

AFRICAN REGIONAL CLIMATE CENTRE

LONG RANGE FORECAST PRODUCT FOR AFRICA VALID FOR MARCH-APRIL-MAY AND APRIL-MAY-JUNE 2023 SEASONS.

ISSUED: February 28, 2023

Highlights

- During the month of February 2023, below average rainfall was observed over northern Africa, Gabon, central DRC, northern and southern Angola, Kenya, southern Ethiopia, southwestern Central African Republic, southeastern Nigeria, southern Somalia, south-western Cameroon and northern Namibia. Above average was observed over southern DRC, most of central to eastern parts of the SADC region, northern and southern Madagascar, south-eastern Cote d'Ivoire, southern Angola, much of Zambia, northern Malawi, north and south of Mozambique, southern Zimbabwe, central Namibia, south-western Ghana, eastern Botswana, eastern South Africa, Lesotho and Madagascar.
- The outlooks for the rainfall season during the March to June 2023 period is that below average and normal to below average rainfall is expected over most of Guinea Gulf region, southern Ethiopia, much of Kenya, central and southernmost of Tanzania, eastern Zambia, most parts of Malawi, northern Mozambique and Madagascar,
- From March to June 2023 normal to above average rainfall are very likely over northern Morocco, Algeria, Tunisia, south-western DRC, south-eastern Somalia, eastern Kenya and Tanzania, eastern Botswana, southern Zimbabwe, Mozambique, Madagascar eastern parts of South Africa, much of Lesotho and Eswatini.
- Over central eastern parts of Nigeria, southernmost of Chad, northern Cameroon, Congo and DRC, most parts of CAR, southern Sudan, Uganda, much of Rwanda, Burundi and eastern Tanzania above average precipitation is expected during March to June 2023
- Near to above average temperature is very likely over Morocco, Algeria, Tunisia, Libya, Egypt, northern Sudan, Chad, Niger, Mali and Mauritania, Mali, south most of Zambia. Much of Zimbabwe, Botswana, South Africa, Lesotho, Eswatini, and southern Mozambique.

RECENT SST CONDITIONS AND OUTLOOK

- The Equatorial Sea surface temperatures (SSTs) have been near to below average conditions across most of the Pacific Ocean December-2022 to February 2023. During the March to June 2023 period, ENSO is favoured to transition from weak La Nina (negative SSTs) to neutral and later-on to an almost El Nino (positive SSTs) phase.
- Near to above average SSTs were observed over the Tropical North Atlantic (TNA) during November-December-2022 to January 2023. Most model outputs and expert judgments favour persistence of near average conditions during the evolution of the seasons (March to June 2023).
- Near to average SSTs characterized the North Atlantic Tropical (NAT) during November-December-2022 to January 2023. During the coming months, February to May, near average SSTs are expected.
- Near average SSTs characterized the South Atlantic Tropical (SAT) from November-December-2022 to January 2023. These conditions are expected to remain near normal during the coming seasons.
- The SSTs over the Tropical South Atlantic (TSA) have been near average during November-December-2022 to January 2023. Model outputs and our expert judgment favour persistence of these conditions during the coming seasons (MAM and AMJ 2023).
- Sea Surface Temperatures in the Western Tropical Indian Ocean (WTIO) and South-Eastern Tropical Indian Ocean (SETIO) have been near average during November-December-2022 to January 2023. Model outputs and our expert assessments are in favour of persistence of this condition for the coming four months.
- The Sea Surface Temperatures over the Mediterranean Sea have been above average during November-December-2022 to January 2023. Model outputs and our expert judgment predicted near average conditions during the next seasons (MAM and AMJ 2023).

RAINFALL OUTLOOK (MAM & AMJ)

Given these SST anomalies, sub-surface temperature patterns and trends, knowledge and understanding of seasonal climate variability in Africa, and the available long range forecast products from Global Producing Centers for Long Range Forecasts, the following outlooks for precipitation and temperature are provided for March-April-May (MAM) and April-May-June (AMJ) 2023 seasons across Africa (see the figures below):

During the March to June 2023 period;

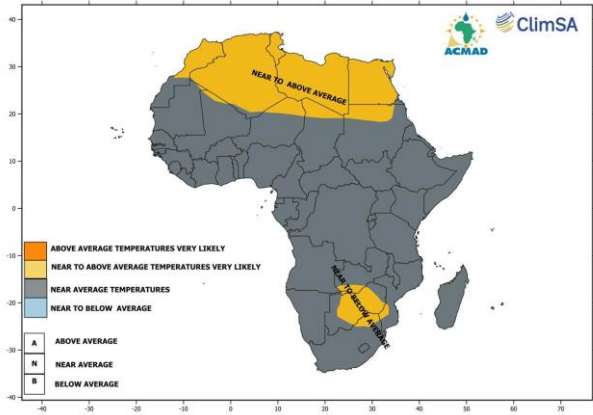
- During the month of February 2023, below average rainfall was observed over northern Africa, Gabon, central DRC, northern and southern Angola, Kenya, southern Ethiopia, south-western Central African Republic, south-eastern Nigeria, southern Somalia, south-western Cameroon and northern Namibia. Above average was observed over southern DRC, most of central to eastern parts of the SADC region, northern and southern Madagascar, south-eastern Cote d'Ivoire, southern Angola, much of Zambia, northern Malawi, north and south of Mozambique, southern Zimbabwe, central Namibia, south-western Ghana, eastern Botswana, eastern South Africa, Lesotho and Madagascar.
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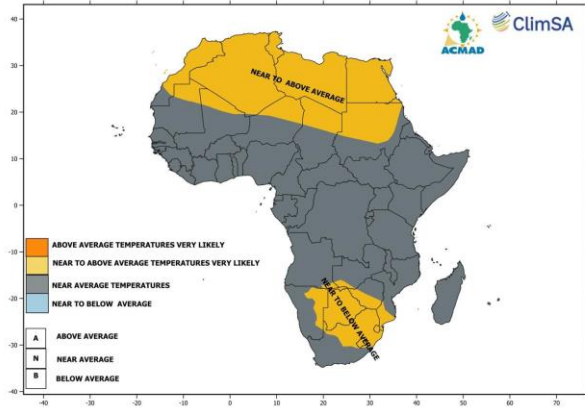
- Near to above average temperature is very likely over Morocco, Algeria, Tunisia, Libya, Egypt, northern Sudan, Chad, Niger, Mali and Mauritania, Mali, south most of Zambia. Much of Zimbabwe, Botswana, South Africa, Lesotho, Eswatini, and southern Mozambique.

