

Underwater gliders: Improving the ocean observation strategy in the Macaronesian region

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Abstract: In-situ ocean observations have been traditionally carried out through oceanographic ships, VOS, moorings, drifters and floats mainly. All of them are able to sample water column biogeochemical parameters but not always within the right spatial-temporal resolution, operational and cost-effective required ratio.

Nowadays, cutting-edge technology tools allows to have autonomous and permanent ocean sites furnished with multidisciplinary observing platforms and sensors, providing product-information to the end-users in real time.

The European Station for Time-series in the Ocean -ESTOC-, as internationally recognized ocean site in the Eastern Central Atlantic (Macaronesian region), has recently improved its sampling program with underwater gliders technology.

This new approach is the result of a collaborative effort between the Oceanic Platform of the Canary Islands - PLOCAN- and the Marine Sciences Institute of Canary Islands (ICCM) where PLOCAN provide all the technical and operational logistics required by the end user, managed by ICCM through its Oceanography's Department.

Keywords: glider, monitoring, oceanography, AUV, Macaronesia, underwater vehicle, ocean observations, time-series, end-user.