WMO OMM

ACMAD

WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

WMO Global to regional climate services for better climate change adaptation and risk management

WMO OMM
World Meteorological Organization
Organisation météorologique mondiale

GFCS
GLOBAL FRAMEWORK FOR CLIMATE SERVICES

UNFCCC/SBSTA 10th Session –
9th Research Dialogue
Boon, Germany, May 10, 2017

OUTLINE

- Climate Service Information System functions

- International Coordination Team for CSIS

- Implementation scales and Sample products/services

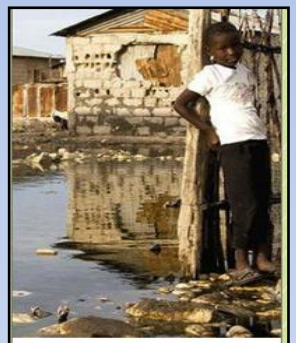
-Use of CSIS products for CCA&CRM and gaps

- Concluding Remarks

GFCS Vision

Enable better management of the risks of climate variability and change and adaptation to climate change


Agriculture and food security


Disaster risk reduction


Water


Health


Energy


Water


Health


Energy


Disaster risk reduction


Agriculture and food security

Priority areas

GFCS GLOBAL FRAMEWORK FOR CLIMATE SERVICES

GFCS Phase II Implementation Objectives

Reducing the vulnerability of society to climate-related hazards through better provision of climate information.

1: Priority Applications

Improving decision making in climate-sensitive areas:

- Health
- Food security and agriculture
- Disaster risk reduction
- Water resources
- Energy

3: Foundational Pillars

Enhancing technical and scientific capabilities to support user-driven climate services:

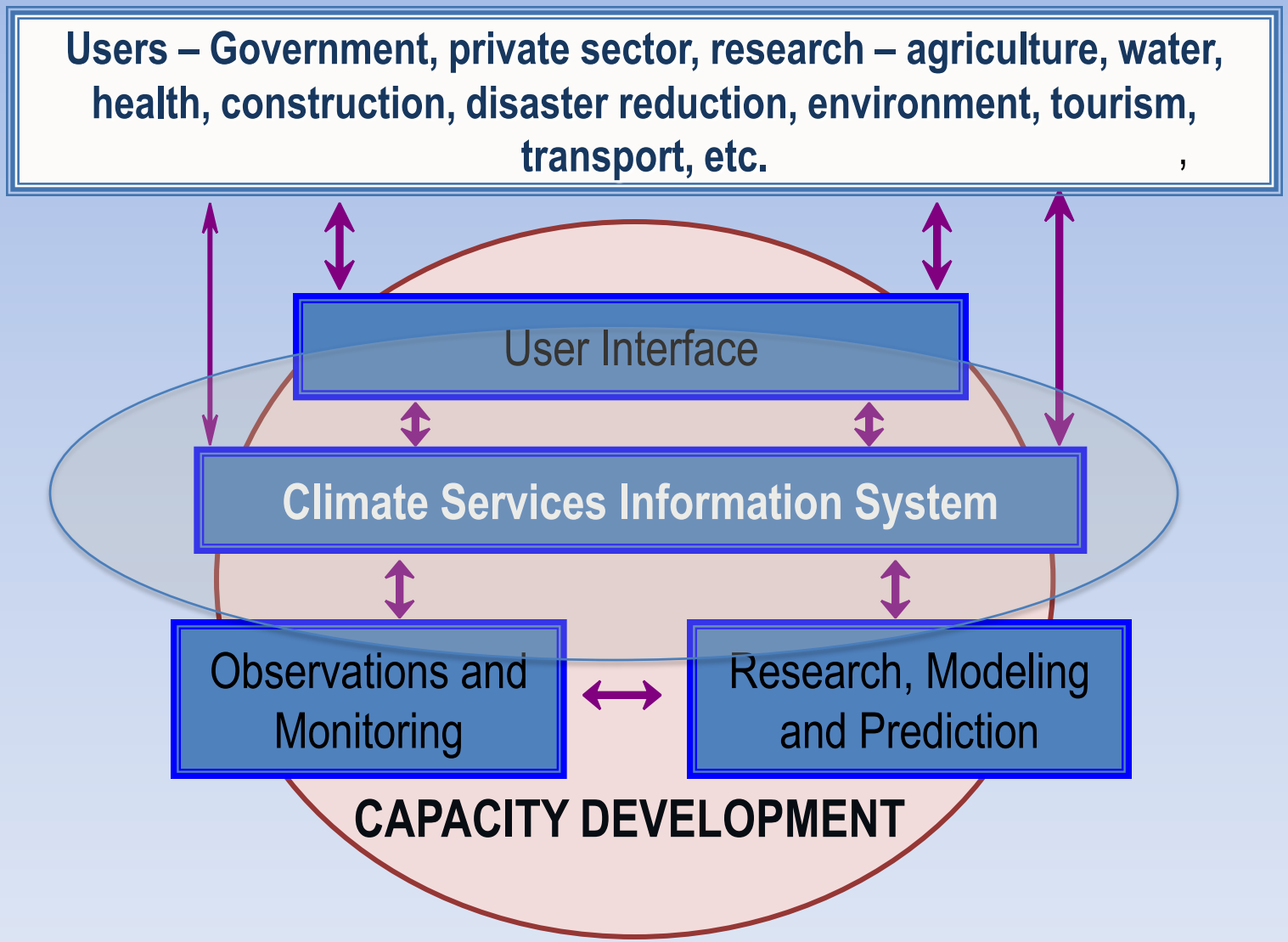
- Observations and monitoring
- Research, modeling, and prediction
- Climate services information systems
- Capacity building

