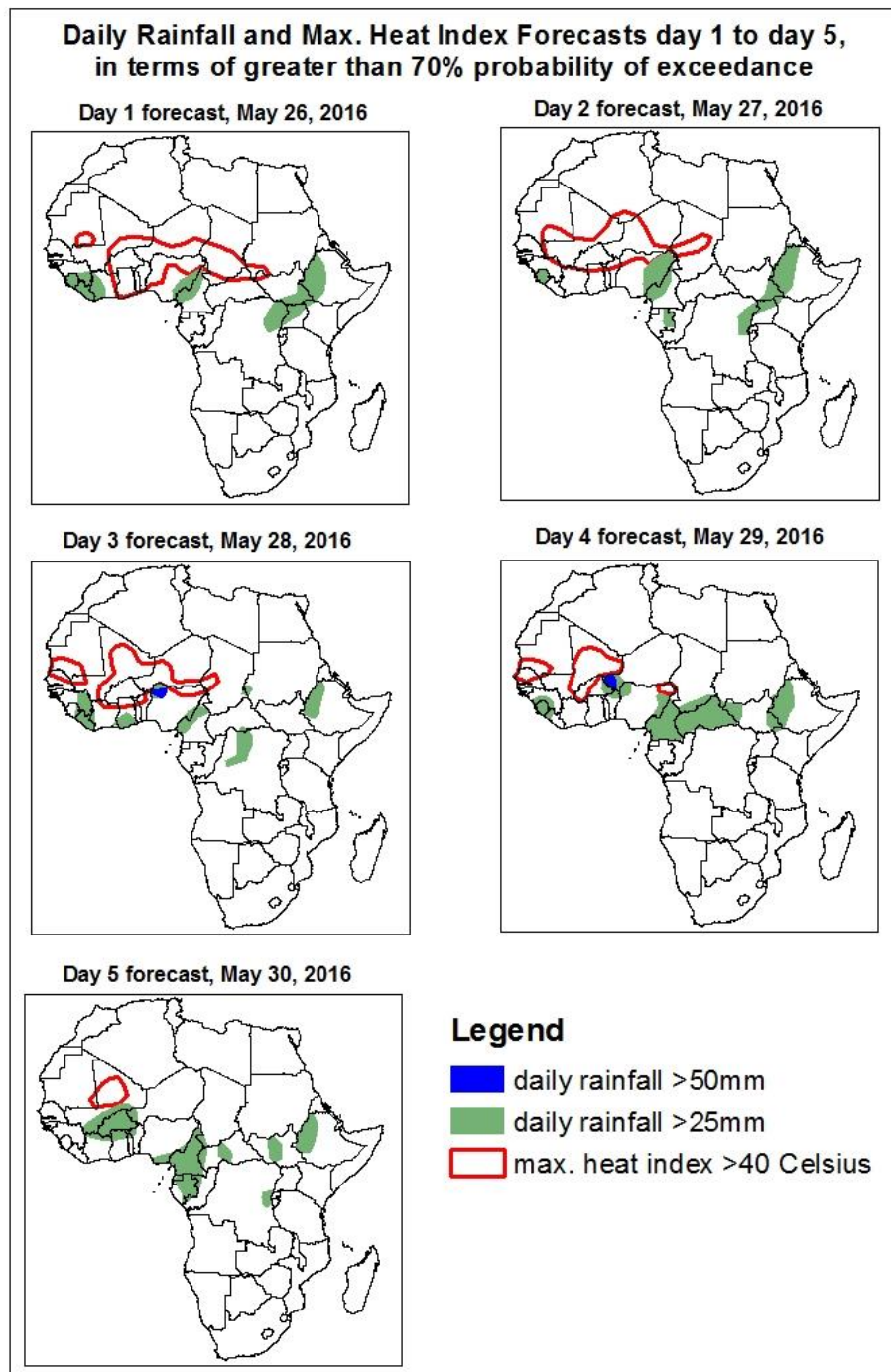


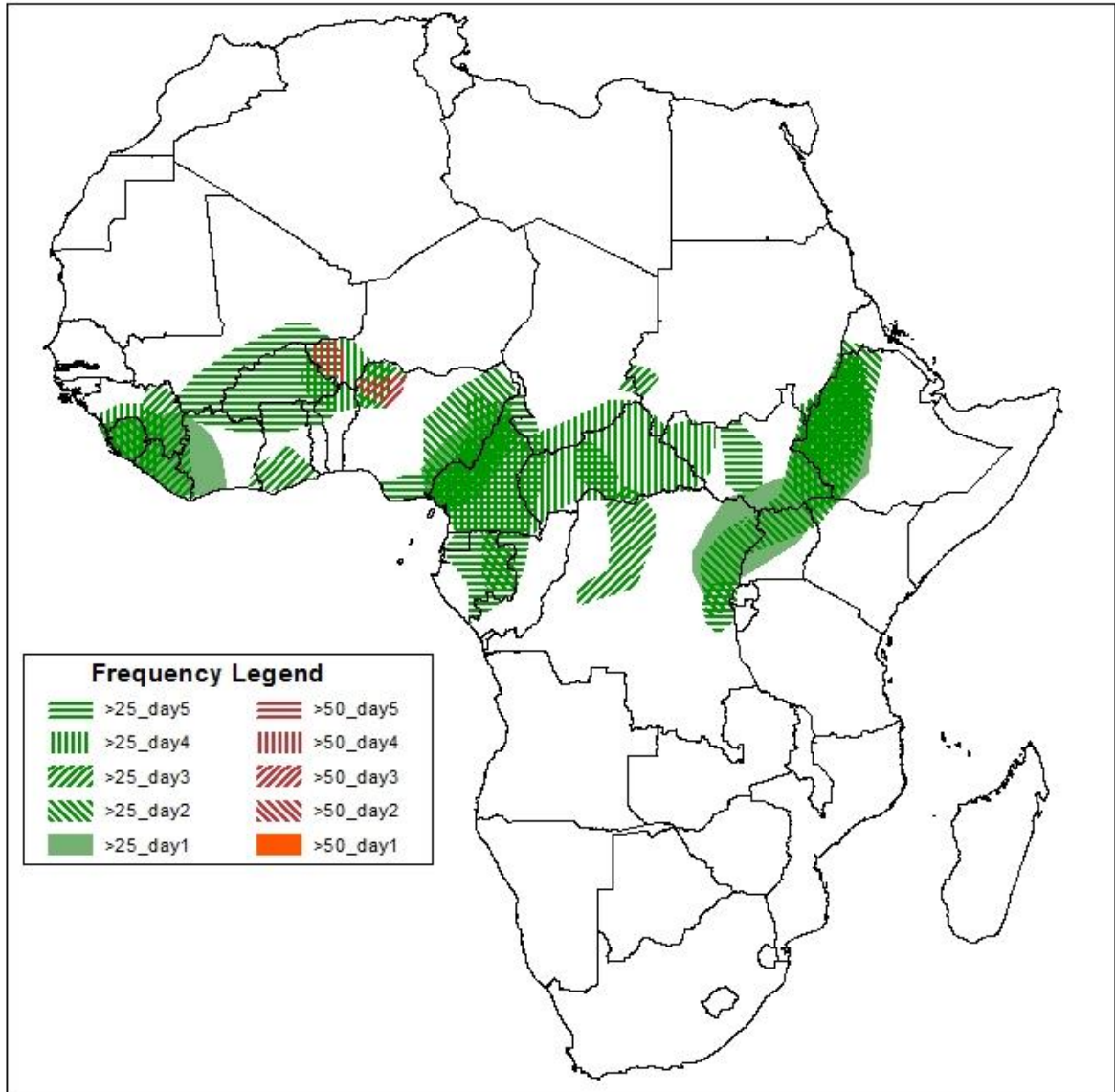
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on May 25, 2016)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: May 26–May 30, 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 May 26 - May 30, 2016

