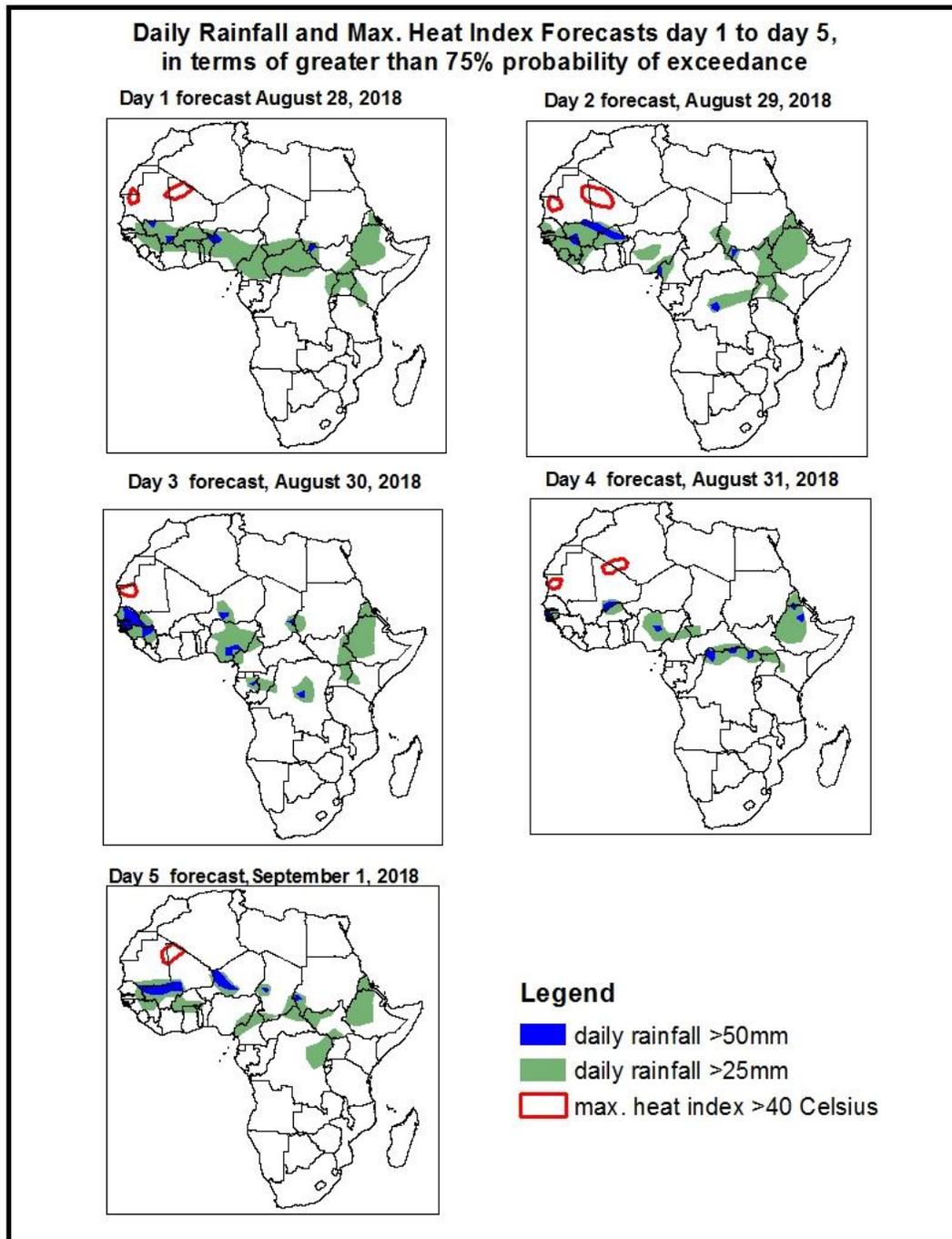


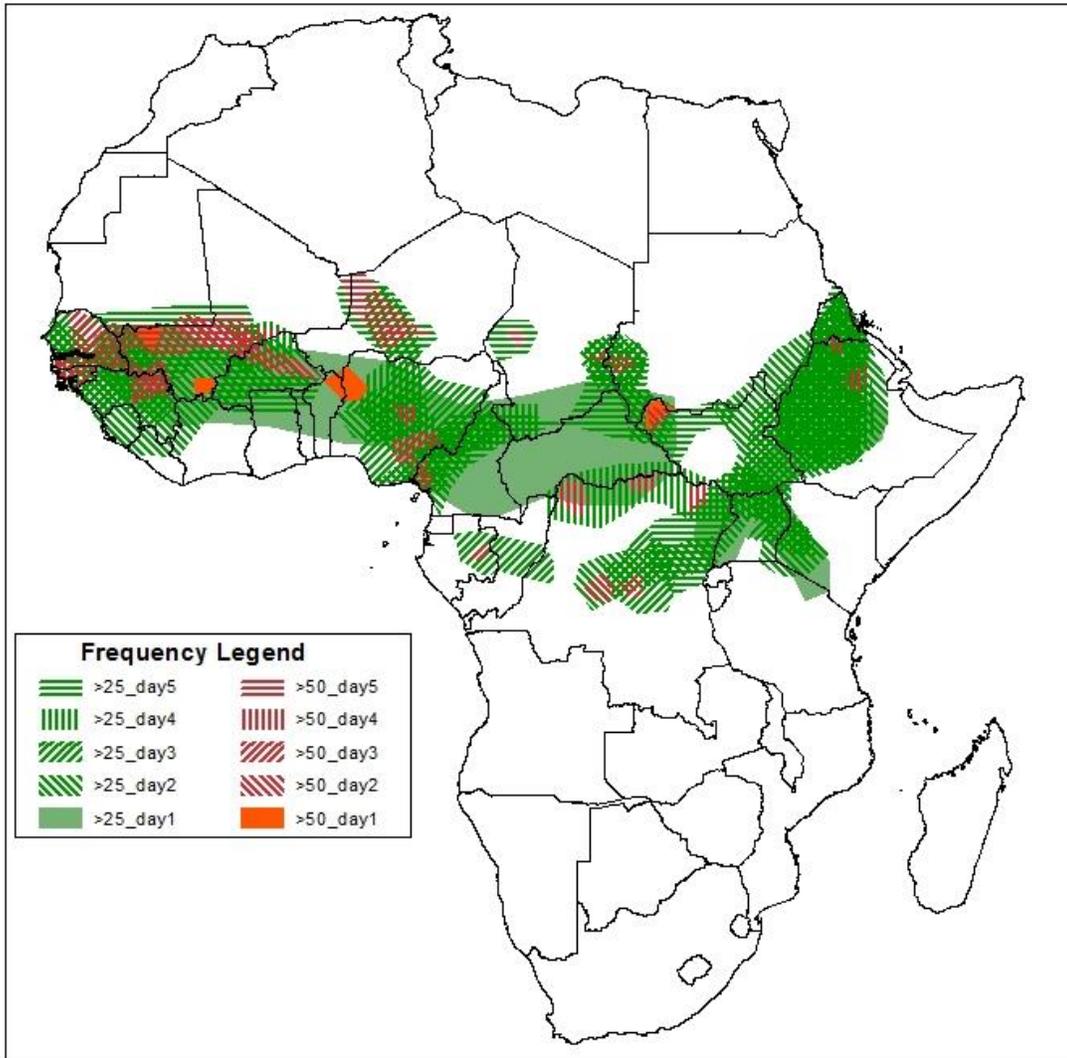
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on August 27, 2018)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Aug 28, – Sept 1, 2018)**

The forecasts are expressed in terms of high probability of precipitation (POP) and high probability of maximum heat index, based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



