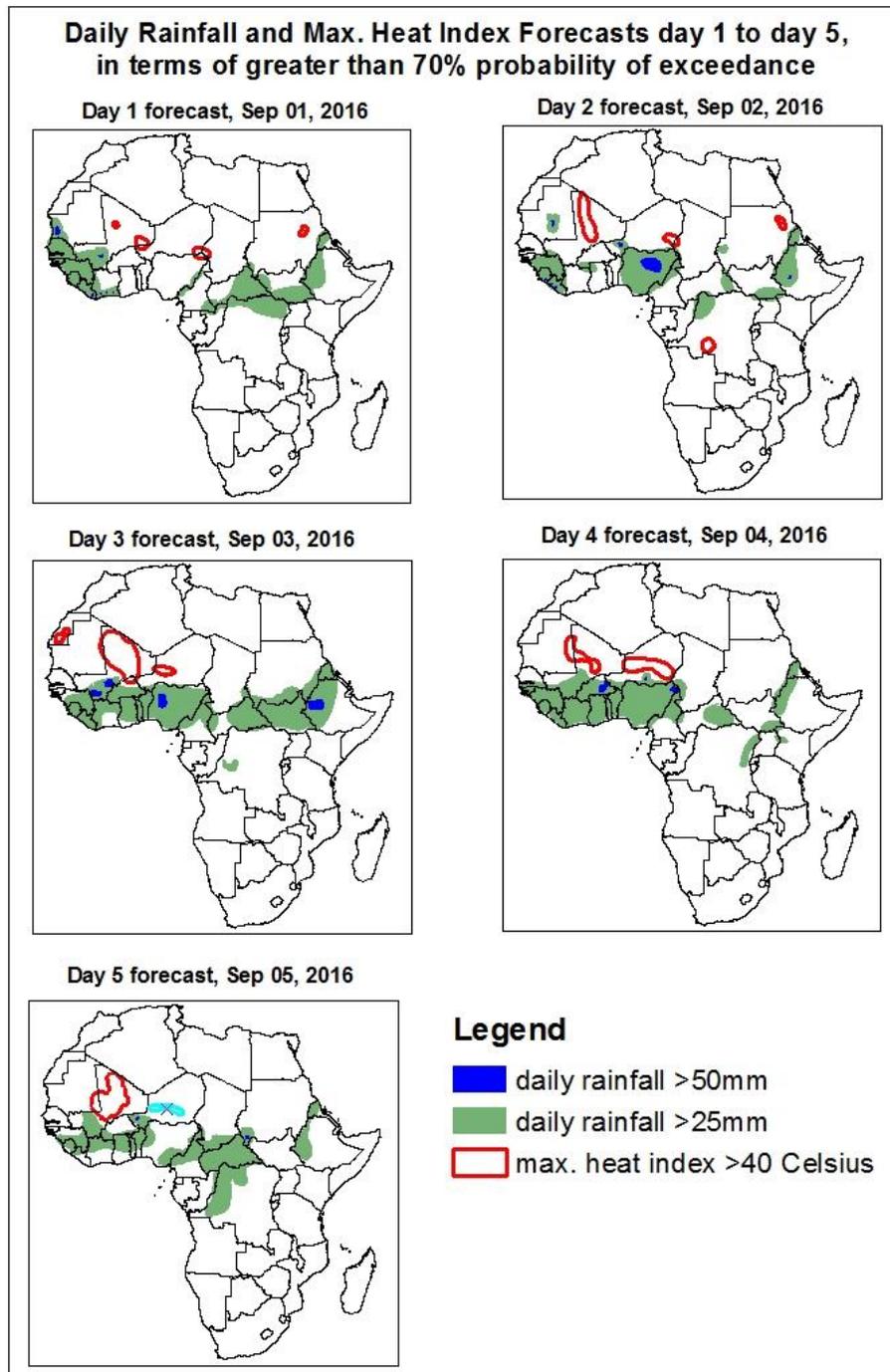


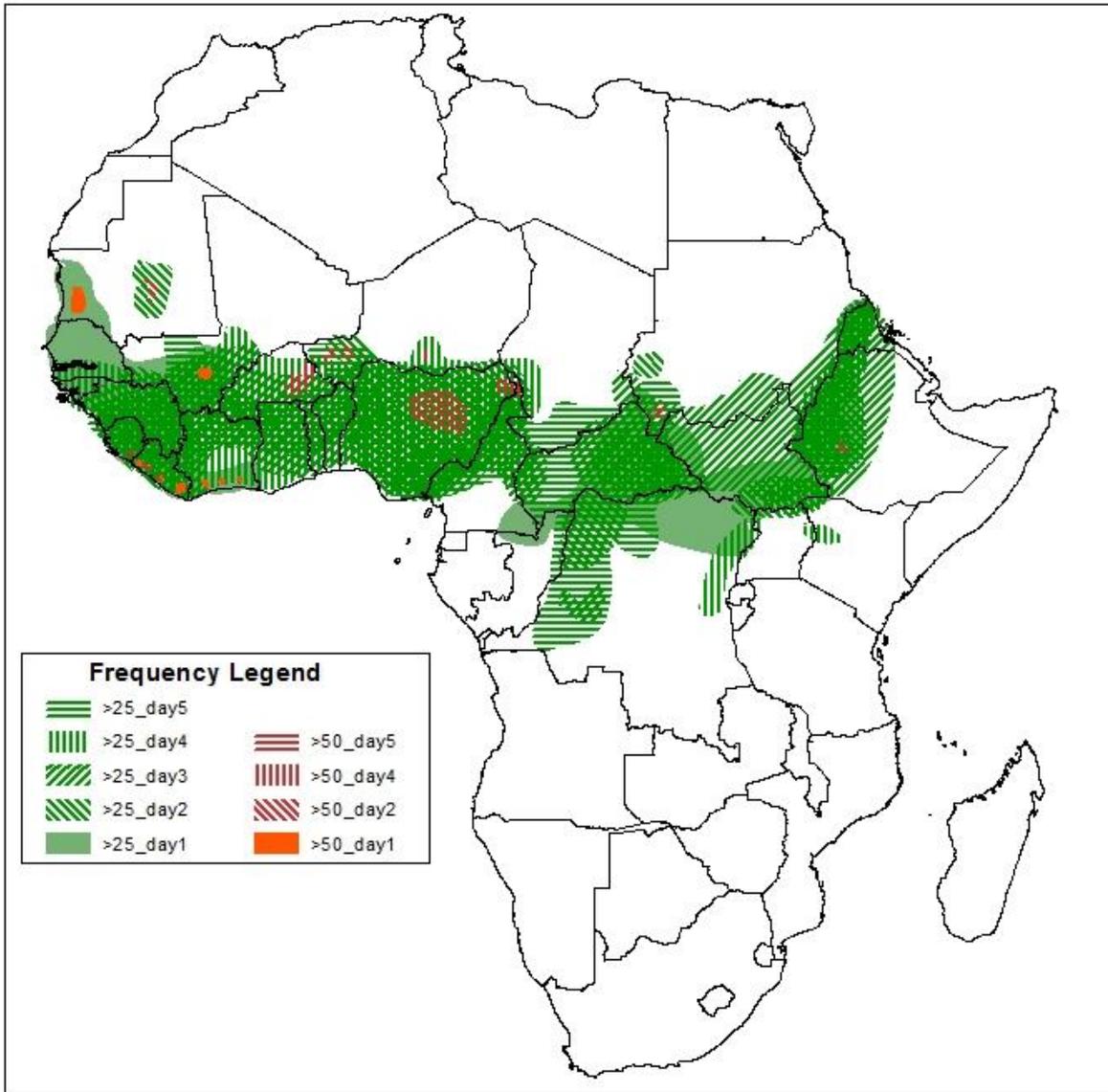
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on Aug 31, 2016)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Sep 01– Sep 05 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 Sep 01 - Sep 05, 2016

