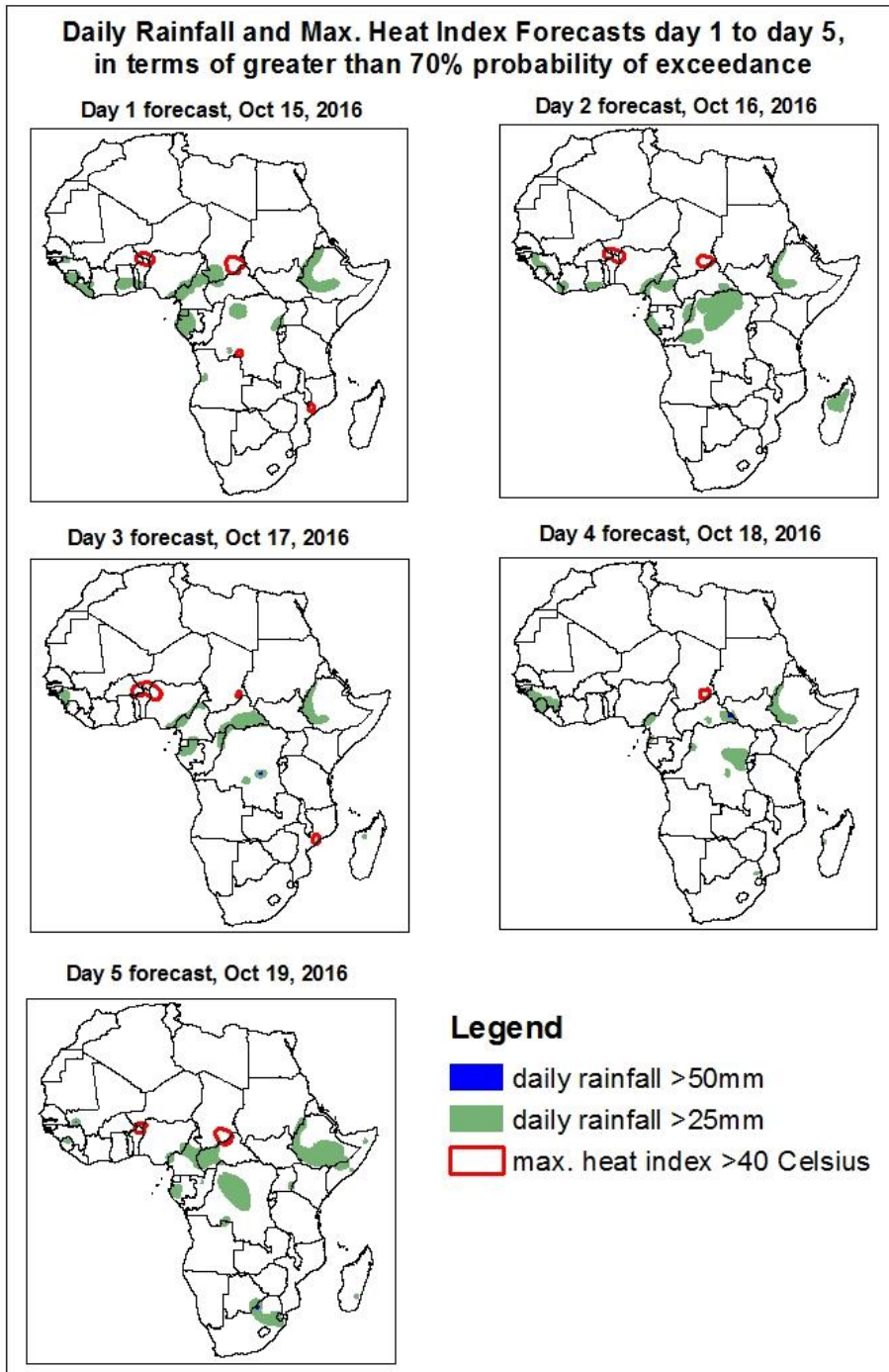


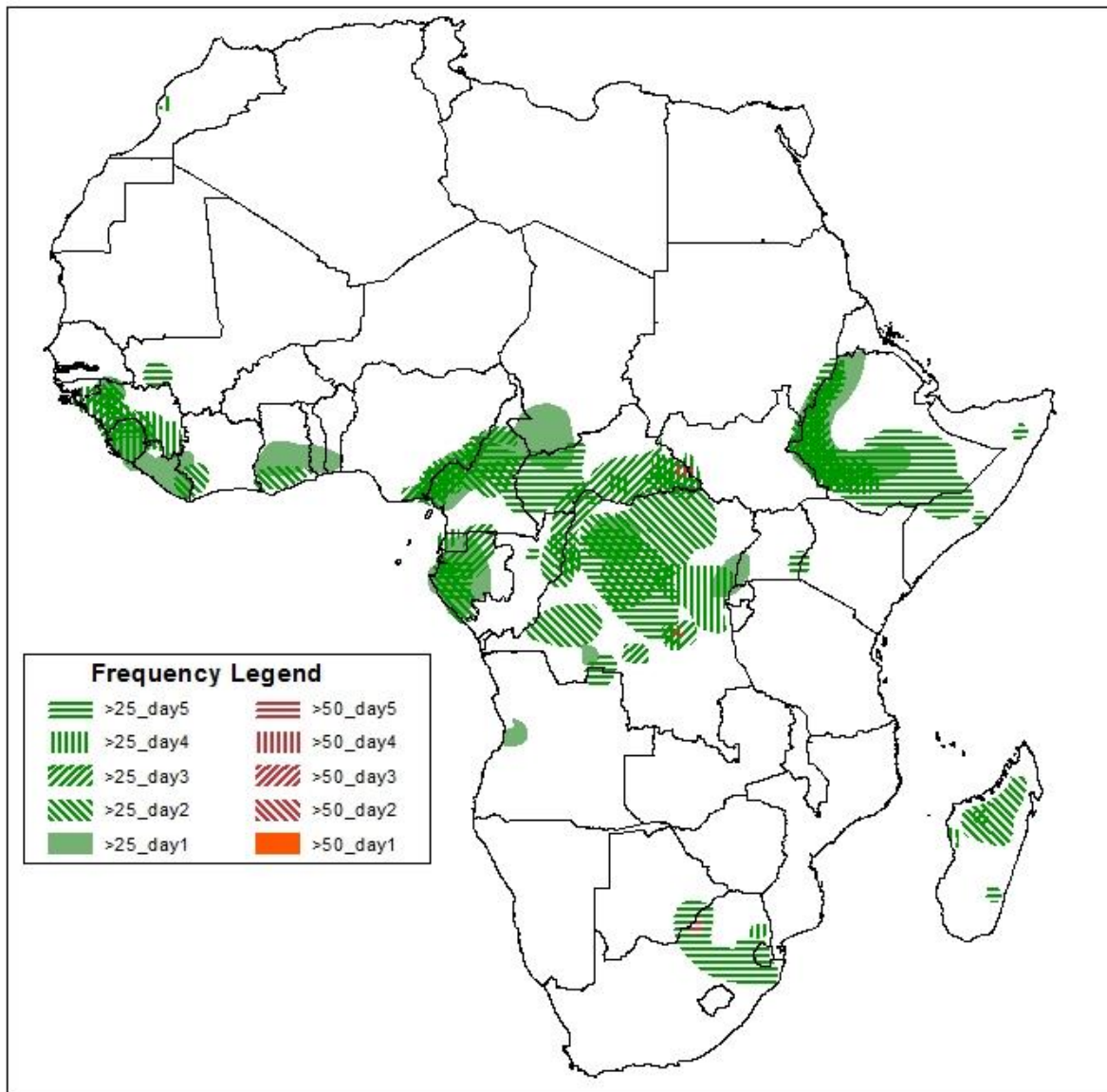
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on Oct 14, 2016)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Oct 15– Oct 19 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 Oct 15 - Oct 19, 2016

