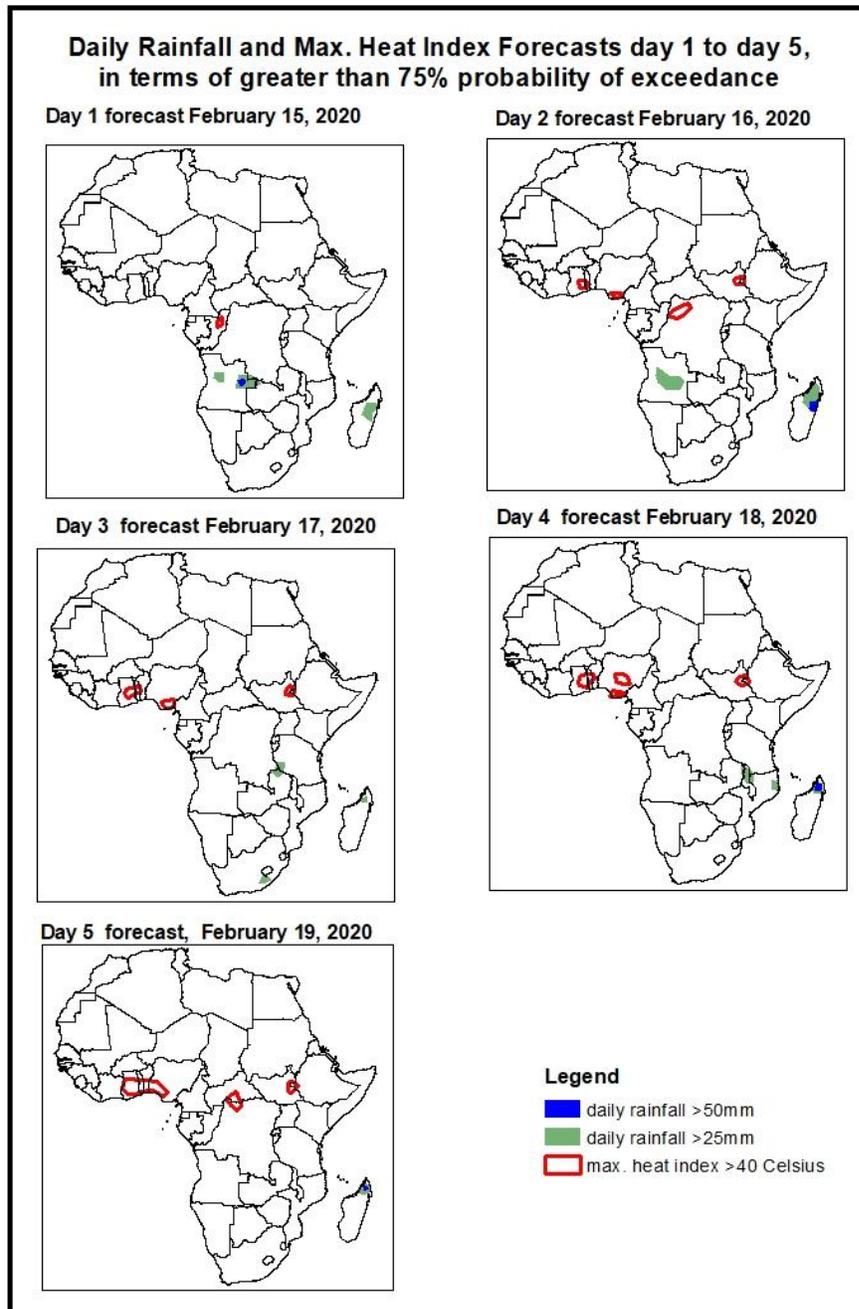


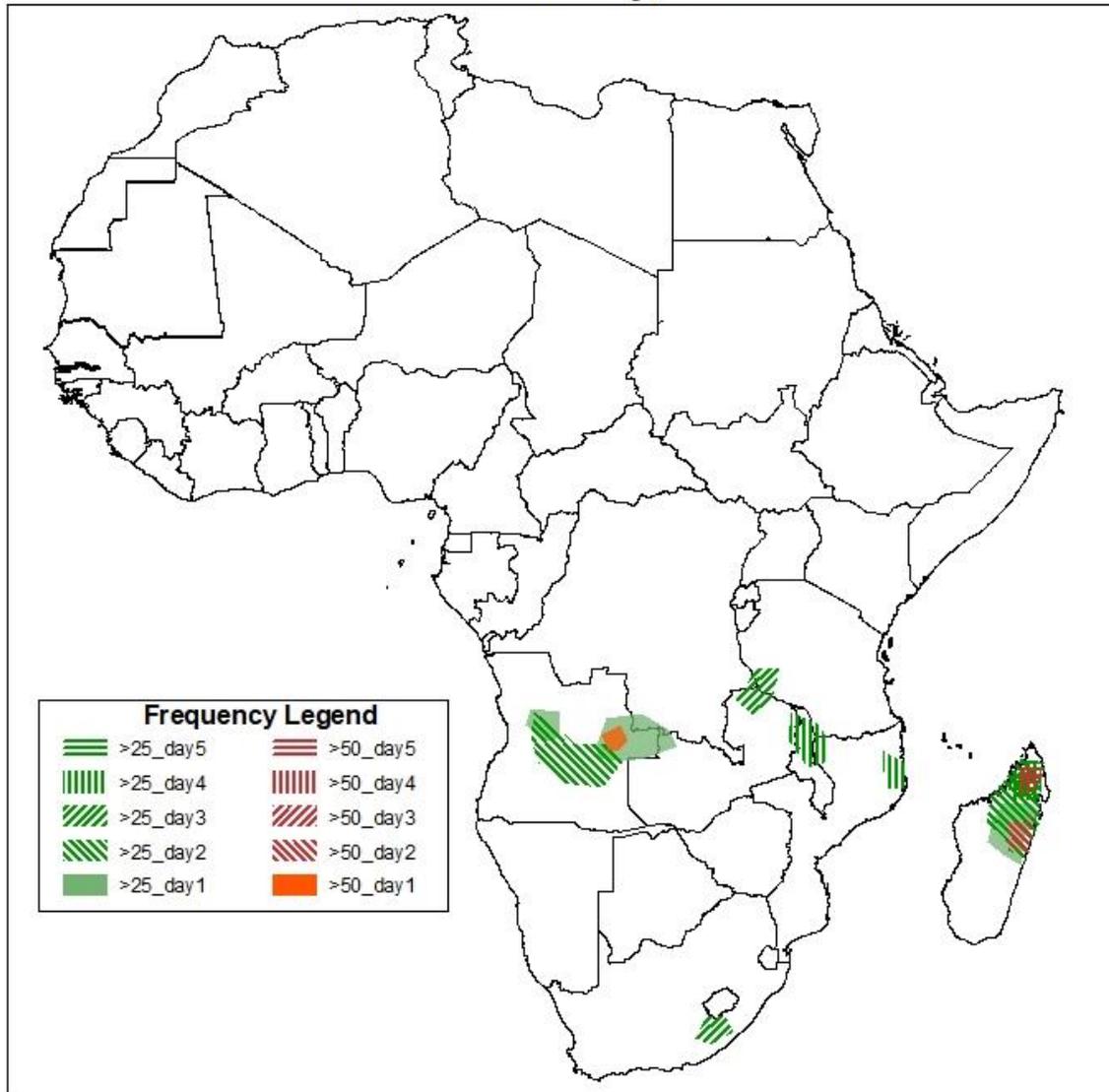
## 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on February 14, 2020)

### 1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 15 – 19 Feb, 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 15 - 19 February, 2020

