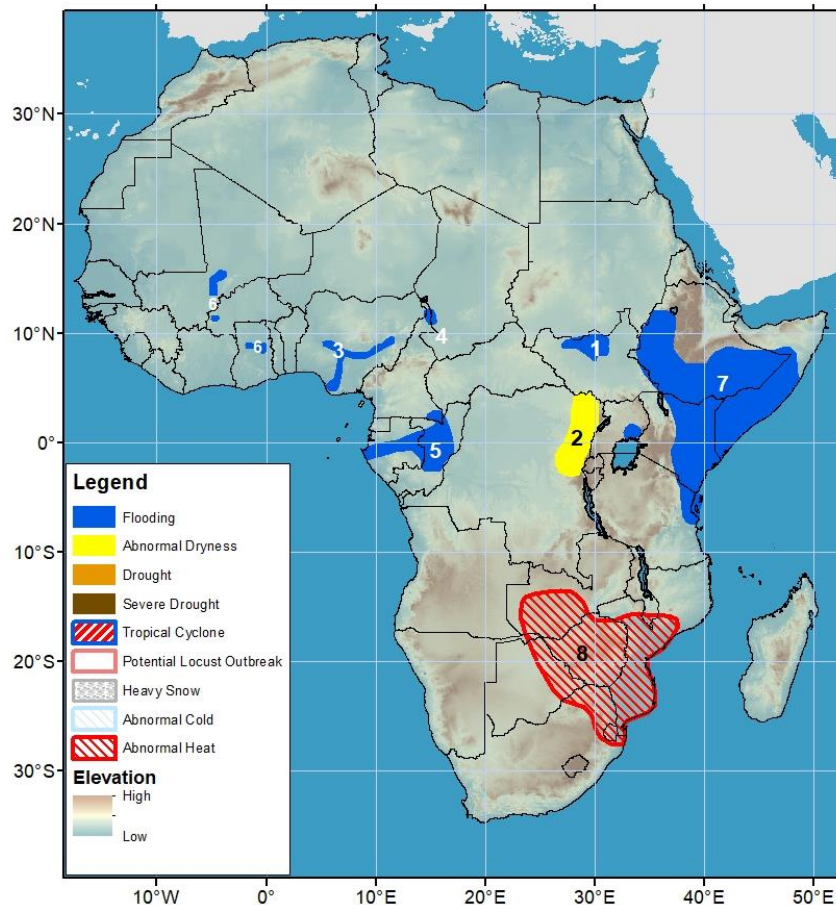


Climate Prediction Center's Africa Hazards Outlook For USAID / FEWS-NET 16 November – 22 November 2023

- Heavy rainfall is ongoing in Eastern Africa, leading to widespread historic level flooding.
- Light to moderate rain was observed across Southern Africa.



- 1) Flooding conditions persist in the Sudd wetlands but have eased in the Sobet and Akobor catchments.
- 2) Since July, uneven rainfall distribution caused moderate to large rainfall deficits, negatively affecting vegetation in the northeastern and eastern parts of DR Congo.
- 3) The previous season's torrential and above-average rain has caused floods to linger along Nigeria's Niger and Benue Rivers.
- 4) Flooding has been maintained over the past week in southern Chad.
- 5) Flooding is likely ongoing in Congo and Gabon due to recent heavy rainfall which is forecast to persist into the outlook period.
- 6) Post rainy season inundation remains unchanged in the Niger River delta in Mali. Due to the recent week's below-average rainfall, flooding conditions have improved in northern and southern Ghana and southern Benin.
- 7) The river levels of the Juba and Shabelle Rivers have exceeded the high risk level, and more heavy rainfall is expected in the Greater Horn of Africa. The torrential rain is leading to widespread serious flooding in Ethiopia's western and southern parts as well as southern Somalia and Kenya that has already led to fatalities and displaced many people.
- 8) In association with suppressed rain and cloud cover maximum temperatures are expected to be 4-8°C warmer than average during the outlook period so an abnormal heat hazard is placed. There is a high likelihood of temperatures exceeding 90th percentile values.

