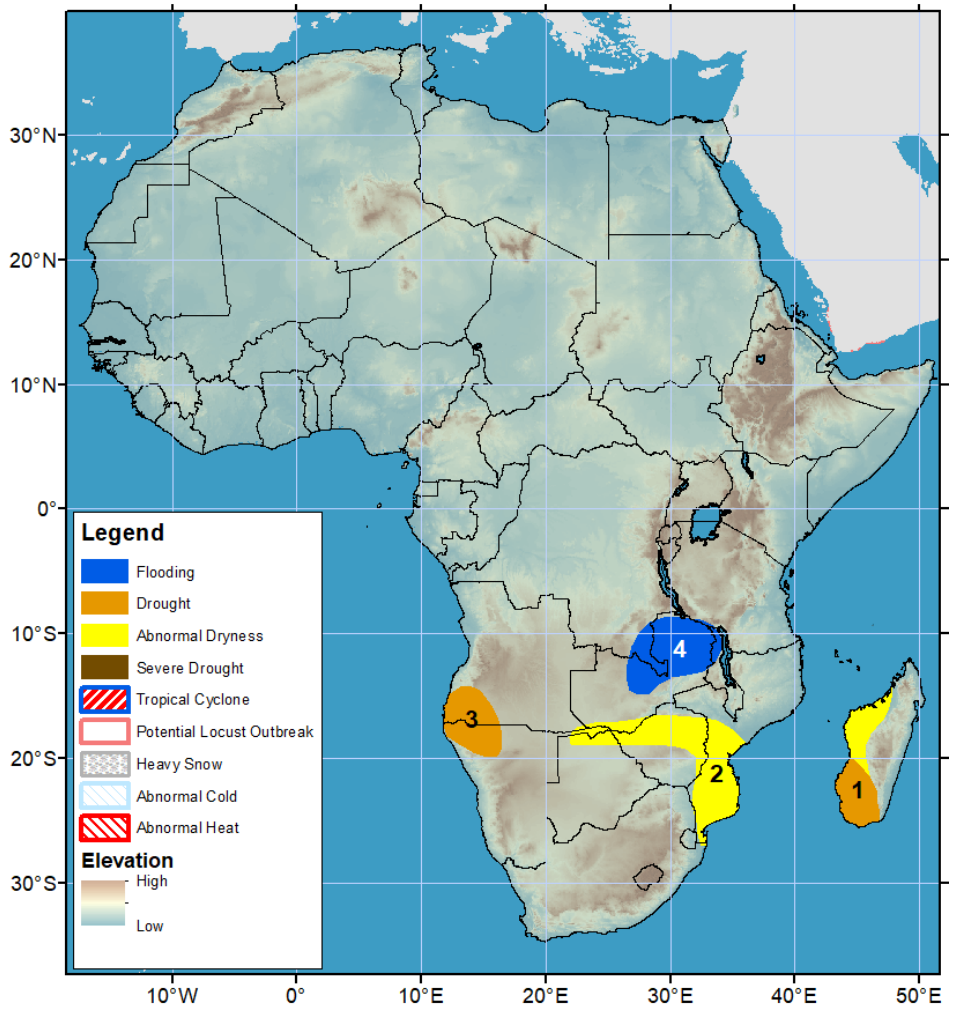
Climate Prediction Center's Africa Hazards Outlook
3 – 9 March 2022

- **Insufficient rain has led to abnormal dryness across portions of Zimbabwe, Botswana, and Namibia.**
- **Heavy downpours to continue, maintaining high risks for flooding over parts of Zambia**



1) Little rainfall so far this season in southern Madagascar has led to large seasonal moisture deficits and very negatively impacted conditions on the ground. This is especially sensitive as the area is in a multi-year drought. Significant rainfall deficits have spread up the west coast during the past 30 days.

2) An uneven rainfall performance during the past two months has led to abnormal dryness over parts of Namibia, Botswana, Zambia, Zimbabwe, central and southern Mozambique. The forecast is for a return to drier conditions.

3) Below normal rainfall for the past three months has led to drought conditions over southwestern Angola and northwestern Namibia. However, some recent improvement is evident.

4) Heavy rains over the past few weeks have saturated soils and led to rising river levels in Zambia. Continued heavy rains in northern Zambia during the outlook period will keep flood risks high.

While heavy rains fell over parts of Madagascar, limited rains continued over Zimbabwe and Mozambique.

