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Distribution of the jellyfish *Periphylla*. Circles (0-200m), square: mesopelagic (200-100 m), triangle bathypelagic (>1000 m), dots: indeterminate depth.

Distribution of *Pygoscelis* spp.

**THE BIOGEOGRAPHIC ATLAS WILL BE PUBLISHED BY SCAR IN 2014**

A DYNAMIC ONLINE VERSION WILL FOLLOW ON: biodiversity.aq

Infos: scaratlas@naturalsciences.be

http://atlas.biodiversity.aq

Spatial distributions of the 20 clusters types from the pelagic regionalisation analyses

**Records of Sterechinus neumayeri**: suitable area (yellow pixels) and highly suitable area (red pixels)
The Census of Antarctic Marine Life (CAML)

CAML (www.caml.aq) was a 5-year project that aimed at assessing the nature, distribution and abundance of all living organisms of the Southern Ocean. In this time of environmental change, CAML provided a comprehensive baseline information on the Antarctic marine biodiversity as a sound benchmark against which future change can reliably be assessed. CAML was initiated in 2005 as the regional Antarctic project of the worldwide programme Census of Marine Life (2000-2010) and was the most important biology project of the International Polar Year 2007-2009.

The Scope

Biogeographic information is of fundamental importance for discovering marine biodiversity hotspots, detecting and understanding impacts of environmental changes, predicting future distributions, monitoring biodiversity, or supporting conservation and sustainable management actions. The recent extensive exploration and assessment of biodiversity by the Census of Antarctic Marine Life (CAML), and the intense compilation and validation efforts of Southern Ocean biogeographic data by the SCAR Marine Biodiversity Information Network (SCAR-MarBIn / OBIS) provided a unique opportunity to assess and synthesise the current knowledge on Southern Ocean biogeography.

The scope of the Biogeographic Atlas of the Southern Ocean is to present a concise synopsis of the present state of knowledge of the distributional patterns of the major benthic and pelagic taxa and of the key communities, in the light of biotic and abiotic factors operating within an evolutionary framework. Each chapter has been written by the most pertinent experts in their field, relying on vastly improved occurrence datasets from recent decades, as well as on new insights provided by molecular and phylogeographic approaches, and new methods of analysis, visualisation, modelling and prediction of biogeographic distributions.

A dynamic online version of the Biogeographic Atlas will be hosted on www.biodiversity.aq.

The Editorial Team

Claude DE BROYER is a marine biologist at the Royal Belgian Institute of Natural Sciences in Brussels. His research interests cover structural and ecophysiological biodiversity and biogeoGRAPHY of benthic ecosystems, and polar and deep sea bentHIC-ecology. Active promotor of CAML and ANDEEP, he is the initiator of the SCAR Marine Biodiversity Information Network (SCAR-MarBIn). He took part to 19 polar expeditions.

How GRiffithS is a marine Biogeographer at the British Antarctic Survey. He is based in Cambridge (UK) and focuses on the biodiversity, phylogeography, and evolution of benthic invertebrates in the Southern Ocean. He has led many expeditions to Antarctica and is a key contributor to the SCAR-MarBIn database. His research focuses on the biogeography of benthic marine invertebrates in the Southern Ocean.

Cédric D’JouknEM d’ACCO is a research scientist at the Royal Belgian Institute of Natural Sciences, Brussels. His main research interests and specialisms are biogeography and biodiversity of crustaceans, and polar and deep-sea bentHIC-ecology. He is involved in large-scale biogeographic and ecological patterns in space and time, and focuses on the biogeography of benthic invertebrates in the Southern Ocean.

Bruno DANIs is an Associate Professor at the Université Libre de Bruxelles, where his research focuses on polar biodiversity. Former coordinator of the scarmarbin, he is involved in several international initiatives, especially related to mid- and small-scale biodiversity monitoring and assessment. He has published in various fields, including ecology, physiology, biogeography, and biodiversity informatics.

Susie GRANT is a marine Biogeoographer at the British Antarctic Survey. Her work is focused on the design and implementation of marine protected areas, particularly through the use of biogeographic information in systematic conservation planning.

Christoph HELD is a Senior Research Scientist at the Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, and Head of Biodiversity Dynamics research group in the Functional Ecology section. He is a specialist in marine ecology and phylogeography of Antarctic crustaceans, especially amphipods.

Falk HUETTMANN is a ‘digital naturalist’; he works on three poles (Arctic, Antarctic and Hindu-Kush Himalaya) and elsewhere (marine, terrestrial and atmospheric). He has a strong background in marine biology, and focuses primarily on effective conservation questions engaging predictions and open access data.

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Anton VAN DE PutTE works at the Royal Belgian Institute for Natural Sciences (Brussels, Belgium). He is an expert in the evolution and ecology of Antarctic fish and is currently the Science Officer for the Antarctic Biodiversity Portal (www.biodiversity.aq). This portal provides free and open access to Antarctic Marine biodiversity data, which allowed more than 60 million downloads.

Philippe KOUBBI is professor at the University Pierre et Marie Curie (Paris, France) and is a specialist in Antarctic fish ecology and biogeography. He is the Principal Investigator of projects supported by IPEV, the French Polar Institute. He is a French representative to the SCAMarbin (Scientific Committee on Antarctic Marine Biodiversity) and has contributed significantly to the biogeography of the Southern Ocean.

Bruno DAVID is CNRS director of research and laboratory BIOGEOSCIENCES, University of Burgundy. His work is focused on the evolution of living forms, with a strong emphasis on sea urchins. He authored a book and edited an extensive bibliography on Antarctic echinoids. He is a French representative to the SCAMarbin (Scientific Committee on Antarctic Marine Biodiversity) and has contributed significantly to the biogeography of the Southern Ocean.

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Graham HOSE is Principal Research Scientist in zooplankton ecology at the Australian Antarctic Division. He founded the SCAR Southern Ocean Continuous Plankton Recorder Survey and is the Chief Officer of the SCAR Life Sciences Standing Scientific Group. His research interests include the ecology and biogeography of plankton species and communities, and their response to environmental changes. He has participated in 17 marine science voyages to Antarctica.

Alexandra POST is a marine biologist, with expertise in benthic habitat mapping, sedimentology, and biogeography of Antarctic shallow marine environments. She has led several expeditions to the Antarctic Peninsula and the Weddell Sea, and has contributed to the development of marine protected areas in the Southern Ocean.