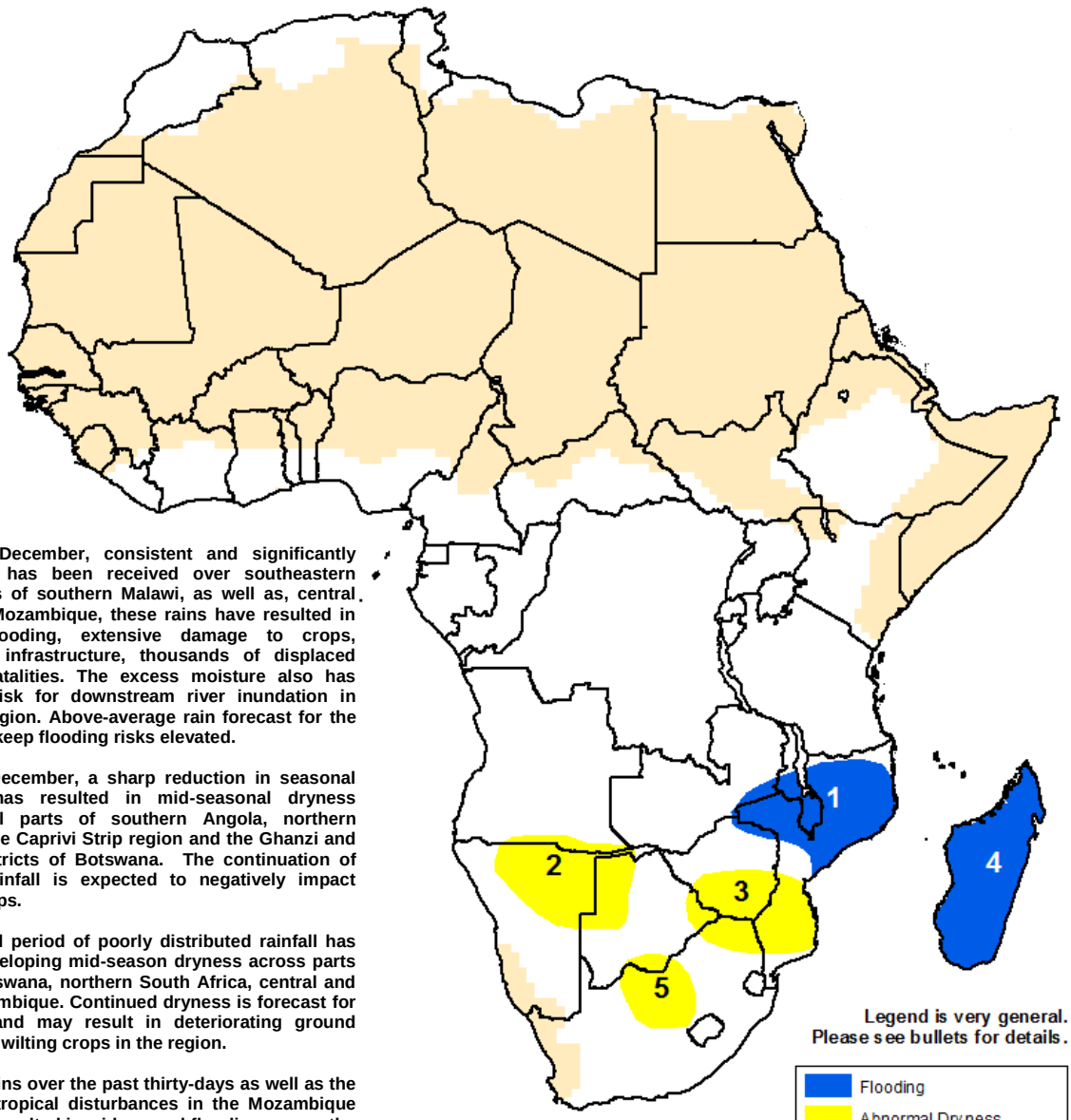
Climate Prediction Center's Africa Hazards Outlook
February 19 – February 25, 2015

- **Heavy rains fell over saturated areas of southeastern Africa.**
- **Rainfall deficits grow over dry areas in southern Zimbabwe, central/southern Tanzania, South Africa, and Namibia.**



1) Since mid-December, consistent and significantly heavy rainfall has been received over southeastern Africa. In parts of southern Malawi, as well as, central and northern Mozambique, these rains have resulted in widespread flooding, extensive damage to crops, livestock and infrastructure, thousands of displaced people, and fatalities. The excess moisture also has elevated the risk for downstream river inundation in rivers in the region. Above-average rain forecast for the next week will keep flooding risks elevated.

2) Since late-December, a sharp reduction in seasonal precipitation has resulted in mid-seasonal dryness across several parts of southern Angola, northern Namibia into the Caprivi Strip region and the Ghanzi and Ngamiland districts of Botswana. The continuation of suppressed rainfall is expected to negatively impact developing crops.

3) An extended period of poorly distributed rainfall has resulted in developing mid-season dryness across parts of eastern Botswana, northern South Africa, central and southern Mozambique. Continued dryness is forecast for some areas, and may result in deteriorating ground conditions and wilting crops in the region.

4) Abundant rains over the past thirty-days as well as the impacts from tropical disturbances in the Mozambique Channel have resulted in widespread flooding across the country which has damaged crops and infrastructure, displaced tens of thousands and increased the risk for water-borne disease outbreaks, especially in the capital of Antananarivo. Heavy rains are forecast for the next week which will kept flooding risks elevated.

5) A prolonged dry spell over the past thirty-days has led to thirty-day rainfall totals below the 15th percentile over a large area in central South Africa and bordering areas in southern Botswana. The lack of rain could negatively impact maize crops in the Free State and North West provinces of South Africa. With little rain forecast for the next week, dryness is expected to deepen.

