



Update on the 2026 Seasonal Forecast for West Africa and the Sahel, August 31, 2026

AGRHYMET RCC-WAS Technical Note No. 3: A Mixed End to the 2026 Rainy Season

Progressive end of the 2026 rainfall season in the Sahel and onset of the short rainy season in the Gulf of Guinea, with contrasting outlooks for SON: rainfall deficits and risk of water stress in several Sahelian areas, but continued heavy rainfall and localized flooding, in the context of persistent heat.

Introduction

The 2026 rainy season in West Africa and the Sahel is unfolding in a particularly dynamic climate and oceanic context, marked by significant sea surface temperature anomalies across several tropical ocean basins. The strengthening of El Niño in the equatorial Pacific, the evolution of the Indian Ocean Dipole (IOD), and the warming observed in the tropical North Atlantic and the Mediterranean Sea are likely to influence, sometimes in competing ways, atmospheric circulation, moisture transport, and the evolution of the West African monsoon.

As the end of the rainy season approaches, monitoring these oceanic forcings is particularly important for assessing the rainfall, hydrological, and temperature outlooks for the coming months. Against this backdrop, AGRHYMET RCC-WAS updated its seasonal forecasts in August 2026 for the September–October–November (SON) 2026 period, using an objective approach that integrates recent observations and outputs from major climate prediction systems, notably NMME and C3S.

This technical note analyses the current state of the main ocean basins and their likely evolution, then presents the outlook for the remainder and end of the 2026 season in terms of rainfall, river flows, and temperatures. It aims to provide national and regional services, as well as stakeholders in climate-sensitive sectors, with updated information to strengthen monitoring, preparedness, and hydroclimatic risk management.

Observed rainfall conditions as of late August 2026

As of 26 August 2026, rainfall conditions remained highly contrasted. Recent weeks were relatively wet across several parts of the western and central Sahel, while deficits persisted more markedly in the eastern Sahel and locally along the Gulf of Guinea coast. These conditions mark the beginning of a transition phase: toward the end of the season in the Sahel and the onset of the short rainy season in the bimodal rainfall zones of the Gulf of Guinea (Figure 1).

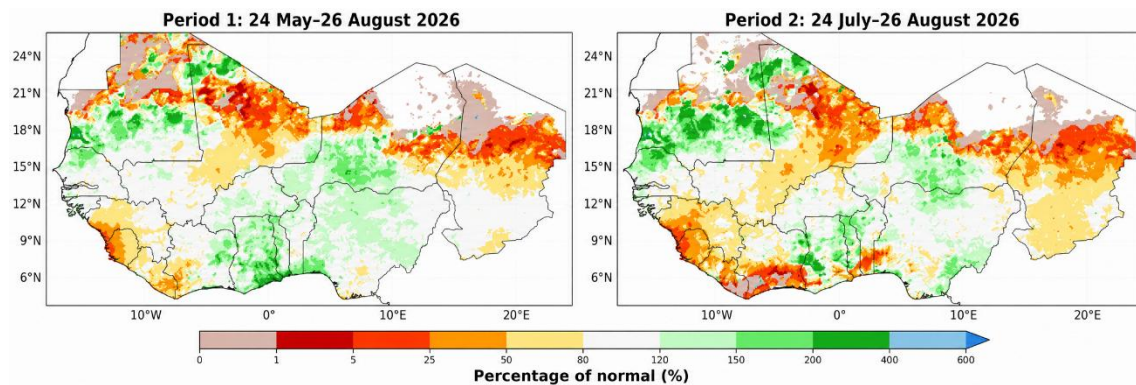


Figure 1: Rainfall totals relative to the 1991–2020 normal in West Africa and the Sahel as of 26 August 2026 (Source: ARC2)

Evolution of El Niño and the main ocean basins

The current sea surface temperature (SST) pattern highlights a complex oceanic situation characterized by simultaneous warm anomalies across several ocean basins. When analysing their potential effects on the West African monsoon, however, attention should not be limited to the magnitude of warming in each basin considered separately. Particular emphasis should be placed on inter-basin temperature gradients, which play a decisive role in shaping tropical atmospheric circulation and moisture transport toward West Africa and the Sahel.