2: Bridge

Connecting user needs with climate services through sustained engagement mechanisms:

- National activities
- Regional activities
- Global activities

How GFCS operates?



CSIS GOAL AND FUNCTIONS

- CSIS produces and delivers information about past, present and future climate for policy, decision making and practices

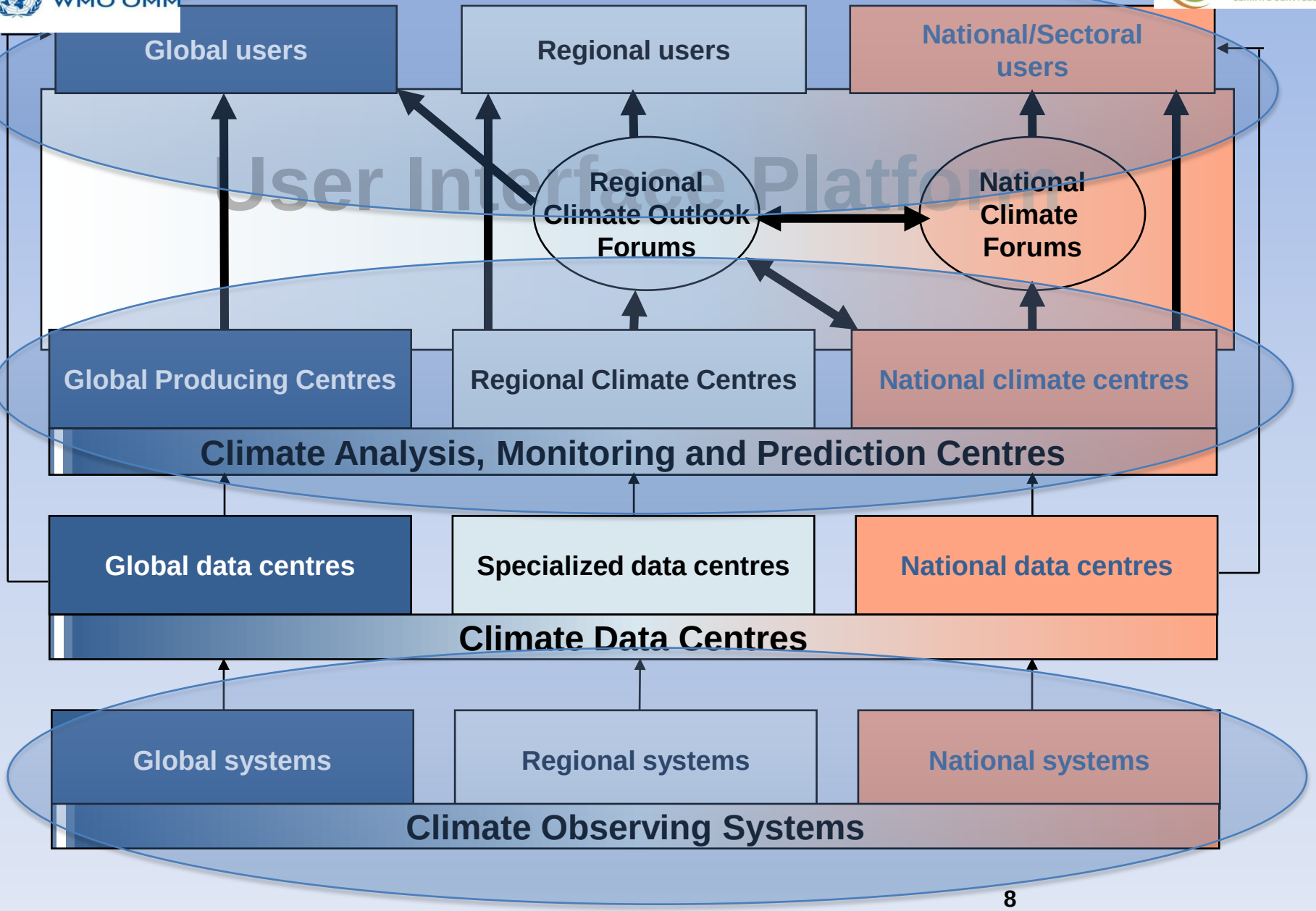
- Functions include:
- climate data management;
- climate analysis, monitoring, assessment and attribution;
- climate predictions(from weeks to a decade) and projections (several decades to centuries)

ICT-CSIS

The Implementation Coordination Team (ICT) was established by WMO/CCl to ensure operation and coordination of CSIS

- ✓ Keep under review the features of the Climate Services Information System (CSIS);
- ✓ Advise and coordinate support across WMO Technical Commission for Climatology,;
- ✓ Elaborate a minimum set of climate information outputs expected from the CSIS at the global, regional and national levels;
- ✓ Liaise closely with other WMO technical commissions to facilitate production, exchange including the development of Technical Reference manual;
- ✓ Collaborate with experts within and outside of the Commission to build a Climate Services Toolkit;
- ✓ Provide guidance on user interface and capacity development for climate services.

