

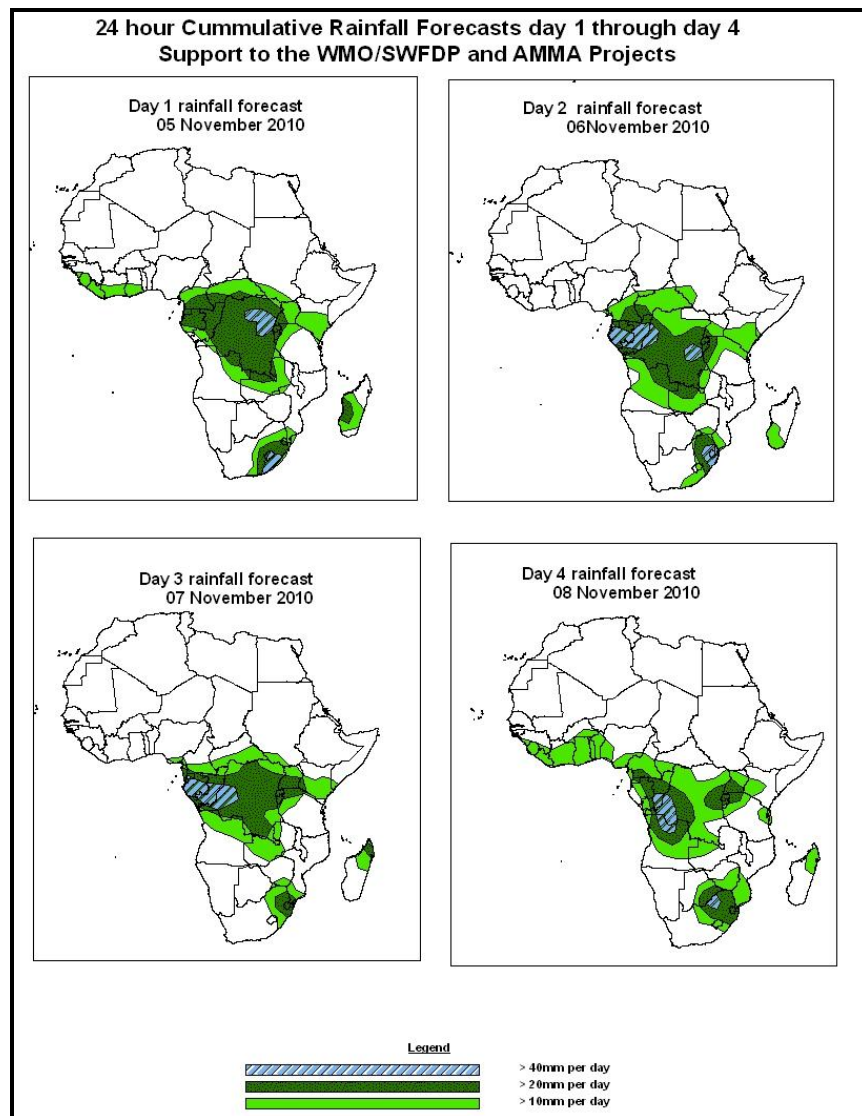


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1.0. Rainfall Forecast: Valid, 06Z of 05 NOVEMBER – 06Z of 08 NOVEMBER 2010, (Issued at 14:00Z of 04 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 DRC, eastern parts Gulf of Guinea countries, Uganda, eastern parts of Angola and South Africa, Madagascar and northern parts of Zambia with chances of locally heavy rainfall over, Angola, Gabon, Congo, DRC, east of South Africa and Swaziland.

1.2. Models Comparison and Discussion-Valid from 00Z of 04 NOVEMBER 2010

The GFS and ECMWF models indicate a trough over Niger extending to Sudan. The cut off low is at central pressure of 1007 hPa and expected to become a cut off low in the next 72 hours. The UKMET model is indicating a cut off low extending from Chad to Sudan from the next 24 hours. The GFS, ECMWF and UKMET models are all indicating a cut off low over southeast Angola to Mozambique across Botswana and Zimbabwe during the next 24 to 96 hours. A trough over southeast of South Africa extends to southern Angola in the next 72 to 96hours.

The seasonal low pressure system (Meridional component of the ITCZ) over western DRC is weak at pressure 1010hPa and expected to persist during the forecast period according to GFS, UKMET and ECMWF models.

