

DLWR 9305
93009
Day = 7

Cruise Report for Delaware II 93-05 May 22-May 27, 1993

Area: Hudson Shelf Valley

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Scientific Crew: Barry Irwin, Rick Rendigs, Ken Parolski, Eric Schmuck (all USGS), Chris Caylor, Peter Cattaneo (NAGT students), and Mead Allison (SUNY)

5/22 JD 142 Depart Woods Hole at 0950 (EDT) under cloudy skies and calm seas for the New York Bight to begin a cruise of seismic profiling-side scan grab sampling, and coring plus video of the Hudson Shelf Valley. After minor generator problems and a fire drill we arrived at the head of the Hudson Shelf Valley off the entrance to New York Harbor.

5/23 JD 143 0505Z we began line 1 which we completed by 0605Z at a crossing well down the Hudson Shelf Valley. 0730Z collected a grab sample but without adequate video lighting. Between 0730 and 1020Z we tried additional grabs and a slow core but grabs were flawed because we could not see the bottom with the video and light before we sampled it. Further the surface of the sea floor sampled by the Van Veen was badly mashed because the sampler sank in up to its hinges. After a short was fixed in the main power cable to the video and some flotation was added to the Van Veen, our sampling efforts improved. Starting at 1020Z we began the sidescan-3.5 kHz profiling in earnest by running lines 2-19 up the axis of the Hudson Shelf Valley. 2330, seas picking up. Completed thalweg line up Hudson Shelf valley by 2106 Z and began to collect the cross valley lines.

5/24 JD 144

Continued to collect the cross valley side scan-3.5-kHz profiles 20-59 under choppy sea conditions. Completed the last geophysical line at 1729 Z and pulled the gear to begin sampling! Sta. 34 grab/video and slow core between 1933 Z and 2014 Z; Sta. 33 grab/video between 2054 Z and 2122 Z; Sta. 32 slow core and grab sample/video between 2307 Z and 0015 (JD 145)

5/25 JD 145

Continued to do slow core and grab/video stations. Sta 30 slow corer between 0045 Z and 0257 Z --four tries to get a core. Sta. 29 grab/video and slow corer between 0326 Z and 0449 Z-several tries to get a core. Sta. 29E grab/video and slow corer several attempts

at each between 0524 Z and 0623 Z. Proceeding to Sta. 29 W to obtain grab/video and slow core between 0703 Z and 0722 Z. Sta. 31 grab/video in two tries between 0804 Z and 0824 Z, Sta. 28 grab/video at 0950 Z. Sta. 27 between 1038 Z and 1100 Z in two attempts to get a grab/no video. Sta. 26 grab and slow corer between 1126 Z and 1212 Z. Sta. 25 at 1250 Z to obtain a grab and slow core by 1322 Z. Sta. 24, grab at 1446 Z. Sta. 23 S at 1535 Z for one grab sample. Sta. 23 between 16:39 Z and 1717 Z two good slow cores: 1808-1823 Z a grab sample obtained. Sta. 23 W 1859 Z to 1902 Z one grab sample obtained. Sta. 23 E two grab samples obtained between 1932 and 1959 Z. Sta. 23 N, two more grab sample attempts between 2034 and 2053 Z. Sta. 22, between 2135 and 2147 Z one grab/video and one slow core obtained. Sta. 21, between 2256 and 2359 Z one grab/video and one slow core (two attempts) obtained.

