

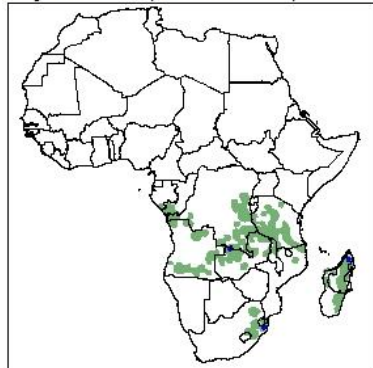
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on Dec 29, 2017)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Dec 30,– January 02,2017/18)**

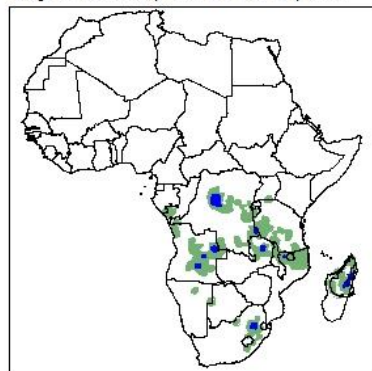
The forecasts are expressed in terms of high probability of precipitation (POP) and high probability of maximum heat index, based on the NCEP/GFS, ECMWF and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.

**Daily Rainfall and Max. Heat Index Forecasts day 1 to day 5, in terms of greater than 70% probability of exceedance**

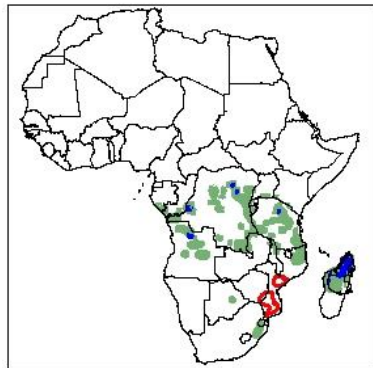
Day 1 forecast, December 30, 2017



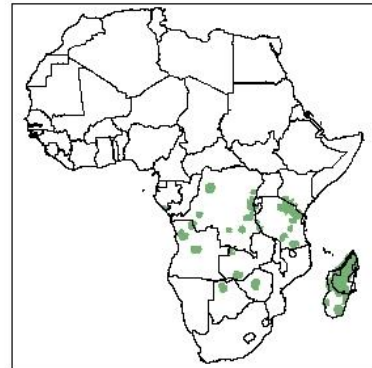
Day 2 forecast, December 31, 2017



Day 3 forecast, January 01, 2018



Day 4 forecast, January 02, 2017



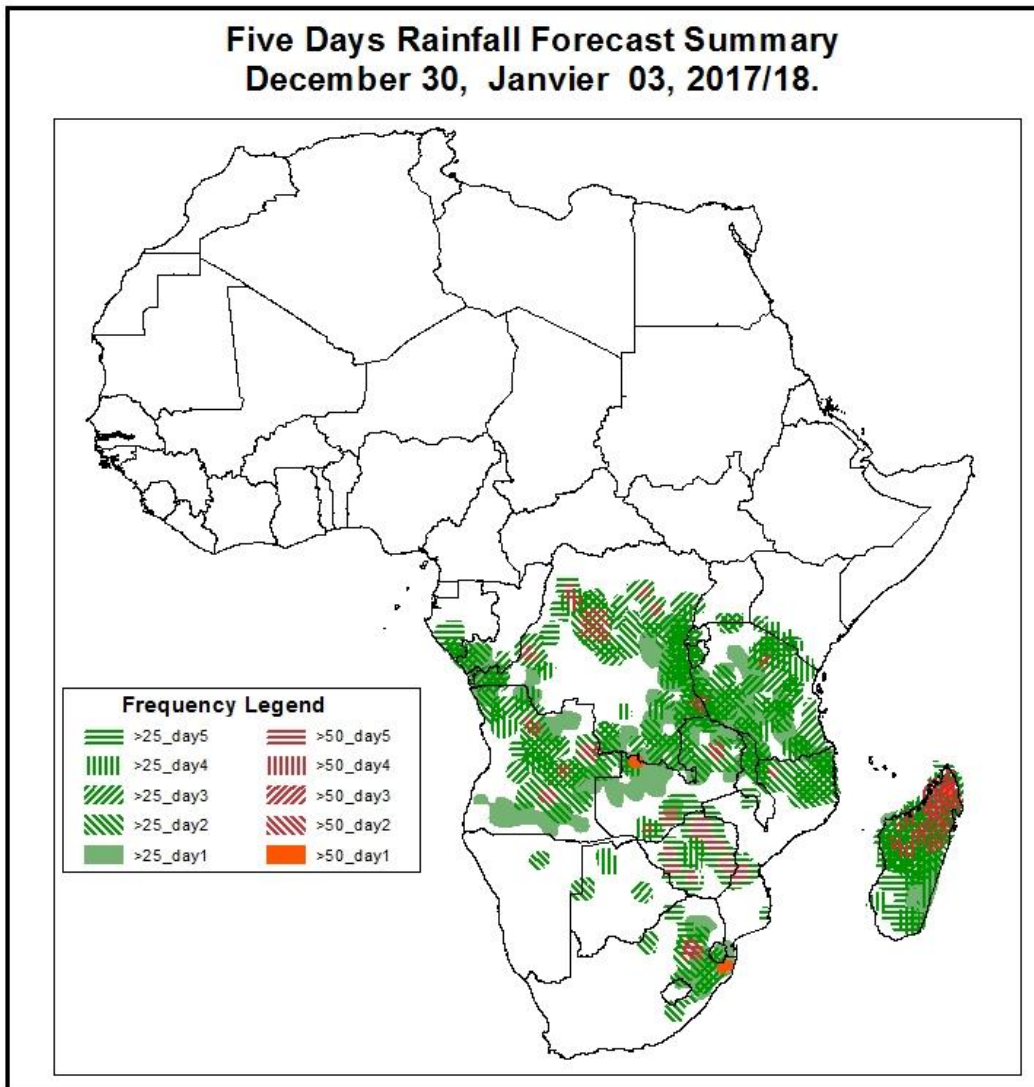
Day 5 forecast, January 03, 2017



**Legend**

-  daily rainfall >25mm
-  max. heat index >40 Celsius
-  0
-  1
-  2
-  3

**Five Days Rainfall Forecast Summary  
December 30, Janvier 03, 2017/18.**

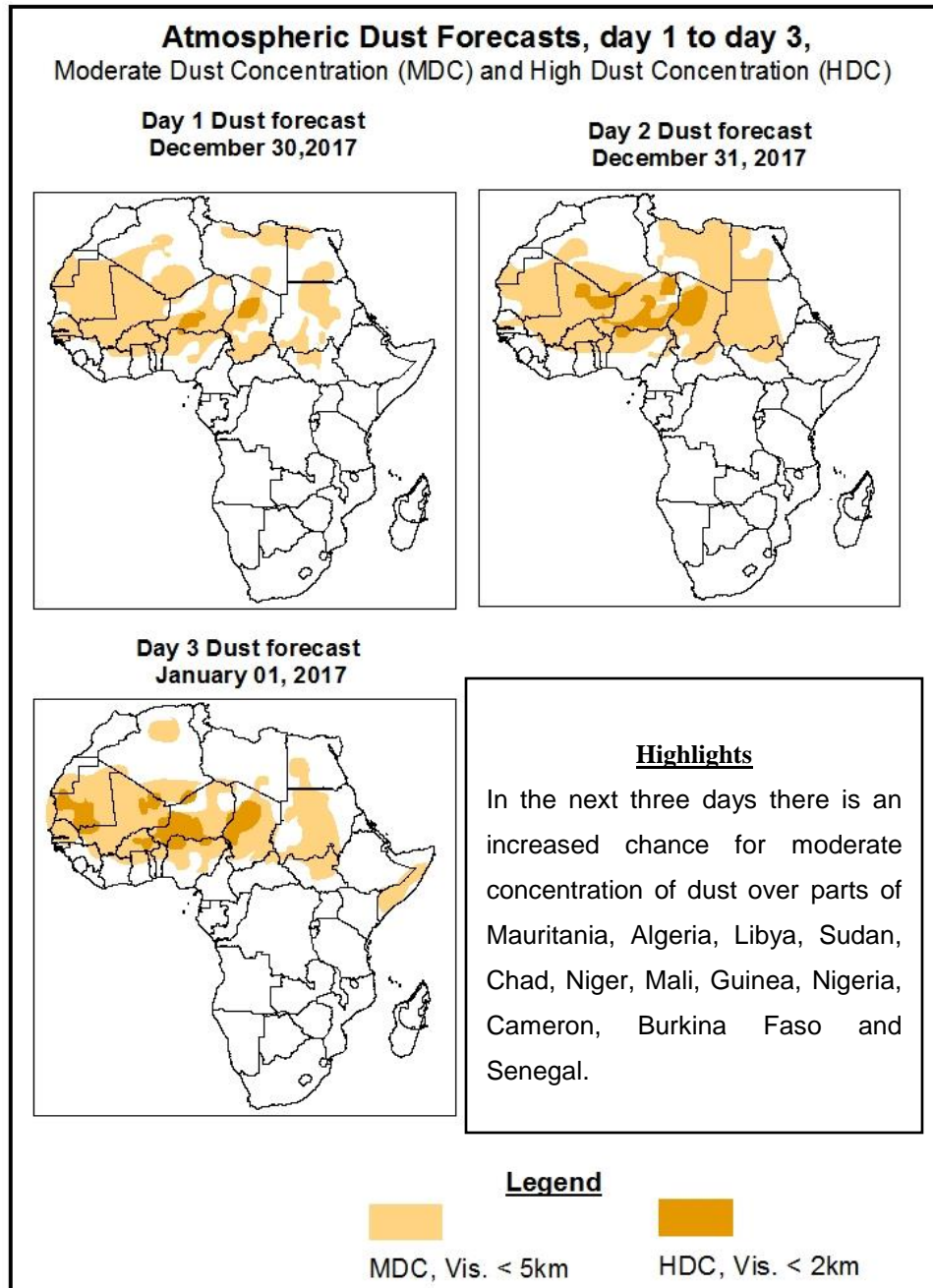


**Highlights**

In the next five days, active lower-level meridional convergence associated with the Congo air boundary (CAB) in the Lake Victoria region, lower-level convergence across the northern parts of southern Africa, and cyclonic circulation in the