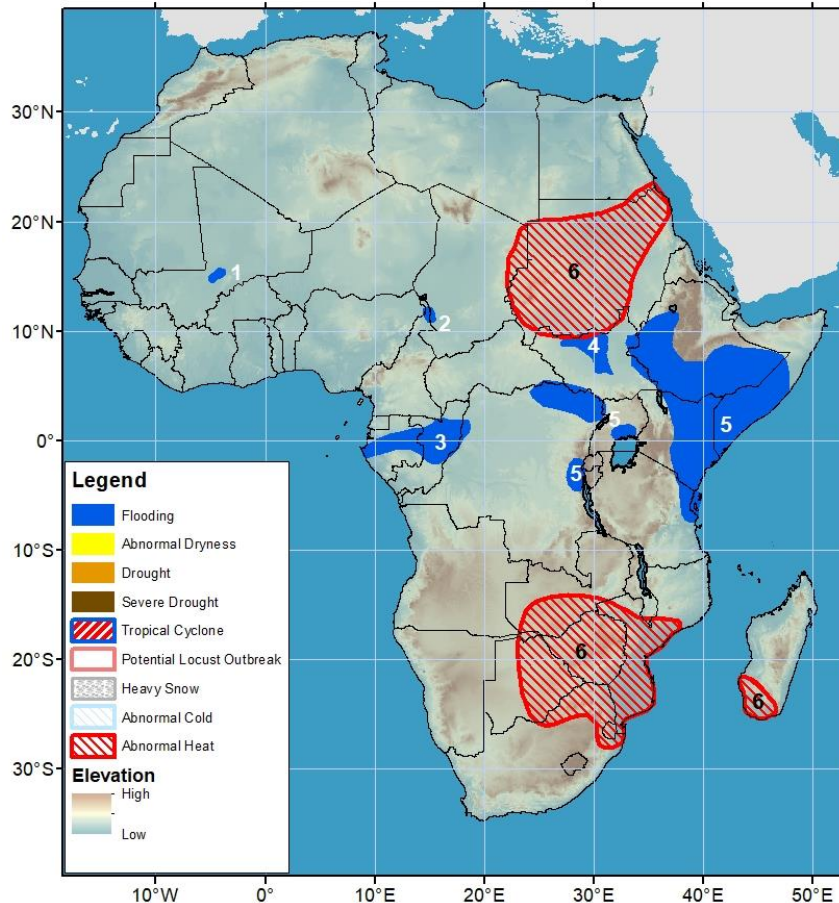


Climate Prediction Center's Africa Hazards Outlook For USAID / FEWS-NET 23 November – 29 November 2023

- Heavy rainfall has persisted for another week in Eastern Africa, leading to widespread historic level flooding.
- Light to moderate rain was observed across Southern Africa.



- 1) The previous season's torrential and above-average rain has caused floods to linger along the Niger River delta in central Mali, though conditions are improving.
- 2) Flooding is maintained over the past week in southern Chad but is improving.
- 3) Flooding is ongoing in Congo and Gabon due to recent heavy rainfall which is forecast to persist into the outlook period.
- 4) Flooding conditions persist in the Sudd wetlands.
- 5) The river levels of the Juba and Shabelle Rivers have reached bankful level along their lengths in Somalia. More heavy rainfall is expected in the Greater Horn of Africa which will reinforce and worsen the risk level. The torrential rain is leading to widespread serious flooding in Ethiopia's western and southern parts as well Kenya that has already led to fatalities and displaced many thousands of people. Recent heavy rains also have caused ongoing inundation central portions of Uganda. Flood models indicate high streamflows due to ongoing rains in northeastern DRC. Reports indicate that 4 fatalities and 4 thousand displaced people have already resulted
- 6) In association with suppressed rain and cloud cover maximum temperatures are expected to be 4-8°C warmer than average during the outlook period. An abnormal heat hazard is placed over a large portion of southern Africa and southern Madagascar. An Abnormal Heat hazards is also placed over Sudan where 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.

