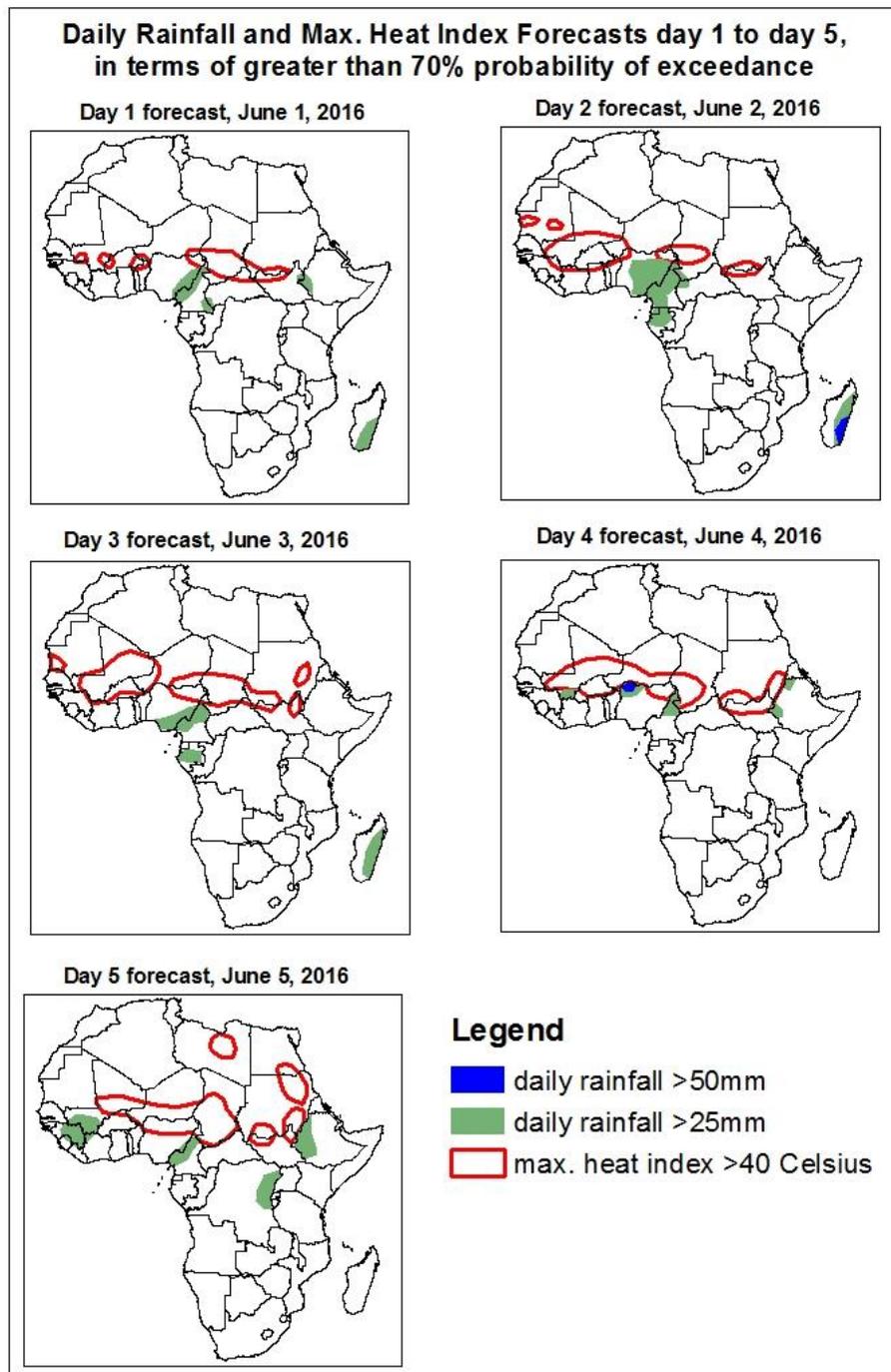


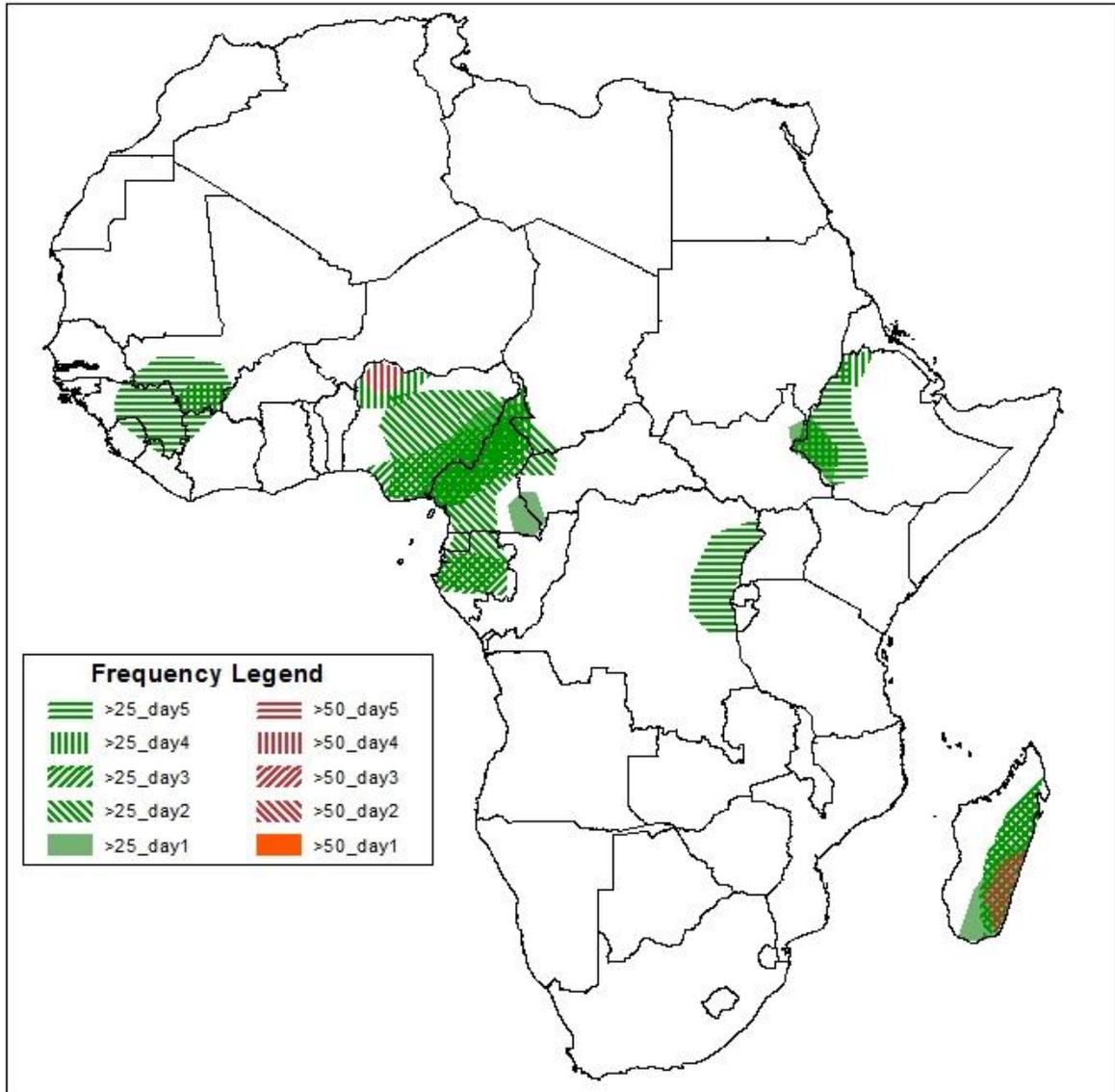
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on May 31, 2016)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: June 1 – June 5, 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 June 1 - June 5, 2016

