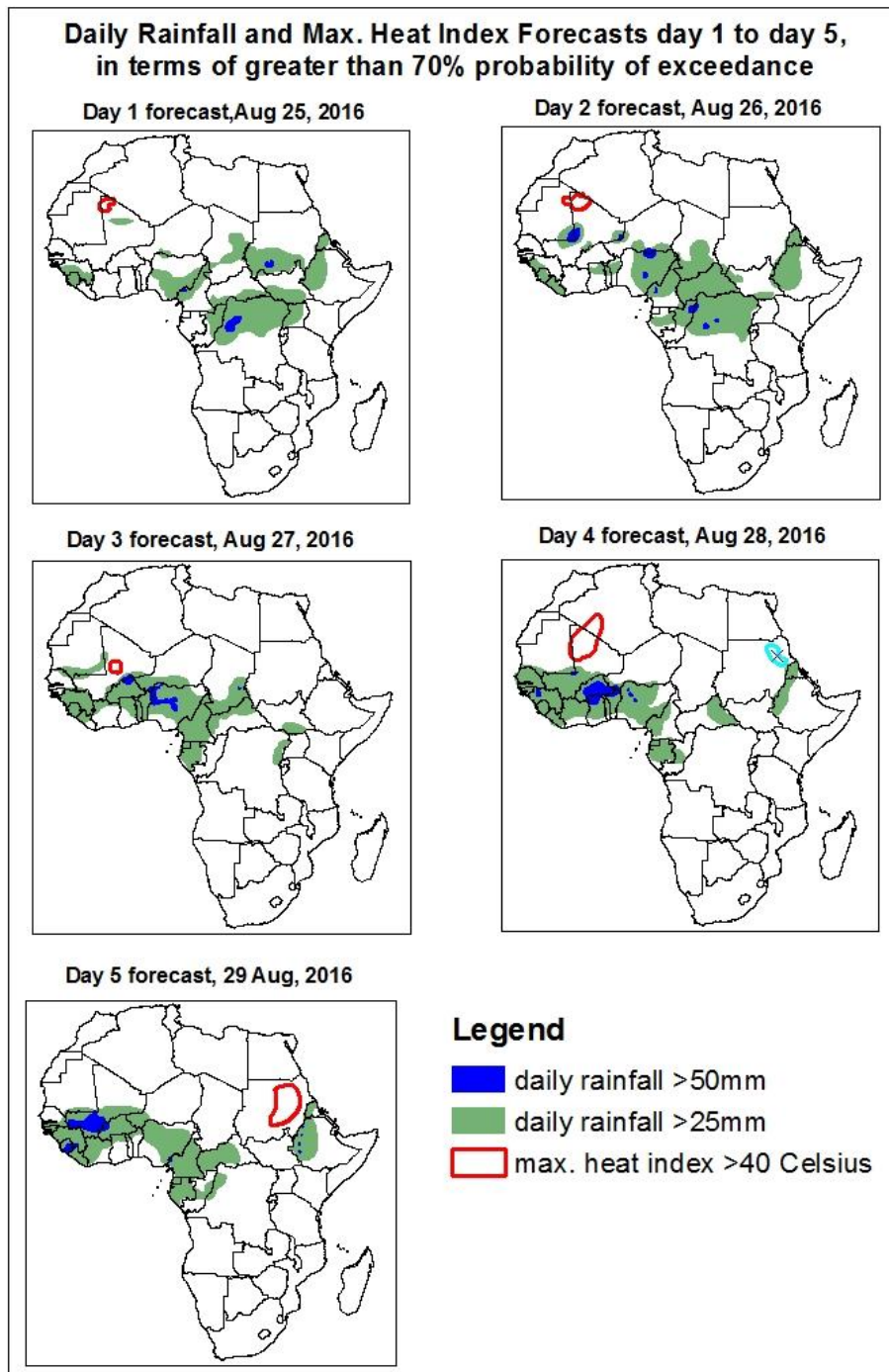


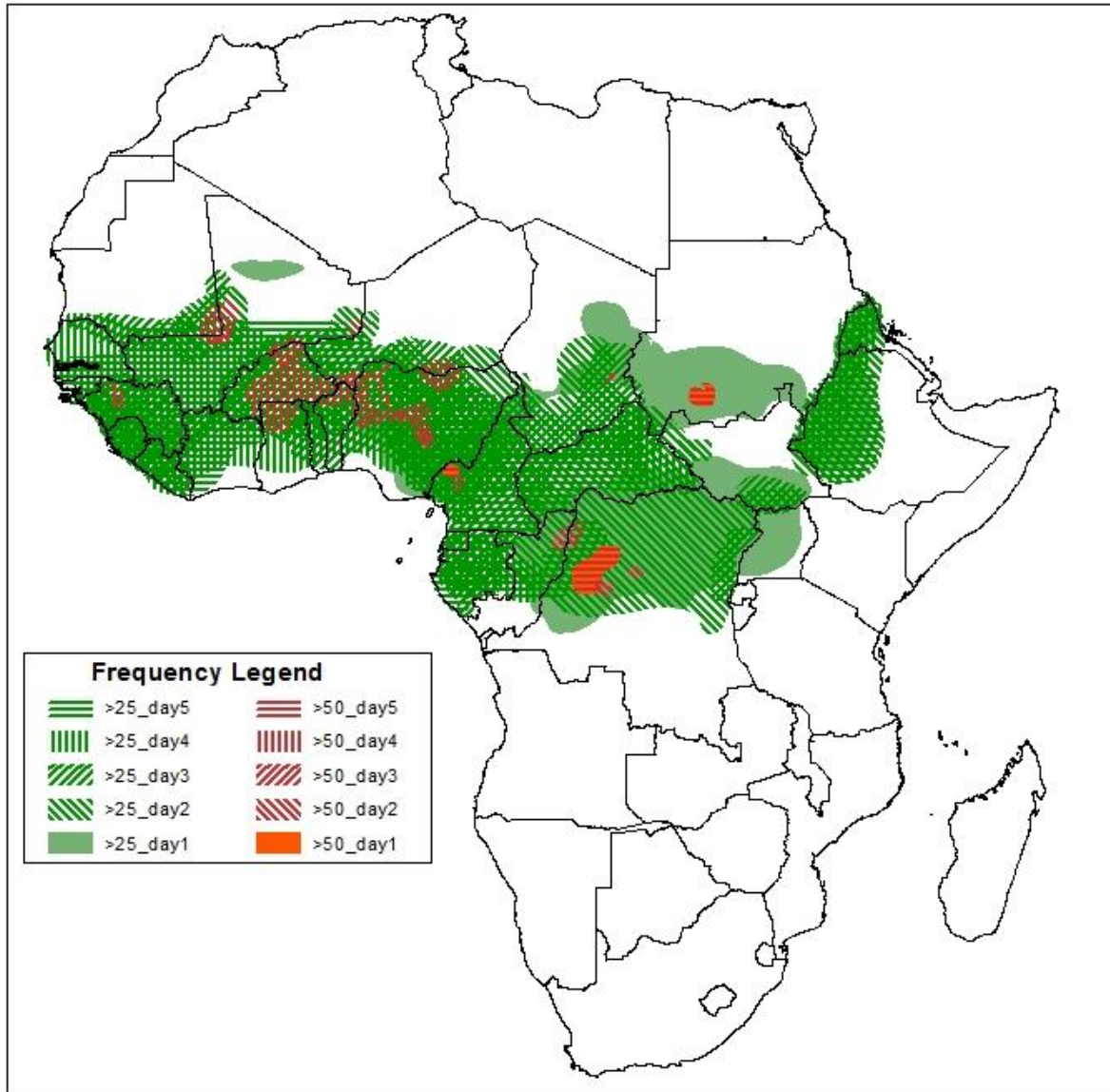
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on Aug 24, 2016)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Aug 25– Aug 29 2016)**

