



MaNIDA: an operational infrastructure for shipborne data

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The Marine Network for Integrated Data Access (MaNIDA) aims to build a sustainable e-Infrastructure to support discovery and re-use of data archived in a distributed network of data providers in Germany (see related abstracts in session ESS11.2 and session ESS12.2). Because one of the primary focus of MaNIDA is the underway data acquired on board of German academic research vessels, we will be addressing various issues related to cruise-level metadata, shiptrack navigation, sampling events conducted during the cruise (event logs), standardization of device-related (type, name, parameters) and place-related (gazetteer) vocabularies, QA/QC procedures (near real time and post-cruise validation, corrections, quality flags) as well as ingestion and management of contextual information (e.g. various types of cruise-related reports and project-related information).

One of MaNIDA's long-term goal is to be able to offer an integrative "one-stop-shop" framework for management and access of ship-related information based on international standards and interoperability. This access framework will be freely available and is intended for scientists, funding agencies and the public. The master "catalog" we are building currently contains information from 13 German academic research vessels and respective cruises (to date ~1900 cruises with expected growing rate of ~150 cruises annually). Moreover, MaNIDA's operational infrastructure will additionally provide a direct pipeline to SeaDataNet Cruise Summary Report Inventory, among others.

In this presentation, we will focus on the extensions we are currently implementing to support automated acquisition and standardized transfer of various types of data from German research vessels to hosts on land. Our concept towards nationwide common QA/QC procedures for various types of underway data (including versioning concept) and common workflows will also be presented. The "linking" of cruise-related information with quality-controlled data and data products (e.g., digital terrain models), publications, cruise-related reports, people and other contextual information will be additionally shown in the framework of a prototype for R.V. Polarstern.