

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

ONSHORE-OFFSHORE WIDE-ANGLE SEISMIC RECORDINGS FROM CENTRAL
OREGON: THE FIVE-DAY RECORDER DATA

By

Anne M. Trehu¹ and Yosio Nakamura²

Open-File Report 93-317

¹College of Oceanic and Atmospheric Sciences, Oregon State University, Corvallis, OR 97331

²Institute for Geophysics, University of Texas, Austin, TX 78759

This report was prepared under a grant from the U.S. Geological Survey and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic Code. Opinions and conclusions expressed herein do not necessarily represent those of the USGS. Any use of trade, product or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Menlo Park, California

1993

CONTENTS

Abstract	2
Introduction and Objectives	2
Data Acquisition and Processing	4
Description of the Data	8
Acknowledgements	13
References Cited	13

FIGURES

Figure 1.	Generalized tectonic setting of the Cascadia subduction zone	3
Figure 2a.	Location map of Oregon showing seismic lines and recorders	5
Figure 2b	Line drawing interpretation of multichannel seismic reflection line	5
Figure 3a.	Receiver gather from OBS1, vertical component	10
Figure 3b.	Receiver gather from OBS2, vertical component	10
Figure 3c.	Receiver gather from OBS2, radial component	10
Figure 3d.	Receiver gather from OBS2, transverse component	10
Figure 3e.	Receiver gather from OBS4, vertical component	11
Figure 3f.	Receiver gather from OBS3, vertical component	11
Figure 3g.	Receiver gather from OBS8, vertical component	12
Figure 3h.	Receiver gather from OBS5, vertical component	12

TABLES

Table 1.	OBS locations and depths	7
----------	--------------------------	---

APPENDICES

A.	Shotpoint times and locations	15
B.	UTIG SEG Y format	30

ABSTRACT

The University of Texas and Oregon State University deployed eight ocean bottom seismometers (OBS) during marine seismic reflection profiling of the central Oregon margin conducted in September 1989 (figure 1). The OBS's were deployed along the reflection profile to record the shots from a tuned 128 liter (7800 cu. in.) airgun array towed by a commercial seismic ship. This report provides the locations of the OBS's, discusses the preliminary processing procedures, and illustrates the recorded wide-angle seismic data.

INTRODUCTION AND OBJECTIVES

In September, 1989, investigators from Oregon State University (OSU), University of Texas Institute for Geophysics (UTIG), and the U.S. Geological Survey (USGS) collaborated to collect a seismic reflection profile and wide-angle seismic recordings along the reflection line in central, coastal Oregon (Trehu et al., 1990; Lin and Trehu, 1991). This study was followed in 1991 by an onshore seismic refraction profile that overlapped and extended the 1989 profile east to the Cascade foothills. Results from an inversion of the travel times recorded during the 1989 and 1991 experiments were presented by Trehu et al. (1992a,b).

In the following we report on wide-angle data obtained by a deployment of University of Texas at Austin ocean-bottom seismometers during the acquisition of the seismic reflection profile. Complementary data recorded onshore are presented in companion Open-file Reports by Brocher et al. (1993) and Trehu et al. (1993).

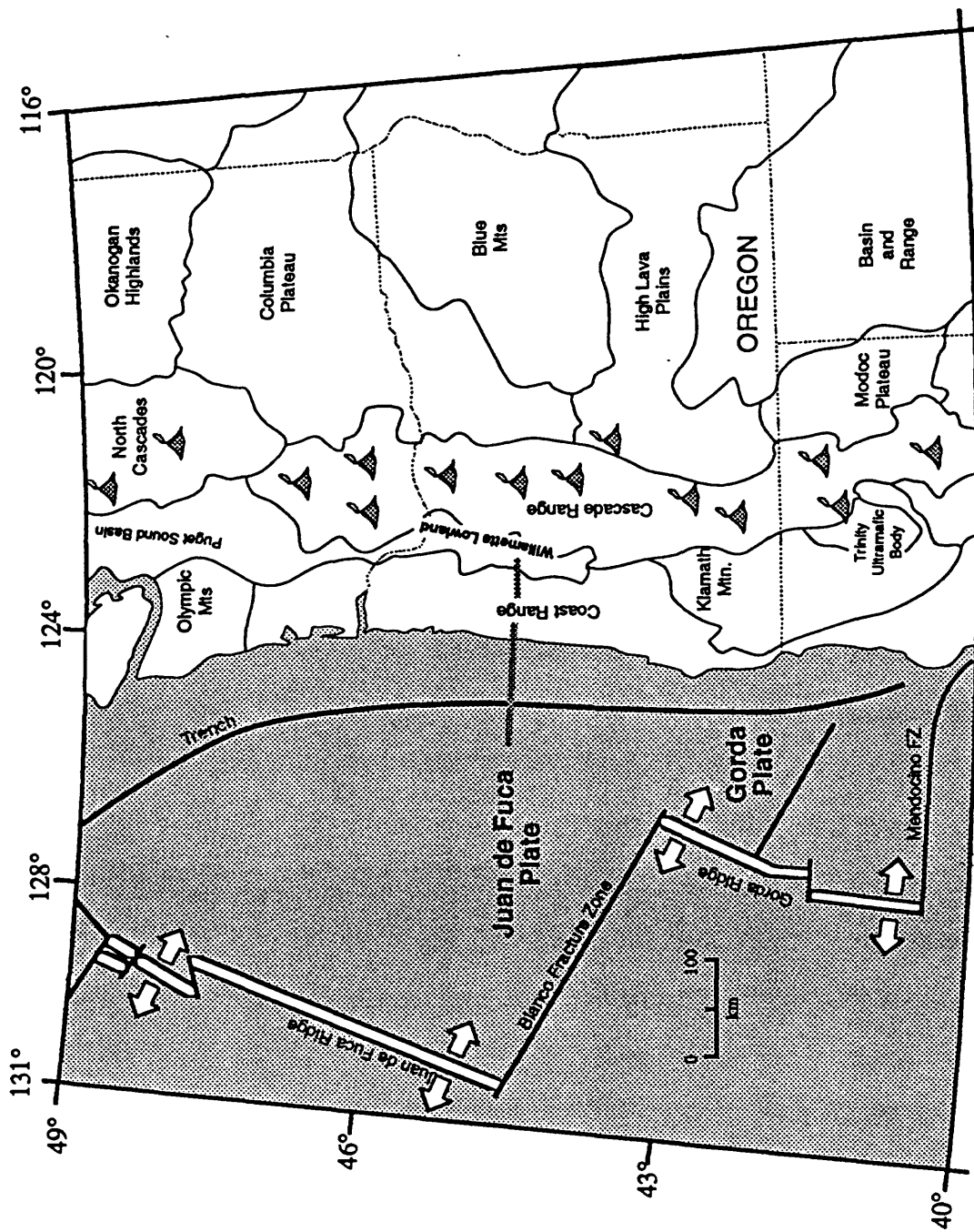


Figure 1. Location map of Pacific Northwest showing the study area and position of 1989 onshore-offshore seismic experiment in central Oregon as a heavy gray line.

DATA ACQUISITION AND PROCESSING

The tuned airgun array used for marine reflection profiling, which had a total volume of 128 liters (7800 cu. in.), also served as a seismic source for ocean bottom seismometers positioned along the profile on the continental shelf, slope and adjacent abyssal plain (fig. 2a). The locations and origin times of all shot points are listed in Appendix A. A simplified line drawing of the unmigrated seismic reflection profile is shown in figure 2b (Lin and Trehu, 1991; Trehu, A., and G. Lin, A deep crustal seismic profile across the central Oregon continental margin; manuscript in preparation).

The OBS's were prepared for deployment in a laboratory at the Hatfield Marine Science Center in Newport, Oregon. When notice was received that the shooting ship was approaching the beginning of the line, eight OBS's were loaded onto a 72-foot-long fishing boat chartered for the occasion (the F/V Olympic) and deployed along the profile prior to the start of shooting. The large gap in spacing between sites 2 and 3 resulted from the need to avoid water depths in which fishermen were actively dragging for shrimp. The gap in spacing between 5 and 8 results from failure of instrument 6, which was deployed at the base of the slope, just seaward of the deformation front.

Six of the OBS's were of the type described in detail by Nakamura et al. (1987). The data storage capacity of these instruments is 5 MBytes, which is insufficient to record continuously for the time it takes to shoot a 120 km long seismic reflection profile. This presents a significant logistic challenge since it requires that deployment and shooting ships be very well synchronized and that the shooting ship shoot at equal time intervals rather than equal distance intervals in order to maximize the efficiency of data storage. Moreover, only every other shot (ie. one minute, or approximately 132 meter, intervals) could be recorded. One of these instruments, located at the base of the continental slope (OBS 6), failed to record data; the other five each recorded the entire profile. One instrument (OBS 4) had a faulty memory, resulting in intermittent distortion of data.

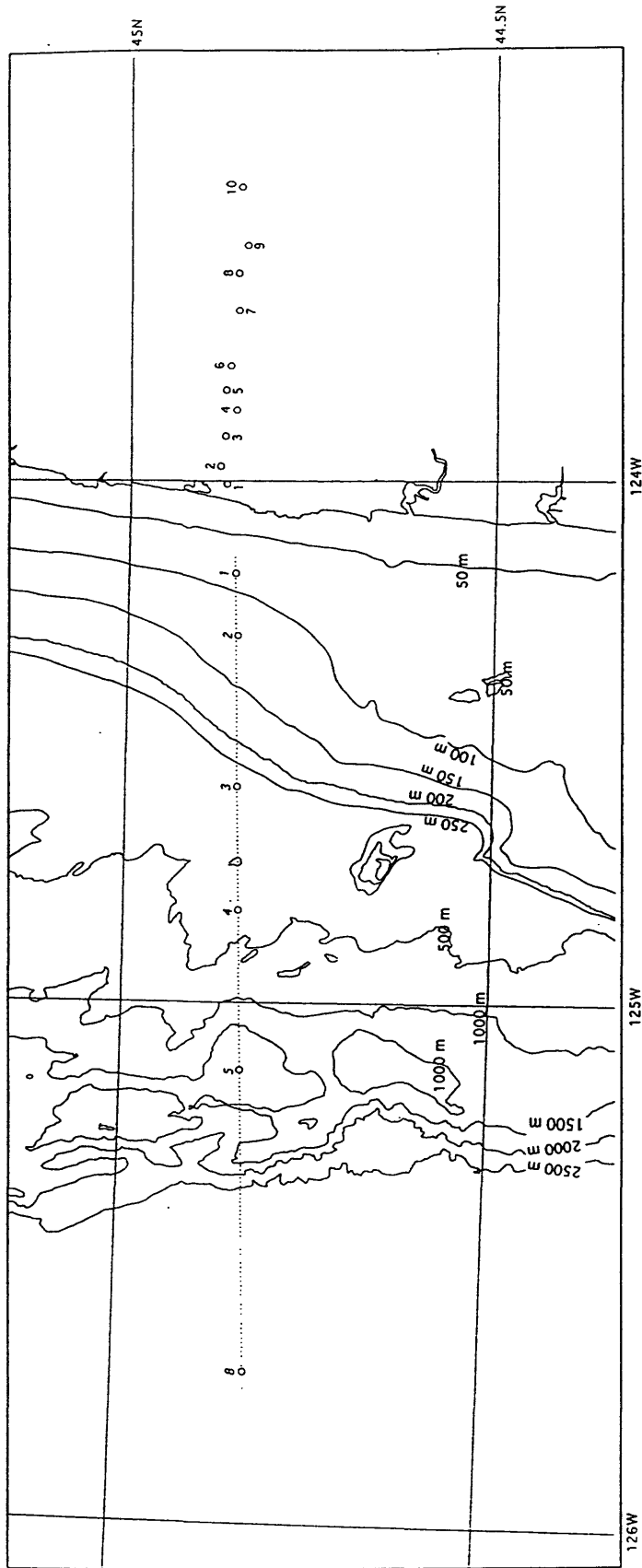


FIGURE 2. (A) Map of central Oregon showing the locations of the marine reflection line (every tenth shot shown as a small dot), temporary seismic recorders (large circles), and offshore bathymetry.

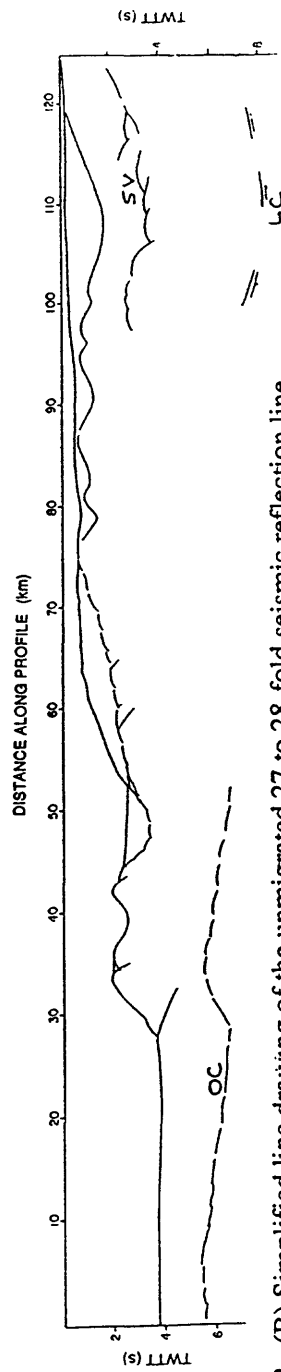


FIGURE 2. (B) Simplified line drawing of the unmigrated 27 to 28-fold seismic reflection line showing the position of Neogene basins. The top of the oceanic crust (OC), the top of the Siletz Volcanics (SV), and a reflection from within the lower crust, interpreted to represent the base of the Siletz Volcanics (LC) are also shown.

Two of the OBS's contained the new large capacity recording system described by Nakamura and Garmany (1991). These instruments recorded three orthogonal geophone components for each shot onto 155 MByte digital cartridge tapes. This experiment represented only the second field deployment for these instruments and was only moderately successful because of a programming error in the internal OBS clock. One instrument recorded a portion of the profile (OBS 2) and released early; it was recovered with the assistance of the local shrimping fleet. The other was not deployed.

Timing for the OBS's was provided by an internal clock that was calibrated with a GOES clock just before deployment and immediately after retrieval. Corrections to the timing to correct for drift were applied during the preliminary processing stage. Because the OBS clock is designed to drift forward, with periodic setbacks to compensate for the positive drift, this procedure is quite complicated and includes several components: a sawtooth function due to the periodic setbacks, a linear long-term drift obtained from comparison with the pre- and post-deployment calibrations, and a constant delay between when the OBS system fetches time from the clock and when it acquires the first sample.

Shot instant times were obtained using a PC-based recorder located on the commercial seismic vessel. A Kinometrics True Time satellite clock receiver (model 468), set for the local time delay to the GOES satellite, and stabilized using a high-precision Cesium oscillator, provided the absolute time base recorded on the commercial vessel. The GOES clock receiver produces time accurate to a millisecond.

Navigation on the deployment ship was by Loran C. This was adequate to place the instruments along the profile and to retrieve them afterwards. For further analysis of the data, instruments positions were calculated using observed first arrivals from shots in the vicinity of the OBS's. For sites 1 and 2, the first arrivals represent waves refracted in the uppermost sediments, and the sediment velocity was treated as an additional variable in the inversion. For sites 3-7, the first arrivals were water waves, and the water velocity obtained from Matthew's tables was used. For site 8, a water velocity of 1500 km/s was assumed. The shot data were also used to orient the

horizontal components at site 2, and the data were rotated to extract the radial and transverse components. These procedures are described in detail by Nakamura et al. (1987). Instruments were relocated independently at UT and at OSU with similar results. The instrument locations are summarized in Table 1. Although two solutions, one on each side of the shot line, are obtained from the inversion (except for site 2, where water wave polarization observations remove this ambiguity), only the preferred solution, chosen by comparison with the position of the ship on deployment as determined from Loran C, is listed. Also listed is the computed delay time of the shots, which represents an estimate of the lag time between the time of the shot trigger recorded on the shooting ship and the actual shot time. A mean shot instant delay of 48 ms is indicated. Instrument depths were estimated from the echo sounder on the F/V Olympic.

Table 1. Location and depth of ocean bottom seismometers. The shots used for each site are also indicated.

Site	Shots used	Latitude (°N)	Longitude (°W)	v, m/s	Dt, ms	s _t , ms	Dep, m
1	5068-5034	44°51'04.9"	124°10'35.0"	1756	57	4	75
2*	4929-4891	44°50'55.3"	124°17'51.0"	1734	44	3	130
3	4584-4544	44°50'32.8"	124°35'23.2"	1480	39	3	335
4	4302-4262	44°50'18.0"	124°49'24.7"	1480	57	4	385
5	3948-3868	44°50'06.1"	125°07'39.8"	1481	41	5	1840
8	3260-3170	44°48'51.9"	125°42'23.5"	1500	50	4	2890

v = sub-bottom wave speed for sites 1 & 2 (output), water-wave speed for other sites (input)

Dt = computed time delay

s_t = standard deviation in arrival time readings

*The orientation of the instrument defined by the direction of +H₁ axis measured clockwise from north = $118.4 \pm 1.6^\circ$ on map (UTM), or $117.5 \pm 1.6^\circ$ from true north

Dep = Depth in meters. Instrument depths were initially determined from the echo sounder on the R/V Olympic. These depths were then compared to depths obtained from the water bottom reflection of the closest shot to each instrument.

Instrument depths were initially determined from the echo sounder on the F/V Olympic.

