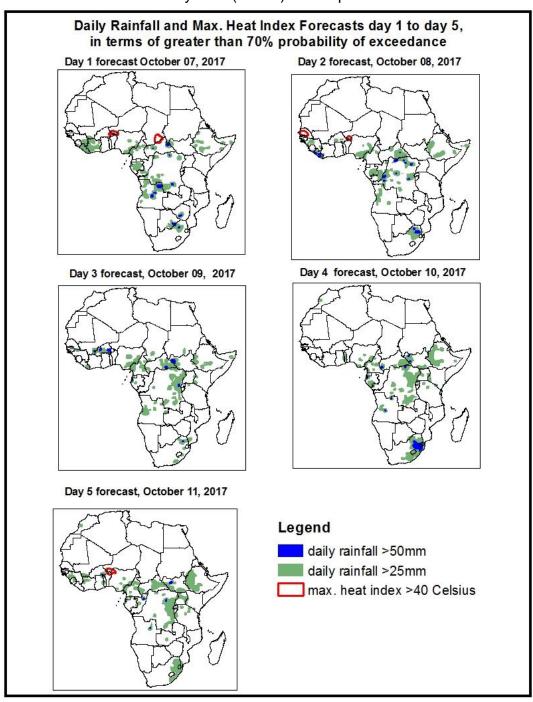
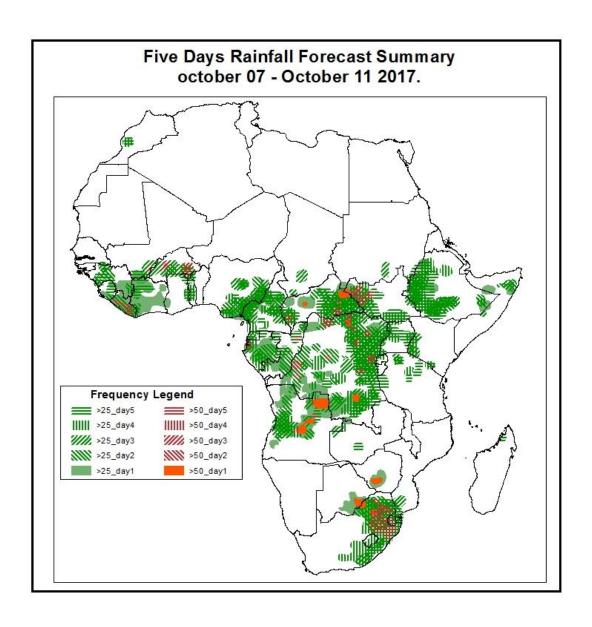
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on Oct. 06, 2017)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Oct. 07, – Oct.11, 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.



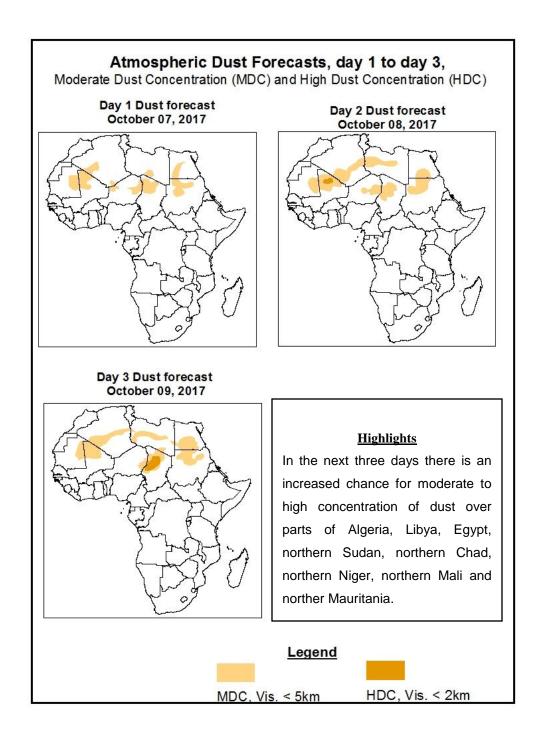


Highlights

In the next five days, a monsoon flow from the Atlantic Ocean across West and Central Africa combined with a lower-level cyclonic circulation propagating across the Sahel countries coupled with upper level divergence is expected to enhance rainfall over many places in West and Central African countries. Active lower-level convergence over DRC and moving eastwards towards the end of the forecast period is also expected to enhance rainfall in the region. 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, Liberia, Cote D'Ivoire, Burkina Faso, Togo, eastern Nigeria, Cameroon, parts of Gabon, parts of Congo, Equatorial Guinea, CAR, DRC, parts of South Sudan, Angola, Lesotho, Swaziland, north eastern South Africa, western Ethiopia and northern Somalia.

