



## AGRHYMET CCR-AOS

Centre Climatique Régional pour l’Afrique de l’Ouest et le Sahel



Seasonal forecasts of agro-hydro-climatic characteristics for the main rainy season in the **Gulf of Guinea countries**.

Spécial PRESAGG Bulletin – 04/2026

The 2026 edition of PRESAGG, organized in Lomé, Togo, by the AGRHYMET Regional Climate Center for West Africa and the Sahel (AGRHYMET RCC-WAS), in collaboration with ACMAD, the National Meteorological and Hydrological Services (NMHSs) of the Gulf of Guinea countries, the river basin organizations responsible for coastal basins, and the World Meteorological Organization (WMO), reached the following conclusions.

*For the 2026 main rainy season in the southern part of the Gulf of Guinea countries, near-normal to below-normal rainfall is globally expected. Above-normal rainfall may occur during the first half of the season in parts of southern Nigeria, Benin, Togo, Ghana, and Côte d’Ivoire. The season is likely to feature an early to near-normal onset, an early to near-normal cessation, short to near-normal dry spells, and near- to above-normal river flows in the coastal basins, while rainfall in the second half of the season is expected to be weaker*

### **I. State and outlook for sea surface temperatures**

#### **1.1. State of sea surface temperatures in January 2026**

In January 2026, sea surface temperature (SST) anomalies show a contrast across the tropical Pacific. Negative anomalies dominate the central and eastern equatorial Pacific, while relatively warm conditions are observed in the western Pacific. This spatial distribution is typical of La Niña conditions, characterized by strengthened easterly trade winds that push warm surface waters toward the western Pacific and enhance the upwelling of cooler waters in the eastern

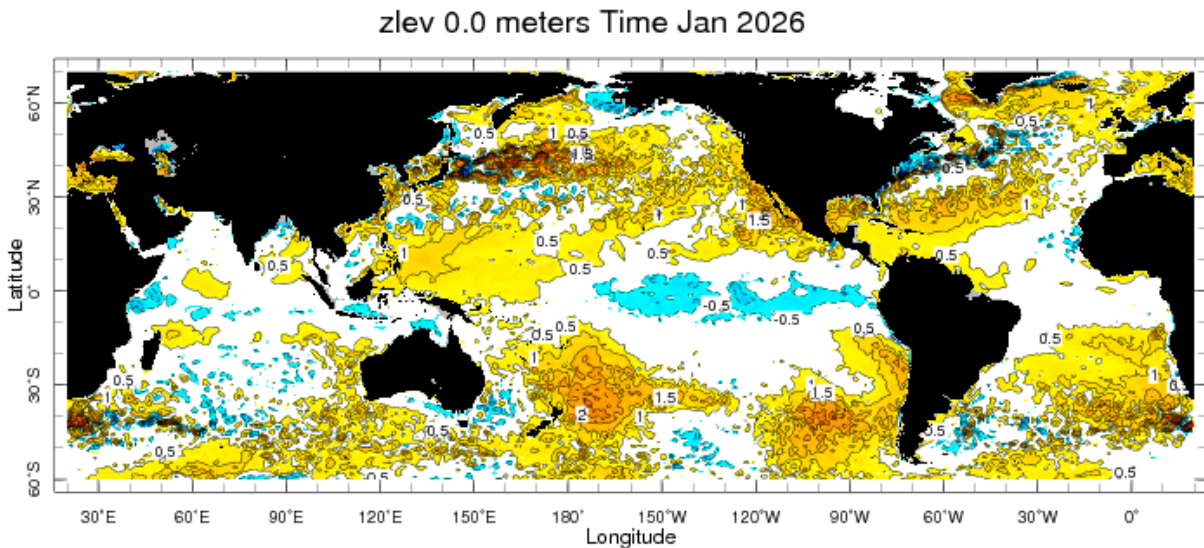
Pacific. Such conditions are generally associated with a strengthened Walker circulation and strong convection over the western Pacific region.

In the tropical North Atlantic Ocean, SST anomalies were generally weak and slightly positive, while in the tropical South Atlantic they were close to the climatological average, with localized positive anomalies. This configuration suggests a moderate north–south thermal gradient, which may be favorable for the development and northward migration of the West African monsoon circulation.

