

Climate Data and Monitoring

WCDMP-No. 79



International Workshop on Data Rescue and Digitization of Climate Records for countries in West Africa

19 - 23 November
Accra, Ghana



**World
Meteorological
Organization**

Weather • Climate • Water

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OPENING

The Director General of ACMAD welcomed the participants to joint ACMAD-WMO workshop and thanked the Ghana Meteorological Department for hosting this important Data rescue workshop and for providing the facilities for the success of the workshop. He recalled ACMAD commitment to help countries in Africa develop high quality digital data records to contribute to the development of the continent.

On behalf of the WMO Commission for Climatology (CCL), Dr William Wright recalled the importance of Data Rescue, particularly with the coming into force of the Global Framework for Climate Services (GFCS), and outlined the fundamental role played by data rescue and data management in supporting the implementation of the recently-approved GFCS. He noted the user-oriented focus of this initiative for the development and provision of climate services and explained that sustainable observations are also important. He then expanded on the importance of data rescue for securing and providing access to the historical climate record, which provides the historical context for climate monitoring, research, prediction and climate change attribution and adaptation. In this context he stressed the importance of secure archival of paper records, and the importance of digitization into climate databases where the data can be accessed, and therefore the strong links that exist between the twin focuses of the CCL OPACE-I, on Data Rescue, and Climate Data Management Systems. He expressed his pleasure to attend the meeting in Africa and concluded by saying that he is confident the Workshop would achieve good outcomes, and looked forward to participating.

On behalf the Secretary General of WMO, Mr Omar Baddour extended his gratitude to Group Captain Stephen Yaokuma Komla, Permanent Representative of Ghana with WMO for hosting the workshop and providing excellent logistical support prior and during the workshop. He thanked the Director General of ACMAD for its co-sponsoring the workshop and coordinating the follow-up of the previous ETCCDI workshop which was held in December 2011 in Banjul, the Gambia. He welcomed the participants from the region and experts from abroad. He recalled the objective of the workshop as to build sustained efforts in Climate data, including Data Rescue and the use of climate data in climate assessment at regional and national levels. He emphasized the current need for developing high quality services as required by the GFCS and climate adaptation which should be based on high quality readily available climate data. The Current efforts will build on the very successful past ACMAD leading role in promoting climate data management in the continent which collaborated with WMO on implementing CLICOM in late 1980s through the 1990s, as well as the efficient role of ACMAD in coordinating other initiatives like PRESAO, for seasonal forecasting in West Africa. He emphasized the need for an international collaboration on climate data and related tools to support the West African efforts, with a particular focus on Data Rescue and climate assessment. The efforts would benefit from the experience in other sub-regions, like the Mediterranean region Data Rescue and Metadata initiative (MEDARE) and the European Climate Assessment and Data project (ECA&D)

On behalf of the Government and people of Ghana, Group Captain Stephen Yaokuma Komla, Permanent Representative of Ghana with WMO, welcomed the participants to ACCRA for this all important Data Rescue Workshop. He recalled Ghana activities to recover its climatological records back as far as 1896 with the UK Met office when Meteorological recording started in Ghana. He expressed Ghana's appreciation for being selected as the venue for this very important workshop and assured that The Ghana Met department will continue its cooperating with WMO and ACMAD in the area of Meteorology for the benefit of humanity and declared the workshop officially opened.

SESSIONS OF THE WORKSHOP

The workshop was organized in the following five sessions, each session introduced by one or several presentations:

Session I: *Emphasizing Needs for DARE Projects* with presentations by Mr Kamga from ACMAD, William Wright, CCI OPACE-1 Co-chair and Omar Baddour from WMO.

Session II: *Existing Global, Regional and National DARE initiatives* with presentation of Dr Aryan van Engelen, Co-lead of the CCI Task Team on Data rescue

Session III: *Reviewing national DARE projects in West Africa* with presentations of the countries data rescue activities at the national level and a remote presentation using WEBEX by Filipe Lucio on Opportunities for accelerating DARE worldwide in the context of GFCS and Climate Adaptation.

During session III, two groups were formed with the following themes:

Working Group 1:

Theme 1: How best use of modern DARE & Digitization in West Africa: user requirements WADARE/WACA&D (e.g. ICA&D) – presentation, workshop and discussions

Theme 2: Infra-structure for WADARE / WACA&D (Web Portal, Archiving facilities, WIS GISCs and DCPCs)

Working Group 2:

Theme 1: Regional and global Coordination and Networks in support of WADARE/WACA&D

Theme 2: How to benefit from existing initiatives to support WADARE/WACA&D (GFCS, CLIMDEV, AMCOMET, ACPC etc.)

Session IV: *Working group session on launching WADARE / WACA&D (e.g. ICA&D) initiative* with presentations of Mr Robert Leander of KNMI and Mr Aziz Barry from the Centre for Climate Change (C3).

Session V: *Follow-up of climate change indices activities in West Africa* (Morning) with a remote presentation using WEBEX of Dr David Thomas on WIS data Infrastructure.

