Despite recent decreases in rainfall, torrential rains have caused flooding across sub-Saharan Africa

Africa Weather Hazards

1. Since early August, above-average seasonal rainfall caused flooding in some areas. With well above-average moisture conditions, additional rain in September may trigger flooding in parts of Senegal, The Gambia, Guinea-Bissau, Guinea, and Sierra Leone.

2. Recent heavy rains have caused the Benue River in Nigeria to overflow its banks. Reports indicate that 100,000 people may have been displaced by flooding. Continued rainfall will keep rivers high.

3. Heavy rainfall triggered flooding in Sudan during the last week. Both the Blue and White Nile rivers are effected, and a dam has reportedly broken along the White Nile. Although rainfall is expected to decrease throughout the region in early September, saturated ground conditions sustain the risk for additional flooding.
Africa Overview

West Africa experiences a decrease in rainfall
According to the latest satellite rainfall estimates, many areas of Senegal, Mali, and Nigeria registered below-normal rainfall totals. Despite these broad decreases, Niamey, Niger and Benue state in Nigeria still received very heavy rain which has led to flooding. Over 100mm of rain was recorded in Niamey last week. Other areas that received heavy rain (>100mm) include eastern Burkina Faso, northern Benin, Guinea, and Sierra Leone (Figure 1). Rains have begun to lessen across the Sahel and little to no rain was observed in southern Cote D’Ivoire and Ghana.

August was characterized by a general decrease in seasonal rainfall, with an increase in rainfall towards the month’s end. The observed recovery was short lived, as rains lessened again to start September. In parts of southern Burkina Faso, northern Ghana, and Liberia, rainfall deficits exceed 50mm and less than 80% of normal over the last 30 days. Large seasonal moisture surpluses persist in western Gulf of Guinea regions and some portions of the Sahel, where parts of Guinea and Mali have experienced more than twice their normal rainfall accumulation since late July (Figure 2). The continuation of heavy seasonal rains in these areas elevates the risk for floods in September.

Next week, weather models suggest the potential for above-normal rainfall for western Gulf of Guinea countries. The rest of the region is likely to receive seasonable conditions.

Locally heavy rains continue to trigger floods in Sudan
A third consecutive week of above-average rainfall over Sudan has resulted in floods, damages to infrastructure, and displaced populations. The areas most affected by overflowing rivers this past week include Sennar, El Gedaref, and White Nile states. More than 100mm of rain fell over parts of the region last week. Persistently above-average rainfall in East Africa over the past few weeks has mitigated abnormal dryness in northern Ethiopia (Figure 2).

Next week, a decrease in rainfall is forecast over eastern Sudan and South Sudan, which is expected to provide much needed relief to saturated ground conditions. However, another week of heavy rainfall over western Ethiopia is expected to sustain the risk for flooding along the Nile River basin.
Central Asia Weather Hazards

Temperatures
Above-normal temperatures continued across Central Asia during late August and early September. The largest warm anomalies (6-8°C) were observed over northern Kazakhstan. Next week, above-normal temperatures are expected to continue throughout the region. An abnormal heat hazard is posted over portions of northern Kazakhstan, as maximum temperature is forecast to exceed 30°C and average more than 6°C above-average.

Precipitation
Last week, below-average precipitation was observed over Central Asia. While precipitation was near-average and typical during this time of the year, accumulated precipitation over the past thirty days indicated moderate to large deficits over northern Kazakhstan.

During the next week, light to locally moderate (up to 50mm) and widespread rainfall is forecast across northern Kazakhstan, while dry weather is expected elsewhere.

Central America and the Caribbean Weather Hazards

1. Abnormal dryness observed over northern Dominican Republic.

2. The neighboring passage of Tropical Cyclone Irma may trigger floods and damages to infrastructure.
Central America and the Caribbean Overview

Above-average rain recorded over Gulf of Fonseca during the last week
During the last week, above-average rainfall was recorded throughout many regions in Central America. Moderate to locally heavy rainfall amounts (>75mm) were recorded across the northern and southeastern departments of Guatemala, with widespread heavier accumulations throughout southwestern Honduras and into the Gulf of Fonseca region. Further south, average to slightly above-average rainfall was recorded across Honduras, Costa Rica, and Panama. Rainfall analysis shows adequate (80-120% of average) performance throughout Central America, except for east-central Guatemala. Here, seasonal rainfall still accounts for only between 50-80% of the climatological average. However, recent indices from crop performance models also indicate mostly favorable conditions throughout the region.

For next week, increased rainfall is forecast for southern Guatemala, as well as western Honduras. Heavy rain is also expected along the Pacific coastline of Costa Rica and Panama. However, light to locally moderate rain is forecast along the Atlantic coastline of Nicaragua and Honduras, with lighter amounts expected for many interior departments.

Passage of Tropical Cyclone Irma may trigger floods and damages to infrastructure
During the last week, seasonable rainfall was recorded over Haiti, with limited rainfall across the Dominican Republic. The highest weekly amounts were recorded over central and northern Haiti (>75mm), with lesser amounts ranging between 5-25mm over Dominican Republic. As seasonal rainfall has been decreasing over the Dominican Republic in recent weeks, moisture deficits have begun to strengthen in central and northern departments of the country. Since early August, many local areas are experiencing less than half of their normal rainfall accumulation. Similarly, dryness has continued along the southern coasts and portions of northern Dominican Republic due to poorly-distributed rainfall since June in the region.

However, a large increase in rainfall is forecast with the passage of Tropical Cyclone Irma during early next week. Although the center of the tropical system is expected to remain offshore, heavy rainfall accumulations and high winds across northern Hispaniola may result in localized floods, damages to infrastructure, displaced populations and possible landslides in the higher elevations.