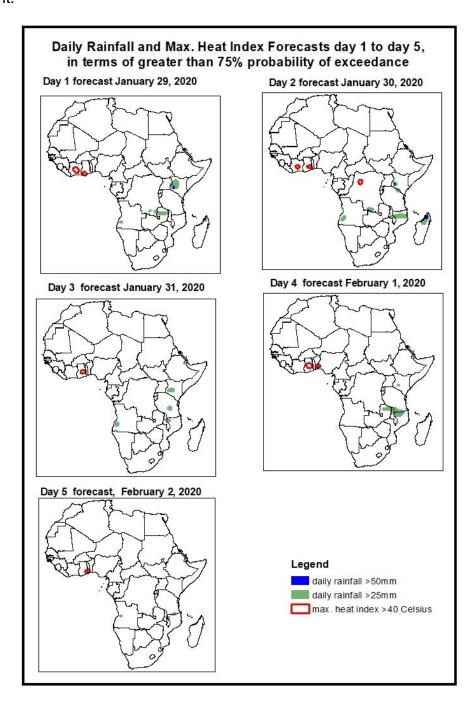
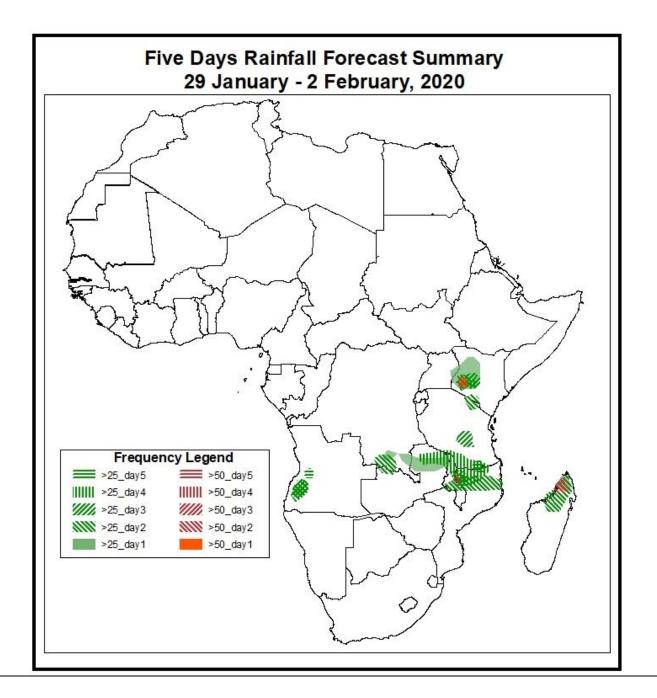
# 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on January 28, 2020)

### **1.1. Daily Rainfall and Maximum Heat Index Forecasts** (valid: 29 Jan – 2 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.



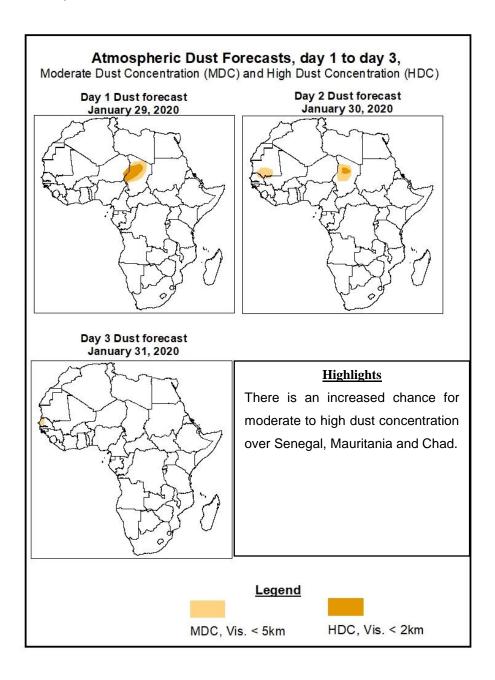


# **Highlights**

- Lower-level wind convergences are expected to enhance rainfall in the Lake Victoria region and portions of southeastern Africa.
- At least 25mm for two or more days is likely over Kenya, Angola, Zambia, northern Mozambique and northern Madagascar.
- There is an increased likelihood for daily rainfall to exceed 50mm over local areas in Kenya, northern Mozambique and northern Madagascar.
- There is an increased chance for daily maximum heat index to exceed 40°C over local areas in the Gulf of Guinea region and northern DRC.

### **1.2. Atmospheric Dust Concentration Forecasts** (valid: 29 – 31 Jan 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: 29 January – 2 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 1026hPa 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 1023hPa to 1021hPa 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 1023hPa to 1026hPa 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 prevail across the Sahel and the neighboring areas of the Gulf of Guinea region. 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 in the Lake Victoria region through 96 hours. 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 in the Lake Victoria region and portions of southeastern Africa. At least 25mm for two or more days is likely over Kenya, Angola, Zambia, northern Mozambique and northern Madagascar. There is an increased likelihood for daily rainfall to exceed 50mm over local areas in Kenya, northern Mozambique and northern Madagascar. There is an increased chance for daily maximum heat index to exceed 40°C over local areas in the Gulf of Guinea region and northern DRC.

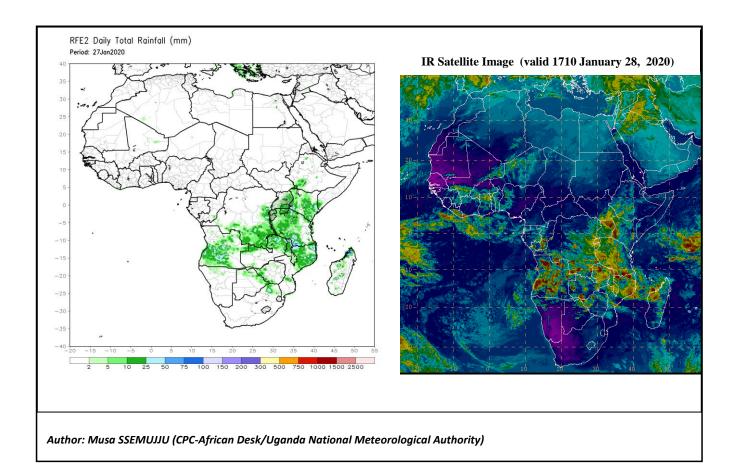
## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (January 27, 2020)

Daily rainfall amount exceeded 25mm over portions of Angola, local areas in DRC, Kenya Tanzania, northern Mozambique and northern Madagascar.

### 2.2. Weather assessment for the current day (January 28, 2020)

Deep convective clouds are observed over equatorial East Africa and the northern portions of Southern Africa.



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