 Q = D — DEPTH CONTROL INADEQUATE
LONG = 114.779 W ERY = 2.8 GAP = 283 AVXM = QS = D — MOAPA
DEPTH = 5.00 KM ERZ = 2.6 NM = QD = D

02	SPRG	EPD	20 16 7.10				44	2.7	94.0	281	92	15.77	15.65	0.11
02	MCY	EPD	20 16 9.10				77	3.3	106.9	278	92	17.77	17.75	0.02
02	JCN	EPD	20 16 10.60				53	3.0	119.0	265	92	19.27	19.72	-0.45
02	GMR	EPD	20 16 11.65				40	2.8	125.8	315	53	20.32	20.77	-0.46
02	LCP	EPD	20 16 12.73				70	3.3	129.3	286	53	21.40	21.22	0.18
02	NCP	EPD	20 16 11.95				72	3.3	131.0	250	53	20.62	21.45	-0.83
02	GLR	EPU	20 16 13.20				37	2.7	133.2	304	53	21.87	21.73	0.28
02	LSM	EPU	20 16 13.23				85	3.5	135.6	280	53	21.90	22.04	-0.14
02	SSP	EPU	20 16 13.76				65	3.2	136.0	249	53	22.43	22.09	0.34
02	SDM	EPD	20 16 14.20				56	3.1	140.1	275	53	22.87	22.62	0.24
02	CDM1	EPD	20 16 14.86				41	2.9	142.3	285	53	23.53	22.92	0.61
02	TPU	EPD	20 16 14.02				37	2.8	142.5	327	53	22.69	22.93	-0.25
02	AMR	EPU4	20 16 16.26						152.5	265	53	24.93	24.24	0.69
02	EPN	EPU	20 16 16.55				78	3.5	157.4	299	53	25.22	24.87	0.35
02	BMT	EPU4	20 16 13.24				50	3.1	177.5	298	53	21.91	27.48	-5.97
02	KRNA	EPU	20 16 21.02						196.7	314	53	29.69	29.97	-0.29
02	OSM	EPU4	20 16 23.21						197.9	252	53	31.88	30.13	1.74
02	SGV	EPU	20 16 23.35				49	3.2	207.3	284	53	32.02	31.35	0.66
02	CTS	EPU	20 16 23.10						212.6	306	53	31.77	32.04	-0.27

OCT H = 20 16 1.15 UTC RMS = 0.97 NO = 8 — FREE DEPTH SOLUTION
02 LAT = 37.170 N ERX = 8.3 ERH = 9.6 AVFM = 2.7 Q = D
LONG = 114.992 W ERY = 4.9 GAP = 166 AVXM = QS = D — DELAMAR MOUNTAINS
DEPTH = 9.71 KM ERZ = 25.7 NM = QD = C

02	EPR	EPD	20 16 4.51				56	2.7	17.3	269	116	3.36	3.47	-0.11
02	PPN	EPD	20 16 7.10						26.8	349	107	5.95	4.90	1.05
02	DLM	EPD	20 16 8.19						53.3	25	99	7.04	9.11	-2.07
02	NPN	EPD	20 16 10.25				51	2.7	53.7	5	99	9.10	9.19	-0.09
02	MTI	EPD	20 16 12.32				40	2.5	61.5	336	98	11.17	10.43	0.94
02	SHRG	IPD	20 16 14.63				34	2.5	75.3	191	96	13.48	12.67	0.86
02	SRG	EPU	20 16 14.20				64	3.0	79.3	355	96	13.05	13.31	-0.26
02	BLT	EPD	20 16 17.72						106.4	288	94	16.57	17.70	-1.13

OCT H = 5 25 3.67 UTC RMS = 0.26 NO = 18 — FREE DEPTH SOLUTION
03 LAT = 37.222 N ERX = 0.9 ERH = 0.9 AVFM = 2.6 Q = B
LONG = 116.338 W ERY = 0.5 GAP = 90 AVXM = QS = B — SILENT CANYON - NORTH
DEPTH = 1.11 KM ERZ = 0.8 NM = QD = B

03	EPN	IPD	5 25 4.03				115	3.3	1.5	125	126	0.36	0.49	-0.13
03	BMT	EPD	5 25 6.20				48	2.6	18.7	291	38	4.53	3.51	0.62
03	BGB	EPU	5 25 7.65				47	2.6	22.6	154	38	3.98	4.15	-0.12
03	BLT	EPU	5 25 9.50				55	2.7	32.1	34	38	5.83	5.69	0.14
03	SSP	EPD	5 25 9.90				83	3.1	34.6	142	38	6.23	6.10	0.13
03	LCP	EPU	5 25 11.30				70	3.0	43.5	160	38	7.63	7.55	0.08
03	LSM	EPD	5 25 13.25				68	3.0	53.9	174	38	9.58	9.24	0.35
03	CTS	EPD	5 25 13.35				45	2.6	57.7	323	38	9.68	9.86	-0.18

OCT 1980	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	KRNA	EPD	5 25 13.38				60	2.9	58.7	356	38	9.71	10.02	-0.31	
. 03	SDM	EPU	5 25 14.24				38	2.5	64.0	180	38	10.57	10.87	-0.30	
. 03	SGV	EPU	5 25 14.90				37	2.5	67.3	247	38	11.23	11.41	-0.18	
. 03	DCS	EPU	5 25 15.80				41	2.6	71.1	52	38	12.13	12.04	0.10	
. 03	FMT	EPU	5 25 16.25				32	2.4	75.6	211	38	12.58	12.77	-0.09	
. 03	GVN	EPU	5 25 19.00				30	2.4	92.6	255	38	15.33	15.53	-0.20	
. 03	MCA	EPD	5 25 21.40				34	2.6	105.5	233	38	17.73	17.62	0.11	
. 03	MGM	EPU	5 25 20.89				31	2.5	105.6	283	38	17.22	17.64	-0.42	
. 03	MZP	EPU8	5 25 22.84				23	2.2	106.6	300	38	19.17	17.81	1.55	
. 03	PRN	EPU4	5 25 24.70				35	2.6	116.0	80	38	21.03	19.34	1.70	
. 03	PGE	EPU	5 25 23.12				29	2.5	116.7	214	38	19.45	19.44	0.01	
. 03	SVP	EPU	5 25 28.00				7	1.3	140.5	293	30	24.33	23.13	1.05	

. OCT H = 11 50 55.40 UTC RMS = 0.06 NO = 5 FREE DEPTH SOLUTION
. 03 LAT = 37.335 N ERX = 2.3 ERH = 3.1 AVFM = 1.4 Q = D
. LONG = 115.916 W ERY = 2.0 GAP = 178 AVXM = QS = C GROOM LAKE
. DEPTH = 5.27 KM ERZ = 10.4 NM = QD = D

. 03	GMR	IPU	11 50 57.91				12	1.3	12.8	91	107	2.51	2.53	-0.01	
. 03	GLR	EPD	11 50 58.55				10	1.2	17.6	211	102	3.15	3.28	0.02	
. 03	TPU	EPU	11 51 2.00				13	1.5	38.1	38	96	6.60	6.57	0.03	
. 03	BGB	EPU	11 51 2.65				12	1.4	43.1	220	95	7.25	7.39	-0.09	
. 03	CDM1	EPD	11 51 6.26				15	1.7	63.7	214	93	10.86	10.73	0.14	

. OCT H = 17 52 6.10 UTC RMS = 0.18 NO = 4 FREE DEPTH SOLUTION
. 03 LAT = 37.309 N ERX = ERH = AVFM = 2.1 Q = C
. LONG = 114.673 W ERY = GAP = 282 AVXM = QS = B DELAMAR MOUNTAINS
. DEPTH = 1.95 KM ERZ = NM = QD = D

. 03	DLM	EPD	17 52 11.87				19	1.8	33.4	350	90	5.77	5.79	-0.02	
. 03	PRN	IPU	17 52 11.85				31	2.2	35.1	288	90	5.75	6.05	-0.31	
. 03	MTI	EPD	17 52 17.38				24	2.1	66.9	308	90	11.28	11.23	0.25	
. 03	GMR	EPU	17 52 22.52				22	2.2	97.4	272	90	16.42	16.19	0.23	

. OCT H = 17 52 41.63 UTC RMS = 0.83 NO = 3 FIXED DEPTH SOLUTION
. 03 LAT = 36.782 N ERX = ERH = AVFM = 1.3 Q = D DEPTH CONTROL INADEQUATE
. LONG = 115.817 W ERY = GAP = 290 AVXM = QS = D MERCURY
. DEPTH = 5.00 KM ERZ = NM = QD = D

. 03	MCY	EPU	17 52 43.96				20	1.8	18.6	224	101	2.33	3.43	-1.10	
. 03	LCP	EPU	17 52 47.27				10	1.2	32.3	284	96	5.64	5.64	0.00	
. 03	JON	EPD	17 52 50.75				6	0.8	45.8	214	94	9.12	7.82	1.30	

. OCT H = 2 23 47.91 UTC RMS = 0.18 NO = 12 FREE DEPTH SOLUTION
. 04 LAT = 35.684 N ERX = 1.3 ERH = 2.2 AVFM = 2.7 Q = C
. LONG = 117.521 W ERY = 1.8 GAP = 294 AVXM = QS = B LITTLE LAKE
. DEPTH = 0.89 KM ERZ = 1.2 NM = QD = D

. 04	GSM	EPU	2 23 59.30				36	2.5	66.8	62	38	11.39	11.38	0.01	
. 04	PGE	EPD	2 24 2.06				28	2.3	84.5	29	38	14.15	14.25	-0.10	
. 04	MCA	EPD3	2 24 5.90				26	2.3	109.2	11	38	17.99	18.27	-0.28	
. 04	AMR	EPU2	2 24 7.94				45	2.9	123.3	50	38	20.03	20.56	-0.53	
. 04	NCP	EPU4	2 24 9.15				38	2.8	133.0	68	38	21.24	22.15	-0.91	
. 04	BRO	EPU3	2 24 11.41				33	2.7	144.3	34	30	23.50	23.68	-0.18	
. 04	GVN	EPU	2 24 12.11				38	2.8	147.1	6	30	24.20	24.04	0.16	
. 04	SGV	EPU3	2 24 12.25						150.5	17	30	24.34	24.48	-0.14	
.		ESU	2 24 31.10									43.19	42.85	0.34	
. 04	JON	EPD	2 24 12.84				39	2.8	152.8	57	30	24.93	24.78	0.15	
. 04	CDM1	EPU4	2 24 16.88				20	2.3	169.5	40	30	28.97	26.95	2.02	
.		ESU4	2 24 36.75									48.84	47.17	1.67	
. 04	LCM	EPU3	2 24 15.20				28	2.6	172.4	356	30	27.29	27.33	-0.04	
. 04	MCY	EPU4	2 24 15.30				49	3.1	177.3	52	30	27.39	27.97	-0.58	
. 04	LCP	EPD	2 24 15.97				44	3.0	177.9	43	30	28.06	28.04	0.02	
. 04	SSP	EPD	2 24 16.22				44	3.0	180.7	40	30	28.31	28.41	-0.10	
. 04	GMN	EPU4	2 24 18.25				9	1.7	180.9	7	30	30.34	28.43	1.91	
. 04	APK	EPU4	2 24 19.38				30	2.7	189.2	68	30	31.47	29.51	1.96	
. 04	SPRG	EPU4	2 24 20.00				40	3.0	190.5	54	30	32.09	29.67	2.42	
.		ESD4	2 24 42.45									54.54	51.93	2.61	
. 04	MGM	EPD4	2 24 20.63				31	2.8	195.0	1	30	32.72	30.27	2.45	
. 04	EPN	EPU4	2 24 22.08				48	3.2	200.9	32	30	34.17	31.03	3.14	
. 04	MZP	EPD4	2 24 25.66				11	2.0	224.2	3	30	37.75	34.05	3.89	
. 04	KRNA	EPD4	2 24 29.17				36	3.1	250.9	24	30	41.26	37.53	3.73	
. 04	TMP	EPD4	2 24 32.00				13	2.3	267.5	6	30	44.09	39.68	4.41	

OCT 1980	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 = 19 40 31.20 UTC			RMS = 0.08		NO = 14								FREE DEPTH SOLUTION		
06 LAT = 37.277 N			ERX = 0.2		ERH = 0.3			AVFM = 2.1		Q = B					
LONG = 117.055 W			ERY = 0.2		GAP = 88			AVXM =		QS = A			MT. JACKSON		
DEPTH = 6.75 KM			ERZ = 1.6		NM =					QD = C					
06	GPN	IPU1	19 40 34.54				14	1.5	18.3	278	106	3.34	3.45	-0.12	
06	SGV	EPU	19 40 37.04				29	2.2	32.8	177	99	5.84	5.76	0.08	
06	MCM	IPU	19 40 38.55				12	1.4	43.2	295	97	7.35	7.42	-0.07	
06	BMT	EPD4	19 40 37.56				30	2.2	46.2	89	96	6.36	7.91	-1.96	
06	CTS	IPD	19 40 39.66				13	1.5	49.7	36	96	8.46	8.48	-0.03	
06	LCH	EPU	19 40 40.30				15	1.7	52.7	265	96	9.10	8.97	0.13	
06	MZP	EPU	19 40 40.39				9	1.2	55.3	328	95	9.19	9.38	-0.00	
06	BRO	EPU	19 40 42.63				23	2.1	68.7	146	94	11.43	11.55	-0.12	
06	FMT	EPU	19 40 43.57				18	1.9	74.8	161	94	12.37	12.55	-0.08	
06	KRNA	EPD	19 40 44.55				23	2.1	79.5	49	94	13.35	13.30	0.04	
06	CDH1	EPU2	19 40 44.80				32	2.4	80.2	125	94	13.60	13.42	0.18	
06	SVP	EPD	19 40 45.12				7	1.1	82.0	306	94	13.92	13.71	0.06	
06	LSM	EPD1	19 40 46.53				47	2.8	91.8	131	93	15.33	15.30	0.03	
06	SDH	EPD1	19 40 47.00				40	2.7	94.7	138	93	15.80	15.79	0.01	
06	QCS	EPU4	19 40 50.86				20	2.1	114.5	62	93	19.66	18.99	0.66	
06	QSM	EPU2	19 40 54.37				40	2.8	146.5	173	53	23.17	23.28	-0.11	
06	NCP	EPD4	19 40 56.30				56	3.2	150.8	148	53	25.10	23.85	1.25	
OCT H = 21 45 54.05 UTC			RMS = 0.17		NO = 16								FREE DEPTH SOLUTION		
08 LAT = 37.300 N			ERX = 4.3		ERH = 4.4			AVFM = 3.3		Q = D					
LONG = 114.794 W			ERY = 0.9		GAP = 285			AVXM =		QS = C			DELAMAR MOUNTAINS		
DEPTH = 5.62 KM			ERZ = 1.5		NM =					QD = D					
08	PRN	IPU	21 45 58.59				131	3.5	25.6	298	99	4.54	4.57	-0.03	
08	EPR	EPD	21 46 0.57				109	3.3	37.8	247	96	6.52	6.53	-0.01	
08	GMR	EPU	21 46 8.45				91	3.4	86.8	272	93	14.40	14.48	-0.08	
08	SHRG	EPD4	21 46 8.17				53	2.9	94.0	200	92	14.12	15.65	-1.48	
08	GLR	EPD	21 46 12.42				77	3.3	109.2	264	92	18.37	18.13	0.38	
08	SPRG	EPD	21 46 12.73				80	3.3	112.7	233	92	18.68	18.69	-0.01	
08	BLT	EPU	21 46 13.80				46	2.9	120.1	279	92	19.75	19.90	-0.15	
08	MCY	EPU	21 46 14.47				76	3.3	125.8	236	53	20.42	20.71	-0.29	
08	SSP	EPU	21 46 15.95				74	3.3	133.3	252	53	21.90	21.68	0.21	
08	EPN	EPU2	21 46 16.50				73	3.3	136.0	266	53	22.45	22.03	0.42	
08	CDH1	EPU	21 46 16.98				63	3.2	144.0	250	53	22.93	23.07	-0.14	
08	CDH5	EPD4	21 46 18.12				40	2.8	144.0	250	53	24.07	23.07	1.00	
08	KRNA	EPU	21 46 17.68				46	3.0	149.0	290	53	23.63	23.72	-0.09	
08	JCN	EPU	21 46 18.00				47	3.0	150.8	231	53	23.95	23.95	-0.00	
08	BMT	EPD4	21 46 19.78				80	3.5	154.3	269	53	25.73	24.41	0.92	
08	BRO	EP	21 46 21.18				37	2.9	173.6	250	53	27.13	26.92	0.21	
08	NCP	EPD3	21 46 21.86				57	3.3	177.9	223	53	27.81	27.48	0.33	
08	FMT	EPU4	21 46 23.75				39	3.0	191.3	247	53	29.70	29.21	0.58	
08	SGV	IPD	21 46 24.76				75	3.6	202.1	260	53	30.71	30.62	0.09	
08	GMN	EPU	21 46 26.70				63	3.5	218.7	270	53	32.65	32.77	-0.12	
08	PGE	EPU4	21 46 32.50				47	3.3	228.6	243	53	38.45	34.06	4.39	
08	MCA	EPU4	21 46 31.87				63	3.5	232.9	252	53	37.82	34.62	3.20	
08	MZP	EPU	21 46 28.24				57	3.5	233.3	281	53	34.19	34.66	-0.29	
08	QSM	EPU4	21 46 32.86				57	3.5	237.5	231	53	38.81	35.21	3.60	
08	SVP	EPD1	21 46 33.20				67	3.7	269.9	280	53	39.15	39.42	-0.42	
08	PPK	EPU2	21 46 33.64				66	3.7	276.1	273	53	39.59	40.22	-0.63	
OCT H = 2 19 22.11 UTC			RMS = 0.14		NO = 12								FREE DEPTH SOLUTION		
09 LAT = 36.771 N			ERX = 0.5		ERH = 0.6			AVFM = 2.0		Q = C					
LONG = 115.935 W			ERY = 0.4		GAP = 100			AVXM =		QS = C			MERCURY		
DEPTH = 1.68 KM			ERZ = 166.8		NM =					QD = C					
09	MCY	IPD0	2 19 24.42				33	2.2	12.4	191	38	2.31	2.38	-0.06	
09	SPRG	IPU	2 19 24.61				22	1.9	14.1	127	38	2.50	2.65	-0.15	
09	LOP	EPU	2 19 26.00				34	2.3	22.7	294	38	3.89	4.05	-0.16	
09	LSM	EPU	2 19 27.32				32	2.2	30.3	263	38	5.21	5.28	-0.07	
09	CDH1	EPU0	2 19 28.18				22	1.9	35.6	286	38	6.07	6.14	-0.07	
09	CDH5	EPU	2 19 28.13						35.6	286	38	6.02	6.14	-0.12	
09	SDH	EPU	2 19 29.03				15	1.6	38.7	249	38	6.89	6.64	0.25	
09	BGB	EPD4	2 19 29.61				20	1.9	39.5	319	38	7.50	6.77	0.78	
09	JCN	EPU0	2 19 29.90				17	1.7	39.8	202	38	6.89	6.82	0.07	
09	GLR	EPU	2 19 30.24						48.1	351	38	8.13	8.17	0.11	
09	EPN	EPD4	2 19 27.82				32	2.4	60.1	325	38	5.71	10.13	-4.42	
09	BRO	EPU	2 19 32.83				17	1.8	61.6	269	38	10.72	10.38	0.34	
09	GMN	EPU0	2 19 32.90				16	1.8	64.1	13	38	10.69	10.78	-0.09	
09	SHRG	EPU	2 19 34.95				21	2.0	75.8	113	38	12.84	12.68	0.21	
09	PRN	EPU4	2 19 32.15				42	2.7	105.7	48	38	10.04	17.54	-7.50	
09	MCA	EPU4	2 19 38.63						121.1	264	38	16.52	20.04	-3.52	

OCT 1980	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	GVN	EPD4	2 19 37.69						128.1	282	38	15.58	21.18	-5.60	

OCT H = 10 3 39.02 UTC RMS = 0.07 NO = 8 FREE DEPTH SOLUTION
09 LAT = 36.781 N ERX = 0.1 ERH = 0.1 AVFM = 1.6 Q = C
LONG = 115.926 W ERY = 0.1 GAP = 169 AVXM = QS = B MERCURY
DEPTH = 2.90 KM ERZ = 2.3 NM = QD = C

09	MCY	IPD	10 3 41.55	31	2.2	13.7	194	96	2.53	2.59	-0.06			
09	SPRG	EPU	10 3 41.70	19	1.7	14.2	133	95	2.68	2.68	-0.00			
09	CPX	EPD	10 3 42.63	20	1.8	20.2	324	94	3.61	3.64	-0.03			
09	LCP	EPU	10 3 43.15	24	2.0	23.0	291	93	4.13	4.10	0.03			
09	SSP	EPU	10 3 44.42	21	1.9	30.6	301	92	5.40	5.33	0.07			
09	CDH1	EPU	10 3 45.38	14	1.5	36.0	284	92	6.36	6.21	0.14			
09	BGB	EPD	10 3 45.85	19	1.8	39.2	317	92	6.83	6.72	0.15			
09	SDH	EPU2	10 3 46.11	13	1.5	39.8	248	92	7.09	6.83	0.26			
09	BRO	EPU4	10 3 58.85	4	0.6	62.4	268	90	19.83	10.51	9.32			
09	SHHG	EPU4	10 3 52.48	4	0.6	75.5	114	90	13.46	12.63	0.88			

OCT H = 2 47 41.28 UTC RMS = 0.01 NO = 4 FREE DEPTH SOLUTION
12 LAT = 37.199 N ERX = ERH = AVFM = 3.5 Q = C
LONG = 117.118 W ERY = GAP = 285 AVXM = QS = A MT. JACKSON
DEPTH = 2.74 KM ERZ = NM = QD = D

12	CTS	EPU	2 47 51.38	89	3.2	60.1	35	90	10.10	10.12	-0.02			
12	EPN	EPU	2 47 53.10	133	3.6	70.6	89	90	11.82	11.82	-0.00			
12	SSP	EPU	2 47 55.55	126	3.6	85.5	111	90	14.27	14.26	0.01			
12	KRNA	EPU	2 47 56.19	94	3.4	89.4	47	90	14.91	14.89	0.02			
12	LSM	EPU4	2 47 54.48	106	3.5	91.0	124	90	13.20	15.14	-1.94			
12	SDH	EPU4	2 47 58.52	121	3.6	92.7	131	90	17.24	15.43	1.81			
12	MCY	EPU4	2 47 54.30	135	3.8	119.0	120	90	13.02	19.70	-6.68			

OCT H = 5 40 44.28 UTC RMS = 0.05 NO = 4 FREE DEPTH SOLUTION
12 LAT = 36.835 N ERX = ERH = AVFM = 2.6 Q = C
LONG = 115.643 W ERY = GAP = 323 AVXM = QS = A MERCURY
DEPTH = 7.33 KM ERZ = NM = QD = D

12	MCY	EPD	5 40 50.28	51	2.7	34.4	236	100	6.00	6.02	-0.01			
		ESU	5 40 54.80						10.52	10.53	-0.01			
12	LCP	EPD	5 40 52.25	48	2.7	46.8	273	97	7.97	8.02	-0.05			
12	LSM	EPD	5 40 54.04	44	2.6	57.1	259	96	9.76	9.68	0.08			

OCT H = 14 52 14.97 UTC RMS = 0.09 NO = 4 FIXED DEPTH SOLUTION
12 LAT = 37.060 N ERX = ERH = AVFM = 2.3 Q = C DEPTH CONTROL INADEQUATE
LONG = 117.143 W ERY = GAP = 267 AVXM = QS = A MT. JACKSON
DEPTH = 5.00 KM ERZ = NM = QD = D

12	CTS	EPD	14 52 27.41	25	2.2	74.2	30	93	12.44	12.43	0.01			
12	EPN	EPD	14 52 27.40	34	2.5	74.8	77	93	12.43	12.53	-0.10			
12	SSP	EPD	14 52 29.10	25	2.2	83.6	100	92	14.13	13.97	0.16			
		ESD4	14 52 38.25						23.28	24.44	-1.16			
12	SDH	EPD1	14 52 29.05	21	2.1	85.2	123	92	14.08	14.22	-0.14			
12	LSM	EPD3	14 52 29.98	33	2.5	85.4	115	92	15.01	14.26	0.75			

OCT H = 16 27 31.22 UTC RMS = 0.63 NO = 6 FREE DEPTH SOLUTION
12 LAT = 37.418 N ERX = 10.8 ERH = 11.6 AVFM = 2.0 Q = D
LONG = 116.136 W ERY = 4.2 GAP = 156 AVXM = QS = D SILENT CANYON - NORTH
DEPTH = 36.14 KM ERZ = 7.1 NM = QD = C

12	BLT	EP	16 27 36.21	21	1.8	4.8	2	171	4.99	5.70	-0.71			
		ESD	16 27 43.15						11.93	9.97	1.96			
12	EPN	EPD4	16 27 39.70	40	2.4	28.1	216	135	8.48	7.10	1.38			
12	KRNA	EPD	16 27 40.00	25	2.1	42.7	330	120	8.78	8.61	0.17			
12	UCS	EPD	16 27 39.75	19	1.8	43.4	27	120	8.53	8.70	-0.17			
12	LOP	EPU	16 27 42.00	28	2.2	62.6	183	109	10.78	10.98	-0.20			
		ES 4	16 27 56.00						24.78	19.21	5.57			
12	LSM	EPU	16 27 44.00	32	2.4	76.3	189	104	12.78	12.68	0.10			
12	JCN	EPD4	16 27 46.80	10	1.5	108.6	178	99	15.58	16.80	-1.21			

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OCT   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
1980               (UTC)       (MU) (SEC)                  (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

. OCT H = 10 57 31.83 UTC  RMS =  0.10  NO =  8                                FREE DEPTH SOLUTION                 .
.  13 LAT =  37.258 N      ERX =   0.6  ERH =   0.8   AVFM =   2.1  Q = B                                         .
.    LONG = 116.455 W      ERY =   0.5  GAP = 106     AVXM =        QS = A     SILENT CANYON - NORTH               .
.   DEPTH =   9.60 KM      ERZ =   1.1  NM =                        QD = B                                         .
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. 13    BMT  EPU   10 57 34.37                          40  2.4    7.6  292  139    2.54   2.18  -0.04              .
. 13    EPN  EPD   10 57 34.70                                     12.6  113  124    2.87   2.80   0.07              .
. 13    BGB  EP 4  10 57 38.25                          37  2.4   31.7  140  105    6.42   5.67   0.60              .
. 13    COM1 EPU   10 57 39.78                          15  1.6   45.8  165  100    7.95   7.91   0.04              .
. 13    CTS  EPU   10 57 40.20                                     48.7  330   99    8.37   8.38  -0.01              .
. 13    LOP  EPD   10 57 40.54                                     51.6  150   99    8.71   8.84  -0.13              .
. 13    KRNA EPU   10 57 41.20                                     55.0    7   98    9.37   9.39  -0.02              .
. 13    SGV  EPU   10 57 42.26                          24  2.1   59.8  239   98   10.43  10.17   0.26              .
. 13    LSM  EPD   10 57 41.77                                     59.9  164   98    9.94  10.17  -0.23              .
. 13    MCY  EPU4  10 57 46.00                                     79.4  146   96   14.17  13.33   0.84              .
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. OCT H = 14 52 15.51 UTC  RMS =  0.26  NO = 11                                FREE DEPTH SOLUTION                 .
.  13 LAT =  37.070 N      ERX =   1.0  ERH =   1.7   AVFM =   1.8  Q = C                                         .
.    LONG = 117.083 W      ERY =   1.4  GAP =  96     AVXM =        QS = C     MT. JACKSON                         .
.   DEPTH =   5.83 KM      ERZ =   6.9  NM =                        QD = B                                         .
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. 13    SGV  IPU   14 52 17.75                          24  1.9   10.9  156  113    2.24   2.26  -0.02              .
. 13    GVN  IPD   14 52 20.21                          19  1.8   24.4  252  100    4.79   4.37   0.33              .
. 13    MCA  EPD4  14 52 20.45                          12  1.5   50.1  201   95    4.94   8.52  -3.58              .
. 13    BRO  EPD   14 52 24.34                          19  1.9   53.2  130   95    8.83   9.02  -0.19              .
. 13    BMT  EPD4  14 52 23.21                          17  1.8   54.2   64   94    7.70   9.19  -1.89              .
. 13    FMT  EPD4  14 52 20.22                          30  2.3   54.9  150   94    4.71   9.31  -4.50              .
. 13    MGM  EPU   14 52 24.29                          18  1.8   55.1  318   94    8.78   9.35  -0.57              .
. 13    EPN  EPD   14 52 27.40                                     69.3   77   93   11.89  11.65   0.24              .
. 13    CTS  EPD   14 52 27.37                                     70.7   27   93   11.86  11.87  -0.01              .
. 13    BGB  EPU   14 52 28.30                          20  2.0   76.1   93   93   12.79  12.74   0.10              .
. 13    LSM  EPU   14 52 28.85                                     81.1  117   93   13.34  13.55  -0.22              .
. 13    SDM  EPU   14 52 28.90                                     81.4  125   93   13.39  13.61  -0.22              .
. 13    LOP  EPU   14 52 29.80                                     84.9  106   93   14.29  14.18   0.11              .
. 13    GMR  EPU   14 52 35.84                           6  1.1  120.0   76   92   20.33  19.89   0.44              .
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. OCT H = 16 27 24.22 UTC  RMS =  0.08  NO = 13                                FREE DEPTH SOLUTION                 .
.  13 LAT =  37.493 N      ERX =   0.3  ERH =   0.4   AVFM =   2.0  Q = C                                         .
.    LONG = 115.369 W      ERY =   0.3  GAP =  95     AVXM =        QS = B     ALAMO                               .
.   DEPTH =   6.05 KM      ERZ =   4.7  NM =                        QD = C                                         .
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. 13    MTI  IPD   16 27 28.05                          27  2.1   22.1   23  102    3.83   4.02   0.01              .
. 13    PRN  EPU   16 27 29.50                          42  2.5   29.8  109   99    5.28   5.25   0.03              .
. 13    EPR  EPD   16 27 30.96                          27  2.1   39.4  156   97    6.74   6.80  -0.07              .
. 13    GMR  EPD2  16 27 30.75                          16  1.7   39.8  244   96    6.53   6.86  -0.33              .
. 13    NPN  EPU   16 27 31.40                          28  2.2   42.1   65   96    7.18   7.23  -0.05              .
. 13    SRG  EPD   16 27 32.83                          32  2.3   50.7   32   95    8.61   8.63  -0.02              .
. 13    GLR  EPU   16 27 35.39                          17  1.8   66.1  240   94   11.17  11.13   0.19              .
. 13    BLT  EPU   16 27 35.60                                     67.8  267   94   11.38  11.40  -0.03              .
. 13    BGB  EPD   16 27 39.27                          23  2.2   91.4  236   93   15.05  15.23  -0.13              .
. 13    KRNA EPU   16 27 39.85                                     93.8  288   93   15.65  15.62   0.00              .
. 13    SPRG EPD4  16 27 41.15                          20  2.1   96.9  204   93   16.93  16.13   0.80              .
. 13    SSP  EPU   16 27 41.00                                     98.3  230   93   16.78  16.35   0.42              .
. 13    LOP  EPU   16 27 41.17                                    100.2  225   93   16.95  16.67   0.28              .
. 13    BMT  EPU4  16 27 58.07                          14  1.8  105.7  257   92   33.85  17.56  15.89              .
. 13    MCY  EPU   16 27 41.73                                    106.2  210   92   17.51  17.65  -0.14              .
. 13    SMRG EPU4  16 27 57.41                           7  1.2  111.3  170   92   33.19  18.47  14.77              .
. 13    LSM  EPU   16 27 44.00                                    115.9  224   92   19.78  19.22   0.56              .
. 13    SGV  EPU4  16 28 10.46                          10  1.7  158.2  249   53   46.24  24.88  21.36              .
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. OCT H =  4 53 22.88 UTC  RMS =  0.24  NO = 12                                FREE DEPTH SOLUTION                 .
.  15 LAT =  37.224 N      ERX =   1.5  ERH =   2.1   AVFM =   2.6  Q = C                                         .
.    LONG = 115.001 W      ERY =   1.5  GAP = 216     AVXM =        QS = B     ALAMO                               .
.   DEPTH =   1.84 KM      ERZ =   3.1  NM =                        QD = D                                         .
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. 15    EPR  IPU    4 53 25.90                          58  2.7   17.6  249   90    3.02   3.21  -0.19              .
. 15    PRN  IPD    4 53 26.40                          62  2.8   20.7  348   90    3.52   3.72  -0.20              .
. 15    NPN  EPD    4 53 30.95                          29  2.2   47.9    7   90    8.07   8.14  -0.07              .
. 15    OLM  EPU    4 53 31.11                          23  2.0   48.3   29   90    8.23   8.21   0.03              .
. 15    MTI  EPD    4 53 32.02                          28  2.2   55.6  334   90    9.14   9.40  -0.06              .
. 15    GMR  EPD    4 53 34.35                          25  2.2   69.3  280   90   11.47  11.62  -0.15              .
. 15    SRG  EPD    4 53 35.23                          44  2.7   73.3  355   90   12.35  12.26   0.09              .
. 15    BLT  EPU    4 53 40.25                                    103.9  285   90   17.37  17.24   0.13              .
. 15    MCY  EPD4   4 53 44.63                          42  2.7  106.0  234   90   21.76  17.58   4.18              .
. 15    BGB  EPD4   4 53 42.40                          38  2.7  111.0  259   90   19.52  18.39   1.18              .
. 15    SSP  EPD4   4 53 42.70                          41  2.8  113.2  253   90   19.82  18.76   1.07              .
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OCT 1980	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	EPN	EPD	4 53 43.00				46	2.9	117.4	269	90	20.12	19.44	0.68	
. 15	LSM	EPD	4 53 42.20				44	2.9	125.3	245	90	19.32	20.72	-1.40	
. 15	KRNA	EPU	4 53 45.60				41	2.8	135.2	296	53	22.72	22.30	0.43	
. 15	SDH	EPD4	4 53 40.60				42	2.9	135.4	242	53	17.72	22.32	-4.60	
. 15	BMT	EPU4	4 53 47.77				33	2.6	136.0	273	53	24.89	22.40	2.09	
. 15	SGV	EPD	4 53 52.06				36	2.9	162.6	261	53	29.18	28.45	0.73	
. 15	GVN	EPU4	4 53 52.98				17	2.3	209.6	263	53	30.10	31.96	-1.86	

