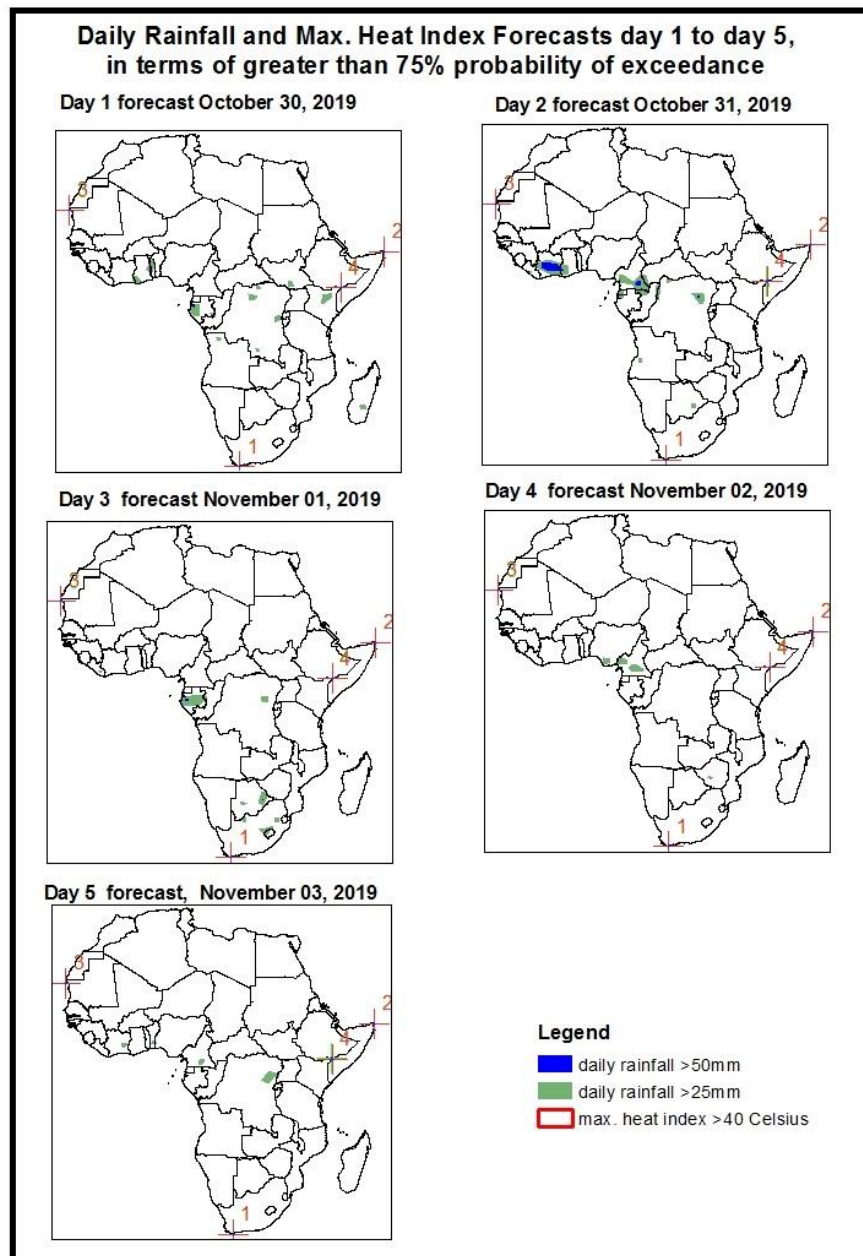


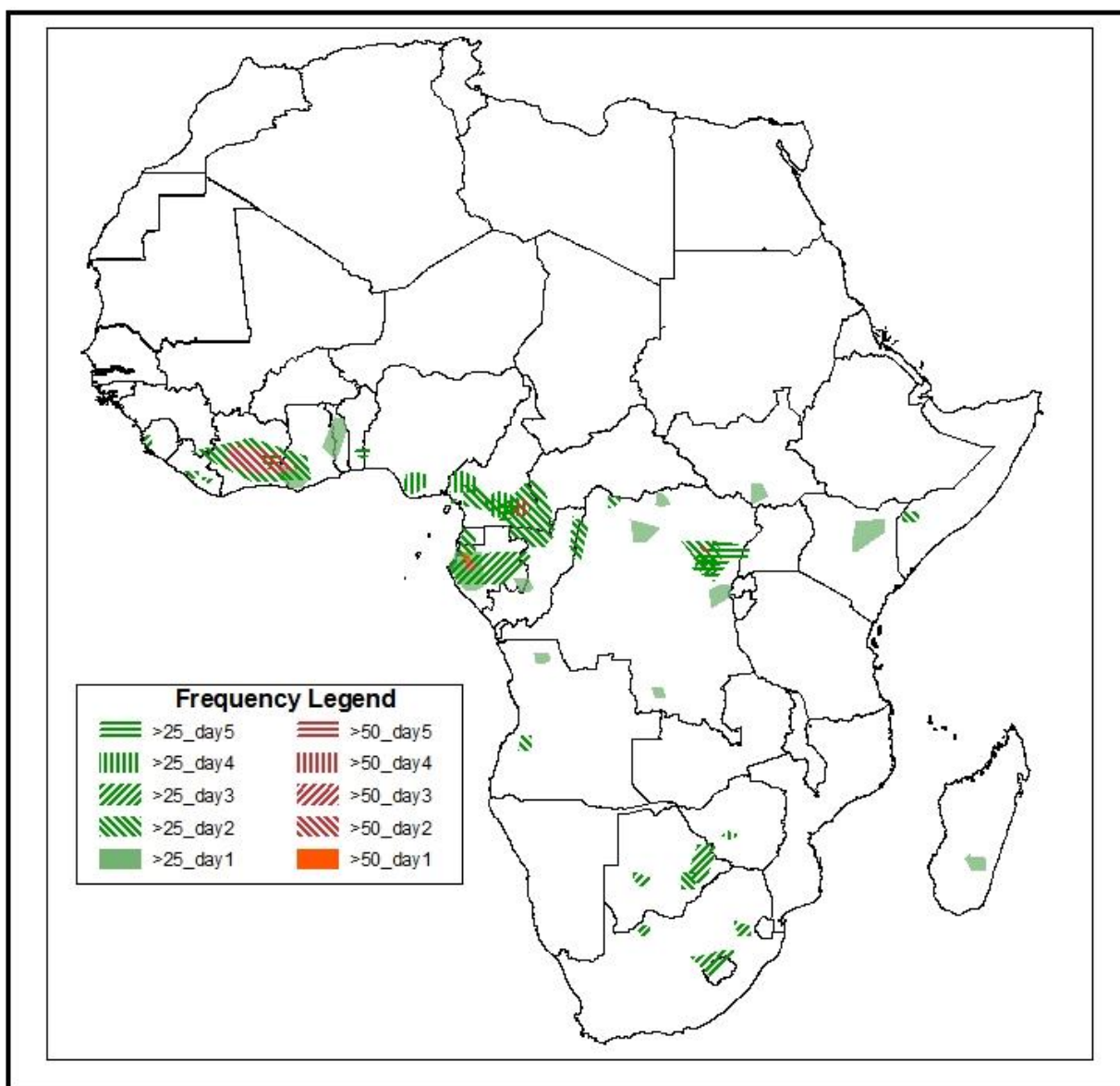
## 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on October 29, 2019)

### 1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 30 October – 03 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 ( $>40^{\circ}\text{C}$ ), based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



