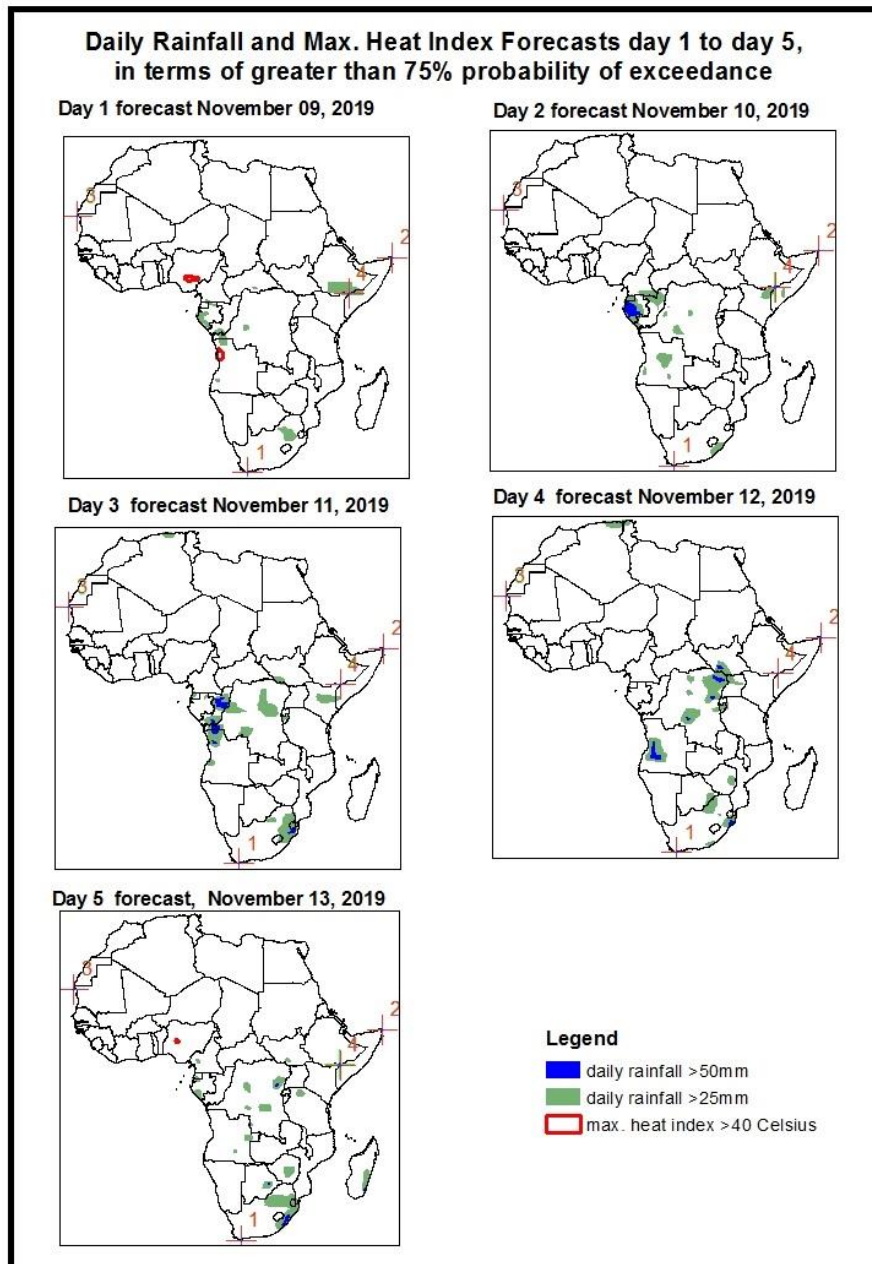


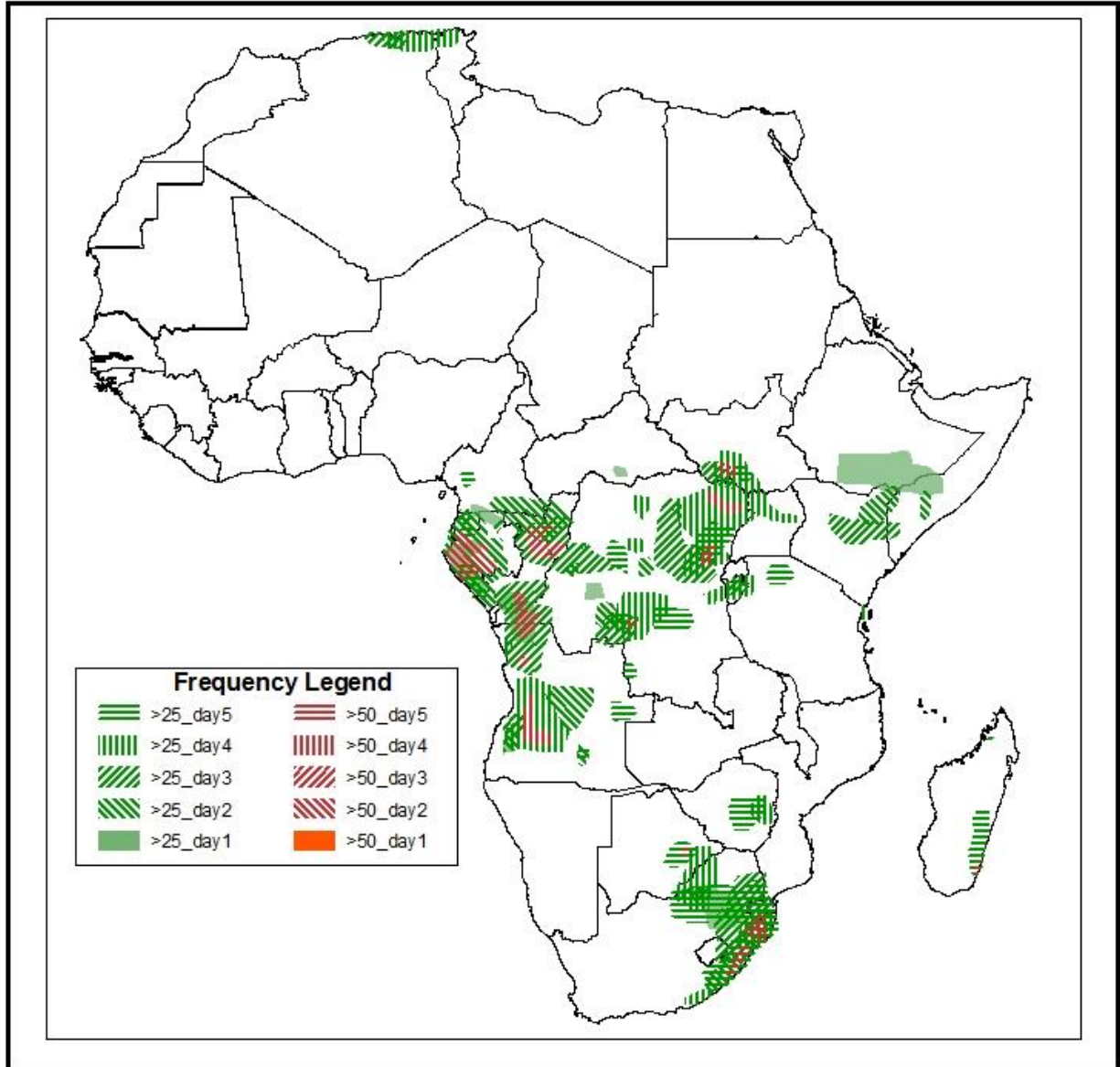
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on November 08, 2019)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 09 November – 13 November, 2019)**

The forecasts are expressed in terms of high probability of precipitation (POP), valid 06Z to 06Z, and exceedance probability of maximum heat index (>40°C), based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



