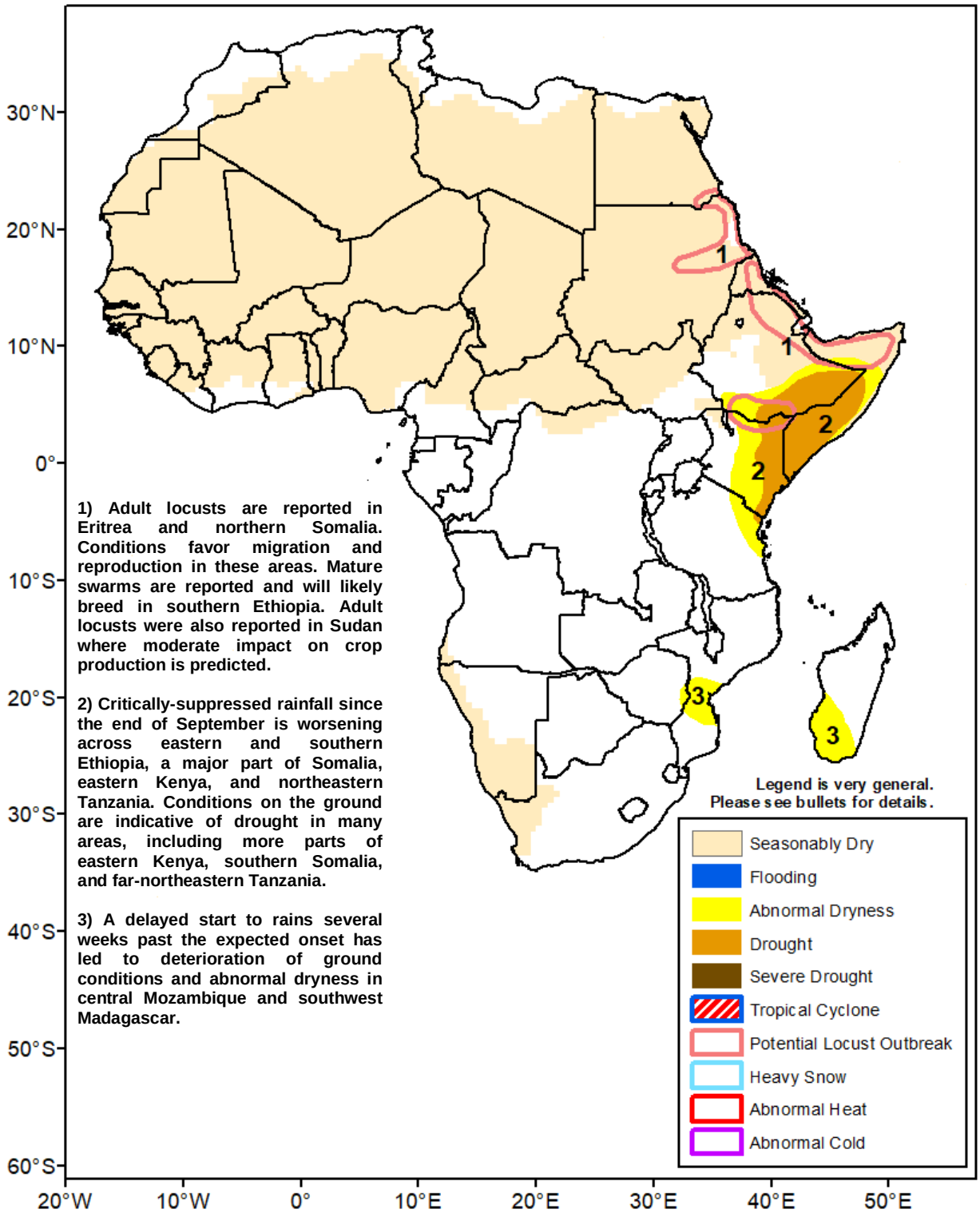
Climate Prediction Center's Africa Hazards Outlook
9 – 15 December 2021

- **While drought continues to negatively impact a wide area of the Horn of Africa, abnormal dryness has emerged over the eastern parts of southern Africa.**



1) Adult locusts are reported in Eritrea and northern Somalia. Conditions favor migration and reproduction in these areas. Mature swarms are reported and will likely breed in southern Ethiopia. Adult locusts were also reported in Sudan where moderate impact on crop production is predicted.

