

WORLD METEOROLOGICAL ORGANIZATION

Expert Team on Data Requirements
for Climate Services (ET DRC),
19 January 2023, 14:00 – 16:00 Geneva time

Original: English

Agenda

1. Opening and review of previous sessions and conferences
2. Current actions or issues
 - Maintaining tools (e.g. homogenization tool)
 - Climatological Standard Normals
 - CDMS
 - WMO-No. 1131 CDMS Specifications
 - Climate Data Model
 - OpenCDMS
 - CLIMAT/DAYCLI
 - Handbook on CLIMAT report
 - Rules on missing data
 - DAYCLI status (handbook, training, ToRs for Global Data Centres)
 - CLIMAT reports monitoring
 - WMO Climate Data Catalogue
 - Assessments of Global Datasets
 - SERCOM/INFCOM Liaison on Climate Data issues
3. Any Other Business
4. Closure and next dates

Participants:

Mr Axel Andersson	Mr Robert Dunn	Mr Ali Eddenjal
Mr Lipeng Jiang	Ms Xiaolan Wang	Mr Urip Haryoko
Mr Dominique Berod	Mr Jose Guijarro	Mr Markus Ziese
Ms Christina Lief	Mr Denis Stuber	Mr Peer Hechler
Ms Ge Peng	Mr William Wright	

Notes (actions and key agreements highlighted in **bold**):

Opening and review of previous sessions and conferences

The meeting was opened by Christina and Denis. Peer reported of ET DRC-relevant recent SERCOM and INFCOM decisions and recommendations including re i) use of baselines in climate monitoring, ii) fourth edition of the Guide to Climatological Practices, iii) climate data requirements and solutions, iv) recognition of long-term observing stations and v) WIS and OpenCDMS. Relevant drafts of approved documents are attached for information of ET DRC members.

Denis, Markus, Axel, Robert and Peer reported of ET DRC poster displays (DAYCLI, Stewardship Maturity Assessment) and interactions at GCOS, SERCOM and INFCOM Conference/Sessions.

Current actions or issues

- *Maintaining tools (e.g. homogenization tool)*

The Team discussed needs for maintaining, updating and further developing software tools and portals, which are important for WMO Members, e.g. homogenization packages. A formal framework is needed to make sure that such tools and portals do not become outdated and useless or forgotten, if developers leave or retire. The Climate Services Toolkit (CST, currently

under development) may provide a more formal frame for such tools and portals and SC CLI may play a role in facilitating knowledge transfer in some cases. **Peer will follow up with CST actors.**

The Team further touched on training opportunities on basic climate statistics and Peer confirmed plans for further regional online consultations and trainings in 2023. He highlighted the benefits of videoconferencing to easily reach out to technicians and experts of WMO Members.

- *Climatological Standard Normals (CLINO)*

Peer reported that 139 out of 193 Members have submitted 1991-2020 CLINO so far. The WMO CLINO collection will be finished by 31 January 2023 and collected CLINO will be sent to NCEI for dataset consolidation and publication in summer 2023. A process for updates will be communicated to Members, thereby offering a pathway for Members who have not been able to submit CLINO in time. Peer thanked members of ET DRC for excellent support to the WMO CLINO collection. A WMO review publication will be drafted by Peer to document the 1991-2020 WMO CLINO collection process and address lessons learnt.

Axel raised the need for updating 1961-1990 CLINO and Peer agreed to initiate a process for 2025/2026-timeframe. Such process will also greatly help avoiding loss of institutional knowledge in calculating and submitting CLINO and may serve as a basis for testing process updates.

- *CDMS*
 - *WMO-No. 1131 CDMS Specifications*

William reported on outcomes of the write shop to update WMO-No. 1131, WMO CDMS Specifications. Some work remains to be done and an update of WMO 1131 is planned to be published in 2023 under Infrastructure lead.

