

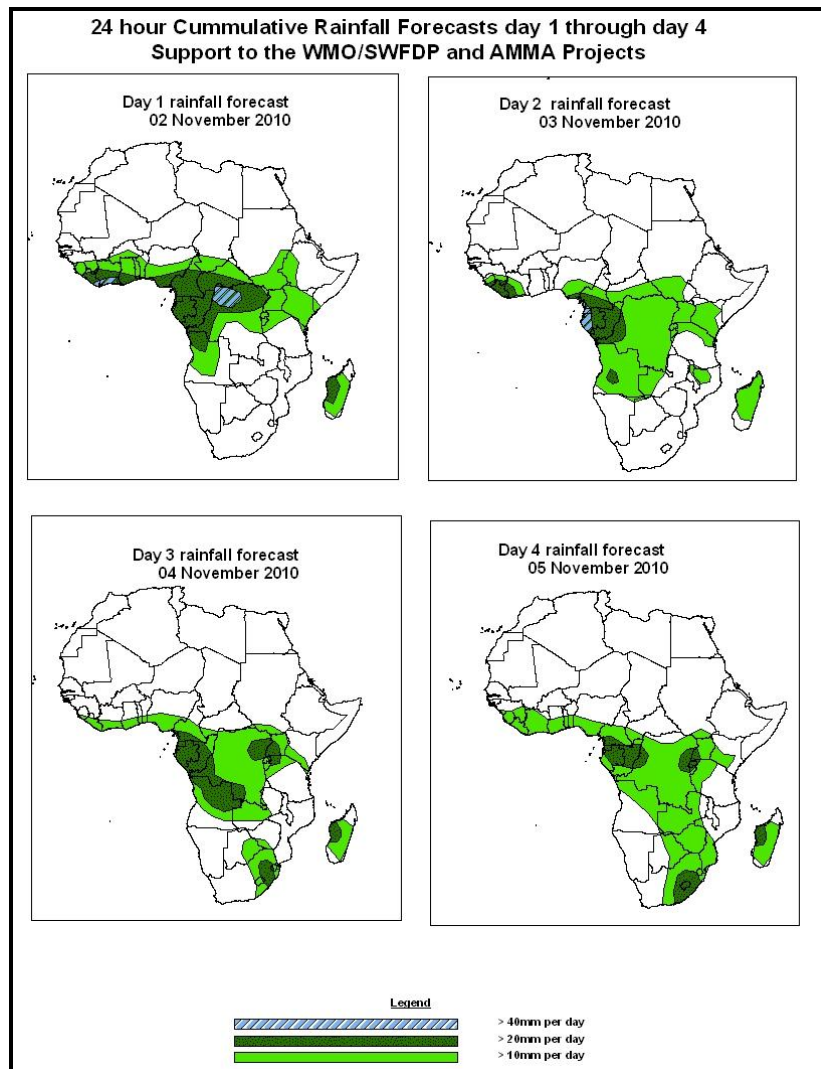


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1.0. Rainfall Forecast: Valid, 06Z of 02 NOVEMBER – 06Z of 05 NOVEMBER 2010, (Issued at 14:00Z of 01 NOVEMBER 2010)

1.1. Twenty Four Hour Cumulative Rainfall Forecasts

The forecasts are expressed in terms of 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 coming four days, there is an increased chance for rainfall to exceed 20mm per day over the eastern parts of the Gulf of Guinea countries, DRC, eastern parts of Central Africa Republic and South Africa with chances of locally heavy rainfall over, Gabon, Eq. Guinea, Liberia and northwest DRC.

1.2. Models Comparison and Discussion-Valid from 00Z of 01 NOVEMBER 2010

The GFS, ECMWF and UKMET models indicate a cut off low over Sudan and southern Chad extending to Niger in the next 48hours. The cut off low is expected to weaken slightly towards the end of the forecast period. Another cut off low over Angola extends to DRC and is expected to weaken in the next 48 hours. A cut off low over South Africa extends to Botswana in the next 48 hours and it is expected to deepen then move to the east coast of South Africa. Also the models are indicating extension of a trough from this system further north in the next 72 to 96 hours.

The seasonal low pressure system (Meridional component of the ITCZ) over western DRC is weak and expected to remain so according to GFS, UKMET and ECMWF models.

