



Forecast Guidance for Africa

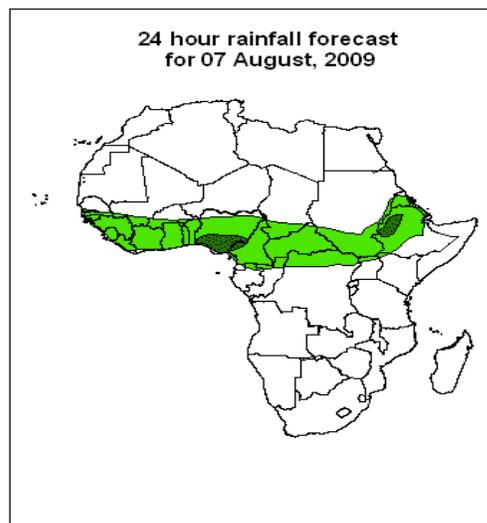
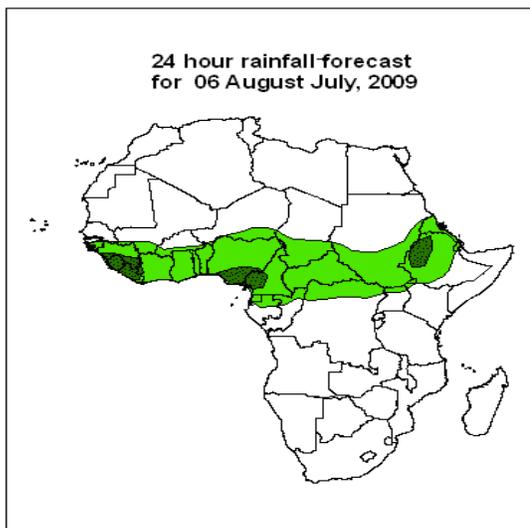
NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative.

FORECAST DISCUSSION 14H00 EST, 05 AUGUST, 2009

Valid: 00Z 06 AUGUST – 08 AUGUST, 2009

1. Twenty Four Hour Cumulative Rainfall Forecasts

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

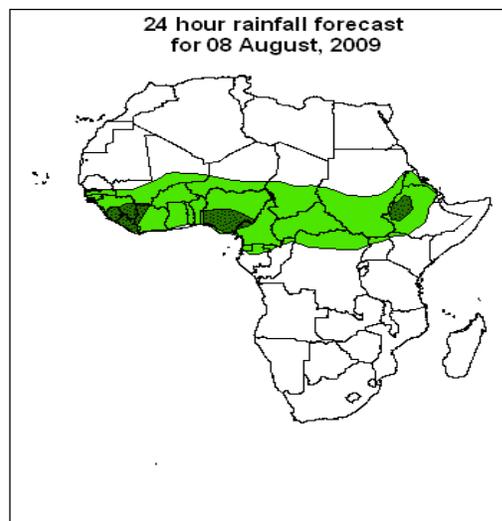


Legend

-  africa_countries_new
-  > 20mm, with probability 70%
-  > 10mm, with probability 70%

Summary

The Mascarene anticyclone is expected to be over southwestern Indian Ocean, southern of Madagascar with its peripheral winds transporting moisture towards the Horn of Africa. The center of the St Helena anticyclone is expected to be over southeastern Atlantic Ocean, southwest of Namibia. In the northern hemisphere, localized convergent and confluent lines are expected over Mali, Niger, Nigeria, Chad, Sudan, northeast Ethiopia and Gulf of Eden.



2. Model discussion

Model comparison (Valid from 00Z; 05 August, 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).

2.1. Flow at 850hPa

T+24h: The Mascarene anticyclone is expected to be over southwestern Indian Ocean, southern of Madagascar with its peripheral winds transporting moisture towards the Horn of Africa. The center of the St Helena anticyclone is expected to be over southeastern Atlantic Ocean, southwest of Namibia. In the northern hemisphere, localized convergent and confluent lines are expected over Mali, Niger, Nigeria, Chad, Sudan, northeast Ethiopia and Gulf of Eden.

T+48h: In the southern hemisphere, the subtropical anticyclones are expected to have zonal orientation while weakening. As a result of this, the peripheral winds are expected to be more of easterlies. In the northern hemisphere, the confluence lines are expected to maintain their previous day position.

T+72h: In the southern hemisphere the Mascarene Anticyclone is expected to intensify, while the St Helena Anticyclone is expected to weaken further.

2.2. Flow at 500hPa

T+24h: Westerly winds are expected to dominate the flow over southern African countries and portions of Madagascar.

T+48h: In the southern hemisphere westerly flow is expected to be persistent over southern Africa countries and Madagascar.

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

2.3. Flow at 200hPa

T+24h: Upper level easterly flow is expected to persist over eastern and central African countries.

T+48h: The upper level easterly flow is expected to expand towards West African countries.

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

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