

## DATASET DESCRIPTION

## Quality controlled maritime meteorological observations

Version: 1.0

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Dataset-ID: de.dwd.gcc.mqc\_data

Dataset-URL: https://opendata.dwd.de/climate\_environment/CDC/observations\_global/ocean/VOS\_GDAC/mqc\_data/

#### **ABSTRACT**

Mqc data files contain all worldwide weather reports of the Voluntary Observing Ships (VOS) that are internationally exchanged via the Voluntary Observing Ship Global Data Assembly Centres (VOS-GDACs) on a quarterly basis. This delayed mode data is checked according to the Minimum Quality Control Standard (MQCS) and provided with quality control indicators, the flags.

The data format is International Maritime Meteorological Tape (IMMT) and from 2010 on also International Maritime Meteorological Archive (IMMA).

#### POINT OF CONTACT

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#### **DATASET DESCRIPTION**

Temporal coverage 1980-01-28 -- unknown

Format description The data are provided in the International Maritime Meteorological Tape (IMMT) and from 2010 on also in

International Maritime Meteorological Archive (IMMA) format.

The structure of the file names is mix\_out\_{yyyy}{qn}\_{format}.gz, where {qn} is the quarter of the year {yyyy}.

#### **DATA ORIGIN**

Since 1964, the World Meteorological Organization (WMO) regulates the international collection of meteorological data on the world's oceans done by ship crews. The WMO also manages the quality control, distribution and archiving of these observations. To improve the processing of observation data and to standardize the quality control, two Global Collecting Centres (GCCs) were founded in 1993: GCC-Germany in Hamburg (DWD) and GCC-UK in Edinburgh (Met Office). In 2017 the Marine Climate Data System (MCDS) was established by the former Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM). The MCDS coordinates the activities of maritime meteorological and oceanographic data systems, and since 2019 the former GCCs are working as Voluntary Observing Ship Global Data Assembly Centres (VOS-GDACs) in this new system.

Port Meteorological Officers (PMOs) collect global data stored on the ships and carry out a standardized minimum quality control (MQCS). Data is forwarded to the VOS-GDACs. The VOS-GDACs verify that quality control is carried out properly, support countries in case of issues with data supply or quality control, archive the data and make them available for download in CDC on a quarterly basis. The regular data exchange is done since 1996. The oldest observations date back to 1982.

#### RESOURCE MAINTENANCE

The VOS-GDAC data is collected worldwide and made available on a quarterly basis.

### **LITERATURE**

International Maritime Meteorological Archive (IMMA) Format, Release R2.5
International Maritime Meteorological Tape (IMMT) Format IMMT-5 (Version 5)
Minimum Quality Control Standard (MQCS), Version 7

# **REVISION HISTORY**

This document is maintained by Deutscher Wetterdienst, VOS-GDAC, last edited at 2024-04-12.