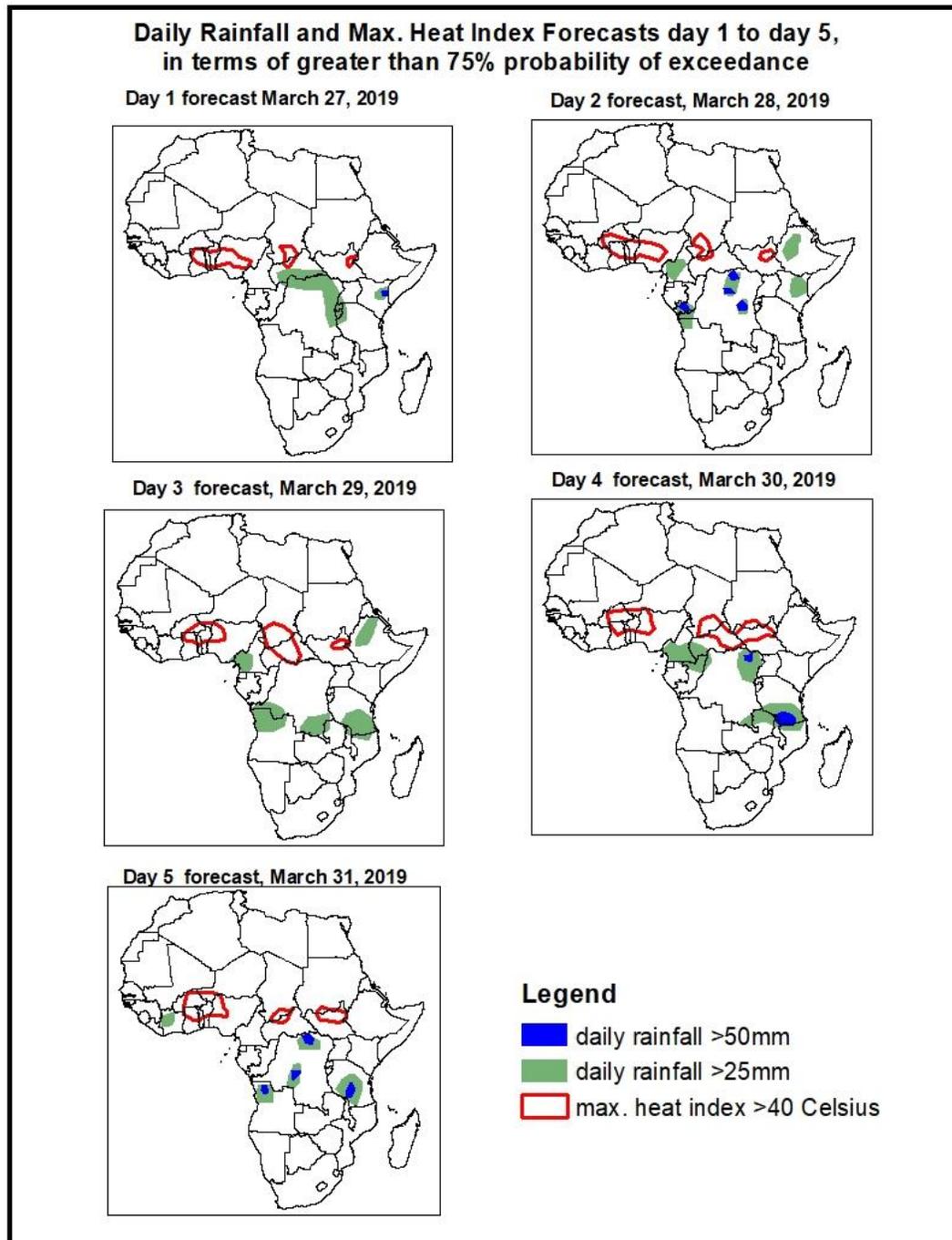


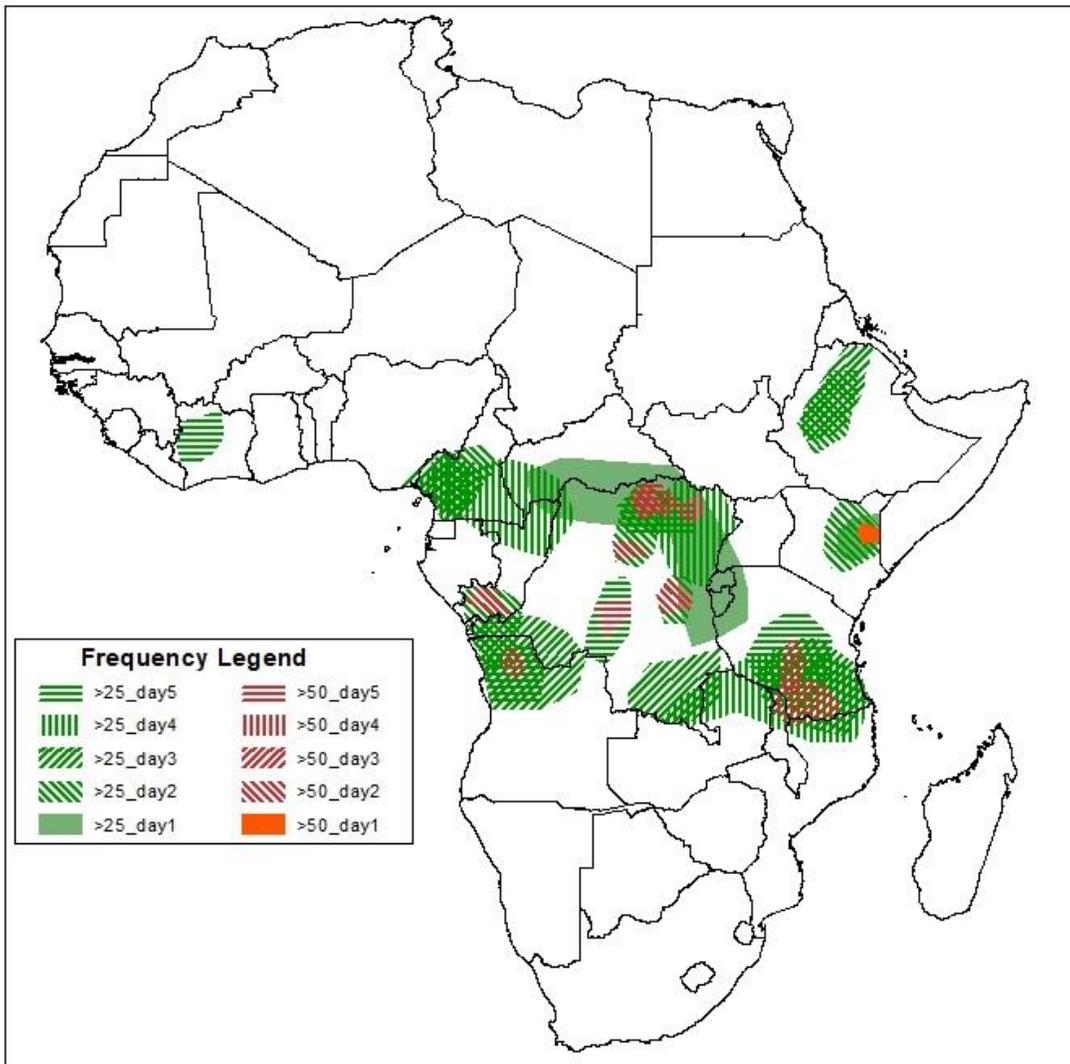
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on March 26, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 27 - 31 March, 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 27 - 31 March, 2019.

