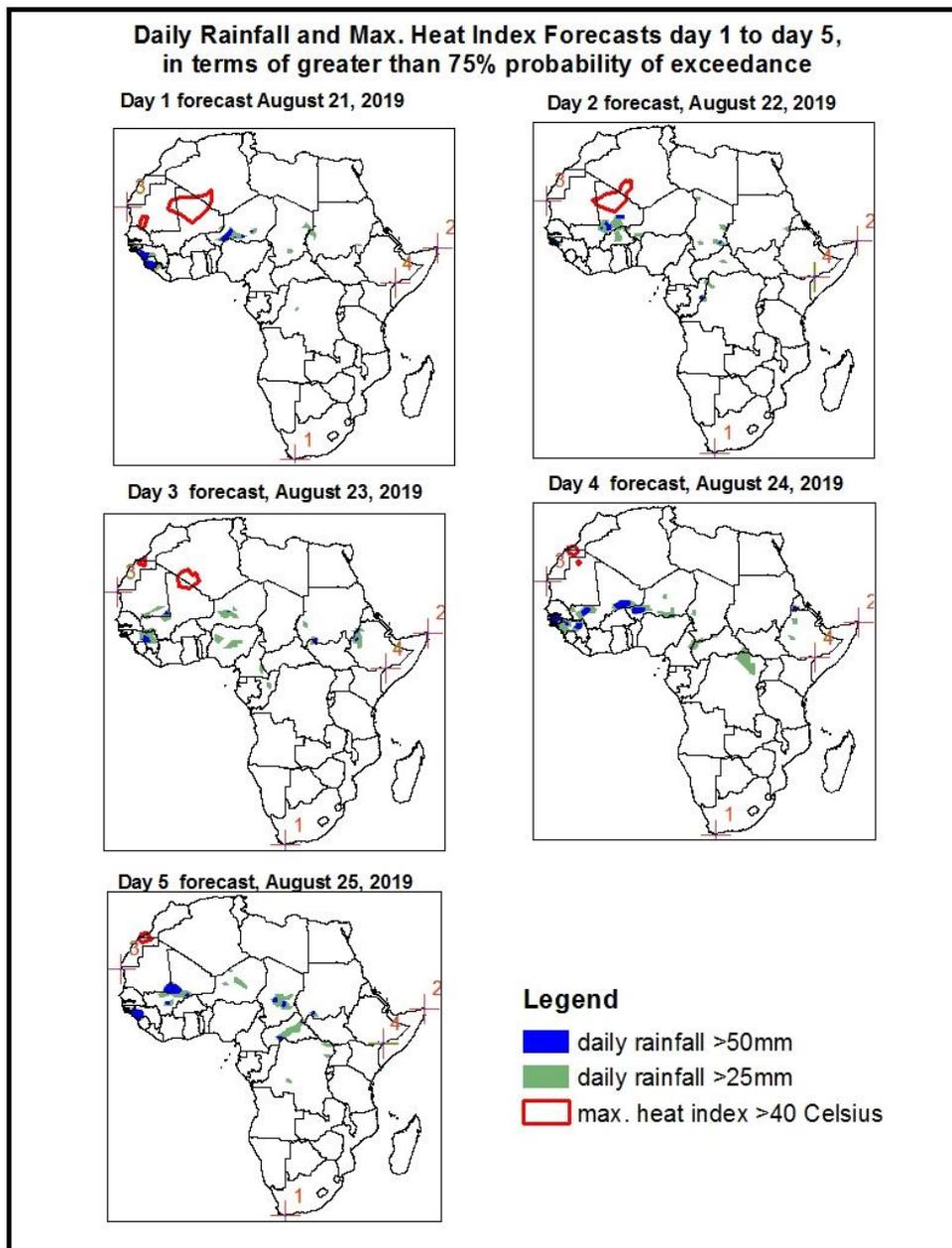


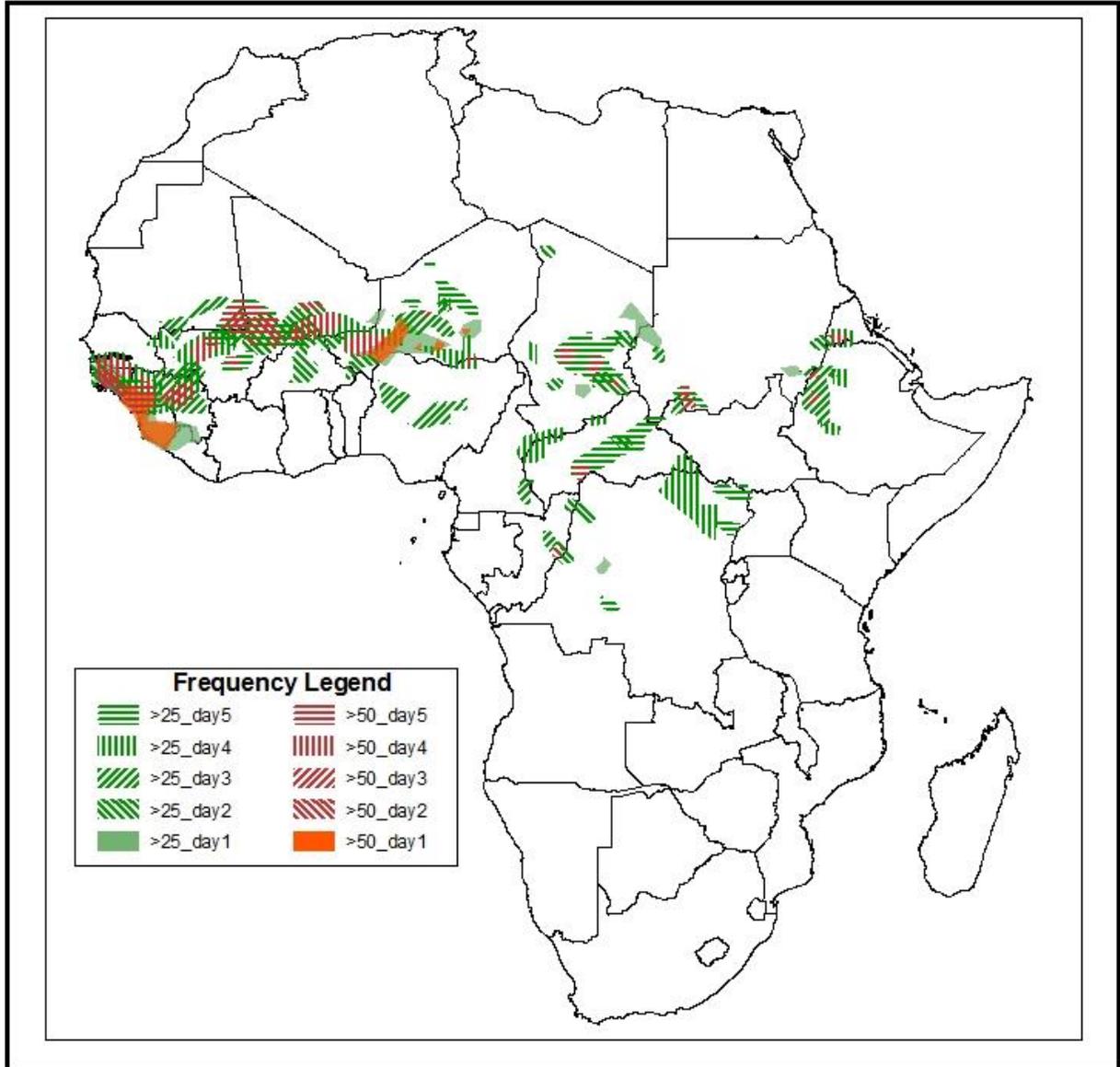
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on August 20, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 21 – 25 August, 2019)