Heavy rain continued over flooded areas in southeastern Africa.

During the past seven days, heavy rain (>50mm) fell across saturated areas in Malawi, eastern Zambia, northern Mozambique, and Madagascar. These regions have already observed substantial flooding over the past two months. Additional rainfall has provided little relief to the region. Elsewhere, heavy rain (>50mm) was observed across previously dry areas in central/western Angola which helped to reduce deficits. In contrast, light to moderate rains (10-40mm) were recorded in northern Zimbabwe, western Tanzania and south central South Africa. Meanwhile, below-average light rains (<15mm) were observed across dry areas in southern/central Tanzania, southern Zimbabwe, central/northern South Africa, Namibia and Botswana (**Figure 1**).

After two tropical systems formed in the Mozambique Channel since January 1st, rainfall has been elevated across southeastern Africa. However, recently, rains have returned to the still heavy but near-normal amounts climatologically expected. Only locations in southern Madagascar, northern Malawi and extreme southwestern Tanzania have seen thirty-day rains exceed the 85th percentile (**Figure 2**). Regardless, the heavy rains have provided little relief to the widespread flooding in Malawi, Mozambique, Zimbabwe, and Madagascar that has displaced over 200,000 people, damaged infrastructure and livestock, flooded crop fields and resulted in fatalities. Luckily, there has been a decrease in flooded areas across Malawi over the past week. However, thousands are still affected in northern Mozambique, including the hardest hit province of Zambezia. In Madagascar, heavy rain and flooding has increased the risk for localized water-borne disease outbreaks as well.

For the next week, enhanced convection around the Mozambique Channel is likely to increase rainfall amounts in saturated areas in Mozambique, Madagascar, Malawi, eastern Zambia and southern Tanzania (**Figure 3**). Flooding risks will remain elevated.

Satellite Estimated Rainfall (mm)
Valid: February 11 – February 17, 2015

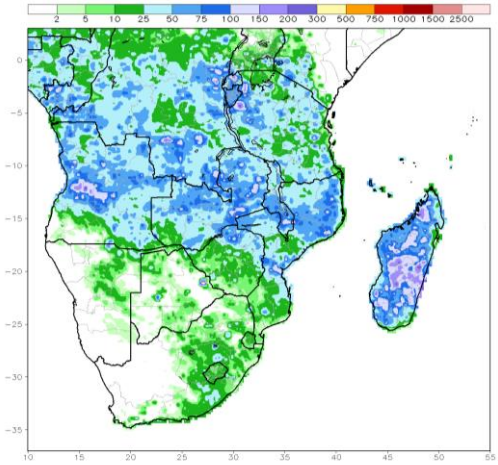


Figure 1: NOAA/CPC

30-Day Satellite Rainfall Percentile (%)
Valid: January 19 – February 17, 2015

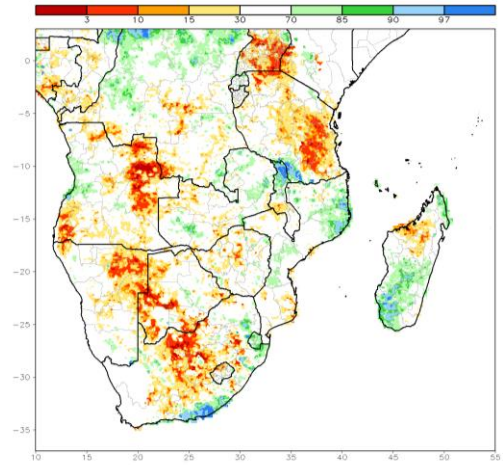


Figure 2: NOAA/CPC

GFS Model Precipitation forecast (mm)
Valid: February 18 – February 25, 2015

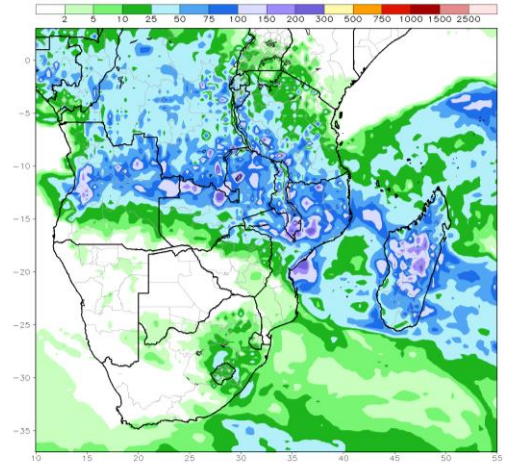


Figure 3: NOAA/CPC

Dryness deepens in Namibia, Tanzania and South Africa.

While heavy rains continued in southeastern Africa, dry conditions prevailed elsewhere. Over the past thirty-days, rainfall has been below the 30th percentile (locally below the 15th or 10th percentile) across northern Namibia, western Botswana, central South Africa and southeastern/central Tanzania (**Figure 2**). Extended dry spells in the Lindi region of southeast Tanzania as well as central Tanzania have already negatively impacted maize crops. Meanwhile, high temperatures and extended dry spells have led to deteriorating conditions in the North West and western Free State provinces of South Africa and bordering regions in southern Botswana. Elsewhere, dryness has continued across northern Namibia and southern Zimbabwe/southern Mozambique while beneficial moderate to heavy rain was observed across central Angola, helping to reduce deficits and end a recent dry spell. For the next week, little rain (<10mm) is expected for dry areas in Namibia, Botswana, South Africa, Zimbabwe and southern Mozambique. In contrast, moderate rains are expected over previously dry areas in Tanzania (**Figure 3**).

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.