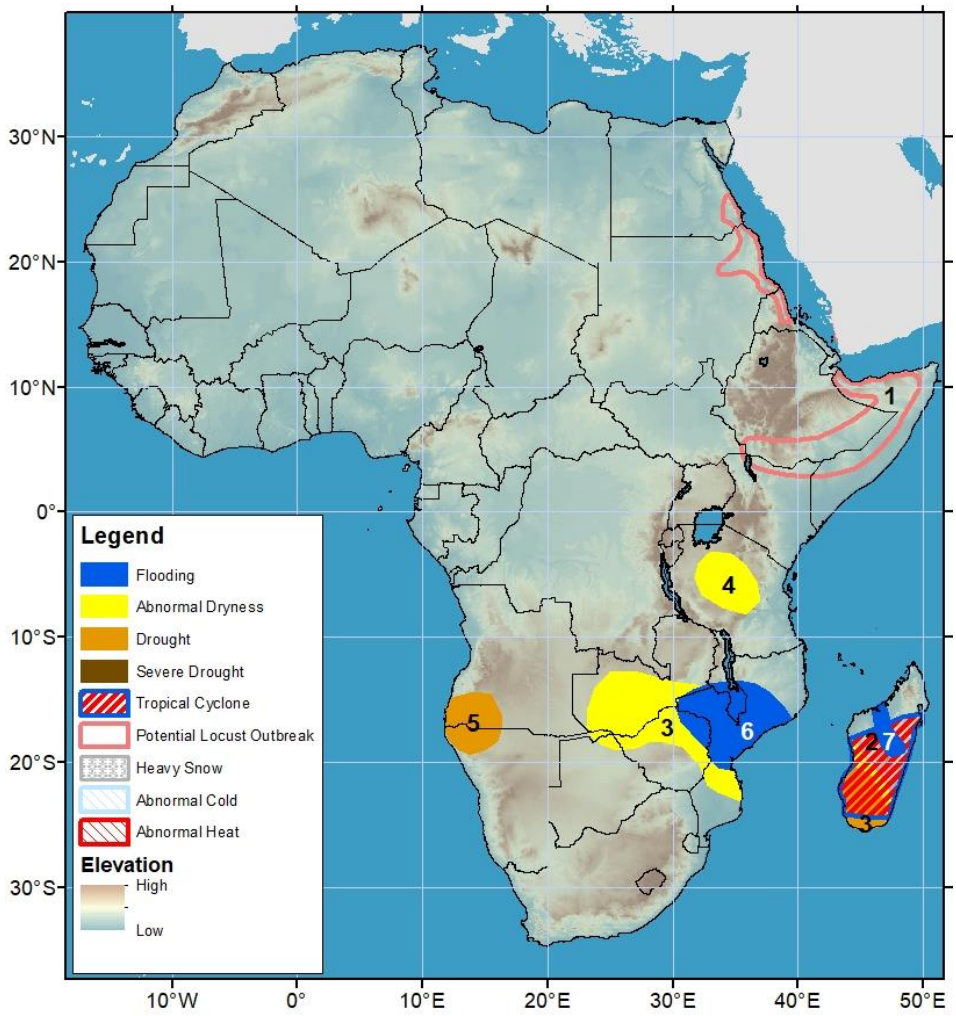
Climate Prediction Center's Africa Hazards Outlook
03 – 09 February, 2022

- **Tropical cyclone Batsirai is forecast to make landfall along the east coast of Madagascar on February 5**
- **Recent heavy rainfall substantially decreased moisture deficits across eastern parts of Southern Africa.**



1) A few immature swarms are still present in the northeast where they are likely to remain a bit longer than expected because local winds are concentrating across eastern Ethiopia to the border of northern Kenya.

2) Tropical cyclone Batsirai has gained strength in the South Indian Ocean and will travel westward towards landfall midaway along the east coast of Madagascar. Impacts could be significant from damaging wind, storm surge, and heavy rain as it traverses the island, especially so soon after TC Ana.

3) Reduction of moisture deficits was observed across southern Zambia, northern Zimbabwe, southern Malawi, and central Mozambique after heavy rains but still showing some below normal rainfall over the region. Forecast is for a return to drier conditions. Southwest Madagascar did not receive beneficial rains and is still suffering from substantial seasonal drought.

4) Despite heavy rainfall this past week, the central part of the Tanzania is still showing some below normal rainfall.

5) Below normal rainfall for the past six weeks tends dangerously toward drought condition which would be an extension of the drought already occurring over southwestern Angola and northwestern Namibia.

6) Flash flooding and river flooding resulted from very heavy rains that were brought by tropical cyclone ANA last week.

