



Forecast Guidance for Africa

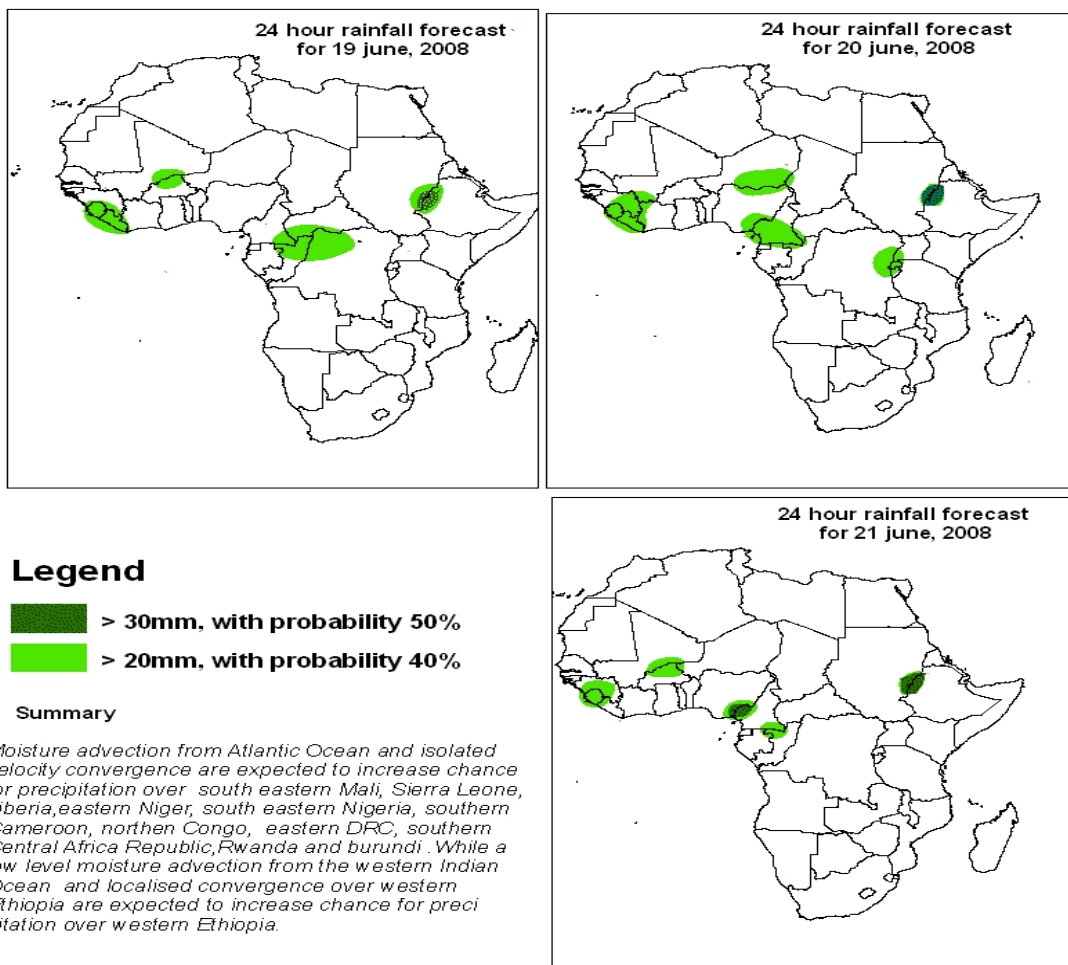
NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

FORECAST DISCUSSION 14H00 EST, 18 JUNE 2008

Valid: 00Z 19- 21 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; 18 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 northern Morocco, southern Tunisia and over Algeria while an anticyclonic flow pattern is expected to dominate over northern Libya with north easterlies over eastern Libya and Egypt. Isolated convergence is expected to take place in the Sahelian countries while southeasterlies are expected to dominate over the coasts of Kenya and Tanzania, and southwesterlies to dominate along the coast of Somalia. An anticyclonic flow pattern is expected to dominate over a large part of Southern Africa with a cyclonic circulation system to its west over western Namibia and southwestern South Africa.

T+48h, a cyclonic flow pattern is expected to prevail over northern Algeria while north easterlies are expected to dominate over the eastern part of North Africa. A cyclonic flow pattern is expected to dominate over Mali with isolated convergence in the remaining Sahelian countries. An anticyclonic flow pattern is expected to prevail over a large part of Southern Africa with a cyclonic circulation system to its west over western Namibia and southwestern South Africa.

T+72h, north easterlies are expected to prevail over a large part of North Africa with a cyclonic flow pattern over northern Algeria. A cyclonic flow pattern is expected to prevail over Mali and expand to Mauritania and Senegal with isolated convergence over Niger, Sudan and Ethiopia. The cyclonic flow system over western Namibia and southwestern South Africa is expected to prevail and expand eastwards; the remaining part of Southern Africa is expected to be under the influence of an anticyclonic flow pattern.

2.2. Flow at 500hPa

T+24h, an extensive anticyclonic flow pattern is expected to prevail over a large part of the African continent from North Africa to southern Africa at approximate latitude 20°S with an exception of a trough that is expected to dominate over the eastern part from eastern Ethiopia, along the coast of Somalia to eastern Kenya and Tanzania; while a cyclonic circulation flow pattern is expected to dominate over the remaining part of Southern Africa including Namibia and Botswana.

T+48h, an extensive anticyclonic flow pattern is expected to prevail over a large part of the African continent from 20°S northwards with a shallow trough over northwestern Egypt, as

well as over eastern Ethiopia, Somalia, Kenya, Tanzania and northern Mozambique. Westerly flow pattern is expected to dominate over the remaining part of Southern Africa including, Namibia, Botswana, southern Mozambique and southern Madagascar.

T+72h, an extensive anticyclonic flow pattern is expected to prevail over a large part of the African continent north of latitude 20°N with a trough over north Egypt and over eastern Ethiopia, Somalia, Kenya, Tanzania and northern Mozambique; while westerlies are expected to dominate the remaining part of southern Africa from Namibia, Botswana to Southern Africa.

2.3. Flow at 200hPa

T+24h, an upper level anticyclonic flow pattern is expected to dominate over a large part of the African continent with a cyclonic flow pattern over Uganda, southern Ethiopia, Kenya, Somalia and Tanzania; while a westerly flow pattern is expected to dominate over the remaining part of Southern Africa.

T+48h, an upper level anticyclonic flow pattern is expected to dominate over a large part of Africa through the Subtropical region to 20°S latitude (including Sahel, Central Africa). A cyclonic flow pattern is expected to dominate over Rwanda, Burundi, Uganda southern Ethiopia, Kenya, Somalia and Tanzania; while a westerly flow pattern is expected to dominate over the remaining part of southern Africa.

T+72h, an upper level anticyclonic flow pattern is expected to dominate from north Africa through the Subtropical region to latitude 20°S, including the Sahel region and Central Africa, with a trough from northwestern DRC, through Rwanda, Burundi, Uganda, Kenya, Tanzania to southern Ethiopia and Somalia; while a westerly flow pattern is expected to dominate over the remaining part of southern Africa.

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