## Five Days Rainfall Forecast Summary November 09 - November 13, 2019

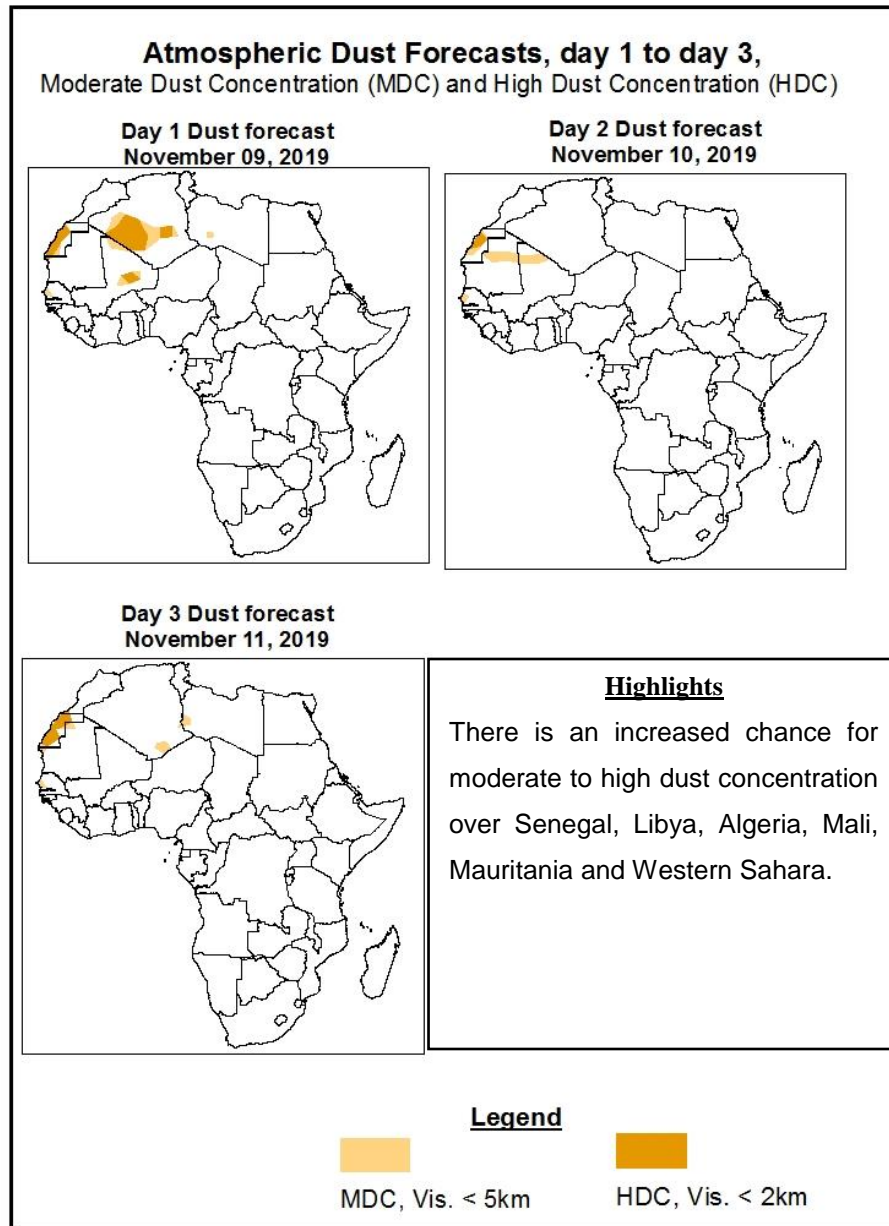


### **Highlights**

- Westerly flow from the Atlantic Ocean with its associated lower-level convergence is expected to enhance rainfall over the western portions of equatorial Africa. Onshore flow from the Indian Ocean with its associated lower-level convergence is expected to enhance rainfall across South Sudan, Ethiopia and western Somalia.
- At least 25mm for two or more days is likely over portions of Algeria, Tunisia, Cameroon, Equatorial Guinea, Gabon, Republic of Congo, DRC, Angola, Uganda, Kenya, South Sudan, Somalia, Burundi, Tanzania, Madagascar, Zimbabwe, Botswana, Eswatini, Lesotho and South Africa.
- There is an increased likelihood for daily rainfall to exceed 50mm over local areas in Gabon, Republic of Congo, DRC, Angola, South Sudan, Botswana, Madagascar and South Africa.
- There is an increased chance for daily maximum heat index to exceed 40°C over Nigeria and Angola.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: 09 Nov – 11 Nov 2019)

The forecasts are expressed in terms of high probability of dust concentration, based on the Navy Aerosol Analysis and Prediction System, NCEP/GFS lower-level wind forecasts and expert assessment.



### **1.3. Model Discussion, Valid: 09 November – 13 November 2019**

The Azores High Pressure system over the Northeast Atlantic is generally expected to intensify with its central pressure value increasing from 1028hPa to 1035hPa during the forecast period.

The St. Helena High Pressure system is over the tip of South Africa and expected to slightly weaken while shifting eastwards with its central pressure value decreasing from 1032hPa to 1028hPa for the first three days of the forecast period and then it is expected to intensify again from 1028hPa to 1037hPa during the rest of the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean is generally expected to weaken while shifting eastwards with its central pressure value decreasing from 1028hPa to 1026hPa for the first three days of the forecast period and then it is expected to disappear from this area during the remainder of the forecast period.

At 925-hPa level, moist southwesterly flow from the Atlantic Ocean is expected to prevail across the Gulf of Guinea, southern Sahel regions and the neighboring areas of Central Africa. On the other hand, easterly flow from the Indian Ocean with its low-level convergence is expected to prevail across the Great Horn of Africa and parts of Central Africa while the northeasterly flow is expected to prevail across most parts of southern Africa.