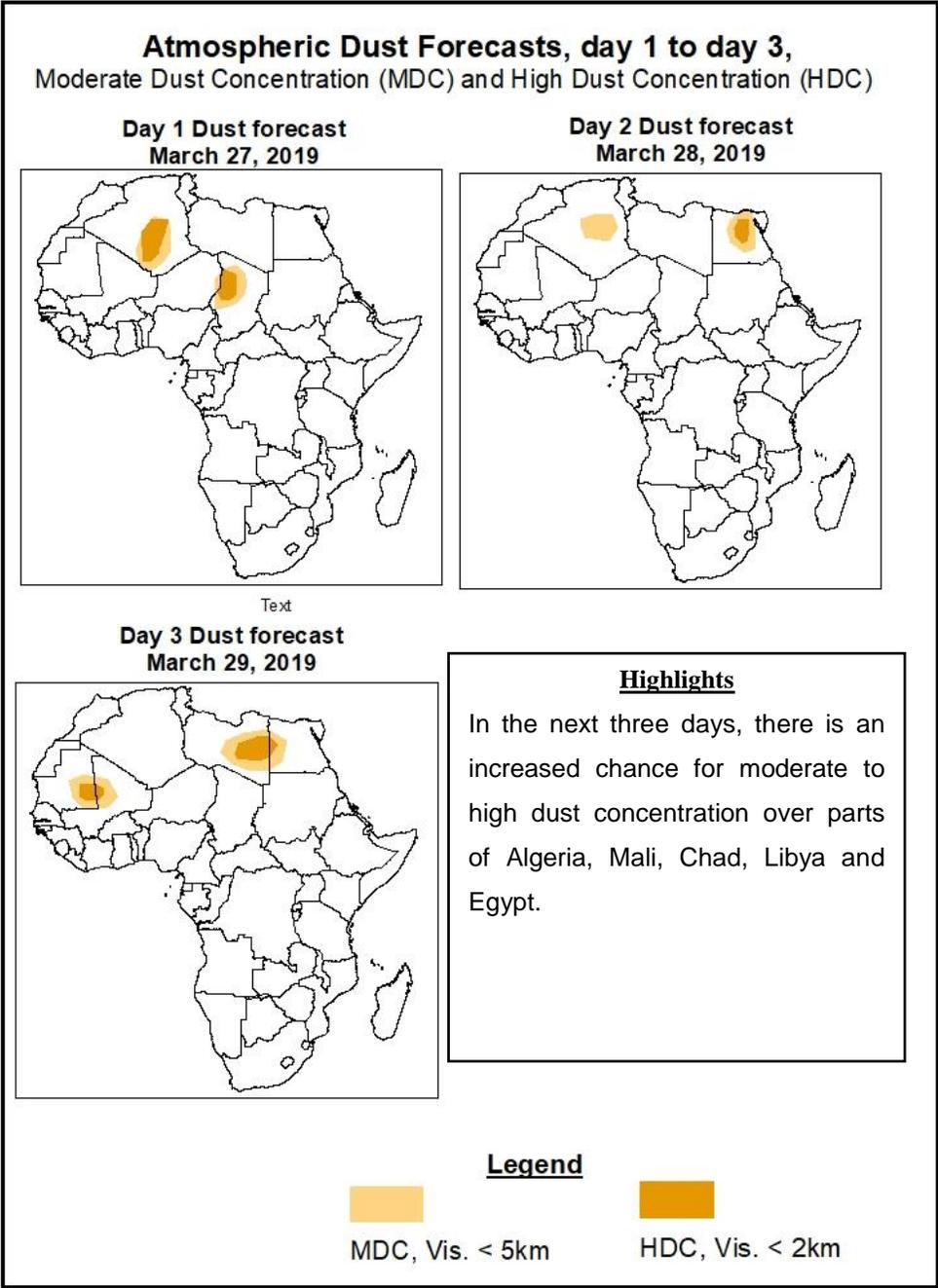


Highlights

- In the next five days, lower-level wind convergences near DRC/CAR border, interactions between mid-latitude and tropical systems across northeastern Africa, and lower-level wind convergence over portions of Angola and Tanzania are expected to enhance rainfall in the regions.
- There is an increased chance for daily rainfall amount to exceed 25mm for 2 or more days over parts of Angola, DRC, Ethiopia, and Tanzania.
- There is a high likelihood for heat index to exceed 40°C across parts of Burkina Faso, northern Ghana, northern Togo, northern Benin, western Niger, northern Nigeria, Chad, and local areas in eastern South Sudan and western Ethiopia.

1.2. Atmospheric Dust Concentration Forecasts (valid: 27 – 29 March 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: 27 - 31 March 2019

The Azores High Pressure system over the North of Atlantic Ocean is expected to progress eastwards while generally maintaining its central pressure value of 1038 during the first half of the forecast period before relaxing from 1036 all the way down to 1021 during the last half of the period.

Meanwhile, the St. Helena High Pressure system over Southeast Atlantic Ocean is expected to remain weak throughout the period due to intrusion of frontal low from the South.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to relax due to the coming frontal low from the West; however at times the system tends to intensify and ridge along the East coast of Southern Africa influencing weather conditions there especially during the first half of the forecast period.

At 925hPa, a broad area of dry and strong northerly to northeasterly wind is expected to prevail across Northwest and North Africa, and portions of the Sahel region. In contrast, moist southwesterly flow is expected to prevail across the central and eastern portions of the Gulf of Guinea countries.