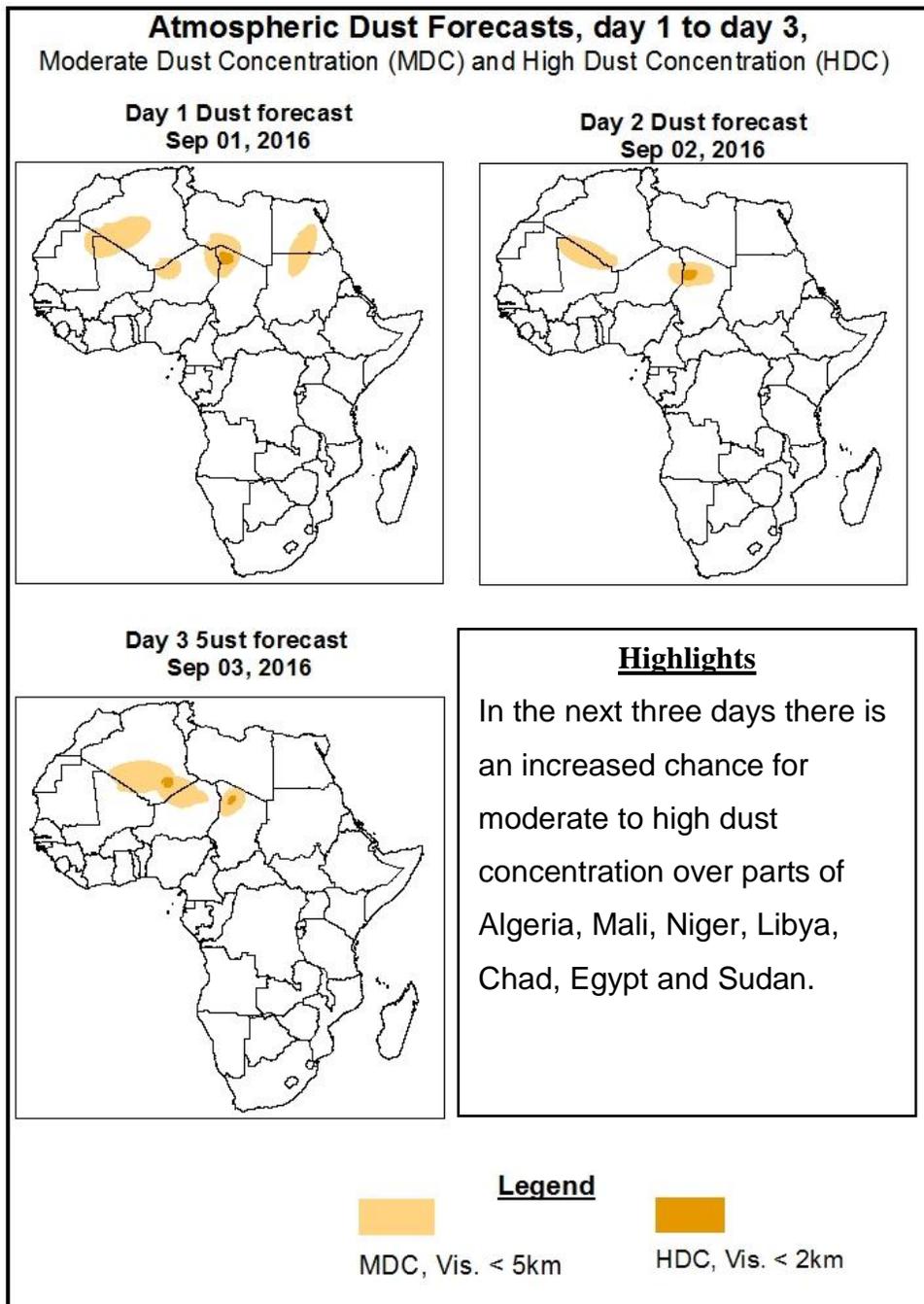


### **Highlights**

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 portion of Mauritania, Senegal, Mali, and Burkina Faso, much of Guinea Bissau, Guinea, Sierra and Liberia, portions of Cote d'Ivoire, Ghana, Togo, Benin, Niger, Nigeria, Cameroon and CAR, local areas in Chad, portions of Southern Sudan, Northern DRC, Ethiopia and Eritrea.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: Sep 01– Sep 03 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: Sep 01 – Sep 05, 2016**

The Azores high pressure system over the North Atlantic is expected to weaken, with its value of the central pressure decreasing from 1027 hPa to 1021 hPa during the forecast period.

The high pressure system St. Helena on the southeast of the Atlantic Ocean is expected to intensify, with its value of the central pressure increasing from 1040 hPa to 1042 hPa from 24 hours to 48 hours and tends to weaken, with its value of central pressure decreasing from 1042 hPa to 1028 hPa between 48 hours to 120 hours.

The Mascarene High pressure system over the Southeast Atlantic Ocean is expected to weaken, with its value of the central pressure increasing from 1043 hPa to 1030 hPa during the forecast period.

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 deepen, with its central pressure value decreasing from 1010 hPa to 1007 hPa from 24 hours to 72 hours and to fill up, with its central pressure value increasing from 1007 hPa to 1008 hPa from 72 hours to 120 hours. The heat low over Central Sahel is expected to fill up, with its central pressure value increasing from 1009 hPa to 1011 hPa during the forecast period. The heat low over Sudan is expected to maintain an average central pressure value of 1009hPa during the forecast period.

At 925hPa, strong dry to northerly easterly winds may lead to moderate to high dust concentration over parts of Algeria, Mali, Niger, Libya, Chad, Egypt and Sudan.

At 850hPa level, lower-level cyclonic systems are expected to propagate westwards in the region between Chad and Senegal through 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 portions of the Gulf of Guinea region 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 portion of Mauritania, Senegal, Mali, and Burkina Faso, much of Guinea Bissau, Guinea, Sierra and Liberia, portions of Cote d'Ivoire, Ghana, Togo, Benin, Niger, Nigeria, Cameroon and CAR, local areas in Chad, portions of Southern Sudan, Northern DRC, Ethiopia and Eritrea.

There is an increased chance for maximum heat index to exceed 40°C over portions of Western Sahara, Mauritania, Mali, Niger, and Chad, and local areas in Burkina Faso, Nigeria, Sudan and DRC.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (Aug 30, 2016)

Moderate to locally heavy rainfall was observed over portions of Guinea and Sera Leone, local areas in Mauritania, portions of Burkina Faso, Ghana, and local areas in Cote d'Ivoire, Togo, Benin, Nigeria, Chad and Ethiopia.

### 2.2. Weather assessment for the current day (Aug 31, 2016)

Intense convective clouds are observed over portions of Mauritania, Mali, Guinea and Sera Leon, local areas in Nigeria, portions of Chad Sudan and DRC, local areas in Eritrea and Ethiopia.

