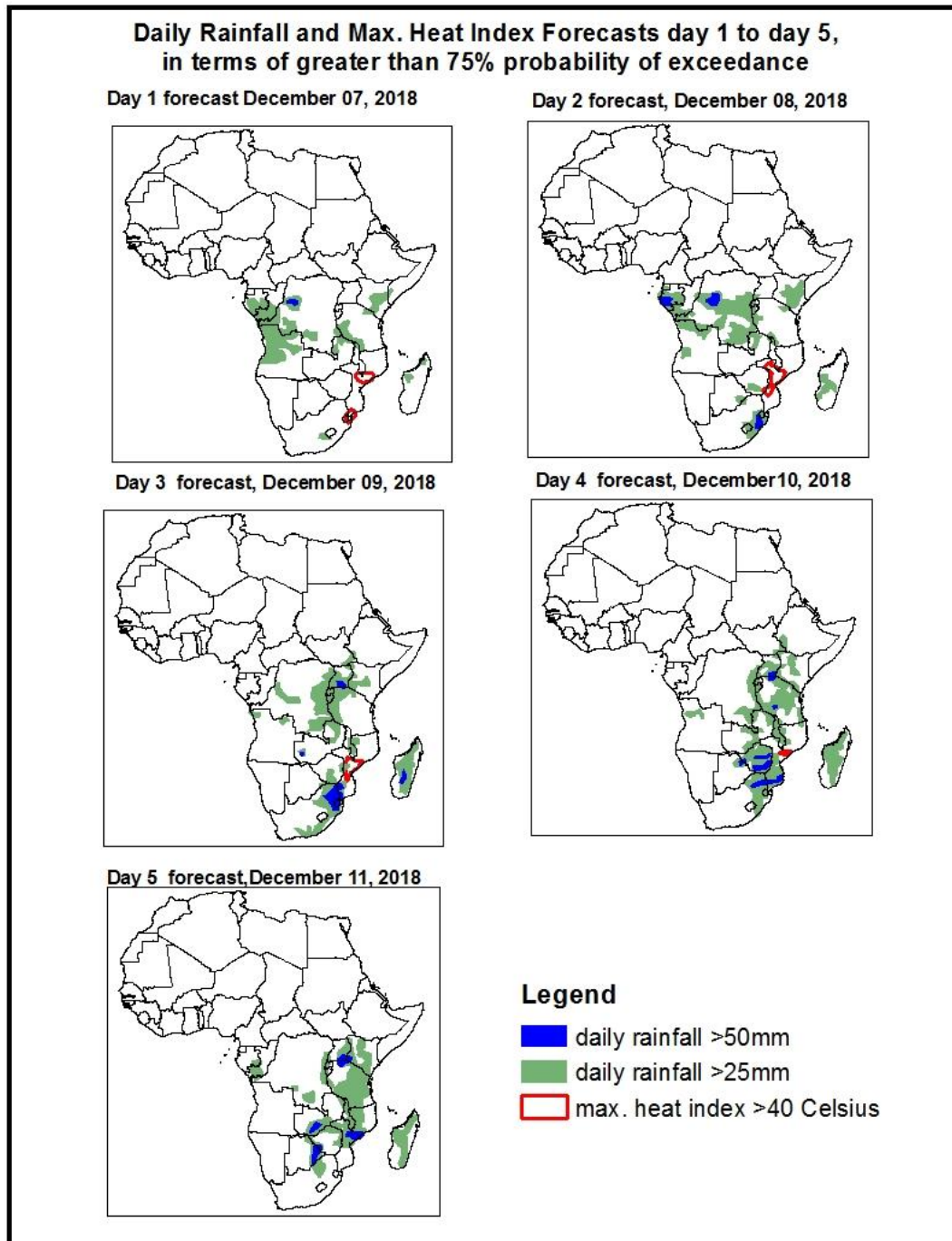


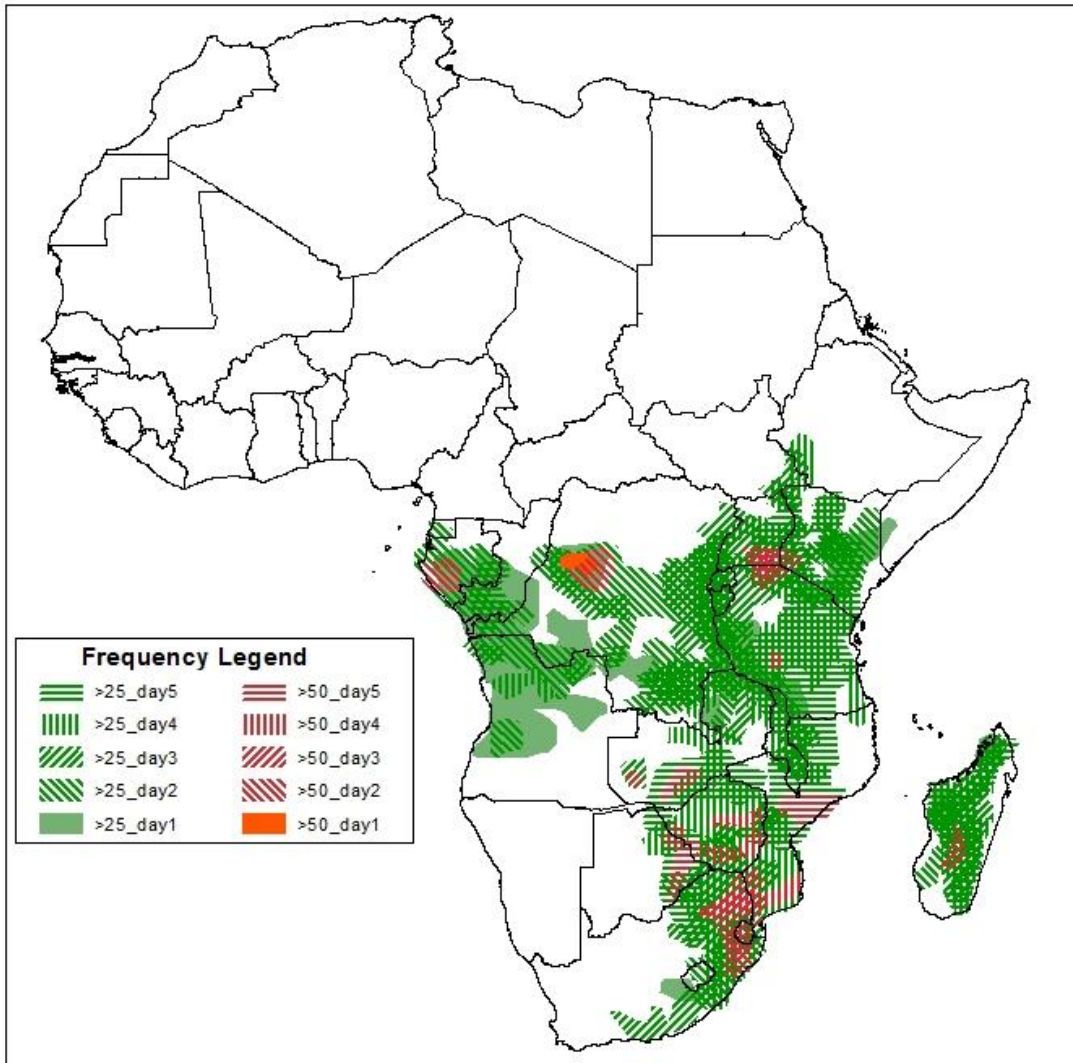
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on December 06, 2018)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Dec 07 -11, 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°C), based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



