

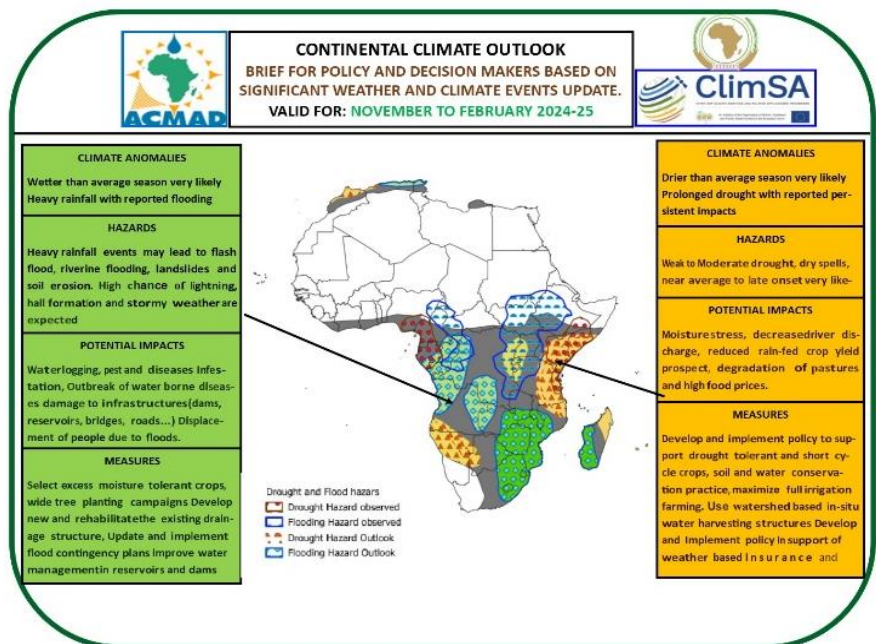
## STATEMENT FROM THE EIGHTEENTH AFRICAN CONTINENTAL CLIMATE OUTLOOK FORUM (ACCOF-18)

29<sup>th</sup> Oct to 01<sup>st</sup> Nov 2024, Accra, Ghana

### Summary:

The rainy season from November 2024 to February 2025 is expected to be:

- **Wetter-than-normal** over southern parts of Africa including Mozambique, Malawi, Zambia, Zimbabwe & South Africa.
- **Normal-to-below** normal rainfall is expected over north-western Morocco, and northern Algeria
- while **Below normal** rainfall is expected over eastern parts of Africa covering parts of Somalia, Kenya, Rwanda, Burundi, Tanzania, southern Angola, northern Namibia, northwestern Botswana and northern Madagascar.



The season will be characterized by a normal to late onset of rainfall over southern Africa.

As per temperature, the following conditions will prevail over the upcoming four months period:

- **Warmer-than-average** conditions are across most parts of Africa during both the NDJ and DJF seasons,
- Meanwhile, **near-average** temperatures are expected in the Sahel region.

## 1. Background :

The Eighteenth Climate Outlook Forum for the African Continent (ACCOF-18) was held in Accra, Ghana, from October 29 to November 1, 2024. This event was organized by the African Centre of Meteorological Applications for Development (ACMAD) in close collaboration with the World Meteorological Organization (WMO), the African Union Commission (AUC), the Africa Regional Climate Centres (RCCs), and other International Partners. ACCOF serves as the platform established by ACMAD to support the implementation of the African Regional Climate Outlook Forum (RCOF) coordination function designated by the WMO for Africa. The forum focuses on addressing and mitigate the challenges posed by extreme weather events that result from climatic variability and change across the continent.

The 18<sup>th</sup> Edition of the forum aimed to review and document the performance and impacts of the June to September (JJAS) season. It also sought to release the consolidated continental climate outlook for the November to February (NDJ/DJF) 2024/2025 season. The forum discusses the implications of the NDJ/DJF 2024/2025 climate forecast and develops advisories and management strategies for various climate-sensitive socio-economic sectors. Additionally, it raises awareness of the benefits and quality of Integrated and Harmonized Climate Outlooks at the continental level, which are essential for adapting to climate change across African Regional Economic Communities (RECs).