## Five Days Rainfall Forecast Summary October 30 - November 03, 2019

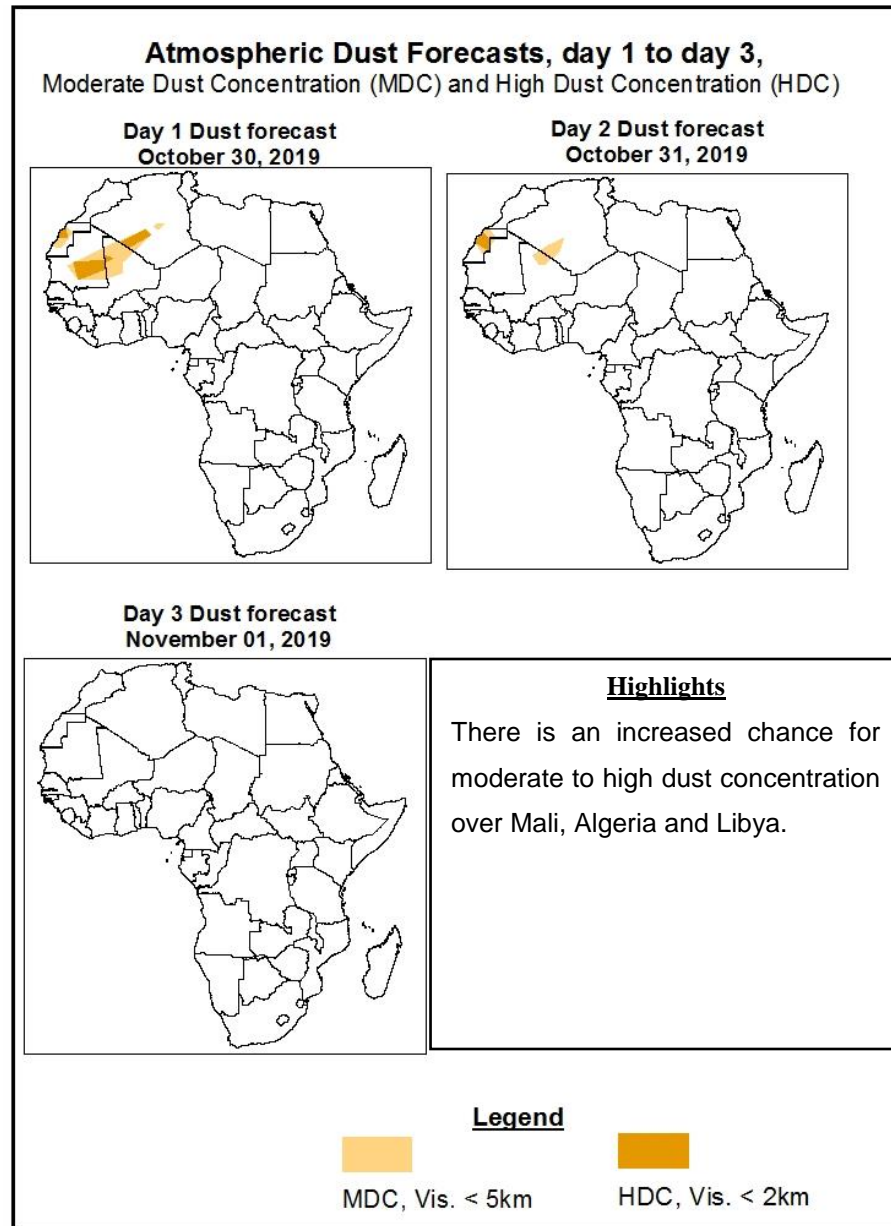


### Highlights

- The monsoon flow from the Atlantic Ocean with its associated lower-level convergence is expected to enhance rainfall over portions of the Gulf of Guinea and Central Africa. Lower-level wind convergence is also expected to enhance rainfall in the Lake Victoria region and parts of Southern Africa.
- At least 25mm for two or more days is likely over portions of Sierra Leone, Liberia, Cote D'Ivoire, Ghana, Benin, Nigeria, Cameroon, DRC, CAR, Gabon, Equatorial Guinea, western Uganda, Somalia, Angola, Botswana, Zimbabwe, Lesotho and South Africa.
- There is an increased likelihood for daily rainfall to exceed 50mm over local areas in Cote d'Ivoire, Ghana and Cameroon.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: 30 Oct – 01 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: 30 October –03 November 2019**

The Azores High Pressure system over the Northeast Atlantic is a bit far and diffuse but shifting eastwards and is expected to weaken with its central pressure value decreasing from 1035hPa to 1029hPa during the forecast period.

The St. Helena High Pressure system over Southeast Atlantic Ocean expected to weaken while shifting eastward with its central pressure value decreasing from 1028hPa to 1021hPa during the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to remain constant with its central pressure value at 1032hPa for the first two days of the forecast period and then it is expected to weaken with its central pressure value decreasing from 1032hPa to 1026hPa during the rest 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 equatorial parts of Great Horn of Africa and parts of Central Africa while the northeasterly flow is expected to prevail across southern Africa.

