

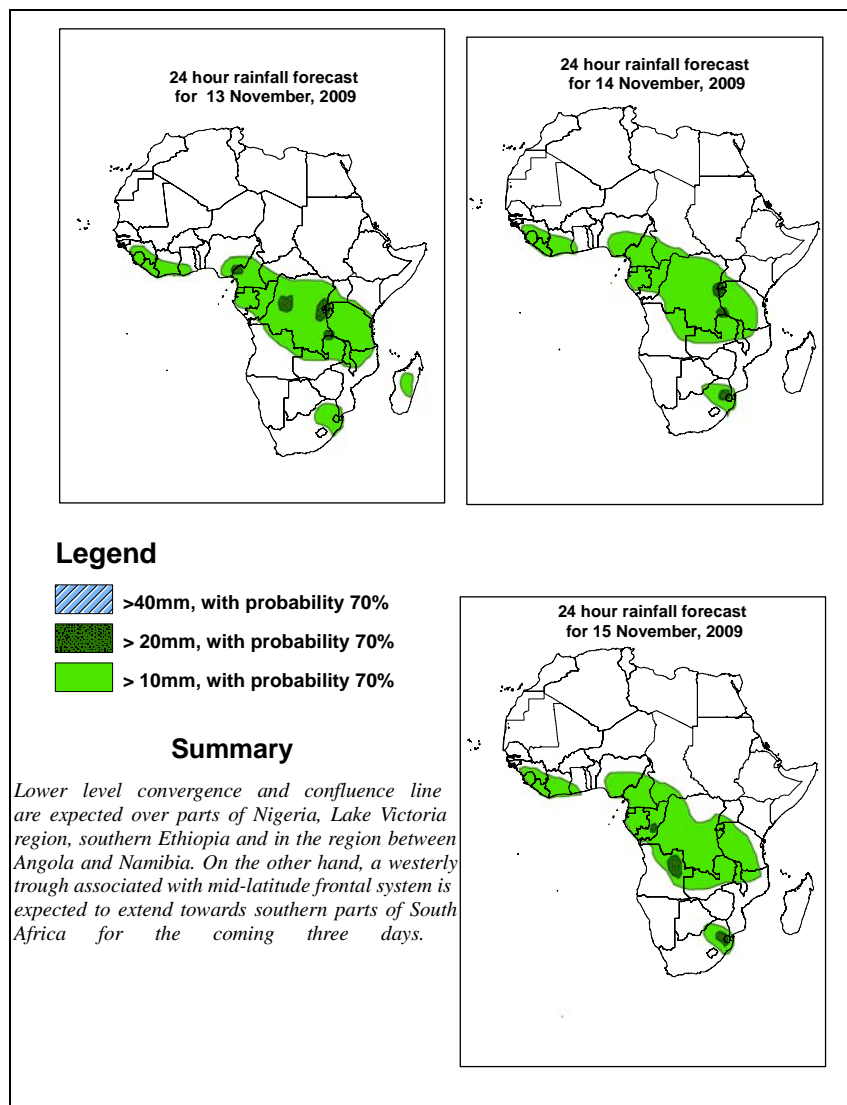


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1. Forecast Discussion: Valid, 06Z of 13 November – 06Z of 15 November 2009, (Issued at 14:00EST of 12 November 2009)

1.1. Twenty Four Hour Cumulative Rainfall Forecasts

The forecasts are expressed in terms of probability of precipitation (POP) exceedence based on the NCEP, UK Met Office and the ECMWF NWP outputs, the NCEP global ensemble forecasts system (GEFS), and expert assessment.



1.2. Model discussion

Model comparison (Valid from 00Z; 13, NOVEMBER, 2009): all the three models are in general agreement especially with respect to the positioning of large scale features, however, the UK model tends to give lower values than both the GFS and ECMWF models especially in the Equatorial region (10°S and 10°N).

1.3. Flow at 850hPa

T+24h: Lower level convergence and confluence line are expected over parts of Nigeria, Lake Victoria region, southern Ethiopia and in the region between Angola and Namibia. On the other hand, a westerly trough associated with mid-latitude frontal system is expected to extend towards southern parts of South Africa.

T+48h: The convergence near Lake Victoria and the one extending between Angola and Namibia is expected to persist, while localized convergences over Nigeria and southern Ethiopia are expected to weaken. On the other hand, a westerly trough associated with mid-latitude frontal system is expected to move eastwards off the coast of South Africa, leaving behind a cut off convergence area over southern coastal areas of South Africa..

T+72h: The convergence over the Lake Victoria region is expected to enhance while extending towards southern Tanzania. On the contrary, the convergence over Angola and Namibia is expected to weaken and will be limited to northwestern portions of Namibia.

1.4. Flow at 500hPa

T+24h: A trough in the westerlies is expected to extend southwards along 60°E longitude with its peripheral winds dominating the flow over coastal areas of the Horn of Africa, while the westerly flow over southern African countries is expected to attain a wavy pattern with a trough axis extending towards Madagascar.

