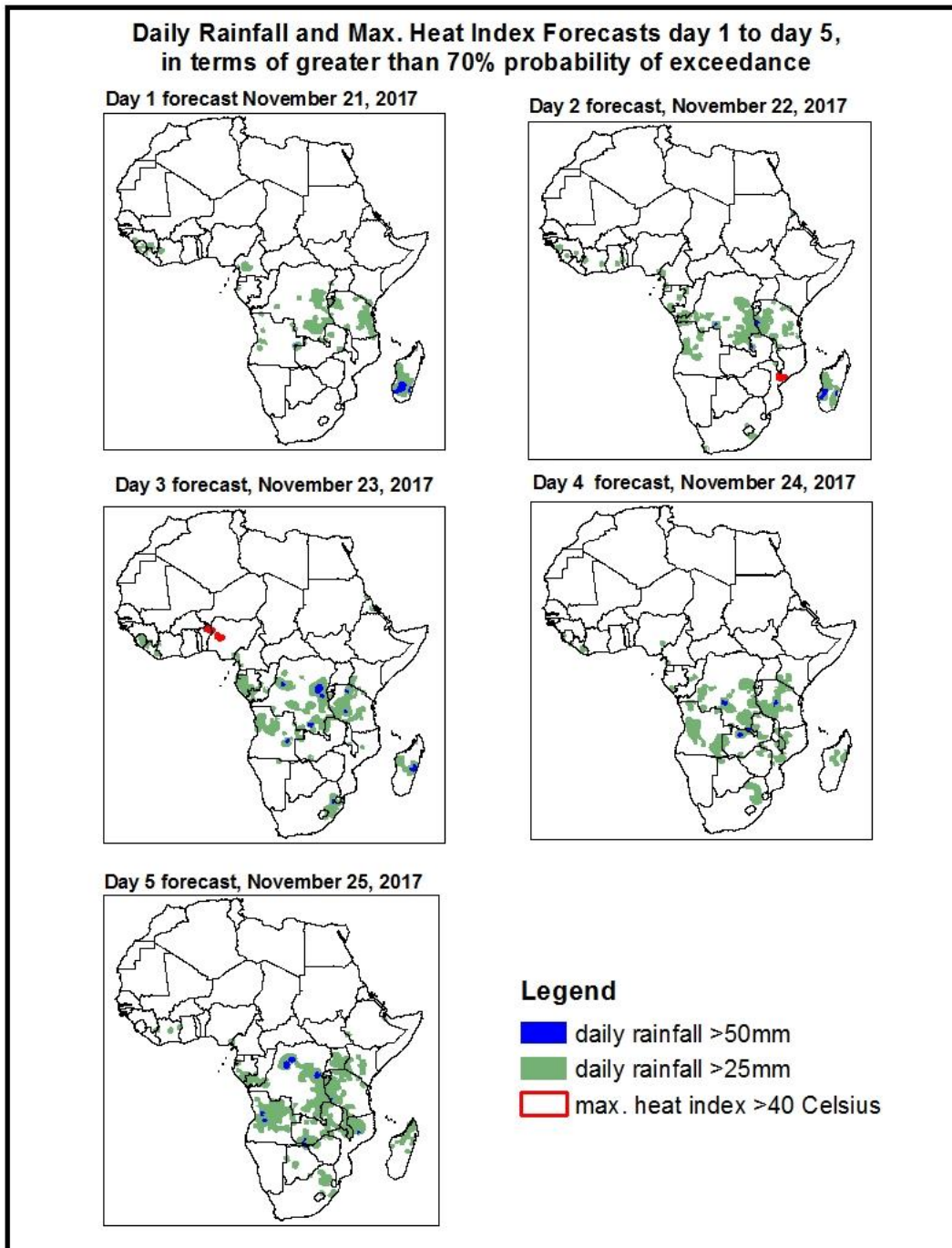


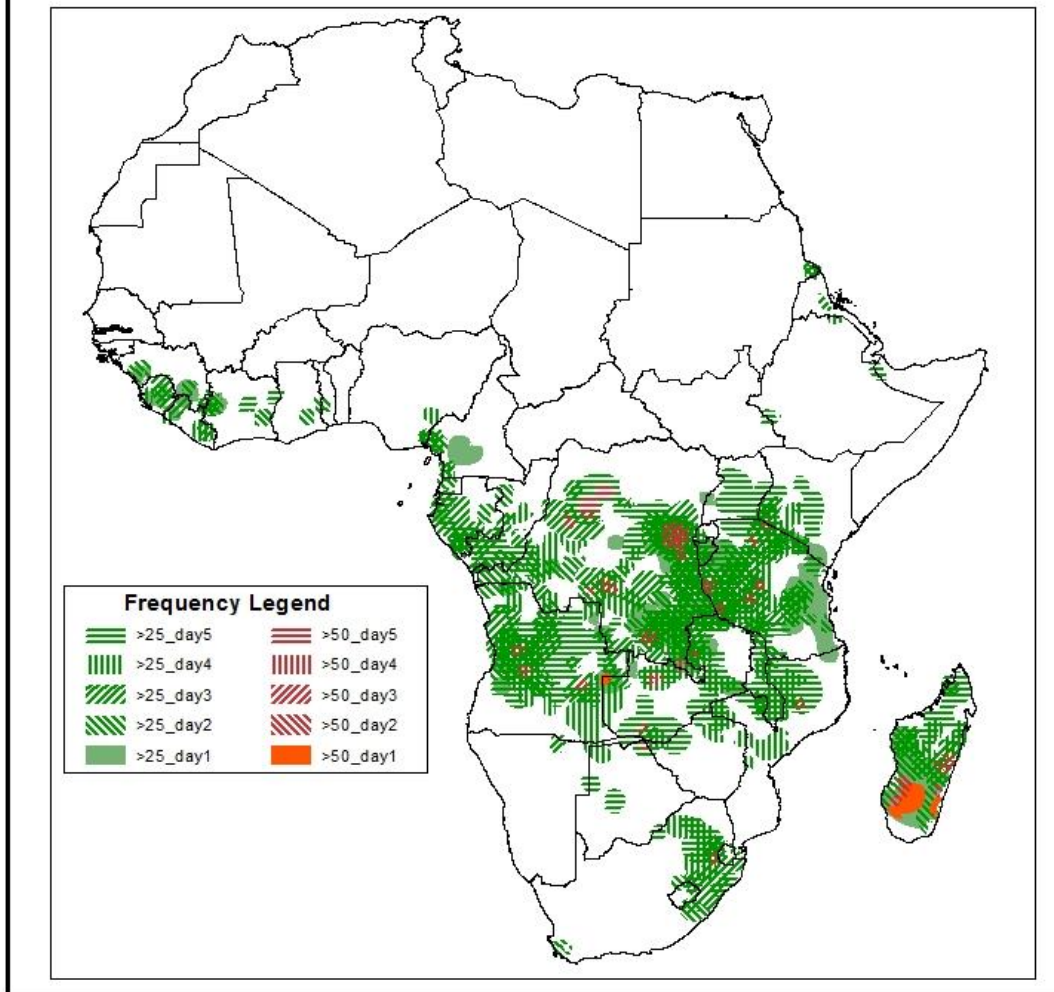
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on Nov 20, 2017)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Nov 21, –Nov 25, 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 21, - November 25, 2017.

