

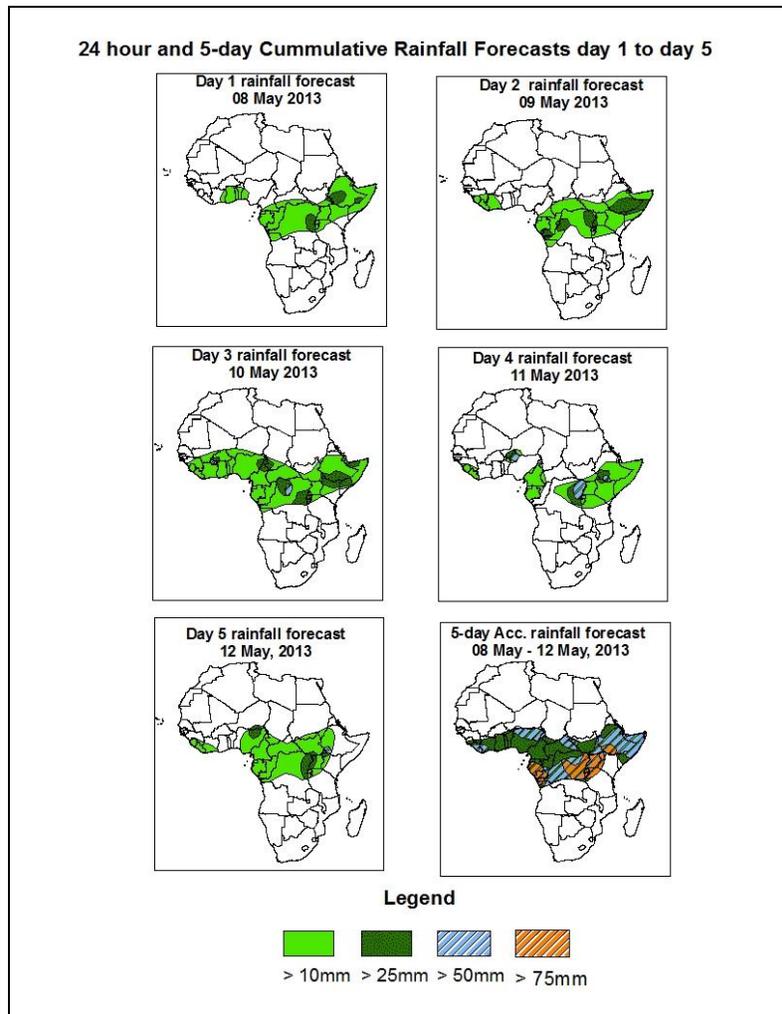


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1.0. Rainfall Forecast: Valid 06Z of 08 May – 06Z of 12 May, 2013. (Issued at 1530Z of 07 May 2013)