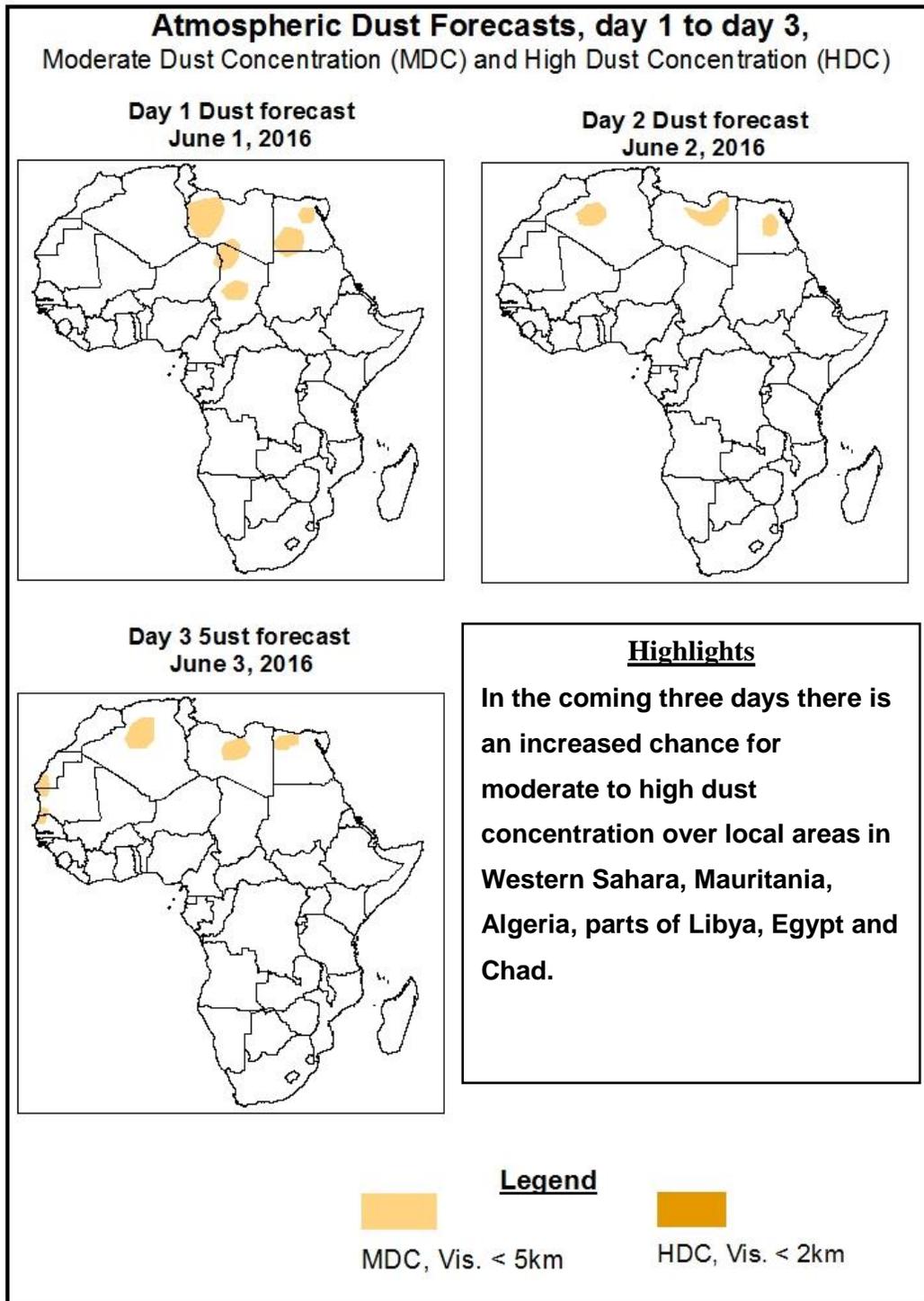


### **Highlights**

In the coming five days, lower level-wind convergences associated with the West African monsoon flow, combined with westward propagating convective systems across Central and West Africa are expected to enhance rainfall over portions of West Africa. Local wind convergences are also expected to enhance rainfall across western Ethiopia and eastern Madagascar. Therefore, there is an increased chance for two or more days of moderate to heavy rainfall over southwestern Mali, portions of Nigeria, Cameroon, Gabon, western Ethiopia and eastern Madagascar.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: June 1 – June 3, 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: June 1 –June 5, 2016**

The Azores high pressure system over the Northeast Atlantic Ocean is expected to maintain an average central pressure value of 1020hPa during the forecast period.

The St. Helena High pressure system over the Southeast Atlantic Ocean is expected to intensify slightly; with its central pressure value is expected to increase from 1030hPa to 1033hPa through 24 to 96 hours.

The Mascarene high pressure system over the Southwest Indian Ocean is expected to weaken gradually, with its central pressure value decreasing from about 1040hPa to 1030hPa through 48 to 120 hours.

The 1016hPa isobar, associated with East African ridge is expected to extend northwards up to central Ethiopia the forecast period.

Central pressure values associated with heat lows across the Western Sahel are expected to remain in the range between 1007hpa to 1009hpa, whereas central pressure values as low as 1004hPa are expected across the Central Sahel and Sudan during the forecast period.

At 925HPa level, the anti-cyclonic circulation over Libya is expected to weaken gradually while shifting eastwards during the forecast period. The dry northeasterly to easterly winds associated with this anti-cyclone are expected to prevail across Egypt, Sudan and northern Chad. Dry northerly flow is also expected to prevail across Western Sahara, Mauritania and Algeria.

At 850hPa level, a broad anti-cyclonic ridge is expected to prevail across much of Northern Africa, whereas a zonal wind convergence with embedded feeble cyclonic circulations is expected to prevail in the region between central Mali Sudan across the Sahel. A broad area of southeasterly flow is expected to prevail across eastern and central Africa.

At 700hPa level, northeasterly to easterly flow is expected to prevail across much of the Gulf of Guinea region during the forecast period.

In the coming five days, lower level-wind convergences associated with the West African monsoon flow, combined with westward propagating convective systems across Central and West Africa are expected to enhance rainfall in the regions. Local wind convergences are also expected to enhance rainfall across western Ethiopia and eastern Madagascar. Therefore, there is an increased chance for two or more days of moderate to heavy rainfall over southwestern Mali, portions of Nigeria, Cameroon, Gabon, western Ethiopia and eastern Madagascar.

There is an increased chance for maximum heat index values to exceed 40°C over local areas in Senegal and Mauritania, portions of Mali, Burkina Faso, Ghana, Togo, northern Nigeria, Niger and Chad.

## 2.0. Previous and Current Day Weather over Africa

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

Moderate to locally heavy rainfall was observed over eastern Liberia, southern Cote d'Ivoire, northern Cameroon, southern Chad, northern CAR, local areas in DRC and South Sudan, Western Ethiopia, and local areas in Madagascar

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

Intense convective clouds are observed over portions of the Central Africa region, South Sudan and western Ethiopia

