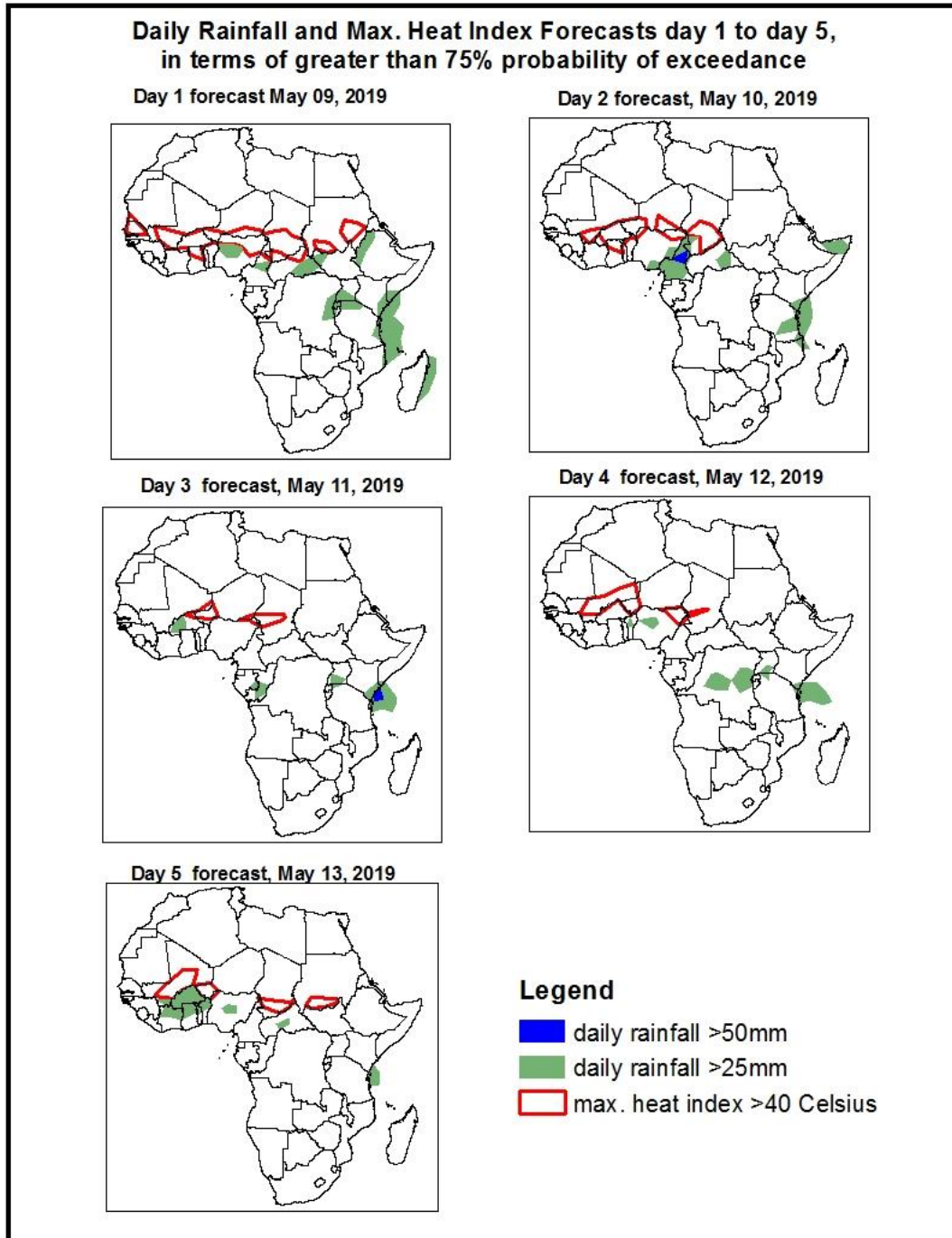


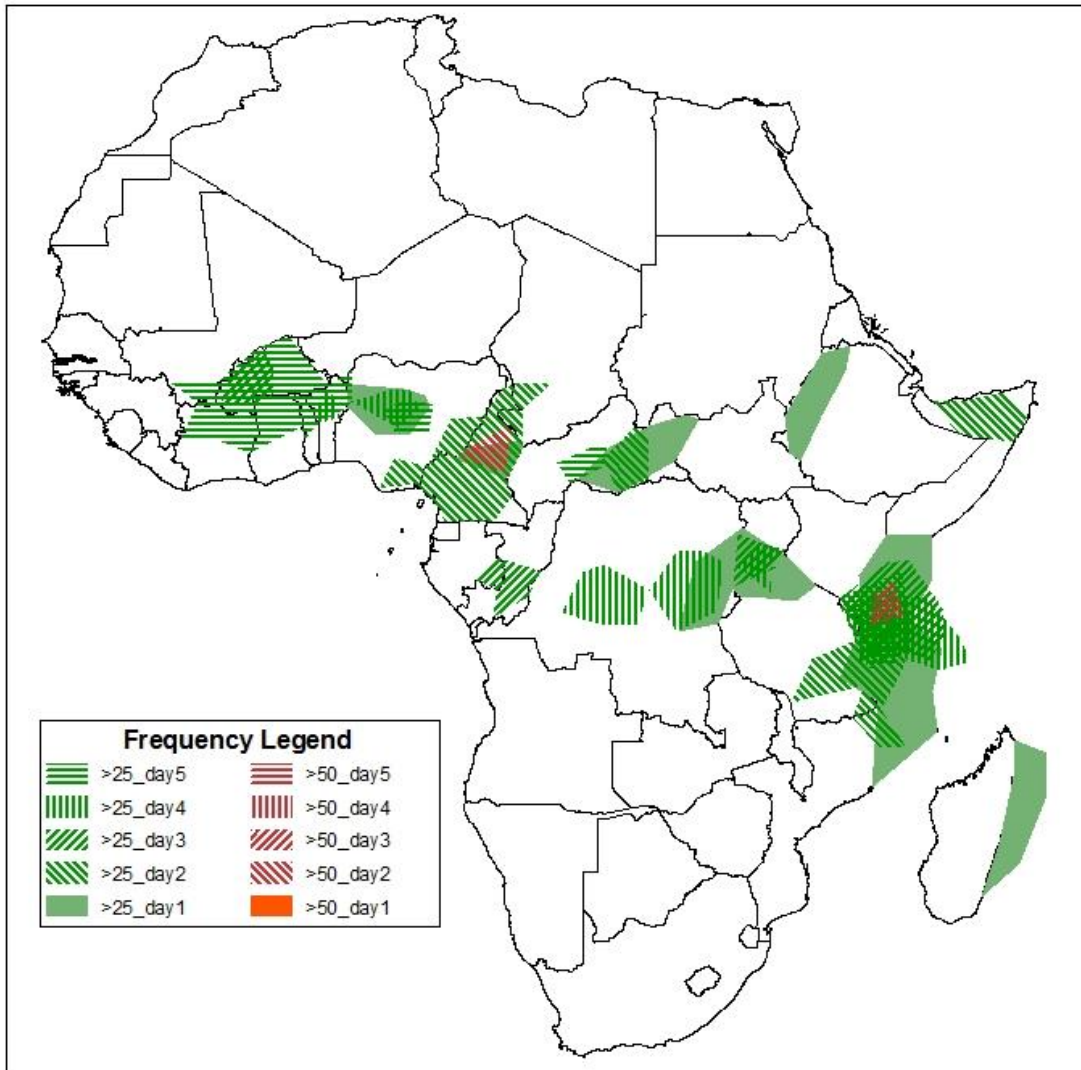
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on May 08, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: May 09 – 13, 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 May 09 - 13, 2019