In the Gulf of Guinea, SSTs were generally close to normal to slightly above average. The absence of strong cold anomalies indicates that the Atlantic cold tongue is not strongly developed, suggesting that coastal ocean conditions are unlikely to significantly suppress convection or delay the inland progression of the monsoon during the early part of the season.

Across the Indian Ocean, SST anomalies are predominantly positive, with warming extending over much of the basin, particularly in the southern and central sectors. However, the spatial structure does not show a strong east–west contrast along the equator, indicating near-neutral conditions for the Indian Ocean Dipole.

The Mediterranean Sea also shows moderate positive SST anomalies, reflecting relatively warm surface waters. Such conditions can enhance evaporation and moisture availability, potentially influencing moisture transport toward North Africa and the Sahara, as well as regional atmospheric circulation patterns that interact with the West African climate system. (Figure 1).



**Figure 1:** Sea surface temperature (SST) anomalies for January 2026, compared with the 1991-2020 reference period average (Source: IRI/NOAA/NCDC/ERSST-version5).

## 1.2. Sea surface temperatures outlook

Forecasts of sea surface temperatures indicate a likely persistence of cold anomalies in the central and eastern equatorial Pacific over the coming months, reflecting the possible continuation of weak to moderate La Niña-type ENSO conditions. However, a gradual transition toward neutral ENSO conditions remains possible during the first half of 2026.

In the tropical Atlantic, near-normal to slightly above-normal temperatures are expected in the tropical North Atlantic, while the tropical South Atlantic should remain close to normal. This configuration could maintain a meridional thermal gradient favorable for the development and progression of the West African monsoon.

Sea surface temperatures in the Gulf of Guinea are expected to remain near normal to slightly above normal between April and June 2026. This situation could help sustain convective activity over coastal areas while allowing a relatively normal progression of the monsoon toward the interior of the continent.

In the Indian Ocean, forecasts indicate the persistence of moderate positive anomalies, without a clear signal of a strongly marked Indian Ocean Dipole (IOD), suggesting generally neutral to slightly positive conditions.

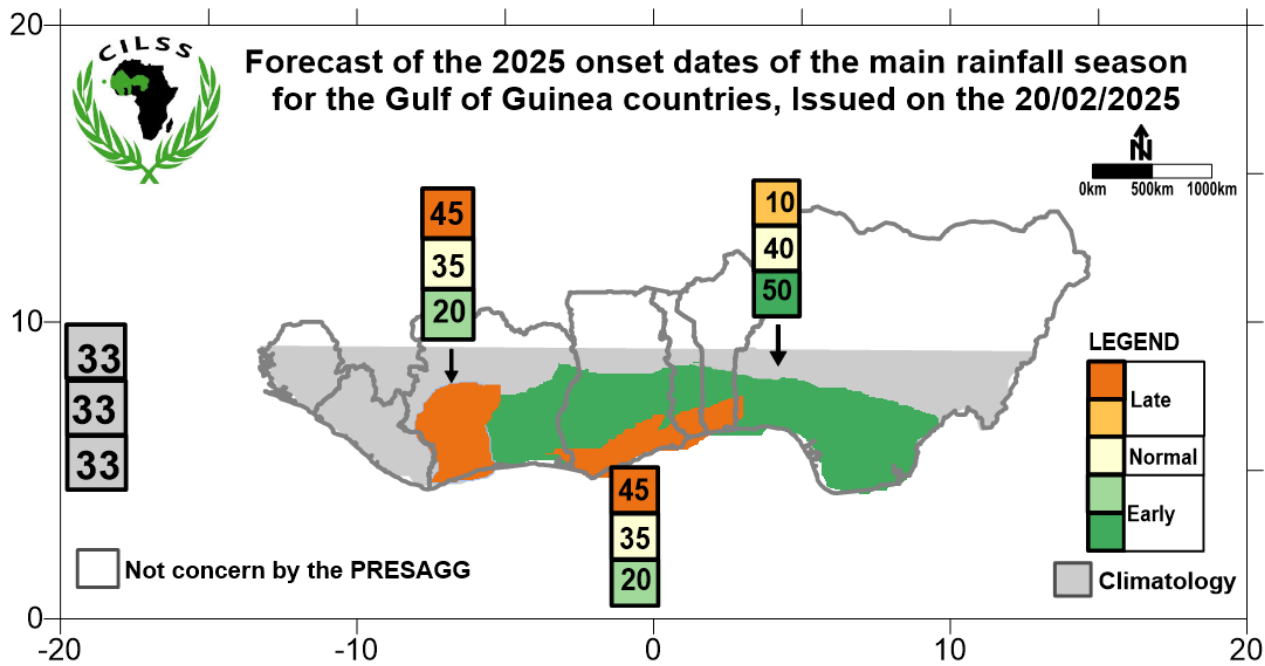
Finally, the Mediterranean Sea is expected to remain relatively warm, with moderate positive anomalies that may influence moisture exchanges and certain regional atmospheric circulations.