This outlook covers the rainy season from November 2024 to February 2025. It is presented in two superimposed quarterly periods: November-December-January (NDJ) and December-January-February (DJF). The Outlook is relevant for seasonal timescales and relatively large geographical areas. Local and month-to-month variations might occur as the season progresses. While wetter than usual seasonal-average conditions are most probable over southern parts of Africa including Mozambique, Malawi, Zambia, Zimbabwe, and South Africa, dry spells may occur in areas with an increased likelihood of above-normal to near-normal rainfall and vice versa. ACMAD will continue to provide Continental updates regularly while the Other Regional Climate Centers (RCC) will provide regional updates. The National Meteorological and Hydrological Services (NMHSs) will provide detailed national and sub-national climate updates.

## 2. Methodology:

Following the recommendations of the World Meteorological Organization (WMO), the African Regional Climate Centres (RCCs) have established an objective procedure for seasonal forecasts. For the seasonal climate outlook of November, December, January, and February (NDJ&DJF) 2024/2025, data and products from Global Producing Centres (GPCs) were collected and processed using statistical downscaling, beginning with forecasts initialized in October 2024. The methods employed included the analysis of climate variability and teleconnections, examination of recent trends, statistical downscaling, and insights from various climate dynamical prediction systems, as well as interpretation by skilled climate experts. The final consolidated forecast is derived by averaging the predictions generated from these diverse approaches.

### 3. Continental Outlook for the period from November 2024 to February 2025:

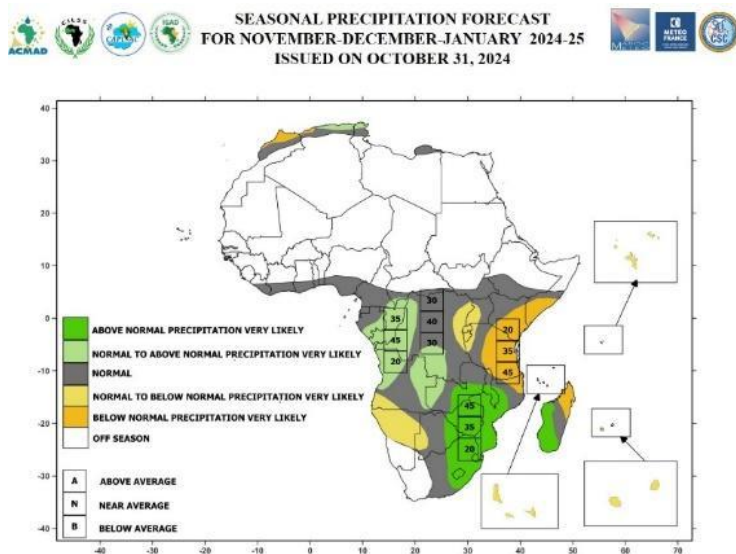
The seasonal forecast was developed during the Pre-ACCOF-18 climate capacity coordination workshop took place in Ghana from October 29<sup>th</sup> to 31<sup>st</sup>, 2024. During this workshop, regional scientists and forecasters from Regional Climate Centers (RCCs), representing each Regional Economic Community (REC) and coordinated by the African Centre of Meteorological Applications for Development (ACMAD), evaluated the progress of the ongoing June-August/September-October (JAS/ASO) 2024 season. The discussions were feed by inputs from the regional climate outlooks for the upcoming November-December/January (NDJ) and January/February 2025 season.

The analysis considered the climatic factors of the current atmospheric behavior over different regions of the Continent as well as the current and predicted Sea Surface Temperatures (SSTs) conditions over the Pacific, Indian, and Atlantic Oceans, and the Mediterranean Sea. The global and regional climate factors that affect the rainfall and temperature evolution during the November to February period were also analyzed. These factors were assessed using dynamical and statistical models accordingly.

