



REGIONAL CLIMATE OUTLOOK FORUM

PRESASS-08

Niamey, Niger 26th to 30th April 2021

THEME: "Climate service to strengthen resilience and reduce climate risks in the Sahel and West Africa"

SEASONAL CLIMATE OUTLOOK BULLETIN
VALID FOR JUNE-JULY-AUGUST AND JULY-AUGUST-SEPTEMBER 2021
OVER THE SUDANO SAHELIAN REGION AND WEST AFRICA COUNTRIES,
(NIAMEY, 30th May 2021)

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 West Africa and Sudano-Sahelian 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.

This is a product Support by the African Development Bank group.

A- Summary

The equatorial zone of the Pacific Ocean is currently dominated by weak La Nina conditions. The temperatures (SSTs) are near to below average from the west-central to eastern Pacific Ocean. A transition from La Nina to ENSO-neutral is very likely in the next month or so, with an 80% chance of ENSO-Neutral during May-July 2021.

The conditions of neutral (ENSO-neutral) SSTs in the Pacific, neutral to warm condition in the southern tropical Atlantic, neutral to cold conditions are currently observed over the northern tropical Atlantic (especially at the level of the Senegalese-Mauritanian coast) and, neutral to slightly warm in the Mediterranean predicted during the May-September period, will lead to above average precipitation to tendency normal in the central Sahel, the near average precipitation to tendency below average from Senegal to Guinea and in the coastal areas of the Guinea Gulf countries.

From Jun to September 2021:

- Normal to above average precipitation is expected over central Sahel, northern CAR, northern Cameroon and northern Guinea Gulf countries in the season JJA.
- Above to normal precipitation is expected over central Sahel, northern CAR, northern Cameroon and northern Guinea Gulf countries in the season JAS.
- Normal to below average precipitation is very likely over from Senegal to Sierra, southern Guinea gulf countries and coastal areas Cameroon in the JJA and JAS season.

B- RECENT CLIMATE CONDITIONS AND OUTLOOK SST

- Below average Sea Surface Temperatures (SSTs) were observed over most of the Equatorial Pacific (ENSO region) since August 2020. Since March 2021, the negative anomalies are weaken over the Pacific equatorial, transition from La Nina to ENSO-neutral is very likely in the next month or so, with an 80% chance of ENSO-Neutral during May-July 2021.
- Near to above average SSTs were observed over the Tropical North Atlantic (TNA) during 2020 until last two week of February 2021. Since mid-March, a cooling tendency has been recorded in the Tropical North Atlantic. Most models outputs and expert judgment are favorable for a transition from warm to neutral condition in the tropical north Atlantic during the June-September season.
- Near to above average Sea Surface Temperatures characterize the North Atlantic Tropical (NAT) since February 2020 to early February 2021. Since mid-March, a cooling tendency has been recorded in the North Atlantic Tropical. A transition from above average to neutral or below is very likely during the June-September season.
- Near to below average Sea Surface Temperatures characterize the South Atlantic Tropical (SAT) since September 2020 to early February 2021. Since mid-March, there has been a warming tendency in the Southern Atlantic Tropical. A transition from cold to neutral condition is very probable in the coming months.
- The tropical south Atlantic (TSA) has been below average near average from September 2020 to and January 2021. The last 4 weeks, there has been à warming tendency was observed. Models outputs and expert judgment are favorable for a neutral to above average of this pattern during the coming seasons.
- Seas 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 Seas 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 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 June-July-August (JJA) and July-August-September (JAS) seasons across West Africa and Sudano Sahelian Region (see figures below):

C- RECENT CLIMATE CONDITIONS AND OUTLOOK PRECIPITATION

- **Normal to below average precipitation is very likely** from June to September 2021 over Senegal, Gambia, Guinea, Bissao-Guinea, Sierra Leone, southern Cote d'Ivoire, southern Ghana, southern Togo, south-western and south-eastern Nigeria, Caps Verde, southern Benin and coastal zone of Cameroon (figure 1 & 2).
- **Normal to above average precipitation is very likely** over southern and central parts of Mali, Burkina Faso, north-eastern Guinea, northern Côte d'Ivoire, northern Ghana, northern Benin, southern Chad, northern CAR, southern Niger, northern Togo, northern Nigeria, northern Cameroon and south-eastern Mauritania in the JJA season 2021 (figure 1).

- **Above average precipitation is very likely** in the JAS season over central Sahel in particular, southern Mali, Burkina Faso, southern Niger, northern Nigeria, northern Ghana, north-eastern Guinea, northern Togo, Central-western Chad, northern Benin and northern Côte d'Ivoire (figure 2).
- **Near to below average precipitation is very likely** in the JJA over south-east Nigeria and south-west Cameroon (figure 1).
- **Near average precipitation conditions will be observed** over the rest of the region (figure 1 & 2).