## **II. Forecast of the agro-hydro-climatic characteristics for the rainy main season**

The 2026 forecast of the agro-hydro-climatic characteristics of the main rainy season in the southern parts of the Gulf of Guinea countries is developed based on the 1991–2020 climatological normal (reference period). It is based on the analysis of the current situation and the likely evolution of Sea Surface Temperatures (SSTs), forecasts from global climate centers, and statistical analyses of data from the National Meteorological and Hydrological Services (NMHSs), as well as experts' knowledge of the climatic characteristics of the Gulf of Guinea region and the consensus among the different sources of information analyzed..

### **2.1. Onset dates of the season**

This year, the main agricultural season is expected to start earlier than usual across almost the entire coastal belt of the Gulf of Guinea (southeastern Côte d'Ivoire, southern Ghana, Togo, Benin, and Nigeria). However, the non-negligible probability of a normal or late onset calls for caution in agricultural decision-making. (Figure 2).



**Figure 2:** Forecast of the onset dates of the 2026 major agricultural season in the southern parts of the Gulf of Guinea countries.

## 2.2. Cumulative rainfall

For March–April–May (MAM), near- to above-normal rainfall totals are expected along the coastal belt of all countries, as well as in southern and central Nigeria, southern Ghana, Togo, and Benin. Localized pockets with a probability of below-normal rainfall are expected over central and west-central Côte d’Ivoire, central Ghana, and central Nigeria.

For the April–May–June (AMJ) period, below-normal rainfall totals are expected over Côte d’Ivoire (across much of the country), Ghana (central and northern parts), Togo and Benin (inland areas), and central and northern Nigeria. Meanwhile, along the southern coast of Nigeria, southern Benin, and in some localized coastal areas, near-normal rainfall totals are forecast. (Figures 3 and 4).