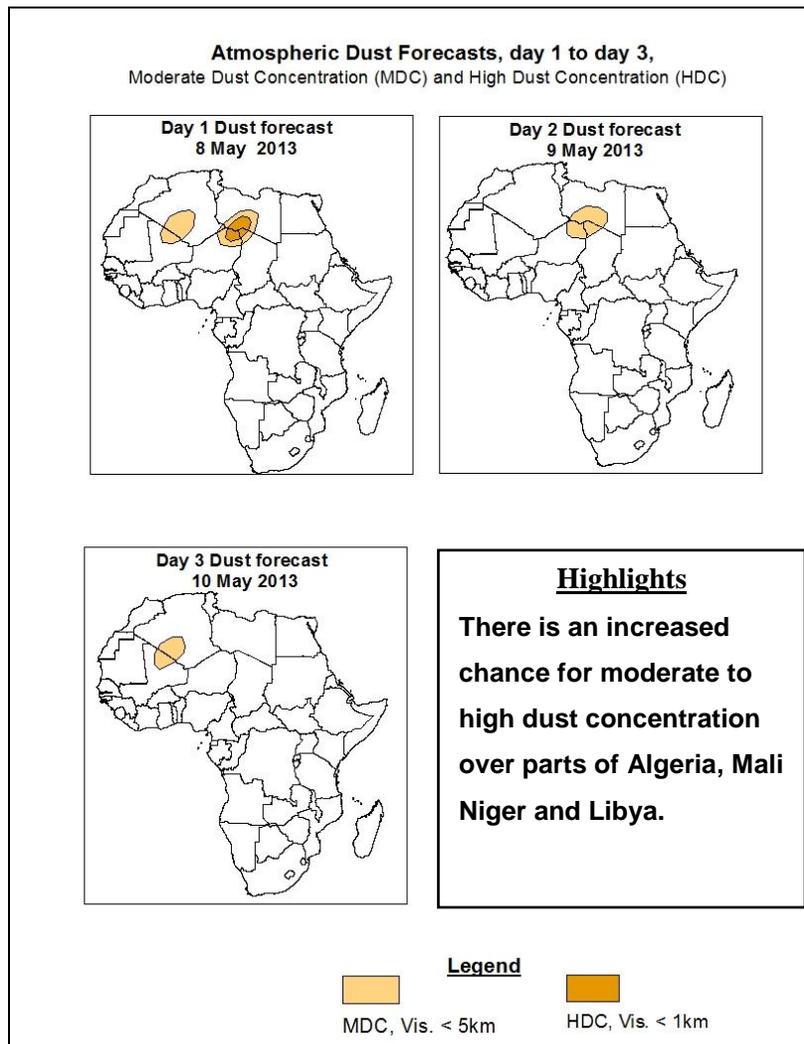
1.1. Twenty Four Hour Cumulative Rainfall Forecasts

The forecasts are expressed in terms of 75% probability of precipitation (POP) exceeded, based on the NCEP, UK Met Office and the ECMWF NWP outputs, the NCEP global ensemble forecasts system (GEFS) and expert assessment.



Summary

In the next five days, the moist cross equatorial flow across East Africa and its associated convergence over the Greater Horn of Africa, seasonal convergence near the Congo Air Boundary (CAB), and the West African Monsoon flow from the Atlantic Ocean and its associated convergence are expected to enhance rainfall in their respective regions. Hence, there is an increased chance for moderate to heavy rainfall over local areas in the Gulf of Guinea region, western Equatorial Africa, northern Angola, parts of DRC, Rwanda, Burundi, Uganda, Ethiopia, and local areas in Tanzania, western Kenya and northern Somalia.



1.2. Model Discussion: Valid from 00Z of 7 May 2013

Model comparison (Valid from 00Z; 7 May, 2013) shows all the three models are in general agreement in terms of depicting positions of the southern hemisphere subtropical highs, while they showed slight differences in depicting their intensity.

The St. Helena High Pressure System over southeast Atlantic Ocean is expected to maintain its moderate intensity while shifting eastwards during the forecast period. Its central pressure value is expected to vary between 1023hpa to 1025hpa through 24 to 72 hours according to the GFS model and from about 1024hpa to 1025hpa according to the UKMET model.

The Mascarene high pressure system over southwestern Indian Ocean is also expected to intensify while shifting eastwards through 24 to 120 hours. Its central pressure value

is expected to decrease from about 1030hpa to 1036hpa, according to the GFS and from about 1031hpa to 1034hpa according to the UKMET model.

The heat lows over central Sahel and neighboring areas are expected to maintain moderate central values, ranging from about 1004hpa to 1005hpa according to the GFS and UKMET models. Similarly, the seasonal lows across South Sudan and the neighboring areas are expected to remain moderate during the forecast period, with their central pressure values varying from 1004hpa to 1005hpa according to the GFS and UKMET models.

At the 850hpa level, the seasonal wind convergence associated with the West African monsoon flow is expected to remain active over central and eastern Gulf of Guinea and the neighboring areas of the Sahel region. The lower level-wind convergence associated with the moist cross equatorial from the Indian Ocean is expected to remain active across central African region, Sudan, Ethiopia and Somalia. The lower level wind convergences near the Congo boundary region are expected to become more active towards end of the forecast period.

