



REGIONAL CLIMATE OUTLOOK FORUM

PRESAGG-09

Cotonou, Benin 21st – 25th February, 2022



THEME: “Climate service for early warning and early action”

SEASONAL CLIMATE OUTLOOK BULLETIN
VALID FOR MARCH –APRIL-MAY AND APRIL-MAY-JUNE 2022
OVER THE GULF OF GUINEA COUNTRIES OF AFRICA,
(Cotonou, Benin 21st – 25th February, 2022)

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 of moderate intensity since November 2011. All the releases of statistical and dynamic models published in mid-February 2022 indicate the persistence of these conditions with the probability of evolve towards neutral conditions during the period from March to June 2022. The forecast of neutral conditions on the Pacific combined with weak to moderate 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 region.

From March to June 2020:

- Normal to below precipitation is expected over eastern part of Liberia, south-west Côte d'Ivoire, south-eastern Ghana and southern Togo, Benin, Nigeria, western Cameroon and much of Equatorial Guinea.
- The western parts of the precipitation region will be characterized by normal to above precipitation, particularly over Guinea and Sierra Leone.
- 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 November 2021 to February 2022. Models outputs and experts assessments support a La Nina of weak intensity during the coming three months.
- Near to above average SSTs were observed over the Tropical North Atlantic during last December 2021 until last two week of February 2022. 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 mid latitude Atlantic Ocean since December 2019 to early March 2020. This pattern is expected to persist during the coming few months.
- The tropical south Atlantic has been above average to near average from November 2019 and February 2020. Models outputs and expert judgment are favorable for a persistence of this pattern during the coming seasons.
- Seas surface temperatures of the western equatorial Indian Ocean and the tropical southern Indian Ocean have been above average during October 2019 until February 2020. Models outputs and experts assessments support persistence of above average Sea Surface Temperatures lower intensity during the coming months.
- The Seas surface temperatures of the Mediterranean Sea have been near average from November 2019 to February 2020. Models outputs and expert judgment 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 2020 (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 the end of February to early March 2020
- **Below to near average precipitation is very likely over** coastal parts of Guinea, Sierra-Leone and Liberia from March to May 2020 (figure 1 and 2).
- **Near average precipitation conditions** will be observed over south-east of Ghana, Togo and Benin
- **Normal to above average precipitation is very likely over** Southern Côte d'Ivoire, Ghana and along coastal parts of Nigeria and western and southern Cameroun and much of Guinea Equatorial from March to May 2020 (figure 1 and 2).

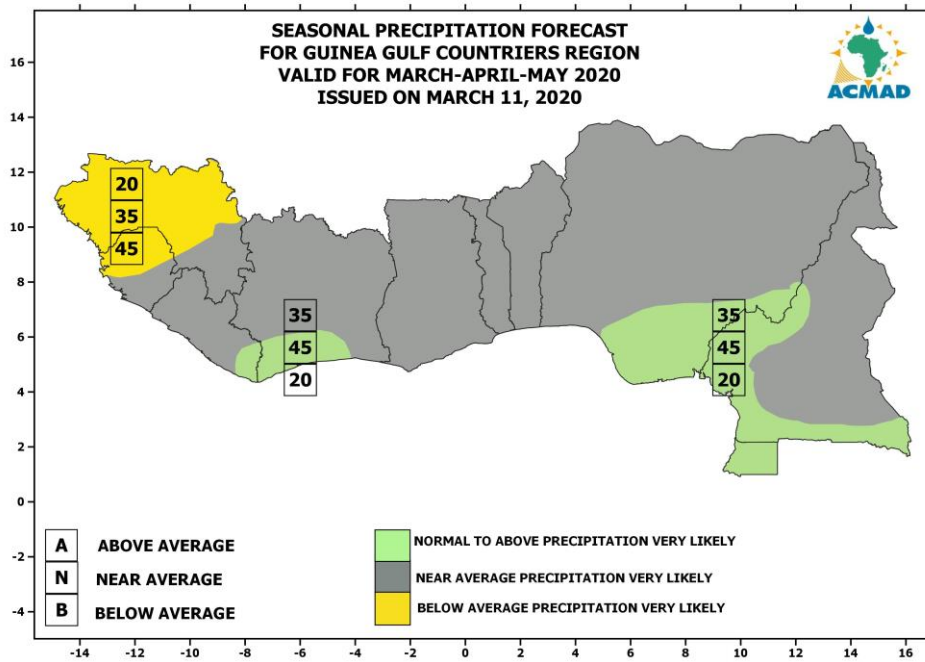


Figure 1: Seasonal forecast of precipitation for March-April May 2020

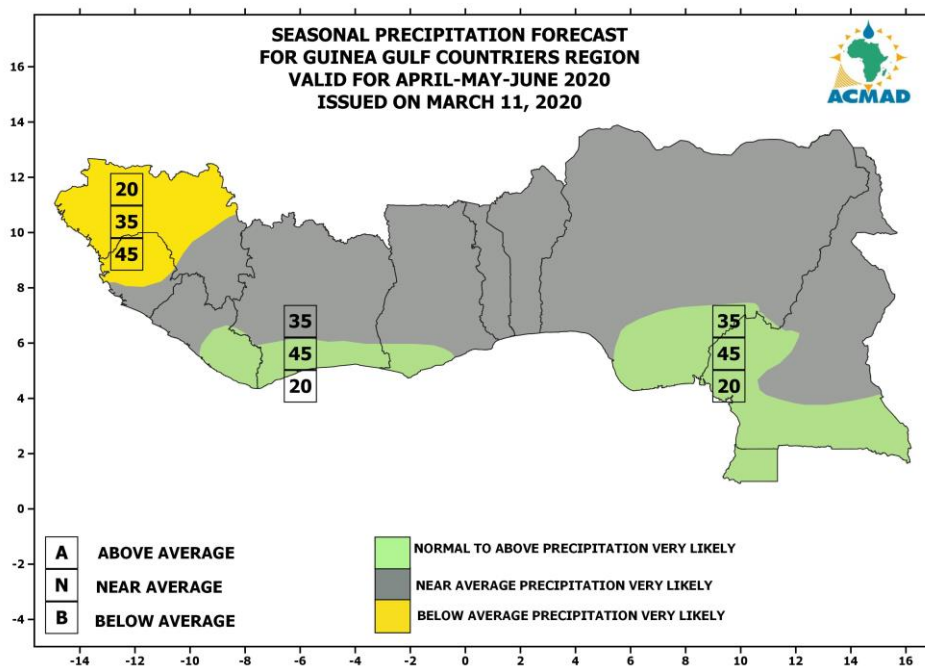


Figure 2: Seasonal forecast of Precipitation for April-May-June 2020

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 2020**

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

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.