. OCT H = 12 21 51.66 UTC RMS = 0.08 NO = 6 FREE DEPTH SOLUTION
. 15 LAT = 37.314 N ERY = 0.9 ERH = 1.0 AVFM = 1.9 Q = C
. LONG = 116.375 W ERY = 0.4 GAP = 201 AVXM = QS = B SILENT CANYON - NORTH
. DEPTH = 9.89 KM ERZ = 2.3 NM = QD = D

. 15	EPN	IPD	12 21 54.45				38	2.3	12.0	158	127	2.79	2.75	0.04	
. 15	BLT	EPD	12 21 56.50				17	1.7	26.8	52	108	4.84	4.91	-0.08	
. 15	BGB	EPU	12 21 57.53						33.3	157	104	5.87	5.94	-0.02	
. 15	KRNA	EPD	12 22 0.10				15	1.7	48.4	359	100	8.44	8.33	0.11	
.		ESU	12 22 6.15									14.49	14.58	-0.09	
. 15	GPR	EP	12 22 0.90				16	1.7	53.5	88	99	9.24	9.16	0.08	
. 15	MCY	EPU3	12 22 6.56				20	2.0	81.2	153	96	14.90	13.62	1.27	

. OCT H = 12 29 7.43 UTC RMS = 0.37 NO = 10 FIXED DEPTH SOLUTION
. 15 LAT = 37.243 N ERX = 1.2 ERH = 2.0 AVFM = 2.3 Q = C DEPTH CONTROL INADEQUATE
. LONG = 116.404 W ERY = 1.6 GAP = 77 AVXM = QS = C SILENT CANYON - NORTH
. DEPTH = 5.00 KM ERZ = 4.3 NM = QD = B

. 15	EPN	IPD	12 29 9.45				39	2.3	7.8	114	116	2.02	1.76	0.27	
. 15	BMT	EPD	12 29 10.20				35	2.3	12.3	291	107	2.77	2.43	-0.06	
. 15	BGB	EPU4	12 29 13.52				27	2.1	27.7	145	97	6.09	4.88	1.26	
. 15	BLT	EPU4	12 29 16.00				32	2.3	34.0	45	96	8.57	5.91	2.66	
. 15	SSP	IPU4	12 29 10.38				60	2.8	39.0	155	95	2.95	6.71	-3.76	
. 15	KRNA	IPU	12 29 16.43				30	2.3	56.3	2	93	9.00	9.53	-0.52	
. 15	GPR	EPU	12 29 16.98				15	1.7	57.0	80	93	9.55	9.64	-0.09	
. 15	LSM	EPD	12 29 17.10				36	2.4	57.1	168	93	9.67	9.66	0.01	
. 15	SGV	EPD4	12 29 19.65				30	2.3	62.9	243	93	12.22	10.60	1.62	
. 15	SDH	EPD3	12 29 19.54				36	2.5	66.6	175	93	12.11	11.19	0.92	
. 15	QCS	EPD4	12 29 21.61						72.5	37	93	14.18	12.16	2.03	
. 15	MCY	EPU	12 29 19.45				34	2.5	75.6	149	93	12.02	12.65	-0.63	
. 15	SPRG	EPD4	12 29 22.20				28	2.3	80.7	139	92	14.77	13.49	1.28	
. 15	GVN	EPU	12 29 22.25				29	2.4	87.6	252	92	14.82	14.61	0.21	
. 15	MGM	EPD	12 29 24.20				23	2.2	99.3	283	92	16.77	16.51	0.26	
. 15	EPR	EPU4	12 29 29.82				30	2.5	108.4	94	92	22.3	18.00	4.39	
. 15	WRN	EPU4	12 29 27.12						109.2	41	92	19.6	18.12	1.57	
. 15	PRN	EPU4	12 29 30.55				39	2.7	121.5	81	92	23.1	20.12	3.00	
. 15	NPN	EPU	12 29 30.60				30	2.6	137.7	71	53	23.17	22.31	0.86	
. 15	SMRG	EPU4	12 29 32.00				7	1.3	138.2	126	53	24.57	22.38	2.24	

. OCT H = 19 21 35.21 UTC RMS = 0.22 NO = 12 FREE DEPTH SOLUTION
. 17 LAT = 35.855 N ERX = 4.1 ERH = 6.6 AVFM = 2.4 Q = D
. LONG = 117.491 W ERY = 5.1 GAP = 290 AVXM = QS = D SEARLES LAKE
. DEPTH = 0.52 KM ERZ = 11.2 NM = QD = D

. 17	PGE	EPD	19 21 46.44				27	2.2	66.8	35	38	11.23	11.46	-0.23	
. 17	MCA	EPU	19 21 50.31				23	2.2	90.0	12	38	15.10	15.23	-0.13	
. 17	AMR	EPU	19 21 53.80				34	2.6	109.6	57	38	18.59	18.41	0.18	
. 17	NOP	EPD	19 21 55.73				31	2.5	124.4	76	38	20.52	20.82	-0.30	
. 17	BRO	EPU	19 21 56.62				10	1.6	127.2	38	38	21.41	21.28	0.13	
. 17	GVN	EPU	19 21 56.55				30	2.5	127.9	6	38	21.34	21.39	-0.05	
. 17	SGV	EPD	19 21 57.35				37	2.7	131.5	18	38	22.14	21.98	0.15	
. 17	SDH	EPD4	19 21 54.21				10	1.6	135.7	50	30	19.00	22.64	-3.64	
. 17	JCN	EPD	19 21 58.38				31	2.6	140.8	63	30	23.17	23.31	-0.14	
. 17	LOP	EPD	19 22 1.65				33	2.7	162.4	47	30	26.44	26.12	0.32	
. 17	MCY	EPU	19 22 1.70				31	2.7	163.9	57	30	26.49	26.31	0.18	
. 17	SSP	EPU	19 22 2.15				28	2.6	164.7	44	30	26.94	26.41	0.53	
. 17	SPRG	EP	19 22 3.90				33	2.8	177.4	58	30	28.69	28.06	0.63	

. OCT H = 19 21 51.47 UTC RMS = 0.26 NO = 4 FREE DEPTH SOLUTION
. 17 LAT = 36.799 N ERX = EPH = AVFM = 1.6 Q = C
. LONG = 117.040 W ERY = GAP = 261 AVXM = QS = B TIN MOUNTAIN
. DEPTH = 19.75 KM ERZ = NM = QD = D

. 17	BMT	EPU	19 22 4.40				32	2.4	71.4	41	53	12.93	12.25	0.28	
. 17	BGB	EPU	19 22 4.80				11	1.5	78.8	70	53	13.33	13.22	0.16	
. 17	EPN	EPU	19 22 4.23				31	2.4	80.2	55	53	12.76	13.40	-0.63	

OCT 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
17	MGM	EPU	19 22 5.00				5	0.8	81.2	331	53	13.53	13.53	0.00	
17	CTS	EPD4	19 22 10.21				10	1.5	98.0	18	53	18.74	15.71	3.03	
17	BLT	EPD4	19 22 9.77				7	1.2	110.3	48	53	18.30	17.32	0.99	

OCT H = 0 33 9.83 UTC RMS = 0.31 NO = 6 FREE DEPTH SOLUTION
19 LAT = 37.372 N ERX = 3.1 ERH = 4.2 AVFM = 2.6 Q = D
LONG = 116.191 W ERY = 2.8 GAP = 199 AVXM = QS = C SILENT CANYON - NORTH
DEPTH = 0.45 KM ERZ = 529.7 NM = QD = D

19	EPN	EPD	0 33 13.70				72	2.9	21.1	214	38	3.87	4.04	-0.17
19	GLR	EPU	0 33 13.91				29	2.1	24.5	141	38	4.08	4.60	-0.37
19	SSP	EPU4	0 33 19.47				43	2.6	49.6	183	38	9.64	8.68	0.96
19	CTS	EPD	0 33 19.65				30	2.3	55.9	302	38	9.82	9.70	0.12
19	LCP	EPU	0 33 20.32				41	2.6	57.5	176	38	10.49	9.96	0.54
19	COHI	EPD	0 33 20.26						57.9	191	38	10.43	10.02	0.41
19	NMN	EPD	0 33 20.65				47	2.7	64.4	240	38	10.82	11.08	-0.26
19	LSM	EPU4	0 33 23.00				47	2.7	70.6	186	38	13.17	12.09	1.08

OCT H = 11 36 8.03 UTC RMS = 0.80 NO = 7 FREE DEPTH SOLUTION
20 LAT = 37.270 N ERX = 11.4 ERH = 12.8 AVFM = 2.1 Q = D
LONG = 117.000 W ERY = 5.6 GAP = 280 AVXM = QS = D MT. JACKSON
DEPTH = 14.31 KM ERZ = 12.5 NM = QD = D

20	GMN	EPU4	11 36 32.00				24	2.0	23.3	278	120	23.97	4.68	19.29
20	NMN	EPD4	11 36 20.65				25	2.0	26.5	143	116	12.62	5.14	7.48
20	BMT	EPD4	11 36 22.81				29	2.2	41.3	88	107	14.78	7.39	7.00
20	GVN	EPD4	11 36 33.03				12	1.4	42.7	226	107	25.00	7.59	17.41
20	CTS	EPU	11 36 16.93				20	1.9	47.6	31	105	8.90	9.37	0.53
20	EPN	IPU	11 36 18.40				47	2.7	60.3	96	102	10.37	10.38	-0.00
20	BRO	EPU4	11 36 27.07				12	1.5	65.4	149	101	19.04	11.19	7.85
20	BGB	EPU	11 36 21.55				20	2.0	73.2	111	100	13.52	12.44	1.14
20	KRNA	EPU	11 36 19.71				25	2.2	76.4	46	100	11.68	12.94	-1.26
		ISD	11 36 31.21									23.18	22.64	0.54
20	BLT	EPD	11 36 20.43				30	2.4	79.4	75	99	12.40	13.43	-1.03
20	LCP	EPU4	11 36 25.00				30	2.4	87.2	122	99	16.97	14.68	2.29
20	LSM	EPD4	11 36 26.80				36	2.5	87.6	132	99	18.77	14.74	4.03
20	GMR	EPU4	11 36 22.71				15	1.9	109.1	86	53	14.68	17.69	-3.01
20	MCY	EPU4	11 36 29.05				28	2.4	114.4	126	53	21.02	18.38	2.65
20	SPRG	EPD4	11 36 25.11				13	1.8	123.8	121	53	17.08	19.59	-2.51
20	TPU	EPU	11 36 27.62				25	2.4	125.2	73	53	19.59	19.78	-0.19
20	APK	EPU4	11 36 30.40				20	2.3	165.3	130	53	22.37	24.98	-2.61
20	PRN	EPU4	11 36 35.70				31	2.7	173.5	85	53	27.67	26.06	1.62

OCT H = 11 41 37.94 UTC RMS = 0.09 NO = 14 FREE DEPTH SOLUTION
20 LAT = 37.316 N ERX = 0.3 ERH = 0.4 AVFM = 2.4 Q = B
LONG = 116.347 W ERY = 0.2 GAP = 110 AVXM = QS = A SILENT CANYON - NORTH
DEPTH = 4.61 KM ERZ = 1.3 NM = QD = C

20	EPN	IPU	11 41 40.30				65	2.8	11.5	170	106	2.36	2.29	0.07
20	BLT	IPD	11 41 42.40				20	1.8	24.8	49	97	4.46	4.41	0.05
20	BGB	EPU	11 41 43.46				37	2.4	32.7	161	95	5.52	5.69	-0.12
20	SSP	IPD	11 41 45.50				32	2.3	44.9	165	94	7.56	7.67	-0.11
20	KRNA	IPU	11 41 45.92				34	2.4	48.2	357	94	7.98	8.21	-0.23
20	CTS	IPU	11 41 46.32				27	2.2	49.1	317	93	8.38	8.35	0.03
20	NMN	EPD4	11 41 42.57				37	2.4	49.3	238	93	4.63	8.38	-3.75
20	GMR	EPD	11 41 46.79				28	2.2	51.1	88	93	8.85	8.68	0.17
20	LCP	EPD	11 41 46.80				37	2.5	53.7	163	93	8.86	9.10	-0.24
20	BRO	EPU	11 41 49.05				25	2.2	66.2	202	93	11.11	11.14	-0.03
20	TPU	EPD	11 41 49.55				24	2.1	69.6	63	92	11.61	11.67	-0.07
20	MCY	EPU	11 41 51.45				39	2.6	80.3	155	92	13.51	13.43	0.08
20	GMN	EPD4	11 41 53.95				32	2.4	80.9	269	92	16.01	13.52	2.49
20	FMT	EPD	11 41 51.97				24	2.2	84.3	207	92	14.03	14.08	0.05
20	JCN	EPD	11 41 54.60				29	2.4	99.7	167	92	16.66	16.58	0.08
20	PRN	EPU2	11 41 57.65				36	2.6	115.3	85	91	19.71	19.12	0.59
20	SRG	EPU	11 41 59.33				35	2.7	129.3	61	53	21.34	21.26	0.10
20	NPN	EPU4	11 42 0.50				33	2.6	130.2	73	53	22.56	21.37	1.19
20	APK	EPD4	11 41 52.27				28	2.5	130.4	148	53	14.33	21.40	-7.07
20	DLM	EPU4	11 42 2.75				36	2.8	145.8	77	53	24.81	23.40	1.40

OCT H = 4 1 54.71 UTC RMS = 0.17 NO = 11 FREE DEPTH SOLUTION
21 LAT = 36.691 N ERX = 1.0 ERH = 1.4 AVFM = 2.5 Q = C
LONG = 115.700 W ERY = 1.0 GAP = 142 AVXM = QS = B MERCURY
DEPTH = 7.43 KM ERZ = 2.3 NM = QD = C

OCT 1980	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	MCY	IPD	4 1 59.20				51	2.6	23.6	262	104	4.49	4.31	0.18	
. 21	APK	IPD	4 2 2.07				38	2.4	42.7	165	98	7.36	7.36	-0.00	
. 21	LCP	EPU	4 2 2.05				38	2.4	45.5	293	97	7.34	7.81	-0.47	
. 21	JON	EPD4	4 2 3.90				34	2.4	45.5	232	97	9.19	7.82	1.37	
. 21	LSM	EPU	4 2 3.19				46	2.6	51.4	276	97	8.48	8.76	-0.28	
. 21	SSP	EPU	4 2 3.80				39	2.5	53.1	299	96	9.09	9.03	0.06	
. 21	SDH	EPD	4 2 4.32				32	2.3	57.2	265	96	9.61	9.71	-0.10	
. 21	BGB	IPD	4 2 5.29				35	2.4	60.8	309	96	10.58	10.28	0.35	
. 21	NOP	EPD4	4 2 9.74				36	2.5	78.5	213	94	15.03	12.50	2.53	
. 21	EPN	EPU	4 2 9.25				34	2.5	80.3	316	94	14.54	13.45	1.09	
. 21	TPU	EPD	4 2 11.05				47	2.8	101.6	3	93	16.34	16.89	-0.56	
. 21	SGV	EPD	4 2 15.13				34	2.6	123.2	285	53	20.42	20.19	0.23	
. 21	KRNA	EPU4	4 2 18.94				30	2.5	132.2	333	53	24.23	21.35	2.87	
. 21	CTS	EPU4	4 2 19.05				24	2.4	139.2	319	53	24.34	22.27	2.07	
. 21	SRG	EPU	4 2 17.56				47	3.0	143.6	23	53	22.85	22.84	0.01	
. 21	TPO	IPD	4 2 18.75				25	2.5	153.1	275	53	24.04	24.08	-0.04	

. OCT H = 1 32 15.47 UTC RMS = 0.19 NO = 16 FREE DEPTH SOLUTION
. 23 LAT = 36.259 N ERX = 1.9 ERH = 2.7 AVFM = 2.8 Q = D
. LONG = 114.801 W ERY = 2.0 GAP = 261 AVXM = QS = C HOOVER DAM
. DEPTH = 10.26 KM ERZ = 0.9 NM = QD = D

. 23	APK	EPU	1 32 27.26				43	2.6	69.8	276	97	11.79	11.79	-0.00	
. 23	SPRG	EPD	1 32 32.99				46	2.8	102.4	298	95	17.52	17.07	0.45	
. 23	EPR	EPU	1 32 33.09				57	3.0	106.7	341	95	17.62	17.76	-0.14	
. 23	MCY	EPD4	1 32 32.90				54	3.0	113.2	293	53	17.43	18.62	-1.19	
. 23	JON	EPD4	1 32 33.55				37	2.7	118.7	280	53	18.08	19.33	-1.25	
. 23	NCP	EPD4	1 32 34.10				36	2.7	122.4	263	53	18.63	19.82	-1.19	
.		ISD	1 32 50.12									34.65	34.68	-0.03	
. 23	PRN	EPU	1 32 36.22				54	3.0	129.4	350	53	20.75	20.71	0.03	
. 23	CPX	EPD	1 32 36.52				30	2.6	134.9	303	53	21.05	21.43	-0.38	
. 23	LCP	EPU	1 32 37.47				40	2.8	139.0	298	53	22.00	21.97	0.03	
. 23	SDH	EPD	1 32 38.13				30	2.6	144.3	287	53	22.66	22.65	0.01	
. 23	SSP	EPU	1 32 37.71				41	2.9	146.8	300	53	22.24	22.98	-0.75	
.		ISU4	1 32 58.89									43.42	40.22	3.20	
. 23	OLM	EPD	1 32 38.79				31	2.6	149.6	2	53	23.32	23.34	-0.02	
.		ISU	1 32 56.44									40.97	40.85	0.12	
. 23	AMR	EPD	1 32 39.18				39	2.8	151.1	276	53	23.71	23.54	0.17	
. 23	BGB	EPU	1 32 39.20				50	3.1	154.2	304	53	23.73	23.94	-0.16	
. 23	NPN	IPD	1 32 39.51				40	2.9	155.2	356	53	24.04	24.07	-0.03	
. 23	EPN	EPU	1 32 42.11				48	3.1	172.5	308	53	26.64	26.32	0.32	
. 23	BMT	EPU4	1 32 48.32				39	3.0	192.0	306	53	32.8	29.85	3.60	
. 23	KRNA	EPU	1 32 47.21						217.2	320	53	31.7	32.12	-0.38	

. OCT H = 2 31 19.56 UTC RMS = 0.36 NO = 9 FREE DEPTH SOLUTION
. 23 LAT = 37.456 N ERX = 1.4 ERH = 1.9 AVFM = 2.1 Q = C
. LONG = 116.269 W ERY = 1.2 GAP = 101 AVXM = QS = C SILENT CANYON - NORTH
. DEPTH = 2.81 KM ERZ = 66.8 NM = QD = C

. 23	EPN	EPD	2 31 24.89				30	2.2	27.3	190	92	5.33	4.79	0.54	
. 23	BMT	EPU4	2 31 27.22						30.3	231	92	7.66	5.28	1.98	
. 23	GLR	IPU4	2 31 28.60				30	2.2	36.1	142	92	9.04	6.23	2.96	
. 23	CTS	EPU	2 31 26.91				17	1.7	45.3	297	91	7.35	7.73	-0.38	
. 23	GMR	EPU4	2 31 29.42				22	2.0	46.1	107	91	9.86	7.85	2.00	
. 23	BGB	IPD	2 31 27.36				26	2.1	46.5	176	91	7.80	7.92	-0.08	
. 23	QCS	EPU	2 31 27.19				20	1.9	46.6	42	91	7.63	7.93	-0.30	
. 23	CDH1	EPU	2 31 30.13				25	2.2	66.2	184	90	10.57	11.12	-0.55	
. 23	LSM	EPD4	2 31 33.95				25	2.2	79.5	180	90	14.39	13.29	1.10	
.		ISD	2 31 42.44									22.88	23.25	-0.37	
. 23	SDH	EPD4	2 31 36.94				28	2.3	90.1	184	90	17.38	15.01	2.37	
.		ISU4	2 31 42.91									23.35	26.26	-2.92	
. 23	MTI	EPD	2 31 35.00				23	2.2	91.3	74	90	15.44	15.20	0.44	
. 23	MCY	EPD4	2 31 36.92				31	2.4	92.2	163	90	17.36	15.35	2.01	
.		ISU4	2 31 42.91									23.35	26.86	-3.52	
. 23	SPRG	EPD4	2 31 37.97						93.9	154	90	18.41	15.62	2.79	
. 23	TNP	EPD	2 31 37.84				11	1.6	108.7	310	90	18.28	15.03	0.24	
.		ISU4	2 31 53.42									34.26	31.56	2.70	
. 23	MGM	EPD	2 31 37.89						108.7	269	90	18.33	18.03	0.29	
. 23	PPK	IPD4	2 31 44.72						145.1	269	53	25.16	23.49	1.66	

. OCT H = 13 27 47.05 UTC RMS = 0.00 NO = 4 FREE DEPTH SOLUTION
. 24 LAT = 36.981 N ERX = ERH = AVFM = 2.5 Q = C
. LONG = 115.956 W ERY = GAP = 130 AVXM = QS = A MERCURY
. DEPTH = 6.63 KM ERZ = NM = QD = D

. 24	SPRG	EPU	13 27 53.06				47	2.6	34.4	158	98	6.01	6.01	0.00	

OCT 1980	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	BMT	EPD	13 27 57.81				27	2.2	61.3	303	95	10.76	10.36	0.00	
24	EPR	EPD	13 27 59.06				33	2.4	71.5	73	94	12.01	12.01	-0.00	
24	GVN	EPD	13 28 7.35				35	2.7	123.4	271	53	20.30	20.30	-0.00	

OCT H = 19 25 38.89 UTC RMS = 0.49 NO = 13 FREE DEPTH SOLUTION
24 LAT = 37.081 N ERX = 2.0 ERH = 2.4 AVFM = 2.6 Q = C
LONG = 115.963 W ERY = 1.3 GAP = 96 AVXM = QS = C GROUM LAKE
DEPTH = 9.52 KM ERZ = 8.6 NM = QD = B

24	GLR	IP	19 25 41.85				58	2.7	14.0	340	121	2.96	2.99	0.12	
24	BGB	EPU	19 25 43.11				47	2.6	24.0	259	109	4.22	4.46	-0.19	
24	SSP	IPD	19 25 43.91				66	2.9	28.5	233	106	5.02	5.17	-0.15	
24	LOP	EPU	19 25 44.16				76	3.0	31.0	216	105	5.27	5.56	-0.29	
24	GMR	EPU2	19 25 43.23				54	2.7	32.9	31	104	4.34	5.85	-1.51	
24	EPN	EPD4	19 25 45.96				48	2.6	35.3	295	103	7.07	6.24	0.83	
24	CDH5	EPD4	19 25 43.28						39.9	232	101	4.39	6.97	-2.57	
24	CDH1	EPU	19 25 44.81				24	2.0	39.9	232	101	5.92	6.97	-1.04	
24	BLT	EPD	19 25 47.22				26	2.1	44.9	340	100	8.33	7.77	0.56	
24	SPRG	EPU	19 25 47.10				63	2.9	45.0	162	100	8.21	7.79	0.42	
24	MCY	EPU	19 25 47.00				83	3.1	46.5	180	100	8.11	8.02	0.09	
24	BMT	EPD	19 25 48.97				43	2.6	55.4	294	98	10.08	9.46	0.23	
24	BRD	EPU4	19 26 0.15				20	2.0	68.8	239	97	21.26	11.61	9.66	
24	EPR	EPU4	19 25 52.20				41	2.6	69.7	82	97	13.31	11.76	1.55	
24	JCN	EPU	19 25 51.55				24	2.1	72.2	190	96	12.66	12.16	0.50	
24	KRNA	EPU	19 25 53.11				24	2.2	83.0	334	95	14.22	13.91	0.32	
24	PRN	EPU	19 25 53.31				45	2.7	88.8	66	95	14.42	14.85	-0.43	
24	MTI	EPU4	19 25 56.62				45	2.8	90.1	43	95	17.73	15.06	2.88	
24	SGV	EPD4	19 25 57.65				39	2.6	95.8	263	95	18.76	15.98	2.78	
24	NPN	EPU4	19 25 59.45				40	2.7	110.9	55	53	21.06	18.38	2.68	
24	GMN	EPU4	19 26 0.50				33	2.6	117.7	282	53	21.61	19.27	2.34	
24	SRG	EPU4	19 26 1.11				49	2.9	119.1	42	53	22.22	19.45	2.77	
24	GVN	EPU4	19 26 1.20				34	2.6	123.1	266	53	22.31	19.97	2.34	
24	DLM	EPD4	19 26 2.00				27	2.4	123.2	62	53	23.11	19.99	3.12	
24	MGM	EPD4	19 26 3.77				31	2.6	141.7	286	53	24.88	22.39	2.49	
24	TAP	EPD4	19 26 6.02				30	2.6	157.0	315	53	27.13	24.37	2.76	

OCT H = 19 27 45.10 UTC RMS = 0.25 NO = 14 FREE DEPTH SOLUTION
24 LAT = 37.078 N ERX = 1.4 ERH = 1.6 AVFM = 2.4 Q = C
LONG = 116.007 W ERY = 0.9 GAP = 139 AVXM = QS = C SILENT CANYON - YUCCA FLAT
DEPTH = 8.59 KM ERZ = 5.3 NM = QD = C

24	GLR	EPU	19 27 47.65				53	2.6	13.5	356	119	2.55	2.84	-0.14	
24	BGB	EPU	19 27 48.88				64	2.8	20.2	257	110	3.78	3.83	-0.00	
24	SSP	EPU	19 27 49.51				50	2.6	25.4	228	106	4.41	4.64	-0.23	
24	LOP	EPD	19 27 50.00				48	2.6	28.7	210	104	4.90	5.16	-0.26	
24	EPN	EPU4	19 27 51.84				50	2.6	32.0	298	103	6.74	5.68	1.06	
24	GMR	EPU	19 27 51.40				28	2.1	35.2	36	101	6.30	6.20	0.10	
24	CDH1	EPU	19 27 51.30				24	2.0	36.7	229	101	6.20	6.43	-0.24	
24	CDH5	EPU	19 27 51.56				13	1.5	36.7	229	101	6.46	6.43	0.02	
		ISD	19 27 56.75									11.65	11.26	0.39	
24	BLT	EPD	19 27 52.95				20	1.9	44.0	345	99	7.85	7.60	0.25	
24	MCY	EPD	19 27 53.35				56	2.8	46.4	175	99	8.25	7.98	0.27	
24	SDM	EPU	19 27 54.15				36	2.4	56.4	212	97	9.05	9.59	-0.54	
24	TPU	EPU	19 27 56.40				23	2.1	66.5	28	96	11.30	11.23	0.07	
24	JCN	EPU	19 27 57.40				22	2.1	71.4	187	96	12.30	12.01	0.29	
24	PRN	EPD4	19 28 2.15				35	2.5	92.5	67	94	17.05	15.43	1.62	
24	NCP	EPU3	19 28 3.60				25	2.3	106.2	187	94	18.50	17.67	0.83	
24	NPN	EPU4	19 28 6.05				34	2.6	114.2	56	53	20.95	18.91	2.04	