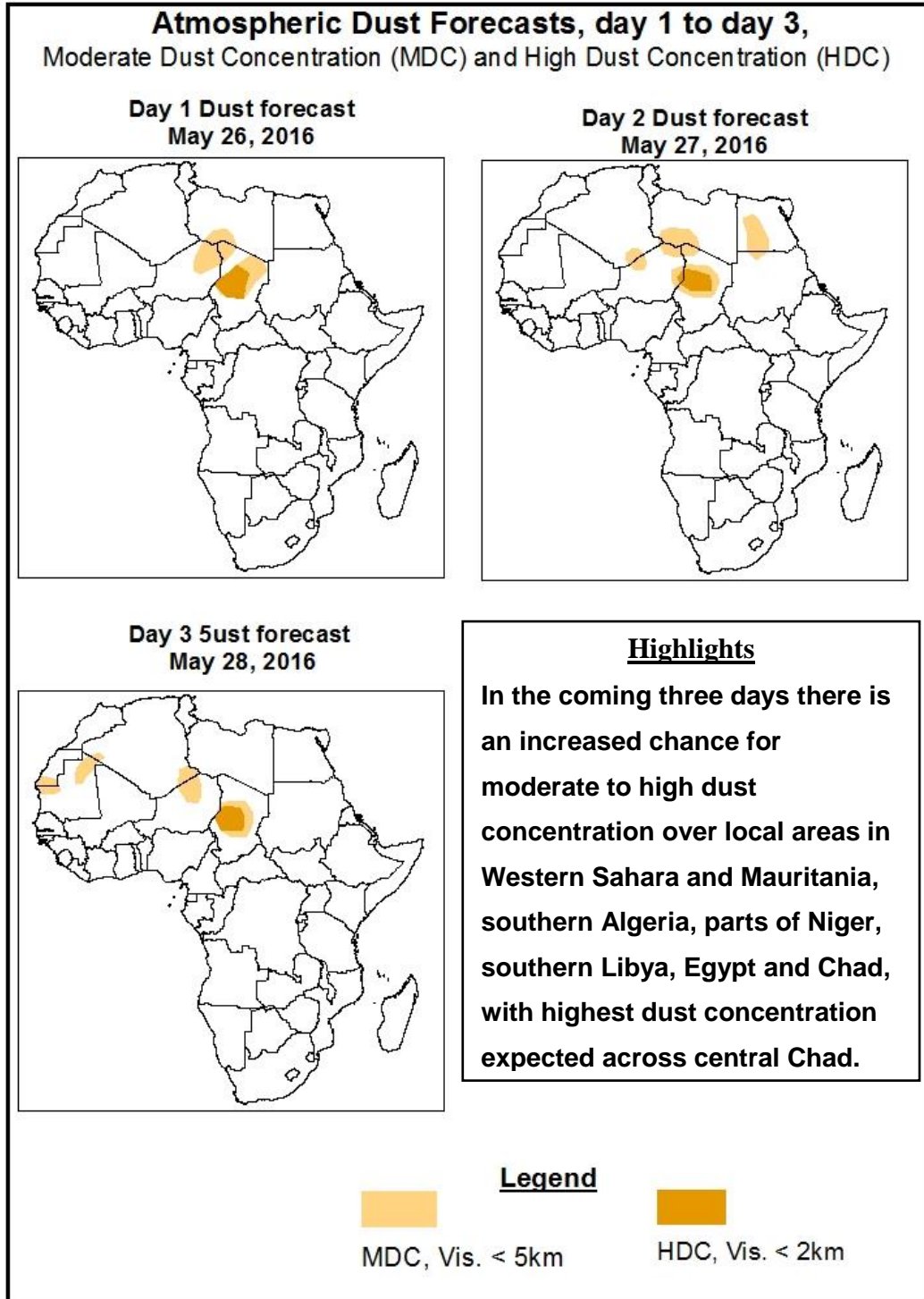


### **Highlights**

In the coming five days, lower level-wind convergences associated with the West Africa monsoon flow, combined with westward propagating lower-level cyclonic circulations across Central and West Africa are expected to enhance rainfall in the regions. Local wind convergences across western Ethiopia, and active meridional wind convergences near the Lake Victoria region are also expected to enhance rainfall in their respective areas. Therefore, there is an increased chance for two or more days of moderate to heavy rainfall over eastern Guinea, Sierra Leone, Liberia, eastern Burkina Faso, western Niger, parts of Nigeria, Cameroon, eastern Gabon, portions of CAR and DRC, northern Uganda, eastern South Sudan, and western Ethiopia.

**1.2. Atmospheric Dust Concentration Forecasts (valid: May 26 – May 28, 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: May 26 – May 30, 2016**

The Azores high pressure system over the Northeast Atlantic Ocean is expected to maintain an average central pressure value of 1023hPa during the forecast period.

The St. Helena High pressure system over the Southeast Atlantic Ocean is expected to weaken slightly; with its central pressure value is expected to decrease from 1026hPa to 1023hPa through 24 to 72 hours.

The Mascarene high pressure system over the Southwest Indian Ocean is expected to intensify slightly, with its central pressure value increasing from about 1028hPa to 1031hPa during the forecast period.

The 1016hPa isobar, associated with East African ridge is expected to extend northwards up to central Ethiopia during the first half of the forecast period, and it tends to retreat southwards towards end of the forecast period.

Central pressure values associated with heat lows across the Sahel and Sudan are expected to remain in the range between 1006hpa to 1010hpa during the forecast period, with the lowest central pressure values expected across the Western Sahel.

