

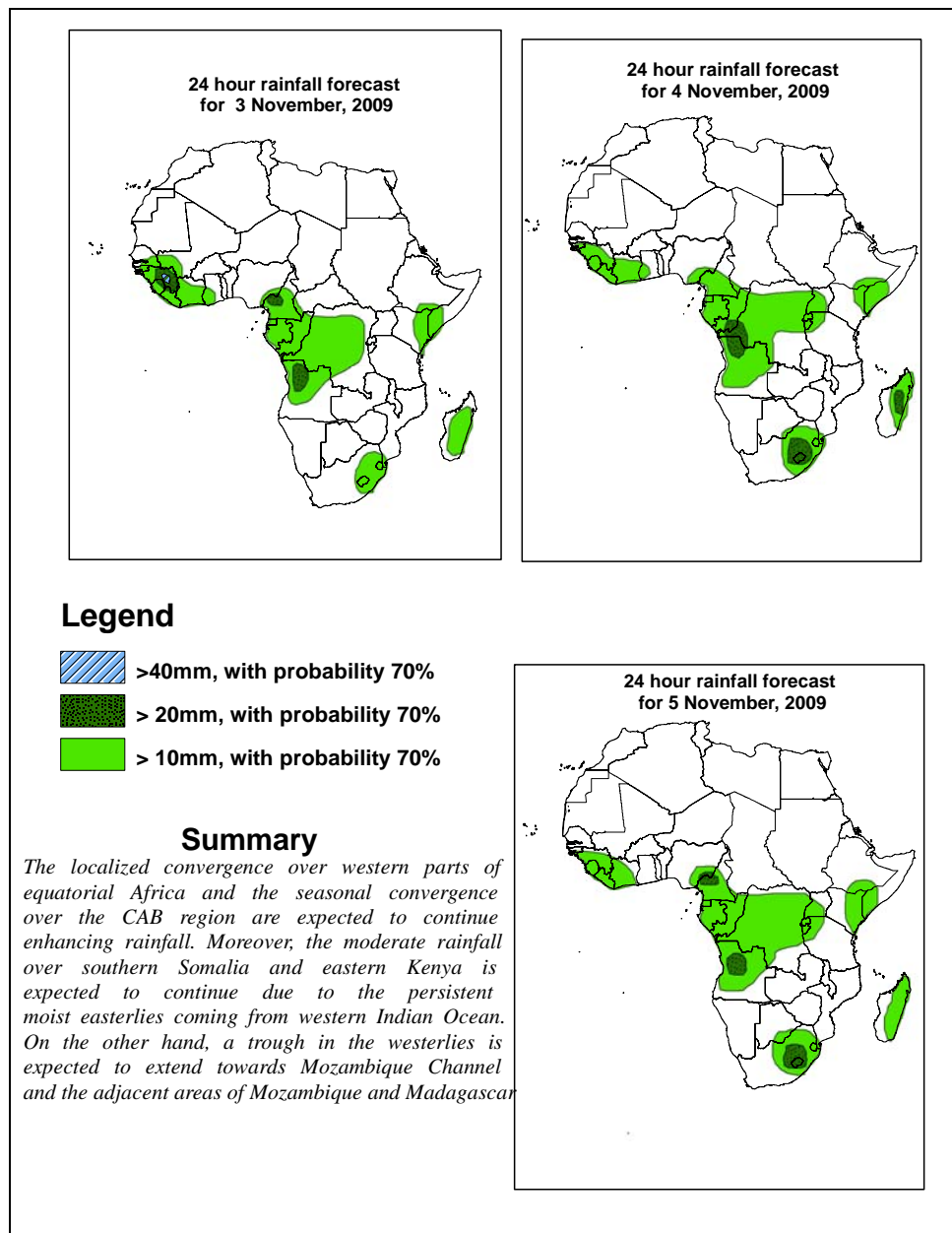


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1. Forecast Discussion: Valid, 06Z of 03 November – 06Z of 05 November 2009, (Issued at 14:00EST Of 02 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; 03, 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 localized convergence over western parts of equatorial Africa and the seasonal convergence over the CAB region are expected to continue enhancing rainfall. Moreover, the moderate rainfall over southern Somalia and eastern Kenya is expected to continue due to the persistent moist easterlies coming from western Indian Ocean. On the other hand, a trough in the westerlies is expected to extend towards Mozambique Channel and the adjacent areas of Mozambique and Madagascar.

T+48h: The convergence over western parts of equatorial Africa and the CAB region as well as the most easterlies from western Indian Ocean are expected to continue enhancing rainfall in the respective regions, while the westerly trough in Mozambique Channel is expected to move towards Madagascar.

T+72h: The westerly trough over Madagascar is expected to move further to the east, while no significant change is expected in the flow chart over equatorial Africa region.

