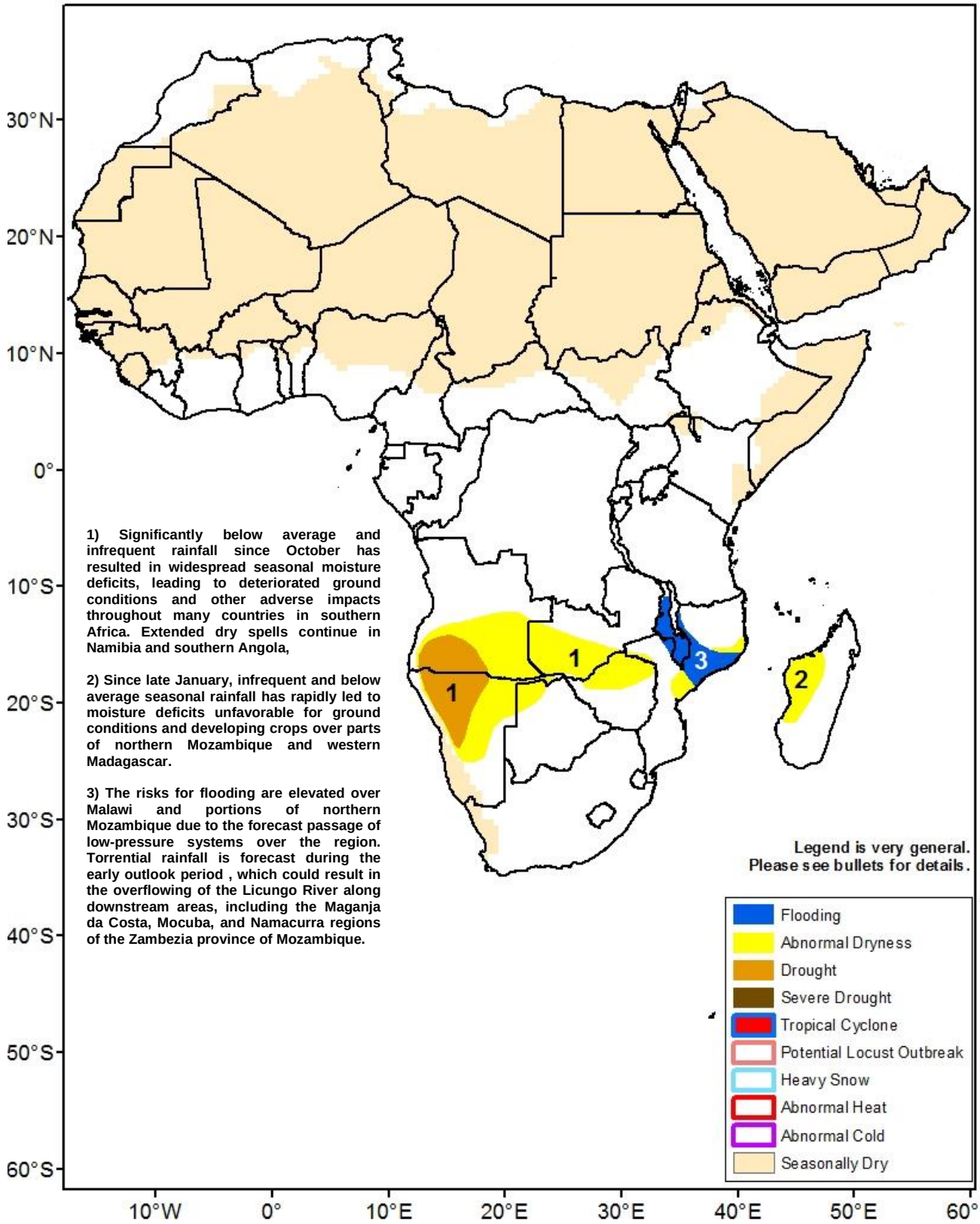
Climate Prediction Center's Africa Hazards Outlook
March 7 – 13, 2019

- **Widespread dryness has continued in western southern Africa, including Angola and Namibia.**
- **Low-pressure system passages over the Channel of Mozambique elevate the risks for flooding in the area.**



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. Extended dry spells continue in Namibia and southern Angola,

2) Since late January, infrequent and below average seasonal rainfall has rapidly led to moisture deficits unfavorable for ground conditions and developing crops over parts of northern Mozambique and western Madagascar.

