

Date: July 1, 1998
 To: Dale Sawyer
 From: Colin Zelt
 Subject: Processing of the UTIG OBS data from the 1997 Iberia cruise
 into final SEG-Y format: Deployments 1 and 2

Final SEG-Y files have been created for the UTIG OBS data from the Iberia cruise for deployments 1 and 2. They include all the relevant in-line and off-line data, for all four components where available, two components otherwise. OBSTOOL was used to locate the OBS's, rotate the horizontal components into radial and transverse components, calculate and apply all clock corrections, and produce the final SEG-Y files. The final locations, average water velocities, and OBS orientations are listed below.

OBS	latitude (degrees)	longitude (degrees)	depth (m)	water velocity (m/s)	OBS orientation (degrees)
106	42.08465	-12.52396	5239	1515	30.3
107	42.08237	-12.47799	5212	1516	132.3
108	42.08570	-12.41460	5114	1515	244.9
109	42.08563	-12.33138	5023	1515	255.6
120	42.02387	-12.41489	5164	1516	126.3
121	42.13996	-12.41415	4963	1514	20.9
122	42.19898	-12.41607	4862	1514	226.5
125	42.14213	-12.52515	5060	1515	195.3
126	42.20009	-12.52502	5069	1515	191.6
110	42.08842	-12.22205	4802	1513	52.8
111	42.08915	-12.11439	4241	1509	173.4
227	42.09512	-10.94216	2649	1505	151.2
228	42.09320	-10.69876	2789	1505	324.6
229	42.09357	-10.45575	2774	1505	343.7
230	42.08936	-10.21338	2697	1505	186.2
231	42.09137	-9.97014	2378	1505	97.7
232	42.08759	-9.76402	2260	1505	322.7
233	42.08696	-9.56383	1699	1507	269.4
234	42.08319	-9.36377	238	1505	6.7
235	42.08044	-9.15680	147	1506	198.4
250	41.30762	-11.93394	3531	1507	221.6
251	41.30332	-12.35269	5202	1516	116.1

Most SEG-Y files are named 'obsdata.###.seg.y.L.c*', for example, 'obsdata.106.segy.1.c1', using the following convention:

= obs station number
 L = line number
 * = component type (1 = vertical; 2 = radial; 3 = transverse; 4 = hydrophone)

SEG-Y files for OBS's 110, 111, 235, 250, and 251 are named 'obsdata.###.@.seg.y.L.c*', for example, 'obsdata.110.4.segy.1.c1', where @=4 when 4-component data acquisition occurred and @=2 when 2-component data acquisition occurred.

Line 3 refers to data recorded along line 1 using a 60-second shot interval; line 1 refers to the 20-second data along 1. Line 0 refers to the shots along two "loops" performed by the ship to the northwest and southeast of the intersection of lines 1 and 5.

All data are in reduced travelttime format using a reduction velocity of 8 km/s. The trace start and end times for the data from deployment 1 are 2 and 20 seconds (reduced time) and 0 and 20 seconds (reduced time) for deployment 2. The sample rate is 5 ms. The time delay for each trace is written in 32-bit format starting at byte 107 in the SEG-Y header.