



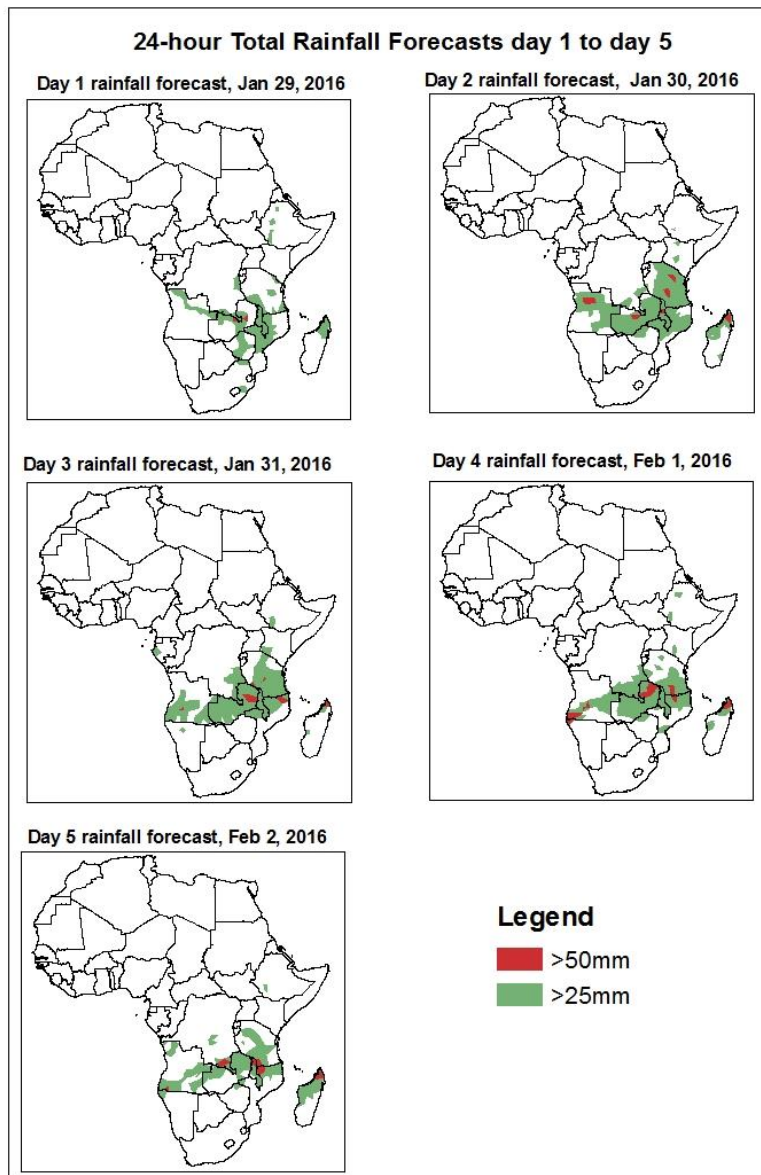
NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1. Rainfall and Dust Concentration Forecasts

