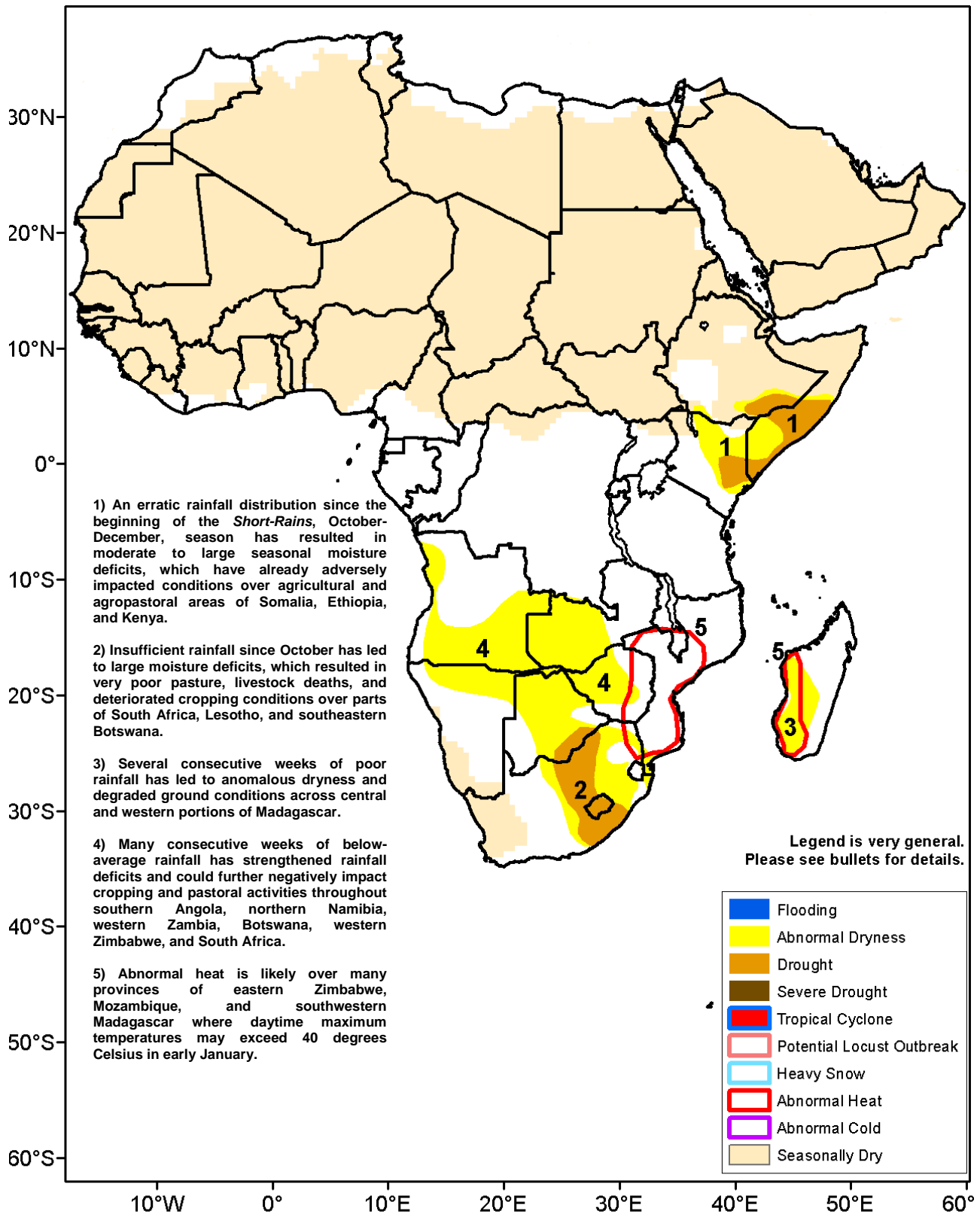




Climate Prediction Center's Africa Hazards Outlook January 3 - 9, 2019

- Enhanced and well distributed precipitation is forecast to help provide moisture relief for many anomalously dry areas in southern Angola, Zambia, Botswana, Zimbabwe, and South Africa.



Moisture relief expected for many parts of southern Africa.

During the last seven days, favorably widespread precipitation accumulations continued over many parts of Zambia, Malawi, northern Mozambique, and northern Madagascar, with lesser but well distributed amounts registered towards the south over parts of South Africa, Zimbabwe, and Mozambique. Locally heavy rainfall accumulations in excess of 100mm were registered across southern Angola, Zambia and Mozambique according to satellite rainfall estimates (**Figure 1**). Compared to the previous week, much needed increases in precipitation were received over southern Angola, northern Namibia, throughout much of Botswana, and northern South Africa. However, many parts of Tanzania saw a reduction in weekly rainfall with minimal totals (<10mm) over the central provinces.

Since the beginning of December, widespread negative precipitation anomalies continue to prevail throughout much of southern Africa. The largest thirty day moisture deficits are concentrated across southwestern Angola, western Madagascar and throughout western South Africa, where several local areas have experienced less than a quarter of their normal rainfall accumulation. Considerable dryness is also evident throughout southern Zambia, Zimbabwe, and southern Mozambique with percent of normal rainfall is less than fifty percent during the last month (**Figure 2**).

