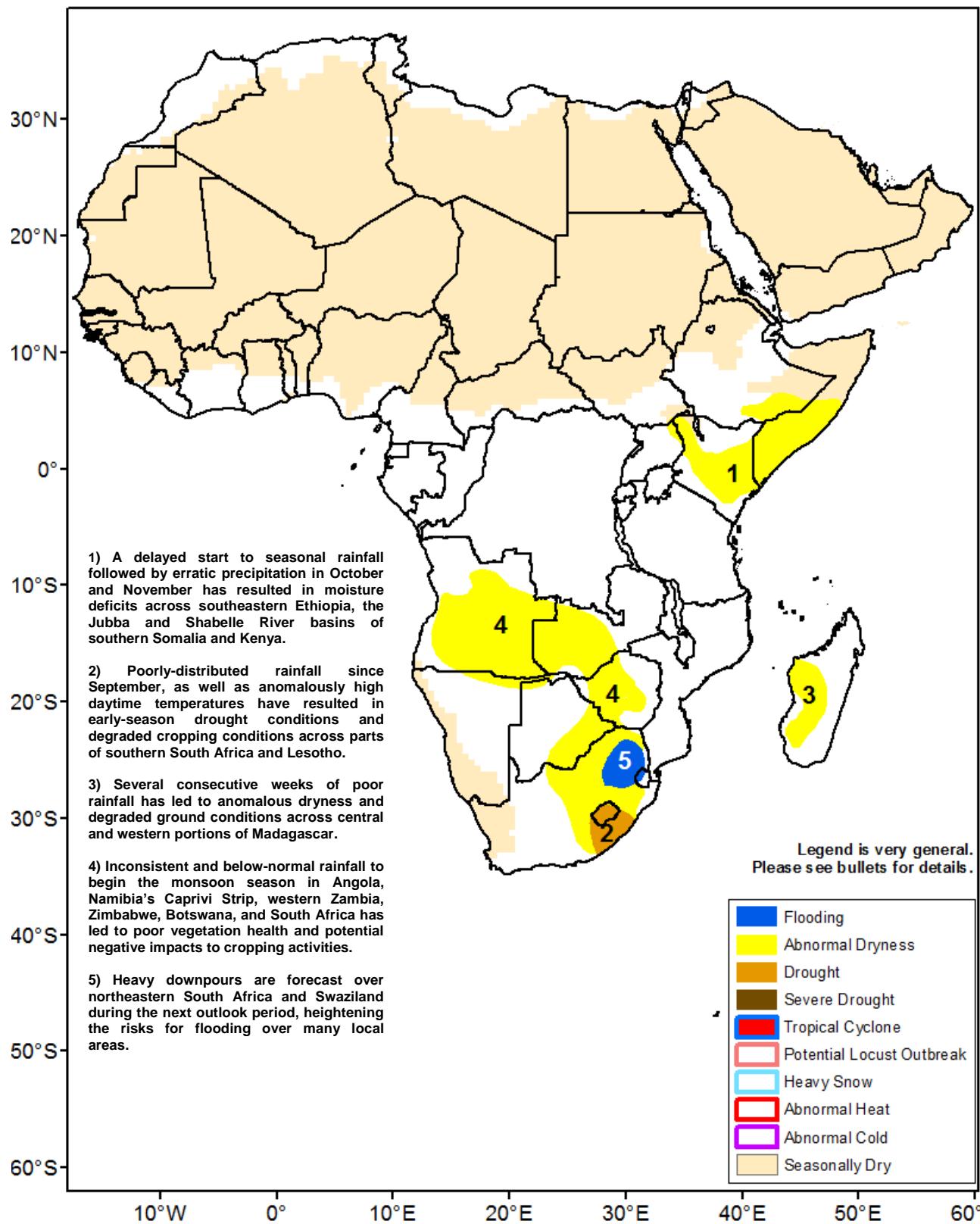




Climate Prediction Center's Africa Hazards Outlook

December 6 – 12, 2018

- Seasonal rainfall deficits have persisted over the Horn of Africa despite increased rainfall over the past weeks.
- A delayed onset to the southern African monsoon and insufficient rainfall has led to widespread dryness.



Scattered light to moderate rainfall over the recent weeks did not eliminate long-term deficits in the Horn of Africa.

During the past observation period, some increase in rainfall was registered across parts of eastern Africa. Widespread, light to locally moderate rainfall fell over southern Somalia, while scattered light rainfall was received over western Ethiopia, northern and central Kenya (**Figure 1**). In contrast, little to no rainfall was recorded over northern Uganda, eastern Kenya, and western Tanzania. The enhancement in rainfall over southern Somalia resulted in seven-day surpluses over the region and was mainly attributed to above-average sea-surface temperatures off the Greater Horn of Africa over the northwestern Indian Ocean. However, recent tendency showed a cooling, which could result in suppression of rainfall over the upcoming weeks.

Despite this past week's enhanced rainfall, seasonal deficits have persisted across equatorial eastern Africa. An analysis of accumulated rainfall since the beginning of the *Short-Rains*, October–December, season, indicated below-average conditions, with the largest (> 100 mm) deficits over southernmost Somalia, eastern Kenya, and parts of Uganda (**Figure 2**). For many areas, seasonal moisture deficits have already adversely impacted ground conditions, which could ultimately reduce crop yields. Furthermore, wet episodes during mid and late November were likely too late for crops over some areas. According to the most recent Normalized Difference Vegetation Index anomaly product, further deterioration in vegetation conditions were observed in central Kenya, while some improvement was recorded over southern Somalia.