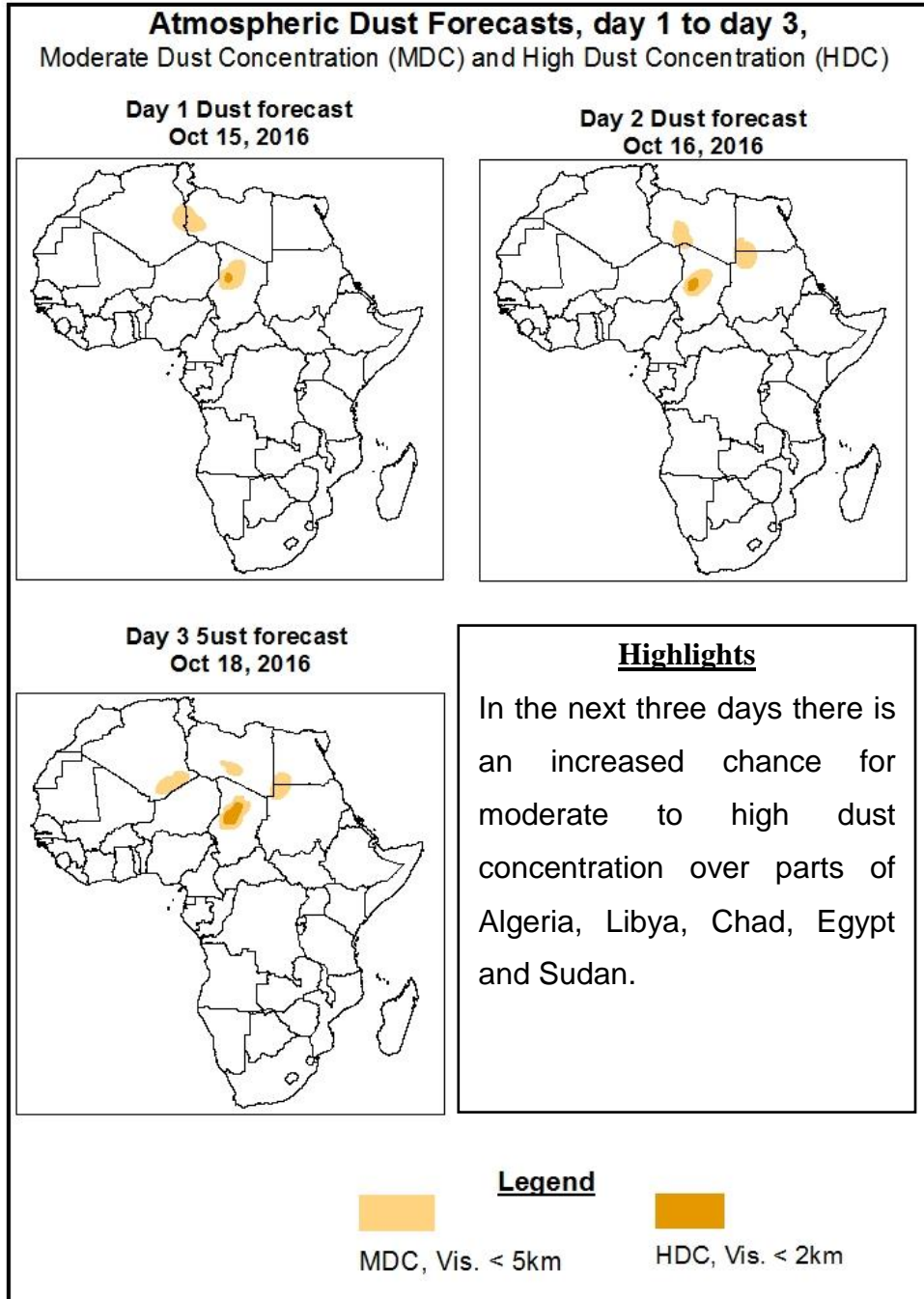


### **Highlights**

In the next five days, monsoon flow from the Atlantic Ocean across the Gulf of Guinea region, and lower level wind convergences across portions of the Central and 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 Guinea, Sera Leone and Liberia, local areas in Ghana, portions of Nigeria, Cameroon and CAR, Gabon, local areas in Congo, portions of DRC and Ethiopia, local areas in South Africa and Madagascar.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: Oct 15– Oct 17 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: Oct 15–Oct 19, 2016**

The Azores high pressure system over the North Atlantic is expected to intensify, with its value of the central pressure increasing from 1019 hPa to 1032 from 24 hours during the forecast period.

The St. Helena high pressure system on the southeast of the Atlantic Ocean is expected to weaken, with its value of the central pressure decreasing from 1034 hPa to 1025 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 1033 hPa to 1025 hPa during the forecast period.

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

At 850hPa level, lower level wind convergences are expected to prevail in central and the Greater Horn of Africa.

In the next five days, monsoon flow from the Atlantic Ocean across the Gulf of Guinea region, and lower level wind convergences across portions of the Central and 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 Guinea, Sera Leone and Liberia, local areas in Ghana, portions of Nigeria, Cameroon and CAR, Gabon, local areas in Congo, portions of DRC and Ethiopia, local areas in South Africa and Madagascar.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (Oct 13, 2016)

Moderate to locally heavy rainfall was observed over local areas in Guinea and Nigeria, portions of Cameroon and CAR, local areas in Chad, Sudan, Ethiopia and DRC.

### 2.2. Weather assessment for the current day (Oct 14, 2016)

Intense convective clouds are observed over portion of Ghana, local areas in Nigeria, Cameroon, Chad, CAR, Congo, DRC and Angola, portion of Sudan, local areas in Ethiopia and Madagascar.

