

## **Aligning the German Marine Data Base with the Modernized MCDS Data Streams**

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The Marine Data Centre of Deutscher Wetterdienst maintains an extensive climatological archive of marine observations. Apart from recent data, the archive consists of a large amount of historic data ranging back to the mid-19th century. Several data streams are combined into a consolidated archive with a constantly increasing data amount. Real-time GTS data from ship, buoys and other marine measurement platforms are automatically archived in an interim database and are consolidated in near real-time for the archive. Additionally, VOS data, which is collected by the Global Collecting Centres (GCC), is injected in delayed mode into the archive. In this context, DWD acts together with UK MetOffice as a contributing as well as a responsible member. In a third stream, newly digitized data from the historic ship journal archive of the DWD are continually added to the archive as well as other available sources. All incoming data sets are routinely checked with a sophisticated high quality control (HQC) procedure that performs several formal and meteorological checks on the data. As part of the contributing member role in the GCC, German ship data undergoes an additional manual quality control.

In the light of the evolution of the Marine Climatological Summaries Scheme (MCSS) into the new Marine Climate Data System (MCDS) new forms of data management are needed, such as flexible data access and product generation. Standardized data formats and metadata handling is essential to allow data exchange with external partners, e.g. ICOADS. The presentation will give an overview of the marine data management at DWD that includes all stages from data collection by the port meteorological officer to data quality assurance and aggregating into marine data products. Current developments such as new routines for automatic and manual HQC, migration of the data archive to a high performance data base system to facilitate user access will be highlighted as well as present and planned data products for a variety of applications.

### **Oral**

- **Data management, recovery and reprocessing (digitisation efforts and reprocessing of previously digitised data)**