1.4. Flow at 500hPa

T+24h: The northern hemisphere mid-latitude westerly trough is expected to dominate the flow over northeast African countries, while the southern hemisphere westerly trough extends northward across Madagascar.

T+48h: The northern hemisphere mid-latitude westerly trough is expected to persist over northeast Africa, while the trough over Madagascar is expected to move slightly to the east.

T+72h: The westerly troughs in both hemispheres are expected to move slightly to the east.

1.5. Flow at 200hPa

T+24h: The wind associated with sub-tropical westerly is expected to extend in the region between Mauritania and Persian Gulf with maximum speed located over Egypt and Libya.

T+48h: The zone of maximum wind associated with sub-tropical westerly jets of both hemispheres is expected to shift slightly to the east.

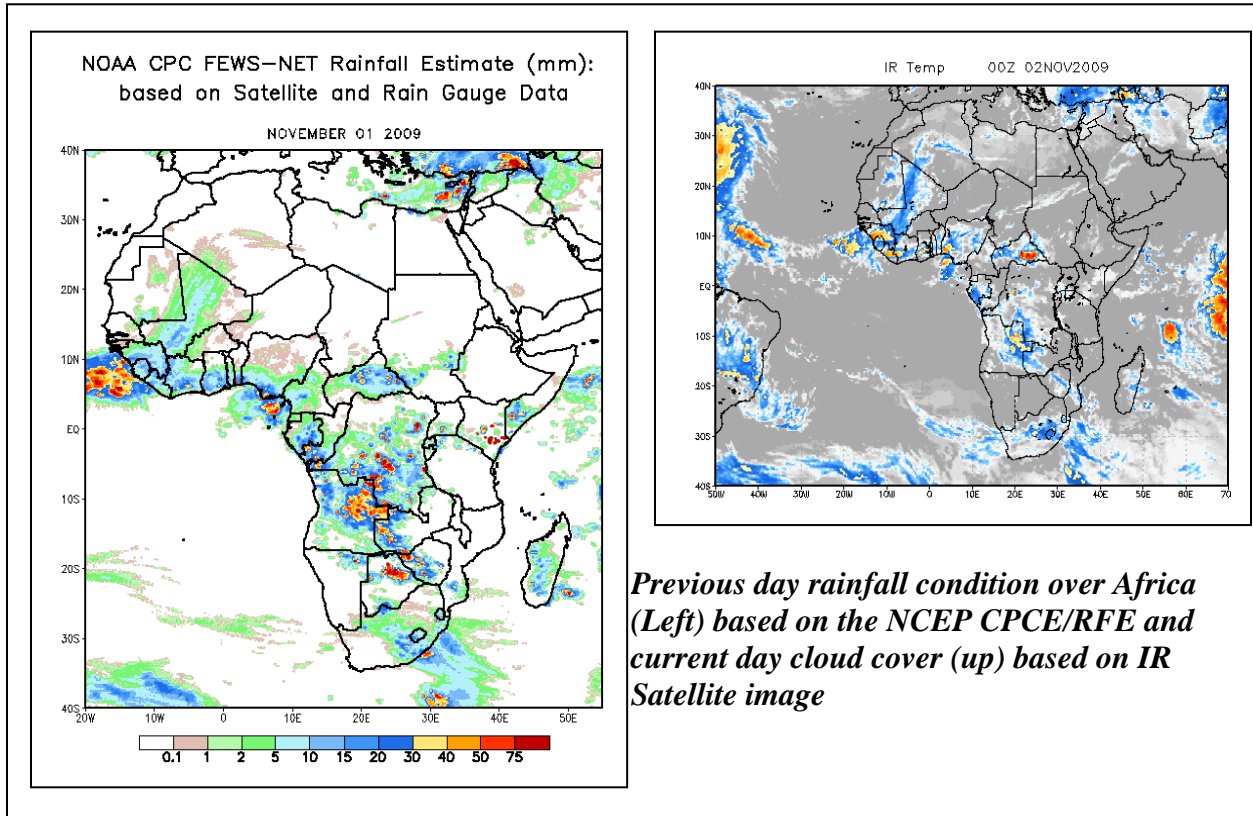
T+72h: The zone of maximum wind associated with sub-tropical westerly jet is expected to persist over northeast Africa while weakening over southern Africa countries.

2. Previous and Current Day Weather Discussion over Africa (01-02 November 2009)

2.1. Weather assessment for the previous day (01 November 2009): During the previous day, moderate to heavy rainfall events were observed over parts of Guinea, Sierra Leone, Liberia, Gulf of Guinea, southern Nigeria, Central Africa Rep., Gabon, Congo, DR

Congo, Lake Victoria basin, eastern Kenya, Angola, Zambia, South Africa and Mozambique.

2.2. Weather assessment for the current day (02 November 2009): Intense clouds are observed over parts of Guinea, Gulf of Guinea, Gabon, Central Africa Rep., DR Congo, Angola and 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.