Note: The Hazards outlook map is based on current weather/climate information, short and medium-range weather forecasts (up to 1 week), sub-seasonal forecasts up to 4 weeks, and assesses the potential impact of extreme events on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed and predicted to continue during the outlook period. The boundaries of these polygons are only approximate at the spatial scale of the map. This product considers long-range seasonal climate forecasts but does not reflect current or projected food security conditions. FEWS NET is a USAID-funded activity whose purpose is to provide objective information about food security conditions. Its views are not necessarily reflective of those of USAID or the U.S. Government. The FEWS NET weather hazards outlook process and products include participation by FEWS NET field and home offices, NOAA-CPC, USGS, USDA, NASA, and several other national and regional organizations in the countries concerned. Questions or comments about the hazard's outlooks may be directed to Dr. Wassila Thiaw, Head, International Desks/NOAA, wassila.thiaw@noaa.gov. Questions about the USAID FEWS NET activity may be directed to Dr. James Verdin, Program Manager, FEWS NET/USAID, jverdin@usaid.gov

Heavy rainfall continues to occur in East Africa, especially in Kenya and southern Somalia.

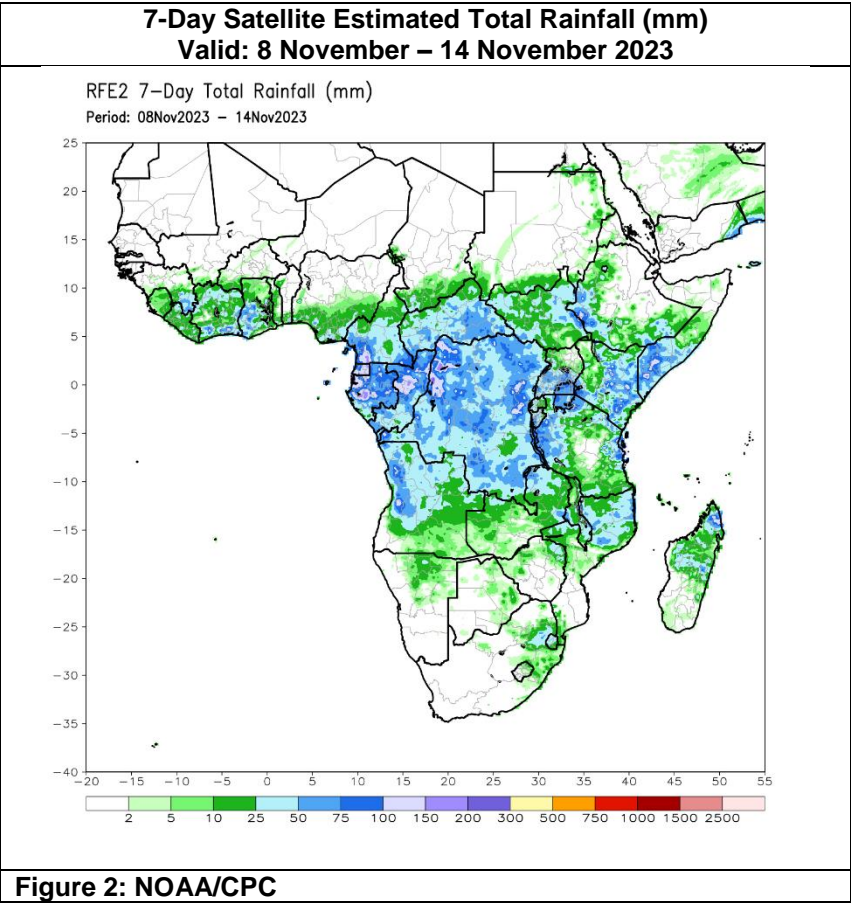
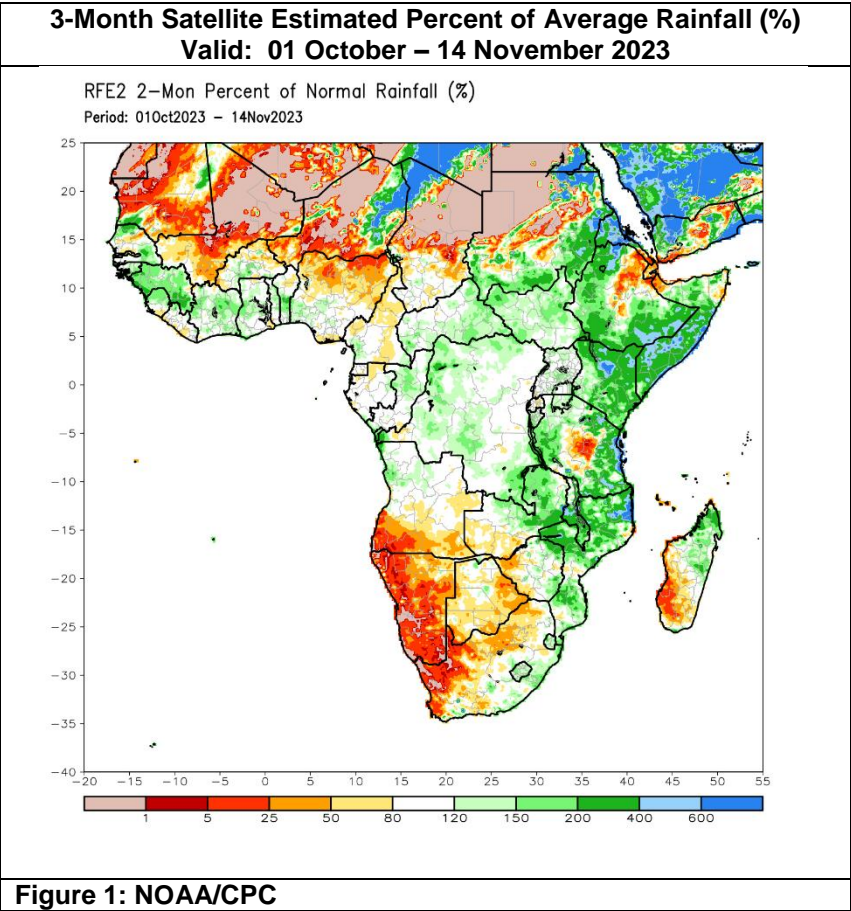
Heavy rains continuing last week in the Greater Horn of Africa have added to surpluses already present this season. Since 1 October, rainfall surpluses have exceeded double and locally quadruple the average in southern/western Ethiopia, Somalia, Kenya, and eastern Tanzania (**Figure 1**). This has set conditions highly susceptible to flooding, as has already been reported widely. In fact, over 1 million people have been affected in Somalia where flash flooding and bankfull water levels on the Juba and Shabelle rivers have occurred. 15 fatalities are also reported in Kenya. Rains over the past 7 days have been heavy. Southwestern Ethiopia, southern Somalia, central, east-central Kenya, and eastern Tanzania received 75-150mm of rainfall (**Figure 2**). Lesser, but still significant, rains were received through many other portions of East Africa, including many remaining areas of Kenya, southern Uganda, and northern Tanzania. Heavy rains in the past months improved dry conditions, but northern and central Ethiopia and parts of northeastern DRC remain dry. Less than 50% of average rainfall is represented in Ethiopia since 1 October.

