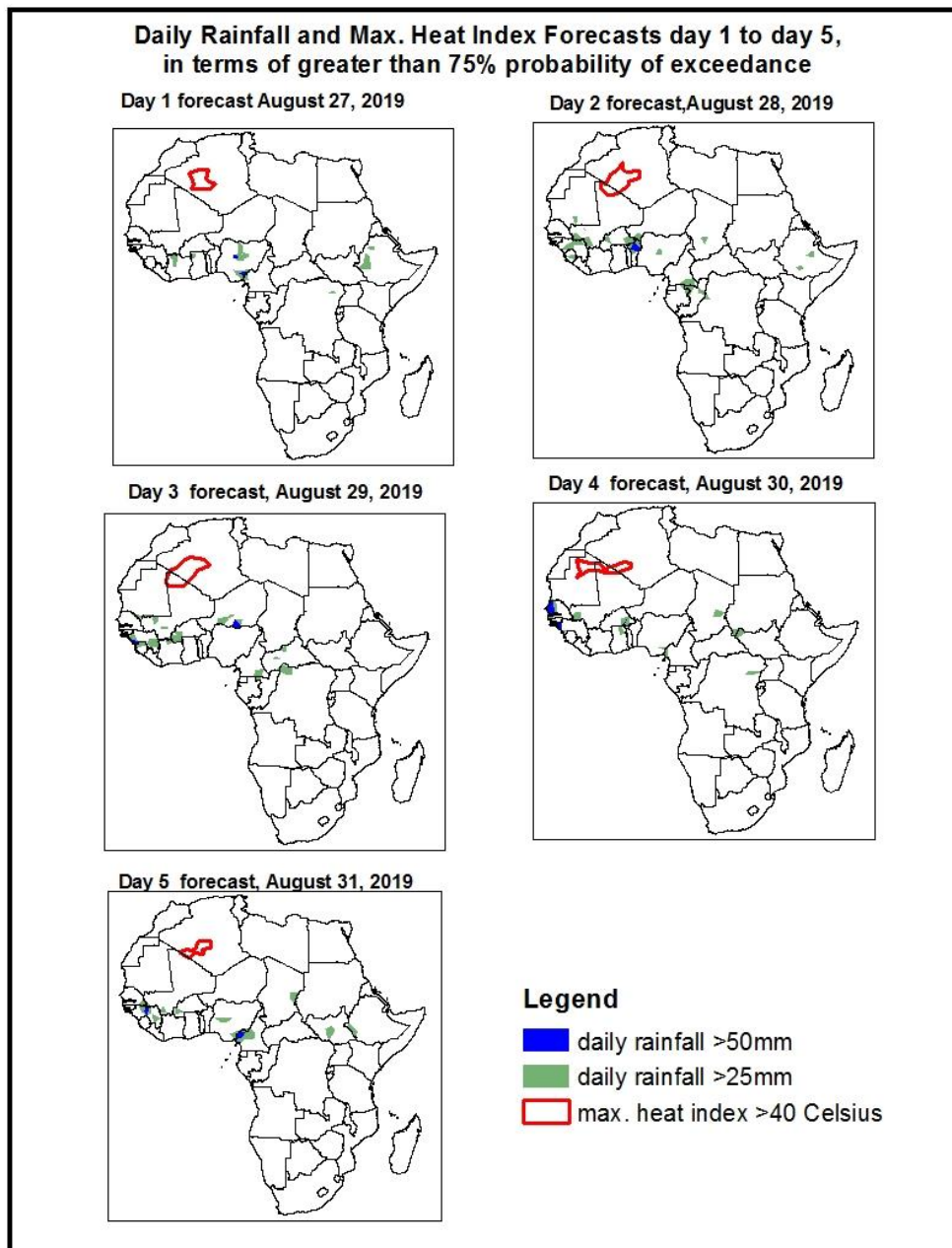


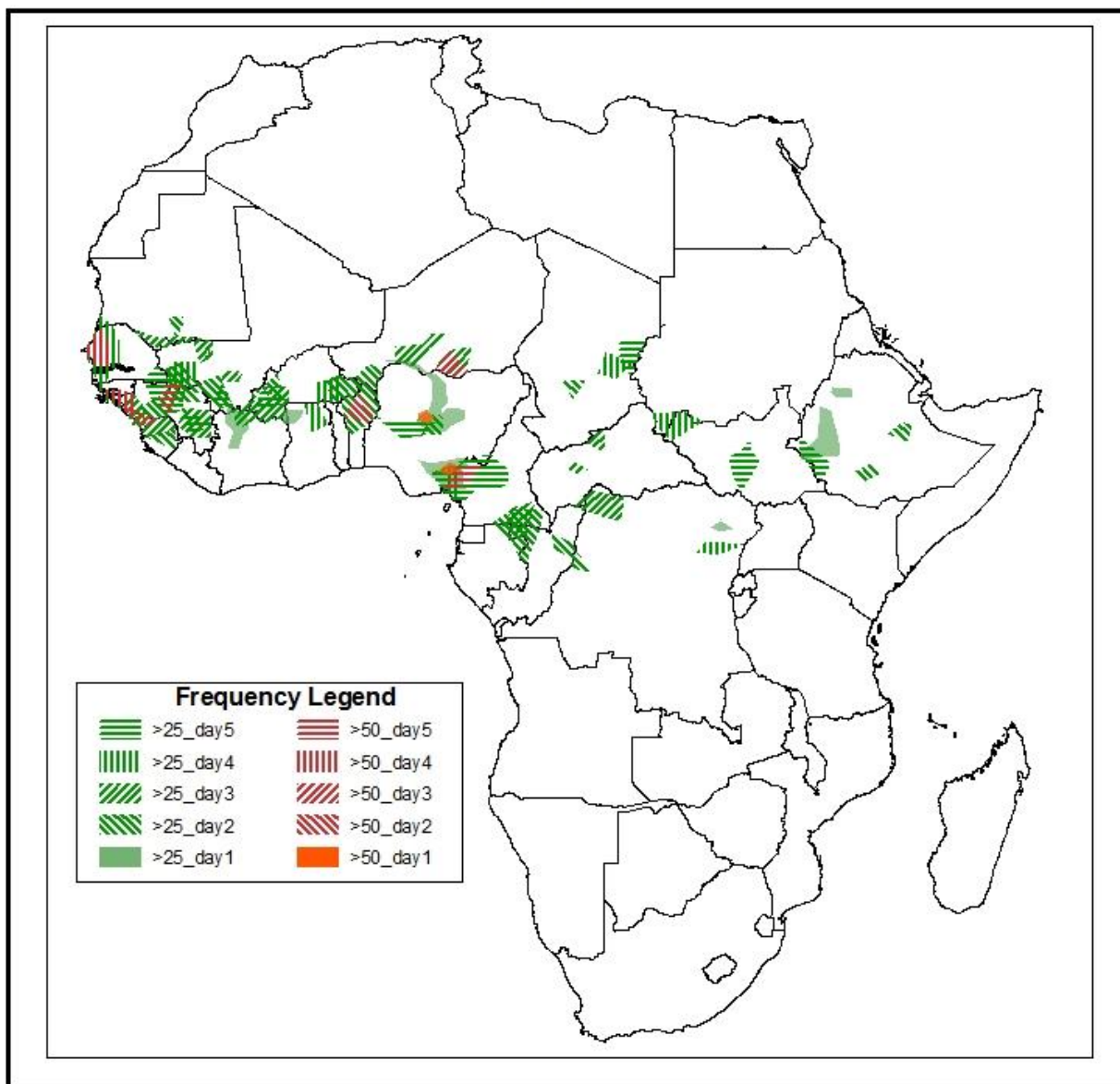
## 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on August 26, 2019)

### 1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 27 – 31 August, 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 27 - 31 August, 2019

