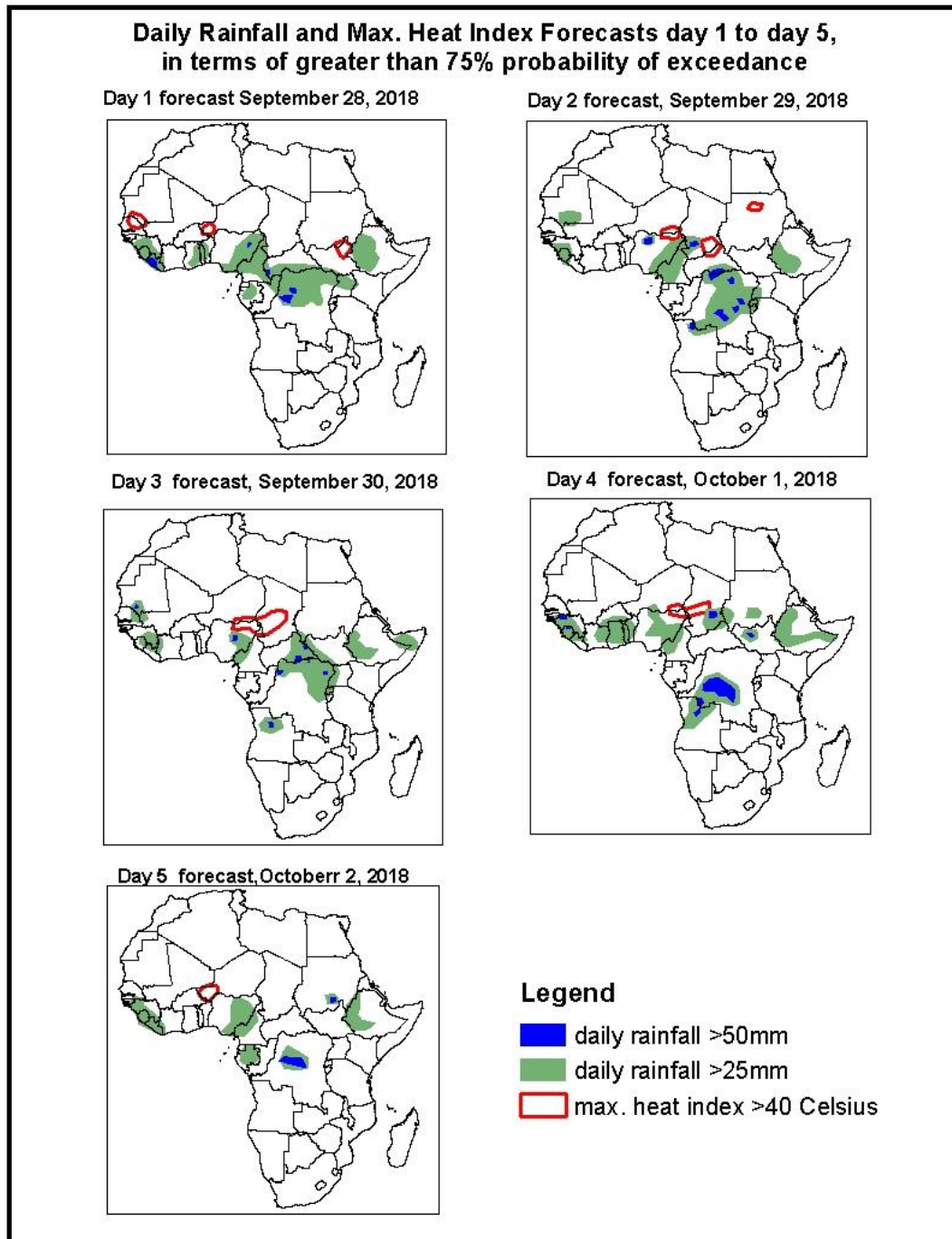


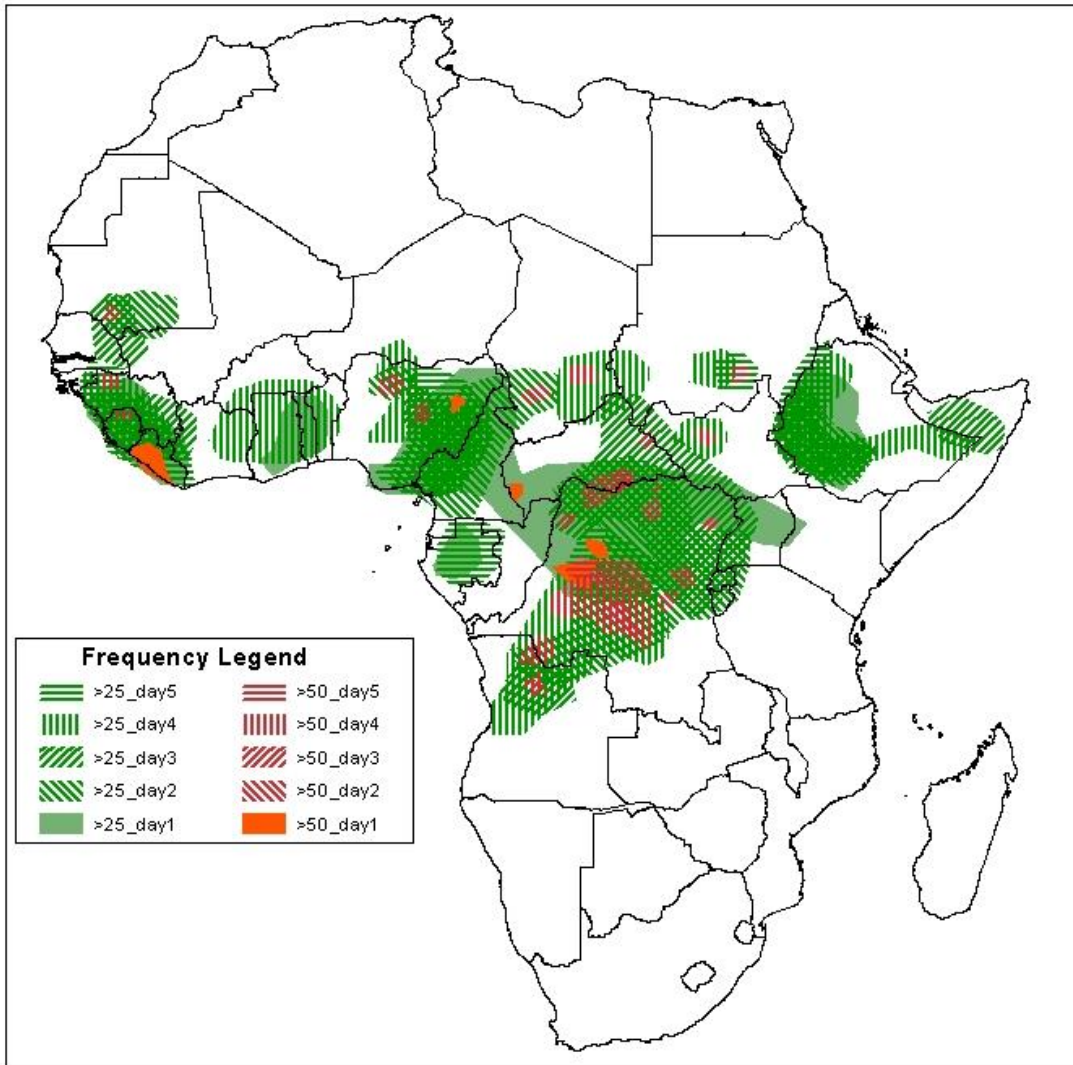
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on September 27, 2018)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Sep 28, –Oct 2, 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 28 September - 2 October, 2018.