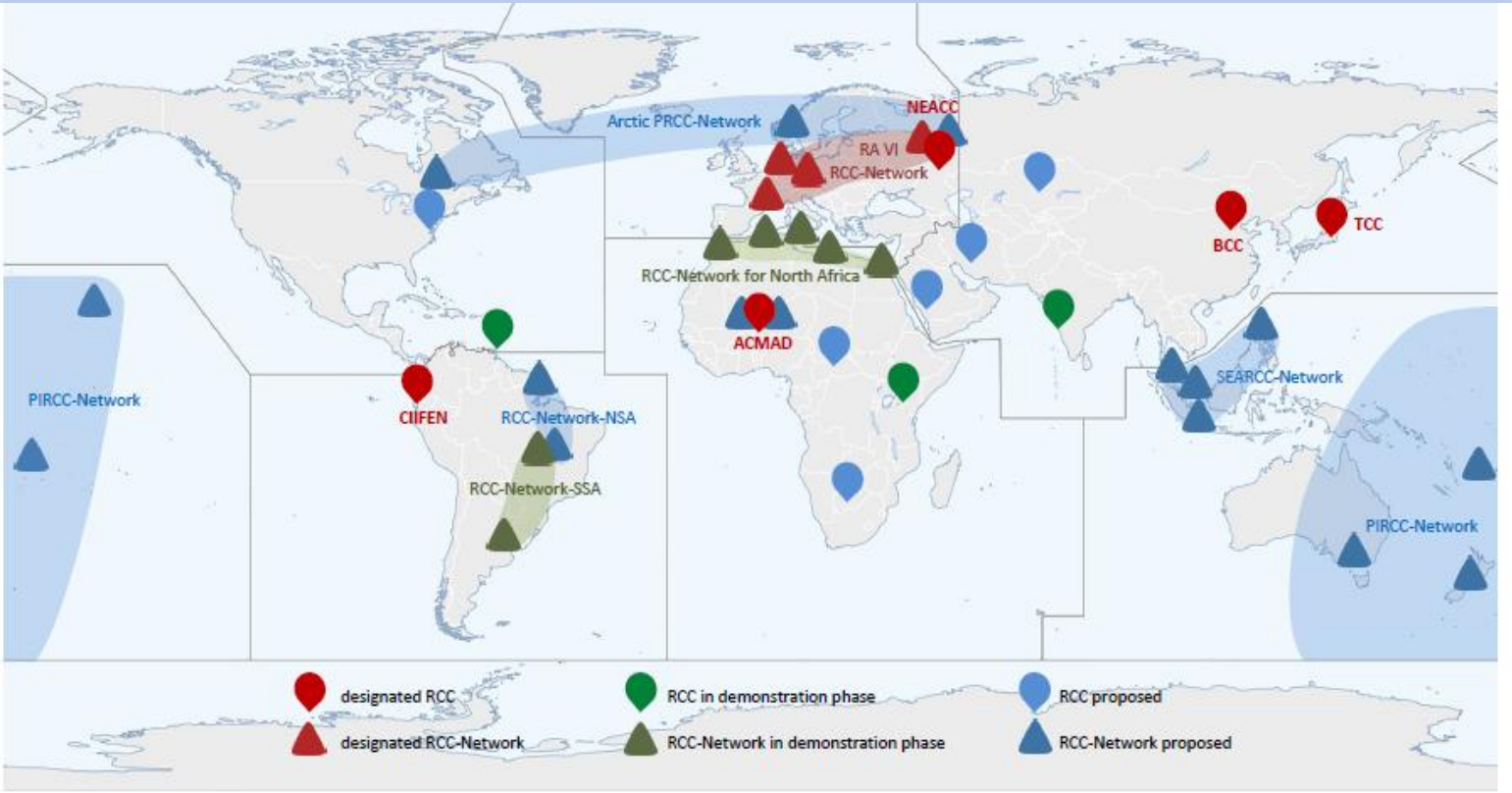
CSIS collaborating entities



8

World Meteorological Organization (WMO) Regional Climate Centers

- RCCs are Centres of Excellence intended to perform regional-scale climate functions
- Established at the request of the Members of the WMO Regional Associations
- Official accreditation given by WMO after a **successful 2- 4 yrs demonstration phase**
- **Primary users are the National Meteorological and Hydrological Services (NMHS)**
- RCCs functions include **data services, training, monitoring, long range forecasting, Climate prediction and projection, research and development, coordination.**



