

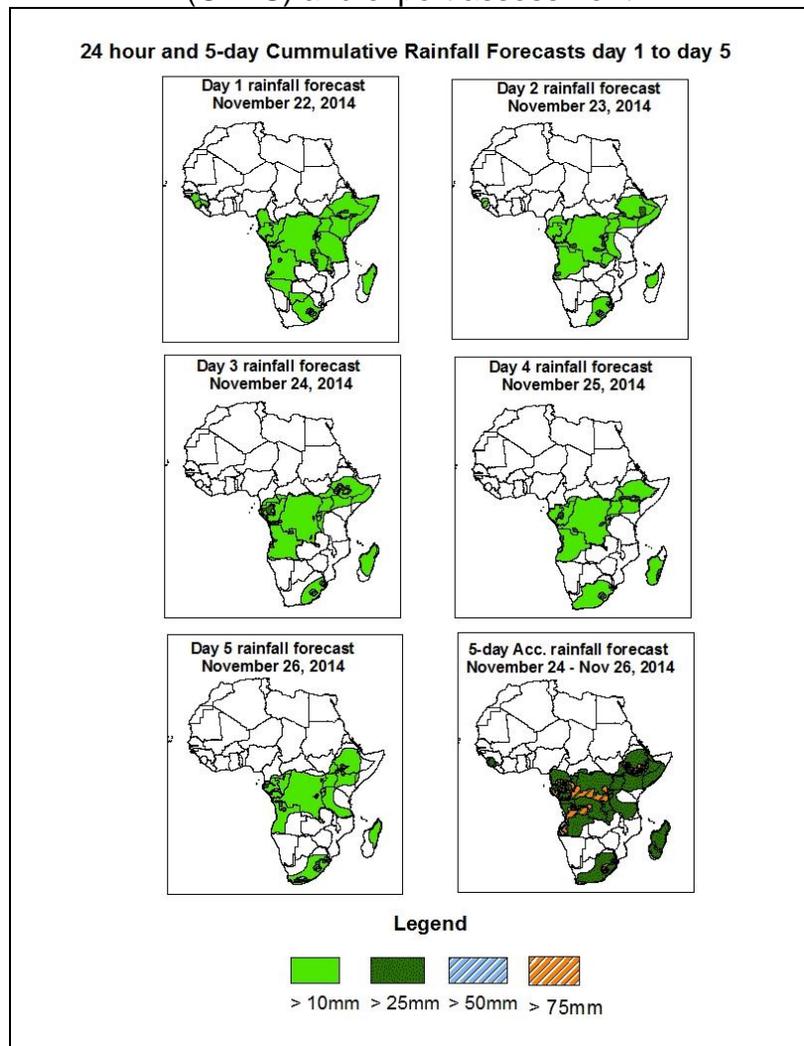


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1. Rainfall Forecast: Valid 06Z of November 22 – 06Z of November 26, 2014. (Issued at 1800Z of November 21, 2014)

1.1. Twenty Four Hour Cumulative Rainfall Forecasts

The forecasts are expressed in terms of 75% probability of precipitation (POP) exceeded, based on the NCEP/GFS and the NCEP global ensemble forecasts system (GEFS) and expert assessment.

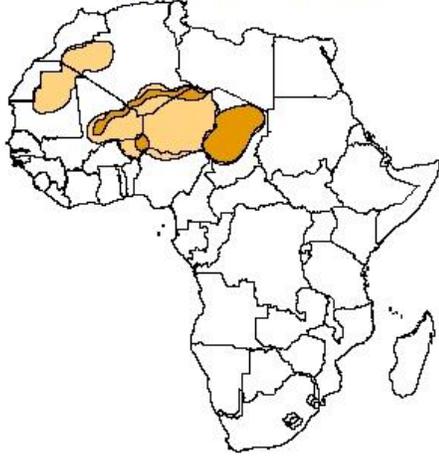


Summary

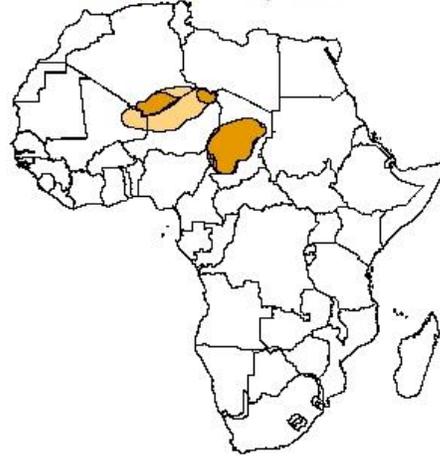
In the next five days, lower-level wind convergence over Gabon, Congo-Brazzaville and the neighboring areas, seasonal wind convergences over the Lake Victoria region, southern Ethiopia and Angola are expected to enhance rainfall in their respective regions. Thus, there is an increased chance for moderate to heavy rainfall over Gabon, Kenya, Congo-Brazzaville, Equatorial Guinea, DRC, the Lake Victoria region, portions of Madagascar, Angola and Ethiopia, local areas in South Africa, southern Somalia.