In the equatorial Pacific, a continuous band of warm anomalies is observed across the central and eastern regions, with particularly pronounced warming toward the east. This pattern now corresponds to a well-established and strengthening El Niño. The latest weekly Niño 3.4 index stood at +2.20 °C (as of 9 August 2026), well above the El Niño threshold and characteristic of a strong event. In addition, the monthly Niño 3.4 anomaly for July 2026 was +1.4 °C (NOAA/CPC), confirming the rapid strengthening of the event.

This situation is likely to significantly alter large-scale tropical atmospheric circulation, particularly the location of deep convection and teleconnections between the Pacific and other tropical regions. In the tropical Atlantic, the northern tropical basin is generally warmer than normal, while anomalies in the Gulf of Guinea are comparatively weaker and spatially heterogeneous. Such a pattern may favour the establishment of a northward-oriented meridional SST gradient, potentially contributing to stronger monsoon flows. Warming in the tropical North Atlantic could therefore partly offset conditions in some parts of the Sahel and, under certain atmospheric configurations, mitigate the potentially adverse influence of the Pacific.

The Mediterranean also exhibits substantial positive anomalies. These conditions could increase lower-atmospheric water vapour content and, when atmospheric circulation is favourable, contribute to moisture transport toward North Africa and the Sahel. This additional moisture may support convective activity and rainfall over the Sahel. Mediterranean warming therefore represents a potentially favourable factor for rainfall in parts of the Sahel and may modulate or partly offset the influence of El Niño.

In the Indian Ocean, SST anomalies are also predominantly positive. The latest weekly Indian Ocean Dipole (IOD) index was $+0.41\text{ }^{\circ}\text{C}$. Overall, the observed pattern therefore suggests the superposition of several potentially competing oceanic forcings. Monsoon evolution over the coming weeks will consequently depend less on any single ocean basin than on the interaction among a now-strong El Niño, the tropical Atlantic, the warm Mediterranean, and a possible shift toward a positive IOD, as well as on the regional and tropical atmospheric circulation response to this configuration.

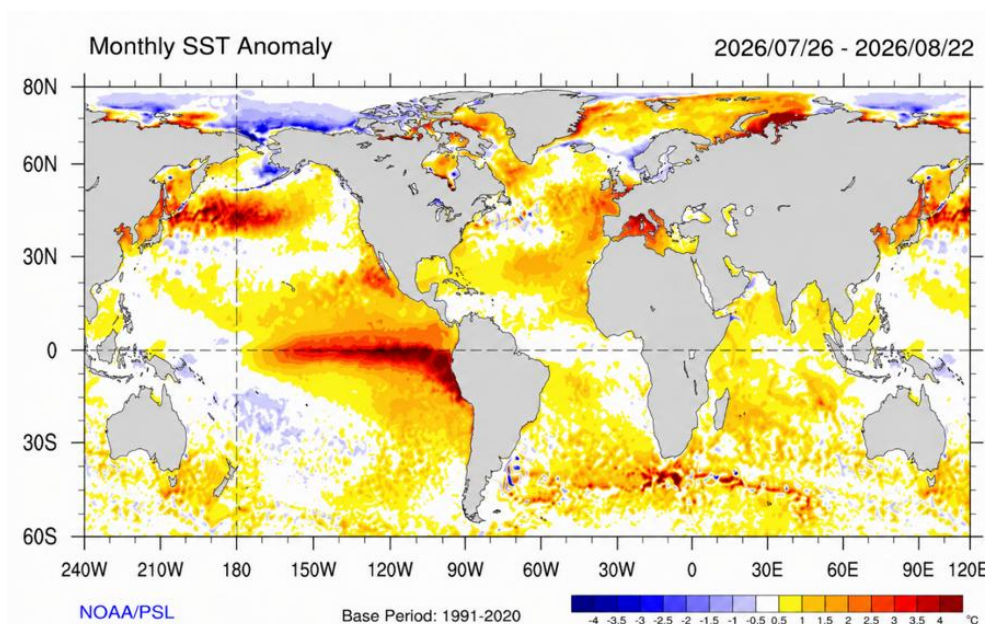


Figure 2 : Anomalies des températures des surfaces des mers Source sur la période du 26 juillet au 22 août 2026 par rapport à la référence 1991 – 2020 (NOAA/PSL)

Outlook for the remainder of the 2026 rainy season

Looking ahead, forecasts converge on a marked strengthening of El Niño, which is expected to reach very strong intensity and likely peak toward the end of the year. At the same time, the Indian Ocean Dipole index is expected to shift into a positive phase and remain positive through much of the latter part of the year.

