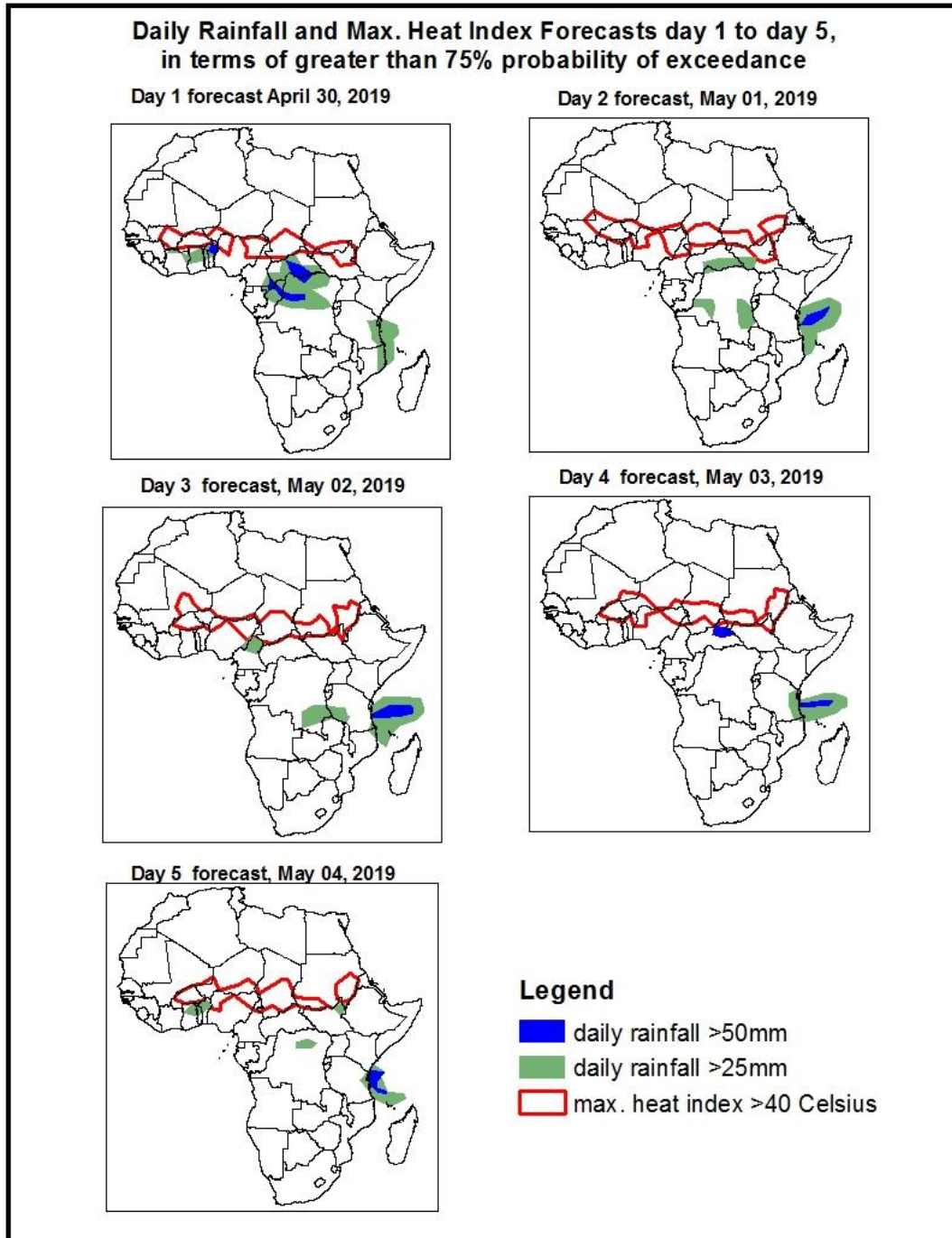


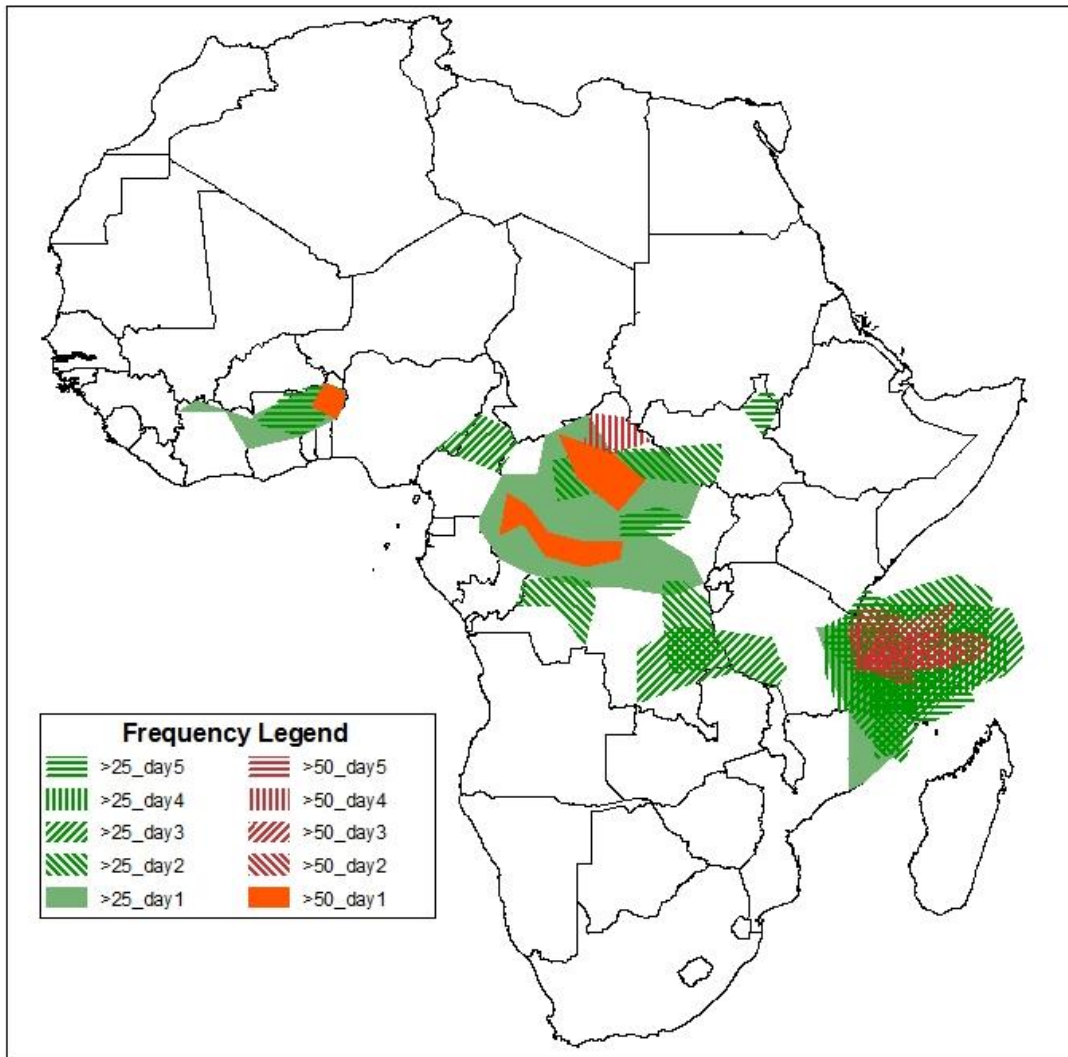
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on April 29, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: April 30 – 04 May, 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 Apr 30 - May 04, 2019

