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10 DAYS CLIMATOLOGICAL SUMMARY AND IMPACTS FOR THE SECOND DEKAD (11-20) OF AUGUST 2019 AND FORECAST FOR THE FIRST DEKAD (01-10) OF SEPTEMBER 2019

1. Introduction

This bulletin reviews the climatic conditions observed during the second dekad (11-20) of August 2019 and gives the climate forecast for the first dekad (01-10) of September 2019 with the associated climate impacts over the Greater Horn of Africa (GHA) region. The observed conditions are compared to the average of the climatological period of 1981-2010 for rainfall and mean surface temperature.

For referencing within this bulletin, the Greater Horn of Africa (GHA) region is generally subdivided into three sub-sectors: The equatorial sector lying approximately between 5^{o} S and 5^{o} N, with the northern and southern sectors occupying the rest of the northern and southern parts of the region respectively while average is computed based on the period 1981 - 2010.

2. Climate Brief

During the second dekad of August 2019, most parts of South Sudan, central to southern part of Sudan, north, western and central Ethiopia, western Eritrea, most parts of Uganda, and western, central and coastal parts of Kenya recorded between 10 mm and 100mm of rainfall. Much of the rest of the GHA recorded light rains of less than 10mm or remained generally dry. Southern parts of Sudan, parts of west and east of South Sudan, northern Ethiopia, much of Eritrea and Djibouti, southeast Somalia northwest and central Kenya, southern Uganda, and much of Rwanda and Burundi recorded rainfall that was drier that the normal conditions Much of the rest of northern sector and equatorial sector of the GHA recorded rainfall that was nearer to the climatological average (Figure 1a, Figure 1b and Figure 1c).

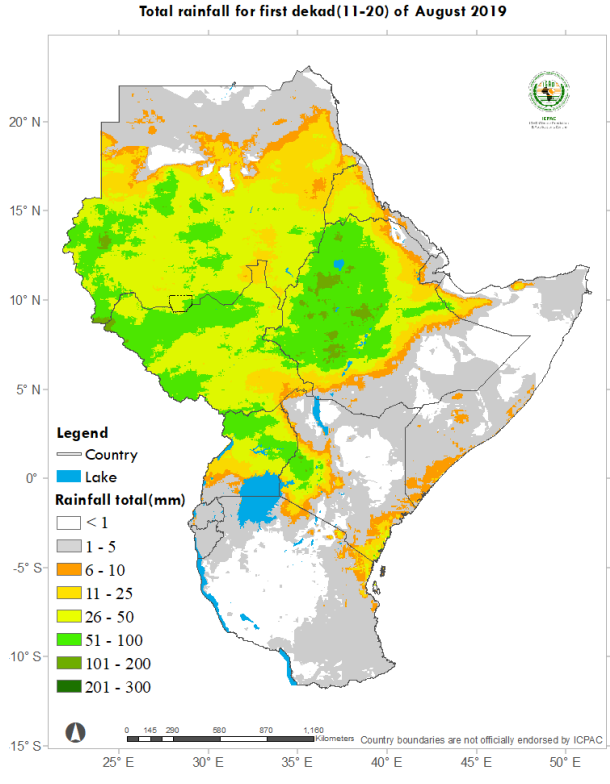

Figure 1a: moderate to very heavy rainfall was recorded in central and southern parts of Sudan, most of South Sudan, Uganda, northern western and central Ethiopia, and western parts of Kenya. *(Data: ICPAC Blended CHIRP)*

Most areas in the equatorial sector, southern sectors, and northern, southern and southeastern part of the northern sector of the GHA recorded maximum and minimum temperature that was warmer than the climatological mean. Much of the rest of the northern sector recorded maximum and minimum temperature that was cooler than or near the climatological mean during the second dekad of August 2019 (Figure 2 and Figure 3).