3) The risks for flooding are elevated over Malawi and portions of northern Mozambique due to the forecast passage of low-pressure systems over the region. Torrential rainfall is forecast during the early outlook period , which could result in the overflowing of the Licungo River along downstream areas, including the Maganja da Costa, Mocuba, and Namacurra regions of the Zambezia province of Mozambique.

Acute dryness impacted Angola and Namibia.

Widespread dryness has affected the western parts of southern Africa, particularly Angola and Namibia, since the beginning of the year. Large (> 100 mm) negative rainfall anomalies were observed throughout southern Angola and northern Namibia, (**Figure 1**). In Namibia, the lack of rainfall over the past several months has resulted in droughts, which have already negatively affected livestock and crop production and water resources, according to reports. Farther east, large moisture deficits were also registered across southern Zambia, northern Zimbabwe, northern Mozambique, and central Madagascar despite some enhancement in rainfall over southern Tanzania, southern Mozambique, northern South Africa, and northern Madagascar during the past month. This reflected the uneven distribution in rainfall over the sub-region since at least the beginning of the year.

During the past week, moderate to locally heavy rainfall fell over the eastern portions of southern Africa, namely from southern DRC, northern Zambia, southern Tanzania, northern Mozambique, to central Madagascar. Widespread light rainfall was recorded over Angola and northernmost South Africa and southern Zimbabwe. In Mozambique, the increased and above-average rainfall contributed to partially reduce thirty-day rainfall deficits over the dry portions of the Zambezia and Nampula Provinces. However, this past week's rainfall was mostly below-average elsewhere, which helped maintaining abnormal dryness over the dry portions of southern Africa. During the upcoming outlook period, a low-pressure system over the Channel of Mozambique is expected to bring heavy rainfall over southern Malawi, northern Mozambique, and northern Madagascar. This heightens the risks for flooding over many local areas. Moderate rainfall is forecast over Angola and eastern South Africa, while little to no rainfall is expected elsewhere. The forecast continued, suppressed rainfall could further exacerbate conditions on the grounds over many dryness-affected areas of southern Africa.

2-Month Satellite-Estimated Rainfall Anomaly (mm)
Valid: January 01 – March 05, 2019

