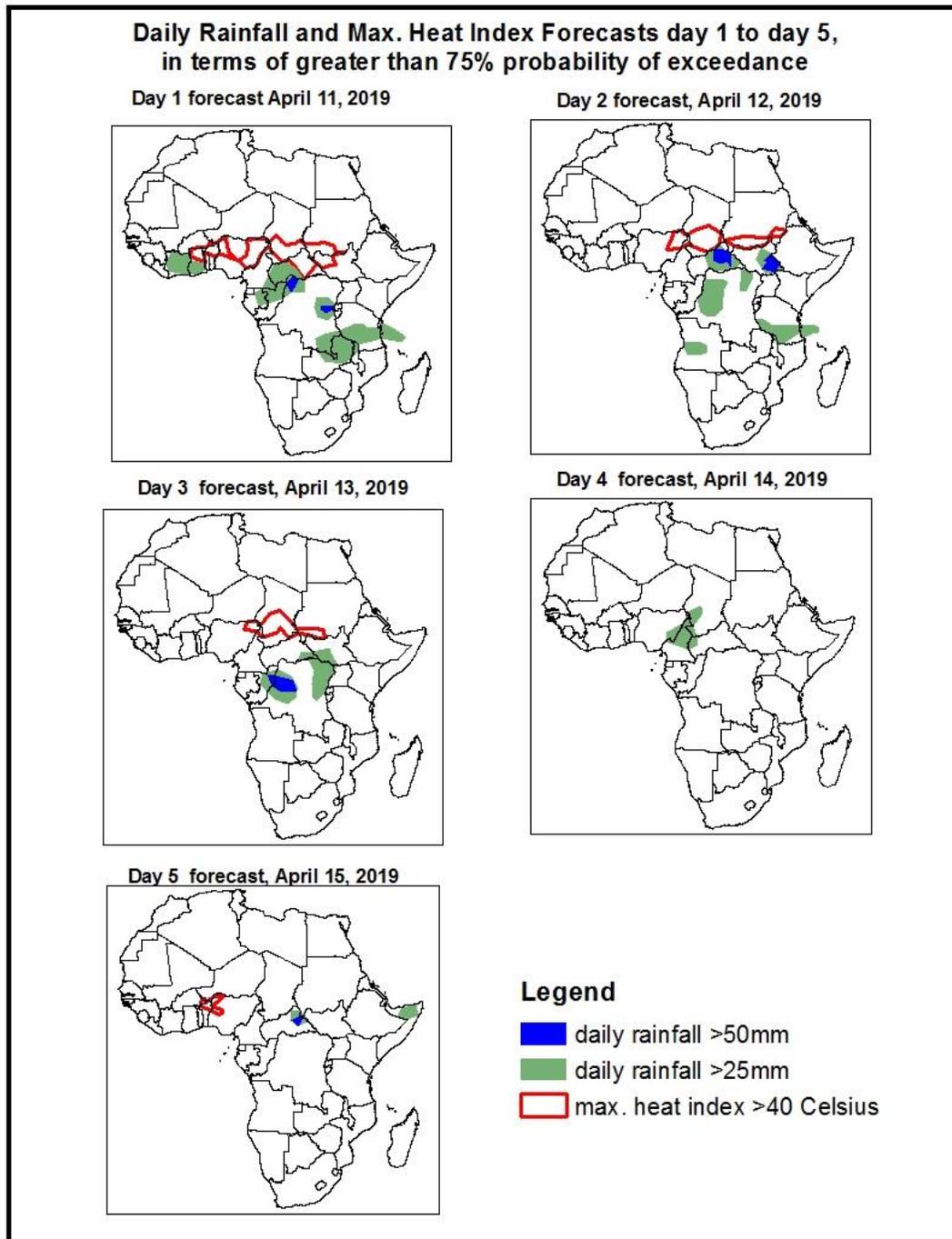


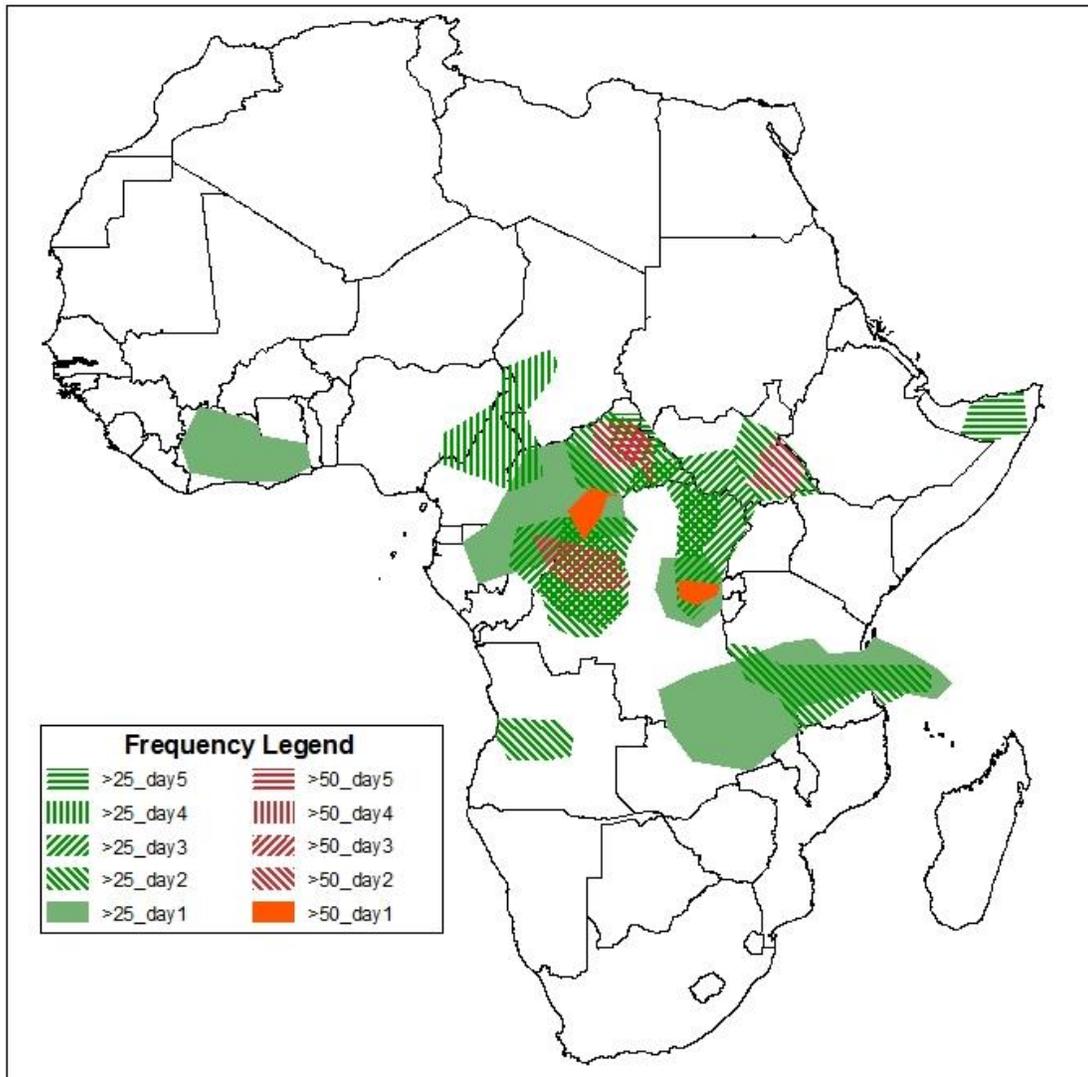
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on April 09, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 11 – 15 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 Apr 11 - Apr 15, 2019