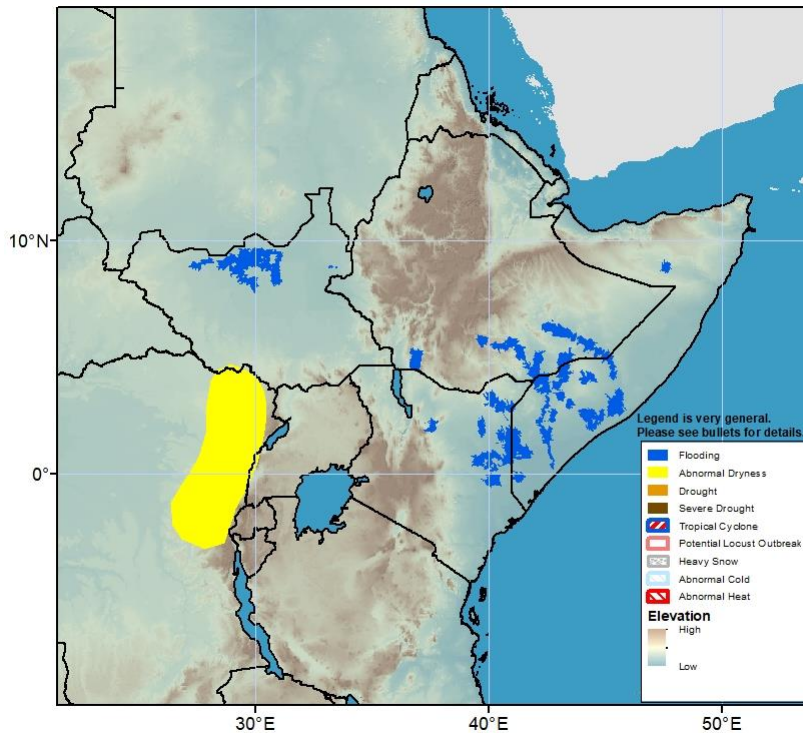
During the outlook period, heavy and above-average rainfall is expected across southern Ethiopia, northeastern Kenya, and southern Somalia with above-average rainfall totaling 100-200 mm. Wetter than average condions are also expected in eastern Tanzania, Uganda, and northeastern DRC. Rainfall of 50 -100 mm is possible. With the substantial rainfall expected, flood risk remains elevated for most of East Africa.