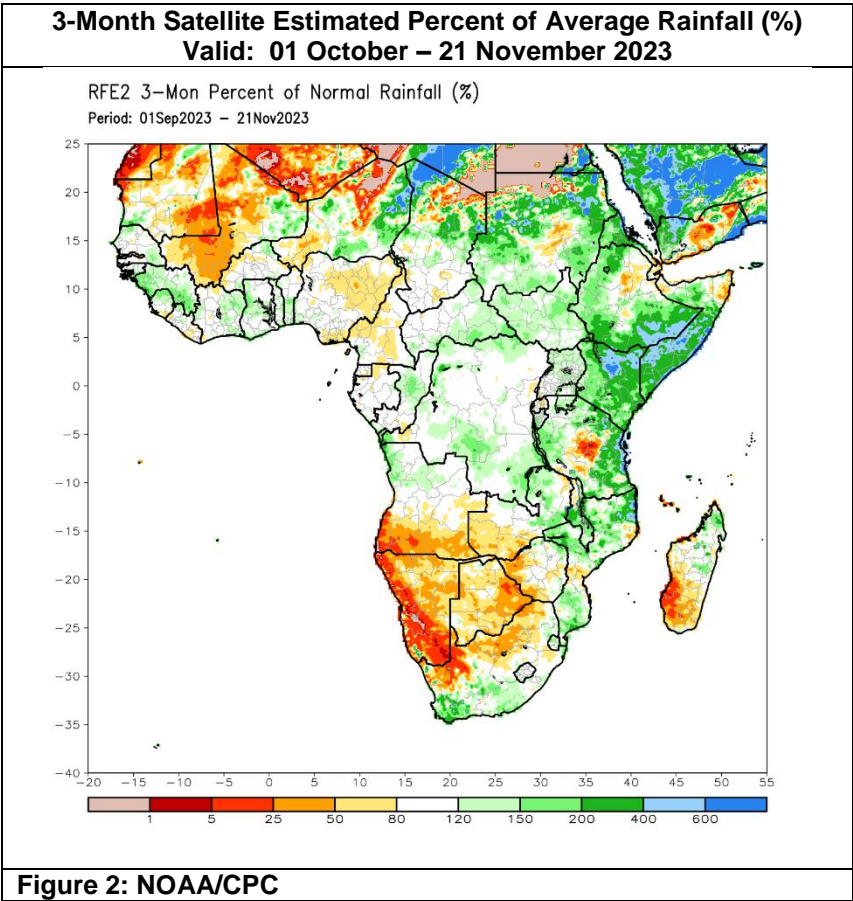
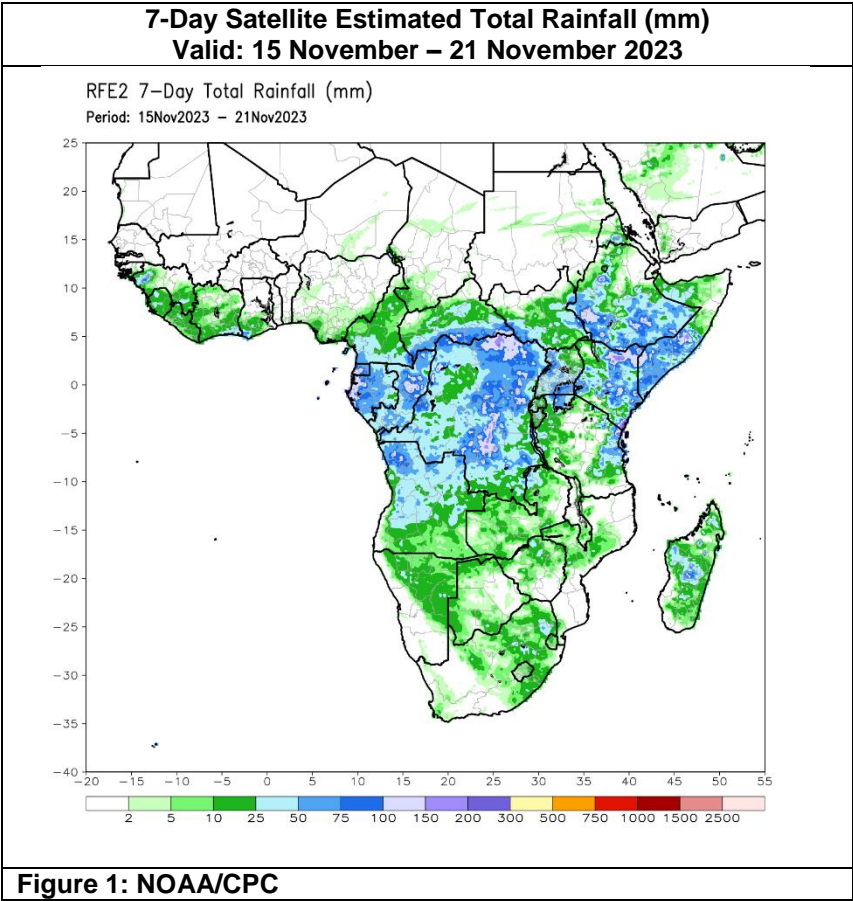
Rains over the past 7 days have increased again and been widely very heavy. Southern Ethiopia, southern and central Somalia, eastern Kenya, and northeastern Tanzania received 50-200mm of rainfall (**Figure 1**). Lesser, but still ample, rains (25-75mm) were received through other portions of East Africa, including southern/western Uganda, South Sudan, and western Tanzania. These heavy rains are renewing the flood danger that has been ongoing during the past several weeks. Repeated rounds of heavy rain have led to very large surpluses over the OND rainfall season. Anomalies have reached 200-500 mm above average over southern Ethiopia, southern Somalia, Kenya, and eastern Tanzania. In many cases, these totals are 2 to 6 times the average seasonal totals to date (**Figure 2**). This pattern has resulted in widespread flooding across the Greater Horn. In fact, over 1 million people have been affected in Somalia where flash flooding and bankfull water levels on the Juba and Shabelle rivers are occurring. Many thousands have been affected in Ethiopia, as well as Kenya, where 46 fatalities have been reported during the season across at least 19 affected counties. Heavy rain was also observed this week in northeastern DRC largely alleviating seasonal dryness there.