1.2. Atmospheric Dust Concentration Forecasts (valid: Oct 07, – Oct 09, 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: October 07 - October 11, 2017.

The Azores High Pressure system over the North Atlantic Ocean is expected to gradually weaken from its central pressure value of 1028hpa to 1024hpa in the next 72hours and then later intensify to 1026hpa towards the end of the forecast period.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is expected to gradually weaken from its central pressure value of 1036hpa to 1025hpa towards the end of the forecast period.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to gradually weaken from its central pressure value of 1034hpa to 1024hpa towards the end of the forecast period.

The heat low over western Sahel is expected to fill up from its value of 1007hpa in the next 48hours to 1008hpa and then thereafter deepens back to its value of 1007hpa towards the end of the forecast period.

Over the central Sahel, the heat low is expected to maintain its value of 1008hpa in the next 48hours then slightly deepen to 1007hpa and thereafter towards the end of the forecast period fill up to 1009hpa.

Over the Sudan area, the heat low is expected to maintain its value of 1007hpa all through the end of the forecast period.

At 925hPa, there is a convergence over West Africa and the Sudan area with vortices developing and spreading over the regions which are dominated by the continental winds and are moving westward towards the end of the forecast period.

Another convergence is established over the DRC and moves eastwards 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, northern Sudan, northern Chad, northern Niger, northern Mali and northern Mauritania.

At 850hPa, there is a convergence flow over West Africa and the Sudan area with some pockets of vortices established over the west Sahel region and the Sudan area which are dominated by the continental winds and are moving westward to the end of the forecast period.

There is another strong convergence over the DRC which moves slightly to east direction towards the end of the forecast period.

At 700hPa, there is the divergence of a northeasterly to easterly flow from the subtropical high pressure system over the north and West Africa to its coasts towards the end of the forecast period.

Divergence over central, eastern and the southern part of Africa predominate but with some cut-off lows developing over the central and southeastern parts of Africa in the next 48hours and to the end of the forecast period.

In the next five days, a monsoon flow from the Atlantic Ocean across West and Central Africa combined with a lower-level cyclonic circulation propagating across the Sahel countries coupled with upper level divergence is expected to enhance rainfall over many places in West and Central African countries. Active lower-level convergence over DRC and moving eastwards towards the end of the forecast period is also expected to enhance rainfall in the region. 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, Liberia, Cote D'Ivoire, Burkina Faso, Togo, eastern Nigeria, Cameroon, parts of Gabon, parts of Congo, Equatorial Guinea, CAR, DRC, parts of South Sudan, Angola, Lesotho, Swaziland, north eastern South Africa, western Ethiopia and northern Somalia.

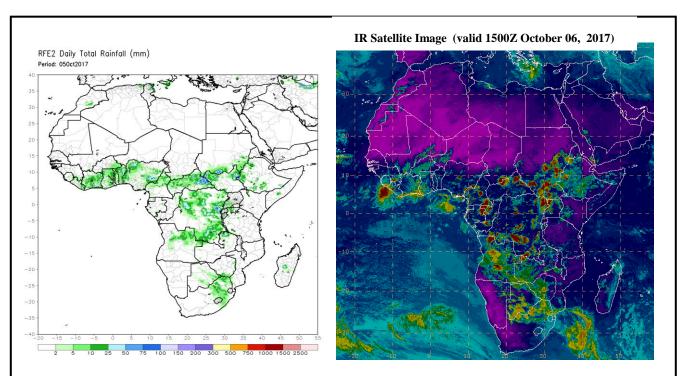
2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (October 05, 2017)

Moderate to locally heavy rainfall was observed over Tunisia, Burkina-Faso, Liberia, Cote D'Ivoire, Ghana, Togo, Benin, Nigeria, central Cameroon, DRC, CAR, southern Sudan, northwestern South Sudan, northeastern Angola, eastern South Africa and Lesotho.

2.2. Weather assessment for the current day (October 06, 2017)

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



Previous day rainfall condition over Africa (Left) based on the NCEP CPCE/RFE and current day cloud cover (right) based on IR Satellite image.

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