For next week, moderate to heavy rainfall is forecast over central Kenya, and neighboring southernmost Somalia, which should help erode seasonal moisture deficits and improve conditions in the region. Farther north, moderate to locally heavy rainfall is expected in southwestern Ethiopia, while little to light rainfall is forecast over southern Ethiopia and the southern and coastal areas of central Somalia.

Seasonal rainfall deficits persisted over southern Africa due to an erratic rainfall distribution.

The performance of the southern African monsoon has been poor so far. Since the beginning of October to present, below-average rainfall has been received across a wide area of the region. Negative anomalies spread from central Angola, southern DRC, western Zambia, northern Namibia, Botswana, Zimbabwe, eastern South Africa, to southern Mozambique (**Figure 2**). Moisture deficits have also been registered across the Channel of Mozambique, over western Madagascar. The drier than normal conditions were attributable to a delayed onset to the rainfall season, followed by an erratic distribution of rainfall. Over southern South Africa and Lesotho, anomalously high surface temperatures exacerbated moisture stressed vegetation, which increased evaporation and resulted in deteriorated crops. During the past observation period, heavy and above-average rainfall was recorded over central Angola, western and central Mozambique, and northwestern Madagascar, while little to light and below-average rainfall was received elsewhere.

An analysis of recent vegetation conditions from remote sensing products indicated that conditions have worsened over the eastern half of South Africa, eastern Botswana, southern Zimbabwe, southern Mozambique, and western Madagascar. Further degradation in condition is feared over many areas, should good rains miss during the upcoming weeks.

During the next outlook period, heavy downpours are forecast over eastern South Africa and southernmost Mozambique, which could trigger flash flooding, adversely impact residents, and destroy crops over localized areas. However, the forecast enhanced rainfall could also erode accumulated moisture deficits and help mitigate dryness over certain areas. Moderate to locally heavy rainfall is expected over northern Angola, central and eastern Zambia, Zimbabwe, central and southern Mozambique, and central Madagascar. In contrast, little to no rainfall is expected over southern Angola and bordering northern Namibia, and northern Mozambique.

Weekly Satellite Estimated Total Rainfall (mm) Valid: November 28 – December 04, 2018

RFE2 7-Day Total Rainfall (mm)

Period: 28Nov2018 – 04Dec2018

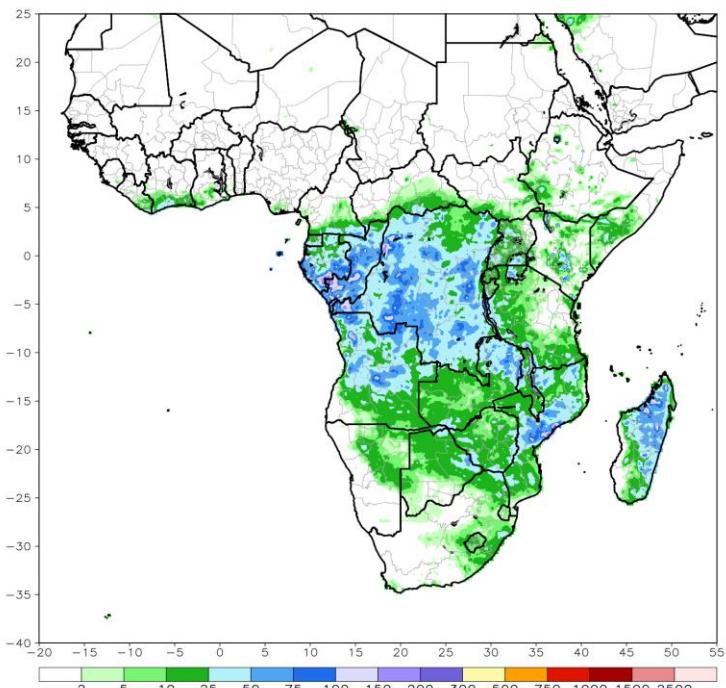


Figure 1: NOAA/CPC

Satellite Estimated Rainfall Anomaly (mm) Valid: October 01 – December 04, 2018

ARC2 3-Mon Total Rainfall Anomaly (mm)

Period: 01Oct2018 – 04Dec2018

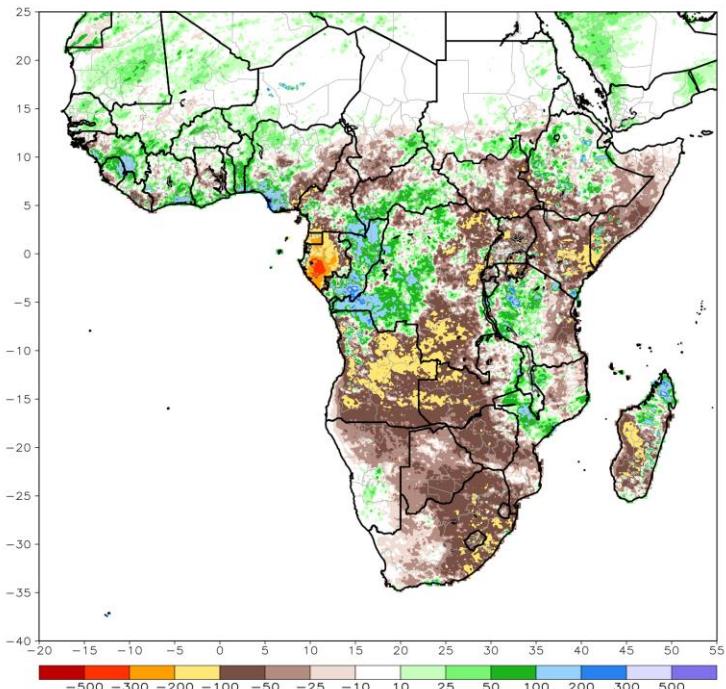


Figure 2: NOAA/CPC

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.