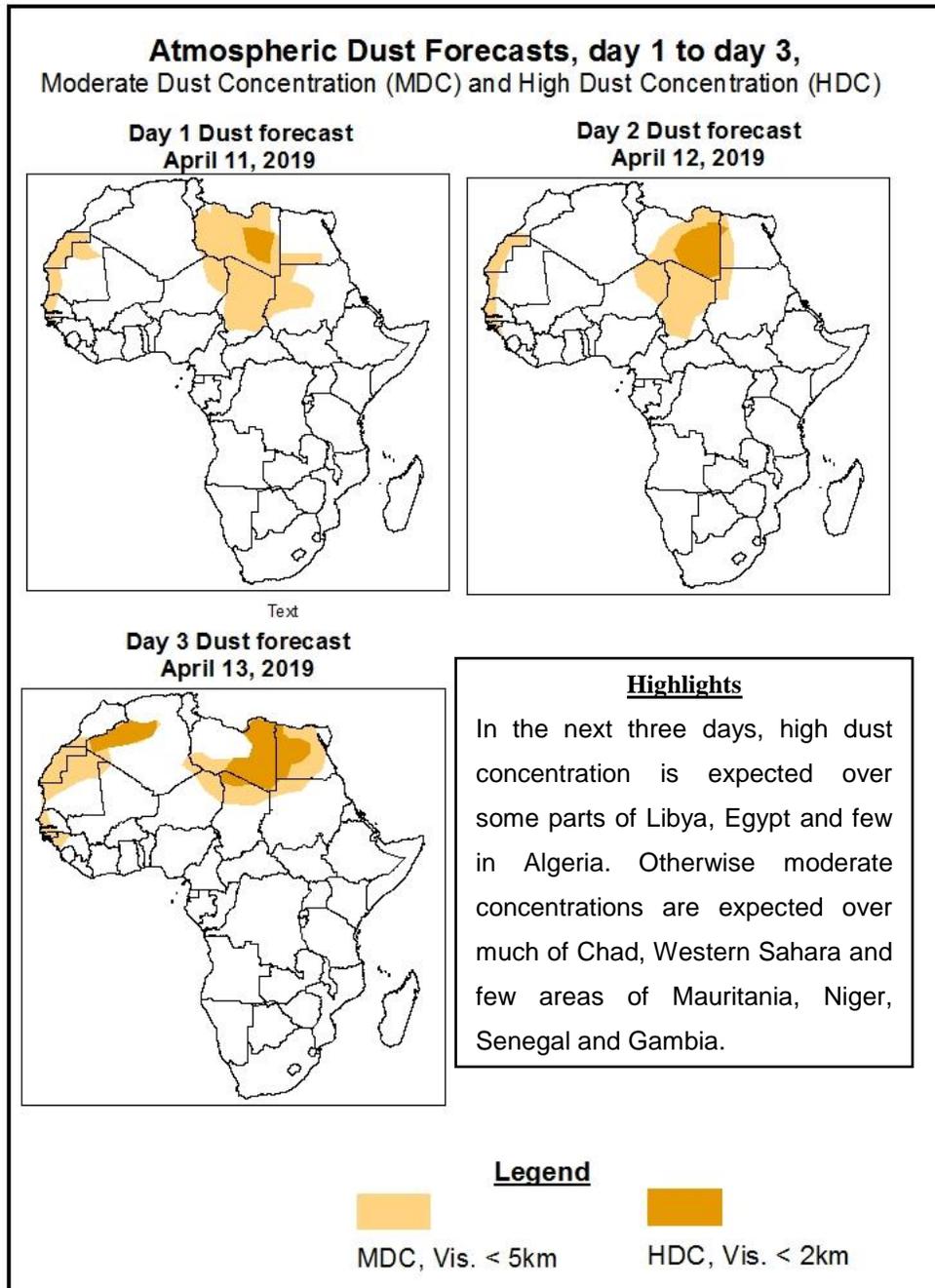


Highlights

- Monsoon wind pattern favors only moderate precipitation over few areas along the Gulf of Guinea.
- Persistent lower-level wind convergences are likely to maintain significant to enhanced precipitation over some areas over central (Cameroon, Republic of Congo, DRC, CAR) and northeast Africa (South Sudan). Meanwhile, the pattern is likely to influence moderate precipitation over East Africa (Tanzania). Parts of Somalia are expected to receive significant precipitation.
- At least 25mm for two or more days is likely over the Gulf of Guinea, central Africa, southern parts of East Africa and few areas of southern and northeast Africa. Heavier precipitation is expected over some parts of central Africa.
- There is an increased chance for daily maximum heat index to exceed 40°C across portions of the Sahel region as well as South Sudan and southern Sudan especially during the first half of the forecast period.

1.2. Atmospheric Dust Concentration Forecasts (valid: 11 – 13 April 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: 11 – 15 April 2019

During the first half of the forecast period, heat lows are expected to keep the Azores High Pressure system over the North of Atlantic at around 1024hPa and further West. However, during the second half, the Azores is expected to extend towards East but relaxing to 1021hPa.

During the most of the forecast period, the St. Helena High Pressure system over Southeast Atlantic Ocean is expected to continue intensifying from 1027hPa to as high as 1033hPa. However, signs of relaxation are seen towards the end of the period.

During the first half of the forecast period, the Mascarene High Pressure system over Southwest Indian Ocean is expected to continue intensifying to as high as 1035hPa. During the second half of the period, however, it is expected to relax, due to a frontal system from the West, down to 1030hPa.

At 925hPa, an isolated zone with dry northerly to northeasterly winds speeds (>35) starting over Libya and then migrating to Mali and towards Niger at the end of the forecast period. Over these areas, moderate convection is likely. Along the East African coast (Tanzania and Kenya), persistent converging winds are likely to cause enhanced to heavy precipitation over some parts of these regions.

