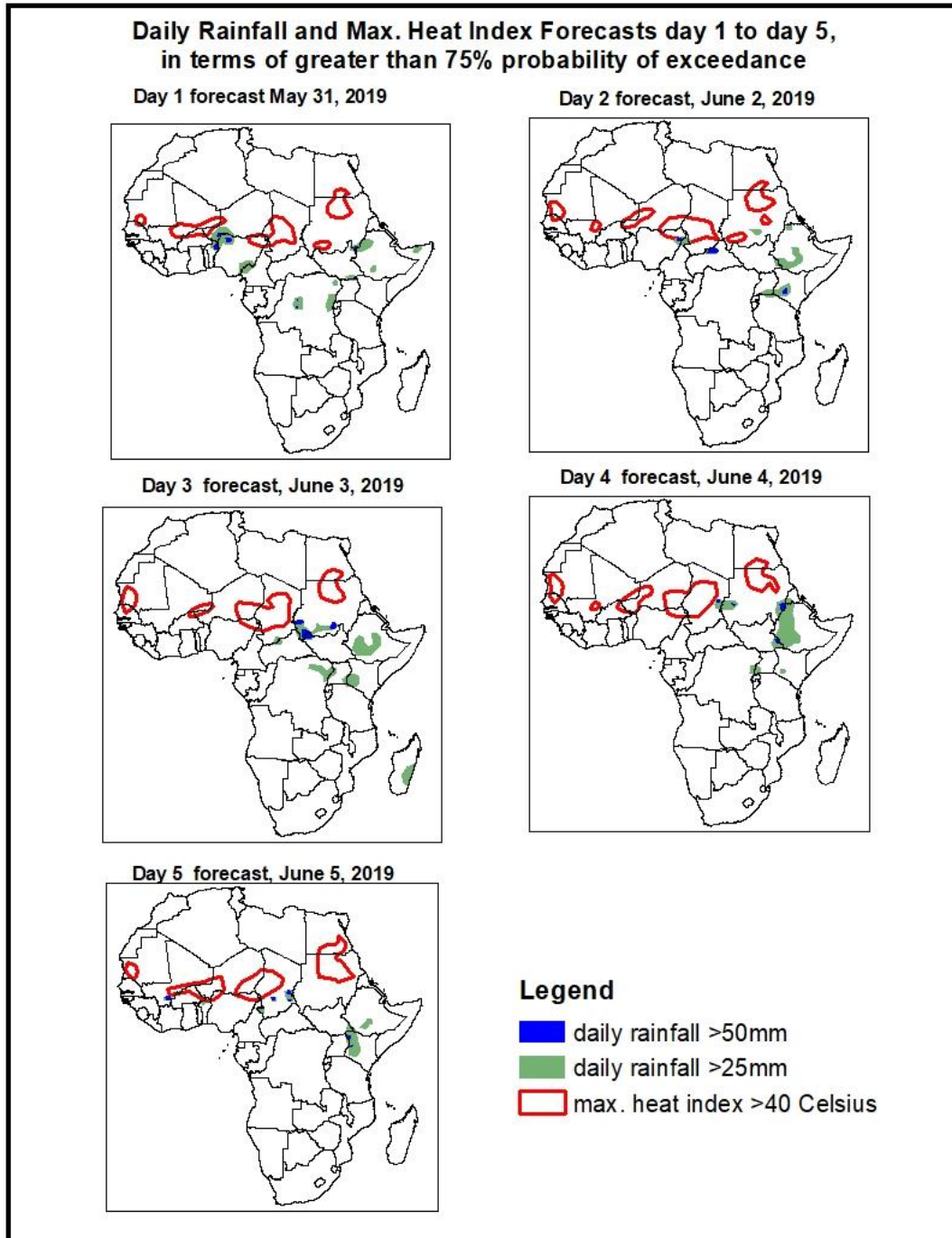


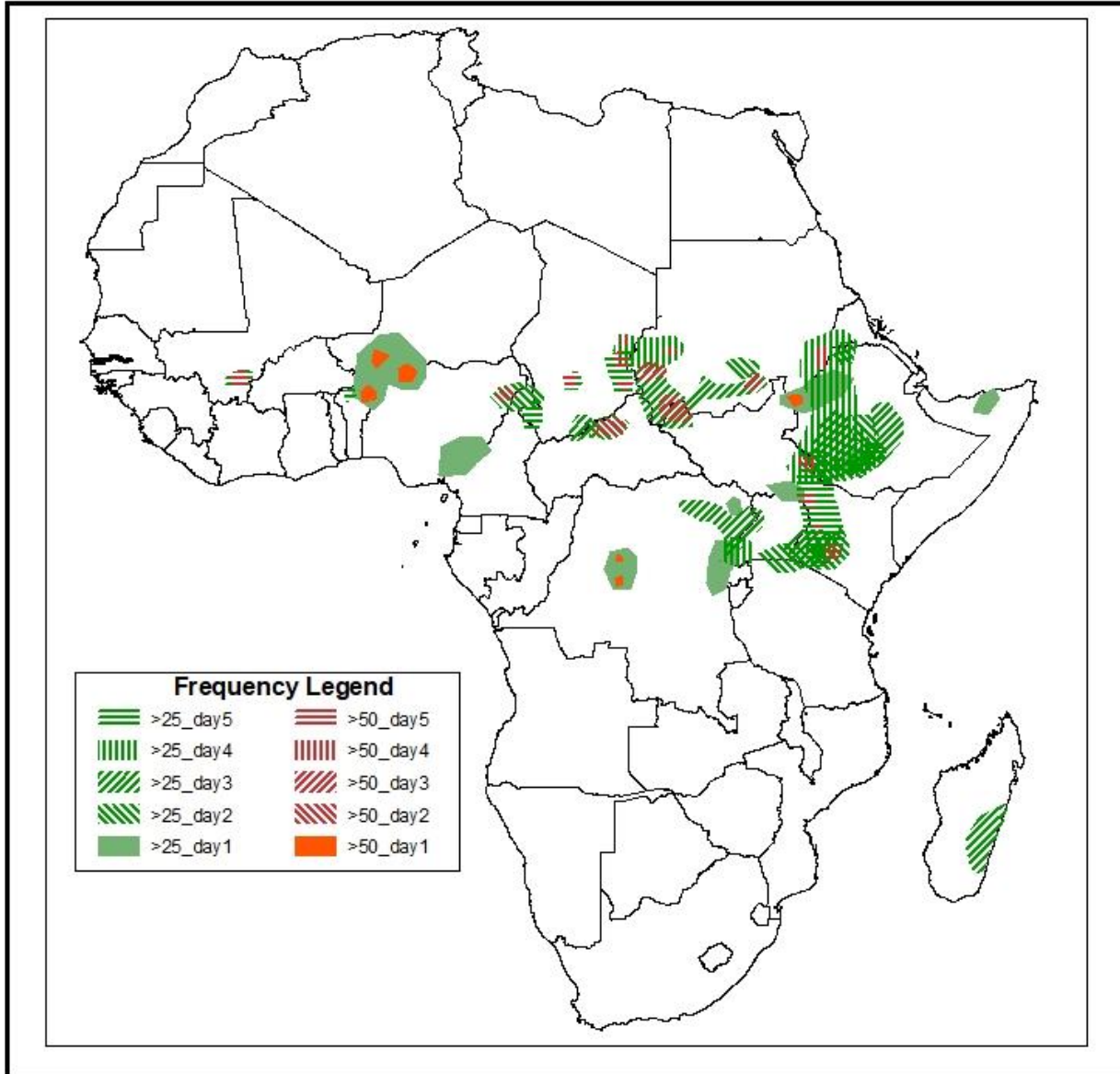
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on May 31, 2019)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 1 – 4 June 5, 2019)**

The forecasts are expressed in terms of high probability of precipitation (POP), valid 06Z to 06Z, and exceedance probability of maximum heat index (>40°C), based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