Shot-receiver offsets were calculated using the navigation data from the shooting ship (obtained

using Starfix), corrected for the offset between the ship's antenna and the center of the airgun array, and the OBS locations obtained from the inversion. The timing corrections, corrected navigation information, and calculated shot-receiver offsets were then merged with the trace headers and reformatted into SEG-Y format tapes (Barry et al., 1975), as interpreted by UTIG (appendix B).

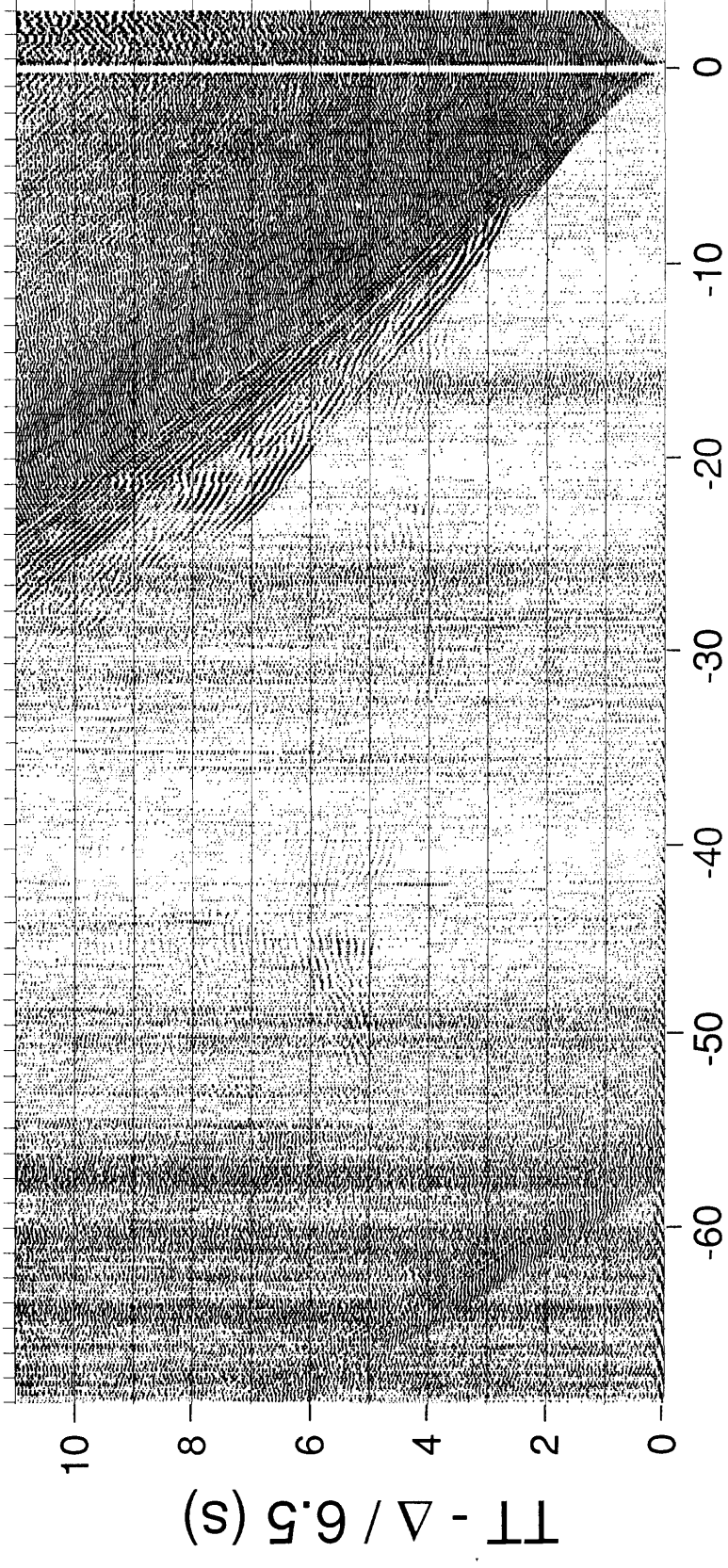
DESCRIPTION OF THE DATA

Figure 3 illustrates the data recorded at the six OBS's. For display, data were filtered with a minimum phase bandpass filter with a passband of 5 to 25 Hz, reduced using a velocity of 6.5 km/s, and corrected for geometrical spreading by multiplying trace amplitudes by a factor of $(\text{offset}/10 \text{ km})^{0.75}$. For offsets less than 10 km, no geometrical spreading was applied. For OBS2, which recorded every shot, two adjacent traces were added together.

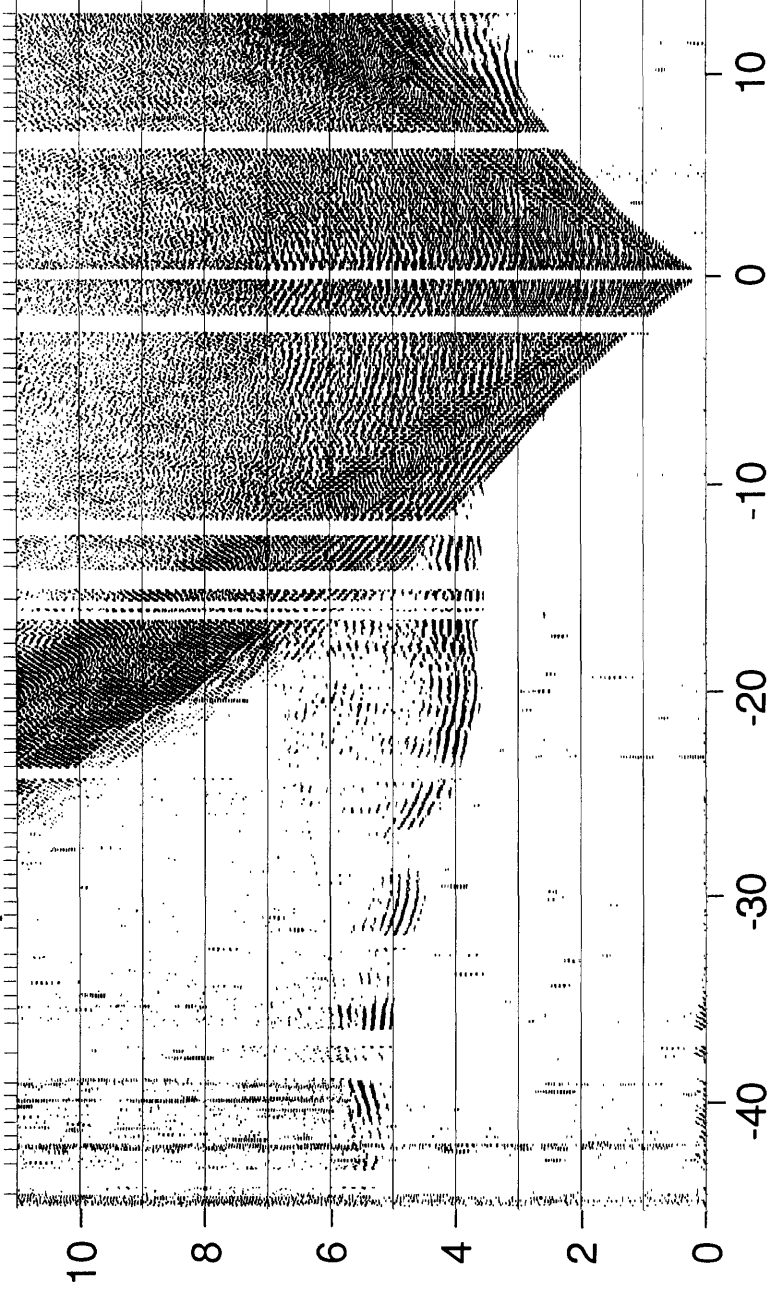
The signal to noise ratio of the recorded data is quite variable along the profile. OBS1 (figure 3a), nearest to the coast, is very noisy. In addition to noise generated at the coast line or sea surface at this shallow water site, this station may be affected by cultural noise due to an active quarry onshore, which began operation at 6:30 AM (i.e. offsets greater than 55 km for OBS1). Data on OBS2 (figure 3b-d) are limited to near offsets because of the clock error mentioned above, and there are several significant data gaps. Data on OBS4 (figure 3e) are noisy because of the memory problem mentioned earlier. In addition, data from that station are strongly affected by water-borne energy from the previous shot. Because of the limited storage capacity of the OBS's, requiring recording of shots at about 132 m intervals, our ability to remove this noise through f-k filtering is very limited. The best data were recorded on OBSs 3 (figure 3f) and 5 (figure 3h), where strong arrivals are observed to the maximum offsets recorded. Although interference from water-borne energy is observed, the primary signal is still clearly detected in this region. For reasons not understood, this water-borne energy is strongest at OBS8 (figure 3g), the deep water

site on the abyssal plain, and severely limits the maximum offset to which primary seismic arrivals are observed at this site.

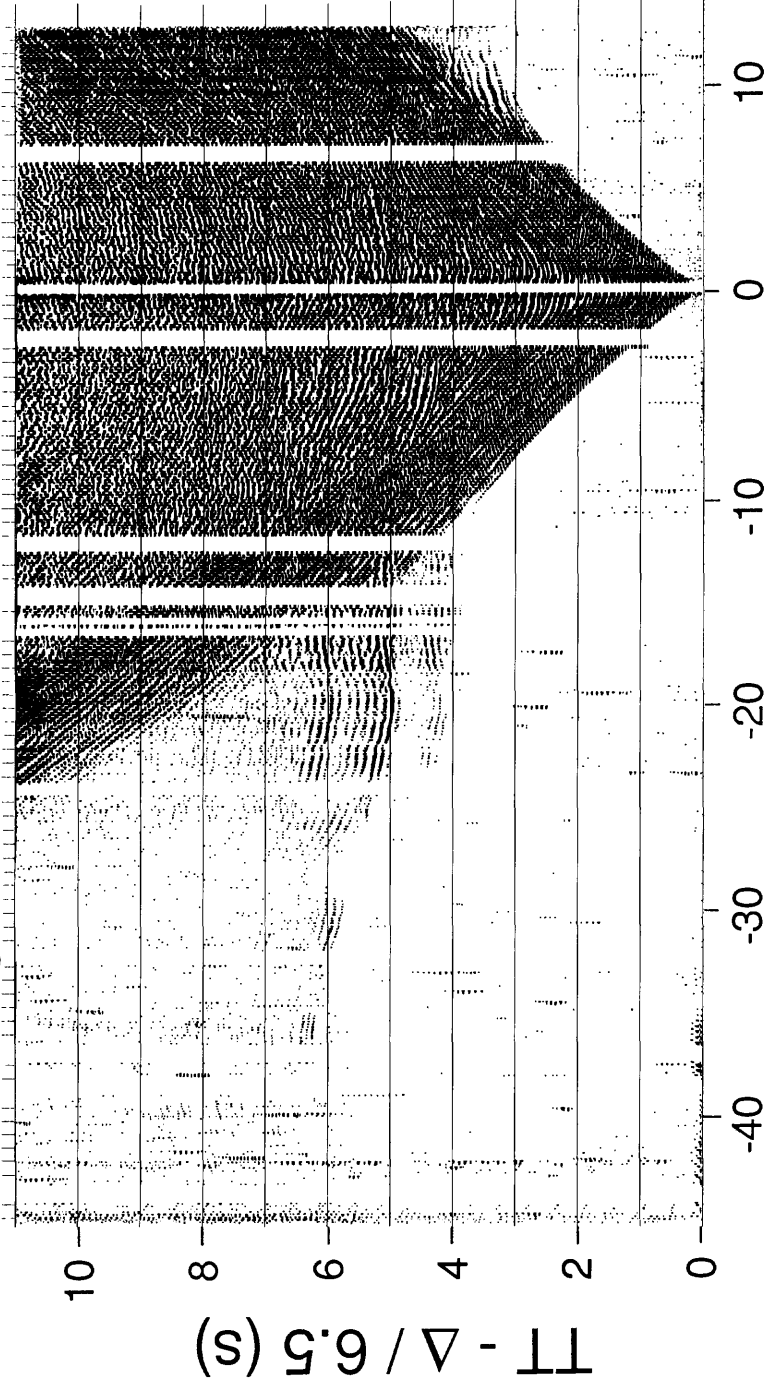
3A Vertical component recorded at site 1.



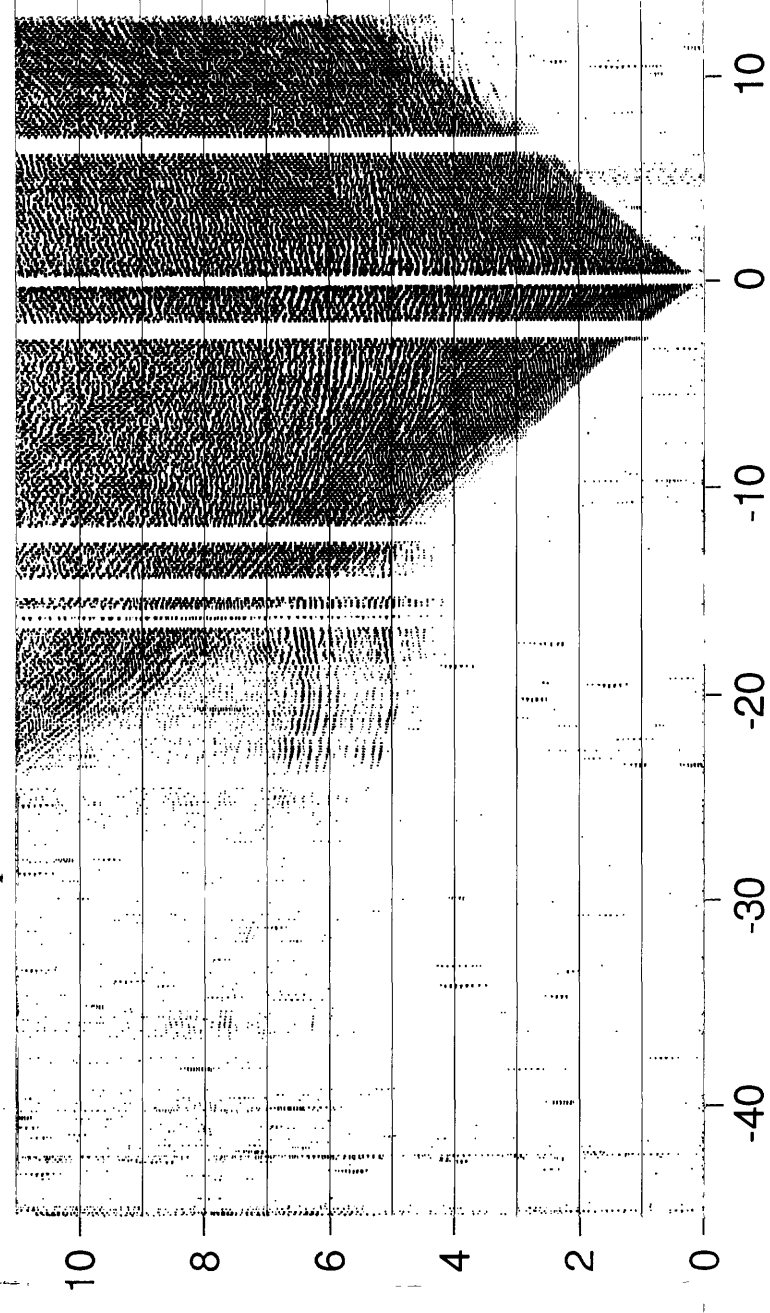
B Vertical component recorded at site 2.



C Radial component recorded at site 2.

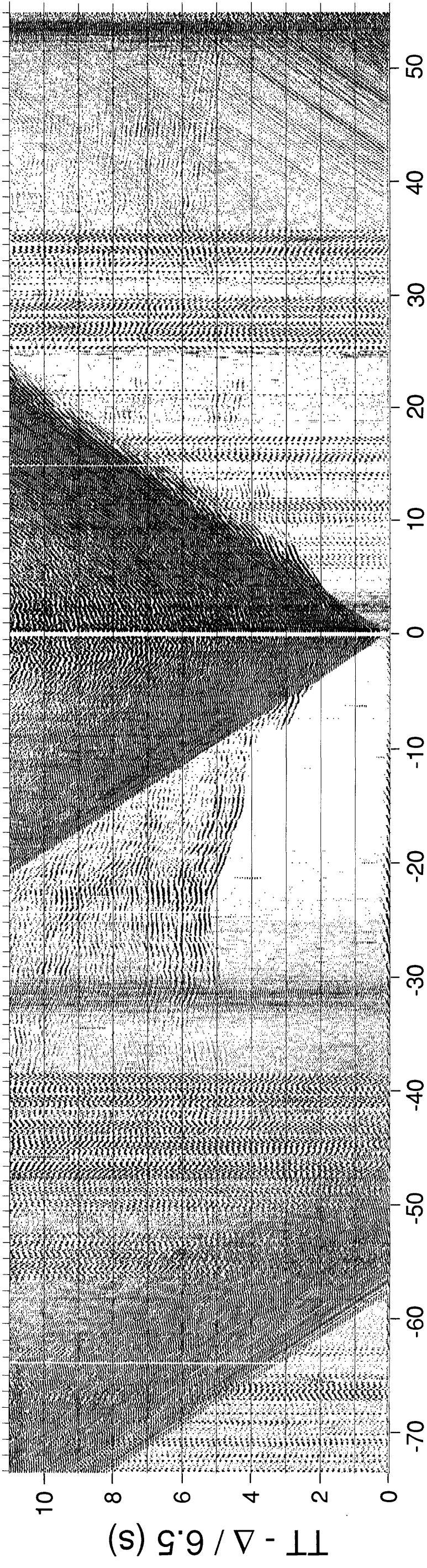


D Transverse component recorded at site 2.

