Figure 1 Block diagram of the seismic acquisition equipment

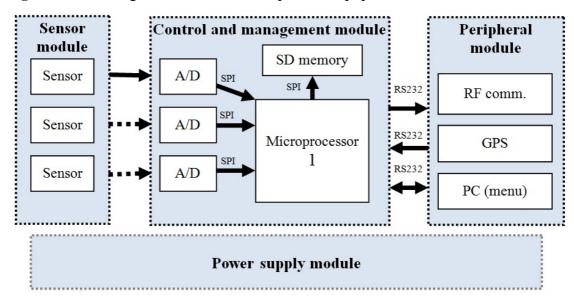


Figure 2 Volcanic seismic acquisition equipment

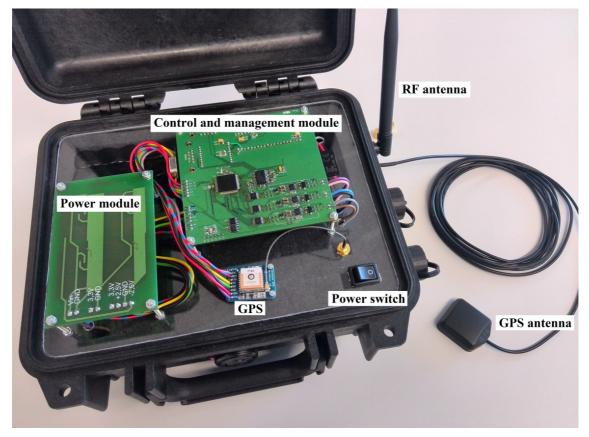


Figure 3 Location of batteries inside waterproof box

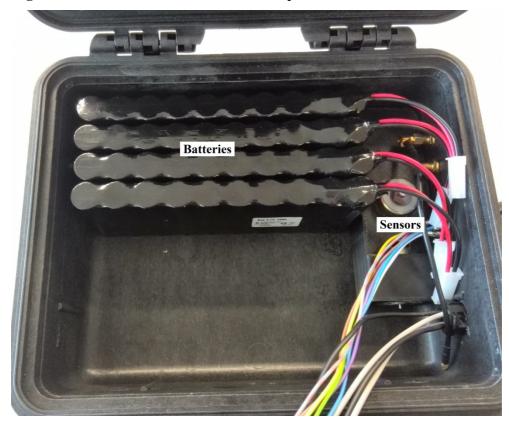


Figure 4 Seismic event detected in El Hierro on 16/07/2012 at 03:01:09 at a depth of 20km (contrasted data with IGN events catalogue), using the STA/LTA algorithm (Short Time Average / Long Time Average).

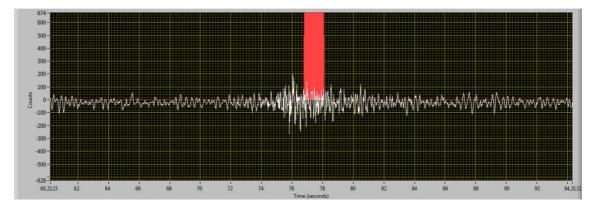


Figure 5 Response of SM6 sensor according to the manufacturer [22]

