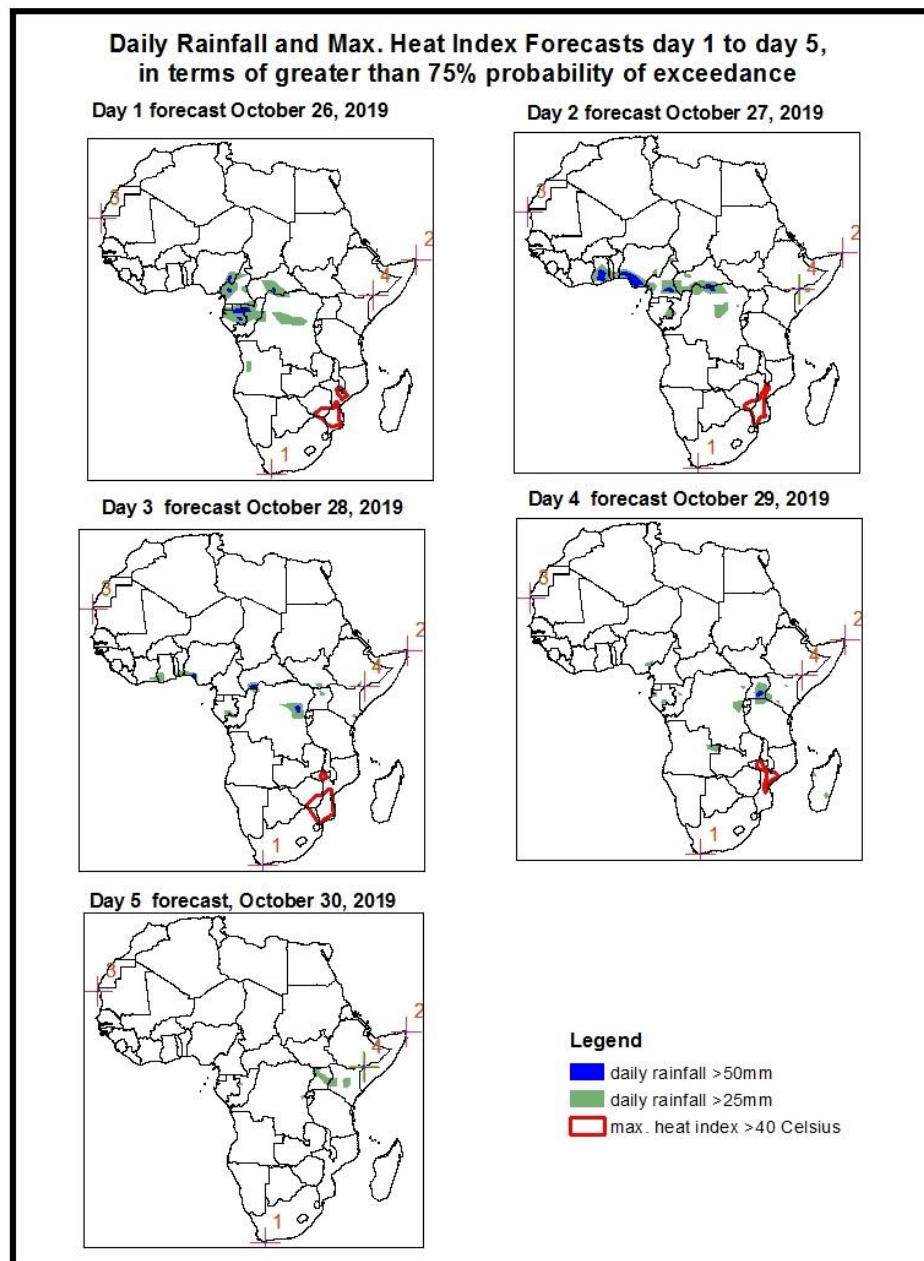


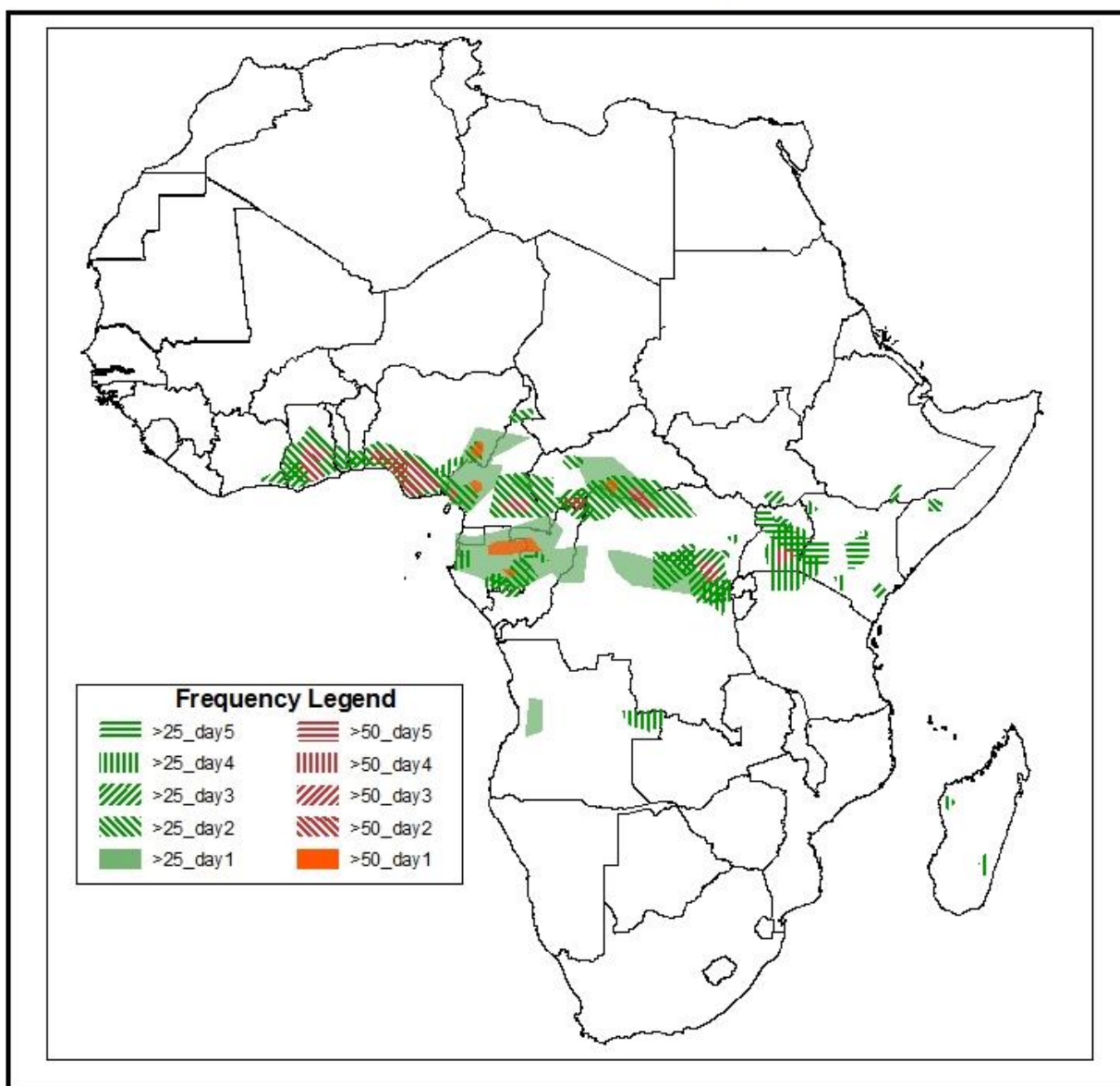
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on October 25, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 26 October – 30 October, 2019)

The forecasts are expressed in terms of high probability of precipitation (POP), valid 06Z to 06Z, and exceedance probability of maximum heat index ($>40^{\circ}\text{C}$), based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



