

A method to obtain an OBS precise location at the sea floor in active and passive experiments.

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One of the problems working with Ocean Bottom seismometers (OBS) is to determine the position at the sea floor. For the positioning of the OBS are often taken as a reference the position of the vessel at the moment of anchoring, checking later (although less precise) the OBS recovery location at surface. Since the deep at the deployment location is usually large (typically greater than 1000 meters), the OBS can vary its position at the seabed due to its drift (the OBS are developed to be anchored with a velocity about of 60 meters per minute, that is for each 1000 meters the OBS deployment takes something more than 16 minutes). This presentation shows a method to estimate a precise of the OBS location at the seabed for active seismic profiles (using the source arrivals) and also for passive experiments (using acoustic ranges). The method has been applied to the NORCARIBE project (active experiment) and also to the ALERTES-RIM OBS array deployment (passive experiment). In this presentation the method and the results will be shown.