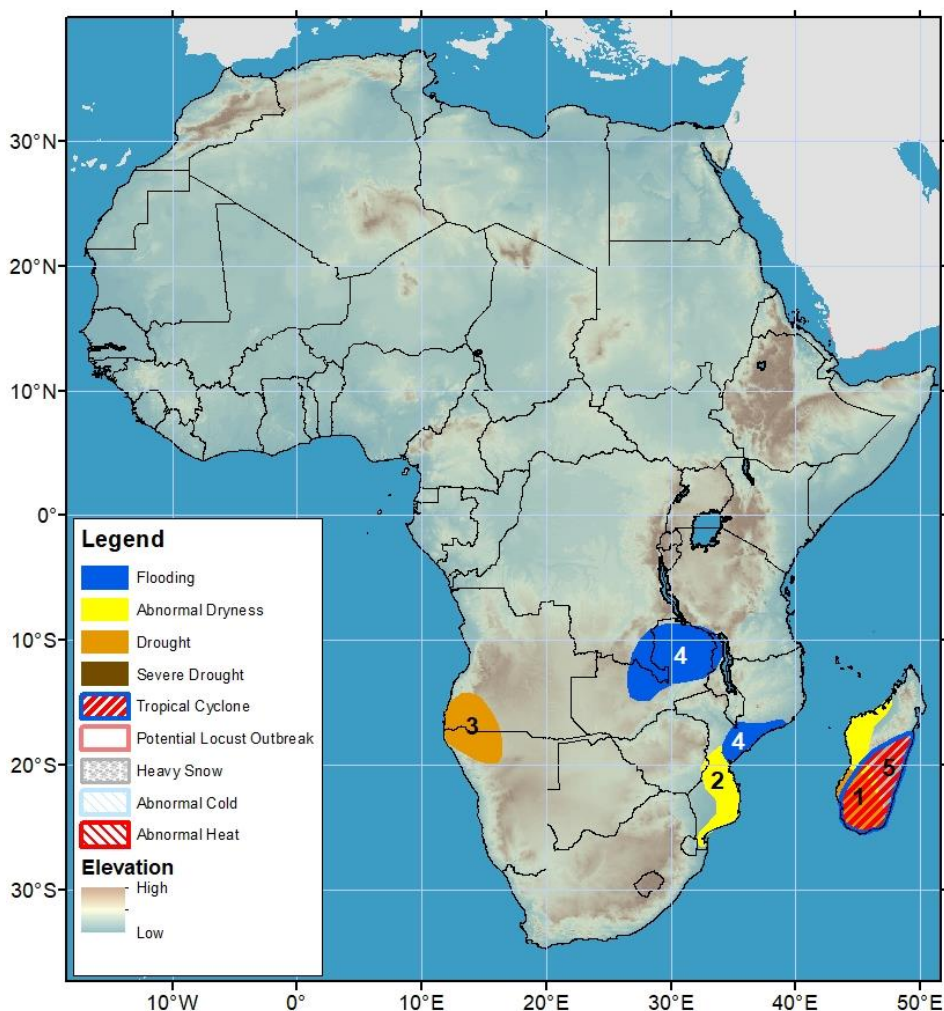




Climate Prediction Center's Africa Hazards Outlook 24 February – 2 March, 2022

- The procession of tropical cyclones continues, with yet another TC impacting Madagascar this week.
- Moisture deficits are on the increase in Botswana and Zimbabwe.



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) Uneven rainfall performance during the past couple of months has led to abnormal dryness in central and southern Mozambique. The forecast is for a return to drier conditions.

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

4) Heavy rains over the last week or two have saturated soils and led to rising river levels in Zambia and central Mozambique. Continued heavy rains in northern Zambia during the outlook period will keep flood risks high.

5) A 5th tropical Cyclone in 2021 is impacting Madagascar. A relatively weak 80kt system as of 21 February, it is still bringing impacts from gusty winds and especially flooding. The area is very vulnerable after so many cyclone strikes in a short period of time.