Over West Africa and the Sahel, this configuration could contribute to a gradual weakening of the monsoon and greater rainfall irregularity late in the season, especially if Pacific forcing becomes dominant. However, the warm tropical North Atlantic, the warm Mediterranean, and conditions in the Gulf of Guinea could sustain moisture inflows and locally mitigate this effect.

Attention should therefore focus on the continuity of the rainy season, dry spells, and the gradual withdrawal of the monsoon. As the Sahelian rainy season ends, monitoring should increasingly focus on the second rainy season in the Gulf of Guinea, temperatures, and the characteristics of monsoon withdrawal. It therefore remains prudent not to infer a region-wide rainfall deficit across the Sahel on the basis of El Niño alone.

The seasonal forecast update produced by AGRHYMET RCC-WAS in August 2026, using the WASS2S-based objective forecasting approach and integrating the latest observations of ocean conditions and outputs from climate models, notably NMME and C3S, indicates a contrasted signal for September–October–November (SON) 2026. Overall, drier-than-normal conditions are favoured across much of the Sahelian belt, while locally wetter conditions are forecast along the Gulf of Guinea coast and in parts of the central Sahel.

- **Rainfall (Figure 3) :**

- In the western Sahel, particularly southern Mauritania, Senegal, much of Mali, and northern Guinea and Burkina Faso, rainfall totals below the climatological average are expected. This pattern could result in a drier-than-normal end to the season, with rainfall activity declining more rapidly during September and October.
- Across the central Sahel, conditions appear more heterogeneous. Near-average to locally above-average rainfall is forecast over parts of Burkina Faso, south-western Niger, northern Benin, and north-western Nigeria. These areas may therefore maintain relatively sustained rainfall activity during the period.
- Farther east, particularly across central and eastern Nigeria and much of Chad, forecasts indicate a predominance of below-average rainfall totals.

- In the Gulf of Guinea countries, the signal is more contrasted. Above-average rainfall totals are expected in some coastal areas of Guinea, Liberia, Côte d'Ivoire, Ghana, Benin, and southern Nigeria, while the more northerly parts of these countries are more likely to experience near-average to below-average conditions.

