ID 10- HYDROPHONE INSTALLATION IN THE RAIA OCEAN-METEOROLOGICAL OBSERVATORY NET

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Abstract

An Iclisten hydrophone has been installed in a metocean platform of RAIA Obervatory, as part of the MarRisk project, and data are being uploaded to EM-ODnet web portal.

KEYWORDS - HYDROPHONE, AMBIENT NOISE, MSFD, EMODNET.

I. DESCRIPTION

The RAIA Observatory monitoring network provides reliable monitoring network provides reliable in-situ meteorological and oceanographic information. MarRisk project aims to improve resilience against climate change collecting and analysing metocean data. As part of this project, this year an ICListen hydrophone has been integrated in one station, new energy supply system and

new storage system has been installed and ambient underwater noise is being recorded currently. Data is being processed in a raspberry pi 3 and the resulting SPL, SPL63, SPL125 and SPL2k are being uploaded to an EMODnet data center that checks and validate the calculated noise parameters.

II. CONCLUSIONS

Although the equipment has been installed recently, we can appreciate that the results are being good. It is still necessary to improve and optimize the energy generation system that now consists of 3 solar panels of 90w and a wind turbine of 90w. At the moment, raw data are stored in a 256GB memory that needs to be changed every month, which forces us to move to the station. In the future we may discard save these raw data and only save the processed that occupy much less volume.



Fig 1.Above, pictures of the station. Image below is a chart captured at EMODnet website in 9/28/2018

