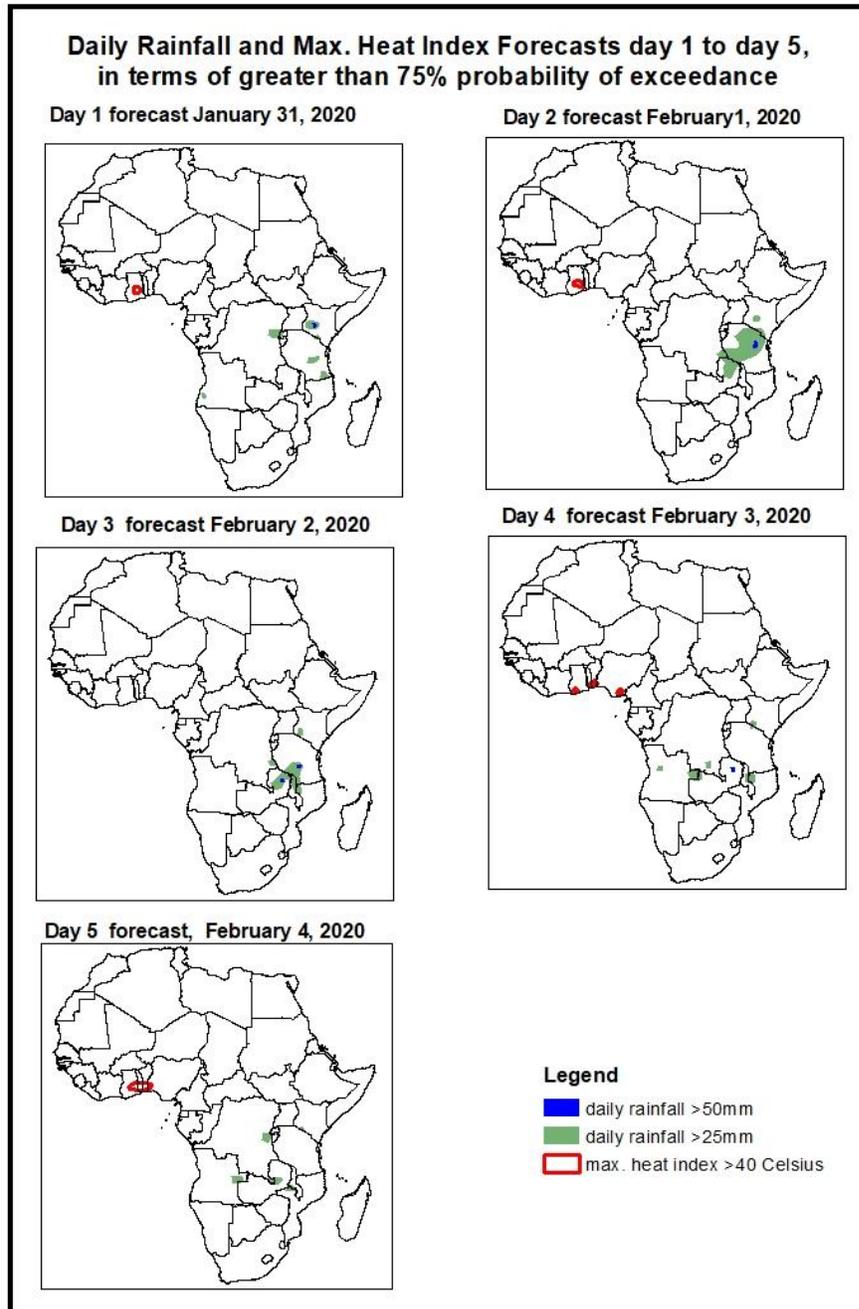


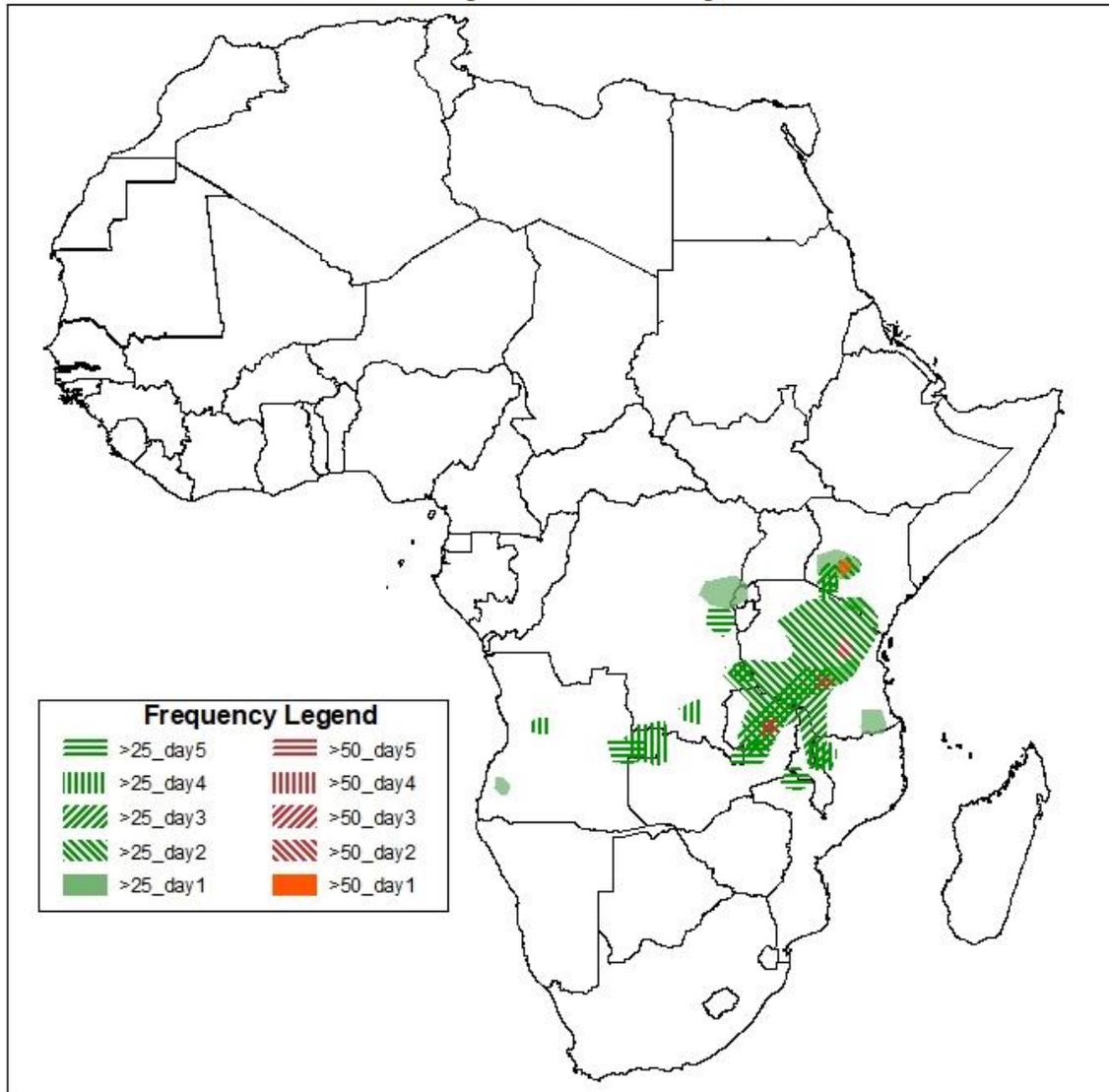
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on January 30, 2020)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 31 Jan – 4 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 31 January - 4 February, 2020

