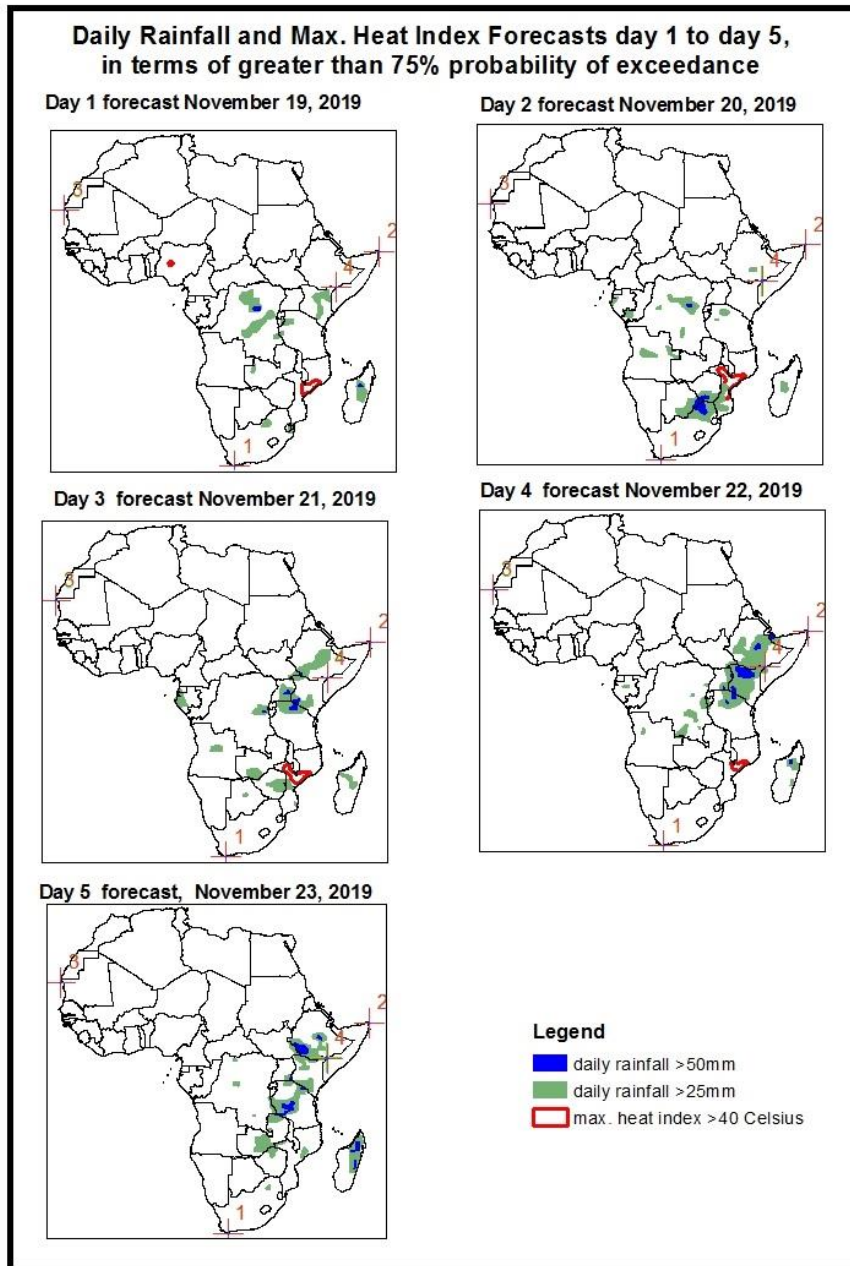


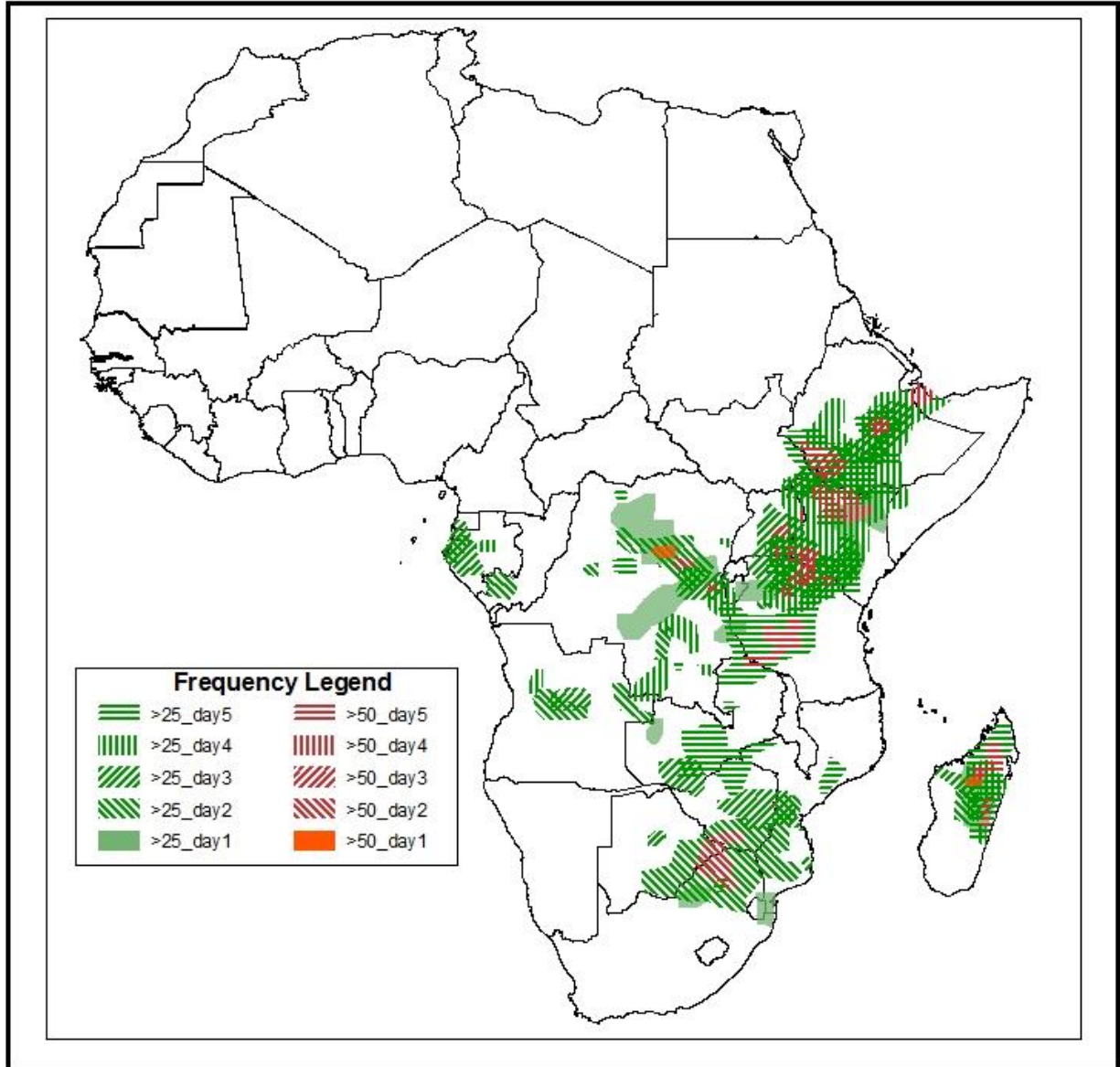
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on November 18, 2019)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts** (valid: 19 November – 23 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 19 - November 23, 2019