Scattered Light to moderate rainfall observed over many portions of Southern Africa.

Over the past week, light to moderate rain showers were scattered across much of Southern Africa. The most significant moderate to heavy rainfall (50-100 mm) was recorded in northern/central Angola, in and around southern Malawi, and northern portions of Madagascar (**Figure 2**). Eastern South Africa, Eswatini, and central Madagascar recieved 25-75 mm. Rainfall anomaly of 10-50 mm above-average was recorded in parts of northern Angola, in and around southern Malawi, and Madagascar. Conversely, below-average rainfall was recorded in a corridor from western Zambia, through Zimbabwe, eastern South Africa, and southern Mozambique. In the past 30 days, above-average rainfall between 25-100 mm was observed along eastern, and southern portions of the southern Africa region as well as in Zambia. Areas including southern Angola, Namibia, and southwestern Madagascar received negative anomalies between 10-50 mm.

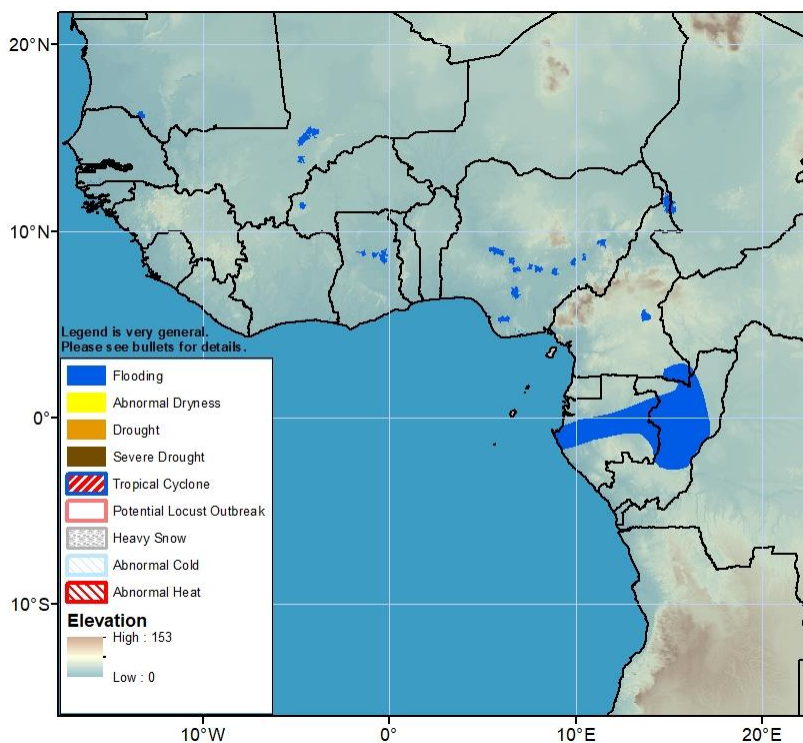
During the outlook period, rainfall is expected to largely suppressed below normal. Heavier and above average rainfall ia likely in northern and western Angola (75-150 mm). Otherwise, little rainfall resulting in 10 - 40mm deficts is likely.





Flooding is ongoing in South Sudan's Sudd Wetlands.
Floods occur along the Juba and Shabelle Rivers with the worst affected areas currently in the Juba catchment.
Widespread flooding also extends into eastern Kenya. Millions of people in the region are affected.

Figure 3: Hazards, focused over Eastern Africa



Inundation conditions has held steady in Central Mali and northern Ghana.
In Nigeria, flooding conditions have improved along the along the Niger and Benue catchments.
Flooding conditions improved substantially in southern Chad. Haevy rains will likely Cause flooding in Congo.

Figure 4: Hazards, focused over West Africa