



Forecast Guidance for Africa

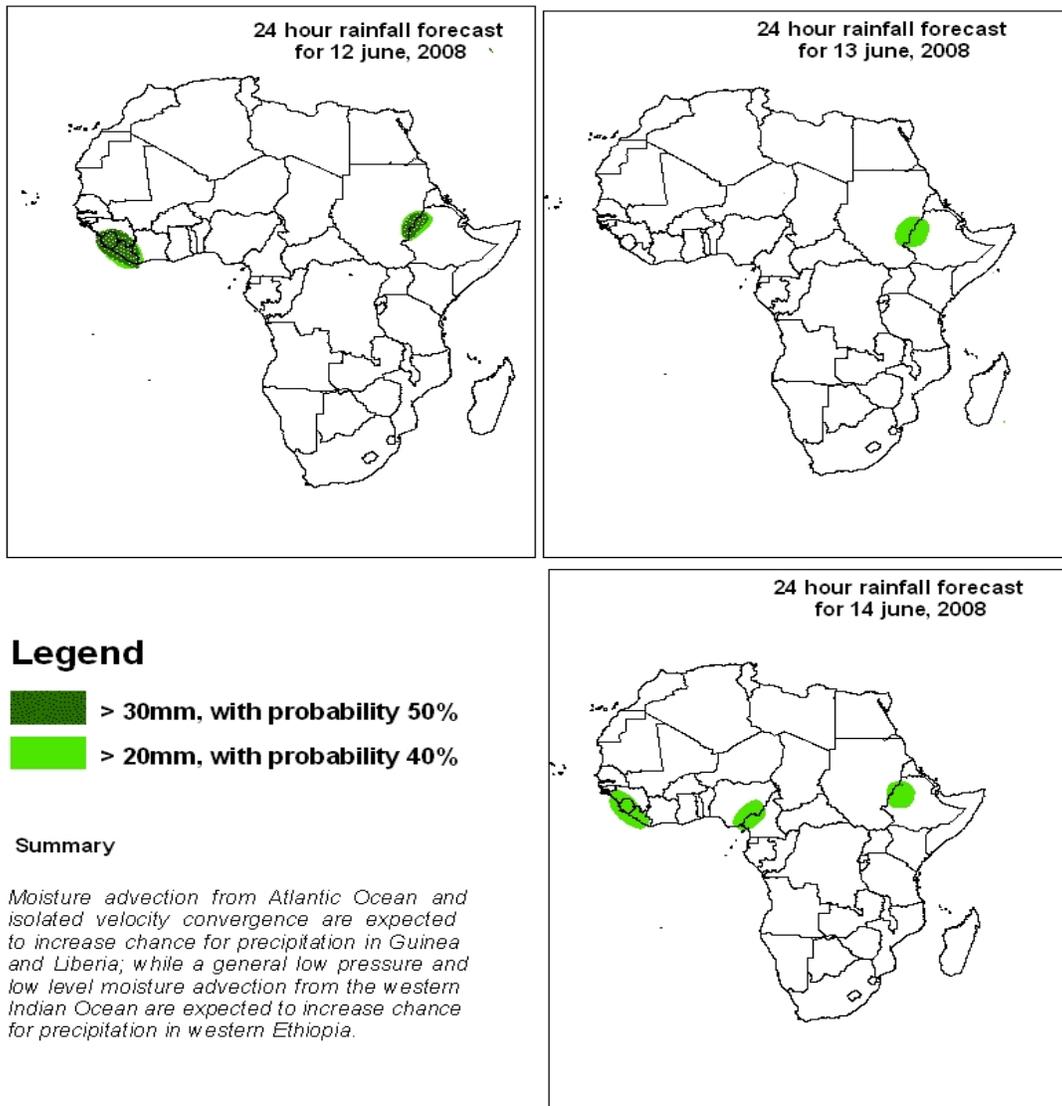
NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

FORECAST DISCUSSION 14H00 EST, 11 JUNE 2008

Valid: 00Z 12 - 14 JUNE, 2008

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.



