

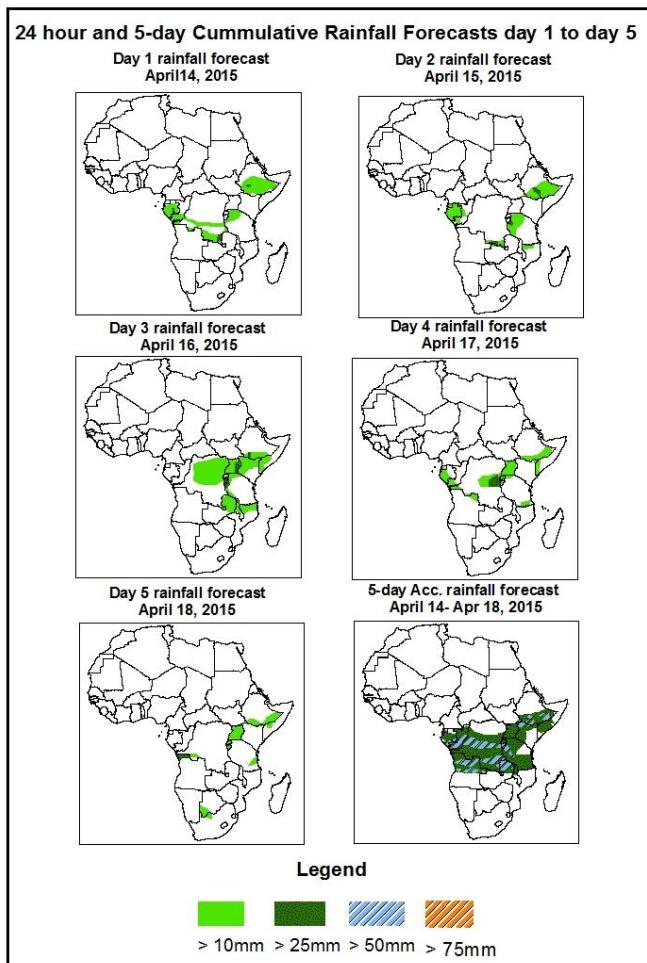


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1. Rainfall Forecast: Valid 06Z of April 14 – 06Z of April 18, 2015. (Issued at 1800Z of April 13, 2015)

1.1. Twenty Four Hour Cumulative Rainfall Forecasts

The forecasts are expressed in terms of 75% probability of precipitation (POP) exceeded, based on the NCEP/GFS and the NCEP global ensemble forecasts system (GEFS) and expert assessment.



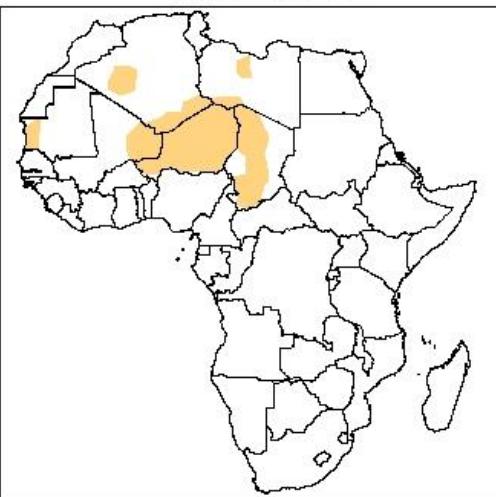
Summary

In the next five days, lower-level wind convergence in the region between Cameroon and Ethiopia is expected to enhance rainfall in these regions. There is an increased chance for heavy rainfall over Tanzania, DRC, Southern Ethiopia and Angola.