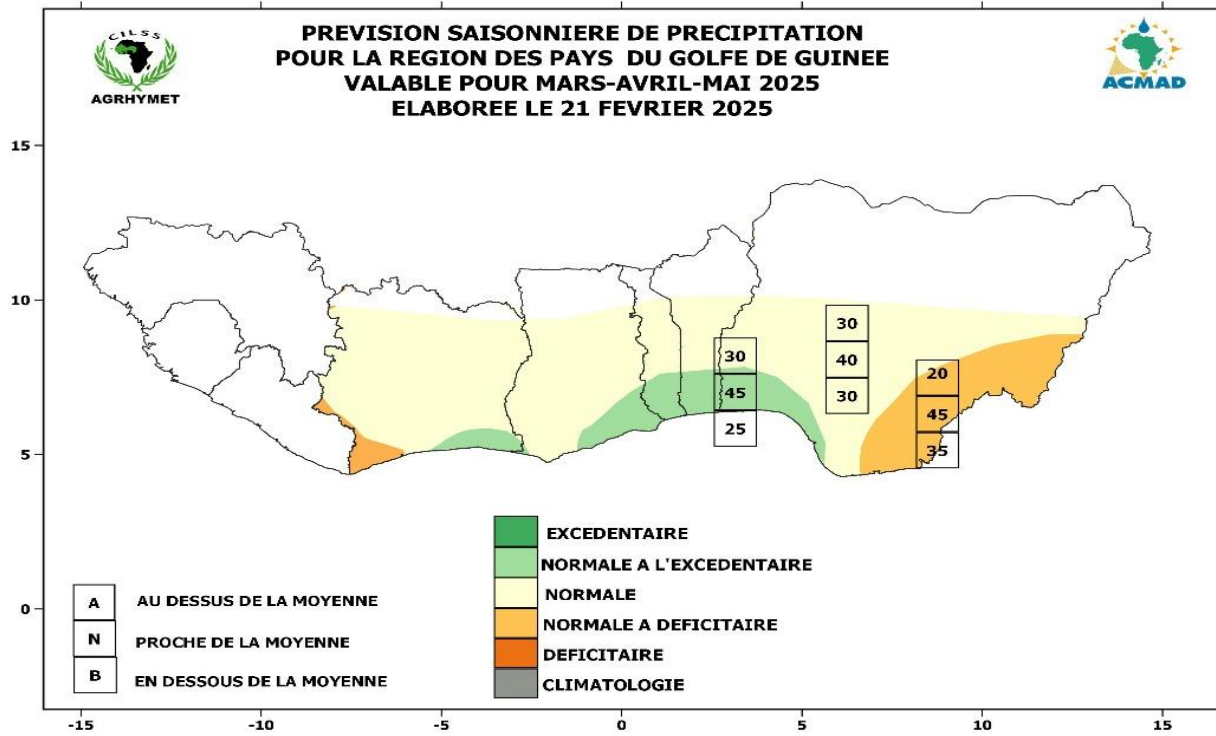
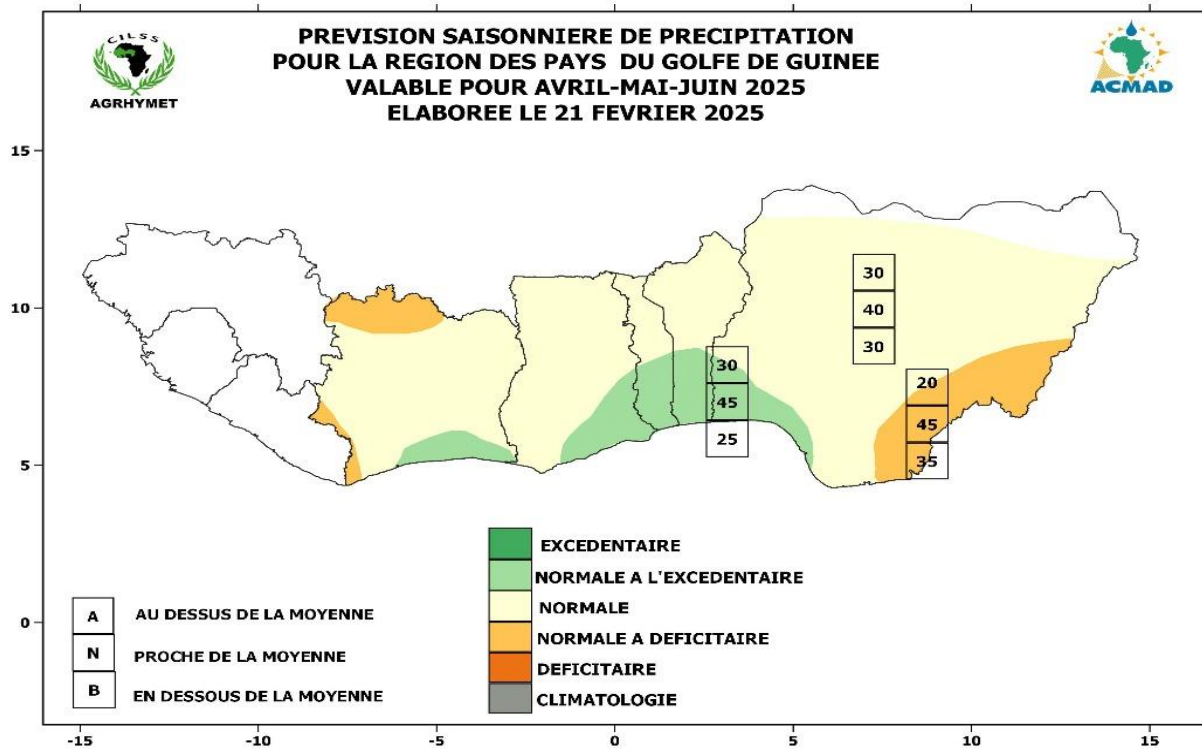


Figure 3: Rainfall forecast for the period March-April-May 2026 in the southern parts of the Gulf of Guinea countries.

