

5. UNDERWAY GEOPHYSICS¹

Shipboard Scientific Party²

Shipboard navigation and geophysical data acquisition were similar to those reported for Leg 149 (Sawyer, Whitmarsh, Klaus, et al., 1994) except for the following two differences: (1) seismic reflection data for Leg 155 were acquired with a single, 80-in.³ water gun; (2) seismic data were recorded on a new seismic work station (a Sun Microsystems Sparc 10/40 work station) using "a2d" seismic acquisition software.

Table 1 indicates when and what types of underway geophysical data were acquired. During transit, we collected navigation, 3.5-kHz, and 12-kHz precision depth recorder (PDR) profiles and magnetic field data. In the immediate vicinity of most sites, we also collected single-channel seismic profiles (Fig. 1). During Line 2, we experimented with various gun and streamer depths to optimize resolution of the upper part of the sediment column, and the remaining lines were run with a streamer depth of about 6 to 8 m.

REFERENCE

Sawyer, D.S., Whitmarsh, R.B., Klaus, A., et al., 1994. *Proc. ODP, Init. Repts.*, 149: College Station, TX (Ocean Drilling Program).

Ms 155IR-105

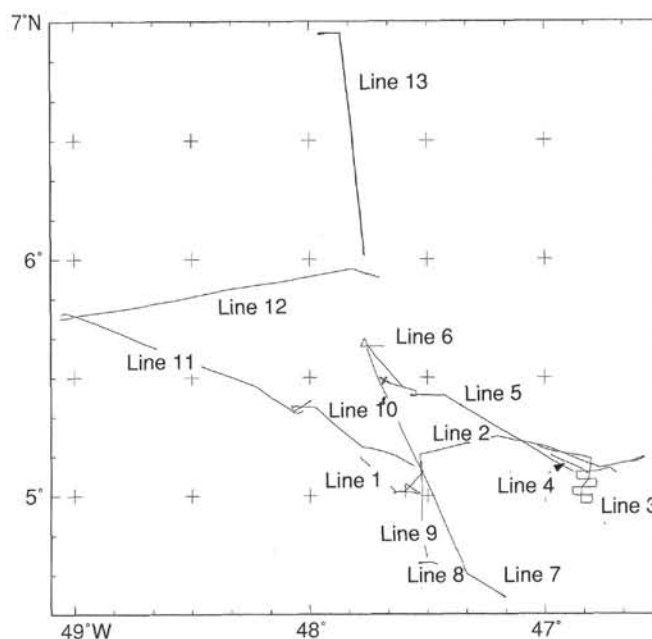


Figure 1. Chart of ship's track during Leg 155 acquisition of seismic data.

Table 1. Intervals of underway geophysical data acquisition during Leg 155.

Line number	3.5-kHz PDR		Seismic reflection		Magnetic
1	2200, March 28	1850, April 1	1203, April 1	1730, April 1	yes
2	2022, April 4	1800, April 5	0130, April 5	1440, April 5	yes
3	1820, April 10	0500, April 11	1845, April 10	0315, April 11	yes
4	2055, April 12	2310, April 12	-	-	no
5	1730, April 15	0415, April 16	2130, April 15	2333, April 15	yes
6	1300, April 22	1730, April 22	1410, April 22	1640, April 22	yes
7	0550, April 27	1510, April 27	1200, April 27	1255, April 27	yes
8	1055, May 1	1300, May 1	-	-	yes
9	0115, May 3	0440, May 3	-	-	no
10	0006, May 6	0550, May 6	0255, May 6	0505, May 6	yes
11	0212, May 9	1100, May 9	-	-	no
12	1145, May 11	0015, May 12	1930, May 11	2100, May 11	no
13	1240, May 17	1950, May 17	1815, May 17	1915, May 17	no
14	0800, May 21	0100, May 24	-	-	yes

Note: All times in UTC.

¹Flood, R.D., Piper, D.J.W., Klaus, A., et al., 1995. *Proc. ODP, Init. Repts.*, 155: College Station, TX (Ocean Drilling Program).

²Shipboard Scientific Party is as given in the list of participants in the contents.