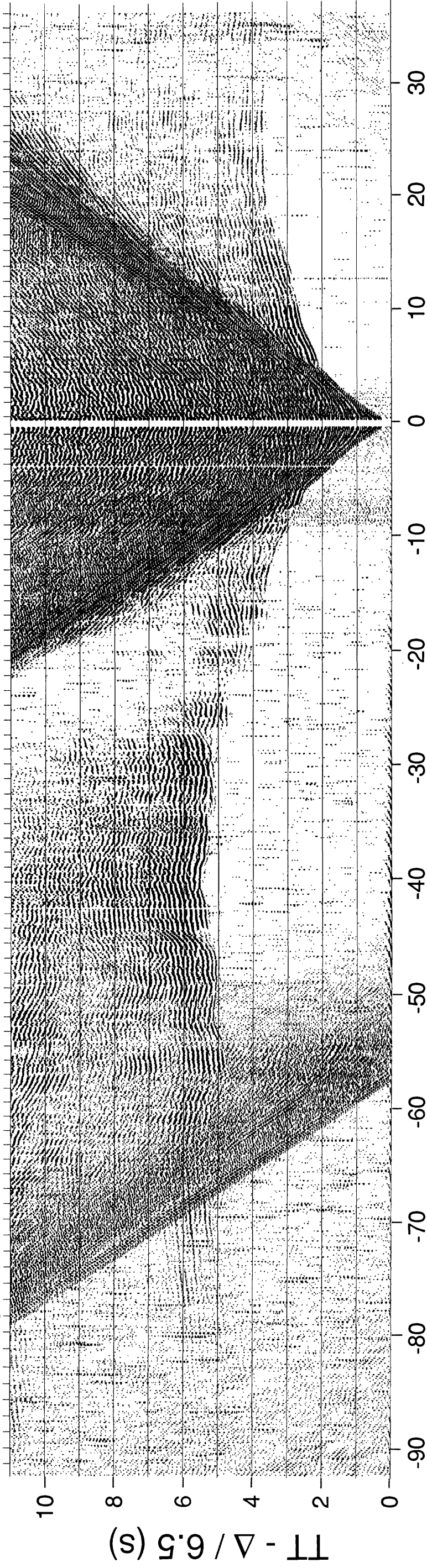


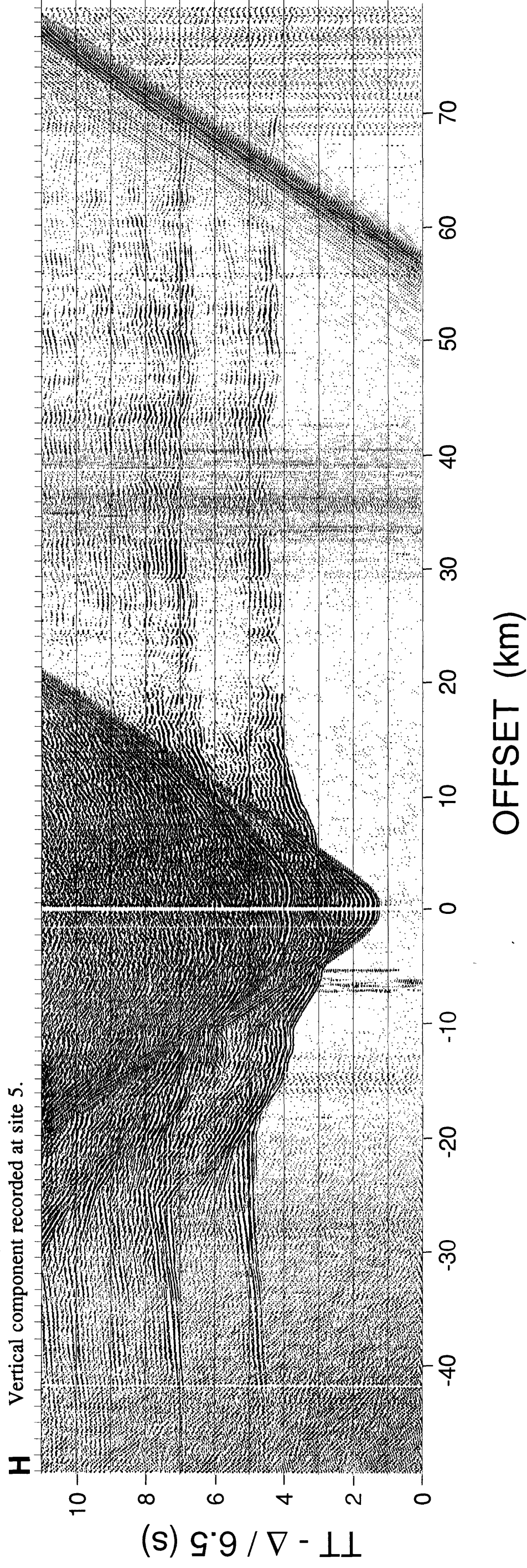
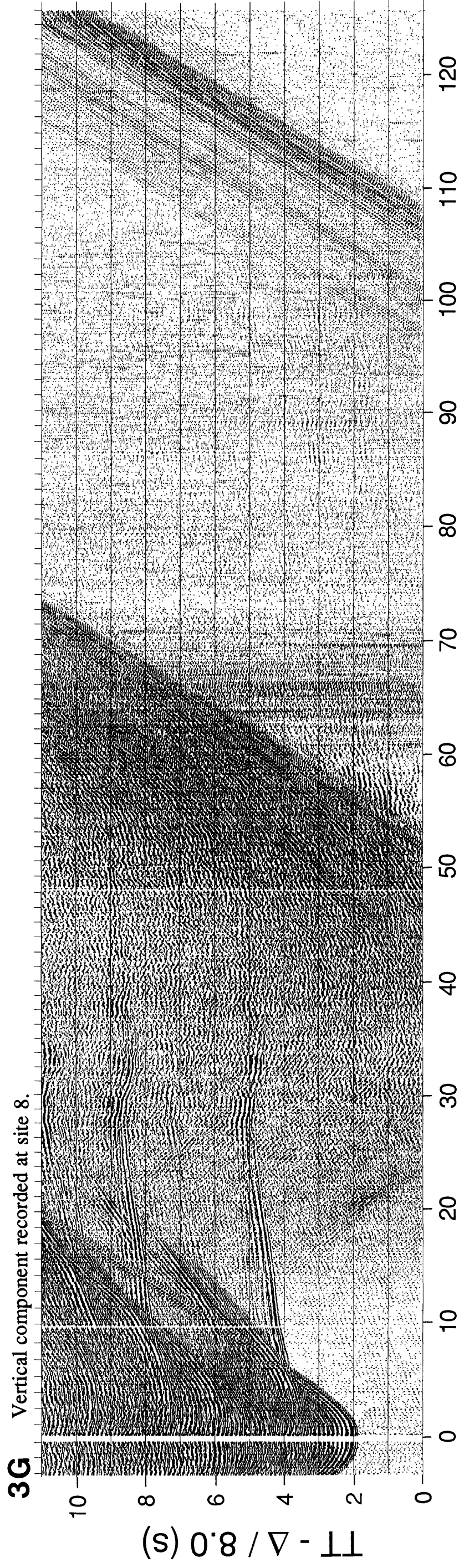
OFFSET (km)

3E Vertical component recorded at site 4.



F Vertical component recorded at site 3.





ACKNOWLEDGEMENTS

Thanks to Terry Thompson, the captain of the F/V Olympic and his crew for their help in deploying the OBS's. John Shay (OSU; now at SIERRA Geophysics) and Gary Lux (UTIG) also assisted with deployment. Guy Cochrane was the observer on the shooting ship. Tim Holt helped with initial data processing and display. The Hatfield Marine Science Center provided laboratory space to prepare the OBSs for deployment. Tom Brocher and H.M. Iyer reviewed the manuscript. This work was supported by the National Science Foundation through grants OCE-8900962 and EAR-8905189 and by the USGS NEHRP grant 1408-0001G2072.

REFERENCES CITED

- Barry, K.M., D.A. Cravers, and C.W. Kneale, 1975, Recommended standards for digital tape formats: *Geophysics*, v. 40, p. 344-352.
- Brocher, T.M., M.J. Moses, and A.M. Trehu, 1993, Onshore-Offshore wide-angle seismic recordings from central Oregon: The five-day recorder data: *U.S. Geological Survey Open-file Report 93-318*, 24 pp.
- Lin, G., and A. Trehu, 1991, Further constraints on the structure of the Cascadia subduction zone offshore central Oregon: *EOS Transactions of the American Geophysical Union*, v. 72, p. 323.
- Nakamura, Y., P. Donoho, P. Roper, and P. McPherson, 1987, Large-offset seismic surveying using ocean bottom seismographs and air guns: instrumentation and field technique: *Geophysics*, v. 12, pp. 1601-1611.
- Nakamura, Y., and J. Garmany, 1991, Development of upgraded ocean-bottom seismograph: *University of Texas Institute for Geophysics Technical Report No. 111*, 45 pp.
- Trehu, A., T. Holt, J. Shi, Y. Nakamura, T. M. Brocher, and M. Moses, 1990, Preliminary results from the 1989 Oregon onshore-offshore seismic imaging experiment: *EOS Transactions of the American Geophysical Union*, v. 71, p. 1588.
- Trehu, A.M., and others, 1992a, Crustal structure of the Cascadia subduction zone beneath western Oregon: *Geological Society of America Bulletin supplement, abstracts of the Cordilleran section meeting*, Eugene, OR, v. 24, no. 5, p. 87.

- Trehu, A. M., J. Nabelek, S. Azevedo, T. Brocher, W. Mooney, J. Luetgert, I. Asudah, R. Clowes, Y. Nakamura, S. Smithson, K. Miller, 1992b, A crustal cross-section across the Cascadia subduction zone in central Oregon: *EOS Transactions of the American Geophysical Union*, v. 73, p. 391.
- Trehu, A. M., S. Azevedo, J. Nabelek, J. Luetgert, W. Mooney, I. Asudeh, and B. Isbell, 1993, Seismic refraction data across the Coast Range and Willamette Valley in central Oregon: The 1991 Pacific Northwest Experiment: *U.S. Geological Survey Open-file Report 93-319*, 31 pp.

APPENDIX A

Oregon Margin Line 89OR100
 Digicon, October, 1989
 Airgun : Starfix
 WGS-72 : UTM zone 10 : meters

shot no.	origin time	latitude (°N)	longitude (°W)
5097	07:00:31	44.85414	-124.13980
5096	07:01:01	44.85411	-124.14058
5095	07:01:31	44.85408	-124.14139
5094	07:02:01	44.85408	-124.14219
5093	07:02:31	44.85405	-124.14300
5092	07:03:01	44.85405	-124.14378
5091	07:03:31	44.85405	-124.14461
5090	07:04:00	44.85405	-124.14544
5089	07:04:30	44.85403	-124.14622
5088	07:05:00	44.85397	-124.14703
5087	07:05:30	44.85394	-124.14786
5086	07:06:00	44.85394	-124.14864
5085	07:06:30	44.85394	-124.14941
5084	07:07:00	44.85394	-124.15019
5083	07:07:30	44.85397	-124.15100
5082	07:08:00	44.85397	-124.15181
5081	07:08:30	44.85397	-124.15256
5080	07:08:59	44.85397	-124.15337
5079	07:09:29	44.85397	-124.15417
5078	07:09:59	44.85397	-124.15500
5077	07:10:29	44.85397	-124.15581
5076	07:10:59	44.85397	-124.15662
5075	07:11:29	44.85400	-124.15739
5074	07:11:59	44.85400	-124.15823
5073	07:12:29	44.85397	-124.15900
5072	07:12:59	44.85394	-124.15984
5071	07:13:29	44.85389	-124.16061
5070	07:13:59	44.85383	-124.16145
5069	07:14:29	44.85381	-124.16225
5068	07:14:59	44.85381	-124.16311
5067	07:15:29	44.85378	-124.16392
5066	07:15:59	44.85378	-124.16475
5065	07:16:29	44.85375	-124.16553
5064	07:16:59	44.85372	-124.16636
5063	07:17:29	44.85372	-124.16717
5062	07:17:59	44.85369	-124.16797
5061	07:18:29	44.85369	-124.16878
5060	07:18:59	44.85366	-124.16958
5059	07:19:29	44.85355	-124.17036
5058	07:19:59	44.85347	-124.17113
5057	07:20:29	44.85339	-124.17191
5056	07:20:59	44.85333	-124.17272
5055	07:21:29	44.85333	-124.17355
5054	07:21:59	44.85333	-124.17433
5053	07:22:29	44.85336	-124.17516
5052	07:22:59	44.85336	-124.17597
5051	07:23:29	44.85336	-124.17677
5050	07:23:59	44.85336	-124.17755
5049	07:24:29	44.85339	-124.17838
5048	07:24:59	44.85339	-124.17916
5047	07:25:29	44.85336	-124.17994
5046	07:25:59	44.85336	-124.18069
5045	07:26:29	44.85336	-124.18153
5044	07:26:59	44.85339	-124.18236
5043	07:27:29	44.85342	-124.18322
5042	07:27:59	44.85344	-124.18406

5041	07:28:29	44.85347	-124.18494
5040	07:28:59	44.85347	-124.18578
5039	07:29:29	44.85347	-124.18667
5038	07:29:59	44.85347	-124.18750
5037	07:30:29	44.85347	-124.18839
5036	07:31:00	44.85347	-124.18922
5035	07:31:30	44.85344	-124.19009
5034	07:32:00	44.85344	-124.19092
5033	07:32:30	44.85342	-124.19178
5032	07:33:00	44.85339	-124.19258
5031	07:33:30	44.85336	-124.19344
5030	07:34:00	44.85336	-124.19428
5029	07:34:30	44.85333	-124.19514
5028	07:35:00	44.85331	-124.19603
5027	07:35:30	44.85331	-124.19689
5026	07:36:00	44.85328	-124.19778
5025	07:36:30	44.85328	-124.19861
5024	07:37:00	44.85328	-124.19947
5023	07:37:30	44.85328	-124.20036
5022	07:38:00	44.85328	-124.20122
5021	07:38:30	44.85325	-124.20208
5020	07:39:00	44.85322	-124.20294
5019	07:39:30	44.85322	-124.20377
5018	07:40:00	44.85319	-124.20464
5017	07:40:30	44.85314	-124.20544
5016	07:41:00	44.85311	-124.20633
5015	07:41:30	44.85308	-124.20719
5014	07:42:00	44.85305	-124.20805
5013	07:42:30	44.85303	-124.20892
5012	07:43:00	44.85300	-124.20978
5011	07:43:30	44.85297	-124.21063
5010	07:44:00	44.85294	-124.21149
5009	07:44:30	44.85289	-124.21233
5008	07:45:00	44.85283	-124.21317
5007	07:45:30	44.85280	-124.21400
5006	07:46:00	44.85278	-124.21489
5005	07:46:30	44.85280	-124.21572
5004	07:47:00	44.85280	-124.21661
5003	07:47:30	44.85278	-124.21741
5002	07:48:00	44.85278	-124.21831
5001	07:48:30	44.85278	-124.21914
5000	07:49:00	44.85278	-124.22003
4999	07:49:30	44.85278	-124.22092
4998	07:50:00	44.85278	-124.22181
4997	07:50:30	44.85278	-124.22272
4996	07:51:00	44.85278	-124.22359
4995	07:51:30	44.85278	-124.22447
4994	07:52:00	44.85278	-124.22536
4993	07:52:30	44.85278	-124.22625
4992	07:53:00	44.85272	-124.22708
4991	07:53:30	44.85264	-124.22797
4990	07:54:00	44.85258	-124.22881
4989	07:54:30	44.85253	-124.22964
4988	07:55:00	44.85253	-124.23048
4987	07:55:30	44.85250	-124.23136
4986	07:56:00	44.85250	-124.23217
4985	07:56:30	44.85247	-124.23300
4984	07:57:00	44.85244	-124.23383
4983	07:57:30	44.85244	-124.23469
4982	07:58:00	44.85244	-124.23553
4981	07:58:30	44.85244	-124.23644
4980	07:59:00	44.85244	-124.23730
4979	07:59:30	44.85244	-124.23822
4978	08:00:00	44.85244	-124.23911
4977	08:00:30	44.85244	-124.24000