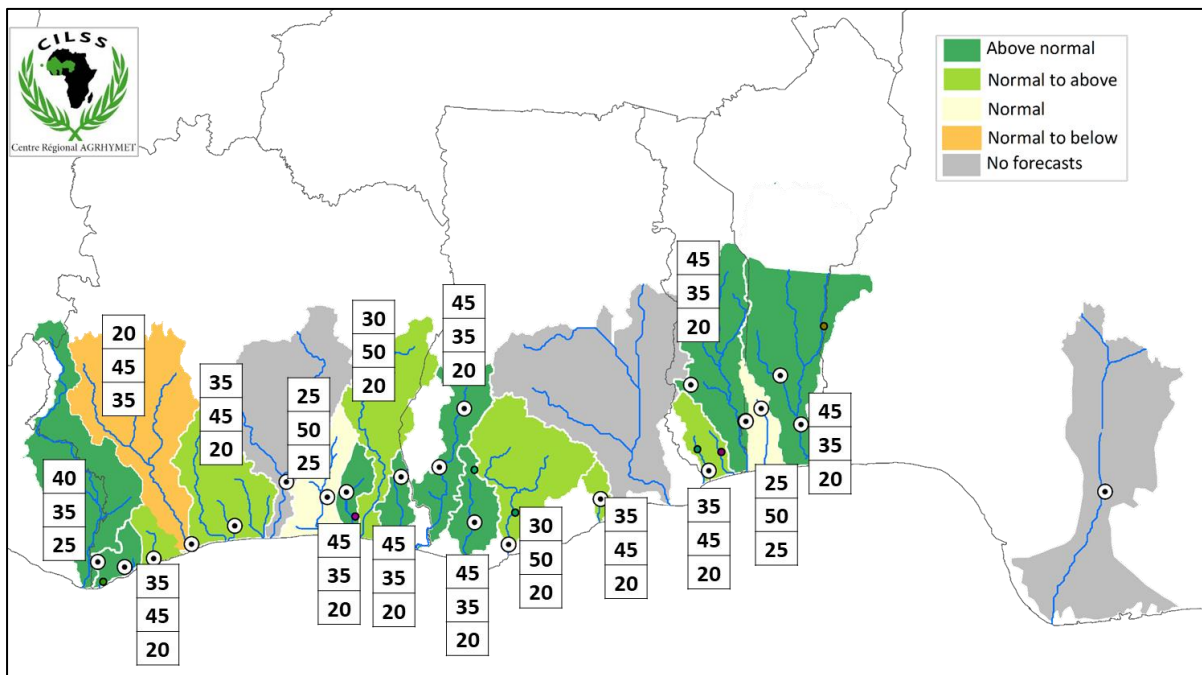


**Figure 4:** Rainfall forecast for the period April-May-June 2026 in the southern parts of the Gulf of Guinea countries.

### 2.3. River basin runoff

Overall normal to above-normal stream flows are expected across all coastal basins of the Gulf of Guinea countries, with some pockets of above-normal flows in the southwest and southeast.

More specifically, flows are expected to be average to above average in the coastal basins of the région AGRHYMET, and above average in the Agnéby Basin (Côte d’Ivoire) and in the Lower Niger Delta Basin (Nigeria). (Figure 5).



**Figure 5:** Forecast of the runoff in coastal basins of Gulf of Guinea countries for the 2026 major rainy season.

### 2.4. Length of dry spells at the beginning of the season

At the beginning of the main agricultural season, short to normal dry spells are expected across the southern belt of the Gulf of Guinea countries, stretching from southwestern Nigeria to Côte d’Ivoire, except in the central parts of Benin, Togo, and Ghana, and in west-central Côte d’Ivoire, where dry spells are expected to be moderate to long. (Figure 6).

