

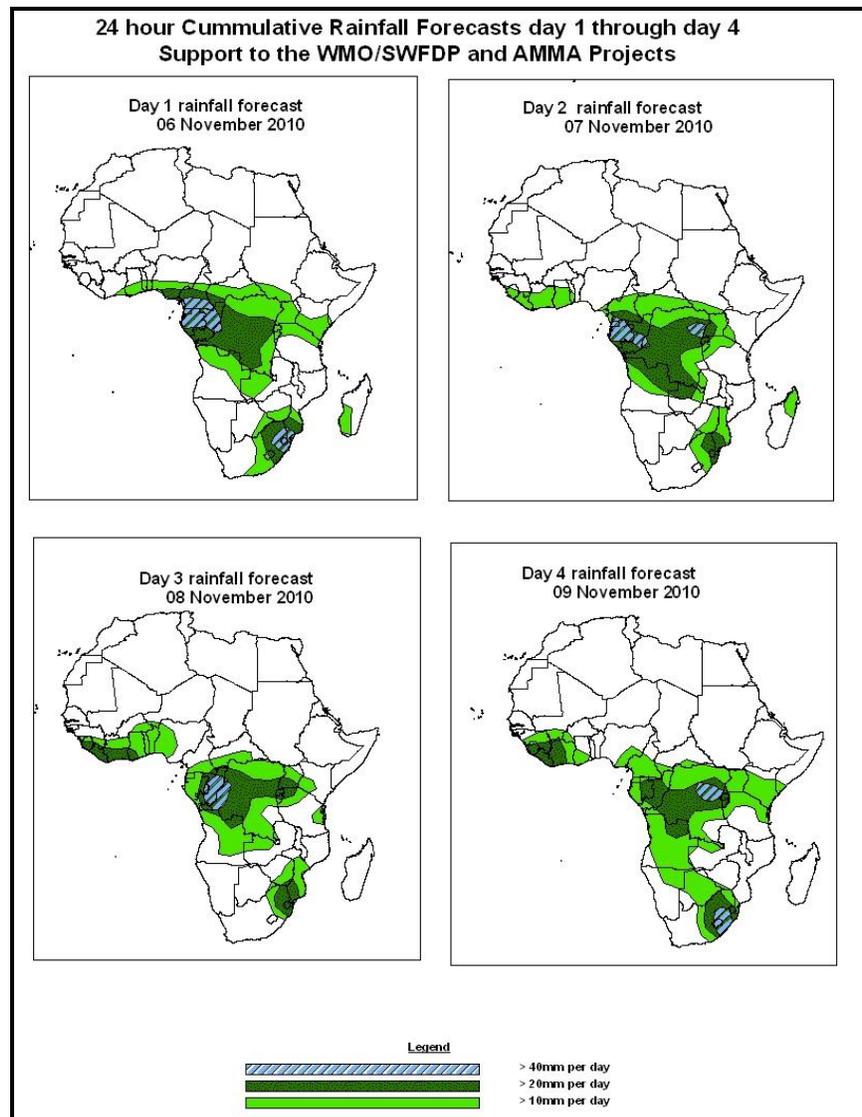


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1.0. Rainfall Forecast: Valid, 06Z of 06 NOVEMBER – 06Z of 09 NOVEMBER 2010, (Issued at 14:00Z of 05 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, eastern parts of Angola and Southern Africa with chances of locally heavy rainfall over, Gabon, Congo, Cameroon, DRC, east of South Africa, Lesotho and Swaziland.

1.2. Models Comparison and Discussion-Valid from 00Z of 05 NOVEMBER 2010

The GFS and ECMWF models indicate a trough from Mali to Sudan. The trough is expected to deepen and become a cut off low extending to Niger in the next 48 to 72 hours. The UKMET model is indicating a cut off low extending from Chad to Sudan from the next 24 to 96 hours. The GFS, ECMWF and UKMET models are all indicating a cut off low over Botswana and east of South Africa. Another trough is expected to develop over South Africa and extends to Botswana and Zambia in the next 72 hours.

The seasonal low pressure system (Meridional component of the ITCZ) over western DRC is expected to deepen slightly from 1009hPa to 1006 hPa during the next 24 to 72 hours.

The southern hemisphere High pressure system (St. Helena) is expected to extend a ridge over the east coast of South Africa in the next 48 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 convergence line over Gabon and west of DRC is expected to move north of DRC across Congo in the next 48 hours. Another convergence line over eastern DRC is expected to persist for the next 96hours. A convergence line has moved over Kenya/Tanzania border during the past 24 hours and it is likely to move over central Kenya in the next 72 hours. Another convergence line over Botswana and northeast South Africa extends to Mozambique coast in the next 48 hours according to the GFS model.