- *Climate Data Model*

Denis reported of good progress in the development of the future WMO Climate Data Model, which will be implemented as a WMO standard including for OpenCDMS. For further information, cf. <https://github.com/wmo-im/tt-cdm/discussions/9#discussioncomment-4718930>

- *OpenCDMS*

Peer reported of the transition of OpenCDMS development work from SERCOM to INFCOM. SERCOM will focus on defining requirements for data management and exchange. OpenCDMS progress can be followed here: <https://openclimate.net/>

- *CLIMAT/DAYCLI*
 - *Handbook on CLIMAT report*

William reported of his review to help updating the popular WMO CLIMAT Handbook (WMO-TD 1188). Some work remains to be done and WMO experts have been engaged to discuss some open issues such as processes for registering and de-registering CLIMAT stations.

- *Rules on missing data*

Denis reported of needs to provide WMO guidance on data gap filling. Peer and William confirmed this need from their recent activities. A complementary activity has been started under UNFCCC with WMO participation. **Peer will link ET DRC to the UNFCCC activity and ET DRC will create a sub-group to start collecting relevant expert guidance.**

- *DAYCLI status (handbook, training, ToRs for Global Data Centres)*

William reported of the current status of DAYCLI guidance material, which is almost readily drafted. A broader review by GCOS and INFCOM experts is envisaged. Peer outlined current Secretariat plans to send a letter to Members encouraging DAYCLI exchange (starting with CLIMAT-reporting stations) upon availability of (draft) DAYCLI guidelines and a plan for regional consultations on DAYCLI to facilitate Members' uptake of the initiative.

- *CLIMAT reports monitoring*

Denis reported that we have today approximately 3 000 CLIMAT messages per month coming mostly from RBCN network (79 %). The other part (21 %) is coming from GOS general. On those 3 000 stations one third (1/3) is part of the GCOS (GSN). **ET DRC members believe that OSCAR is the best place to document WMO observing stations' reporting practices (which station submits which reports incl. CLIMAT, SYNOP, DAYCLI etc), thereby enabling monitoring (expectations (OSCAR) vs reality (WIS)).**

- *WMO Climate Data Catalogue*

Christina reported of certain delays and challenges in finalising the climate data catalogue WebPortal. Clarification meetings will be held in the weeks to come.

- *Assessments of Global Datasets*

Christina noted some delays in assessing datasets due to a very limited number of volunteering reviewers. She will contact ET DRC members again in order to facilitate outstanding and future assessment reviews.

- *SERCOM/INFCOM Liaison on Climate Data issues*

Christina reported of consultations with the chair of SC IMT on strengthening the SERCOM/INCOM liaison on climate data issues. **Peer highlighted plans for a hybrid meeting of ET DRC and ET IM with SC CLI and SC IMT representation to implement the above SERCOM decision on climate data requirements and solutions. A draft concept not will be shared soon.** Axel informed of a planned meeting of (former) CBS Lead Centres for GCOS, which role has also been mentioned in the above SERCOM decision. **Peer and Axel will strive to coordinate meeting agendas accordingly.**

Any Other Business

Although not an AoB topic by nature, Peer highlighted the pro-active role of ET DRC and its excellent support to ongoing WMO initiatives including climate data exchange, WMO CLINO collection, CDMS, DARE, stewardship maturity assessment etc.

Closure and next dates

The meeting was closed by the Co-Chairs shortly after 4 p.m. Geneva time.

The next meetings will be held on Wednesday, 15 February, 13:00-15:00 Geneva time on data gap filling approaches (sub-group meeting with open invitation to all ET DRC members) and on Wednesday, 15 March, 13:00 – 15:00 Geneva time (regular ET DRC meeting).

Denis informed of dates of EC and Congress sessions: EC-76: 27 February to 3 March, Congress: 22 May to 2 June. In response to a related question, Peer encouraged ET DRC

members to contact their PR to be part of the Congress delegation of their countries or territories, thereby enabling participation in Congress discussions.