

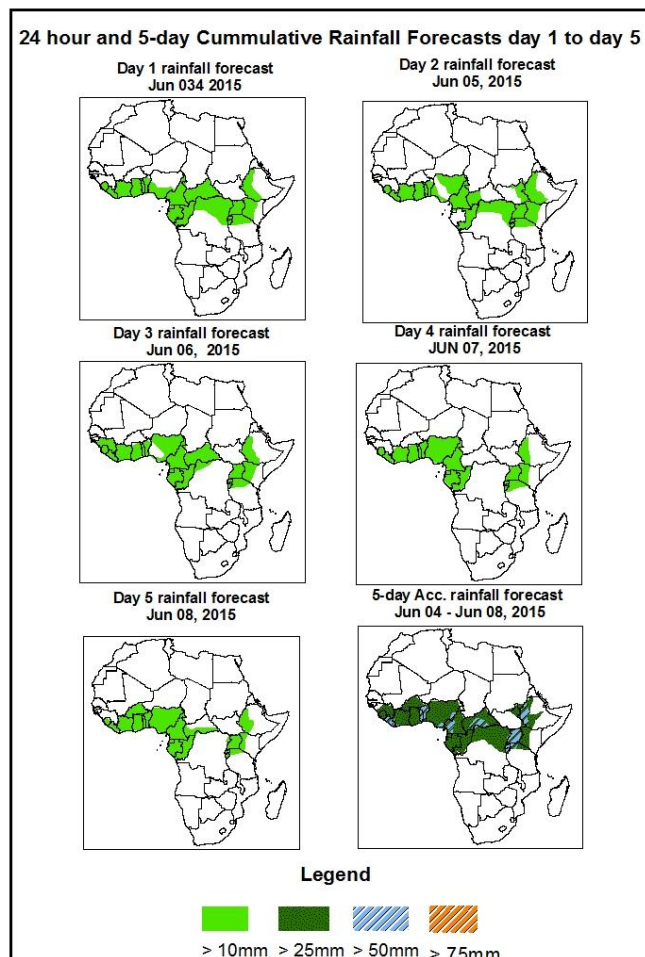


NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1. Rainfall Forecast: Valid 06Z of Jun 04 – 06Z of Jun 08, 2015. (Issued at 1600Z of Jun 03, 2015)

1.1. Twenty Four Hour Cumulative Rainfall Forecasts

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

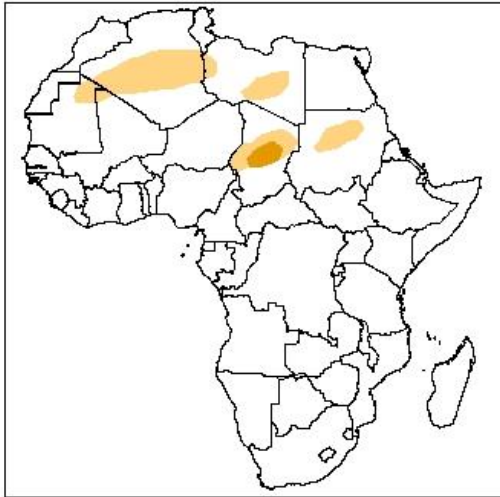


Summary

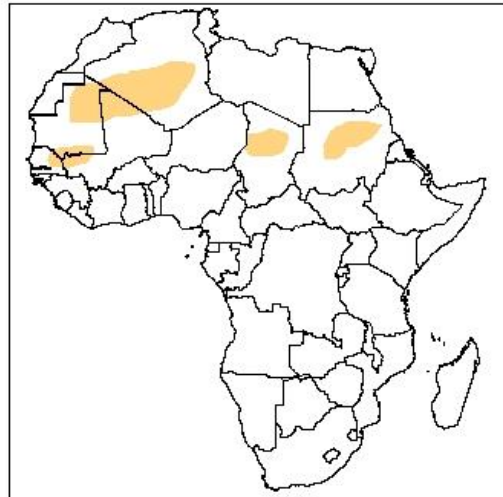
In the next five days, the monsoon flow from the Atlantic Ocean and its associated convergence across West Africa, and lower level wind convergences across the central African Countries, combined with westward propagating convective systems across the central Africa and Gulf of Guinea countries, and active CAB in the Lake Victoria region and lower level wind convergences across the Greater Horn of Africa are expected to enhance rainfall in their