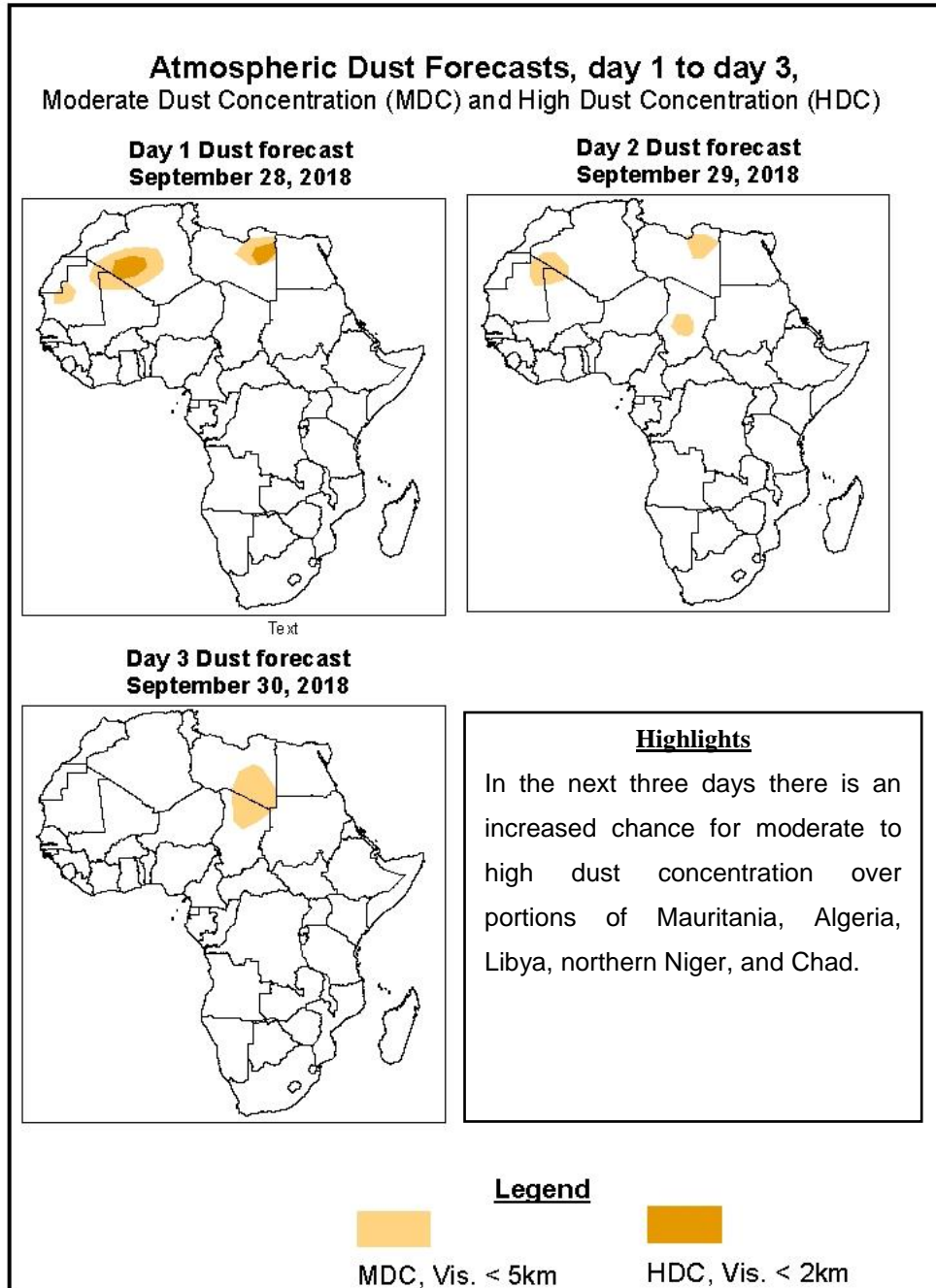


Highlights

- In the next five days, tropical/extratropical interaction across northwestern Africa, lower-level cyclonic systems across the Gulf of Guinea region and localized lower-level wind convergences over Sahel region, active lower-level wind convergences in the Congo Basin, Sudan, and Ethiopia are expected to enhance rainfall.
- There is an increased chance for 2 or more days of moderate to heavy rainfall over portions of the Gulf of Guinea countries and the neighboring areas of the Sahel region, DRC, Angola, and Ethiopia.
- There is an increased chance for temperature heat index values to exceed 40°C over local areas in Mauritania, Senegal, Niger, Nigeria, Chad and Sudan.

1.2. Atmospheric Dust Concentration Forecasts (valid: September 28 – September 30, 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: September 28 –October 2, 2018

The Azores High Pressure system over the North Atlantic Ocean is expected to intensify. Its central pressure value is expected to decrease from 1027hPa to 1032hPa during the forecast period.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is expected to intensify gradually. Its central pressure value is expected to increase from 1028hPa to 1036hPa through 120 hours.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to intensify gradually. Its central pressure value is expected to increase from 1031hPa to 1034hPa.

Thermal lows over northern Mali and Chad are expected to maintain average central pressure values of 1006hPa and 1007hPa, respectively.

At 925hPa, dry strong northeasterly to easterly flow is expected to prevail over Western Sahara, Mauritania, northern Mali, parts of Algeria, Chad, Libya, northern Niger, and portions of Egypt and Sudan. In contrast, moist southwesterly to westerly monsoon flow from the Atlantic Ocean is expected to remain active across the Gulf of Guinea countries. Active East African monsoon flow from the Indian Ocean, with its associated lower-level convergence across equatorial eastern Africa is expected to prevail during the forecast period.

At 850hPa, a cyclonic trough is expected to prevail along the Gulf of Guinea coast during the forecast period. Localized lower-level wind Convergence across portions of the Sahel region, Sudan and Ethiopia and seasonal wind convergence in the Congo Basin are expected to remain active during the forecast period.

At 700-hPa, an area of strong easterly flow is expected to prevail across many places in the Gulf of Guinea countries through 24 hours.

In the next five days, tropical/extratropical interaction across northwestern Africa, lower-level cyclonic systems across the Gulf of Guinea region and localized lower-level wind convergences over Sahel region, active lower-level wind convergences in the Congo Basin, Sudan, and Ethiopia are expected to enhance rainfall. There is an increased chance for 2 or more days of moderate to heavy rainfall over portions of the Gulf of Guinea countries and the neighboring areas of the Sahel region, DRC, Angola, and Ethiopia. There is an increased chance for temperature heat index values to exceed 40⁰C over local areas in Mauritania, Senegal, Niger, Nigeria, Chad and Sudan.

2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (September 26, 2018)

Daily rainfall totals exceeded 25mm over local areas in Senegal, Guinea-Conakry, central Gabon, western Sudan, parts of Angola and DRC, and coastal Kenya.

2.2. Weather assessment for the current day (September 27, 2018)

Intense convective clouds are observed over parts of Nigeria, CAR, many parts of DRC, northern Angola, and local areas in Uganda, South Sudan and Ethiopia.

