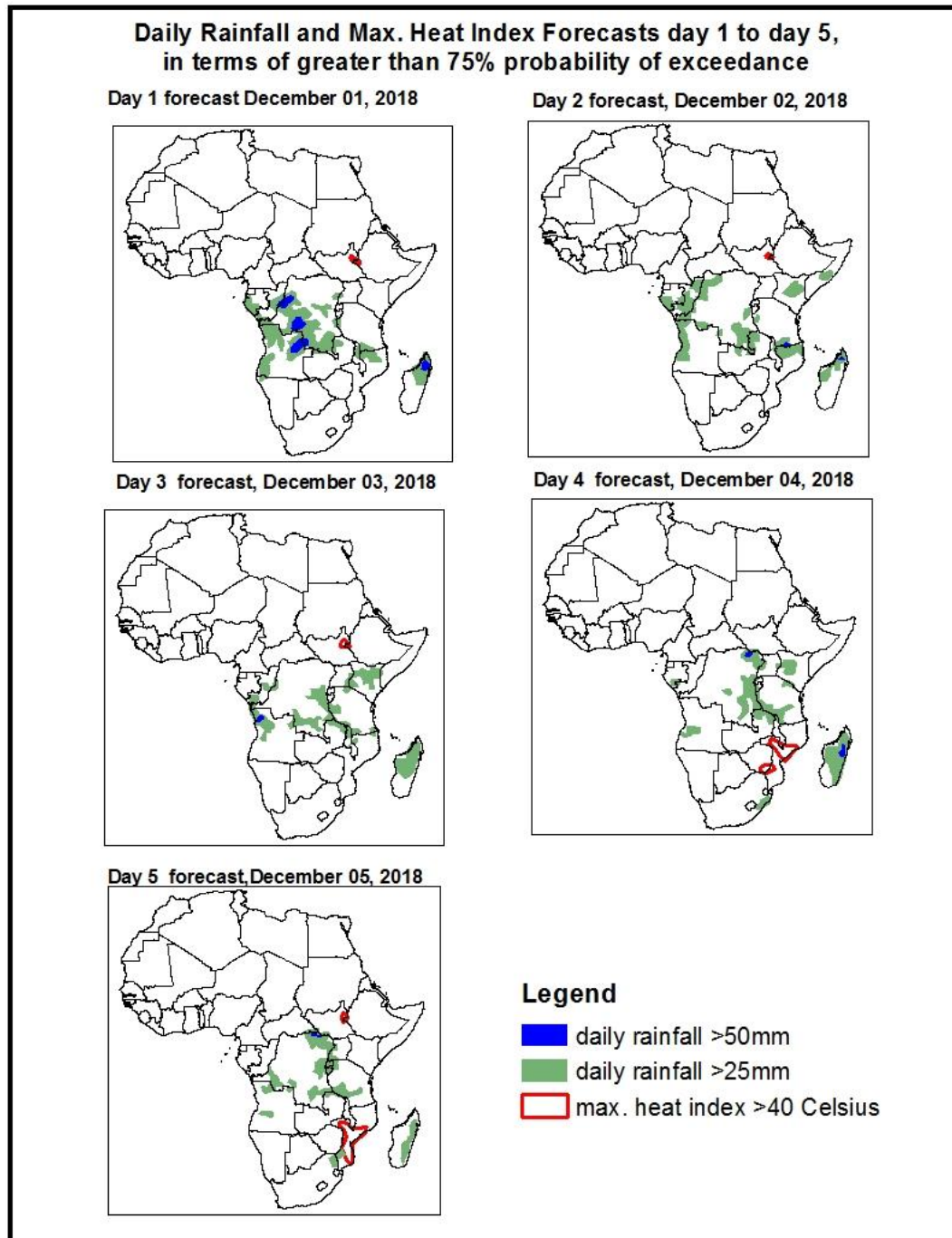


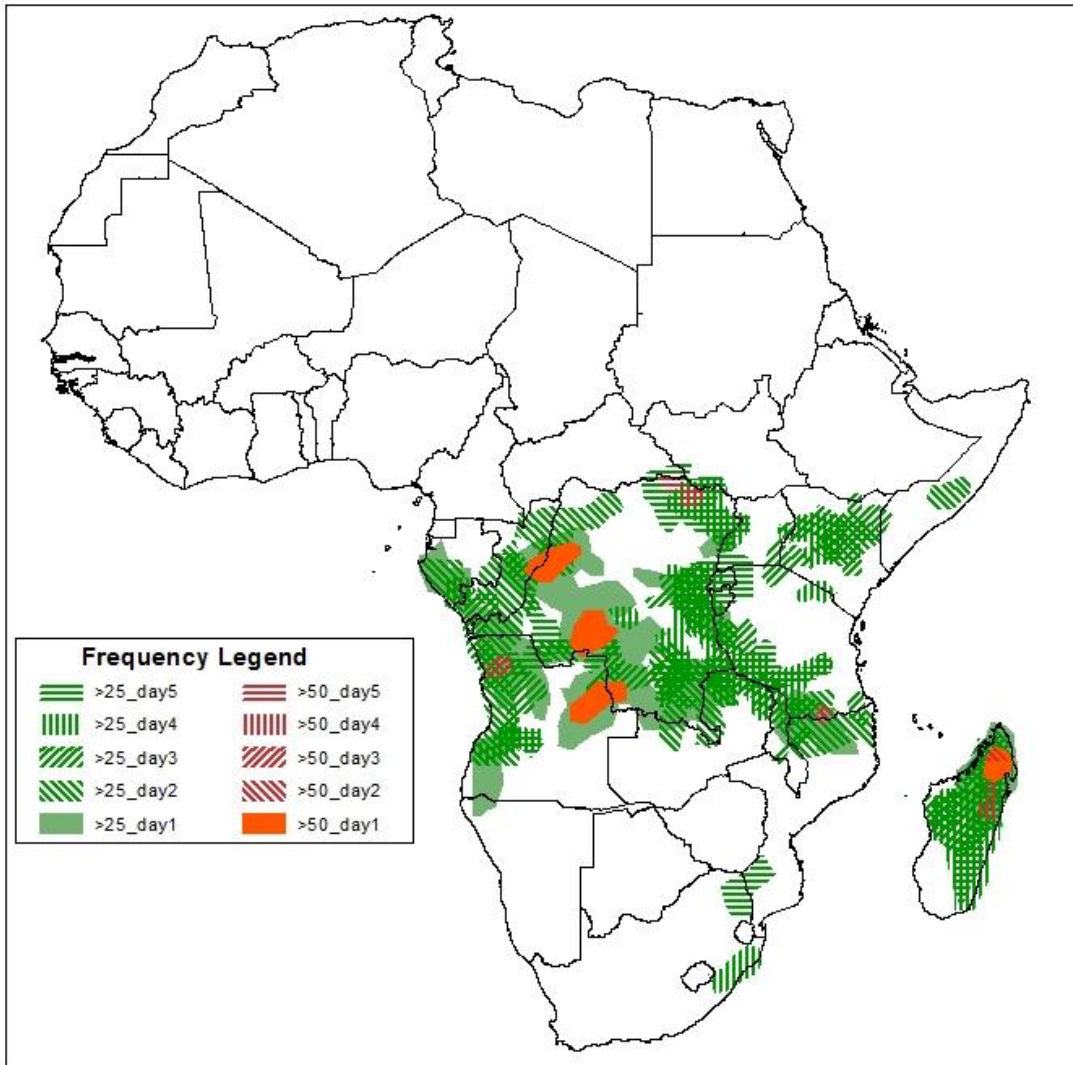
## 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on November 30, 2018)

### 1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Dec 01 -05, 2018)

The forecasts are expressed in terms of high probability of precipitation (POP), valid 06Z to 06Z, and exceedance probability of maximum heat index ( $>40^{\circ}\text{C}$ ), based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



