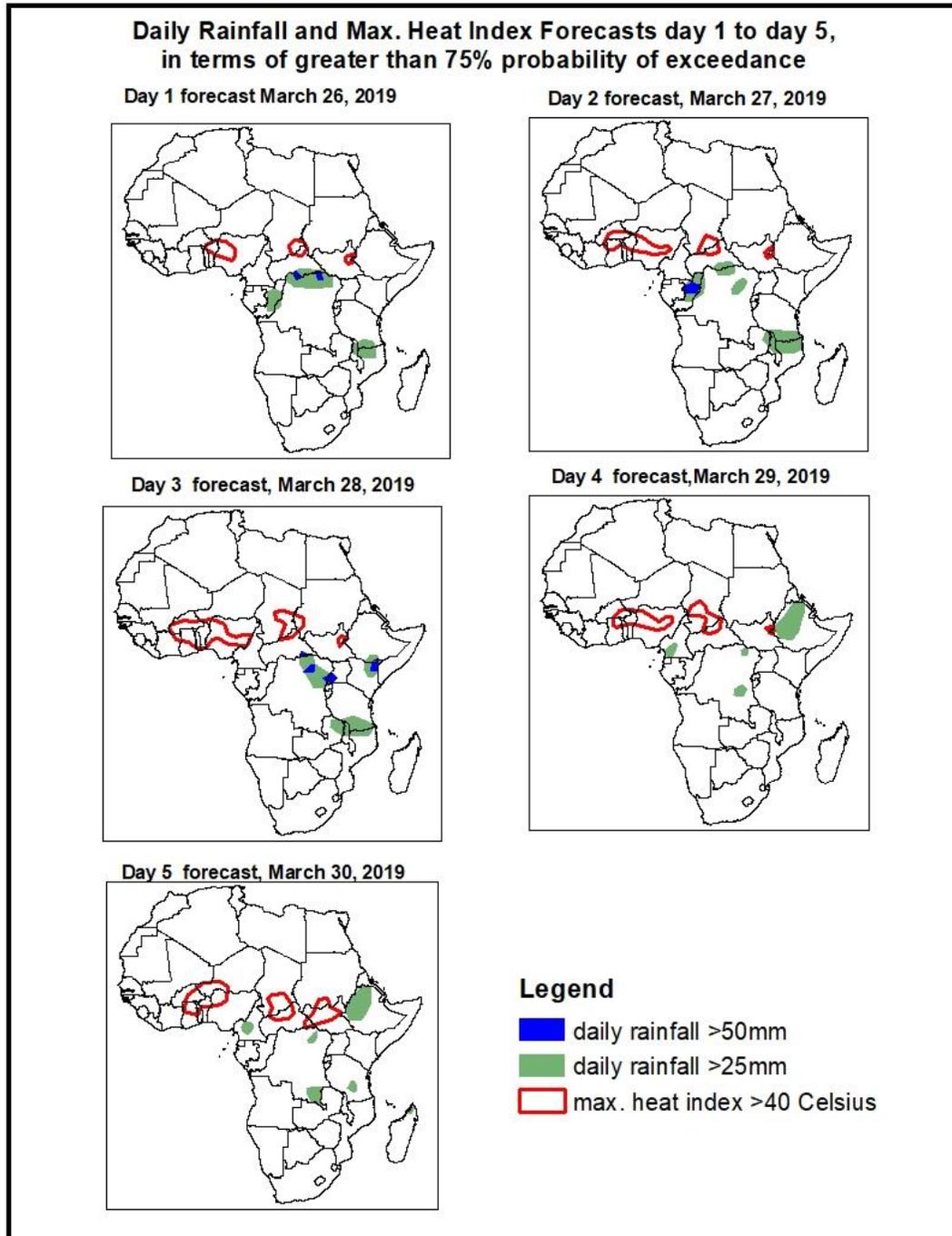


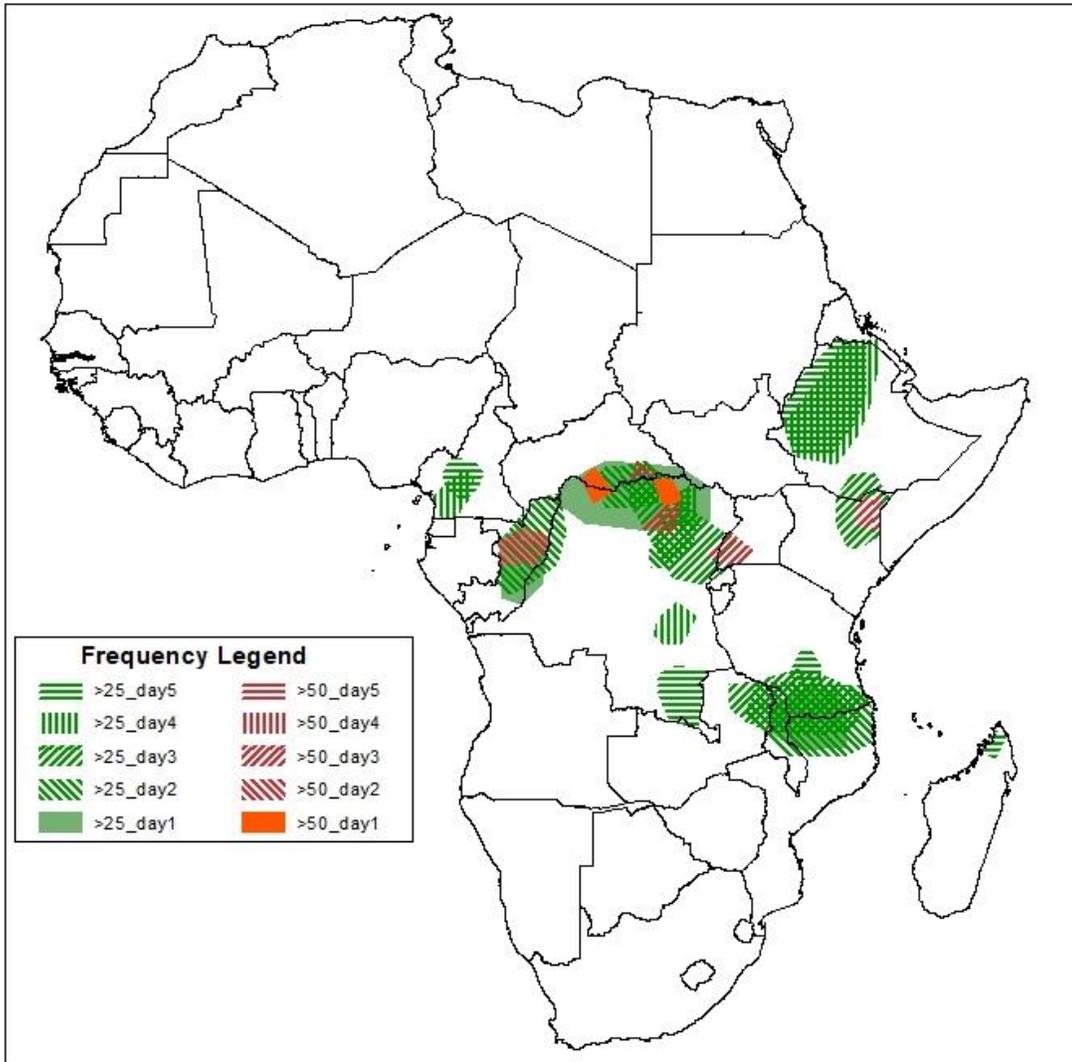
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on March 25, 2019)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 26 - 30 March, 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 26 - 30 March, 2019.