At 850-hPa level, strong dry northerly flow is expected remain active and prevail across southern Sahel. Otherwise, meridional wind convergence is expected to remain active in the Lake Victoria region, Congo Basin and the neighboring areas of Central Africa, southern Cameroon, Angola, southern Chad and CAR during the forecast period. Converging winds over Great Horn of Africa are likely to maintain occasional enhanced to moderate precipitation over these areas.

The monsoon flow from the Atlantic Ocean with its associated lower-level convergence is expected to enhance rainfall over portions of the Gulf of Guinea and Central Africa. Lower-level wind convergence is also expected to enhance rainfall in the Lake Victoria region and parts of Southern Africa. At least 25mm for two or more days is likely over portions of Sierra Leone, Liberia, Cote D'Ivoire, Ghana, Benin, Nigeria, Cameroon, DRC, CAR, Gabon,

Equatorial Guinea, western Uganda, Somalia, Angola, Botswana, Zimbabwe, Lesotho and South Africa. There is an increased likelihood for daily rainfall to exceed 50mm over local areas in Cote d'Ivoire, Ghana and Cameroon.

## 2.0. Previous and Current Day Weather over Africa

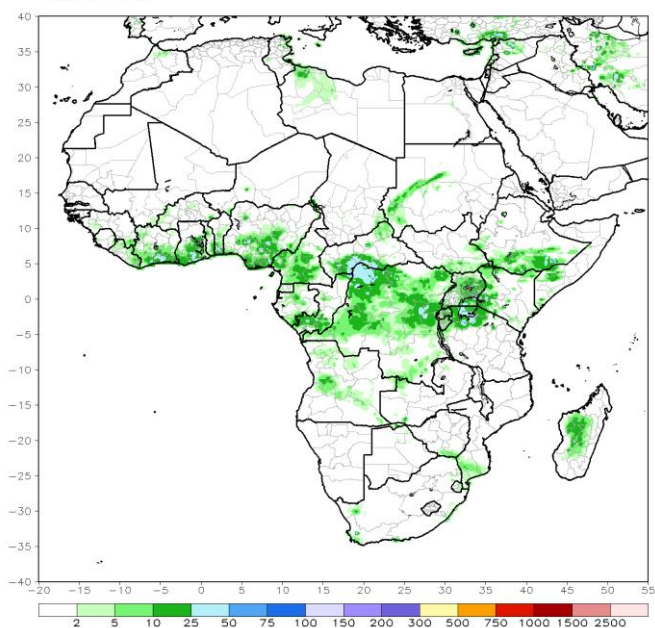
### 2.1. *Weather assessment for the previous day* (Oct 28, 2019)

Daily rainfall amount exceeded 25mm over Cote d'Ivoire, Ghana, Benin, Nigeria, Republic of Congo, DRC, CAR, Tanzania, Uganda, Kenya and Mozambique; and exceeded 50mm over CAR, DRC, Congo, Tanzania and Ethiopia.

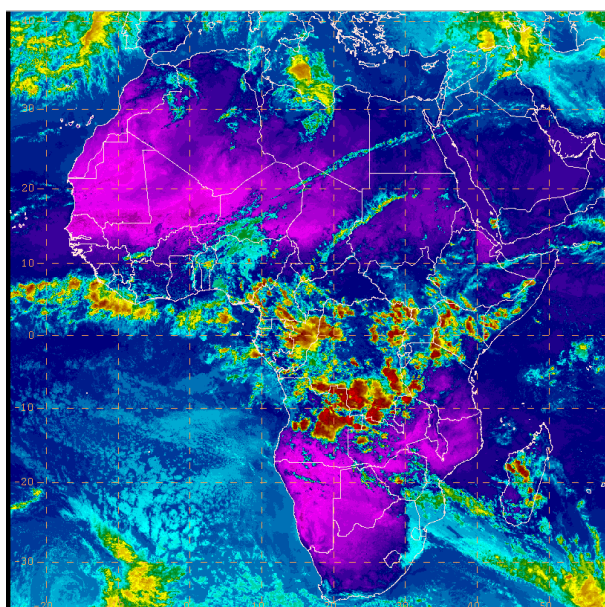
### 2.2. *Weather assessment for the current day* (Oct 29, 2019)

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

RFE2 Daily Total Rainfall (mm)  
Period: 28Oct2019



IR Satellite Image (valid 1452 October 29, 2019)



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