4976	08:01:00	44.85247	-124.24083	4911	08:33:30	44.85133	-124.29725
4975	08:01:30	44.85247	-124.24166	4910	08:34:00	44.85130	-124.29808
4974	08:02:00	44.85247	-124.24249	4909	08:34:30	44.85130	-124.29894
4973	08:02:30	44.85250	-124.24333	4908	08:35:00	44.85128	-124.29977
4972	08:03:00	44.85253	-124.24422	4907	08:35:30	44.85125	-124.30064
4971	08:03:30	44.85253	-124.24513	4906	08:36:00	44.85125	-124.30148
4970	08:04:00	44.85253	-124.24603	4905	08:36:30	44.85122	-124.30234
4969	08:04:30	44.85250	-124.24691	4904	08:37:00	44.85119	-124.30317
4968	08:05:00	44.85244	-124.24780	4903	08:37:30	44.85119	-124.30403
4967	08:05:30	44.85239	-124.24863	4902	08:38:00	44.85117	-124.30486
4966	08:06:00	44.85233	-124.24950	4901	08:38:30	44.85114	-124.30569
4965	08:06:30	44.85228	-124.25036	4900	08:39:00	44.85114	-124.30650
4964	08:07:00	44.85219	-124.25122	4899	08:39:30	44.85111	-124.30737
4963	08:07:30	44.85214	-124.25203	4898	08:40:00	44.85111	-124.30820
4962	08:08:00	44.85208	-124.25289	4897	08:40:30	44.85108	-124.30903
4961	08:08:30	44.85208	-124.25375	4896	08:41:00	44.85106	-124.30987
4960	08:09:00	44.85208	-124.25464	4895	08:41:30	44.85102	-124.31070
4959	08:09:30	44.85208	-124.25553	4894	08:42:00	44.85097	-124.31156
4958	08:10:00	44.85208	-124.25639	4893	08:42:30	44.85094	-124.31242
4957	08:10:30	44.85208	-124.25725	4892	08:43:00	44.85091	-124.31328
4956	08:11:00	44.85208	-124.25814	4891	08:43:30	44.85089	-124.31417
4955	08:11:30	44.85208	-124.25900	4890	08:44:00	44.85086	-124.31500
4954	08:12:00	44.85208	-124.25986	4889	08:44:30	44.85086	-124.31590
4953	08:12:30	44.85208	-124.26075	4888	08:45:00	44.85083	-124.31672
4952	08:13:00	44.85211	-124.26164	4887	08:45:30	44.85083	-124.31761
4951	08:13:30	44.85211	-124.26256	4886	08:46:00	44.85083	-124.31844
4950	08:14:00	44.85211	-124.26344	4885	08:46:30	44.85083	-124.31934
4949	08:14:30	44.85208	-124.26436	4884	08:47:00	44.85083	-124.32017
4948	08:15:00	44.85205	-124.26525	4883	08:47:30	44.85080	-124.32105
4947	08:15:30	44.85203	-124.26617	4882	08:48:00	44.85080	-124.32191
4946	08:16:00	44.85200	-124.26703	4881	08:48:30	44.85080	-124.32278
4945	08:16:30	44.85197	-124.26792	4880	08:49:00	44.85080	-124.32364
4944	08:17:00	44.85194	-124.26881	4879	08:49:30	44.85080	-124.32450
4943	08:17:30	44.85189	-124.26967	4878	08:50:00	44.85080	-124.32533
4942	08:18:00	44.85186	-124.27053	4877	08:50:30	44.85080	-124.32619
4941	08:18:30	44.85186	-124.27142	4876	08:51:00	44.85080	-124.32706
4940	08:19:00	44.85183	-124.27225	4875	08:51:30	44.85080	-124.32794
4939	08:19:30	44.85180	-124.27309	4874	08:52:00	44.85080	-124.32880
4938	08:20:00	44.85178	-124.27392	4873	08:52:30	44.85078	-124.32964
4937	08:20:30	44.85178	-124.27481	4872	08:53:00	44.85072	-124.33047
4936	08:21:00	44.85178	-124.27570	4871	08:53:30	44.85069	-124.33128
4935	08:21:30	44.85178	-124.27656	4870	08:54:00	44.85069	-124.33211
4934	08:22:00	44.85175	-124.27747	4869	08:54:30	44.85072	-124.33297
4933	08:22:30	44.85175	-124.27834	4868	08:55:00	44.85072	-124.33384
4932	08:23:00	44.85175	-124.27925	4867	08:55:30	44.85072	-124.33467
4931	08:23:30	44.85175	-124.28014	4866	08:56:00	44.85069	-124.33556
4930	08:24:00	44.85172	-124.28106	4865	08:56:30	44.85069	-124.33642
4929	08:24:30	44.85172	-124.28194	4864	08:57:00	44.85069	-124.33728
4928	08:25:00	44.85169	-124.28284	4863	08:57:30	44.85069	-124.33811
4927	08:25:30	44.85169	-124.28369	4862	08:58:00	44.85067	-124.33900
4926	08:26:00	44.85167	-124.28455	4861	08:58:30	44.85069	-124.33987
4925	08:26:30	44.85161	-124.28539	4860	08:59:00	44.85069	-124.34078
4924	08:27:00	44.85158	-124.28625	4859	08:59:30	44.85069	-124.34161
4923	08:27:30	44.85158	-124.28709	4858	09:00:00	44.85069	-124.34250
4922	08:28:00	44.85155	-124.28792	4857	09:00:30	44.85069	-124.34339
4921	08:28:30	44.85152	-124.28875	4856	09:01:00	44.85067	-124.34431
4920	08:29:00	44.85152	-124.28963	4855	09:01:30	44.85069	-124.34517
4919	08:29:30	44.85150	-124.29050	4854	09:02:00	44.85067	-124.34608
4918	08:30:00	44.85147	-124.29136	4853	09:02:30	44.85067	-124.34698
4917	08:30:30	44.85147	-124.29217	4852	09:03:00	44.85067	-124.34784
4916	08:31:00	44.85144	-124.29303	4851	09:03:30	44.85064	-124.34872
4915	08:31:30	44.85141	-124.29383	4850	09:04:00	44.85061	-124.34959
4914	08:32:00	44.85139	-124.29469	4849	09:04:30	44.85058	-124.35044
4913	08:32:30	44.85136	-124.29556	4848	09:05:00	44.85058	-124.35130
4912	08:33:00	44.85133	-124.29639	4847	09:05:30	44.85058	-124.35217

4846	09:06:00	44.85058	-124.35305	4781	09:38:30	44.84936	-124.40953
4845	09:06:30	44.85056	-124.35391	4780	09:39:00	44.84939	-124.41042
4844	09:07:00	44.85056	-124.35477	4779	09:39:30	44.84939	-124.41125
4843	09:07:30	44.85052	-124.35569	4778	09:40:00	44.84939	-124.41214
4842	09:08:00	44.85052	-124.35658	4777	09:40:30	44.84939	-124.41300
4841	09:08:30	44.85052	-124.35747	4776	09:41:00	44.84939	-124.41392
4840	09:09:00	44.85050	-124.35833	4775	09:41:30	44.84939	-124.41478
4839	09:09:30	44.85050	-124.35922	4774	09:42:00	44.84936	-124.41566
4838	09:10:00	44.85047	-124.36005	4773	09:42:30	44.84930	-124.41653
4837	09:10:30	44.85044	-124.36095	4772	09:43:00	44.84925	-124.41741
4836	09:11:00	44.85041	-124.36180	4771	09:43:30	44.84919	-124.41830
4835	09:11:30	44.85039	-124.36269	4770	09:44:00	44.84914	-124.41919
4834	09:12:00	44.85036	-124.36356	4769	09:44:30	44.84911	-124.42005
4833	09:12:30	44.85033	-124.36444	4768	09:45:00	44.84903	-124.42091
4832	09:13:00	44.85030	-124.36530	4767	09:45:30	44.84897	-124.42181
4831	09:13:30	44.85028	-124.36617	4766	09:46:00	44.84894	-124.42266
4830	09:14:00	44.85022	-124.36703	4765	09:46:30	44.84892	-124.42352
4829	09:14:30	44.85019	-124.36792	4764	09:47:00	44.84892	-124.42439
4828	09:15:00	44.85019	-124.36878	4763	09:47:30	44.84889	-124.42525
4827	09:15:30	44.85019	-124.36967	4762	09:48:00	44.84886	-124.42611
4826	09:16:00	44.85017	-124.37056	4761	09:48:30	44.84886	-124.42694
4825	09:16:30	44.85014	-124.37144	4760	09:49:00	44.84886	-124.42777
4824	09:17:00	44.85008	-124.37231	4759	09:49:30	44.84886	-124.42863
4823	09:17:30	44.85006	-124.37317	4758	09:50:00	44.84886	-124.42950
4822	09:18:00	44.85000	-124.37403	4757	09:50:30	44.84886	-124.43033
4821	09:18:30	44.84997	-124.37489	4756	09:50:59	44.84883	-124.43114
4820	09:19:00	44.84995	-124.37578	4755	09:51:29	44.84883	-124.43200
4819	09:19:30	44.84991	-124.37667	4754	09:51:59	44.84883	-124.43280
4818	09:20:00	44.84989	-124.37756	4753	09:52:29	44.84886	-124.43364
4817	09:20:30	44.84983	-124.37842	4752	09:52:59	44.84883	-124.43447
4816	09:21:00	44.84980	-124.37931	4751	09:53:29	44.84883	-124.43531
4815	09:21:30	44.84978	-124.38017	4750	09:53:59	44.84883	-124.43611
4814	09:22:00	44.84975	-124.38109	4749	09:54:29	44.84880	-124.43694
4813	09:22:30	44.84972	-124.38194	4748	09:54:59	44.84878	-124.43775
4812	09:23:00	44.84972	-124.38287	4747	09:55:29	44.84878	-124.43861
4811	09:23:30	44.84975	-124.38375	4746	09:55:59	44.84875	-124.43941
4810	09:24:00	44.84975	-124.38461	4745	09:56:29	44.84875	-124.44028
4809	09:24:30	44.84975	-124.38544	4744	09:56:59	44.84875	-124.44114
4808	09:25:00	44.84975	-124.38631	4743	09:57:29	44.84875	-124.44197
4807	09:25:30	44.84975	-124.38716	4742	09:57:59	44.84875	-124.44278
4806	09:26:00	44.84975	-124.38802	4741	09:58:29	44.84878	-124.44366
4805	09:26:30	44.84975	-124.38892	4740	09:58:59	44.84875	-124.44450
4804	09:27:00	44.84975	-124.38978	4739	09:59:29	44.84872	-124.44537
4803	09:27:30	44.84978	-124.39066	4738	09:59:59	44.84872	-124.44617
4802	09:28:00	44.84978	-124.39149	4737	10:00:29	44.84869	-124.44703
4801	09:28:30	44.84975	-124.39233	4736	10:00:59	44.84867	-124.44781
4800	09:29:00	44.84972	-124.39317	4735	10:01:29	44.84864	-124.44864
4799	09:29:30	44.84969	-124.39403	4734	10:01:59	44.84861	-124.44942
4798	09:30:00	44.84964	-124.39489	4733	10:02:29	44.84858	-124.45025
4797	09:30:30	44.84958	-124.39577	4732	10:02:59	44.84855	-124.45108
4796	09:31:00	44.84956	-124.39664	4731	10:03:29	44.84850	-124.45191
4795	09:31:30	44.84953	-124.39750	4730	10:03:59	44.84844	-124.45272
4794	09:32:00	44.84947	-124.39836	4729	10:04:29	44.84842	-124.45352
4793	09:32:30	44.84944	-124.39922	4728	10:04:59	44.84836	-124.45433
4792	09:33:00	44.84939	-124.40005	4727	10:05:29	44.84830	-124.45516
4791	09:33:30	44.84936	-124.40095	4726	10:05:59	44.84828	-124.45597
4790	09:34:00	44.84936	-124.40181	4725	10:06:29	44.84825	-124.45677
4789	09:34:30	44.84933	-124.40267	4724	10:06:59	44.84822	-124.45758
4788	09:35:00	44.84933	-124.40356	4723	10:07:29	44.84822	-124.45836
4787	09:35:30	44.84933	-124.40442	4722	10:07:59	44.84819	-124.45919
4786	09:36:00	44.84933	-124.40528	4721	10:08:29	44.84816	-124.46000
4785	09:36:30	44.84933	-124.40614	4720	10:08:59	44.84816	-124.46080
4784	09:37:00	44.84936	-124.40697	4719	10:09:29	44.84816	-124.46161
4783	09:37:30	44.84936	-124.40784	4718	10:09:59	44.84814	-124.46239
4782	09:38:00	44.84936	-124.40872	4717	10:10:29	44.84811	-124.46319

4716	10:10:59	44.84811	-124.46400
4715	10:11:29	44.84808	-124.46481
4714	10:11:59	44.84808	-124.46564
4713	10:12:29	44.84808	-124.46644
4712	10:12:59	44.84808	-124.46731
4711	10:13:29	44.84808	-124.46817
4710	10:13:59	44.84808	-124.46902
4709	10:14:29	44.84808	-124.46986
4708	10:14:59	44.84805	-124.47064
4707	10:15:29	44.84803	-124.47142
4706	10:15:59	44.84800	-124.47220
4705	10:16:29	44.84800	-124.47300
4704	10:16:59	44.84797	-124.47386
4703	10:17:29	44.84800	-124.47469
4702	10:17:59	44.84800	-124.47559
4701	10:18:29	44.84803	-124.47642
4700	10:18:59	44.84803	-124.47728
4699	10:19:29	44.84805	-124.47811
4698	10:19:59	44.84808	-124.47894
4697	10:20:29	44.84808	-124.47981
4696	10:20:59	44.84805	-124.48061
4695	10:21:29	44.84803	-124.48141
4694	10:21:59	44.84800	-124.48225
4693	10:22:29	44.84797	-124.48309
4692	10:22:59	44.84797	-124.48391
4691	10:23:29	44.84797	-124.48475
4690	10:23:59	44.84794	-124.48563
4689	10:24:29	44.84794	-124.48647
4688	10:24:59	44.84792	-124.48733
4687	10:25:29	44.84789	-124.48817
4686	10:25:59	44.84786	-124.48900
4685	10:26:29	44.84783	-124.48980
4684	10:26:59	44.84783	-124.49061
4683	10:27:29	44.84783	-124.49141
4682	10:27:59	44.84781	-124.49225
4681	10:28:29	44.84778	-124.49311
4680	10:28:59	44.84775	-124.49400
4679	10:29:29	44.84772	-124.49483
4678	10:29:59	44.84772	-124.49572
4677	10:30:29	44.84769	-124.49655
4676	10:30:59	44.84766	-124.49736
4675	10:31:29	44.84761	-124.49819
4674	10:31:59	44.84755	-124.49897
4673	10:32:29	44.84750	-124.49977
4672	10:32:59	44.84744	-124.50058
4671	10:33:29	44.84742	-124.50139
4670	10:33:59	44.84736	-124.50228
4669	10:34:29	44.84733	-124.50314
4668	10:34:59	44.84733	-124.50400
4667	10:35:29	44.84731	-124.50486
4666	10:35:59	44.84727	-124.50569
4665	10:36:29	44.84722	-124.50650
4664	10:36:59	44.84719	-124.50731
4663	10:37:29	44.84714	-124.50814
4662	10:37:59	44.84705	-124.50900
4661	10:38:29	44.84697	-124.50983
4660	10:38:59	44.84686	-124.51064
4659	10:39:29	44.84675	-124.51147
4658	10:39:59	44.84664	-124.51228
4657	10:40:29	44.84658	-124.51317
4656	10:40:59	44.84655	-124.51403
4655	10:41:29	44.84650	-124.51483
4654	10:41:59	44.84647	-124.51566
4653	10:42:29	44.84644	-124.51644
4652	10:42:59	44.84644	-124.51728

4651	10:43:29	44.84644	-124.51809
4650	10:43:59	44.84647	-124.51892
4649	10:44:29	44.84653	-124.51975
4648	10:44:59	44.84658	-124.52056
4647	10:45:29	44.84661	-124.52136
4646	10:45:59	44.84664	-124.52220
4645	10:46:29	44.84669	-124.52300
4644	10:46:59	44.84675	-124.52381
4643	10:47:29	44.84681	-124.52464
4642	10:47:59	44.84686	-124.52551
4641	10:48:29	44.84689	-124.52631
4640	10:48:59	44.84692	-124.52717
4639	10:49:29	44.84692	-124.52798
4638	10:49:59	44.84692	-124.52881
4637	10:50:29	44.84689	-124.52964
4636	10:50:59	44.84692	-124.53050
4635	10:51:29	44.84694	-124.53131
4634	10:51:59	44.84694	-124.53217
4633	10:52:29	44.84694	-124.53300
4632	10:52:59	44.84694	-124.53386
4631	10:53:29	44.84692	-124.53467
4630	10:53:59	44.84689	-124.53553
4629	10:54:29	44.84686	-124.53633
4628	10:54:59	44.84683	-124.53719
4627	10:55:29	44.84683	-124.53806
4626	10:55:59	44.84678	-124.53894
4625	10:56:29	44.84678	-124.53978
4624	10:56:59	44.84675	-124.54064
4623	10:57:29	44.84675	-124.54144
4622	10:57:59	44.84669	-124.54227
4621	10:58:29	44.84666	-124.54308
4620	10:58:59	44.84664	-124.54389
4619	10:59:29	44.84664	-124.54472
4618	10:59:59	44.84664	-124.54552
4617	11:00:29	44.84664	-124.54639
4616	11:00:59	44.84664	-124.54722
4615	11:01:29	44.84664	-124.54808
4614	11:01:59	44.84666	-124.54892
4613	11:02:29	44.84666	-124.54975
4612	11:02:59	44.84666	-124.55056
4611	11:03:29	44.84664	-124.55142
4610	11:03:59	44.84664	-124.55231
4609	11:04:29	44.84661	-124.55312
4608	11:04:59	44.84658	-124.55395
4607	11:05:29	44.84655	-124.55476
4606	11:05:59	44.84653	-124.55559
4605	11:06:29	44.84650	-124.55642
4604	11:06:59	44.84650	-124.55728
4603	11:07:29	44.84650	-124.55814
4602	11:07:59	44.84650	-124.55901
4601	11:08:29	44.84647	-124.55984
4600	11:08:59	44.84644	-124.56067
4599	11:09:29	44.84644	-124.56150
4598	11:09:59	44.84639	-124.56228
4597	11:10:29	44.84633	-124.56311
4596	11:10:59	44.84631	-124.56392
4595	11:11:29	44.84628	-124.56475
4594	11:11:59	44.84628	-124.56561
4593	11:12:29	44.84625	-124.56651
4592	11:12:59	44.84625	-124.56733
4591	11:13:29	44.84622	-124.56817
4590	11:13:59	44.84619	-124.56897
4589	11:14:29	44.84614	-124.56980
4588	11:14:59	44.84611	-124.57064
4587	11:15:29	44.84611	-124.57144