At 850hPa, the frontal low in the Northern Hemisphere is expected to cause interaction between Tropical and Extra-tropical systems across Northeastern Africa, especially over Ethiopia and Northern Kenya. Otherwise Western Tanzania is under favorable converging winds as the result of Congo air mass and the effects of Meridional arm of the ITCZ migrating towards the East. As for Southern Tanzania, the depression over the Mozambique Channel is expected to maintain or even increase of rainfall over there. DRC and CAR are also expected to receive significant precipitation due to low level convergence over the region associated by the Zonal component of the ITCZ.

At 700hPa, a broad area of cyclonic circulation is expected to prevail across Northeast Mediterranean Sea and the Northeast Africa, with its associated trough extending southwards into Sudan and western Ethiopia. Also, generally easterly flow is expected to steer convective activities from DRC towards the West affecting the Gulf of Guinea and central Africa regions.

At 500hPa, wind speed in excess of 30kts is expected to prevail across the equatorial Africa region during the first half of forecast period.

At 200hPa, a strong wind (>90kts), associated with the subtropical westerly jet, is expected to prevail across northern Africa, with the strongest wind (>130kts) over Northwest Africa, and slight southward bending over Northeast Africa.

In the next five days, lower-level wind convergences near DRC/CAR border, interactions between mid-latitude and tropical systems across northeastern Africa, and lower-level wind convergence over portions of Angola and Tanzania are expected to enhance rainfall in the regions. There is an increased chance for daily rainfall amount to exceed 25mm for two or more days over parts of Angola, DRC, Ethiopia, and Tanzania. There is a high likelihood for heat index to exceed 40°C across parts of Burkina Faso, northern Ghana, northern Togo, northern Benin, western Niger, northern Nigeria, Chad, and local areas in eastern South Sudan and western Ethiopia.

2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (March 25, 2019)

Daily rainfall totals exceeded 25mm over parts of southern Cameroon, Gabon, parts of DRC, CAR, Malawi, northern Mozambique, and local areas in South Africa.

2.2. Weather assessment for the current day (March 26, 2019)

Intense convective clouds are observed over many places in the central and the northern portions of Southern Africa countries, and parts of Ethiopia and Madagascar.

