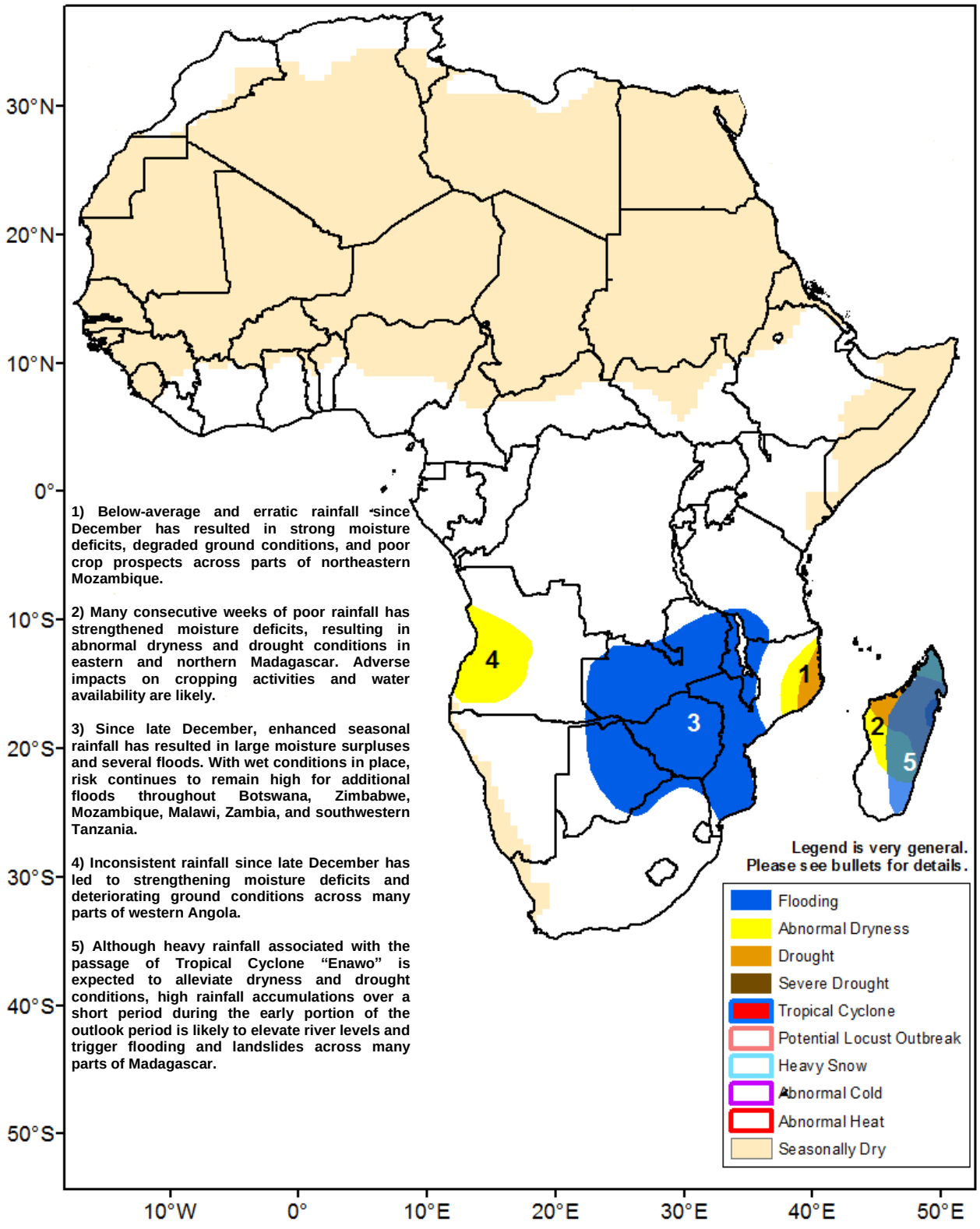
Climate Prediction Center's Africa Hazards Outlook
March 9 – March 15, 2017

- **Heavy rainfall associated with Tropical Cyclone Enawo expected to alleviate seasonal dryness, but elevate risk of flooding across eastern Madagascar.**



1) Below-average and erratic rainfall since December has resulted in strong moisture deficits, degraded ground conditions, and poor crop prospects across parts of northeastern Mozambique.

2) Many consecutive weeks of poor rainfall has strengthened moisture deficits, resulting in abnormal dryness and drought conditions in eastern and northern Madagascar. Adverse impacts on cropping activities and water availability are likely.

3) Since late December, enhanced seasonal rainfall has resulted in large moisture surpluses and several floods. With wet conditions in place, risk continues to remain high for additional floods throughout Botswana, Zimbabwe, Mozambique, Malawi, Zambia, and southwestern Tanzania.

4) Inconsistent rainfall since late December has led to strengthening moisture deficits and deteriorating ground conditions across many parts of western Angola.

5) Although heavy rainfall associated with the passage of Tropical Cyclone "Enawo" is expected to alleviate dryness and drought conditions, high rainfall accumulations over a short period during the early portion of the outlook period is likely to elevate river levels and trigger flooding and landslides across many parts of Madagascar.