7) Flash foods causing fatalities, landslides, mudslides, and disasters across the capital Antananarivo and Analamanga region of

A dry rainfall pattern prevailed across eastern Africa this past week.

During the past week, rain was suppressed further to the south. Little rainfall was observed in Ethiopia, South Sudan, Somalia, and Kenya. Some light rain was observed along southern Uganda. Moderate rainfall of 25-75mm was observed over large portions of Tanzania (**Figure 1**). Some localized heavier amounts were registered in east-central DRC. Compared to the previous week's rainfall distribution, this is a significant decrease across the region. Though dry this past week, some January rains have improved seasonal moisture conditions for many areas. The vegetation health index showed improving vegetation condition across Kenya, southern Somalia, and eastern Ethiopia. The standardized precipitation index showed values above 1.5 to 2 which confirmed a return of ground moisture coverage across Kenya, central Ethiopia, southern Somalia, and Uganda.

During the outlook period, the region is forecast to remain in a dry pattern. Rains should be relegated to Tanzania, Rwanda, Burundi and Southeastern DRC. However rainfall totals are likely to exceed 75mm in central Tanzania.

Tropical cyclone Ana brought heavy rain, wind and many negative impacts to Madagascar and Mozambique.

This past week, Tropical cyclone Ana made landfall in central Mozambique. It brought strong winds and much heavy rainfall. A large swath of rains in excess of 100mm was recorded by satellite estimates in Mozambique, Malawi and neighboring Zimbabwe. Some gauges in the region measured more than 200mm and 300mm. Similar totals were recorded in northern Madagascar. This led to flooding and reports of 41 fatalities in Mozambique, Malawi, and Madagascar. Elsewhere, locally heavy rainfall exceeding 100mm was observed in parts of western and southeastern Angola and northeastern South Africa (**Figure 1**) Lighter rains were seen in Namibia, Botswana and central parts of South Africa. Outside of the region affected by Ana the rainfall pattern was a mixed bag of positive and negative anomalies regionally. Madagascar returned to very dry conditions with negative anomalies as much as 100mm.

Over the course of the monsoon season, two historically significant extremes have developed over the region. Persistent suppressed of rainfall has led from abnormal dryness to drought conditions across southern Madagascar, and region located over southwestern Angola including northwestern Namibia (**Figure 2**). These large moisture deficits are likely to have many adverse impacts on cropping activities and water availability. Conversely, the season has been wetter than average across South Africa.

For the upcoming outlook period, tropical cyclone Batsirai in the southern Indian Ocean will move over Madagascar exacerbating the situation there. Landfall is expected midway along the east coast and much more torrential rain is expected along with damaging winds. Enhanced rainfall is forecasted over Zambia, Malawi and Tanzania. Meanwhile, a return to dry conditions is expected in Mozambique and eastern Zimbabwe. Ample rainfall is likely to persist in South Africa, and likely extend north into eastern Namibia this week. .

7-Day Satellite Estimated Total Rainfall (mm)
Valid: 26 January – 1 February 2022

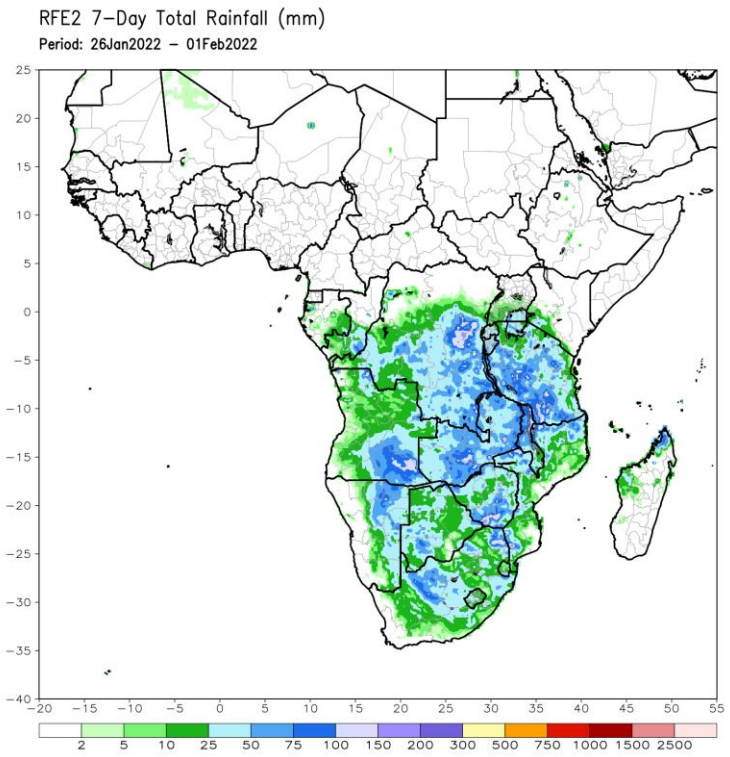


Figure 1: NOAA/CPC

2-Month Satellite Estimated Rainfall Anomaly (mm)
Valid: 01 December 2021 – 1 February 2022