Rain has been suppressed in a large portion of central Southern Africa

During the past week, rain was suppressed over southern Mozambique, Zimbabwe, Botswana, and northern South Africa. Little rainfall was observed in those areas (**Figure 1**). To the north, a band of heavy rain was present across the northern half of Mozambique, southern Tanzania, Malawi, and Zambia. More than 100mm of rainfall was observed in many cases, with up to 300mm in localized areas of Mozambique leading to observed flooding. Lighter and widespread rains (10-50mm totals) were observed across Angola, Namibia, and South Africa. These rains continued slow improvement to moisture conditions in western Angola and northwestern Namibia. On the other hand, moisture deficits on the 30-day time scale are strengthening over Botswana and Zimbabwe. Vegetation health in this region will be expected to decline in coming weeks, even though satellite derived products indicate it is so far ok. Longer-term deficits remain in southwest Angola, Mozambique, and southwest Madagascar (**Figure 2**). In Madagascar, moisture deficits are back on the rise in the South and West, even as tropical cyclones continue to strike the East Coast. Last week TC Dumako made landfall in the North causing flooding and wind damage that led to 6 fatalities. Currently, TC Emnati is impacting the same vulnerable coastline with similar conditions.

The pattern of recent weeks is forecasted to persist during the outlook period. The heaviest rain (>100mm possible) is likely in Angola, northern Zambia, Malawi, northern Mozambique, and Tanzania. Meanwhile strongly suppressed rains are likely in Botswana, Zimbabwe, southern Mozambique, and now in Namibia. Moderate rain is expected in southeast South Africa. A substantial increase in rain is expected for Madagascar with large totals more than 100mm likely. This is in association with the passage of another TC (Emnati).

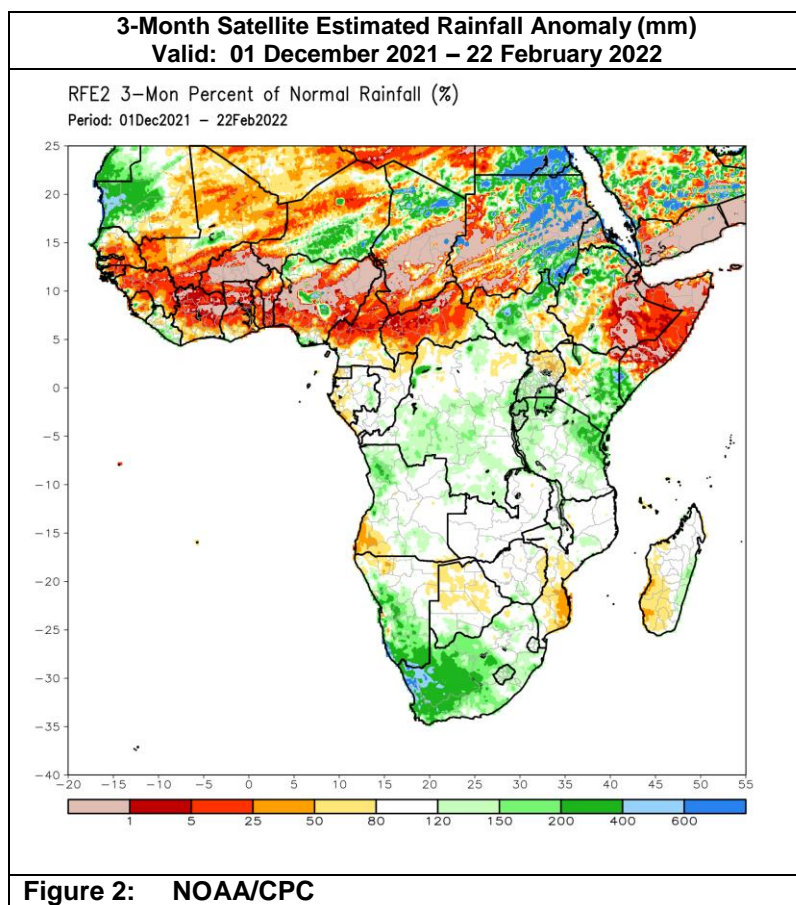
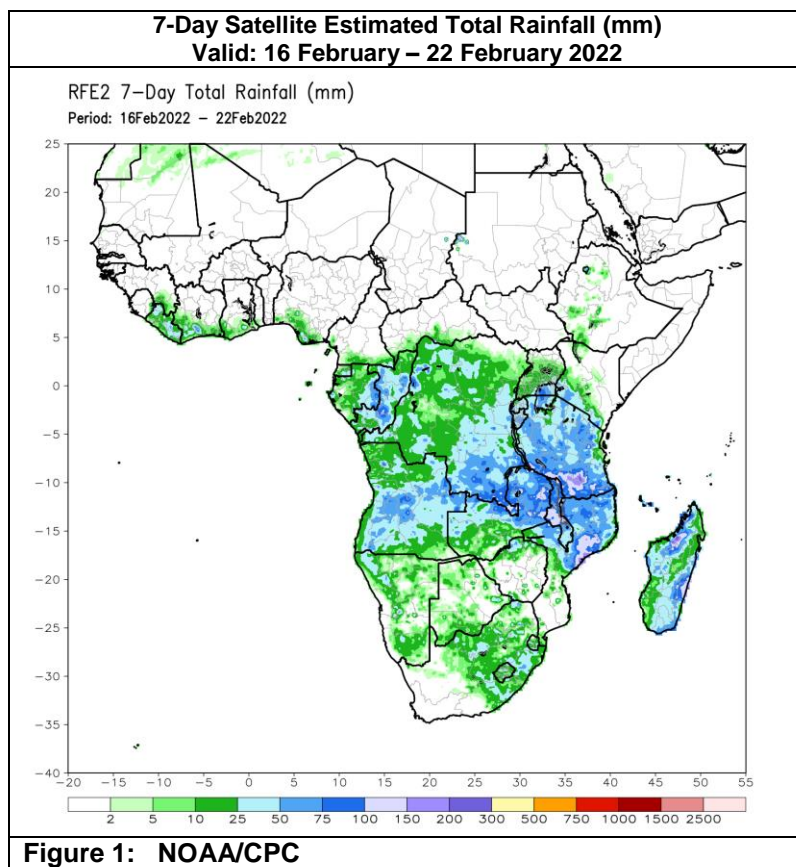
The early part of the 'Belg' season is off to a slow start in East Africa.

