

**Expert-Team on Data Requirements
for Climate Services
(ET-DRC)**

ET-DRC Team Meeting

**September 20, 2023
14:00-16:00 CET
Video Call**



WMO OMM

**World Meteorological Organization
Organisation météorologique mondiale**

Agenda

1. **Introduction** (Christina)
2. **SC-CLI-6 report** (Christina)
3. **WMO Publications status** (Denis, Peer, Christina)
 - WMO-No. 49 Technical Regulations
 - WMO-No. 1238 Manual on High-quality Global Data Management Framework for Climate
 - WMO-No. 1328 Guidance Booklet: WMO Stewardship Maturity Matrix for Climate Data
 - WMO-No. 1131 Climate Data Management Specifications
 - WMO-No. 1182 Guidelines on Best Practices for Climate Data Rescue
4. **Meetings/Workshops reports** (Denis, William, Jose)
 - CLIMSA Data exchange Angola
 - SADC workshop: Data Rescue, CDMS, Homogenization
 - SADC workshop report and feedback

Agenda (Continued)

5. **WMO Climate Data Catalogue update** (Christina)
6. **Data Gaps projects** (Denis, Peer, Christina)
 - ET-DRC Paper on data gaps (Denis)
 - CLIMSA Activity 3.3: A Strategy and Action Plan for Enhancing Intra-ACP Data Availability and Sharing to Support Climate Monitoring and Risk Reduction + Follow up ET-DRC team paper lead by Lisa-Anne Jepsen (Christina)
 - Second Global Forum on Climate Science Information (Abu Dhabi) 10-12 October 2023 (William to make in person presentation)
 - Additional paper addressing data gaps (Lead author Atsushi Goto, WMO)
7. **ClimateEurope2 project** (Denis)
8. **DAYCLI project + Handbook update** (William, Denis)
9. **Climate Data Model** (Denis)
10. **OpenCDMS** (Denis)

Agenda Item 2: Standing Committee on Climate Services (SC-CLI-6) report

FINAL REPORT- SC-CLI-6.pdf (wmo.int)

<https://community.wmo.int/en/activity-areas/climate/meetings/sixth-meeting-standing-committee-climate-services-sc-cli-6>

- Took place at WMO June 13-15, 2023
- SC-CLI and the importance of the use of the Climate Science Information System (CSIS) of the Global Framework for Climate Services (GFCS)
- SC-CLI and the Technical Regulations WMO-No.49 : (1) harmonization of the Technical Resolutions, (2) drafting a new section on climate services on WMO-No.49 and (3) refining understanding of Members' needs relating to climate data management.
- Implementation of the Roadmap on the Quality Management System (QMS) in Climate Services

Main tasks presented by ET-DRC

ET-DRC: 1) DAYCLI exchange of data, 2) Review and publication of a 2nd edition of WMO 1131, 3) Climate Data Model and Open CDMS, Data Rescue and new datasets in the WMO Climate Data Catalogue 4) Technical Regulations, including editing the manual, which is currently under the custody of INFCOM and has made little progress towards publishing this year. A vision paper for the manual should be produced for SERCOM-3 and will require input from other Climate Expert Teams.

