

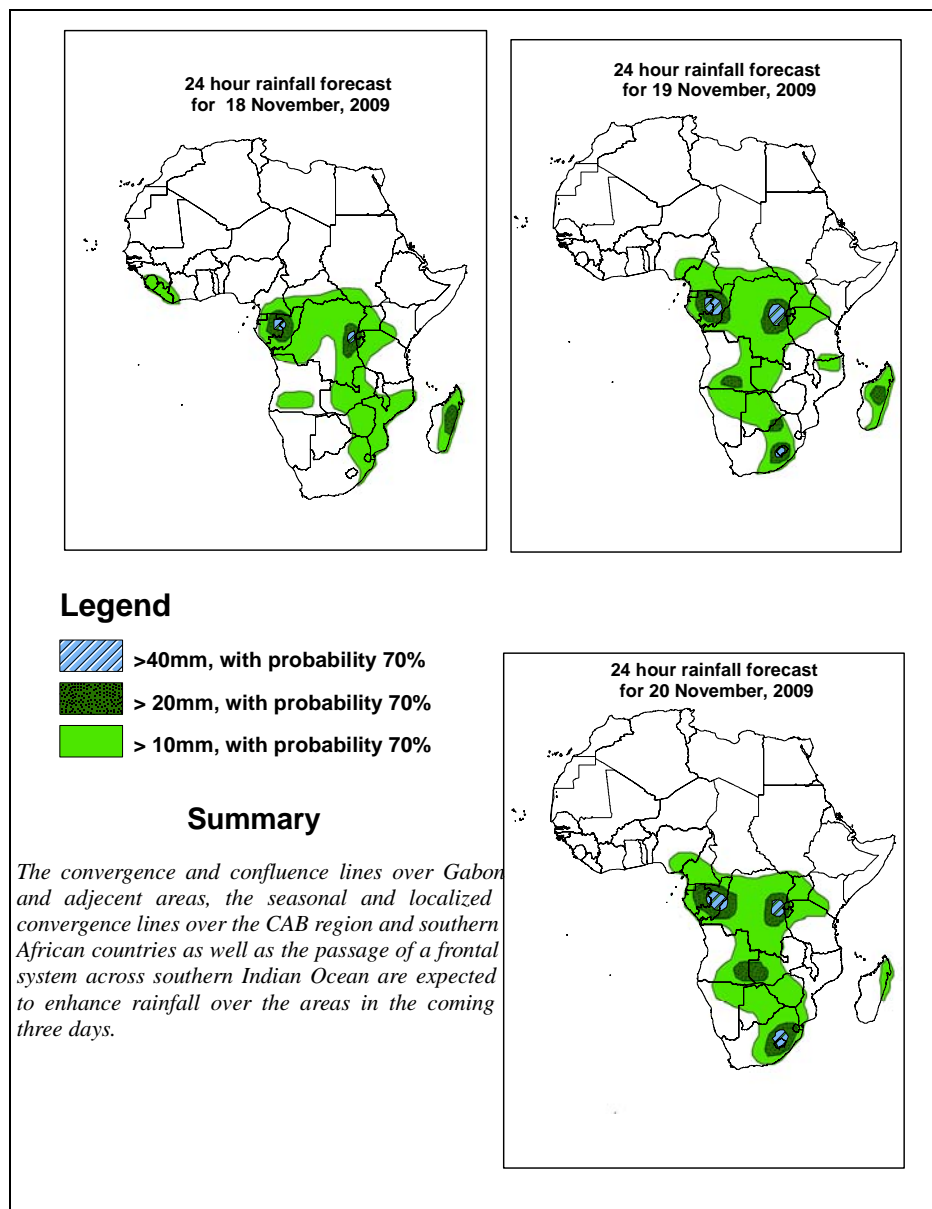


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1. Forecast Discussion: Valid, 06Z of 18 November – 06Z of 20 November 2009, (Issued at 14:00EST Of 17 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; 17, 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: A convergence line is expected to develop over Gabon, Congo and the adjacent areas of DRC. Moreover, the seasonal convergences over the CAB region as well as the localized convergence and confluence lines over southern African countries are expected to continue influencing the rainfall activity in the regions. On the other hand, a trough associated with mid-latitude system is expected to extend towards northern parts of Madagascar.

T+48h: The convergence over western parts of equatorial Africa is expected to persist, but slightly shifting to the west, while the seasonal convergence lines over the CAB region and southern African countries are expected to persist. On the other hand, a convergence line is expected to develop along the western coast of Madagascar.

T+72h: The seasonal convergence and confluence lines over the CAB region and southern African countries are expected to get enhanced. On the other hand, a cyclonic flow is expected to develop over southern portions of Madagascar.

1.4. Flow at 500hPa

T+24h: A northeast-southwest oriented trough in the westerlies is expected over northeast Africa, while a westerly trough in the southern hemisphere is expected to extend its axis over Madagascar.