**SEASONAL PRECIPITATION FORECAST
FOR SUDANO-SAHELIAN REGION OF AFRICA
VALID FOR JUNE-JULY-AUGUST 2021
ISSUED ON APRIL 29, 2021**

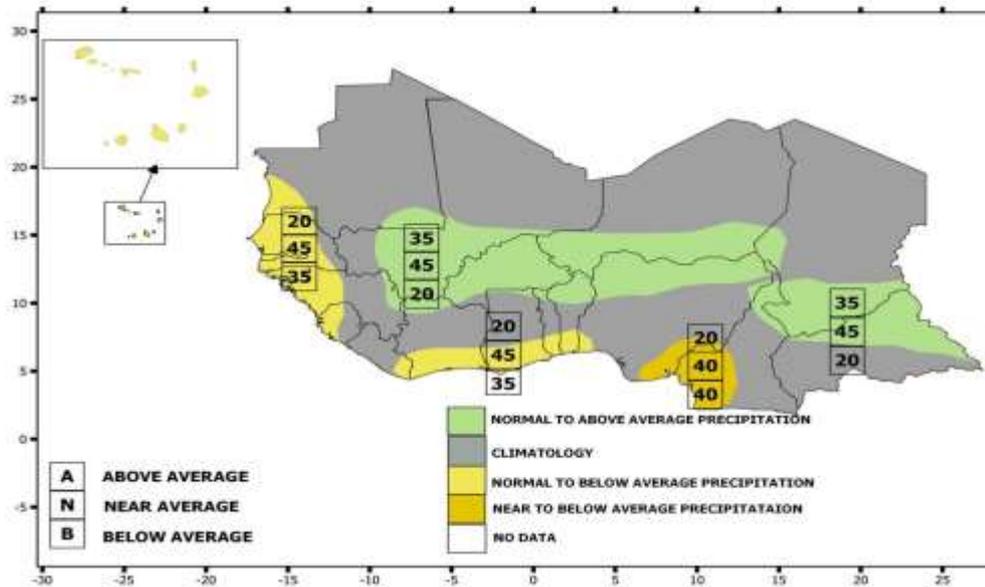


Figure 1: Seasonal forecast of precipitation for June-July-August 2021



**SEASONAL PRECIPITATION FORECAST
FOR SUDANO-SAHELIAN REGION OF AFRICA
VALID FOR JULY-AUGUST-SEPTEMBER 2021
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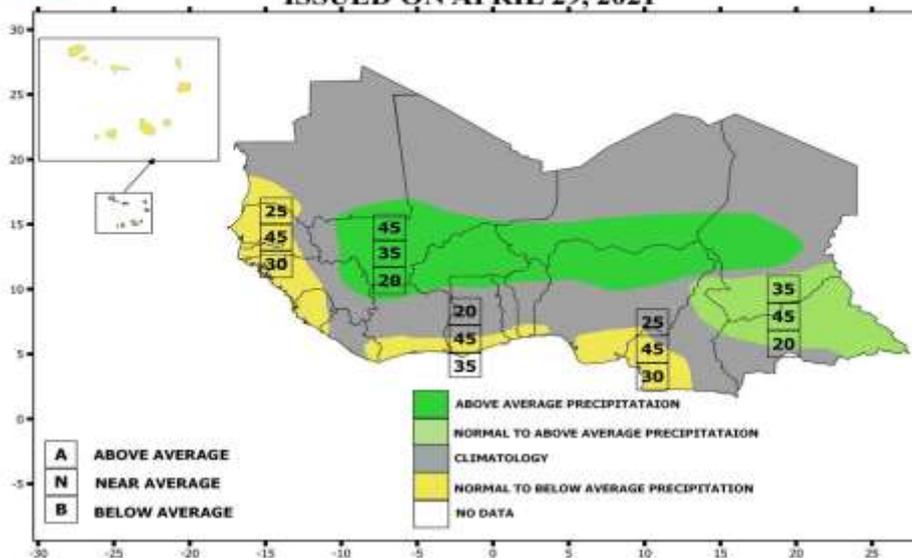


Figure 2: Seasonal forecast of Precipitation for July-August-September 2021

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

**B- SOME ADVICES AND ACTIONS OPTIONS FOR SECTORS DURING JUNE-JULY-
AUGUST-SEPTEMBRE 2020**

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

ABOVE AVERAGE AND 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.