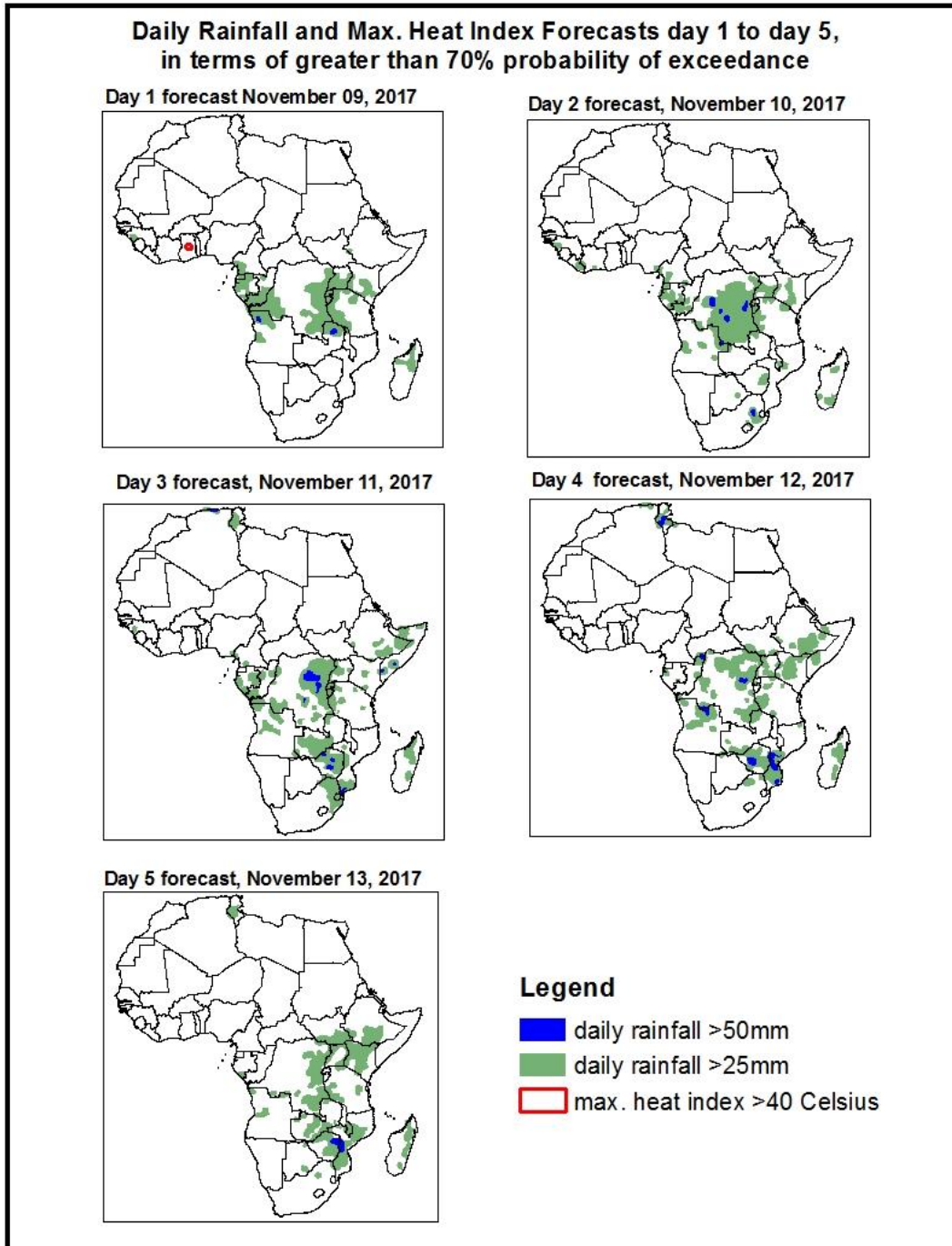


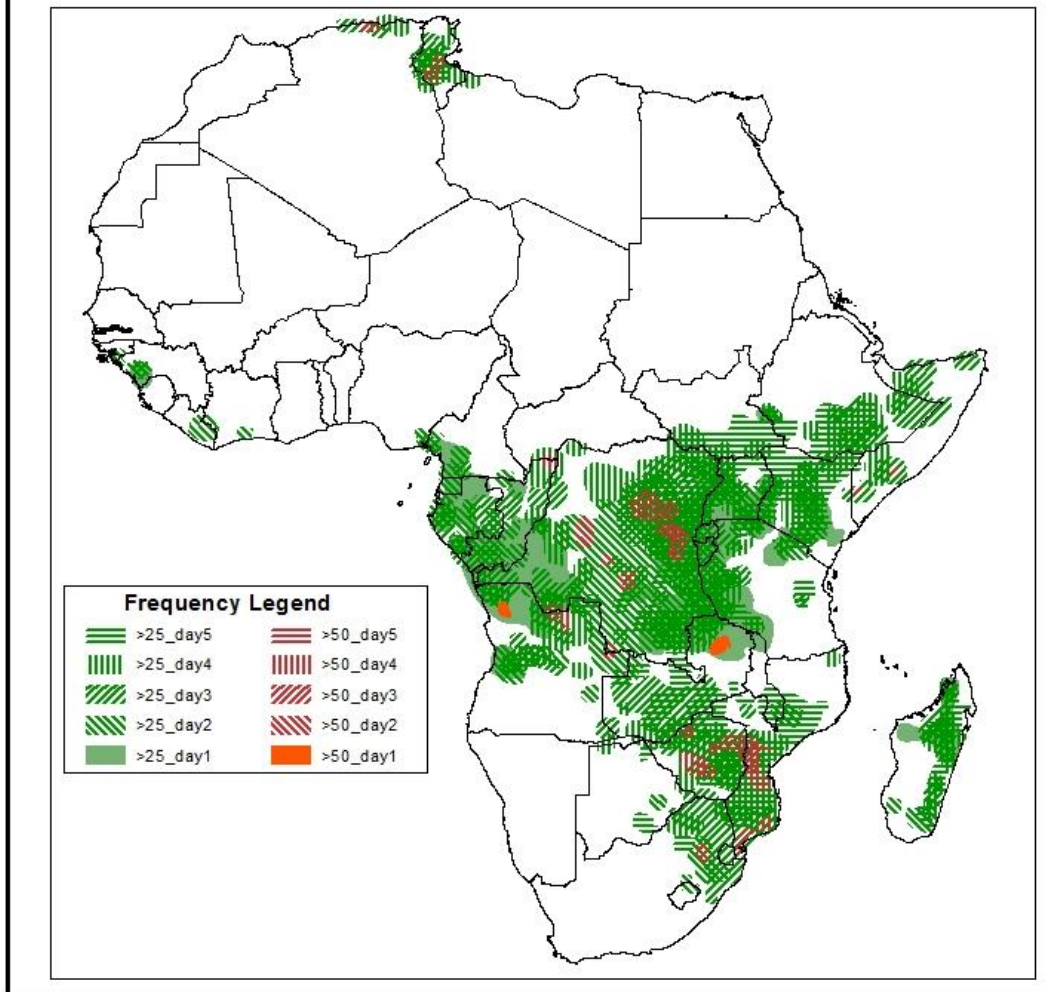
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on Nov 08, 2017)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Nov 09, –Nov 13, 2017)**