SAMPLE PRODUCT FROM WMO GLOBAL CENTRES

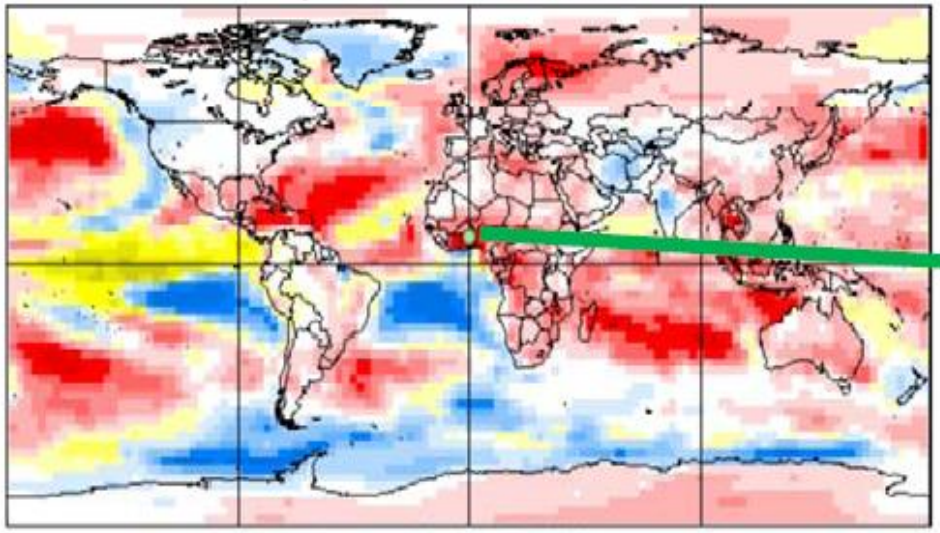
CMC/CCCma (Environment Canada) Experimental Seasonal Probability Forecasts/Hindcasts

(contact: slava.kharin@ec.gc.ca)

Variable	Time avg.	Prev./Next	Init. year/month		Lead	Region	Version	Calibration/Observations	
Temperature	Seasonal	<<	>>	2013	Nov	0-month	Globe(-180..180)	cmc(d+e)	Calibrated(constant)	eraint

Forecast Type	Observation Type	Show PDF/Obs.	Skill	Attr.Type
Probabilistic	N/A	Show PDF	smoothed	fitted

Temperature, 3-category Probabilistic Forecast
year=2013, NDJ, 0-month lead



12-season calibrated probability forecast.

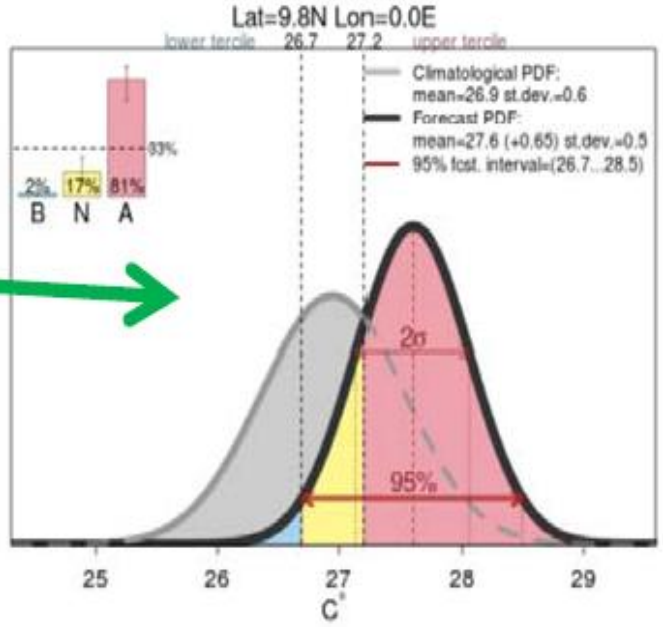
40 50 60 70 80 90 100 below normal (%)

40 50 60 70 80 90 100 near normal (%)

40 50 60 70 80 90 100 above normal (%)

Areas where forecast probability exceeds 40% are shaded in colours.
White color indicates areas where forecast probabilities of all 3 categories are below 40% and approximately equal.

