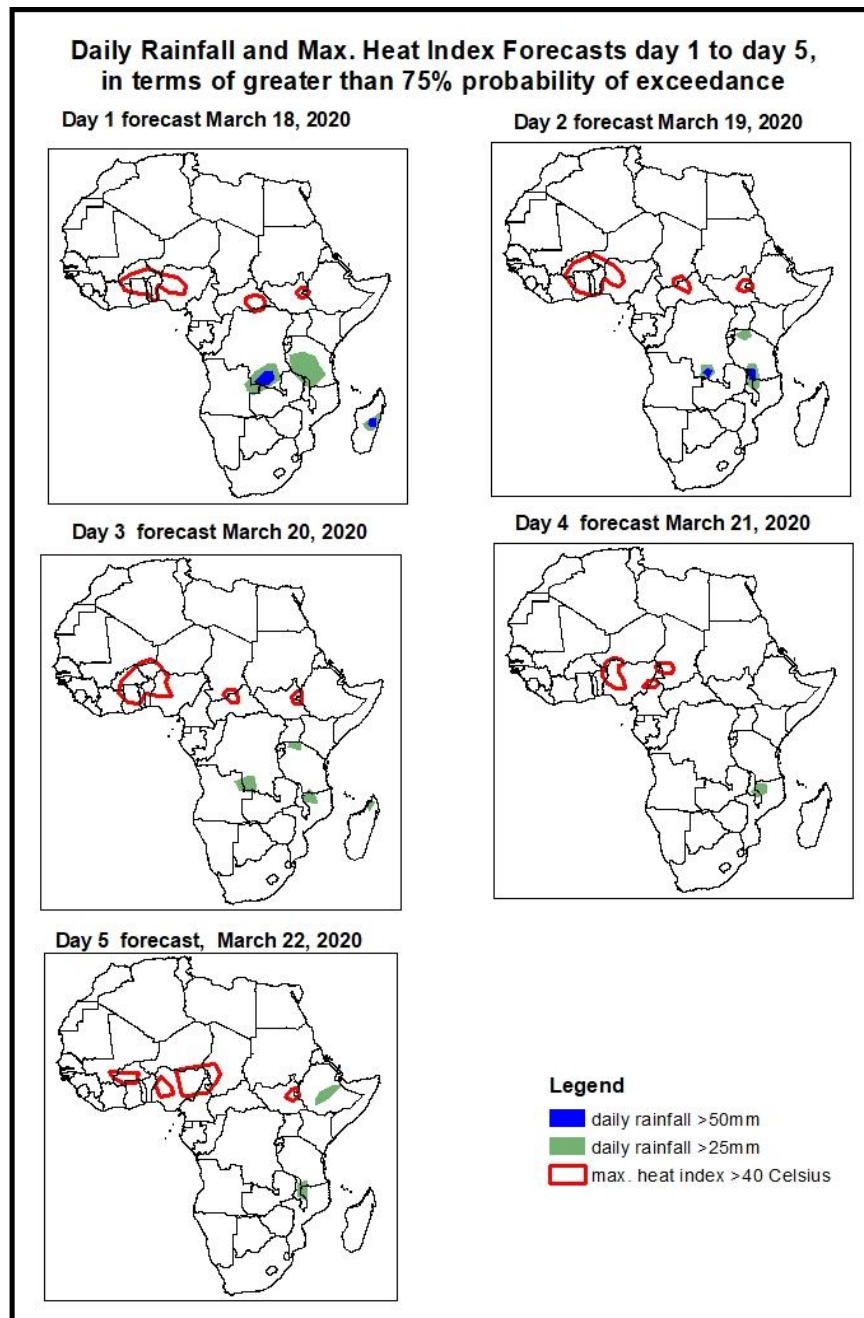


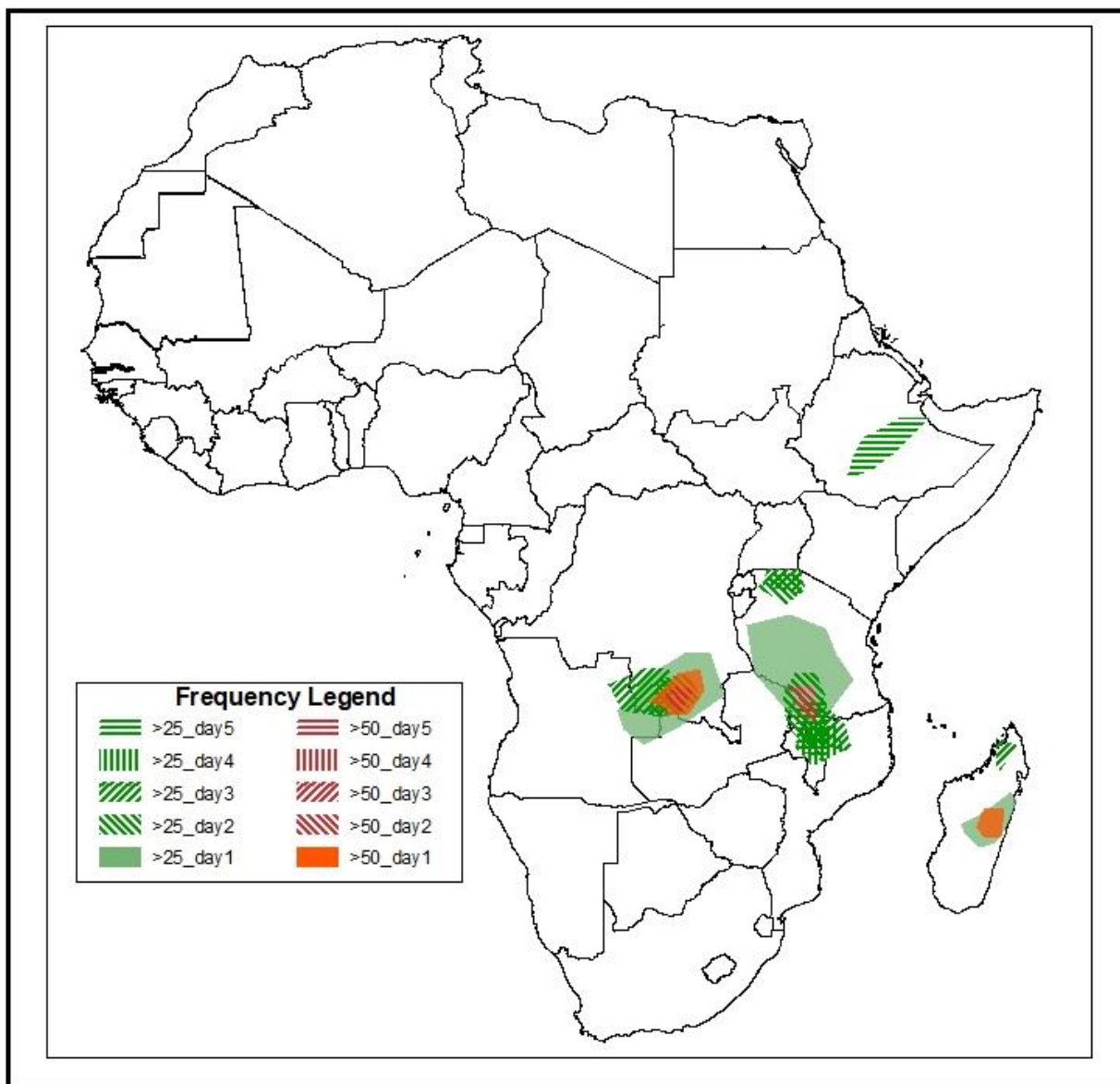
## 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on March 17, 2020)