At 925HPa level, the anti-cyclonic circulation over Libya is expected to weaken slightly, with its associated dry northeasterly to easterly winds prevailing across Egypt, Sudan and northern Chad. The dry easterly flow across Chad is expected to exceed 35kts occasionally, which may lead to an increased atmospheric dust concentration in the region during the forecast period. The east-west oriented seasonal convergence is expected to prevail in the region between central Mali and Sudan, across central Niger and Chad during the forecast period.

At 850hPa level, a cyclonic circulation is expected to propagate westwards in the region between Niger and central Mali during the forecast period. A broad area of southeasterly flow is expected to prevail across eastern and central Africa. Meridional wind convergence near the Lake Victoria region is also expected to maintain seasonal rainfall in the region.

At 700hPa level, a trough in the easterlies is expected to propagate westwards between Cote d'Ivoire and Sierra Leone, leaving the West Africa coast by 48 hours.

In the coming five days, lower level-wind convergences associated with the West Africa monsoon flow, combined with westward propagating lower-level cyclonic circulations across Central and West Africa are expected to enhance rainfall in the regions. Local wind convergences across western Ethiopia, and active meridional wind convergences near the Lake Victoria region are also expected to enhance rainfall in their respective areas. Therefore, there is an increased chance for two or more days of moderate to heavy rainfall over eastern Guinea, Sierra Leone, Liberia, eastern Burkina Faso, western Niger, parts of Nigeria, Cameroon, eastern Gabon, portions of CAR and DRC, northern Uganda, eastern South Sudan, and western Ethiopia.

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, Chad, portions of eastern and southern Sudan, and northern South Sudan Republic.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (May 24, 2016)

Moderate to locally heavy rainfall was observed over many places in the Gulf of Guinea region, southern Niger and Chad, CAR, northern DRC, South Sudan, western Ethiopia and Lake Victoria region.

### 2.2. Weather assessment for the current day (May 25, 2016)

Intense convective clouds are observed across southwest Nigeria, northeastern Niger, northern DRC, South Sudan and Western Ethiopia.