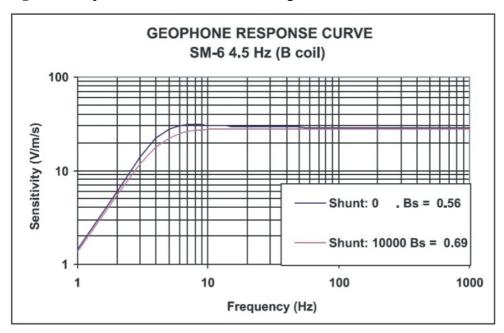


Figure 6 Equivalent circuit of the SM6 sensor

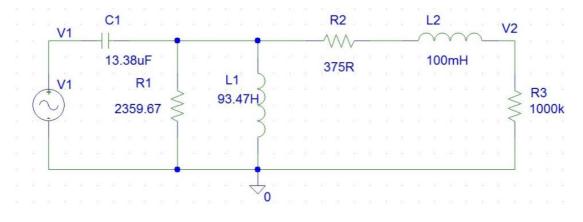


Figure 7 Electromagnetic sensor responses through the conditioning circuit

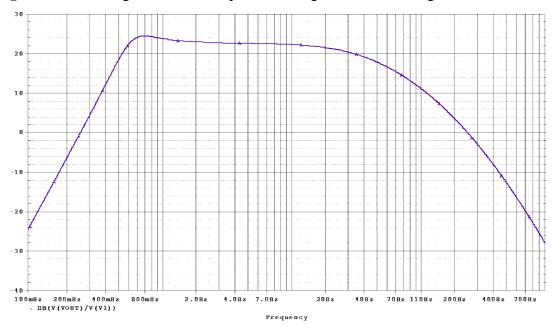


Figure 8 Test connections in the table vibration

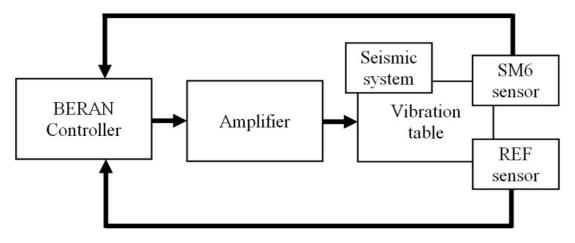


Figure 9 Response of SM6 sensor in laboratory test

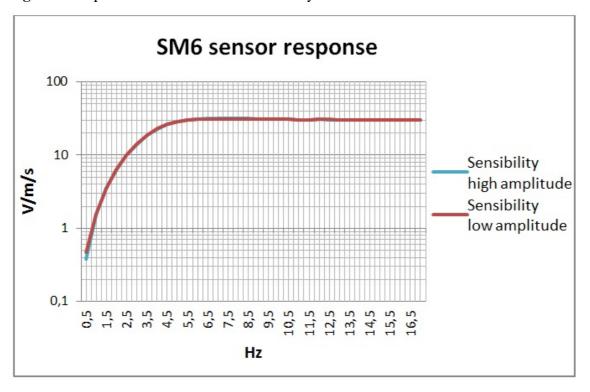


Figure 10 Graphic results of SM6 sensor with the designed conditioned circuit

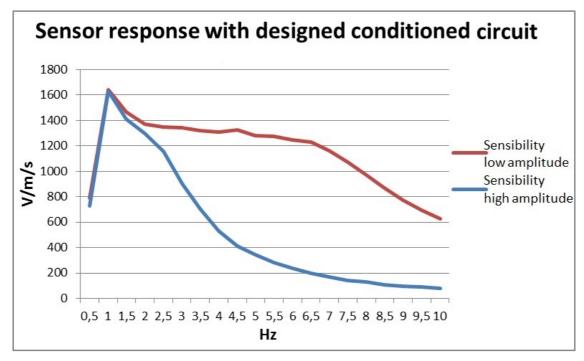
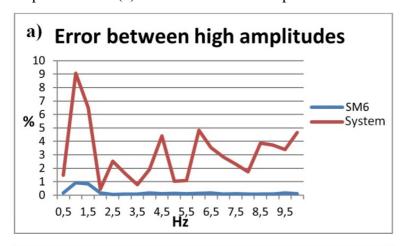


Figure 11 Relative errors between tests with the same features. (a) Error between high amplitudes test. (b) Error between low amplitudes tests.



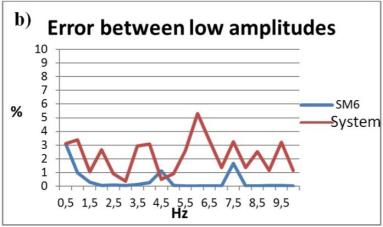
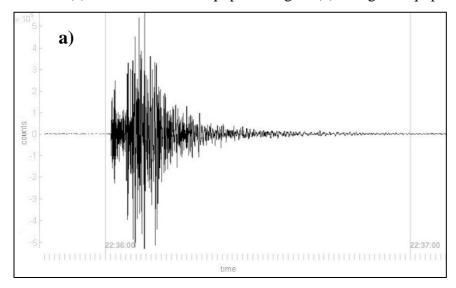


Figure 12 Obtained events on *El Hierro* Island in Canary Islands, on September 3, 2014 at 22:36.(a) Taurus reference equipment signal (b) Designed equipment signal



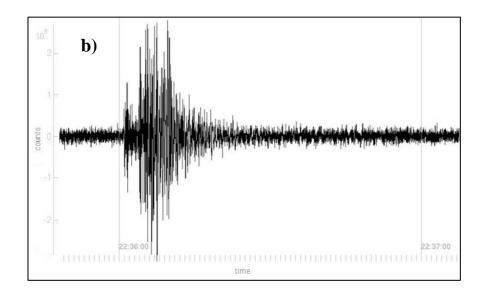


Figure 13 Comparison of acquired signals. Designed equipment in blue, and reference equipment in red.

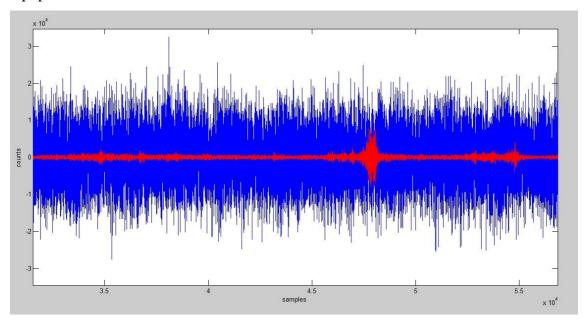
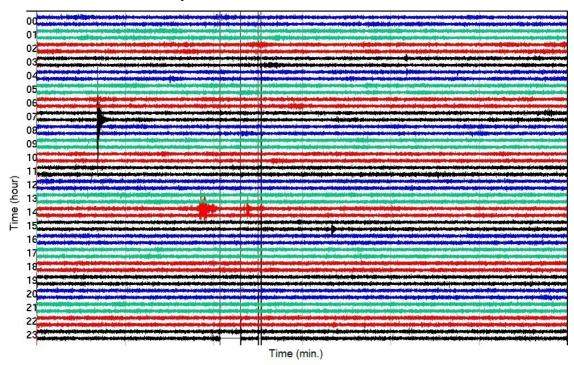


Figure 14 Signal acquired by reference equipment in a complete day in *Las Cañadas del Teide* in Tenerife, Canary Islands. December 13, 2014.



^{*} Each data line of vertical axis represents 30 minutes of the corresponding hour.

Figure 15 Obtained events in *Las Cañadas del Teide* in Tenerife, Canary Islands, on December 13, 2014 at 07:33. (a) Guralp reference equipment signal. (b) Designed equipment signal.

