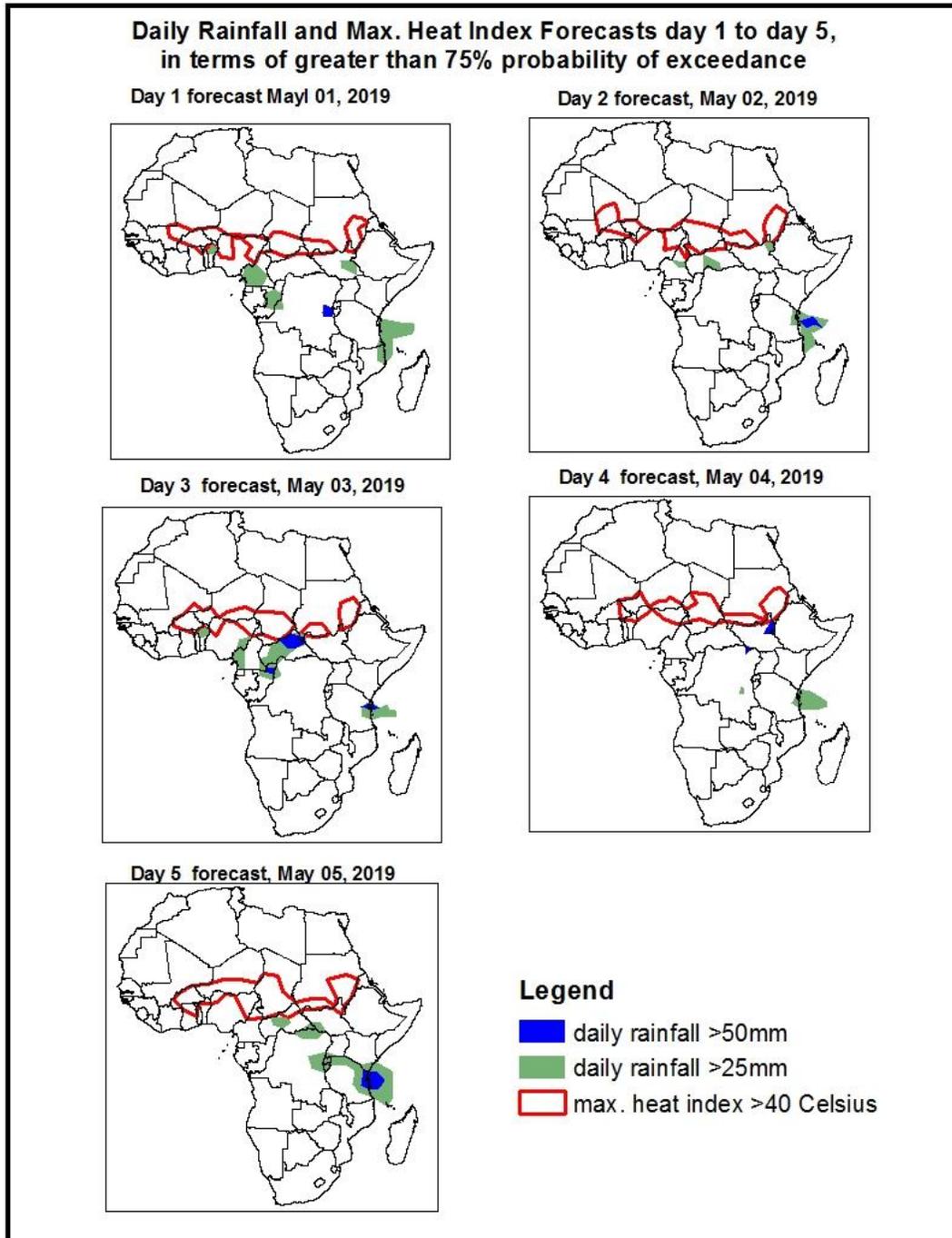


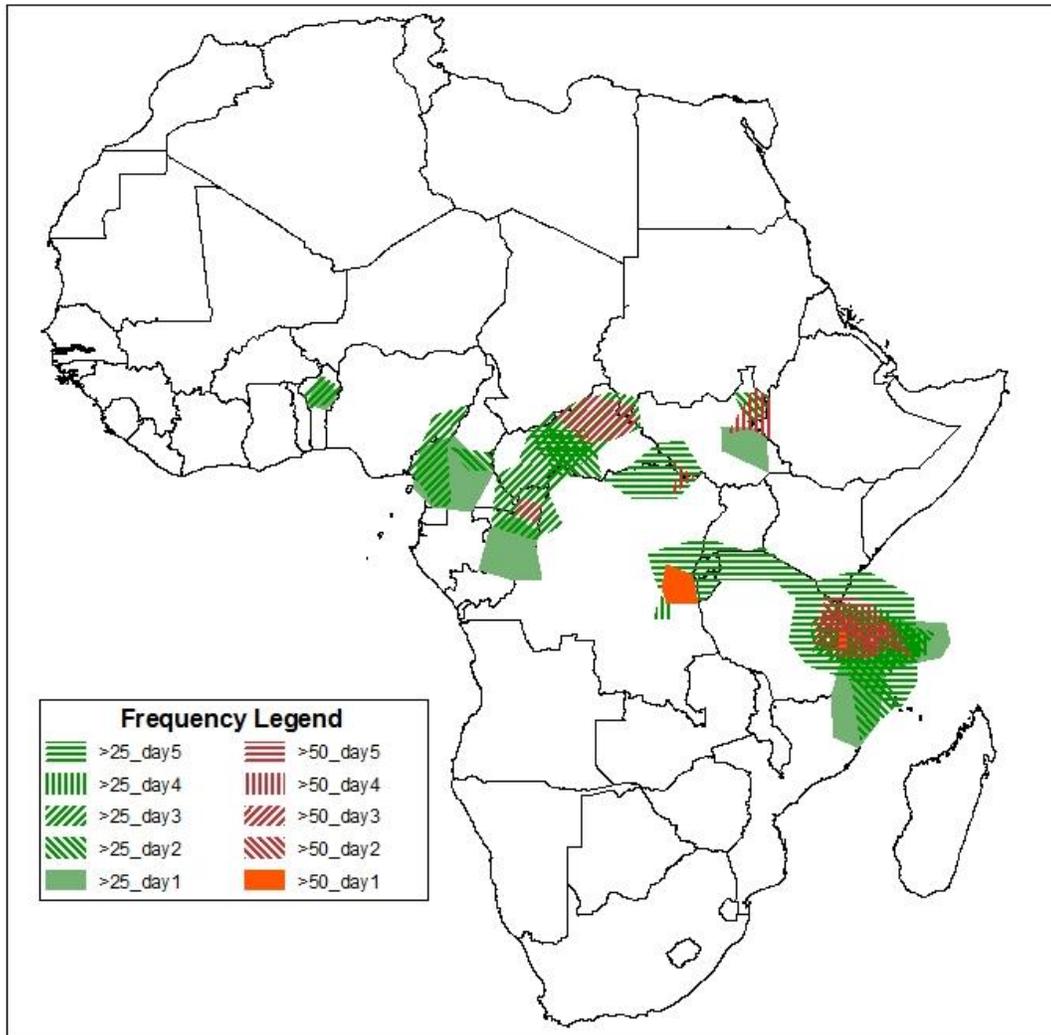
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on April 30, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: May 01 – 05, 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 01 - 05, 2019