At 700hPa level, a convergence line over Gabon and Congo is expected to persist for the next 24 to 72 hours. Another convergence line extends from Namibia to east of South Africa across Botswana and is likely to persist for the entire forecast period.

At 500hPa level, a trough situated along the Namibia and west coast of South Africa is expected to move eastwards across South Africa in the next 72 to 96 hours.

At 200hPa, zone of strong wind (>50Kts) associated with the Sub Tropical westerly Jet over the southern Hemisphere is expected to move across South Africa in the next 24 to

48 hours. 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.

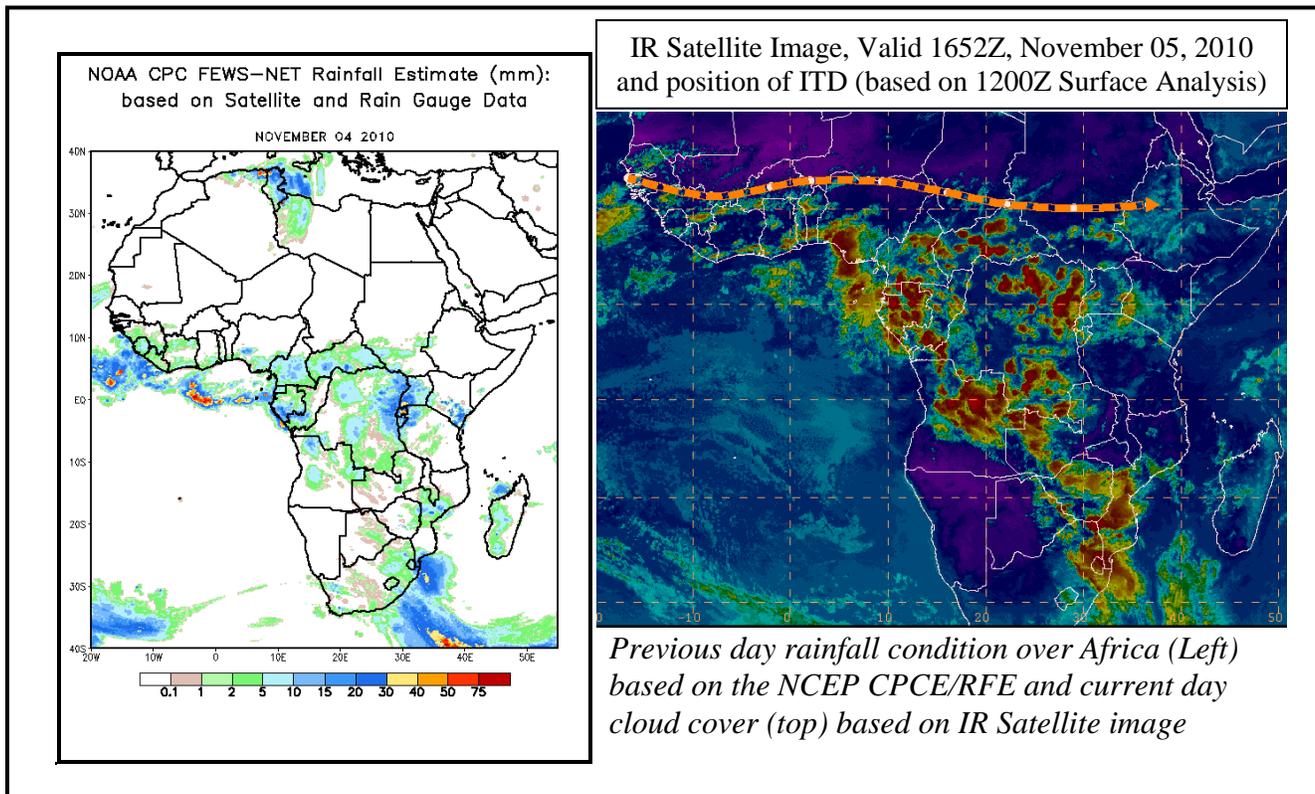
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2.0. Previous and Current Day Weather Discussion over Africa (04 November 2010 – 05 November 2010)

2.1. Weather assessment for the previous day (04 November 2010):

During the previous day, locally moderate rainfall was observed over Rwanda, Burundi, eastern DRC and Southeastern Kenya.

2.2. Weather assessment for the current day (05 November 2010): Intense clouds are observed over Angola, eastern DRC, Central Africa Republic, eastern Gulf of Guinea Countries, east of South Africa and Mozambique.



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