

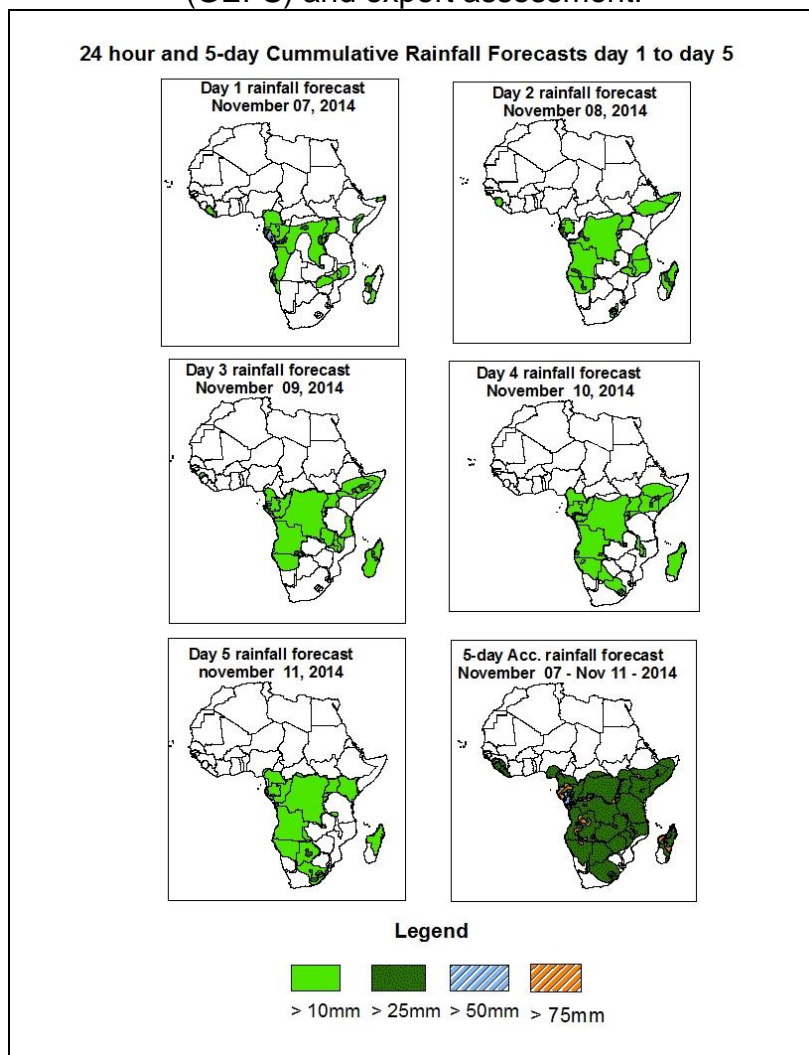


## NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

### 1. Rainfall Forecast: Valid 06Z of November 7 – 06Z of November 11, 2014. (Issued at 1800Z of November 06, 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 the NCEP global ensemble forecasts system (GEFS) and expert assessment.



#### Summary

In the next five days, seasonal wind convergence over Gabon and the neighboring areas, southern Ethiopia, DRC, Angola and Namibia, and eastward propagating frontal system across Southeast Africa are expected to enhance rainfall in their respective regions. Thus, there is an increased chance for moderate to heavy rainfall over Gabon, Congo-Brazzaville, Equatorial Guinea, portions of DRC, Angola, northern Namibia, local areas in southern Ethiopia, and portions of Madagascar.

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

**Day 1 Dust forecast**  
November 07, 2014



**Day 2 Dust forecast**  
November 08, 2014



**Day 3 Dust forecast**  
November 09, 2014



**Highlights**

There is an increased chance for moderate to high dust concentration over Western Sahara, northern Mauritania and Mali, Niger, Algeria, Libya and Chad.

**Legend**



MDC, Vis. < 5km



HDC, Vis. < 1km

## **1.2. Model Discussion: Valid from 00Z of November 06, 2014**

The Azores high pressure system over the Northeast Atlantic Ocean is expected to weaken slightly, with its central pressure value decreasing from 1029hpa to 1027hpa through 48 to 120 hours, according to the GFS model.

The St Helena high pressure system over the Southeast Atlantic Ocean is expected to weaken, with its central pressure value decreasing from 1034hpa to 1030hpa through 48 to 120 hours, according to the GFS model.

The Mascarene high pressure system over the southwestern Indian Ocean is expected to weaken gradually while shifting eastwards with its central pressure value decreasing from 1029hpa to 1028hpa through 24 to 120 hours, according to the GFS model.

The east African ridge across southeastern and eastern Africa is expected to weaken with eastward shift of the Mascarene high pressure system.

At 925Hpa level, dry northeasterly to easterly wind (>25kts) is expected to prevail across Western Sahara, Mauritania, Libya, Chad, Niger, Algeria, and Mali during the forecast period.

At 850Hpa level, seasonal wind convergences are expected to remain active across southern Ethiopia, the Lake Victoria region, Gabon, Congo, DRC, Angola and portions of Zambia and northern Namibia.

At 500hpa level, a trough associated with mid-latitude frontal system is expected to propagate across parts of Mozambique Channel and Madagascar during the forecast period.

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Congo-Brazzaville, Equatorial Guinea, portions of DRC, Angola, northern Namibia, local areas in southern Ethiopia, and portions of Madagascar.

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

(November 05, 2014 – November 06, 2014)

### 2.1. Weather assessment for the previous day (November 05, 2014)

During the previous day, moderate to heavy rainfall was observed over Sierra Leone, Liberia, Ivory Coast, Togo, Ghana, Benin, Gabon, Congo-Brazzaville, Angola, Zimbabwe and Rwanda, portions of Madagascar, DRC, Guinea-Conakry, Nigeria, Cameroon, CAR, local areas in Zambia, Kenya, Burkina-Faso Tanzania, South Sudan, western South Africa, Ethiopia and Uganda, southeastern Mali.

### 2.2. Weather assessment for the current day (November 06, 2014)

Intense clouds are observed over portions of DRC, Angola and Madagascar, local areas in Gabon, Nigeria, Cameroon, CAR and Uganda, southern Congo-Brazzaville and Liberia, northern Zimbabwe and Botswana