At 850-hPa level, strong dry northerly flow is expected remain active and prevail across southern Sahel countries. On the other hand, meridional and seasonal wind convergence is expected to remain active in the Lake Victoria region, Congo Basin and the neighboring areas of Central Africa, southern Cameroon, Gabon, Angola, CAR and Sudan during the forecast period. Converging winds over Somalia, Kenya, Tanzania, Uganda, Ethiopia, South Sudan, Mozambique, Malawi, Zimbabwe, Zambia, Namibia, Botswana, Madagascar and South Africa; these are likely to maintain the occasional enhanced to moderate precipitation over these areas.

Westerly flow from the Atlantic Ocean with its associated lower-level convergence is expected to enhance rainfall over the western portions of equatorial Africa. Onshore flow from

the Indian Ocean with its associated lower-level convergence is expected to enhance rainfall across South Sudan, Ethiopia and western Somalia. At least 25mm for two or more days is likely over portions of Algeria, Tunisia, Cameroon, Equatorial Guinea, Gabon, Republic of Congo, DRC, Angola, Uganda, Kenya, South Sudan, Somalia, Burundi, Tanzania, Madagascar, Zimbabwe, Botswana, Eswatini, Lesotho and South Africa. There is an increased likelihood for daily rainfall to exceed 50mm over local areas in Gabon, Republic of Congo, DRC, Angola, South Sudan, Botswana, Madagascar and South Africa. There is an increased chance for daily maximum heat index to exceed 40°C over Nigeria and Angola.

## 2.0. Previous and Current Day Weather over Africa

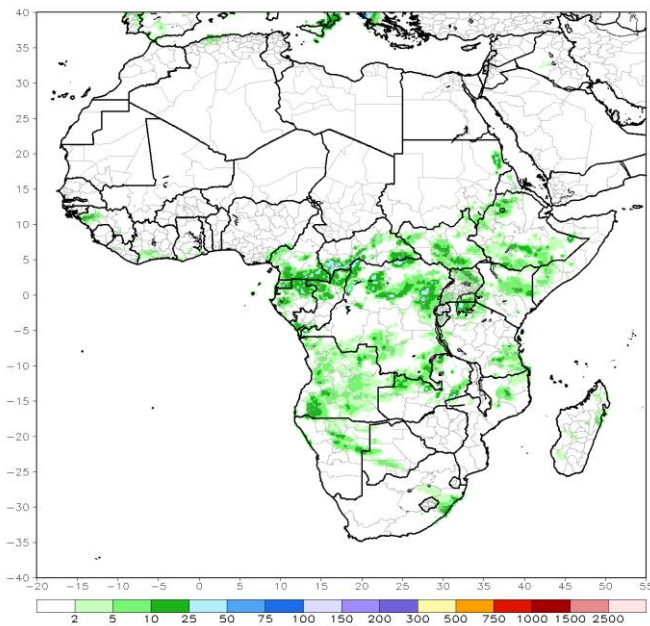
### 2.1. Weather assessment for the previous day (Nov 07, 2019)

Daily rainfall amount exceeded 25mm over Cameroon, Equatorial Guinea, Gabon, DRC, Republic of Congo, CAR, Tanzania, Ethiopia, Sudan and Zambia; and exceeded 50mm over CAR.

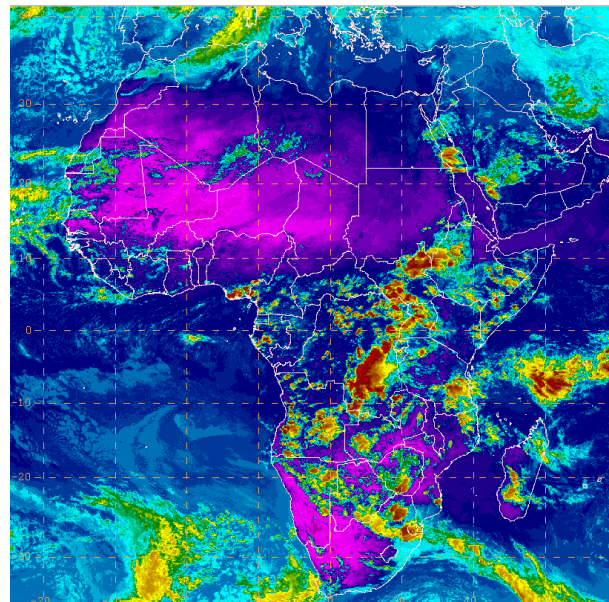
### 2.2. Weather assessment for the current day (Nov 08, 2019)

Deep convective clouds are observed over many places in Central Africa, Great Horn of Africa and portions of southern Africa.

RFE2 Daily Total Rainfall (mm)  
Period: 07Nov2019



IR Satellite Image (valid 1452 November 08, 2019)



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