



## **THE SEISMIC BROAD BAND WESTERN MEDITERRANEAN (WM) NETWORK AND THE OBS FOMAR POOL: Current state and OBS activities.**

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The Western Mediterranean (WM) seismic network started in 1996 as an initiative of the Royal Spanish Navy Observatory (ROA) and the Universidad Complutense de Madrid (UCM), with the collaboration of the Geoforschungszentrum (GFZ) of Potsdam. A first broad band seismic station (SFUC) was installed close to Cádiz (South Spain). Since then, additional stations have been installed in the Ibero-Moghrebian region. In 2005, the “WM” code was assigned by the FDSN and new partners were jointed: Evora University (UEVO, Portugal), the Scientifique Institute of Rabat (ISRABAT, Morocco), and GFZ.

Now days, the WM network is composed by 15 BB stations, all of them with Streckaisen STS-2 or STS-2.5 sensors, Quanterra or Earthdata digitizers and Seiscomp. Most them have co-installed a permanent geodetic GPS stations, and some them also have an accelerometer. There are 10 stations deployed in Spanish territory (5 in the Iberian peninsula, 1 in Balearic islands and 4 in North Africa Spanish places) with VSAT or Internet communications, 2 in Portugal (one of them without real time), and 3 in Morocco (2 VSAT and 1 ADSL). Additionally, 2 more stations (one in South Spain and one in Morocco) will be installed along this year. Additionally ROA has deployed a permanent real time VBB (CMG-3T: 360s) station at the Alboran Island.

Due to the fact that part of the seismic activity is located at marine areas, and also because of the poor geographic azimuthal coverage at some zones provided by the land stations (specially in the SW of the San Vicente Cape area), ROA and UCM have acquired six broad band “LOBSTERN” OBS, manufactured by KUM (Kiel, Germany), conforming the OBS FOMAR pool. Three of them with CMG-40T sensor and the other with Trillium 120. These OBS were deployed along the Gibraltar strait since January to November 2014 to study the microseismicity in the Gibraltar strait area. In September 2015 FOMAR network has been deployed in SW of the San Vicente Cape for 8 months as a part of ALERTES-RIM project.

In this work the current state and future plans of the WM network, the results of the Gibraltar strait campaign and San Vicente Cape OBS experiment are shown.