



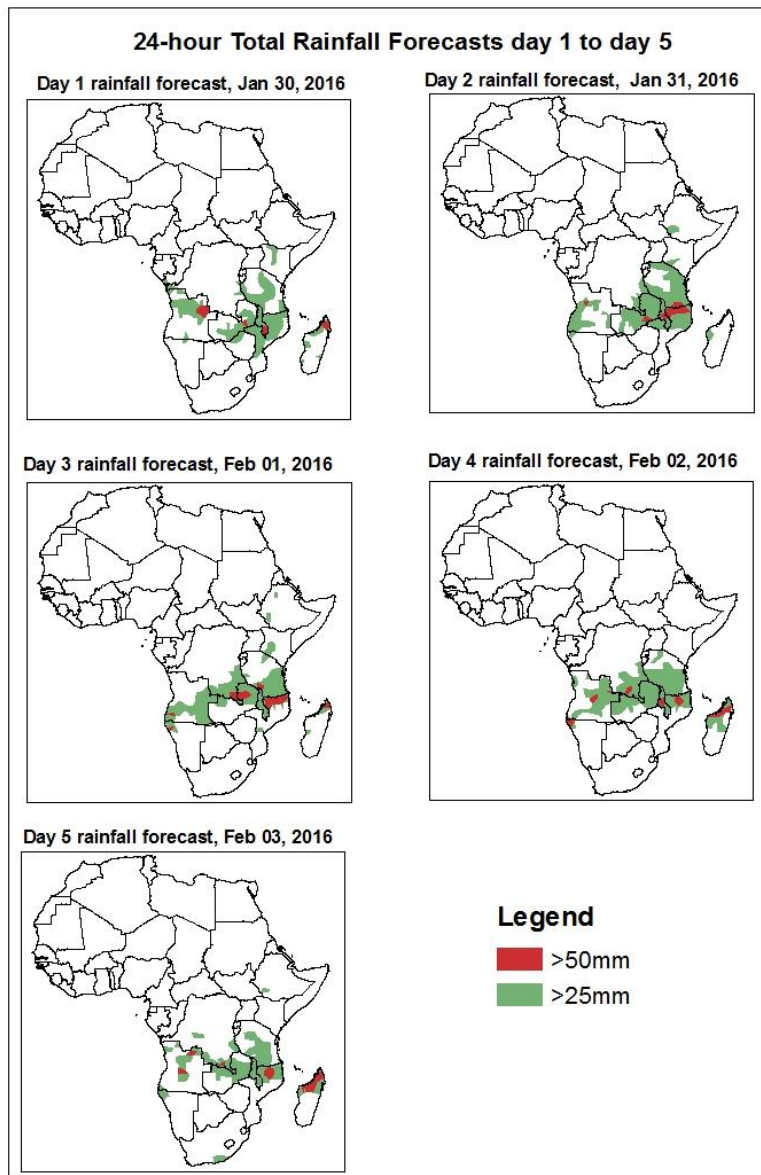
NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative