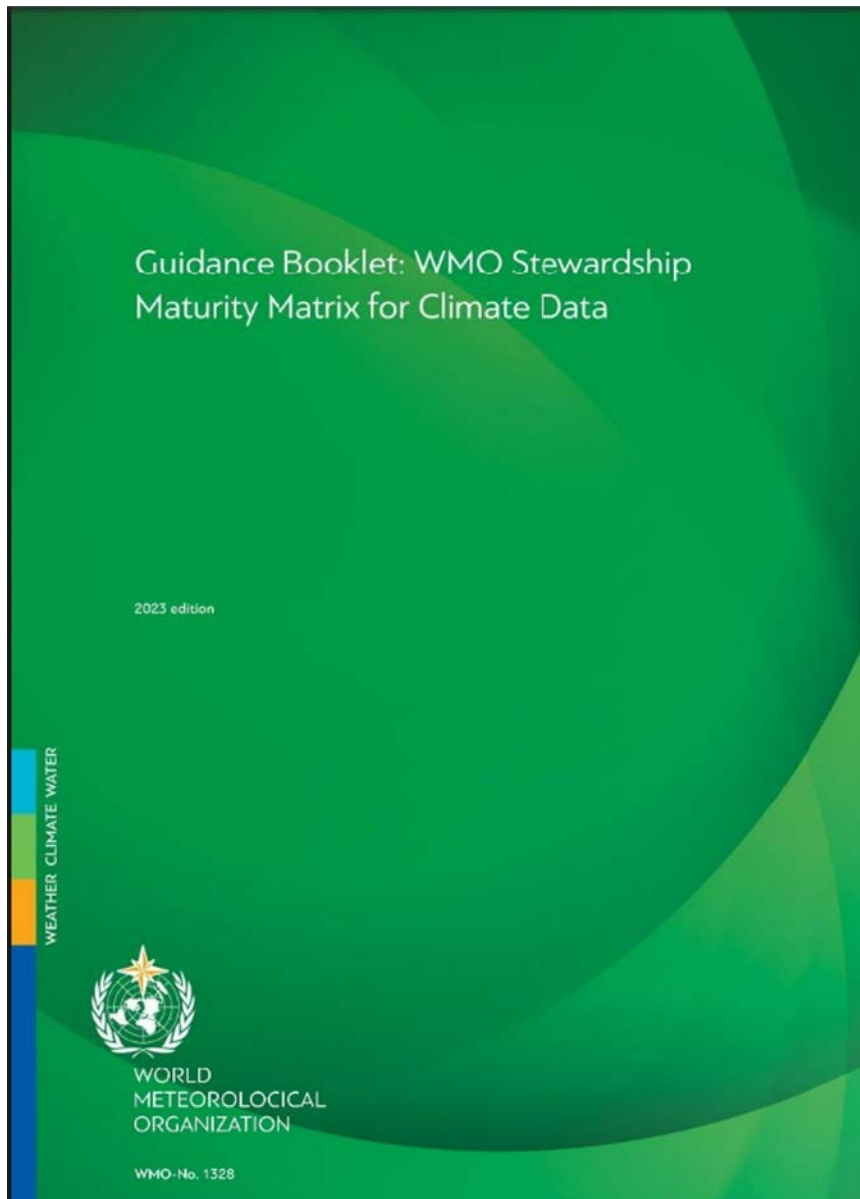
Agenda Item 3: ET-DRC & WMO publications

- **WMO-No. 1131 Climate Data Management Specifications**
- **WMO-No. 1182 Guidelines on Best Practices for Climate Data Rescue**
- **WMO-No. 1238 Manual on High-quality Global Data Management Framework for Climate**
- **WMO-No. 1328 WMO Stewardship Maturity Matrix for Climate Data (WMO-No. 1328, 2023)**
- **WMO-No. 49 Technical Regulations**

Also:

- Handbook on DAYCLI message in collaboration with ET-IM and TT-TDCF from INFCOM
- Paper on Data Gaps (forthcoming 2023)

The 2 documents: Climate Data Management System Specifications (WMO-No.1131, 2014) and the Manual on the High-Quality Global Data Management Framework for Climate (WMO-No. 1238, 2019) are, since the last WMO Congress (Cg-19, May 2023), under the ownership of INFCOM (See the list of WMO publications mandatory for production Annex 1 to Resolution 6.2(1)/1) pages 5 and 6. Under process to recover the custody of these 2 documents.



- Title: **Guidance Booklet: WMO Stewardship Maturity Matrix for Climate Data**
- Published in August 2023
- Includes links to matrices that can be downloaded
- Available online in WMO.int Library.
<https://library.wmo.int/records/item/68238-guidance-booklet-wmo-stewardship-maturity-matrix-for-climate-data>
- Also available on the WMO Climate Data Catalogue: <https://climatedata-catalogue-wmo.org/>
- Was a coordinated effort by ET-DRC members.
- Is a subset of the 'High-Quality Global Data Management Framework for Climate Data' Manual, WMO No. 1238

