

WORLD METEOROLOGICAL ORGANIZATION

Meeting report:

Expert Team on Climate Data Development and Stewardship (**ET-DDS**)
Standing Committee on Climate Services (SC-CLI)
SERCOM

22 March 2025, 13:00 – 15:00 Geneva time

References

Github: <https://github.com/ET-DRC>

Wiki general: <https://github.com/ET-DRC/Home/wiki>

Wiki DAYCLI: <https://github.com/ET-DRC/DAYCLI-message/wiki>

Shared drive, see at:

<https://community.wmo.int/en/governance/commission-membership/sercom-management-group/standing-committee-climate-services/expert-team-climate-data-development-and-stewardship>

Agenda

1. Summary of actions and news since the last meeting (12/03/2025).....2
2. Consultation on homogenization.....2
3. DAYCLI (Guidelines and other related subjects).....2
4. Any Other Business.....3
5. Date of next meeting4
6. Coming events4

Participants:

Name	P*	Name	P*	Name	P*
Mr Alessandro Spinuso		Mr Jose Guijarro	P	Ms Sandhya Dindyal	P
Mr Ali Eddenjal	P	Mr Markus ZIESE	P	Mr Tursyn Tillakarim,	
Mr Axel Andersson	P	Mr Peer Hechler		Mr Urip Haryoko	P
Ms Cathy Smith	P	Mr Rachid Sebbari	P	Mr William Wright	P
Mr Denis Stuber	P	Mr Reinaldo Silveira	P		
Ms Ge Peng		Mr Robert Dunn	P		

*P: Present

Notes: actions and agreements highlighted in **bold**.

1. Summary of actions and news since the last meeting (12/03/2025)

ET-IM Expert Team on Information Management (SC-IMT, INFCOM)

2 meetings from ET-IM (19/03/2025 and 16/04/2025). Two main tasks with two sub-groups (SG):

1. **SG1:** Review of the Manual on High Quality Global Data Management Framework for Climate (WMO-No. 1238), ensuring consistency with the WMO Earth system approach and harmonization of the standard and recommended practices related to climate data and observations across the Technical Regulations.
2. **SG2:** Identify and prioritize essential functional requirements for a climate data management system (CDMS) based on the revised CDMS specifications (WMO-No. 1131).

Task Team on Climate Infrastructure - TT-CI INFCOM

For the TT-CI meeting on the 22/04/2025, which focus on national and regional climate data centres (RCCs), Reinaldo is invited to present a talk on RCCs practices.

Kazakhstan workshop (enhancements of the WMO State of the Climate Reports)

Meeting of the International Organising Committee for the WMO Astana workshop on the 02/04/2025. It results a draft on the workshop concept that should be finalized during the next meeting on 7 May 2025.

WMO-No. 49 adding from SERCOM

Forwarded to SC-CLI, the request made during Cg-19 for SERCOM to draft a new section on climate services for inclusion in Part IV, Volume I of the WMO Technical Regulations (WMO-No. 49). See <https://library.wmo.int/viewer/67177/?offset=3#page=206&viewer=picture&o=ocr&n=15&q=>

RA VI RCC workshop: Advancing Regional Climate Services 8-10 April 2025

Now available on <https://community.wmo.int/en/meetings/ra-vi-rcc-network-workshop-advancing-regional-climate-services-meet-evolving-needs-ra-vi-members>.

2. Consultation on homogenization

Strategy: Discuss and prepare the consultation with the whole community in advance, and schedule the consultation at the end of the process. Consultation on homogenization scheduled not before September 2025.

17 NMHS responses to the products and services using homogenized data. See the list of responses, and the map mind on the current status of the preparation of the consultation (<https://github.com/ET-DRC/Home/tree/main/consultation/homogenization>).

Jose presented his talk on homogenization. **ET-DDS members to review Jose's presentation before the 24th of May 2025.**

3. DAYCLI (Guidelines and other related subjects)

William sent the review of the DAYCLI guidelines on 16th of March 2025 (please have a look at Wiki DAYCLI: <https://github.com/ET-DRC/DAYCLI-message/wiki>)

A major issue that needs to be resolved with DAYCLI is whether the date should be defined in Members' local time or in UTC. The current BUFR format specifies that all dates and time periods for each element should be defined in UTC. It should be noted that this is mainly due to the fact that BUFR messages generally deal with real time, and are not used to handling dates in local time.

