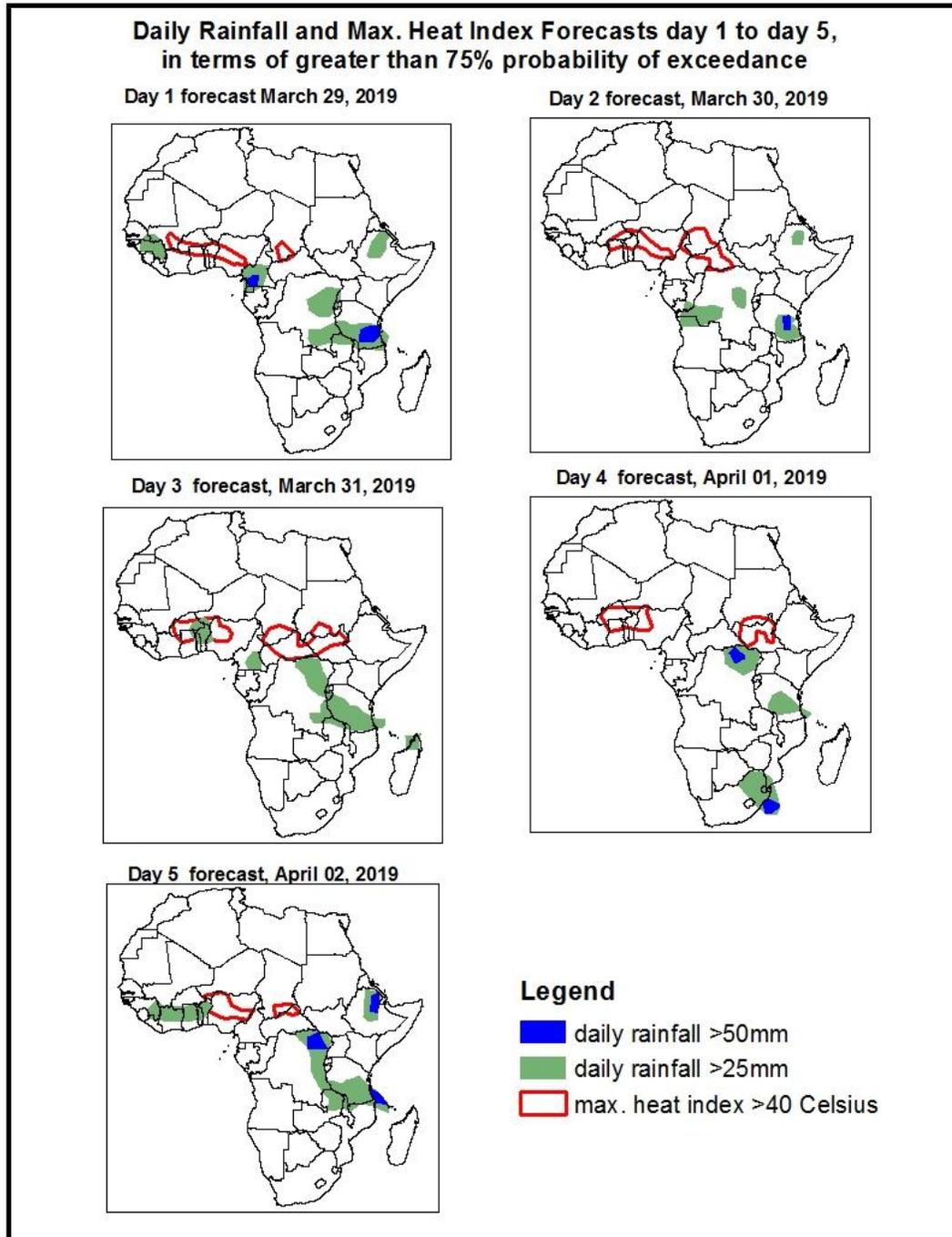


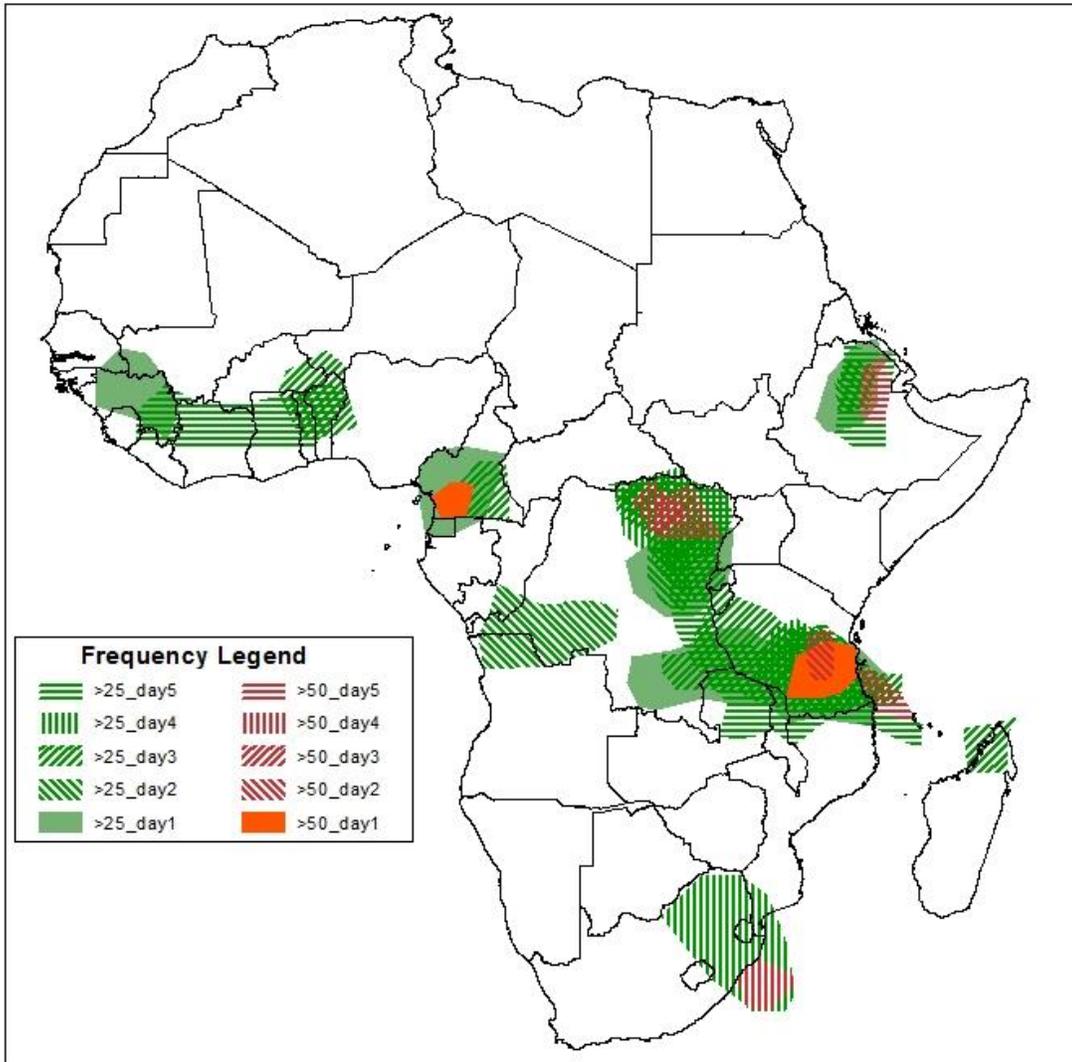
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on March 28, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 29 March - 02 April, 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 29 March - 02 April, 2019.