1. Rainfall and Dust Concentration Forecasts

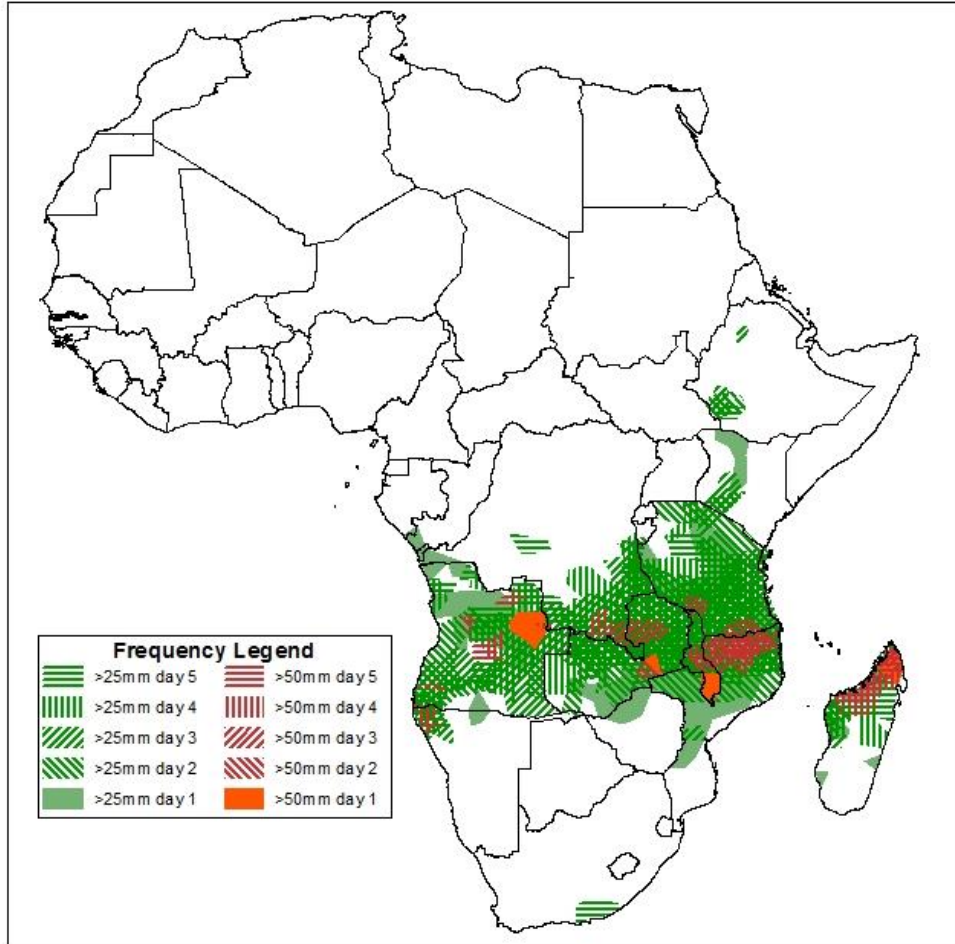
Valid: 06Z of Jan 30 - 06Z of Feb 3, 2016. (Issued on January 29, 2016)