Five Days Rainfall Forecast Summary October 26 - October 30, 2019

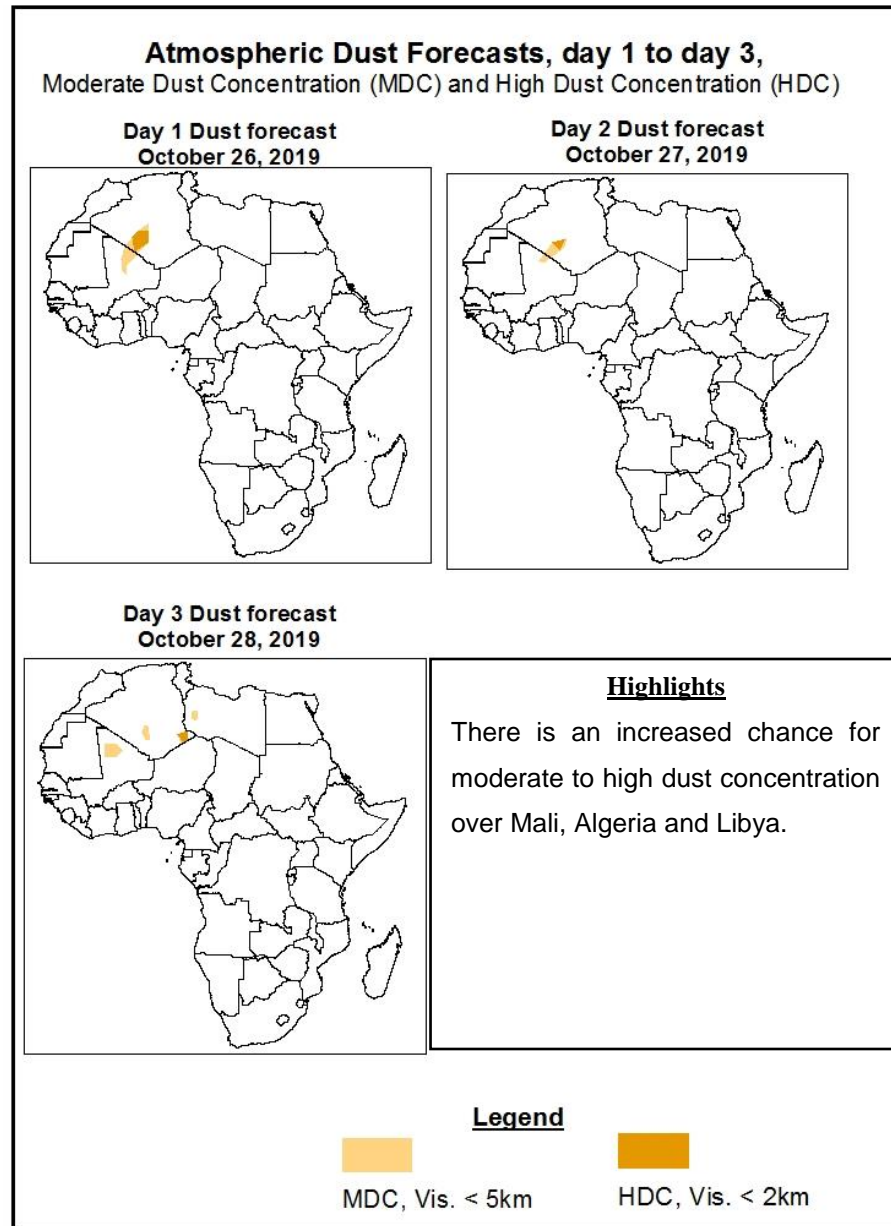


Highlights

- The monsoon flow from the Atlantic Ocean with its associated lower-level convergence is expected to enhance rainfall over eastern Gulf of Guinea and Central Africa countries. Lower-level wind convergence is also expected to enhance rainfall in the Lake Victoria region.
- At least 25mm for two or more days is likely over portions of southeastern Cote D'Ivoire, Ghana, southern Togo, southern Benin, southern Nigeria, Cameroon, DRC, Republic of Congo, CAR, Gabon, Uganda, northern Tanzania, Kenya, southern South Sudan, Ethiopia, Somalia and eastern Angola.
- There is an increased chance for daily rainfall to exceed 50mm over Ghana, Nigeria, Cameroon, CAR, DRC and Uganda.
- There is an increased chance for daily maximum heat index to exceed 40°C over Malawi, Mozambique and Zimbabwe.

1.2. Atmospheric Dust Concentration Forecasts (valid: 26 Oct – 28 Oct 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: 26 October –30 October 2019

The Azores High Pressure system over the Northeast Atlantic is very far and is expected to weaken with its central pressure value decreasing from 1037hPa to 1028hPa during the first two days of the forecast period. And then, intensify with its central pressure value increases from 1028hPa to 1037hPa during the last three days of the forecast period.

The St. Helena High Pressure system over Southeast Atlantic Ocean expected to strengthen while shifting eastward with its central pressure value increases from 1021hPa to 1029hPa during the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean is generally expected to remain constant with slight variation in its central pressure value between 1022hPa and 1024hPa during the first three days of the forecast period; and then, strengthens with its central pressure value increasing from 1024hPa to 1029hPa during the last two days of the forecast period.

Thermal low across the Sahel region is expected to deepen with its central pressure value decreasing from 1011hPa to 1008hPa during the forecast period.

At 925-hPa level, moist southwesterly flow from the Atlantic Ocean is expected to prevail across the Gulf of Guinea and the southern Sahel regions, the neighboring areas of Central Africa. On the other hand, easterly flow from the Indian Ocean is expected to prevail across the eastern part of Great Horn of Africa while the northeasterly flow is expected to prevail across the eastern coastal areas of southern Africa.

At 850-hPa level, strong dry northerly flow is expected remain active and prevail across southern Sahel. Otherwise, meridional wind convergence is expected to remain also active in the Lake Victoria region and the neighboring areas of Central Africa, over DRC, Republic of Congo, southern Cameroon, southern Chad and CAR during the forecast period. Converging winds over East Africa (Burundi, Rwanda, Tanzania, Kenya, Uganda, South Sudan, Somali and Ethiopia) are likely to maintain occasional enhanced to moderate precipitation over these areas.

