Data Analysis of Ocean Bottom Seismometers: San Vicente deployment

Roberto Cabieces Díaz (1), Antonio Pazos García (1), José Santos Loaisa (1), and María Araceli García Yeguas (2)
(1) Real Instituto y Observatorio de la Armada, Spain (rcabdia@roa.es), (2) Universidad de Cádiz, Spain (araceli.garcia@uca.es)

The localization of earthquakes with sea focus is one of the problems that show the seismicity in the Iberian Peninsula. One solution to this problem is the use of ocean bottom seismometers (OBS) to fill the seismic ground net.

Data from an OBS’s array and ground seismometers stations have been combined to relocate earthquakes in the area of Cape S. Vicente from September 2015 to April 2016, using non linear methods.

Previously to this relocalization OBS data have been analyzed to remove tilt noise from low-frequency, measure clock drift and calculate the orientation of the horizontal components. Moreover, a brand new positioning technique has been implemented to locate the OBS on the sea bottom.