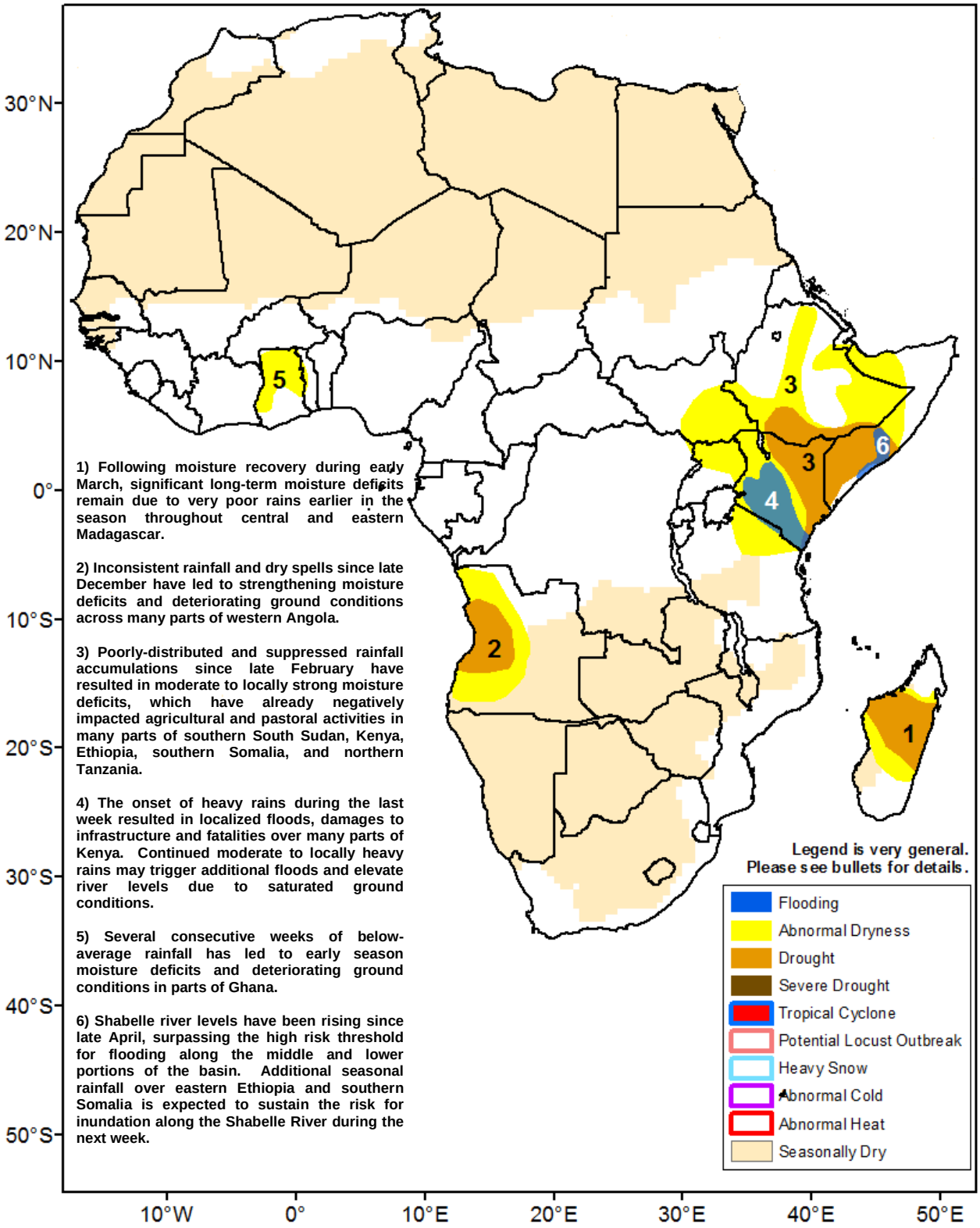
Climate Prediction Center's Africa Hazards Outlook
May 11 – May 17, 2017

- **Continued late-season heavy rains trigger floods throughout parts of Kenya.**
- **Favorable rainfall returns over the higher elevations of Ethiopia.**



1) Following moisture recovery during early March, significant long-term moisture deficits remain due to very poor rains earlier in the season throughout central and eastern Madagascar.