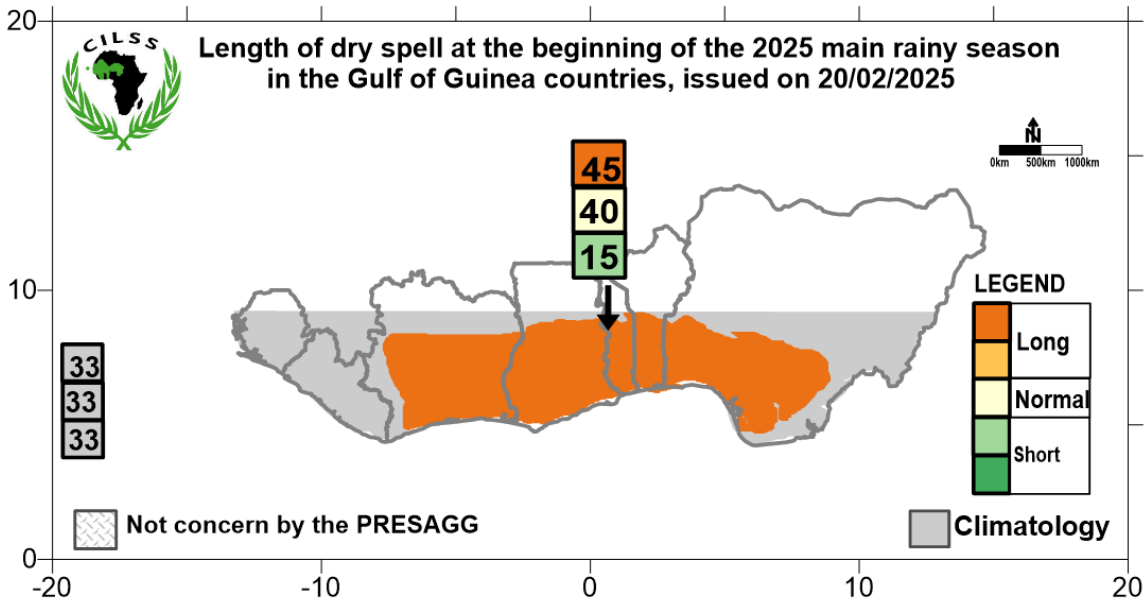
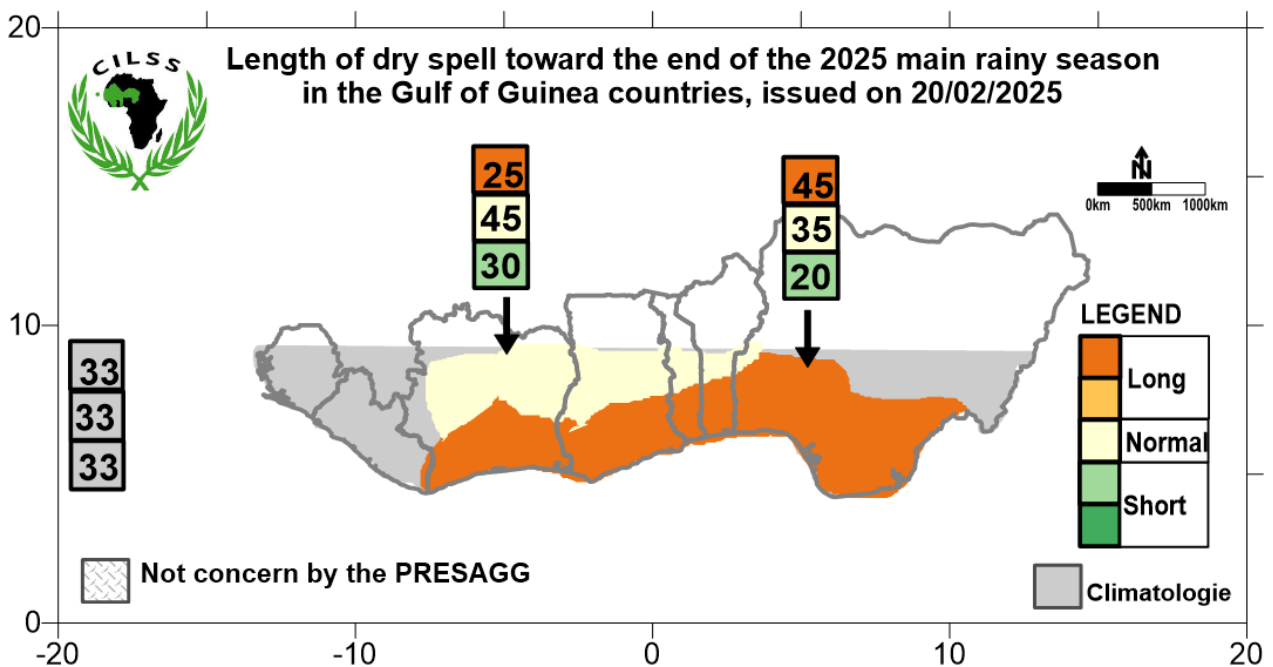


