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10 DAYS CLIMATOLOGICAL SUMMARY AND IMPACTS FOR THE THIRD DEKAD (21-31) OF JULY 2019 AND FORECAST FOR THE SECOND DEKAD (11-20) OF AUGUST 2019

1. Introduction

This bulletin reviews the climatic conditions observed during the third dekad (21-31) of July 2019 and gives the climate forecast for the second dekad (11-20) of August 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 third dekad of July 2019, several parts South Sudan, southern part of Sudan, western and central Ethiopia, western Eritrea, northern and eastern Uganda, and western parts of Kenya recorded between 25 mm and 200mm of rainfall. Most areas in the northern sector and equatorial sector of the GHA recorded rainfall that was nearer to or exceeded the climatological amount except for some areas in southern and western part of Sudan, northern parts of South Sudan, northern Ethiopia, western and central parts of Kenya, southwest Uganda, and northwest Rwanda which recorded rainfall that was below the expected amount. (Figure 1a, Figure 1b and Figure 1c).

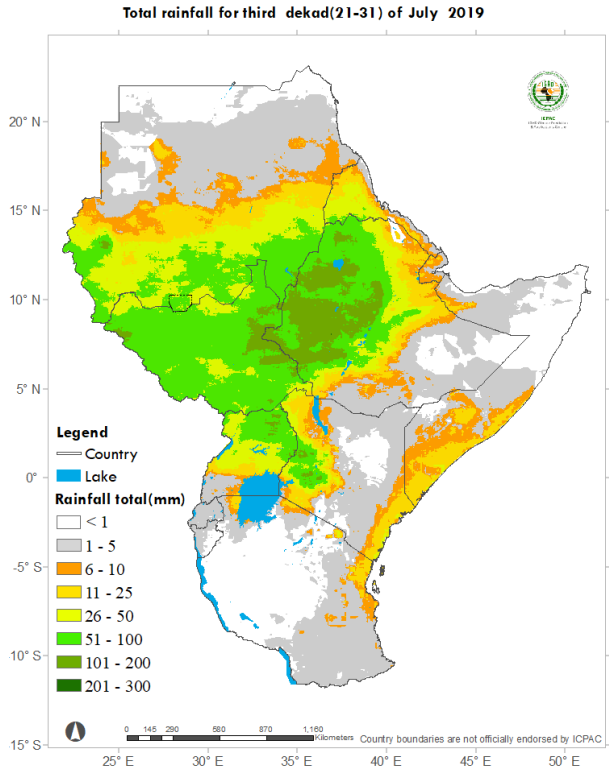


Figure 1a: moderate to very heavy rainfall was recorded mainly in southern parts of Sudan, most of South Sudan, western and central Ethiopia, north and eastern Uganda, and western parts of Kenya. *(Data: ICPAC Blended CHIRP)*

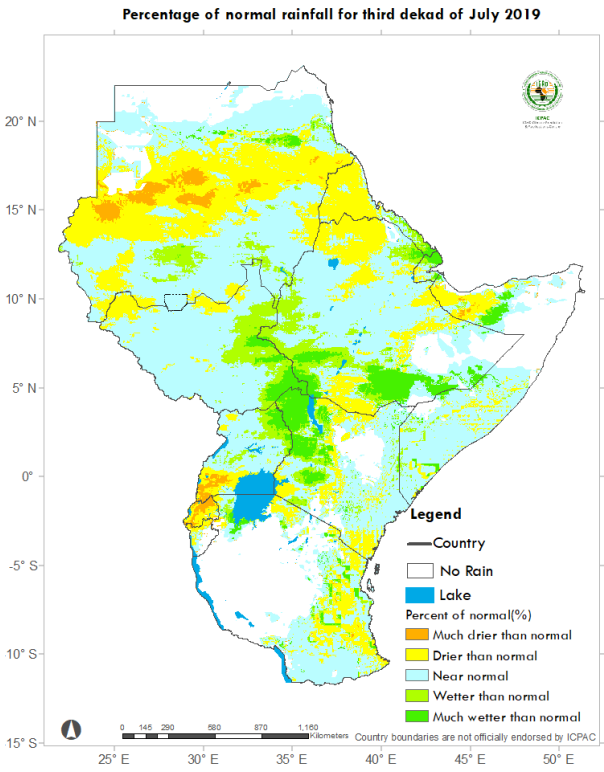
Several areas in the GHA recorded maximum temperature that was warmer than or near the climatological mean. However northern, and southwest Sudan, northwest and southeast

South Sudan extending to southwest Ethiopia and northwest Kenya, south eastern part of Somalia, and southwest Tanzania recorded maximum temperature that was cooler than the climatological mean. Several areas in the equatorial sector and eastern and southeastern parts of the northern sector of the GHA recorded minimum temperature that was warmer than the climatological mean. Much of the rest of the GHA recorded minimum temperature that was cooler than or near the climatological mean during the third dekad of July 2019 (Figure 2 and Figure 3).

