

REGIONAL CLIMATE CENTRE AFRICA

The [WMO Regional Climate Centre Africa](#) (RCC Africa) is hosted by the [African Centre of Meteorological Applications for Development](#) (ACMAD), based in Niger. RCC Africa currently has four sponsors:

- Development cooperation agencies of France, United States of America (USA), Canada, and United Kingdom of Great Britain and Northern Ireland (UK)
- European Development Fund
- Research and Innovation Funds
- African Development Bank

Linkage with Global Climate Centres

RCC Africa uses data and products from eight WMO Global Producing Centres for Seasonal Prediction and from the [WMO Lead Centre for Seasonal Prediction Multi-Model Ensembles](#), the [International Research Institute for Climate and Society](#) (IRI), [COPERNICUS](#) and the [North American Multi-Model Ensemble](#).

Linkage with WMO Regional Climate Outlook Fora

RCC Africa works closely with neighbouring WMO RCCs, namely the networks for North Africa, for the [WMO Regional Association for Europe \(RA VI\)](#) and for [IGAD \(African Intergovernmental Authority on Development\)](#), on the co-organization of Regional Climate Outlook Forums (RCOFs) in Africa:

- The Prévisions Climatiques Saisonnières en Afrique Soudano-Sahélienne (PRESASS)
- The Prévisions Climatiques Saisonnières pour les pays du Golfe de Guinée (PRESAGG)
- The Prévisions Climatiques Saisonnières en Afrique Centrale (PRESAC).

It provides continental scale outlooks for the Greater Horn of Africa Climate Outlook Forum (GHACOF), the Southern African Regional Climate Outlook Forum (SARCOF) and the Southwest Indian Ocean Climate Outlook Forum (SWIOCOF).

Mandatory functions

All WMO RCCs fulfill a set of mandatory functions related to seasonal prediction, climate monitoring, data services and training. Listed below are those performed by RCC Africa.

OVERVIEW

Domain of responsibility: WMO Region I (Africa)



Languages: English and French

Status:

- Demonstration phase initiated: September 2012
- Designation by WMO: May 2015

Climate features

The El Niño Southern Oscillation (ENSO) affects mainly the western, eastern and southern parts of Africa as well as the Indian Ocean region.

The Indian Ocean Dipole affects precipitation pattern in East Africa, while the South-West Indian Ocean Dipole modulates rainfall over southern Africa and the Indian Ocean region.

The Mediterranean Sea Surface Temperatures affect North Africa and the Sahel. The equatorial Atlantic and Tropical SSTs affect the Equatorial Africa from West to East through Central Africa.

Social media:



Seasonal prediction

- Continental-scale climate outlook statements during the African Continental Climate Outlook Forum (ACCOF) organized with contributions from other African RCCs
- Seasonal precipitation and temperature predictions
- Skill maps from statistical and dynamical models
- Technical notes for seasonal prediction briefings for other RCCs and National Meteorological and Hydrological Services (NMHSs)

Climate monitoring

- Technical notes for the annual report on the state of climate in Africa
- Technical note on monthly and decadal climate diagnostics
- Synthesis and short statements for the public as well as for policy and decision-makers
- Drought watch

Data services

- Monthly synoptic station reports
- Precipitation and temperature datasets from synoptic stations
- Gridded climate statistics, number of rainy days and seasonal totals

Training

- Training materials on software such as [ClimSoft](#) and [RClimDex](#)
- User manuals on data rescue
- Training materials related to RCOFs
- Workshop training materials on sub-seasonal and seasonal predictions

Recommended functions fulfilled

WMO RCCs are recommended to perform certain functions. Listed below are those performed by RCC Africa.

Non-operational data services – RCC Africa assists NMHSs in data rescue activities.

Coordination – It provides technical support for coordination and harmonization of datasets, methods, tools and products for climate monitoring, seasonal prediction and training across Africa through the ACCOF.

Training and capacity building – It organizes trainings on new

datasets, advanced methods, tools and products to improve climate information across Regional Economic Communities.

RCC Africa also organizes regular training workshops with the national meteorological service of Senegal on climate products tailored to Senegal's agricultural sector.

RCC Africa also contributes to National Climate Outlook Forums in Nigeria by training climate experts on objective seasonal forecasting and on downscaling methods.

Research and development – RCC Africa validates climate projections over African sub-regions and downscales seasonal predictions with the [IRI Climate Predictability Tool](#) and the [Climate Forecasting Toolbox](#).

Success stories

RCC Africa's successes include the provision of national climate trends and impacts information to support, for example, parliamentary discussions on climate bills, the drafting of Nationally Determined Contributions for parties to the Paris Agreement of the United Nations Framework Convention on Climate Change, and national and sub-regional sustainable development plans such as the formulation of the Economic Community of West African States' Vision 2050.

Its collaboration with the United Nations Office for the Coordination of Humanitarian Affairs has resulted in the co-production of impact-based climate outlooks and actionable indicators for contingency and emergency planning.

The African Continental Multi-Hazards Advisory Centre uses RCC Africa products to issue situation reports and continental watches that support the operationalization of the African Multi-Hazards Early Warning and Early Action System.

