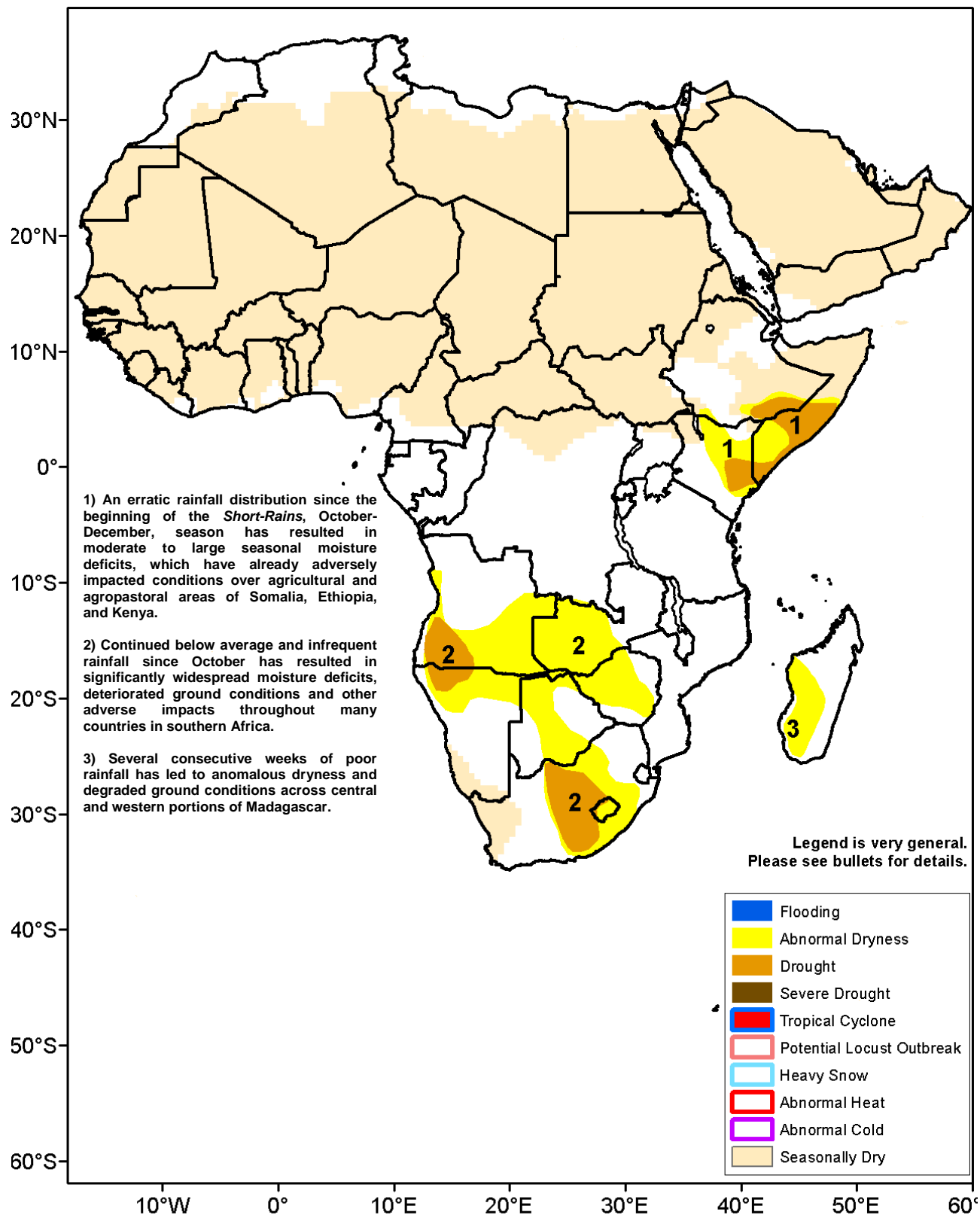




## Climate Prediction Center's Africa Hazards Outlook January 10 - 16, 2019

- Significant moisture recovery was received across many parts of South Africa, Botswana, Zimbabwe and southeastern Angola during late December and early January.



## Continued moisture relief felt for several anomalously dry regions of southern Africa.

During the last seven days, significantly heavy and widespread precipitation accumulations were received throughout many countries in southern Africa. According to satellite rainfall estimates, the highest weekly rainfall amounts (>100mm) were registered in central Mozambique and northern Madagascar, with well-distributed amounts in excess of 75mm observed throughout southeastern Angola, southern and eastern Zambia, Malawi, and northeastern (Figure 1). Lesser, but well distributed rainfall amounts were also received in parts of Angola, northern Namibia, and eastern South Africa. Many parts of central Tanzania saw reduced precipitation totals (<25mm) for the second consecutive week.

Since late December, the pattern of monsoon convergence has shifted southward bringing much needed enhanced precipitation into many southern Africa regions where anomalous dryness and drought conditions have developed since the start of season. Analysis of changes in the 30-day rainfall anomalies shows the latest moisture recovery has been most pronounced across southeastern Angola, the Caprivi Strip region, northern and eastern Botswana, Zimbabwe, Mozambique, and northern South Africa. The onset of favorably heavy rainfall has now led to near average to above-average moisture conditions, where several local areas in eastern Botswana, southern Mozambique and northern South Africa are now experiencing 150 to 200 percent of their normal rainfall accumulation since early December (Figure 2). The increased moisture is expected to benefit many cropping and pastoral areas following a very poor monsoon performance since the beginning of the season.