Local probability forecast

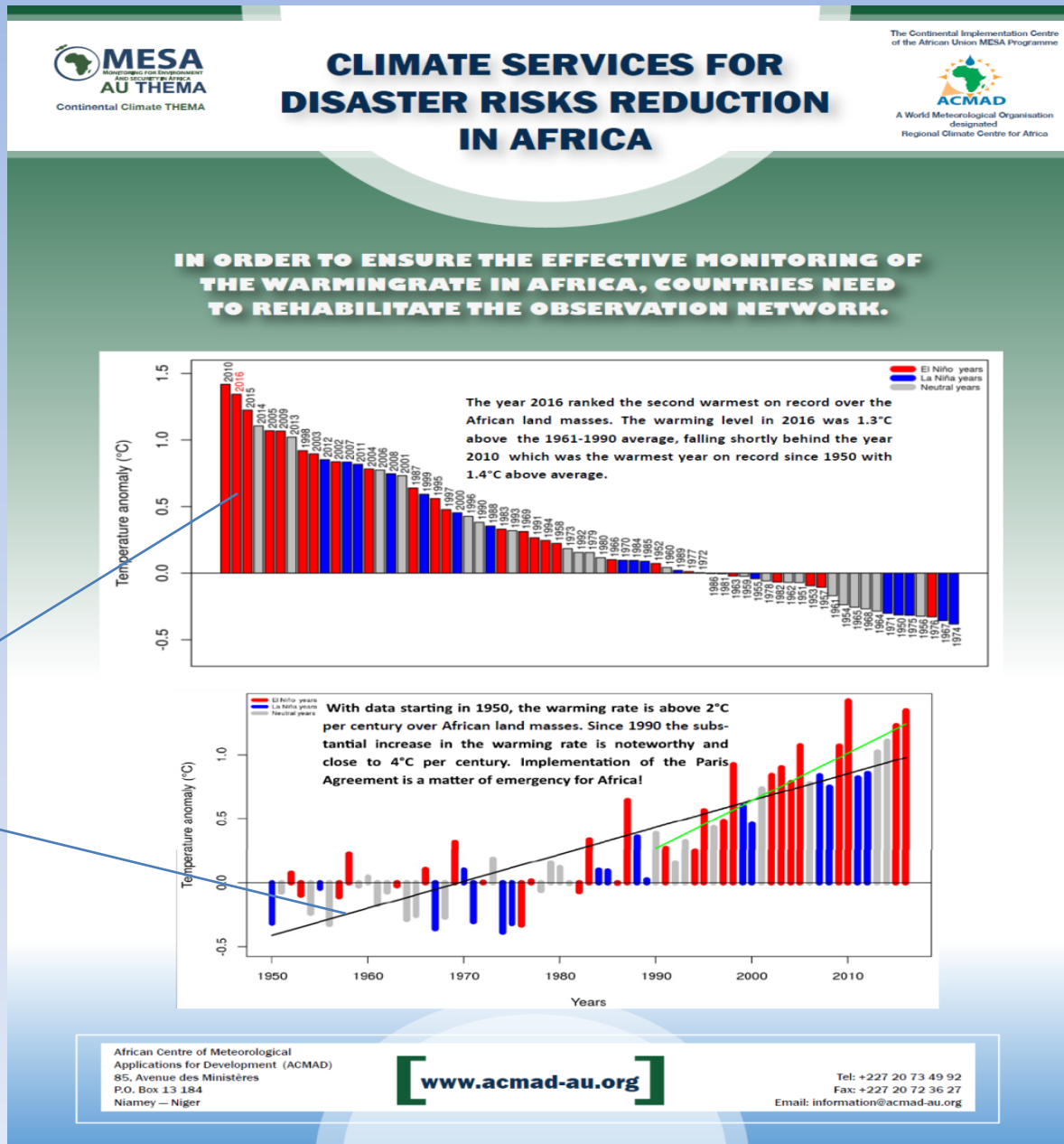


Sample Regional Products

PARIS AGREEMENT

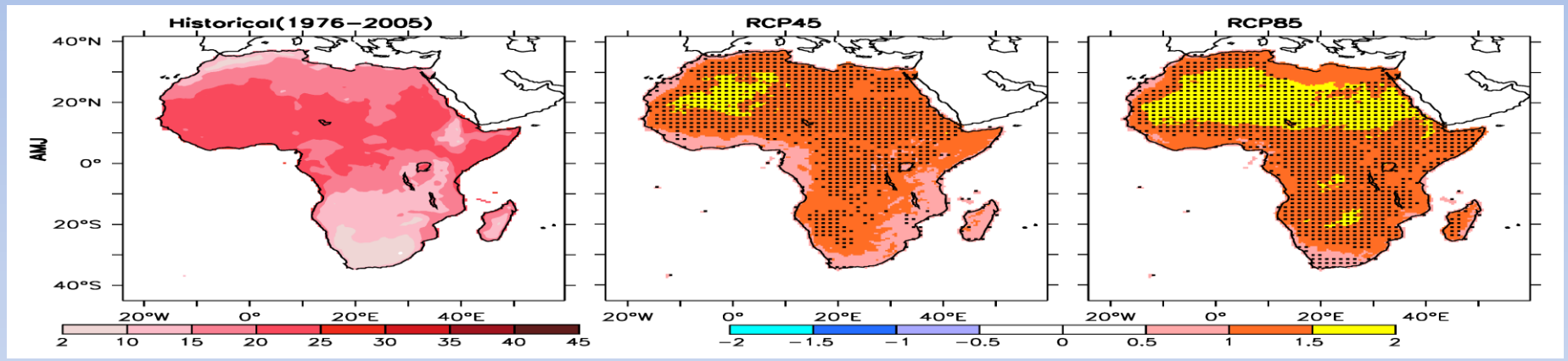
Its aims to strengthen global response to CC