T+48h: The westerly trough over the Horn of Africa is expected to move slightly to the east, while wavy pattern in the southern hemisphere is expected to weaken, becoming zonal over much of the southern African countries.

T+72h: The westerly trough in the northern Hemisphere is expected to shift towards the east while the westerly flow in the southern hemisphere is expected to develop a short wave pattern.

1.5. Flow at 200hPa

T+24h: The westerly flow in the southern hemisphere is expected to attain wavy pattern with a trough axis over Madagascar, while the westerly flow in the northern hemisphere is expected to be more of zonal.

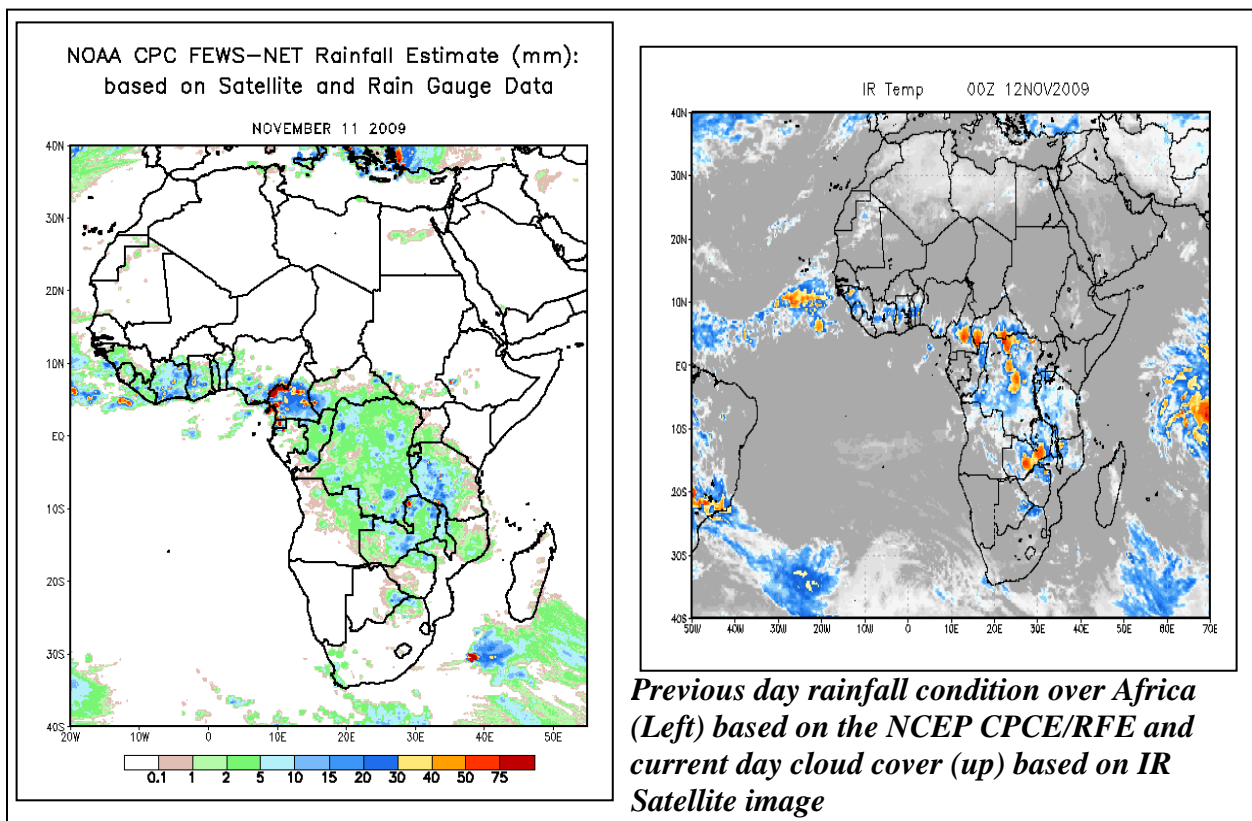
T+48h: No significant change is expected in the main flow pattern in both hemispheres.

T+72h: A wavy pattern is expected to develop out of the persistent zonal flow over northern Africa, while the wavy pattern in westerlies over southern hemisphere is expected to weaken.

2. Previous and Current Day Weather Discussion over Africa (11-12 November 2009)

2.1. Weather assessment for the previous day (11 November 2009): During the previous day, moderate to heavy rainfall events were observed over parts of Guinea, Gulf of Guinea, central Cameroon, southern Central Africa Rep., DR Congo and Zambia.

2.2. Weather assessment for the current day (12 November 2009): Intense clouds are observed over parts of Guinea, Gulf of Guinea, central Cameroon, southern Central Africa Rep., DR Congo and Zambia.



Authors: Anthony Twahirwa (Rwanda Meteorological Services)
Chali Debele (National Meteorological Agency of Ethiopia and African desk)

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