

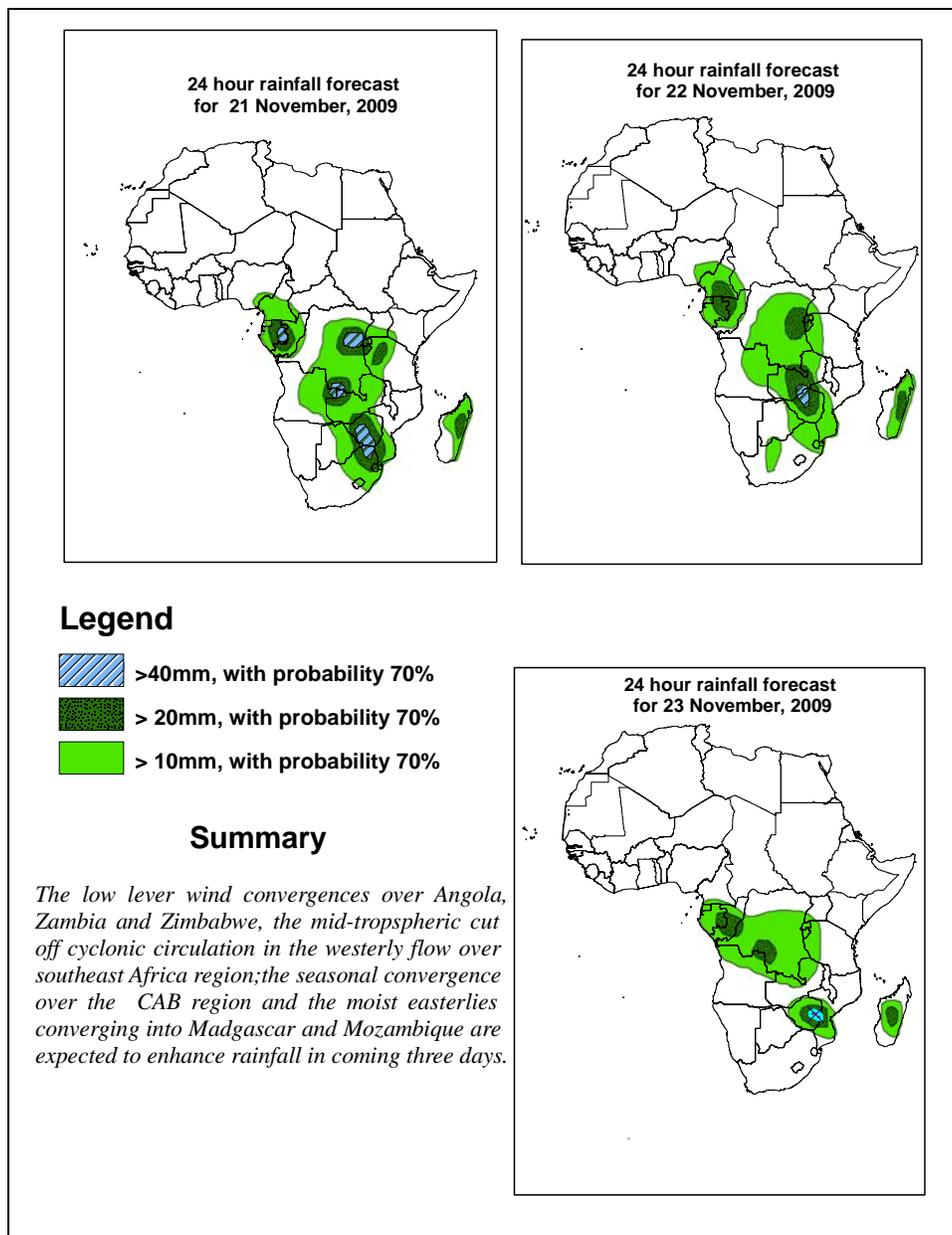


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1. Forecast Discussion: Valid, 06Z of 21 November – 06Z of 23 November 2009, (Issued at 14:00EST Of 20 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; 21, 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: Deep wind convergence lines are expected to develop over eastern Angola and in the area bordering Zambia and Zimbabwe, while the seasonal convergence over the CAB region is expected to remain active over the Great lake regions. On the other hand moist easterlies are expected to dominate the flow over eastern portions of Madagascar and Mozambique.

T+48h: The convergence over eastern Angola is expected to weaken while the convergence the area bordering Zambia and Zimbabwe remains active. Besides, the seasonal convergence over the CAB region is expected to persist and the moist easterlies over southern Indian Ocean are expected to continue converging over Madagascar and Mozambique.

T+72h: The convergence the area bordering Zambia and Zimbabwe is expected to extend towards southern Mozambique. On the other hand, the trough associated with mid-latitude frontal system is expected to extent towards southern Madagascar.