5/ 26 JD 146

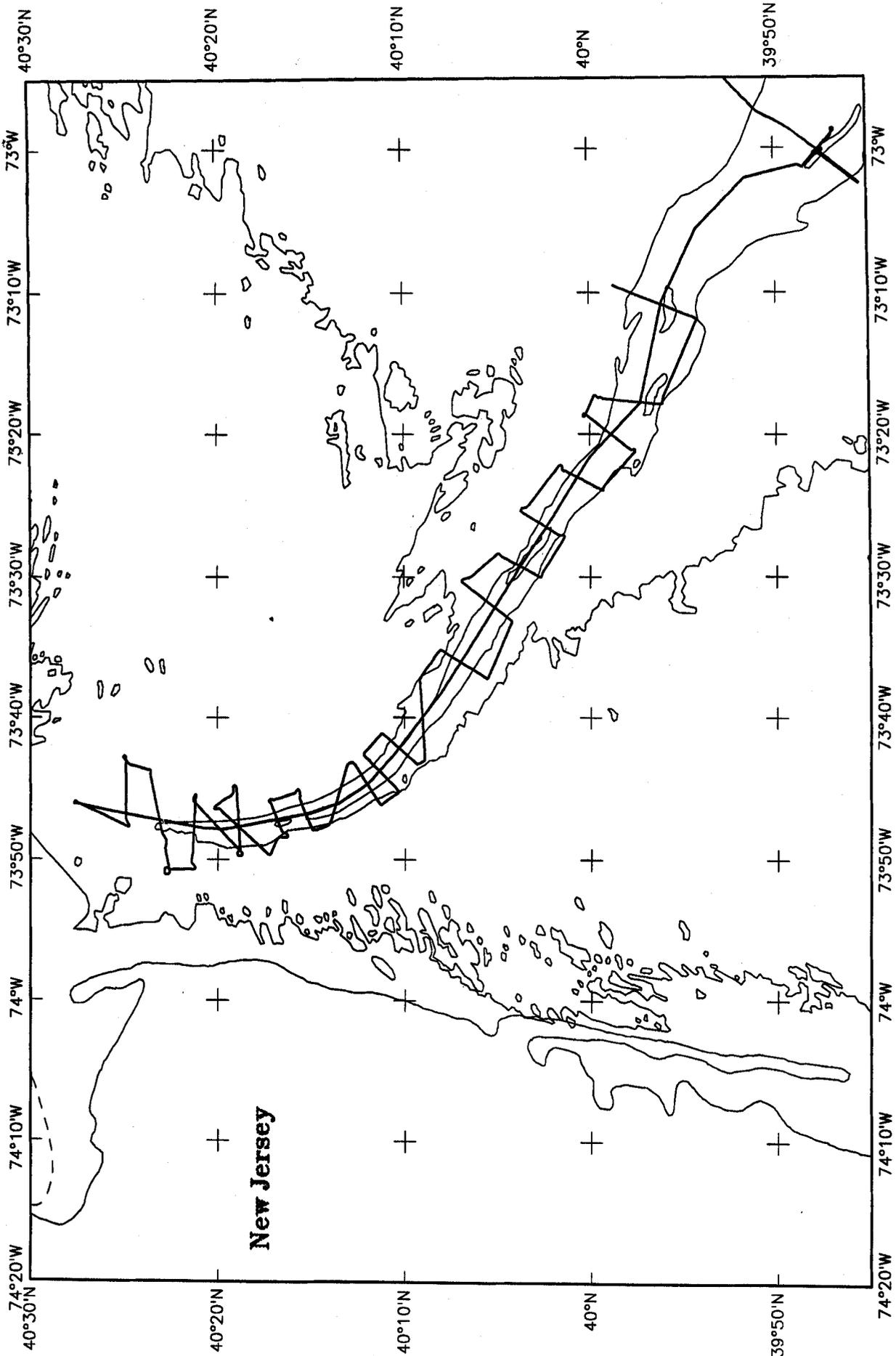
Sta. 20, 0046 and 0204 Z a grab and one slow core obtained after two attempts for the grab/video. Sta. 19, 0238 to 0324 Z a grab/video and one slow core. Sta. 18, 0418 and 0444 Z one grab/video and one slow core. Sta. 16, 0513 and 0543 Z one grab/video and one slow core. Sta. 17, 0618 to 0647 Z we collected one slow core and one video/grab. Sta. 15, 0714 to 0738 Z we collected one slow core and one grab/video. Sta. 14, 0805 to 0831 Z, we collected one slow core and one grab/video. Sta. 13, between 0856 and 0919 z we collected another slow core and a grab/video. Sta. 12, between 0950 and 1040 Z one slow core (two attempts) and one grab/video.. Sta. 11, 1059 to 1145 Z one slow core and one grab/video (two attempts). Sta. 10, from 1210 to 1325 Z we collected one slow (two attempts) and one grab/video. Sta. 9, 1348 and 1448 we collected two slow cores and one grab video. Sta. 8, 1515 to 1551 Z, one slow core and one grab/video (three attempts). Sta. 7 from 1632 to 1726 Z we collected one slow core (two tries) and one grab/video (also two attempts). Sta. 5, from 1757 to 1826 Z, one slow core and one grab/video (two attempts). Sta. 6, from 1853 to 1930 we collected one slow core and one grab/video. Sta.4, 1953 and to 2047 Z, two slow cores and one grab/video. Sta. 3 between 2108 and 2133 Z we collected one slow core and one grab/video. Sta. 2, from 2203 to 2230, we collected one slow core and one grab/video. Sta. 1, 2258 to 2328 Z we collected one slow core and two grab/videos. From 2340 to 0206 Z (JD 147 we