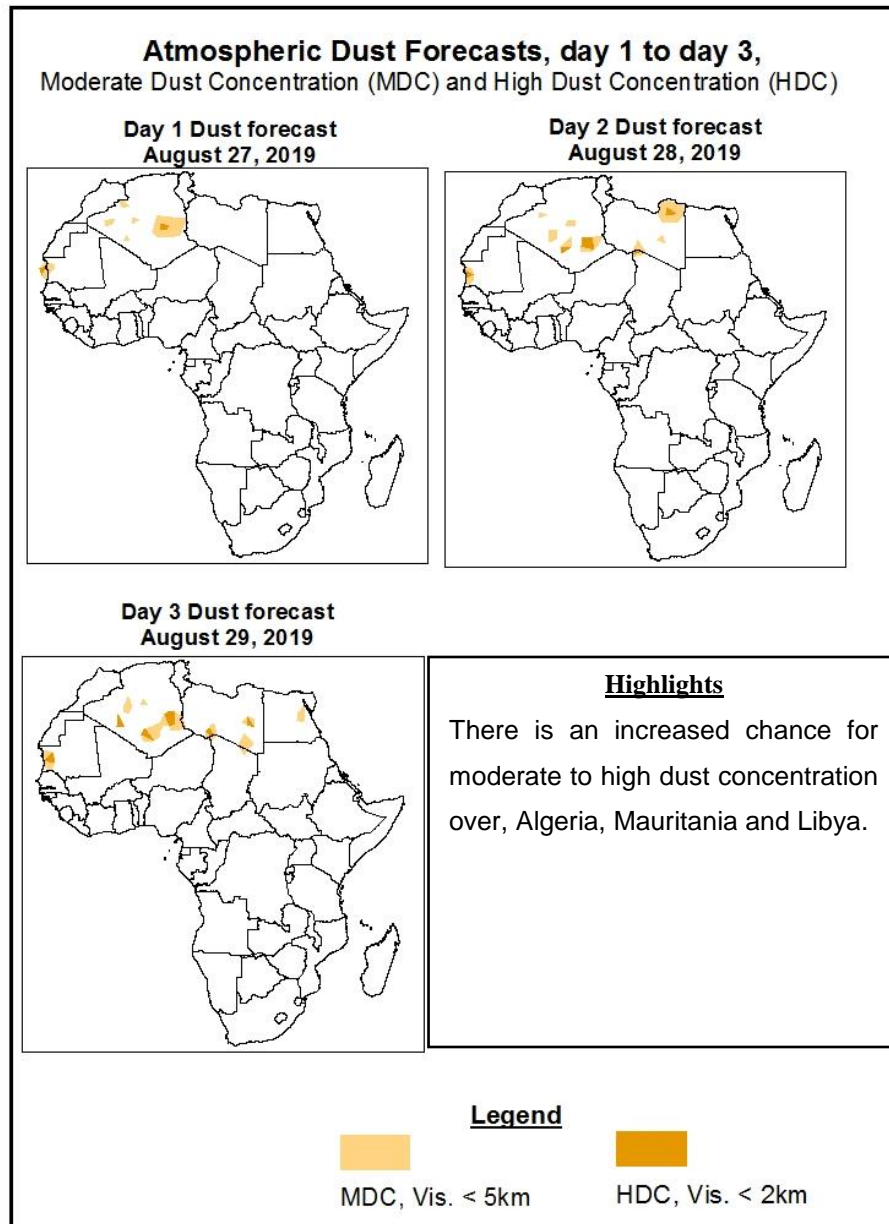


### Highlights

- The monsoon flow from the Atlantic Ocean with its associated lower-level convergence, and westward propagating meso-scale convective systems are expected to enhance rainfall over Western Africa, portions of the Sahel and Central Africa countries.
- At least 25mm for two or more days is likely over some countries Western Africa, portions of the Sahel and Central Africa. There is an increased chance for daily rainfall to exceed 50mm over portions of Guinea Bissau, West of Senegal, Southwest of Guinea, South of Niger and Center and Southeast of Nigeria
- There is an increased chance for daily maximum heat index to exceed 40°C over Algeria, Mali and Mauritania.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: 27 – 29 August 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: 27 – 31 August 2019**

The Azores High Pressure system over the Northeast Atlantic is expected to weaken during the first half period with its central pressure value decreasing from 1026hPa to 1022hPa. During the second half of the period, is expected to getting strength and shift to the North, with its central pressure value increasing from 1022hPa to 1028hPa

The St. Helena High Pressure system over Southeast Atlantic Ocean is expected to weaken with its central pressure value increasing from 1038hPa to 1033hPa during the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to weaken with its central pressure value decreasing from 1029hPa to 1030hPa during the forecast period.

Thermal low across the Sahel region is expected to remain quasi stationary with its central pressure value about 1008 hPa, with a slightly strengthen to 1011 hPa at the end of forecast period.

At 925-hPa level, strong dry northerly to northeasterly flow is expected to prevail across Northwest Africa. In contrast, moist southwesterly flow from the Atlantic Ocean is expected to prevail across the Gulf of Guinea and the Sahel regions, and the neighboring areas of Central Africa.