## Five Days Rainfall Forecast Summary December 07 - 11 , 2018.

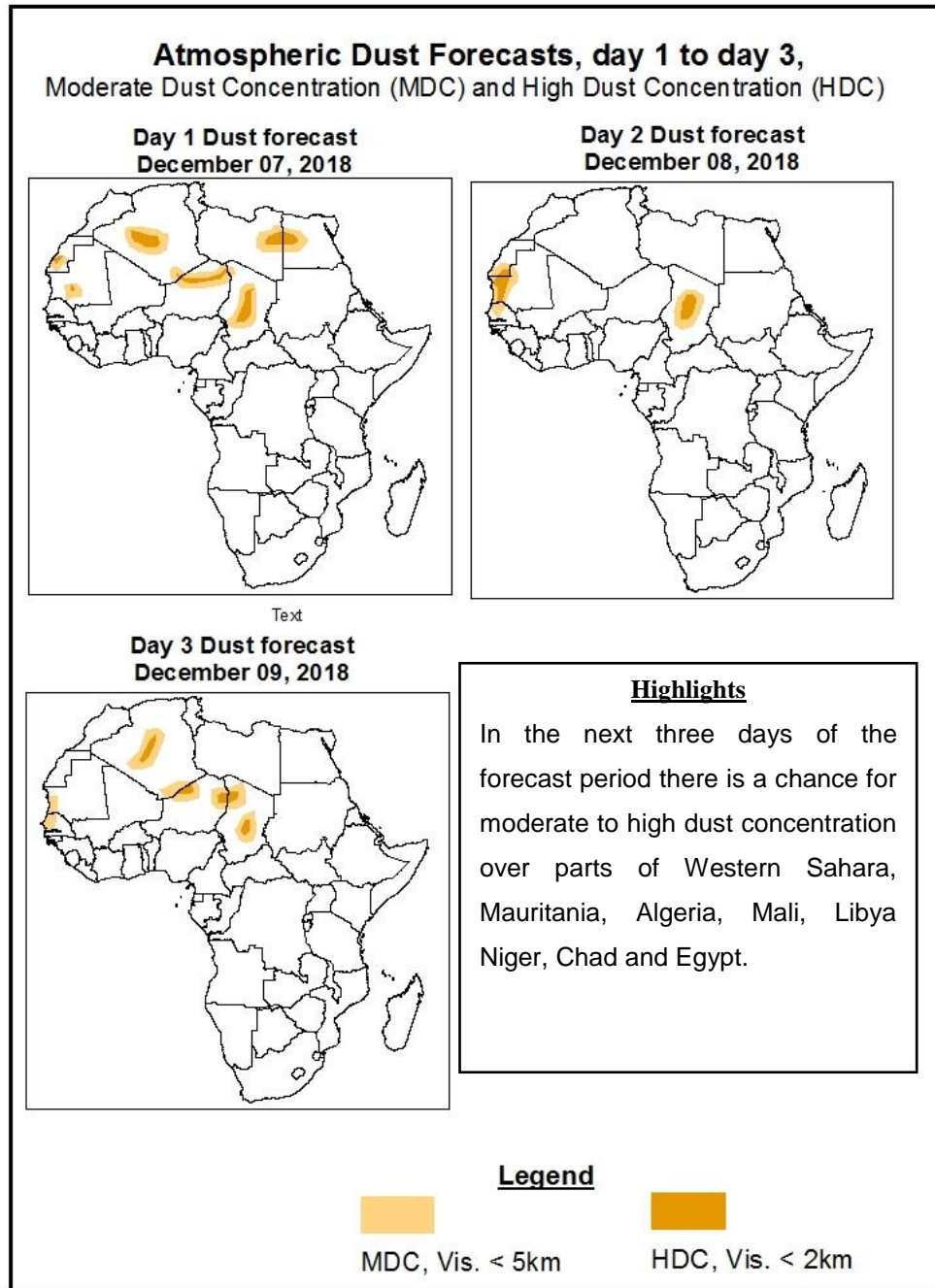


### **Highlights**

- In the next five days the convergence of moist and unstable northwesterly and northeasterly is expected to continue affecting parts of Central Africa and the northern parts of Southern African countries, the continental low is expected to continue fluctuating over Southern Africa. These two systems continue to enhance rainfall activities over most parts of Central and Southern African countries, there is a chance for moderate to heavy rainfall over some parts of Gabon, Congo DR, Uganda, Kenya, Tanzania, and some of the Southern African Countries
- There is a high likelihood for temperature heat index values to exceed 40<sup>0</sup>C over local areas of Mozambique and Swaziland.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: December 07 – 09, 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: December 07 – 11, 2018**

The Azores High Pressure system over the North of Atlantic Ocean is expected to transit eastwards. Its central pressure value is expected to weaken from 1032hPa to 1024hPa at the end of 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 1019hPa to 1025hPa through the 72hours. Another developing St. Helena High Pressure system moves eastwards decreasing in strength from central Pressure values of 1025hPa to 1023hPa towards the end of the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to maintain its position. Its central pressure value is expected to vary between 1029hPa to 1027hPa through the 96hours of the forecast period.

Deep continental low Pressure system is likely to continue oscillating about the interior of Southern Africa covering through the forecast period.

At 925hPa, strong northeasterly to easterly flow is expected to continue prevailing Northern Africa and the Sahel region. Congo air boundary continues to remain active over the Central parts of the continent. Also, moist and unstable winds from Northeast continue to affect the 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 Angola low over parts of Southern Africa.

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of Gabon, Congo DR, Uganda, Kenya, Tanzania, and some of the Southern African Countries

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

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (December 05, 2018)

Daily rainfall above 25mm was observed over Angola, Zambia, Zimbabwe and Madagascar.

### 2.2. Weather assessment for the current day (December 06, 2018)

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

