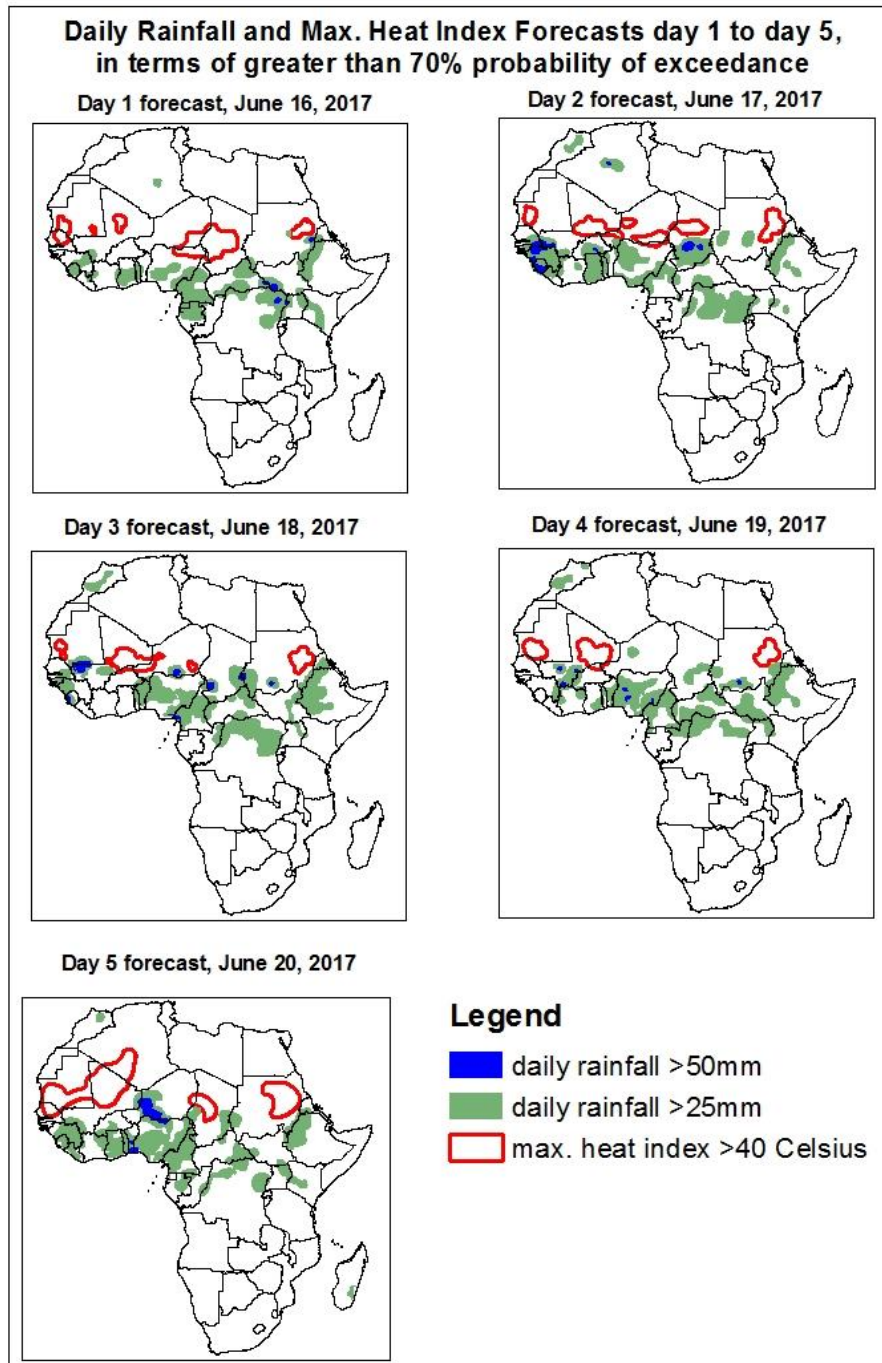


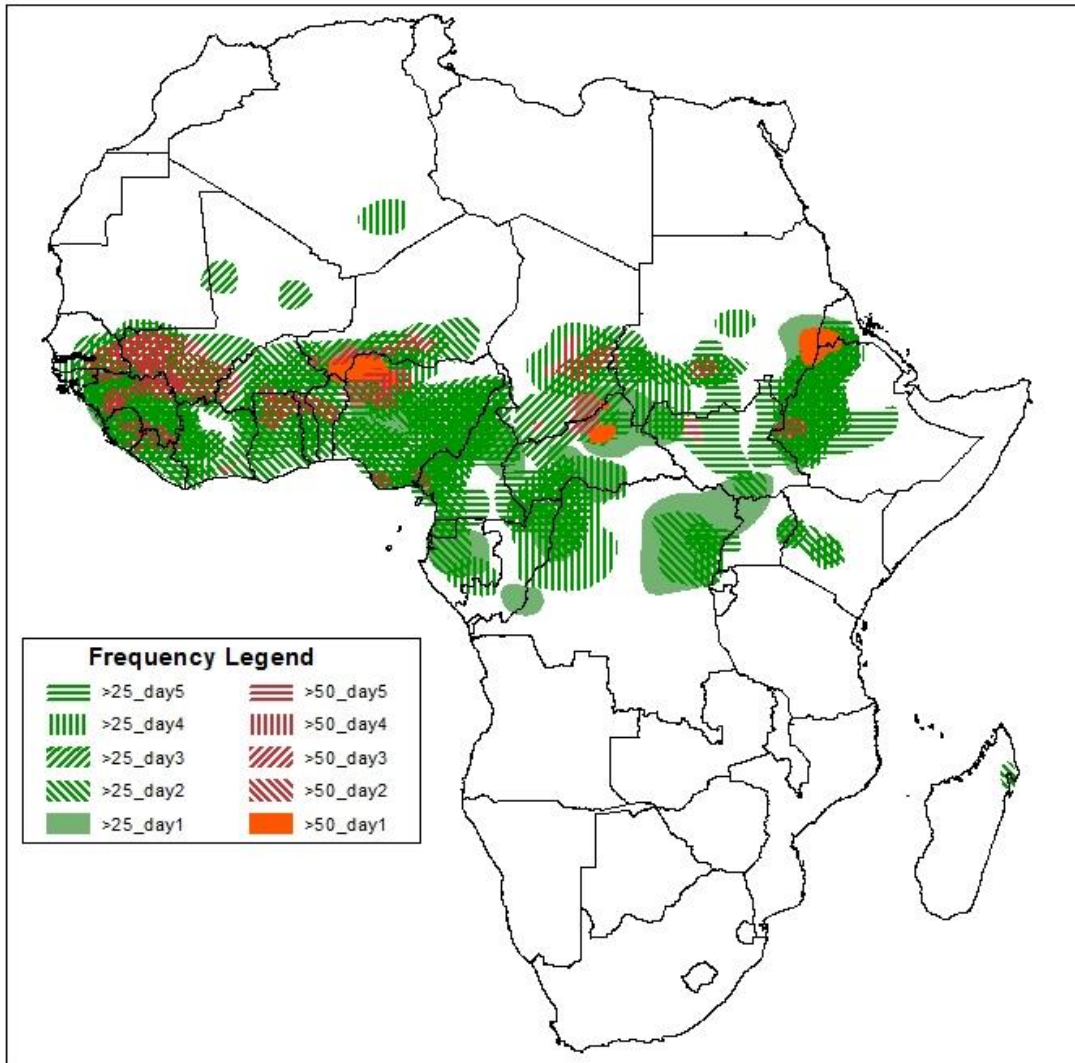
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on June 19, 2017)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: June 20– 24, 2017)**

