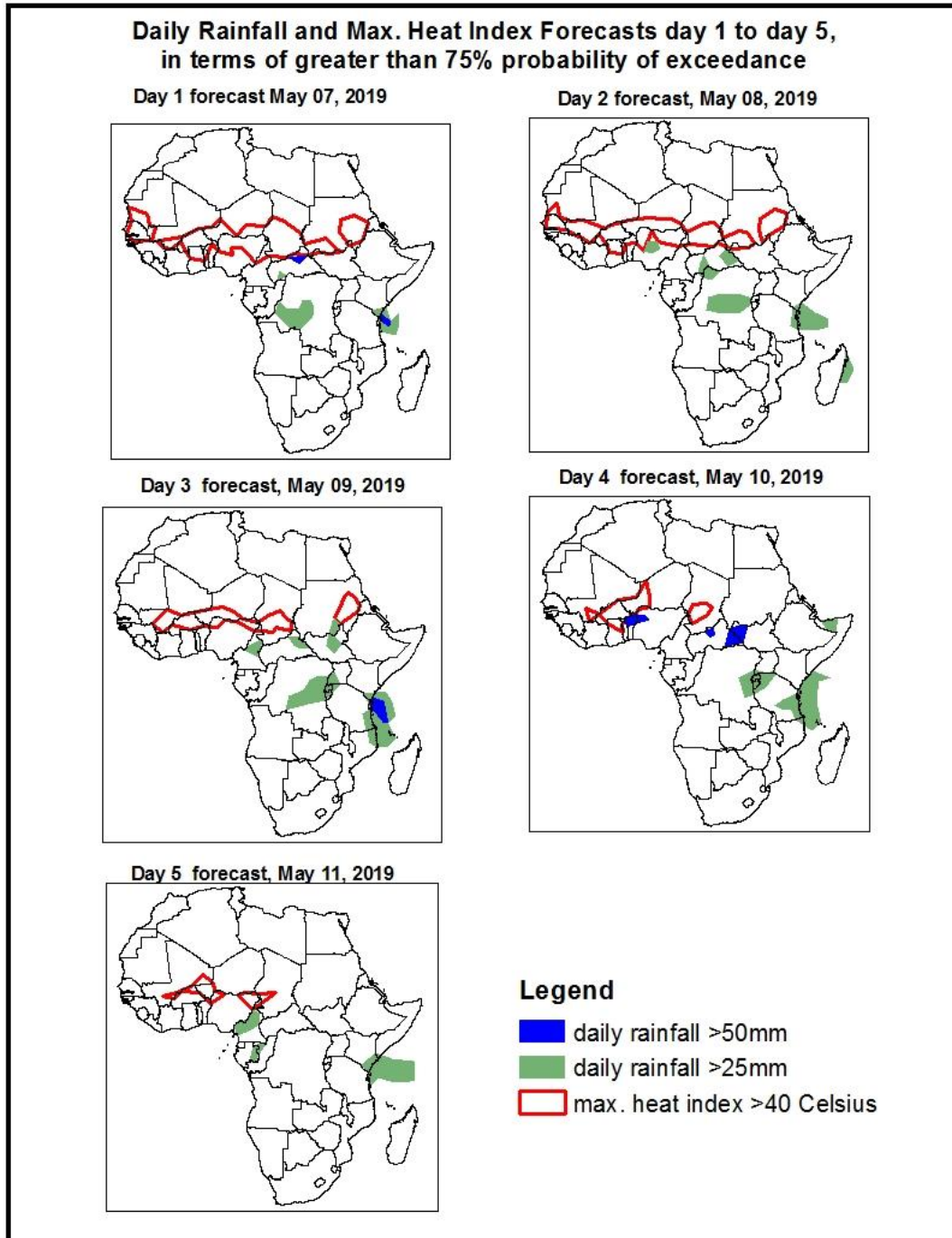


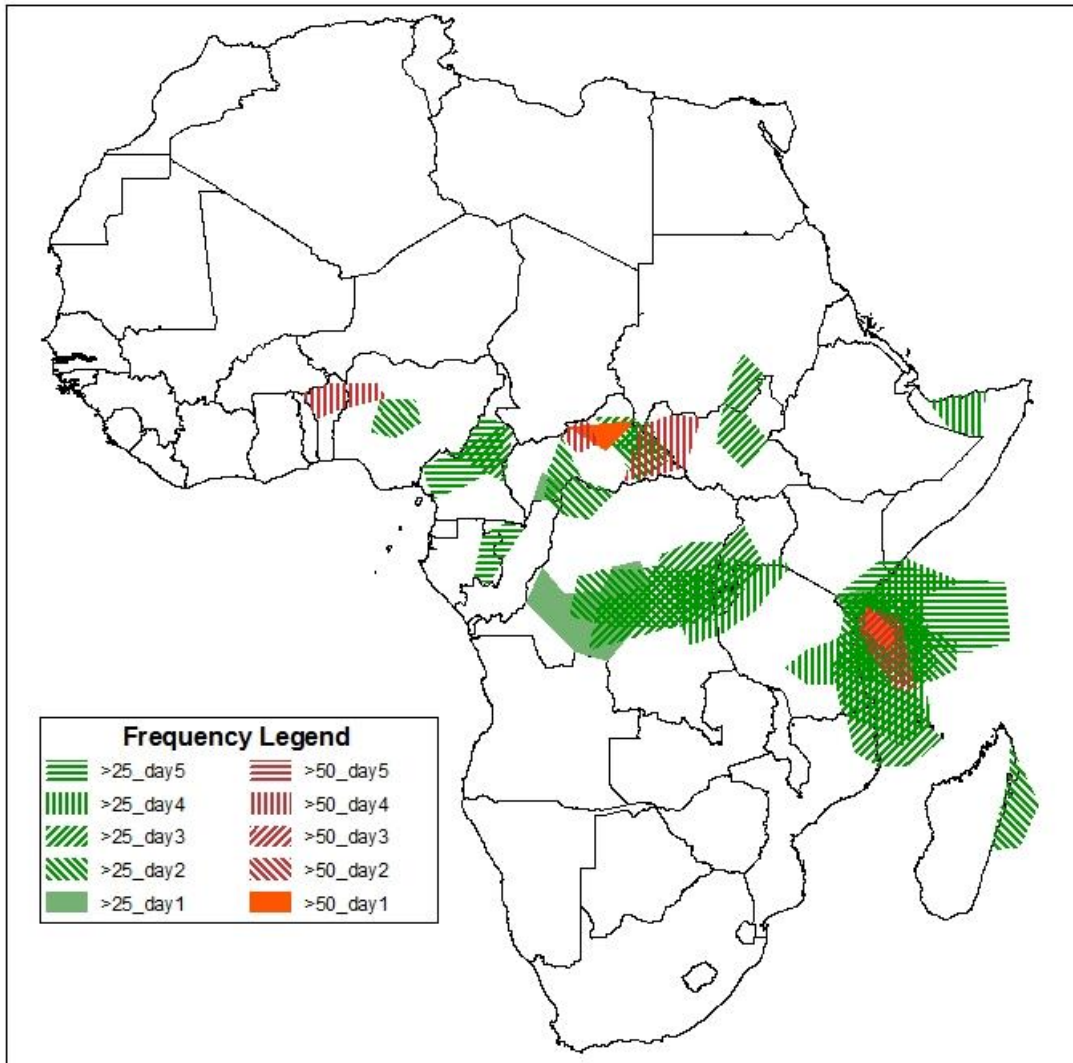
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on May 06, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: May 07 – 11, 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 07 - 11, 2019