4586	11:15:59	44.84611	-124.57227	4521	11:48:29	44.84483	-124.62728
4585	11:16:29	44.84611	-124.57314	4520	11:48:59	44.84483	-124.62814
4584	11:16:59	44.84614	-124.57400	4519	11:49:29	44.84480	-124.62892
4583	11:17:29	44.84611	-124.57486	4518	11:49:59	44.84480	-124.62975
4582	11:17:59	44.84608	-124.57567	4517	11:50:29	44.84478	-124.63055
4581	11:18:29	44.84605	-124.57650	4516	11:50:59	44.84478	-124.63142
4580	11:18:59	44.84603	-124.57733	4515	11:51:29	44.84478	-124.63228
4579	11:19:29	44.84603	-124.57819	4514	11:51:59	44.84478	-124.63317
4578	11:19:59	44.84600	-124.57903	4513	11:52:29	44.84478	-124.63400
4577	11:20:29	44.84597	-124.57986	4512	11:52:59	44.84480	-124.63492
4576	11:20:59	44.84597	-124.58070	4511	11:53:29	44.84480	-124.63577
4575	11:21:29	44.84594	-124.58153	4510	11:53:59	44.84480	-124.63667
4574	11:21:59	44.84589	-124.58231	4509	11:54:29	44.84480	-124.63750
4573	11:22:29	44.84586	-124.58314	4508	11:54:59	44.84480	-124.63836
4572	11:22:59	44.84583	-124.58398	4507	11:55:29	44.84483	-124.63922
4571	11:23:29	44.84581	-124.58486	4506	11:55:59	44.84480	-124.64011
4570	11:23:59	44.84578	-124.58569	4505	11:56:29	44.84478	-124.64097
4569	11:24:29	44.84578	-124.58650	4504	11:56:59	44.84475	-124.64183
4568	11:24:59	44.84572	-124.58728	4503	11:57:29	44.84467	-124.64264
4567	11:25:29	44.84566	-124.58809	4502	11:57:59	44.84464	-124.64347
4566	11:25:59	44.84564	-124.58892	4501	11:58:29	44.84461	-124.64433
4565	11:26:29	44.84564	-124.58981	4500	11:58:59	44.84461	-124.64522
4564	11:26:59	44.84561	-124.59067	4499	11:59:29	44.84461	-124.64603
4563	11:27:29	44.84561	-124.59156	4498	11:59:59	44.84458	-124.64686
4562	11:27:59	44.84558	-124.59245	4497	12:00:29	44.84458	-124.64769
4561	11:28:29	44.84555	-124.59331	4496	12:00:59	44.84453	-124.64853
4560	11:28:59	44.84555	-124.59420	4495	12:01:29	44.84453	-124.64936
4559	11:29:29	44.84553	-124.59509	4494	12:01:59	44.84450	-124.65019
4558	11:29:59	44.84553	-124.59592	4493	12:02:30	44.84447	-124.65108
4557	11:30:29	44.84553	-124.59681	4492	12:03:00	44.84447	-124.65195
4556	11:30:59	44.84550	-124.59761	4491	12:03:30	44.84447	-124.65275
4555	11:31:29	44.84544	-124.59845	4490	12:04:00	44.84444	-124.65359
4554	11:31:59	44.84542	-124.59925	4489	12:04:30	44.84444	-124.65439
4553	11:32:29	44.84536	-124.60008	4488	12:05:00	44.84439	-124.65520
4552	11:32:59	44.84536	-124.60091	4487	12:05:30	44.84436	-124.65603
4551	11:33:29	44.84536	-124.60178	4486	12:06:00	44.84428	-124.65684
4550	11:33:59	44.84539	-124.60261	4485	12:06:30	44.84425	-124.65764
4549	11:34:29	44.84539	-124.60350	4484	12:07:00	44.84425	-124.65847
4548	11:34:59	44.84542	-124.60436	4483	12:07:30	44.84428	-124.65936
4547	11:35:29	44.84539	-124.60519	4482	12:08:00	44.84425	-124.66017
4546	11:35:59	44.84539	-124.60600	4481	12:08:30	44.84425	-124.66100
4545	11:36:29	44.84539	-124.60680	4480	12:09:00	44.84422	-124.66187
4544	11:36:59	44.84539	-124.60767	4479	12:09:30	44.84422	-124.66273
4543	11:37:29	44.84542	-124.60855	4478	12:10:00	44.84419	-124.66358
4542	11:37:59	44.84542	-124.60939	4477	12:10:30	44.84417	-124.66444
4541	11:38:29	44.84542	-124.61028	4476	12:11:00	44.84417	-124.66528
4540	11:38:59	44.84542	-124.61108	4475	12:11:30	44.84417	-124.66617
4539	11:39:29	44.84539	-124.61195	4474	12:12:00	44.84417	-124.66700
4538	11:39:59	44.84536	-124.61280	4473	12:12:30	44.84419	-124.66783
4537	11:40:29	44.84533	-124.61366	4472	12:13:00	44.84419	-124.66866
4536	11:40:59	44.84528	-124.61450	4471	12:13:30	44.84419	-124.66949
4535	11:41:29	44.84525	-124.61530	4470	12:14:00	44.84419	-124.67033
4534	11:41:59	44.84522	-124.61617	4469	12:14:30	44.84417	-124.67119
4533	11:42:29	44.84522	-124.61700	4468	12:15:00	44.84411	-124.67200
4532	11:42:59	44.84519	-124.61789	4467	12:15:30	44.84402	-124.67286
4531	11:43:29	44.84517	-124.61870	4466	12:16:00	44.84394	-124.67369
4530	11:43:59	44.84514	-124.61956	4465	12:16:30	44.84386	-124.67452
4529	11:44:29	44.84508	-124.62039	4464	12:17:00	44.84380	-124.67533
4528	11:44:59	44.84505	-124.62128	4463	12:17:30	44.84375	-124.67616
4527	11:45:29	44.84500	-124.62214	4462	12:18:00	44.84369	-124.67699
4526	11:45:59	44.84497	-124.62300	4461	12:18:30	44.84369	-124.67786
4525	11:46:29	44.84494	-124.62386	4460	12:19:00	44.84369	-124.67867
4524	11:46:59	44.84492	-124.62478	4459	12:19:30	44.84369	-124.67953
4523	11:47:29	44.84489	-124.62561	4458	12:20:00	44.84372	-124.68036
4522	11:47:59	44.84483	-124.62647	4457	12:20:30	44.84375	-124.68119

4456	12:21:00	44.84375	-124.68200	4391	12:53:30	44.84239	-124.73466
4455	12:21:30	44.84375	-124.68286	4390	12:54:00	44.84247	-124.73550
4454	12:22:00	44.84378	-124.68367	4389	12:54:30	44.84253	-124.73633
4453	12:22:30	44.84380	-124.68453	4388	12:55:00	44.84256	-124.73711
4452	12:23:00	44.84380	-124.68533	4387	12:55:30	44.84256	-124.73797
4451	12:23:30	44.84380	-124.68616	4386	12:56:00	44.84250	-124.73880
4450	12:24:00	44.84378	-124.68697	4385	12:56:30	44.84241	-124.73963
4449	12:24:30	44.84372	-124.68781	4384	12:57:00	44.84233	-124.74047
4448	12:25:00	44.84369	-124.68858	4383	12:57:30	44.84228	-124.74130
4447	12:25:30	44.84367	-124.68936	4382	12:58:00	44.84225	-124.74211
4446	12:26:00	44.84361	-124.69014	4381	12:58:30	44.84225	-124.74294
4445	12:26:30	44.84358	-124.69095	4380	12:59:00	44.84228	-124.74377
4444	12:27:00	44.84356	-124.69178	4379	12:59:30	44.84230	-124.74464
4443	12:27:30	44.84352	-124.69258	4378	13:00:00	44.84233	-124.74544
4442	12:28:00	44.84352	-124.69342	4377	13:00:30	44.84233	-124.74630
4441	12:28:30	44.84350	-124.69422	4376	13:01:00	44.84236	-124.74714
4440	12:29:00	44.84350	-124.69503	4375	13:01:30	44.84236	-124.74802
4439	12:29:30	44.84347	-124.69581	4374	13:02:00	44.84239	-124.74883
4438	12:30:00	44.84344	-124.69659	4373	13:02:30	44.84239	-124.74966
4437	12:30:30	44.84344	-124.69736	4372	13:03:00	44.84236	-124.75050
4436	12:31:00	44.84344	-124.69817	4371	13:03:30	44.84233	-124.75134
4435	12:31:30	44.84341	-124.69894	4370	13:04:00	44.84230	-124.75217
4434	12:32:00	44.84339	-124.69975	4369	13:04:30	44.84233	-124.75300
4433	12:32:30	44.84333	-124.70052	4368	13:05:00	44.84233	-124.75383
4432	12:33:00	44.84328	-124.70130	4367	13:05:30	44.84233	-124.75469
4431	12:33:30	44.84325	-124.70208	4366	13:06:00	44.84236	-124.75550
4430	12:34:00	44.84325	-124.70286	4365	13:06:30	44.84239	-124.75636
4429	12:34:30	44.84322	-124.70364	4364	13:07:00	44.84239	-124.75716
4428	12:35:00	44.84319	-124.70441	4363	13:07:30	44.84236	-124.75803
4427	12:35:30	44.84314	-124.70519	4362	13:08:00	44.84230	-124.75883
4426	12:36:00	44.84311	-124.70597	4361	13:08:30	44.84225	-124.75972
4425	12:36:30	44.84306	-124.70677	4360	13:09:00	44.84222	-124.76053
4424	12:37:00	44.84303	-124.70758	4359	13:09:30	44.84217	-124.76139
4423	12:37:30	44.84303	-124.70836	4358	13:10:00	44.84214	-124.76217
4422	12:38:00	44.84303	-124.70916	4357	13:10:30	44.84205	-124.76297
4421	12:38:30	44.84300	-124.70992	4356	13:11:00	44.84203	-124.76383
4420	12:39:00	44.84300	-124.71066	4355	13:11:30	44.84197	-124.76466
4419	12:39:30	44.84297	-124.71139	4354	13:12:00	44.84192	-124.76547
4418	12:40:00	44.84291	-124.71217	4353	13:12:30	44.84186	-124.76630
4417	12:40:30	44.84291	-124.71300	4352	13:13:00	44.84183	-124.76709
4416	12:41:00	44.84289	-124.71383	4351	13:13:30	44.84180	-124.76792
4415	12:41:30	44.84286	-124.71466	4350	13:14:00	44.84178	-124.76875
4414	12:42:00	44.84289	-124.71547	4349	13:14:30	44.84178	-124.76956
4413	12:42:30	44.84289	-124.71633	4348	13:15:00	44.84175	-124.77045
4412	12:43:00	44.84291	-124.71714	4347	13:15:30	44.84172	-124.77126
4411	12:43:30	44.84294	-124.71797	4346	13:16:00	44.84167	-124.77206
4410	12:44:00	44.84297	-124.71878	4345	13:16:30	44.84164	-124.77290
4409	12:44:30	44.84297	-124.71958	4344	13:17:00	44.84158	-124.77370
4408	12:45:00	44.84297	-124.72039	4343	13:17:30	44.84153	-124.77453
4407	12:45:30	44.84294	-124.72125	4342	13:18:00	44.84147	-124.77534
4406	12:46:00	44.84289	-124.72208	4341	13:18:30	44.84142	-124.77620
4405	12:46:30	44.84283	-124.72295	4340	13:19:00	44.84144	-124.77703
4404	12:47:00	44.84280	-124.72378	4339	13:19:30	44.84147	-124.77789
4403	12:47:30	44.84275	-124.72461	4338	13:20:00	44.84150	-124.77872
4402	12:48:00	44.84272	-124.72542	4337	13:20:30	44.84155	-124.77959
4401	12:48:30	44.84267	-124.72625	4336	13:21:00	44.84158	-124.78040
4400	12:49:00	44.84264	-124.72703	4335	13:21:30	44.84164	-124.78123
4399	12:49:30	44.84261	-124.72789	4334	13:22:00	44.84164	-124.78206
4398	12:50:00	44.84258	-124.72872	4333	13:22:30	44.84167	-124.78287
4397	12:50:30	44.84256	-124.72958	4332	13:23:00	44.84167	-124.78369
4396	12:51:00	44.84253	-124.73042	4331	13:23:30	44.84167	-124.78455
4395	12:51:30	44.84247	-124.73131	4330	13:24:00	44.84164	-124.78539
4394	12:52:00	44.84241	-124.73211	4329	13:24:30	44.84164	-124.78625
4393	12:52:30	44.84233	-124.73297	4328	13:25:00	44.84164	-124.78706
4392	12:53:00	44.84233	-124.73383	4327	13:25:30	44.84164	-124.78789

4326	13:26:00	44.84158	-124.78872	4261	13:58:30	44.84014	-124.84158
4325	13:26:30	44.84153	-124.78958	4260	13:59:00	44.84014	-124.84245
4324	13:27:00	44.84144	-124.79044	4259	13:59:30	44.84014	-124.84325
4323	13:27:30	44.84136	-124.79128	4258	14:00:00	44.84014	-124.84409
4322	13:28:00	44.84128	-124.79211	4257	14:00:30	44.84014	-124.84492
4321	13:28:30	44.84119	-124.79292	4256	14:01:00	44.84011	-124.84578
4320	13:29:00	44.84114	-124.79364	4255	14:01:30	44.84011	-124.84659
4319	13:29:30	44.84108	-124.79436	4254	14:02:00	44.84008	-124.84742
4318	13:30:00	44.84105	-124.79503	4253	14:02:30	44.84005	-124.84823
4317	13:30:30	44.84100	-124.79575	4252	14:03:00	44.84003	-124.84908
4316	13:31:00	44.84100	-124.79647	4251	14:03:30	44.84003	-124.84989
4315	13:31:30	44.84100	-124.79720	4250	14:04:00	44.84000	-124.85075
4314	13:32:00	44.84097	-124.79791	4249	14:04:30	44.83997	-124.85161
4313	13:32:30	44.84097	-124.79867	4248	14:05:00	44.83994	-124.85250
4312	13:33:00	44.84100	-124.79950	4247	14:05:30	44.83994	-124.85333
4311	13:33:30	44.84103	-124.80028	4246	14:06:00	44.83994	-124.85416
4310	13:34:00	44.84105	-124.80114	4245	14:06:30	44.83992	-124.85500
4309	13:34:30	44.84111	-124.80195	4244	14:07:00	44.83989	-124.85586
4308	13:35:00	44.84114	-124.80281	4243	14:07:30	44.83986	-124.85667
4307	13:35:30	44.84111	-124.80361	4242	14:08:00	44.83986	-124.85750
4306	13:36:00	44.84111	-124.80447	4241	14:08:30	44.83983	-124.85833
4305	13:36:30	44.84105	-124.80528	4240	14:09:00	44.83983	-124.85916
4304	13:37:00	44.84103	-124.80614	4239	14:09:30	44.83981	-124.86000
4303	13:37:30	44.84103	-124.80692	4238	14:10:00	44.83981	-124.86083
4302	13:38:00	44.84100	-124.80775	4237	14:10:30	44.83978	-124.86169
4301	13:38:30	44.84097	-124.80853	4236	14:11:00	44.83972	-124.86250
4300	13:39:00	44.84097	-124.80936	4235	14:11:30	44.83969	-124.86327
4299	13:39:30	44.84097	-124.81017	4234	14:12:00	44.83969	-124.86411
4298	13:40:00	44.84094	-124.81100	4233	14:12:30	44.83966	-124.86491
4297	13:40:30	44.84094	-124.81178	4232	14:13:00	44.83966	-124.86575
4296	13:41:00	44.84092	-124.81261	4231	14:13:30	44.83966	-124.86661
4295	13:41:30	44.84086	-124.81339	4230	14:14:00	44.83964	-124.86745
4294	13:42:00	44.84078	-124.81419	4229	14:14:30	44.83958	-124.86828
4293	13:42:30	44.84075	-124.81503	4228	14:15:00	44.83955	-124.86911
4292	13:43:00	44.84075	-124.81583	4227	14:15:30	44.83953	-124.86995
4291	13:43:30	44.84075	-124.81664	4226	14:16:00	44.83950	-124.87078
4290	13:44:00	44.84075	-124.81747	4225	14:16:30	44.83950	-124.87161
4289	13:44:30	44.84075	-124.81828	4224	14:17:00	44.83947	-124.87244
4288	13:45:00	44.84072	-124.81911	4223	14:17:30	44.83947	-124.87328
4287	13:45:30	44.84069	-124.81992	4222	14:18:00	44.83947	-124.87408
4286	13:46:00	44.84069	-124.82072	4221	14:18:30	44.83947	-124.87489
4285	13:46:30	44.84066	-124.82156	4220	14:19:00	44.83950	-124.87576
4284	13:47:00	44.84064	-124.82239	4219	14:19:30	44.83950	-124.87656
4283	13:47:30	44.84061	-124.82320	4218	14:20:00	44.83953	-124.87737
4282	13:48:00	44.84058	-124.82400	4217	14:20:30	44.83950	-124.87817
4281	13:48:30	44.84055	-124.82481	4216	14:21:00	44.83947	-124.87897
4280	13:49:00	44.84053	-124.82564	4215	14:21:30	44.83947	-124.87975
4279	13:49:30	44.84050	-124.82642	4214	14:22:00	44.83947	-124.88055
4278	13:50:00	44.84047	-124.82728	4213	14:22:30	44.83944	-124.88136
4277	13:50:30	44.84047	-124.82811	4212	14:23:00	44.83942	-124.88219
4276	13:51:00	44.84044	-124.82894	4211	14:23:30	44.83942	-124.88297
4275	13:51:30	44.84042	-124.82980	4210	14:24:00	44.83939	-124.88377
4274	13:52:00	44.84039	-124.83067	4209	14:24:30	44.83936	-124.88458
4273	13:52:30	44.84033	-124.83150	4208	14:24:59	44.83936	-124.88541
4272	13:53:00	44.84033	-124.83236	4207	14:25:29	44.83933	-124.88622
4271	13:53:30	44.84031	-124.83319	4206	14:25:59	44.83931	-124.88705
4270	13:54:00	44.84031	-124.83408	4205	14:26:29	44.83928	-124.88783
4269	13:54:30	44.84031	-124.83495	4204	14:26:59	44.83928	-124.88863
4268	13:55:00	44.84027	-124.83584	4203	14:27:29	44.83925	-124.88944
4267	13:55:30	44.84027	-124.83667	4202	14:27:59	44.83922	-124.89027
4266	13:56:00	44.84025	-124.83750	4201	14:28:29	44.83916	-124.89103
4265	13:56:30	44.84022	-124.83831	4200	14:28:59	44.83914	-124.89180
4264	13:57:00	44.84019	-124.83914	4199	14:29:29	44.83914	-124.89261
4263	13:57:30	44.84019	-124.83995	4198	14:29:59	44.83914	-124.89342
4262	13:58:00	44.84016	-124.84078	4197	14:30:29	44.83914	-124.89422

