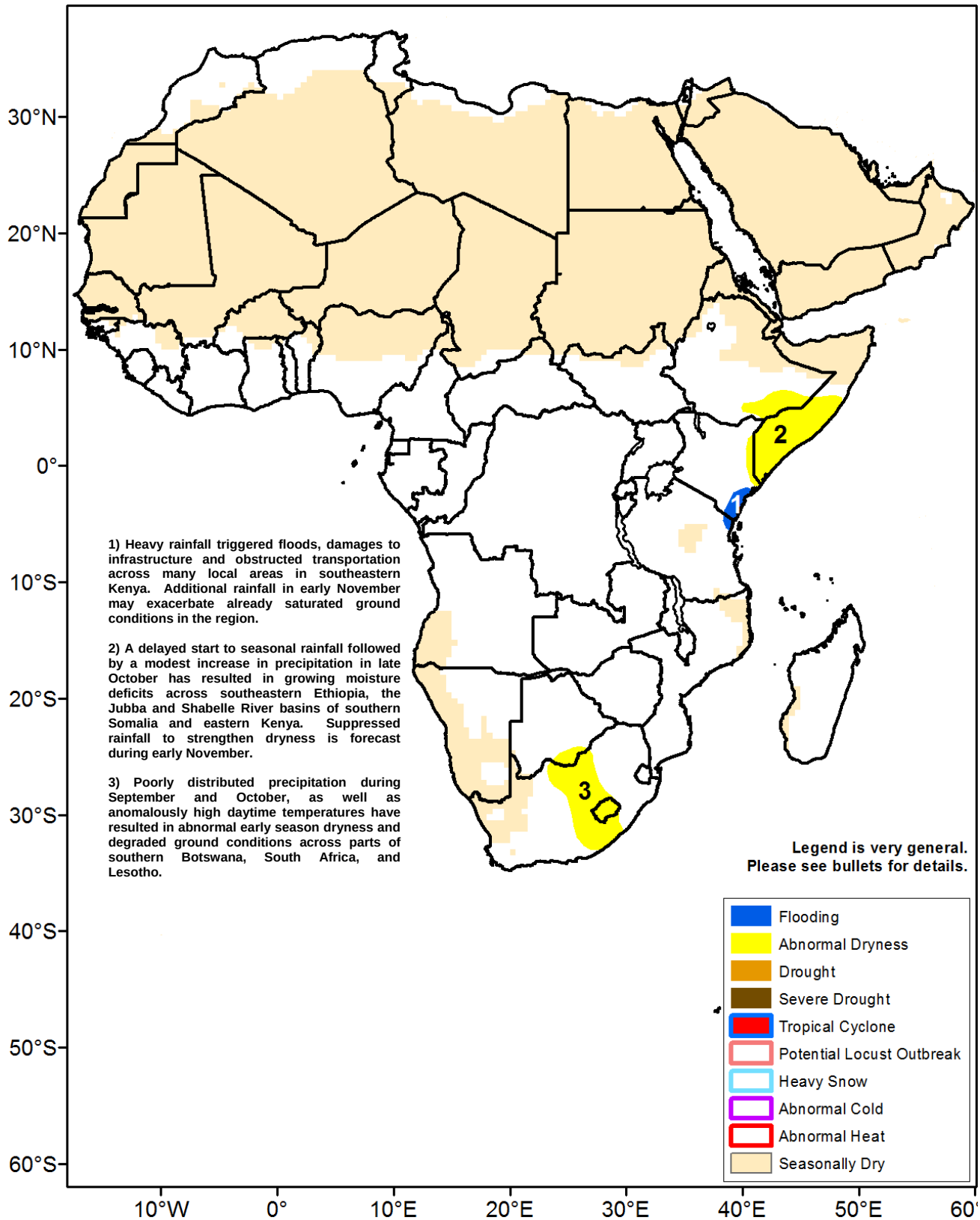
Climate Prediction Center's Africa Hazards Outlook
November 1 – 7, 2018

- **Despite a recent increase in rainfall, anomalous dryness continues to strengthen in the Greater Horn.**
- **Poorly distributed rainfall has led to early season dryness and degraded ground conditions in South Africa.**



1) Heavy rainfall triggered floods, damages to infrastructure and obstructed transportation across many local areas in southeastern Kenya. Additional rainfall in early November may exacerbate already saturated ground conditions in the region.