The rainfall forecast for the second dekad (11-20) of August indicates that heavy to very heavy rainfall (50-200mm) is expected over northern, central and western Ethiopia, southern parts of Sudan, southwestern Eritrea, over much of South Sudan, and western highlands of Kenya. Some areas in southern Eritrea, parts of Djibouti, northern Uganda, and central and coastal Kenya should expect light to moderate to heavy rainfall (10-50mm). The rest of the region is expected to record light rainfall or remain relatively dry.

3. Observed rainfall during the third dekad (21-31) of July 2019

Figure 1a, 1b and 1c shows the distribution of total rainfall, percentage of the long-term average rainfall, and the standardized precipitation index (SPI), respectively.



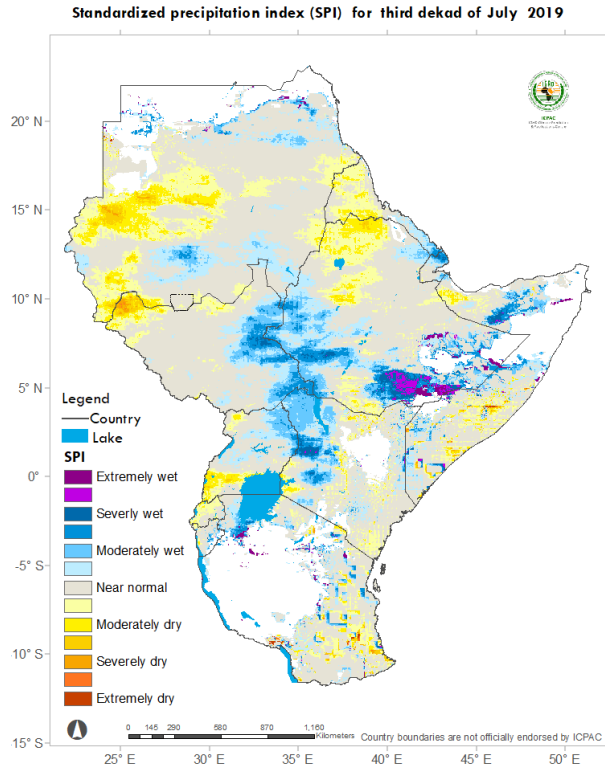


Figure 1b **Figure 1c**

Most parts of the northern sector and equatorial sector recorded near average rainfall, except for southern and western parts of Sudan, northern parts of South Sudan, western Eritrea, northern Ethiopia, southwest Uganda, and northeastern Rwanda which recorded below average rainfall *(Data: ICPAC Blended CHIRP)*

4. Maximum and Minimum Temperature during the third dekad (21-31) of July 2019

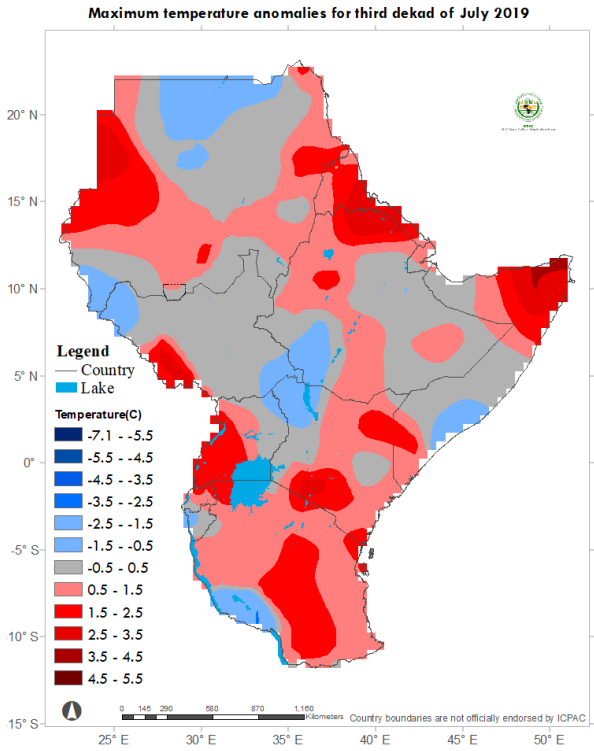


Figure 2: Most areas of the GHA was warmer than or near the mean condition for maximum temperatures except for western part of Tanzania, southwest part of Sudan, northwest and southeast South Sudan, southwest Ethiopia, southeast Somalia, and the northwest parts of Kenya which recorded maximum temperatures cooler than the mean*(Data Sourced from: the* NOAA-*NCEP CPC. GTS gridded data)*

