



REGIONAL CLIMATE OUTLOOK FORUM

PRESAGG-10

Lomé, Togo 20th – 24th February, 2023



THEME: "Climate service for early warning and early action"

SEASONAL CLIMATE OUTLOOK BULLETIN
VALID FOR MARCH –APRIL-MAY AND APRIL-MAY-JUNE 2023
OVER THE GULF OF GUINEA COUNTRIES OF AFRICA,
(Cotonou, Benin 20th – 24th February, 2024)

Produced by

The African Centre of Meteorological Applications for development (ACMAD) and AGRHYMET Regional Center in collaboration with National Meteorological and Hydrological Services of the Gulf of Guinea countries with support of WMO designated Global Producing Centers for Long Range Forecasts and the International Research Institute for Climate & Society at Columbia University in New-York USA.



A- Summary

Pacific surface temperature conditions have been marked by cold conditions with the weak intensity since October 2022. All the releases of statistical and dynamic models published in mid-February 2023 indicate the decreasing of these conditions with the probability of evolve towards neutral conditions during the period from March to June 2023. The forecast of neutral conditions on the Pacific combined with weak warming on the Atlantic Ocean with a trend of presence of neutral to hot will lead to a tendency of cumulative normal precipitation towards below normal amounts over most of the southern part of the Guinea Gulf region.

From March to June 2023:

- Normal to below precipitation is expected over south-west Côte d'Ivoire, south-eastern Ghana and southern Togo, Benin, Nigeria, western Cameroon much of Equatorial Guinea and Gabon.
- Below to normal precipitation is very likely over westernmost of Guinea, much of Sierra Leone, Liberia, and south-westernmost of Cote d'Ivoire
- Near average precipitation conditions will be observed over the rest of region



B- RECENT CLIMATE CONDITIONS AND OUTLOOK SST

- Below average Sea Surface Temperatures (SSTs) were observed over most of the Equatorial Pacific (ENSO region) from October 2021 to mid-February 2023. Models outputs and experts assessments support a La Nina of weak intensity during the coming three months.
- Near to above SSTs were observed over the Tropical North Atlantic during January until last two week of February 2023. Most models outputs and expert judgement are favorable for persistence of these conditions during the coming few months.
- Near to above average Sea Surface Temperatures characterize the mid latitude Atlantic Ocean since December 2022 to early February 2023. This pattern is expected to observed by the neutral during the coming few months.
- The tropical south Atlantic has been above average to near average from November 2022 and February 2023. Models outputs and expert judgement are favorable for a neutral SST of this pattern during the coming seasons.
- Seas surface temperatures of the western equatorial Indian Ocean and the tropical southern Indian Ocean have been neutral to cold during October 2023 until February 2023. Models outputs and experts assessments support for a neutral Sea Surface Temperatures during the coming months.
- The Seas surface temperatures of the Mediterranean Sea have been near to above average from November 2022 to February 2023. Models outputs and expert judgement are favorable for the persistence of this condition during the coming few months.

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

C- RECENT CLIMATE CONDITIONS AND OUTLOOK PRECIPITATION

- Over the southern parts of the Guinea Gulf Countries, the **late to normal onset season** is expected from end of February to March 2023
- **Below to normal precipitation is expected** during March to June 2023 over westernmost of Guinea, most of Sierra Leone and south-westernmost Côte d'Ivoire.
- **Normal to Below average precipitation is very likely** over the most of the coastal parts from Guinea, Sierra-Leone, Liberia, Côte d'Ivoire, Ghana, Togo, Benin, Nigeria, Cameroon, Equatorial Guinea and Gabon during March to May 2023 (figure 1 and 2).
- **Near average precipitation conditions** will be observed over most of the Central to northern parts of the region