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



## Five Days Rainfall Forecast Summary November 09, - November 13, 2017.

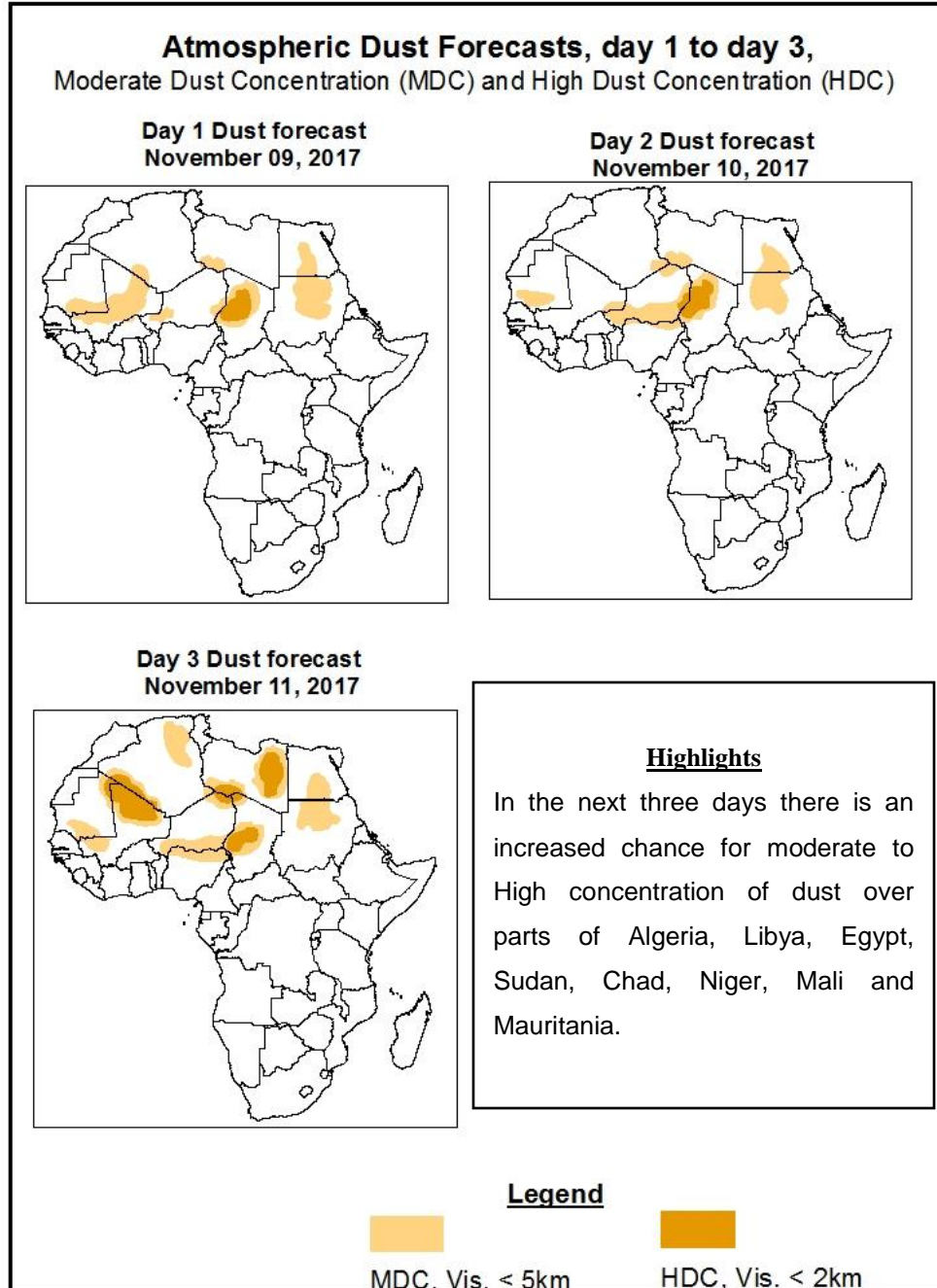


### **Highlights**

In the next five days, active lower-level meridional convergence associated with the Congo air boundary (CAB) between the South Sudan to the southeast DRC and low level wind convergences in the equatorial Africa, the extreme Western Africa, parts of Angola, South Africa and Ethiopia, are expected to enhance rainfall in the respective regions. As a result, there is an increased chance for two or more days of moderate to heavy rainfall over many places in Tunisia, southern Guinea, southern Cameroon, Equatorial Guinea, Gabon, Congo, DRC, southern South Sudan, southern Ethiopia, Kenya, parts of Somalia, Uganda, western Tanzania, Burundi, Rwanda, Angola, Zambia, Zimbabwe, Eastern South Africa, Botswana, Swaziland, southern Mozambique and Madagascar.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: Nov 09, – Nov 11, 2017)

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: Nov 09 – Nov 13, 2017**

The Azores High Pressure system over the North Atlantic Ocean is expected to gradually weaken from its central pressure value of 1040hpa to 1031hpa towards the end of the forecast.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is expected to slightly weaken from its central pressure value of 1023hpa to 1022hpa in the next 48hours and then later intensify to 1025hpa towards the end of the forecast period.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to gradually intensify from its central pressure value of 1022hpa to 1025hpa towards the end of the forecast period.

The heat low over western Sahel is expected to fill up from its value of 1009hpa to 1010hpa in the next 48hours and then deepen back to its value of 1009hpa towards the end of the forecast period.

The heat low over central Sahel is expected to maintain its value of 1010hpa in the next 72hours and then slightly deepen to 1009hpa towards the end of the forecast period.

Over the Sudan area, the heat low is expected to slightly deepen from its value of 1009hpa in the next 24hours to 1008hpa and then maintain this value towards the end of the forecast period.