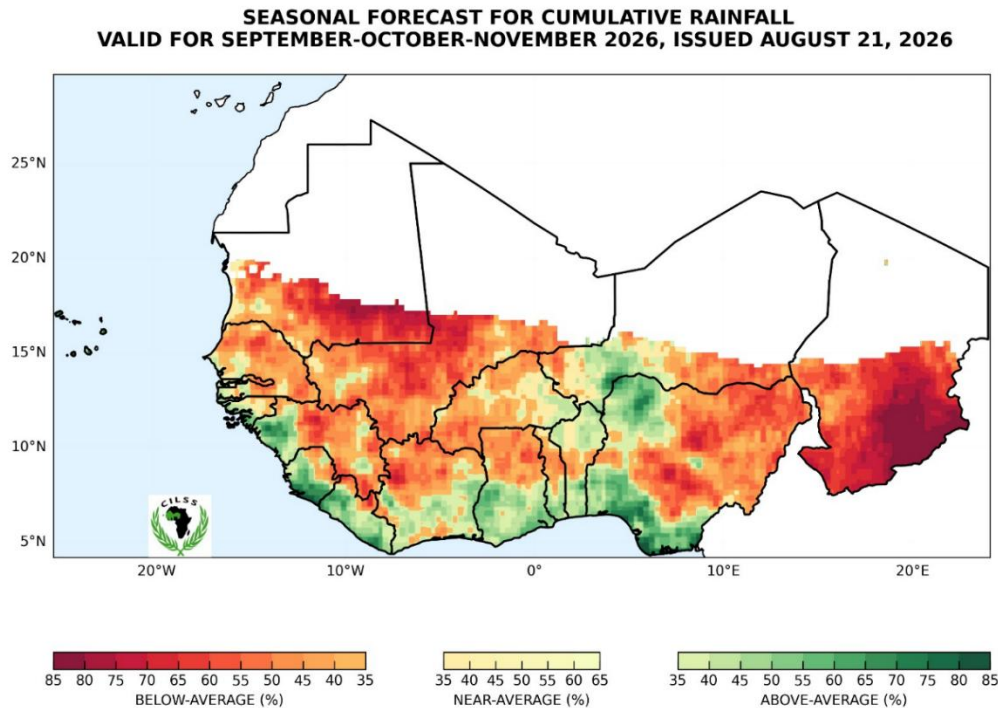
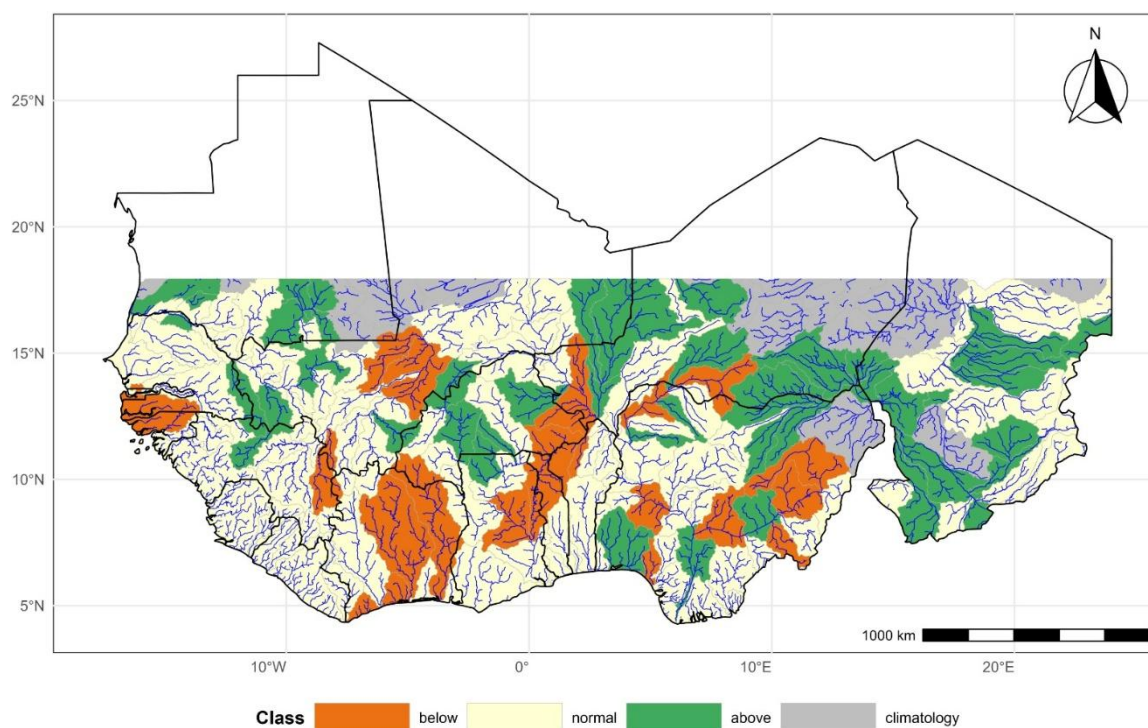


Figure 3: Seasonal rainfall forecast for September–October–November 2026

- **River flows:** Strong spatial variability is expected, with predominantly near-normal conditions, but also several above-normal pockets and a few areas of deficient flow. Above-normal flows are expected in parts of the central and eastern Sahel and in several sub-basins of the Niger River system, Nigeria, and the Lake Chad basin. Deficits remain localized in a few western and central parts of the region. Overall, continued hydrological vigilance is required, particularly in basins where above-normal flows could increase the risk of flooding and river overflow (Figure 4).



*Figure 4: Seasonal river-flow forecast for September–October–November 2026, AGRHYMET RCC-WAS
August update*

- **Temperatures:** Globally, SON 2026 is expected to be warmer than normal, with an increased risk of persistent heat, heat stress, and higher evapotranspiration, particularly toward the end of the rainy season and the beginning of the dry season.