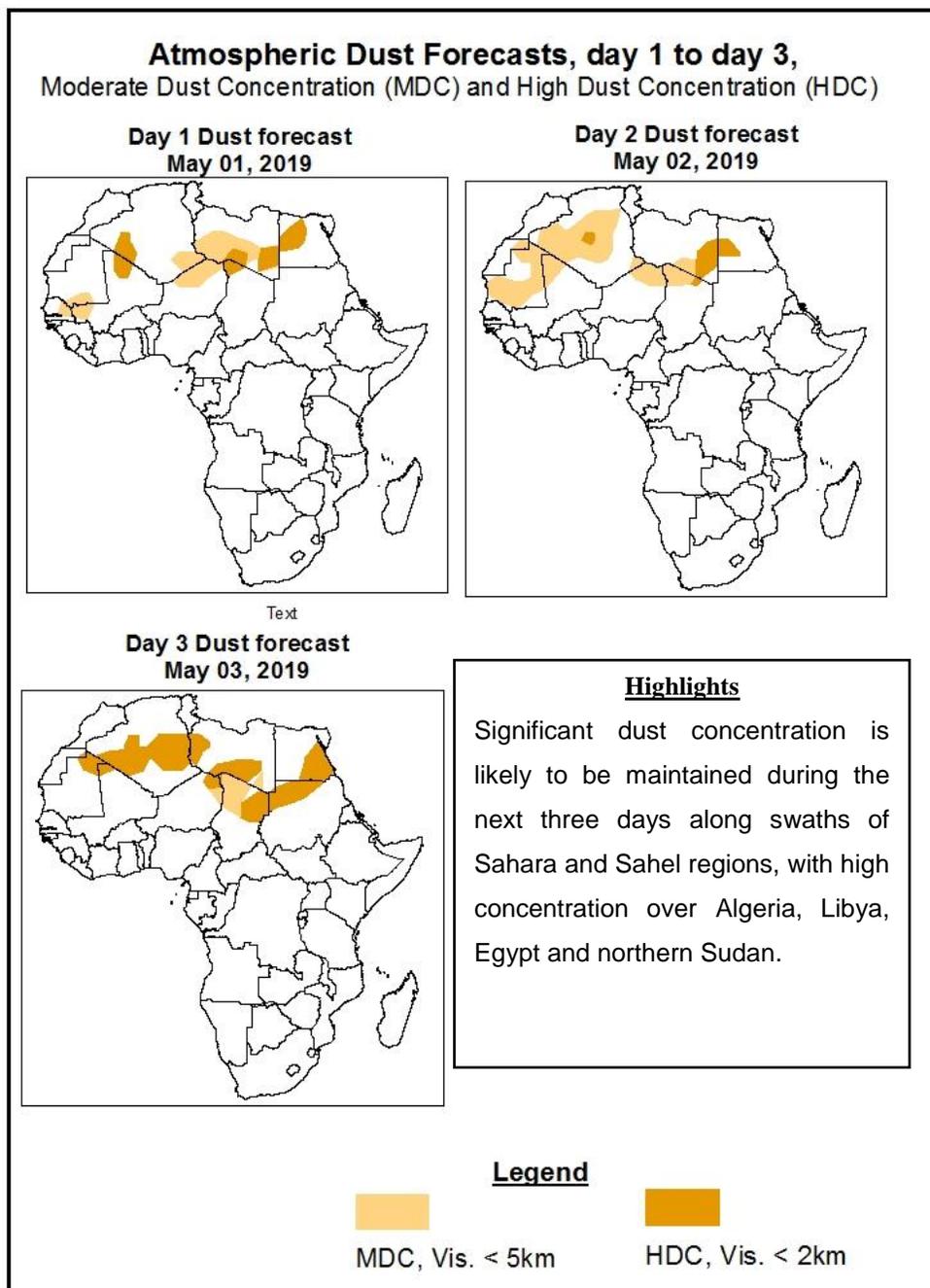


Highlights

- Over the central Africa, low to mid-level converging winds are likely to enhance convective activities over the region, particularly the CAR, DRC and Cameroon.
- A well organized 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 as well as those in northern Mozambique. CAR, eastern DRC and South Sudan are also expected to receive at least 25mm or rainfall for two or more days.
- 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 01 – 03 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 01 – 05 2019

During the first half of the forecast period, the Azores High Pressure system over the North of Atlantic is expected to relax slightly from 1026hPa to 1024hPa and then be maintained at around 1021hPa through the second half 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.

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, winds are expected to be strong over parts of Libya, 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, converging surface winds along the East African coast are likely to keep moderate to enhanced precipitation over there.

At 850hPa level, the converging wind patterns over central Africa (DRC, CAR and Cameroon) as well as South Sudan are likely to maintain moderate to enhanced precipitation with a possibility of localized heavy precipitation.

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. As no bending (trough) is likely, then its influence on African precipitation is minimal.

Over the central Africa, low to mid-level converging winds are likely to enhance convective activities over the region, particularly the CAR, DRC and Cameroon. A well organized 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 as well as those in northern Mozambique. CAR, eastern DRC and South Sudan are also expected to receive at least 25mm or rainfall for two or more days. 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 29, 2019)

Daily rainfall totals exceeding 25mm is observed localized over parts of the Gulf of Guinea (Ivory Coast, Ghana and Benin), Lake Victoria Basin (LVB), northern Mozambique and northeastern Madagascar.

2.2. Weather assessment for the current day (April 28, 2019)

Fairly deep convection is observed over CAR, South Sudan and over DRC.