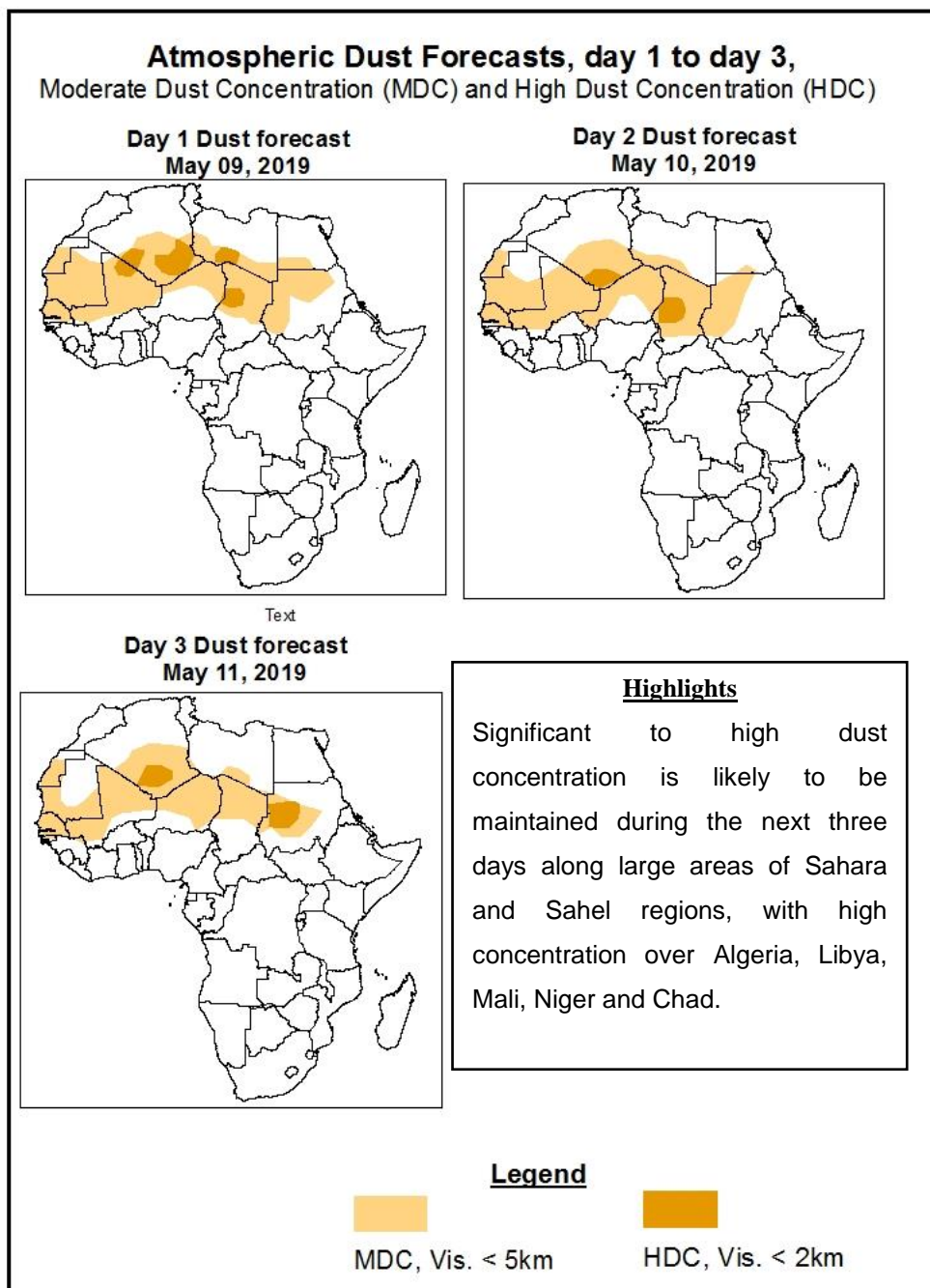


Highlights

- The Monsoon wind pattern over the Gulf of Guinea is expected to be maintained keeping scattered significant to enhanced precipitation over few areas.
- Low level converging winds are likely to cause moderate to enhanced precipitation over few areas in DRC, Uganda and CAR.
- The ITCZ across the coast of east Africa is likely to keep enhanced to heavy precipitation over some parts of the east African coastal areas, particularly in coastal areas of Tanzania and Kenya.
- At least 25mm for two or more days is likely over some areas over east Africa, particularly along the coastal areas of Tanzania and Kenya, LVB, and parts of Gulf of Guinea and central Africa.
- As the Monsoon rains shift further north, fewer areas in the Sahel, southern Sudan and Sudan are likely to feature increased chance for daily maximum heat index to exceed 40°C.