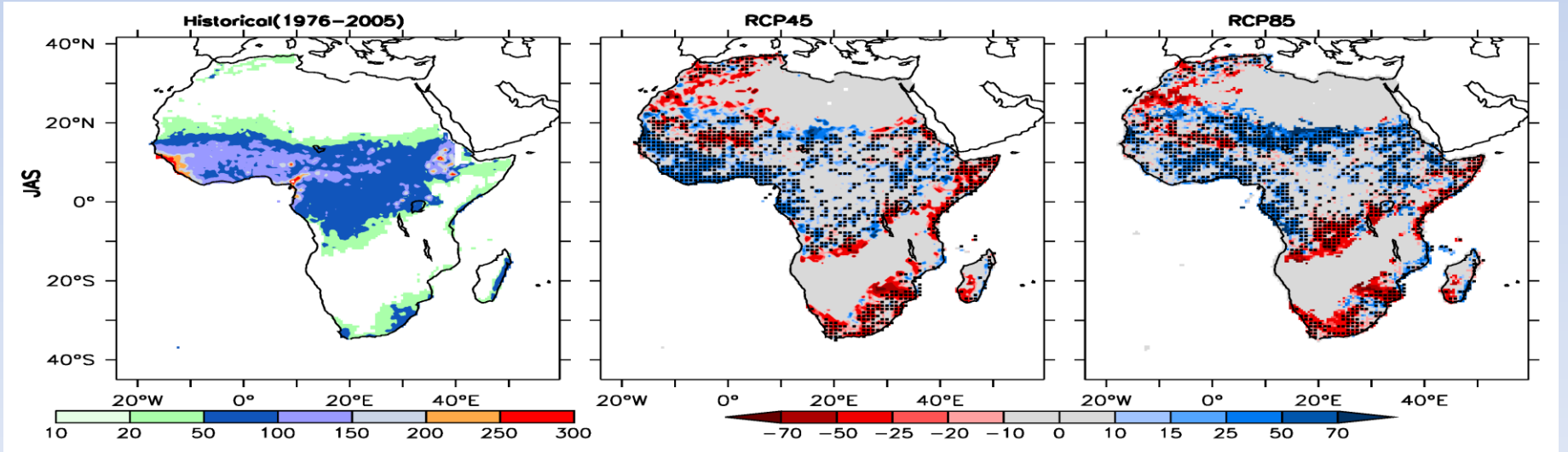
Objective: Hold the global temperature increase well below 2° C above pre-industrial levels and pursue effort to limit it below 1.5° C



PIDA AND CAADP IN AFRICA

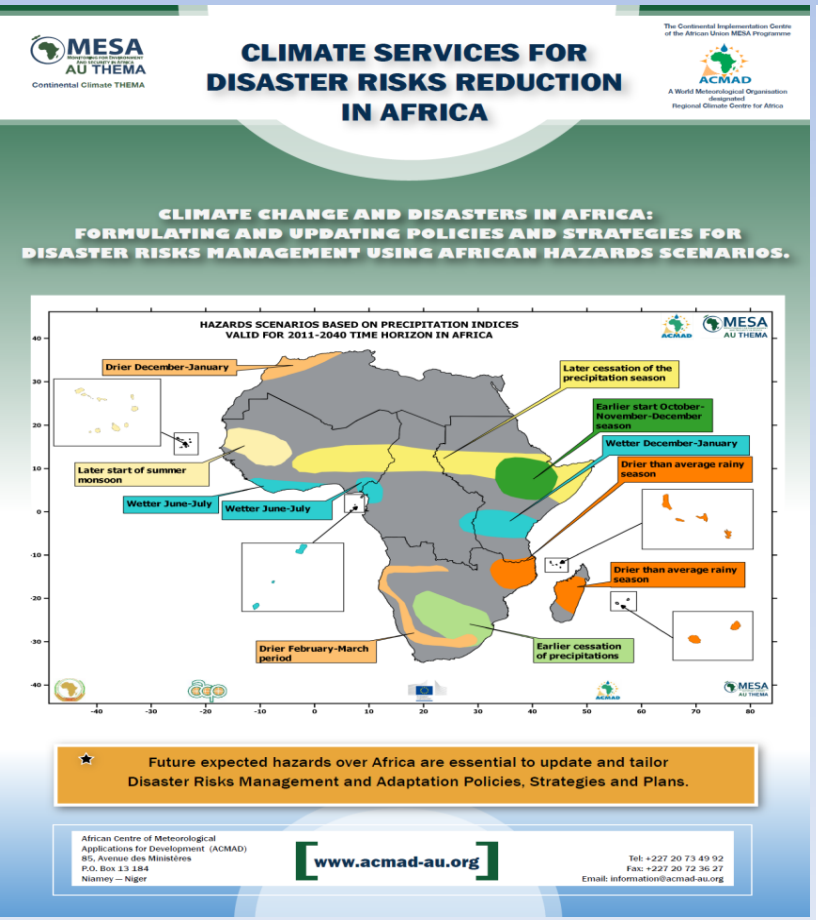
Change in mean seasonal (AMJ) minimum temperature (top) and JAS Maximum 10 day precipitation (bottom) between the future (2011-2040) and present-day (1976-2005) . Design Roads, energy infrastructure (PIDA) and agriculture(CAADP) calendars to adapt impacts for very high temperatures and heat waves, heavy precipitation and floods