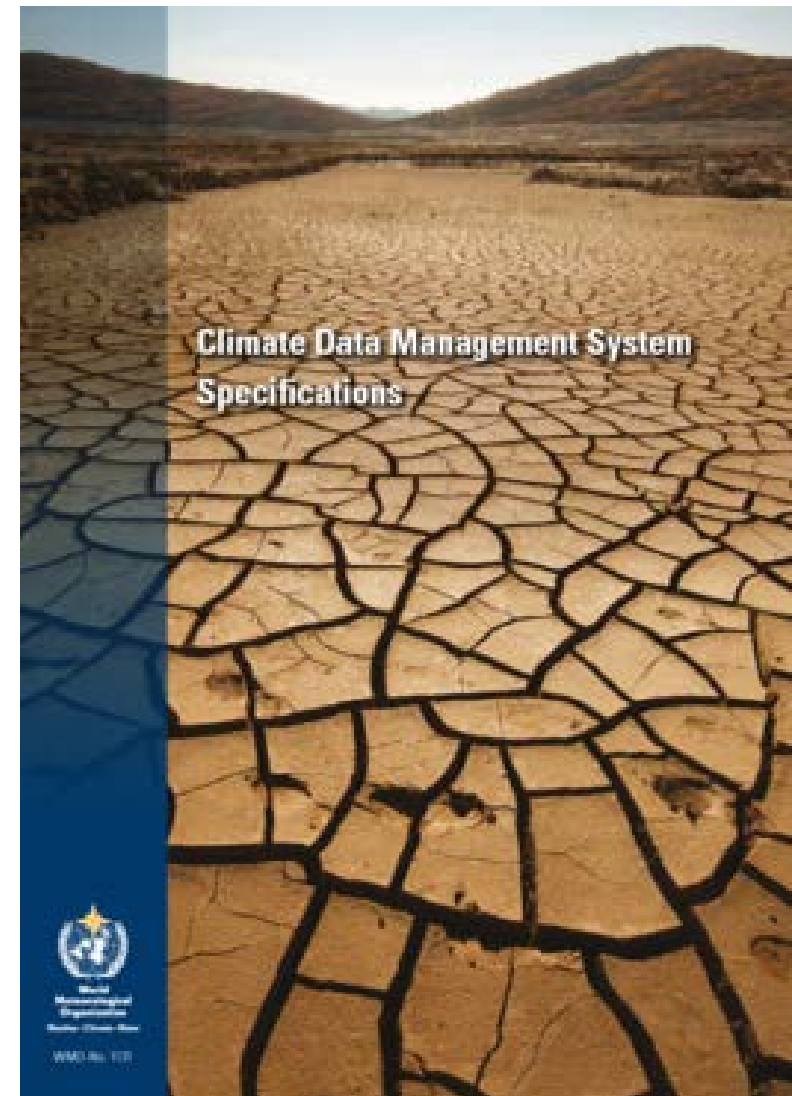
SC-CLI Manual on Technical Regulations WMO-No.49

- (1) harmonization of the Technical Regulations,
- (2) drafting a new section on climate services on WMO-No.49 and
- (3) refining understanding of Members' needs relating to climate data management.



Agenda Item 3: Climate Data Management System Specifications –

- 11 responses received with over 300 comments. Thank you to those who took the time to contribute!
- Available at:
https://drive.google.com/file/d/1vM6A7PO6SRVcv7bRAGYGY43qeI3IJ1_f/view?usp=drive_link
- **Draft finalization write shop:**
William Wright & Denis Stuber,
planned from December 4-5, 2023,
at WMO, Geneva



WMO-No 1131

Agenda Item 4: SADC workshop report and feedback

ET-DRC participated in 2 Workshops:

1. ClimSA Data Exchange Angola: 8-13 May 2023

- Assessment: availability of data in SADC/CSC (Christina Lief)
- CDMS (Denis STUBER)

SADC/CSC: Southern African Development Community/Climate Services Centre

2. SADC workshop: Capacity-building for Member States on Homogenisation of Climate Data and workshop to initiate harmonisation of Climate Data Management System (CDMS) in the SADC region: 31 July – 05 August 2023