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 30 - February 3, 2016



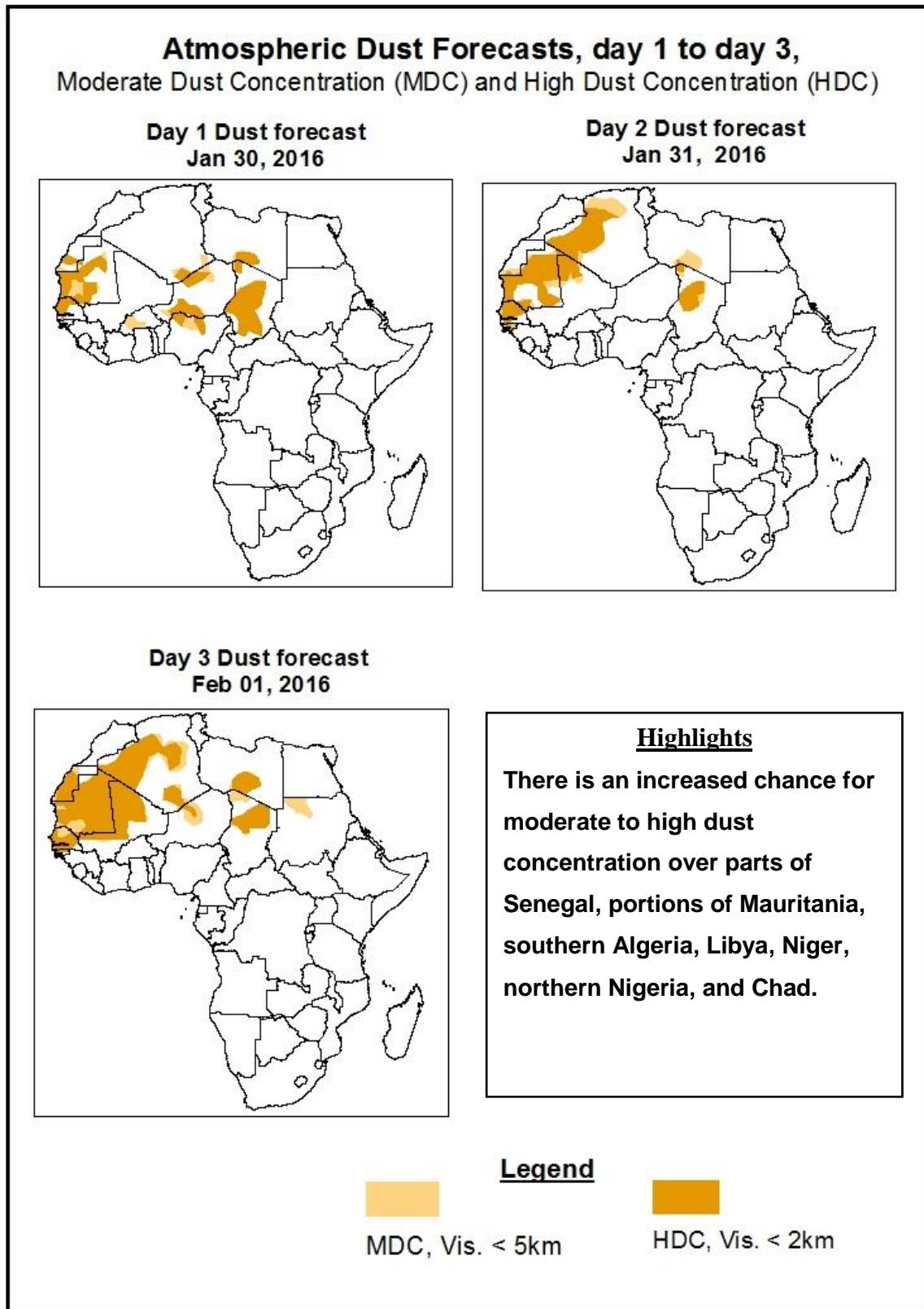
Highlights

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, many parts of Zambia and Tanzania, Malawi, northern Mozambique and northern Madagascar with high probability of heavy rainfall over parts of northern Madagascar, northern Mozambique, Malawi and eastern Angola.

1.2. Atmospheric Dust Concentration Forecasts

Valid: 12Z of Jan 30 – 12Z of Feb 01, 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 30 – Feb 3, 2016

Azores high pressure system over Sahara is expected to weaken in to 1031Hpa In 24 hours' time and intensify in to the relative maximum value of 1039Hpa in 48 hours' time. This relatively maximum intensification along with the west side shift of the system, facilitates conditions for the dust concentration to prevail strongly over Algeria, Mauritania, Mali, Senegal, western Sahara, Niger, Chad and northern Nigeria with high probability of visibility less than 2km in some parts of Chad, Algeria, Mauritania and Mali. The intensity of the dust concentration over the region if expected to increase from day to day and attain the maximum value in 72 hours' time.

The Arabian high pressure system is expected to intensify in to 1035Hpa in 24 hours' time from its central value of 1032Hpa and weaken back to 1032Hpa in 48 hours' time. This high pressure system is expected to attain its central value 1032Hpa for about 24 hours and weaken back in to 1032Hpa and in to 1031Hpa in 96 and 120 hours' time respectively.

The St Helena high pressure system over South East Atlantic Ocean is expected to weaken in to 1026Hpa in 24 hours' time from its central value of 1028Hpa and weaken back in to 1028Hpa in 48 hours' time. This high pressure system is also expected to weaken further in to 1027Hpa and in to 1023Hpa in 72 and 96 hours' time respectively and attain this value up to the end of the forecast period.

The Mascarene high pressure system over Southwest Indian Ocean is expected to weaken in to 1034Hpa, in to 1027Hpa and in to 1023Hpa in 24, 48 and 72 hours' time respectively from its central value of 1035Hpa. This high pressure system is also expected to intensify in to 1028Hpa in 96 hours' time and weaken back in to 1027Hpa in 120 hours' time.

Following the relative stability of the high pressure systems and the development of low pressure systems over central Atlantic and southern Indian Ocean the amount of moist air that has been incurring in to southern Africa is expected to decrease.

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, many parts of Zambia and Tanzania, Malawi, northern Mozambique and northern Madagascar with high probability of heavy rainfall over parts of northern Madagascar, northern Mozambique, Malawi and eastern Angola.

2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (January 28, 2016)

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

2.2. Weather assessment for the current day (January 29, 2016)

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