Atmospheric Dust Forecasts, day 1 to day 3,
Moderate Dust Concentration (MDC) and High Dust Concentration (HDC)

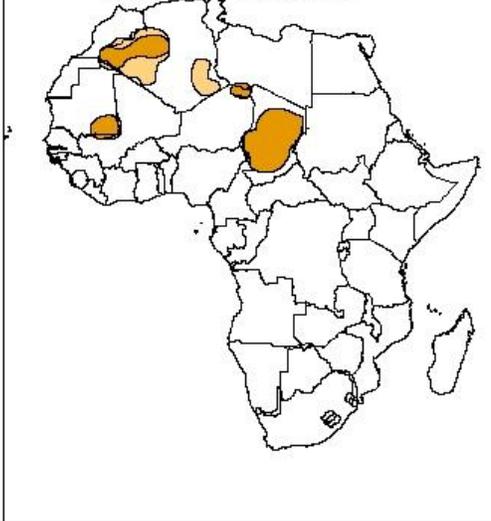
Day 1 Dust forecast
November 22, 2014



Day 2 Dust forecast
November 23, 2014



Day 3 Dust forecast
November 24, 2014



Highlights

There is an increased chance for moderate to high dust concentration over southern Algeria, Mali, northern Niger and Chad.

Legend



MDC, Vis. < 5km



HDC, Vis. < 1km

1.2. Model Discussion: Valid from 00Z of November 21, 2014

The Azores high pressure system over the Northeast Atlantic Ocean is expected to strengthen through 48 to 120 hours, with its central pressure value increase from 1026hpa to 1034hpa, according to the GFS model.

The St Helena high pressure system over the Southeast Atlantic Ocean is expected to vary through 24 to 120 hours, with its central pressure value of about 1024 to 1023hpa, according to the GFS model.

The Mascarene high pressure system over the southwestern Indian Ocean is expected to maintain through 24 to 72hours, with its central pressure value of about 1026hpa and then it is expected to weaken, with its central pressure value decreasing from 1026hpa to 1025hpa, through 72 to 120hours, according to the GFS model.

The East African ridge is expected to weaken gradually, with eastward shift of the Mascarene high pressure system.

At 925Hpa level, dry northeasterly to easterly wind (>25kts) is expected to prevail across portions of Mauritania, Morocco, Western Sahara, Mali, Chad, Niger and parts of Sudan during the forecast period.

At 850Hpa level, a seasonal meridional wind convergence is expected to remain active across eastern DRC and the neighboring areas. Lower-level wind convergence is also expected to prevail over southern Ethiopia, Gabon, Congo, southern DRC, Angola and portions of Zambia, Botswana and northern Namibia.

At 500hpa level, a trough associated with mid-latitude frontal system is expected to propagate across southern Africa (with its northern extent reaching the latitudes of Zambia) through 24 to 96hours; whereas a trough associated with mid-latitude frontal system is expected to prevail over Northeast Africa during the forecast period.

In the next five days, lower-level wind convergence over Gabon, Congo-Brazzaville and the neighboring areas, seasonal wind convergences over the Lake Victoria region,

southern Ethiopia and Angola are expected to enhance rainfall in their respective regions. Thus, there is an increased chance for moderate to heavy rainfall over Gabon, Kenya, Congo-Brazzaville, Equatorial Guinea, DRC, the Lake Victoria region, portions of Madagascar, Angola and Ethiopia, local areas in South Africa, southern Somalia.

2.0. Previous and Current Day Weather Discussion over Africa

(November 20, 2014 – November 21, 2014)

2.1. Weather assessment for the previous day (November 20, 2014)

During the previous day, moderate to heavy rainfall was observed over Sierra Leone, DRC, Gabon, Uganda, Burundi and Rwanda, Tanzania, Kenya and Malawi, portions of Madagascar, CAR and south Sudan, Angola, Somalia, Zambia and Congo-Brazzaville, local areas in Ivory Coast, Ghana, South Africa, Mozambique, Ethiopia, Liberia and Guinea-Conakry, southern Burkina Faso, Nigeria, Cameroon, Mali, Benin and Togo, southwestern Malawi, northeastern Namibia.

2.2. Weather assessment for the current day (November 21, 2014)

Intense clouds are observed over local areas in Gabon, Congo-Brazzaville, DRC, Angola, Tanzania, Kenya, Ethiopia, Uganda, south Sudan, CAR, Madagascar and Somalia, southern Nigeria, Ghana, Benin and Togo.