2) A delayed start to seasonal rainfall followed by a modest increase in precipitation in late October has resulted in growing moisture deficits across southeastern Ethiopia, the Jubba and Shabelle River basins of southern Somalia and eastern Kenya. Suppressed rainfall to strengthen dryness is forecast during early November.

3) Poorly distributed precipitation during September and October, as well as anomalously high daytime temperatures have resulted in abnormal early season dryness and degraded ground conditions across parts of southern Botswana, South Africa, and Lesotho.

Delayed onset of seasonal rains observed in East Africa.

According to satellite rainfall estimates, a well distributed increase in seasonal rainfall was received throughout many parts of eastern Ethiopia, Somalia and Kenya following a predominately dry October in the region. The highest weekly rainfall accumulations (>75mm) were locally registered over parts of the Jubba and Shabelle River basins of southern Somalia, northern Marsabit and Wajir regions of northern Kenya, and across coastal southeastern Kenya where heavy rainfall and floods have led to damages to infrastructure, and obstructed bridges and roads during the last week (**Figure 1**). Further west, rainfall remained well distributed, but relatively less in amount (5-25mm) across many areas in central and southwestern Kenya, South Sudan, Uganda, Rwanda, Burundi and northern Tanzania.

Despite the increase in rainfall signaling the onset of seasonal rains over the Greater Horn, many local areas continue to experience a strengthening of negative precipitation anomalies. Since the beginning of October, moderate to strong moisture deficits remain concentrated across the Shabelle and Jubba River basins of southern Somalia, the southern Somali region of eastern Ethiopia, and into parts of eastern Kenya where many local areas have registered less than half of their normal rainfall accumulation for the period (**Figure 2**). Much of the anomalous dryness is associated with either a delayed (3-4 week) onset or an infrequent distribution of rains. Climatologically, seasonal rainfall typically reaches its peak in intensity during the next several weeks before decreasing by mid to late November. Given the brevity of seasonal rainfall in the region, the persistence of anomalous dryness into November is likely to adversely impact many pastoral and agro-pastoral areas and cause concern for water availability.

During the next outlook period, models suggest a decrease in the spatial extent and quantity of rainfall over several anomalously dry areas in southern Somalia, southern Ethiopia and eastern Kenya, which is likely to strengthen moisture deficits into early-mid November. Decreased rainfall is also forecast over many saturated areas southeastern Kenya, however additional rains may trigger additional floods and worsen ground conditions.

Weekly Satellite Estimated Total Rainfall (mm)
Valid: October 24 – October 30, 2018