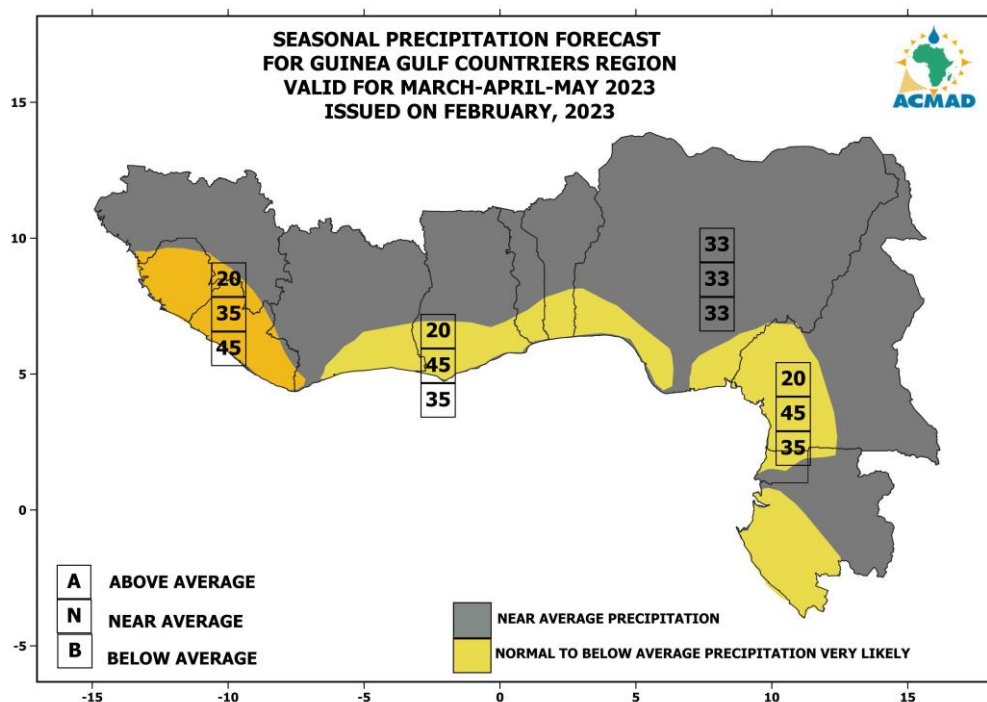


Figure 1: Seasonal forecast of precipitation for March-April May 2023

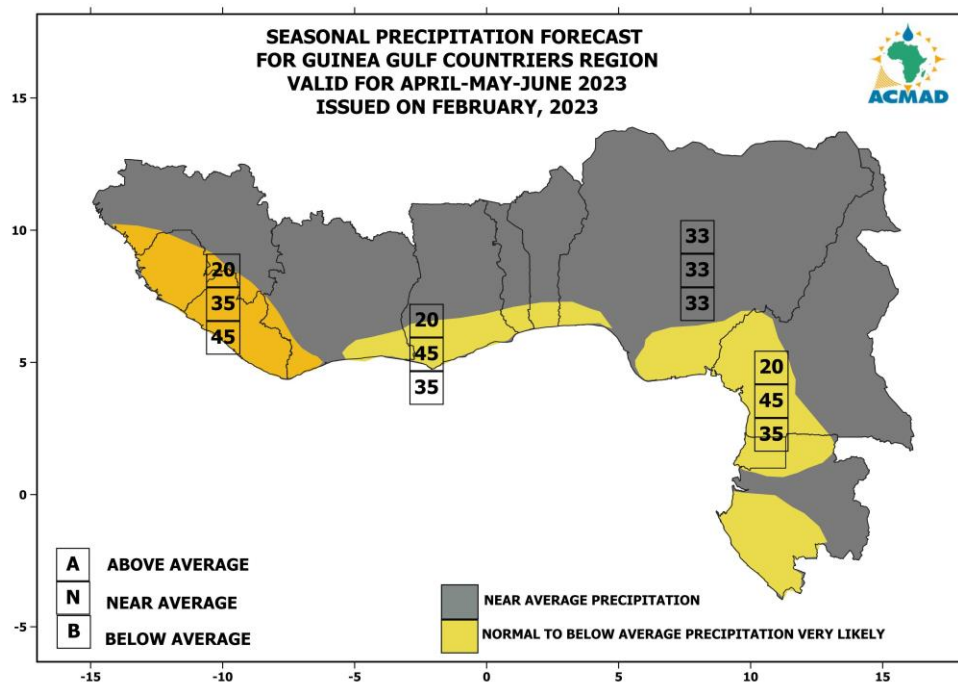


Figure 2: Seasonal forecast of Precipitation for April-May-June 2023

This outlook is produced at the regional scale. Thus, its interpretation should be for regional use. For local and/or country adaptation and applications needs, it is highly recommended to consult the National Meteorological and Hydrological Services of Gulf of Guinea countries for local details.

**B- SOME ADVICES AND ACTIONS OPTIONS FOR SECTORS DURING MARCH-APRIL-
MAY-JUN 2023**

NORMAL TO BELOW AVERAGE PRECIPITATION VERY LIKELY

- Beginning early to mean and end mid seasonal dates

Using short and varieties resistant to drought cycle
Begin agricultural activities earlier than usual
Interacting with the technicians of agricultural services for advice on the varieties to use
Use water conservation techniques in soil
Plan the use of supplemental irrigation

- Late start to early mean and mid-end seasonal dates

Limit the use of varieties that require a lot of water
Using varieties resistant to drought
More investment in aquaculture
Exploiting the shallows
Plan the use of supplemental irrigation

Users are strongly advised to contact their National Meteorological and Hydrological Services as well as ACMAD website (www.acmad.org) for further expert advices and assistance.