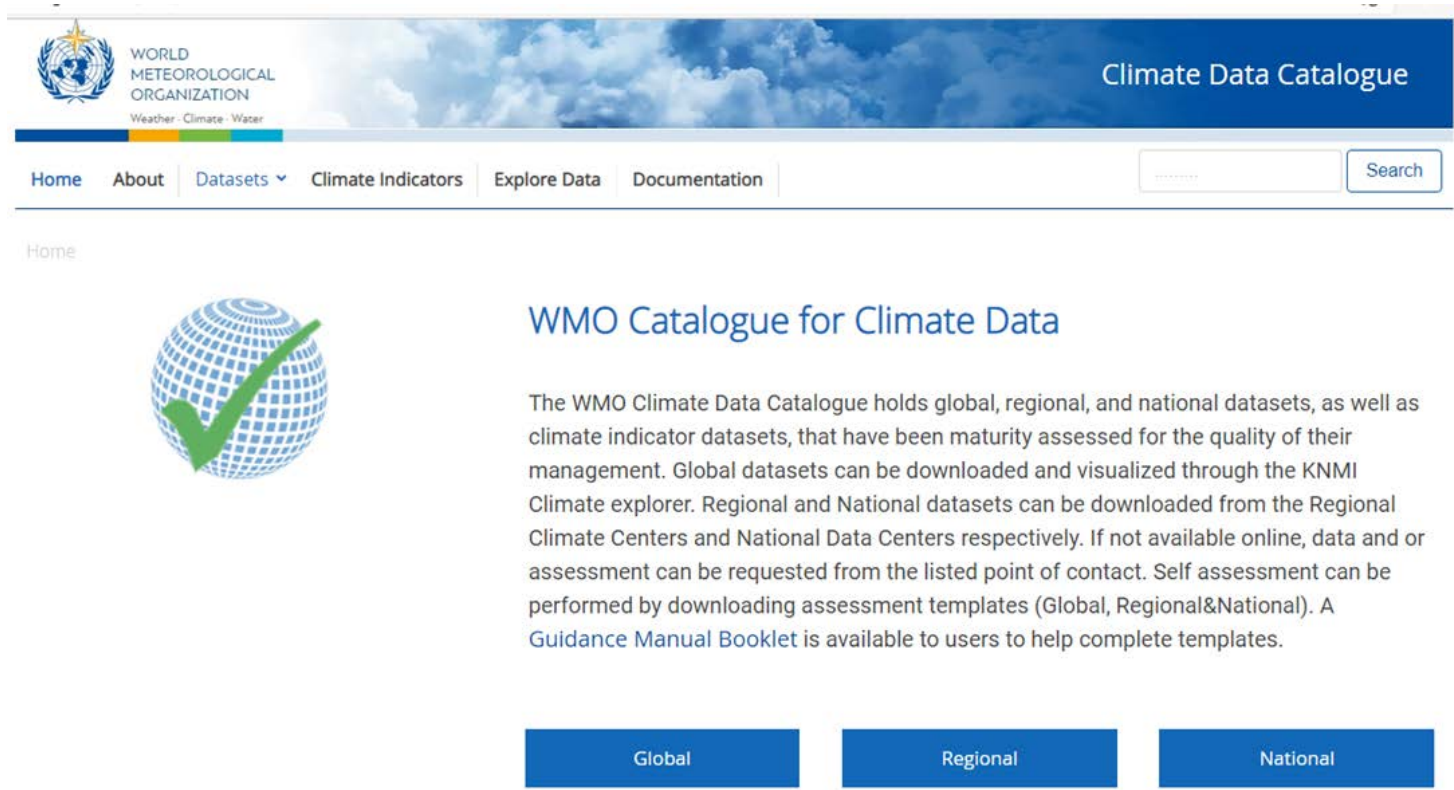
- William, Jose, Peer and Denis on support for Data Rescue, CDMS and Homogenization

Comments:

- The number of resource experts who are able to contribute during these workshop appears to be very low. There is a need to train the trainers on different subjects to fill this void.
- Many NMHSs representatives struggled with the concept and practice of assigning Measurement Quality Classifications and Siting Classifications as per WMO No 8.

Agenda Item 5: WMO Climate Data Catalogue update

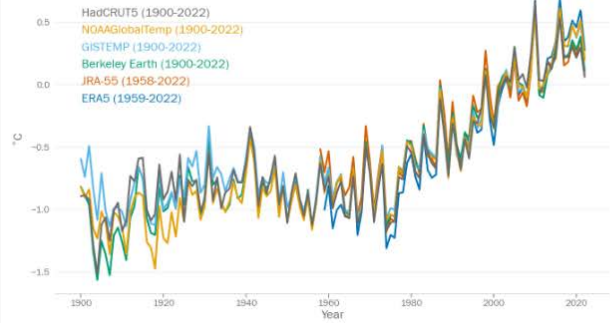
- Lists global, regional and national datasets that have been maturity assessed for the quality of their management and stewardship.
- The newly added regional and national datasets were provided under the ClimSA program.
- A new **Climate Indicator Dashboard** will be added to the Catalogue and will be global as well as for the WMO regions and developed by John Kennedy.
- Claire Ransom and John Kennedy will be working with KNMI to continue develop the Catalogue.
- Available at: <https://climatedata-catalogue-wmo.org>