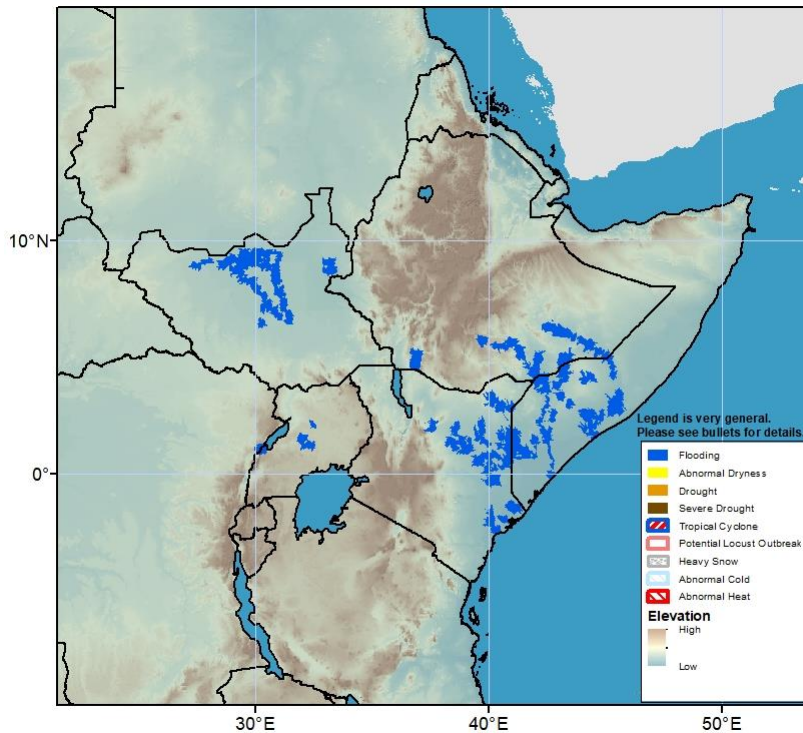
During the outlook period, drying conditions are expected in Ethiopia and central Somalia. However, heavy and above-average rainfall will continue across Kenya and Tanzania likely totaling 100-200 mm. More riverine and flash flooding is expected. Wetter than average conditions are also expected in Uganda, and northeastern DRC. Rainfall of 50 -100 mm is possible.