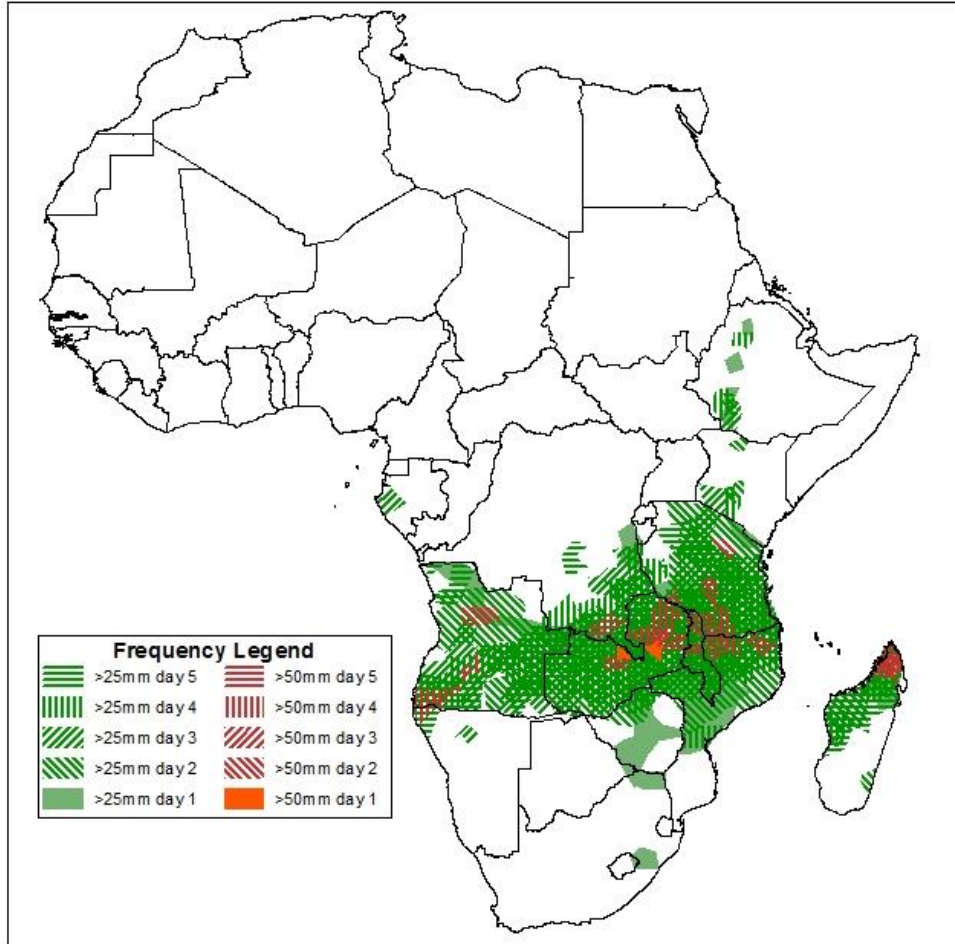
Valid: 06Z of Jan 29 - 06Z of Feb 2, 2016. (Issued on January 28, 2016)

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 January 29 - February 2, 2016