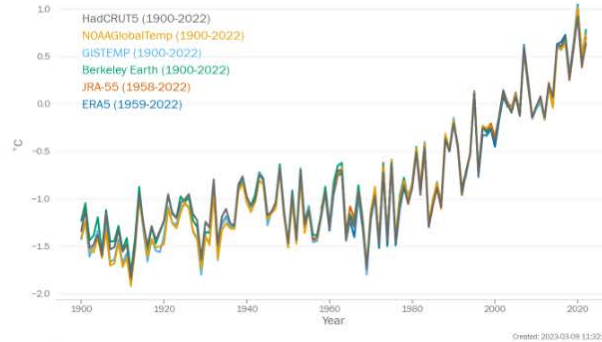
The screenshot shows the homepage of the WMO Climate Data Catalogue. At the top, there is a header with the WMO logo and the text "WORLD METEOROLOGICAL ORGANIZATION" and "Weather · Climate · Water". To the right of the header is the title "Climate Data Catalogue". Below the header is a navigation bar with links: "Home", "About", "Datasets", "Climate Indicators", "Explore Data", and "Documentation". There is also a search bar with a "Search" button. Below the navigation bar, the main content area features a large green checkmark icon over a globe. To the right of the icon is the heading "WMO Catalogue for Climate Data". Below the heading is a paragraph of text: "The WMO Climate Data Catalogue holds global, regional, and national datasets, as well as climate indicator datasets, that have been maturity assessed for the quality of their management. Global datasets can be downloaded and visualized through the KNMI Climate explorer. Regional and National datasets can be downloaded from the Regional Climate Centers and National Data Centers respectively. If not available online, data and or assessment can be requested from the listed point of contact. Self assessment can be performed by downloading assessment templates (Global, Regional&National). A Guidance Manual Booklet is available to users to help complete templates." Below the text are three blue buttons labeled "Global", "Regional", and "National".

Agenda Item 5: WMO Regional Climate Indicators Dashboard

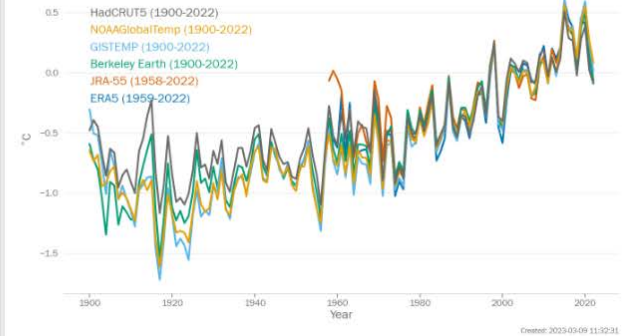
WMO RA I Africa annual temperature
Compared to 1991-2020 average



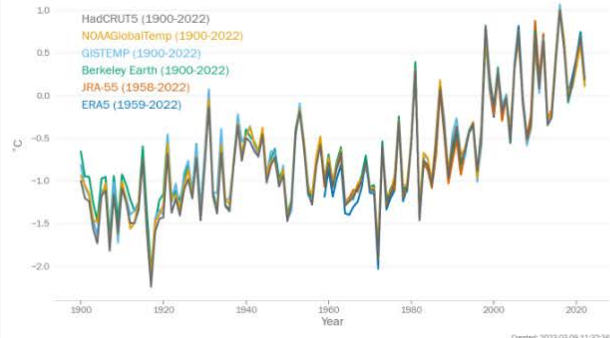
WMO RA II Asia annual temperature
Compared to 1991-2020 average