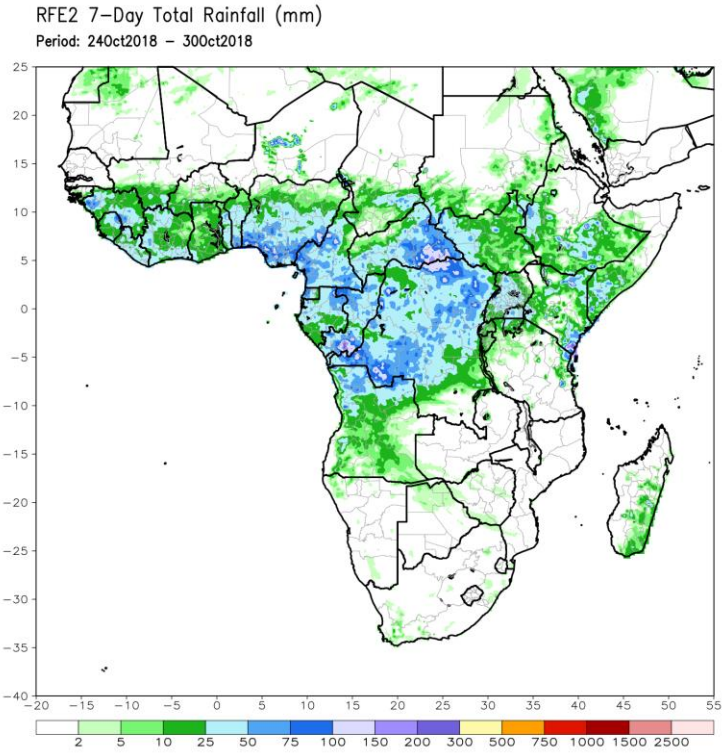


Figure 1: NOAA/CPC

Suppressed rainfall continues throughout many areas in South Africa, Lesotho, and southern Botswana.

Throughout southern Africa, widespread heavy rainfall accumulations (>75mm) were received throughout northern Angola, with lesser but well distributed rainfall amounts received over southern Angola, northern Botswana and across many areas in Namibia. Conversely, a broad scale absence of seasonal rainfall was observed towards the southeastern portion of the continent, with little to no weekly rainfall amounts registered over Zambia, South Africa and Lesotho, with locally light to moderate accumulations in Zimbabwe, Malawi and Mozambique (**Figure 1**).

In many parts of South Africa, Lesotho and southern Botswana, widespread moisture deficits have developed as a result of several weeks of suppressed seasonal rainfall. As a result, some local areas have experienced less than a quarter of their normal October rainfall accumulation (**Figure 2**), which has resulted in degraded ground conditions according to remotely sensed vegetation health indices. In addition, daytime maximum temperatures have been above average mainly throughout South Africa, where moisture stress and increased evapotranspiration is expected to adversely impact early season cropping activities.

For the next seven days, precipitation models suggest favorable increase in precipitation over western South Africa, Swaziland and southern Mozambique. The potential for enhanced rainfall is expected to help mitigate seasonal dryness in the region, however the continuation of reduced rainfall amounts is expected to strengthen early season dryness over the Eastern Cape, Free State, and North West States further west by early November. Maximum temperatures are also forecast to remain above-average over many areas affected by dryness.

30-Day Satellite Estimated Percent of Normal Rainfall (%)
Valid: October 1 – October 30, 2018

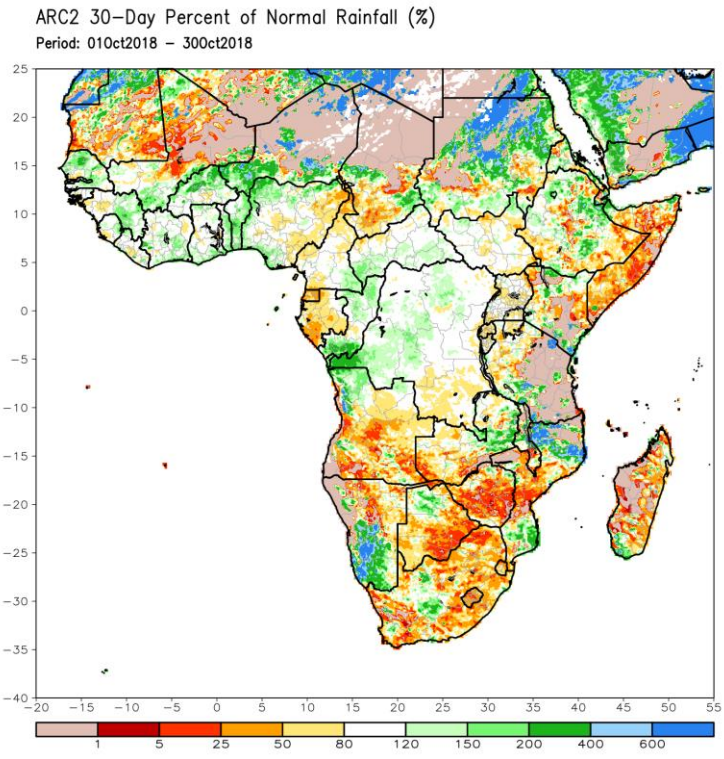


Figure 2: NOAA/CPC

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.

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