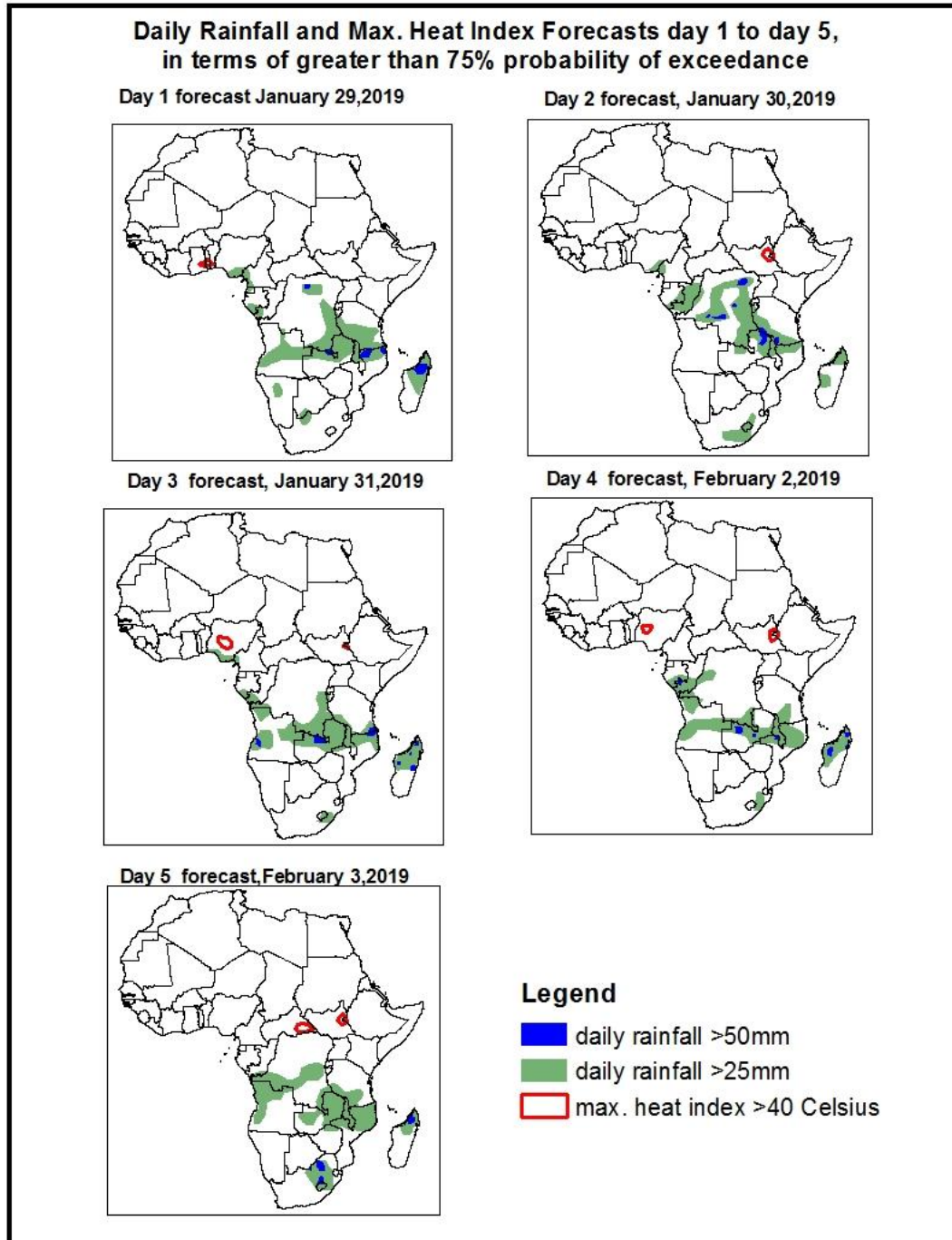


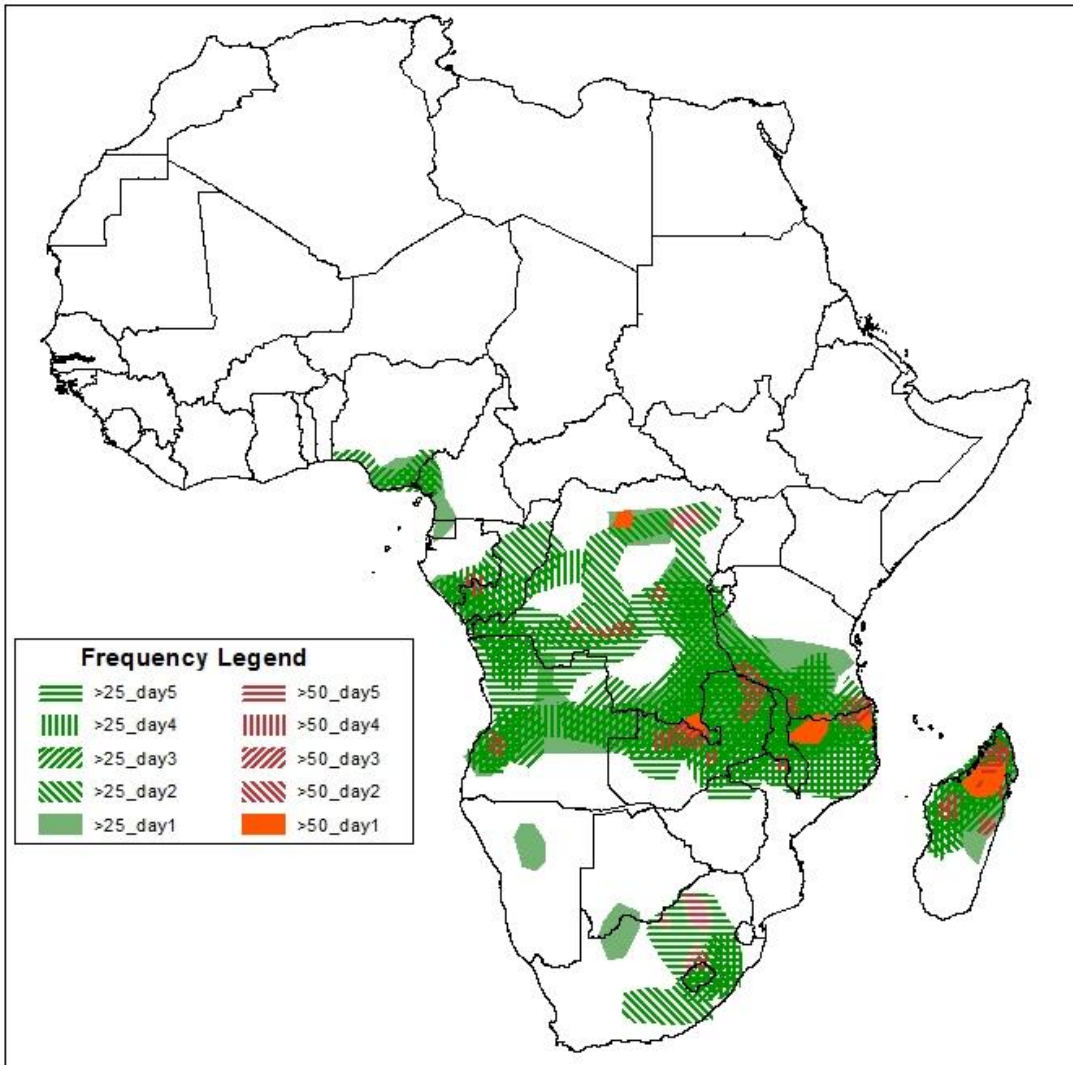
## 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on January 28, 2019)

### 1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Jan 29 –Feb 2, 2019)

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 January 29 - February 2 , 2012.

