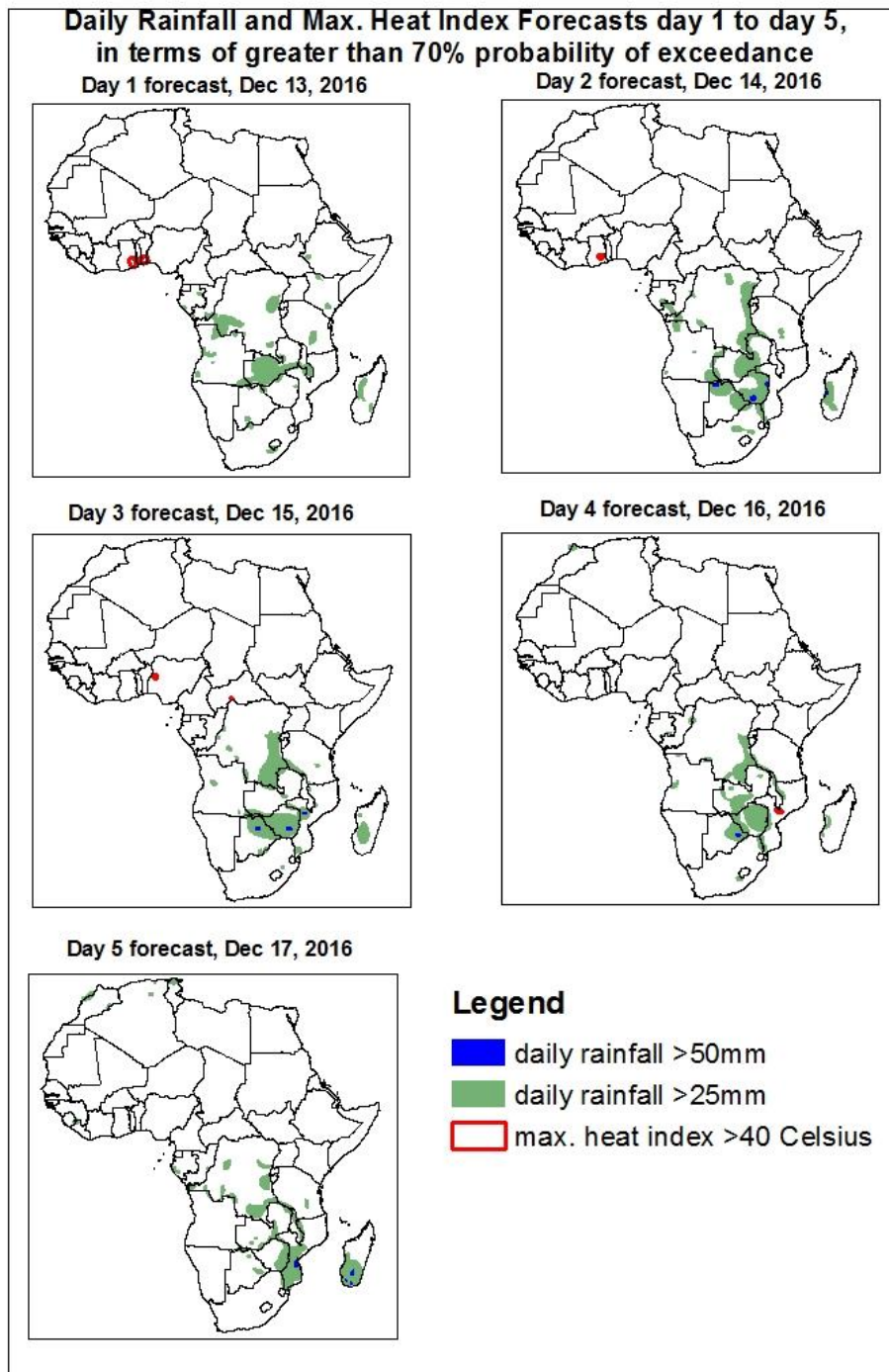


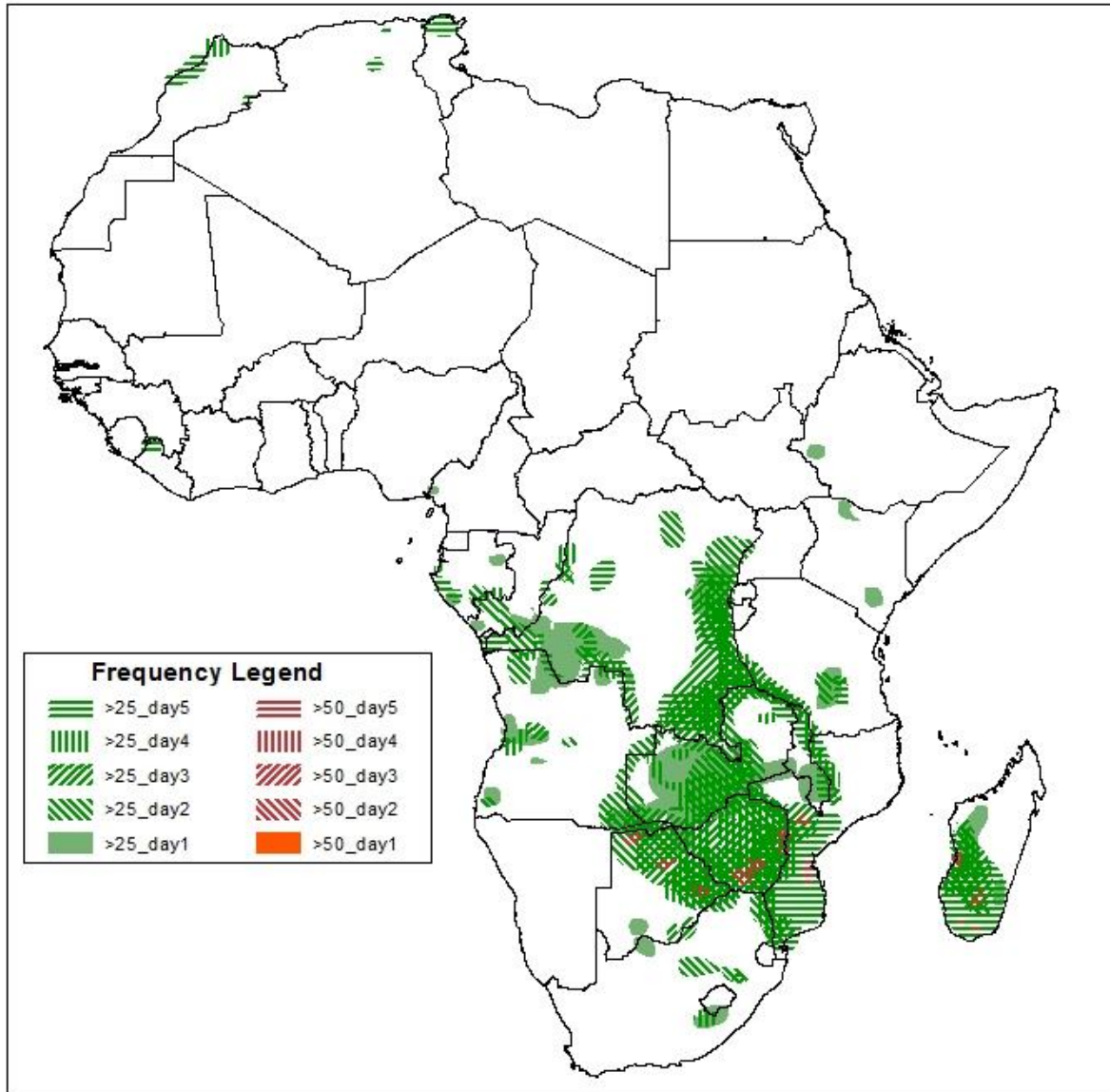
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on Dec 12, 2016)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Dec 13 – Dec 17, 2016)**

The forecasts are expressed in terms of high probability of precipitation (POP) and high probability of maximum heat index, based on the NCEP/GFS, ECMWF and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