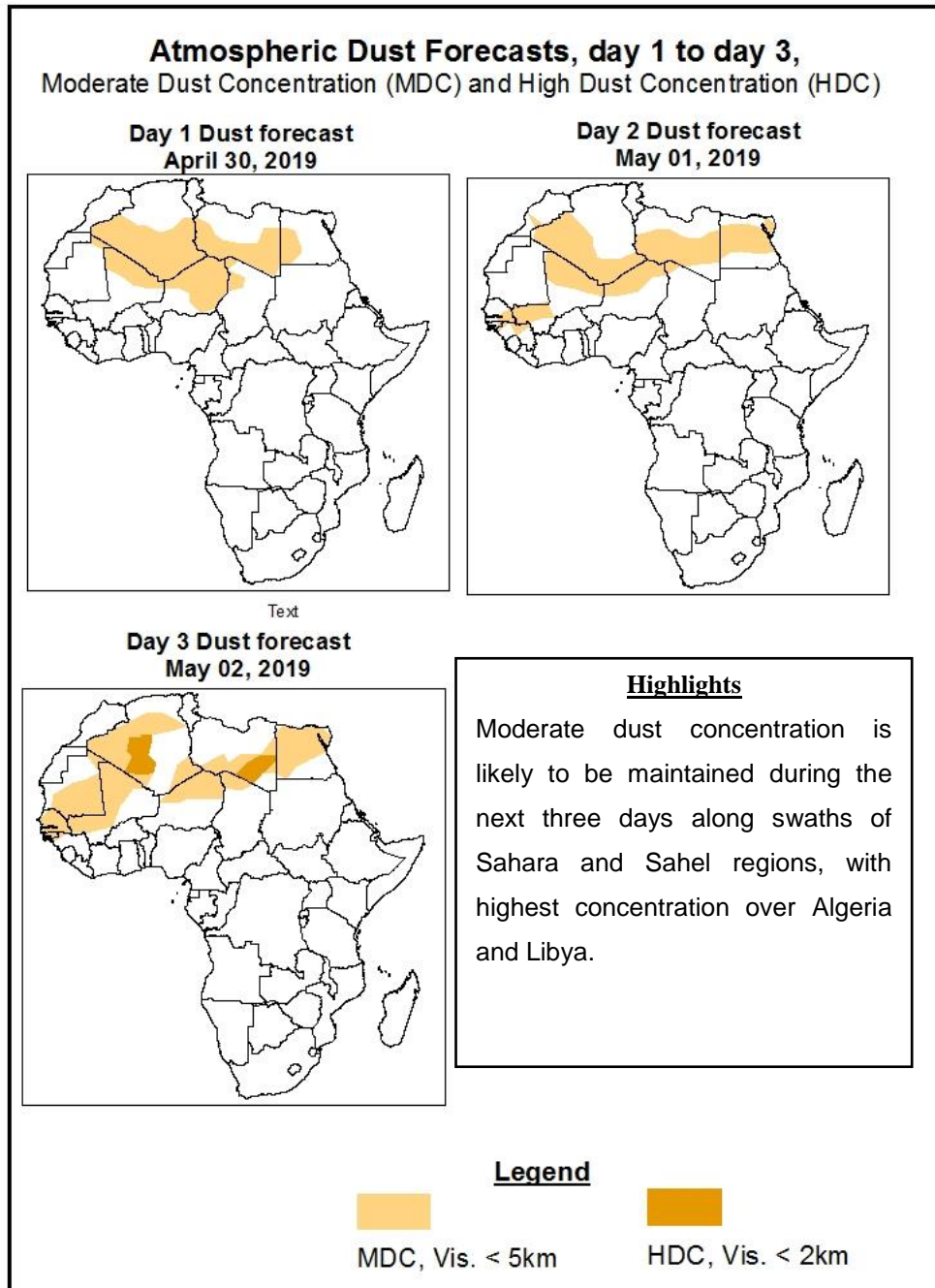


Highlights

- The trough associated with Monsoon winds is expected to cause localized enhanced precipitation over few areas in the Gulf of Guinea.
- Over the central Africa, low to mid-level converging winds are likely to enhance convective activities over the region, particularly the DRC and CAR.
- The well organized ITCZ across the coast of east Africa is likely to keep enhanced to heavy precipitation over some parts.
- 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 Mozambique. Eastern DRC is 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 Gulf of Guinea, CAR, southern Sudan and South Sudan.

1.2. Atmospheric Dust Concentration Forecasts (valid: 30 April – 02 May 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: April 30 – 04 May 2019

During the first half of the period, the Azores High Pressure system over the North of Atlantic is likely to be maintained at around 1022-1026hPa and be confined further west due to heat lows dominating west Africa.

During the first half of the period, the St. Helena High Pressure system over Southeast Atlantic Ocean is expected to be maintained at around 1019hPa before strengthening to 1033hPa during the second half of the period.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to generally be maintained at around 1026hPa throughout the forecast period. However, in mid-period it is likely to intensify as high as 1028hPa. This is likely to enhance southeasterly flow of winds towards the east African coastal areas, maintaining moderate to enhanced precipitation.

At 925hPa, generally weak winds are expected to be maintained over most of the Sahara and Sahel regions. However, during mid-period, isolated areas of strong winds are expected over Algeria, causing fairly high Atmospheric dust concentrations over there. Meanwhile, converging surface winds along the East African coast are likely to keep moderate to enhanced precipitation over there.

At 850hPa level, the trough associated with Monsoon winds over the Gulf of Guinea is expected to keep isolated but moderate to enhanced precipitation over there. The East African coast is also expected to be influenced by the trough from the Indian Ocean associated with the ITCZ, resulting in moderate to enhanced precipitation.

700hPa wind pattern is dominated by mainly easterlies, converging over central to western Tanzania, DRC, and over much of central Africa. This is likely to enhance convective precipitation over these areas advecting it towards west.

Northeasterly 500hPa wind pattern is expected to help propagating activities towards southwest over central and east Africa. Further north, there is persistent cyclonic flow over

the Sahel region signaling the presence of the ITCZ over there and the approach of the rain season.

During the period, a Subtropical Westerly Jet at 200hPa is expected to be fairly strong with winds (>130kts) expected over North Africa. As no bending (trough) is likely, then its influence on African precipitation is minimal.

The trough associated with Monsoon winds is expected to cause localized enhanced precipitation over few areas in the Gulf of Guinea. Over the central Africa, low to mid-level converging winds are likely to enhance convective activities over the region, particularly the DRC and CAR. The well organized ITCZ across the coast of east Africa is likely to keep enhanced to heavy precipitation over some parts. 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 Mozambique. Eastern DRC is 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 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 28, 2019)

Daily rainfall totals exceeding 25mm is observed over parts of the Gulf of Guinea (Ivory Coast and Ghana), along the northern coast of Mozambique and northern CAR.

2.2. Weather assessment for the current day (April 29, 2019)

Enhanced convection is evident along the Gulf of Guinea and central Africa.