OCT H = 0 27 40.59 UTC RMS = 0.37 NO = 30 FREE DEPTH SOLUTION
25 LAT = 38.197 N ERX = 1.2 ERH = 3.0 AVFM = 2.8 Q = D
LONG = 117.233 W ERY = 2.7 GAP = 246 AVXM = QS = C TONOPAH
DEPTH = 0.61 KM ERZ = 5.9 NM = QD = D

25	TAP	IPU	0 27 42.89						12.9	170	38	2.30	2.67	-0.37	
25	CTS	EPU	0 27 53.21						76.3	144	38	12.62	12.98	-0.36	
25	MGM	EPU	0 27 55.12				29	2.4	87.1	195	38	14.53	14.73	-0.21	
25	KRNA	EPU	0 27 55.50						89.9	124	38	14.91	15.19	-0.28	
25	GMN	IPU4	0 27 56.75				45	2.8	99.6	181	38	16.16	16.77	-0.61	
25	PRK	EPU2	0 27 57.70				23	2.2	104.1	215	38	17.11	17.51	-0.40	
25	LCM	EPD	0 27 59.42				28	2.4	112.9	199	38	19.23	18.94	0.29	
25	BMT	EPD4	0 28 0.03						118.7	149	39	19.44	19.88	-0.44	
25	QCS	EPU3	0 28 1.02				40	2.8	125.1	112	38	20.43	20.92	-0.49	
25	BLT	EPU	0 28 1.72				38	2.7	126.6	150	38	21.13	21.17	-0.04	
25	GVN	EPU	0 28 2.79						133.1	184	38	22.20	22.21	-0.02	
25	EPN	EPU	0 28 3.75				71	3.3	135.4	144	30	23.16	22.59	0.57	

OCT 1980	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	SGV	EPU	0 28 3.67				34	2.7	136.1	173	30	23.08	22.68	0.40	
. 25	TPU	EPD	0 28 5.15				38	2.8	154.1	115	30	24.56	25.01	-0.45	
. 25	GLR	EPD	0 28 5.90				34	2.7	154.2	136	30	25.31	25.02	0.44	
. 25	BGB	EPU	0 28 6.30				44	3.0	156.4	145	30	25.71	25.31	0.45	
. 25	GMR	EPD	0 28 6.58				33	2.7	160.5	127	30	25.99	25.85	0.14	
. 25	SSP	EPD	0 28 7.86						167.3	148	30	27.27	26.72	0.54	
. 25	BRO	EPD	0 28 7.85						168.0	161	30	27.26	26.82	0.43	
. 25	CDH1	EPU	0 28 7.81				32	2.7	169.1	151	30	27.22	26.96	0.26	
. 25	CPX	EPU	0 28 8.56						174.9	144	30	27.97	27.72	0.25	
. 25	LCP	EPD	0 28 8.90						176.4	148	30	28.31	27.91	0.40	
. 25	FMT	EPD	0 28 9.32				38	2.8	177.5	167	30	28.73	28.05	0.78	
. 25	MTI	EPD	0 28 8.62				17	2.2	181.9	109	30	28.03	28.62	-0.39	
. 25	LSM	EPD	0 28 9.70						182.8	152	30	29.11	28.74	0.36	
. 25	SPG	EPU	0 28 10.17				52	3.2	193.4	100	30	29.58	30.12	-0.54	
. 25	MCY	EPU	0 28 11.90						204.2	147	30	31.31	31.53	-0.22	
. 25	PGE	EPU	0 28 13.15				37	3.0	205.7	176	30	32.56	31.71	0.85	
. 25	SPRG	EPU	0 28 12.10				14	2.2	209.1	143	30	31.51	32.16	-0.65	
. 25	NPN	EPD	0 28 12.44				41	3.1	210.8	107	30	31.85	32.38	-0.53	
. 25	PPN	EPD2	0 28 12.65				42	3.1	211.4	115	30	32.06	32.45	-0.40	
. 25	EPR	EPU	0 28 13.16				34	2.9	213.6	122	30	32.57	32.74	-0.17	
. 25	JCN	EPU	0 28 14.95						219.3	153	30	34.36	33.48	0.88	
. 25	DLM	EPU	0 28 14.35						229.0	107	30	33.76	34.74	-0.99	

. OCT H = 0 30 59.69 UTC RMS = 0.18 NO = 40 FREE DEPTH SOLUTION
. 25 LAT = 37.753 N ERX = 0.2 ERM = 0.4 AVFM = 3.7 Q = C
. LONG = 116.306 W ERY = 0.3 GAP = 134 AVXM = QS = C QUARTZITE MOUNTAIN
. DEPTH = 0.67 KM ERZ = 6.8 NM = QD = C

. 25	QCS	IPU	0 31 5.63				150	3.6	34.4	87	38	5.94	6.16	-0.21	
. 25	BLT	IPU	0 31 5.53						35.8	155	38	5.84	6.39	-0.54	
. 25	CTS	IPU	0 31 6.38						39.1	251	38	6.69	6.92	-0.22	
. 25	BMT	IPD	0 31 10.06				160	3.7	55.9	201	38	10.37	9.65	0.32	
. 25	EPN	IPD	0 31 10.42						59.9	181	38	10.73	10.30	0.43	
. 25	TPU	IPU	0 31 9.95				122	3.5	60.3	106	38	10.26	10.36	-0.10	
. 25	GMR	IPU	0 31 11.22						66.4	135	38	11.53	11.36	0.17	
. 25	GLR	IPU	0 31 10.86				119	3.5	66.6	157	38	11.17	11.39	-0.07	
. 25	NRN	EPU	0 31 11.32						68.1	68	38	11.63	11.63	0.00	
. 25	BGB	EPU	0 31 13.15						79.7	175	38	13.46	13.53	-0.01	
. 25	TMP	IPU	0 31 14.56						88.1	294	38	14.87	14.89	-0.01	
. 25	MTI	IPU	0 31 14.89				105	3.5	91.6	95	38	15.20	15.46	-0.05	
. 25	SSP	EPD	0 31 15.16						92.3	175	38	15.47	15.57	-0.09	
. 25	CPX	EPU	0 31 15.25				115	3.6	94.1	166	38	15.56	15.87	-0.31	
. 25	MZP	EPD4	0 31 16.40						95.1	266	38	16.71	16.03	0.87	
. 25	GMN	IPU	0 31 16.18				104	3.5	98.2	239	38	16.49	16.53	-0.03	
. 25	CDH5	EPD	0 31 16.21						99.1	181	38	16.52	16.68	-0.16	
. 25	CDH1	IPU	0 31 16.31				94	3.4	99.1	181	38	16.62	16.68	-0.06	
. 25	LGP	EPD	0 31 16.60				200	4.1	100.6	173	38	16.91	16.92	-0.00	
. 25	SGV	IPD	0 31 17.78				142	3.8	107.1	217	38	18.09	17.98	0.11	
. 25	SRG	EPU	0 31 18.50				162	3.9	110.0	83	38	18.81	18.45	0.36	
. 25	MGM	IPU	0 31 18.26				112	3.6	110.7	252	38	18.57	18.56	0.01	
. 25	LSM	EPU	0 31 18.50				206	4.2	112.6	178	38	18.81	18.88	-0.06	
. 25	BRO	IPD	0 31 18.65				91	3.4	113.5	194	38	18.96	19.03	-0.06	
. 25	PRN	IPU	0 31 19.40				150	3.9	117.5	109	38	19.71	19.66	0.05	
. 25	EPR	IPU	0 31 19.73				180	4.1	118.4	123	38	20.04	19.82	0.23	
. 25	NPN	EPU	0 31 20.00				130	3.8	121.3	95	38	20.31	20.29	0.03	
. 25	SDM	EPD	0 31 20.04						123.0	181	38	20.35	20.56	-0.21	
. 25	GVN	IPD	0 31 20.57				130	3.8	124.9	228	38	20.88	20.73	0.15	
. 25	MCY	EPD	0 31 20.53						125.0	166	38	20.84	20.88	-0.04	
. 25	SPRG	EPU	0 31 20.50				139	3.9	125.6	159	38	20.81	20.99	-0.17	
. 25	FMT	IPD	0 31 21.35				89	3.5	130.5	199	38	21.66	21.79	-0.02	
. 25	LCM	EPD	0 31 21.95				98	3.6	131.8	244	38	22.26	22.00	0.27	
. 25	DLM	IPU	0 31 22.85				107	3.7	139.2	97	30	23.16	23.07	0.09	
. 25	TMO	EPU	0 31 24.20				26	2.5	143.6	223	30	24.51	23.63	0.88	
. 25	PPK	EPU	0 31 23.80				96	3.6	146.0	256	30	24.11	23.94	0.17	
. 25	JCN	EPD	0 31 24.10						146.9	173	30	24.41	24.07	0.35	
. 25	MCA	EPD	0 31 24.25						150.1	215	30	24.56	24.48	0.08	
. 25	PGE	IPU	0 31 27.45				82	3.6	169.9	203	30	27.76	27.05	0.71	
. 25	APK	IPD	0 31 27.78				112	3.8	172.0	158	30	28.09	27.32	0.77	
. 25	NCP	EPU	0 31 28.20						180.9	176	30	28.51	28.48	0.03	
. 25	OSM	EPU	0 31 31.25				87	3.7	204.6	194	30	31.56	31.57	-0.00	

. OCT H = 1 6 46.30 UTC RMS = 0.20 NO = 9 FREE DEPTH SOLUTION
. 25 LAT = 37.335 N ERX = 6.0 ERM = 6.1 AVFM = 2.8 Q = D
. LONG = 114.924 W ERY = 1.2 GAP = 281 AVXM = QS = D DELAMAR MOUNTAINS
. DEPTH = 0.34 KM ERZ = 11.2 NM = QD = D

1980 SOUTHERN GREAT BASIN
LOCAL-EVENT DATA REPORT

OCT 1980	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	QCS	EPD	1 7 3.07				39	2.7	99.9	299	38	16.77	16.89	-0.11	
25	BLT	EPU	1 7 4.61				39	2.7	108.1	277	38	18.31	18.22	0.10	
25	MCY	EPD	1 7 6.05				49	2.9	118.8	231	38	19.75	19.96	-0.21	
25	LCP	EPU	1 7 6.66				47	2.9	122.7	264	38	20.36	20.59	-0.23	
25	KRNA	EPU	1 7 9.17				42	2.9	136.8	290	30	22.87	22.83	0.04	
25	JCN	EPU	1 7 10.54				40	2.8	144.6	227	30	24.24	23.84	0.40	
25	SCH	EPD	1 7 10.81				36	2.8	147.3	239	30	24.51	24.20	0.31	
25	NCP	EPD	1 7 13.76				43	3.0	173.2	219	30	27.46	27.56	-0.10	
25	TNP	EPU	1 7 20.11				16	2.3	218.7	292	30	33.81	33.46	0.35	

OCT H = 13 22 51.35 UTC RMS = 0.13 NO = 9 FREE DEPTH SOLUTION
27 LAT = 36.796 N ERX = 0.5 ERH = 0.8 AVFM = 2.4 Q = C
LONG = 116.316 W ERY = 0.6 GAP = 129 AVXM = QS = C LATHROP WELLS
DEPTH = 3.73 KM ERZ = 5.4 NM = QD = B

27	LSM	IPU	13 22 52.76				87	3.0	7.5	148	108	1.41	1.62	-0.21	
27	LCP	IPU	13 22 54.21				36	2.3	14.8	64	99	2.86	2.78	0.08	
27	SCH	EPD	13 22 54.57				30	2.1	16.8	187	97	3.22	3.11	0.11	
27	CPX	EPU	13 22 56.18				30	2.2	27.3	57	94	4.83	4.80	0.02	
27	MCY	EPD	13 22 57.15				39	2.4	35.0	115	93	5.80	6.05	-0.25	
27	JCN	EPU	13 22 58.79				30	2.2	43.9	154	93	7.44	7.50	-0.06	
27	SPRG	EPU	13 22 59.36				36	2.4	46.7	104	93	8.01	7.95	0.05	
27	SGV	EPD	13 23 2.54				34	2.4	67.1	288	92	11.19	11.27	-0.08	
27	GVN	EPU4	13 23 9.81				33	2.5	94.3	284	91	18.46	15.70	2.75	
27	EPR	EPD	13 23 9.84				38	2.7	108.7	68	90	18.49	18.03	0.45	

OCT H = 20 2 28.83 UTC RMS = 0.15 NO = 11 FREE DEPTH SOLUTION
27 LAT = 36.010 N ERX = 1.9 ERH = 2.9 AVFM = 2.7 Q = D
LONG = 115.139 W ERY = 2.2 GAP = 273 AVXM = QS = C LAS VEGAS
DEPTH = 0.60 KM ERZ = 8.5 NM = QD = D

27	NCP	EPU	20 2 44.31				28	2.3	92.2	278	38	15.48	15.57	-0.09	
27	JCN	EPU	20 2 45.50				32	2.5	99.0	299	38	16.67	16.67	-0.00	
27	MCY	IPU	20 2 45.95				47	2.8	103.4	314	38	17.12	17.40	-0.28	
27	SCH	EPD	20 2 50.22				33	2.6	128.8	303	38	21.39	21.52	-0.13	
27	LSM	IPU	20 2 50.55				35	2.7	129.9	309	38	21.72	21.70	0.02	
27	LCP	EPD	20 2 50.85				35	2.7	131.5	315	38	22.02	21.96	0.06	
27	CDH1	EPU	20 2 52.49				35	2.7	141.7	312	30	23.66	23.41	0.25	
27	BGB	EPD	20 2 53.57				38	2.8	150.1	319	30	24.74	24.50	0.29	
27	PRN	EPD	20 2 53.90				42	2.9	155.3	3	30	25.07	25.17	-0.10	
27	GMR	EPU4	20 2 54.95				34	2.7	157.4	339	30	26.12	25.45	0.67	
27	TPU	EPD	20 2 57.67				31	2.8	182.8	346	30	28.84	28.75	0.09	
27	NPN	EPD	20 2 57.83				32	2.8	183.2	6	30	29.00	28.80	0.20	

OCT H = 0 40 33.42 UTC RMS = 0.45 NO = 22 FREE DEPTH SOLUTION
31 LAT = 36.726 N ERX = 0.8 ERH = 1.1 AVFM = 2.5 Q = C
LONG = 115.932 W ERY = 0.7 GAP = 56 AVXM = QS = C MERCURY
DEPTH = 0.79 KM ERZ = 3.1 NM = QD = B

31	MCY	EPU	0 40 35.01				47	2.5	7.6	201	38	1.59	1.77	-0.18	
		ISU2	0 40 37.76									4.34	3.11	1.24	
31	SPRG	IPU	0 40 35.30						11.5	108	38	1.88	2.41	-0.52	
31	CPX	EPD	0 40 37.30				26	2.0	25.2	333	38	3.88	4.64	-0.76	
31	LSM	EPU2	0 40 37.46				38	2.4	30.4	273	38	4.04	5.49	-1.45	
31	SSP	EPD	0 40 39.18				37	2.4	33.8	311	38	5.76	6.04	-0.28	
31	BGB	EPD	0 40 40.70				33	2.3	43.6	323	38	7.28	7.62	-0.29	
31	APK	EPU	0 40 42.78				27	2.2	55.3	145	38	9.36	9.53	-0.16	
31	EPN	EPD	0 40 44.50				35	2.4	64.5	327	38	11.08	11.03	0.06	
31	GMR	EPD	0 40 45.18				37	2.5	69.0	12	38	11.76	11.76	0.00	
31	SHRG	EPU	0 40 46.20				22	2.1	73.7	109	38	12.78	12.52	0.31	
31	FMT	EPU4	0 40 52.15				30	2.4	76.3	263	38	18.73	12.95	5.88	
31	BMT	EPU	0 40 48.13				30	2.4	81.9	319	38	14.71	13.86	0.46	
31	EPR	EPU	0 40 47.71				46	2.7	82.6	53	38	14.29	13.98	0.31	
31	TPU	EPD	0 40 50.20				31	2.5	100.8	14	38	16.78	16.93	-0.14	
31	PRN	EPD	0 40 52.12				45	2.8	108.9	46	38	18.70	18.25	0.45	
31	OSM	EPU	0 40 53.65				33	2.6	119.1	225	38	20.23	19.91	0.32	
31	KRNA	EPU	0 40 54.35				24	2.3	120.5	341	38	20.93	20.13	0.80	
31	MTI	EPU4	0 40 54.60				32	2.6	120.7	29	38	21.18	20.16	1.22	
31	CTS	EPU	0 40 54.51				22	2.2	123.6	325	38	21.09	20.63	0.46	
31	GVN	EPU	0 40 54.11				35	2.7	129.4	284	38	20.69	21.59	-0.89	
31	GMN	EPD	0 40 55.95				36	2.7	134.3	298	38	22.53	22.38	0.15	
31	DLM	EPU	0 40 57.31				35	2.7	144.1	47	30	23.89	23.67	0.22	
31	SRG	EPU	0 40 58.13				48	3.0	149.5	31	30	24.71	24.37	0.34	
31	MGM	IPD4	0 40 60.28				32	2.7	160.2	300	30	26.86	25.76	1.10	

OCT 1980	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 = 18 11 9.65 UTC				RMS = 0.37	NO = 12										FREE DEPTH SOLUTION
31 LAT = 37.193 N				ERX = 1.1	ERH = 1.6			AVFM = 2.1		Q = C					
LONG = 116.188 W				ERY = 1.1	GAP = 72			AVXM =		QS = C					SILENT CANYON - YUCCA FLAT
DEPTH = 0.01 KM				ERZ = 453.5	NM =					QD = C					
31	EPN	IPU	18 11 12.13				45	2.5	12.6	281	38	2.48	2.75	-0.27	
31	GLR	IPU	18 11 12.00				26	2.0	14.8	87	38	2.35	3.11	-0.61	
31	BGB	IPD	18 11 13.32				32	2.2	17.6	193	38	3.67	3.57	0.15	
31	SSP	EPD	18 11 15.22				40	2.4	29.9	186	38	5.57	5.56	0.01	
31	BLT	EPD	18 11 15.35				35	2.3	30.1	9	38	5.70	5.60	0.10	
31	CPX	EPU	18 11 15.50				20	1.8	31.4	159	38	5.85	5.80	0.05	
31	BMT	EPU2	18 11 16.73				22	1.9	32.6	288	38	7.08	6.00	0.68	
31	LOP	EPD	18 11 16.50				39	2.4	37.6	178	38	6.85	6.82	0.03	
31	GMR	IPD	18 11 17.24				18	1.8	39.8	67	38	7.59	7.18	0.41	
31	SPRG	EPD4	18 11 22.11				15	1.7	64.7	149	38	12.46	11.22	1.24	
31	OCS	EPD	18 11 21.70				25	2.2	68.1	20	38	12.05	11.77	0.28	
31	CTS	EPD	18 11 21.00				27	2.2	69.0	316	38	11.35	11.92	-0.57	
31	SGV	IPD	18 11 23.54				27	2.3	79.0	253	38	13.89	13.54	0.35	
31	MTI	EPD4	18 11 26.82				15	1.8	97.0	56	38	17.17	16.47	0.90	
31	GVN	EPD4	18 11 28.43				28	2.4	105.1	258	38	18.78	17.79	0.98	
OCT H = 18 11 49.28 UTC				RMS = 0.00	NO = 5										FREE DEPTH SOLUTION
31 LAT = 37.171 N				ERX = 0.0	ERH = 0.0			AVFM = 2.3		Q = C					
LONG = 116.200 W				ERY = 0.0	GAP = 165			AVXM =		QS = A					SILENT CANYON - YUCCA FLAT
DEPTH = 7.50 KM				ERZ = 0.0	NM =					QD = D					
31	EPN	IPU	18 11 51.82				59	2.7	12.0	294	118	2.54	2.54	-0.00	
31	BGB	EPD	18 11 52.21				38	2.3	15.0	189	113	2.93	2.98	-0.00	
31	BLT	EPU	18 11 55.05				28	2.1	32.8	10	100	5.77	5.76	0.00	
31	LOP	EPD	18 11 55.45				30	2.2	35.3	175	100	6.17	6.17	0.00	
31	KPNA	EPD	18 12 0.45				24	2.1	66.2	346	95	11.17	11.16	0.00	
31	PPN	EPD4	18 12 8.85				31	2.5	105.3	76	93	19.57	17.50	2.06	
OCT H = 18 15 51.35 UTC				RMS = 0.16	NO = 9										FREE DEPTH SOLUTION
31 LAT = 37.196 N				ERX = 0.8	ERH = 1.1			AVFM = 2.1		Q = B					
LONG = 116.239 W				ERY = 0.7	GAP = 101			AVXM =		QS = B					SILENT CANYON - YUCCA FLAT
DEPTH = 13.87 KM				ERZ = 1.7	NM =					QD = B					
31	EPN	IPU	18 15 54.02				43	2.4	7.7	285	149	2.67	2.77	-0.10	
31	BGB	IPD	18 15 55.17				35	2.3	17.6	177	126	3.82	3.87	0.00	
31	BMT	IPD	18 15 56.85				29	2.2	27.9	290	115	5.50	5.31	-0.21	
31	SSP	EPD	18 15 57.05				39	2.4	30.2	176	113	5.70	5.66	0.05	
31	BLT	EPU	18 15 57.25				29	2.2	30.8	18	112	5.90	5.76	0.14	
31	CPX	EPD4	18 15 56.61				22	1.9	33.8	152	110	5.26	6.20	-0.94	
31	LOP	EPD2	18 15 58.66				31	2.2	38.5	170	109	7.31	6.93	0.38	
31	GMR	EPD	18 15 59.01				20	1.9	44.2	70	106	7.66	7.82	-0.16	
31	CTS	EPU4	18 16 3.60				22	2.0	65.4	319	101	12.25	11.17	1.08	
31	SGV	EPU	18 16 3.03				27	2.3	74.4	251	99	11.68	12.62	-0.93	
31	GVN	EPU	18 16 8.09				30	2.4	100.4	258	53	16.74	16.60	0.14	
31	MTI	EPD4	18 16 10.19				10	1.5	100.8	58	53	18.84	16.66	2.38	
OCT H = 18 40 57.63 UTC				RMS = 0.17	NO = 7										FREE DEPTH SOLUTION
31 LAT = 37.139 N				ERX = 1.1	ERH = 1.4			AVFM = 2.4		Q = B					
LONG = 116.253 W				ERY = 0.8	GAP = 103			AVXM =		QS = B					SILENT CANYON - PAHUTE MESA
DEPTH = 9.01 KM				ERZ = 3.0	NM =					QD = B					
31	EPN	IPU	18 41 0.23				66	2.8	10.4	323	128	2.60	2.46	0.14	
31	BGB	EPD	18 41 0.00						11.5	169	125	2.37	2.59	-0.18	
31	SSP	EPU2	18 41 2.45				57	2.7	24.0	173	108	4.82	4.43	0.38	
31	LOP	EPD	18 41 3.60				52	2.7	32.5	167	103	5.97	5.78	0.19	
31	BLT	EPU	18 41 4.05				22	1.9	37.3	16	101	6.42	6.53	-0.11	
31	GMR	EPD	18 41 5.79						47.9	63	99	8.16	8.25	-0.08	
31	SGV	EPD	18 41 9.53				22	2.1	71.5	256	96	11.90	12.04	-0.14	
OCT H = 18 43 4.45 UTC				RMS = 0.27	NO = 8										FREE DEPTH SOLUTION
31 LAT = 37.203 N				ERX = 1.4	ERH = 1.9			AVFM = 2.4		Q = C					
LONG = 116.216 W				ERY = 1.2	GAP = 97			AVXM =		QS = C					SILENT CANYON - NORTH
DEPTH = 8.15 KM				ERZ = 5.7	NM =					QD = B					
31	EPN	EPD	18 43 6.61				65	2.8	9.6	277	127	2.16	2.27	-0.12	
31	GLR	IPU	18 43 8.23				27	2.1	17.6	91	111	3.78	3.41	0.51	
31	BGB	IPD	18 43 7.76				40	2.4	18.4	183	111	3.31	3.53	-0.17	
31	BLT	EPU	18 43 9.60				39	2.4	29.5	14	103	5.15	5.27	-0.13	

OCT 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
31	BMT	EPU4	18 43 11.95				32	2.2	29.6	288	103	7.50	5.28	1.82	
31	SSP	EPD	18 43 9.64				39	2.4	30.9	180	102	5.19	5.48	-0.30	
31	LCP	EPD	18 43 11.40				42	2.5	39.0	174	100	6.95	6.78	0.17	
31	GMR	EPU	18 43 11.51				32	2.3	42.0	70	99	7.06	7.27	-0.21	
31	LSM	EPD4	18 43 12.00				40	2.5	51.8	186	97	7.55	8.83	-1.29	
31	SGV	EPD	18 43 17.79				40	2.6	76.6	251	95	13.34	12.96	0.48	
31	GVN	EPU4	18 43 23.30				29	2.4	102.6	257	94	18.85	17.07	1.77	

OCT H = 19 18 13.53 UTC RMS = 0.24 NO = 8 FREE DEPTH SOLUTION
31 LAT = 37.051 N ERX = 1.7 ERH = 2.0 AVFM = 2.4 Q = B
LONG = 116.165 W ERY = 1.1 GAP = 112 AVXM = QS = B SILENT CANYON - YUCCA FLAT
DEPTH = 12.19 KM ERZ = 1.8 NM = QD = B

31	BGB	IPD	19 18 16.11				34	2.2	5.7	256	153	2.58	2.37	0.25	
31	SSP	IPU4	19 18 15.00						14.7	199	127	1.47	3.33	-1.86	
31	GLR	EPU4	19 18 14.00				26	2.0	21.1	38	118	0.47	4.20	-3.59	
31	LCP	EPU	19 18 18.00				50	2.6	21.8	181	117	4.47	4.31	0.16	
31	EPN	EPD	19 18 18.06				40	2.4	23.0	322	116	4.53	4.48	0.05	
31	LSM	EPU	19 18 19.55				43	2.5	35.9	195	107	6.02	6.44	-0.42	
31	BLT	EP	19 18 21.25				36	2.4	45.7	3	103	7.72	7.98	-0.26	
31	SGV	IPU	19 18 26.39				26	2.2	77.6	264	98	12.86	13.08	-0.22	
31	GVN	EPU	19 18 31.22				31	2.5	104.9	267	53	17.69	17.35	0.33	
31	PRN	EPU	19 18 31.25				29	2.4	106.6	68	53	17.72	17.57	0.14	

OCT H = 19 46 11.39 UTC RMS = 0.23 NO = 14 FREE DEPTH SOLUTION
31 LAT = 37.164 N ERX = 0.8 ERH = 1.0 AVFM = Q = C
LONG = 116.219 W ERY = 0.6 GAP = 100 AVXM = QS = B SILENT CANYON - YUCCA FLAT
DEPTH = 7.48 KM ERZ = 2.2 NM = QD = C

31	CPX	EPU	19 46 16.54						29.7	151	101	5.15	5.28	-0.13	
31	BMT	EPD	19 46 17.27						31.0	295	101	5.88	5.47	0.01	
31	KRNA	IPD	19 46 22.01						66.6	348	95	10.62	11.22	-0.60	
31	CTS	EPD	19 46 23.21						69.3	320	95	11.82	11.67	0.16	
31	TPU	EPU	19 46 22.85						70.3	46	95	11.46	11.82	-0.36	
31	QCS	EPU	19 46 23.85						72.2	22	95	12.46	12.12	0.34	
31	SGV	EPU4	19 46 22.20						75.1	254	94	10.81	12.60	-1.79	
31	JCN	EPD	19 46 25.01						81.0	173	94	13.62	13.56	0.06	
31	AMR	EPD	19 46 26.10						88.0	195	94	14.71	14.70	0.01	
31	EPR	EPU	19 46 26.26						91.6	90	94	14.87	15.28	-0.41	
31	GVN	EPD4	19 46 28.01						93.6	279	94	16.62	15.61	1.01	
31	MTI	EPD	19 46 28.39						101.3	56	93	17.00	16.85	0.36	
31	PRN	EPD	19 46 29.55						107.1	75	93	18.16	17.79	0.37	
31	MZP	EPD4	19 46 32.27						119.1	300	53	20.88	19.65	1.42	
		ESD4	19 46 49.69									38.30	34.06	4.24	
31	SHRG	EPD	19 46 30.86						119.9	128	53	19.47	19.76	-0.23	
31	NPN	EPD	19 46 32.10						125.8	64	53	20.71	20.53	0.19	
31	SPG	EPU	19 46 32.05						129.3	52	53	20.66	20.98	-0.32	
31	PPK	EPD4	19 46 37.37						152.5	281	53	25.98	24.00	1.99	

NOV H = 23 59 35.63 UTC RMS = 0.03 NO = 5 FREE DEPTH SOLUTION
02 LAT = 37.344 N ERX = 0.4 ERH = 1.0 AVFM = 2.1 Q = D
LONG = 116.984 W ERY = 0.9 GAP = 201 AVXM = QS = C THIRSTY CANYON
DEPTH = 9.17 KM ERZ = 5.8 NM = QD = D

02	GMN	IPD	23 59 40.19				16	1.6	24.9	259	108	4.56	4.59	-0.03	
02	BMT	EPU	23 59 43.10				24	2.0	40.5	100	101	7.47	7.05	0.02	
02	SGV	IPU	23 59 42.68				28	2.2	40.5	160	101	7.05	7.05	-0.01	
02	GVN	IPU	23 59 44.19				19	1.9	49.6	220	99	8.56	8.51	0.05	
02	MZP	EPD4	23 59 46.00				20	1.9	53.0	318	98	10.37	9.06	1.50	
02	GLR	EPD4	23 59 52.98				22	2.1	87.2	101	95	17.35	14.58	2.92	
02	LSM	EPU	23 59 51.02				28	2.3	92.3	137	95	15.39	15.42	-0.03	
02	SCH	EPD4	23 59 54.49				32	2.5	96.5	143	94	18.86	16.09	2.76	
02	MCY	EPD4	23 59 52.09				40	2.7	118.4	130	53	16.46	19.39	-2.94	

NOV H = 2 17 27.19 UTC RMS = 0.00 NO = 4 FREE DEPTH SOLUTION
03 LAT = 37.532 N ERX = ERH = AVFM = 2.1 Q = C
LONG = 115.310 W ERY = GAP = 130 AVXM = QS = A HIKO
DEPTH = 14.73 KM ERZ = NM = QD = D