Contribution to implementation of African DRR&CC strategic objective/pillars

-improve identification and assessment of disaster risks (DRR)
-Mainstreaming and integrating climate change imperatives in planning, budgeting, and development processes (CC)
-Promotion of research, education, awareness raising and advocacy (CC)



Climate Services for Disaster Risks Reduction in Africa

FED/2014/331-704

This project is funded by The European Union

MESA
Monitoring for Environment and Security in Africa

ACMAD

A project led & implemented by the African Center of Meteorological Applications for Development

SECOND POLICY DIALOGUE DAY REPORT

THEME: "Changing climate and impacts on economy, society and environment in Africa: how to organize planning and budgeting of climate services for more resilient development strategies and plans?"

DATE: WEDNESDAY FEBRUARY 15, 2017
VENUE: SOLUXE HOTEL IN NIAMEY -NIGER

An event organized by the African Centre for Meteorological Applications for Development (ACMAD) with the support of the 10th European Development Fund (EDF) through the Monitoring of the Environment for Security in Africa(MESA) Programme.

Agenda 2063 - ASPIRATION 1:
A prosperous Africa based on inclusive growth and sustainable development.

Agenda 2063 - ASPIRATION 4:
A peaceful and secure Africa

RECOMMENDATION ON CONTINENTAL COLLABORATION FOR IMPLEMENTATION OF AGENDA 2063

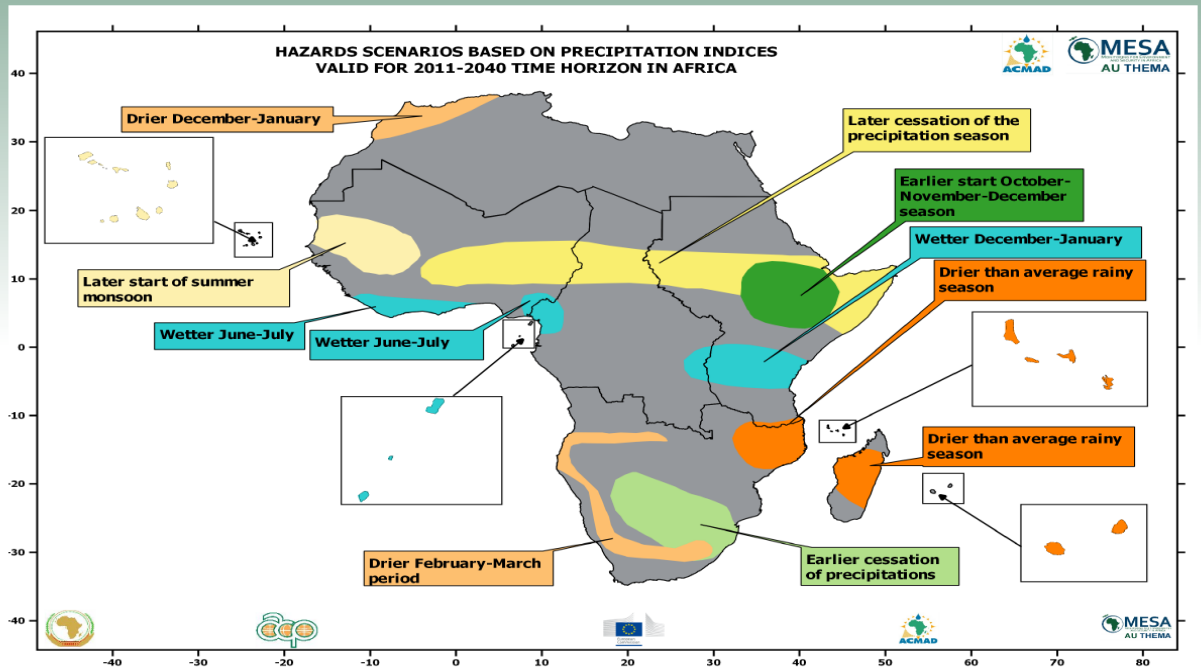
AUC, partners and networks support operationalization of ARC, ACMAD and AfBD collaboration to support Aspirations 1 and 4 of our Africa Agenda

MESA
Monitoring for Environment and Security in Africa
AU THEMA
Continental Climate THEMA

CLIMATE SERVICES FOR DISASTER RISKS REDUCTION IN AFRICA

The Continental Implementation Centre of the African Union MESA Programme
ACMAD
A World Meteorological Organisation designated Regional Climate Centre for Africa

CLIMATE CHANGE AND DISASTERS IN AFRICA: FORMULATING AND UPDATING POLICIES AND STRATEGIES FOR DISASTER RISKS MANAGEMENT USING AFRICAN HAZARDS SCENARIOS.