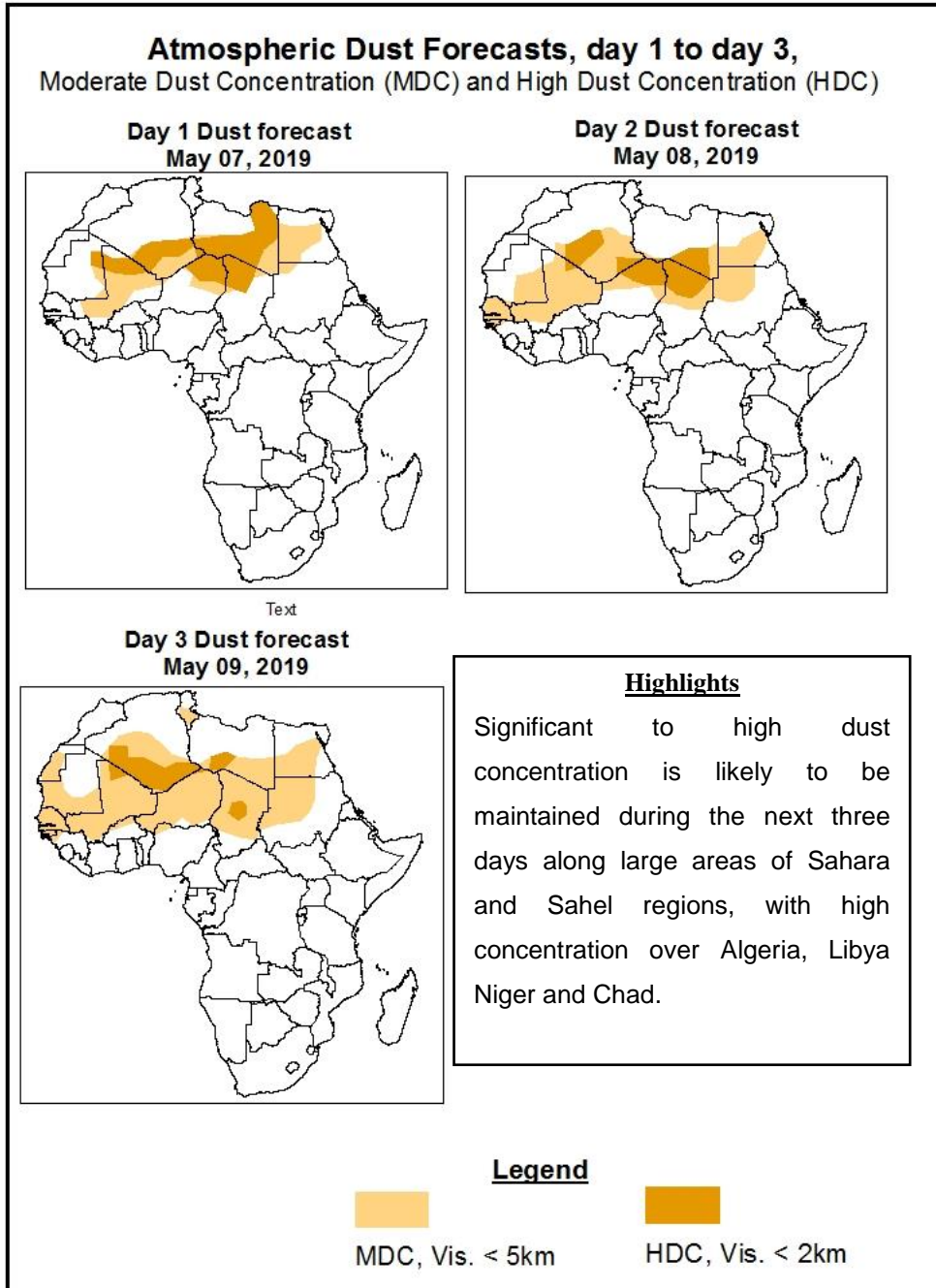


Highlights

- The Monsoon wind pattern over the Gulf of Guinea is expected to keep isolated significant to enhanced precipitation over few areas in the Gulf of Guinea.
- The low level converging winds are likely to cause moderate to enhanced precipitation over some areas in central Africa (CAR and DRC), few areas in South Sudan towards southern Sudan and some areas along the East African coast.
- The ITCZ across the coast of east Africa is likely to keep enhanced to heavy precipitation over some parts of the east African coast, particularly in northern Tanzania and, with lower chances, south coast of 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, and over central Africa (DRC and eastern CAR).
- There is an increased chance for daily maximum heat index to exceed 40°C across some areas in the Sahel region as well as few in southern Sudan and South Sudan.

1.2. Atmospheric Dust Concentration Forecasts (valid: May 07 – 09 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 07 – 11 2019

The Azores High Pressure system over the North of Atlantic is expected to maintain a central pressure of around 1023hPa while ridging over northwest Africa. However, during the end of the forecast period, it is expected to be eroded by a frontal low from west. This is likely to keep dry conditions over extreme northern Africa.

During most the forecast period, the St. Helena High Pressure system over Southeast Atlantic Ocean is expected to slowly relaxing from 1020hPa to 1019hPa as a result of the frontal lows from west. However, during the end of the period, it is likely to rebuild significantly to around 1026hPa. Its influence on precipitation over southwest Africa is minimal as frontal lows dominate.

Throughout the forecast period, the Mascarene High Pressure system over Southwest Indian Ocean is expected to intensify from 1031hPa to 1033hPa. It is therefore expected to influence moist southeasterly winds towards the east African coast.

At 925hPa level, winds are expected to peak up during the mid-period, especially over Egypt, Sudan and Chad and therefore enhancing Atmospheric dust concentrations over there. In the Gulf of Guinea, Monsoon winds are favoring only localized enhanced precipitation over few areas, especially near or at the coastal areas. Meanwhile, converging, moist southeasterly winds towards East Africa are likely to keep moderate to enhanced precipitation over there, particularly along the Tanzanian coast. The converging winds are also expected over South Sudan, causing moderate precipitation over there.