Although favorable rainfall was received for many countries during the past 2 weeks, other regions in southern Africa have observed some strengthening in both short term and long term moisture deficits. Namely, portions of southwest Angola, western South Africa and western Madagascar have not benefitted from the enhanced rains, as these regions continue to experience less than half of their normal rainfall accumulation since both early December (Figure 2) and since early October. Seasonal rainfall has also been notably absent over many parts of Tanzania for at least two consecutive weeks, as moisture deficits are beginning to develop in the Mbeya, Iringa, and Morogoro provinces of the country.

The lack of rainfall since the beginning of the southern African monsoon has reportedly led to drought and has already negatively affected ground conditions over many areas, including central South Africa, Lesotho, and southeastern Botswana. Poor pasture conditions, livestock deaths, and poor ground conditions have already been reported over areas of South Africa.

During mid-January, models indicate a northeastward shift in the monsoon convergence with widespread, heavy rainfall accumulations (>75mm) to take place over the western Indian Ocean, Madagascar, northern Zimbabwe, Zambia, Malawi, Mozambique, and Tanzania during the next week. The heavy rainfall forecast in Tanzania and Madagascar is expected to help mitigate anomalous dryness. However, for the many areas that have experienced ample moisture recovery over the past couple of weeks, the return of decreased rainfall amounts may lead to a re-strengthening of moisture deficits into mid to late January.

### 7-Day Satellite-Estimated Rainfall Total (mm)

Valid: January 2– January 8, 2019

RFE2 7–Day Total Rainfall (mm)

Period: 02Jan2019 – 08Jan2019

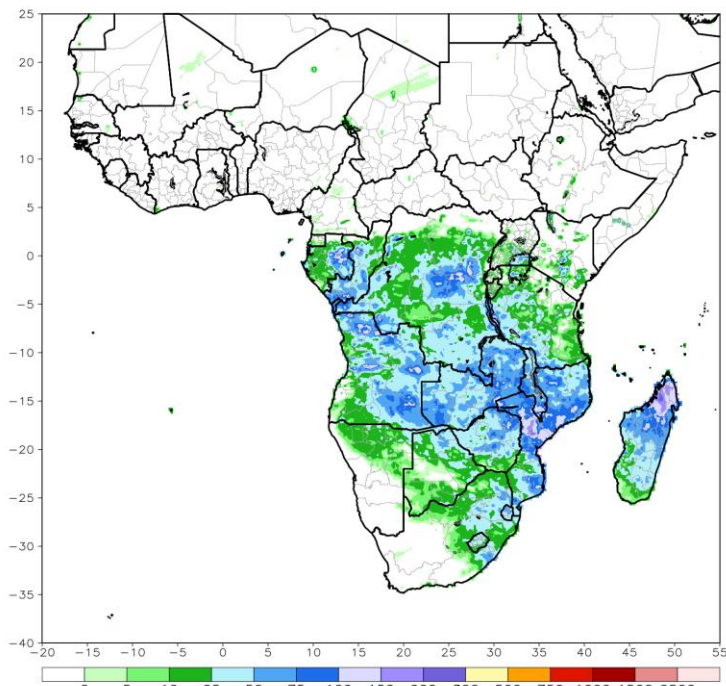


Figure 1: NOAA/CPC

### 30-Day Satellite-Estimated Percent of Normal Rainfall (%)

Valid: December 10, 2018 – January 8, 2019

ARC2 30–Day Percent of Normal Rainfall (%)

Period: 10Dec2018 – 08Jan2019

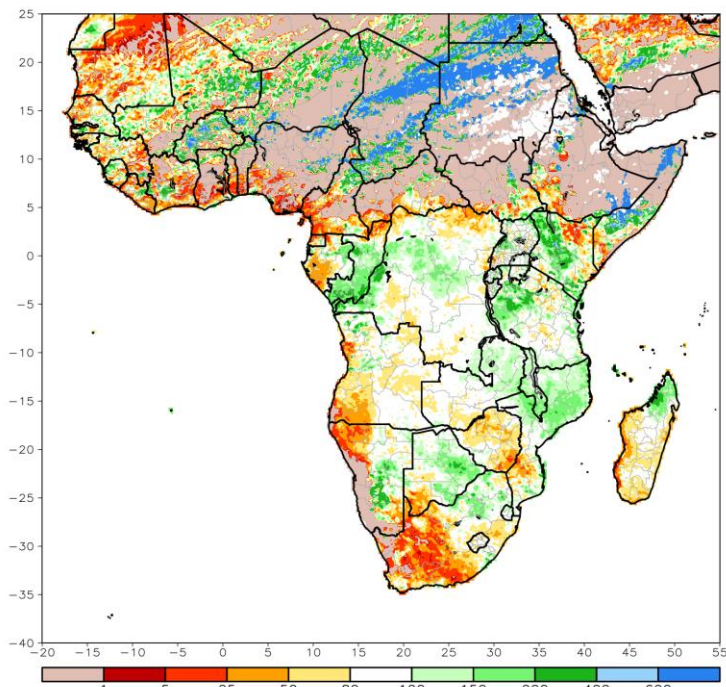


Figure 2: NOAA/CPC

**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.