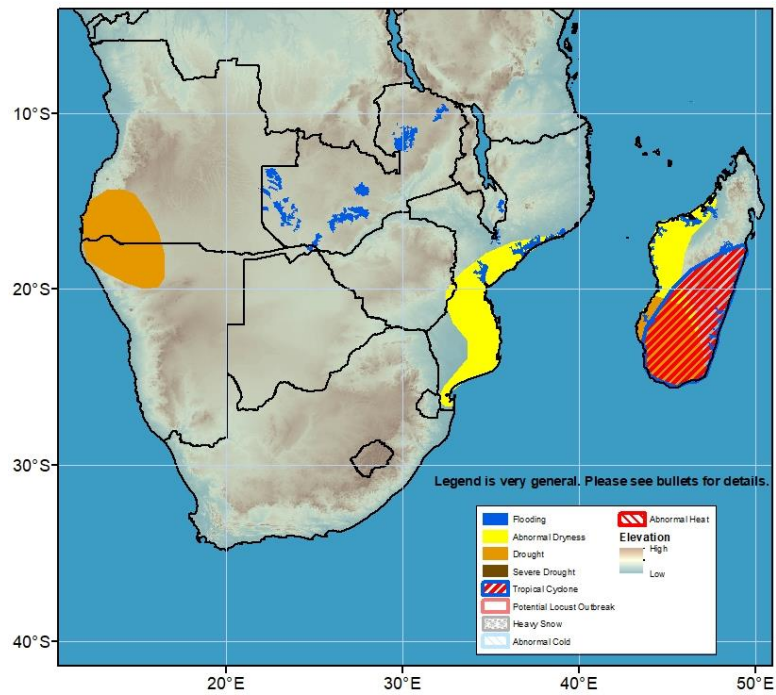
Moderate rains (25-75mm) were observed over southern Uganda, southern Kenya, and Tanzania (**Figure 1**). Some scattered light showers occurred in western and central Ethiopia. Otherwise, the remainder of the East Africa region stayed dry. Some negative 30-day anomalies are arising in central Ethiopia where light 'Belg' season rains should be starting to emerge. This sensitive area will have to be closely monitored for the placement of abnormal dryness in the next few weeks if rainfall conditions do not improve. Above-average rainfall has been present in Tanzania, southern Uganda, Rwanda, and Burundi since the start of the year. Surpluses greater than 100mm are evident in Tanzania. This led to improved vegetation health in the country according to satellite derived indices. Vegetation health remains poor in southern Ethiopia and Somalia – stemming from the last failed rainy season.

For the upcoming outlook period, no change in pattern is expected for East Africa. Suppressed rainfall is expected to continue in Ethiopia indicating the start of the 'Belg' season will remain delayed. Heavy rains are likely in bimodal Tanzania and light rain is possible in southern Uganda. Enhanced rainfall is likely to spread slightly across the border into southern Kenya.

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.





A broad geographic range of Madagascar has seen impacts from floods. More tropical cyclones impacting the country will reinforce flooding risk in southern and eastern portions of the country. Flooding continues in many parts of Zambia. Heavy rains in northern portions of the country will reinforce flood risks there. Improving conditions are observed in Malawi this week. Torrential rainfall amounts this past week have led to flooding in central Mozambique.

Figure 3: Hazards, focused over southern Africa