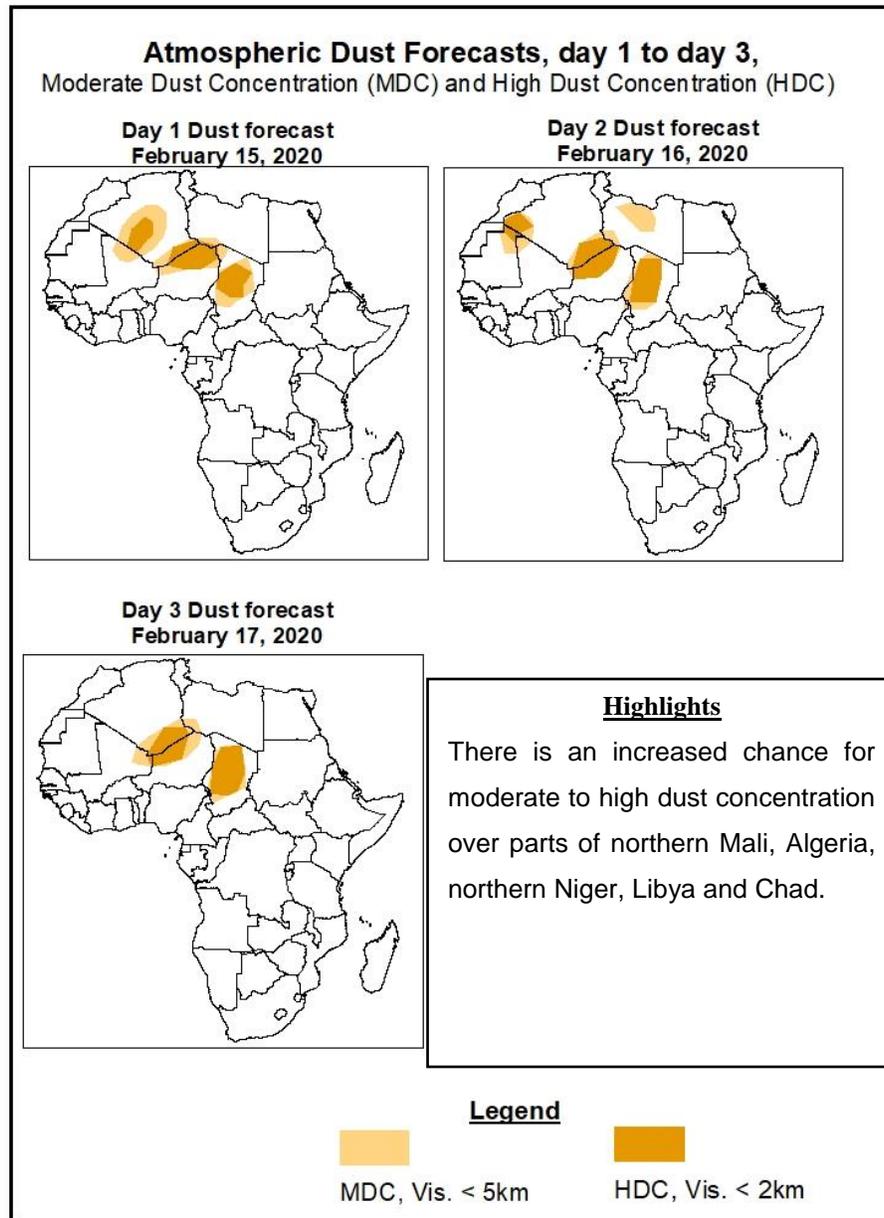


### **Highlights**

- Lower level wind convergences are expected to enhance rainfall over the northern portions of Southern Africa and Madagascar.
- At least 25mm for two or more days is likely over parts of Angola northern Malawi and northern Madagascar, with an increased chance for rainfall to exceed 50mm over southern local areas in Angola and Madagascar.
- There is an increased chance for daily maximum heat index to exceed 40°C over local areas in the Gulf of Guinea region, northern DRC and eastern South Sudan and southwestern Ethiopia.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: 15 – 17 Feb, 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: 15 – 19 February 2020**

The Azores High Pressure system over Northeast Atlantic and neighboring areas is expected to intensify significantly with its central pressure value increasing from 1025hPa to 1037hPa during the forecast period.

The St. Helena High Pressure system over the Southwest Atlantic Ocean is expected to move slightly northeastwards while weakening with his central pressure value decreasing from 1028hPa to 1024hPa during the forecast period.

The Mascarene High Pressure system over Southwest of Indian Ocean is expected to maintain an average central pressure value around 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 the Sahel and Sahara region. Zonal wind convergences are expected to remain active along 5°N and in some parts of central and southern Africa.

At 850-hPa level, lower level-wind convergences are expected to remain active over central Africa, and the neighboring areas of Southern Africa. A cyclonic circulation is expected to move eastwards across eastern Mediterranean region while deepening.

At 700-hPa level, a cyclonic circulation is expected to propagate eastwards across the northern parts of Southern Africa. A trough associated with mid-latitude frontal system is expected to propagate eastward across the eastern Mediterranean region, and is likely to cause increased cloudiness over parts of the Greater Horn of Africa during the forecast period.

Lower level wind convergences are expected to enhance rainfall over the northern portions of Southern Africa and Madagascar. At least 25mm for two or more days is likely over parts of Angola northern Malawi and northern Madagascar, with an increased chance for rainfall to exceed 50mm over southern local areas in Angola and Madagascar. There is an increased chance for daily maximum heat index to exceed 40°C over local areas in the Gulf of Guinea region, northern DRC and eastern South Sudan and southwestern Ethiopia.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (February 13, 2020)

Daily rainfall amount exceeded 25 mm over local areas in Congo and Angola, southern DRC, and portions of Zambia and Tanzania, with rainfall amount in excess of 50 mm observed over local areas in Zambia and Tanzania.

### 2.2. Weather assessment for the current day (February 14, 2020)

Convective clouds are observed across the northern portions of Southern Africa and Madagascar.

