

WMO Stewardship Maturity Assessment Matrix for Climate Data

ET-DDS Team of WMO SERCOM/SC-CLI



WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

References

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- [https://figshare.com/articles/online_resource/WMO SMM-CD NRP Guidance Booklet/13004606](https://figshare.com/articles/online_resource/WMO_SMM-CD_NRP_Guidance_Booklet/13004606)
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- **WMO CLIMATEDATA CATALOGUE** <https://climatedata-catalogue-wmo.org/homepage>

Quick definition of Stewardship Maturity Matrix for Climate Data (SMM-CD)

- ✓ A self-assessment tool developed by WMO expert teams to evaluate how well climate datasets are managed
- ✓ SMM-CD defines data management and stewardship behaviours for climate data
- ✓ SMM-CD provides a structured, tiered approach to dataset stewardship assessment

WMO 1238 - HQ-GDMFC

The HQ-GDMFC consists of **three building blocks**:

- (1) The Manual on the HQ-GDMFC**, which is part of the WMO Regulatory material, and provides regulations and recommended best practice on climate data management, was recently adopted by the Eighteenth World Meteorological Congress (Cg-18), and has been published under WMO-No.1238 (WMO, 2019);
- (2) The WMO Stewardship Maturity Matrix for Climate Data (SMM-CD)** was developed as a tool to enable dataset owners to self-assess and rate their datasets quantifiably, based on internationally validated data stewardship best practices. It constitutes a formal annex to the WMO-No.1238, and focuses on datasets that are of global use, such as for global climate monitoring and assessment. The process will help WMO in evaluating the stewardship maturity of the datasets which are to be submitted for inclusion in the third building block,
- (3) The WMO Catalogue for Climate Data.**

WMO Stewardship Maturity Assessment Matrix for Climate Data – SMM-CD (Global level)

The assessment of Climate Data maturity comprises the following steps:

- WMO endorsed datasets need to be of high scientific quality, commencing with well-established and utilized global datasets identified by various scientific domain Subject Matter Experts (SMEs)
- The process for a dataset to be included into the WMO Catalogue of Climate Data starts with an assessment of the degree of stewardship of the dataset by the data provider.
- The assessment is then submitted to WMO and undergoes review by the respective domain SMEs.
- The selection of the datasets is based on five criteria, which have been derived and summarized from the GCOS Monitoring Principles: 1. Worldwide in coverage; 2. Free and open access; 3. Quality controlled with documentation ; 4. Include metadata; 5. Considered and recommended by the appropriate GCOS Science Panel Experts.

Assessment status

<https://climatedata-catalogue-wmo.org/homepage>



CD assessed datasets:

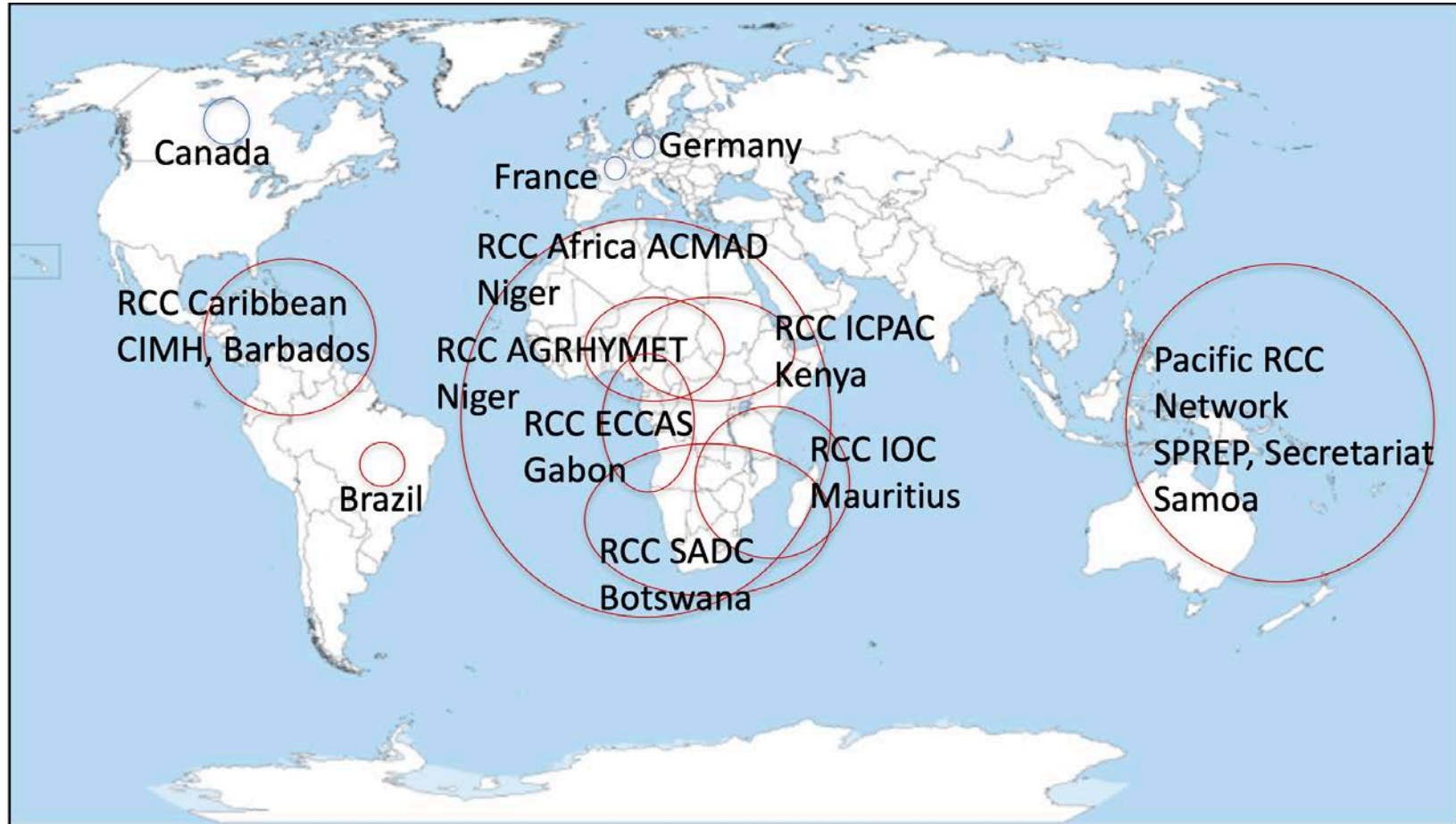
- ✓ 20 global
- ✓ 9 Regional
- ✓ 18 National

Last assessed datasets:

- ✓ Global: 30 November 2022 ([GPCC](#))
- ✓ Regional: 28 June 2021 (CAROGEN)
- ✓ National assessed: 22 September 2021 (Seychelles)

WMO_SMM-CD_RNP

Assessed climate data



Proposed ET-DDS tasks for SMM-CD/SMM-CD_NRP

- ✓ WMO will stop the real time update and maintenance of the *WMO Climatedata Catalogue*
- ✓ Strengthen (update) and promote the SMM-CD and SMM-CD_NRP (WIS2, WIPPS, RCCs and NMHSs)
- ✓ Keep the assessment examples for the Data Catalogue on a dedicated WMO web page
- ✓ Use SMM-CD and SMM-CD_NRP as educational basis to keep abreast the WMO HQ-GDMFC
- ✓ Update the stewardship practices based on worldwide examples (C3S, NOAA, MeteoFrance, etc)
- ✓ WMO Consultation: managing datasets

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