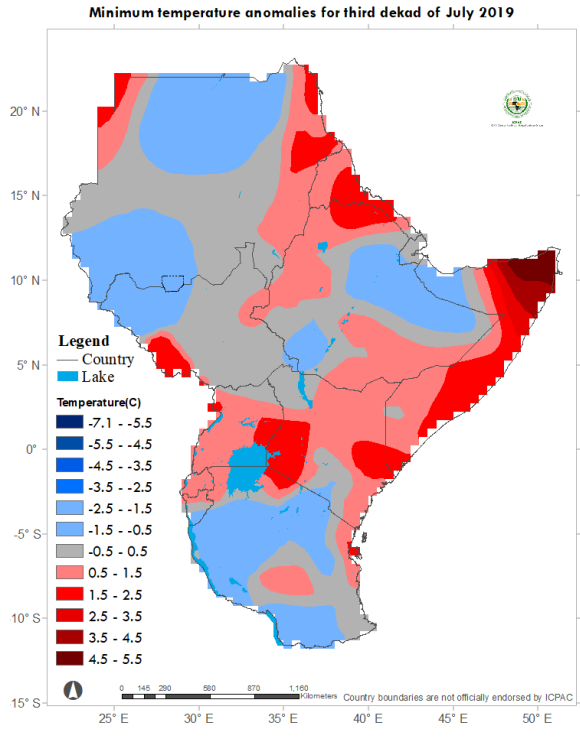


Figure 3: Minimum temperature cooler than or near the mean were recorded in much of the Sudan, South Sudan, southwest and eastern Ethiopia, and much of Tanzania.much of the rest of the the equatorial sector and eastern and southeastern parts of the northern sectors of the GHA recorded minimum temperature that was warmer than the climatological mean *(Data Source: Data Sourced from: the NOAA-NCEP CPC. GTS gridded data)*

4. Climate Forecast

Rainfall Forecast

Forecast for the second dekad (11-20) of the August indicates that heavy to very heavy rainfall is expected in southern parts of Sudan, northern parts of South Sudan, southwestern Eritrea, western, northern and central Ethiopia, and some parts of western Kenya. Northern parts of Sudan, southern Ethiopia, southern Uganda, and much of Rwanda, Burundi, Kenya and Somalia and Tanzania are forecasted to record light rainfall or remain generally dry. Much of the rest of the GHA is forecasted to record moderate to heavy rainfall.

Temperature forecast

Higher daily-mean temperatures are to be recorded in Sudan, Djibouti, southern Eritrea, parts of north eastern and southeastern Ethiopia, northern Kenya, and parts of northern Somalia. Cool average daily temperatures (less than 20^{o}C) are forecasted to be recorded in central and western Ethiopia, central highlands and parts of western Kenya, southern parts of Uganda, parts of Rwanda, Burundi, and southwest, central and northeastern parts of Tanzania

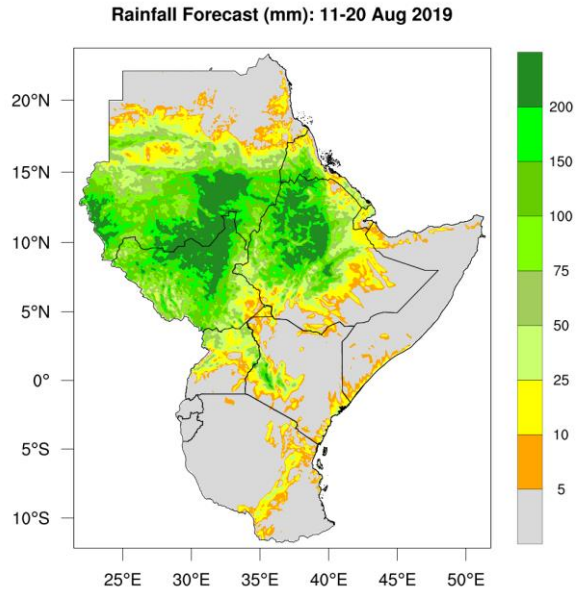


Figure 4: central and southern parts of Sudan, western, northern and central parts of Ethiopia, several parts of Djibouti and Eritrea, most areas in South Sudan, northern Uganda, and western and central parts of Kenya are expected to receive moderate to very heavy rainfall. The rest of the region is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

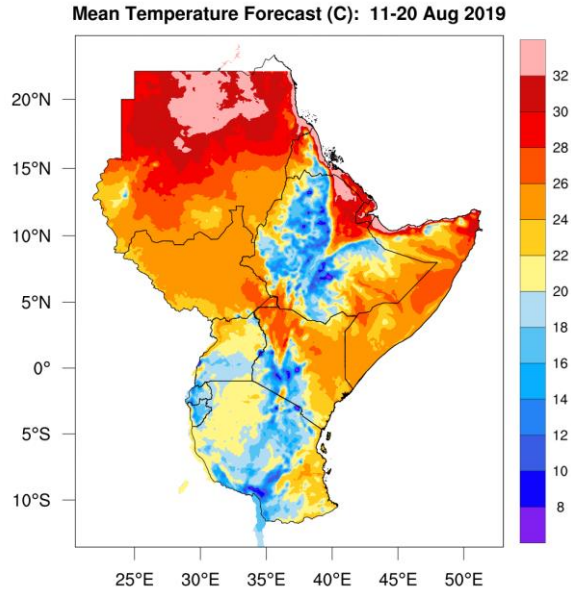


Figure 5: Most parts of Sudan, Eritrea, Djibouti, northern and central parts of Sudan, northeast Ethiopia, northwest Kenya, and northern parts of Somalia are expected to record very warm to hot weather. Cooler weather is expected in western and central highlands of Ethiopia, southern parts of Uganda, 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%

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