The southern hemisphere High pressure system (St. Helena) indicates that the system is weak and remains far westwards in the next 24 to 72 hours and thereafter a likelihood of a weak ridge over the southwest of South Africa. The Mascarene high pressure is expected to remain very weak and confined further eastwards.

At 850hPa level, there is a weak convergence line over the west coast along the Gulf of Guinea Countries. A cyclonic convergence over east Sudan is expected to become weak in the next 48 hours and move over north of Central Africa Republic.

At 700hPa level, a convergence line over Congo and DRC is expected to weaken in the next 48 hours. Another Convergence line over east Sudan to Central Africa Republic is expected to move slightly southwards in the next 24 to 48 hours. Another convergence line is expected to develop over Angola in the next 48 hours and persist during the rest of the forecast period.

At 200hPa, zone of strong wind (>50Kts) over the northern hemisphere is inclined slightly southwards from the next 48 to 96 hours. The Sub Tropical westerly Jet over the southern Hemisphere is expected move towards the west coast of South Africa in the next 72 hours. The wind speed associated with the Jet is expected to be in the order of 70 to 110Kts at first reaching 130 Kts later.

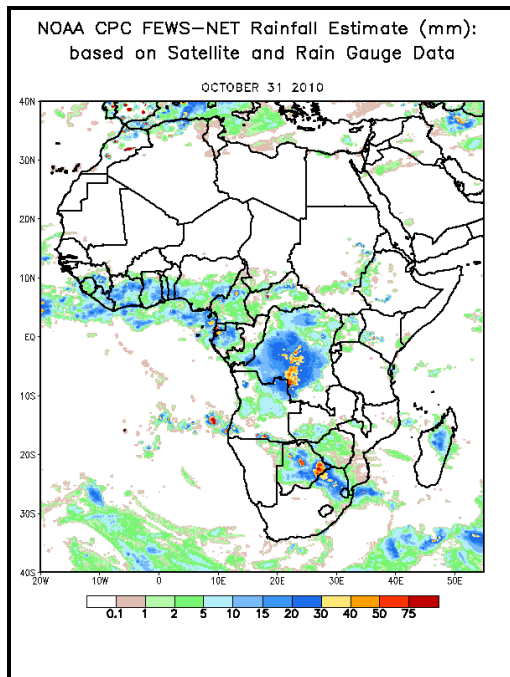
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2.0. Previous and Current Day Weather Discussion over Africa (31 October 2010 – 01 November 2010)

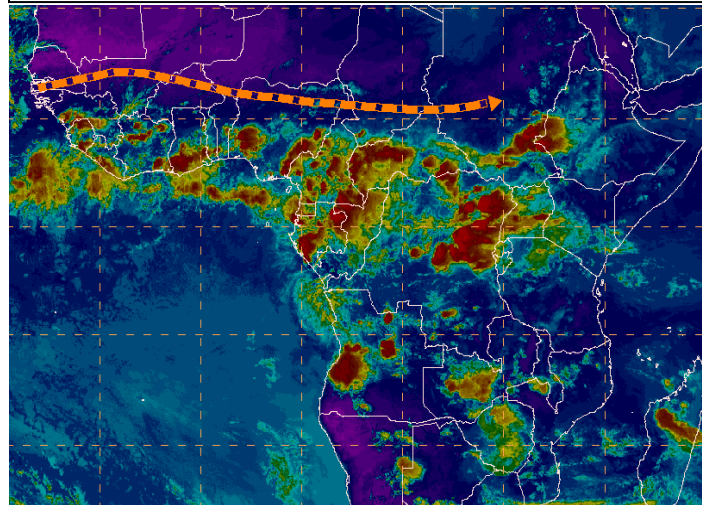
2.1. Weather assessment for the previous day (31 October 2010):

During the previous day, locally heavy rainfall was observed over Botswana, western Gabon and Eq. Guinea.

2.2. Weather assessment for the current day (01 November 2010): Intense clouds are observed over Gabon, Eq. guinea, Central Africa Republic, Cameroon, Angola, CAB region, Southern Sudan, and over the coast of Ghana.



IR Satellite Image, Valid 1652Z, November 01, 2010
and position of ITD (based on 1200Z Surface Analysis)



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

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