

R/V Wecoma Cruise W1110B

Ports: Newport, OR, Newport, OR

Dates: 15 Nov. – Dec. 1, 2011

Cruise Objectives

The primary objective is to deploy 25 Ocean-Bottom Seismographs (OBS) at the locations listed in Table 1 and in the Excel spreadsheet submitted with this document, and shown in Figure 1. Each OBS will be deployed by free-fall, and the *Wecoma* will remain on station until the OBS reach the seafloor. At that time, an acoustic survey lasting approximately 1 hour will be conducted in order to determine the position of the OBS on the seafloor.

Two types of OBS will be deployed: 15 systems of a new WHOI design (Figure 2), and 10 WHOI Keck OBS (Figure 3) identical to those deployed and recovered on W1007B and W1106B, respectively. OBS operations will take place 24/7. WHOI will bring 4 engineers/technicians. WHOI will not put a lab. van aboard.

The planned cruise track is indicated by the order of the stations listed in the Excel spreadsheet. Of course, this can be modified in the light of bad weather etc. The timeline was calculated assuming a transit speed of 10 knots, but contingency days were added for bad weather.

It is desirable that the ocean sound-speed be determined at each of our planned stations, but this may not be possible because of time, weather or personnel availability. This can be done with XBTs or a CTD casts.

Personnel

John Collins (WHOI), Chief Scientist

Emily Hooft (Univ. Oregon), Co-Chief Scientist

Alan Gardner (WHOI), Engineer

Tim Kane (WHOI), Technician

Dan Kot (WHOI), Technician

Matt Gould (WHOI), Technician

Site Name	Site Latitude (deg)	Site Latitude (min)	Site Latitude (hemi)	Site Longitude (deg)	Site Longitude (min)	Site Longitude (hemi)	Site Elevation (m)	Site Latitude (decimal degrees)	Site Longitude (decimal degrees)
G3	40	3.46200	N	126	6.95400	W	-4020	40.05770	-126.11590
G30	41	55.93800	N	128	32.35800	W	-3276	41.93230	-128.53930
J6	43	24.62400	N	128	47.74800	W	-3222	43.41040	-128.79580
J23	44	53.20800	N	129	39.06000	W	-2654	44.88680	-129.65100
J32	45	42.81600	N	130	35.67600	W	-2766	45.71360	-130.59460
J31	45	33.21000	N	129	43.67400	W	-2360	45.55350	-129.72790
J30	45	23.20200	N	128	51.93000	W	-2839	45.38670	-128.86550
J29	45	12.80400	N	128	0.46800	W	-2808	45.21340	-128.00780
J28	45	2.01000	N	127	9.31200	W	-2865	45.03350	-127.15520
J37	45	51.89400	N	127	59.14200	W	-2858	45.86490	-127.98570
J38	46	2.29200	N	128	51.19800	W	-2776	46.03820	-128.85330
J39	46	12.28800	N	129	43.53600	W	-2179	46.20480	-129.72560
J48	47	0.34200	N	130	33.43800	W	-2913	47.00570	-130.55730
J47	46	50.75400	N	129	40.22400	W	-2685	46.84590	-129.67040
J46	46	40.75200	N	128	47.29200	W	-2751	46.67920	-128.78820
J45	46	30.33600	N	127	54.65400	W	-2747	46.50560	-127.91090
J52	46	58.99800	N	127	2.42400	W	-2620	46.98330	-127.04040
J53	47	9.80400	N	127	55.36200	W	-2688	47.16340	-127.92270
J54	47	20.20200	N	128	48.63000	W	-2667	47.33670	-128.81050
J55	47	30.16800	N	129	42.20400	W	-2717	47.50280	-129.70340
J63	48	12.37200	N	130	0.21000	W	-2856	48.20620	-130.00350
J69	48	37.65000	N	128	44.34000	W	-2566	48.62750	-128.73900
J61	47	52.33200	N	128	11.89200	W	-2639	47.87220	-128.19820
J68	48	27.25800	N	127	49.81200	W	-2588	48.45430	-127.83020
J67	48	16.43400	N	126	55.62000	W	-2556	48.27390	-126.92700

Table 1. Planned station deployment locations for the 25 OBS to be deployed from the Wecoma on Cruise 1110B, Nov. 15 – Dec. 1.