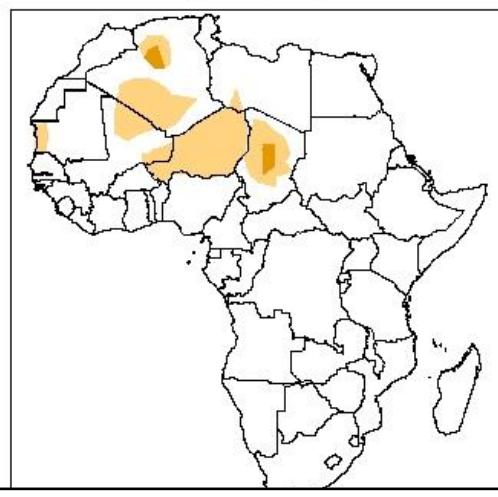
Atmospheric Dust Forecasts, day 1 to day 3,

Moderate Dust Concentration (MDC) and High Dust Concentration (HDC)

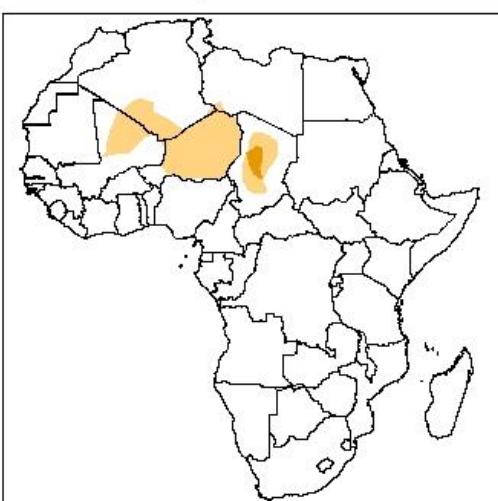
Day 1 Dust forecast
April 14, 2015



Day 2 Dust forecast
April 15 2015



Day 3 Dust forecast
April 16, 2015



Highlights

There is an increased chance for moderate to high dust concentration over some parts of the Sahel, and North Africa countries, with highest dust concentration expected over some parts of Chad and Algeria.

Legend



MDC, Vis. < 5km



HDC, Vis. < 1km

1.2. Model Discussion: Valid from 06Z of April 13, 2015

The Azores high pressure system over the Northeast Atlantic Ocean is expected to weaken from a central pressure value of 1026hpa in 24 hours to 1022hpa in 120hours, according to the GFS model.

The Arabian High Pressure system is expected to remain constant a central pressure value of 1020hpa during the forecast period, according to the GFS model.

The central pressure value of the Mascarene high pressure system over the southwestern Indian Ocean is expected to intensify from a value of 1019hpa in 24 hours to a value of 1034hpa in 120 hours, according to the GFS model.

The St Helena high pressure system over the Southeast Atlantic Ocean is expected to weaken from a central pressure value of 1033hpa in 24 hours to 1028hpa in 120 hours, according to the GFS model.

At 925Hpa level, easterly wind (>20kts) is expected to prevail across much of the African countries through 24 to 120 hours while the intensity of the wind tends to weaken across the North central, Northeastern regions of Africa, while remaining moderately strong across Northwestern Africa towards end of the forecast period.

At 850Hpa level, easterly wind is expected to prevail across much of African countries while wind convergence is expected to remain active in Namibia, Tanzania, CAR as well as DRC during the forecast period.

At 700hpa level, a trough associated with mid-latitude frontal system is expected to prevail across Northeast Africa. Divergence is expected over West Africa and Southern African countries. Wind convergence over DRC, Cameroon, Zambia and Angola. Easterly wind flow over Eastern and central Africa is expected to prevail during the forecast period, according to the GFS model.

At 500Hpa, a trough associated with a mid-latitude frontal system is expected to prevail across the north east and East Africa. while wind divergence over West and Southern African countries, easterly wind over east and central Africa, Wind Convergence over Angola, Botswana and Zambia will prevail in the region during the forecast period, according to the GFS model.

In the next five days, lower-level wind convergence in the region between Cameroon and Ethiopia is expected to enhance rainfall in these regions. There is an increased chance for heavy rainfall over Tanzania, DRC, Southern Ethiopia and Angola

2.0. Previous and Current Day Weather Discussion over Africa

(April 12, 2015 – April 13, 2015)

2.1. Weather assessment for the previous day (April 12, 2015)

Moderate to heavy rainfall were observed across DRC, CAR, Ivory Coast, Cameroon, Congo Brazzaville, Liberia, Angola, Tanzania, Equatorial Guinea and Gabon

2.2. Weather assessment for the current day (April 13, 2015)

Intense convective deep clouds are observed over DRC, Zambia, Angola, Tanzania, South Ethiopia and Gabon