## Five Days Rainfall Forecast Summary 1 - 5 June, 2019

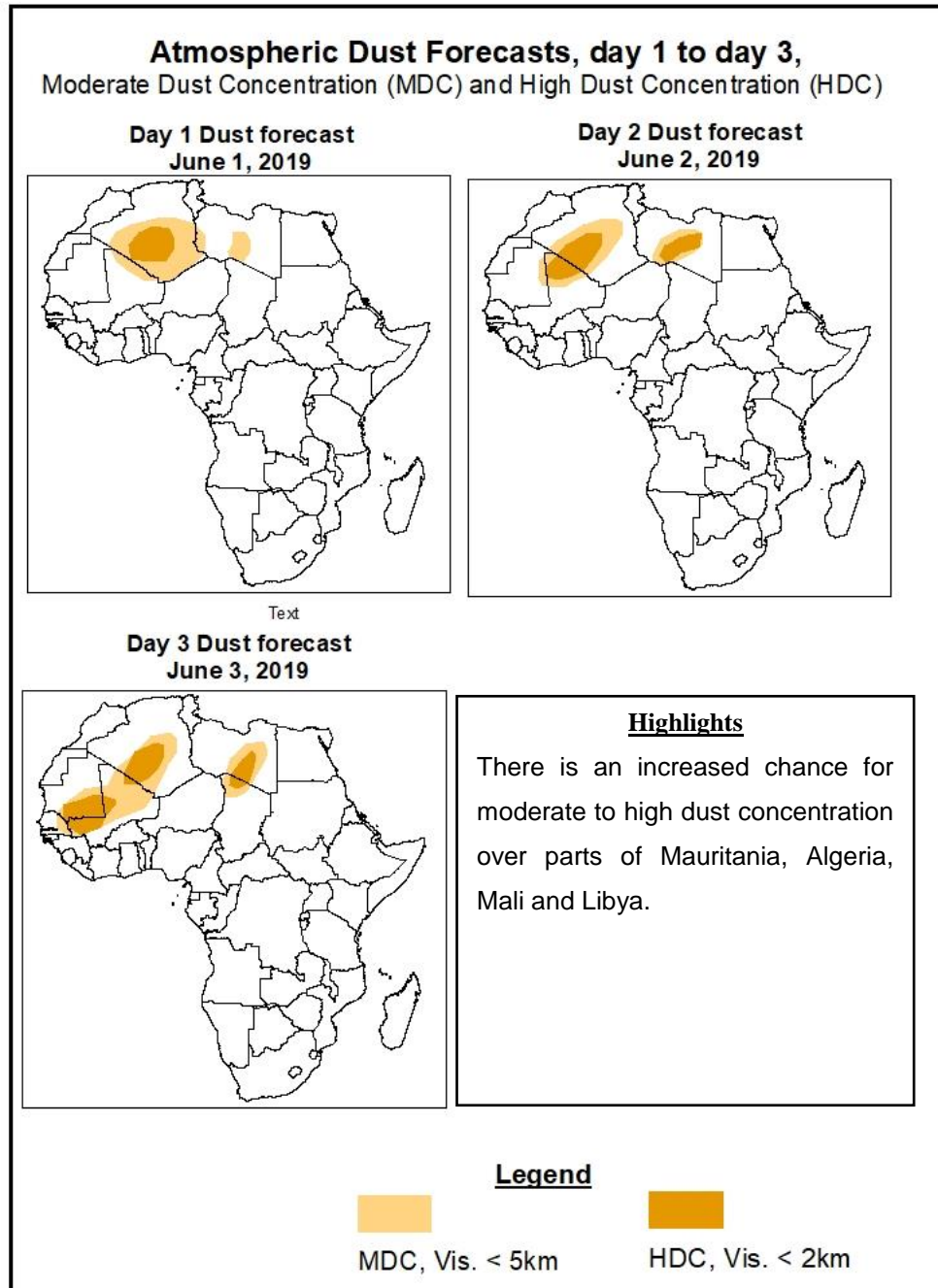


### Highlights

- The monsoon flow from the Atlantic Ocean with its associated lower-level convergence is expected to enhance rainfall over local areas in West Africa.
- Westward propagating cyclonic circulations across the Greater Horn of Africa, and Sudan and eastern Sahel are expected to enhance rainfall in the region.
- At least 25mm for two or more days is likely over some areas in eastern Sahel and the Greater Horn of Africa. There is an increased chance for daily rainfall to exceed 50mm over local areas in Niger, northeastern Nigeria, CAR, Sudan and South Sudan, Ethiopia and western Kenya.
- There is an increased chance for daily maximum heat index to exceed 40°C over portions of the Sahel region and Sudan.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: 1 – 3 June 2019)

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: 1 – 5 June, 2019**

During the forecast period, the Azores High Pressure system over the North of Atlantic is expected to intensify with its central pressure value increasing from about 1022hpa to 1032hpa and stay just northwest of West Africa.

During the forecast period, the St. Helena High Pressure system over Southeast Atlantic Ocean is expected to intensify, with its central pressure value increasing from 1022hPa to 1032hPa.

During the forecast period, the Mascarene High Pressure system over Southwest Indian Ocean is expected to be intensify from 1029hPa to 1040hPa.

At 925hPa level, strong dry northeasterly flow is expected to prevail across North Africa and the Sahel region. In contrast, moist westerly flow from the Atlantic Ocean is expected to prevail across the Gulf of Guinea region, and the neighboring areas of Central Africa.

At 850hPa, lower-level wind convergences are expected to remain active across central and eastern Sahel, and the Lake Victoria region. A cyclonic circulation over Sudan is expected to propagate westwards into western Chad during the forecast period. Meridional wind convergence is expected to remain active in the Lake Victoria region during the forecast period.

At 700hPa, mainly northeasterly to easterly wind pattern is expected to be maintained, across central Africa and the Gulf of Guinea. A cyclonic circulation near the coast of Horn of Africa, is expected to propagate westwards into Somalia and eastern Ethiopia through 72 hours.

The monsoon flow from the Atlantic Ocean with its associated lower-level convergence is expected to enhance rainfall over local areas in West Africa. Westward propagating cyclonic circulations across the Greater Horn of Africa, and Sudan and eastern Sahel are expected to enhance rainfall in the region. At least 25mm for two or more days is likely over some areas in eastern Sahel and the Greater Horn of Africa. There is an increased chance for daily rainfall to exceed 50mm over local areas in Niger, northeastern Nigeria, CAR, Sudan and

South Sudan, Ethiopia and western Kenya. There is an increased chance for daily maximum heat index to exceed 40°C over portions of the Sahel region and Sudan.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (May 30, 2019)

Daily rainfall amount exceeded 25mm over local areas in Burkina Faso, Nigeria, Chad, CAR and DRC.

### 2.2. Weather assessment for the current day (May 31, 2019)

Deep convective clouds are observed across eastern Gulf of Guinea, and many places in central and eastern Africa. An area of deep convection is also observed off the coast of the Greater Horn of Africa.

