

The High Quality Global Data Management Framework for Climate

Improving the Quality of Climate Data Management For Better Climate Monitoring

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World Meteorological Organization
Organisation météorologique mondiale

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Background

- Monitoring climate variability and change, modelling and predicting future climate, and setting climate-related policy, depends on reliable climate datasets covering all environmental variables
- Reliable climate datasets require not just sound observational practices, but also good management (stewardship)



WMO and Climate Data Standards

- The World Meteorological Organisation (WMO) is the global standard-setting body for meteorological and related practices, including for climate data.
- The **High-Quality Global Data Management Framework for Climate** was endorsed at the 18th WMO Congress (June 2019) aiming to promote good practices in the management and exchange of climate data.
- The HQ-GDMFC has three components:

Components of the HQ-GDMFC

Manual of Best Practices and Standards

Promoting data management standards and best practices for ensuring high-quality datasets for use in climate policy and services.

Dataset Assessment Tools

To measure quality of data stewardship by Data Owners for global as well as national and regional datasets.

WMO Climate Data Catalogue

Climate Data Catalogue providing access to assessed and scored data as well as metadata, and data visualization, using the WMO Information System (WIS)



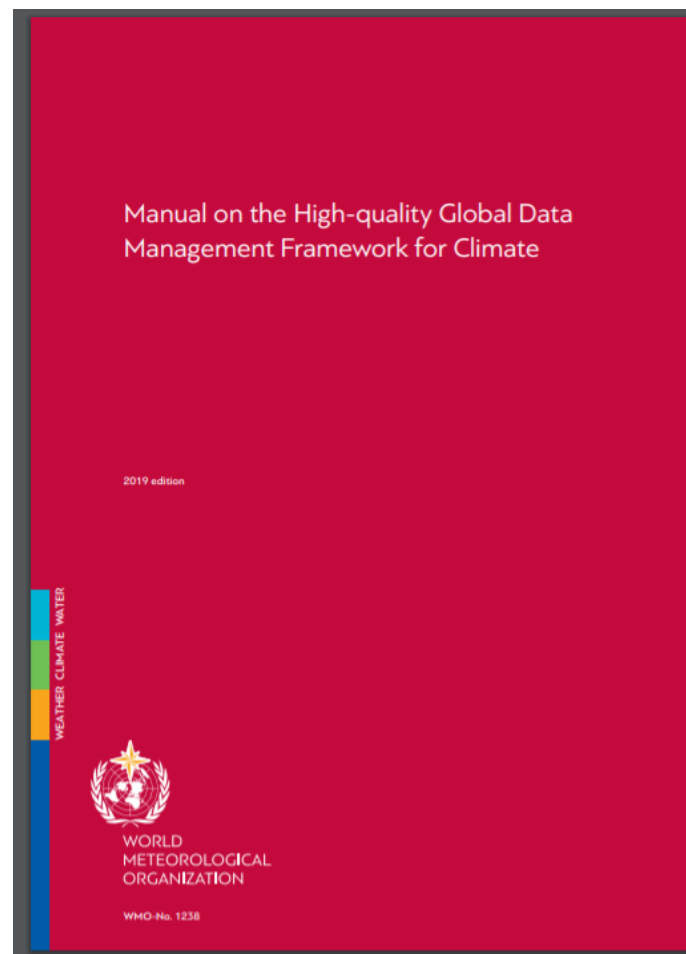
Discoverable, Accessible, Usable, Authoritative, High-Quality, and Well-Managed Climate Datasets



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About the Manual on HQ-GDMFC

- Contains definitions, recommended procedures, and regulations on climate data management
- Applies to climate observations, analyses and predictions
- Regulations expressed as *Shall* or *Should*:
 - *shall* means mandatory for WMO Member States;
 - *should* means recommended
- Is part of the suite of WMO Regulatory publications, marking the first-time climate data management has a regulatory status.
- Download at:
https://library.wmo.int/doc_num.php?exp_lnum_id=10197



Data Stewardship Self-Assessment Tools

The two self-assessment tools:

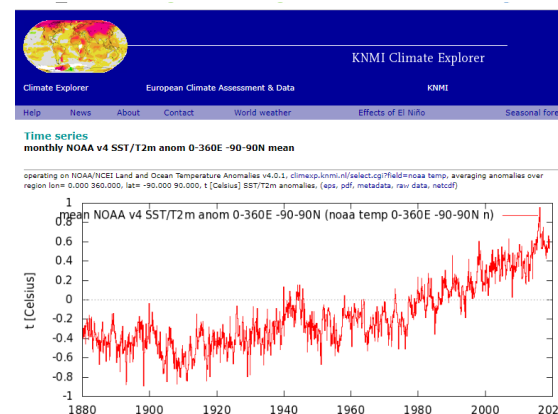
- For global datasets: Stewardship Maturity Matrix for Climate Data (SMM-CD) composed of 4 categories, with a total 11 aspects, assessing Data Access, Usability & Usage, Quality Management, and Data Management provides high quality data for developing climate services for policy and decision making in a variety of applications.
- For national and regional datasets: SMM-CD for National and Regional Purposes (SMM-CD_NRP) focuses on operational data management and stewardship.

WMO Climate Data Catalogue

- An international group of Subject Matter Experts assessed and scored initial set of global climate and climate indicator datasets spanning a variety of variables and data types.

Accessibility	★★★★★
Usability	★★★★☆
Stewardship	★★★★☆

- Catalogue was developed and kindly hosted by KNMI, holds assessed datasets and documentation as well as metadata and visualization tools.



Access catalogue at
<https://climatedata-catalogue.wmo.int/>

Thank you!
Merci!

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