03	MTI	EPD	2 17 30.79				26	2.0	16.4	11	130	3.60	3.80	-0.00	
03	PRN	IPD	2 17 32.41				38	2.4	26.8	121	117	5.22	5.22	0.00	
03	NPN	IPD4	2 17 34.49				26	2.1	35.6	68	111	7.30	6.52	0.78	

NOV 1980	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	GMR	EPD	2 17 35.38				24	2.1	46.4	242	106	8.19	8.19	-0.00	
. 03	OLM	EPU	2 17 36.12				17	1.8	51.1	81	105	8.93	8.93	0.00	

. NOV H = 3 30 26.85 UTC RMS = 0.05 NO = 4 FREE DEPTH SOLUTION
. 03 LAT = 36.630 N ERX = ERH = AVFM = 2.2 Q = C
. LONG = 116.267 W ERY = GAP = 203 AVXM = QS = A LATHROP WELLS
. DEPTH = 22.54 KM ERZ = NM = QD = D

. 03	SDM	IPU	3 30 30.83				42	2.4	6.6	285	163	3.98	3.99	-0.01	
. 03	LSM	IPU4	3 30 32.30				38	2.3	12.1	358	151	5.45	4.34	1.11	
. 03	MCY	EPD	3 30 32.85				42	2.5	27.5	83	128	6.00	6.00	0.00	
. 03	BGB	EPU4	3 30 33.49				29	2.2	45.4	4	115	6.64	8.49	-1.80	
. 03	GLR	EPU	3 30 38.21				17	1.8	67.0	19	53	11.36	11.41	0.10	
. 03	GMR	EPU	3 30 41.14				18	2.0	89.7	29	53	14.29	14.37	-0.07	
. 03	MTI	EPD4	3 30 51.18				23	2.4	145.9	37	53	24.33	21.66	2.87	

. NOV H = 9 10 25.01 UTC RMS = 0.33 NO = 10 FREE DEPTH SOLUTION
. 03 LAT = 36.629 N ERX = 1.7 ERH = 3.3 AVFM = 3.3 Q = D
. LONG = 116.025 W ERY = 2.8 GAP = 216 AVXM = QS = C LATHROP WELLS
. DEPTH = 11.21 KM ERZ = 2.8 NM = QD = D

. 03	MCY	EPD	9 10 27.36				155	3.5	6.7	57	147	2.35	2.31	0.04	
. 03	LSM	EPD	9 10 30.02				137	3.5	25.2	299	112	5.01	4.74	0.26	
. 03	SDM	EPU	9 10 29.85				134	3.5	28.1	274	109	4.84	5.18	-0.35	
. 03	SSP	EPD	9 10 31.45				145	3.6	37.1	332	105	6.44	6.58	-0.14	
. 03	BGB	EPD4	9 10 31.41				79	3.1	48.8	338	101	6.40	8.44	-1.99	
. 03	GLR	EPU	9 10 38.82				56	2.8	63.3	1	99	9.81	10.76	-0.80	
. 03	EPN	EPD	9 10 37.19				85	3.2	70.1	338	98	12.18	11.86	0.31	
. 03	GMR	EPU	9 10 38.78				77	3.2	81.4	16	97	13.77	13.68	0.09	
. 03	BLT	EPD	9 10 41.00				80	3.3	92.8	354	96	15.99	15.53	0.46	
. 03	PRN	EPU	9 10 44.50				91	3.5	122.4	45	53	19.49	19.72	-0.23	
. 03	KRNA	EPD4	9 10 36.70				83	3.4	128.3	346	53	11.69	20.49	-8.80	
. 03	MTI	EPD2	9 10 46.74				50	3.0	134.1	30	53	21.73	21.23	0.70	

. NOV H = 14 8 37.68 UTC RMS = 0.09 NO = 5 FREE DEPTH SOLUTION
. 03 LAT = 36.663 N ERX = 0.9 ERH = 2.2 AVFM = 2.4 Q = C
. LONG = 116.081 W ERY = 2.1 GAP = 174 AVXM = QS = B LATHROP WELLS
. DEPTH = 12.66 KM ERZ = 2.5 NM = QD = D

. 03	MCY	EPD	14 8 40.55				57	2.7	10.6	91	138	2.87	2.89	-0.02	
. 03	LSM	EPD4	14 8 43.42				47	2.5	19.0	296	121	5.74	3.95	1.79	
. 03	SDM	EPD	14 8 42.25				49	2.6	23.1	265	117	4.57	4.53	0.04	
. 03	SSP	EPD4	14 8 47.00				18	1.8	31.5	337	110	9.32	5.79	3.53	
. 03	BGB	EPU	14 8 45.19				35	2.4	43.6	343	105	7.51	7.66	-0.11	
. 03	GLR	EPU4	14 8 50.00				31	2.3	59.7	5	101	12.32	10.23	2.23	
. 03	BLT	EPD	14 8 53.20				52	2.9	88.7	357	97	15.52	14.88	0.63	
. 03	KRNA	EPU	14 8 57.33				19	2.1	123.5	348	53	19.65	19.72	-0.07	

. NOV H = 6 49 50.88 UTC RMS = 0.23 NO = 18 FREE DEPTH SOLUTION
. 04 LAT = 37.666 N ERX = 0.7 ERH = 0.9 AVFM = 2.8 Q = B
. LONG = 114.974 W ERY = 0.6 GAP = 127 AVXM = QS = B HIMGLAND PEAK
. DEPTH = 1.25 KM ERZ = 0.8 NM = QD = B

. 04	NPN	IP	6 49 51.85				58	2.7	3.6	115	109	0.97	0.99	-0.02	
. 04	DLM	IPU	6 49 54.86				35	2.3	21.8	108	38	3.98	3.99	-0.01	
. 04	SRG	IP	6 49 55.40				74	3.0	25.4	341	38	4.52	4.57	-0.05	
. 04	MTI	IP	6 49 55.45				44	2.5	26.4	273	38	4.57	4.74	0.03	
. 04	PRN	IPU	6 49 55.75				64	2.8	29.5	193	38	4.87	5.25	-0.38	
. 04	EPR	EPU4	6 50 9.74				65	3.0	58.3	199	38	18.86	9.93	8.93	
. 04	TPU	EPU	6 50 1.00				49	2.7	60.0	264	38	10.12	10.21	-0.09	
. 04	GMR	EPD	6 50 3.90				46	2.7	79.6	292	38	13.02	13.38	-0.36	
. 04	QCS	EPD4	6 50 5.95				44	2.7	83.9	278	38	15.07	14.09	0.98	
. 04	BLT	EPU	6 50 8.78				37	2.6	105.0	258	38	17.90	17.52	0.38	
. 04	GLR	IPU	6 50 8.74				39	2.7	106.0	241	38	17.88	17.67	0.35	
. 04	KRNA	EPU	6 50 12.00				48	2.9	124.4	274	38	21.12	20.68	0.44	
. 04	CPX	EPU	6 50 12.05				35	2.7	126.3	230	38	21.17	20.98	0.19	
. 04	EPN	EPU	6 50 12.79				63	3.2	129.6	247	38	21.91	21.52	0.39	
. 04	SMRG	EPU	6 50 13.22				36	2.7	129.9	187	38	22.34	21.57	0.82	
. 04	BGB	EPD	6 50 12.88				42	2.8	131.1	238	38	22.00	21.76	0.29	
. 04	LCP	EPU	6 50 14.38				46	2.9	139.0	230	30	23.50	22.91	0.59	
. 04	MCY	EPU	6 50 14.44				66	3.3	141.9	218	30	23.56	23.28	0.28	
. 04	UMT	EPD4	6 50 17.16				57	3.1	144.3	253	30	26.28	23.60	2.28	
. 04	LSM	EPD	6 50 16.52				60	3.2	154.5	228	30	25.64	24.92	0.72	
. 04	CTS	EPU4	6 50 10.19				33	2.7	154.5	269	30	19.31	24.93	-5.62	

NOV 1980	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	APK	EPU4	6 50 17.45				39	2.9	158.7	200	30	26.97	25.47	1.50	
04	SGV	EPU	6 50 22.32				58	3.3	197.7	247	30	31.44	30.53	0.91	
04	PPK	EPD4	6 50 34.15				16	2.5	260.8	264	30	43.27	38.72	4.55	

NOV H = 7 39 51.16 UTC RMS = 0.06 NO = 17 FREE DEPTH SOLUTION
04 LAT = 36.243 N ERX = 0.5 ERH = 1.1 AVFM = 2.7 Q = C
LONG = 117.121 W ERY = 1.0 GAP = 265 AVXM = QS = B PANAMINT BUTTE
DEPTH = 1.89 KM ERZ = 0.6 NM = QD = D

04	SGV	IPU	7 40 4.93				50	2.8	82.3	6	90	13.77	13.73	0.04
04	LSM	EPU	7 40 6.79				73	3.2	93.9	54	90	15.63	15.62	0.01
04	LCP	EPU	7 40 9.26				66	3.2	109.1	52	90	18.10	18.09	0.01
04	MCY	IPU	7 40 10.00				80	3.3	113.7	66	90	18.84	18.84	-0.00
04	BGB	EPD	7 40 10.85				41	2.8	119.0	42	90	19.69	19.71	0.03
04	CPX	EPU	7 40 11.33				34	2.6	121.8	51	90	20.17	20.16	0.02
04	BMT	EPU	7 40 12.25				39	2.8	126.8	24	90	21.09	20.97	-0.28
04	SPRG	EPU	7 40 12.25				35	2.7	127.7	67	90	21.09	21.12	-0.03
04	EPN	EPD	7 40 12.55				71	3.3	129.2	33	90	21.39	21.36	0.03
04	MGM	EPD	7 40 13.69				8	1.4	137.1	346	53	22.53	22.54	-0.01
04	GLR	EPD	7 40 14.58				27	2.5	144.9	43	53	23.42	23.55	0.03
04	PPK	EPU	7 40 15.19				33	2.7	148.9	332	53	24.03	24.07	-0.04
04	CTS	EPU	7 40 16.57				45	3.0	159.0	13	53	25.41	25.38	0.03
04	BLT	EPU	7 40 16.88				38	2.9	161.3	33	53	25.72	25.68	0.04
04	GMR	EPU	7 40 18.09				12	1.9	170.8	45	53	26.93	26.91	0.02
04	KRNA	EPU	7 40 19.27				50	3.2	179.8	22	53	28.11	28.08	0.03
04	EPR	EPD	7 40 22.01				8	1.6	201.1	59	53	30.85	30.85	0.00
04	PRN	EPD	7 40 25.18				14	2.2	225.5	55	53	34.02	34.02	0.00

NOV H = 8 6 38.42 UTC RMS = 0.59 NO = 9 FREE DEPTH SOLUTION
04 LAT = 36.650 N ERX = 4.5 ERH = 7.5 AVFM = 2.2 Q = D
LONG = 116.096 W ERY = 5.9 GAP = 210 AVXM = QS = D LATHROP WELLS
DEPTH = 20.92 KM ERZ = 3.1 NM = QD = D

04	MCY	IPU	8 6 42.57				42	2.4	12.0	84	149	4.15	4.11	0.04	Good qual
04	LSM	IPU	8 6 44.37				49	2.6	18.6	302	137	5.95	4.75	1.20	
04	LCP	IPU	8 6 43.40				41	2.4	23.5	344	130	4.98	5.33	-0.35	
04	CPX	EPD	8 6 43.85				21	1.9	31.1	6	123	5.43	6.33	-0.90	
04	BGB	EPD	8 6 46.65				20	1.9	44.6	345	114	8.23	8.27	0.01	
04	GLR	EPU	8 6 49.05				21	2.0	61.3	7	108	10.63	10.81	-0.03	
04	BMT	EPU	8 6 51.21				21	2.1	80.4	331	53	12.79	13.31	-0.92	
04	GMR	EPU	8 6 52.35				18	1.9	81.2	21	53	13.93	13.42	0.51	
04	SGV	EPU	8 6 51.81				29	2.4	91.3	294	53	13.39	14.73	-1.34	

NOV H = 9 46 15.77 UTC RMS = 0.15 NO = 4 FREE DEPTH SOLUTION
05 LAT = 37.143 N ERX = ERH = AVFM = 2.4 Q = C
LONG = 115.000 W ERY = GAP = 345 AVXM = QS = B ALAMO
DEPTH = 1.53 KM ERZ = NM = QD = D

05	MCY	EPU	9 46 32.44				33	2.5	101.0	238	38	16.67	16.81	-0.15
05	LCP	EPU	9 46 33.72				24	2.3	108.7	253	38	17.95	18.07	-0.12
05	LSM	EPU	9 46 36.15				24	2.3	121.9	246	38	20.38	20.21	0.17
05	SDH	EPU	9 46 37.70				28	2.5	131.4	245	38	21.93	21.76	0.17

NOV H = 5 52 31.89 UTC RMS = 0.15 NO = 6 FREE DEPTH SOLUTION
06 LAT = 36.796 N ERX = 1.9 ERH = 2.3 AVFM = 1.6 Q = D
LONG = 115.994 W ERY = 1.3 GAP = 191 AVXM = QS = C MERCURY
DEPTH = 1.77 KM ERZ = 258.2 NM = QD = D

06	MCY	EPU	5 52 34.70				24	1.9	15.2	169	90	2.81	2.82	-0.01
06	CPX	EPU	5 52 34.70				11	1.3	15.8	339	90	2.81	2.93	-0.11
06	LCP	EPU	5 52 34.80				24	1.9	16.8	293	90	2.91	3.08	-0.17
06	SPRG	EPD4	5 52 38.79				11	1.3	20.0	124	90	6.90	3.60	3.30
06	LSM	EPD	5 52 36.25				30	2.2	25.6	256	90	4.36	4.52	-0.15
06	CCM1	EPD	5 52 37.34				11	1.3	29.8	284	90	5.45	5.19	0.26
06	BGB	EPD	5 52 38.10				14	1.5	34.0	322	90	6.21	5.88	0.39

NOV H = 10 41 21.81 UTC RMS = 0.07 NO = 6 FREE DEPTH SOLUTION
06 LAT = 36.712 N ERX = 0.3 ERH = 0.8 AVFM = 1.5 Q = C
LONG = 115.931 W ERY = 0.8 GAP = 126 AVXM = QS = C MERCURY
DEPTH = 2.88 KM ERZ = 6.8 NM = QD = B

06	MCY	IPD	10 41 23.23				32	2.2	6.2	206	103	1.42	1.39	0.03

NOV 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 06	SPRG	EPU	10 41 23.93				18	1.7	11.1	100	97	2.12	2.17	-0.05	
. 06	LCP	EPU	10 41 26.40				24	2.0	26.3	307	93	4.59	4.64	-0.05	
. 06	CPX	EPO	10 41 26.55				11	1.3	26.6	335	93	4.74	4.68	0.06	
. 06	LSM	EPU	10 41 27.00				30	2.2	30.6	276	92	5.19	5.33	-0.14	
. 06	CDH1	EPO4	10 41 32.39				4	0.5	38.2	296	92	10.58	6.57	4.01	
. 06	GVN	EPO	10 41 43.38				7	1.3	129.8	284	90	21.57	21.46	0.11	
. 06	MGM	EPU4	10 41 45.22				5	1.1	161.0	300	53	23.41	25.54	-2.13	

. NOV H = 22 27 17.61 UTC RMS = 0.28 NO = 6 FREE DEPTH SOLUTION
. 08 LAT = 37.185 N ERX = 3.0 ERH = 3.3 AVFM = 2.1 Q = C
. LONG = 115.830 W ERY = 1.3 GAP = 159 AVXM = QS = C GROOM LAKE
. DEPTH = 0.20 KM ERZ = 460.8 NM = QD = C

. 08	GMR	EPO4	22 27 22.29				29	2.1	17.3	18	38	4.68	3.48	1.20
. 08	BGB	EPU4	22 27 26.83				27	2.1	38.9	245	38	9.22	6.99	2.28
. 08	BLT	EPU	22 27 24.50				30	2.2	40.9	319	38	6.89	7.31	-0.42
. 08	EPN	EPO4	22 27 27.10				39	2.5	43.9	274	38	9.49	7.81	1.68
. 08	SSP	EPU4	22 27 26.90				35	2.4	45.0	230	38	9.29	7.98	1.31
. 08	TPU	EPO	22 27 26.35				17	1.8	49.3	19	38	8.74	8.68	0.06
. 08	SPRG	EPO	22 27 26.92				16	1.7	54.5	178	38	9.31	9.52	-0.22
. 08	LSM	EPU	22 27 29.00				29	2.3	63.2	218	38	11.39	10.94	0.45
. 08	QCS	EPU	22 27 28.70				19	1.9	65.2	353	38	11.09	11.26	-0.17
. 08	PRN	EPO4	22 27 31.31				23	2.1	73.4	70	38	13.70	12.60	1.10
. 08	SDH	EPO4	22 27 31.85				30	2.3	75.1	217	38	14.24	12.87	1.37
. 08	KRNA	EPO	22 27 31.05				27	2.3	79.4	322	38	13.44	13.57	-0.13
. 08	NMN	EPU4	22 27 35.69				16	1.8	88.6	263	38	18.08	15.07	3.01

. NOV H = 2 25 29.36 UTC RMS = 0.46 NO = 7 FIXED DEPTH SOLUTION
. 09 LAT = 36.130 N ERX = 19.3 ERH = 57.8 AVFM = 2.6 Q = D DEPTH CONTROL INADEQUATE
. LONG = 116.154 W ERY = 54.5 GAP = 175 AVXM = QS = D ASH MEADOWS
. DEPTH = 5.00 KM ERZ = 61.6 NM = QD = C

. 09	NGP	EPU	2 25 30.10				41	2.4	0.2	141	177	0.74	0.99	-0.25
. 09	JGN	EPO	2 25 35.01				37	2.4	34.7	8	96	5.65	6.02	-0.38
. 09	AMR	EPO	2 25 36.22				42	2.5	41.3	316	95	6.86	7.10	-0.24
. 09	SDH	EPU	2 25 39.77				36	2.5	59.6	344	93	10.41	10.05	0.35
. 09	MCY	EPU4	2 25 40.81				46	2.7	61.5	16	93	11.45	10.37	1.08
. 09	LSM	EPO	2 25 41.55				48	2.7	68.4	351	93	12.19	11.49	0.69
. 09	LCP	EPU	2 25 43.30				47	2.8	80.4	359	92	13.94	13.44	0.50
. 09	SSP	EPU	2 25 43.47				43	2.7	88.5	356	92	14.11	4.75	-0.64

. NOV H = 7 8 45.67 UTC RMS = 0.17 NO = 20 FIXED DEPTH SOLUTION
. 09 LAT = 37.769 N ERX = 0.5 ERH = 0.6 AVFM = 2.8 Q = B DEPTH CONTROL INADEQUATE
. LONG = 116.305 W ERY = 0.4 GAP = 86 AVXM = QS = B QUARTZITE MOUNTAIN
. DEPTH = 3.71 KM ERZ = 3.4 NM = QD = B

. 09	KRNA	IPO	7 8 47.25				50	2.6	7.0	252	109	1.58	1.54	0.04
. 09	RVE	IPO	7 8 50.87				36	2.3	29.5	20	94	5.20	5.16	0.04
. 09	QCS	EPU	7 8 51.40				40	2.5	34.2	90	93	5.73	5.93	-0.20
. 09	BLT	IPU4	7 8 51.27				46	2.6	37.3	156	93	5.60	6.43	-0.83
. 09	CTS	EPO	7 8 52.10				38	2.4	39.8	249	93	6.43	6.83	-0.39
. 09	BMT	IPO	7 8 55.91				65	3.0	57.6	201	92	10.24	9.72	0.12
. 09	TPU	EPO	7 8 55.92				40	2.5	60.7	107	92	10.25	10.23	0.03
. 09	EPN	EPO	7 8 56.20				74	3.1	61.6	182	92	10.53	10.38	0.15
. 09	GMR	IPU	7 8 57.10				43	2.6	67.5	136	92	11.43	11.34	0.09
. 09	BGB	EPO	7 8 59.10				51	2.8	81.5	175	91	13.43	13.61	-0.13
. 09	TAP	EPU	7 9 0.33				39	2.6	87.5	293	91	14.66	14.59	0.07
. 09	MTI	EPO	7 9 0.78				40	2.7	91.6	96	91	15.11	15.27	0.04
. 09	CPX	EPO	7 9 1.36				40	2.7	95.8	167	91	15.69	15.95	-0.26
. 09	GPN	IPO4	7 9 9.03				42	2.7	99.2	238	91	23.36	16.50	6.86
. 09	LCP	EPO	7 9 2.90				50	2.9	102.3	173	90	17.23	16.98	0.25
. 09	LSM	EPO	7 9 4.70				55	3.0	114.4	179	90	19.03	18.95	0.08
. 09	PPN	IPO	7 9 5.01				74	3.3	117.9	110	90	19.34	19.53	-0.18
. 09	EPR	EPO	7 9 5.19				87	3.4	119.3	124	90	19.52	19.75	-0.22
. 09	NPN	EPO	7 9 6.45				54	3.0	121.4	96	90	20.78	20.08	0.70
. 09	GVN	IPO	7 9 6.59				44	2.9	125.3	227	90	20.92	20.72	0.20
. 09	MCY	EPU	7 9 6.57				48	2.9	126.6	166	90	20.90	20.94	-0.04
. 09	DLM	EPO4	7 9 9.51				41	2.8	139.3	97	53	23.84	22.65	1.19
. 09	PPK	EPU	7 9 10.31				37	2.8	146.5	255	53	24.64	23.58	1.06
. 09	SHRG	EPO4	7 9 14.78				66	3.4	173.6	144	53	29.11	27.11	2.06

. NOV H = 13 58 35.97 UTC RMS = 0.01 NO = 3 FIXED DEPTH SOLUTION
. 09 LAT = 36.774 N ERX = ERH = AVFM = 1.8 Q = C DEPTH CONTROL INADEQUATE
. LONG = 116.013 W ERY = GAP = 217 AVXM = QS = A LATHROP WELLS

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NOV   STA  PHASE    TIME       AMP  PER   XMAG  DUR  FMAG  DIST  AZI  AIN   TOBS   TCAL  RES   REMARKS
1980               (UTC)      (MU) (SEC)                (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

.   DEPTH =   5.00 KM      ERZ =        NM =                        QD = D                                .
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. 09    MCY  EPD   13 58 38.55                        26  2.0   13.2  160  105    2.58   2.58   0.00    .
. 09    LOP  EPU   13 58 39.05                        18  1.7   16.4  303  102    3.08   3.08   0.01    .
. 09    LSM  EPD   13 58 40.15                        20  1.8   23.4  261   99    4.18   4.19  -0.01    .
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. NOV H =  1 43 51.42 UTC  RMS =  0.00  NO =  3                                  FIXED DEPTH SOLUTION    .
.  11 LAT =  36.738 N      ERX =        ERH =        AVFM =    1.6  Q = C       DEPTH CONTROL INADEQUATE .
.    LONG = 116.235 W      ERY =        GAP = 162    AVXM =         QS = A       LATHROP WELLS           .
.   DEPTH =   5.00 KM      ERZ =        NM =                        QD = D                               .
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. 11    LSM  IPD    1 43 52.59                        21  1.8    3.3  271  142    1.17   1.17  -0.00    .
. 11    LCP  EPD    1 43 54.15                        15  1.5   14.2   25  104    2.73   2.73   0.00    .
. 11    MCY  EPU    1 43 56.01                        16  1.6   25.8  109   98    4.59   4.59  -0.00    .
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. NOV H =  8 33  4.01 UTC  RMS =  0.36  NO = 19                                  FIXED DEPTH SOLUTION    .
.  11 LAT =  37.302 N      ERX =   1.1  ERH =   1.4  AVFM =    2.8  Q = C       DEPTH CUNTROL INADEQUATE .
.    LONG = 116.466 W      ERY =   0.9  GAP =  81    AVXM =         QS = C       SILENT CANYON - NORTH   .
.   DEPTH =   4.76 KM      ERZ =   3.1  NM =                        QD = C                               .
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. 11    BMT  IPD4   8 33 15.00                        60  2.7    6.4  251  120   10.99   1.52   9.07    .
. 11    EPN  IPU    8 33  7.32                        72  2.9   16.0  128  102    3.31   3.00   0.32    .
. 11    BLT  IPD    8 33  9.85                        56  2.7   34.2   59   95    5.64   5.94  -0.10    .
. 11    BGB  IPU    8 33 10.22                        41  2.5   36.2  144   95    6.21   6.26   0.01    .
. 11    CTS  IPU4   8 33  8.45                        55  2.8   44.0  329   94    4.44   7.52  -3.07    .
. 11    SSP  IPD    8 33 12.17                              47.3  152   94    8.16   8.06   0.11    .
. 11    CPX  IPD    8 33 12.97                        36  2.4   55.0  139   93    8.96   9.32  -0.35    .
. 11    LCP  EPU    8 33 13.15                        65  3.0   56.4  152   93    9.14   9.53  -0.39    .
. 11    BRO  IPD    8 33 14.12                        50  2.7   61.5  193   93   10.11  10.37  -0.26    .
. 11    GMR  EPU    8 33 14.00                        41  2.6   61.7   87   93    9.99  10.40  -0.41    .
. 11    LSM  EPU    8 33 15.21                        72  3.1   64.8  165   93   11.20  10.91   0.29    .
. 11    QCS  EPU    8 33 15.52                        40  2.6   70.9   43   93   11.51  11.90  -0.39    .
. 11    SDM  EPD4   8 33 17.61                        51  2.8   73.8  171   92   13.60  12.36   1.24    .
. 11    TPU  EPD2   8 33 17.92                        53  2.9   79.7   65   92   13.91  13.32   0.60    .
. 11    RVE  EPU4   8 33 15.45                        39  2.6   83.2   17   92   11.44  13.90  -2.45    .
. 11    MCY  EPD4   8 33 17.00                        67  3.1   84.1  148   92   12.99  14.03  -1.04    .
. 11    MGM  EPD    8 33 18.73                        41  2.7   92.5  280   92   14.72  15.41  -0.69    .
. 11    AMR  EPD4   8 33 21.61                        52  2.9  100.4  180   92   17.60  16.69   0.91    .
. 11    JCN  EPD2   8 33 21.40                        48  2.8  101.0  161   92   17.39  16.79   0.60    .
. 11    MCA  IPD2   8 33 21.70                        39  2.7  102.6  225   92   17.69  17.05   0.64    .
. 11    TNP  EP     8 33 22.40                        50  2.9  109.0  323   92   18.39  18.10   0.29    .
. 11    MTI  EPD    8 33 23.11                        42  2.8  113.4   69   92   19.10  18.81   0.49    .
. 11    PRN  IPD    8 33 25.10                        60  3.1  125.9   85   53   21.09  20.81   0.29    .
. 11    PPK  EPD4   8 33 26.38                        40  2.8  128.4  276   53   22.37  21.12   1.25    .
. 11    NPN  EPU    8 33 26.89                        79  3.4  140.7   74   53   22.88  22.72   0.16    .
. 11    SHRG EPU2   8 33 28.44                        41  2.9  146.6  127   53   24.43  23.49   0.99    .
. 11    DLM  EPD4   8 33 29.90                        40  2.9  156.4   78   53   25.89  24.76   1.13    .
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. NOV H = 11  4 59.01 UTC  RMS =  0.43  NO = 11                                  FREE DEPTH SOLUTION     .
.  11 LAT =  37.279 N      ERX =   1.1  ERH =   2.1  AVFM =    2.3  Q = C       THIRSTY CANYON          .
.    LONG = 116.507 W      ERY =   1.7  GAP = 111    AVXM =         QS = C                               .
.   DEPTH =   9.03 KM      ERZ =   8.4  NM =                        QD = B                               .
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. 11    EPN  IPD   11  5  2.78                        45  2.5   17.8  114  114    3.77   3.50   0.26    .
. 11    BGB  IPD   11  5  5.82                        29  2.2   36.5  137  102    6.81   6.41   0.45    .
. 11    BLT  EPD   11  5  5.30                        29  2.2   38.7   58  101    6.29   6.76  -0.47    .
. 11    CTS  IPU   11  5  7.37                        30  2.2   44.5  334  100    8.36   7.68   0.67    .
. 11    KPNA EPU   11  5  7.50                        30  2.3   53.5   12   98    8.49   9.13  -0.64    .
. 11    CPX  EPD   11  5  8.39                        15  1.7   55.7  134   98    9.38   9.49  -0.11    .
. 11    LSM  EPU3  11  5  9.00                        35  2.4   63.5  161   97    9.99  10.75  -0.76    .
. 11    GMR  EPU   11  5 10.00                        23  2.1   65.6   85   97   10.99  11.08  -0.09    .
. 11    GMN  IPD   11  5 10.47                        35  2.5   66.7  272   96   11.46  11.27   0.18    .
.            ISD   11  5 18.45                                                    19.44  19.73  -0.29    .
. 11    SDM  EPD4  11  5 13.50                        31  2.4   71.9  168   96   14.49  12.10   2.38    .
. 11    GVN  EPU4  11  5 14.31                        28  2.3   80.4  247   95   15.30  13.48   1.82    .
. 11    MCY  EPD4  11  5 11.10                        31  2.4   84.0  145   95   12.09  14.06  -1.97    .
. 11    PRN  EPD3  11  5 20.92                        28  2.5  130.0   84   53   21.91  20.92   0.99    .
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. NOV H = 12 36 13.92 UTC  RMS =  0.00  NO =  3                                  FIXED DEPTH SOLUTION    .
.  11 LAT =  36.700 N      ERX =        ERH =        AVFM =    2.0  Q = C       DEPTH CONTROL INADEQUATE .
.    LONG = 116.248 W      ERY =        GAP = 130    AVXM =         QS = A       LATHROP WELLS           .
.   DEPTH =   5.00 KM      ERZ =        NM =                        QD = D                               .
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NOV 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
11	LSM	EPU	12 36 14.20				25	1.9	4.3	356	133	1.28	1.28	0.00	
11	SCM	EPD	12 36 14.80				25	2.0	8.7	226	114	1.88	1.88	0.00	
11	MCY	EPD	12 36 17.80				26	2.1	27.7	99	97	4.88	4.89	-0.00	

NOV H = 9 44 44.54 UTC RMS = 0.17 NO = 8 — FREE DEPTH SOLUTION
12 LAT = 37.314 N ERX = 0.9 ERH = 1.4 AVFM = 2.2 Q = B
LONG = 116.431 W ERY = 1.1 GAP = 81 AVXM = QS = B — SILENT CANYON - NORTH
DEPTH = 12.14 KM ERZ = 3.2 NM = QD = A

