



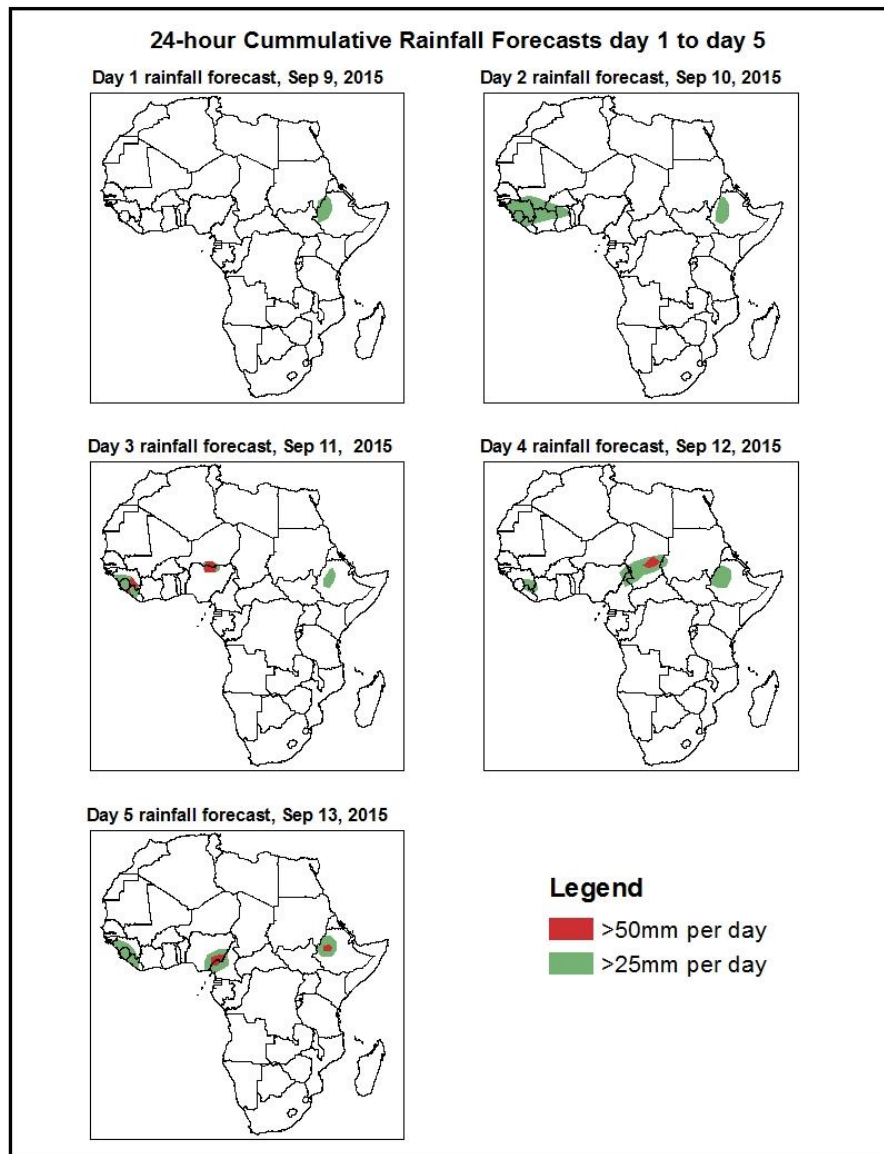
NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1. Rainfall and Dust Concentration Forecasts