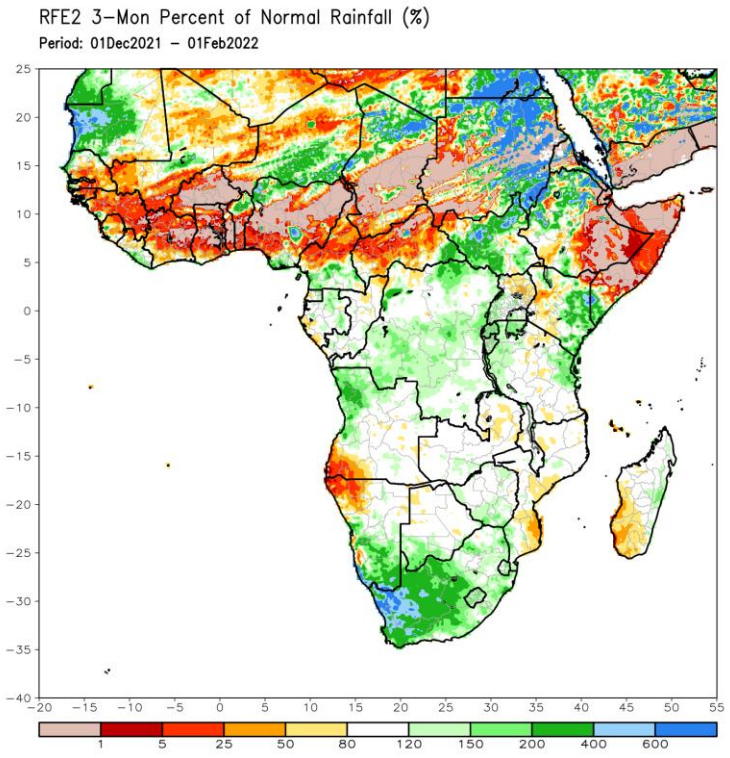
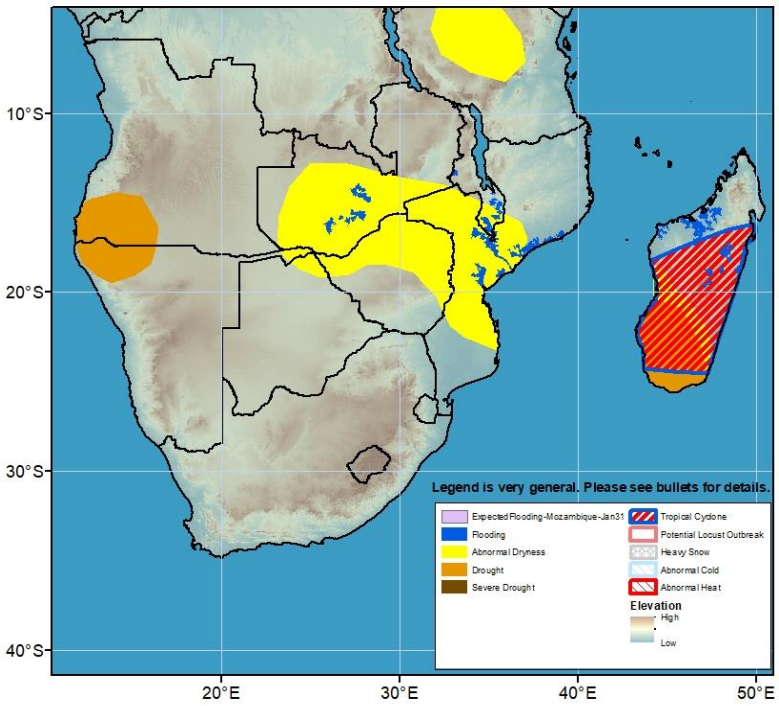


Figure 2: NOAA/CPC

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.



Flash floods and landslides were reported over southern Zambia and near Blantyre City in southern Malawi. Madagascar registered the most affected area this past week, such as Atsinanana, Alaotramangoro, Antananarivo and Analamanga with riverine flood along Betsiboka river and Vohitra river respectively in the central and eastern part of Madagascar.
During the outlook period, Tropical Batsirai will bring heavy rainfall and strong winds to Madagascar, which could potentially cause flash flood, landslides, mudslides, and riverine flooding. There are high discharges at levels of 5 and 20-year return period in Mozambique and southern Malawi after TC Ana brought a wide swath of very heavy rain.

Figure 3: Hazards, focused over southern Africa