2) Inconsistent rainfall and dry spells since late December have led to strengthening moisture deficits and deteriorating ground conditions across many parts of western Angola.

3) Poorly-distributed and suppressed rainfall accumulations since late February have resulted in moderate to locally strong moisture deficits, which have already negatively impacted agricultural and pastoral activities in many parts of southern South Sudan, Kenya, Ethiopia, southern Somalia, and northern Tanzania.

4) The onset of heavy rains during the last week resulted in localized floods, damages to infrastructure and fatalities over many parts of Kenya. Continued moderate to locally heavy rains may trigger additional floods and elevate river levels due to saturated ground conditions.

5) Several consecutive weeks of below-average rainfall has led to early season moisture deficits and deteriorating ground conditions in parts of Ghana.

6) Shabelle river levels have been rising since late April, surpassing the high risk threshold for flooding along the middle and lower portions of the basin. Additional seasonal rainfall over eastern Ethiopia and southern Somalia is expected to sustain the risk for inundation along the Shabelle River during the next week.

Torrential rains and floods continue in Kenya.

During the first week in May, enhanced, late season precipitation continued across much the horn, with the heaviest rainfall accumulations received over several regions of Kenya. According to satellite rainfall estimates, weekly amounts in excess of 100mm were registered in the central and eastern provinces of Kenya (**Figure 1**), with flooding, damages to infrastructure, livestock losses, displaced populations, and fatalities reported since late April. The hardest hit regions were counties surrounding Mount Kenya, as well as, coastal areas near Mombasa during the last week. Elsewhere, lesser but favorably distributed (10-75mm) rains were recorded throughout Somalia Uganda, South Sudan and Ethiopia continuing a trend of increased rainfall and ground moisture in East Africa since late April.

Latest analysis of percent of normal rainfall since early April suggests a weakening of the persistent moisture deficits that have negatively impacted much of Kenya, Uganda, South Sudan, Ethiopia, and Somalia for much of the season. While East Africa still remains predominantly dry, pockets of neutral to above-average conditions, particularly over parts of Kenya and Ethiopia, have emerged due to the recent uptick in rainfall activity (**Figure 2**). Although this latest increase in rainfall activity over East Africa is too late with respect to developing crops, the late season increase moisture is expected to replenish water availability and help to improve conditions in pastoral regions.

For the upcoming outlook period, a continuation of average to above-average rainfall is forecast during early May which is expected to continue to help alleviate seasonal dryness over Kenya, Somalia and Ethiopia. However, additional rains over several saturated regions in Kenya is expected to sustain the risk of flooding and other adverse ground impact during the middle of May. Water levels along the Shabelle river basin in southern Somalia have also been on the rise.