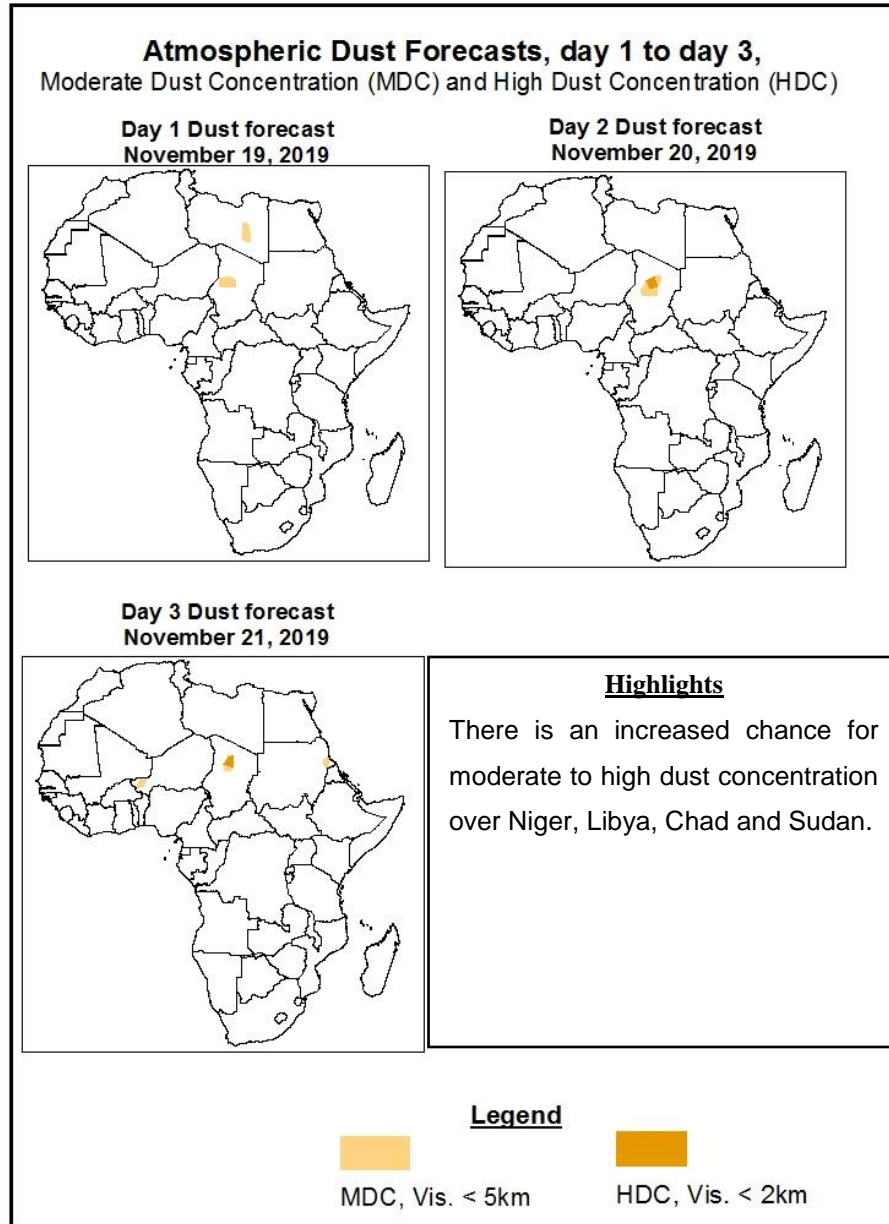


### Highlights

- Strong lower-level convergence in the Lake Victoria region and onshore flow from the Indian Ocean with its associated lower-level convergence is expected to enhance rainfall over the many places in the Greater Horn of Africa and Southeast Africa.
- At least 25mm for two or more days is likely over portions of Gabon, Equatorial Guinea, Republic of Congo, DRC, Angola, Uganda, South Sudan, Kenya, Ethiopia, Somalia, Djibouti, Zambia, Zimbabwe, Mozambique, Madagascar, Botswana and South Africa.
- There is an increased likelihood for daily rainfall to exceed 50mm over local areas in South Africa, Botswana, Zimbabwe, Madagascar, DRC, Zambia, Tanzania, Uganda, Kenya, Ethiopia, Somalia and Djibouti.
- There is an increased chance for daily maximum heat index to exceed 40°C over Nigeria and Mozambique.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: 19 Nov – 21 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: 19 November –23 November 2019**

The Azores High Pressure system over the Northeast Atlantic is generally expected to weaken while shifting eastwards with its central pressure value decreasing from 1026hPa to 1019hPa during the forecast period.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is generally expected to weaken while shifting eastwards with its central pressure value decreasing from 1030hPa to 1019hPa during the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to weaken while shifting eastwards with its central pressure value decreasing from 1028hPa to 1023hPa for the first three days of the forecast period and then it is expected to slightly strengthen from 1023hPa to 1025hPa 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 across 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 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.

Strong lower-level convergence in the Lake Victoria region and onshore flow from the Indian Ocean with its associated lower-level convergence is expected to enhance rainfall over the many places in the Greater Horn of Africa and Southeast Africa. At least 25mm for two or

more days is likely over portions of Gabon, Equatorial Guinea, Republic of Congo, DRC, Angola, Uganda, South Sudan, Kenya, Ethiopia, Somalia, Djibouti, Zambia, Zimbabwe, Mozambique, Madagascar, Botswana and South Africa. There is an increased likelihood for daily rainfall to exceed 50mm over local areas in South Africa, Botswana, Zimbabwe, Madagascar, DRC, Zambia, Tanzania, Uganda, Kenya, Ethiopia, Somalia and Djibouti. There is an increased chance for daily maximum heat index to exceed 40°C over Nigeria and Mozambique.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (Nov 17, 2019)

Daily rainfall amount exceeded 25mm over Guinea, Sierra Leone, Liberia, Gabon, Republic of Congo, DRC, Uganda, Tanzania, Kenya, Ethiopia, South Sudan, Malawi, Zambia, Zimbabwe, Mozambique, Eswatini, South Africa and Madagascar; and exceeded 50mm over Guinea, Sierra Leone, Liberia, Republic of Congo, DRC, Uganda, Tanzania, Malawi, Zambia and Madagascar.

### 2.2. Weather assessment for the current day (Nov 18, 2019)

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

