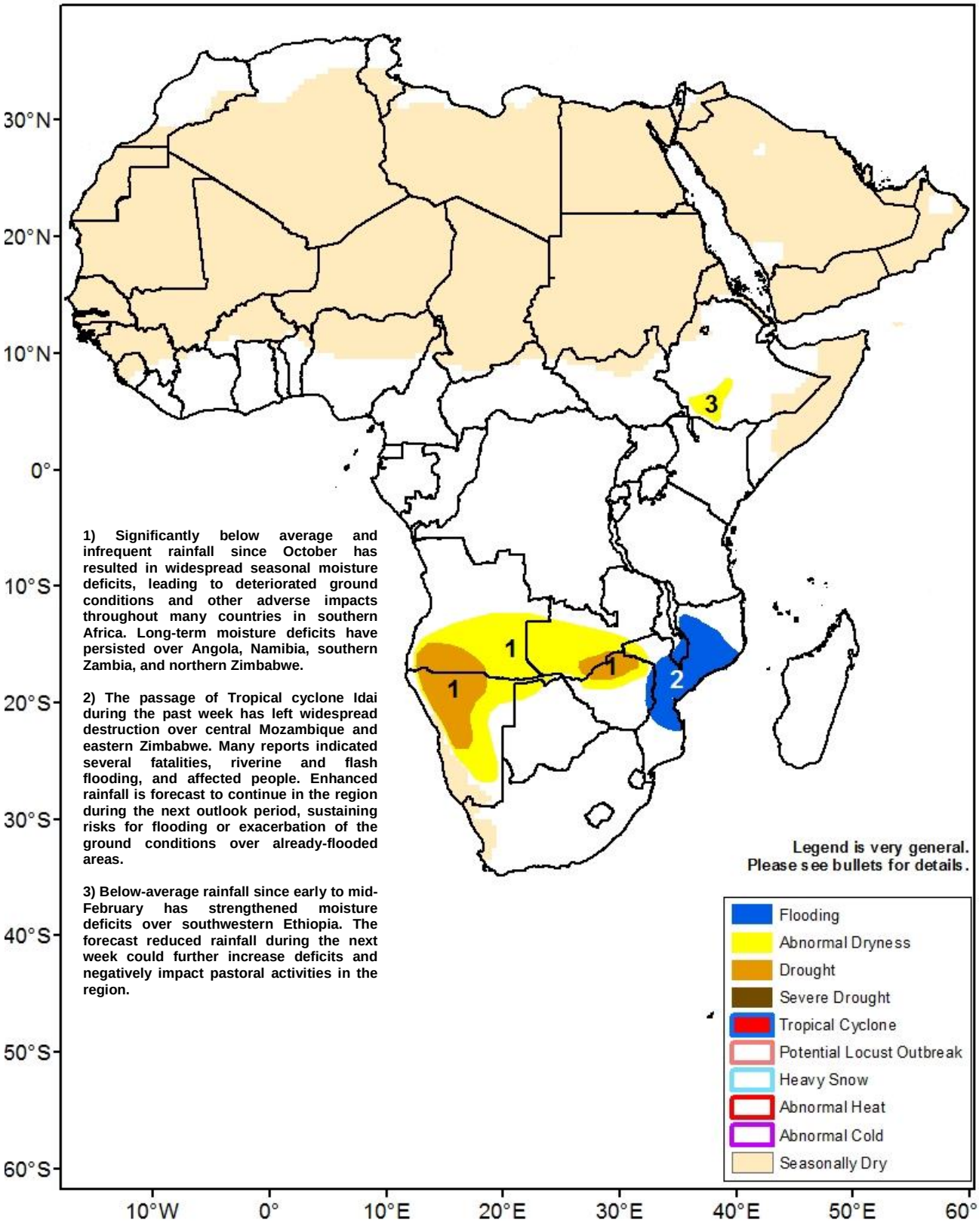
Climate Prediction Center's Africa Hazards Outlook
March 21 – 27, 2019

- **The passage of Tropical cyclone Idai left fatalities, affected people, and flooding in southeastern Africa.**
- **Poorly-distributed rainfall since mid-February has led to abnormal dryness in southwestern Ethiopia.**



1) Significantly below average and infrequent rainfall since October has resulted in widespread seasonal moisture deficits, leading to deteriorated ground conditions and other adverse impacts throughout many countries in southern Africa. Long-term moisture deficits have persisted over Angola, Namibia, southern Zambia, and northern Zimbabwe.

