

Symposium on Decadal Variability
of the North Atlantic and its Marine
Ecosystems: 2010-2019



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Symposium on Decadal Variability of the North Atlantic and its Marine Ecosystems: 2010 – 2019

20-22 June 2022

Bergen, Norway

This symposium is endorsed by



2021 United Nations Decade
2030 of Ocean Science
for Sustainable Development

THE EVOLUTION OF THE ZOOPLANKTON COMMUNITY IN THE GULF OF CÁDIZ, SW IBERIAN PENINSULA

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The Spanish Institute of Oceanography (IEO) has been conducting a multidisciplinary study of the marine ecosystem in the Gulf of Cadiz (GoC; SW Iberian Peninsula) since 2009 within the frame of the program Time Series of Oceanographic data in the Gulf of Cadiz (STOCA, in Spanish). The program maintains repeated observations along five across-shelf transects: three times a year from 2009 to 2012 and quarterly on hereafter.

In this paper we present the temporal evolution of the zooplankton community in the GoC. In particular, we focused on samples from three stations located off the Guadalquivir river mouth: GD1 (20 m depth), GD3 (80 m) and GD6 (450 m). Samples were taken with bongo-40 cm paired zooplankton nets (mesh size 200 μ m). Double oblique hauls were conducted from top to bottom or to a maximum depth of 200 m while the ship was steaming at 2.5 kn. A total of 43 samples per station were included in the analysis. Samples were imaged with ZooScan. Full images were processed with ZooProcess which generated set of associated features measured on each identified object (Gorsky et al, 2010). These objects were sorted following a common taxonomic guide using the web application EcoTaxa (<http://ecotaxa.obs-vlfr.fr>). As a sanity check, a variable number of aliquots were directly identified by light microscopy. These results permitted the description of the mean and variable components of the plankton community, their seasonal in the context of the thermohaline and transport variability in the 2010s.

Poster presentation