



Defining the Canary Islands Oceanic Platform (PLOCAN) Observing System mission

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A permanent multidisciplinary ocean observing system is planned as both a technological and scientific infrastructure for the Canary Islands Oceanic Platform (PLOCAN). The first component of its two-fold mission is to respond to systems and processes' in-situ environmental testing, certification and benchmarking requirements. This will generally take place in dedicated oceanic experimental areas, from the vicinity of the platform to the deep ocean. While these areas and related infrastructures still are at definition stage, an anticipated prerequisite is that testbed observing assets will have to provide a broad range of measurements in agreement with, as well as in contribution to, current and upcoming environmental and technical standards. The second component is to contribute to the global effort towards continuous and real-time multidisciplinary ocean observations. Related activities will encompass climate change parameters characterization as well as important regional specificities like the preservation and study of the region's unique marine biodiversity and sparsely explored seabed. Continuous sampling is planned to progressively expand from the platform vicinity down to the end of the continental slope - to about 3000m depth, the surrounding seabed and water column, then scale up to the region, through mobile systems and fixed open-ocean stations. Such a large and diverse spectrum of observing activities stems from the fact that the PLOCAN observing system is at the center of a long-term strategy, thus granting the opportunity to plan its mission by way of an ambitious set of ocean measurement methods and technologies.