

## Cascadia Initiative Recovery Cruise OC1306A; 17 June – 22 June 2013

The objective of cruise OC1306A aboard the R/V Oceanus was to recover sections of an array of ocean bottom seismometers (OBSs) deployed in 2012 as part of the National Science Foundation's Cascadia Initiative. The cruise took place during 17-22 June 2013 and recovered fifteen trawl resistant Abalone instruments built by the Scripps Institute of Oceanography (SIO). The OBS design includes three-component seismometers and Dynamic Pressure Gauges (DPG) designed to detect vertical seafloor ground motion. The OBS were deployed at sites west and east of the accretionary prism along the southern Juan de Fuca plate, from depths as deep as 3480 m to as shallow as 107 m.

This was the second of six recovery/deployment legs scheduled for 2013 and was focused on recovering the fifteen instruments offshore of southern Oregon and northern California. The cruise plan was to recover the shallow stations while transiting south from Newport OR, and then recover deeper water stations during the transit back north. Both the science party and OBS personnel worked a 24 hour schedule to get all instruments recovered as efficiently as possible. The weather was good for the entire six-days of the cruise, and overall recoveries went very smoothly. All 15 OBS instrument packages were recovered; 13 instruments successfully recorded three-component seismic and DPG data for the entire deployment period. Two OBS (FS1 & J20) failed to record DPG data, one OBS (J10) had a 62 sec clock drift for the year, and two OBS (G12B & FS14) recorded data for only 2 and 3 months, respectively

The table and map below shows the recovery sites (names are labelled with "B" to represent second year recovery). The complete cruise report is available from the cruise chief scientist Bob Dziak (Oregon State University/NOAA).

Additional information about the community experiment and details of the ongoing 2013 cruises is available of the Cascadia Initiative Expedition Team website:  
<http://pages.uoregon.edu/drt/CIET/>

*Prepared by the Cascadia Initiative Expedition Team.*

**Table 1: 2013 Recovered OBS Locations (Locations surveyed in 2012)**

Station Name	Lat deg	Lat min	N/S	Long deg	Long min	E/W	Depth (m)
J18B	44	0.498	N	125	27.959	W	3047
J10B	43	20.964	N	125	32.612	W	3093
M11B	42	55.922	N	125	1.027	W	1109
M12B	42	11.040	N	124	56.766	W	1045
M14B	40	59.103	N	124	35.385	W	638
FS14B	40	29.730	N	124	35.505	W	107
J9B	40	12.069	N	124	43.628	W	252
FS01B	40	19.606	N	124	56.950	W	940
G02B	40	2.916	N	125	17.816	W	1920
G10B	40	40.672	N	125	33.200	W	2936
G12B	40	41.216	N	127	13.731	W	3080
G27B	41	54.995	N	126	1.002	W	3480
G28B	41	56.565	N	126	44.031	W	3327
G37B	42	35.478	N	127	43.280	W	3004
J20B	44	21.251	N	127	5.710	W	2934
J09B	43	9.087	N	124	43.644	W	252