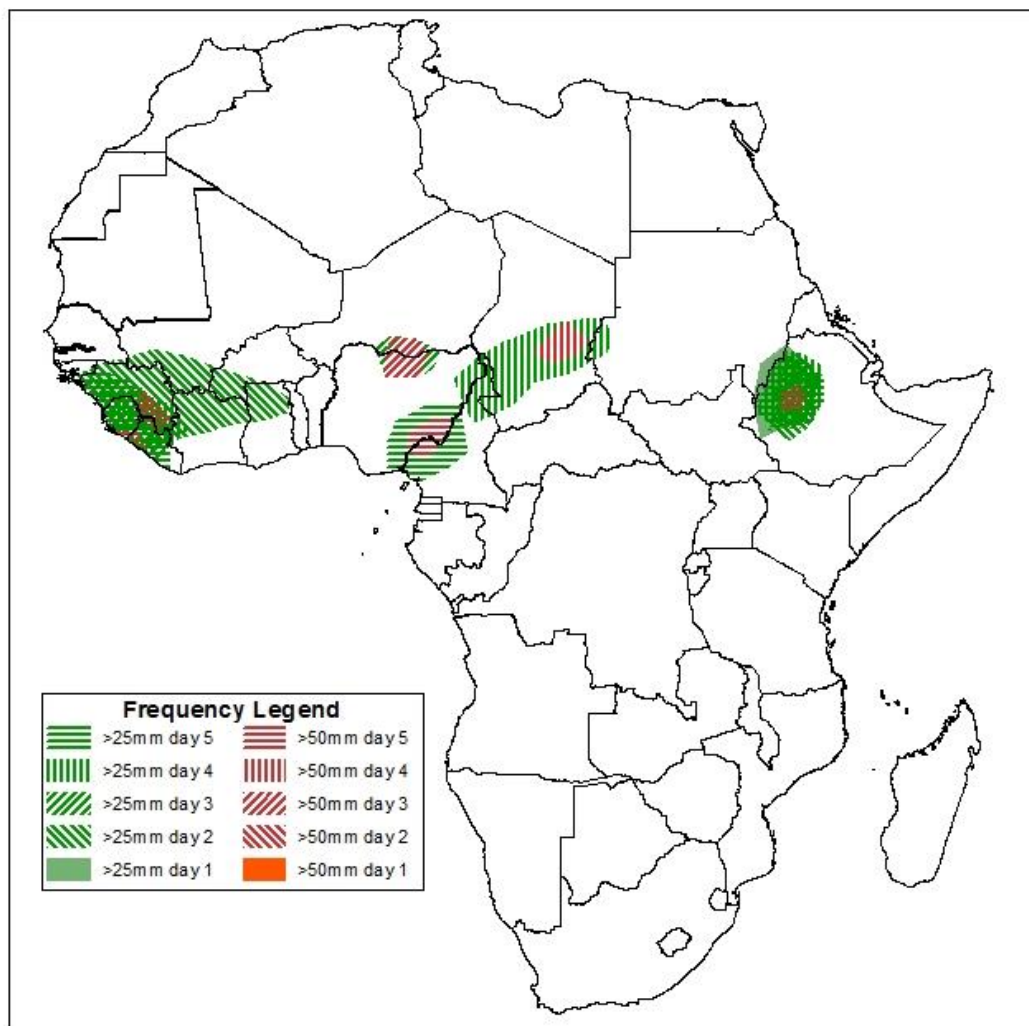
Valid: 06Z of Sep 9 – 06Z of Sep 13 2015. (Issued on September 8, 2015)

1.1. 24-hour Cumulative Rainfall Forecasts

The forecasts are expressed in terms of high probability of precipitation (POP), based on the NCEP/GFS, ECMWF and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



