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ABSTRACT

Benthic ecoregionalisation and conservation issues in the French EEZ of the Kerguelen Island

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Poster

Author One Alexis Martin, UMR BOREA, Muséum national d'Histoire naturelle, Paris, 43 rue Cuvier 75005, alexis.martin@mnhn.fr

Author Two Emmanuelle Trouslard, UMR BOREA, Muséum national d'Histoire naturelle, Paris, 43 rue Cuvier 75005, manue.trouslard@gmail.com

Additional authors

Thomas Saucède, UMR Biogéosciences, Université de Bourgogne Franche-Comté, Dijon, 6 bd Gabriel 21000, thomas.saucede@u-bourgogne.fr

Nadia Améziane, UMR ISYEB, Muséum national d'Histoire naturelle, Paris, 43 rue Cuvier 75005, nadia.ameziane@mnhn.fr

Marc Eléaume, UMR ISYEB, Muséum national d'Histoire naturelle, Paris, 43 rue Cuvier 75005, marc.eleaume@mnhn.fr

Abstract

The Kerguelen Plateau includes several deep sea benthic ecosystems which are characterized by typical faunistical assemblages according to environmental gradients. To highlight the related conservation issues, in the context of the extension of the Marine Reserve of the French EEZ of the Kerguelen Island, a benthic ecoregionalisation analysis, from 100 to 1000 meters depth, has been conducted. The study is based on the generalized dissimilarity modelling approach, which allows crossing biological and environmental data for habitat characterization. Abiotic factors derived from international databases and taxa presence data from the benthic macro-invertebrates organisms collected during the Poker 2 (2010) survey were used. Models have been produced both for taxonomic groups, functional groups, and taxa which are considered by the CCAMLR as bioindicators of the Vulnerable Marine Ecosystems (VME). The modelling results allow to characterize subregions that display homogeneous benthic assemblages. Furthermore, the expert advice used to justify the extension of the marine reserve could be confirmed by this new study based on scientific measurable and repeatable methods.