2) The passage of Tropical cyclone Idai during the past week has left widespread destruction over central Mozambique and eastern Zimbabwe. Many reports indicated several fatalities, riverine and flash flooding, and affected people. Enhanced rainfall is forecast to continue in the region during the next outlook period, sustaining risks for flooding or exacerbation of the ground conditions over already-flooded areas.

3) Below-average rainfall since early to mid-February has strengthened moisture deficits over southwestern Ethiopia. The forecast reduced rainfall during the next week could further increase deficits and negatively impact pastoral activities in the region.

Tropical cyclone Idai wreaked havoc over southeastern Africa.

During the past observation period, Tropical cyclone *Idai* battered central Mozambique and eastern Zimbabwe with heavy rainfall and strong winds. Media and official sources reported deaths, riverine and flash flooding, landslides, destruction of homes and infrastructures, which have adversely affected the livelihoods of many residents. Satellite-derived rainfall estimates showed torrential rainfall over central Mozambique (**Figure 1**), where the storm made landfall on Thursday March 14 of the past week. While moderate to locally heavy rainfall was observed over other areas of southern Africa, including central South Africa and northern Madagascar, suppressed and limited rainfall prevailed elsewhere.

An analysis of the southern African monsoon performance to date (October 1, 2018 – March 19, 2019) has indicated that a wide area of the sub-region from southern Angola, Namibia, southern Zambia, to northern Zimbabwe has received between 25 – 50 percent only of its average rainfall. Some areas such as southwestern Angola and northwestern Namibia have recorded even less than 25 percent of their average rainfall. Consequently, recent Normalized Difference Vegetation Index (NDVI) anomaly has also indicated worsening vegetation conditions over southwestern Angola and much of Namibia. During the next outlook period, widespread suppressed rainfall is forecast over western and central southern Africa, which is likely to exacerbate dry conditions in the region. In contrast, wetter than average conditions are expected to persist over northern Mozambique, thus sustaining flooding risks over many already-saturated areas.