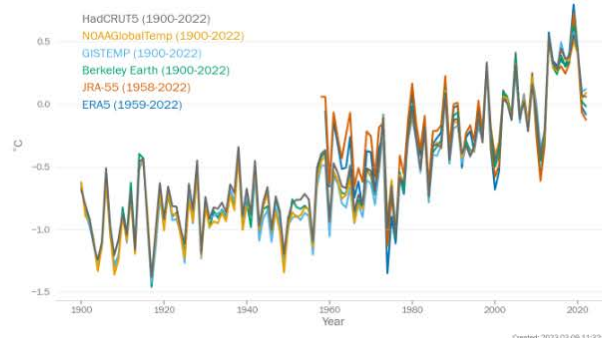
WMO RA III South America annual temperature
Compared to 1991-2020 average



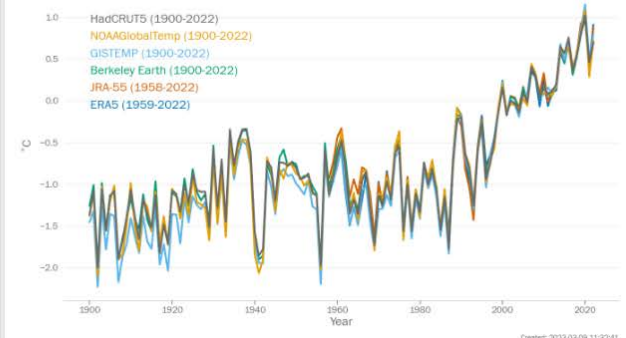
WMO RA IV North America annual temperature
Compared to 1991-2020 average



WMO RA V Southwest Pacific annual temperature
Compared to 1991-2020 average



WMO RA VI Europe annual temperature
Compared to 1991-2020 average



Under construction....

- Planned to be finished at the end of 2023
- ET-DRC invited to present the current state of the paper during the Second Global Forum on Climate Science Information (10-12 October 2023, Abu Dhabi).
- Everyone's participation is welcome (NMHSs use cases are needed). So far: CLISIS, CLIMSOL, CLIDE, R INSTAT, CLIMATOL, CLIMSOFT, CLIDATA and more should come...
- Working meetings to plan...