Forecast for the first dekad (01-10) of the September 2019 indicates that heavy rainfall amounts exceeding 100 mm is expected in central and western Kenya, northern Uganda, central and northern South Sudan, and central Ethiopia. Moderate rainfall amounts of between 25mm and 100 mm in forecasted over southern Sudan, southern South Sudan, central and southern Uganda, and northern Somalia. The rest of the GHA region is expected to receive less than 25 mm of rainfall, or remain generally dry. This includes much of Sudan, Eritrea, southern Ethiopia, central and southern Somalia, northern, eastern and southern Kenya, much of Tanzania, Rwanda and Burundi. Highest daily-mean temperature, above 30^{o}C is forecasted for Sudan, northeastern Ethiopia, coastal region of Eritrea, Djibouti, northern and central Somalia, and northern Kenya. General warm daily mean temperatures of between 20^{o}C and 30^{o}C is expected in South Sudan, Uganda, Rwanda, Burundi, Tanzania, eastern Kenya, and southern Somalia. In the mountainous regions of central Ethiopia, central and western Kenya, and southern Tanzania daily-mean temperatures is forecasted to be below 20^{o}C, and going down to 10^{o}C.

3. Observed rainfall during the second dekad (11-20) of August 2019

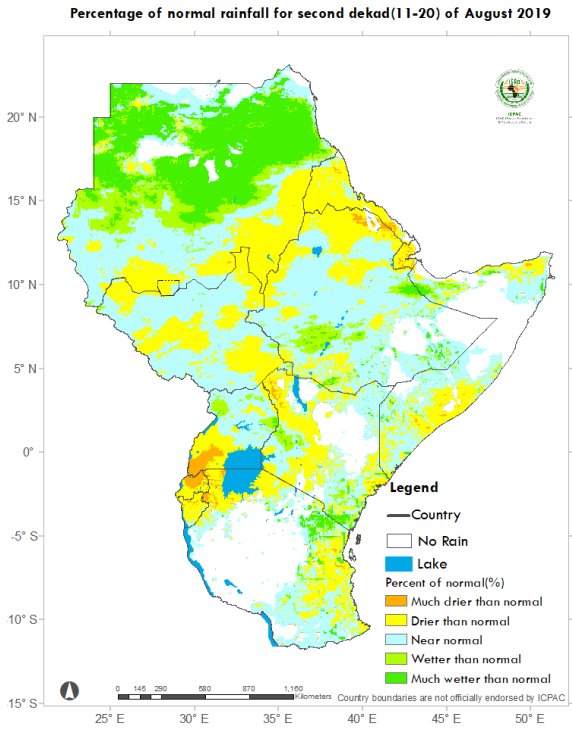

Figure 1b

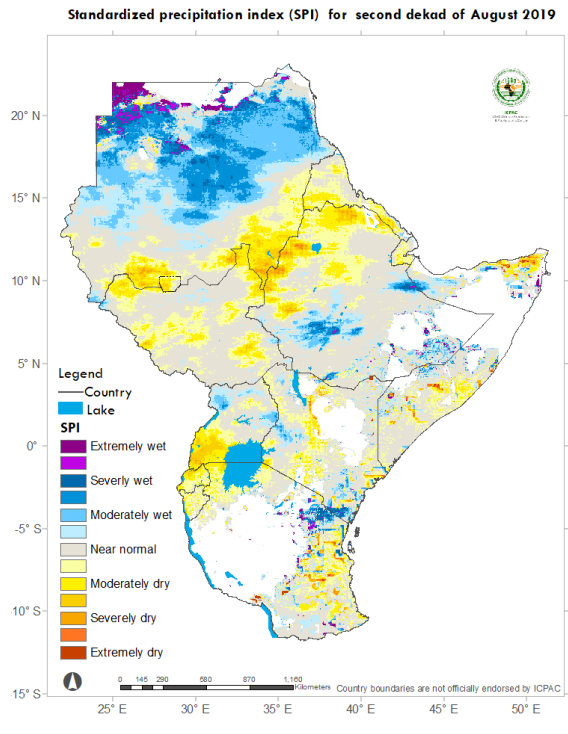

Figure 1c

Most of Eritrea, Djibouti, southern part of Sudan, northern Ethiopia, north, eastern and western parts of South Sudan, northwest and central parts of Kenya, southeast Somalia, and much of Rwanda, Burundi and southern Uganda the rainfall was drier than the climatological average. Most parts of the northern sector and equatorial sector of the GHA recorded near average rainfall, except for some areas in southeastern parts of the northern sector, and eastern parts of the equatorial sector of the GHA which remained generally dry *(Data: ICPAC Blended CHIRP)*

