

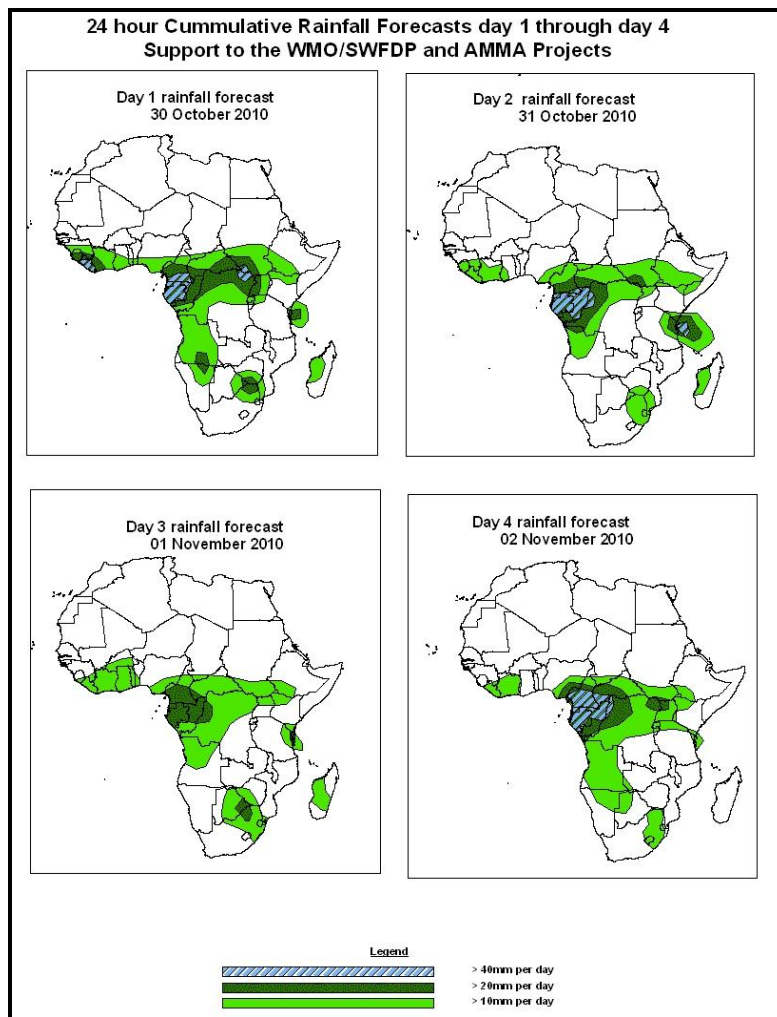


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1.0. Rainfall Forecast: Valid, 06Z of 30 OCTOBER – 06Z of 02 NOVEMBER 2010, (Issued at 14:00Z of 29 OCTOBER 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 and Central Africa and East Africa with chances of locally heavy rainfall over, Gabon, Eq. Guinea, Congo, Cameroon, and Liberia. Pockets of moderate to heavy rainfall are likely to occur locally along the northeastern Tanzania.

1.2. Models Comparison and Discussion-Valid from 00Z of 29 OCTOBER 2010

The GFS, ECMWF and UKMET models indicate a broad trough from Burkina Faso across Chad to Sudan that will persist during the forecast period. Another trough over Angola extends to northern Botswana and South Africa in the next 24 to 48 hours. A cut off low over southeast DRC extends to south Zambia and then further to Botswana from 72 to 96 hours.

The seasonal low pressure system (Meridional component of the ITCZ) over DRC has weakened slightly and moves over Congo where it is likely to be active during the next 24 to 72 hours according to GFS, UKMET and ECMWF models.

The southern hemisphere High pressure system (St. Helena) indicates that the ridge from the St Helena High pressure over east South Africa is expected to weaken and retreat westwards in the next 24 hours and thereafter the models are indicating a likelihood of another ridge from the St. Helena high moving over the southeast coast of South Africa during the next 48 to 72 hours. The Mascarene high pressure is expected to remain very weak displaced eastwards occasionally extending a weak ridge over Southeast Madagascar. The models are still indicating a ridge along East Africa extending up to Kenya and a times reaching Ethiopia during the next 24 to 96 hours. Also a weak trough from Indian Ocean is in effect over the vicinity of the East Africa coastline for the entire forecast period.

At 850hPa level, a weak convergence line along the border of Chad and Cameroon is expected to persist during the next 24 hours. A weak cyclonic convergence over south east Sudan is expected to become weak towards the end of the forecast period and moves to the Ethiopia/Sudan border. Another convergence line from DRC extends to eastern Angola and it is expected to shift towards Uganda during the next 72 to 96 hours. A cyclonic convergence line over eastern Congo is expected to move further west to Gabon and Eq. guinea in the next 48 to 72 hours.