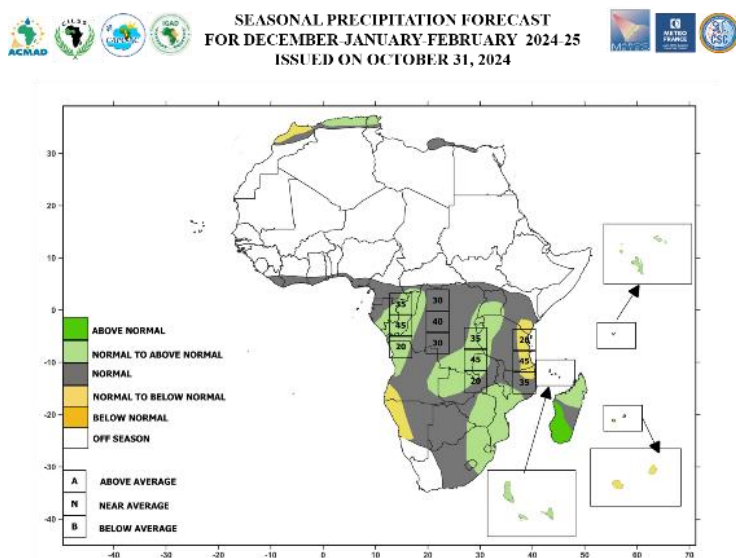
- Over the Equatorial Pacific region, SSTs forecast from dynamic and statistical models' predictions as well as the analyses of the experts are favorable to near-to-below-average throughout the forecast period. WMO and major GPCs have called for the emergence of La Niña conditions from November 2024 to February 2025 with a likely chance of 75% and 70% for the NDJ and DJF upcoming seasons respectively.
- Over the Atlantic basin: -Tropical North Atlantic was characterized by above-normal SSTs, and persistence of this condition is expected for the period November 2024 to February 2025. - Tropical South Atlantic has been near to above average, neutral to warm conditions is very likely from November to February 2024-25.
- The Indian Ocean Dipole (IOD) is currently in the neutral phase and forecasted to remain in the neutral state throughout the NDJF 24/25 season. All climate models indicate the IOD index will meet or exceed negative IOD thresholds in November, before returning to neutral values during December.

Based on the current and forecast evolution of the influencing factors, as well as the evidence gathered from the analytical tools discussed in Section 2, the following trends are anticipated for the key parameters (precipitation and temperature) during the season from November 2024 to February 2025.

### 3.1. Continental Outlook of Precipitation for the period from November 2024 to February 2025:



**Figure 1.** Probability forecast for precipitation in Africa from November 2024 to January 2025. White shading indicates areas where OND is typically a dry season.



**Figure 2.** Probability forecast of precipitation across Africa for December 2024 to February 2025. White shading indicates regions where OND is climatologically a dry season.

➤ **Above normal precipitation** is expected over Mozambique, Malawi, Zambia, Zimbabwe, Madagascar and South Africa;

➤ **Normal to below normal precipitation** is expected over north-western Morocco, northern Algeria, northern Namibia and south-western Angola;

➤ **Below normal precipitation** is expected over eastern parts of the Africa covering parts of Somalia, Kenya, Rwanda, Burundi, and Tanzania & northern Madagascar;

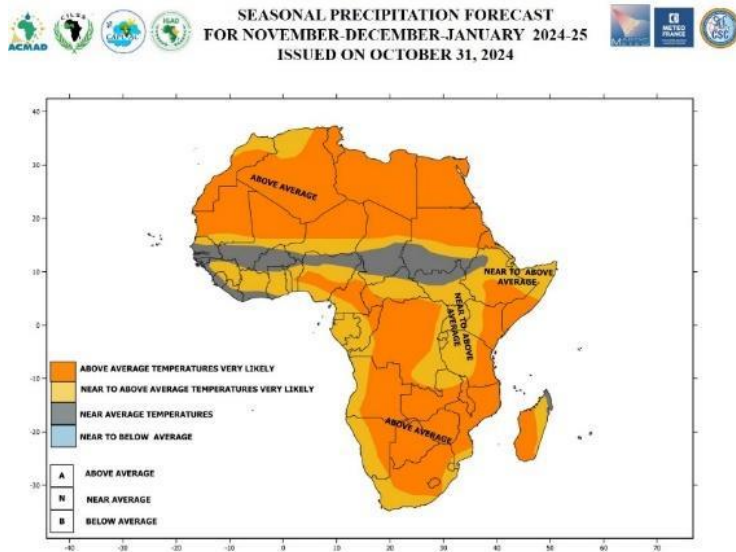
➤ **For the rest of the Continent, seasonal average conditions are expected.**

The rainfall forecast for the season from November 2024 to February 2025 predicts normal to below-average rainfall in several regions. The areas affected include the northernmost parts of Morocco, southern Somalia, eastern Kenya, central and eastern Tanzania, western Uganda, most of Rwanda, Burundi, northeastern Mozambique, northern Madagascar, southwestern Angola, and northern Namibia.