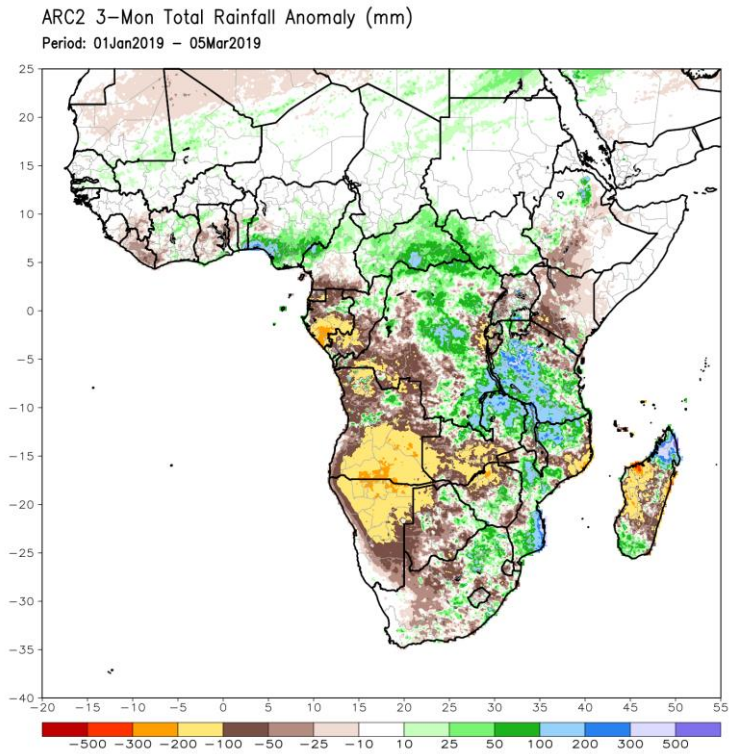


Figure 1: NOAA/CPC

7-Day Satellite-Estimated Rainfall Total (mm)
Valid: February 27 – March 05, 2019

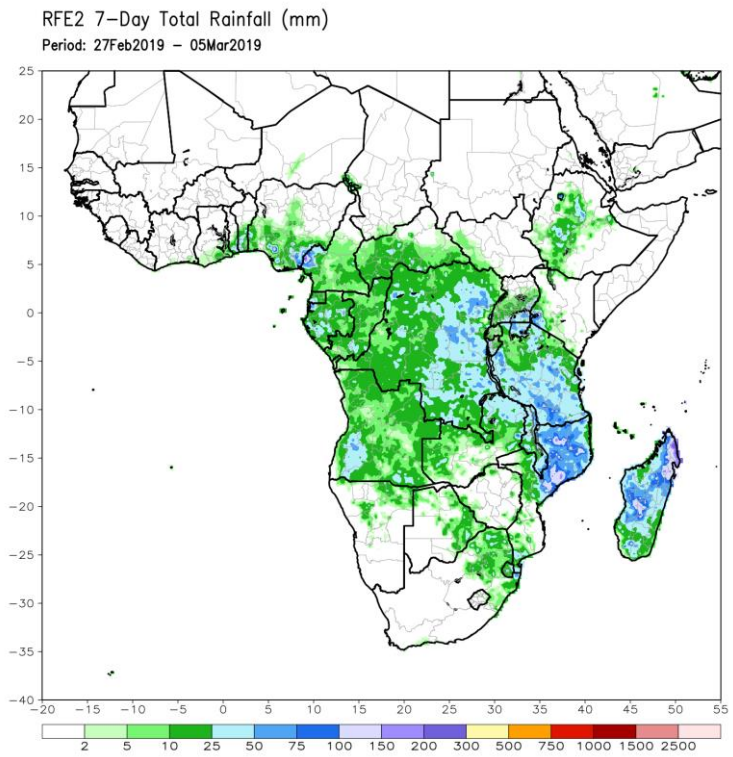


Figure 2: NOAA/CPC

Near-average beginning of the March-May season observed in the Horn of Africa

During the past observation period, scattered light rainfall was registered across western Ethiopia, whereas little to no rainfall was observed elsewhere (**Figure 2**). In Ethiopia, the continued, though localized, rainfall followed well above-average rainfall during the week prior, which resulted in short-term wetness over localized areas of west-central Ethiopia. It also could indicate the onset of the *Belg*, March-May, rainfall season over the region. An analysis of the accumulated rainfall since early February to date has indicated that a dipole structure has settled in, with positive thirty-day rainfall anomalies over parts of the SNNPR, Gambela, and Amhara regions of Ethiopia and negative rainfall anomalies over the southern and central Oromiya regions. Farther south, below-average rainfall was registered across western and southern Kenya and northern Tanzania. As the early period of the season is highly important for cropping activities, a close monitoring of the rainfall situation over the upcoming weeks is needed. During the next outlook period, scattered moderate rainfall is forecast to continue over central Ethiopia. Light to locally moderate rainfall is expected over southern Kenya and northern Tanzania, while little to light rainfall is forecast over Uganda.

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.