



REGIONAL CLIMATE OUTLOOK FORUM

PRESAGG-08

Niamey, Niger 22th- 26th February, 2021

THEME: "Application of prevention and Disaster Management Risk"

SEASONAL CLIMATE OUTLOOK BULLETIN
VALID FOR MARCH –APRIL-MAY AND APRIL-MAY-JUNE 2021
OVER THE GULF OF GUINEA COUNTRIES OF AFRICA,
(NIAMEY, 26th February 2021)

Produced by

The African Centre of Meteorological Applications for development (ACMAD) 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 La Niña (cooling) conditions of moderate intensity since August 2020. All the releases of statistical and dynamic models published in mid-February 2021 predict Niña conditions to continue into the Northern Hemisphere spring (April-June) 2021, returning to ENSO-neutral during summer and fall 2021.

The forecast of La Niña conditions on the Pacific combined with the neutral condition to weak warming on the Tropical Southern Atlantic (TSA) will lead to a tendency of cumulative normal precipitation towards above normal amounts over most of the southern part of the region.

From March to June 2021 :

- *Normal to above precipitation is expected over south-east Liberia, south Côte d'Ivoire, south-west Ghana, south Nigeria and coastal zone Cameroon.*
- *Normal to below average precipitation is expected over Sierra Leone and from central to coastal zone of Guinea.*
- *Near average precipitation conditions will be observed over the rest of the 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 August 2020 to February 2021. The models outputs and expert's assessment predict Niña conditions to continue into April-June 2021, returning to ENSO-neutral during summer and fall 2021.
- Near to above average SSTs were observed over the Tropical North Atlantic (TNA) during 2020 until last two week of February 2021. Most models outputs and expert judgment are favorable for persistence of these conditions during the coming few months.
- Near to above average Sea Surface Temperatures characterize the North Atlantic Tropical (NAT) since February 2020 to early February 2021. This pattern is expected to persist during the coming few months.
- Near to below average Sea Surface Temperatures characterize the South Atlantic Tropical (SAT) since September 2020 to early February 2021. This pattern is expected to persist during the coming few months.
- The tropical south Atlantic (TSA) has been below average near average from September 2020 to and January 2021. The last week the February 2021 were near to above average. Models outputs and expert judgment are favorable for a near to above average of this pattern during the coming seasons.
- The Sea surface temperatures of the western tropical Indian Ocean (WTIO), and South-eastern tropical Indian Ocean (SETIO) have been below average since January 2021. Models outputs and experts' assessments are favorable support persistence of near to below average Sea Surface Temperatures lower intensity during the coming months.
- The Sea surface temperatures of the Mediterranean Sea have been above average from November 2020 to February 2021. Models outputs and expert judgment are favorable for the persistence of this condition during the coming few months.

Given these SSTs 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 2021 (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** was been observed since 20th February 2021.
- ❖ **Below to near average precipitation is very likely over** Sierra-Leone and from central to coastal parts of Guinea (figure 1 and 2).
- ❖ Normal to above precipitation is **very likely** over south-east Liberia, south Côte d'Ivoire, south-west Ghana, south Nigeria and coastal zone Cameroon (figure 1 and 2).
- ❖ **Near average precipitation conditions will** be observed over the rest of the region (figure 1 and 2).