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 greatest rainfall (71-150 mm) was recorded in northwestern and northeastern Angola, as well as central Madagascar (**Figure 1**). Many portions of southern Zambia, Botswana, Mozambique, and southern Madagascar received very little rain. This resulted in negative rainfall anomalies in these areas, with the largest 25-50 mm negative anomalies in Zambia and Angola. In the past 30 days, rains have been largely suppressed. Some positive anomalies are observed in the East and in northern Madagascar, but the majority of the region exhibits negative anomalies between 10 and 50 mm. Where inadequate rainfall has been occurring the longest in Angola and northern Namibia, degradation of vegetation health is already observed according to satellite observed vegetation indices

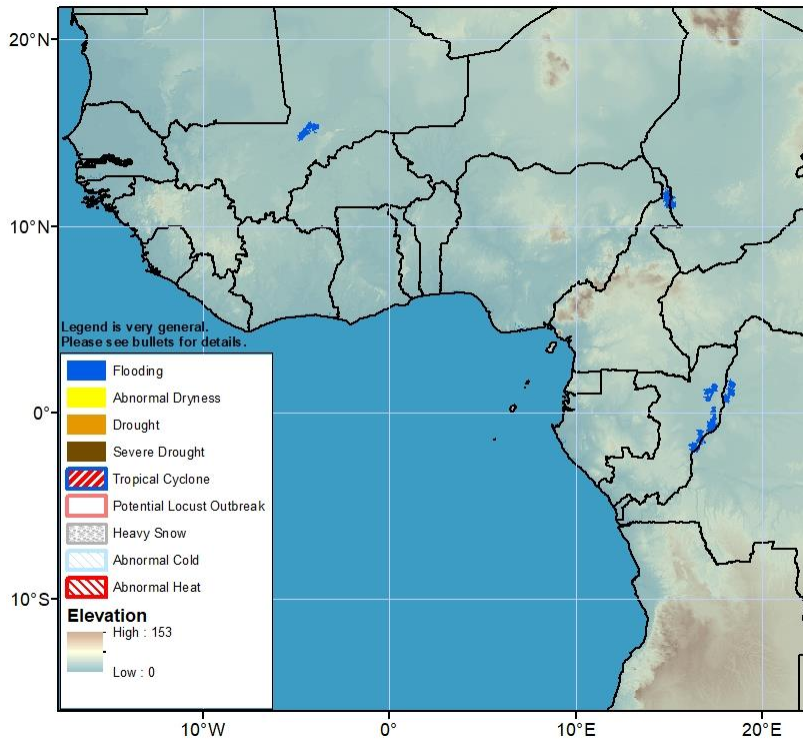
During the outlook period, rainfall is expected to be suppressed below normal again. However, heavier and above-average rainfall is likely in northern and western Angola (75-150 mm). Otherwise, little rainfall resulting in 10 - 40mm deficits is likely.





Flooding is ongoing in South Sudan's Sudd Wetlands. Inundation is increasing along the Juba and Shabelle Rivers with most stations showing bankful levels. Additionally, The Lagh Dera/Lagh Jura river discharge may reach to a 10-year return period level. Widespread deadly flooding also extends into eastern Kenya. Millions of people in the region are affected.

Figure 3: Hazards, focused over Eastern Africa



Inundation conditions are lingering but have improved in Central Mali. Flooding conditions improved substantially in southern Chad. Recent heavy rains have caused inundation along the Congo river basin in Congo.

Figure 4: Hazards, focused over West Africa