1.4. Flow at 500hPa

T+24h: A westerly flow with a short wave pattern is expected southern African countries with a cut off cyclonic circulation centered over Zimbabwe and the adjacent areas of Botswana and South Africa.

T+48h: The cut off cyclonic circulation is expected to fill up and become an open trough, while moving towards Mozambique

T+72h: The trough over Mozambique is expected to move further to the east.

1.4. Flow at 200hPa

T+24h: A westerly flow with a cut off cyclonic system over South Africa is expected to dominate the flow over southern African countries, southern Atlantic and southern Indian Oceans.

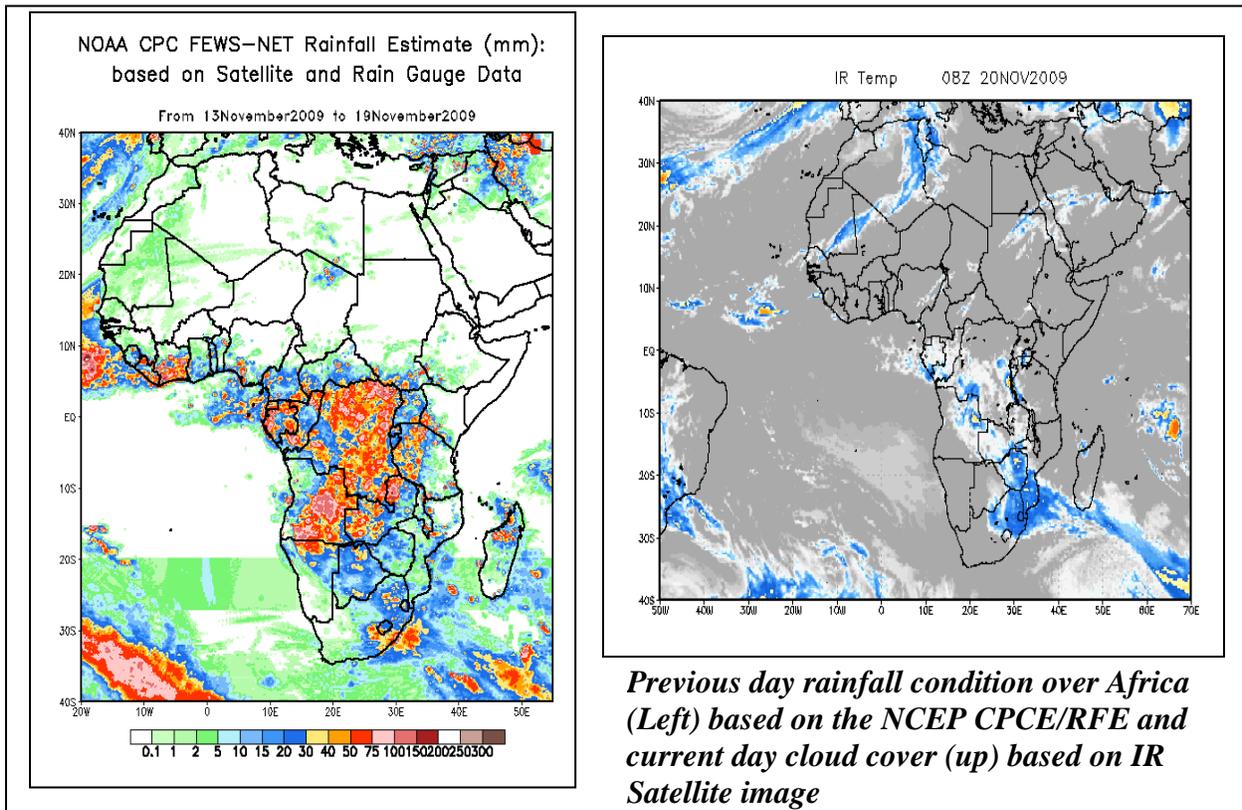
T+48h: The cut off cyclonic flow over South Africa is expected to be replaced by zonal westerly flow.

T+72h: No significant change is expected in the flow pattern.

2. Previous and Current Day Weather Discussion over Africa (18-19 November 2009)

2.1. Weather assessment for the previous day (19 November 2009): During the previous day, moderate to heavy rainfall events were observed over parts of Gabon, southern Congo, southern DR Congo, Rwanda, Burundi, lake Victoria region, northeastern Angola, southern Zambia, eastern Botswana, Zimbabwe, southern Mozambique and eastern South Africa.

2.2. Weather assessment for the current day (20 November 2009): Intense clouds are observed over parts of DR Congo, northeastern Angola, Zimbabwe, southern Mozambique and eastern South Africa.



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Disclaimer: This bulletin is for training purposes only and should be used as guidance. NOAA does not make forecasts for areas outside of the United State.