River flooding and above-average rainfall continue in Nigeria and Sudan

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.

4. Heavy rains along the Kenyan coast over the last 24 hours have caused flash flooding. Rainfall is expected to continue through early next week.
Africa Overview

Widespread rainfall recorded across West Africa

West Africa received a mix of above- and below-average conditions this past week. Rains were well-distributed, but lighter than is typical, especially within the southern Gulf of Guinea countries. Many areas received moderate to heavy (50-100mm) rainfall, including Guinea, Sierra Leone, southern Mali, Burkina Faso and parts of Nigeria (Figure 1). This resulted in significant positive anomalies in Mali and Burkina Faso, but registered as near-normal in Guinea. Areas of southern Côte D’Ivoire, Togo, Benin and Nigeria received below-normal rainfall. Of greatest interest, southern Burkina Faso and northern Ghana have received 50-200mm less rainfall than normal since mid-August (Figure 2). Other areas, such as western Guinea, as well as central Mali and Burkina Faso carry large 30-day surpluses. This has resulted in major flooding issues downstream along the Niger River in Nigeria.

Next week, weather models suggest rainfall will continue for western Gulf of Guinea countries. This region may be sandwiched between areas of suppressed rainfall to north over Senegal and to the south along the Gulf of Guinea coastline.

Heavy rains continue to trigger floods in Sudan

Most areas in East Africa received near or above-normal amounts of rain over the past week. The greatest rainfall totals (>100mm) were recorded along the Ethiopia-Sudan border (Figure 1). Nearly 100mm of rain was recorded in Uganda and western Kenya. Heavy rain showers occurred in coastal Kenya where up to 92mm were measured in 24 hours. Some rainfall was recorded in northern Somalia. Heavy rains, both recently and over the whole season, have caused the Blue and White Nile Rivers to flood, resulting in damages to infrastructure. Persistently above-average rains across many regions in East Africa over the past several weeks have resulted in large positive precipitation anomalies since Mid-August. Vegetation indices show positive values throughout the region.

New week, near- or above-normal rainfall is forecast for the region. Above-normal totals exceeding 100mm are possible in western Ethiopia. Elsewhere, rains should continue to spread into northern Somalia and push inland from the coast of Tanzania, Kenya and southern Somalia.
Central Asia Weather Hazards

Temperatures
Seasonal temperatures (anomalies <3°C) prevailed across Central Asia during mid-September. Patchy frost affected northern Kazakhstan last week, with hard freezes limited to the higher elevations of northeast Afghanistan and Tajikistan. The GFS model indicates that minimum temperatures will average 2-6°C below normal across northeast Kazakhstan during late September. Therefore, some areas of northeast Kazakhstan may experience a hard freeze slightly earlier than normal.

Precipitation
Widespread precipitation (2-32mm) was recorded across the northeast quarter of Kazakhstan from September 10 to 16. Isolated showers (locally >25mm) were recorded across northern Pakistan as the Indian Monsoon begins to shift east.

During the next week, light precipitation (mostly <25mm) is expected to be limited to northeast Kazakhstan.

Central America and the Caribbean Weather Hazards

1. Tropical Cyclone Maria is expected to impact eastern and northern Hispaniola.

2. Heavy rains forecast next week may trigger flooding in the Huehuetenango, Quiche, and San Marco departments of western Guatemala.

3. Abnormal dryness observed over northern Dominican Republic.
Central America and the Caribbean Overview

Postrera seasonal dryness strengthens over parts of Guatemala, Honduras, and Nicaragua

For the second consecutive week, below-average seasonal rainfall was recorded throughout much of Central America. The highest weekly totals (>50mm) were recorded across northern Guatemala, the Gulf of Fonseca region, and western Honduras, with lower amounts (10-25mm) registered elsewhere. In El Salvador, a large decrease was observed for many departments that saw heavy rainfall during the previous week. Towards the south, large rainfall totals were recorded mostly offshore in the Pacific with more moderate accumulations recorded over Costa Rica and Panama. Currently, many areas in central and eastern Nicaragua and eastern Honduras have between 50-80% of their normal rainfall totals since the beginning of August, with some local areas received less than half of their normal rainfall. Frequency analysis of rains also depicts an anomalously lower number of rain days in September. Vegetation health indices indicate declining conditions where anomalous seasonal dryness has developed.

For next week, heavy rainfall is forecast for western Guatemala and southern Honduras. However, light to locally moderate rain is forecast over eastern Honduras and central Nicaragua, which may result in the continued strengthening of mid-season moisture deficits.

Tropical Cyclone Maria expected to impact northeastern Hispaniola

Last week, below-average rainfall was recorded over much of Haiti, with average to above-average seasonal rainfall totals over northern Dominican Republic. Locally heavy precipitation accumulations (>75mm) were registered over northwestern Dominican Republic, with generally lesser amounts (<25mm) over Haiti. Since mid-August, much of northern Haiti and the Dominican Republic have experienced positive moisture surpluses following the rainfall associated with Tropical Cyclone Irma earlier in September. However, much of the rainfall since mid-August has not been located over southern Hispaniola where seasonal rainfall continues to be erratic.

Next week, Tropical Cyclone Maria is expected to move close or make landfall over northeastern Dominican Republic. Maria is expected to intensify to a major hurricane during this time and high winds with heavy precipitation will affect the northern departments which were previously affected by the passage of Hurricane Irma earlier this month. There is an elevated risk for flooding, damages to infrastructure, and displaced populations during the next week. Landslides in the higher elevations of Hispaniola are also possible.

ABOUT WEATHER HAZARDS

Hazard maps are based on current weather/climate information, short and medium range weather forecasts (up to 1 week) and their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.