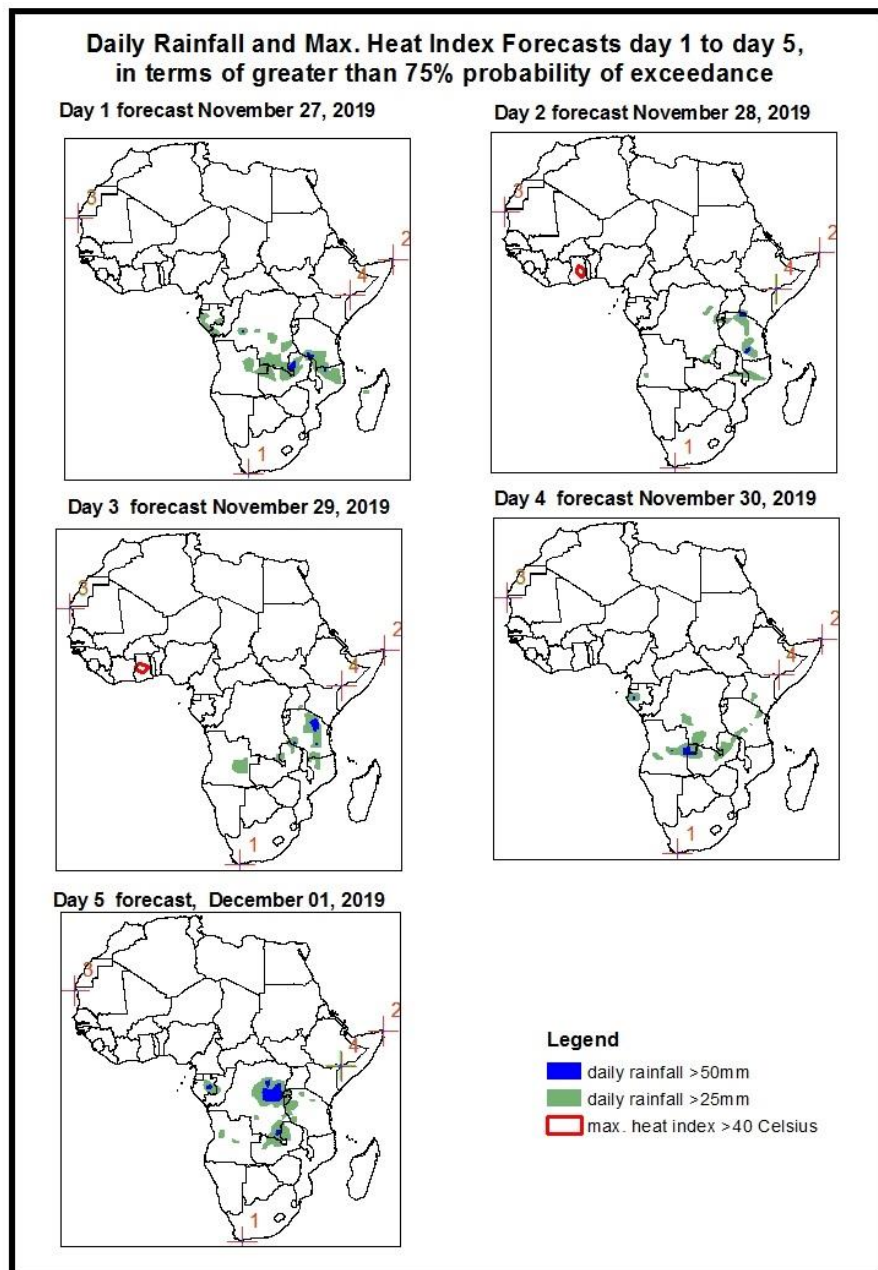


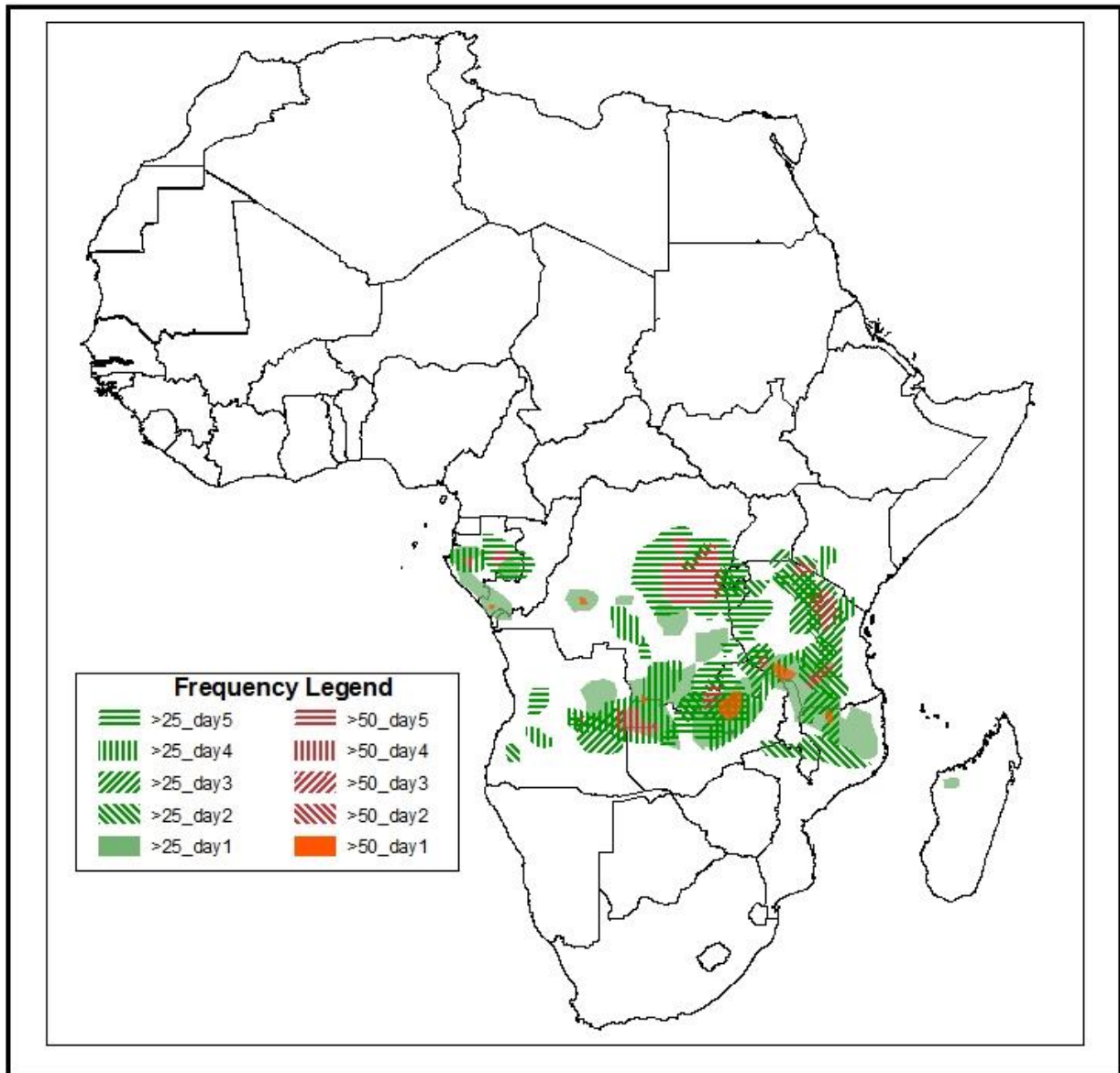
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on November 26, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 27 November – 01 December, 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 November 27 - December 01, 2019

