

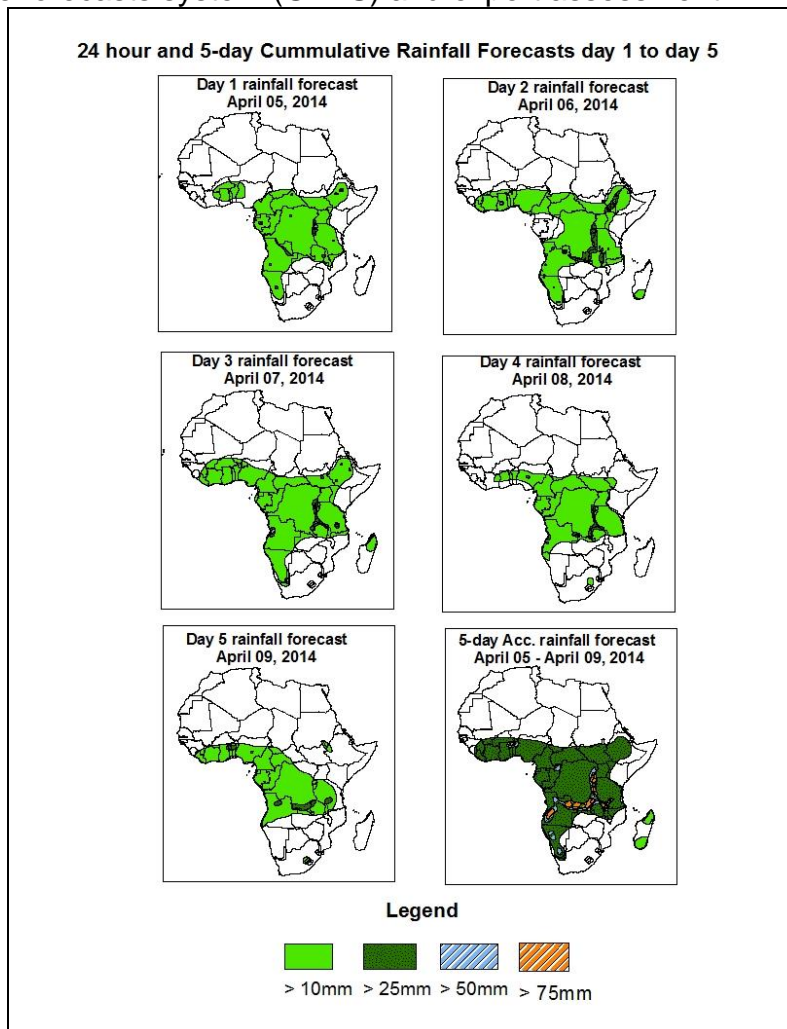


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1.0. Rainfall Forecast: Valid 06Z of April 05 – 06Z of April 09, 2014. (Issued at 1600Z of April 04, 2014)

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 UK Met Office NWP outputs, and the NCEP global ensemble forecasts system (GEFS) and expert assessment.

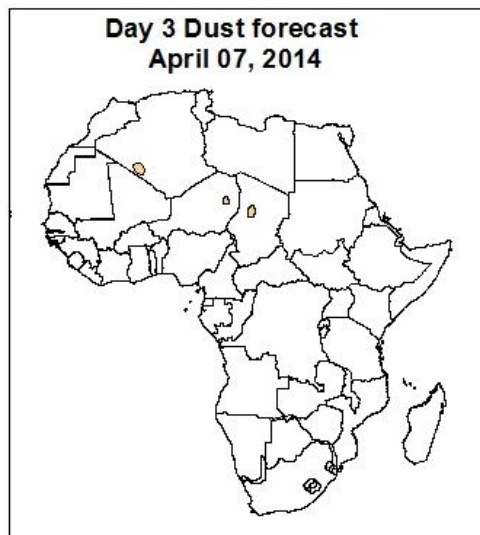
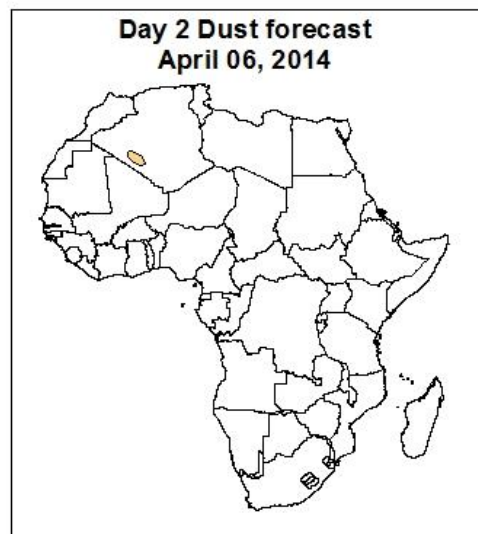


