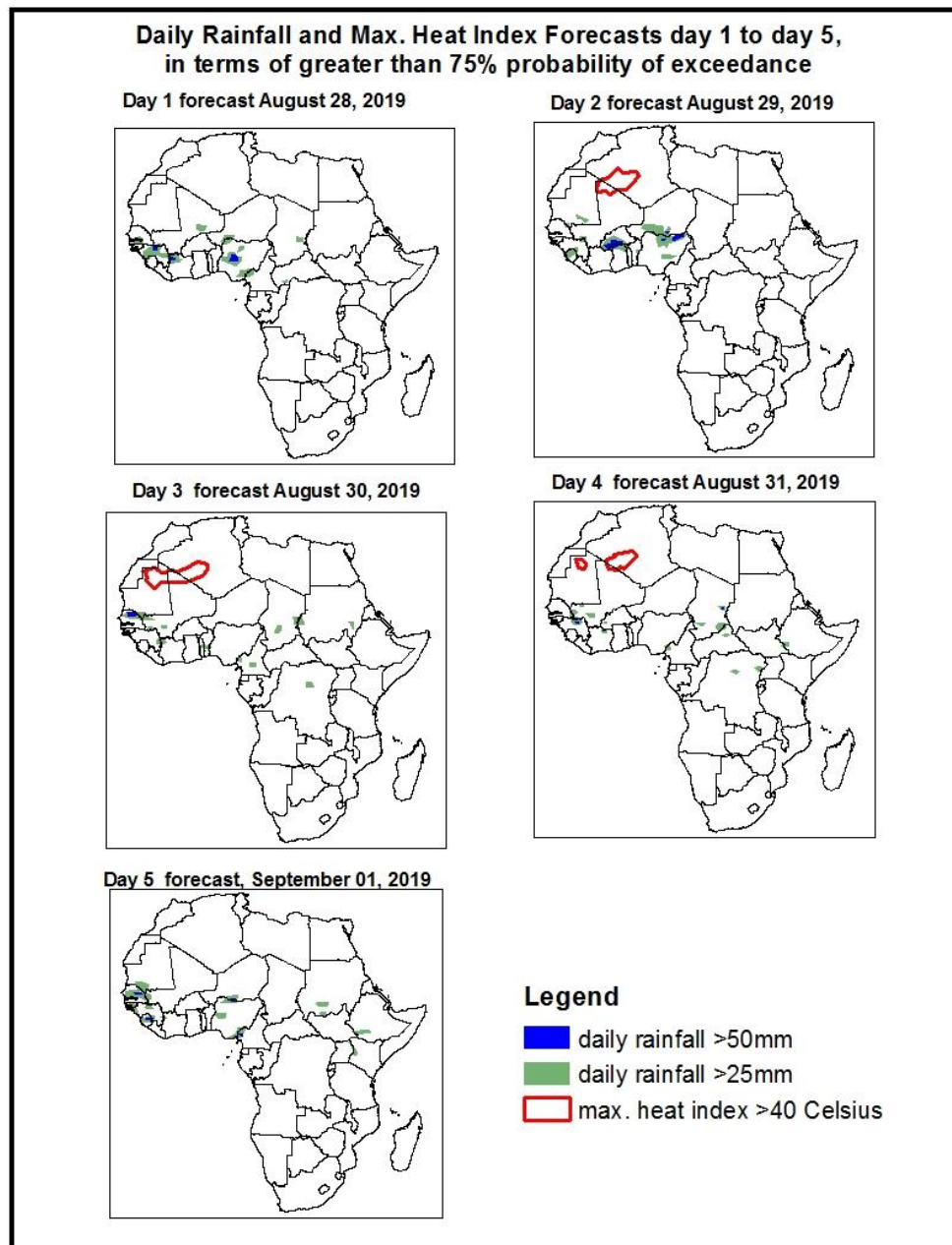


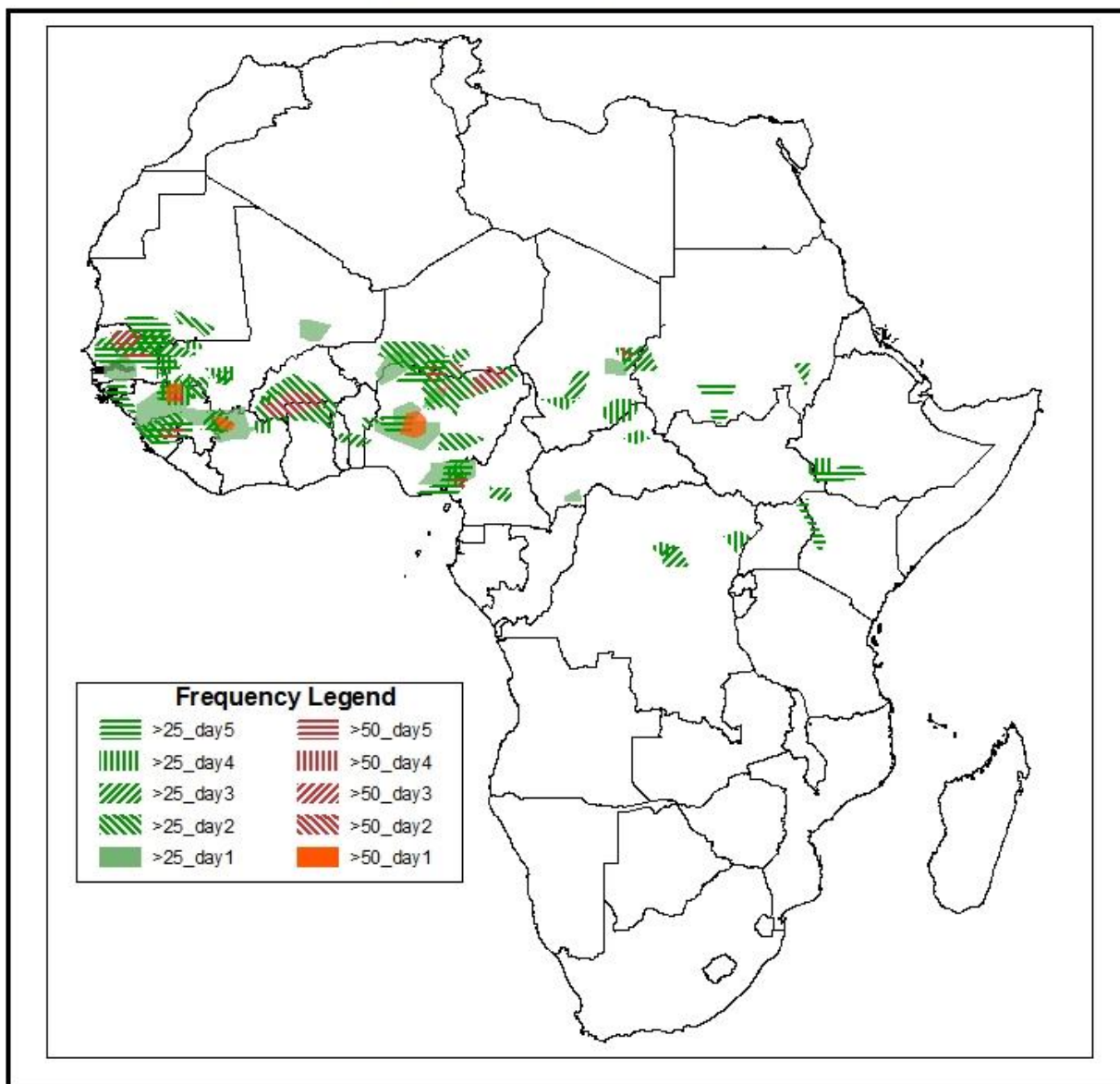
## 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on August 27, 2019)

### 1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 28 – 01 September, 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 28 August - 01 September, 2019