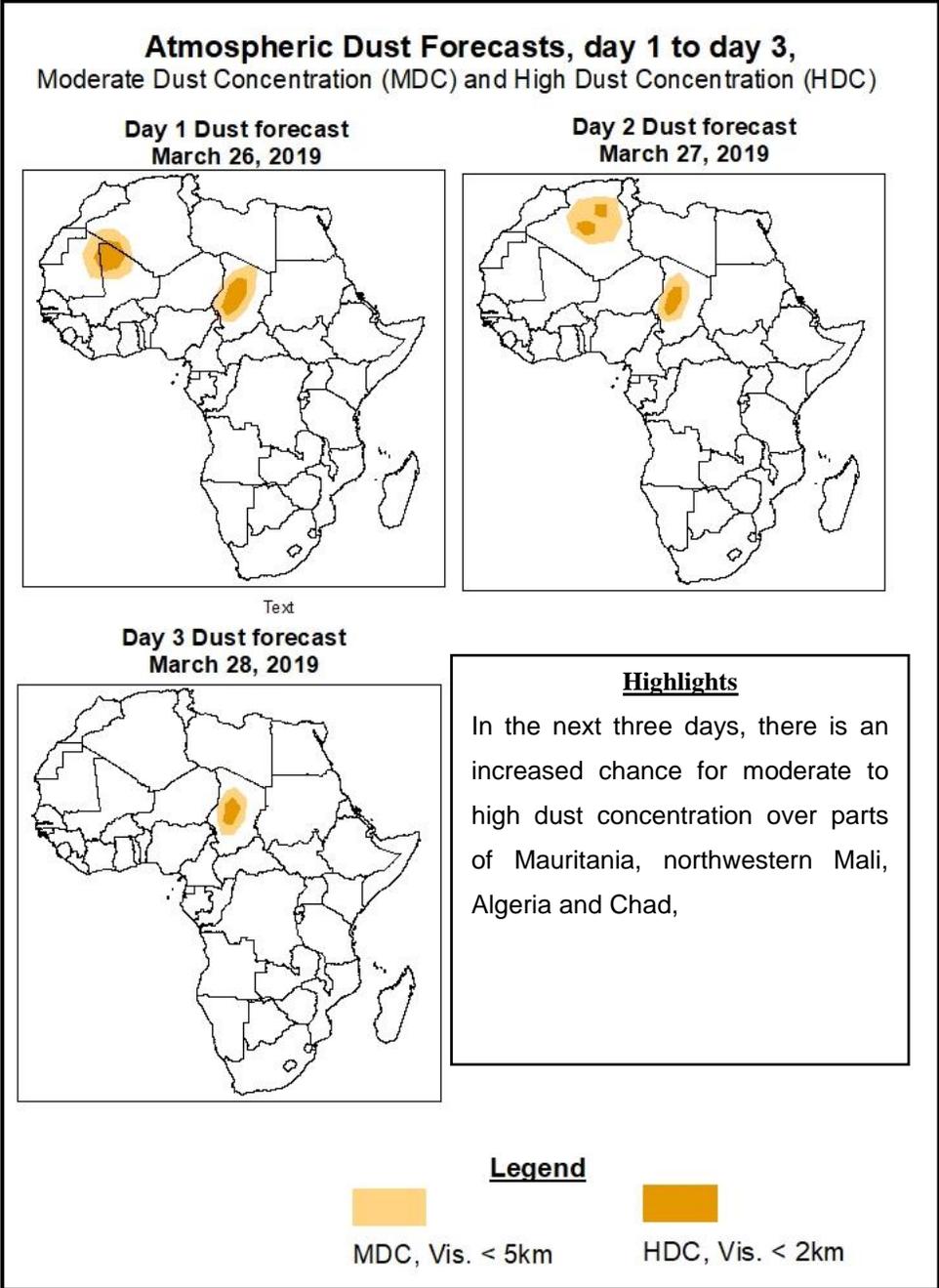


### **Highlights**

- In the next five days, lower-level wind convergences near DRC/CAR border, interactions between mid-latitude and tropical systems across northeastern Africa, and lower-level wind convergence over portions of southeastern Africa are expected to enhance rainfall in the regions.
- There is an increased chance for daily rainfall amount to exceed 25mm for 1 or more day(s) over parts of Congo Brazzaville, northern DRC, portions of Ethiopia, northern Mozambique, northern Malawi and southern Tanzania.
- There is a high likelihood for heat index to exceed 40°C across parts of Burkina Faso, northern Ghana, northern Togo, northern Benin, western Niger, northern Nigeria, Chad, and local areas in eastern South Sudan and western Ethiopia.

**1.2. Atmospheric Dust Concentration Forecasts** (valid: 26 – 28 March 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: 26 - 30 March 2019**

The Azores High Pressure system over the North of Atlantic Ocean is expected to progress eastwards while its central pressure value intensifying from 1036hPa to 1040hPa during the first half of the forecast period.

The St. Helena High Pressure system over Southwest Atlantic Ocean is expected to maintain an average central pressure value of 1026hPa as it progresses eastward during the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to intensify as it progresses eastwards with its central pressure value is expected to increase from 1028hPa to 1032hPa during the first half of the forecast period. A new high-pressure system is expected to emerge in the Southwest Indian Ocean, and gradually intensify during the second half of the forecast period.

At 925hPa, a broad area of dry and strong northerly to northeasterly wind is expected to prevail across Northwest and North Africa, and portions of the Sahel region. In contrast, moist southwesterly flow is expected to prevail across the central and eastern portions of the Gulf of Guinea countries.

At 850hPa, lower-level wind convergences are expected to remain active over northern and eastern DRC. A cyclonic trough over the central Mediterranean Sea is expected to deepen as it progresses eastwards into the eastern Mediterranean Sea towards end of the forecast period. A lower-level cyclonic circulation is also expected to deepen near the Mozambique Channel towards end of the forecast period.

At 700hPa, a broad area of cyclonic circulation is expected to prevail across Northeast Mediterranean Sea and the Northeast Africa, with its associated trough extending southwards into Sudan and western Ethiopia. Lower-level wind flow is expected to remain northeasterly across the Gulf of Guinea and central Africa regions.

At 500hPa, wind speed in excess of 30kts is expected to prevail across the equatorial Africa region during the forecast period.

At 200hPa, a strong wind (>90kts), associated with the subtropical westerly jet, is expected to prevail across northern Africa, with the strongest wind (>130kts) over Northwest Africa, and slight southward bending over Northeast Africa.

In the next five days, lower-level wind convergences near DRC/CAR border, interactions between mid-latitude and tropical systems across northeastern Africa, and lower-level wind convergence over portions of southeastern Africa are expected to enhance rainfall in the regions. There is an increased chance for daily rainfall amount to exceed 25mm for 1 or more day(s) over parts of Congo Brazzaville, northern DRC, portions of Ethiopia, northern Mozambique, northern Malawi and southern Tanzania. There is a high likelihood for heat index to exceed 40°C across parts of Burkina Faso, northern Ghana, northern Togo, northern Benin, western Niger, northern Nigeria, Chad, and local areas in eastern South Sudan and western Ethiopia.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (March 24, 2019)

Daily rainfall totals exceeded 25mm over parts of southern Cameroon, Gabon, parts of DRC, CAR, Malawi, northern Mozambique, and local areas in South Africa.

### 2.2. Weather assessment for the current day (March 25, 2019)

Intense convective clouds are observed over many places in central and the northern portions of Southern Africa countries, and parts of Ethiopia and Madagascar.