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

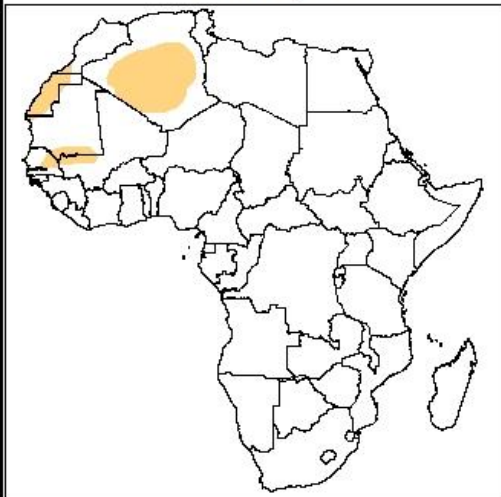
Day 1 Dust forecast
Jun 04, 2015



Day 2 Dust forecast
Jun 05, 2015



Day 3 Dust forecast
Jun 06, 2015



Highlights

There is an increased chance for moderate to high dust concentration over some parts of the Sahel and North African countries with highest dust concentrations over some parts of Chad.

Legend



MDC, Vis. < 5km



HDC, Vis. < 1km

1.2. Model Discussion: Valid from 06Z of Jun 04, 2015

The St Helena high pressure system over the Southeast Atlantic Ocean is expected to weaken gradually, while shifting eastwards. Its central pressure value is expected to decrease from 1033hpa to 1025hpa through 24 to 96 hours, according to the GFS model.

The central pressure value of the Mascarene high pressure system over the Southwestern Indian Ocean is expected to decrease from about 1026hpa in 24hours to 10287hpa in96hours, while its center is moving eastwards, according to the GFS model.

The central pressure values associated with the heat lows in the region between Mali and Sudan across the Sahel region are expected to range between 1006hpa to 1007hpa during the forecast period.

The 1016hpa isobar associated with the East African ridge across central Kenya is expected to retreat southwards during the first half of the forecast period, and expected to regain strength towards end of the forecast period.

At 925Hpa level, the monsoon flow from the Atlantic Ocean is expected to remain active across the much of the Gulf of Guinea region. On the other hand, dry northeasterly wind (>20kts) is expected to prevail across northern Mauritania, Algeria, Egypt, and northern Sudan. A feeble cyclonic circulation is expected to propagate westwards between southern Niger and southern Mauritania during the forecast period.

At 850Hpa level, east-west oriented wind convergence is expected to remain active across Guinea, Burkina Faso, northern Nigeria, northern Cameroon, CAR and Sudan. Wind convergence associated with Congo Air Boundary (CAB) is also expected to remain active in the Lake Victoria region. Localized wind convergences are expected to prevail across portions of Ethiopia during the forecast period. On the other hand, strong lower level wind associated with the Somali Jet is expected to remain active across eastern Kenya, Somalia and southeastern Ethiopia.

At 700hpa level, a narrow area of strong easterly wind (>30kts) is expected to prevail along the Gulf of Guinea coast and parts of the Central Africa region through 24 to 96hours.

At 500Hpa level, isolated areas of strong easterly wind (>50kts) is expected to prevail over the Gulf of Guinea region and parts of the Central Africa countries.

In the next five days, the monsoon flow from the Atlantic Ocean and its associated convergence across West Africa, and lower level wind convergences across the central African Countries, combined with westward propagating convective systems across the central Africa and Gulf of Guinea countries, and active CAB in the Lake Victoria region and lower level wind convergences across the Greater Horn of Africa are expected to enhance rainfall in their respective regions. Thus, There is an increased a chance for heavy rainfall over Liberia, Togo, Benin, Nigeria, Cameroon, DRC, Rwanda, Burundi, Ivory Coast, Uganda, and Ethiopia.

2.0. Previous and Current Day Weather Discussion over Africa

(02 – 03 Jun 2015)

2.1. Weather assessment for the previous day (June 2, 2015)

Moderate to heavy rainfall were observed across Burkina Faso, Ghana, Liberia, Ivory Coast, Nigeria, South Africa, Cameroon, Uganda, CAR, DRC, South Sudan, and Ethiopia.

2.2. Weather assessment for the current day (Jun 3, 2015)

Intense convective deep clouds are observed over Burkina Faso, Ghana, Nigeria, Cameroon, CAR, DRC, South Africa, South Sudan, Sudan, and Ethiopia.