1.2. Atmospheric Dust Concentration Forecasts (valid: May 09 – 11 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: May 09 – 13 2019

Throughout the forecast period, the Azores High Pressure system over the North of Atlantic is expected to relax to the incoming frontal low pressure system coming from west. Its influence on weather over Africa is rather limited.

During the first half of the forecast period, the St. Helena High Pressure system over Southeast Atlantic Ocean is expected to relax to 1019hPa as a result of the frontal low from west. However, during the second half of the period, it is likely to rebuild significantly to around 1032hPa at times. Its influence on precipitation over southwest Africa is minimal as frontal lows dominate.

During the first half of the forecast period, the Mascarene High Pressure system over Southwest Indian Ocean is expected to slightly intensify to 1033hPa but the relaxing down to 1024hPa during the second half of the period due to the frontal low from west and therefore its influence on southwesterly winds towards the east African coast is expected to diminish.

At 925hPa level, strong winds are expected over Egypt, Sudan, Chad and Algeria. This translates to enhanced Atmospheric dust concentrations over these areas, during the period. In the Gulf of Guinea, Monsoon winds pattern has remained the same and is likely to be maintained during the forecast period. This favors localized enhanced precipitation over few areas. Meanwhile, converging, moist southeasterly winds towards East Africa are likely to keep moderate to enhanced precipitation over there, particularly along the Tanzanian Kenyan coastal areas.

At 850hPa, a trough from the Indian Ocean, associated with the zonal component of the ITCZ, is expected to continue influencing precipitation over east Africa. Moderate to enhanced falls are expected to be maintained over there. Also, at this level the converging winds over Angola, DRC, Uganda and CAR is likely to cause moderate to enhanced localized precipitation over there.

700hPa mainly easterly wind pattern is expected to be maintained, converging over GHA (Ethiopia, South Sudan), central Africa (CAR, DRC) as well as east Africa (Uganda, Kenya and Tanzania). The convergence is likely to favor deep convection over these areas.

During the period, the wind pattern at 500hPa is not well organized. However, majority of the winds are easterlies.

During the period, a Subtropical Westerly Jet at 200hPa is expected to be weak, rarely hitting (>130kts). Also, no bending is likely and therefore the GHA region is likely to remain generally calm with little to moderate localized precipitation.

The Monsoon wind pattern over the Gulf of Guinea is expected to be maintained keeping scattered significant to enhanced precipitation over few areas. Low level converging winds are likely to cause moderate to enhanced precipitation over few areas in DRC, Uganda and CAR. The ITCZ across the coast of east Africa is likely to keep enhanced to heavy precipitation over some parts of the east African coastal areas, particularly in coastal areas of Tanzania and Kenya. At least 25mm for two or more days is likely over some areas over east Africa, particularly along the coastal areas of Tanzania and Kenya, LVB, and parts of Gulf of Guinea and central Africa. As the Monsoon rains shift further north, fewer areas in the Sahel, southern Sudan and Sudan are likely to feature increased chance for daily maximum heat index to exceed 40°C.

2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (May 07, 2019)

Daily rainfall totals exceeding 25mm have been observed over some areas in Benin, Togo, Ghana and Burkina Faso.

2.2. Weather assessment for the current day (May 08, 2019)

Significant convection is observed over Cameroon. Otherwise, scattered moderate convection is seen over Uganda and Somalia. More stratiform but significant clouds are evident over the coast of Tanzania and southeastern South Africa