Summary

In the coming five days, lower-tropospheric wind convergences across the gulf of guinea, East, Central and Southern Africa countries are expected to persist and hence continued moderate rains over Angola, Gabon, Equatorial Guinea, Tanzania, DRC, Namibia, Central African Republic, Ethiopia, South Sudan, Uganda, parts of Zambia, Tanzania, Kenya, Cameroon, Congo Brazzaville, Guinea Bissau, Liberia, Ivory Coast, Ghana, Togo, Benin, Nigeria, Burkina Faso and Madagascar. Dry conditions are expected to persist over Zimbabwe, Mozambique, Botswana and most part of South Africa.

1.2. Atmospheric Dust Forecasts: Valid April 05 – April 07 2014

Atmospheric Dust Forecasts, day 1 to day 3,
Moderate Dust Concentration (MDC) and High Dust Concentration (HDC)



Highlights
There is an increased
chance for moderate to
high dust concentration
over Algeria, Chad and
Niger.



1.3. Model Discussion: Valid from 00Z of April 05, 2014

Model comparison (GFS and UKMET Valid from 00Z: April 05, 2014) shows general agreement in terms of depicting positions of the northern and southern hemisphere sub-tropical highs, while they showed slight differences in depicting their intensity.

The St. Helena High Pressure System, on the last forecast period is expected to increase in activity where their values, can vary between 1021Hpa to 1023Hpa. This may result in a decrease in rainfall over Namibia.

According to both the GFS and UKMET model, the system St. Helena high pressure, will be able to move to the East of the Continent and assume the characteristics of the Mascarene high pressure system. This system will be able to intensify and cause rainfall over Namibia. However in the second half expected a slight relaxation which may result in reduction of rainfall over Ethiopia and Kenya. Dry conditions are expected over Botswana, Zambia, Mozambique and most part over Zambia and South Africa.

At 850Hpa level, Moderate to strong convergence is expected to persist throughout the forecast period over Democratic Republic of Congo (DRC), Angola, Tanzania Cameroon and parts of Center African Republic, Sudan, Zambia, Nigeria, Uganda, Namibia, South Africa, South Chad and Ethiopia.

At 500Hpa level, troughs associated with mid-latitude frontal system persist and are expected to result in some tropical, extra-tropical interactions bringing rains over Bissau Guinea, Liberia, Burkina Faso, Ivory Coast, Ghana, Togo, Benin, over South Sudan, Nigeria, South Chad and Ethiopia for most part of the forecast period.

At 200hpa level, the sub-tropical Westerly Jet mainly (with wind speed >70 knots and <110 knots), extending between Mauritania, Algeria, Libya and Egypt, and across, Mali, Niger, Chad, Western Sahara, persist during the forecast period. In the south, the sub-tropical westerly Jet (with speed >70 knots) is expected over South Africa, Indian and Atlantic Ocean.

In the coming five days, lower-tropospheric wind convergences across the Gulf of Guinea, East, Central and Southern Africa countries are expected to persist and hence continued moderate rains over Angola, Gabon, Equatorial Guinea, Tanzania, DRC, Namibia, Central African Republic, Ethiopia, South Sudan, Uganda parts of Zambia, Tanzania, Kenya, Cameroon, Congo Brazzaville, Bissau Guinea, Liberia, Ivory Coast, Ghana, Togo, Benin, Nigeria, Burkina Faso and Madagascar. Dry conditions are expected to persist over Zimbabwe, Mozambique, Botswana and most part of South Africa.

2.0. Previous and Current Day Weather Discussion over Africa

(April 03, 2014 – April 04, 2014)

2.1. Weather assessment for the previous day (April 03, 2014)

During the previous day, moderate rainfall was observed over Ethiopia, DRC and parts of Angola, Tanzania, South Sudan and Central African Republic.

2.2. Weather assessment for the current day (April 04, 2014)

Intense clouds are observed over parts of Gulf of Guinea, East, Central and Southern Africa countries as well as Madagascar.

