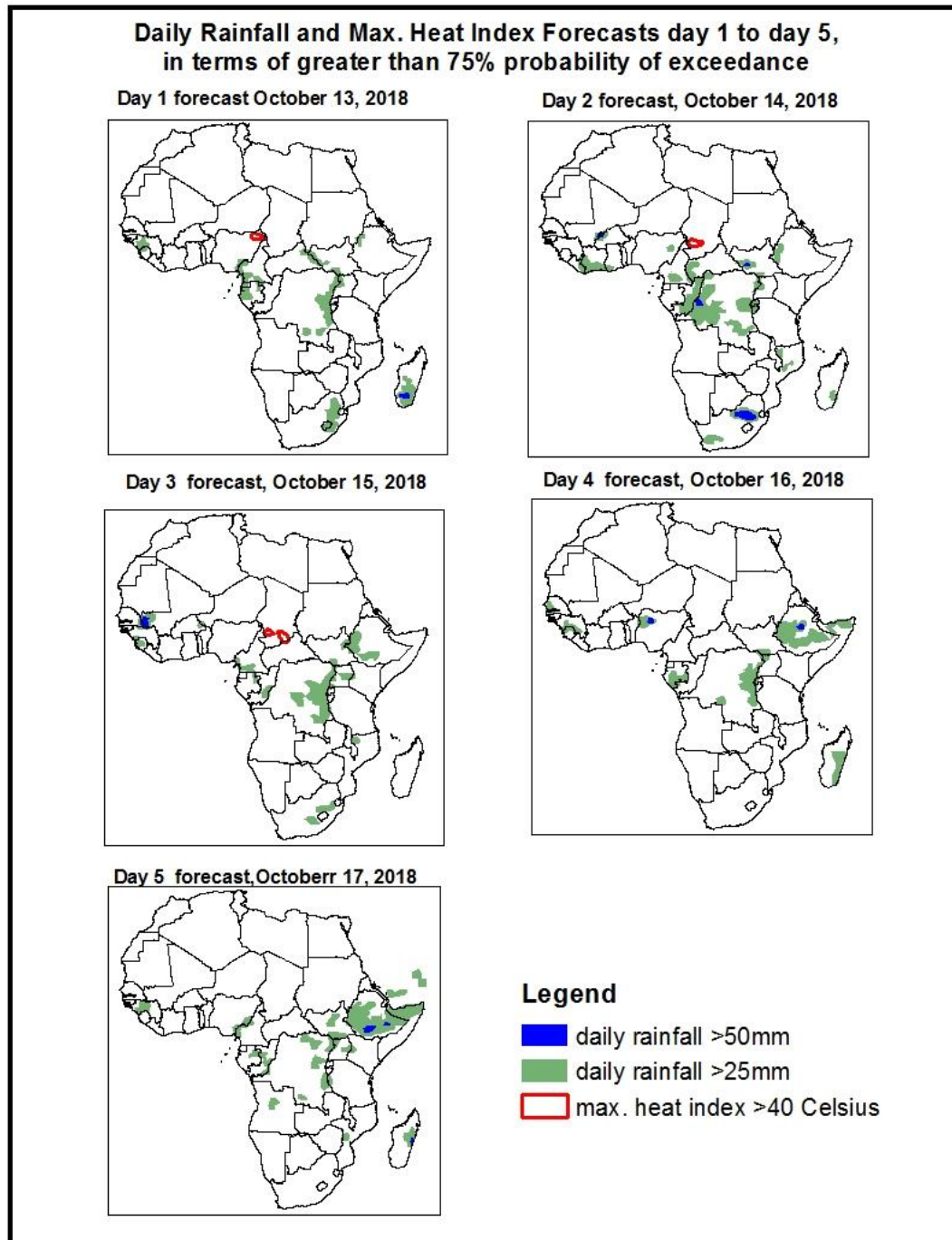


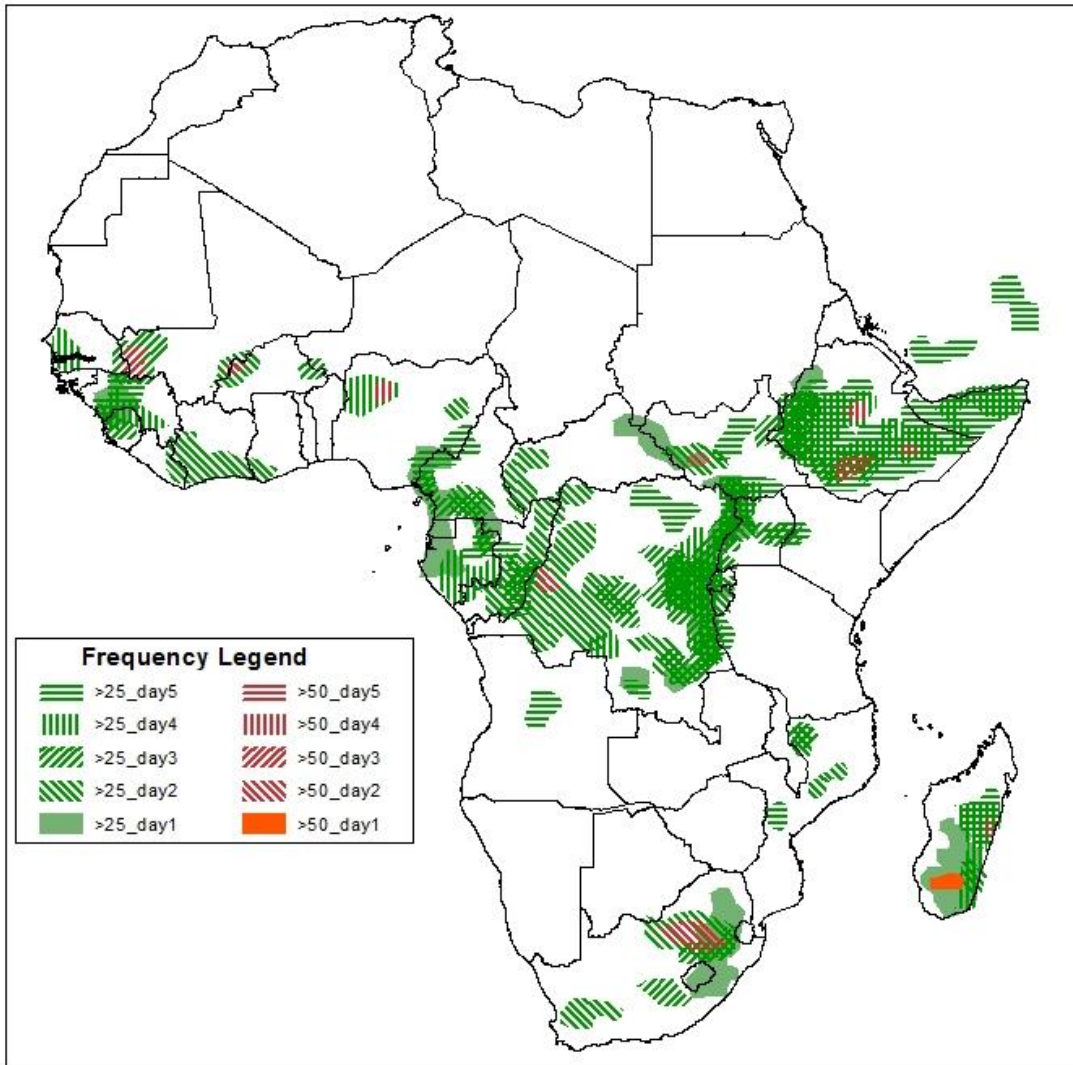
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on *October 12, 2018*)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (*valid: Oct 13, –Oct 15, 2018*)

The forecasts are expressed in terms of high probability of precipitation (POP), valid 06Z to 06Z, and exceedance probability of maximum heat index (>40°C), based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



Five Days Rainfall Forecast Summary 13 - 17 Octoberr, 2018.

