



Forecast Guidance for Africa

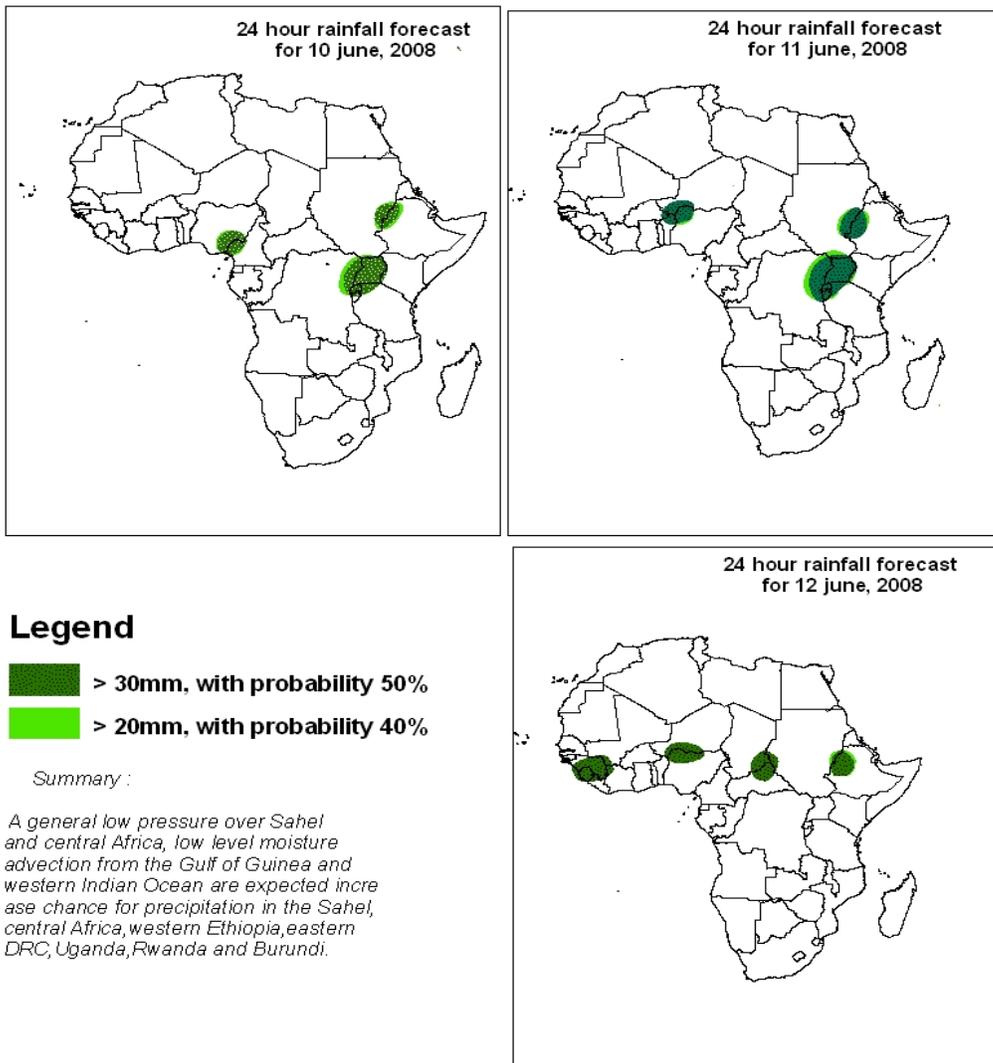
NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

FORECAST DISCUSSION 14H00 EST, 09 JUNE 2008

Valid: 00Z 10 12 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; 09 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, an anticyclonic flow pattern is expected to dominate over the eastern part of North Africa (over Libya and Egypt) with a cyclonic flow pattern to the west over Morocco, Algeria and Tunisia. Isolated convergent flow pattern is expected to dominate over West and Central Africa and over the Lake Victoria basin. A southerly flow pattern is expected to dominate over the coasts of Tanzania and Kenya while a southwesterly flow pattern is expected to dominate along the coast of Somalia. An anticyclonic flow pattern is expected to dominate over large part of Southern Africa with an exception of southwestern Namibia and western South Africa where a cyclonic circulation is expected to dominate.

T+48h, an anticyclonic flow pattern is expected to prevail over the eastern part of North Africa with a cyclonic flow pattern to the west, while an isolated convergent flow pattern is expected to prevail over the Sahel. Southerlies are expected to prevail over the coast of Kenya and Tanzania with southwesterlies along the coast of Somalia. An anticyclonic flow pattern is expected to prevail over a large part of Southern Africa with a cyclonic flow system around a trough over southwestern Namibia and western South Africa.

T+72h, an anticyclonic flow pattern is expected to prevail over the eastern part of North Africa with a cyclonic flow pattern to the west over Morocco Algeria and Tunisia. An isolated convergent flow pattern is expected to prevail over the Sahel and the Lake Victoria basin. An anticyclonic flow pattern is expected to prevail over a large part of Southern Africa with a trough over southern South Africa and another one in the Mozambique Channel.

2.2. Flow at 500hPa

T+24h, a trough is expected to dominate off the coast of 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, southwestern Kenya, and Madagascar to western Indian Ocean and southwestern tip of South Africa where a cyclonic flow pattern is expected to dominate.

T+48h, a trough is expected to dominate off the coast of Morocco. An extensive anticyclonic flow pattern is expected to prevail over the Africa continent with a cyclonic flow over eastern Ethiopia, Somalia, Madagascar and surrounding 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. A cyclonic flow pattern is expected to dominate over eastern Ethiopia, Somalia, Kenya, Madagascar and surrounding the extreme part of Southern Africa.

2.3. Flow at 200hPa

T+24h, an anticyclonic flow pattern is expected to dominate over a large part of North Africa from latitude 20°S with a southwesterly flow pattern over Morocco, Algeria and Tunisia while a westerly flow pattern is expected to dominate over a large part of Southern Africa South of latitude 20°S.

T+48h, an anticyclonic flow pattern is expected to prevail over a large part of North Africa from latitude 20°S with an upper level trough off the coast of Morocco and an upper level cyclonic circulation over northern Kenya and surroundings. A westerly flow pattern is expected to prevail over a large part of Southern Africa south of latitude 20°S with an upper level trough in the Atlantic Ocean off the coast Namibia and South Africa and another upper level trough over eastern coast of Madagascar.

T+72h, an upper level anticyclonic flow pattern is expected to prevail over a large part of North Africa as well as over Central and eastern Africa while a westerly flow pattern is expected to prevail over a large part of Southern Africa with an embedded trough over South Africa

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