At 850-hPa, lower-level wind convergences are expected to remain active over portions of the Sahel Central Africa and Lake Victoria regions. An area of cyclonic circulation is over Western Africa during the forecast period.

At 700-hPa, a broad area of anticyclonic flow is expected to prevail and intensify across much of Northwest and West Africa during the forecast period.

The monsoon flow from the Atlantic Ocean with its associated lower-level convergence, and westward propagating meso-scale convective systems are expected to enhance rainfall over Western Africa, portions of the Sahel and Central Africa countries. At least 25mm for two or more days is likely over some countries Western Africa, portions of the Sahel and Central Africa. There is an increased chance for daily rainfall to exceed 50mm over portions of Guinea Bissau, West of Senegal, Southwest of Guinea, South of Niger and Center and Southeast of Nigeria. There is an increased chance for daily maximum heat index to exceed 40oC over Algeria, Mali and Mauritania.

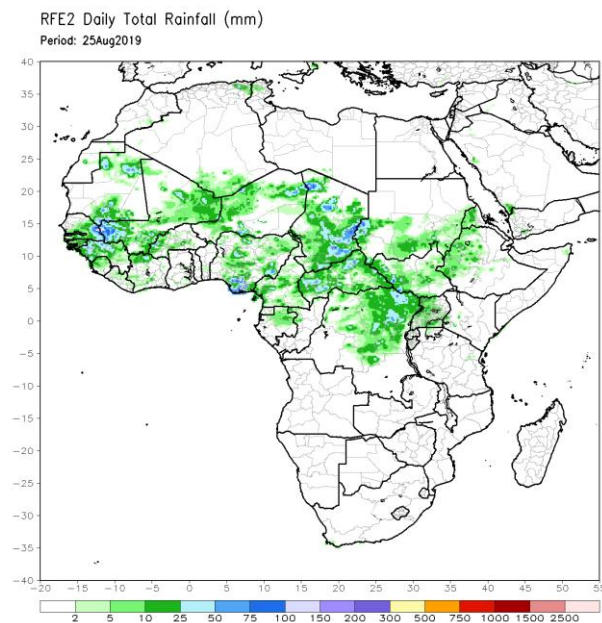
## 2.0. Previous and Current Day Weather over Africa

### 2.1. *Weather assessment for the previous day* (August 25, 2019)

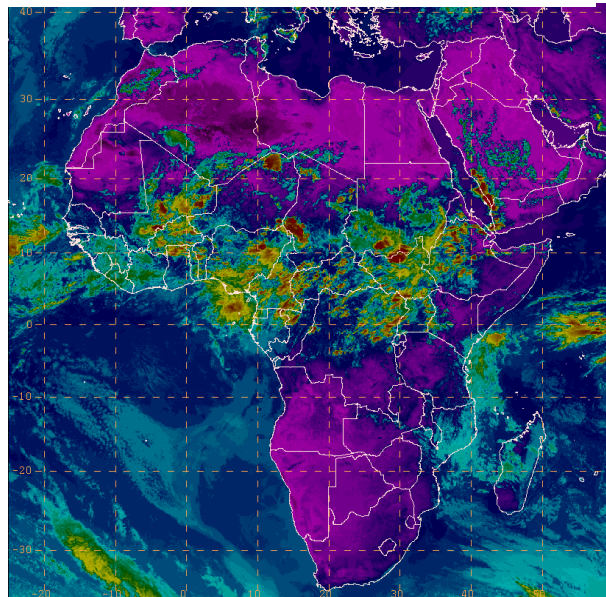
Daily rainfall amount exceeded 25mm over Northeast of Niger, Southwest of Senegal and Gambia, Northwest of Mali, North of Mauritania, North of Benin, South of Nigeria, Southwest of Cameroon, Center and Southeast of Chad, Central Africa and some portions of RDC, and exceeded 50mm over East of Senegal, West of Mali, some portions of Chad, South Nigeria, and West of Sudan.

### 2.2. *Weather assessment for the current day* (August 26, 2019)

Deep convective clouds are observed over portions of the Sahel, Central Africa and some portions of the Greater Horn of Africa.



IR Satellite Image (valid 1452 August 26, 2019)



*Author: Eufemia Brito (CPC-African Desk/Cabo Verde Meteorological Service INMG)*