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



## Five Days Rainfall Forecast Summary Aug 25 - Aug 29, 2016

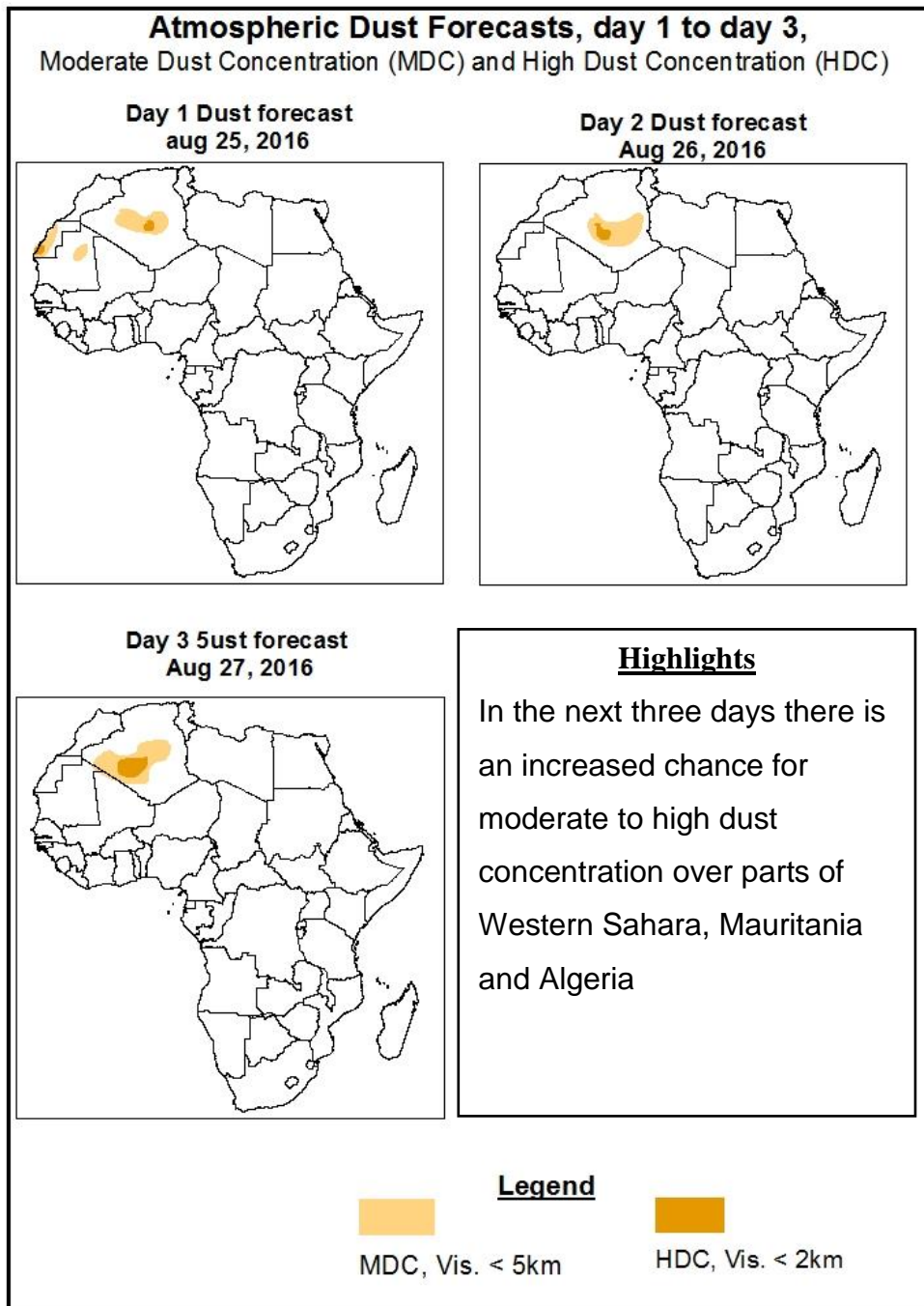


### **Highlights**

In the next five days, westward propagating lower-level cyclonic systems across West Africa and central Sahel and lower level wind convergences across the Greater Horn of Africa are expected to enhance rainfall in their respective regions. Therefore, there is an increased chance for two or more days of moderate to heavy rainfall over portions of Senegal, Guinea Bissau, much of Guinea, Sierra Leone and Liberia, portions of, Mali and Southern Mauritania, much of Burkina Faso, portions of Cote d'Ivoire, Ghana, Togo, Benin, Niger, Nigeria and Chad, much of Cameroon and CAR, local areas in Sudan portions of Ethiopia, Eritrea, DRC, Congo and Gabon.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: Aug 25– Aug 27 2016)

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: Aug 24 –Aug 29, 2016**

The Azores high pressure system over the North Atlantic is expected to maintain, with an average central pressure value of 1025hPa during the forecast period..

The high pressure system St. Helena on the southeast of the Atlantic Ocean is expected to maintain, with a central pressure value ranging between 1025 hPa to 1027 hPa during the forecast period.

The Mascarene High pressure system over the Southeast Atlantic Ocean is expected to weaken, with its value of the central pressure decreasing from 1031 hPa to 1029 hPa from 24 hours to 48 hours and tends to intensify, with its value of central pressure increasing from 1035 hPa to 1038 hPa between 72 hours to 120 hours.

The 1016mb isobar, associated with the East African ridge is expected to remain near the latitudes of northern Ethiopia during the forecast period.

The heat low over Western Sahel is expected to fill up, with its central pressure value increasing from 1003 hPa to 1007 hPa during the forecast period. The heat low over Central Sahel is expected to fill up, with its central pressure value increasing from 1006 hPa to 1011 hPa between during the forecast period. The heat low over Sudan is expected to maintain an average central pressure value of 1008hPa during the forecast period.