2) Critically-suppressed rainfall since the end of September is worsening across eastern and southern Ethiopia, a major part of Somalia, eastern Kenya, and northeastern Tanzania. Conditions on the ground are indicative of drought in many areas, including more parts of eastern Kenya, southern Somalia, and far-northeastern Tanzania.

3) A delayed start to rains several weeks past the expected onset has led to deterioration of ground conditions and abnormal dryness in central Mozambique and southwest Madagascar.

Favorable rains fell over eastern Kenya and eastern Tanzania.

This past seven-day satellite rainfall estimates indicated that favorable rainfall pattern, with scattered moderate to heavy amounts, fell over central and eastern Kenya and eastern Tanzania (**Figure 1**). While the increased and above-average rain affected eastern Kenya for the second consecutive week, suppressed rainfall and drier-than-average conditions were observed over elsewhere, including southwestern Ethiopia and southwestern Kenya. This past thirty days, cumulative rainfall remained mostly below-average throughout the Horn of Africa, maintaining drought conditions throughout the region.

The latest Vegetation Health Index (VHI) analysis has showed that very unhealthy vegetation dominated over the eastern two-thirds of Kenya. Reports have also indicated that the current drought has already negatively impacted the livelihoods of many people, and livestock production. Hence, substantial reduction in crop yields are expected over Ethiopia, Kenya, and Somalia by the end of the season.

During the outlook period, little to no rainfall is, generally, forecast over the Horn of Africa, except along eastern Kenya and northeastern coastal areas of Tanzania, where moderate rains are possible. With the forecast limited rain amounts and season, coming to an end, conditions are likely to worsen over many local areas.

7-Day Satellite Estimated Total Rainfall (mm)
Valid: 30 November – 06 December, 2021

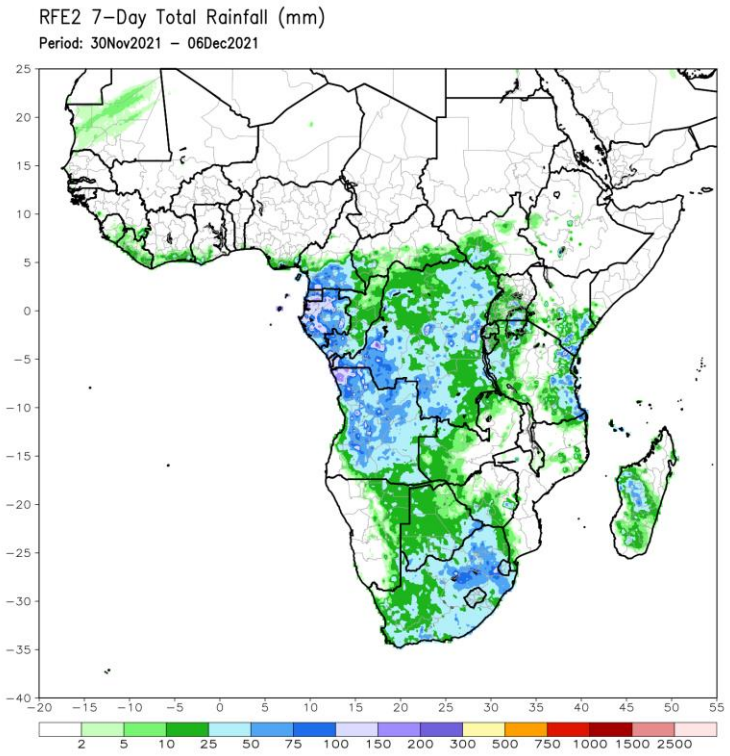


Figure 1: NOAA/CPC

Drier-than-average conditions spread across central and eastern southern Africa.

An analysis of this past thirty-day rainfall totals has indicated that drier-than-average conditions have extended over the central and eastern portions of southern Africa. Large (> 50 mm) rainfall deficits were now present over eastern Angola, much of Zambia, the Caprivi Strip of northeastern Namibia, northwestern Botswana, central Mozambique, and Madagascar (**Figure 2**). This dryness was attributable to an uneven distribution in rainfall and presence of an anomalous upper-level high pressure system, which contributed to inhibit rainfall over parts of Mozambique and Madagascar over the past few weeks. In contrast, rainfall was above-average over northwestern Angola, much of South Africa, Lesotho, and Eswatini.