### 1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 18 – 22 March, 2020)

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



## Five Days Rainfall Forecast Summary 18 - 22 March, 2020

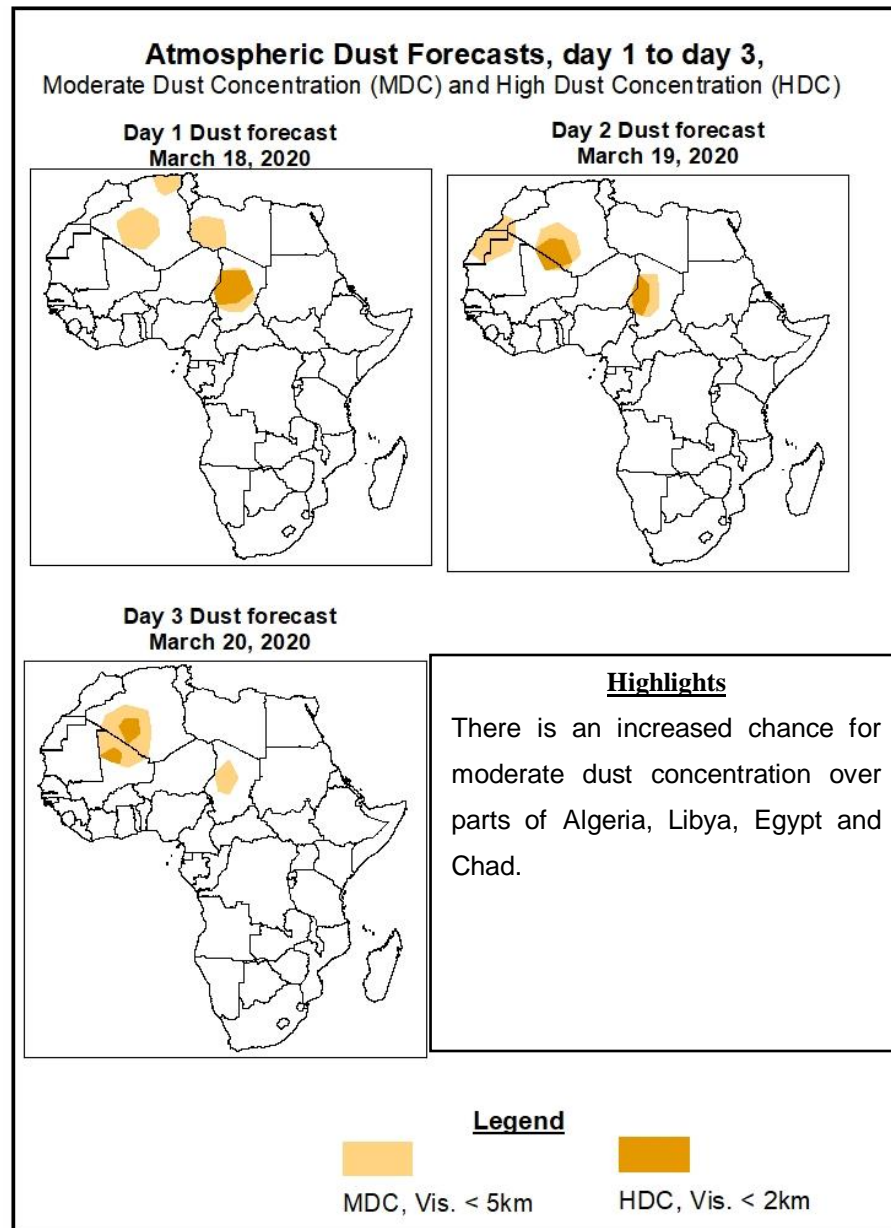


### **Highlights**

- Lower-level wind convergences are expected to enhance rainfall over portions of DRC and Tanzania and the neighboring areas.
- At least 25mm for two or more days is likely over southern DRC, Tanzania, northern Mozambique and central Madagascar.
- There is an increased chance for daily rainfall totals to exceed 50mm over local areas in DRC, Tanzania, and Madagascar.
- There is an increased chance for daily maximum heat index to exceed 40°C over portions of the Gulf of Guinea region, CAR and South Sudan.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: 18 – 20 March, 2020)

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: 18 – 22 March 2020**

The Azores High Pressure system over Northeast Atlantic and neighboring areas is expected to weaken with its central pressure value increasing from 1042hPa to 1036hPa during the forecast period.

The St. Helena High Pressure system over the South Atlantic Ocean is expected to intensify slightly with its central pressure value increasing from 1019hPa to 1022hPa during the forecast period.

The Mascarene High Pressure system over Southwest of Indian Ocean is expected to intensify with his central pressure value increasing from 1032hPa to 1034hPa during the forecast period.

At 925-hPa level, an area of strong dry northerly to northeasterly flow is expected to enhance atmospheric dust concentration over portions of the Sahel and North Africa regions. Zonal wind convergences are expected to remain active near 10°N in West and Central Africa.

At 850-hPa level, zonal wind convergences are expected to remain active near 5°N. Meridional wind convergences expected to remain active in the Lake Victoria region. Wind convergences are also expected to remain active in parts of East and Southeast Africa.

At 700-hPa level, a broad area of anti-cyclonic ridge is expected to prevail across much of West Africa. In contrast, a trough associated with a mid-latitude frontal system is expected to deepen while shifting eastwards across eastern Mediterranean Sea and the neighboring areas on Northeast Africa.

Lower-level wind convergences are expected to enhance rainfall over portions of DRC and Tanzania and the neighboring areas. At least 25mm for two or more days is likely over southern DRC, Tanzania, northern Mozambique and central Madagascar. There is an increased chance for daily rainfall totals to exceed 50mm over local areas in DRC, Tanzania, and Madagascar. There is an increased chance for daily maximum heat index to exceed 40°C over portions of the Gulf of Guinea region, CAR and South Sudan.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (March 16, 2020)

Daily rainfall amount exceeded 25 mm over local areas in Angola, DRC and eastern Zambia, and many parts of Tanzania.

### 2.2. Weather assessment for the current day (March 17, 2020)

Convective clouds are observed across portions of Central, East and Southern Africa.