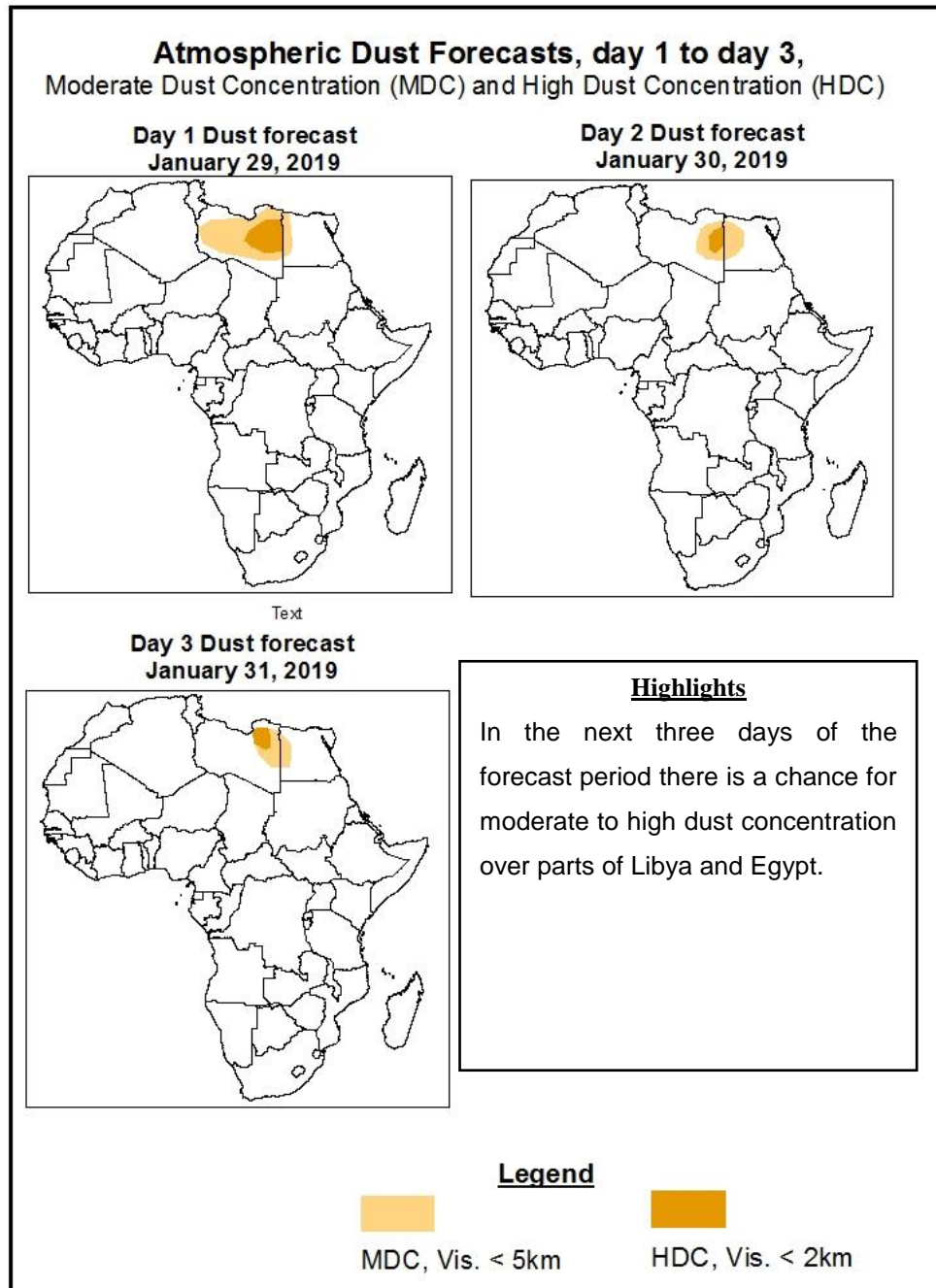


### **Highlights**

- In the next five days, lower-level wind convergence across parts of central Africa and the northern portions of Southern Africa, localized convergence in South Africa, and cyclonic circulation in the Mozambique Channel and Madagascar are expected to enhance rainfall in the areas. Hence, there is an increased chance for 2 or more days of moderate to heavy rainfall across parts of Central, and the northern portions of Southern Africa.
- There is a high likelihood for temperature heat index values to exceed 40<sup>0</sup>C over local areas of in Nigeria, Car, eastern South Sudan, and southwestern Ethiopia.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: January 29 – 31, 2019)

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: January 29 – February 2, 2019***

The Azores High Pressure system over the North of Atlantic Ocean is expected to progress eastwards with its central pressure value expected to weaken from 1031hPa to 1026hPa during the forecast period.

The St. Helena High Pressure system over Southwest Atlantic Ocean is expected to intensify as it progresses eastwards with its central pressure value expected to increase from 1022hPa to 1028hPa through 96hours.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to intensify as it progresses eastwards with its central pressure value is expected to increase from 1026hPa to 1033hPa.

At 925hPa, the dry northeasterly flow continues to prevail in the northern part of the continent.

At 850hPa, a broad area of wind convergence is expected to prevail across DRC, Angola, Zambia, and northern Mozambique. A cyclonic circulation in the Mozambique Channel and neighboring areas is expected to weaken gradually during the forecast period. Localized wind convergence is also expected to enhance rainfall across parts of South Africa.

In the next five days, lower-level wind convergence across parts of central Africa and the northern portions of Southern Africa, localized convergence in South Africa, and cyclonic circulation in the Mozambique Channel and Madagascar are expected to enhance rainfall in the areas. Hence, there is an increased chance for 2 or more days of moderate to heavy rainfall across parts of Central, and the northern portions of Southern Africa. There is a high likelihood for temperature heat index values to exceed 40<sup>0</sup>C over local areas of in Nigeria, Car, eastern South Sudan, and southwestern Ethiopia.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (January 27, 2019)

Daily rainfall above 25mm was observed over local areas in Congo-Brazzaville, western DRC, southern Tanzania, northern Mozambique and Madagascar.

### 2.2. Weather assessment for the current day (January 28, 2019)

Intense convective clouds are observed over many places in central and the northern portions of Southern Africa countries.