At 700-hPa, a broad area of anticyclonic circulation is expected to remain while shifting westward over Northwestern Africa. Mainly easterly wind pattern is expected to be maintained, converging over Nigeria, southern Cameroon, Republic of Congo, Gabon, southern Chad, CAR, South Sudan, Tanzania, Kenya, Uganda and Ethiopia; this is likely to be advecting convective activities.

The monsoon flow from the Atlantic Ocean with its associated lower-level convergence is expected to enhance rainfall over eastern Gulf of Guinea and Central Africa countries. Lower-level wind convergence is also expected to enhance rainfall in the Lake Victoria region. At least 25mm for two or more days is likely over portions of southeastern Cote D'Ivoire, Ghana, southern Togo, southern Benin, southern Nigeria, Cameroon, DRC, Republic of Congo, CAR, Gabon, Uganda, northern Tanzania, Kenya, southern South Sudan, Ethiopia, Somalia and eastern Angola. There is an increased chance for daily rainfall to exceed 50mm over Ghana, Nigeria, Cameroon, CAR, DRC and Uganda. There is an increased chance for daily maximum heat index to exceed 40°C over Malawi, Mozambique and Zimbabwe.

2.0. Previous and Current Day Weather over Africa

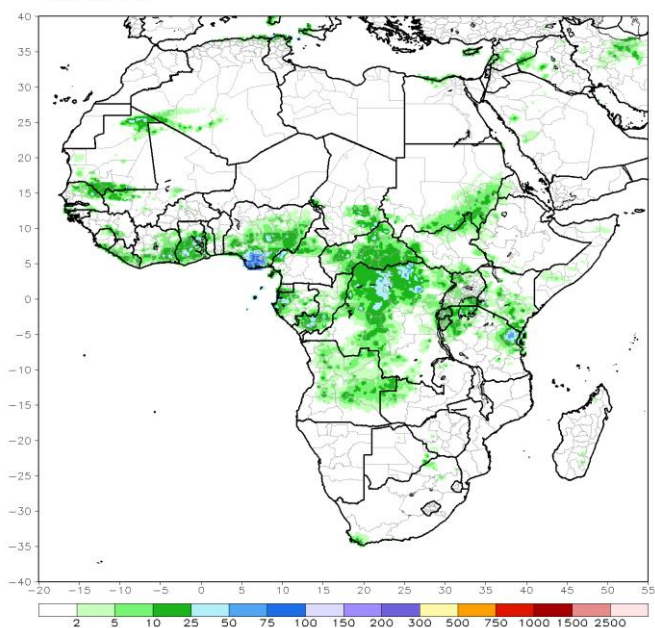
2.1. *Weather assessment for the previous day* (Oct 24, 2019)

Daily rainfall amount exceeded 25mm over Ghana, Nigeria, Cameroon, Republic of Congo, DRC, Gabon, Chad, Tanzania and Sudan; and exceeded 50mm over Tanzania, DRC and Nigeria.

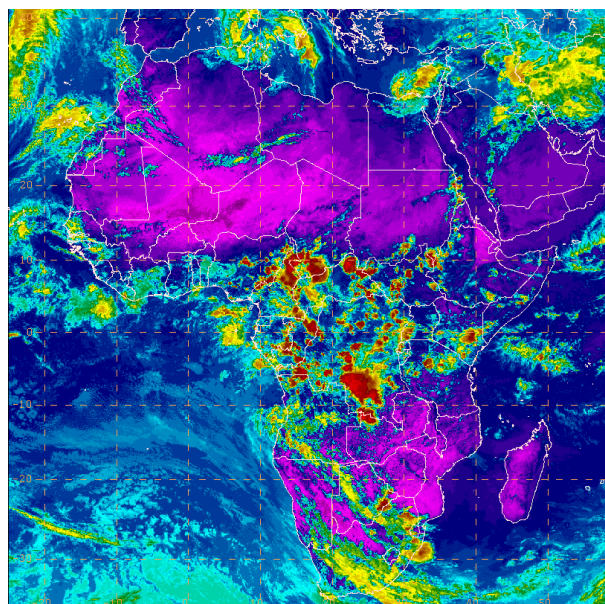
2.2. *Weather assessment for the current day* (Oct 25, 2019)

Deep convective clouds are observed over many places in Central Africa, and portions of eastern and southern Africa.

RFE2 Daily Total Rainfall (mm)
Period: 24Oct2019



IR Satellite Image (valid 1352 October 25, 2019)



Author: DIALLO Ahmadou AI. (CPC-African Desk/Guinea Meteorological Service)