



Arctic Regional Ocean Observing System

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An Arctic Regional Ocean Observing System (Arctic ROOS) has been established by a group of 14 institutions from nine European countries working actively with ocean observation and modelling systems for the Arctic Ocean and adjacent seas. There is an increasing demand for information about ocean, sea ice and atmosphere at high northern latitudes. Arctic ROOS will promote, develop and maintain operational monitoring and forecasting of ocean circulation, water masses, ocean surface conditions, sea ice and biological/chemical constituents. This information can only be achieved by close integration of data from in situ observations (ships, moorings, buoys, floats), remote sensing (satellite, aircraft, land based), and from numerical model simulations. During the International Polar Year (IPY) there are enhanced observational efforts of the Arctic and sub-Arctic seas, with testing and implementation of new instruments and platforms for data collection and data transmission. There is also a growing number of systems providing information from earth observation satellite and from ice-ocean models. Many of these systems are developed and operated by support from EU projects, in particular MERSEA, DAMOCLES, BOSS4GMES, MyOcean as well as other projects contributing to the implementation of GMES and GEOSS. One of the goals of Arctic ROOS is to contribute to the legacy of IPY, maintaining cost-effective and useful observing systems after the end of IPY. The members of Arctic GOOS are data providers running operational services and research programmes collecting ocean

and sea ice data and value-added products for dissemination to different user groups. Data dissemination of Arctic ROOS will follow the guidelines of EU (INSPIRE Directive) and the GEOSS Data Sharing Principles. A main goal of Arctic ROOS is to expand with more members from countries outside of Europe and become a GOOS Regional Alliance for the Arctic. More information about Arctic ROOS is found at www.arctic-roos.org.