At 850hPa, a trough from the Indian Ocean, associated with the zonal component of the ITCZ, is expected to continue influencing precipitation over East. Moderate to enhanced falls exist over there. The system is also expected to influence further interior as far as DRC. South Sudan and CAR are also likely to be affected by these winds, with moderate precipitation expected.

700hPa mainly easterly wind pattern is expected to be maintained, converging over CAR, northern and central DRC as well as Kenya. This is likely to keep convective precipitation over these areas.

Mainly easterly 500hPa wind pattern, especially during the start of the period, together with 700mb pattern, are likely to help propagating activities generally towards west over central and east Africa.

During the period, a Subtropical Westerly Jet at 200hPa is expected to be rather weak, with only occasional winds (>130kts). However, from mid towards the end of the forecast period, a sharp bending is likely to enhance precipitation towards the end of the forecast period over the great horn of Africa.

The Monsoon wind pattern over the Gulf of Guinea is expected to keep isolated significant to enhanced precipitation over few areas in the Gulf of Guinea. The low level converging winds are likely to cause moderate to enhanced precipitation over some areas in central Africa (CAR and DRC), few areas in South Sudan towards southern Sudan and some areas along the East African coast. The ITCZ across the coast of east Africa is likely to keep enhanced to heavy precipitation over some parts of the east African coast, particularly in northern Tanzania and, with lower chances, south coast of 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, and over central Africa (DRC and eastern CAR). There is an increased chance for daily maximum heat index to exceed 40oC across some areas in the Sahel region as well as few in southern Sudan and South Sudan.

2.0. Previous and Current Day Weather over Africa

2.1. *Weather assessment for the previous day* (May 05, 2019)

Daily rainfall totals exceeding 25mm have been observed over some areas in central and east Africa, especially along the coastal areas.

2.2. *Weather assessment for the current day* (May 06, 2019)

Significant convection is observed over northern DRC.