NOV 1980	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	BMT	EPU	9 44 47.82				22	1.8	9.7	250	139	3.28	2.72	0.15	
12	EPN	IPU	9 44 47.72				49	2.6	14.6	139	127	3.18	3.31	-0.13	
12	BLT	EPU	9 44 50.37				28	2.1	30.9	58	109	5.83	5.67	0.15	
12	CTS	IPU	9 44 52.30				21	1.9	44.6	324	104	7.76	7.80	-0.05	
12	KRNA	IPD	9 44 52.70				29	2.2	48.6	5	102	8.16	8.45	-0.29	
12	SGV	EPD	9 44 55.45				18	1.9	64.9	235	99	10.91	11.05	-0.14	
12	SDH	EPD3	9 44 56.44				32	2.4	74.6	174	98	11.90	12.61	-0.71	
12	MCY	EPD4	9 44 54.30				36	2.5	83.5	150	97	9.76	14.04	-4.29	
12	GVN	EPD	9 44 59.55				25	2.2	88.0	247	97	15.01	14.76	0.24	

NOV H = 19 7 44.57 UTC RMS = 0.17 NO = 7 — FIXED DEPTH SOLUTION
13 LAT = 36.996 N ERX = 1.6 ERH = 1.8 AVFM = 1.8 Q = C — DEPTH CONTROL INADEQUATE
LONG = 116.229 W ERY = 0.8 GAP = 168 AVXM = QS = B — LATHROP WELLS
DEPTH = 5.00 KM ERZ = 3.1 NM = QD = C

NOV 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
13	BGB	IPD	19 7 45.72				22	1.8	4.6	2	131	1.15	1.31	-0.11	
13	SSP	IPU	19 7 46.37				30	2.1	8.0	173	116	1.80	1.78	0.02	
13	LCP	EPU	19 7 47.68				27	2.1	16.7	161	102	3.11	3.13	-0.02	
13	CPX	EPD	19 7 47.79				7	0.9	17.0	116	102	3.22	3.17	0.05	
13	EPN	EPD	19 7 49.21				31	2.2	25.6	341	98	4.64	4.55	0.09	
13	GLR	EPD	19 7 49.24				17	1.7	29.3	40	97	4.67	5.16	-0.34	
13	GMR	EPD	19 7 54.26				14	1.6	55.3	47	93	9.69	9.36	0.33	

NOV H = 17 10 26.79 UTC RMS = 0.61 NO = 17 — FREE DEPTH SOLUTION
14 LAT = 37.081 N ERX = 1.8 ERH = 2.4 AVFM = 3.2 Q = D
LONG = 116.003 W ERY = 1.6 GAP = 100 AVXM = QS = D — SILENT CANYON - YUCCA FLAT
DEPTH = 1.81 KM ERZ = 10.5 NM = QD = C

NOV 1980	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	CPX	EPD4	17 10 30.71				92	3.1	17.6	196	90	3.92	3.21	0.72	
14	SSP	EPU	17 10 31.05				220	3.9	25.8	228	90	4.26	4.55	-0.28	
14	LCP	EPU	17 10 31.45				210	3.9	29.1	210	90	4.66	5.08	-0.42	
14	GMR	EPD	17 10 31.95				98	3.2	34.8	36	90	5.16	6.02	-0.85	
14	CCHS	EPD4	17 10 37.27				89	3.2	37.1	229	90	10.48	6.39	4.09	
14	SPRG	EPD	17 10 34.75				72	3.0	46.3	158	90	7.96	7.88	0.09	
14	SDH	EPD4	17 10 37.30				113	3.4	56.8	212	90	10.51	9.58	0.93	
14	TPU	EPU	17 10 37.35				63	3.0	66.1	28	90	10.56	11.10	-0.54	
14	JCN	EPD	17 10 38.75				120	3.5	71.7	187	90	11.96	12.01	-0.04	
14	EPR	EPD	17 10 39.40				85	3.2	73.3	82	90	12.61	12.27	0.35	
14	CCS	EPU	17 10 39.63				105	3.4	76.6	6	90	12.84	12.81	0.03	
14	PRN	EPD	17 10 41.58				79	3.2	92.1	67	90	14.79	15.32	-0.53	
14	SHRG	EPU	17 10 43.94				54	2.9	99.1	130	90	17.15	16.47	0.78	
14	NOP	EPU	17 10 43.42				35	2.6	106.6	187	90	16.63	17.68	-1.05	
14	NPN	EPU	17 10 46.51				48	2.9	113.8	56	90	19.72	18.85	0.87	
14	GVN	EPU	17 10 47.10				56	3.0	119.5	266	90	20.31	19.79	0.53	
14	SRG	EPD	17 10 47.83				73	3.3	121.5	43	90	21.04	20.10	0.94	
14	MCA	EPU3	17 10 48.52				51	3.0	123.6	247	90	21.73	20.44	1.29	
14	PGE	EPD4	17 10 49.48				70	3.3	124.9	229	90	22.69	20.67	2.03	
14	DLM	EPD	17 10 48.79				41	2.8	126.4	63	90	21.91	20.90	1.02	
14	GSM	EPU	17 10 51.56				47	3.0	146.0	212	53	24.77	23.71	1.07	

NOV H = 17 15 35.51 UTC RMS = 0.26 NO = 17 — FREE DEPTH SOLUTION
14 LAT = 37.089 N ERX = 0.9 ERH = 1.1 AVFM = 4.3 Q = C
LONG = 115.965 W ERY = 0.7 GAP = 81 AVXM = QS = C — GROOM LAKE
DEPTH = 0.83 KM ERZ = 20.3 NM = QD = C

NOV 1980	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	CPX	EPD	17 15 38.91				279	4.1	19.7	205	38	3.40	3.73	-0.33	
14	SSP	IPU	17 15 41.01						29.0	231	38	5.50	5.25	0.25	
14	LCP	IPU	17 15 40.74						31.7	215	38	5.23	5.69	-0.46	
14	GMR	EPD	17 15 40.97				319	4.2	32.1	32	38	5.46	5.75	-0.29	
14	SPRG	EPU	17 15 43.80				268	4.1	46.0	162	38	8.29	8.01	0.28	
14	TPU	EPD	17 15 46.36				284	4.3	63.7	26	38	10.85	10.89	-0.04	
14	BRO	EPU	17 15 47.40				232	4.1	69.1	238	38	11.89	11.78	0.12	
14	EPR	EPD4	17 15 48.25				292	4.3	69.7	83	38	12.74	11.87	0.87	
14	JCN	EPU	17 15 47.64						73.1	190	38	12.13	12.42	-0.29	

NOV 1980	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	QCS	EPD	17 15 48.50						75.4	3	38	12.99	12.80	0.20	
14	FMT	EPD4	17 15 56.41				253	4.2	88.1	235	38	20.90	14.85	6.15	
14	PRN	IPU	17 15 50.39				295	4.4	88.6	67	38	14.88	14.93	-0.05	
14	AMR	EPD	17 15 50.10						89.2	211	38	14.59	15.04	-0.45	
14	MTI	EPD4	17 15 51.31				268	4.3	89.5	43	38	15.80	15.08	0.92	
14	APK	EPU	17 15 51.35				290	4.4	92.3	158	38	15.84	15.54	0.30	
14	SHRG	EPU	17 15 51.93				247	4.3	97.1	132	38	16.42	16.33	0.14	
14	NOP	EPU	17 15 53.50						108.0	189	38	17.99	18.09	-0.10	
14	NPN	EPU2	17 15 54.70				231	4.2	110.4	56	38	19.19	18.49	0.71	
14	DLM	EPD4	17 15 57.05				273	4.4	122.9	62	38	21.54	20.51	1.03	
14	GVN	EPU4	17 15 57.06				253	4.4	123.0	265	38	21.55	20.54	1.02	
14	MCA	EPU2	17 15 57.32				240	4.3	127.1	247	38	21.81	21.20	0.61	
14	QSM	EPD4	17 16 0.67						148.7	213	30	25.16	24.26	0.90	
14	PPK	EPU	17 16 3.50				247	4.5	176.2	282	30	27.99	27.84	0.15	

NOV H = 3 15 8.81 UTC RMS = 0.08 NO = 16 — FREE DEPTH SOLUTION
19 LAT = 37.134 N ERX = 0.2 ERH = 0.3 AVFM = 2.3 Q = B
LONG = 116.591 W ERY = 0.2 GAP = 89 AVXM = QS = A — THIRSTY CANYON
DEPTH = 16.11 KM ERZ = 0.6 NM = QD = B

19	BMT	IPU4	3 15 11.19				43	2.5	17.3	17	131	2.38	4.06	-2.07	
19	EPN	IPD	3 15 13.83				70	2.9	25.3	70	121	5.02	5.12	-0.09	
19	BGB	IPU	3 15 15.07				36	2.4	34.0	108	114	6.26	6.38	-0.06	
19	CDMI	IPD	3 15 15.83				26	2.1	39.0	141	111	7.02	7.12	-0.09	
19	CDMS	EPD4	3 15 20.88				9	1.2	39.0	141	111	12.07	7.12	4.96	
19	SSP	IPU	3 15 16.20						40.5	125	110	7.39	7.35	0.04	
19	SGV	IPD	3 15 16.55				29	2.2	42.8	247	109	7.74	7.70	0.04	
19	LOP	EPU	3 15 17.57				50	2.7	48.9	130	107	8.76	8.65	0.12	
19	LSM	EPU	3 15 17.62				49	2.7	52.3	147	106	8.81	9.18	-0.37	
19	BLT	EPD	3 15 18.50				29	2.2	54.3	48	105	9.69	9.50	0.20	
		ESD	3 15 25.44									16.63	16.62	0.01	
19	CTS	IPU	3 15 18.67				30	2.3	57.4	348	104	9.86	9.97	-0.11	
19	SDH	EPD	3 15 19.00				35	2.4	58.8	157	104	10.19	10.19	-0.00	
19	GMN	EPU4	3 15 24.84				21	2.0	62.1	287	103	16.03	10.73	5.30	
19	GVN	IPU	3 15 20.53				30	2.3	68.4	258	102	11.72	11.73	-0.00	
		ISU	3 15 29.39									20.58	20.52	0.07	
19	KRNA	EPD	3 15 20.95				40	2.6	70.8	15	102	12.14	12.11	0.04	
19	MCY	EPU	3 15 21.80				48	2.8	76.8	133	101	12.99	13.06	-0.06	
19	MGM	EPU	3 15 23.45				16	1.8	87.2	293	53	14.64	14.67	-0.02	

NOV H = 8 43 56.49 UTC RMS = 0.20 NO = 14 — FIXED DEPTH SOLUTION
19 LAT = 37.219 N ERX = 0.5 ERH = 0.9 AVFM = 2.4 Q = C — DEPTH CONTROL INADEQUATE
LONG = 115.635 W ERY = 0.7 GAP = 107 AVXM = QS = C — GROOM LAKE
DEPTH = 5.00 KM ERZ = 21.6 NM = QD = C

19	GLR	EPU	8 44 2.46						34.1	266	96	5.97	5.92	0.20	
19	EPR	EPU	8 44 3.21				39	2.5	40.2	98	95	6.72	6.91	-0.19	
19	BLT	EPD	8 44 4.97						51.9	301	94	8.48	8.80	-0.32	
19	PRN	IPD	8 44 6.14				29	2.3	55.9	68	93	9.65	9.45	0.20	
19	BGB	EPD4	8 44 6.59				22	2.0	56.4	249	93	10.10	9.55	0.60	
19	EPN	EPD	8 44 7.06						61.2	269	93	10.57	10.32	0.25	
19	LOP	EPD	8 44 7.31						62.4	229	93	10.82	10.51	0.31	
19	MCY	EPU	8 44 7.90				44	2.7	68.4	205	93	11.41	11.50	-0.08	
19	CDMI	EPD4	8 44 9.61				19	1.9	72.7	237	93	13.12	12.19	0.93	
19	LSM	EPD	8 44 9.40				44	2.7	77.9	227	92	12.91	13.03	-0.11	
19	NPN	EPD	8 44 9.50				38	2.6	78.3	52	92	13.01	13.09	-0.08	
19	BMT	EPU	8 44 10.56				22	2.1	80.0	275	92	14.07	13.38	0.29	
19	KRNA	EPD	8 44 11.22				34	2.5	88.4	312	92	14.73	14.74	-0.01	
		ESD	8 44 21.75									25.26	25.80	-0.54	
19	SRG	EPD	8 44 11.42				37	2.6	89.0	34	92	14.93	14.83	0.10	
19	SDH	EPD4	8 44 12.90						89.4	225	92	16.41	14.90	1.51	
19	JCN	EPU	8 44 12.20				31	2.4	96.1	206	92	15.71	15.99	-0.28	
19	NGP	EPD4	8 44 19.98				34	2.6	129.7	201	53	23.49	21.27	2.22	

NOV H = 9 2 41.18 UTC RMS = 0.17 NO = 5 — FREE DEPTH SOLUTION
19 LAT = 36.613 N ERX = 3.4 ERH = 3.8 AVFM = 1.8 Q = D
LONG = 116.250 W ERY = 1.8 GAP = 207 AVXM = QS = C — LATHROP WELLS
DEPTH = 9.14 KM ERZ = 9.2 NM = QD = D

19	LSM	IPU	9 2 44.04				25	2.0	14.1	352	120	2.86	2.97	-0.11	
19	JCN	IPU	9 2 45.45				18	1.7	23.3	146	109	4.27	4.34	-0.07	
19	MCY	IPU	9 2 46.09				30	2.2	26.3	79	107	4.90	4.81	0.09	
19	BGB	EPU	9 2 49.63				12	1.5	47.2	2	99	8.45	8.12	0.38	

NOV 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 19	GLR	EPU	9 2 52.33				13	1.6	68.3	18	96	11.15	11.52	-0.22	
. 19	GMR	EPU4	9 2 55.18				17	1.9	90.6	28	95	14.00	15.14	-1.14	

. NOV M = 2 50 17.27 UTC RMS = 0.24 NO = 6 FREE DEPTH SOLUTION
. 20 LAT = 37.799 N ERX = 13.5 ERM = 93.0 AVFM = 1.8 Q = D
. LONG = 116.305 W ERY = 92.0 GAP = 327 AVXM = QS = D QUARTZITE MOUNTAIN
. DEPTH = 9.28 KM ERZ = 29.7 NM = QD = D

. 20	BMT	IPU	2 50 27.89				4	0.5	60.5	200	97	10.62	10.26	-0.04
. 20	BGB	EPU	2 50 31.91				27	2.3	84.5	175	95	14.64	14.15	0.54
. 20	SSP	IPD	2 50 33.84				23	2.2	97.1	175	95	16.57	16.18	0.39
. 20	CPX	IPD	2 50 33.51				14	1.8	98.8	167	94	16.28	16.46	-0.22
. 20	CDH5	IPU4	2 50 35.30				9	1.4	103.9	181	94	18.03	17.30	0.73
. 20	CDH1	IPU4	2 50 35.37				19	2.1	103.9	181	94	18.10	17.30	0.80
. 20	LOP	IPD	2 50 34.33				23	2.2	105.3	173	94	17.06	17.52	-0.46
. 20	MCY	IPU	2 50 38.15				20	2.2	129.6	166	53	20.88	20.84	0.04

. NOV M = 3 52 55.46 UTC RMS = 0.27 NO = 5 FREE DEPTH SOLUTION
. 21 LAT = 37.468 N ERX = 3.2 ERM = 7.3 AVFM = 2.4 Q = D
. LONG = 116.877 W ERY = 6.6 GAP = 217 AVXM = QS = D THIRSTY CANYON
. DEPTH = 2.83 KM ERZ = 260.3 NM = QD = D

. 21	BMT	IPU	3 53 2.02				45	2.6	36.7	124	92	6.56	6.33	-0.17
. 21	GMN	IPU	3 53 1.92				28	2.2	38.7	241	92	6.46	6.64	-0.19
. 21	MGM	IPU	3 53 5.01				31	2.3	54.8	267	91	9.55	9.28	0.27
. 21	SGV	EPD	3 53 5.27				42	2.6	55.8	194	91	9.81	9.44	0.37
. 21	GVN	EPD4	3 53 6.14				42	2.6	66.3	219	90	10.68	11.13	-0.45
. 21	LCM	EPU4	3 53 8.33				27	2.2	72.9	249	90	12.87	12.21	0.65
.		ISD	3 53 16.49									21.03	21.37	-0.35

. NOV M = 3 35 28.53 UTC RMS = 0.00 NO = 3 FIXED DEPTH SOLUTION
. 21 LAT = 37.401 N ERX = ERM = AVFM = 2.3 Q = C DEPTH CONTROL INADEQUATE
. LONG = 115.067 W ERY = GAP = 264 AVXM = QS = A ALAMO
. DEPTH = 5.00 KM ERZ = NM = QD = D

. 21	PRN	IPD	3 35 29.57				46	2.5	1.7	66	159	1.04	1.04	0.00
. 21	NPN	IPU	3 35 33.84				25	2.0	30.2	22	97	5.31	5.30	0.01
. 21	MTI	EPD	3 35 34.50				33	2.3	35.6	329	95	5.97	6.17	-0.00

. NOV M = 4 58 53.67 UTC RMS = 0.20 NO = 16 FREE DEPTH SOLUTION
. 22 LAT = 36.507 N ERX = 0.6 ERM = 0.9 AVFM = 2.2 Q = C
. LONG = 116.588 W ERY = 0.7 GAP = 169 AVXM = QS = B CHLORIDE CLIFF
. DEPTH = 9.76 KM ERZ = 2.0 NM = QD = C

. 22	AMR	IPU	4 58 56.90				38	2.3	15.8	140	119	3.23	3.26	-0.03
. 22	FMT	EPU	4 58 57.61				17	1.7	22.6	311	111	3.94	4.26	-0.22
. 22	SDH	IPU	4 58 58.50				32	2.2	27.1	55	107	4.83	4.96	-0.13
. 22	BRO	EPD2	4 58 59.50				15	1.6	28.6	353	106	5.83	5.19	0.64
. 22	LSM	IPD	4 59 0.30				39	2.4	38.3	48	102	6.63	6.71	-0.09
. 22	JCN	EPD	4 59 1.60				30	2.2	44.1	100	101	7.93	7.64	0.29
. 22	CDH1	EPD	4 59 1.50				24	2.1	46.1	32	100	7.83	7.96	-0.13
. 22	LCP	EPU	4 59 2.90				36	2.4	53.8	44	99	9.23	9.20	0.02
. 22	NOP	EPU	4 59 3.50				26	2.2	57.4	137	98	9.83	9.78	0.05
. 22	MCY	EPU	4 59 3.75				39	2.5	58.6	73	98	10.08	9.97	0.11
. 22	SGV	EPU	4 59 4.92				25	2.2	65.9	323	97	11.25	11.16	0.09
. 22	BGB	EPU	4 59 5.06				23	2.1	67.1	29	97	11.39	11.35	0.09
. 22	SPRG	EPU2	4 59 5.20				9	1.3	72.7	73	96	11.53	12.25	-0.72
. 22	BMT	EPD	4 59 8.34						86.3	3	95	14.67	14.45	-0.18
. 22	GVN	EPD	4 59 8.58				29	2.4	86.9	309	95	14.91	14.54	0.37
. 22	SPRG	EPD	4 59 13.85				37	2.7	128.4	90	53	20.18	20.64	-0.41

. NOV M = 19 16 25.92 UTC RMS = 0.08 NO = 8 FREE DEPTH SOLUTION
. 22 LAT = 36.515 N ERX = 1.9 ERM = 2.0 AVFM = 2.3 Q = C
. LONG = 116.639 W ERY = 0.4 GAP = 265 AVXM = QS = B CHLORIDE CLIFF
. DEPTH = 5.67 KM ERZ = 4.5 NM = QD = D

. 22	AMR	IPU	19 16 29.53				30	2.2	19.7	131	102	3.61	3.62	-0.01
. 22	SDH	IPU	19 16 31.14				37	2.4	30.5	62	94	5.22	5.36	-0.14
. 22	LSM	IPD	19 16 32.96				35	2.4	41.2	53	96	7.04	7.08	-0.04
. 22	JCN	EPD	19 16 34.27				31	2.3	48.7	100	95	8.35	8.30	0.05
. 22	LOP	EPU	19 16 35.50				33	2.4	56.5	48	94	9.58	9.56	0.02
. 22	SSP	EPU	19 16 36.05				31	2.3	59.0	40	94	10.13	9.97	0.16
. 22	NOP	EPU	19 16 36.20				27	2.2	61.2	135	94	10.28	10.33	-0.05
. 22	MCY	EPD	19 16 36.50				39	2.5	62.7	75	94	10.58	10.57	0.02

NOV 1980	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 = 22 6 32.31 UTC	RMS = 0.24	NO = 10													FREE DEPTH SOLUTION
22 LAT = 36.535 N	ERX = 1.0	ERH = 1.5	AVFM = 1.9	Q = C											
LONG = 115.815 W	ERY = 1.0	GAP = 120	AVXM =	QS = C											MERCURY
DEPTH = 9.37 KM	ERZ = 7.3	NM =		QD = C											
22	MCY	IPU	22 6 36.00				29	2.1	19.3	317	113	3.69	3.74	-0.06	
22	JON	EPD	22 6 37.07				18	1.7	27.9	248	106	4.76	5.06	-0.31	
22	APK	IPD	22 6 38.55						32.2	138	104	6.24	5.74	0.50	
22	LSM	EPD	22 6 40.51				23	2.0	46.7	299	100	8.20	8.06	0.14	
22	LCP	IPD	22 6 40.62				24	2.1	47.4	318	99	8.31	8.17	0.14	
22	LCP	IPD	22 6 40.62				24	2.1	47.4	318	99	8.31	8.17	0.14	
22	SCH	EPU	22 6 40.70				19	1.9	48.4	285	99	8.39	8.32	0.06	
22	CPX	EPD	22 6 40.76						48.8	334	99	8.45	8.39	0.05	
22	NCP	EPU	22 6 41.34				12	1.5	54.4	214	98	9.03	9.28	-0.26	
22	SHRG	IPU	22 6 41.95						59.2	93	98	9.64	10.06	-0.38	
NOV H = 1 11 44.51 UTC	RMS = 0.23	NO = 7													FREE DEPTH SOLUTION
23 LAT = 37.170 N	ERX = 2.9	ERH = 3.2	AVFM = 2.1	Q = D											
LONG = 114.682 W	ERY = 1.4	GAP = 216	AVXM =	QS = C											DELAMAR MOUNTAINS
DEPTH = 4.57 KM	ERZ = 4.2	NM =		QD = D											
23	PRN	EPU	1 11 52.11				32	2.3	41.9	309	94	7.60	7.18	0.42	
23	EPR	EPD	1 11 52.02				34	2.3	44.8	270	94	7.51	7.66	-0.15	
23	OLM	EPD	1 11 52.54				20	1.9	48.6	354	93	8.03	8.27	-0.24	
23	NPN	EPD	1 11 54.40				22	2.0	58.1	337	93	9.89	9.81	0.08	
23	MTI	EPU4	1 11 58.40				32	2.4	76.8	317	92	13.89	12.85	1.24	
23	SHRG	EPD	1 11 58.80				13	1.7	85.1	210	92	14.29	14.21	0.13	
23	SPG	EPD4	1 12 0.10				28	2.3	86.1	337	92	15.59	14.36	1.23	
23	TPU	EPU	1 12 0.51				22	2.2	98.3	299	92	16.00	16.36	-0.35	
23	MCY	EPD	1 12 5.61				18	2.1	127.3	244	53	21.10	21.01	0.09	
23	LCP	EPD4	1 12 9.01				14	1.9	136.9	255	53	24.50	22.24	2.26	
23	SSP	EPD4	1 12 11.11				17	2.1	139.5	259	53	26.60	22.59	4.01	
23	LSM	EPU4	1 12 9.81				14	1.9	149.4	251	53	25.30	23.88	1.42	
23	JCN	EPU4	1 12 10.52				15	2.0	150.6	237	53	26.01	24.02	1.99	
23	SCH	EPU4	1 12 15.85				16	2.1	158.7	248	53	31.34	25.09	6.25	
NOV H = 2 57 24.19 UTC	RMS = 0.16	NO = 12													FREE DEPTH SOLUTION
23 LAT = 36.526 N	ERX = 0.5	ERH = 0.7	AVFM = 2.3	Q = C											
LONG = 115.545 W	ERY = 0.5	GAP = 94	AVXM =	QS = C											MERCURY
DEPTH = 0.36 KM	ERZ = 20.5	NM =		QD = C											
23	APK	EP	2 57 28.61				27	2.1	23.1	187	38	4.42	4.38	0.04	
23	SPRG	EPU1	2 57 29.20				27	2.1	30.1	308	38	5.01	5.53	-0.51	
23	SHRG	EPU	2 57 30.38				25	2.0	35.0	94	38	6.19	6.32	-0.08	
23	MCY	IPU	2 57 31.07				46	2.6	40.2	292	38	6.88	7.17	-0.29	
23	CPX	EPU	2 57 35.30				15	1.7	64.1	314	38	11.11	11.04	0.07	
23	LCP	EPU	2 57 35.50				39	2.5	66.5	303	38	11.31	11.44	-0.13	
23	LSM	EPU	2 57 35.95				40	2.6	69.2	290	38	11.76	11.88	-0.12	
23	SCH	EPU	2 57 36.50				23	2.1	72.2	281	38	12.31	12.37	-0.06	
23	GLR	EPD	2 57 38.75				20	2.0	85.8	331	38	14.56	14.58	0.13	
23	BRD	EPU4	2 57 41.71				9	1.4	100.2	285	38	17.52	16.92	0.60	
23	PRN	EPU4	2 57 43.11				32	2.5	107.2	24	38	18.92	18.07	0.85	
23	BMT	EPU	2 57 45.24				34	2.6	121.8	314	38	21.05	20.43	0.22	
23	MTI	EPU	2 57 46.15				25	2.4	130.0	11	38	21.96	21.76	0.40	
23	NPN	EPU0	2 57 47.57				31	2.6	136.2	23	30	23.38	22.75	0.63	
23	SGV	EPD4	2 57 48.55				33	2.7	142.0	291	30	24.36	23.50	0.86	
23	GVN	EPU4	2 57 53.00				35	2.8	168.9	288	30	28.81	26.99	1.82	
23	NZP	EPD4	2 57 53.74				15	2.2	209.0	309	30	29.55	32.21	-2.46	
NOV H = 4 48 28.60 UTC	RMS = 0.22	NO = 12													FREE DEPTH SOLUTION
23 LAT = 36.531 N	ERX = 0.4	ERH = 0.6	AVFM = 2.3	Q = C											
LONG = 115.554 W	ERY = 0.5	GAP = 90	AVXM =	QS = C											MERCURY
DEPTH = 0.31 KM	ERZ = 9.0	NM =		QD = C											
23	APK	EPD	4 48 33.05				23	1.9	23.5	188	38	4.45	4.46	-0.02	
23	SPRG	EPU4	4 48 35.23				23	2.0	29.2	308	38	6.63	5.38	1.25	
23	SHRG	EPD	4 48 34.95				20	1.9	35.9	95	38	6.35	6.47	-0.07	
23	MCY	IPU	4 48 35.30				37	2.4	39.3	292	38	6.70	7.03	-0.33	
23	JCN	EPU	4 48 37.45				30	2.3	50.2	258	38	8.85	8.80	0.05	
23	CPX	EPD	4 48 39.50				15	1.7	63.1	314	38	10.90	10.90	-0.00	
23	LCP	EPD	4 48 39.90				30	2.3	65.5	303	38	11.30	11.29	0.00	
23	LSM	EPU3	4 48 39.80				29	2.3	68.3	290	38	11.20	11.74	-0.54	
23	SCH	EPU	4 48 40.80				25	2.2	71.3	280	38	12.20	12.23	-0.04	
23	PRN	EPU4	4 48 48.21				35	2.6	107.1	25	38	19.61	18.05	1.55	
23	BMT	EPD4	4 48 50.80				33	2.6	120.8	314	38	22.20	20.29	1.51	

NOV 1980	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	NPN	EPD4	4 48 52.97						128.3	298	38	24.37	21.50	2.87	
. 23	MTI	EPU3	4 48 51.07				25	2.4	129.6	11	38	22.47	21.71	0.96	
. 23	NPN	EPU	4 48 52.20				30	2.6	136.0	24	30	23.60	22.74	0.86	
. 23	SGV	EPU3	4 48 52.90				29	2.5	141.1	291	30	24.30	23.39	0.90	
. 23	GVN	EPU	4 48 56.01				27	2.6	167.9	288	30	27.41	26.88	0.53	

. NOV H = 12 13 22.72 UTC RMS = 0.11 NO = 11 FREE DEPTH SOLUTION
. 23 LAT = 36.537 N ERX = 0.4 ERM = 0.6 AVFM = 2.2 Q = C
. LONG = 115.544 W ERY = 0.5 GAP = 90 AVXM = QS = B MERCURY
. DEPTH = 8.75 KM ERZ = 2.4 NM = QD = C

. 23	APK	EPD	12 13 27.17				19	1.8	24.3	186	107	4.45	4.48	-0.03	
. 23	SPRG	EPU	12 13 28.05				19	1.8	29.4	306	104	5.33	5.27	0.05	
. 23	SHRG	EPU	12 13 28.92				14	1.5	35.1	96	102	6.20	6.17	0.07	
. 23	MCY	IPU	12 13 29.42				40	2.5	39.8	290	100	6.70	6.93	-0.24	
. 23	JON	EPD	12 13 31.41				34	2.4	51.2	258	98	8.69	8.76	-0.07	
. 23	CPX	EPU	12 13 33.75				17	1.8	63.2	313	96	11.03	10.70	0.33	
. 23	LOP	EPD	12 13 34.00				34	2.4	65.9	302	96	11.28	11.12	0.15	
. 23	LSM	IPU	12 13 34.96				32	2.4	68.8	289	96	12.24	11.60	0.63	
. 23	SDM	EPD	12 13 34.94				26	2.2	72.0	280	96	12.22	12.12	0.09	
. 23	BGB	EPU3	12 13 37.35				23	2.1	82.5	312	95	14.63	13.81	0.86	
. 23	PRN	EPD	12 13 40.24				30	2.5	106.1	25	94	17.52	17.64	-0.13	
. 23	BMT	EPU	12 13 43.11				38	2.7	121.0	313	53	20.39	19.77	0.21	
. 23	SGV	EPU4	12 13 47.00				33	2.7	141.6	290	53	24.28	22.46	1.82	