At 850hPa, convergent wind patterns over the East Africa (Tanzania, Kenya), central Africa (DRC and CAR) as well as over South (Zambia) and southwest Africa (Angola) are likely to cause moderate to isolated cases of enhanced precipitation over there. Southern Uganda is also likely to benefit from these converging winds.

At 700hPa, Northerly to Northeasterly wind pattern is expected over the areas expected to receive significant convective activities. In light of this, convective activities are likely to be propagated towards southwest.

Being mainly westerly, 500hPa wind pattern is expected to help propagating activities towards southwest over most of the areas expected to feature significant convection.

At 200hPa, strong wind (>130kts), associated with the Subtropical Westerly Jet, is expected to be maintained across northern Africa throughout the forecast period. However, only slight bending (trough) are seen over northwest Africa where it is climatologically dry. Over the northeast, this configuration is likely to maintain slight to no precipitation.

Monsoon wind pattern favors only moderate precipitation over few areas along the Gulf of Guinea. Persistent lower-level wind convergences are likely to maintain significant to enhanced precipitation over some areas over central (Cameroon, Republic of Congo, DRC, CAR) and northeast Africa (South Sudan). Meanwhile, the pattern is likely to influence moderate precipitation over East Africa (Tanzania). Parts of Somalia are expected to receive significant precipitation. At least 25mm for two or more days is likely over the Gulf of Guinea, central Africa, southern parts of East Africa and few areas of southern and northeast Africa. Heavier precipitation is expected over some parts of central Africa. There is an increased chance for daily maximum heat index to exceed 40°C across portions of the Sahel region as well as South Sudan and southern Sudan especially during the first half of the forecast period.

2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (April 9, 2019)

Daily rainfall totals exceeding 25mm is observed over isolated areas in Liberia.

2.2. Weather assessment for the current day (April 10, 2019)

Enhanced convective clouds are observed over western DRC towards CAR. Also, significant convective clouds are seen over central Uganda and along the coast of Nigeria. Shallow convection is evident over southeast Tanzania and parts of South.