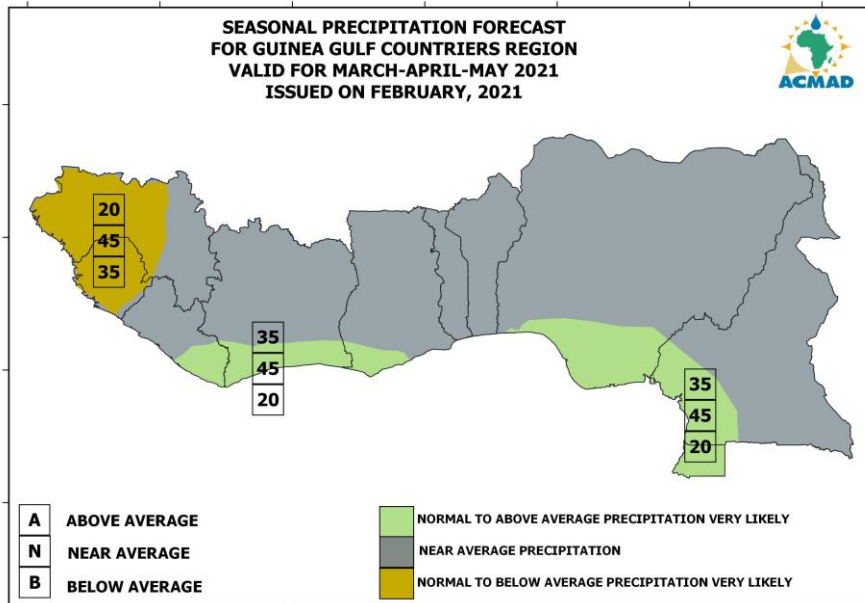


Figure 1: Seasonal forecast of precipitation for March-April May 2021

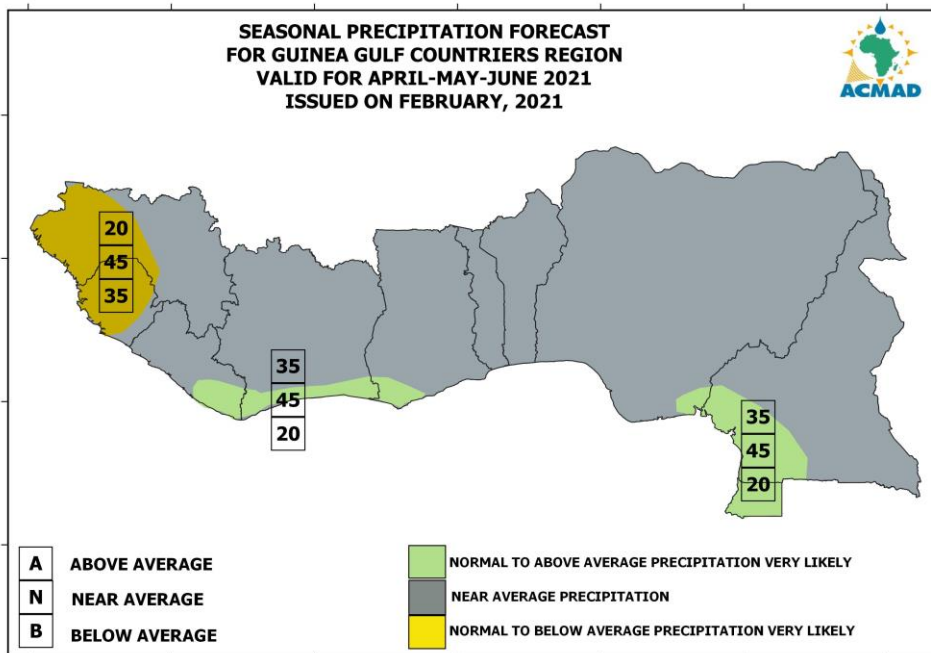


Figure 2: Seasonal forecast of Precipitation for April-May-June 2021

This outlook is produced at the regional scale. Thus, its interpretation should be for regional use. For local and/or country adaptation and applications need, 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 2021**

BELOW AVERAGE PRECIPITATION VERY LIKELY

❖ **Early Onset to average and early Cessation of rain 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 Onset to average and late cessation of rain 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

NORMAL TO ABOVE AVERAGE PRECIPITATION VERY LIKELY

Look technicians' agricultural extension services
Properly Managing water resources for better use
Prevent additional inputs of fertilizer during the growing season of plants
Take steps to minimize any damage as a result of heavy rains
Control and survey risk of floods

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.