DECISIONS

The participants decided to create a West Africa Climate Assessment and Data rescue initiative (WACA-DARE) and developed a road map (Annex 1) with detailed specifications for short, medium and long term activities. The Initiative will be coordinated by ACMAD under WMO auspices and CCI guidance. WACA-DARE constitutes henceforth the West African Component of the WMO sponsored International Climate Assessment and Data (ICA&D) sets under the technical and management support of KNMI and CCI guidance.

RECOMMENDATIONS

- Evaluation of the effectiveness of the training and trainees using ACMAD existing mechanisms (ACMAD & countries)

- Creation of a Network of CDMS users (ACMAD & countries)
- Accelerate the establishment of regional data base at ACMAD / RCC-function on Data Management (ACMAD & countries)
- Creation of focal points for climate services preferably the same CCI/WMO climate focal points
- CCI-TT-DARE to assist in developing a technical guidance on DARE for West Africa
- Each country prepares a proposal for data rescue and data management projects
- Request the Commission for Climatology (CCI) Management Group to accelerate the establishment of focal points.
- Carry up a gap analysis of digitized and non-digitized climate data and missing data and attempt to locate and recover missing data. An immediate need for locating Liberia Climate data to restore the country data base which lost a large part of the data during the past conflicts. (Dr William Wright will follow on this specific needs with international climate data repositories)
- Undertake an activity to raise the profile of data rescue through case studies illustrating the value of climate services
Establish an operational system for countries to send climate data to ICA&D for agreed selected stations.
- An MoU will be signed by ACMAD and ICA&D (International Climate Assessment and Data sets initiative) under the umbrella of WMO. ACMAD will sign an agreement with each country.
- A first draft of the proceedings will be submitted by ACMAD for review by participants. Participants will send the summaries of their presentations by end of the next week. Contact email: akamgaf@yahoo.com

The participants proposed that Mr Moussa Mouhaimouni from Niger and Mr Elarion Sambou from Senegal with the support of ACMAD, the CCI Task Team on Data Rescue and the Expert Team on Climate database management Systems, develop a guideline document on technical aspects of data rescue and climate data management for West Africa. Dr William Wright (for CCI) and Dr Andre Kamga (for ACMAD) will coordinate this activity.

CLOSING OF THE WORKSHOP

In closing the workshop, the permanent representative of Ghana with WMO Group Captain Stephen Yaokuma Komla thanked the participants for the outcomes of the workshop and the decision de establish the WACA-DARE initiative. He also thanked the expert from the Bureau of Meteorology of Australia, Dr William Wright, the experts of KNMI Dr Aryan van Engelen and Mr Robert Leander, the co-chair of the TT-DARE Mr Joseph Kimani, Mrs Nancy Westcott, members of the TT-DARE. He finally thanked the Director General of ACMAD Mr Adama Alhassane Diallo and the WMO representatives Mr Omar Baddour and Mr Hama Kontongomde.

ANNEX 1: Road map for the WACA-DARE implementation

Period	Actions	Responsibilities / tentative dates
Short Term (3 – 6 months)	<p>Produce a Flyer</p> <p>Develop a paper on showcases</p> <p>Develop the prototype of the WACA-DARE system with the indices generated after the Banjul workshop</p> <p>Each country if needed, to send 1 or 2 staff to ACMAD to be trained in Climsoft</p> <p>Focal points to be designated in each country</p>	<p>ACMAD-WMO-KNMI (by Feb 2013)</p> <p>Writing team: The Gambia, Guinea Bissau, Benin</p> <p>Countries - ACMAD – C3 – KNMI Resp: ACMAD</p> <p>Countries and ACMAD Resp: countries</p> <p>WMO-Countries</p>
Medium (6 months to 1 year)	<p>Establish the WACA-DARE system</p> <p>Organize sub-regional training workshops in Climate data management</p> <p>Make an inventory of data (digitized and non-digitized) and locate where missing records can be found.</p> <p>Make an inventory of Data rescue equipment needed for DARE activities</p>	<p>ACMAD-KNMI-WMO Resp: ACMAD</p> <p>ACMAD– CCI ET-CDMS-WMO (Jul – Nov 2013) Resp: ACMAD-WMO</p> <p>Countries and TT-DARE in liaison with other institutions (NCDC, IEDRO, ACRE, Hadley centre etc.)</p>
Long Term (1 to 2 years)	<p>Get functionalities built into CDMSs</p> <p>Develop long term climate services</p> <p>Make recommendations to the CCI ET-CDMS to improve CDMS functionalities</p>	

ANNEX 2: Provisional Programme

DAY- 1

Opening ceremony

09:00 – 09:10 Address by Director General ACMAD

09:10 – 09:20 Address by the Co-chair of CCl OPACE I (William Wright)

09:20 – 09:40 Address by the Representative of the Secretary General of WMO

09:20 – 09:30 Welcoming address by the representative of the PR of Ghana with WMO (Group Captain Stephen Yao Kuma Komla)

09:30 – 10:00 Coffee break

SESSION I: Emphasizing Needs for DARE Projects

Chair: William Wright, Co-chair of OPACE-1 on climate data management

10:00 – 10:20 Climate Data and information: A resource for present and future development challenges (O. Baddour & H. Kontongomde; WMO)