4196	14:30:59	44.83914	-124.89500	4131	15:03:29	44.83786	-124.94728
4195	14:31:29	44.83914	-124.89581	4130	15:03:59	44.83783	-124.94806
4194	14:31:59	44.83911	-124.89658	4129	15:04:29	44.83783	-124.94884
4193	14:32:29	44.83911	-124.89738	4128	15:04:59	44.83780	-124.94962
4192	14:32:59	44.83908	-124.89814	4127	15:05:29	44.83775	-124.95039
4191	14:33:29	44.83908	-124.89897	4126	15:05:59	44.83767	-124.95113
4190	14:33:59	44.83905	-124.89975	4125	15:06:29	44.83758	-124.95191
4189	14:34:29	44.83903	-124.90056	4124	15:06:59	44.83753	-124.95272
4188	14:34:59	44.83897	-124.90136	4123	15:07:29	44.83750	-124.95355
4187	14:35:29	44.83892	-124.90220	4122	15:07:59	44.83750	-124.95436
4186	14:35:59	44.83886	-124.90298	4121	15:08:29	44.83750	-124.95516
4185	14:36:29	44.83878	-124.90376	4120	15:08:59	44.83747	-124.95594
4184	14:36:59	44.83872	-124.90453	4119	15:09:29	44.83747	-124.95677
4183	14:37:29	44.83872	-124.90533	4118	15:09:59	44.83747	-124.95758
4182	14:37:59	44.83872	-124.90614	4117	15:10:29	44.83744	-124.95839
4181	14:38:29	44.83872	-124.90697	4116	15:10:59	44.83744	-124.95916
4180	14:38:59	44.83872	-124.90778	4115	15:11:29	44.83741	-124.95994
4179	14:39:29	44.83872	-124.90864	4114	15:11:59	44.83739	-124.96075
4178	14:39:59	44.83869	-124.90945	4113	15:12:29	44.83736	-124.96152
4177	14:40:29	44.83867	-124.91025	4112	15:12:59	44.83733	-124.96230
4176	14:40:59	44.83867	-124.91103	4111	15:13:29	44.83730	-124.96313
4175	14:41:29	44.83864	-124.91187	4110	15:13:59	44.83730	-124.96397
4174	14:41:59	44.83864	-124.91270	4109	15:14:29	44.83733	-124.96478
4173	14:42:29	44.83861	-124.91348	4108	15:14:59	44.83733	-124.96555
4172	14:42:59	44.83861	-124.91425	4107	15:15:29	44.83736	-124.96635
4171	14:43:29	44.83861	-124.91503	4106	15:15:59	44.83736	-124.96719
4170	14:43:59	44.83861	-124.91586	4105	15:16:29	44.83736	-124.96800
4169	14:44:29	44.83858	-124.91667	4104	15:16:59	44.83733	-124.96878
4168	14:44:59	44.83858	-124.91750	4103	15:17:29	44.83728	-124.96953
4167	14:45:29	44.83855	-124.91827	4102	15:17:59	44.83719	-124.97028
4166	14:45:59	44.83853	-124.91911	4101	15:18:29	44.83714	-124.97103
4165	14:46:29	44.83847	-124.91991	4100	15:18:59	44.83706	-124.97181
4164	14:46:59	44.83842	-124.92075	4099	15:19:29	44.83702	-124.97261
4163	14:47:29	44.83836	-124.92155	4098	15:19:59	44.83700	-124.97347
4162	14:47:59	44.83833	-124.92239	4097	15:20:29	44.83700	-124.97433
4161	14:48:29	44.83828	-124.92316	4096	15:20:59	44.83702	-124.97520
4160	14:48:59	44.83828	-124.92400	4095	15:21:29	44.83702	-124.97600
4159	14:49:29	44.83825	-124.92480	4094	15:21:59	44.83700	-124.97684
4158	14:49:59	44.83822	-124.92564	4093	15:22:29	44.83700	-124.97764
4157	14:50:29	44.83819	-124.92645	4092	15:22:59	44.83700	-124.97847
4156	14:50:59	44.83814	-124.92728	4091	15:23:29	44.83700	-124.97931
4155	14:51:29	44.83811	-124.92805	4090	15:23:59	44.83697	-124.98016
4154	14:51:59	44.83805	-124.92886	4089	15:24:29	44.83694	-124.98100
4153	14:52:29	44.83803	-124.92966	4088	15:24:59	44.83691	-124.98183
4152	14:52:59	44.83800	-124.93050	4087	15:25:29	44.83689	-124.98264
4151	14:53:29	44.83800	-124.93127	4086	15:25:59	44.83686	-124.98347
4150	14:53:59	44.83803	-124.93211	4085	15:26:29	44.83683	-124.98430
4149	14:54:29	44.83803	-124.93288	4084	15:26:59	44.83680	-124.98519
4148	14:54:59	44.83803	-124.93372	4083	15:27:29	44.83678	-124.98600
4147	14:55:29	44.83803	-124.93453	4082	15:27:59	44.83675	-124.98683
4146	14:55:59	44.83803	-124.93536	4081	15:28:29	44.83672	-124.98766
4145	14:56:29	44.83803	-124.93611	4080	15:28:59	44.83669	-124.98853
4144	14:56:59	44.83800	-124.93694	4079	15:29:29	44.83669	-124.98936
4143	14:57:29	44.83800	-124.93772	4078	15:29:59	44.83669	-124.99025
4142	14:57:59	44.83797	-124.93853	4077	15:30:29	44.83669	-124.99110
4141	14:58:29	44.83797	-124.93933	4076	15:30:59	44.83669	-124.99194
4140	14:58:59	44.83797	-124.94014	4075	15:31:29	44.83667	-124.99274
4139	14:59:29	44.83797	-124.94092	4074	15:31:59	44.83667	-124.99358
4138	14:59:59	44.83794	-124.94170	4073	15:32:29	44.83667	-124.99442
4137	15:00:29	44.83791	-124.94247	4072	15:32:59	44.83664	-124.99528
4136	15:00:59	44.83791	-124.94325	4071	15:33:29	44.83661	-124.99608
4135	15:01:29	44.83789	-124.94405	4070	15:33:59	44.83661	-124.99691
4134	15:01:59	44.83789	-124.94486	4069	15:34:29	44.83658	-124.99772
4133	15:02:29	44.83789	-124.94567	4068	15:34:59	44.83656	-124.99855
4132	15:02:59	44.83786	-124.94647	4067	15:35:29	44.83652	-124.99936

4066	15:35:59	44.83650	-125.00022
4065	15:36:29	44.83647	-125.00103
4064	15:36:59	44.83644	-125.00183
4063	15:37:29	44.83641	-125.00264
4062	15:37:59	44.83639	-125.00347
4061	15:38:29	44.83639	-125.00428
4060	15:38:59	44.83639	-125.00514
4059	15:39:29	44.83641	-125.00594
4058	15:39:59	44.83639	-125.00677
4057	15:40:29	44.83639	-125.00764
4056	15:40:59	44.83636	-125.00850
4055	15:41:29	44.83633	-125.00933
4054	15:41:59	44.83628	-125.01019
4053	15:42:29	44.83619	-125.01100
4052	15:42:59	44.83611	-125.01183
4051	15:43:29	44.83608	-125.01261
4050	15:43:59	44.83606	-125.01347
4049	15:44:29	44.83606	-125.01427
4048	15:44:59	44.83603	-125.01511
4047	15:45:29	44.83600	-125.01595
4046	15:45:59	44.83597	-125.01678
4045	15:46:29	44.83600	-125.01759
4044	15:46:59	44.83603	-125.01842
4043	15:47:29	44.83606	-125.01920
4042	15:47:59	44.83606	-125.02003
4041	15:48:29	44.83606	-125.02084
4040	15:48:59	44.83600	-125.02161
4039	15:49:29	44.83597	-125.02239
4038	15:49:59	44.83597	-125.02320
4037	15:50:29	44.83597	-125.02400
4036	15:50:59	44.83594	-125.02483
4035	15:51:29	44.83591	-125.02564
4034	15:51:59	44.83589	-125.02647
4033	15:52:29	44.83583	-125.02728
4032	15:52:59	44.83580	-125.02808
4031	15:53:29	44.83580	-125.02881
4030	15:53:59	44.83580	-125.02959
4029	15:54:29	44.83578	-125.03037
4028	15:54:59	44.83578	-125.03117
4027	15:55:29	44.83575	-125.03194
4026	15:55:59	44.83572	-125.03272
4025	15:56:29	44.83569	-125.03352
4024	15:56:59	44.83567	-125.03433
4023	15:57:29	44.83564	-125.03516
4022	15:57:59	44.83564	-125.03594
4021	15:58:29	44.83556	-125.03672
4020	15:58:59	44.83550	-125.03750
4019	15:59:29	44.83544	-125.03831
4018	15:59:59	44.83541	-125.03911
4017	16:00:29	44.83541	-125.03997
4016	16:00:59	44.83541	-125.04078
4015	16:01:29	44.83541	-125.04161
4014	16:01:59	44.83541	-125.04242
4013	16:02:29	44.83541	-125.04322
4012	16:02:59	44.83541	-125.04400
4011	16:03:29	44.83541	-125.04483
4010	16:03:59	44.83541	-125.04567
4009	16:04:29	44.83541	-125.04650
4008	16:05:00	44.83539	-125.04730
4007	16:05:29	44.83536	-125.04811
4006	16:06:00	44.83533	-125.04886
4005	16:06:30	44.83533	-125.04964
4004	16:07:00	44.83536	-125.05042
4003	16:07:30	44.83533	-125.05125
4002	16:08:00	44.83533	-125.05209

4001	16:08:30	44.83530	-125.05289
4000	16:09:00	44.83525	-125.05367
3999	16:09:30	44.83519	-125.05447
3998	16:10:00	44.83514	-125.05525
3997	16:10:30	44.83505	-125.05603
3996	16:11:00	44.83503	-125.05684
3995	16:11:30	44.83503	-125.05767
3994	16:12:00	44.83505	-125.05850
3993	16:12:30	44.83508	-125.05931
3992	16:13:00	44.83511	-125.06011
3991	16:13:30	44.83511	-125.06089
3990	16:14:00	44.83508	-125.06167
3989	16:14:30	44.83500	-125.06242
3988	16:15:00	44.83497	-125.06322
3987	16:15:30	44.83494	-125.06397
3986	16:16:00	44.83489	-125.06478
3985	16:16:30	44.83483	-125.06553
3984	16:17:00	44.83480	-125.06634
3983	16:17:30	44.83475	-125.06714
3982	16:18:00	44.83467	-125.06792
3981	16:18:30	44.83461	-125.06872
3980	16:19:00	44.83458	-125.06953
3979	16:19:30	44.83455	-125.07034
3978	16:20:00	44.83455	-125.07111
3977	16:20:30	44.83458	-125.07188
3976	16:21:00	44.83458	-125.07266
3975	16:21:30	44.83461	-125.07347
3974	16:22:00	44.83464	-125.07433
3973	16:22:30	44.83464	-125.07516
3972	16:23:00	44.83461	-125.07603
3971	16:23:30	44.83455	-125.07686
3970	16:24:00	44.83450	-125.07769
3969	16:24:30	44.83447	-125.07850
3968	16:25:00	44.83447	-125.07931
3967	16:25:30	44.83447	-125.08016
3966	16:26:00	44.83450	-125.08100
3965	16:26:30	44.83450	-125.08180
3964	16:27:00	44.83450	-125.08266
3963	16:27:30	44.83444	-125.08350
3962	16:28:00	44.83442	-125.08434
3961	16:28:30	44.83439	-125.08520
3960	16:29:00	44.83433	-125.08601
3959	16:29:30	44.83428	-125.08684
3958	16:30:00	44.83425	-125.08762
3957	16:30:30	44.83419	-125.08839
3956	16:31:00	44.83419	-125.08923
3955	16:31:30	44.83416	-125.09003
3954	16:32:00	44.83416	-125.09084
3953	16:32:30	44.83416	-125.09164
3952	16:33:00	44.83416	-125.09248
3951	16:33:30	44.83416	-125.09334
3950	16:34:00	44.83416	-125.09414
3949	16:34:30	44.83414	-125.09498
3948	16:35:00	44.83414	-125.09581
3947	16:35:30	44.83411	-125.09664
3946	16:36:00	44.83408	-125.09747
3945	16:36:30	44.83405	-125.09837
3944	16:37:00	44.83403	-125.09917
3943	16:37:30	44.83403	-125.10001
3942	16:38:00	44.83400	-125.10081
3941	16:38:30	44.83397	-125.10164
3940	16:39:00	44.83392	-125.10244
3939	16:39:30	44.83386	-125.10325
3938	16:40:00	44.83383	-125.10403
3937	16:40:30	44.83378	-125.10484

3936	16:41:00	44.83378	-125.10561	3871	17:13:30	44.83239	-125.15845
3935	16:41:30	44.83378	-125.10645	3870	17:14:00	44.83239	-125.15928
3934	16:42:00	44.83378	-125.10725	3869	17:14:30	44.83242	-125.16014
3933	16:42:30	44.83381	-125.10811	3868	17:15:00	44.83244	-125.16097
3932	16:43:00	44.83381	-125.10894	3867	17:15:30	44.83244	-125.16180
3931	16:43:30	44.83383	-125.10980	3866	17:16:00	44.83244	-125.16267
3930	16:44:00	44.83386	-125.11061	3865	17:16:30	44.83242	-125.16348
3929	16:44:30	44.83383	-125.11144	3864	17:17:00	44.83236	-125.16431
3928	16:45:00	44.83381	-125.11225	3863	17:17:30	44.83236	-125.16514
3927	16:45:30	44.83378	-125.11308	3862	17:18:00	44.83231	-125.16600
3926	16:46:00	44.83372	-125.11395	3861	17:18:30	44.83228	-125.16683
3925	16:46:30	44.83369	-125.11478	3860	17:19:00	44.83225	-125.16766
3924	16:47:00	44.83366	-125.11561	3859	17:19:30	44.83220	-125.16850
3923	16:47:30	44.83364	-125.11644	3858	17:20:00	44.83214	-125.16933
3922	16:48:00	44.83358	-125.11725	3857	17:20:30	44.83208	-125.17017
3921	16:48:30	44.83355	-125.11806	3856	17:21:00	44.83208	-125.17103
3920	16:49:00	44.83353	-125.11887	3855	17:21:30	44.83208	-125.17188
3919	16:49:30	44.83347	-125.11964	3854	17:22:00	44.83208	-125.17272
3918	16:50:00	44.83344	-125.12042	3853	17:22:30	44.83205	-125.17352
3917	16:50:30	44.83342	-125.12125	3852	17:23:00	44.83203	-125.17436
3916	16:51:00	44.83342	-125.12206	3851	17:23:30	44.83200	-125.17519
3915	16:51:30	44.83339	-125.12289	3850	17:24:00	44.83197	-125.17606
3914	16:52:00	44.83336	-125.12370	3849	17:24:30	44.83194	-125.17686
3913	16:52:30	44.83336	-125.12453	3848	17:25:00	44.83189	-125.17769
3912	16:53:00	44.83333	-125.12534	3847	17:25:30	44.83186	-125.17847
3911	16:53:30	44.83333	-125.12617	3846	17:26:00	44.83186	-125.17931
3910	16:54:00	44.83331	-125.12698	3845	17:26:30	44.83189	-125.18014
3909	16:54:30	44.83328	-125.12781	3844	17:27:00	44.83189	-125.18100
3908	16:55:00	44.83325	-125.12859	3843	17:27:30	44.83189	-125.18180
3907	16:55:30	44.83325	-125.12939	3842	17:28:00	44.83189	-125.18269
3906	16:56:00	44.83322	-125.13017	3841	17:28:30	44.83186	-125.18353
3905	16:56:30	44.83322	-125.13100	3840	17:29:00	44.83183	-125.18436
3904	16:57:00	44.83319	-125.13184	3839	17:29:30	44.83178	-125.18517
3903	16:57:30	44.83319	-125.13264	3838	17:30:00	44.83172	-125.18592
3902	16:58:00	44.83314	-125.13342	3837	17:30:30	44.83169	-125.18667
3901	16:58:30	44.83314	-125.13425	3836	17:31:00	44.83169	-125.18745
3900	16:59:00	44.83311	-125.13508	3835	17:31:30	44.83175	-125.18822
3899	16:59:30	44.83308	-125.13586	3834	17:32:00	44.83181	-125.18906
3898	17:00:00	44.83308	-125.13663	3833	17:32:30	44.83181	-125.18980
3897	17:00:30	44.83308	-125.13747	3832	17:33:00	44.83178	-125.19061
3896	17:01:00	44.83305	-125.13828	3831	17:33:30	44.83175	-125.19141
3895	17:01:30	44.83305	-125.13908	3830	17:34:00	44.83175	-125.19225
3894	17:02:00	44.83305	-125.13992	3829	17:34:30	44.83175	-125.19312
3893	17:02:30	44.83305	-125.14069	3828	17:35:00	44.83169	-125.19392
3892	17:03:00	44.83300	-125.14149	3827	17:35:30	44.83164	-125.19475
3891	17:03:30	44.83297	-125.14230	3826	17:36:00	44.83155	-125.19553
3890	17:04:00	44.83297	-125.14311	3825	17:36:30	44.83150	-125.19633
3889	17:04:30	44.83292	-125.14389	3824	17:37:00	44.83147	-125.19711
3888	17:05:00	44.83286	-125.14472	3823	17:37:30	44.83144	-125.19791
3887	17:05:30	44.83286	-125.14552	3822	17:38:00	44.83144	-125.19875
3886	17:06:00	44.83283	-125.14636	3821	17:38:30	44.83147	-125.19958
3885	17:06:30	44.83281	-125.14714	3820	17:39:00	44.83150	-125.20036
3884	17:07:00	44.83275	-125.14797	3819	17:39:30	44.83144	-125.20119
3883	17:07:30	44.83272	-125.14875	3818	17:40:00	44.83142	-125.20197
3882	17:08:00	44.83266	-125.14955	3817	17:40:30	44.83136	-125.20283
3881	17:08:30	44.83264	-125.15036	3816	17:41:00	44.83133	-125.20364
3880	17:09:00	44.83264	-125.15120	3815	17:41:30	44.83133	-125.20447
3879	17:09:30	44.83261	-125.15200	3814	17:42:00	44.83133	-125.20530
3878	17:10:00	44.83261	-125.15286	3813	17:42:30	44.83133	-125.20616
3877	17:10:30	44.83261	-125.15367	3812	17:43:00	44.83130	-125.20697
3876	17:11:00	44.83258	-125.15450	3811	17:43:30	44.83125	-125.20780
3875	17:11:30	44.83255	-125.15528	3810	17:44:00	44.83119	-125.20855
3874	17:12:00	44.83253	-125.15608	3809	17:44:30	44.83111	-125.20933
3873	17:12:30	44.83247	-125.15686	3808	17:45:00	44.83108	-125.21011
3872	17:13:00	44.83244	-125.15767	3807	17:45:30	44.83105	-125.21097

