**WMO Stewardship Maturity Matrix for Climate Data**

**for National and Regional Purposes**

**SMM-CD\_NRP Self-Assessment Template**

Document ID: WMO-SMM-CD\_NRP-0001; Version: v01r00 20200805

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| **Steps for carrying out self-assessment of a dataset:**   1. Go over the whole file and read the disclaimer carefully before using the assessment template; for additional information read the Guidance Booklet for the SMM-CD\_NRP; 2. Enter dataset and relevant Point-Of-Contacts (POCs) information in the template metadata section; 3. Go through each of the two categories with its relevant aspects, enter your rating in the template column to the right (pink) and justify your level rating in the same section; 4. Obtain any additional information if necessary and, if any, restrictions should be stated; 5. Summarize your aspect results by category in the form of a number or graphic stars in the metadata section of the template. |
| **Creative Commons License** – Attribution (BY)-NC (Non-Commercial) |
| **Disclaimer:** This template is provided “as is” without any representations or warranties, express or implied. WMO makes no representations or warranties in relation to this template or the information and materials provided on this template. Use for the template is intended for use as a preliminary stewardship maturity assessment of a dataset, utilizing the latest WMO SMM-CD\_NRP version. Examples in the SMM-CD\_NRP for each category with its individual aspects are provided only to help users of the SMM-CD to better understand the meaning of the languages used in the matrix. No endorsement or preference is intended.  WMO will not be liable to you or a third party (data provider, data user, contractors, etc.) in relation to the contents of, or use of, or otherwise in connection with, this temple for any direct loss, for any indirect, special or consequential implications on business, reputation or goodwill or misinterpretation and misuse of the dataset for which maturity assessment was made using this template.  The layout or/and content of the matrix and template are subject to change any time without notification.  Any opinions or recommendations expressed here are those of the people who have carried out the assessment and do not necessarily reflect the views of WMO, CICS-NC, or NCEI. |

**Template Metadata Section** (fill out dataset information and version your assessment):

|  |  |
| --- | --- |
| **Dataset Title** |  |
| **Dataset URL** |  |
| **Data Provider POC**  **(Name; E-mail; Affiliation)** |  |
| **Dataset POC**  **(Name; E-mail; Affiliation)** |  |
| **WMO SMM-CD\_NRP Matrix Version (Document ID and Version Number)** | WMO-SMM-CD\_NRP-0001-v01r00-20200805 |
| **WMO SMM-CD\_NRP POC (Name; E-mail; Affiliation)** | Christina Lief; [christina.lief@gmail.com](mailto:christina.lief@gmail.com); WMO CCl ET-DDS Chair |
| **WMO SMM-CD\_NRP Template Version (Document ID and Version Numbers)** | WMO-SMM-CD\_NRP-0001-v01r00-20200805 |
| **WMO SMM-CD\_NRP Template POC**  **(Name; E-mail; Affiliation)** | Christina Lief; [christina.lief@gmail.com](mailto:christina.lief@gmail.com); WMO CCl ET-DDS Chair |
| **Assessment Version (v<nn>r<mm>, e.g., v01r00)** | V00r00 |
| **Original Assessment Date (MM/DD/YYYY)** |  |
| **Original Assessment POC (Name; E-mail; Affiliation)** |  |
| **Averaged Stewardship Maturity Rating levels for Categories** | **Operational Data Management:**  **Data Stewardship:** |
| **Update Assessment Date (MM/DD/YYYY)** |  |
| **Update Assessment POC**  **(Name; E-mail; Affiliation)** |  |

**Self-Assessment Template** (enter your level rating with justification in pink column for each Aspect and summarize your level ratings for each category in the template metadata section):

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Mandatory Maturity Assessment Criteria** | | | **Optional** | **User Input** |
| **Category** | **Aspect** | **Level 1**  **(ad hoc)** | **Level 2 (medium)** | **Level 3**  **(highest)** | **Highly Desirable** | **Assessment Level with justification** |
| **Operational Data Management** | **Data Access** | Dataset information not discoverable; Data not available publicly; person to person contact. | Limited dataset information and discovery metadata; Basic online services available for data access (e.g. ftp). | Level 2 + comprehensive discovery metadata; Dataset searchable online; access provided with enhanced online data services. | Level 3 + interoperable data services; web services; conforming to international standards such as the ISO or WIS Core Metadata profile; auditable; ability to download subset of dataset. |  |
| **Data Portability** | Non-machine readable. | Basic machine readable. (e.g. ASCII, data and metadata separate in one file such as [gpcc\_first\_guess\_01\_2020.gz](https://opendata.dwd.de/climate_environment/GPCC/first_guess/2020/)) | Standards-based machine readable. | Machine independent, self-describing, interoperable format. (e.g. netCDF) |  |
| **Data Preservation** | Data not routinely backed up. | Backup copy of electronic data is routinely made. | Level 2 + follow institutional archival practices including off-site copy; basic retention policy defined and implemented. | Level 3 + Conforming to National archiving standards; Comprehensive retention policy defined and implemented. |  |
| **Documentation** | Product information not publicly available online. | Limited online documentation (e.g. User Guide). | Comprehensive documentation available online. | Level 3 + available in standard format template (e.g. [INSPIRE](https://inspire.ec.europa.eu/), [NASA ATBD's](https://eospso.nasa.gov/content/algorithm-theoretical-basis-documents)). |  |
| **Data Integrity** | Unknown or no data integrity check. | Random data integrity check. | Data integrity systematically verified through effective checks and rectification actions, so that data expected is data received into the climate database. | Level 3 + verified with documented audit trails, and/or traceability; also for data services for users and applications. |  |
| **Data Stewardship** | **Quality and Usage** | No QA/QC procedures defined or implemented and information not available online. | QA/QC procedures defined and available online but not systematically implemented. | Level 2 + data quality assessed and available online such as error or uncertainty estimates; dataset used in national report. | Level 3 + dataset citations in scientific publication in peer-reviewed journal. Used/cited by other well-known climate data centers (NOAA/NCEI, DWD, etc.). |  |
| **Governance** | Responsibility/accountability compliance mechanism is not defined; No contact information. | Responsibility/accountability compliance mechanism defined for data management operations; User support contact information available. | Level 2 + adheres to data management competency standards and includes written data management policies, procedures, and compliance mechanisms. | Level 3 + compliance to community standards  controlled and audited by ISO procedures; or following community best-practice guidance, such as the Data Management Body of Knowledge ([DAMA-DMBOK V2 Guide](https://dama.org/sites/default/files/download/DAMA-DMBOK2-Framework-V2-20140317-FINAL.pdf)) |  |
| **Metadata** | Collection-level metadata not publicly available and/or not usable. | Limited collection-level metadata available for the users. (e.g. model, network, granular and station metadata such as station latitude/longitude, elevation, instrument type and method) | Level 2 + metadata conforming to community standards and available online  (e.g. for observations [WIGOS Metadata Standards](https://library.wmo.int/?lvl=notice_display&id=19925#.Xs0vp2hKhPY)). | Fully compliant with national and international standards; rich metadata content; support dataset provenance. |  |