10:20 – 10:40 The WADARE initiative: synergies with DARE national and regional projects (A. A. Diallo; Director ACMAD)

10:40 – 11:00 CCl related DARE and CDMS Activities (Dr William Wright; Co-chair CCl OPACE I)

11:00 – 11:20 Presentation of the Commission for WMO Commission for Climatology (O. Baddour and H. Kontongomde; WMO)

12:00 – 14:00 Lunch Break

SESSION II: Existing Global, Regional and National DARE initiatives

Chair: William Wright, Co-Chair of CCl-OPACE-1 on Data Management

Global initiatives

14:30 – 15:00 ICA&D: International Climate Assessment & Data Set/Data Rescue: “climate services across borders” (Dr Aryan Van Engelen and Joseph Kimani; Co-leads of CC-TT on DARE)

15:30 – 15:30 Scientific benefits from undertaking data rescue activities: what more can be achieved with long digital records. The MEDARE initiative (Dr Manola Brunet Co-chair CCl OPACE II)

15:30 – 16:00 Coffee break

16:00 – 16:20 Review of the paper on the climate change indices in West Africa, report from the Banjul workshop (Aziz Barry)

DAY- 2

Session III: Reviewing national DARE projects in West Africa

Chair: A. A. Diallo, DG ACMAD

Introduction and Presentations by countries : “Review of data rescue activities and update on the Climate change Indices calculation in each country (follow up of the Banjul seminar)” 15 mn / country

National presentations:

09:30 – 09:45 Benin

09:45 – 10:00 Burkina

10:00 – 10:15 Cape Verde

10:15 – 10:30 Cote d’Ivoire

10:30 – 11:00 Coffee break

11:00 – 11:15 Gambia

11:15 – 11:30 Ghana

11:30 – 11:45 Guinea

11:30 – 12:00 Opportunities for accelerating DARE worldwide in the context of GFCS and Climate Adaptation (Filipe Lucio, remote)

12:00 – 12:15 Guinea Bissau

12:15 – 12:30 Liberia

12:30 – 12:45 Mali

12:45 – 14:00 Lunch break

14:00 – 14:15 Niger

14:15 – 14:30 Nigeria

14:30 – 14:45 Senegal

14:45 – 15:00 Togo

15:15 – 15:35 WIS data Infrastructure (David Thomas, remote)

15:30 – 16:00 Coffee break

16:30 – 17:00 The ECA&D platform and an Introduction to WACA&D (Dr. Robert Leander)

17:00 - 19:00 First session of the 2nd meeting CCl TT on DARE

DAY- 3

SESSION IV: Working group session on launching WADARE / WACA&D (e.g. ICA&D) initiative

Chairs: Joseph Kimani and Aryan van Engelen, co-leads CCl TT on DARE

Reports by Members of the TT-DARE

09:00 – 09:20 WMO Region I Africa Joseph Kimani

09:30 – 10:00 Introduction to the working groups (O. Baddour)

10:00 – 12:30:

Working Group 1:

Theme 1: How best use of modern DARE & Digitization in West Africa: user requirements WADARE/WACA&D (e.g. ICA&D) – presentation, workshop and discussions

Theme 2: Infra-structure for WADARE / WACA&D (Web Portal, Archiving facilities, WIS GISCs and DCPCs)

Working Group 2:

Theme 3: Regional and global Coordination and Networks in support of WADARE/WACA&D

Theme 4: How to benefit from existing initiatives to support WADARE/WACA&D (GFCS, CLIMDEV, AMCOMET, ACPC)

12:30 – 14:00 lunch break

Working Groups continue

15:30 – 16:00 Coffee break

Working Groups continue

16:00 – 18:30 2nd session of the second meeting of the CCI Task Team on DARE

DAY- 4

SESSION IV: Follow-up on assessing climate change indices in West Africa

09:00 – 09:30 IEDRO and ACRE Activities with a focus on Africa (Teddy Allen)

09:30 - 11:00 3rd session of the second meeting of the CCI Task Team on DARE

Reports of the Working Groups sessions

Chair: Alhassane DIALLO

11:00 – 11:45 Conclusions and Recommendations of WG 1

11:45 – 12:30 Conclusions and Recommendations of WG 2

Afternoon: Visit of the Ghana Meteorological Department

DAY-5

Session V: Conclusions and Recommendations

Chair: Alhassane DIALLO

Decisions and recommendations

09:00 – 10:30

Data Rescue (WADARE) and Data Analysis (WACA&D) initiatives in West Africa (ICA&D)
Final Road map for WADARE / WACA&D implementation
Peer review paper on Climate Indices in West Africa

10:30 – 11:00 Coffee break

Decisions and recommendations continued

11:00 – 12:30

Data Rescue (WADARE) and Data Analysis (WACA&D) initiatives in West Africa (ICA&D)
Final Road map for WADARE / WACA&D implementation
Peer review paper on Climate Indices in West Africa

12:30 Closure of the Workshop and the meeting of the CCI TT-DARE

ANNEX 3: List of Participants

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