



Serving data from the SCAR Southern Ocean Observing System (SOOS) using the SeaDataNet infrastructure

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The importance of the Southern Ocean to the global climate system and the uniqueness of its ecosystems are well known. The region is remote and logistically difficult to access and thus is one of the least sampled regions on the planet. Design and implementation of an observing system that encompasses physical, biogeochemical and ecological processes is therefore a formidable challenge. The Scientific Committee on Antarctic Research (SCAR) has, jointly with the SCAR/SCOR Expert Group on the Southern Ocean, started the process to develop such a Southern Ocean Observing System (SOOS). The goals are to address major scientific questions and to coordinate measurement campaigns to do so. The SCAR Standing Committee on Antarctic Data Management (SC-ADM) is responsible for the design of the SOOS data flow system or Virtual Observatory, which will be used to archive and exchange data. SC-ADM is working in close cooperation with National Oceanographic Data Centres (NODCs), the International Oceanographic Data and Information Exchange Committee of the Intergovernmental Oceanographic Commission (IOC-IODE) and the IOC-WMO Joint Committee on Oceanography and Marine Meteorology (JCOMM). This presentation will focus on the European SeaDataNet project (www.seadatanet.org), which provides a real-world, operational model for access to and exchange of data from big observing systems such as the proposed SOOS and the European Marine Observation and Data Network (EMODNet).