From November 2024 to February 2025, the SADC region is expected to experience above-normal rainfall in several areas, including southeastern Zambia, southern Malawi, eastern Botswana, most of Zimbabwe, Mozambique, South Africa, Lesotho, Eswatini, and western and southern Madagascar. During the same period, normal to above-average rainfall is likely in northern Algeria, Tunisia, and the western and southern parts of Central Africa.

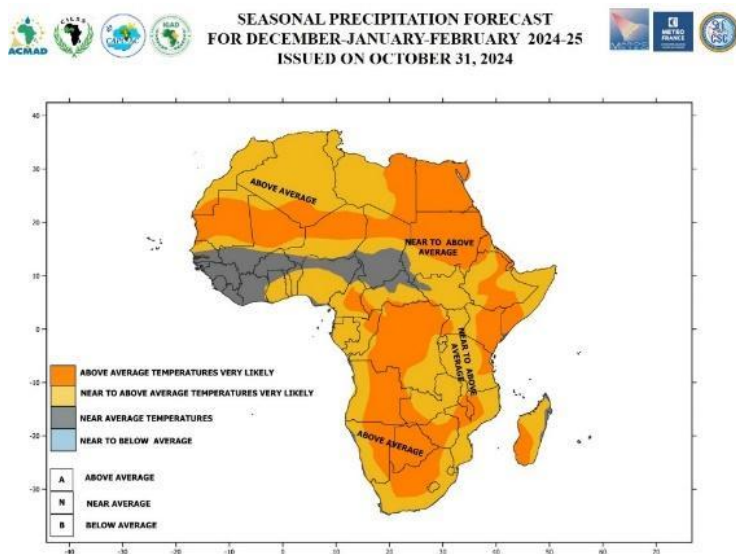


### 3.2. Continental Outlook of Temperature for the period from November 2024 to February 2025:



**Figure 3.** Probability forecast of temperature across Africa for November 2024 to January 2025.

- **Warmer-than-average conditions** are expected across most parts of Africa; on record joining 2023 as the two hottest years on record according to WMO.



**Figure 4.** Probability forecast of temperature across Africa for December 2024 to February 2025.

- **Near average temperatures** are expected from western to central Sahel region, and over parts over Gulf of Guinea countries.

True to the above forecast, the headlines in the State of the Climate Update 2024 give cause for great concern. Greenhouse gas concentrations continue to steadily rise, driving further long-term temperature increases, highlighting the rapid changes in our climate system in the space of a single generation. We are on track for 2024 to be the hottest year as shown by figures 3 and 4 above. There were numerous significant heatwaves in 2024 particularly affected areas included in the Horn of Africa.

#### 4. Sectoral Impacts and Mitigation/Adaptation and Advisories for the NDJ & DJF Season

Weather and climate significantly impact every sector of the economy and various aspects of human activities in Africa. The forecast conditions for the November-December-January (NDJ) and December-January-February (DJF) periods will influence different sectors in unique ways and to varying degrees. Consequently, the responses required by end users will differ across sectors. During the ACCOF-18 event, climate experts engaged with representatives from various sectors to identify climatic anomalies, their hazards, potential impacts, and the appropriate mitigation measures to adopt.