Heavy rains continues across southeastern Africa

During the last week, the southern Africa monsoon circulation remained robust throughout southeastern Africa, however an extension of moisture convergence was observed towards the west bringing increased precipitation amounts over portions of northern Namibia. According to satellite rainfall estimates, the highest weekly accumulations (>150mm) were received across central Mozambique, where regional pockets of high rainfall (>100mm) totals were also received across many parts of northern Namibia, eastern Angola, Zambia, Malawi, and southern Tanzania (**Figure 1**). Compared to the previous week's rainfall distribution, a sharp reduction in rainfall was felt across eastern Botswana, as more seasonable rainfall was received in the region. In addition, increased rainfall amounts were received across northern Namibia. However, diminished and poorly distributed rains were again observed across western Angola, sustaining seasonal moisture deficits in the region.

Since early February, there has been little change to the saturated conditions throughout southeastern Africa. Analysis of the latest short-term rainfall anomaly fields depict largely positive conditions throughout much of the southern continent, with surpluses exceeding 100mm throughout much of Botswana, Zimbabwe, Mozambique, Zambia and South Africa (**Figure 2)**. The large extent of the anomalously wet conditions has resulted in numerous flood events, inundated river basins, damages to crops and infrastructure, and fatalities during the course of the monsoon season. This year's monsoon distribution has been in sharp contrast to last year, where poorly distributed rainfall was widespread throughout southern Africa, which had caused sweeping moisture shortages and many adverse ground impacts.

For the upcoming outlook period, heavy rainfall is forecast over many parts of Madagascar as Tropical cyclone "Enawo" exits the island. Heavy rains are also forecast throughout southern Angola, Zambia, and Malawi for next week.

Favorable early seasonal rains received over Ethiopia.

Following a poor OND rains season last year in the Greater Horn of Africa, early season "belg" rainfall suggests favorable signs of moisture recovery throughout Ethiopia. Analysis of monthly precipitation anomalies depict average to above-average conditions, with surpluses exceeding 25mm in many local parts of the SNNP, Oromia, and Amhara regions of the country (**Figure 3**). Despite the above-average rains favorable for cropping activities, precipitation forecasts suggest a reduction of rainfall during the first dekad of March, with only light rainfall accumulations expected in the higher elevations of Ethiopia.

7-Day Satellite-Estimated Rainfall (mm)
Valid: February 27 – March 5, 2017

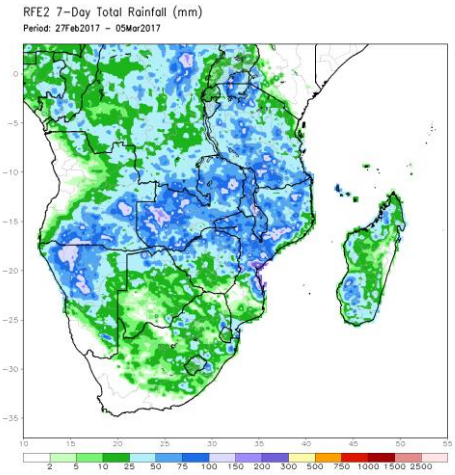


Figure 1: NOAA/CPC

30-Day Satellite Estimate Rainfall Anomaly (mm)
Valid: February 4 – March 5, 2017

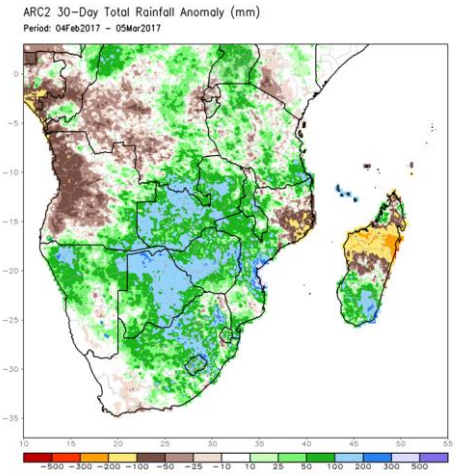


Figure 2: NOAA/CPC

Monthly Satellite Estimate Rainfall Anomaly (mm)
Valid: February, 2017

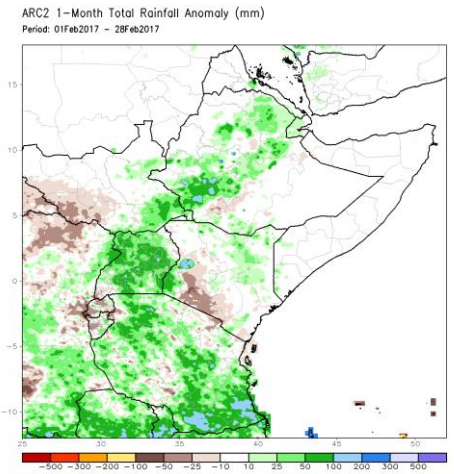


Figure 3: NOAA/CPC

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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