NB: Users are advised to seek more detailed climate information on the distribution of precipitation during the season, impacts and action options from their National Meteorological and Hydrological Services and the ACMAD website (www.acmad.org).

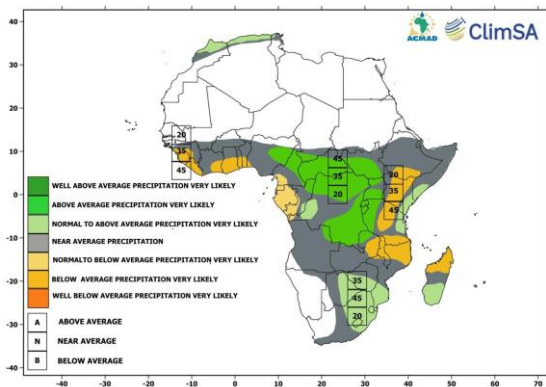
SEASONAL TEMPERATURE FORECAST
FOR MARCH-APRIL-MAY 2023
ISSUED ON FEBRUARY 28, 2023



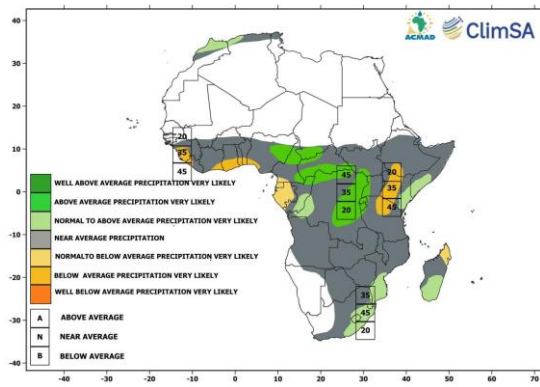
SEASONAL TEMPERATURE FORECAST
FOR APRIL-MAY-JUNE 2023
ISSUED ON FEBRUARY 28, 2023



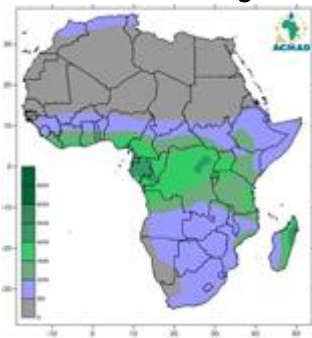
SEASONAL PRECIPITATION FORECAST
FOR MARCH-APRIL-MAY 2023
ISSUED ON FEBRUARY 28, 2023



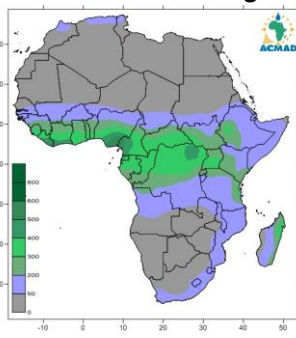
SEASONAL PRECIPITATION FORECAST
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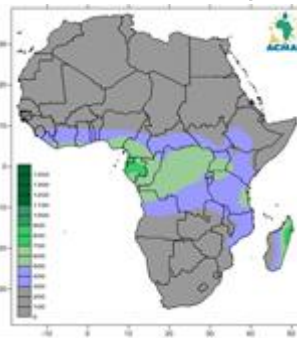
75% of MAM average



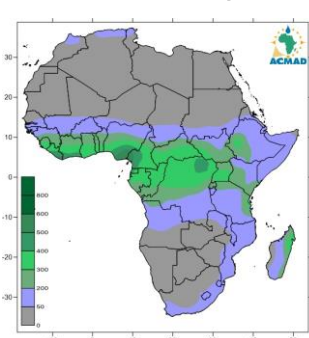
75% of AMJ average



125% of MAM average



125% of AMJ average



The African seasonal precipitation average based on the reference period 1981-2010 for March-April-May (MAM) and April-May-June (AMJ). The 75% threshold depicts areas under significant deficits or drought.

Data source: NOAA/NCEP/CPC/CAMS-OPI

The African seasonal precipitation average based on reference period 1981-2010 for March-April-May (MAM) and April-May-June (AMJ). The 125% threshold depicts areas under significant excessive precipitation.

Data source: NOAA/NCEP/CPC/CAMS-OPI

