

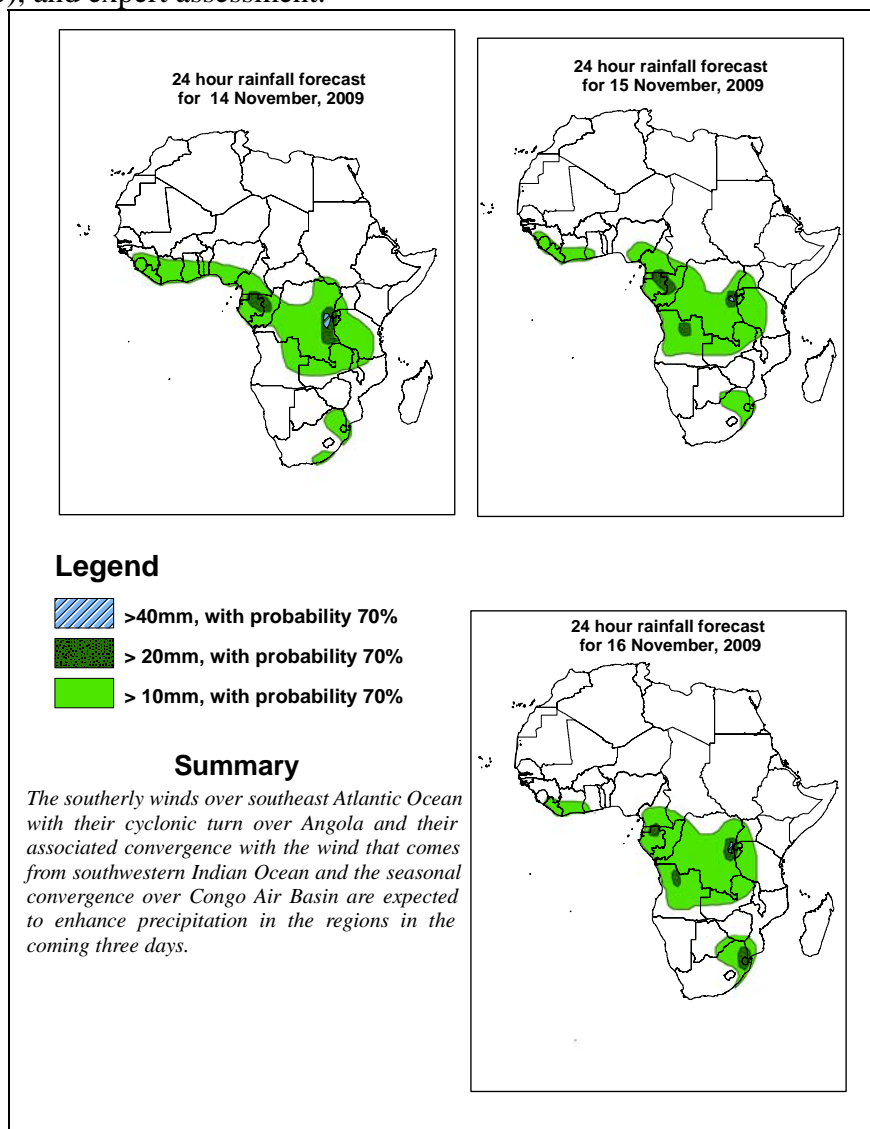


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1. Forecast Discussion: Valid, 06Z of 14 November – 06Z of 16 November 2009, (Issued at 14:00EST Of 13 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; 14, 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: The southerly winds over southeast Atlantic Ocean with their cyclonic turn over Angola and their associated convergence with the wind that comes from southwestern Indian Ocean are expected to dominate the flow over southern African countries. Moreover, the seasonal convergence over Congo Air Basin region is expected to persist.

T+48h: The cyclonic and wind convergence system over southern African countries is expected to persist while the seasonal convergence over the Congo Air Basin is expected to weaken slightly.

T+72h: The cyclonic flow and its associated convergence over southern African countries is expected to expand towards to the east.

1.4. Flow at 500hPa

T+24h: A trough in the westerlies is expected to extend southwestwards off the coast of the Horn of Africa, while the westerly flow over southern African countries is expected to remain zonal.

T+48h: The westerly trough off the coast of the Horn of Africa is expected to move slightly to the east, while zonal westerly flow in the southern hemisphere is expected to persist.

