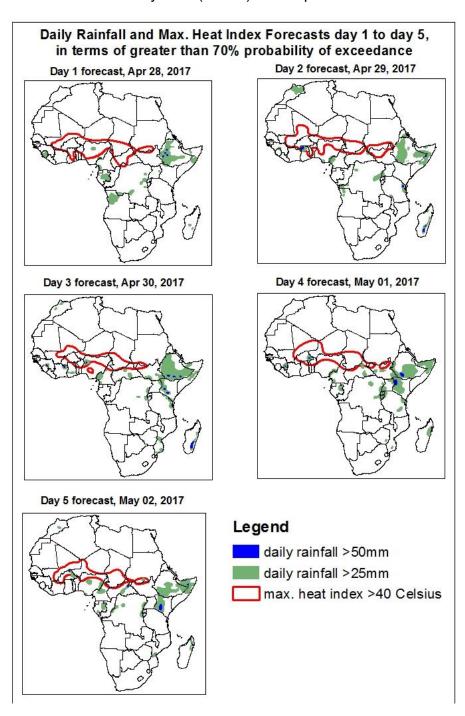
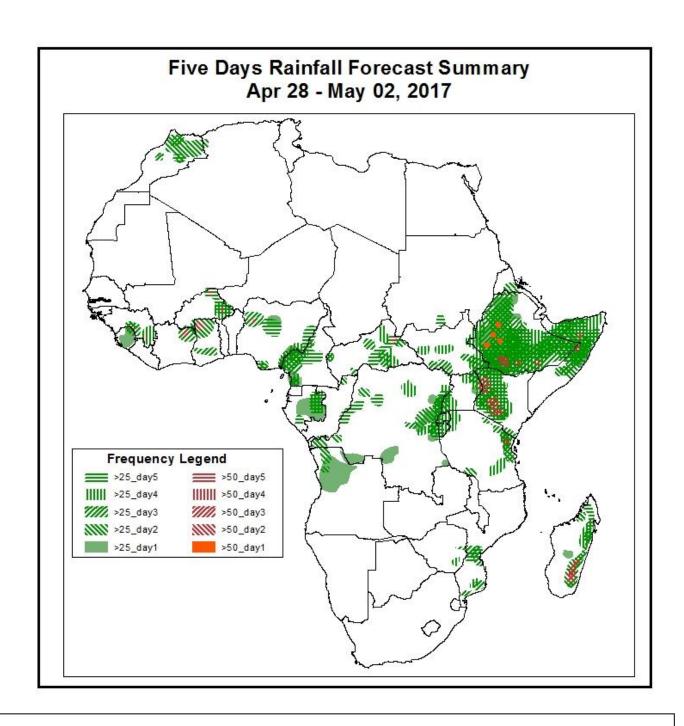
# 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on Apr 27, 2017)

# 1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Apr 28 – May 02, 2017)

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.



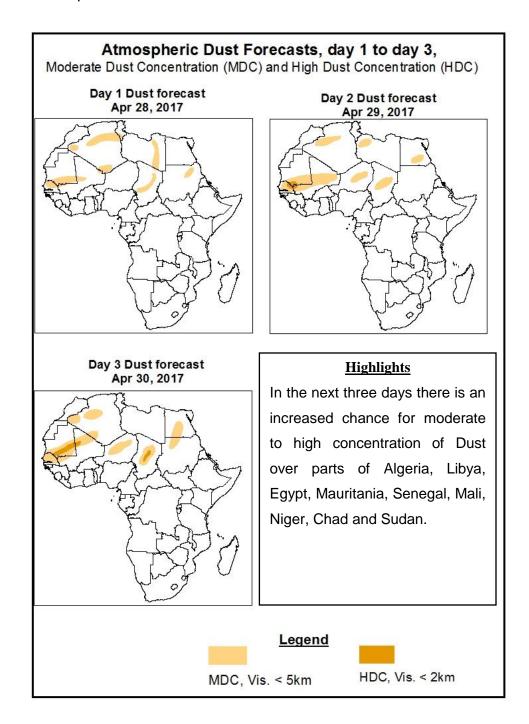


# **Highlights**

In the next five days, lower level wind convergences across the Central and South African countries are expected to enhance rainfall in their respective regions. Therefore, there is an increased chance for two or more days of moderate to heavy rainfall over portions of Gabon, Ethiopia, Somalia, Kenya, Rwanda, Burundi and local areas of Morocco, Burkina Faso, Sierra Leone, Guinea, Cote d'Ivoire, Ghana, Nigeria, Cameroon, CAR, DRC, South Sudan, Uganda, Tanzania, Angola, Mozambique and Madagascar.

# **1.2. Atmospheric Dust Concentration Forecasts** (valid: Apr 28 – 30, 2017)

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: Apr 28 – May 02, 2017

The Azores High Pressure system over the North Atlantic Ocean is expected to weaken with its value of the central pressure decreasing from 1034hPa to 1021hPa 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 1029hPa to 1022hPa during the next 96 hours and intensify to 1028hPa during the remaining forecast period.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to weaken with its value of the central pressure increasing from 1041hPa to 1032hPa during the forecast period.

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

At 850hPa level, lower level wind convergences are expected to prevail over Cameroon, Gabon, CAR, DRC, South Sudan, Ethiopia, Uganda, Kenya, Rwanda, Burundi, Mozambique, Namibia and South Africa.

In the next five days, lower level wind convergences across the Central and South African countries are expected to enhance rainfall in their respective regions. Therefore, there is an increased chance for two or more days of moderate to heavy rainfall over portions of Gabon, Ethiopia, Somalia, Kenya, Rwanda, Burundi and local areas of Morocco, Burkina Faso, Sierra Leone, Guinea, Cote d'Ivoire, Ghana, Nigeria, Cameroon, CAR, DRC, South Sudan, Uganda, Tanzania, Angola, Mozambique and Madagascar.

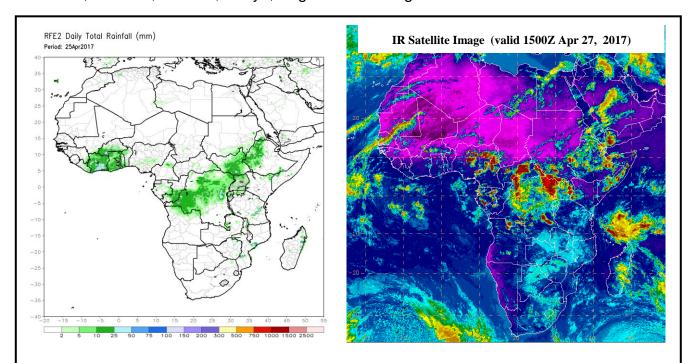
### 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (Apr 25, 2017)

Light to moderate rainfall was observed over portions of Burkina Faso, Cote d'Ivoire, Ghana, Congo, DRC, South Sudan, Ethiopia, Somalia, Kenya, Tanzania, Mozambique and Madagascar.

# 2.2. Weather assessment for the current day (Apr 27, 2017)

Intense convective clouds are observed over portions of Mali, Burkina Faso, Nigeria, Cameroon, Equatorial Guinea, Gabon, Congo, CAR, DRC, South Sudan, Uganda, Ethiopia, Somalia, Rwanda, Burundi, Kenya, Angola and Madagascar.



Previous day rainfall condition over Africa (Left) based on the NCEP CPCE/RFE and current day cloud cover (right) based on IR Satellite image.

**Authors:** Elyes OTHMEN (Tunisia – INM)/ (CPC-African Desk); <u>elyes.othmen@noaa.gov</u>