Mozambique Channel are expected to remain active during the forecast period. As a result, there is an increased chance for two or more days of moderate to heavy rainfall over many places in south Gabon, south Congo, parts of DRC, Tanzania, Burundi, Angola, Zambia, Zimbabwe, eastern South Africa, Swaziland, Malawi, parts of Mozambique and Madagascar. .

## 1.2. Atmospheric Dust Concentration Forecasts (valid: Dec 30, – Jan 01, 2017/18)

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 30 – Jan 01, 2017/18**

The Azores High Pressure system over the North Atlantic Ocean is expected to maintain in next 48hours from its central pressure value of 1030hpa and then intensify to 1037hpa towards the end of the forecast period.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is expected to intensify from its central pressure value of 1021hpa to 1024hpa and then weaken in the next 72hours to 1023hpa towards the end of the forecast period.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to slightly intensify from its central pressure value of 1022hpa to 1025hpa towards the end of the forecast period.

At 925hPa, dry strong northeasterly to easterly wind is expected to prevail across the Sahel and northern Africa countries. As a result, there is an increased chance for moderate to high dust concentration in these regions.

At 850hPa, areas of wind convergences are expected to remain active in the Lake Victoria region, extending into parts of DRC. Lower-level wind convergences are also expected to enhance rainfall over parts of Angola and northern Mozambique. A cyclonic circulation across Madagascar is expected to enhance rainfall during the forecast period.

In the next five days, active lower-level meridional convergence associated with the Congo air boundary (CAB) in the Lake Victoria region, lower-level convergence across the northern parts of southern Africa, and cyclonic circulation in the Mozambique Channel are expected to remain active during the forecast period. As a result, there is an increased chance for two or more days of moderate to heavy rainfall over many places in south Gabon, south Congo, parts of DRC, Tanzania, Burundi, Angola, Zambia, Zimbabwe, eastern South Africa, Swaziland, Malawi, parts of Mozambique and Madagascar. .

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (December 28, 2017)

Moderate to locally heavy rainfall was observed over Gabon, Congo, DRC, Zambia, Angola, Tanzania, Zambia, Botswana, Burundi, Rwanda, South Africa, Mozambique and Madagascar.

### 2.2. Weather assessment for the current day (December 29, 2017)

Intense convective clouds are observed over portions of Central and Madagascar.