4. Maximum and Minimum Temperature during the second dekad (11-20) of August 2019

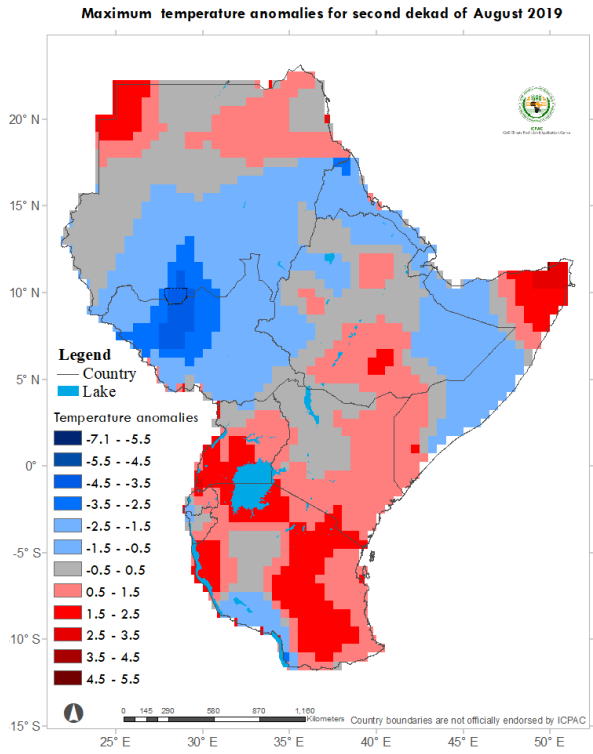

Figure 2: Most areas of the Uganda, Kenya, Rwanda Burundi, Tanzania, northern parts of Sudan, southern Ethiopia, and northeast and southern parts of Somalia recorded maximum temperatures that was warmer than the climatological mean Much of the rest of Sudan, South Sudan, Ethiopia, Eritrea, Djibouti, central Somalia and western Tanzania recorded maximum temperature that was cooler than or near the climatological mean *(Data Sourced from: the* NOAA-*NCEP CPC. GTS gridded data)*

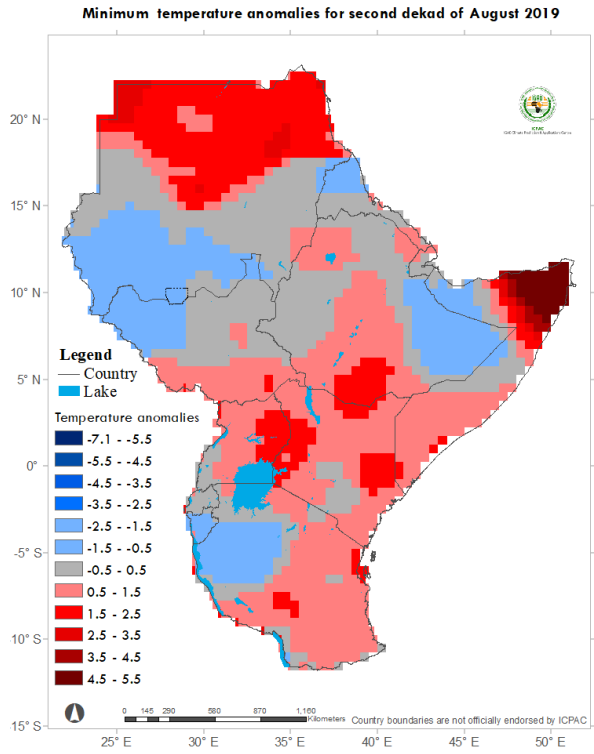

Figure 3: some places in southern parts of Sudan extending to northwest parts of South Sudan, western Eritrea, eastern Ethiopia, Rwanda, and northwest Tanzania recorded minimum temperature that was cooler than the climatological mean Much of the rest of the GHA recorded minimum temperature that was warmer than or near the climatological mean *(Data Source: Data Sourced from: the NOAA-NCEP CPC. GTS gridded data)*

