



Analyse of seismological broad-band observation at 2400m on sea floor in Mediterranean Sea.

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In the frame of the Antares Neutrino telescope which will be deployed on sea floor, a broad-band seismological sensor (Guralp GMG3T, 360 sec) coupled with a differential pressure gauge has been installed. Sensor is powered and data are collected on land in quasi-real time thanks to a communication cable which make the instrument usable in the regional seismic alarm network. In that purpose, we first analyse carefully the large seismic noise observed on the records, mainly on the horizontal components. We show that there was no large improvement with time since the installation of the sensor in March 2005 even at the larger periods (360 s - 120 s). In the frequency band of 40 s to 1 s noise amplitude is strongly related to the meteorological conditions, as it is on land stations of the TGRS network running in the same area. We propose some possible improvement on the installation of the sensor on the sea floor which should be tested. Data from some teleseismic events are used to characterise the superficial layer of sediments on this part of the Ligurian margin