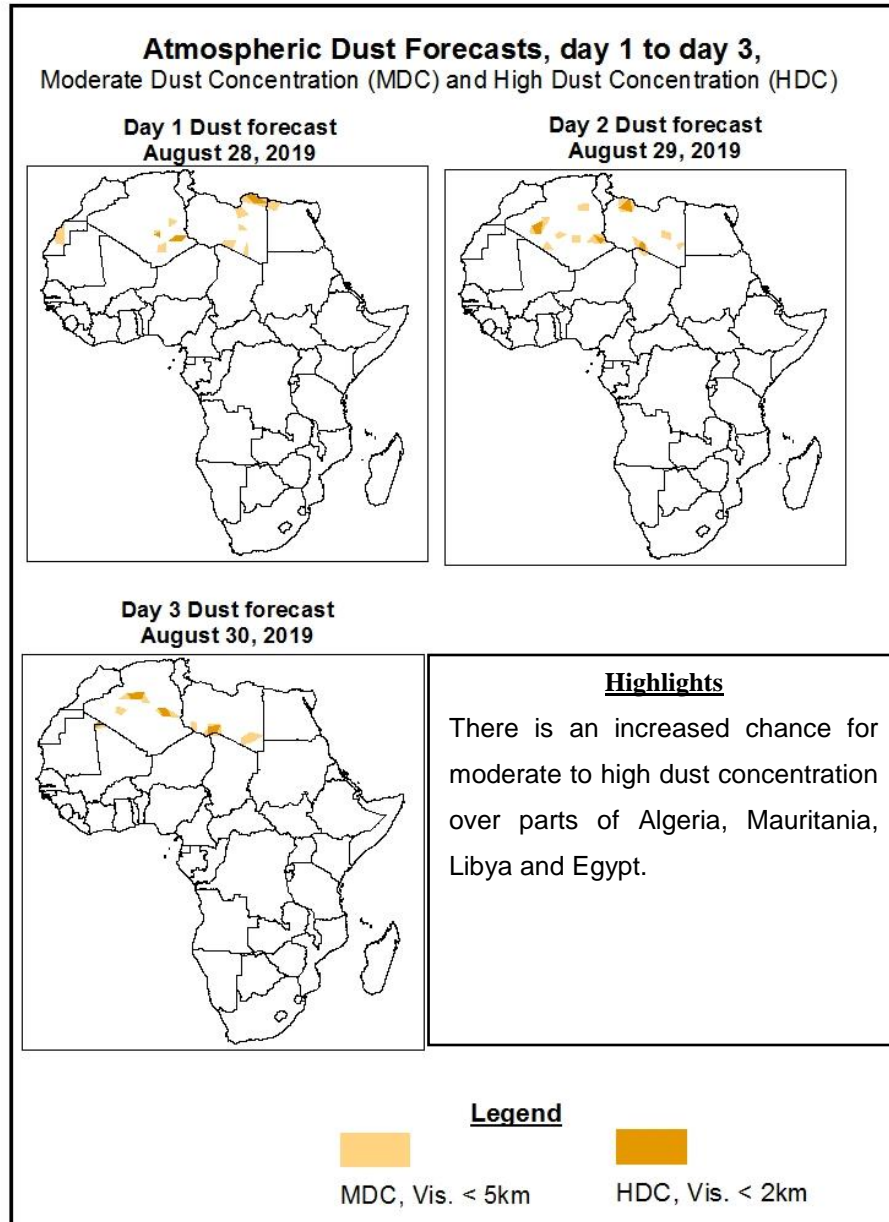


### Highlights

- 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.
- Lower-level wind convergences are expected to enhance rainfall across portions of the Greater Horn of Africa.
- At least 25mm for two or more days is likely over portions of Western Africa, and local areas in Central and East Africa. There is an increased chance for daily rainfall to exceed 50mm over southwestern and northern Guinea, northern Senegal, southern Burkina Faso, and central and northern 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: 28 – 30 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: 28 – 01 September 2019**

The Azores High Pressure system over the Northeast Atlantic is expected to get stronger and shift to the North, with its central pressure value increasing from 1021hPa to 1027hPa

The St. Helena High Pressure system over Southeast Atlantic Ocean is expected to weaken with its central pressure value decreasing from 1038hPa to 1030hPa during the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to weaken with its central pressure value decreasing from 1027hPa to 1024hPa during the forecast period.

Thermal low across the Sahel region is expected to maintain average central pressure value of 1008 hPa, and likely to fill up with central pressure value slightly increasing to 1009 hPa towards 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, a broad area of cyclonic trough is expected to prevail across West Africa during the forecast period.

At 700-hPa, a trough in the easterly flow near Nigeria is expected to propagate westwards across the Gulf of Guinea countries 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. Lower-level wind convergences are expected to enhance rainfall across portions of the Greater Horn of Africa. At least 25mm for two or more days is likely over portions of Western Africa, and local areas in Central and East Africa. There is an increased chance for daily rainfall to exceed 50mm over southwestern and northern Guinea, northern Senegal, southern Burkina Faso, and central and northern Nigeria. There is an increased chance for daily maximum heat index to exceed 40°C over Algeria, Mali and Mauritania.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (August 26, 2019)

Daily rainfall amount exceeded 25mm over Southern Niger, southeastern Senegal, Gambia, central Mali, Southern Mauritania, southwestern and northern Guinea, southern Nigeria, southwestern Cameroon, southern Sudan, parts of Sudan and eastern Ethiopia, and exceeded 50mm over northern Guinea, southern Nigeria, southwestern Cameroon and portions of Ethiopia.

### 2.2. Weather assessment for the current day (August 27, 2019)

Deep convective clouds are observed over eastern Gulf of Guinea and Central Africa, and local areas in the Greater Horn of Africa.