7-Day Satellite Estimated Rainfall (mm)
Valid: May 3 – May 9, 2017

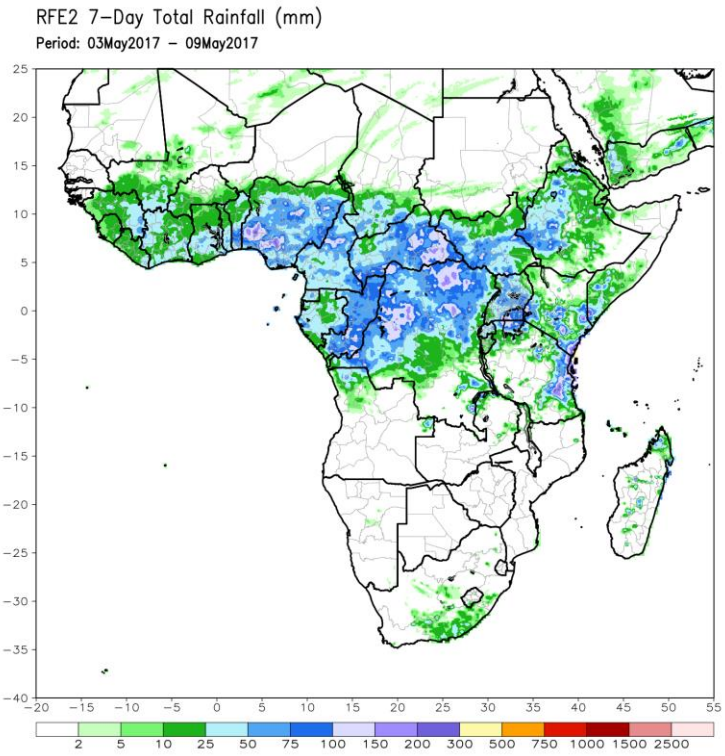


Figure 1: NOAA/CPC

30-Day Satellite-Estimated Percent of Normal Rainfall (%)
Valid: April 10 – May 9, 2017

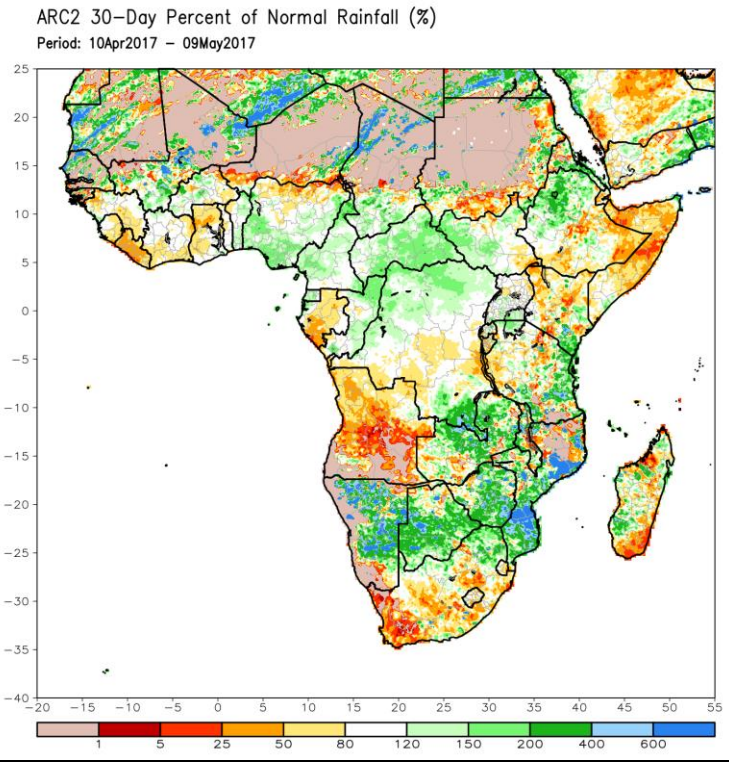


Figure 2: NOAA/CPC

Dryness continues in parts of Liberia, Guinea and Ghana.

During the last week, a northward push of monsoon rains was observed throughout West Africa, with the highest rainfall accumulations received over much of Nigeria according to satellite rainfall estimates. However, lighter rainfall totals were again registered over parts of Guinea, Liberia and Ghana, resulting in strengthening moisture deficits (25-80 percent of normal) for many local areas (**Figure 2**). In Ghana, the frequency of rains has been below-average since February and remote vegetation health indices also have depicted a declining in ground conditions due to early season rainfall shortages

During the next week, increased rainfall amounts are forecast over much of Guinea, Sierra Leone, and Liberia which is expected to help alleviate early season dryness. However, light to locally moderate rainfall amounts (5-25mm) remain forecast for Ghana, Cote d'Ivoire and southern Burkina Faso.

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.