Climate Anomaly	Hazards	Potential impacts	Mitigations Measurement
<ul style="list-style-type: none"> <li>★ <b>Wetter-than-average Season due to heavy rainfall and Stormy Weather;</b></li> <li>★ <b>Prolonged rainfall season</b></li> </ul>	<ul style="list-style-type: none"> <li>➢ Flooding, landslides, soil erosion, and risk of lightning expected particularly over Mozambique, Malawi, Zambia, Zimbabwe and South Africa.</li> <li>➢ Prolonged rainfall season in Central Africa Republic and Cameroon with flood likelihood even in Chad</li> </ul>	<ul style="list-style-type: none"> <li>● Breaching river embankments</li> <li>● Overflowing drainage systems</li> <li>● Infrastructure damage (dams, reservoirs, bridges, roads...)</li> <li>● School Closure, People displacement, Fatalities</li> <li>● Outbreak of water-borne infectious diseases</li> <li>● Waterlogging, Pest and diseases infestation</li> <li>● Agricultural losses</li> </ul>	<ul style="list-style-type: none"> <li>● Protecting river banks;</li> <li>● Encourage the development of new drainage systems and rehabilitate existing drains;</li> <li>● Controlling floods and water levels in dams;</li> <li>● Mobilize/prepare disaster response teams;</li> <li>● Update or set up early warning systems;</li> <li>● Identify high-risk areas (towns along rivers, exposed urban sites, etc.);</li> <li>● Raising awareness among populations at risk (hygiene promotion, habitat resilience, etc.);</li> <li>● Consider cross-border coordination measures between countries</li> <li>● Develop or update national and provincial emergency and contingency plans in exposed areas;</li> <li>● Selecting crops that are tolerant to excess humidity,</li> <li>● Strengthening inter-sectoral, institutional and multidisciplinary dialogue.</li> </ul>
<ul style="list-style-type: none"> <li>★ <b>Drier-than-average season due to rainfall deficit;</b></li> <li>★ <b>Rainy season shorter than usual</b></li> </ul>	<ul style="list-style-type: none"> <li>➢ Sequenced drought of low to moderate intensity associated with late to normal start to the season,</li> <li>➢ Prolonged dry spell particularly over eastern Africa region, northwestern Morocco, southern Angola, northern Namibia, northwestern Botswana and northern Madagascar.</li> </ul>	<ul style="list-style-type: none"> <li>● Water shortage, reduced flow (low water) in rivers and dams leading to lower energy and drinking water supplies,</li> <li>● reduced yield prospects for rain-fed crops,</li> <li>● degradation of pastures and likely movements of herders with the risk of agro-pastoral or land conflicts, higher food prices.</li> <li>● Heatwaves, moisture stress, reduced rain-fed crop yield prospect, degradation of pastures, epidemics and high food prices. prolonged drought spell in Namibia, Angola and Botswana, wildfire, and diseases.</li> </ul>	<ul style="list-style-type: none"> <li>● Encourage the development of agro-pastoral systems that are more resilient to drought and the vagaries of the climate (intelligent agriculture, agricultural irrigation and watershed water harvesting, weather insurance, development of forage techniques);</li> <li>● Develop national contingency plans for drought risk management.</li> </ul>

## 5. Contributors

ACCOF-18 was organized by the African Centre of Meteorological Applications for Development (ACMAD) in collaboration with several key organizations, including the World Meteorological Organization (WMO), the African Union Commission (AUC), and the African Regional Climate Centres (RCCs), along with other international partners. The forum was supported by the Intra-African Caribbean Pacific (Intra-ACP) Climate Services and Related Applications (ClimSA) Programme, which is funded by the 11<sup>th</sup> European Development Fund (EDF).

Participants at ACCOF-18 included representatives from the Organization of African, Caribbean, and Pacific States (OACPS), regional situation rooms across Africa (such as IGAD, ACMAD, SADC SHOC, and ECCAS), the AUC Situation Room, and national meteorological services from ClimSA pilot countries, which include Angola, Burkina Faso, Cameroon, Kenya, Uganda, and Madagascar. Other contributors were the Ghana Meteorological Agency (GMET), the Nile Basin Initiative (NBI), African Risk Capacity (ARC), the Pan-African Farmers Organization (PAFO), the African Network of Basin Organizations (ANBO), NORCAP, the United Nations Office for Disaster Risk Reduction (UNDRR), the International Federation of Red Cross and Red Crescent Societies (IFRC), the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), along with climate scientists and various experts from national, regional, and international institutions and organizations.