. NOV H = 15 15 28.22 UTC RMS = 0.05 NO = 6 FREE DEPTH SOLUTION
. 23 LAT = 36.561 N ERX = 0.3 ERM = 0.6 AVFM = 1.8 Q = C
. LONG = 115.510 W ERY = 0.5 GAP = 162 AVXM = QS = C MERCURY
. DEPTH = 4.83 KM ERZ = 11.9 NM = QD = C

. 23	APK	EPU	15 15 33.07				18	1.7	27.4	192	97	4.85	4.84	0.01	
. 23	SPRG	EPD	15 15 33.60				18	1.7	30.6	299	96	5.38	5.36	0.02	
. 23	SHRG	EPD	15 15 33.80				15	1.6	32.4	101	96	5.58	5.64	-0.01	
. 23	MCY	IPU	15 15 35.33				35	2.4	42.0	285	94	7.11	7.20	-0.10	
. 23	JON	EPU4	15 15 38.35				26	2.2	54.8	256	93	10.13	9.29	0.84	
. 23	CPX	EPU4	15 15 39.75				5	0.8	63.8	310	93	11.53	10.74	0.78	
. 23	LOP	EPD2	15 15 40.00				29	2.3	67.2	299	93	11.78	11.29	0.48	
. 23	SDM	EPU	15 15 40.85				23	2.1	74.7	277	92	12.63	12.52	0.11	
. 23	PRN	EPU4	15 15 48.52				21	2.1	102.4	24	92	20.30	17.02	3.27	
. 23	SGV	EPU4	15 15 52.90				7	1.3	143.7	289	53	24.68	23.11	1.57	

. NOV H = 0 38 31.11 UTC RMS = 0.12 NO = 7 FREE DEPTH SOLUTION
. 25 LAT = 36.676 N ERX = 0.3 ERM = 0.6 AVFM = 2.3 Q = C
. LONG = 115.557 W ERY = 0.5 GAP = 150 AVXM = QS = B MERCURY
. DEPTH = 7.35 KM ERZ = 4.0 NM = QD = C

. 25	SPRG	EPU	0 38 35.45				35	2.3	22.6	275	105	4.34	4.15	0.20	
. 25	MCY	EPU0	0 38 37.35				37	2.4	36.2	267	99	6.24	6.31	-0.07	
. 25	SHRG	EPD	0 38 38.05				53	2.7	40.7	118	98	6.94	7.04	-0.05	
. 25	CPX	EPD	0 38 40.00				26	2.1	52.8	302	96	8.89	8.98	-0.09	
. 25	CPX	EPD	0 38 40.00				26	2.1	52.8	302	96	8.89	8.98	-0.09	
. 25	LOP	EPU4	0 38 39.43				22	2.0	57.9	290	96	8.32	9.82	-1.49	
. 25	LSM	EPU4	0 38 42.75				44	2.6	64.2	276	95	11.64	10.84	0.81	
. 25	BGB	EPU	0 38 42.95				27	2.2	72.0	304	95	11.84	12.09	-0.20	
. 25	NCP	EPU4	0 38 46.09				25	2.2	80.9	221	94	14.98	13.55	1.43	
. 25	EPN	EPU4	0 38 42.21				22	2.1	90.7	311	94	11.10	15.13	-4.03	
. 25	MTI	EPU	0 38 49.96				27	2.4	113.9	13	93	18.85	18.89	0.16	
. 25	MGM	EPU4	0 38 57.84				14	2.1	192.1	296	53	26.73	29.15	-2.42	

. NOV H = 4 7 5.81 UTC RMS = 0.10 NO = 6 FREE DEPTH SOLUTION
. 26 LAT = 37.095 N ERX = 0.4 ERM = 0.5 AVFM = 1.9 Q = C
. LONG = 117.331 W ERY = 0.4 GAP = 120 AVXM = QS = C MT. JACKSON
. DEPTH = 2.57 KM ERZ = 8.4 NM = QD = C

. 26	GVN	EPD	4 7 7.77				24	1.9	10.4	185	95	1.96	2.05	-0.09	
. 26	GMN	EPU	4 7 10.00				11	1.3	23.6	16	92	4.19	4.20	-0.01	
. 26	SGV	EPU	4 7 11.05				25	2.0	29.5	115	92	5.24	5.15	0.10	
. 26	LCM	EPD4	4 7 12.27				12	1.4	32.1	299	92	6.46	5.57	0.89	
. 26	MGM	EPU	4 7 12.76				12	1.4	41.1	339	91	6.95	7.05	-0.09	
. 26	PPK	EPU	4 7 16.51				15	1.7	62.9	306	90	10.70	10.58	0.12	
. 26	CTS	EPD4	4 7 20.11				14	1.7	80.8	42	90	14.30	13.50	0.81	
. 26	LSM	EPD2	4 7 23.42				25	2.3	102.4	113	90	17.61	17.00	0.62	
. 26	MCY	EPU4	4 7 28.12				26	2.4	131.2	112	90	22.31	21.68	0.63	
. 26	SPRG	EPU4	4 7 30.55				27	2.5	142.8	108	53	24.74	23.21	1.53	

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NOV   STA  PHASE    TIME       AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIM    TOBS   TCAL  RES   REMARKS
1980               (UTC)      (MU) (SEC)                   (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

. NOV H = 11 12 45.06 UTC  RMS =  0.07  NO =  5                                FIXED DEPTH SOLUTION
.  26 LAT =  36.158 N      ERX =   2.3  ERH =   5.7   AVFM =   2.4  Q = D      DEPTH CONTROL INADEQUATE
.    LONG = 117.505 W      ERY =   5.3  GAP = 285     AVXM =        QS = D     DARWIN
.   DEPTH =   5.00 KM      ERZ =   3.4  NM =                        QD = D
. 26    SGV  EPD   11 13  1.80                          38  2.6  100.7   25   92   16.74  16.74   0.01
. 26    LCM  EPD   11 13  4.95                          35  2.6  120.2  354   92   19.89  19.91  -0.02
. 26    GMN  EPU4  11 13  7.21                           8  1.4  128.6   10   53   22.15  21.14   1.02
. 26    BMT  EPU   11 13  9.62                          29  2.6  152.1   35   53   24.56  24.18  -0.02
. 26    CPX  EPD3  11 13 10.00                          41  2.9  155.3   57   53   24.94  24.60   0.35
. 26    SPRG EPD   11 13 10.65                          42  2.9  163.3   69   53   25.59  25.64  -0.04
. 26    SHRG EPD4  11 13 18.49                          12  2.0  214.5   80   53   33.43  32.29   1.20

. NOV H = 11 24 33.94 UTC  RMS =  0.12  NO =  5                                FIXED DEPTH SOLUTION
.  26 LAT =  37.514 N      ERX =   2.6  ERH =   3.3   AVFM =   1.9  Q = D      DEPTH CONTROL INADEQUATE
.    LONG = 116.343 W      ERY =   1.9  GAP = 175     AVXM =        QS = C     QUARTZITE MOUNTAIN
.   DEPTH =   5.00 KM      ERZ =  43.0  NM =                        QD = D
. 26    BLT  EPU   11 24 37.45                          14  1.5   19.3  108  100    3.51   3.54  -0.03
. 26    KRNA EPU4  11 24 39.35                          15  1.6   26.4  353   97    5.41   4.69   0.72
. 26    BMT  EPD0  11 24 39.53                          30  2.2   30.6  213   96    5.59   5.36  -0.17
. 26    EPN  EPU2  11 24 40.00                          30  2.2   33.3  177   96    6.06   5.79   0.27
. 26    CTS  EPU   11 24 40.32                          12  1.4   36.6  293   95    6.38   6.33   0.05
. 26    SGV  EPD0  11 24 48.03                          30  2.4   85.1  226   92   14.09  14.20  -0.11
. 26    SPRG EPU4  11 24 51.52                          26  2.3  102.6  152   92   17.58  17.05   0.53

. NOV H = 10 15 13.36 UTC  RMS =  0.25  NO =  8                                FREE DEPTH SOLUTION
.  27 LAT =  36.438 N      ERX =   1.0  ERH =   3.6   AVFM =   2.0  Q = C
.    LONG = 115.562 W      ERY =   3.4  GAP = 116     AVXM =        QS = C     CHARLESTON PEAK
.   DEPTH =   4.49 KM      ERZ =  28.9  NM =                        QD = C
. 27    APK  EPU   10 15 15.93                          24  1.9   13.1  185  103    2.57   2.54   0.03
. 27    SPRG EPU   10 15 19.21                          22  1.9   36.1  322   95    5.85   6.24  -0.39
. 27    SHRG EPD   10 15 19.75                          27  2.1   37.2   78   94    6.39   6.41   0.03
. 27    MCY  EPU   10 15 20.76                          27  2.1   43.7  305   94    7.40   7.47  -0.07
. 27    JCN  EPU   10 15 21.20                          20  1.9   48.6  270   93    7.84   8.26  -0.43
. 27    CPX  EPU   10 15 25.32                          14  1.7   70.3  321   92   11.96  11.80   0.16
. 27    LCP  EPU   10 15 25.43                          24  2.1   71.3  310   92   12.07  11.95   0.12
. 27    LSM  EPD4  10 15 26.43                          21  2.0   71.8  298   92   13.07  12.04   1.03
. 27    SDH  EPD   10 15 26.28                          17  1.8   73.3  288   92   12.92  12.28   0.63
. 27    SSP  EPU4  10 15 28.22                          23  2.1   79.8  313   92   14.86  13.35   1.51
. 27    SGV  EPU4  10 15 38.29                          32  2.6  144.6  295   53   24.93  23.26   1.67

. NOV H = 22  2  2.34 UTC  RMS =  0.00  NO =  4                                FREE DEPTH SOLUTION
.  27 LAT =  36.871 N      ERX =        ERH =         AVFM =   1.6  Q = C
.    LONG = 116.245 W      ERY =        GAP = 216     AVXM =        QS = A     LATHROP WELLS
.   DEPTH =   6.31 KM      ERZ =        NM =                     QD = D
. 27    SSP  IPD   22  2  4.02                          16  1.6    6.4   21  130    1.68   1.68   0.00
. 27    LCP  IPU   22  2  4.11                          18  1.7    7.1  105  127    1.77   1.77  -0.00
. 27    MCY  EPD   22  2  8.33                          19  1.8   34.3  133   98    5.99   5.98   0.00
. 27    JCN  EPU   22  2 10.78                           9  1.2   49.5  165   95    8.44   8.44  -0.00

. NOV H = 11  8 20.10 UTC  RMS =  0.19  NO =  6                                FREE DEPTH SOLUTION
.  28 LAT =  36.856 N      ERX =   3.1  ERH =   3.5   AVFM =   1.6  Q = D
.    LONG = 115.936 W      ERY =   1.7  GAP = 227     AVXM =        QS = C     MERCURY
.   DEPTH =   1.07 KM      ERZ = 314.2  NM =                        QD = D
. 28    LCP  EPU   11  8 23.92                          19  1.8   20.6  269   38    3.82   3.83  -0.01
. 28    MCY  EPD   11  8 24.00                          20  1.8   21.7  186   38    3.90   4.01  -0.11
. 28    SSP  EPD   11  8 24.51                          12  1.4   26.3  287   38    4.41   4.76  -0.35
. 28    LSM  EPD   11  8 26.00                          20  1.6   32.6  247   38    5.90   5.79   0.11
. 28    JCN  EPU   11  8 28.60                          10  1.3   48.5  198   38    8.50   8.37   0.13
. 28    EPN  EPD   11  8 29.39                          11  1.4   52.6  319   38    9.29   9.04   0.25

. NOV H =  4 56 53.57 UTC  RMS =  0.03  NO =  5                                FREE DEPTH SOLUTION
.  29 LAT =  36.760 N      ERX =   0.4  ERH =   0.5   AVFM =   1.6  Q = C
.    LONG = 116.273 W      ERY =   0.3  GAP = 198     AVXM =        QS = A     LATHROP WELLS
.   DEPTH =   3.50 KM      ERZ =   0.7  NM =                        QD = D
. 29    LSM  IPD    4 56 54.45                          25  1.9    2.4  176  138    0.88   0.88   0.00
. 29    SDH  EPD    4 56 56.20                          11  1.3   14.8  204   98    2.63   2.65  -0.01
. 29    LCP  EPU    4 56 56.25                          18  1.7   14.1   42   98    2.68   2.66   0.02
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NOV   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN   TOBS   TCAL  RES   REMARKS
1980               (UTC)       (MU) (SEC)                    (KM) (DEG)(DEG) (SEC)  (SEC) (SEC)

. 29   MCY  EPU    4 56 58.75                        15  1.6   29.9  111   94   5.18   5.22 -0.04
. 29   JON  EPD    4 57  0.26                        12  1.4   38.7  157   93   6.69   6.65  0.04
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. NOV H =  5 21 31.05 UTC  RMS =  0.05  NO =  3                                FIXED DEPTH SOLUTION
.  29 LAT =  36.868 N      ERX =        ERH =        AVFM =   0.9  Q = C      DEPTH CONTROL INADEQUATE
.    LONG = 115.786 W      ERY =        GAP = 307    AVXM =        QS = A     MERCURY
.   DEPTH =   5.00 KM      ERZ =        NM =                       QD = D
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. 29   MCY  EPU    5 21 35.93                         9  1.1   27.8  214   97   4.88   4.91 -0.03
. 29   LCP  EPD    5 21 36.94                         6  0.8   34.1  267   96   5.89   5.92 -0.02
. 29   LSM  EPU    5 21 38.93                         6  0.8   45.7  252   94   7.88   7.80  0.08
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. NOV H =  9 17 14.53 UTC  RMS =  0.00  NO =  4                                FREE DEPTH SOLUTION
.  29 LAT =  36.708 N      ERX =        ERH =        AVFM =   1.2  Q = C
.    LONG = 116.273 W      ERY =        GAP = 143    AVXM =        QS = A     LATHROP WELLS
.   DEPTH =   9.35 KM      ERZ =        NM =                       QD = D
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. 29   LSM  EPD    9 17 16.32                        12  1.3    3.4    2  158   1.79   1.80 -0.00
. 29   SDM  EPD    9 17 16.85                         7  0.9    9.0  220  133   2.32   2.32  0.00
. 29   LCP  EPU    9 17 18.19                         9  1.1   18.8   30  113   3.66   3.66  0.00
. 29   MCY  EPU    9 17 19.65                        12  1.4   28.3  101  106   5.12   5.13 -0.00
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. NOV H =  6  0 56.01 UTC  RMS =  0.65  NO =  7                                FREE DEPTH SOLUTION
.  30 LAT =  36.240 N      ERX =  23.8  ERH =  27.5  AVFM =   2.1  Q = D
.    LONG = 116.476 W      ERY =  13.8  GAP = 247    AVXM =        QS = D     ASH MEADOWS
.   DEPTH =   8.94 KM      ERZ =  36.3  NM =                       QD = D
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. 30   AMR  EPU    6  0 59.35                        34  2.3   17.5    0  114   3.34   3.44 -0.10
. 30   NOP  EPU    6  1  1.35                        34  2.3   31.6  113  103   5.34   5.63 -0.29
. 30   SDM  EPU    6  1  4.96                        39  2.5   46.6   15   99   8.95   8.03  0.93
. 30   LSM  EPD    6  1  6.76                        12  1.5   58.3   18   97  10.75   9.90  0.85
. 30   BRO  EPU4   6  1  2.83                        30  2.3   59.5  347   97   6.82  10.10 -3.28
. 30   MCY  EPU    6  1  7.05                        25  2.2   65.6   45   96  11.04  11.08 -0.04
. 30   LOP  EPU    6  1  7.12                        10  1.4   73.5   22   96  11.11  12.36 -1.25
. 30   BGB  EPU    6  1 10.86                        27  2.3   91.2   14   95  14.85  15.24 -0.33
. 30   SGV  EPU4   6  1  2.80                        37  2.6   96.1  329   94   6.79  16.03 -9.23
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. DEC H = 23 16 11.90 UTC  RMS =  0.12  NO = 16                                FREE DEPTH SOLUTION
.  01 LAT =  36.670 N      ERX =   0.6  ERH =   0.8  AVFM =   2.5  Q = C
.    LONG = 115.326 W      ERY =   0.6  GAP = 123    AVXM =        QS = C     HAYFORD PEAK
.   DEPTH =   3.07 KM      ERZ =  22.4  NM =                       QD = C
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. 01   SHRG IPU   23 16 16.08                        30  2.2   23.9  140   93   4.18   4.24 -0.01
. 01   SPRG EPD   23 16 19.36                        40  2.5   43.3  274   92   7.46   7.40  0.06
. 01   APR  EPU   23 16 19.65                        31  2.3   44.8  210   92   7.75   7.65  0.10
. 01   EPR  EPD4  23 16 19.84                        53  2.8   56.7   13   91   7.94   9.58 -1.64
. 01   MCY  EPU   23 16 21.80                        39  2.5   56.9  269   91   9.90   9.61  0.29
. 01   JON  EPD   23 16 24.15                        31  2.4   74.1  250   90  12.25  12.40 -0.15
. 01   LCP  EPU   23 16 25.00                        36  2.5   77.9  285   90  13.10  13.01  0.09
. 01   SSP  EPD   23 16 26.03                        38  2.6   84.6  290   90  14.13  14.10  0.03
. 01   LSM  EPU   23 16 25.85                        31  2.4   84.9  275   90  13.95  14.16 -0.21
. 01   GLR  EPD   23 16 26.05                        45  2.7   85.2  314   90  14.15  14.20  0.10
. 01   PPN  EPU   23 16 26.13                        49  2.8   85.4   17   90  14.23  14.24 -0.01
. 01   BGB  EPD   23 16 27.03                        42  2.7   90.2  297   90  15.13  15.01  0.17
.           ESU4  23 16 37.63                                                  25.73  26.18 -0.45
. 01   SDM  EPD   23 16 27.25                        27  2.3   90.5  268   90  15.35  15.07  0.28
. 01   CDH1 EPD4  23 16 27.79                        40  2.7   91.0  283   90  15.89  15.15  0.74
.           ESU   23 16 38.10                                                  26.20  26.51 -0.31
. 01   CDH5 EPU   23 16 27.20                        18  2.0   91.0  283   90  15.30  15.15  0.15
.           ESU4  23 16 37.05                                                  25.15  26.51 -1.36
. 01   NPN  EPU2  23 16 31.36                        39  2.7  114.4   18   90  19.46  18.95  0.51
.           ESU   23 16 44.90                                                  33.00  33.16 -0.16
. 01   DLM  EPU4  23 16 31.85                        25  2.3  116.2   27   90  19.95  19.25  0.70
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. DEC H =  6 31  2.93 UTC  RMS =  0.09  NO =  5                                FREE DEPTH SOLUTION
.  02 LAT =  36.774 N      ERX =   1.1  ERH =   1.9  AVFM =   1.8  Q = D
.    LONG = 115.906 W      ERY =   1.5  GAP = 205    AVXM =        QS = C     MERCURY
.   DEPTH =   3.91 KM      ERZ =  19.1  NM =                       QD = D
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. 02   SPRG EPU    6 31  5.38                        22  1.9   12.4  136  101   2.45   2.40  0.05
. 02   MCY  IPD    6 31  5.38                        27  2.0   13.4  202  100   2.45   2.56 -0.11
. 02   LOP  EPU    6 31  7.31                        22  1.9   25.0  291   95   4.38   4.43 -0.05
. 02   LSM  EPD4   6 31  7.34                        18  1.8   32.8  263   94   4.41   5.71 -1.30
. 02   SDM  EPU    6 31 10.03                        12  1.4   41.1  250   93   7.10   7.05  0.05
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DEC 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
		ESU	6 31 15.40									12.47	12.34	0.13	

DEC H = 0 40 35.65 UTC RMS = 0.23 NO = 11 FREE DEPTH SOLUTION
04 LAT = 38.289 N ERX = 2.2 ERH = 4.2 AVFM = 3.0 Q = D
LONG = 117.196 W ERY = 3.6 GAP = 244 AVXM = QS = C TONOPAH
DEPTH = 6.39 KM ERZ = 3.3 NM = QD = D

DEC 1980	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	MZP	EPD	0 40 46.46					34	2.4	67.3	194	94	10.81	11.33	-0.33
04	SVP	EPU	0 40 49.75					40	2.6	83.0	220	93	14.10	13.86	0.09
04	GMN	EPD	0 40 54.25					46	2.8	109.9	183	92	18.60	18.24	0.36
04	SGV	EPD	0 40 58.86					45	2.9	145.9	174	53	23.21	23.24	-0.03
04	TPU	EPD	0 41 0.13					41	2.9	155.8	119	53	24.48	24.53	-0.05
04	GLR	IPD	0 41 0.62					37	2.8	159.5	139	53	24.97	25.01	0.12
04	BGB	EPD	0 41 1.20					47	3.0	163.0	148	53	25.55	25.47	0.13
04	COH1	EPD	0 41 2.60					43	3.0	176.5	154	53	26.95	27.22	-0.27
04	MTI	EPD	0 41 3.40					48	3.1	182.1	112	53	27.75	27.95	0.01
04	SRG	IPU	0 41 5.06					59	3.3	192.1	104	53	29.41	29.24	0.17
04	NPN	EPU	0 41 7.10					57	3.4	210.6	110	53	31.45	31.65	-0.20

DEC H = 6 46 35.11 UTC RMS = 0.09 NO = 10 FREE DEPTH SOLUTION
06 LAT = 37.374 N ERX = 0.5 ERH = 0.6 AVFM = 2.6 Q = B
LONG = 115.127 W ERY = 0.3 GAP = 119 AVXM = QS = A ALAMO
DEPTH = 5.20 KM ERZ = 1.8 NM = QD = B

DEC 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
06	PRN	IPD	6 46 36.90					65	2.8	7.8	62	118	1.79	1.76	0.03
06	EPR	EPD	6 46 39.22					60	2.8	23.4	193	99	4.11	4.20	-0.09
06	NPN	EPD	6 46 41.10					38	2.4	35.2	29	96	5.99	6.10	-0.11

DEC 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
06	MTI	EPU	6 46 41.12					33	2.3	35.9	339	96	6.01	6.22	-0.01
06	DLM	EPU	6 46 42.50					27	2.1	42.9	53	95	7.39	7.35	0.04
06	TPU	EPD	6 46 44.07					31	2.3	52.8	299	94	8.96	8.95	0.01
06	SMRG	EPU	6 46 51.20					37	2.6	96.6	181	92	16.09	16.07	0.07
		ESD4	6 47 6.19										31.08	28.03	3.05
06	SPRG	EPU	6 46 51.17					41	2.7	96.9	219	92	16.06	16.12	-0.06
06	EPN	EPU2	6 46 54.00					46	2.8	107.5	260	92	18.89	17.85	1.04
06	MCY	EPD	6 46 53.40					44	2.8	108.5	223	92	18.29	18.01	0.28
06	LDP	EPU4	6 46 54.67					42	2.8	109.0	238	92	19.56	18.09	1.47
06	SSP	EPD4	6 46 54.40					43	2.8	109.1	243	92	19.29	18.10	1.19
06	KRNA	EPU	6 46 54.95					38	2.7	118.3	291	92	19.84	19.60	0.24
06	LSM	EPD	6 46 56.44					45	2.9	123.8	235	53	21.33	20.49	0.85

DEC H = 20 5 13.69 UTC RMS = 0.02 NO = 3 FIXED DEPTH SOLUTION
08 LAT = 36.794 N ERX = ERH = AVFM = 1.5 Q = C DEPTH CONTROL INADEQUATE
LONG = 115.480 W ERY = GAP = 157 AVXM = QS = A MAYFORD PEAK
DEPTH = 5.00 KM ERZ = NM = QD = D

DEC 1980	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	EPR	EPU	20 5 22.03					16	1.7	49.1	32	94	8.34	8.36	-0.02
08	APK	EPU	20 5 22.72					10	1.3	53.3	189	94	9.03	9.04	-0.01
08	CPX	EPU	20 5 22.81					12	1.5	53.6	286	94	9.12	9.09	0.03

DEC H = 19 34 47.37 UTC RMS = 0.28 NO = 12 FREE DEPTH SOLUTION
10 LAT = 38.214 N ERX = 1.8 ERH = 4.3 AVFM = 2.7 Q = D
LONG = 117.235 W ERY = 3.9 GAP = 249 AVXM = QS = C TONOPAH
DEPTH = 0.10 KM ERZ = 11.9 NM = QD = D

DEC 1980	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	KRNA	EPD	19 35 3.00					37	2.6	91.0	124	38	15.63	15.48	0.15
10	RVE	EPD	19 35 3.15					30	2.4	94.0	103	38	15.78	15.97	-0.19
10	GMN	EPD	19 35 4.14					30	2.4	101.5	181	38	16.77	17.18	-0.41
10	PPK	EPD	19 35 5.12					25	2.3	105.6	214	38	17.75	17.85	-0.10
10	LCM	EPD	19 35 6.93							114.6	198	38	19.56	19.32	0.24
10	BMT	EPU	19 35 7.82					42	2.8	120.4	149	38	20.45	20.26	-0.21
10	QCS	EPU	19 35 8.95					28	2.5	126.0	113	38	21.58	21.17	0.41
10	BLT	EPU	19 35 9.05					42	2.8	127.9	131	38	21.68	21.49	0.19
10	GVN	IPU4	19 35 10.61					32	2.6	134.9	184	38	23.24	22.62	0.62
10	SGV	EPU	19 35 10.82					35	2.7	138.0	173	30	23.45	23.04	0.41
10	TPU	EPU	19 35 12.44					39	2.9	155.0	116	30	25.07	25.25	-0.18
		ESU4	19 35 33.11										45.74	44.19	1.55
10	BRO	EPU4	19 35 15.81					30	2.7	169.8	161	30	28.44	27.18	1.26
10	MTI	EPD	19 35 15.69					37	2.9	182.6	109	30	28.32	28.64	-0.31
10	NPN	EPD	19 35 19.44					46	3.2	211.5	107	30	32.07	32.59	-0.52

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DEC   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
1980                (UTC)       (MU) (SEC)                   (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

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. DEC H = 21 44 33.13 UTC  RMS =  0.19  NO =  6                                FREE DEPTH SOLUTION
.  10 LAT =  36.692 N      ERX =   6.5  ERH =   9.3   AVFM =   3.0  Q = D
.    LONG = 114.609 W      ERY =   6.7  GAP = 291     AVXM =         QS = D     MOAPA
.   DEPTH =   8.97 KM      ERZ =   3.0  NM =                         QD = D
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. 10    PRN  EPU   21 44 48.13                        63  3.0   88.5  334   95   15.00  14.80   0.20
. 10    OLM  EPU   21 44 49.78                        60  3.0  102.1  354   94   16.65  17.00  -0.35
. 10    NPN  IPU   21 44 51.75                        56  3.0  110.5  345   94   18.62  18.37   0.25
. 10    TPU  EPD   21 44 55.00                        45  2.9  137.2  318   53   21.87  21.86   0.01
. 10    SRG  EPU   21 44 55.12                        65  3.2  138.2  343   53   21.99  21.99  -0.01
. 10    BGB  EPU   21 44 56.39                        43  2.9  149.3  285   53   23.26  23.43  -0.12
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. DEC H =  0 21 40.52 UTC  RMS =  0.21  NO = 21                                FREE DEPTH SOLUTION
.  14 LAT =  37.385 N      ERX =   0.4  ERH =   0.6   AVFM =   2.2  Q = C
.    LONG = 116.059 W      ERY =   0.4  GAP =  72     AVXM =         QS = B     SILENT CANYON - NORTH
.   DEPTH =   1.68 KM      ERZ =   1.1  NM =                         QD = C
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. 14    BLT  EPU    0 21 42.52                        24  1.9   10.8  322   38    2.00   2.11  -0.12
. 14    GLR  IPD    0 21 44.08                        26  2.0   20.9  170   38    3.56   3.76  -0.06
. 14    EPN  EPD    0 21 45.90                        31  2.2   30.2  231   38    5.38   5.26   0.11
. 14    BGB  EPU4   0 21 46.74                        34  2.3   41.3  201   38    6.22   7.08  -0.81
.            ESD4   0 21 50.48                                                    9.96  12.30  -2.35
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LOCAL-EVENT DATA REPORT

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DEC   STA  PHASE    TIME        AMP  PER   XMAG  DUR  FMAG   DIST  AZI  AIN    TOBS   TCAL  RES   REMARKS
1980                (UTC)       (MU) (SEC)                   (KM) (DEG)(DEG)  (SEC)  (SEC) (SEC)