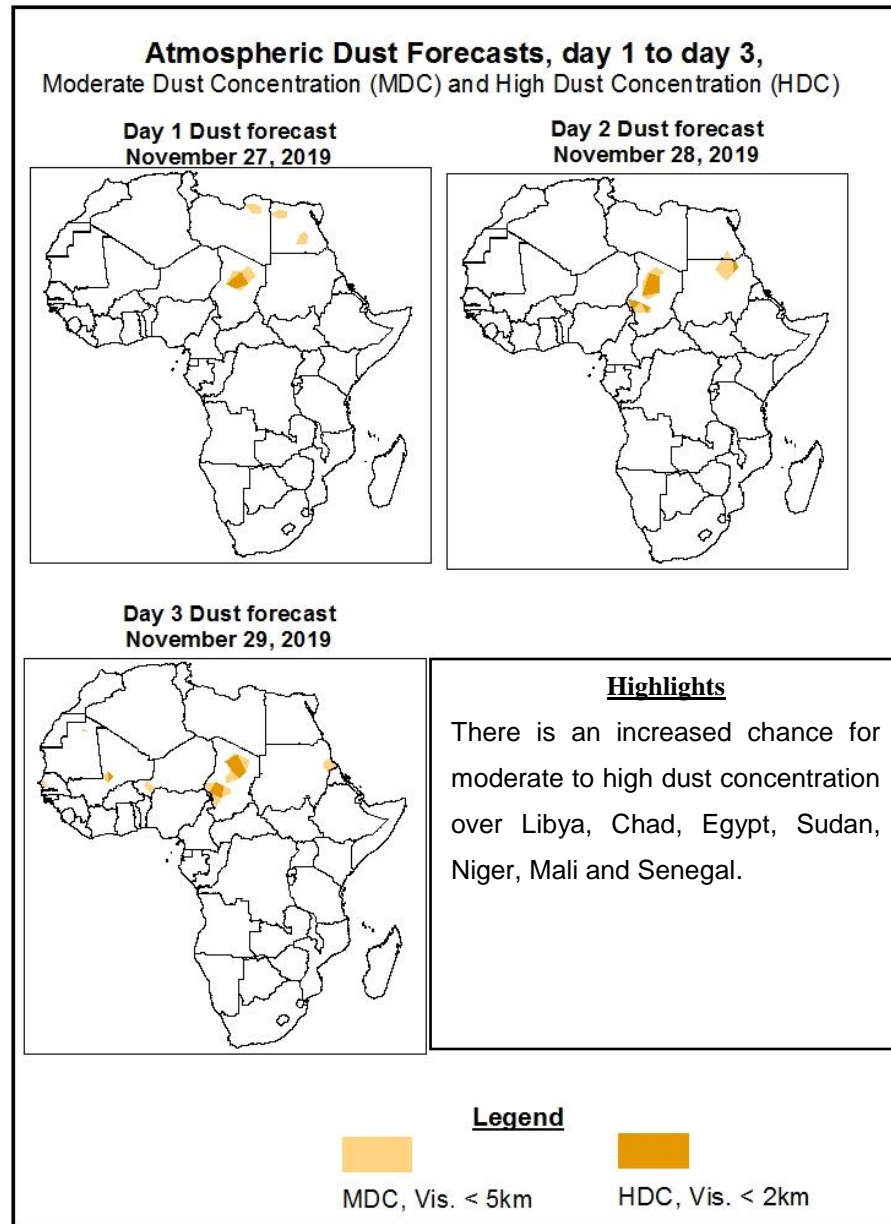


Highlights

- Strong lower-level convergence in the Lake Victoria region and onshore flow from the Indian Ocean with its associated lower-level convergence is expected to enhance rainfall over Central and East Africa. Onshore flow from the Atlantic Ocean with its associated lower-level convergence is expected to enhance rainfall over parts of western Equatorial Africa.
- At least 25mm for two or more days is likely over portions of Gabon, Republic of Congo, DRC, Angola, Uganda, Kenya, Rwanda, Burundi, Tanzania, Malawi, Zambia and Mozambique.
- There is an increased likelihood for daily rainfall to exceed 50mm over local areas in Mozambique, Zambia, Angola, DRC, Tanzania, Kenya, Republic of Congo and Gabon.
- There is an increased chance for daily maximum heat index to exceed 40°C over Ghana.

1.2. Atmospheric Dust Concentration Forecasts (valid: 27 Nov – 29 Nov 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 November – 01 December 2019

The Azores High Pressure system over the Northeast Atlantic is generally expected to strengthen while shifting eastwards with its central pressure value increasing from 1020hPa to 1023hPa during the forecast period. The center is expected to be purely maritime for day one, purely continental for the next three days and then partly continental for the last day of the forecast period.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is generally expected to remain constant while shifting eastwards with its central pressure value at 1020hPa during the forecast period.

The primary center of the Mascarene High Pressure system is further to the east of the Indian Ocean and is expected to intensify from 1030hPa to 1036hPa while shifting eastwards during the forecast period. However, there is a secondary center forming over Southwest of Indian Ocean near the Mozambique Channel and this is expected to intensify with its central pressure value increasing from 1019hPa to 1026hPa during the forecast period. This secondary center is the key driver of the prevailing weather across the southern and eastern parts of Africa.

The relatively strong Arabian Ridge from the strong Siberian High Pressure system (alternating between 1042hpa and 1047hPa during the forecast period) is expected to remain active and it will have a significant impact on the weather across most parts of northeastern Africa and Great Horn of Africa.

At 925-hPa level, moist southwesterly flow from the Atlantic Ocean with its low-level convergence is expected to prevail across the Gulf of Guinea, southern Sahel regions and most neighboring areas of Central Africa. On the other hand, a combination of easterly and northeasterly flow from the Indian Ocean with their low-level convergences is expected to prevail across the Greater Horn of Africa, parts of Central Africa and most parts of southern Africa.

At 850-hPa level, strong dry northerly flow is expected remain active and prevail across southern Sahel countries. On the other hand, meridional and seasonal wind convergence is expected to remain active across the Lake Victoria region, Congo Basin and the neighboring areas of Central Africa, Cameroon, Gabon, Equatorial Guinea, Angola, CAR, South Sudan and Sudan during the forecast period. Converging winds over Kenya, Tanzania, Uganda, Burundi, Rwanda, Ethiopia, South Sudan, Mozambique, Malawi, Zimbabwe, Zambia, Namibia, Botswana, Lesotho, South Africa and Madagascar; these are likely to maintain the occasional enhanced to moderate precipitation over these areas.