attempted at stations 7, 8, and 9 to collect gravity cores, but without much success.

5/26 JD 147

From 0155 to 0719 we reoccupied several of the previous stations to obtain slow cores where they had been missed earlier because of choppy sea conditions. Now we had calm seas and a chance to get them. Sta. 27 from 0512 to 0517 Z one slow core; Sta. 28 at 0554 Z one slow core. Sta. 29 W at 0646 a slow core. At Sta. 29 E 0719 Z a slow core. From 0850 to 0952 we tried a video transect of the mid-shelf edge of the Hudson Shelf valley but the video malfunctioned and the light would not stay on. At 1153 Z we collected one more slow core at Sta. 31. At 1200 Z we ceased operation in the New York Bight area and headed for Woods Hole, arriving there at 0247 Z (JD 148--5/28) to conclude cruise Dlw 93-05

HUDSON SHELF VALLEY, DE9305



DLWR 93-5
Hudson Shelf Valley
J. Schlee/M. tenBrink
May 22-28, 1993
Sidescan Sonar+3.5K Lines

Line #	Date	JD/Start	JD/End	Zone
1	May 23	143/0434	143/0602	GMT
2		143/1105	143/1134	
3		143/1134	143/1211	
4		143/1211	143/1252	
5		143/1252	143/1337	
7		143/1337	143/1437	
8		143/1437	143/1518	
9		143/1518	143/1605	
10		143/1605	143/1630	
11		143/1650	143/1756	
12		143/1756	143/1836	
13		143/1836	143/1859	
14		143/1859	143/1917	
15		143/1917	143/1937	
16		143/1937	143/2017	
17		143/2017	143/2027	
18		143/2027	143/2106	
19		143/2106	143/2128	
20		143/2138	143/2205	
21		143/2213	143/2241	
21?		143/2250	143/2255	
22		143/2255	143/2305	
23		143/2305	144/0008	
24		144/0008	144/0019	
24?		144/0019	144/0031	
25		144/0037	144/0108	
26		144/?	144/0207	
27		144/0213	144/0239	
28		144/0248	144/0301	
29		144/0306	144/0345	
30		144/0345	144/0406	
31		144/0406	144/0426	
32		144/0426	144/0443	
33		144/0443	144/0506	
34		144/0506	144/0515	
35		144/0515	144/??	
36		144/?	144/0552	
37		144/0552	144/0621	
38		144/0621	144/0633	
39		144/0633	144/0659	
40		144/0700	144/0713	
41		144/0715	144/0739	
42		144/0739	144/0744	
43		144/0745	144/0827	
44		144/0828	144/0845	
45		144/0848	144/0916	
46		144/0916	144/0950	
47		144/0951	144/1025	
48		144/1042	144/1054	
49		144/1058	144/1124	
50		144/1149	144/1153	
51		144/1158	144/1223	
52		144/1230	144/1301	
53		144/1308	144/1335	
54		144/1341	144/1408	

55	144/1413	144/1445
56	144/1451	144/1503
57	144/1508	144/1547
58	144/1551	144/1640
59	144/1642	144/1729