Analysis of changes in the 30-day rainfall anomaly patterns since last week indicate some much needed moisture recovery over southeastern Angola, northern Namibia, Botswana, northern South Africa and northern Madagascar due to increased rainfall in late December. However, moisture deficits have strengthened across southern Zambia, Zimbabwe, and into central and southern Mozambique since last week.

Despite the recent moisture recovery in the southwestern Africa, the performance of the southern Africa monsoon has been quite poor and has mimicked the early to mid stages of the poor 2015-2016 monsoon. Many countries have experienced a pronounced delayed start of seasonal precipitation followed by erratic, infrequent and poorly distributed rainfall which has resulted in significant dryness over the past ninety days. Many local areas in Angola, Namibia, Zambia, Botswana, and South Africa have experienced at least eight consecutive weeks of suppressed precipitation according to satellite estimated rainfall. 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 were reported over areas of South Africa. An analysis of recent remote sensing products indicates that unfavorable ground conditions have continued to worsen over southern Angola, northern Namibia, western Zambia, Zimbabwe, Botswana, and eastern South Africa.

For the upcoming outlook period, models suggest the continuation of moisture relief for many anomalously dry areas. Widespread enhanced rainfall with weekly accumulations in excess of 50mm is forecast for much of southeastern Angola, western Zambia, Zimbabwe, and northern South Africa into early January. Anomalously high temperatures are also forecast for parts of eastern Zimbabwe, Mozambique and Madagascar.

7-Day Satellite-Estimated Rainfall Total (mm)

Valid: December 26, 2018 – January 1, 2019

RFE2 7-Day Total Rainfall (mm)

Period: 26Dec2018 – 01Jan2019

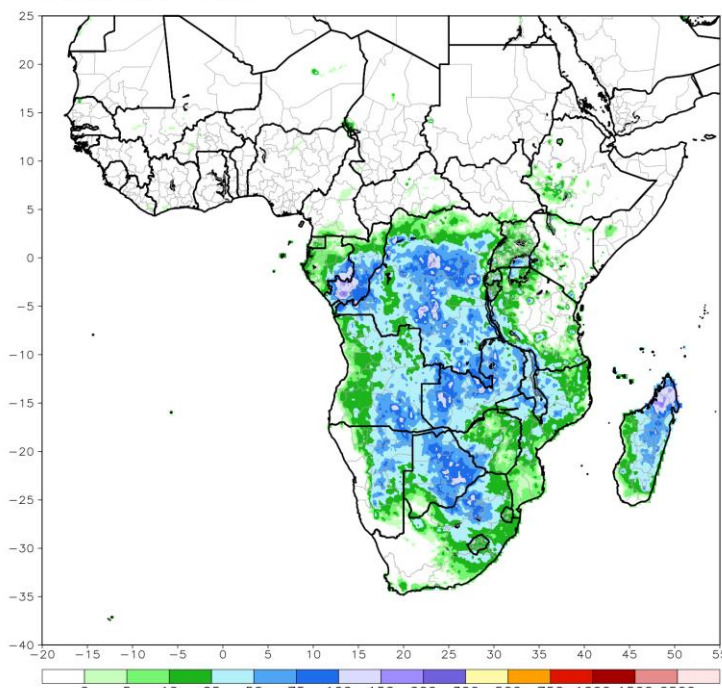


Figure 1: NOAA/CPC

30-Day Satellite-Estimated Rainfall Anomaly (mm)

Valid: December 3, 2018 – January 3, 2019

ARC2 30-Day Percent of Normal Rainfall (%)

Period: 03Dec2018 – 01Jan2019

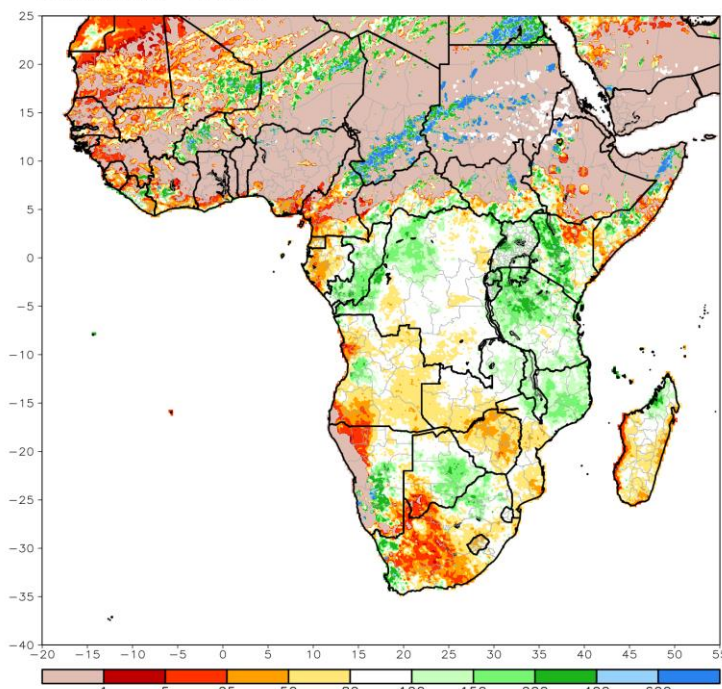


Figure 2: NOAA/CPC

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.