. 14    BMT  EPD4   0 21 49.51                        39  2.5   43.6  255   38    8.99   7.44   1.15
.            ISD4   0 21 56.59                                                   16.07  13.72   2.35
. 14    TPU  EPD    0 21 47.71                        22  2.0   43.7   56   38    7.19   7.46  -0.28
. 14    QCS  EPU    0 21 48.21                        16  1.7   44.3   17   38    7.69   7.56   0.12
. 14    KRNA EPU    0 21 48.94                        20  1.9   49.5  325   38    8.42   8.40   0.02
. 14    CPX  EPD    0 21 48.62                        22  2.0   50.6  180   38    8.10   8.59  -0.50
.            ESU    0 21 54.79                                                   14.27  15.03  -0.77
. 14    LOP  EPU    0 21 50.52                        28  2.2   59.7  189   38   10.00  10.06  -0.07
. 14    RVE  EPD    0 21 52.47                        15  1.7   71.4  351   38   11.95  11.97  -0.02
. 14    SPRG EPD    0 21 53.89                        34  2.5   79.9  164   38   13.37  13.34   0.02
. 14    MCY  EPU    0 21 54.11                        30  2.4   80.7  174   38   13.59  13.49   0.10
. 14    EPR  EPU2   0 21 54.71                        34  2.5   81.0  107   38   14.19  13.53   0.66
. 14    PRN  IPU    0 21 55.82                        39  2.6   89.4   88   38   15.30  14.89   0.40
.            ISD    0 22  6.51                                                   25.99  26.06  -0.08
. 14    SGV  EPD    0 21 56.87                        33  2.5   97.3  243   38   16.35  16.18   0.16
. 14    NPN  EPU    0 21 57.83                        28  2.4  103.6   73   38   17.31  17.20   0.11
. 14    JCN  EPU    0 21 59.08                        20  2.1  105.0  182   38   18.56  17.43   1.13
. 14    GVN  EPU    0 22  0.70                        38  2.7  121.6  250   38   20.18  20.13   0.04
.            ESU    0 22 15.75                                                   35.23  35.23  -0.01
. 14    SHRG EPD    0 22  2.29                        29  2.5  126.7  140   38   21.77  20.95   0.86
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. DEC H =  6  5 58.21 UTC  RMS =  0.22  NO = 26                                FREE DEPTH SOLUTION
.  14 LAT =  37.107 N      ERX =   0.4  ERH =   0.6   AVFM =   2.5  Q = C
.    LONG = 116.748 W      ERY =   0.4  GAP = 104     AVXM =         QS = B     THIRSTY CANYON
.   DEPTH =   4.41 KM      ERZ =   1.7  NM =                         QD = C
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. 14    BMT  IPD    6  6  2.89                        48  2.6   27.4   44   96    4.68   4.82  -0.54
. 14    SGV  IPD    6  6  3.37                        42  2.5   28.9  241   96    5.16   5.07   0.10
. 14    EPN  IPD    6  6  5.40                        74  3.0   39.5   72   94    7.19   6.80   0.40
. 14    BRO  EPU    6  6  4.80                        30  2.2   39.7  164   94    6.59   6.82  -0.23
. 14    BGB  IPU    6  6  6.38                        31  2.3   46.9   99   93    8.17   7.99   0.23
. 14    CDHS IPD    6  6  6.15                        23  2.0   47.1  125   93    7.94   8.02  -0.08
. 14    CDHI IPD    6  6  6.31                        26  2.1   47.1  125   93    8.10   8.02   0.08
. 14    SSP  IPU    6  6  7.06                        55  2.8   51.3  113   93    8.85   8.70   0.15
. 14    GVN  EPD    6  6  7.52                        33  2.4   54.1  258   93    9.31   9.16   0.15
. 14    LOP  EPU    6  6  8.24                        48  2.7   58.8  118   93   10.03   9.92   0.11
. 14    LSM  EPD    6  6  8.20                        47  2.7   58.9  134   93    9.99   9.94   0.06
. 14    CTS  EPU    6  6  8.22                        33  2.4   59.2    2   93   10.01  10.00   0.02
. 14    SDM  EPU    6  6  8.60                        35  2.4   62.9  144   93   10.39  10.59  -0.19
. 14    BLT  EPD    6  6  9.05                        34  2.4   67.1   54   92   10.84  11.28  -0.44
. 14    MCA  EPU    6  6 10.23                        24  2.1   69.6  223   92   12.02  11.68   0.35
.            ESU    6  6 18.19                                                   19.98  20.44  -0.45
. 14    KRNA EPD    6  6 11.28                        42  2.7   78.5   25   92   13.07  13.13  -0.05
. 14    APR  EPD    6  6 12.06                        29  2.3   82.4  163   92   13.85  13.76   0.09
. 14    MCY  EPU    6  6 12.46                        51  2.8   85.7  125   92   14.25  14.30  -0.05
. 14    JCN  EPD    6  6 13.71                        31  2.4   93.8  142   92   15.50  15.61  -0.11
. 14    SPRG EPU    6  6 14.10                        36  2.6   95.4  119   92   15.89  15.88   0.02
.            ESD    6  6 26.59                                                   28.38  27.79   0.60
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DEC 1980	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	TPU	EPU	6 6 16.80				32	2.5	111.9	60	91	18.59	18.57	0.02	
		ESU	6 6 30.45									32.24	32.50	-0.26	
14	QSM	EPU	6 6 20.21				28	2.5	127.1	185	53	22.00	20.99	1.01	
		ESU	6 6 34.85									36.64	36.74	-0.09	
14	PRN	EPU	6 6 23.84				37	2.8	154.2	78	53	25.63	24.52	1.12	

DEC M = 11 12 55.09 UTC RMS = 0.29 NO = 13 FREE DEPTH SOLUTION
14 LAT = 36.529 N ERX = 1.0 ERM = 1.2 AVFM = 2.1 Q = C
LONG = 116.606 W ERY = 0.6 GAP = 156 AVXM = QS = C CHLORIDE CLIFF
DEPTH = 6.69 KM ERZ = 7.5 NM = QD = C

DEC 1980	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	APR	EPU	11 12 58.28				38	2.4	18.8	141	106	3.19	3.52	-0.33	
14	BRO	EPU	11 12 59.00				19	1.8	26.0	356	101	3.91	4.66	-0.76	
14	SDH	EPD	11 12 59.83				32	2.2	27.3	62	101	4.74	4.86	-0.13	
14	LSM	IPD	11 13 1.67						38.0	52	98	6.58	6.58	-0.00	
14	GRV	EPD	11 13 1.82				31	2.2	38.4	189	98	6.73	6.65	-0.02	
14	CDH1	EPD	11 13 2.92				15	1.6	44.9	35	97	7.83	7.71	0.12	
14	JCN	EPD	11 13 3.34				32	2.3	46.2	102	96	8.25	7.90	0.34	
14	LCP	EPD	11 13 4.13				33	2.4	53.3	47	95	9.04	9.06	-0.02	
14	SSP	EPU	11 13 4.92				21	2.0	56.0	38	95	9.83	9.49	0.33	
14	MCY	EPD	11 13 5.50				37	2.5	59.5	76	95	10.41	10.06	0.34	
14	NOP	EPD	11 13 5.00				29	2.3	60.3	137	95	9.91	10.19	-0.29	
14	QSM	EPU	11 13 6.66				17	1.8	66.8	201	94	11.57	11.24	0.32	
		ESD	11 13 14.79									19.70	19.68	0.02	

DEC M = 2 34 46.54 UTC RMS = 0.06 NO = 20 FREE DEPTH SOLUTION
15 LAT = 36.631 N ERX = 0.1 ERM = 0.2 AVFM = 2.6 Q = B
LONG = 115.409 W ERY = 0.1 GAP = 108 AVXM = QS = A MAYFORD PEAK
DEPTH = 0.42 KM ERZ = 0.5 NM = QD = C

DEC 1980	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	SMRG	EPU	2 34 51.44				29	2.1	26.7	122	38	4.90	4.96	-0.00	
15	SPRG	IPU	2 34 53.10				41	2.5	36.5	281	38	6.56	6.55	0.02	
15	EPR	IPU	2 34 57.41				41	2.6	62.9	18	38	10.87	10.84	0.04	
15	JCN	EPD	2 34 57.80				42	2.6	65.7	251	38	11.26	11.30	-0.04	
15	LCP	EPU	2 34 58.90				48	2.7	72.2	290	38	12.36	12.35	0.01	
15	LSM	EPU	2 34 59.81				60	3.0	78.0	279	38	13.27	13.31	-0.03	
15	SDH	EPU	2 35 0.65				35	2.5	83.2	271	38	14.11	14.14	-0.03	
15	GLR	EPU	2 35 0.46				33	2.5	83.2	319	38	13.92	14.15	-0.07	
15	CDH1	EPU	2 35 0.93				35	2.5	85.1	287	38	14.39	14.45	-0.06	
15	BGB	EPU	2 35 1.08				31	2.4	85.9	302	38	14.54	14.58	0.01	
15	NCP	EPU	2 35 1.30				39	2.6	87.0	230	38	14.76	14.76	0.00	
15	PRN	EPU	2 35 2.09				43	2.7	91.8	20	38	15.55	15.55	0.00	
15	MTI	EPD	2 35 5.92				31	2.5	116.7	6	38	19.38	19.59	-0.00	
15	OLM	IPU	2 35 7.24				28	2.5	123.5	29	38	20.70	20.70	0.01	
		ESU4	2 35 18.69									32.15	36.22	-4.06	
15	SGV	EPD	2 35 11.31				38	2.8	150.0	285	30	24.77	24.53	0.25	
		ESD	2 35 29.83									43.29	42.93	0.37	
15	KRNA	EPD	2 35 11.22				49	3.0	151.2	325	30	24.68	24.68	0.00	
15	GVN	EPU	2 35 14.60				38	2.9	177.4	283	30	28.06	28.09	-0.02	
		ESU4	2 35 36.73									50.19	49.15	1.04	
15	GWN	IPU	2 35 15.23				30	2.7	180.7	294	30	28.69	28.52	0.18	
		ESU	2 35 36.21									49.67	49.90	-0.23	

DEC M = 21 17 40.96 UTC RMS = 0.10 NO = 3 FIXED DEPTH SOLUTION
16 LAT = 37.205 N ERX = ERM = AVFM = 2.1 Q = C DEPTH CONTROL INADEQUATE
LONG = 115.824 W ERY = GAP = 307 AVXM = QS = A GROOM LAKE
DEPTH = 5.00 KM ERZ = NM = QD = D

DEC 1980	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	EPN	EPU	21 17 48.56				30	2.2	44.4	271	94	7.60	7.59	0.01	
16	SSP	EPU	21 17 48.79				27	2.2	46.9	228	94	7.83	7.99	-0.16	
16	LCP	EPU	21 17 49.50				17	1.8	49.5	218	94	8.54	8.42	0.13	

DEC M = 7 28 51.47 UTC RMS = 0.00 NO = 4 FREE DEPTH SOLUTION
17 LAT = 37.028 N ERX = ERM = AVFM = 2.3 Q = C
LONG = 116.211 W ERY = GAP = 195 AVXM = QS = A SILENT CANYON - YUCCA FLAT
DEPTH = 5.85 KM ERZ = NM = QD = D

DEC 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
17	SSP	IPU	7 28 53.82				33	2.2	11.5	163	112	2.35	2.36	-0.00	
17	LCP	EPD	7 28 55.10				30	2.2	19.7	169	103	3.63	3.63	0.00	

DEC 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 17	EPN	EPD	7 28 55.61				42	2.5	22.9	334	101	4.14	4.14	0.00	
. 17	LSM	EPD	7 28 57.16				32	2.3	32.6	190	98	5.69	5.70	-0.00	

. DEC H = 15 23 52.35 UTC RMS = 0.42 NO = 25 FREE DEPTH SOLUTION
. 17 LAT = 37.329 N ERX = 0.8 ERM = 1.1 AVFM = 3.4 Q = C
. LONG = 116.290 W ERY = 0.7 GAP = 43 AVXM = QS = C SILENT CANYON - NORTH
. DEPTH = 0.79 KM ERZ = 3.6 NM = QD = C

. 17	BLT	EPD	15 23 56.15				150	3.6	20.1	43	38	3.80	3.81	-0.01	
. 17	BMT	EPD	15 23 57.45				113	3.3	22.2	257	38	5.10	4.15	0.55	
. 17	GLR	EPD	15 23 57.18				77	3.0	28.1	121	38	4.83	5.11	-0.13	
. 17	BGB	IPD	15 23 57.69				113	3.4	32.8	170	38	5.34	5.87	-0.48	
. 17	SSP	IPU	15 23 59.82				150	3.6	45.3	172	38	7.47	7.90	-0.43	
. 17	KRNA	EPD	15 24 0.30				150	3.6	47.4	350	38	7.95	8.25	-0.30	
. 17	CTS	EPD	15 24 1.00				150	3.7	51.7	312	38	8.65	8.96	-0.31	
. 17	CDHS	EPU	15 24 1.09				40	2.5	52.0	183	38	8.74	9.00	-0.26	
.		ISD	15 24 8.54									16.19	15.75	0.44	
. 17	LOP	EPD	15 24 0.90				120	3.5	53.8	168	38	8.55	9.29	-0.74	
. 17	QCS	EPD	15 24 2.48				110	3.4	58.9	34	38	10.13	10.11	0.01	
. 17	TPU	IPU	15 24 3.39				77	3.1	64.4	62	38	11.04	11.02	0.02	
. 17	BRO	IPU	15 24 3.96				79	3.2	69.6	205	38	11.61	11.85	-0.24	
. 17	SDH	EPU	15 24 4.78				120	3.6	75.9	183	38	12.43	12.89	-0.46	
. 17	SGV	IPU	15 24 5.09				116	3.5	76.4	240	38	12.74	12.96	-0.22	
. 17	RVE	EPD	15 24 5.27						77.2	6	38	12.92	13.09	-0.17	
. 17	SPRG	IPD	15 24 6.61				114	3.5	82.4	149	38	14.26	13.94	0.32	
. 17	AMR	EPD	15 24 10.13				120	3.7	104.6	189	38	17.78	17.55	0.23	
. 17	MZP	EPD	15 24 9.69				45	2.8	105.1	293	38	17.34	17.63	-0.10	
. 17	SPG	IPD	15 24 14.21				96	3.5	124.2	60	38	21.86	20.73	1.13	
. 17	NPN	EPD	15 24 14.45				93	3.5	124.9	73	38	22.10	20.85	1.25	
. 17	NOP	EPU	15 24 15.04				120	3.8	133.8	175	38	22.69	22.30	0.39	
. 17	SHRG	IPU	15 24 16.01				64	3.2	136.4	132	30	23.66	22.67	1.04	
. 17	DLM	EPU	15 24 16.41				59	3.2	140.6	77	30	24.06	23.22	0.84	
. 17	PPK	IPU	15 24 16.58				84	3.5	143.6	274	30	24.23	23.61	0.62	
.		ESD4	15 24 36.49									44.14	41.32	2.82	
. 17	QSM	EPU4	15 24 16.58				76	3.5	159.9	199	30	24.23	25.73	-1.50	
.		ISU4	15 24 19.98									27.63	45.02	-17.39	

. DEC H = 15 25 45.47 UTC RMS = 0.21 NO = 20 FREE DEPTH SOLUTION
. 17 LAT = 37.348 N ERX = 0.5 ERM = 0.7 AVFM = 3.4 Q = C
. LONG = 116.330 W ERY = 0.4 GAP = 44 AVXM = QS = B SILENT CANYON - NORTH
. DEPTH = 2.21 KM ERZ = 2.2 NM = QD = C

. 17	BLT	EPD	15 25 49.27				131	3.4	21.4	54	91	3.80	3.83	-0.03	
. 17	GLR	IPD2	15 25 50.00				119	3.4	32.3	121	90	4.53	5.60	-0.92	
. 17	KRNA	IPD	15 25 53.21				120	3.4	44.8	354	90	7.74	7.64	0.10	
. 17	CTS	EPU	15 25 53.68				118	3.4	47.7	313	90	8.21	8.10	0.11	
. 17	CPX	EPD	15 25 54.30				86	3.2	52.4	153	90	8.83	8.88	-0.05	
. 17	CDHS	EPD	15 25 54.72				36	2.4	54.1	179	90	9.25	9.16	0.09	
. 17	QCS	EPU	15 25 55.47				112	3.4	59.2	38	90	10.00	9.98	0.02	
. 17	SGV	IPU	15 25 58.09				97	3.4	74.5	237	90	12.62	12.46	0.16	
. 17	RVE	EPD	15 25 58.15				110	3.5	75.5	9	90	12.68	12.63	0.04	
. 17	SDH	EPU	15 25 58.47				120	3.6	78.0	181	90	13.00	13.03	-0.03	
. 17	GMN	EPD	15 25 59.39				61	3.0	82.6	266	90	13.92	13.78	0.14	
.		ISD3	15 26 7.53									22.06	24.11	-2.06	
. 17	MTI	EPU	15 26 1.91				50	2.9	100.4	69	90	16.44	16.67	-0.04	
. 17	MZP	EPU	15 26 1.51				44	2.8	101.0	293	90	16.04	16.77	-0.54	
. 17	JOH	EPU	15 26 2.54				117	3.6	102.8	169	90	17.07	17.07	-0.00	
. 17	AMR	EPU	15 26 3.11				115	3.6	106.3	187	90	17.64	17.63	0.01	
. 17	NPN	EPU	15 26 6.52				103	3.6	127.8	75	90	21.05	21.13	-0.08	
. 17	GNV	IPU	15 26 7.21				120	3.8	132.4	193	90	21.74	21.88	-0.25	
. 17	APK	EPD4	15 26 8.11				105	3.6	132.6	149	90	22.64	21.91	0.73	
. 17	NOP	EPU	15 26 7.71				121	3.8	136.3	173	53	22.24	22.41	-0.17	
. 17	SHRG	EPU	15 26 8.41				69	3.3	140.5	132	53	22.94	22.95	0.04	
.		ISU4	15 26 16.42									30.95	40.07	-9.12	
. 17	DLM	IPU	15 26 9.21				77	3.4	143.6	79	53	23.74	23.35	0.39	

. H = 15 51 31.42 UTC RMS = 0.52 NO = 24 FREE DEPTH SOLUTION
. 17 LAT = 37.394 N ERX = 0.7 ERM = 0.9 AVFM = 3.8 Q = C
. LONG = 116.339 W ERY = 0.6 GAP = 47 AVXM = QS = C SILENT CANYON - NORTH
. DEPTH = 2.05 KM ERZ = 2.3 NM = QD = C

. 17	[illegible]	EPD	15 51 33.35						19.0	284	93	3.93	3.84	0.09	
. 17	BLT	EPU	15 51 35.40						21.9	54	92	3.94	3.91	0.07	
. 17	EPD4	EPU	15 51 36.49						45.2	355	90	7.38	7.70	-0.32	
. 17	SSP	EPU	15 51 40.60						47.6	160	90	8.58	8.10	0.48	

1980 SOUTHERN GREAT BASIN
LOCAL-EVENT DATA REPORT

DEC 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
17	CLS	EPU	15 51 39.20						47.7	315	90	7.79	8.11	-0.33	
17	LPK	EPU	15 51 40.05						52.2	152	90	8.63	8.84	-0.21	
17	LCP	EPU	15 51 40.45						56.4	165	90	9.43	9.52	-0.09	
17	WCR	EPU	15 51 41.70						59.7	36	90	10.28	10.06	0.22	
17	LS4	IPD	15 51 42.15						67.4	175	90	11.43	11.31	0.12	
17	SGV	EPU	15 51 43.17						74.6	237	90	11.75	12.38	-0.63	
17	RVE	EPU4	15 51 45.50						76.0	9	90	14.08	12.71	1.37	
17	SFH	EPD	15 51 44.50						77.6	140	90	13.08	12.96	0.12	
17	GVW	EPD	15 51 45.35				170	3.6	82.3	267	90	13.93	13.73	0.21	
17	MCY	IPD	15 51 44.85						82.7	156	90	13.43	13.79	-0.36	
17	SPRG	EPU	15 51 45.10				175	3.7	85.6	147	90	13.68	14.33	-0.64	
17	MZP	EPD	15 51 46.13				189	3.8	100.9	293	90	16.71	16.75	0.15	
17	JCN	EPD	15 51 46.15				198	3.9	102.5	169	90	16.73	17.01	-0.28	
17	EPK	EPD	15 51 46.45				169	3.8	103.6	101	90	17.53	17.19	0.34	
17	ANM	EPU	15 51 49.75				175	3.8	105.8	187	90	16.53	17.56	0.78	
17	LCM	EPU	15 51 51.52						117.1	264	90	20.10	19.39	0.71	
17	GVV	EPU	15 51 53.40						131.9	193	53	21.98	21.81	0.08	
17	APK	EPD	15 51 53.55						132.4	149	53	22.13	21.86	0.27	
17	NCP	EPD	15 51 53.53						135.9	173	53	21.91	22.33	-0.41	
17	PPK	EPU	15 51 54.52						139.6	274	53	23.10	22.80	0.30	
17	SHRG	EPU	15 51 54.10						140.4	132	53	22.68	22.91	-0.18	

DEC H = 16 1 18.40 UTC RMS = 0.10 NO = 13 FREE DEPTH SOLUTION
17 LAT = 36.944 N ERX = 0.3 ERH = 0.4 AVFM = 3.8 Q = B
LONG = 115.737 W ERY = 0.3 GAP = 83 AVXM = QS = A MERCURY
DEPTH = 2.49 KM ERZ = 1.8 NM = QD = C

17	SPRG	EPD	16 1 23.40			154	3.6	28.5	193	92	5.00	4.99	0.01	
17	GLR	EPD	16 1 24.81			210	3.9	37.7	319	91	6.41	6.49	0.07	
		ISD	16 1 28.92								10.52	11.10	-0.58	
17	SSP	EPU4	16 1 26.63			202	3.9	42.9	267	90	8.23	7.33	0.90	
17	BGB	EPD	16 1 26.01			206	3.9	44.9	283	90	7.61	7.65	0.02	
17	EPR	EPU	16 1 27.71			70	3.0	54.9	63	90	9.31	9.29	0.03	
17	EPN	EPU	16 1 28.03			192	3.9	60.1	300	90	9.63	10.13	-0.49	
		ISD4	16 1 31.91								13.51	17.72	-4.21	
17	SDH	EPD	16 1 29.09			79	3.1	63.0	238	90	10.69	10.60	0.09	
		4	16 1 34.74								16.34	18.55	-2.21	
17	SHRG	EPD	16 1 30.25			127	3.6	71.3	133	90	11.85	11.95	-0.05	
17	NCP	EPD	16 1 34.70			184	4.0	97.9	202	90	16.30	16.27	0.03	
17	KRNA	EPD	16 1 36.05			166	3.9	106.1	327	90	17.65	17.60	0.06	
17	DLM	EPU	16 1 37.45			157	3.9	115.0	50	90	19.05	19.05	-0.00	
17	CTS	EPD	16 1 37.83			191	4.1	116.8	311	90	19.43	19.34	0.09	
17	RVE	EPU2	16 1 39.92			202	4.2	125.9	341	90	21.52	20.83	0.69	
17	MCA	EPU	16 1 41.61					141.6	257	53	23.21	23.07	0.15	

DEC H = 0 30 11.80 UTC RMS = 0.22 NO = 13 FREE DEPTH SOLUTION
18 LAT = 38.036 N ERX = 1.1 ERH = 3.3 AVFM = 2.6 Q = D
LONG = 116.830 W ERY = 3.1 GAP = 217 AVXM = QS = C BLACK BUTTE
DEPTH = 7.27 KM ERZ = 2.4 NM = QD = D

18	CTS	EPU4	0 30 25.40			28	2.2	44.9	168	97	13.60	7.71	5.90	
18	RVE	EPU4	0 30 23.69			27	2.2	56.1	92	96	11.89	9.51	2.38	
18	MZP	EPD	0 30 21.75			34	2.4	61.3	233	95	9.95	10.35	-0.21	
18	BLT	IPU4	0 30 19.10					88.4	136	94	7.30	14.76	-7.46	
18	SVP	EPD	0 30 27.34			28	2.3	92.5	247	93	15.54	15.43	-0.03	
18	EPN	EPD4	0 30 29.00			34	2.5	101.6	154	93	17.20	16.89	0.31	
18	NMN	EPD4	0 30 36.10					106.0	179	93	24.30	17.62	6.69	
18	TPU	EPD	0 30 30.89			41	2.8	114.4	115	93	19.09	18.99	0.11	
18	PPK	EPD	0 30 31.51			24	2.3	116.6	235	93	19.71	19.34	0.37	
18	GLR	EPU	0 30 31.39			39	2.7	117.3	142	53	19.59	19.44	0.30	
18	SGV	EPD4	0 30 35.57					118.4	189	53	23.77	19.59	4.19	
18	BGB	EPU	0 30 31.91			48	2.9	122.9	154	53	20.11	20.17	-0.00	
18	GVW	EPU4	0 30 29.66			33	2.6	123.4	202	53	17.86	20.24	-2.37	
18	SSP	EPU	0 30 33.21			27	2.5	134.6	156	53	21.41	21.69	-0.27	
18	MTI	EPD	0 30 34.21			35	2.7	142.6	106	53	22.41	22.73	-0.12	
18	LCP	EPU4	0 30 29.50			30	2.6	143.6	156	53	17.70	22.86	-5.16	
18	LSM	EPU	0 30 36.04			40	2.9	152.2	161	53	24.24	23.97	0.28	
18	FMT	EPD	0 30 35.91			29	2.6	155.0	178	53	24.11	24.34	-0.12	
18	NPN	EPD	0 30 38.04			42	3.0	172.0	104	53	26.24	26.55	-0.31	
18	EPR	EPU	0 30 38.61					174.1	124	53	26.81	26.82	-0.01	
18	JCN	EPD	0 30 41.10			40	3.0	188.5	160	53	29.30	28.69	0.62	
18	APK	EPU4	0 30 41.20					220.7	150	53	29.40	32.87	-3.46	

DEC H = 14 47 32.92 UTC RMS = 0.44 NO = 4 FREE DEPTH SOLUTION
19 LAT = 36.325 N ERX = ERH = AVFM = 2.3 Q = D
LONG = 116.313 W ERY = GAP = 152 AVXM = QS = C ASH MEADOWS
DEPTH = 0.10 KM ERZ = NM = QD = D

19	AMR	EPD	14 47 36.05			23	1.9	16.6	299	38	3.13	3.38	-0.25	
19	JCN	EPD	14 47 36.86			24	2.0	22.7	56	38	3.94	4.37	-0.44	
19	NCP	EPU	14 47 38.05			17	1.7	26.2	147	38	5.13	4.94	0.18	

DEC 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 19	BGB	EPU	14 47 47.30				31	2.4	79.4	5	38	14.38	13.60	0.83	
. 19	PRN	IPD4	14 47 51.45				41	2.9	164.5	43	30	18.53	26.49	-7.96	
. 19	MTI	EPD4	14 47 54.28				28	2.6	176.2	32	30	21.36	28.00	-6.45	

. DEC H = 19 10 33.96 UTC RMS = 0.24 NO = 15 FREE DEPTH SOLUTION
. 19 LAT = 36.955 N ERX = 0.6 ERM = 1.1 AVFM = 2.2 Q = C
. LONG = 116.708 W ERY = 1.0 GAP = 114 AVXM = QS = C CHLORIDE CLIFF
. DEPTH = 6.73 KM ERZ = 8.7 NM = QD = C

. 19	BRO	IPU	19 10 37.81				20	1.8	22.6	161	103	3.85	4.12	-0.27	
. 19	SGV	IPU	19 10 39.29				28	2.1	29.0	276	100	5.33	5.14	0.19	
.		ESD	19 10 42.94									8.98	9.00	-0.02	
. 19	CDHS	EPD	19 10 40.29				21	1.9	36.4	107	98	6.33	6.32	0.01	
. 19	CDH1	EPU	19 10 40.32				26	2.1	36.4	107	98	6.36	6.32	0.04	
. 19	BMT	EPD	19 10 40.79				26	2.1	39.6	23	97	6.83	6.84	-0.41	
.		ISU2	19 10 45.79									11.83	12.68	-0.85	
. 19	BGB	EPD	19 10 41.72				28	2.2	43.7	78	97	7.76	7.51	0.30	
. 19	SSP	EPU	19 10 41.81				39	2.5	43.8	94	97	7.85	7.51	0.34	
. 19	EPN	EPU4	19 10 42.34				37	2.4	44.6	50	97	8.38	7.66	0.72	
. 19	LSM	EPD	19 10 41.62				42	2.5	45.7	122	96	7.66	7.83	-0.17	
. 19	SDM	EPU	19 10 42.02				27	2.2	47.6	136	96	8.06	8.14	-0.08	
. 19	LOP	EPD	19 10 42.56				40	2.5	49.5	103	96	8.60	8.44	0.17	
. 19	GVN	EPD4	19 10 39.97				27	2.2	56.7	275	95	6.01	9.61	-3.60	
.		ESD	19 10 50.54									16.58	16.82	-0.24	
. 19	GMN	EPU	19 10 44.82				17	1.8	62.2	308	95	10.86	10.50	0.36	
. 19	MCY	EPD	19 10 46.30				39	2.6	74.1	116	94	12.34	12.43	-0.09	

. DEC H = 0 38 2.82 UTC RMS = 0.32 NO = 11 FREE DEPTH SOLUTION
. 20 LAT = 38.372 N ERX = 10.9 ERM = 14.9 AVFM = 3.5 Q = D
. LONG = 117.379 W ERY = 10.2 GAP = 285 AVXM = QS = D TONOPAH
. DEPTH = 0.89 KM ERZ = 8.3 NM = QD = D

. 20	MZP	EPU	0 38 15.02						74.5	180	38	12.20	12.63	-0.24	
. 20	GMN	EPU	0 38 22.50						119.4	175	38	19.68	19.93	-0.25	
. 20	BMT	IPU4	0 38 25.06						141.9	148	30	22.24	23.36	-1.52	
.		ESD	0 38 44.85									42.03	41.58	0.45	
. 20	SGV	EPU	0 38 28.76						157.3	169	30	25.94	25.37	0.57	
. 20	TPU	EPU	0 38 30.29				57	3.3	174.1	119	30	27.47	27.55	-0.08	
.		ESU	0 38 50.58									47.76	48.22	-0.45	
. 20	GLR	IPU	0 38 30.96				73	3.5	176.9	137	30	28.14	27.91	0.38	
. 20	BGB	EPU	0 38 30.91				73	3.5	179.5	146	30	28.09	28.25	-0.11	
.		ESU4	0 38 53.13									50.31	49.35	0.96	
. 20	CDH1	EPD	0 38 32.94				42	3.0	192.1	151	30	30.12	29.89	0.23	
. 20	MTI	IPU	0 38 33.62				88	3.7	200.4	113	30	30.80	30.97	0.04	
. 20	SRG	EPU	0 38 35.01				95	3.8	209.8	105	30	32.19	32.19	0.00	
. 20	PGE	EPD	0 38 37.32				70	3.6	226.2	173	30	34.50	34.31	0.19	
. 20	NPN	IPU	0 38 37.41				83		228.8	110	30	34.59	34.66	-0.06	
. 20	OLM	EPU	0 38 39.51				40	3.2	247.0	110	30	36.69	37.01	-0.32	

. DEC H = 0 47 54.10 UTC RMS = 0.10 NO = 7 FREE DEPTH SOLUTION
. 20 LAT = 36.525 N ERX = 0.4 ERM = 1.5 AVFM = 2.4 Q = C
. LONG = 115.555 W ERY = 1.4 GAP = 166 AVXM = QS = C MERCURY
. DEPTH = 0.79 KM ERZ = 156.3 NM = QD = C

. 20	SHRG	IPD	0 48 0.41				19	1.6	35.9	94	38	6.31	6.37	-0.01	
. 20	MCY	IPU	0 48 0.81				45	2.6	39.5	293	38	6.71	6.96	-0.25	
. 20	JON	EPD	0 48 2.80				34	2.4	50.0	259	38	8.70	8.67	0.03	
. 20	LCP	EPU	0 48 5.35				38	2.5	65.9	304	38	11.25	11.25	0.00	
. 20	SDM	EPD	0 48 6.38				30	2.3	71.4	281	38	12.28	12.15	0.13	
. 20	SSP	EPU2	0 48 7.13						74.1	307	38	13.03	12.59	0.44	
. 20	CDH1	EPU	0 48 7.17				23	2.1	77.7	299	38	13.07	13.17	-0.10	
. 20	PPN	EPD4	0 48 13.53				36	2.6	107.7	25	38	19.43	18.06	1.37	
. 20	BMT	EPD4	0 48 16.56				32	2.6	121.3	314	38	22.46	20.26	1.80	
. 20	MTI	EPD3	0 48 16.47				29	2.5	130.3	11	38	22.37	21.72	0.84	

. DEC H = 1 46 16.86 UTC RMS = 0.18 NO = 21 FREE DEPTH SOLUTION
. 20 LAT = 36.529 N ERX = 0.5 ERM = 0.6 AVFM = 2.6 Q = C
. LONG = 115.550 W ERY = 0.4 GAP = 91 AVXM = QS = B MERCURY
. DEPTH = 1.34 KM ERZ = 1.2 NM = QD = C

. 20	APK	FPU	1 46 21.13				28	2.1	23.4	185	38	4.27	4.23	0.04	
. 20	SPRG	IPU	1 46 21.57				33	2.3	29.6	308	38	4.71	5.24	-0.53	
. 20	SHRG	IPU	[illegible]				27	2.1	15.8	90	38	[illegible]	[illegible]	[illegible]	

DEC 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	XMAG	QUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
. 20	CPX	EPD	1 46 27.64				22	2.0	63.5	314	38	10.78	10.75	0.03	.
. 20	LCP	EPU	1 46 27.78				48	2.7	66.0	303	38	10.92	11.15	-0.23	.
. 20	LSM	EPU	1 46 28.29						68.7	290	38	11.43	11.60	-0.17	.
. 20	SDM	EPU	1 46 28.69				43	2.6	71.7	280	38	12.03	12.09	-0.06	.
. 20	SSP	EPD	1 46 29.50				52	2.8	74.2	306	38	12.64	12.49	0.15	.
. 20	CDHS	EPU	1 46 29.77				34	2.5	77.8	298	38	12.91	13.08	-0.17	.
. 20	CDHI	EPU	1 46 29.99				40	2.6	77.8	298	38	13.13	13.08	0.05	.
. 20	BGB	EPD	1 46 30.78				46	2.7	82.8	313	38	13.92	13.88	0.09	.
. 20	AMR	EPD	1 46 31.13				38	2.6	84.1	260	38	14.27	14.10	0.17	.
. 20	GLR	EPD	1 46 31.05				48	2.8	85.3	331	38	14.19	14.29	0.05	.
. 20	EPN	EPD	1 46 33.24				54	3.0	102.7	318	38	16.38	17.12	-0.74	.
. 20	MTI	EPD	1 46 38.70				36	2.7	129.7	11	38	21.84	21.52	0.52	.
. 20	NPN	EPD	1 46 39.64				52	3.0	136.1	24	30	22.78	22.50	0.28	.
. 20	DLM	EPU	1 46 40.32				36	2.7	139.5	31	30	23.46	22.96	0.50	.
. 20	SGV	EPD	1 46 40.45				39	2.8	141.5	291	30	23.59	23.22	0.38	.