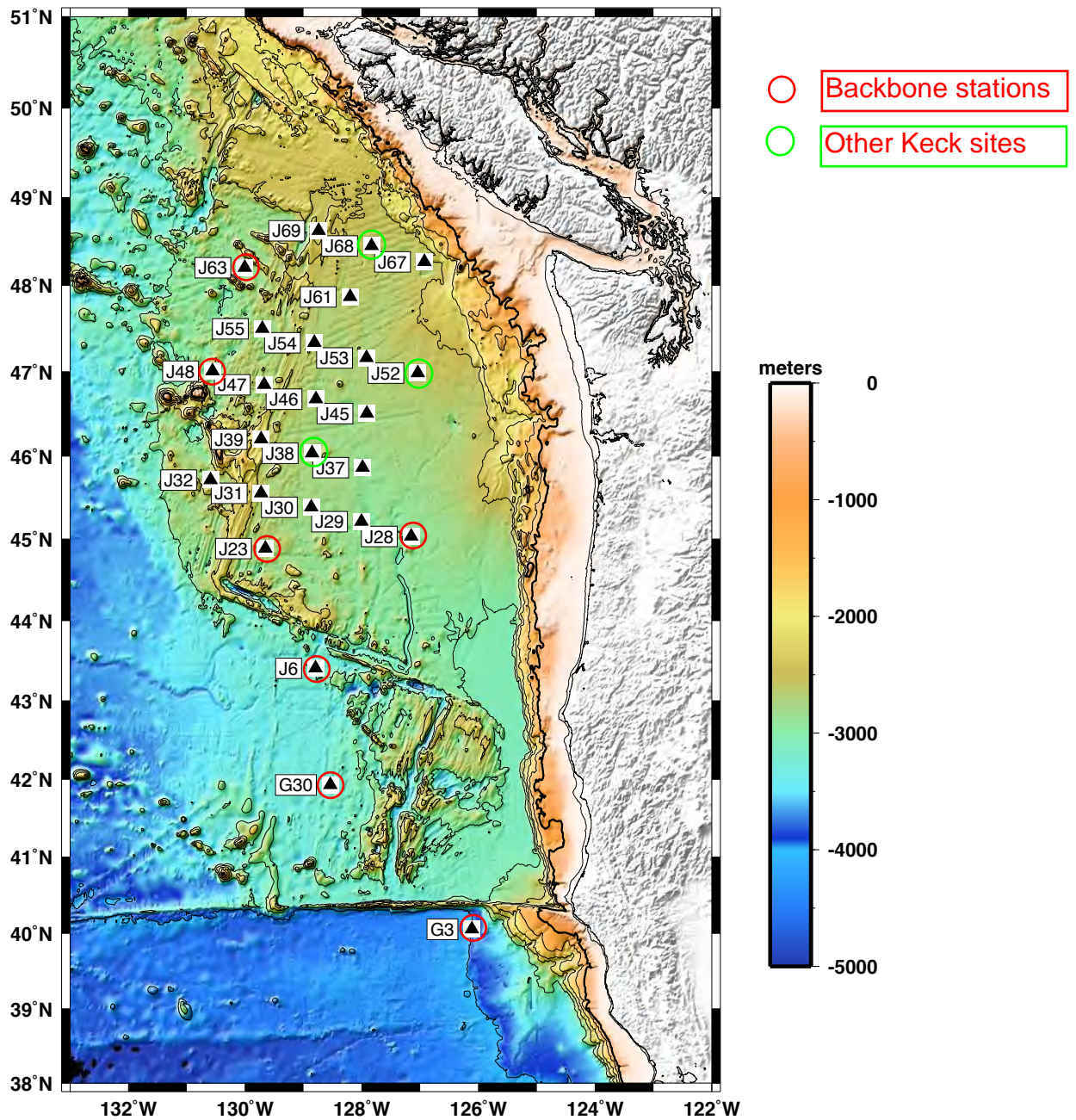


Figure 1. Planned OBS station locations. See Excel spreadsheet for positions. Plan is to deploy from south (G3) to north (J67).



Figure 2. New WHOI OBS. A total of 15 OBS of this design will be deployed.

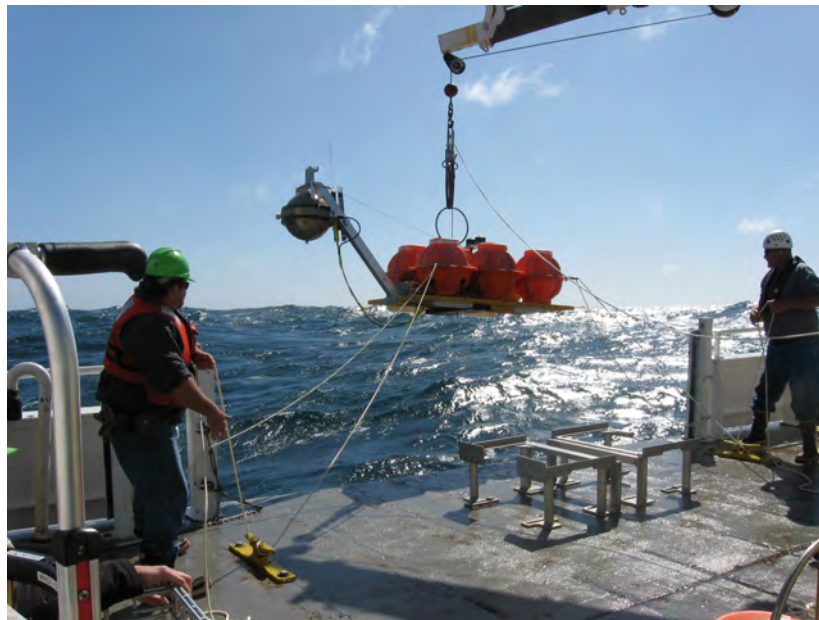


Figure 3. WHOI Keck OBS on the Wecoma cruise W100B. A total of 10 OBS of this design will be deployed.