## Five Days Rainfall Forecast Summary 28 August -1 September, 2018.

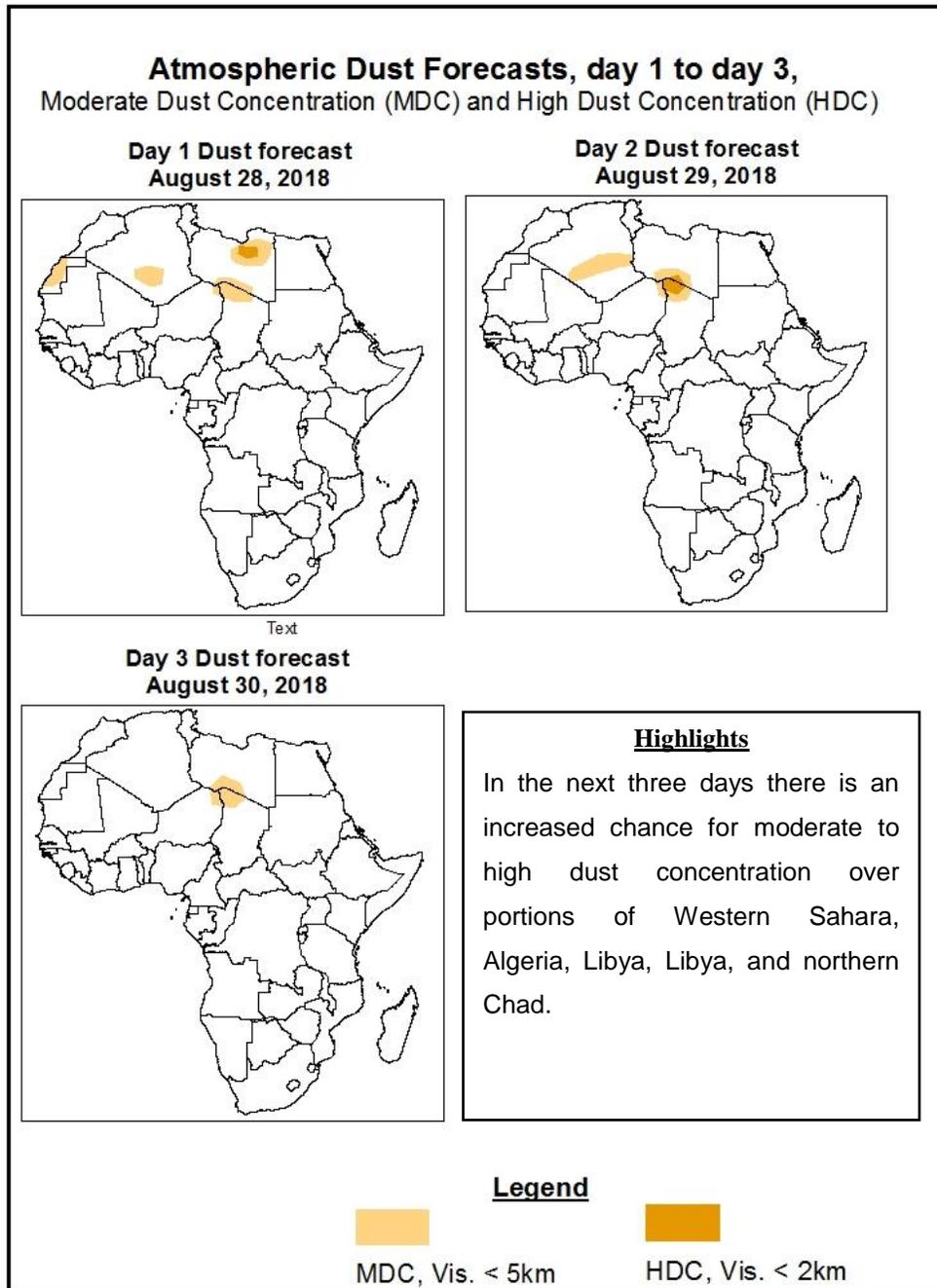


### Highlights

- In the next five days, westward propagating lower-level cyclonic systems across West Africa, active lower-level wind convergences in the Sahel and Lake Victoria regions, including portions of the Greater Horn of Africa are expected to enhance rainfall.
- There is an increased chance for 2 or more days of moderate to heavy rainfall over many places in the Sahel region and the neighboring areas of the Gulf of Guinea countries, and portions of the Lake Victoria region, Ethiopia and Eritrea.
- There is an increased chance for high heat index values over local areas in Northwest Africa during the forecast period.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: August 28 – August 30, 2018)

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: August 27 – September 1, 2018**

The Azores High Pressure system over the North Atlantic Ocean is expected to intensify during the forecast period. The central pressure value increased from 1023hPa to 1026hPa in the forecast period.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is expected to weaken in the forecast period. The central pressure values decreased from 1038hPa to 1027hPa in the forecast period.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to intensify during the forecast period. The central pressure value increased from 1027hPa to 1039hPa.

The thermal low near northeastern Mali and southern Algeria is expected to shift towards northern Mauritania while deepening. Its central pressure value is expected to decrease from about 1008hPa to 1003hPa during the forecast period. The central thermal low across Chad and Niger is expected to maintain an average central pressure value of 1006hPa during the forecast period.

At 925hPa, dry strong northeasterly to northeasterly wind is expected to prevail across northern and northeastern Africa. In contrast, moist southwesterly to westerly flow from the Atlantic Ocean is expected to prevail across much of the Gulf of Guinea countries and the neighboring areas of the Sahel region.

At 850hPa, a cyclonic circulation is expected to propagate westwards in the region between southern Chad and southern Mali during the forecast period. A zonal wind convergence is expected to remain active across the Sahel region during the forecast period. Moist southwesterly flow from the Gulf of Guinea region, with its associated lower-level wind Convergence in Sudan and Ethiopia is expected to enhance rainfall in the region. Lower-level meridional wind convergence is expected to remain active near the Lake Victoria region during the forecast period.

At 700-hPa, A cyclonic circulation with its associated trough is expected to propagate westwards in the region between Cameroon and Guinea-Conakry during the forecast period.

At 500-hPa, an area of strong wind (>30kts), associated with African Easterly Jet, is expected to prevail in the region between Senegal and southern Niger.

In the next five days, westward propagating lower-level cyclonic systems across West Africa, active lower-level wind convergences in the Sahel and Lake Victoria regions, including portions of the Greater Horn of Africa are expected to enhance rainfall. There is an increased chance for 2 or more days of moderate to heavy rainfall over many places in the Sahel region and the neighboring areas of the Gulf of Guinea countries, and portions of the Lake Victoria region, Ethiopia and Eritrea. There is an increased chance for high heat index values over local areas in Northwest Africa during the forecast period.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (August 26, 2018)

Moderate to locally heavy rainfall was observed over parts of Mauritania, Mali, Gambia, Guinea, Sierra Leone, Liberia, Cote d'Ivoire, Burkina Faso, Niger, Chad, Cameroon, Congo, CAR, DRC, South Sudan, Ethiopia and Angola.

### 2.2. Weather assessment for the current day (August 27, 2018)

Intense convective clouds are observed over parts of Morocco, Mauritania, Senegal, Mali, Togo, Benin, Niger, Nigeria, Cameroon, Chad, CAR, Congo, DRC, Uganda, Kenya, Sudan, South Sudan, Eritrea and Ethiopia.

