

## Cascadia Initiative deployment update – OC1407A July 10-18, 2014

The fourth cruise of 2014 to deploy ocean bottom seismographs (OBSs) for the for the Cascadia Initiative community experiment was conducted on the R/V Oceanus cruise OC1407A from July 10-18, 2014. The Year 4 OBS array covers the southern Juan de Fuca (JdF) / Gorda plate and the Cascadia margin. Data from this deployment will be available to the community after the instruments are recovered in the summer of 2015.

OC1407A deployed 24 OBSs built by the Woods Hole Oceanographic Institution (WHOI). Fourteen of these are “ARRA” instruments built with funds from the American Recovery and Reinvestment Act and 10 were built with funds from the W. M. Keck Foundation. Both the science party and OBS personnel worked close to a 24-hour schedule to get all of the instruments deployed while the weather permitted.

The ARRA instruments were deployed first at deep water sites determined by the community on the southern Juan de Fuca / Gorda plate and just south of the Mendocino transform fault sailing in an anticlockwise pattern. The Keck OBSs include a strong-motion accelerometer and were then deployed as part of a tight array on the continental slope just north of the Mendocino triple junction – in year 2, local earthquakes in this region had saturated seismometer channels on other OBSs. To minimize the chances of the OBSs being disturbed by bottom trawling, the Keck OBSs were either deployed in Essential Fish Habitats or at depths exceeding 1000 m. The cruise went as planned, except for a day spent in port in Eureka to fix a ship’s generator.

A complete cruise report, additional information about the community experiment, and details of ongoing planning for 2013 and beyond is available of the Cascadia Initiative Expedition Team website: <http://cascadia.uoregon.edu/CIET>. Prepared by the Cascadia Initiative Expedition Team.