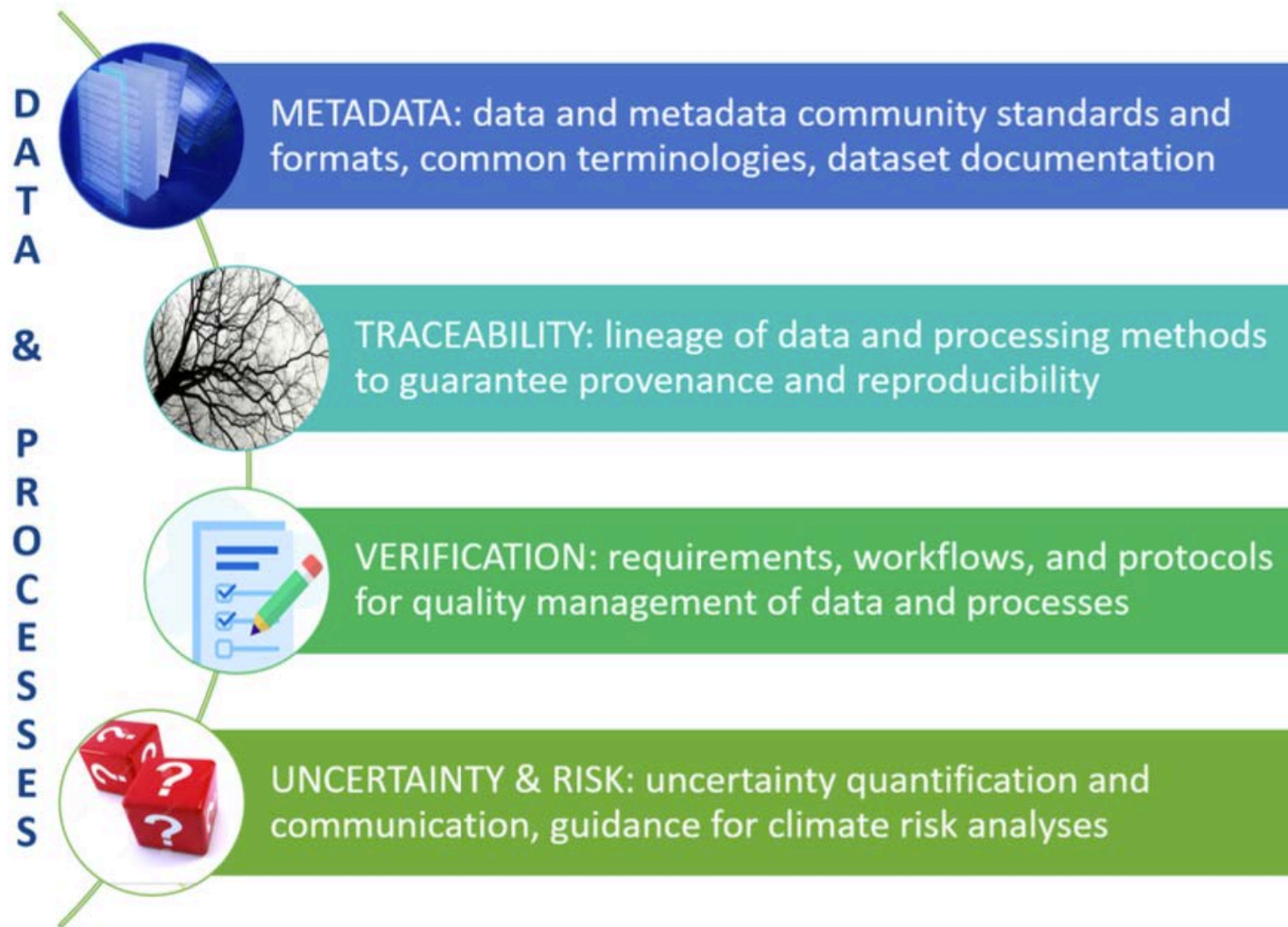
Agenda Item 6: CLIMSA Activity 3.3



- ClimSA Activity 3: Improve access to climate information by strengthening observation network, communication technology, enhancing climate monitoring systems and conducting Research, Climate Modelling and Climate Forecasting.
- ClimSA Activity 3.3: Define and consolidate requirements for user driven services and provide feedback to international data providers for all 8 regions.
- Activity 3.3 has been completed with final report: **'A Strategy and Action Plan for Enhancing Intra-ACP Data Availability and Sharing to Support Climate Monitoring and Risk Reduction'**
- Follow up activity is the publishing of a peer-reviewed paper based on the ClimSA Activity 3.3 Final Report with authorships from eight African-Caribbean-Pacific (ACP) RCCs and ET-DRC. Timeline of publishing is 2024.

Agenda Item 7: ClimatEurope2 Project

Funded by the European Union: Supporting and standardizing climate services in Europe and beyond



In contact with Alessandro Spinuso in charge of the Traceability task of ClimatEurope2, need for ET-DRC to master these concepts into our work.

Decided during the 15/08/2022 meeting between INFCOM & SERCOM:

- ET-DRC to provide the DAYCLI handbook to WMO
- WMO Secretariat to draft a letter to Members with the message that the DAYCLI BUFR sequence is officially in place with the associated guidance
- ET-DRC to produce a set of draft ToR for global data centers about the DAYCLI monitoring and management jointly with GCOS
- WMO Secretariat to draft a paragraph into the SERCOM decision on climate data that requests INFCOM to work with SERCOM on reflecting DAYCLI appropriately in WMO documents and governance

ET-DRC comments:

- Put in place Communication plan (Hotline needed)
- Training material to develop (e.g., on-line multilingual videos)
- Training sessions to organize
- Tools to share
- Funding Budget ?

Agenda Item 9: CLIMATE DATA MODEL

Next meeting of the Task Team on CLIMATE Data Model (TT-CDM) the Tuesday 26 September 2023

Difficulties in combining a general CLIMATE DATA MODEL for:

- CDMS
- DATA EXCHANGE

Agenda Item 10: OpenCDMS

Next Dates

- **4 October 2023:** SERCOM Management Group Q3
- **10-12 October 2023:** Second Global Forum on Climate Science Information
- **30 October – 2 November 2023:** 2nd F2F SERCOM MG Meeting
- **November 2023:** COP28
- **December 4-5, 2023:** ET-DRC Write-Shop 1131
- **December 6-8, 2023:** ET-DRC Working Session (participation TBD. Invitations will be sent out by WMO Secretariat)
- **March 2024:** end of the ET-DRC inter-session. New SERCOM-3 to start. (Experts team TBD)

Expert-Team on Data Requirements for Climate Services (ET-DRC)

Thank you
Merci

Christina Lief/Denis Stuber



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