Temperatures are expected to be above average across nearly all of West Africa and the Sahel, with a particularly strong signal over Sahelian areas and several Gulf of Guinea countries (Figure 5).

**SEASONAL FORECAST FOR MEAN TEMPERATURE
VALID FOR SEPTEMBER–OCTOBER–NOVEMBER 2026, ISSUED ON 30 AUGUST 2026**

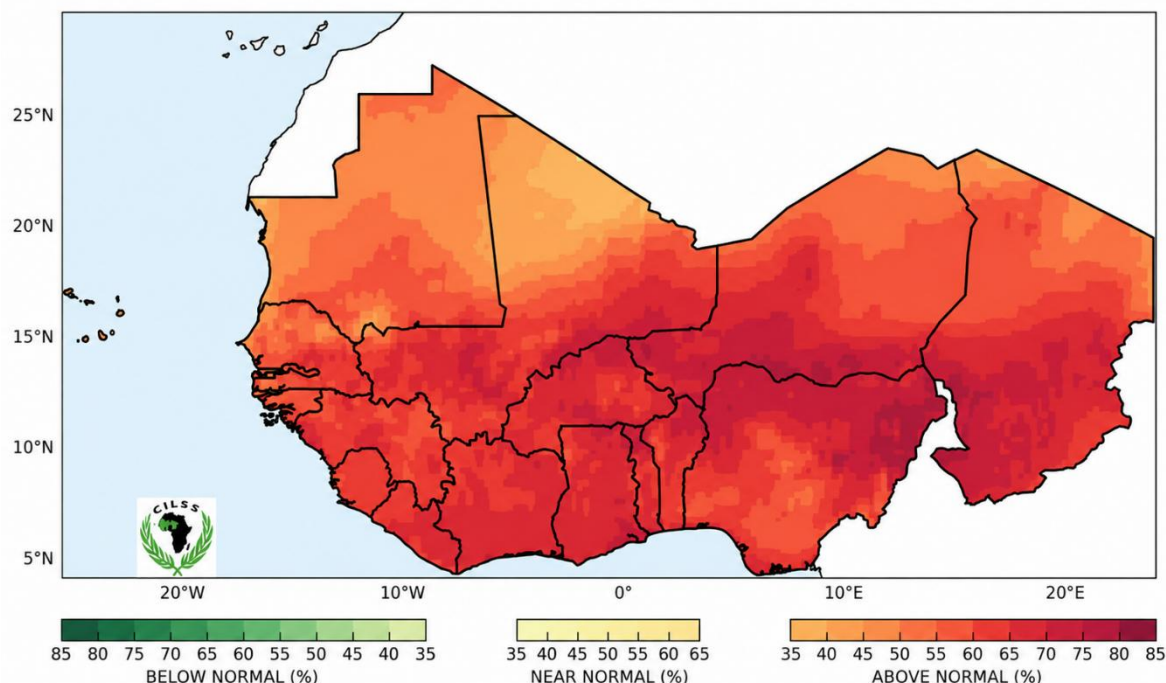


Figure 5: Seasonal temperature forecast for September–October–November 2026, AGRHYMET RCC-WAS August update

Conclusion

The end of the 2026 rainy season in West Africa and the Sahel is expected to unfold in a complex oceanic context marked by a strengthening El Niño, a possible shift toward a positive IOD, and relatively warm conditions in the tropical North Atlantic and the Mediterranean that may modulate their effects on the monsoon.

For SON 2026, forecasts indicate generally below-average rainfall across much of the western and eastern Sahel, with near-normal to locally above-normal conditions in parts of the central Sahel and the Gulf of Guinea. River flows are expected to remain broadly near normal, with some localized above-normal conditions requiring vigilance for flooding. Temperatures are also expected to be above average across almost the entire region, increasing the risks of persistent heat and high evapotranspiration.

Enhanced monitoring should therefore focus on dry spells, monsoon withdrawal, heavy rainfall, flooding, heat conditions, and the evolution of the second rainy season in the Gulf of Guinea.

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