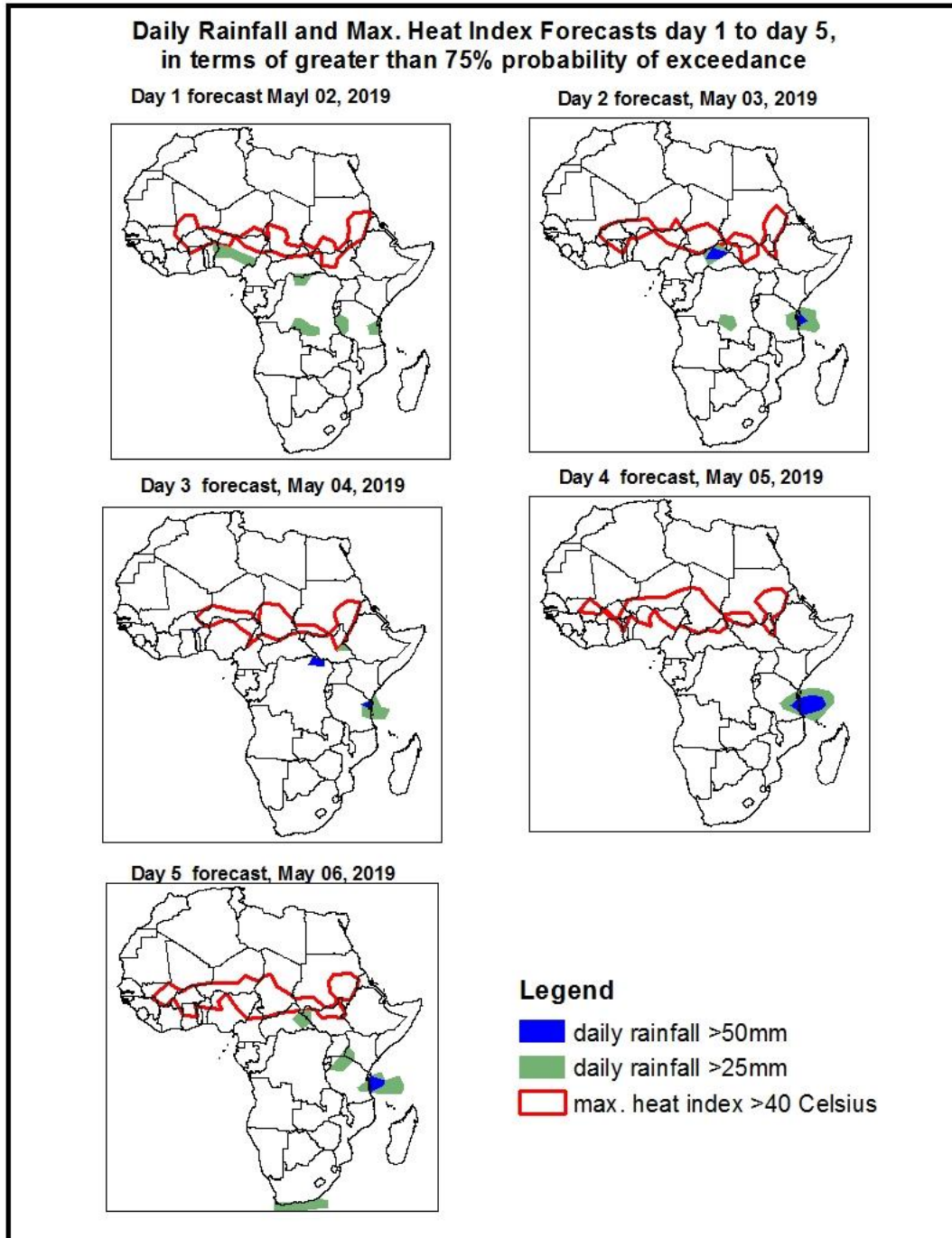


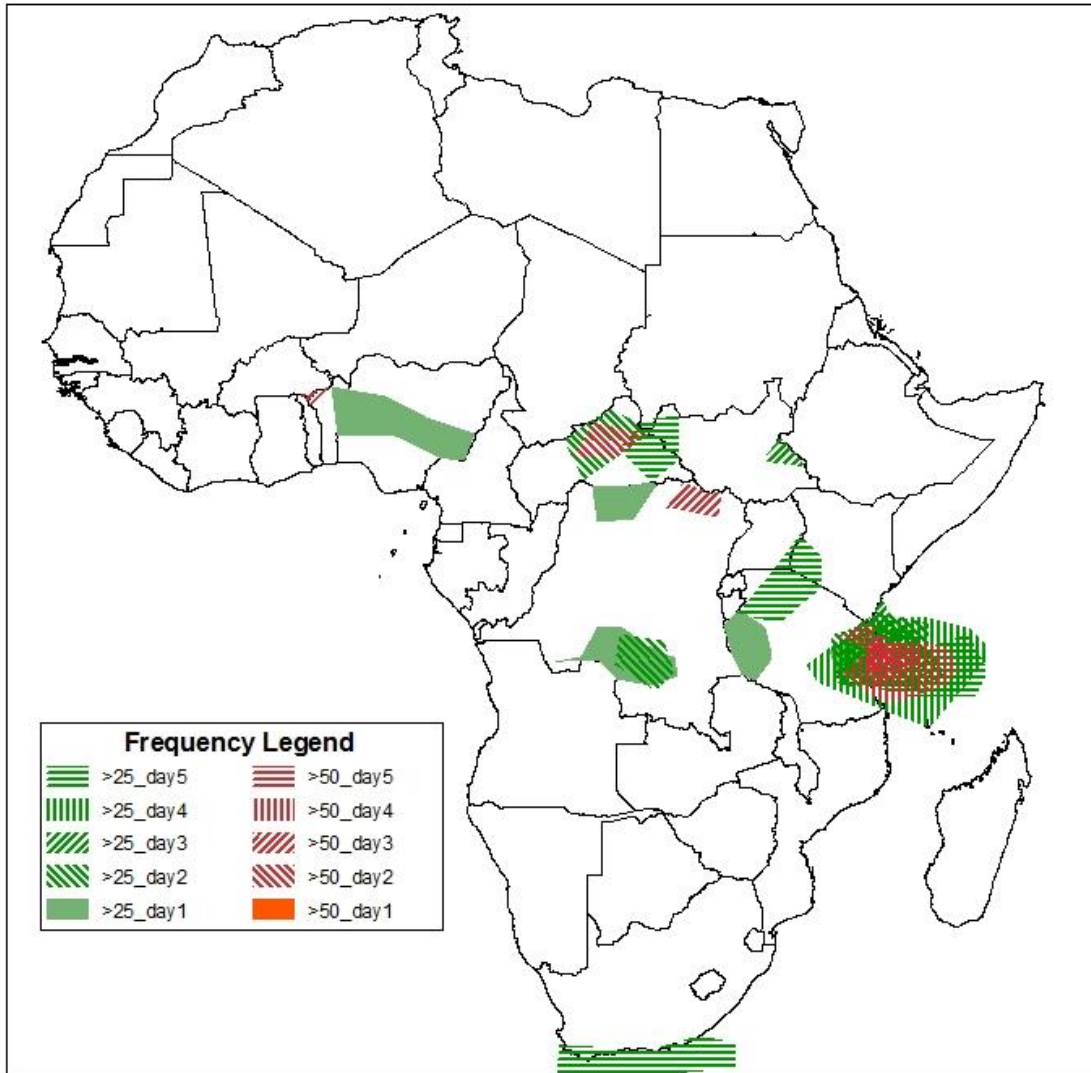
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on April 30, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: May 02 – 06, 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 02 - 06, 2019