At 700hPa level, a convergence line over Central Africa Republic and northern DRC is expected to remain active in the next 24 to 48 hours. Another Convergence line develops from south Sudan to southeast Nigeria during the next 72 to 96 hours. A convergence line over Botswana is expected to persist during the next 24 hours. Over East Africa, the Near Equatorial Trough (NET) is expected to extend to the coastline of

Tanzania and Kenya in the next 24 hours and then move to Tanzania mainland during the next 48 to 72 hours.

At 200hPa, zone of strong wind (>50Kts) is inclined further north. The Sub Tropical westerly Jet over the southern Hemisphere is expected to weaken as it moves off the east coast across southern Madagascar during the next 24 hours. The wind speed associated with the Jet is expected to be in the order of 70 to 110Kts during that period.

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 and Central Africa and East Africa with chances of locally heavy rainfall over, Gabon, Eq. Guinea, Congo, Cameroon, and Liberia. Pockets of moderate to heavy rainfall are likely to occur locally along the northeastern Tanzania.

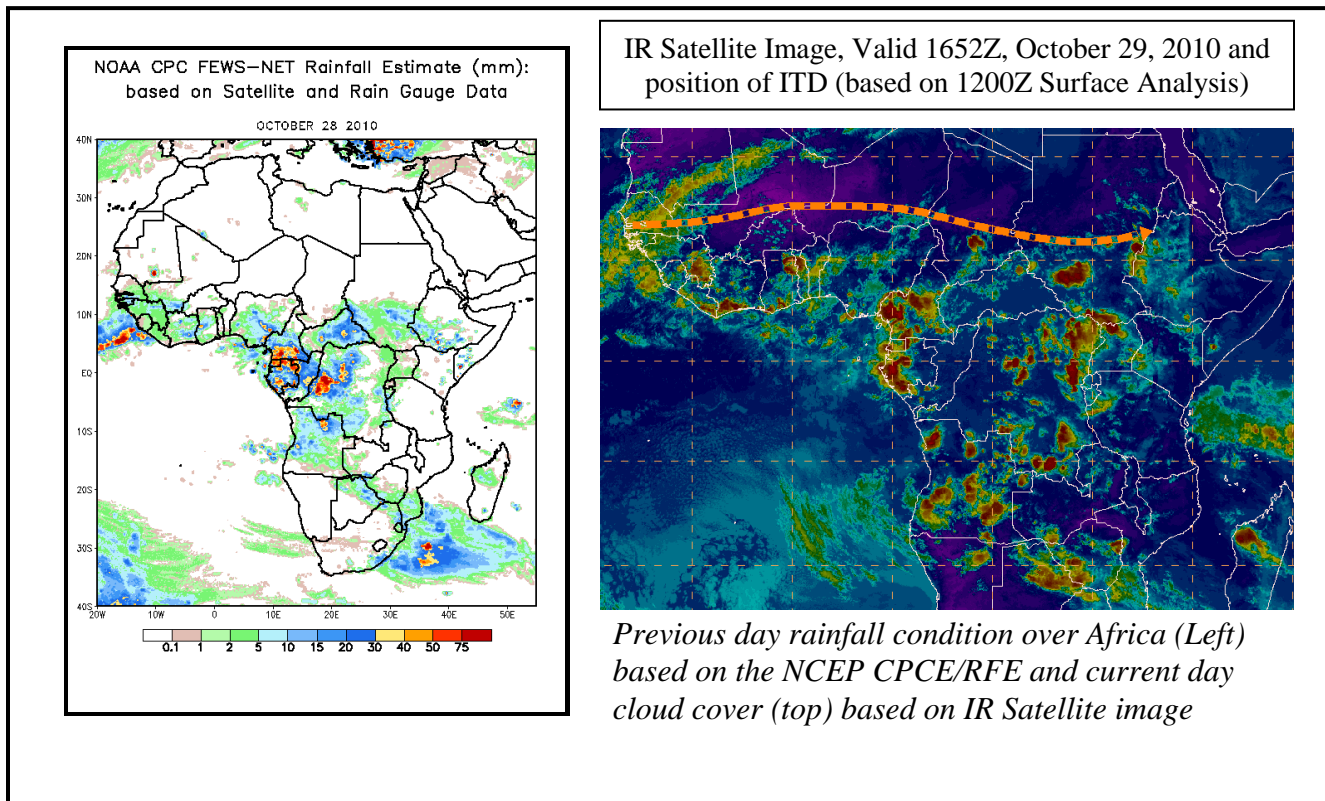
2.0. Previous and Current Day Weather Discussion over Africa (28 – 29 October 2010)

2.1. Weather assessment for the previous day (28 October 2010):

During the previous day, locally heavy rainfall was observed over Cameroon, Gabon and DRC. Also moderate to heavy rainfall was observed over Congo, Southern Ethiopia and parts of Somalia.

2.2. Weather assessment for the current day (29 October 2010):

Intense clouds are observed over Eq. guinea, Cameroon, Gabon, Angola, CAB region, Southern Sudan, along Botswana/Zimbabwe border and over western Madagascar.



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