## Five Days Rainfall Forecast Summary Dec 13 - Dec 17, 2016

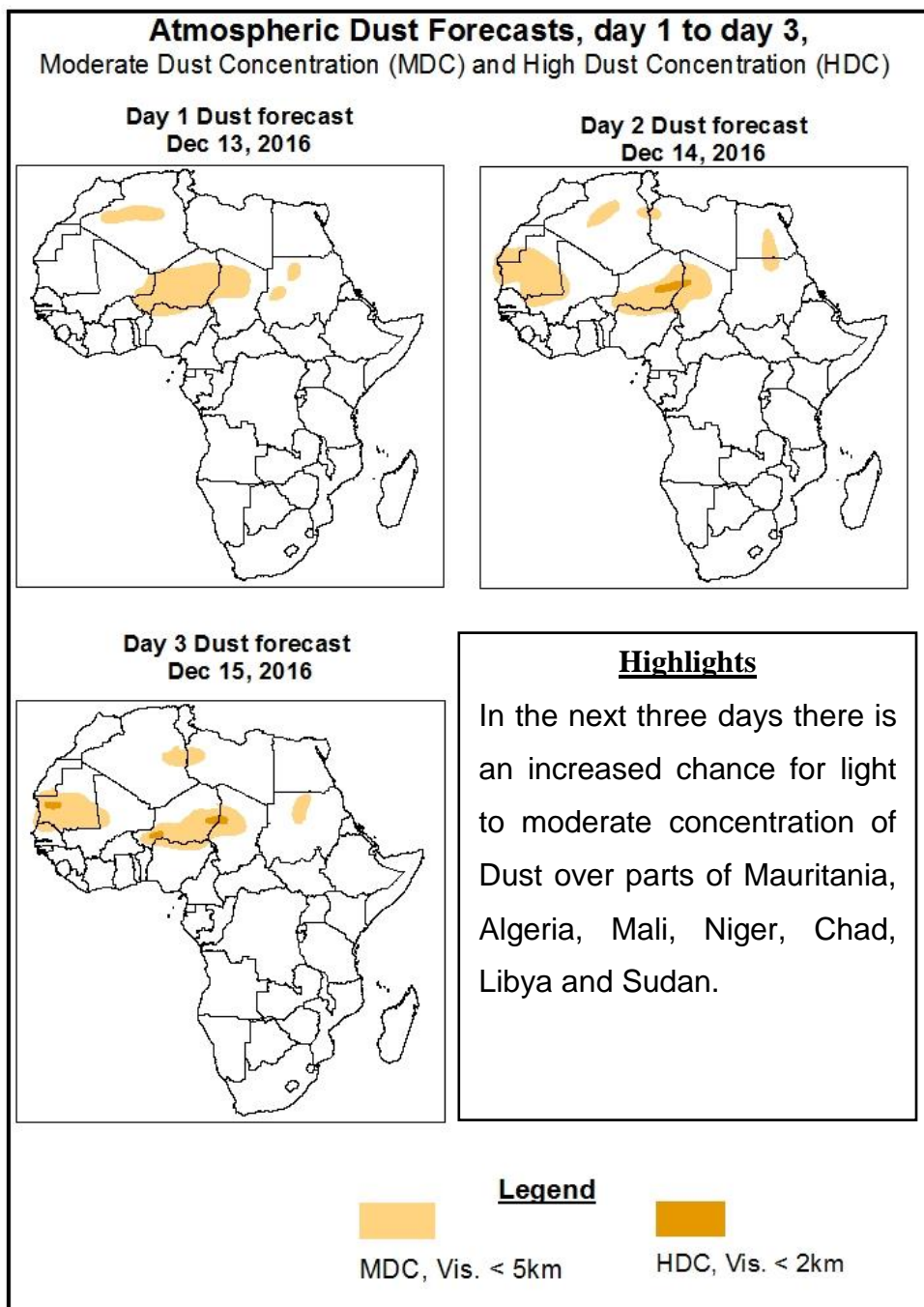


### **Highlights**

In the next five days, lower level wind convergences across the Northern parts of the South African countries are expected to enhance rainfall in their respective regions. Therefore, there is an increased chance for two or more days of light to moderate rainfall over portion of DRC, Zambia, Angola, Botswana, Zimbabwe, Mozambique, Malawi, Tanzania and Madagascar.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: Dec 13 – Dec 15, 2016)

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: Dec 13–Dec 17, 2016**

The Sub-Tropical High Pressure system over the Libya is expected to intensify, with its value of the central pressure increasing from 1026hPa to 1036hPa during the forecast period.

The St. Helena High Pressure system over the Southeast of the Atlantic Ocean is expected to weaken, with its value of the central pressure decreasing from 1022hPa to 1019hPa during the forecast period.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to intensify, with its value of the central pressure increasing from 1027hPa to 1030hPa in the next 72 hours, weaken to 1024hPa during the remaining forecast period.

At 925hPa, strong dry Northerly to Easterly winds may lead from light to moderate dust concentration over parts of Morocco, Mauritania, Algeria, Libya, Mali, Niger, Chad, Northern Nigeria, Sudan and Egypt.

At 850hPa level, lower level wind convergences are expected to prevail over CAR, Congo, DRC, Angola, Namibia, Zambia, Botswana, Tanzania, Gabon, South Africa, South Sudan and Ethiopia.

In the next five days, lower level wind convergences across the Northern parts of the South African countries are expected to enhance rainfall in their respective regions. Therefore, there is an increased chance for two or more days of light to moderate rainfall over portion of DRC, Zambia, Angola, Botswana, Zimbabwe, Mozambique, Malawi, Tanzania and Madagascar.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (Dec 11, 2016)

Light to moderate rainfall was observed over portion of Gabon, DRC, Zambia, Zimbabwe, Mozambique and Madagascar.

### 2.2. Weather assessment for the current day (Dec 12, 2016)

Intense convective clouds are observed over portions of Liberia, Togo, Cameroon, Gabon, Congo, DRC, Angola, Zambia, Uganda, Kenya, Zimbabwe, Malawi, Mozambique, South Africa and Madagascar.