2. Model discussion

Model comparison (Valid from 00Z; 11 June 2008): all the three models are in agreement especially with respect to the positioning of large scale features, although UK model gives lower values as always in the Equatorial (10°N and 10°S) Continental Africa.

2.1. Flow at 850hPa

T+24h, a cyclonic flow pattern is expected to dominate over Western Sahara, Morocco, northwestern Algeria, Tunisia and eastern Libya while an anticyclonic flow pattern is expected to dominate over the remaining part of North Africa. A cyclonic flow pattern is expected to also dominate over Senegal, Mauritania, western Mali, Guinea, Sierra Leone and Liberia with isolated convergence activities over the remaining Sahelian countries including the Lake Victoria basin. Southeasterlies are expected to dominate over the coasts of Tanzania and Kenya while southwesterlies are expected to dominate along the coast of Somalia. A trough is expected to dominate over South Africa and southern Mozambique while an anticyclonic flow pattern is expected to dominate over the remaining part of southern Africa with a centre in Botswana and cause southeasterlies towards the Equator.

T+48h, a cyclonic flow pattern is expected to prevail over western part of North Africa (Morocco, northwestern Algeria and Tunisia) with an anticyclonic flow pattern dominating over the eastern part. Isolate convergence is expected to prevail over a large part of Sahelian countries (over Guinea, Mali, northern Nigeria, western Niger and Sudan) including eastern Ethiopia and the Lake Victoria Basin. Southeasterlies are expected to prevail over the coasts of Kenya and Tanzania and southwesterlies along the coast of Somalia, while an anticyclonic flow pattern is expected to prevail over a large part of Southern Africa with a trough over the tip of South Africa.

T+72h, an anticyclonic flow pattern is expected to dominate over a large part of North Africa extending from western Sahel (Mauritania, Senegal, Guinea and western Mali) to Egypt with a cyclonic flow pattern over Morocco and a widespread convergence activity over the remaining part of the Sahel from Burkina Faso to eastern Ethiopia. An anticyclonic flow pattern is expected to prevail over Southern Africa with a closed cyclonic circulation over southwestern South Africa in the Atlantic Ocean.

2.2. Flow at 500hPa

T+24h, a trough is expected to dominate over northern Morocco. An extensive anticyclonic flow pattern is expected to dominate over a large part of Africa from North Africa to southern Africa with an exception of the eastern coastline from Somalia, through Kenya, Tanzania, Madagascar, western Indian Ocean, around South Africa to Namibia where a cyclonic flow pattern is expected to dominate.

T+48h, an extensive anticyclonic flow pattern is expected to prevail over a large part of the Africa continent with a cyclonic flow pattern over a large part of eastern Africa from

Ethiopia through southern Sudan, Somalia ,eastern DRC,Uganda,Tanzania to Madagascar while westerly flow is expected to dominate the extreme part of Southern Africa.

T+72h, an anticyclonic flow pattern is expected to prevail over a large part of Africa from North Africa to southern Africa; While a cyclonic flow pattern is expected to dominate over eastern Ethiopia, Somalia, Kenya, Uganda, eastern DRC, Rwanda,Burundi,Tanzania and westerlies to dominate the extreme part of South Africa.

2.3. Flow at 200hPa

T+24h, a southwesterly flow pattern is expected to dominate over Western Sahara, Morocco, northern Algeria and over Tunisia while a westerly flow pattern is expected to dominate south of 20°S latitude with an extensive upper level anticyclonic flow pattern in between over the remaining part of Africa.

T+48h, an extensive upper level anticyclonic flow pattern is expected to prevail over a large part of Africa north of latitude 20°S with a southwesterly flow pattern over Western Sahara, Morocco, northern Algeria and Tunisia and a westerly flow pattern south of latitude 20°S

T+72h, an extensive upper level anticyclonic flow pattern is expected to prevail between latitude 30°N and 20°S with a southwesterly flow pattern to its north and a westerly flow pattern to its south.

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