At 925hPa, strong dry to northerly northeasterly winds may lead to moderate to high dust concentration in parts of Western Sahara, Mauritania and Algeria.

At 850hPa level, a cyclonic circulation is expected to propagate westwards in the region between Chad and Senegal through northern Mali during the forecast period, while the lower level wind convergence is expected to prevail in the Greater Horn of Africa.

A trough in the easterlies is expected to propagate westwards across the western between southern Chad and Southern Mauritania during the forecast period.

At 500 hPa, a zone of strong wind (>35kts), associated with AEJ is expected to propagate westwards across in the region between Border Niger/Nigeria and Senegal.

At 150 hPa A strong wind (> 70 kts), associated with the TEJ is also expected to remain weak over the Greater Horn of Africa during the forecast period.

In the next five days, westward propagating lower-level cyclonic systems across West Africa and central Sahel and lower level wind convergences across the Greater Horn of Africa are expected to enhance rainfall in their respective regions. Therefore, there is an increased chance for two or more days of moderate to heavy rainfall over portions of Senegal, Guinea Bissau, much of Guinea, Sierra Leone and Liberia, portions of Mali and Southern Mauritania, much of Burkina Faso, portions of Cote d'Ivoire, Ghana, Togo, Benin, Niger, Nigeria and Chad, much of Cameroon and CAR, local areas in Sudan portions of Ethiopia, Eritrea, DRC, Congo and Gabon.

There is an increased chance for maximum heat index to exceed 40°C over portions of Mauritania, Mali and Sudan.



## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (Aug 23, 2016)

Moderate to locally heavy rainfall was observed over local areas in Mali, portions of Burkina Faso, Nigeria, Central Africa and Great Horn of Africa.

### 2.2. Weather assessment for the current day (Aug 24, 2016)

Intense convective clouds are observed over portions of Sera Leone, Mali, Benin, and Nigeria, Central Africa and Great horn of Africa