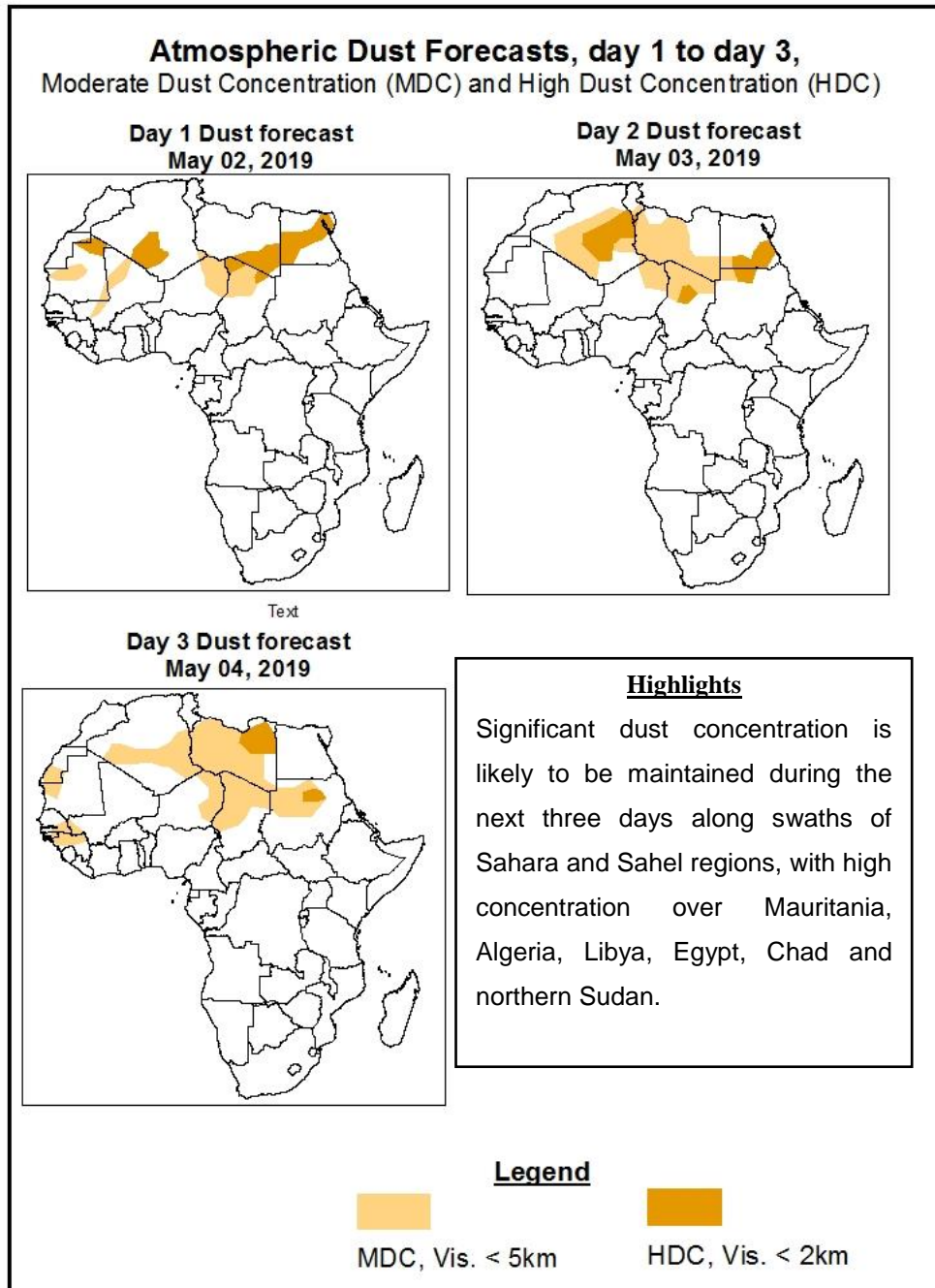


Highlights

- The Monsoon wind pattern over the Gulf of Guinea is expected to keep significant to enhanced, but very localized, precipitation.
- The converging winds over the central Africa (CAR and DRC) are likely to cause moderate to heavy occasional precipitation over there.
- The ITCZ across the coast of east Africa, couple by strengthening Mascarene high pressure system, is likely to keep enhanced to heavy precipitation over some parts of the east African coast, particularly Tanzania.
- At least 25mm for two or more days is likely over some areas over east Africa, particularly along the coastal areas of Tanzania.
- 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 the Gulf of Guinea, CAR, southern Sudan and South Sudan.

1.2. Atmospheric Dust Concentration Forecasts (valid: May 02 – 04 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 02 – 06 2019

During the start of the forecast period, the Azores High Pressure system over the North of Atlantic is expected to relax from 1024hPa to 1021hPa and then maintain this pressure pretty much throughout the rest of the period. Throughout the period, it is expected to be confined further west due to heat lows dominating West Africa. Its influence on African weather is therefore minimal.

Throughout the forecast period, the St. Helena High Pressure system over Southeast Atlantic Ocean is expected to be strengthening from 1018hPa to 1032hPa towards the end of the period. However, its influence on African precipitation is minimal.

Despite the passage of the frontal low in the south, the Mascarene High Pressure system over Southwest Indian Ocean is expected to generally be maintained at around 1026-1027hPa throughout the forecast period. This is likely to keep enhanced easterly to southeasterly flow of winds towards the east African coastal areas, maintaining moderate to enhanced precipitation, occasionally becoming heavy.

At 925hPa, the zones of strong winds are expected to spread to parts of Libya, Egypt, Chad and Sudan, enhancing Atmospheric dust concentrations over there. Further south over the Gulf of Guinea, Monsoon winds are only likely to influence localized enhanced precipitation over few areas. Meanwhile, moist southeasterly winds towards the East African coast are likely to keep moderate to enhanced precipitation over there.

At 850hPa level, the converging wind patterns over central Africa (CAR) as well as South Sudan are likely to maintain moderate to enhanced precipitation with a possibility of localized heavy precipitation. Further south, over DRC and Tanzania, the trough from the Indian Ocean, associated with the zonal component of the ITCZ, is expected to keep moderate to enhanced with chances of heavy falls over there.

700hPa mainly easterly wind pattern is expected to be maintained, converging over South Sudan, central to western Tanzania, DRC and over much of central Africa. This is likely to enhance convective precipitation over these areas while advecting it towards west.

Mainly easterly 500hPa wind pattern is expected 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 fairly strong with winds (>130kts) expected to occasionally occur over North Africa. A weak bending, expected during the second half of the forecast period, is unlikely to have impact on precipitation over the GHA.

The Monsoon wind pattern over the Gulf of Guinea is expected to keep significant to enhanced, but very localized, precipitation. The converging winds over the central Africa (CAR and DRC) are likely to cause moderate to heavy occasional precipitation over there. The ITCZ across the coast of east Africa, couple by strengthening Mascarene high pressure system, is likely to keep enhanced to heavy precipitation over some parts of the east African coast, particularly Tanzania. At least 25mm for two or more days is likely over some areas over east Africa, particularly along the coastal areas of Tanzania. 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 the Gulf of Guinea, CAR, southern Sudan and South Sudan.

2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (April 30, 2019)

Daily rainfall totals exceeding 25mm is observed localized over parts of the central Africa (Cameroon, southern Chad and DRC).

2.2. Weather assessment for the current day (May 01, 2019)

Significant convection is observed over parts of central Africa and along the Gulf of Guinea.