3806	17:46:00	44.83103	-125.21175	3741	18:18:30	44.82969	-125.26408
3805	17:46:30	44.83100	-125.21255	3740	18:18:59	44.82967	-125.26486
3804	17:47:00	44.83100	-125.21333	3739	18:19:29	44.82961	-125.26561
3803	17:47:30	44.83097	-125.21411	3738	18:19:59	44.82958	-125.26636
3802	17:48:00	44.83097	-125.21491	3737	18:20:29	44.82956	-125.26717
3801	17:48:30	44.83094	-125.21574	3736	18:20:59	44.82956	-125.26797
3800	17:49:00	44.83094	-125.21658	3735	18:21:29	44.82956	-125.26881
3799	17:49:30	44.83092	-125.21741	3734	18:21:59	44.82953	-125.26962
3798	17:50:00	44.83089	-125.21822	3733	18:22:29	44.82950	-125.27045
3797	17:50:30	44.83083	-125.21902	3732	18:22:59	44.82947	-125.27122
3796	17:51:00	44.83080	-125.21986	3731	18:23:29	44.82944	-125.27203
3795	17:51:30	44.83078	-125.22066	3730	18:23:59	44.82941	-125.27283
3794	17:52:00	44.83075	-125.22144	3729	18:24:29	44.82939	-125.27359
3793	17:52:30	44.83072	-125.22227	3728	18:24:59	44.82936	-125.27437
3792	17:53:00	44.83072	-125.22311	3727	18:25:29	44.82939	-125.27514
3791	17:53:30	44.83075	-125.22392	3726	18:25:59	44.82941	-125.27598
3790	17:54:00	44.83075	-125.22472	3725	18:26:29	44.82944	-125.27678
3789	17:54:30	44.83075	-125.22552	3724	18:26:59	44.82944	-125.27759
3788	17:55:00	44.83072	-125.22630	3723	18:27:29	44.82941	-125.27834
3787	17:55:30	44.83072	-125.22711	3722	18:27:59	44.82936	-125.27908
3786	17:56:00	44.83072	-125.22794	3721	18:28:29	44.82933	-125.27984
3785	17:56:30	44.83069	-125.22872	3720	18:28:59	44.82930	-125.28059
3784	17:57:00	44.83067	-125.22953	3719	18:29:29	44.82928	-125.28131
3783	17:57:30	44.83061	-125.23031	3718	18:29:59	44.82928	-125.28211
3782	17:58:00	44.83058	-125.23111	3717	18:30:29	44.82928	-125.28292
3781	17:58:30	44.83053	-125.23186	3716	18:30:59	44.82925	-125.28367
3780	17:59:00	44.83050	-125.23264	3715	18:31:29	44.82922	-125.28447
3779	17:59:30	44.83050	-125.23341	3714	18:31:59	44.82917	-125.28522
3778	18:00:00	44.83053	-125.23428	3713	18:32:29	44.82911	-125.28597
3777	18:00:30	44.83058	-125.23508	3712	18:32:59	44.82911	-125.28675
3776	18:01:00	44.83058	-125.23592	3711	18:33:29	44.82911	-125.28753
3775	18:01:30	44.83053	-125.23672	3710	18:33:59	44.82911	-125.28828
3774	18:02:00	44.83044	-125.23750	3709	18:34:29	44.82911	-125.28905
3773	18:02:30	44.83036	-125.23822	3708	18:34:59	44.82911	-125.28983
3772	18:03:00	44.83033	-125.23902	3707	18:35:29	44.82908	-125.29066
3771	18:03:30	44.83030	-125.23980	3706	18:35:59	44.82908	-125.29144
3770	18:04:00	44.83030	-125.24064	3705	18:36:29	44.82906	-125.29225
3769	18:04:30	44.83030	-125.24144	3704	18:36:59	44.82903	-125.29300
3768	18:05:00	44.83033	-125.24227	3703	18:37:29	44.82900	-125.29381
3767	18:05:30	44.83036	-125.24308	3702	18:37:59	44.82895	-125.29459
3766	18:06:00	44.83036	-125.24394	3701	18:38:29	44.82891	-125.29539
3765	18:06:30	44.83036	-125.24472	3700	18:38:59	44.82891	-125.29613
3764	18:07:00	44.83033	-125.24555	3699	18:39:29	44.82889	-125.29694
3763	18:07:30	44.83030	-125.24638	3698	18:39:59	44.82889	-125.29769
3762	18:08:00	44.83028	-125.24716	3697	18:40:29	44.82886	-125.29845
3761	18:08:30	44.83025	-125.24794	3696	18:40:59	44.82886	-125.29925
3760	18:09:00	44.83022	-125.24877	3695	18:41:29	44.82880	-125.30000
3759	18:09:30	44.83019	-125.24958	3694	18:41:59	44.82875	-125.30078
3758	18:10:00	44.83014	-125.25042	3693	18:42:29	44.82869	-125.30156
3757	18:10:30	44.83011	-125.25122	3692	18:42:59	44.82869	-125.30236
3756	18:11:00	44.83006	-125.25203	3691	18:43:29	44.82869	-125.30314
3755	18:11:30	44.83003	-125.25289	3690	18:43:59	44.82864	-125.30389
3754	18:12:00	44.83000	-125.25367	3689	18:44:29	44.82861	-125.30461
3753	18:12:30	44.83000	-125.25452	3688	18:44:59	44.82861	-125.30534
3752	18:13:00	44.82997	-125.25530	3687	18:45:29	44.82861	-125.30606
3751	18:13:30	44.82994	-125.25614	3686	18:45:59	44.82861	-125.30686
3750	18:14:00	44.82989	-125.25689	3685	18:46:29	44.82861	-125.30767
3749	18:14:30	44.82983	-125.25767	3684	18:46:59	44.82861	-125.30840
3748	18:15:00	44.82983	-125.25847	3683	18:47:29	44.82856	-125.30911
3747	18:15:30	44.82980	-125.25928	3682	18:47:59	44.82850	-125.30984
3746	18:16:00	44.82978	-125.26006	3681	18:48:29	44.82847	-125.31062
3745	18:16:30	44.82978	-125.26089	3680	18:48:59	44.82841	-125.31136
3744	18:17:00	44.82978	-125.26170	3679	18:49:29	44.82839	-125.31214
3743	18:17:30	44.82975	-125.26250	3678	18:49:59	44.82839	-125.31292
3742	18:18:00	44.82972	-125.26331	3677	18:50:29	44.82841	-125.31370

3676	18:50:59	44.82844	-125.31448
3675	18:51:29	44.82844	-125.31525
3674	18:51:59	44.82844	-125.31603
3673	18:52:29	44.82836	-125.31675
3672	18:52:59	44.82830	-125.31756
3671	18:53:29	44.82828	-125.31831
3670	18:53:59	44.82828	-125.31911
3669	18:54:29	44.82825	-125.31989
3668	18:54:59	44.82822	-125.32064
3667	18:55:29	44.82817	-125.32133
3666	18:55:59	44.82814	-125.32205
3665	18:56:29	44.82806	-125.32281
3664	18:56:59	44.82803	-125.32352
3663	18:57:29	44.82800	-125.32430
3662	18:57:59	44.82800	-125.32503
3661	18:58:29	44.82797	-125.32581
3660	18:58:59	44.82797	-125.32658
3659	18:59:29	44.82800	-125.32736
3658	18:59:59	44.82800	-125.32808
3657	19:00:29	44.82794	-125.32883
3656	19:00:59	44.82786	-125.32958
3655	19:01:29	44.82783	-125.33033
3654	19:01:59	44.82780	-125.33109
3653	19:02:29	44.82780	-125.33180
3652	19:02:59	44.82786	-125.33258
3651	19:03:29	44.82789	-125.33334
3650	19:03:59	44.82789	-125.33408
3649	19:04:29	44.82786	-125.33481
3648	19:04:59	44.82783	-125.33556
3647	19:05:29	44.82783	-125.33628
3646	19:05:59	44.82780	-125.33703
3645	19:06:29	44.82778	-125.33778
3644	19:06:59	44.82775	-125.33855
3643	19:07:29	44.82769	-125.33931
3642	19:07:59	44.82767	-125.34009
3641	19:08:29	44.82764	-125.34087
3640	19:08:59	44.82761	-125.34170
3639	19:09:29	44.82758	-125.34250
3638	19:09:59	44.82755	-125.34328
3637	19:10:29	44.82755	-125.34403
3636	19:10:59	44.82750	-125.34475
3635	19:11:29	44.82747	-125.34550
3634	19:11:59	44.82744	-125.34625
3633	19:12:29	44.82742	-125.34703
3632	19:12:59	44.82739	-125.34778
3631	19:13:29	44.82733	-125.34856
3630	19:13:59	44.82730	-125.34928
3629	19:14:29	44.82730	-125.35005
3628	19:14:59	44.82733	-125.35081
3627	19:15:29	44.82733	-125.35152
3626	19:15:59	44.82733	-125.35228
3625	19:16:29	44.82736	-125.35305
3624	19:16:59	44.82736	-125.35386
3623	19:17:29	44.82736	-125.35467
3622	19:17:59	44.82733	-125.35547
3621	19:18:29	44.82730	-125.35625
3620	19:18:59	44.82725	-125.35697
3619	19:19:29	44.82719	-125.35770
3618	19:19:59	44.82717	-125.35844
3617	19:20:29	44.82714	-125.35919
3616	19:20:59	44.82711	-125.36000
3615	19:21:29	44.82711	-125.36080
3614	19:21:59	44.82708	-125.36161
3613	19:22:29	44.82705	-125.36241
3612	19:22:59	44.82703	-125.36317

3611	19:23:29	44.82697	-125.36391
3610	19:23:59	44.82694	-125.36466
3609	19:24:29	44.82694	-125.36547
3608	19:24:59	44.82694	-125.36625
3607	19:25:29	44.82694	-125.36709
3606	19:25:59	44.82694	-125.36787
3605	19:26:29	44.82692	-125.36864
3604	19:26:59	44.82689	-125.36939
3603	19:27:29	44.82689	-125.37017
3602	19:27:59	44.82692	-125.37100
3601	19:28:29	44.82692	-125.37178
3600	19:28:59	44.82692	-125.37259
3599	19:29:29	44.82686	-125.37336
3598	19:29:59	44.82681	-125.37412
3597	19:30:29	44.82675	-125.37492
3596	19:30:59	44.82669	-125.37572
3595	19:31:29	44.82666	-125.37647
3594	19:31:59	44.82661	-125.37730
3593	19:32:29	44.82655	-125.37811
3592	19:32:59	44.82653	-125.37892
3591	19:33:29	44.82653	-125.37967
3590	19:33:59	44.82653	-125.38048
3589	19:34:29	44.82650	-125.38123
3588	19:34:59	44.82650	-125.38203
3587	19:35:29	44.82650	-125.38280
3586	19:35:59	44.82650	-125.38361
3585	19:36:29	44.82650	-125.38441
3584	19:36:59	44.82650	-125.38525
3583	19:37:29	44.82650	-125.38602
3582	19:37:59	44.82644	-125.38680
3581	19:38:29	44.82642	-125.38755
3580	19:38:59	44.82639	-125.38836
3579	19:39:29	44.82636	-125.38919
3578	19:39:59	44.82633	-125.38997
3577	19:40:29	44.82631	-125.39075
3576	19:40:59	44.82631	-125.39158
3575	19:41:29	44.82631	-125.39242
3574	19:41:59	44.82627	-125.39320
3573	19:42:29	44.82625	-125.39400
3572	19:42:59	44.82622	-125.39481
3571	19:43:29	44.82616	-125.39561
3570	19:43:59	44.82614	-125.39636
3569	19:44:29	44.82611	-125.39716
3568	19:44:59	44.82605	-125.39794
3567	19:45:29	44.82603	-125.39875
3566	19:45:59	44.82600	-125.39955
3565	19:46:29	44.82594	-125.40031
3564	19:46:59	44.82592	-125.40105
3563	19:47:29	44.82589	-125.40186
3562	19:47:59	44.82586	-125.40267
3561	19:48:29	44.82586	-125.40350
3560	19:48:59	44.82581	-125.40430
3559	19:49:29	44.82575	-125.40514
3558	19:49:59	44.82572	-125.40594
3557	19:50:29	44.82572	-125.40678
3556	19:50:59	44.82575	-125.40762
3555	19:51:29	44.82578	-125.40845
3554	19:51:59	44.82583	-125.40928
3553	19:52:29	44.82589	-125.41014
3552	19:52:59	44.82589	-125.41097
3551	19:53:29	44.82589	-125.41183
3550	19:53:59	44.82586	-125.41264
3549	19:54:29	44.82583	-125.41348
3548	19:54:59	44.82578	-125.41425
3547	19:55:29	44.82575	-125.41508