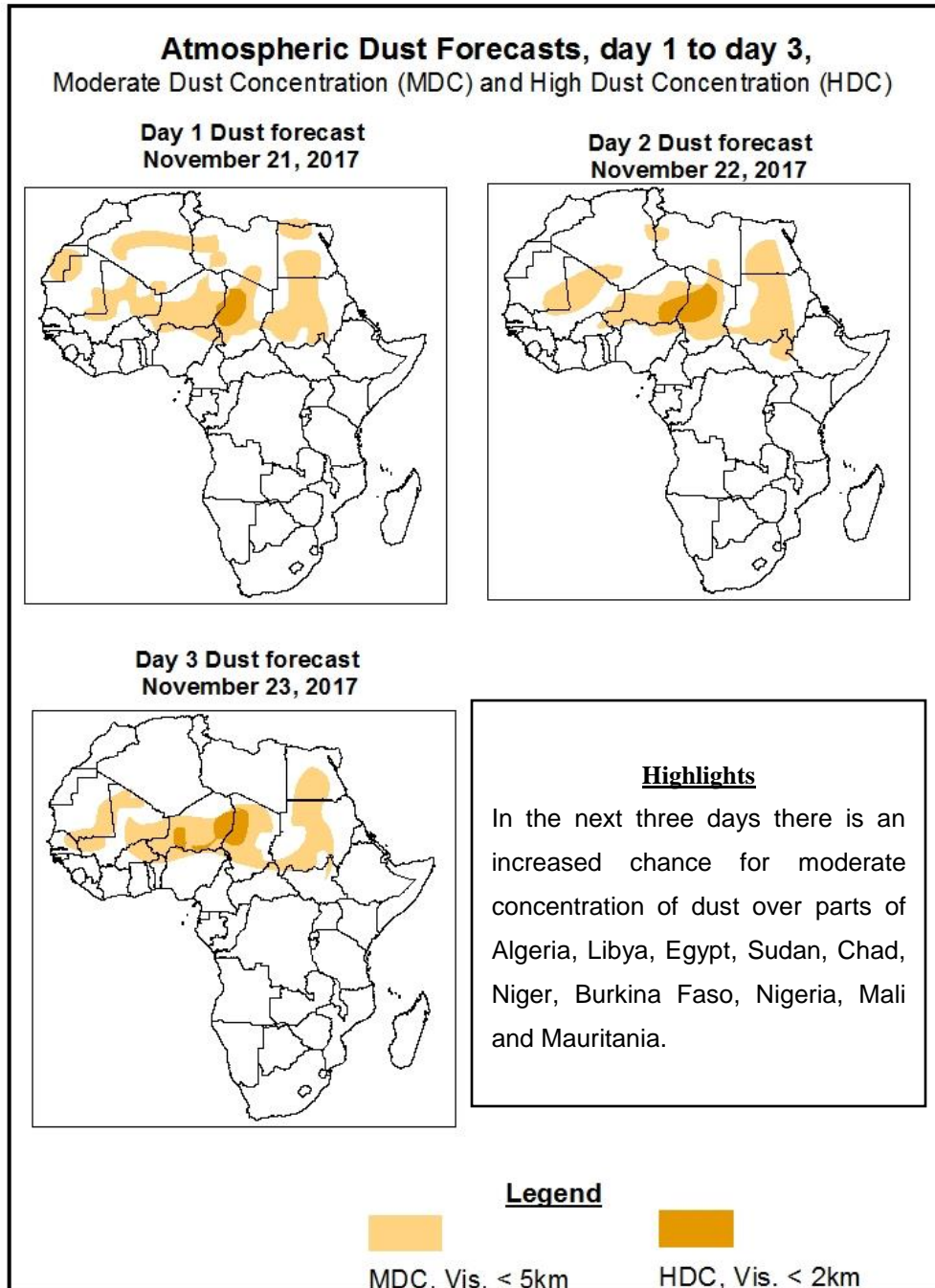


### **Highlights**

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, parts of Angola and South Africa, 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 Guinea, Sierra Leone, Equatorial Guinea, parts of Cote D'Ivoire, western Cameroon, Gabon, Congo, DRC, parts of Kenya, Tanzania, Ruanda, Angola, north Zimbabwe, Zambia, eastern South Africa, north Mozambique and Madagascar.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: Nov 21, – Nov 23, 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 21 – Nov 25, 2017**

The Azores High Pressure system over the North Atlantic Ocean is expected to weaken from its central pressure value of 1025hpa to 1023hpa and then intensify to 1028hpa towards the end of the forecast.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is expected to intensify from its central pressure value of 1024hpa to 1028hpa and then weaken to 1026hpa towards the end of the forecast period.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to intensify from its central pressure value of 1024hpa to 1028hpa and then weaken to 1026hpa towards the end of the forecast period.

The heat low over western Sahel is expected to deepen in the next 24hours its value of 1010hpa to 1009 and then fill up back to its value of 1010hpa towards the end of the forecast period.

The heat low over central Sahel is expected to maintain in the next 72hours its value of 1010hpa and then fill up to 1011hpa towards the end of the forecast period.

Over the Sudan area, the heat low is expected to maintain its value of 1009hp in the next 72hours and then fill up to 1011hpa 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, parts of Angola and South Africa, 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 Guinea, Sierra Leone, Equatorial Guinea, parts of Cote D'Ivoire, western Cameroon, Gabon, Congo, DRC, parts of Kenya, Tanzania, Ruanda, Angola, north Zimbabwe, Zambia, eastern South Africa, north 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 19, 2017)

Moderate to locally heavy rainfall was observed over southern Cote D'Ivoire, Ghana, south Togo, southeastern Nigeria, Cameroon, Equatorial Guinea, Congo, parts of Gabon, DRC, north Angola, north Zambia, parts of Zimbabwe, north Mozambique and Madagascar.

### 2.2. *Weather assessment for the current day* (November 20, 2017)

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