★ Future expected hazards over Africa are essential to update and tailor Disaster Risks Management and Adaptation Policies, Strategies and Plans.

African Centre of Meteorological Applications for Development (ACMAD)
85, Avenue des Ministères
P.O. Box 13 184
Niamey — Niger

www.acmad-au.org

Tel: +227 20 73 49 92
Fax: +227 20 72 36 27
Email: information@acmad-au.org

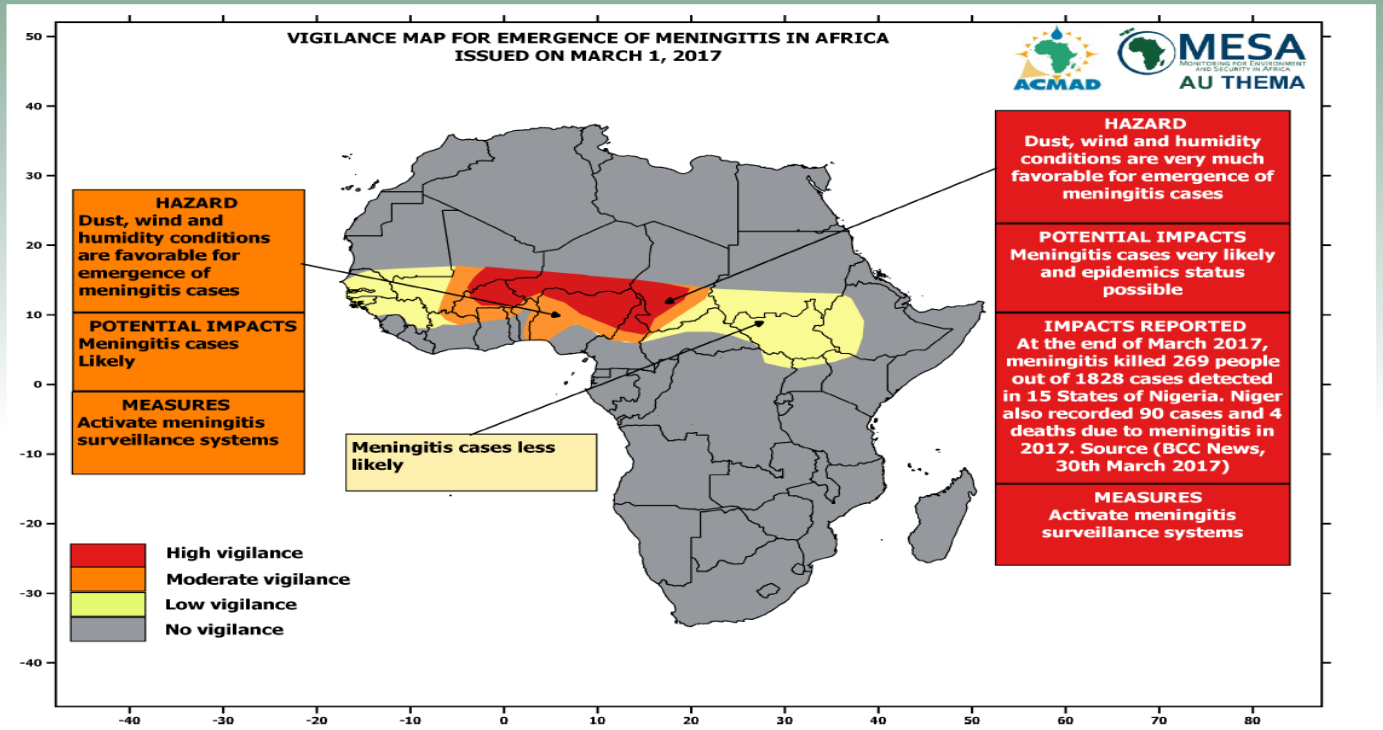
MESA
Monitoring for Environment and Security in Africa
AU THEMA
Continental Climate THEMA

CLIMATE SERVICES FOR DISASTER RISKS REDUCTION IN AFRICA

The Continental Implementation Centre of the African Union MESA Programme

ACMAD
A World Meteorological Organisation designated Regional Climate Centre for Africa

CLIMATE SERVICES FOR MENINGITIS EPIDEMIC SURVEILLANCE AND CONTROL IN AFRICA IN SUPPORT OF SUSTAINABLE DEVELOPMENT GOAL THREE–GOOD HEALTH AND WELL-BEING.



★ As part of the implimentation of SENDAI Framework for Disister Risk Reduction, African countries in the meningits belt are encouraged to consider vigilance products for optimal planning and distribution of vaccine following the best practice initiated in Niger through the ministry of Healf

Challenge to operationalize Integrated Information System for effective policy, decision making and actions

REMARKS ON FUTURE ACTIVITIES

- Inventorying and making available and usable existing data, methods, tools, products and services
- Identify improvements and further develop the syst

- **Develop capacity and governance to support observations, research, modelling, prediction, information and use**

- **Prioritize capacity development on integration of climate information in sustainable development planning and budgeting processes**

(e.g Agenda 2063 of the African Union)

THANKS !!!