. DEC H = 6 24 27.71 UTC RMS = 0.06 NO = 11 FREE DEPTH SOLUTION .
. 20 LAT = 36.748 N ERX = 0.3 ERH = 0.4 AVFM = 2.0 Q = B .
. LONG = 116.000 W ERY = 0.2 GAP = 124 AVXM = QS = A LATHROP WELLS .
. DEPTH = 6.03 KM ERZ = 1.8 NM = QD = B .

. 20	MCY	IPD	6 24 29.87				44	2.5	10.2	160	116	2.16	2.17	-0.02	.
. 20	SPRG	IPU	6 24 31.09				24	2.0	18.1	109	104	3.38	3.39	-0.01	.
. 20	LCP	IPU	6 24 31.28				36	2.3	19.0	308	104	3.57	3.52	0.04	.
. 20	CPX	EPU	6 24 31.53				18	1.7	20.7	346	103	3.82	3.80	0.02	.
. 20	LSM	IPU	6 24 32.13				36	2.3	24.3	268	101	4.42	4.36	0.05	.
. 20	SSP	EPU	6 24 32.73				33	2.3	27.6	315	99	5.02	4.90	0.11	.
. 20	CDHS	EPD	6 24 32.94				13	1.5	30.9	294	98	5.23	5.43	-0.20	.
. 20	CDHI	IPD	6 24 33.03				18	1.7	30.9	294	98	5.32	5.43	-0.11	.
. 20	SDM	EPU	6 24 33.30				23	2.0	32.3	249	98	5.59	5.65	-0.06	.
. 20	JCN	EPU	6 24 33.96				22	1.9	35.4	195	97	6.25	6.16	0.09	.
. 20	BGB	EPU	6 24 34.21				18	1.8	38.0	328	97	6.50	6.57	-0.02	.

. DEC H = 18 18 43.36 UTC RMS = 0.38 NO = 12 FREE DEPTH SOLUTION .
. 20 LAT = 36.514 N ERX = 1.3 ERH = 1.7 AVFM = 2.4 Q = C .
. LONG = 115.560 W ERY = 1.1 GAP = 92 AVXM = QS = C MERCURY .
. DEPTH = 1.66 KM ERZ = 3.4 NM = QD = C .

. 20	APK	EPD	18 18 47.33				33	2.2	21.6	183	38	3.97	3.88	0.09	.
. 20	SPRG	IPU	18 18 47.85				34	2.3	29.9	312	38	4.49	5.22	-0.73	.
. 20	SHRG	EPD	18 18 49.15				26	2.1	36.3	92	38	5.79	6.26	-0.42	.
.		ISU	18 18 54.01									10.65	10.87	-0.22	.
. 20	MCY	IPU	18 18 49.70				50	2.7	39.5	294	38	6.34	6.78	-0.44	.
. 20	JCN	EPD	18 18 51.70				40	2.5	49.3	260	38	8.34	8.38	-0.04	.
. 20	LCP	EPU	18 18 54.12				48	2.7	66.1	305	38	10.76	11.11	-0.35	.
. 20	SDM	EPD	18 18 55.28				37	2.5	71.1	282	38	11.92	11.92	-0.00	.
. 20	SSP	EPU4	18 18 53.50				53	2.8	74.4	308	38	10.14	12.46	-2.32	.
. 20	CDHI	EPU	18 18 56.78				22	2.1	77.8	300	38	13.42	13.01	0.41	.
. 20	BGB	EPD	18 18 57.95				34	2.5	83.2	314	38	14.59	13.89	0.75	.
. 20	PRN	IPD	18 19 2.08				32	2.5	109.0	25	38	18.72	18.08	0.64	.
. 20	MTI	EPD	18 19 5.48				24	2.4	131.5	11	38	22.12	21.74	0.58	.

. DEC H = 18 32 26.54 UTC RMS = 0.09 NO = 7 FREE DEPTH SOLUTION .
. 20 LAT = 36.543 N ERX = 0.4 ERH = 0.7 AVFM = 2.2 Q = C .
. LONG = 115.557 W ERY = 0.5 GAP = 150 AVXM = QS = C MERCURY .
. DEPTH = 0.85 KM ERZ = 133.1 NM = QD = C .

. 20	APK	EPD	18 32 31.05				26	2.0	24.8	184	38	4.51	4.57	-0.05	.
. 20	SPRG	EPD	18 32 31.56				23	2.0	28.1	307	38	5.02	5.10	-0.08	.
. 20	SHRG	IPD	18 32 32.95				16	1.7	36.3	97	38	6.41	6.42	0.04	.
. 20	MCY	EPU	18 32 33.35				35	2.4	38.6	290	38	6.81	6.80	0.01	.
. 20	JCN	EPD	18 32 35.33				27	2.2	50.2	257	38	8.79	8.69	0.10	.
. 20	LCP	EPU4	18 32 38.30				39	2.5	64.6	302	38	11.76	11.03	0.74	.
. 20	LSM	EPU	18 32 38.18				38	2.5	67.6	289	38	11.64	11.51	0.13	.
. 20	SDM	EPD	18 32 38.83				23	2.1	70.8	279	38	12.29	12.04	0.25	.
. 20	PRN	EPD4	18 32 46.23				29	2.4	106.0	25	38	19.69	17.76	1.93	.

. DEC H = 14 54 45.53 UTC RMS = 0.16 NO = 11 FREE DEPTH SOLUTION .
. 21 LAT = 37.428 N ERX = 0.7 ERH = 1.1 AVFM = 2.5 Q = C .
. LONG = 114.997 W ERY = 0.8 GAP = 176 AVXM = QS = B DELAMAR MOUNTAINS .
. DEPTH = 3.94 KM ERZ = 3.7 NM = QD = C .

. 21	PRN	IPU	14 54 46.22				32	2.2	5.2	243	118	0.69	1.30	-0.60	.
. 21	NPN	IPU	14 54 50.09				50	2.6	25.5	12	95	4.56	4.51	0.05	.
. 21	DLM	EPD	14 54 50.60				29	2.2	30.2	49	94	5.27	5.27	0.00	.
. 21	MTI	EPD	14 54 51.58				28	2.2	36.8	319	94	6.05	6.35	-0.09	.

DEC 1980	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	BGB	EPD	14 55 5.29				18	2.1	117.5	248	90	19.76	19.46	0.35	
. 21	EPN	EPD	14 55 5.94				38	2.7	120.0	259	90	20.41	19.87	0.55	
. 21	MCY	EPU	14 55 5.47				47	2.9	120.9	225	90	19.94	20.01	-0.07	
. 21	SSP	EPD	14 55 6.00				35	2.6	122.0	243	90	20.47	20.19	0.29	
. 21	LOP	EPU	14 55 6.02				38	2.7	122.0	239	90	20.49	20.19	0.30	
. 21	KRNA	EPD	14 55 6.94				32	2.6	127.3	286	90	21.41	21.05	0.36	
. 21	LSM	EPD	14 55 7.35				41	2.8	136.7	236	53	21.82	22.29	-0.47	

. DEC M = 22 13 45.41 UTC RMS = 0.17 NO = 5 FREE DEPTH SOLUTION
. 21 LAT = 36.781 N ERX = 2.3 ERM = 3.4 AVFM = 1.2 Q = D
. LONG = 116.229 W ERY = 2.5 GAP = 100 AVXM = QS = C LATHROP WELLS
. DEPTH = 0.35 KM ERZ = 4.9 NM = QD = D

. 21	LSM	EPD	22 13 47.00				15	1.5	6.0	219	93	1.59	1.58	0.02	
. 21	LOP	EPU	22 13 47.39				13	1.4	9.9	34	38	1.98	2.23	-0.25	
. 21	CDH1	EPU	22 13 47.81				9	1.1	11.8	318	38	2.40	2.55	-0.15	
. 21	SSP	EPU4	22 13 50.25				9	1.1	16.0	3	38	4.84	3.24	1.60	
. 21	SDH	EPU4	22 13 50.37				5	0.6	17.9	213	38	4.96	3.54	1.42	
. 21	MCY	EPU	22 13 50.62				10	1.2	27.3	119	38	5.21	5.07	0.14	
. 21	BGB	EPU	22 13 50.94				17	1.7	28.5	0	38	5.53	5.27	0.31	

. DEC M = 1 34 17.36 UTC RMS = 0.19 NO = 8 FREE DEPTH SOLUTION
. 22 LAT = 36.546 N ERX = 0.8 ERM = 1.4 AVFM = 2.1 Q = C
. LONG = 115.546 W ERY = 1.1 GAP = 153 AVXM = QS = C MERCURY
. DEPTH = 9.80 KM ERZ = 9.4 NM = QD = C

. 22	APK	IPD	1 34 22.05				30	2.2	25.3	186	109	4.69	4.68	0.01	
. 22	SPRG	EPD	1 34 22.46				33	2.3	28.7	305	106	5.10	5.21	-0.11	
. 22	SMRG	IPD	1 34 23.29				20	1.9	35.4	97	103	5.93	6.26	-0.28	
. 22	MCY	EPU	1 34 24.17				32	2.3	39.4	289	102	6.81	6.89	-0.08	
. 22	JCN	EPD	1 34 26.17				17	1.8	51.2	257	99	8.81	8.79	0.02	
. 22	LOP	EPU4	1 34 29.00				26	2.2	65.2	302	97	11.64	11.04	0.60	
. 22	LSM	EPU	1 34 29.45				32	2.4	68.4	288	97	12.09	11.55	0.54	
. 22	SDH	EPD	1 34 29.67				20	2.0	71.7	279	97	12.31	12.09	0.22	

. DEC M = 1 35 26.88 UTC RMS = 0.08 NO = 4 FREE DEPTH SOLUTION
. 22 LAT = 37.000 N ERX = ERM = AVFM = 1.5 Q = C
. LONG = 115.436 W ERY = GAP = 222 AVXM = QS = A ALAMO
. DEPTH = 0.08 KM ERZ = NM = QD = D

. 22	PRN	EPD	1 35 36.75				28	2.2	56.7	37	38	9.[illegible]	9.91	-0.04	
. 22	MTI	EPD	1 35 39.85				26	2.2	76.5	11	38	12.[illegible]	13.12	0.05	
. 22	CDH1	EPU	1 35 40.69				5	0.8	80.1	259	38	13.81	13.71	0.10	
. 22	CDH5	EPD	1 35 40.49				5	0.8	80.1	259	38	13.61	13.71	-0.10	

. DEC M = 11 42 55.02 UTC RMS = 0.27 NO = 12 FREE DEPTH SOLUTION
. 22 LAT = 37.325 N ERX = 0.8 ERM = 1.2 AVFM = 2.3 Q = C
. LONG = 116.304 W ERY = 0.9 GAP = 75 AVXM = QS = C SILENT CANYON - NORTH
. DEPTH = 1.67 KM ERZ = 328.5 NM = QD = C

. 22	EPN	EPU	11 42 57.00				63	2.8	12.4	188	38	1.98	2.38	-0.40	
. 22	BMT	EPU	11 42 59.39				40	2.4	20.9	257	38	4.37	3.75	0.22	
.		ISD4	11 42 5.65									-49.37	7.27	-56.64	
. 22	GLR	EPD	11 42 59.71				24	2.0	29.0	119	38	4.69	5.07	-0.23	
. 22	BGB	EPU2	11 43 0.00				51	2.7	32.6	168	38	4.98	5.66	-0.63	
. 22	SSP	EPU	11 43 2.55				37	2.4	45.1	170	38	7.53	7.69	-0.15	
. 22	KRNA	EPD	11 43 2.85				22	2.0	47.6	352	38	7.83	8.10	-0.27	
. 22	CTS	EPU	11 43 3.60				17	1.8	51.1	313	38	8.58	8.67	-0.08	
. 22	LOP	EPU	11 43 4.09				32	2.3	53.7	167	38	9.07	9.08	-0.01	
. 22	LSM	EPU4	11 43 7.10				33	2.4	65.1	177	38	12.08	10.95	1.14	
. 22	SGV	EPD	11 43 7.76				35	2.5	75.1	239	38	12.74	12.57	0.17	
. 22	MCY	EPD	11 43 8.70				36	2.5	79.7	158	38	13.68	13.31	0.37	
. 22	MTI	EPU	11 43 11.69				23	2.2	99.2	67	38	16.67	16.49	0.39	
. 22	JCN	EPU4	11 43 12.91				17	1.9	99.9	170	38	17.09	16.60	1.29	
. 22	PRN	EPD	11 43 13.95				38	2.7	111.4	85	38	18.93	18.48	0.46	
.		ESD4	11 43 30.61									35.59	32.33	3.26	

. DEC M = 14 42 25.17 UTC RMS = 0.18 NO = 13 FREE DEPTH SOLUTION
. 22 LAT = 37.224 N ERX = 4.9 ERM = 5.0 AVFM = 3.1 Q = D
. LONG = 114.706 W ERY = 1.1 GAP = 270 AVXM = QS = D DELAMAR MOUNTAINS
. DEPTH = 12.33 KM ERZ = 219.2 NM = QD = D

. 22	WRN	EPD	14 42 43.95				34	2.6	114.7	317	53	18.78	18.61	0.18	
. 22	UCS	EPD	14 42 44.85				49	2.9	122.9	299	53	19.68	19.67	0.01	

DEC 1980	STA	PHASE	TIME (UTC)	AMP (MU)	PER (SEC)	AMAG	DUR	FMAG	DIST (KM)	AZI (DEG)	AIN (DEG)	TOBS (SEC)	TCAL (SEC)	RES (SEC)	REMARKS
22	MCY	EPD	14 42 45.25				72	3.3	128.2	291	53	20.08	20.36	-0.28	
22	BLT	EPD	14 42 45.70				60	3.1	129.4	282	53	20.53	20.52	0.01	
22	LCP	EPD	14 42 46.60				68	3.3	136.4	253	53	21.43	21.43	0.00	
22	SSP	EPD	14 42 46.94				65	3.2	138.5	256	53	21.77	21.70	0.07	
22	EPN	EPU	14 42 47.95				66	3.3	143.6	270	53	22.78	22.37	0.42	
22	LSM	EPU4	14 42 47.40				76	3.4	149.4	249	53	22.23	23.12	-0.89	
22	JON	EPD	14 42 48.66				47	3.0	152.0	235	53	23.49	23.46	0.03	
22	RVE	EPD	14 42 49.06				43	3.0	158.2	304	53	23.89	24.26	-0.37	
22	SDM	EPU	14 42 49.65				50	3.1	159.0	246	53	24.48	24.36	0.12	
22	KRNA	EPD	14 42 49.39				58	3.2	159.2	292	53	24.22	24.39	-0.16	
22	NOP	EPD	14 42 52.00				58	3.3	177.5	227	53	26.83	26.76	0.07	
22	CTS	EPU	14 42 52.66				57	3.3	184.7	284	53	27.49	27.70	-0.21	

DEC H = 1 14 4.59 UTC RMS = 0.15 NO = 5 FREE DEPTH SOLUTION
23 LAT = 36.752 N ERX = 2.5 ERM = 3.0 AVFM = 1.4 Q = D
LONG = 116.009 W ERY = 1.6 GAP = 209 AVXM = QS = C LATHRUP WELLS
DEPTH = 2.08 KM ERZ = 55.3 NM = QD = D

23	MCY	IPD	1 14 6.53				12	1.3	10.9	157	92	1.94	2.12	-0.18	
23	LCP	EPU	1 14 7.90				15	1.5	18.1	309	91	3.31	3.30	0.01	
23	LSM	EPU	1 14 8.71				13	1.4	23.5	266	90	4.12	4.18	-0.05	
23	SDM	EPU	1 14 10.11				9	1.1	31.7	288	90	5.52	5.51	0.02	
23	JCN	EPD	1 14 10.97				12	1.4	35.7	194	90	6.38	6.15	0.23	

DEC H = 9 5 26.41 UTC RMS = 0.42 NO = 21 FREE DEPTH SOLUTION
23 LAT = 36.956 N ERX = 4.0 ERM = 4.3 AVFM = 3.0 Q = D
LONG = 117.682 W ERY = 1.3 GAP = 258 AVXM = QS = C DRY MOUNTAIN
DEPTH = 0.29 KM ERZ = 2.5 NM = QD = D

23	MCA	IPD	9 5 34.70				42	2.5	49.5	134	38	8.29	8.69	-0.40	
23	GMN	IPU	9 5 34.95						53.6	44	38	8.54	9.35	-0.81	
23	SGV	IPD	9 5 36.43						57.9	87	38	10.02	10.06	-0.04	
23	BPO	EPU	9 5 42.14				40	2.7	96.6	103	38	15.73	16.35	-0.62	
23	EPN	EPD	9 5 47.61				52	3.0	124.1	77	38	21.20	20.82	0.38	
23	GWV	EPD	9 5 47.13				40	2.8	124.4	133	38	20.72	20.87	-0.25	
23	AMR	EPU	9 5 47.05				41	2.8	124.4	120	38	20.64	20.88	-0.24	
23	SDM	EPD	9 5 47.79				41	2.8	124.8	106	38	21.38	20.93	0.45	
23	LSM	EPD	9 5 48.17				60	3.1	128.1	101	38	21.76	21.48	0.28	
23	BGB	EPU	9 5 48.14				58	3.1	129.8	86	38	21.73	21.74	0.04	
23	SSP	EPD	9 5 48.55				50	3.0	130.5	92	38	22.14	21.86	0.28	
23	QSM	EPU	9 5 48.43				40	2.8	131.9	146	38	22.02	22.08	-0.06	
		ESU	9 6 5.40									38.99	38.65	0.34	
23	LCP	EPD	9 5 49.26				57	3.1	135.4	95	30	22.85	22.67	0.18	
23	CPX	EPD4	9 5 51.65				45	2.9	144.7	91	30	25.24	23.87	1.37	
		ESD	9 6 8.21									41.80	41.78	0.02	
23	KRNA	EPU	9 5 50.60				48	3.0	145.1	53	30	24.19	23.92	0.27	
23	BLT	EPU	9 5 51.21				40	2.9	148.4	68	30	24.80	24.34	0.46	
23	GLR	EPD4	9 5 51.78				41	2.9	150.4	80	30	25.37	24.61	0.91	
23	JON	EPU4	9 5 52.20				38	2.8	152.3	112	30	25.79	24.85	0.94	
23	MCY	EPU	9 5 52.56				57	3.2	156.9	102	30	26.15	25.45	0.70	
23	NCP	EPD	9 5 53.08				37	2.8	165.0	124	30	26.67	26.50	0.17	
23	SPRG	EPD4	9 5 54.83				57	3.2	169.6	100	30	28.42	27.11	1.32	
		ISU4	9 6 16.65									50.24	47.44	2.81	
23	RVE	EPD	9 5 55.76				39	2.9	176.9	48	30	29.35	28.05	1.30	
23	QCS	EPD	9 5 56.43				34	2.8	180.4	60	30	30.02	28.51	1.51	
23	TPU	EPD4	9 5 58.30				46	3.1	194.1	68	30	31.89	30.28	1.61	
		ESD4	9 6 22.69									56.28	52.99	3.29	
23	PRN	EPU	9 6 2.98				65	3.6	239.0	78	30	36.57	36.11	0.46	
23	NPN	EPU	9 6 5.04				54	3.5	255.4	72	30	38.63	38.24	0.39	

DEC H = 17 35 58.97 UTC RMS = 0.59 NO = 14 FREE DEPTH SOLUTION
25 LAT = 37.367 N ERX = 2.1 ERM = 2.7 AVFM = 2.9 Q = D
LONG = 116.392 W ERY = 1.7 GAP = 83 AVXM = QS = D SILENT CANYON - NORTH
DEPTH = 12.40 KM ERZ = 3.9 NM = QD = C

25	EPN	EPD4	17 35 54.18				146	3.5	18.0	160	122	******	3.79	-8.58	
25	BLT	EPD	17 36 4.70				65	2.8	25.1	65	114	5.73	4.80	0.92	
25	BGH	IPD	17 36 8.23				75	3.0	39.3	158	106	9.26	6.99	2.32	
25	CTS	EPD	17 36 6.89				33	2.3	42.3	316	105	7.92	7.45	0.47	
25	KRNA	EPD	17 36 5.88				44	2.6	42.5	1	105	6.91	7.49	-0.58	
25	SSP	EPU4	17 36 5.35				85	3.2	51.4	163	102	6.38	8.90	-2.52	
25	LCP	EPD4	17 36 7.37				53	2.8	60.3	161	100	8.40	10.31	-1.91	
25	LSM	EPU	17 36 10.25				93	3.3	70.5	171	99	11.28	11.95	-0.67	
25	SGV	EPU	17 36 10.63				63	3.0	71.1	233	99	11.66	12.05	-0.39	
25	RVE	EPU	17 36 11.30				39	2.6	74.6	14	98	12.33	12.61	-0.28	
25	SDM	EPU	17 36 12.60				37	2.5	80.2	177	98	13.63	13.51	0.12	
25	MCY	EPU	17 36 12.65				68	3.1	87.1	154	97	13.68	14.63	-0.95	
25	SPRG	EPD	17 36 13.62				60	3.0	90.9	145	97	14.65	15.24	-0.59	

DEC 1980	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	JCN	EPU	17 36 16.42				33	2.5	106.1	166	53	17.45	17.48	-0.03	
. 25	EPR	EPU	17 36 16.65				65	3.1	109.2	102	53	17.68	17.88	-0.20	
. 25	PPN	EPD	17 36 18.05						119.0	88	53	19.08	19.16	-0.08	
. 25	GWV	EPU	17 36 20.71				35	2.7	133.3	191	53	21.74	21.02	0.62	

. DEC H = 3 21 46.63 UTC RMS = 1.37 NO = 5 FIXED DEPTH SOLUTION
. 26 LAT = 36.663 N ERX = 324.0 ERH = 335.6 AVFM = 2.5 Q = D DEPTH CONTROL INADEQUATE
. LONG = 115.201 W ERY = 87.5 GAP = 276 AVXM = QS = D HAYFORD PEAK
. DEPTH = 5.00 KM ERZ = 318.6 NM = QD = D

. 26	MCY	EPU	3 21 57.20				52	2.6	68.0	270	93	10.57	11.42	-0.86	
. 26	JCN	EPD	3 21 59.20				19	2.0	84.4	253	92	12.57	14.09	-1.52	
. 26	LSM	EPU	3 22 6.00				57	3.0	96.0	275	92	19.37	15.98	3.39	
. 26	NOP	EPD	3 22 4.50				55	3.0	104.0	235	92	17.87	17.28	0.59	
. 26	KRNA	EPU	3 22 11.79				13	1.9	159.7	319	53	25.16	25.17	-0.01	

. DEC H = 7 1 18.15 UTC RMS = 0.06 NO = 7 FREE DEPTH SOLUTION
. 26 LAT = 36.646 N ERX = 0.3 ERH = 0.4 AVFM = 2.5 Q = B
. LONG = 115.443 W ERY = 0.3 GAP = 106 AVXM = QS = A HAYFORD PEAK
. DEPTH = 18.66 KM ERZ = 0.4 NM = QD = B

. 26	SHRG	IPD	7 1 24.13				29	2.2	30.2	121	120	5.98	6.01	0.02	
. 26	SPRG	EPU	7 1 24.51				34	2.3	33.2	279	118	6.36	6.43	-0.07	
. 26	MCY	EPD	7 1 26.36				44	2.6	46.4	272	111	8.21	8.40	-0.20	
. 26	JCN	EPU4	7 1 27.85				32	2.4	63.4	249	105	9.70	11.03	-1.34	
. 26	LCP	EPU	7 1 30.35				36	2.5	68.6	290	104	12.20	11.85	0.34	
. 26	SDM	EPD	7 1 31.70				32	2.4	80.1	270	53	13.55	13.50	0.05	
. 26	NCP	EPD	7 1 32.41				35	2.5	85.8	228	53	14.26	14.24	0.02	
. 26	PRN	EPU4	7 1 30.81				41	2.7	91.4	23	53	12.66	14.96	-2.30	
.		ISU	7 1 44.34									26.19	26.18	0.01	
. 26	EPN	EPU4	7 1 35.94				44	2.8	100.6	309	53	17.79	16.16	1.62	

. DEC H = 8 46 30.82 UTC RMS = 0.03 NO = 4 FREE DEPTH SOLUTION
. 28 LAT = 36.687 N ERX = ERH = AVFM = 1.9 Q = C
. LONG = 116.322 W ERY = GAP = 182 AVXM = QS = A LATHROP WELLS
. DEPTH = 3.66 KM ERZ = NM = QD = D

. 28	SDM	EPD	8 46 32.03				22	1.8	4.8	198	118	1.21	1.22	-0.01	
. 28	LOP	EPD	8 46 34.90				24	2.0	23.1	37	95	4.08	4.13	-0.05	
. 28	SSP	EPD	8 46 35.80				16	1.6	28.0	19	94	4.98	4.92	0.06	
. 28	MCY	EPU	8 46 36.46				23	2.0	32.3	95	94	5.64	5.61	0.03	

. DEC H = 12 9 23.94 UTC RMS = 0.03 NO = 4 FIXED DEPTH SOLUTION
. 30 LAT = 36.612 N ERX = ERH = AVFM = 1.5 Q = C DEPTH CONTROL INADEQUATE
. LONG = 116.257 W ERY = GAP = 153 AVXM = QS = A LATHROP WELLS
. DEPTH = 5.00 KM ERZ = NM = QD = D

. 30	SDM	EPU	12 9 25.75				12	1.3	8.1	297	115	1.81	1.79	0.02	
. 30	LSM	EPU	12 9 26.60				18	1.7	14.1	355	104	2.66	2.72	-0.05	
. 30	JCN	EPU	12 9 28.16				9	1.1	23.6	144	98	4.22	4.23	-0.01	
. 30	MCY	EPU	12 9 28.75				17	1.7	27.0	78	97	4.81	4.77	0.04	

. DEC H = 19 45 27.57 UTC RMS = 0.19 NO = 12 FREE DEPTH SOLUTION
. 30 LAT = 37.316 N ERX = 0.9 ERH = 1.1 AVFM = 2.2 Q = C
. LONG = 115.046 W ERY = 0.7 GAP = 203 AVXM = QS = B ALAMO
. DEPTH = 1.66 KM ERZ = 1.4 NM = QD = D

. 30	PRN	EPU	19 45 29.49				23	1.9	10.1	358	38	1.92	2.01	-0.08	
. 30	EPR	IPD	19 45 31.13				34	2.3	20.5	217	38	3.56	3.70	-0.14	
. 30	NPN	IPU	19 45 34.13				24	2.0	38.6	15	38	6.56	6.64	-0.08	
.		ISU	19 45 39.34									11.77	11.62	0.15	
. 30	MTI	EPD	19 45 34.93				27	2.1	44.8	333	38	7.36	7.64	-0.08	
. 30	TPU	EPD	19 45 37.95				22	2.0	62.2	301	38	10.38	10.48	-0.10	
.		ISU	19 45 45.71									18.14	18.33	-0.19	
. 30	SRG	EPD	19 45 38.11				29	2.3	62.9	358	38	10.54	10.59	-0.04	
.		ISU4	19 45 46.62									19.05	18.53	0.53	
. 30	QCS	EPU4	19 45 43.60				16	1.9	91.8	303	38	16.23	15.29	0.94	
. 30	SPPG	EP	19 45 43.71				27	2.3	98.8	225	38	16.14	16.10	0.04	
.		ISD4	19 45 58.43									30.86	28.18	2.68	
. 30	MCY	EPU4	19 45 46.62				30	2.5	109.2	228	38	19.05	18.11	0.94	
. 30	LCP	EPU4	19 45 47.48				25	2.3	112.1	243	38	19.91	18.58	1.33	
. 30	EPN	EPU4	19 45 47.82				23	2.3	113.8	264	38	20.25	18.87	1.39	
. 30	LSM	EPU2	19 45 49.35				24	2.3	126.5	240	38	21.78	20.93	0.86	
. 30	KRNA	EPU	19 45 49.09				25	2.4	127.4	292	38	21.52	21.08	0.44	
. 30	RVE	EPU	19 45 49.12				19	2.1	127.7	308	38	21.55	21.13	0.43	

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