

Measurements of ambient noise in the sea, using mobile low cost autonomous recorders

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ABSTRACT

The paper presents the instrumentation, configuration and the testing of mobile underwater listening stations aiming at the monitoring of the ambient noise in the marine environment. The testing of these stations has been performed in the framework of the European Commission funded project “QUIETMED” aiming at the homogenization of the practices to be adopted by European countries around the Mediterranean basin in order to fulfill the requirements of the Marine Strategy Framework Directive (MSFD) of the E.C, with respect to the marine ambient noise monitoring.

In particular, the instrumentation, large part of which was self-made at the Hydroacoustics Laboratory of FORTH, the calibration of the underwater listeners, the two types of deployments tested and the pilot experiments that were held in the north and south coast of Crete, will be presented and analyzed. The suggested post-processing of the recordings in order to be referred to the properties of the ambient noise of interest for the MSFD in the low frequency range will also be explained, accompanied by a set of typical graphs, illustrating the different output of the post-processing.

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