### Five Days Rainfall Forecast Summary December 01 - 05 , 2018.

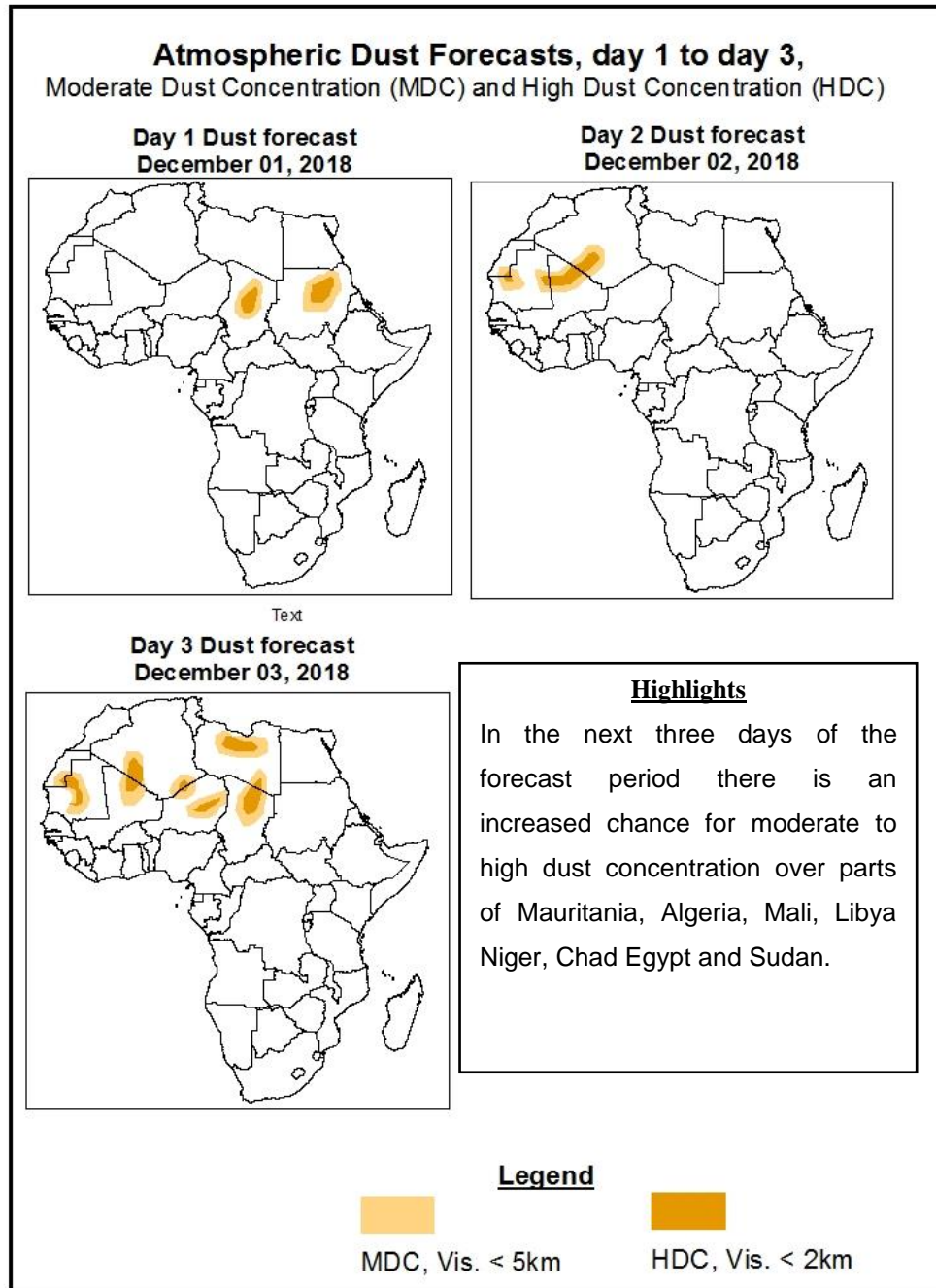


#### **Highlights**

- In the next five days the Congo Air Boundary (CAB) is expected to continue been active over Central Africa and the northern parts of Southern African countries, The Southern Costal low is expected to continue fluctuating over South Africa. These two systems are likely to enhance rainfall activities over most parts of Central and Southern African countries, there is a chance for moderate to heavy rainfall over localized areas of Congo Brazzaville, Congo DR, Angola, Tanzania, Mozambique and Madagascar through the forecast period.
- There is a high likelihood for temperature heat index values to exceed 40<sup>0</sup>C over local areas of South Sudan and Mozambique.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: December 01 – 03, 2018)

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: November 30 – 04 December, 2018**

The Azores High Pressure system has continued to fluctuate over land in the Northern regions of the Continent and is expected to maintain its strength. Its central pressure value is expected to vary between 1026hPa and 1022hPa through the forecast period.

The St. Helena High Pressure system over Southwest Atlantic Ocean is expected to weaken and maintain its position. Its central pressure value is expected to decrease from 1022hPa to 1018hPa through the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to relax as it progresses eastward and it's likely to cut away from the sub-continent after the 48hours of the forecast period. Its central pressure value is expected to vary between 1028hPa to 1032hPa through the forecast period.

Series of low Pressure systems over Southern Africa is expected to continue covering most parts of the sub- region through the forecast period.

At 925hPa, strong northeasterly to easterly flow is expected to prevail over most parts of Northern Africa and the Sahel region. Congo air boundary continues to remain active over the Central parts of the continent. Also, Northeasterly flow over Southern and the Southeast of Africa.

At 850hPa, Lower-level wind convergence associated with the Congo air boundary (CAB) over parts of Central Africa. Lower-level wind convergence associated with the Costal low over parts of Southern Africa.

In the next five days the Congo Air Boundary (CAB) is expected to continue been active over Central Africa and the northern parts of Southern African countries, The Southern Costal low is expected to continue fluctuating over South Africa. These two systems are likely to enhance rainfall activities over most parts of Central and Southern African countries, there is a chance for moderate to heavy rainfall over localized areas of Congo Brazzaville, Congo DR, Angola, Tanzania, Mozambique and Madagascar through the forecast period.

There is a high likelihood for temperature heat index values to exceed 40<sup>0</sup>C over local areas of South Sudan and Mozambique.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. *Weather assessment for the previous day* (November 29, 2018)

Above 25mm daily rainfall was observed over localized areas of Gabon, Congo Brazzaville, Zambia, Malawi, Mozambique and Madagascar.

### 2.2. *Weather assessment for the current day* (November 30, 2018)

Intense convective clouds are observed over some areas of Central and southern African countries.