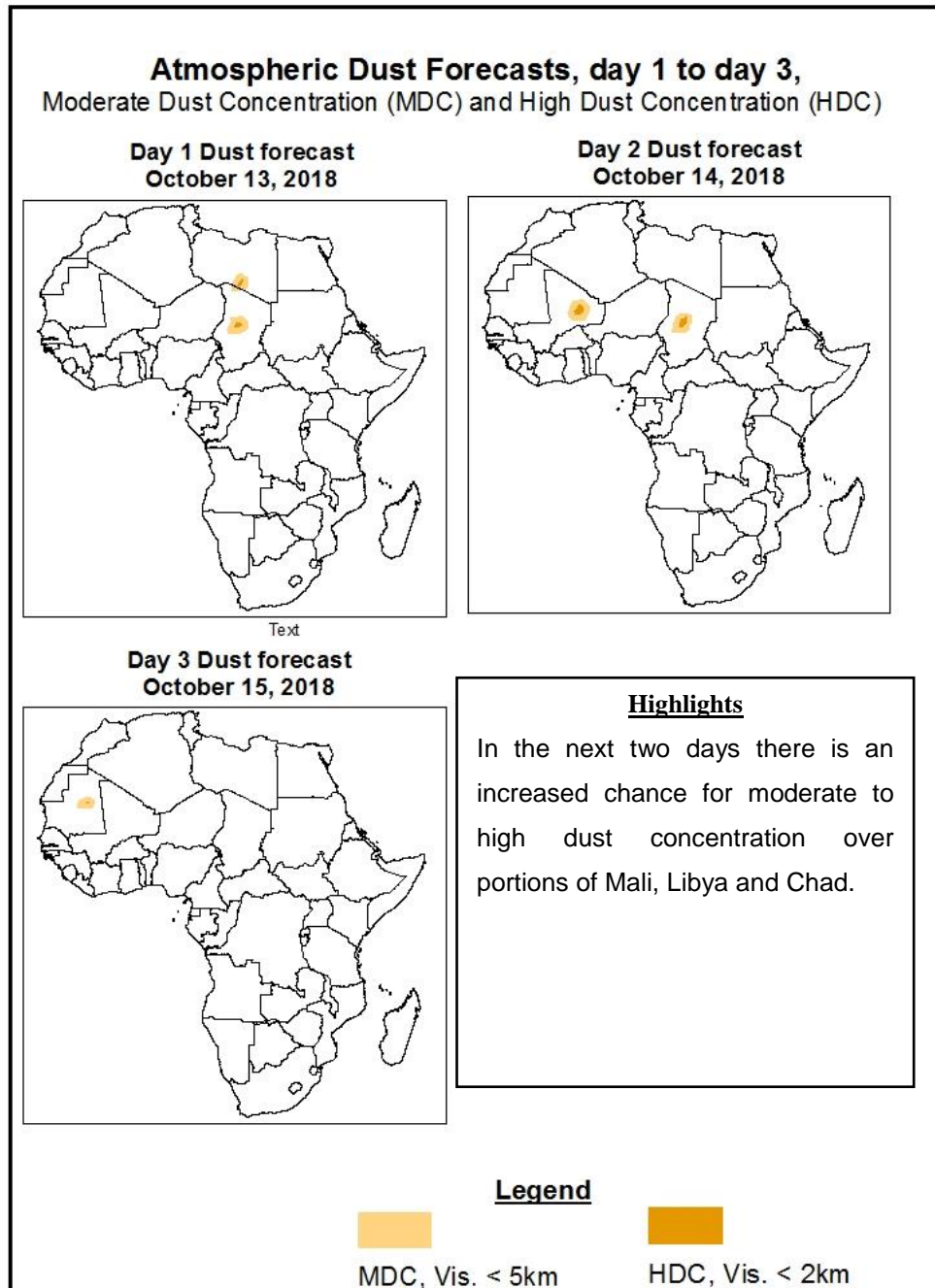


Highlights

- In the next five days, lower-level wind convergences over parts of the Gulf of Guinea countries, active Congo air boundary, localized convergence over the southern Africa and Ethiopia are expected to enhance rainfall. There is an increased chance for 2 or more days of moderate to heavy rainfall over Central Africa, parts of Ethiopia, parts of South Africa and southern Madagascar.
- There is an increased chance for temperature heat index values to exceed 40°C over local areas in Nigeria and Chad.

1.2. Atmospheric Dust Concentration Forecasts (valid: Oct 13 – October 15, 2018)

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 13 – October 17, 2018

The Azores High Pressure system over the North Atlantic Ocean is expected to strengthen throughout the forecast period. Its central pressure value is expected to increase from 1022hPa to 1030hPa.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is expected to maintain its strength. Its average central pressure value is 1022hPa.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to weaken gradually, while progressing eastwards. Its central pressure value is expected to maintain its strength of 1028hPa through the 96 and 120hrs.

A low Pressure system associated with tropical cyclone (Luban) is moving towards the Arabian Peninsula and is expected to land fall through 48 hours. Its central pressure value is expected to increase from 992hPa in 24hours to 1009hpa after land fall.

A low system is expected to develop over the southern Africa moving southeast during the forecast period.

At 925hPa, dry strong northeasterly to easterly flow is expected to prevail over portions of northern Africa and the neighboring areas of the Sahel region. Moist southwesterly to westerly monsoon flow from the Atlantic Ocean is expected to remain active along the Gulf of Guinea coast. A broad area of cross equatorial flow from the Indian Ocean is expected to prevail across the Greater Horn of Africa due to the presence of tropical cyclone (Luban) in the Arabian Sea. Moist and unstable northeasterly is expected to prevail over some parts of southeast Africa.

At 850hPa, localized lower-level wind Convergence across portions of the Gulf of Guinea region. Lower-level wind convergence associated with the Congo air boundary (CAB) and lower level wind convergence associated with the southern costal low is expected to remain active during the forecast period.

In the next five days, lower-level wind convergences over parts of the Gulf of Guinea countries, active Congo air boundary, localized convergence over the southern Africa and Ethiopia are expected to enhance rainfall. There is an increased chance for 2 or more days of moderate to heavy rainfall over Central Africa, parts of Ethiopia, parts of South Africa and southern Madagascar. There is an increased chance for temperature heat index values to exceed 40⁰C over local areas in Nigeria and Chad.

2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (October 11, 2018)

Daily rainfall totals exceeded 25mm over northern of republic of Congo, eastern Cameroon Central Africa Republic, parts of Congo DRC and southern Madagascar.

2.2. Weather assessment for the current day (October 12, 2018)

Intense convective clouds are observed over most parts of Central African Countries.