Over southern Africa, heavy (> 50 mm) rains fell over western Angola, northern Zambia, northern Malawi, and the western and southeastern parts of Madagascar during late February. The passage of Tropical Cyclone Emnati brought rainfall amounts between 100 – 200 mm along southeastern coastal areas of Madagascar (**Figure 1**), causing flooding, fatalities, infrastructure damages, and many people affected over Farafangana, Mananjary, Manakara, Ihosy, and Vangaindrano, according to reports. In contrast, dry weather pattern with suppressed rainfall prevailed over Zimbabwe, southern Mozambique, southern Zambia, and parts of Botswana. This past thirty days, rainfall was below-average across northern Botswana, southern Zambia, much of Zimbabwe, southern Mozambique, and the western two-thirds of Madagascar. An abnormal dryness hazard polygon is posted across portions of Zimbabwe, Mozambique, Botswana, and Namibia, where rainfall deficits exceeded 100 mm. Negative impacts on ground conditions could occur if insufficient rainfall would persist over the region over the next few weeks.

During this upcoming week, abundant rains are forecast over northern southern Africa, including Angola, northern Zambia, northern Malawi, northern Mozambique, central South Africa, Lesotho, central and northern Madagascar. The expected additional rain maintains heightened risks for flooding over many previously-flooded areas in Zambia, Mozambique, and Madagascar (**Figure 3**). In contrast, suppressed rainfall is forecast to persist over Zimbabwe and southern Mozambique, which will likely further deficits in the region.

7-Day Satellite Estimated Total Rainfall (mm)
Valid: 23 February – 01 March 2022

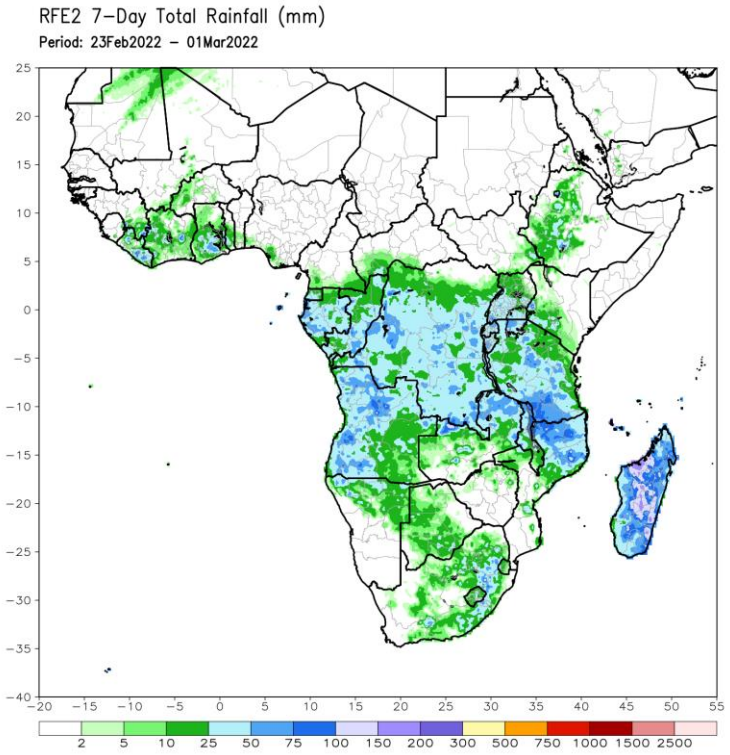


Figure 1: NOAA/CPC

The March – May rainfall season is off to a sluggish start in the Greater Horn of Africa.

An analysis of the accumulated rainfall since late January to present has showed that insufficient rainfall was received over a wide area of Ethiopia. Negative rainfall anomalies spread across southwestern and central Ethiopia, where moderate (25 – 50 mm) deficits were already creeping in (**Figure 2**). The drier-than-average conditions may announce a sluggish onset to the early period of the *Belg*, March – May, rainfall season in the Greater Horn of Africa. The delayed start to the season was attributable to ongoing La Niña conditions and persistent cooler-than-average sea-surface-temperatures during the past thirty days over the western Indian Ocean, which tended to inhibit rainfall over the region. During this past week, scattered light to locally moderate rains fell over southwestern and central Ethiopia. The increased rains relative to prior week's accumulation contributed to partially erode moisture deficits over central Ethiopia. A continuation of favorable rainfall distribution is critical to ensure adequate land preparation and cropping activities over many sensitive areas of the region.

During the upcoming week, model rainfall forecasts suggested that drier-than-average conditions are likely over the Horn of Africa. Suppressed rainfall is expected over much of the Horn of Africa. The forecast, insufficient rain amounts will likely increase rainfall deficits further over many local areas.