While the VHI depicted very poor vegetation conditions already over Zambia, Malawi, northern Mozambique, and the western two-thirds of Madagascar, worsening conditions were also detected over the central parts of Mozambique recently. If favorable rains do not return over the upcoming weeks, further deterioration in biomass and ground conditions is likely over many areas. In contrast, near-average to above-average vegetation conditions were observed over southeastern Angola, northeastern Namibia, South Africa, Lesotho, and Eswatini.

During the outlook period, a similar rainfall pattern as this past week is forecast over southern Africa. While moderate to heavy rains are relegated to northern and central Angola, eastern South Africa, Lesotho, Eswatini, and western Madagascar, little to no rainfall is expected across eastern southern Africa, including Zambia, Malawi, Mozambique, and east-central Madagascar for another week. This forecast, continued lack of rainfall could strengthen deficits further and amplify dryness in the region.

2-Month Satellite Estimated Rainfall Anomaly (mm)
Valid: 07 November – 06 December, 2021

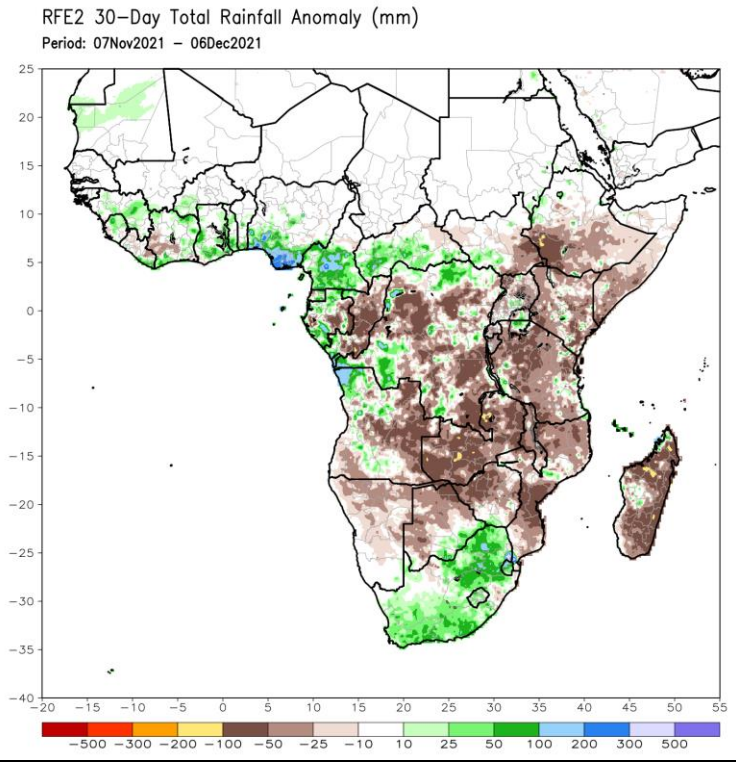


Figure 2: NOAA/CPC

Note: The hazards outlook map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses 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.

Questions or comments about this product may be directed to Wassila.Thiaw@noaa.gov or 1-301-683-3424.