5. Climate Forecast

Rainfall and Temperature Forecast

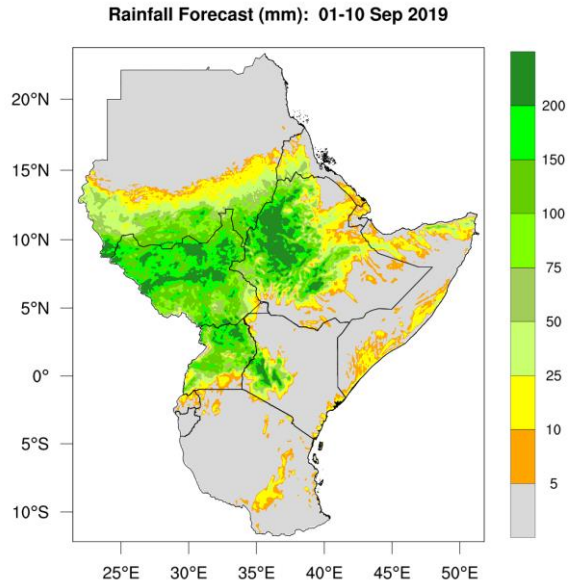

Figure 4: southern parts of Sudan, western, northwestern and central parts of Ethiopia, southwestern Eritrea, most of South Sudan, Uganda, and in western and central parts of Kenya are expected to receive moderate to very heavy rainfall. Most of the rest of the region is expected to record light rainfall conditions or remain generally dry (Source: WRF-ICPAC**).**

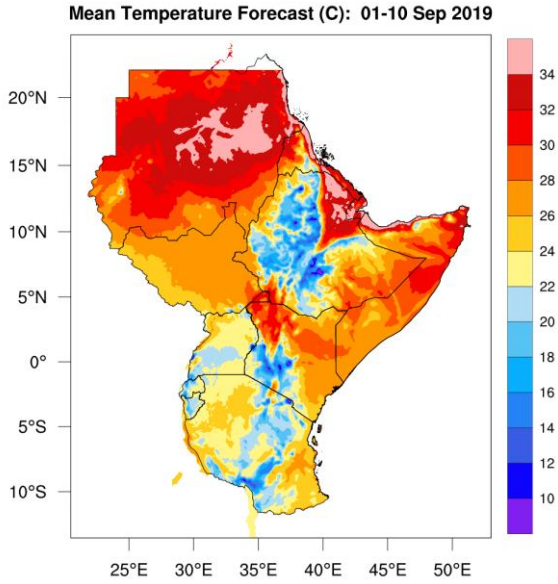

Figure 5: Most parts of Sudan, Eritrea, Djibouti, Somalia, northeast and southeast Ethiopia, and northern Kenya, are expected to record very warm to hot weather. Cooler weather is expected in western and central highlands of Ethiopia, southern parts of Uganda, western and central Kenya, much of Rwanda and Burundi, and northeast, central and southwestern parts of Tanzania (Source: WRF-ICPAC**).**

Reference terminology

Rainfall categories	
Range	**Category**
<10 mm	Light
10 - 25mm	Moderate
20 - 50mm	Heavy
>50mm	Very heavy

Rainfall coverage	
Coverage	**Range**
Most Places	Between 66% and 100%
Several Places	Between 33% and 66%
Few Places	Below 33%

DISCLAIMER: *The designations employed and the maps do not imply the expression of any opinion whatsoever on the part of IGAD or cooperating agencies concerning the legal status of any region, area of its authorities, or the delineation of its frontiers or boundaries. ICPAC does not claim responsibility for the use of the product by another, however due reference should be accorded.*

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