At 925hPa, West Africa is dominated by the continental winds with a convergence all through the region and vortex developing over the extreme western part and moving westward to the end of the forecast period. Over the Sudan area, there is a convergence which is dominated by the continental winds also with a vortex located over the South Sudan and moving westward towards the end of the forecast period.

Another strong convergence is established over the Central Africa Republic, Tanzania and the southern part of Africa which are quasi-stationary towards the end of the forecast period.

The dry north easterlies to easterly winds propagating from the subtropical high pressure system over North Africa sustained the spreading and transportation of the Saharan dust over Algeria, Libya, Egypt, Sudan, Chad, Niger, Mali and Mauritania.

At 850hPa, there is a convergence flow over West Africa with a low pressure system developing over the West Sahel which is dominated by the continental winds and is propagating westward to the end of the forecast period.

There is another strong convergence over the southeastern DRC which traverse and extends to western Tanzania, Burundi, Rwanda and then to Uganda and is quasi-stationary towards the end of the forecast period.

In the next five days, active lower-level meridional convergence associated with the Congo air boundary (CAB) between the South Sudan to the southeast DRC and low level wind convergences in the equatorial Africa and parts of Angola, South Africa and Ethiopia, are expected to enhance rainfall in the respective regions. As a result, there is an increased chance for two or more days of moderate to heavy rainfall over many places in Tunisia, southern Guinea, southern Cameroon, Equatorial Guinea, Gabon, Congo, DRC, southern South Sudan, southern Ethiopia, Kenya, parts of Somalia, Uganda, western Tanzania, Burundi, Rwanda, Angola, Zambia, Zimbabwe, Eastern South Africa, Botswana, Swaziland, southern Mozambique and Madagascar.

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## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (November 07, 2017)

Moderate to locally heavy rainfall was observed over Guinea, southern Cameroon, Equatorial Guinea, southern Congo, Gabon, southern CAR, DRC, Uganda, Kenya, western Tanzania, northern Angola and Madagascar.

### 2.2. Weather assessment for the current day (November 08, 2017)

Intense convective clouds are observed over portions of West, Central and East Africa.