30-Day Satellite Estimated Rainfall Anomaly (mm)
Valid: 31 January – 01 March 2022

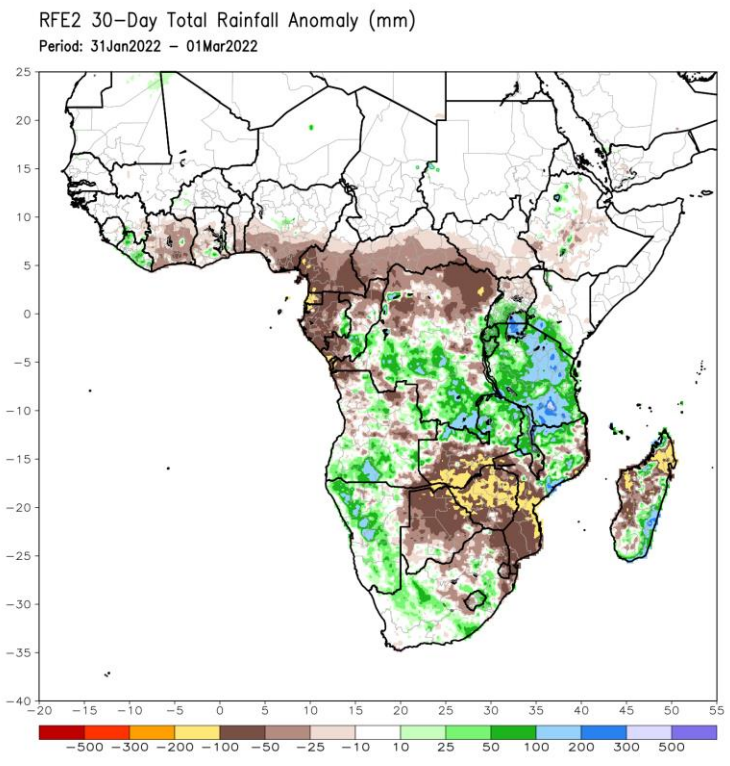
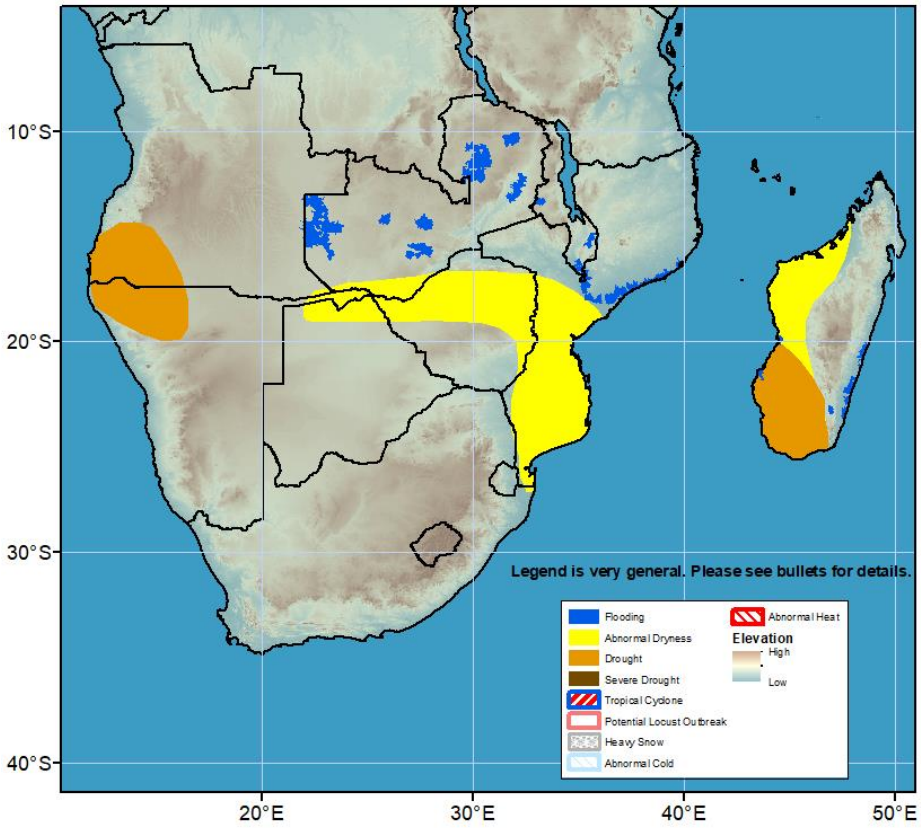


Figure 2: NOAA/CPC

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.

Questions or comments about this product may be directed to Wassila.Thiaw@noaa.gov or 1-301-683-3424.



Flooding were detected in the upper reaches of the Zambezi River in western Zambia, northern Zambia, along the Shire River in southern Malawi, coastal Mozambique, and southeastern coastal areas, following the land falling of Tropical Cyclone Emnati over Madagascar. The forecast additional rain may exacerbate conditions on the ground over each respective region.

Figure 3: Hazards, focused over southern Africa