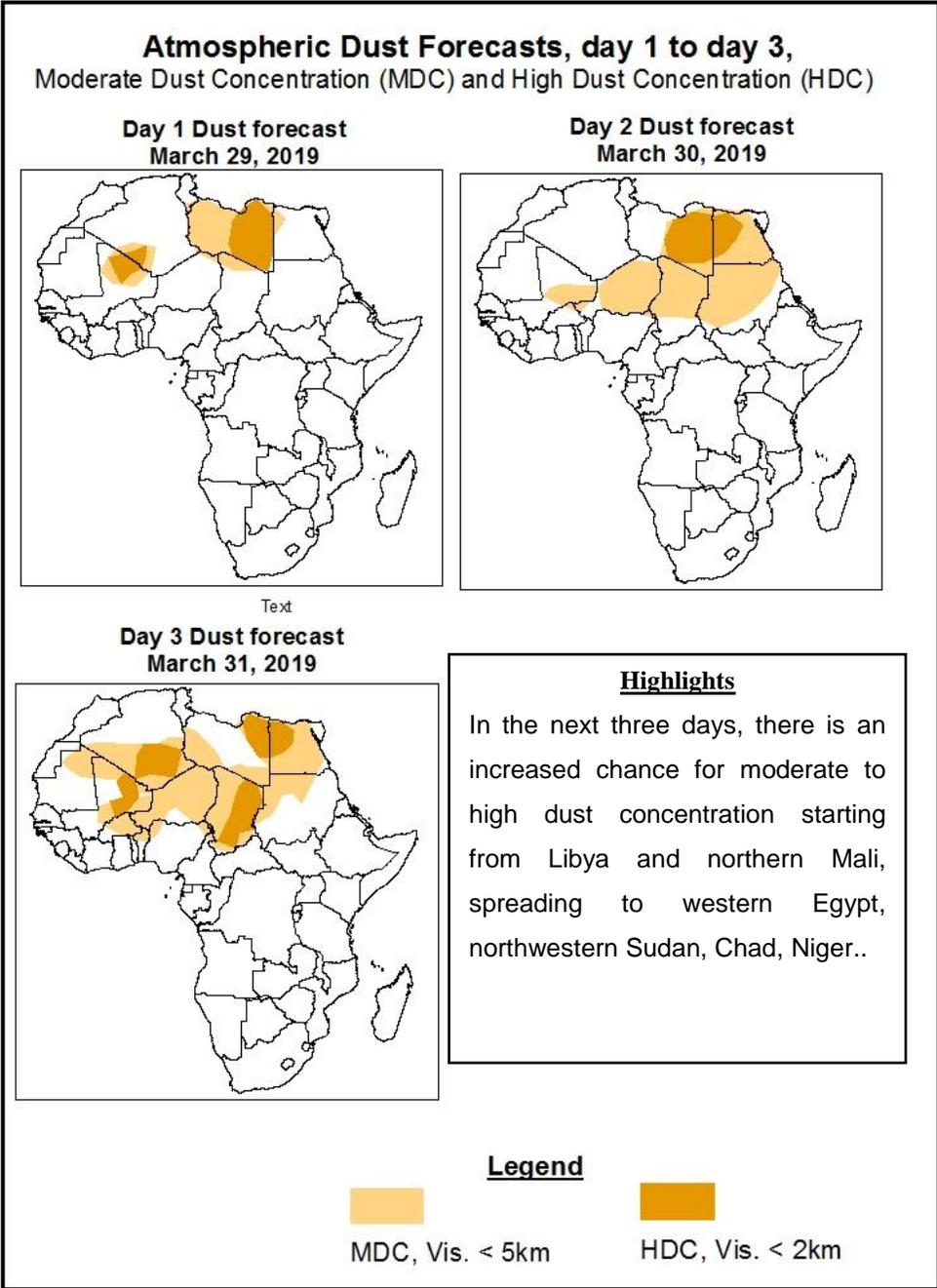


Highlights

- In the next five days, lower-level wind convergences are likely to cause significant but mostly isolated precipitation over some parts of East, Central and Southern Africa.
- There is an increased chance for daily rainfall amount to exceed 50mm for two or more days over much of Southern Tanzania as well as few areas in southern Cameroon, northern Ethiopia, northeastern DRC and around the eastern coast of South Africa.
- There is a high likelihood for heat index to exceed 40°C across parts of Cote d'Ivoire, Ghana, Togo, Benin, Chad, CAR and South Sudan.

1.2. Atmospheric Dust Concentration Forecasts (valid: 29 – 31 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: 29 March - 02 April 2019

The Azores High Pressure system over the North of Atlantic Ocean is expected to continue weakening due to a passing low pressure system from the West. However, from mid towards the end of the forecast period, the Azores is likely to rebuild behind this passing low pressure.

The St. Helena High Pressure system over Southeast Atlantic Ocean is expected to continue intensifying from 1021 to 1032 as it slowly migrates towards the East, just behind the frontal low, showing signs of relaxation at the end of the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean, on the other hand, is expected to intensify from around 1028hPa to 1034hPa but with increasingly reduced influence over the Southern Africa as it progresses further East.

At 925hPa, the strong northerly to northeasterly dry and strong winds are expected to continue blowing over the Sahel while spreading and covering the Sahara region during the next couple of days. In contrast, further South along the Gulf of Guinea as well over Central Africa region, generally southerly, moist winds are expected to converge with dry air from the north influencing precipitation over these areas. Meanwhile, convergent winds are likely to be maintained throughout the forecast period over East Africa.

At 850hPa, the Monsoon winds are expected to continue converging along the Gulf of Guinea as well as over parts of central Africa, particularly over the DRC and neighboring countries, influencing isolated to scattered precipitation over these areas. Converging winds are likely to be maintained over the Eastern Africa, keeping these areas wet. Meanwhile, the frontal low, currently situated in the Mediterranean Ocean, just North of Libya, is expected to continue propagate towards East, increasing precipitation activities over Ethiopia and Sudan.

At 700hPa, generally easterly winds over the central Africa and Gulf of Guinea are expected to continue advect convective activities towards West. The low pressure over the Mediterranean is also evident at this level.

At 500hPa, general wind flow over central and eastern Africa is easterly and therefore, alongside 700hPa wind, expected to advect convective activities towards West.

At 200hPa, a strong wind (>90kts), associated with the subtropical westerly jet, is expected to prevail across northern Africa, with the strongest wind (>130kts) and significant bending over Northern progressing towards Northeastern Africa.

During the next five days, lower-level wind convergences along the Gulf of Guinea, parts of central, East and Northeast Africa as well as frontal system along the South African coast are expected to result into significant to heavy rainfall over these areas. Further northeast, over northern Ethiopia, the interactions between mid-latitude and tropical systems across northeastern Africa is expected to maintain slight to moderate rainfall over there. There is an increased chance for daily rainfall amount to exceed 25mm for two or more days over parts of Guinea, Cote d'Ivoire, Ghana, Togo, Benin, Cameroon, Equatorial Guinea, South Sudan, Ethiopia, DRC, Tanzania, Zambia, South Africa and northern Madagascar.

2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (March 27, 2019)

Daily rainfall totals exceeded 25mm over parts of northern DRC, western Tanzania, central towards Kenya as well as northern tip of Madagascar.

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

Intense convective clouds are observed over some areas of equatorial, Central and Eastern Africa.