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 20- 24, 2017

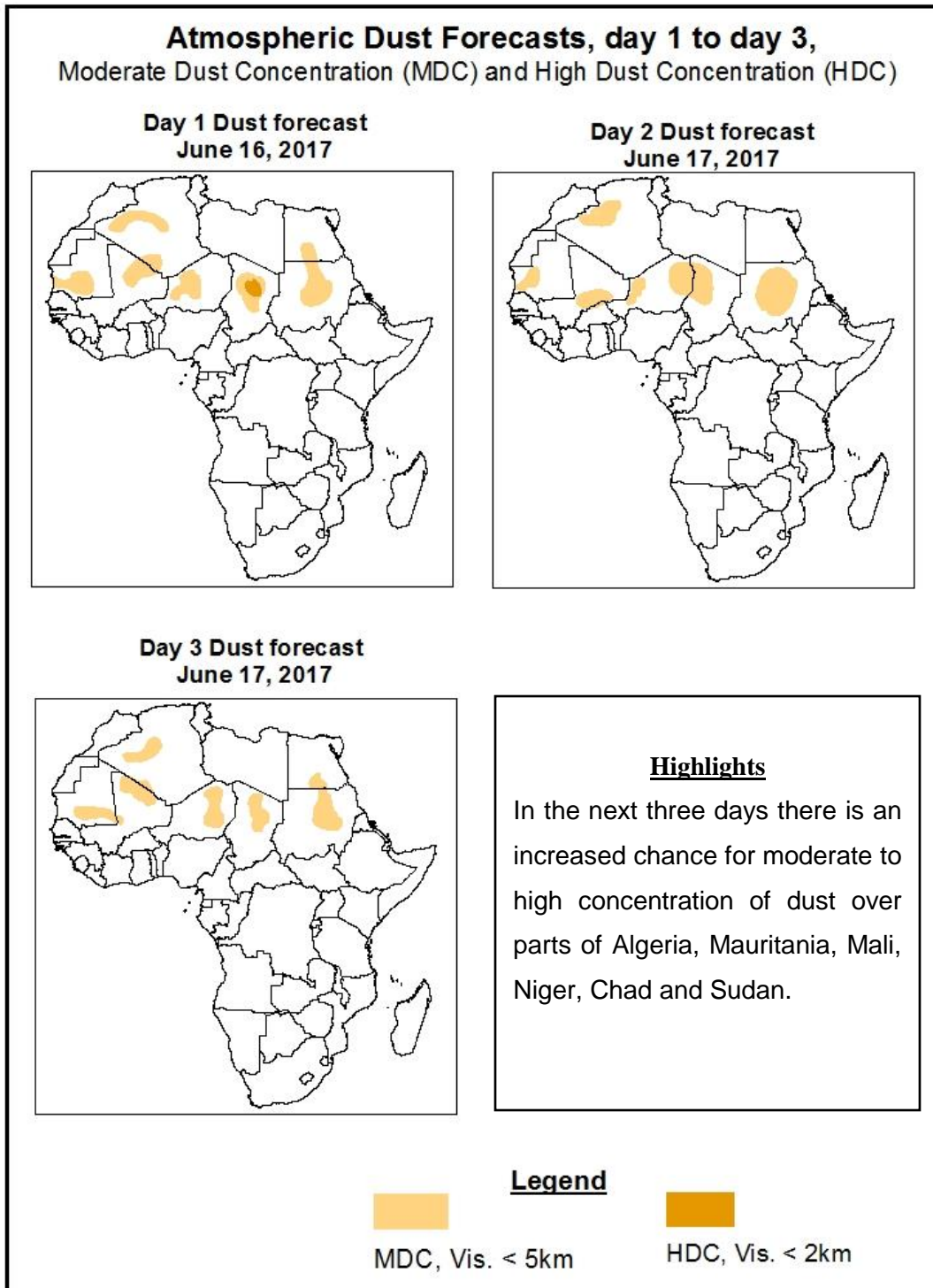


### **Highlights**

In the next five days, a strong monsoon flow from the Atlantic Ocean across West and Central Africa combined with a lower-level cyclonic circulation propagating across the Sahel region is expected to enhance rainfall over many places in West and Central Africa. Lower level wind convergence is expected to enhance rainfall over Sudan and western Ethiopia. As a result, there is an increased chance for two or more days of moderate to heavy rainfall over many places in the Gulf of Guinea and southern Sahel countries, and portions of Sudan South Sudan and western Ethiopia.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: June 16–18, 2017)

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 20– 24, 2017**

The Azores High Pressure system over the North Atlantic Ocean is expected to weaken with its central pressure value decreasing from 1031hPa to 1025hPa through 72 hours, and expected to strengthen slightly towards end of the forecast period.

The St. Helena High Pressure system over the Southeast of the Atlantic Ocean is expected to intensify, with its central pressure value increasing from 1029hPa to 1034hPa during the remaining forecast period.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to maintain an average central pressure value of 1028 hPa during the forecast period.

At 925hPa, strong dry Northeasterly to westerly winds may lead from light to moderate dust concentration over parts of Algeria, Egypt, Mauritania, Mali, Niger, Chad and Sudan.

At 850 hPa, a cyclonic circulation over eastern Chad is expected to propagate westward into northern Mali across the Sahel region through 24 to 120 hours.

At 700 hPa, the flow across the Gulf of Guinea countries and the neighboring areas of southern Sahel is expected to remain zonal, except for a feeble trough in the easterlies to form across Nigeria towards end of the forecast period.

At 500 hPa, wind speed associated with strong easterly flow is expected to exceed 30kts across Senegal, Mali and parts of Nigeria during the forecast period.

In the next five days, a strong monsoon flow from the Atlantic Ocean across West and Central Africa combined with a lower-level cyclonic circulation propagating across the Sahel region is expected to enhance rainfall over many places in West and Central Africa. Lower level wind convergence is expected to enhance rainfall over Sudan and western Ethiopia. As a result, there is an increased chance for two or more days of moderate to heavy rainfall over many places in the Gulf of Guinea and southern Sahel countries, and portions of Sudan South Sudan and western Ethiopia.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (June 18, 2017)

Light to moderate rainfall was observed over parts of Mauritania, Liberia, Cote d'Ivoire, Ghana, local areas in Niger, much of Cameroon, southern Chad, CAR, northern DRC, parts of South Sudan and western Ethiopia.

### 2.2. Weather assessment for the current day (June 19, 2017)

Intense convective clouds are observed many places in the Gulf of Guinea and Central Africa countries.