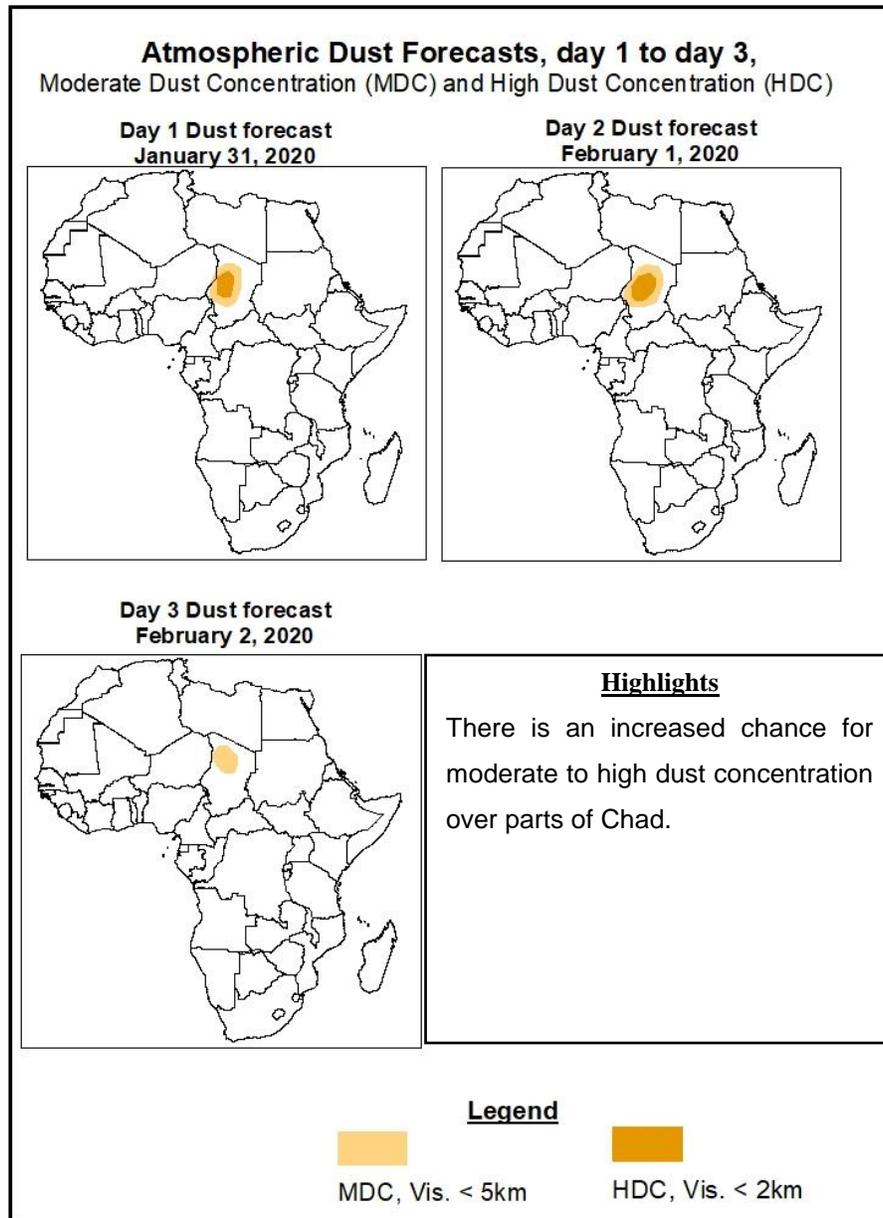


### **Highlights**

- Lower-level wind convergences are expected to enhance rainfall over many parts of Tanzania and the neighboring areas of Kenya, Zambia and Mozambique.
- At least 25mm for two or more days is likely over parts of Zambia, Tanzania, southern Kenya and northern Mozambique.
- There is an increased likelihood for daily rainfall to exceed 50mm over local areas in eastern Zambia, Tanzania and Kenya.
- There is an increased chance for daily maximum heat index to exceed 40°C over local areas in the Gulf of Guinea region.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: 31 Jan – 2 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: 31 January – 4 February 2020**

The Azores High Pressure system over the Northwest Africa and the neighboring areas is expected to maintain an average central pressure value of 1027hPa during the forecast period.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is expected to weaken, with its central pressure value decreasing from 1024hPa to 1020hPa during the forecast period.

The Mascarene High Pressure system over Southwest of Indian Ocean is expected to intensify, with its central pressure value increasing from 1024hPa to 1031hPa during the forecast period.

The Arabian Ridge is expected to remain strong, stretching as far as Ethiopia, and is expected to maintain dry weather over northeastern Africa.

At 925-hPa level, an area of strong dry northerly to northeasterly flow is expected to enhance atmospheric dust concentration over portions of Chad. Zonal wind convergences are expected to remain active in the equatorial Africa region.

At 850-hPa level, lower-level wind convergences are expected to remain active over many parts of Tanzania and the neighboring areas. An area of cyclonic trough is expected to prevail in the region between central Angola and northern Mozambique.

Lower-level wind convergences are expected to enhance rainfall over many parts of Tanzania and the neighboring areas of Kenya, Zambia and Mozambique. At least 25mm for two or more days is likely over parts of Zambia, Tanzania, southern Kenya and northern Mozambique. There is an increased likelihood for daily rainfall to exceed 50mm over local areas in eastern Zambia, Tanzania and Kenya. There is an increased chance for daily maximum heat index to exceed 40°C over local areas in the Gulf of Guinea region.

## 2.0. Previous and Current Day Weather over Africa

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

Daily rainfall amount exceeded 25mm over western Kenya, and central Tanzania.

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

Convective clouds are observed over parts of DRC, Angola, Zambia, Botswana, Zimbabwe, Uganda, Kenya, Tanzania, northern Mozambique and Madagascar.