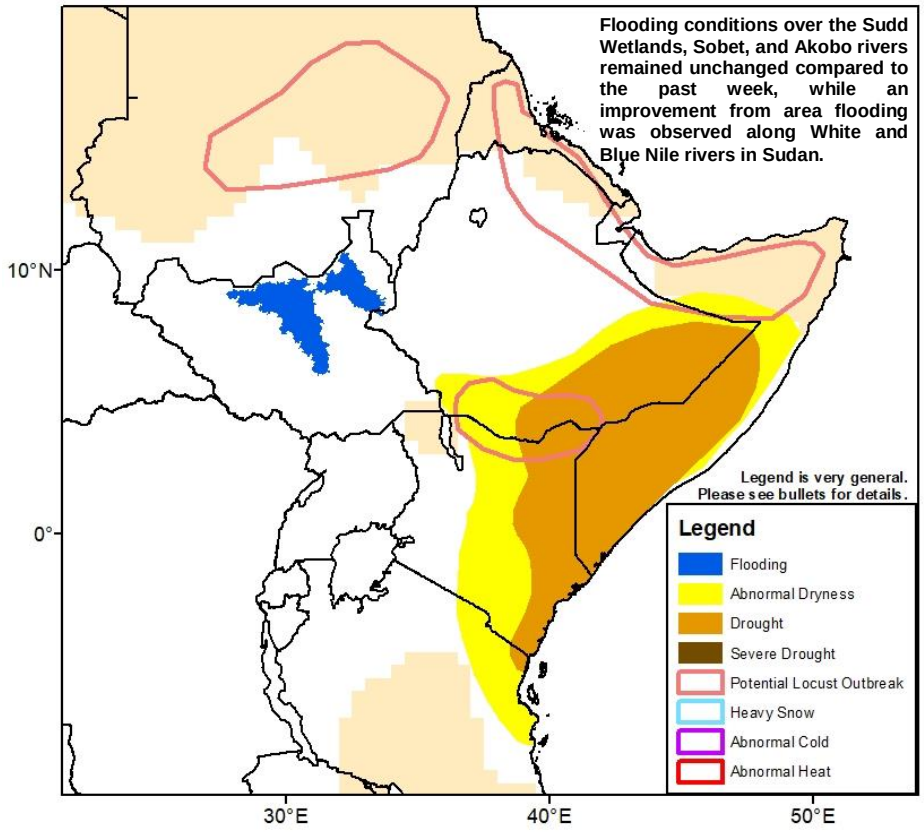


Figure 3: Hazards, focused over eastern Africa

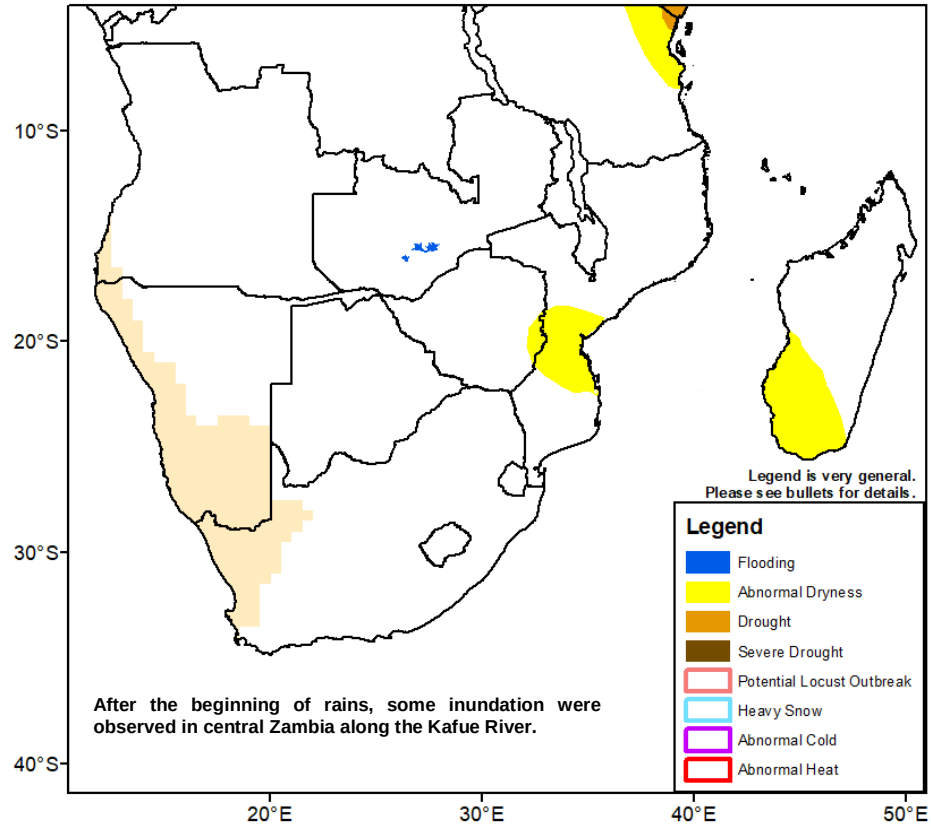


Figure 4: Hazards, focused over southern Africa