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2.0. Previous and Current Day Weather Discussion over Africa

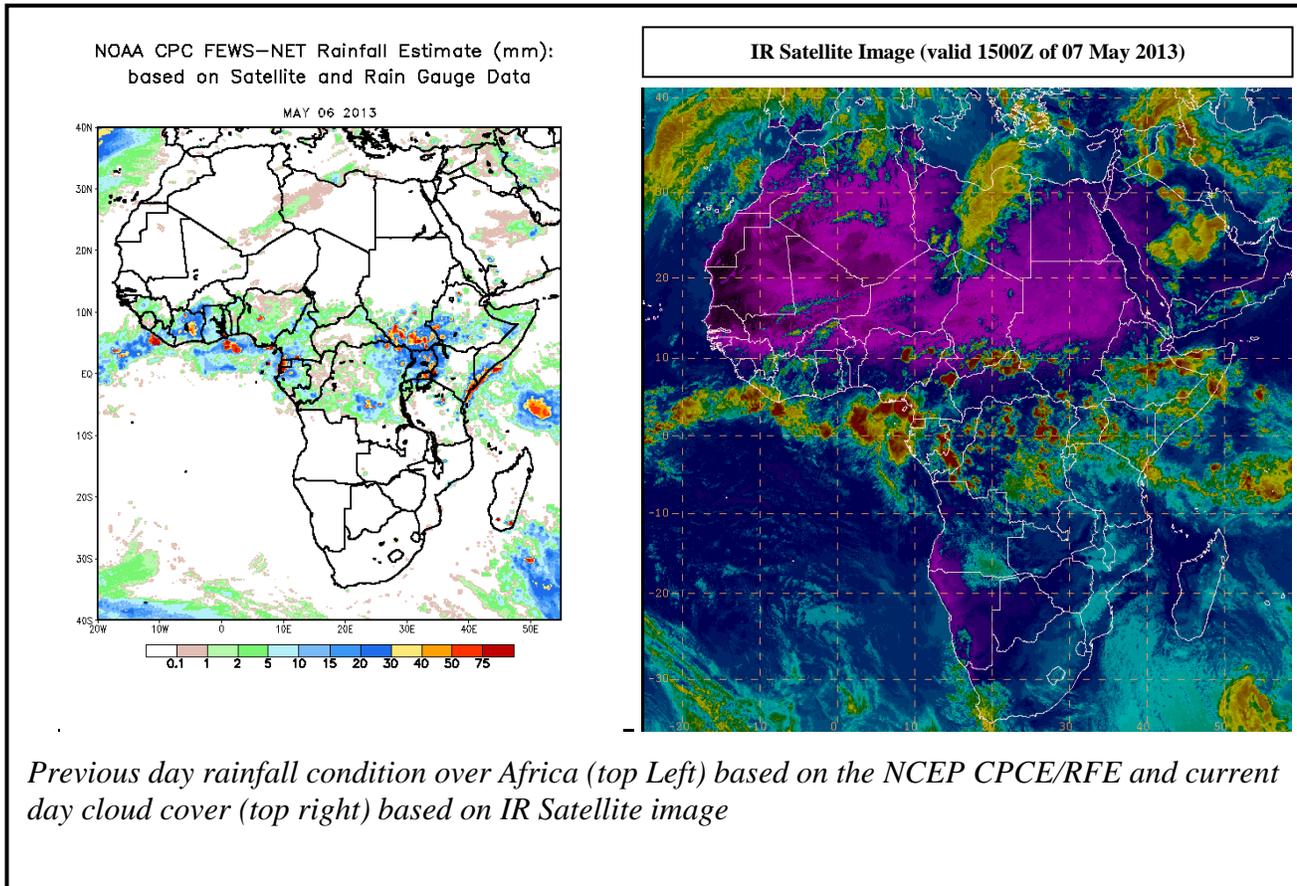
(06 May 2013 – 06 May 2013)

2.1. Weather assessment for the previous day (06 May 2013)

During the previous day, moderate to localized heavy rainfall was observed over parts of Liberia, Code d'Ivoire, Cameroon, Gabon, Congo, southern Chad, DRC, southern Sudan, Uganda, Kenya, Somalia and Ethiopia.

2.2. Weather assessment for the current day (07 May, 2013)

Intense patches of clouds are observed over parts of Nigeria, Cameroon, Gabon, Congo, southern Chad, CAR, DRC, southern Sudan, Uganda, Kenya, Somalia and Ethiopia.



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