The southern hemisphere High pressure system (St. Helena) indicates that the system is very weak (central pressure 1020 to 1021hPa) and expected to extend a ridge over southeast of South Africa in the next 72 hours. The Mascarene high pressure is expected to weaken further from central pressure of 1024 to 1020hPa in the next 72 to 96 hours.

At 850hPa level, a cyclonic convergence over the Burkina Faso and Mali border is expected to move to southeast of Mauritania in the next 48hours. A convergence line over DRC is expected to move over Lake Victoria in the next 48 hours. Another convergence line from south Angola to Botswana is expected to extend to South Africa in the next 96hours according to the GFS model.

At 700hPa level, a convergence line over Kenya/Tanzania border near the Lake Victoria basin is expected to move slightly westward in the next 48 hours. A cyclonic convergence is likely to develop over east Angola and move to Gabon and Angola in the next 48to 72 hours.

At 200hPa, zone of strong wind (>50Kts) over the northern hemisphere is inclined slightly southwards from the next 24 to 48 hours. The Sub Tropical westerly Jet over the southern Hemisphere is expected to move across South Africa in the next 24 to

72hours. The wind speed associated with the Jet is expected to be in the order of 70 to 110Kts reaching 130 Kts later during the forecast period.

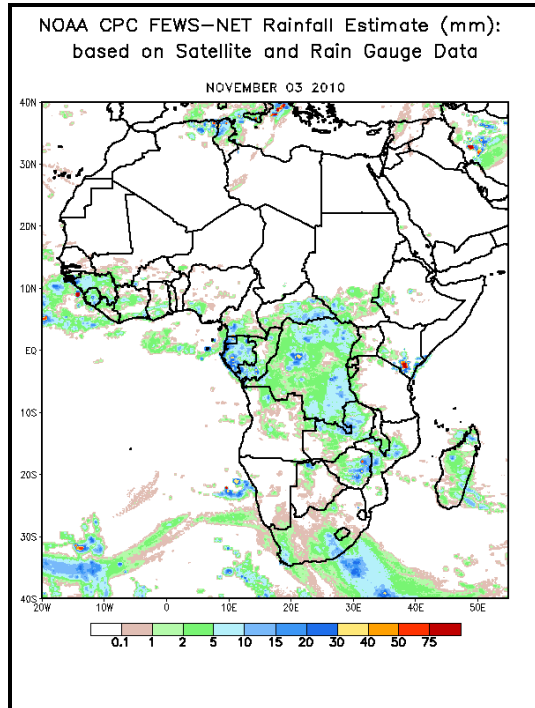
In the coming four days, there is an increased chance for rainfall to exceed 20mm per day over DRC, eastern parts Gulf of Guinea countries, Uganda, eastern parts of Angola and South Africa, Madagascar and northern parts of Zambia with chances of locally heavy rainfall over, Angola, Gabon, Congo, DRC, east of South Africa and Swaziland.

2.0. Previous and Current Day Weather Discussion over Africa (03 November 2010 – 04 November 2010)

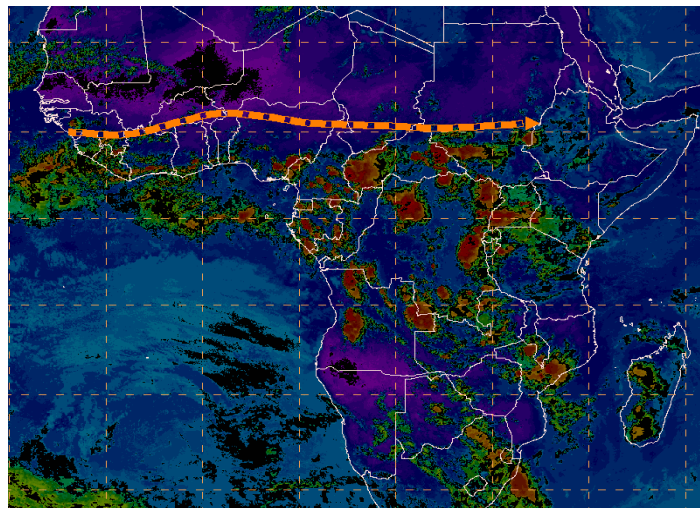
2.1. Weather assessment for the previous day (03 November 2010):

During the previous day, locally heavy rainfall was observed over Gabon and Southern Kenya.

2.2. Weather assessment for the current day (04 November 2010): Intense clouds are observed over DRC, Central Africa Republic, eastern Gulf of Guinea Countries, Angola and Mozambique.



IR Satellite Image, Valid 1630Z, November 04, 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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