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 21 - 25 August, 2019

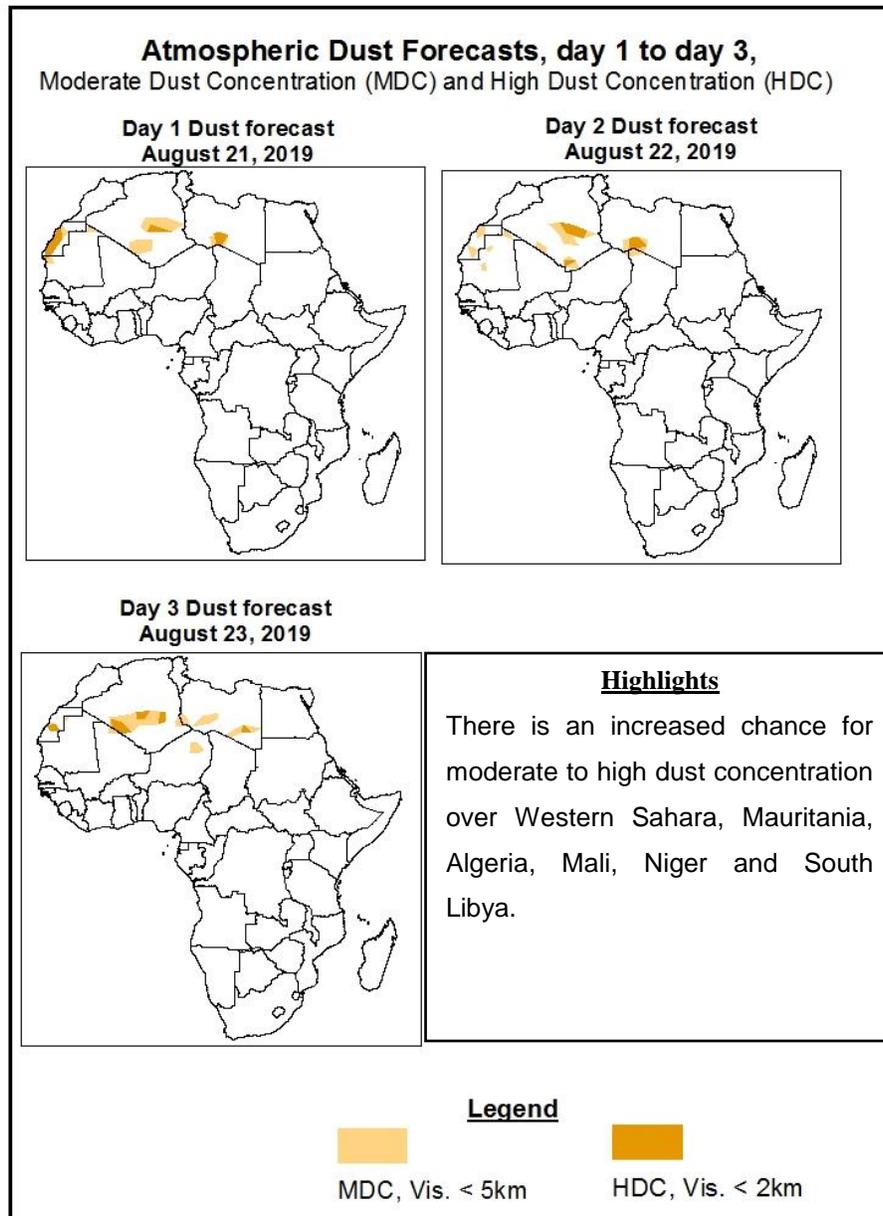


Highlights

- The monsoon flow from the Atlantic Ocean with its associated lower-level convergence, and westward propagating meso-scale convective systems are expected to enhance rainfall over Western Africa, portions of the Sahel and Central Africa countries.
- Lower-level wind convergences are expected to enhance rainfall across portions of the Greater Horn of Africa.
- At least 25mm for two or more days is likely over portions of the Sahel region and the Greater Horn of Africa, and Central Africa countries. There is an increased chance for daily rainfall to exceed 50mm over portions of Guinea, Sierra Leone, Mali, South of Niger, and Central of Sudan.
- There is an increased chance for daily maximum heat index to exceed 40°C over portions of Northwest Africa, Algeria and Mali.

1.2. Atmospheric Dust Concentration Forecasts (valid: 21 – 23 August 2019)

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: 21 – 25 August 2019

The Azores High Pressure system over the Northeast Atlantic is expected to weaken with its central pressure value decreasing from 1027hPa to 1023hPa during the forecast period.

The St. Helena High Pressure system over Southeast Atlantic Ocean is expected to strengthen with its central pressure value increasing from 1023hPa to 1040hPa during the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to weaken with its central pressure value decreasing from 1032hPa to 1029hPa during the forecast period.

Thermal low across the western Sahel region is expected to deepen slightly with its central pressure value of decreasing from 1005hPa to 1004hPa during the forecast period.

At 925-hPa level, strong dry northerly to northeasterly flow is expected to prevail across Northwest Africa. In contrast, moist southwesterly flow from the Atlantic Ocean is expected to prevail across the Gulf of Guinea and the Sahel regions, and the neighboring areas of Central Africa.

At 850-hPa, lower-level wind convergences are expected to remain active over portions of the Sahel Central Africa and Lake Victoria regions. A cyclonic circulation over the far western West Africa is expected to shift to the west during the forecast period.

At 700-hPa, a broad area of anticyclonic flow is expected to prevail across much of Northwest and West Africa during the forecast period.

At 500-hPa, wind speed associated with easterly flow is expected to exceed 30kts over local areas in the Sahel region during the forecast period.

The monsoon flow from the Atlantic Ocean with its associated lower-level convergence, and westward propagating meso-scale convective systems are expected to enhance rainfall over Western Africa, portions of the Sahel and Central Africa countries. Lower-level wind convergences are expected to enhance rainfall across portions of the Greater Horn of Africa. At least 25mm for two or more days is likely over portions of the Sahel region and the Greater Horn of Africa, and Central Africa countries. There is an increased chance for daily rainfall to exceed 50mm over portions of Guinea, Sierra Leone, Mali, South of Niger, and Central of Sudan. There is an increased chance for daily maximum heat index to exceed 40oC over portions of Northwest Africa, Algeria and Mali.

2.0. Previous and Current Day Weather over Africa

2.1. *Weather assessment for the previous day* (August 19, 2019)

Daily rainfall amount exceeded 25mm over portions Southeast Niger, South of Mali and portions of Northeast of Ghana, Togo, Benin and Northwest of Nigeria, Sudan and Ethiopia exceeded 50mm over South of Mali, Southeast Niger, Cameroon and Northwest of Nigeria.

2.2. *Weather assessment for the current day* (August 20, 2019)

Deep convective clouds are observed over portions of the Sahel, Central Africa and the Greater Horn of Africa regions.