Five Days Rainfall Forecast Summary 9 - 13 September, 2015



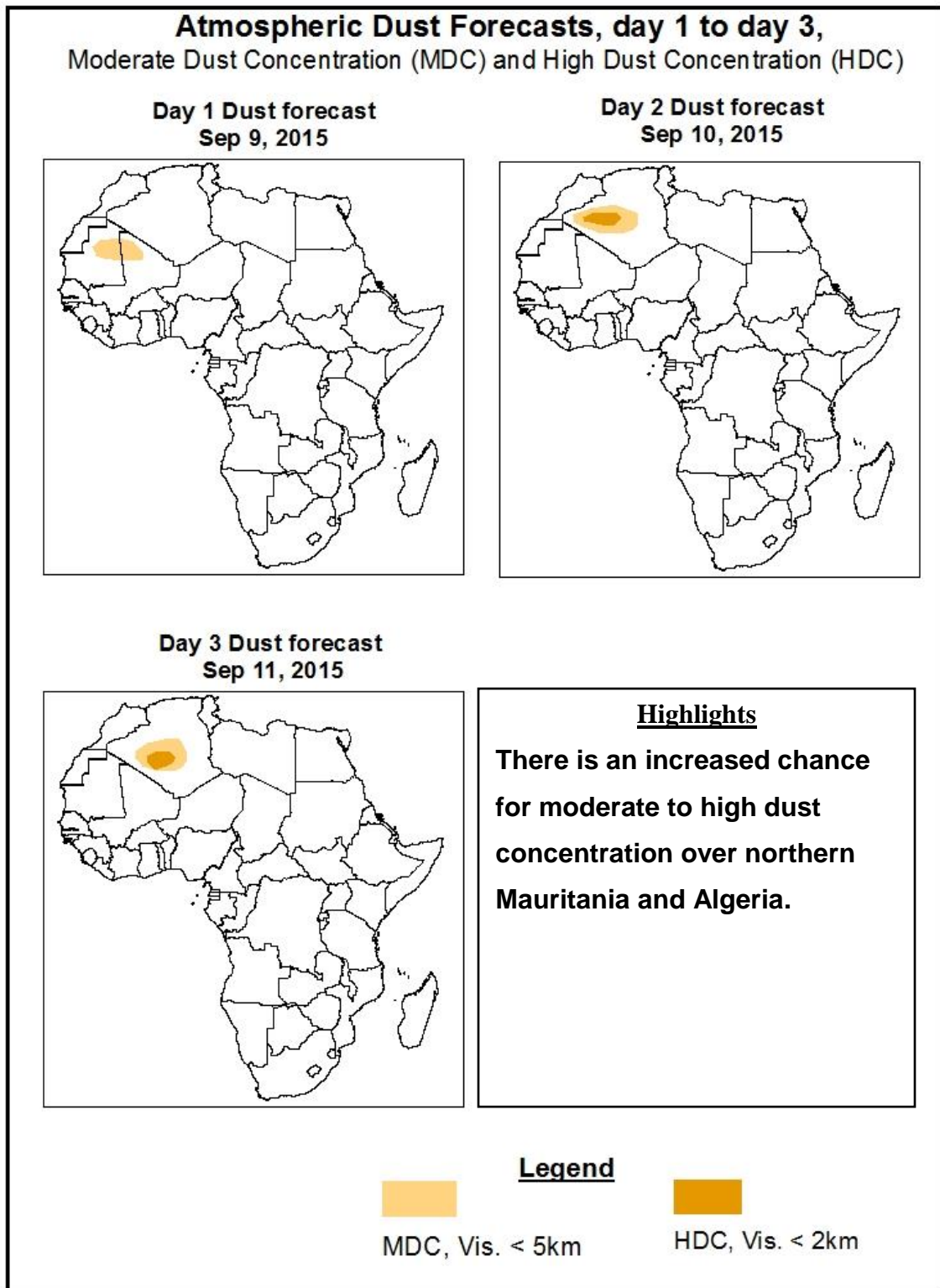
Summary

In the coming five days, the seasonal monsoon flow from the Atlantic Ocean with its associated convergence across West and Central Africa will continue enhancing rainfall over Guinea, Sierra Leone, Liberia, southern Mali, northern Cote d'Ivoire, western Burkina Faso, northern Ghana, parts of Nigeria, Cameroon and Chad. Seasonally moderate to heavy rainfall is also expected to continue across western Ethiopia.

1.2. Atmospheric Dust Concentration Forecasts

Valid: 12Z of Sep 9– 12Z of Sep 13, 2015

The forecasts are expressed in terms of high probability of dust concentration, based on the Navy Aerosol Analysis and Prediction System, NCEP/GFS lower-level wind forecasts and expert assessment.



1.3. Model Discussion, Valid: 9 – 13 September, 2015

The Azores high pressure system over Northeast Atlantic Ocean is expected to intensify, with its central pressure value increasing from about 1021hpa to 1027hpa during the forecast period, according to the GFS model.

The St Helena high pressure system over the Southeast Atlantic Ocean is expected to intensify, with its central pressure value increasing from about 1036hpa to 1043hpa, during the forecast period.

The Mascarene high pressure system over Southwest Indian Ocean is expected to intensify slightly, with its central pressure value increasing from about 1036hpa to 1039hpa during the forecast period, according to the GFS model.

A low over Mali is expected to shift towards Mauritania, leaving the West Africa coast in 72 hours. Another thermal low over Niger is expected to shift towards northern Mali, while deepening. Its central pressure value is expected to decrease from 1008hpa in 24 hours to 1006hpa in 120 hours.

At 925Hpa, a cyclonic circulation over northern Mali is expected to propagate towards Mauritania, leaving the West Africa coast in 96hours. Zonal wind convergence is expected to prevail across the Central and eastern Sahel with embedded feeble cyclonic circulations over Niger and Sudan. Meridional wind convergence is expected to remain active in the region between southern Sudan and the Lake Victoria region during the forecast period.

At 850Hpa level, a cyclonic circulation across Mali and the neighboring areas is expected to propagate towards Mauritania, leaving the West Africa coast in 96hours. The seasonal monsoon trough is expected to remain active across the Sahel region, with embedded cyclonic circulations over southern, Niger, Chad and Sudan during the forecast period.

At 700hpa level, a deep trough in the easterlies is expected to propagate across the Gulf of Guinea countries, in the region between Nigeria and Guinea through 24 to 96 hours.

In the coming five days, the seasonal monsoon flow from the Atlantic Ocean with its associated convergence across West and Central Africa will continue enhancing rainfall over Guinea, Sierra Leone, Liberia, southern Mali, northern Cote d'Ivoire, western Burkina Faso, northern Ghana, parts of Nigeria, Cameroon and Chad. Seasonally moderate to heavy rainfall is also expected to continue across western Ethiopia.

2.0. Previous and Current Day Weather over Africa

(Valid: 7 – 8 September, 2015)

2.1. Weather assessment for the previous day (September 7, 2015)

Moderate to locally heavy rainfall was observed over southern Niger, northern Togo, northern Benin, portions of Nigeria, and local areas in northern Ethiopia.

2.2. Weather assessment for the current day (September 8, 2015)

Intense clouds are observed over parts of Mali, southern Chad, South Sudan and northeastern Ethiopia.