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

1.4. 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.

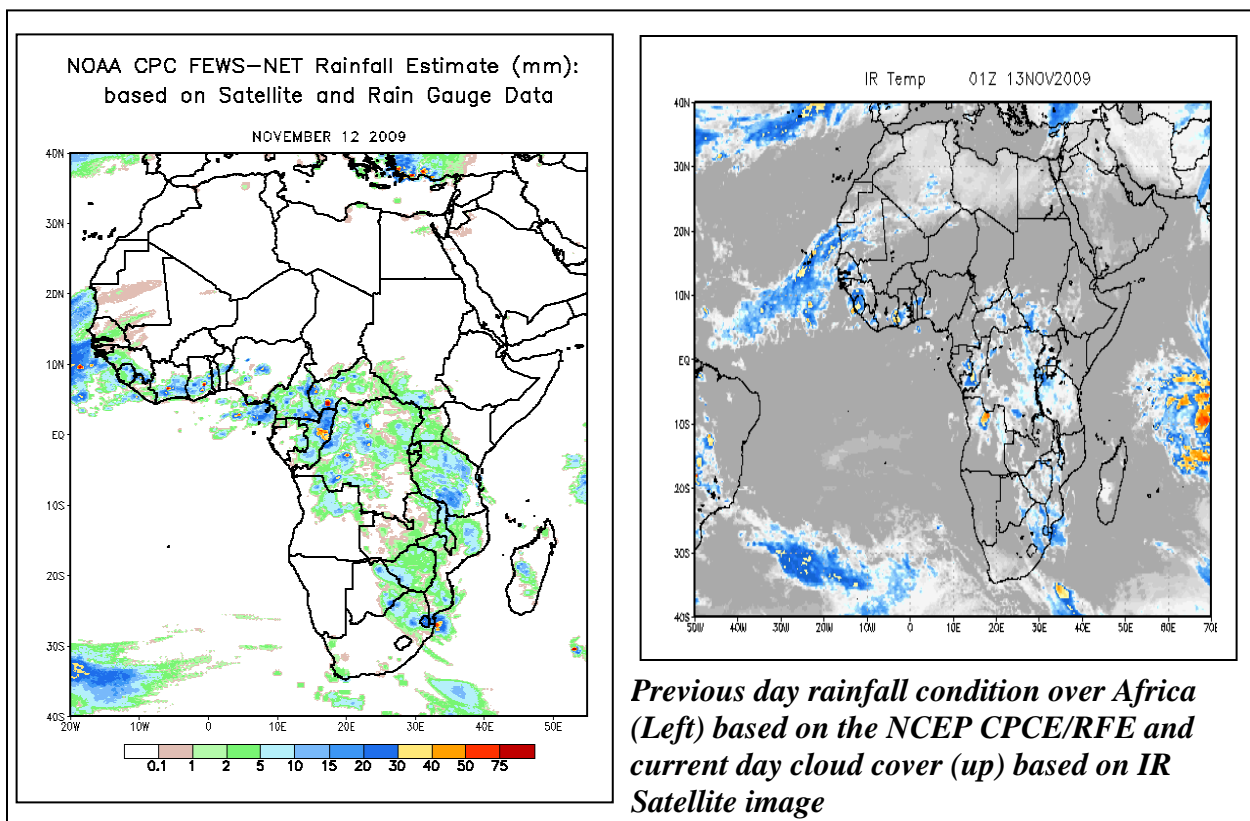
T+48h: The westerly zonal flow in the northern hemisphere is expected to persist, while the trough in the southern hemisphere is expected to weaken.

T+72h: The zonal flow in the southern hemisphere is expected to develop a wavy pattern with a trough axis extending northwards along the southeastern coastal areas of Africa.

2. Previous and Current Day Weather Discussion over Africa (12-13 November 2009)

2.1. Weather assessment for the previous day (12 November 2009): During the previous day, moderate to heavy rainfall events were observed over parts of Guinea, Gulf of Guinea, central Nigeria, central Cameroon, southern Central Africa Rep., Congo, DR Congo, western Tanzania, Zambia and South Africa.

2.2. Weather assessment for the current day (13 November 2009): Intense clouds are observed over parts of Sierra Leone, Gulf of Guinea, Congo, DR Congo, northern Angola, Rwanda, Burundi, western Tanzania northeastern South Africa and southern Mozambique.



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