Figure 6: Prediction of dry spells at the start of the 2026 major rainy season in the countries of the Gulf of Guinea.

### 2.5. Length of dry spells towards the end of the season

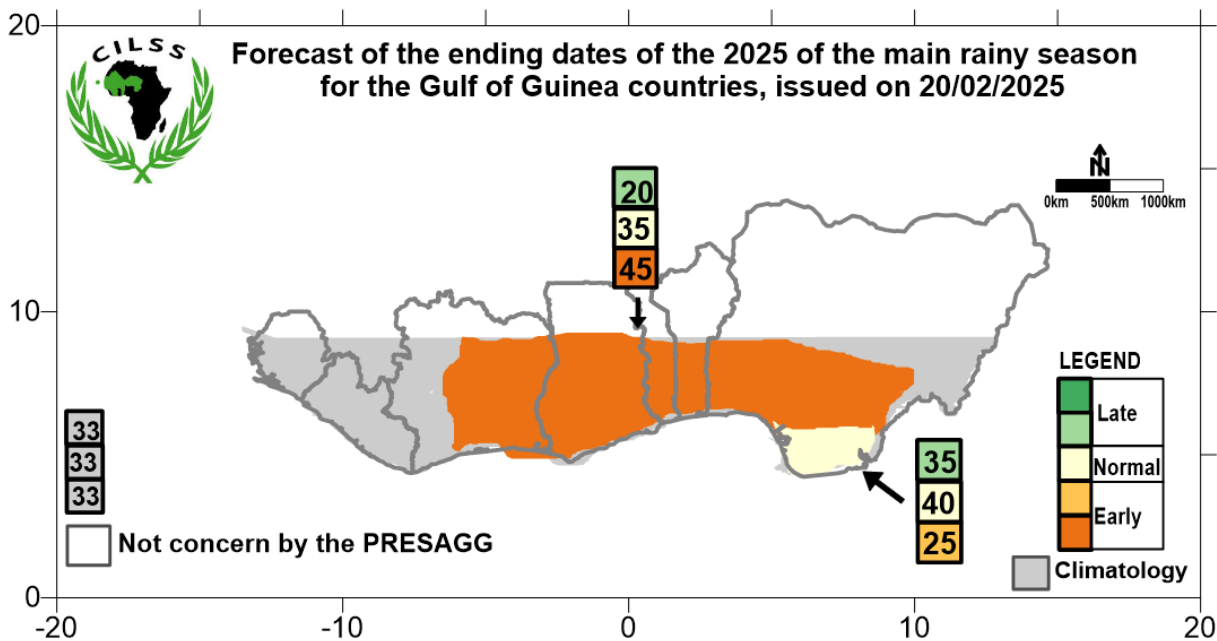
Toward the end of the season, dry spell durations are expected to be mostly short in the western areas and normal to long in the central-eastern areas, which could influence the effective length of the season and the yields of late-season crops (Figure 7).



**Figure 7:** Forecast of the end dates of the 2026 major rainy season in the countries of the Gulf of Guinea.

### 2.6. Cessation date of the season

This year, the end of the main agricultural season is expected to be normal to slightly early in the western areas and early in the eastern part of the Gulf of Guinea, which could reduce the effective length of the agricultural season, particularly in the Togo–Benin–Southern Nigeria zones (Figure 8).



**Figure 8:** Forecast of dry sequences towards the end of the main rainy season 2026, in the countries of the Gulf of Guinea.