T+48h: The trough in the westerlies over northern parts of the Horn of Africa is expected to expand towards the west, while a back hanging westerly trough of the southern hemisphere is expected to expand northwards over Southern African Countries.

T+72h: The trough in the westerlies over northern hemisphere is expected to expand further to the west while a back hanging trough of westerly in the southern hemisphere is expected to persist over Southern African Countries.

1.4. Flow at 200hPa

T+24h: The westerly flow in the southern hemisphere is expected to attain wavy pattern, with the trough axes dominating the flow over southeastern Atlantic Ocean and southwestern Indian Ocean.

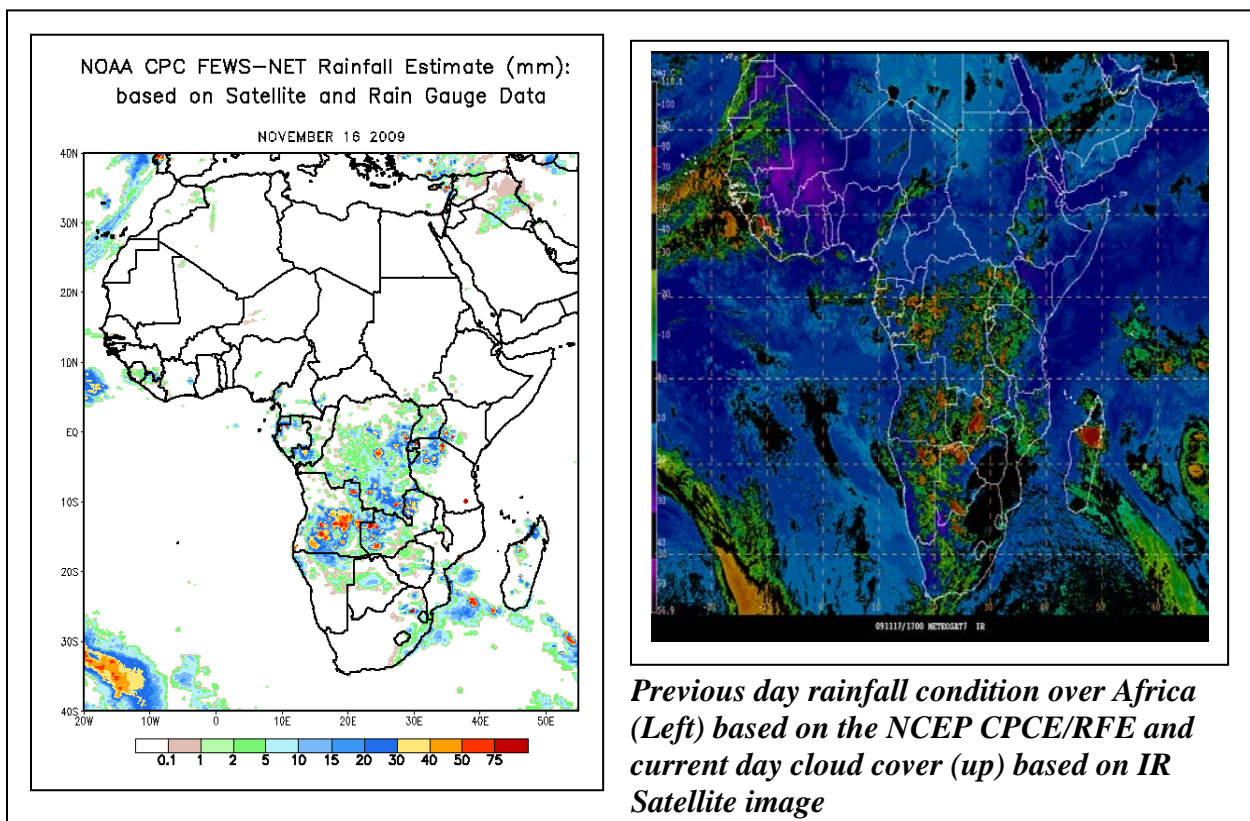
T+48h: The westerly wavy flow in the southern hemisphere is expected to persist dominating the flow over southern African countries and the adjacent oceans.

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

2. Previous and Current Day Weather Discussion over Africa (16-17 November 2009)

2.1. Weather assessment for the previous day (16 November 2009): During the previous day, moderate to heavy rainfall events were observed over parts of Equatorial Guinea, Congo, DR Congo, Rwanda, Burundi, Uganda, western Kenya, northwestern Tanzania, Angola, Zambia, northern Namibia, central Botswana, central Zambia, South Africa and northern Madagascar.

2.2. Weather assessment for the current day (17 November 2009): Intense clouds are observed over parts of Senegal, Guinea, Gabon, Congo, DR Congo, Angola, Namibia, Botswana, Zambia, South Africa, Rwanda, Burundi, Uganda, western Tanzania, South Africa, southern Mozambique and northern Madagascar.



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