Currently, most if not all NMHSs measure, compute, store and exchange their daily climatological values according to their own time zone. For example:

ET-DDS meeting 22/04/2025

Page 2 over 4

- BoM (Australia) exchanges its daily data according its local time zone. E.g. for rainfall measurements are nominally made at 9 am local clock time and record the total for the previous 24 hours
(http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p_nccObsCode=136&p_display_type=dailyDataFile&p_startYear=&p_c=&p_stn_num=086282).
- Météo-France exchanges its daily data according its local time zone. That means in UTC for its territory in continental Europe (0 meridian), and in local time zone for stations in the Pacific, in the Caribbean, etc.
- NOAA/NCEI and in particular its GHCND (Global Historical Climatology Network Daily) (if we are not mistaken!), exchanges its daily data according to the time of observation that "is the 24 hour clock time of the observation given as the local time at the station of record".
<https://www.ncdc.noaa.gov/cdo-web/datasets> and see
https://www.ncei.noaa.gov/pub/data/cdo/documentation/GHCND_documentation.pdf

Changing this practice and exchanging daily values, through the DAYCLI message, in UTC time is a source of error for the climate community: for NMHSs, for climatologists, and for data centers alike. [Using UTC can change the climatological day and thus lead to an error in the number of the day of the month].

It is safer and easier to simply use local time when defining the Climatological Day and the time periods for each daily variable, with an additional field containing the UTC offset. The UTC offset should be added in any case.

Support for using local time was received by Blair Trewin (BoM and ET-MCCV) and Jay Lawrimore (NOAA).

TT-TDCF is responsible for BUFR at WMO (part of the ET-DATA at INFCOM). Our contact is Sergio Ferreira. He will submit a new DAYCLI proposal to resolve the local date /UTC issue to ET-DATA for their next meeting.

A first draft of a "DAYCLI amendment proposal to the Manual on Codes WMO-No. 306" is available in order to:

- Support and preserve current national practices;
- Simplify message preparation and post-processing;
- Enhance clarity and reduce the risk of time-based discrepancies for all actors: meteorologists, climatologists, global and regional Centers.

ET-DDS members to eventually send or present their comments by 21st of May 2025 and for discussion during our next meeting.

4. Any Other Business

Other consultations to prepare:

- Climate dataset development and stewardship maturity matrix;
- Data Control and Data Stewardship + Provenance and Lineage;
- Use of gridded data.

ET-DDS members to consider being leaders for a consultation. Tasks and leaders to be designated during our next meeting.

Availability of climate data from NOAA

Cathy Smith, scientist at the NOAA's Oceanic and Atmospheric Research (OAR) Division, expressed concern about the possible loss of availability of research datasets including observations and model output. In addition, many of the websites that are relied on may disappear or no longer function following possible extensive cuts to NOAA's research budget (OAR).

This concern was echoed by our German colleague Markus Ziese of DWD/GPCC (The Global Precipitation Climatology Centre), who noted that there is no official WMO World Climate Data Centre (see WIPPS).

Denis added that the WMO relies heavily on American data centers (Berkeley Earth, GISTEMP, NOAA GlobalTemp, GHCN, ERSST, etc.) for its annual State of the World reports. What would happen if these data were no longer accessible?

5. Date of next meeting

28 of May 2025 13:00 15:00 Geneva Time

6. Coming events

- ✓ **Foro virtual sobre Gestión de Datos, Buenos Aires, 30/04/2025, 2pm to 5pm UTC (information with hernan.veiga@smn.gob.ar)**
- ✓ 16 June 2025, 79th session of the Executive Council
- ✓ 23-26 June, Hybrid Workshop "Climate Data Stewardship needs and applications in support of the State of the Climate reporting", Astana, Kazakhstan
- ✓ ??? Workshop on Climate Services (China)
- ✓ 20-24 October, Cg-Ext
- ✓ **November 4-6, 2025, 15th Data Management Workshop, Oslo**
- ✓ 10-21 November, 2025, COP 30, Belem, Brazil
- ✓ March 2026, SERCOM-4
- ✓ April 2026, INFCOM-4
- ✓ **May 2026, 12th Seminar for Homogenization and Quality Control in Climatological Databases and the 7th Interpolation Conference in Budapest**