Strong lower-level convergence in the Lake Victoria region and onshore flow from the Indian Ocean with its associated lower-level convergence is expected to enhance rainfall over Central and East Africa. Onshore flow from the Atlantic Ocean with its associated lower-level convergence is expected to enhance rainfall over parts of western Equatorial Africa. At least 25mm for two or more days is likely over portions of Gabon, Republic of Congo, DRC, Angola, Uganda, Kenya, Rwanda, Burundi, Tanzania, Malawi, Zambia and Mozambique. There is an increased likelihood for daily rainfall to exceed 50mm over local areas in Mozambique, Zambia, Angola, DRC, Tanzania, Kenya, Republic of Congo and Gabon. There is an increased chance for daily maximum heat index to exceed 40°C over Ghana.

2.0. Previous and Current Day Weather over Africa

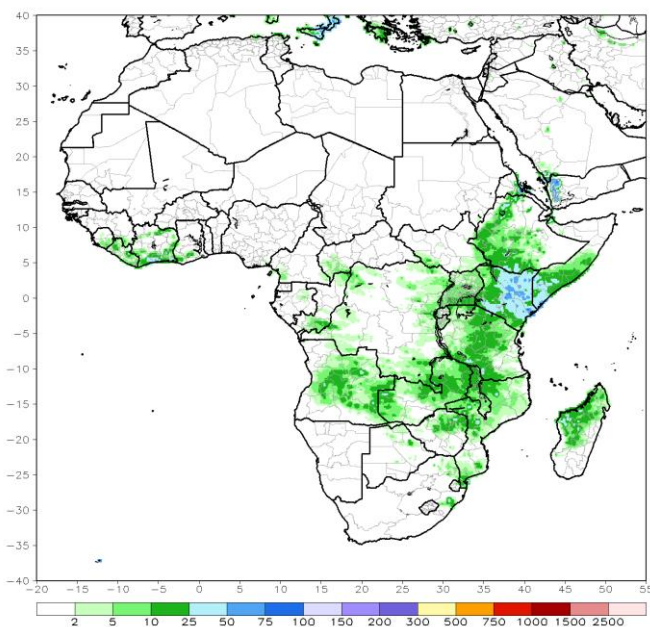
2.1. *Weather assessment for the previous day* (Nov 25, 2019)

Daily rainfall amount exceeded 25mm over Libya, Cote D'Ivoire, Cameroon, Angola, Republic of Congo, DRC, Uganda, Tanzania, Kenya, Ethiopia, Malawi, Zambia, Zimbabwe, Mozambique, Botswana and Madagascar; and exceeded 50mm over Madagascar, Mozambique, Malawi, Zambia, Tanzania, Kenya, Ethiopia, DRC, Republic of Congo and Libya.

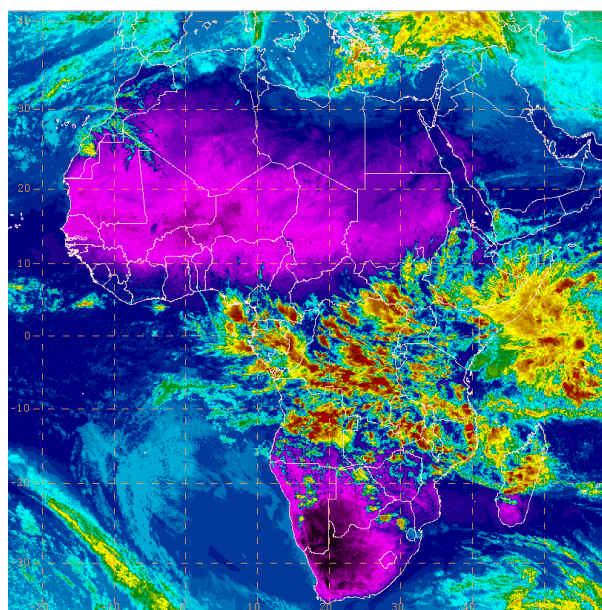
2.2. *Weather assessment for the current day* (Nov 26, 2019)

Deep convective clouds are observed over many places in the equatorial western Africa, Central Africa, the Greater Horn of Africa and a few portions in southeastern Africa.

RFE2 Daily Total Rainfall (mm)
Period: 24Nov2019



IR Satellite Image (valid 1352 November 26, 2019)



Author: MUSA Ssemujju (CPC-African Desk/Uganda Meteorological Service)