### III. Recommendations

The potential negative impacts of the 2026 seasonal forecasts in the southern parts of the Gulf of Guinea countries could be as follows:

- In areas where early onset of the season are expected, short dry spells and normal to above average rainfall and river flows, heavy rainfall events that could lead to more or less localized flooding are possible, particularly in the first half of the main rainy season.

- In areas where normal to below-normal rainfall totals, early end-of-season dates and normal runoff are expected, there is a risk of poor rainfall distribution which could lead to negative impacts on crop growth and water availability for hydroelectric dams, irrigated areas and fish production.

As for the potential positive impacts, they can be best leveraged in areas where an early start to the rainy season is expected, with above-average rainfall and runoff. In these areas, stakeholders could seize the opportunities offered by the season to increase agricultural, energy, and fisheries production.:

### **3.1. With regard to the risk of drought**

The low rainfall totals forecast, particularly in the second half of the season across most of the southern Gulf of Guinea countries, and the early end of the season suggest a risk of water shortages in the affected areas. These water shortages could disrupt plant growth and promote the development of crop pests. To mitigate these risks, it is recommended to:

- To ensure regular and timely dissemination of meteorological, climatological and hydrological information as well as specific advice to users and decision-makers, throughout the rainy season.
- Promote the deployment of climate-smart techniques adapted to drought, including: the choice of species or varieties tolerant to water deficit, supplementary irrigation, the efficient use of agrometeorological advice and the development of other income-generating activities.
- Promote risk transfer to protect producers against the effects of crop losses, through the subscription of index-based agricultural insurance.

### **3.2. With regard to the risk of flooding**

The southern parts of the Gulf of Guinea countries are quite vulnerable to flooding, due in particular to high population density, rapid soil saturation, and poor maintenance of sanitation networks. The conditions forecast for the 2026 rainy season could therefore lead to flooding. To reduce these risks, it is recommended to:

- to support community awareness activities on risks and to strengthen their capacity to undertake preventive actions and to avoid the occupation of flood-prone areas.
- maintain continuous monitoring of risks and their impacts through the regular production and dissemination of information by the meteorological and hydrological services of the countries and regional institutions such as AGRHYMET CCR-AOS and ACMAD.
- Strengthen and support the efforts of the medias, communication platforms, NGOs and EWS in countries in disseminating and making information available in a timely manner.
- strengthen the response capacities of agencies in charge of flood management, disaster risk management and humanitarian aids.
- to ensure the safety of vulnerable people, including children, women, the elderly and those with limited mobility.

### **3.3. With regard to the risk of diseases**

Wetlands and flooded areas can be favorable to the development of disease-causing germs (cholera, malaria, dengue fever, schistosomiasis, etc.). Similarly, the expected rainfall deficits, particularly in the second half of the main rainy season, could lead to the proliferation of other epidemic disease germs. Therefore, it is recommended to:

- Raising awareness among the population and issuing warnings about climate-sensitive germ diseases, in collaboration with meteorological, water resources and health services.
- Strengthen the response capacities of health services and national disaster risk reduction platforms.
- Strengthen vigilance and means of prevention against crop diseases and pests (army beetle and other harmful insects).
- To clean up urban areas to avoid stagnation and contact with contaminated water, through drainage and rainwater evacuation operations.

### **3.4. With regard to the opportunities to seize**

Given the generally normal to below-average rainfall during the main rainy season in the countries of the Gulf of Guinea, it is recommended to the authorities, NGOs and Projects, to support farmers, including women and young people, to better benefit from the rainy season by:

- Supporting the deployment of techniques to increase crop yields and efficient water resource management;
- Strengthening agro-meteorological assistance to farmers, especially the most committed, who are mostly women and young people;
- Facilitating access for producers to improved seeds, suitable agricultural equipment, microfinance, index-based agricultural insurance and other appropriate technologies;
- Taking advantage of normal to surplus situations to develop fish farming and optimize fishing yields in the Agniby and Lower Niger Delta river basins.

**Finally, it is recommended that stakeholders in the various sectors pay attention to the updates that will be made by the national meteorological and hydrological services, AGRHYMET CCR-AOS and ACMAD throughout the rainy season.**