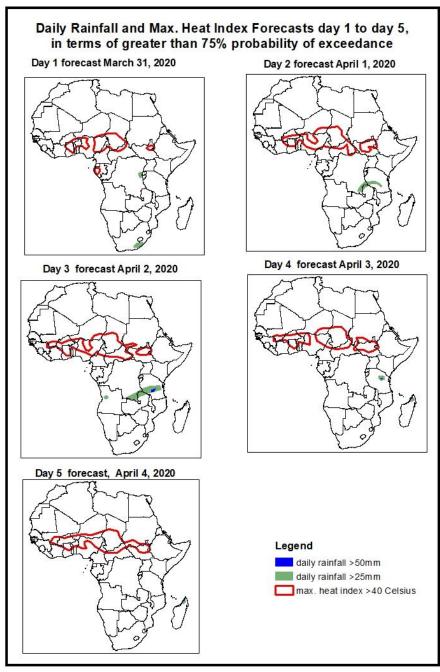
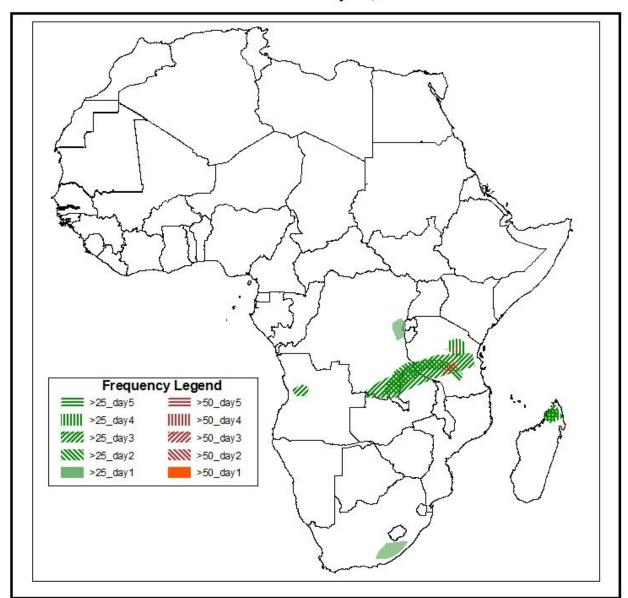
# 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on March 30, 2020)

## 1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 30 March – 4 April, 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°C), based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



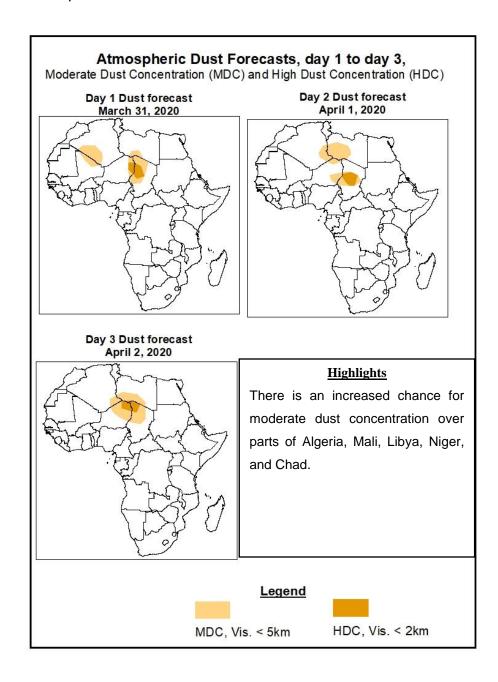
# Five Days Rainfall Forecast Summary 31 March - 4 April, 2020



# **Highlights**

- Localized lower-level wind convergences are expected to enhance rainfall over portions of eastern and southeastern Africa.
- At least 25mm for two or more days is likely over parts of DRC, Tanzania, and northern Madagascar.
- There is an increased chance for daily rainfall amount to exceed 50mm over local areas in DRC.
- There is an increased chance for daily maximum heat index to exceed 40°C across the eastern portions of the Sahel region, and local areas in South Sudan and southwestern Ethiopia.

# **1.2.** Atmospheric Dust Concentration Forecasts (valid: 31 March – 1 April, 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: 31 March – 4 April 2020

The Azores High Pressure system over Northeast Atlantic and neighboring areas is expected to intensify with its central pressure value increasing from 1050hPa to 1052hPa during the forecast period.

The St. Helena High Pressure system over the South Atlantic Ocean is expected to weaken with its central pressure value decreasing from 1033hPa to 1029hPa during the forecast period.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to weaken with his central pressure value decreasing from 1028hPa to 1025hPa 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 region and North Africa. Zonal wind convergences are expected to remain active near 10°N in West and Central Africa.

At 850-hPa level, a deep cyclonic circulation over Northeast Africa is expected to shift eastwards into the Middle East region while weakening. Zonal wind convergences are expected to remain active near 5°N. Local wind convergences are also expected to remain active in parts of East and Southeast Africa.

At 700-hPa level, a broad anticyclonc circulation is expected to prevail over much of West Africa during the forecast period. A trough associated with a mid-latitude frontal system is expected to deepen while shifting eastwards across the Mediterranean Sea and the neighboring areas of North Africa.

Localized lower-level wind convergences are expected to enhance rainfall over portions of eastern and southeastern Africa. At least 25mm for two or more days is likely over parts of DRC, Tanzania, and northern Madagascar. There is an increased chance for daily rainfall amount to exceed 50mm over local areas in DRC. There is an increased chance for daily

maximum heat index to exceed 40°C across the eastern portions of the Sahel region, and local areas in South Sudan and southwestern Ethiopia.

# 2.0. Previous and Current Day Weather over Africa

## 2.1. Weather assessment for the previous day (March 29, 2020)

Daily rainfall amount exceeded 25 mm over parts of Liberia, Cote d'Ivoire, southern Cameroon, Gabon, Congo, parts of CAR and DRC, South Sudan, local areas in Ethiopia, Tanzania, Southern Somalia, South Africa and northern Madagascar.

## 2.2. Weather assessment for the current day (March 30, 2020)

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