3546	19:55:59	44.82575	-125.41586	3481	20:28:30	44.82394	-125.47011
3545	19:56:29	44.82572	-125.41669	3480	20:29:00	44.82397	-125.47095
3544	19:56:59	44.82570	-125.41750	3479	20:29:30	44.82397	-125.47183
3543	19:57:29	44.82561	-125.41830	3478	20:30:00	44.82397	-125.47266
3542	19:57:59	44.82555	-125.41911	3477	20:30:30	44.82394	-125.47353
3541	19:58:29	44.82553	-125.41991	3476	20:31:00	44.82392	-125.47437
3540	19:58:59	44.82550	-125.42075	3475	20:31:30	44.82389	-125.47525
3539	19:59:29	44.82544	-125.42158	3474	20:32:00	44.82386	-125.47614
3538	19:59:59	44.82542	-125.42239	3473	20:32:30	44.82383	-125.47706
3537	20:00:29	44.82539	-125.42316	3472	20:33:00	44.82383	-125.47794
3536	20:00:59	44.82533	-125.42394	3471	20:33:30	44.82380	-125.47884
3535	20:01:29	44.82533	-125.42472	3470	20:34:00	44.82380	-125.47972
3534	20:01:59	44.82531	-125.42555	3469	20:34:30	44.82378	-125.48061
3533	20:02:29	44.82528	-125.42636	3468	20:35:00	44.82372	-125.48141
3532	20:02:59	44.82525	-125.42725	3467	20:35:30	44.82369	-125.48225
3531	20:03:29	44.82520	-125.42805	3466	20:36:00	44.82367	-125.48314
3530	20:03:59	44.82516	-125.42889	3465	20:36:30	44.82364	-125.48399
3529	20:04:29	44.82514	-125.42972	3464	20:37:00	44.82361	-125.48489
3528	20:05:00	44.82511	-125.43058	3463	20:37:30	44.82358	-125.48575
3527	20:05:30	44.82505	-125.43136	3462	20:38:00	44.82356	-125.48666
3526	20:06:00	44.82500	-125.43219	3461	20:38:30	44.82353	-125.48753
3525	20:06:30	44.82497	-125.43300	3460	20:39:00	44.82353	-125.48841
3524	20:07:00	44.82494	-125.43384	3459	20:39:30	44.82350	-125.48927
3523	20:07:30	44.82494	-125.43472	3458	20:40:00	44.82350	-125.49019
3522	20:08:00	44.82494	-125.43562	3457	20:40:30	44.82350	-125.49105
3521	20:08:30	44.82494	-125.43645	3456	20:41:00	44.82344	-125.49194
3520	20:09:00	44.82492	-125.43725	3455	20:41:30	44.82341	-125.49281
3519	20:09:30	44.82489	-125.43809	3454	20:42:00	44.82339	-125.49369
3518	20:10:00	44.82486	-125.43892	3453	20:42:30	44.82336	-125.49455
3517	20:10:30	44.82483	-125.43975	3452	20:43:00	44.82330	-125.49538
3516	20:11:00	44.82481	-125.44056	3451	20:43:30	44.82328	-125.49622
3515	20:11:30	44.82478	-125.44141	3450	20:44:00	44.82322	-125.49708
3514	20:12:00	44.82478	-125.44225	3449	20:44:30	44.82317	-125.49797
3513	20:12:30	44.82478	-125.44305	3448	20:45:00	44.82314	-125.49886
3512	20:13:00	44.82475	-125.44389	3447	20:45:30	44.82311	-125.49975
3511	20:13:30	44.82475	-125.44469	3446	20:46:00	44.82308	-125.50064
3510	20:14:00	44.82472	-125.44553	3445	20:46:30	44.82306	-125.50153
3509	20:14:30	44.82472	-125.44633	3444	20:47:00	44.82303	-125.50239
3508	20:15:00	44.82469	-125.44714	3443	20:47:30	44.82300	-125.50328
3507	20:15:30	44.82464	-125.44798	3442	20:48:00	44.82300	-125.50414
3506	20:16:00	44.82464	-125.44881	3441	20:48:30	44.82300	-125.50503
3505	20:16:30	44.82464	-125.44962	3440	20:49:00	44.82300	-125.50586
3504	20:17:00	44.82464	-125.45047	3439	20:49:30	44.82300	-125.50672
3503	20:17:30	44.82464	-125.45136	3438	20:50:00	44.82294	-125.50753
3502	20:18:00	44.82464	-125.45216	3437	20:50:30	44.82291	-125.50842
3501	20:18:30	44.82461	-125.45305	3436	20:51:00	44.82291	-125.50931
3500	20:19:00	44.82458	-125.45391	3435	20:51:30	44.82291	-125.51019
3499	20:19:30	44.82455	-125.45472	3434	20:52:00	44.82289	-125.51111
3498	20:20:00	44.82447	-125.45555	3433	20:52:30	44.82286	-125.51197
3497	20:20:30	44.82444	-125.45638	3432	20:53:00	44.82283	-125.51283
3496	20:21:00	44.82442	-125.45724	3431	20:53:30	44.82283	-125.51373
3495	20:21:30	44.82439	-125.45808	3430	20:54:00	44.82283	-125.51458
3494	20:22:00	44.82436	-125.45894	3429	20:54:30	44.82280	-125.51547
3493	20:22:30	44.82430	-125.45975	3428	20:55:00	44.82280	-125.51639
3492	20:23:00	44.82428	-125.46058	3427	20:55:30	44.82278	-125.51728
3491	20:23:30	44.82425	-125.46144	3426	20:56:00	44.82272	-125.51820
3490	20:24:00	44.82422	-125.46227	3425	20:56:30	44.82269	-125.51906
3489	20:24:30	44.82419	-125.46319	3424	20:57:00	44.82267	-125.52000
3488	20:25:00	44.82419	-125.46405	3423	20:57:30	44.82264	-125.52089
3487	20:25:30	44.82417	-125.46494	3422	20:58:00	44.82261	-125.52181
3486	20:26:00	44.82408	-125.46574	3421	20:58:30	44.82258	-125.52267
3485	20:26:30	44.82403	-125.46661	3420	20:59:00	44.82256	-125.52356
3484	20:27:00	44.82400	-125.46748	3419	20:59:30	44.82253	-125.52442
3483	20:27:30	44.82397	-125.46836	3418	21:00:00	44.82250	-125.52534
3482	20:28:00	44.82394	-125.46922	3417	21:00:30	44.82247	-125.52620

3416	21:01:00	44.82247	-125.52706	3351	21:33:30	44.82067	-125.58511
3415	21:01:30	44.82244	-125.52798	3350	21:34:00	44.82067	-125.58601
3414	21:02:00	44.82241	-125.52884	3349	21:34:30	44.82067	-125.58692
3413	21:02:30	44.82239	-125.52975	3348	21:35:00	44.82064	-125.58784
3412	21:03:00	44.82236	-125.53062	3347	21:35:30	44.82064	-125.58878
3411	21:03:30	44.82233	-125.53153	3346	21:36:00	44.82067	-125.58975
3410	21:04:00	44.82233	-125.53242	3345	21:36:30	44.82067	-125.59064
3409	21:04:30	44.82233	-125.53334	3344	21:37:00	44.82064	-125.59156
3408	21:05:00	44.82230	-125.53419	3343	21:37:30	44.82064	-125.59248
3407	21:05:30	44.82228	-125.53508	3342	21:38:00	44.82061	-125.59339
3406	21:06:00	44.82225	-125.53594	3341	21:38:30	44.82058	-125.59434
3405	21:06:30	44.82222	-125.53680	3340	21:39:00	44.82053	-125.59522
3404	21:07:00	44.82217	-125.53772	3339	21:39:30	44.82047	-125.59617
3403	21:07:30	44.82214	-125.53864	3338	21:40:00	44.82044	-125.59706
3402	21:08:00	44.82211	-125.53953	3337	21:40:30	44.82036	-125.59795
3401	21:08:30	44.82206	-125.54039	3336	21:41:00	44.82030	-125.59881
3400	21:09:00	44.82200	-125.54131	3335	21:41:30	44.82025	-125.59972
3399	21:09:30	44.82197	-125.54219	3334	21:42:00	44.82022	-125.60064
3398	21:10:00	44.82197	-125.54308	3333	21:42:30	44.82019	-125.60161
3397	21:10:30	44.82195	-125.54397	3332	21:43:00	44.82017	-125.60255
3396	21:11:00	44.82191	-125.54486	3331	21:43:30	44.82011	-125.60350
3395	21:11:30	44.82191	-125.54575	3330	21:44:00	44.82005	-125.60442
3394	21:12:00	44.82189	-125.54664	3329	21:44:30	44.81997	-125.60533
3393	21:12:30	44.82186	-125.54752	3328	21:45:00	44.81992	-125.60628
3392	21:13:00	44.82180	-125.54842	3327	21:45:30	44.81989	-125.60716
3391	21:13:30	44.82175	-125.54931	3326	21:46:00	44.81986	-125.60811
3390	21:14:00	44.82172	-125.55017	3325	21:46:30	44.81983	-125.60900
3389	21:14:30	44.82172	-125.55109	3324	21:47:00	44.81981	-125.60997
3388	21:15:00	44.82169	-125.55200	3323	21:47:30	44.81978	-125.61086
3387	21:15:30	44.82167	-125.55286	3322	21:48:00	44.81972	-125.61175
3386	21:16:00	44.82167	-125.55376	3321	21:48:30	44.81969	-125.61269
3385	21:16:30	44.82164	-125.55467	3320	21:49:00	44.81966	-125.61364
3384	21:17:00	44.82164	-125.55556	3319	21:49:30	44.81966	-125.61458
3383	21:17:30	44.82164	-125.55645	3318	21:50:00	44.81969	-125.61547
3382	21:18:00	44.82158	-125.55731	3317	21:50:30	44.81966	-125.61642
3381	21:18:30	44.82153	-125.55820	3316	21:51:00	44.81964	-125.61731
3380	21:19:00	44.82147	-125.55911	3315	21:51:30	44.81961	-125.61826
3379	21:19:30	44.82144	-125.56001	3314	21:52:00	44.81961	-125.61917
3378	21:20:00	44.82144	-125.56095	3313	21:52:30	44.81961	-125.62009
3377	21:20:30	44.82141	-125.56187	3312	21:53:00	44.81961	-125.62106
3376	21:21:00	44.82141	-125.56275	3311	21:53:30	44.81961	-125.62197
3375	21:21:30	44.82139	-125.56364	3310	21:54:00	44.81958	-125.62292
3374	21:22:00	44.82139	-125.56458	3309	21:54:30	44.81955	-125.62381
3373	21:22:30	44.82136	-125.56548	3308	21:55:00	44.81950	-125.62475
3372	21:23:00	44.82133	-125.56639	3307	21:55:30	44.81950	-125.62567
3371	21:23:30	44.82130	-125.56731	3306	21:56:00	44.81947	-125.62659
3370	21:24:00	44.82128	-125.56825	3305	21:56:30	44.81944	-125.62750
3369	21:24:30	44.82122	-125.56914	3304	21:57:00	44.81942	-125.62842
3368	21:25:00	44.82119	-125.57003	3303	21:57:30	44.81936	-125.62933
3367	21:25:30	44.82117	-125.57092	3302	21:58:00	44.81931	-125.63023
3366	21:26:00	44.82114	-125.57181	3301	21:58:30	44.81927	-125.63117
3365	21:26:30	44.82111	-125.57272	3300	21:59:00	44.81925	-125.63203
3364	21:27:00	44.82108	-125.57359	3299	21:59:30	44.81919	-125.63295
3363	21:27:30	44.82106	-125.57447	3298	22:00:00	44.81916	-125.63383
3362	21:28:00	44.82100	-125.57536	3297	22:00:30	44.81914	-125.63472
3361	21:28:30	44.82097	-125.57628	3296	22:01:00	44.81905	-125.63564
3360	21:29:00	44.82097	-125.57719	3295	22:01:30	44.81903	-125.63655
3359	21:29:30	44.82092	-125.57811	3294	22:02:00	44.81900	-125.63747
3358	21:30:00	44.82086	-125.57892	3293	22:02:30	44.81897	-125.63839
3357	21:30:30	44.82080	-125.57977	3292	22:03:00	44.81894	-125.63931
3356	21:31:00	44.82075	-125.58064	3291	22:03:30	44.81892	-125.64022
3355	21:31:30	44.82072	-125.58156	3290	22:04:00	44.81889	-125.64114
3354	21:32:00	44.82069	-125.58241	3289	22:04:30	44.81889	-125.64205
3353	21:32:30	44.82067	-125.58327	3288	22:05:00	44.81886	-125.64300
3352	21:33:00	44.82067	-125.58420	3287	22:05:30	44.81886	-125.64391

3286	22:06:00	44.81889	-125.64478
3285	22:06:30	44.81889	-125.64564
3284	22:07:00	44.81886	-125.64647
3283	22:07:30	44.81881	-125.64730
3282	22:08:00	44.81881	-125.64814
3281	22:08:30	44.81881	-125.64897
3280	22:09:00	44.81878	-125.64986
3279	22:09:30	44.81875	-125.65075
3278	22:09:59	44.81875	-125.65164
3277	22:10:29	44.81872	-125.65253
3276	22:10:59	44.81872	-125.65339
3275	22:11:29	44.81870	-125.65428
3274	22:11:59	44.81866	-125.65517
3273	22:12:29	44.81866	-125.65606
3272	22:12:59	44.81864	-125.65694
3271	22:13:29	44.81864	-125.65781
3270	22:13:59	44.81861	-125.65870
3269	22:14:29	44.81861	-125.65958
3268	22:14:59	44.81858	-125.66048
3267	22:15:29	44.81855	-125.66133
3266	22:15:59	44.81855	-125.66222
3265	22:16:29	44.81853	-125.66311
3264	22:16:59	44.81853	-125.66400
3263	22:17:29	44.81850	-125.66489
3262	22:17:59	44.81850	-125.66578
3261	22:18:29	44.81847	-125.66664
3260	22:19:00	44.81847	-125.66753
3259	22:19:29	44.81844	-125.66841
3258	22:19:59	44.81842	-125.66930
3257	22:20:29	44.81842	-125.67019
3256	22:20:59	44.81839	-125.67108
3255	22:21:29	44.81839	-125.67197
3254	22:21:59	44.81836	-125.67283
3253	22:22:29	44.81833	-125.67372
3252	22:22:59	44.81833	-125.67461
3251	22:23:29	44.81831	-125.67550
3250	22:23:59	44.81831	-125.67638
3249	22:24:29	44.81828	-125.67725
3248	22:24:59	44.81825	-125.67814
3247	22:25:29	44.81825	-125.67902
3246	22:25:59	44.81822	-125.67992
3245	22:26:29	44.81822	-125.68080
3244	22:26:59	44.81819	-125.68166
3243	22:27:29	44.81816	-125.68256
3242	22:27:59	44.81816	-125.68345
3241	22:28:29	44.81814	-125.68433
3240	22:29:00	44.81814	-125.68523
3239	22:29:29	44.81808	-125.68611
3238	22:29:59	44.81805	-125.68700
3237	22:30:29	44.81803	-125.68789
3236	22:30:59	44.81800	-125.68878
3235	22:31:29	44.81797	-125.68967
3234	22:31:59	44.81792	-125.69056
3233	22:32:29	44.81789	-125.69144
3232	22:32:59	44.81786	-125.69234
3231	22:33:29	44.81783	-125.69322
3230	22:33:59	44.81778	-125.69411
3229	22:34:29	44.81775	-125.69500
3228	22:34:59	44.81772	-125.69589
3227	22:35:29	44.81769	-125.69678
3226	22:35:59	44.81767	-125.69767
3225	22:36:29	44.81761	-125.69856
3224	22:36:59	44.81758	-125.69945
3223	22:37:29	44.81755	-125.70033
3222	22:37:59	44.81753	-125.70122

3221	22:38:29	44.81747	-125.70211
3220	22:39:00	44.81744	-125.70300
3219	22:39:29	44.81742	-125.70386
3218	22:39:59	44.81739	-125.70475
3217	22:40:29	44.81736	-125.70564
3216	22:40:59	44.81733	-125.70653
3215	22:41:29	44.81730	-125.70741
3214	22:41:59	44.81728	-125.70831
3213	22:42:29	44.81728	-125.70919
3212	22:42:59	44.81725	-125.71008
3211	22:43:29	44.81722	-125.71097
3210	22:43:59	44.81719	-125.71186
3209	22:44:29	44.81717	-125.71275
3208	22:44:59	44.81714	-125.71361
3207	22:45:29	44.81711	-125.71452
3206	22:45:59	44.81708	-125.71539
3205	22:46:29	44.81705	-125.71628
3204	22:46:59	44.81703	-125.71717
3203	22:47:29	44.81700	-125.71806
3202	22:47:59	44.81697	-125.71895
3201	22:48:29	44.81694	-125.71983
3200	22:49:00	44.81692	-125.72073
3199	22:49:29	44.81689	-125.72158
3198	22:49:59	44.81686	-125.72244
3197	22:50:29	44.81683	-125.72334
3196	22:50:59	44.81680	-125.72420
3195	22:51:29	44.81678	-125.72506
3194	22:51:59	44.81672	-125.72591
3193	22:52:29	44.81669	-125.72678
3192	22:52:59	44.81667	-125.72764
3191	22:53:29	44.81664	-125.72853
3190	22:53:59	44.81661	-125.72939
3189	22:54:29	44.81658	-125.73025
3188	22:54:59	44.81653	-125.73111
3187	22:55:29	44.81650	-125.73197
3186	22:55:59	44.81647	-125.73286
3185	22:56:29	44.81644	-125.73372
3184	22:56:59	44.81642	-125.73458
3183	22:57:29	44.81639	-125.73544
3182	22:57:59	44.81633	-125.73631
3181	22:58:29	44.81630	-125.73716
3180	22:59:00	44.81628	-125.73805
3179	22:59:29	44.81622	-125.73891
3178	22:59:59	44.81619	-125.73978
3177	23:00:29	44.81614	-125.74064
3176	23:00:59	44.81608	-125.74149
3175	23:01:29	44.81606	-125.74236
3174	23:01:59	44.81600	-125.74322
3173	23:02:29	44.81594	-125.74408
3172	23:02:59	44.81591	-125.74494
3171	23:03:29	44.81586	-125.74580
3170	23:04:00	44.81580	-125.74669

APPENDIX B

UTIG OBS SEG-Y Format Tape Trace Header Information

Bytes ¹	Value ²	Data Description	Unit
1-4, 5-8	v	Trace sequence number	
9-12	v	Field record number ³	
13-16	v	Component ⁴	
17-20	v	Shot number	
29-30	1	Trace identification code = seismic data	
31-32	1	Vertical summing = none	
33-34	1	Horizontal stacking = none	
35-36	1	Data use = production	
37-40	v	Distance from source to OBS	m
41-44	c	OBS depth (negative elevation)	-m
49-52	c	Source depth	m
61-64	v	Water depth at source	m
65-68	c	Water depth at OBS	m
69-70	1	Depth scale factor = 1	
71-72	-10	Coordinate scale factor = 0.1	
73-76	v	Source longitude	0.1"
77-80	v	Source latitude	0.1"
81-84	c	OBS longitude	0.1"
85-88	c	OBS latitude	0.1"
89-90	2	Coordinate units = seconds of arc	
109-110	v	Delay recording time ⁵	ms
115-116	c	Number of samples	
117-118	c	Sample interval	μs
119-120	3	Instrument gain type = floating point	
141-142	c	Alias filter frequency	Hz
143-144	24	Alias filter slope	dB/oct
157-158	c	Year data recorded	
159-160	v	Day of year	
161-162	v	Hour of day	
163-164	v	Minute of hour	
165-166	v	Second of minute	
167-168	v	Millisecond of the first sample of the trace ⁶	
181-184	v	Shot azimuth ⁷	0.01°

¹Those not listed are all zeroes

²v = variable for each trace; c = generally constant for each OBS/line

³Usually OBS record number plus a constant offset to give a unique record number to each record

⁴1 = horizontal 1 or radial; 2 = horizontal 2 or transverse, 3 = vertical

⁵Note that this quantity varies for each trace, and usually is negative at close ranges

⁶Note that this is a non-SEG-standard entry

⁷Azimuthal angle of shot location as seen from OBS, measured clockwise from north