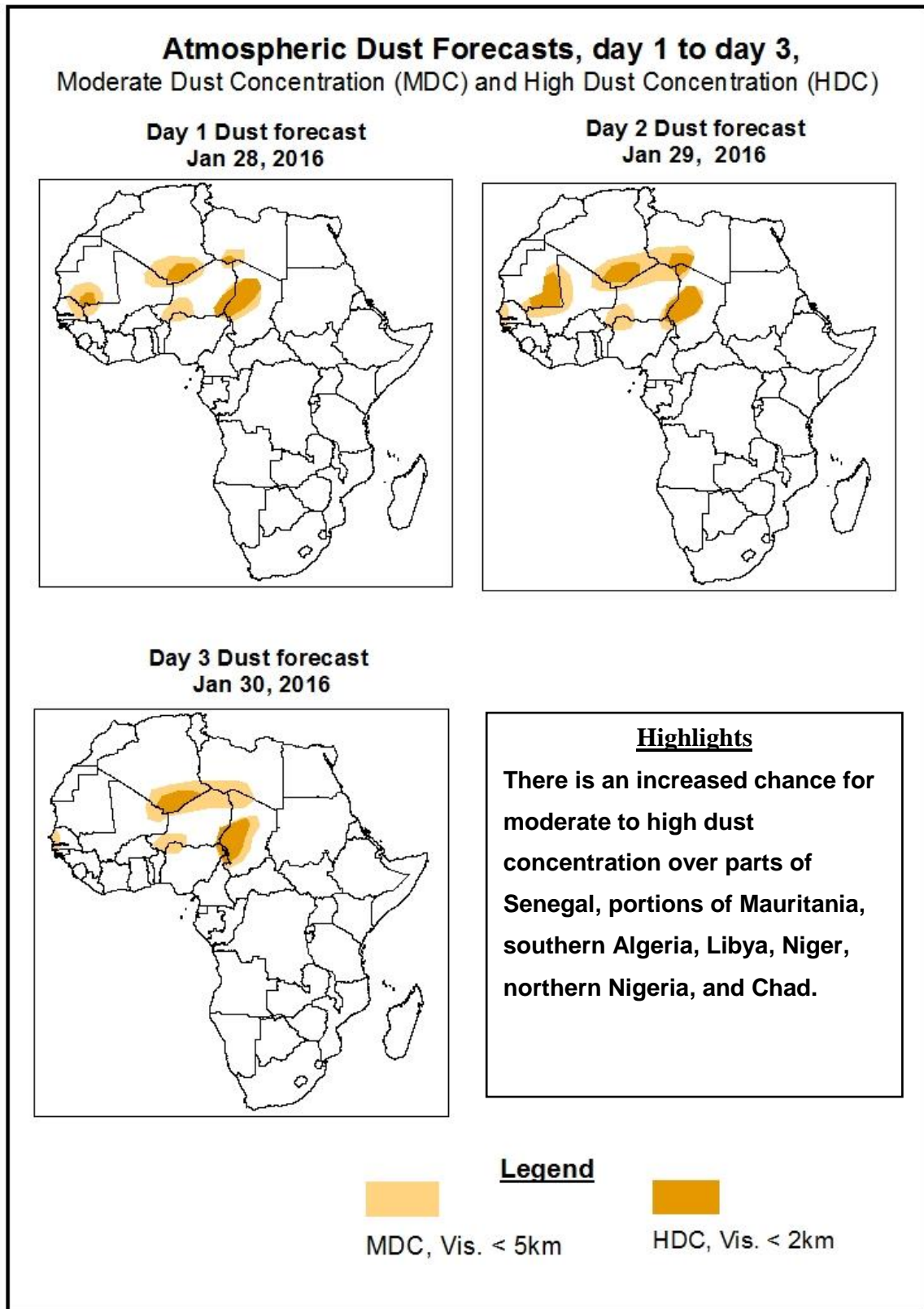
Highlights

In the coming five days, there is an increased chance for two or more days of moderate to heavy rainfall over many places in Angola, southern DRC, Zambia, Malawi, many parts of Tanzania, northern Mozambique and northern Madagascar with high probability of heavy rainfall over parts of northern Madagascar, southern Tanzania and eastern Zambia.

1.2. Atmospheric Dust Concentration Forecasts

Valid: 12Z of Jan 29 – 12Z of Jan 31, 2016

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: Jan 28 – Feb 2, 2016

A high pressure system with its associated ridge is expected to prevail across northern Africa, the Mediterranean Sea and the neighboring areas of southern Europe, while maintaining an average central pressure value of 1032 hPa during the forecast period.

The St Helena high pressure system over Southeast Atlantic Ocean is expected to intensify, while shifting eastwards. Its central pressure value is expected to weaken in to 1020hPa from its central value of 1023hPa and intensify in to 1025hPA by the end of the forecast period.

The Mascarene high pressure system over Southwest Indian Ocean is expected to weaken gradually towards end of the forecast period, with its central pressure value decreasing from about 1033 hPa in 96 hours to 1027 hPa in 120 hours.

At 925 hPa level, a broad area of strong dry northeasterly to easterly flow is expected to prevail over much of North and West Africa, including the Sahel region, leading to an increased chance for widespread atmospheric dust concentration in the regions.

At 850 hPa level, an area of wind convergence between easterlies from the Indian Ocean and westerlies from the Congo Basin is expected to remain active across Tanzania and the neighboring areas during the forecast period. Zonal wind convergence is expected to prevail in the region between eastern Angola and northern Mozambique, across Zambia and southern Malawi, which is expected to enhance rainfall in the region.

In the coming five days, there is an increased chance for two or more days of moderate to heavy rainfall over many places in Angola, southern DRC, Zambia, Malawi, many parts of Tanzania, northern Mozambique and northern Madagascar with high probability of heavy rainfall over parts of northern Madagascar, southern Tanzania and eastern Zambia.

2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (January 27, 2016)

Moderate to heavy rainfall was observed over southern DRC, northern Angola, central Tanzania, northern Mozambique, Zambia, Zimbabwe, Mozambique, Malawi and northern Madagascar.

2.2. Weather assessment for the current day (January 28, 2016)

Intense convective clouds are observed across southern DRC, eastern Tanzania, eastern Zambia, eastern Zimbabwe, central Botswana, northern Mozambique and northern Madagascar.

