Coordinating sustained coastal and ocean observing systems in Germany

Strategy groups in the German Marine Research Consortium (KDM)

In KDM, the member institutes bundle their marine science expertise in order to represent them jointly to decision-makers and donors as well as the general public. Several strategic groups (SGs) have been established under the KDM umbrella to address overarching marine scientific topics with a high societal relevance, including observing systems, coastal and climate research, biodiversity, and marine biological as well as mineral resources.

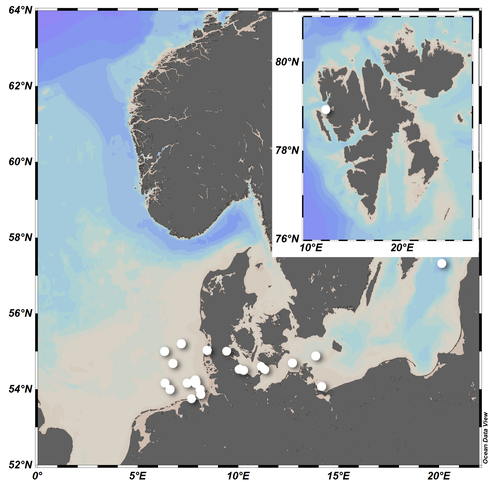
German ocean observing activities

German ocean observing activities have a regional focus on the North and Baltic Seas as well as the Atlantic Ocean, including the connected polar areas. Observations focusing on specific topics (e.g., towards the Marine Strategy Framework Directive) are also carried out in other areas of the oceans. Observing activities include mandatory contributions (e.g., towards the Marine Strategy Framework Directive) as well as science-driven bottom-up initiatives, and involve governmental agencies, research institutions, as well as universities. Observations contribute to a number of large ocean observation initiatives (e.g., GCOS, ICOS, LTER).

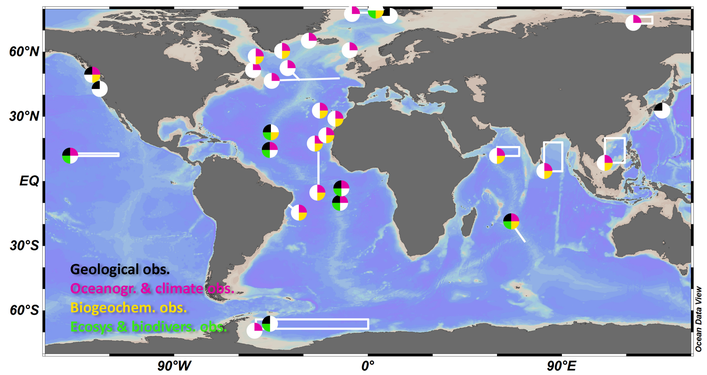
Representing and coordinating ocean observing activities

The Strategy Groups (SGs) for Sustained Ocean Observing and for Coastal Observing Systems are installed to strengthen the national coordination of ocean observing efforts and connect a large and heterogeneous group of institutions and people involved. The activities of the SGs address technological challenges and solutions for observations, the current and future observing needs and the seamless integration of Germany's observing efforts into European and global observing initiatives. Missions include:

- Representing German efforts in ocean observations, providing information on activities and forwarding meta-information to data centers (e.g. JCOMMOPS)
- Supporting the integration of national observations into European and international observing programs (e.g. GCOS, GOOS, BluePlanet, GEOSS)
- Supporting innovation in observing techniques and the development of scientific topics focusing on observing technologies and strategies
- Strengthen the operation and provision of marine research infrastructures in coastal and open ocean areas to provide permanent access for research projects and technology developments
- Developing strategies to expand and optimize national observing systems in consideration of stakeholder's needs and conventions
- Contributing to agenda processes and roadmaps in science strategy and funding
- Compiling recommendations for state of the art data management matching requirements of global data centers



Coastal observing systems under the auspices of German institutions and authorities are situated in the North and Baltic Seas, and Svalbard. Most systems perform physical observations in the water column and/or in the lowermost atmosphere. Monitoring of biogeochemical as well as biological parameters are carried out at many of the sites. Platforms include ships, buoys, moorings, poles, lighthouses, lightships, as well as cabled observatories. See further details at:



Open ocean observation efforts under the auspices of German institutions. The quartered circles indicate positions of the observatories / observation programs and the main disciplines served (legend in lower left corner of the map). White lines and boxes next to the circles indicate areas or transects where multi-point observations are carried out. Observations are mostly obtained with research vessels, moorings, and benthic installations.
See further details at:

Authors

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KDM Strategy Groups