7-Day Satellite-Estimated Rainfall Total (mm)
Valid: March 13 – March 19, 2019

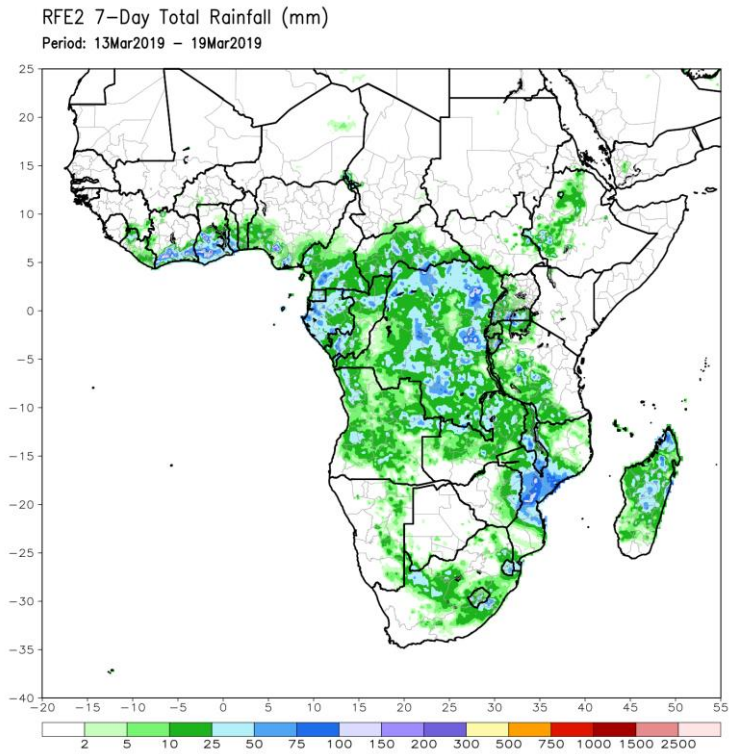


Figure 1: NOAA/CPC

Despite good rains over most areas of Ethiopia, rainfall deficits have strengthened in the south.

During the past observation period, scattered light to moderate rainfall was recorded over southwestern and north-central Ethiopia. Although slightly reduced relative to the observed rainfall amounts during a week prior, this past week's rainfall total remained mostly near-average. However, suppressed rainfall was observed across the remainders of eastern Africa, which translated in below-average rainfall and deficits over some areas, including parts of the SNNPR of Ethiopia, southern Kenya, and localized areas of the bimodal region of northern Tanzania. Since mid-February, negative rainfall anomalies have been registered over southwestern and northeastern Ethiopia, while positive rainfall anomalies with surpluses between 25 – 100 mm have been observed across most of the *Belg*-producing areas of the country (**Figure 2**). The favorable distribution of rainfall over the past several weeks could indicate a timely and positive March-May season for agricultural activities over Ethiopia. In contrast, moisture deficits may have already negatively impacted water availability for pastoral activities in southern Ethiopia.

Recent NDVI anomalies have showed near to above-average conditions across eastern Africa. During the next outlook period, seasonal rainfall is forecast to continue over west-central Ethiopia. However, suppressed rainfall is expected over southern Ethiopia and much of Kenya, which could deplete ground moisture further over the dry portions of eastern Africa.

30-Day Satellite-Estimated Rainfall Anomaly (mm)
Valid: February 18 – March 19, 2019

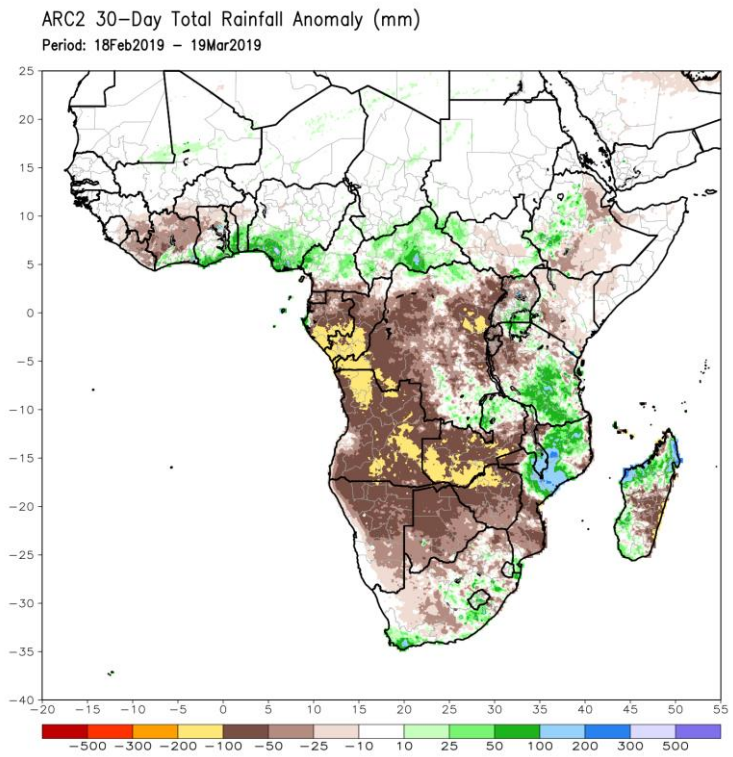


Figure 2: NOAA/CPC

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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