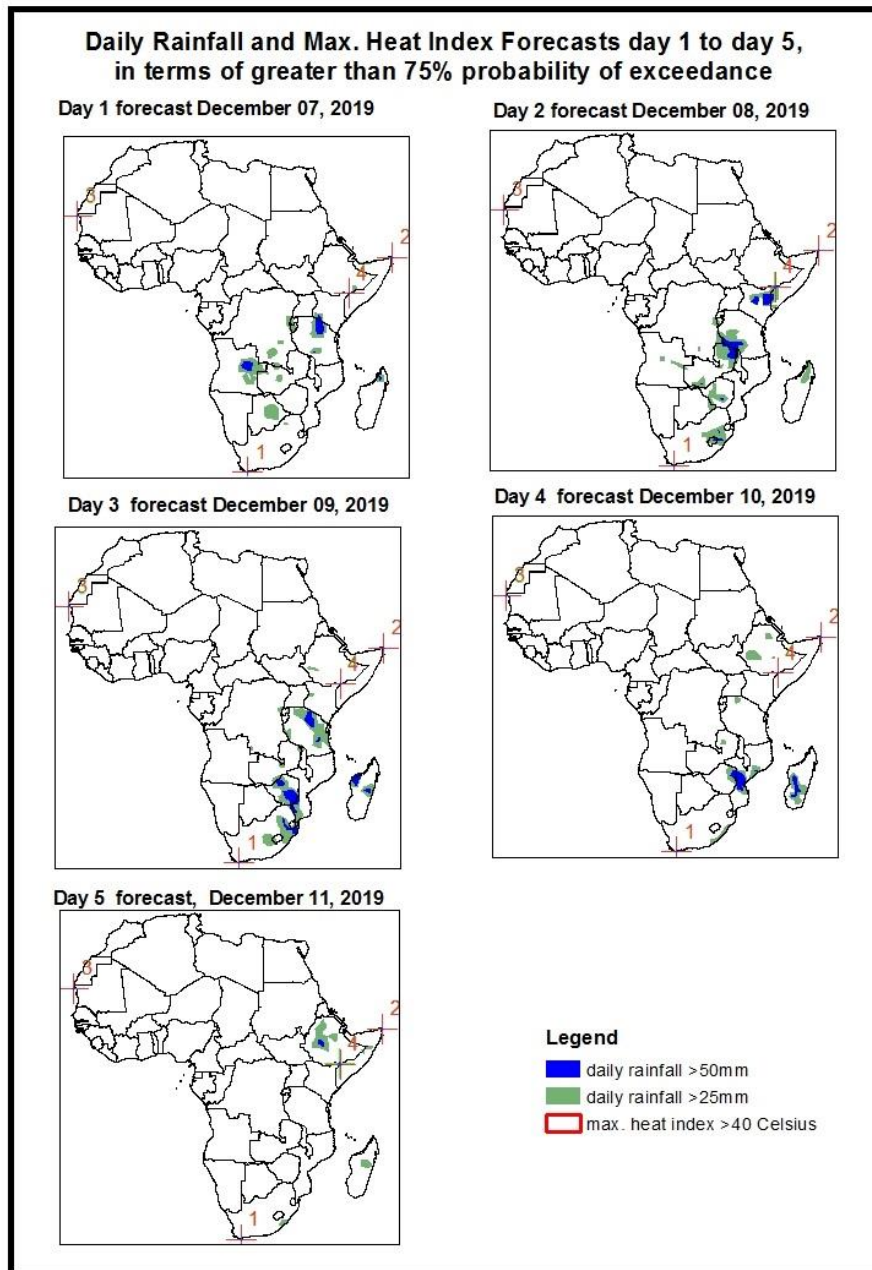


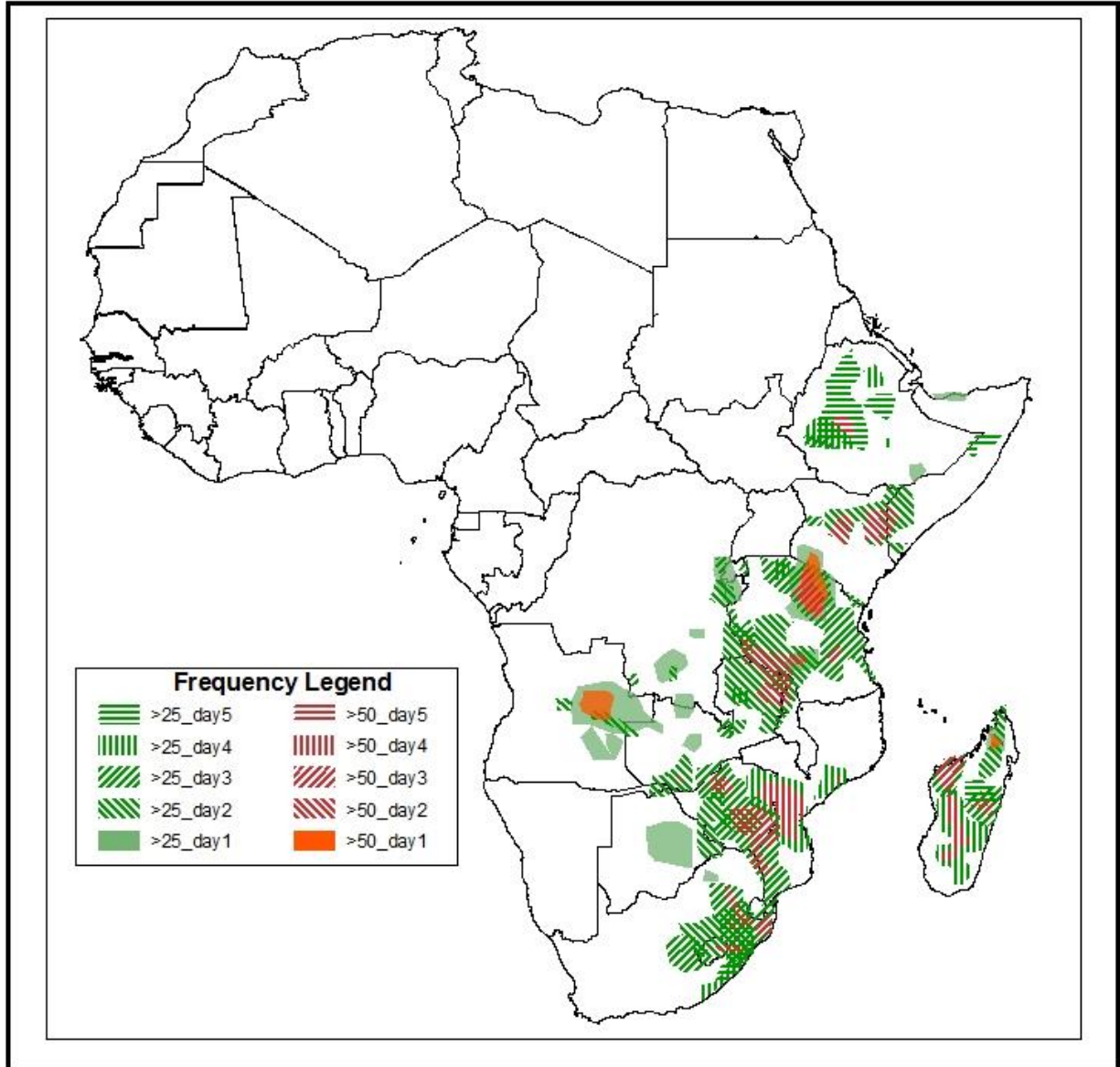
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on December 06, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 07 December – 11 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°C), based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



Five Days Rainfall Forecast Summary December 07 - December 11, 2019

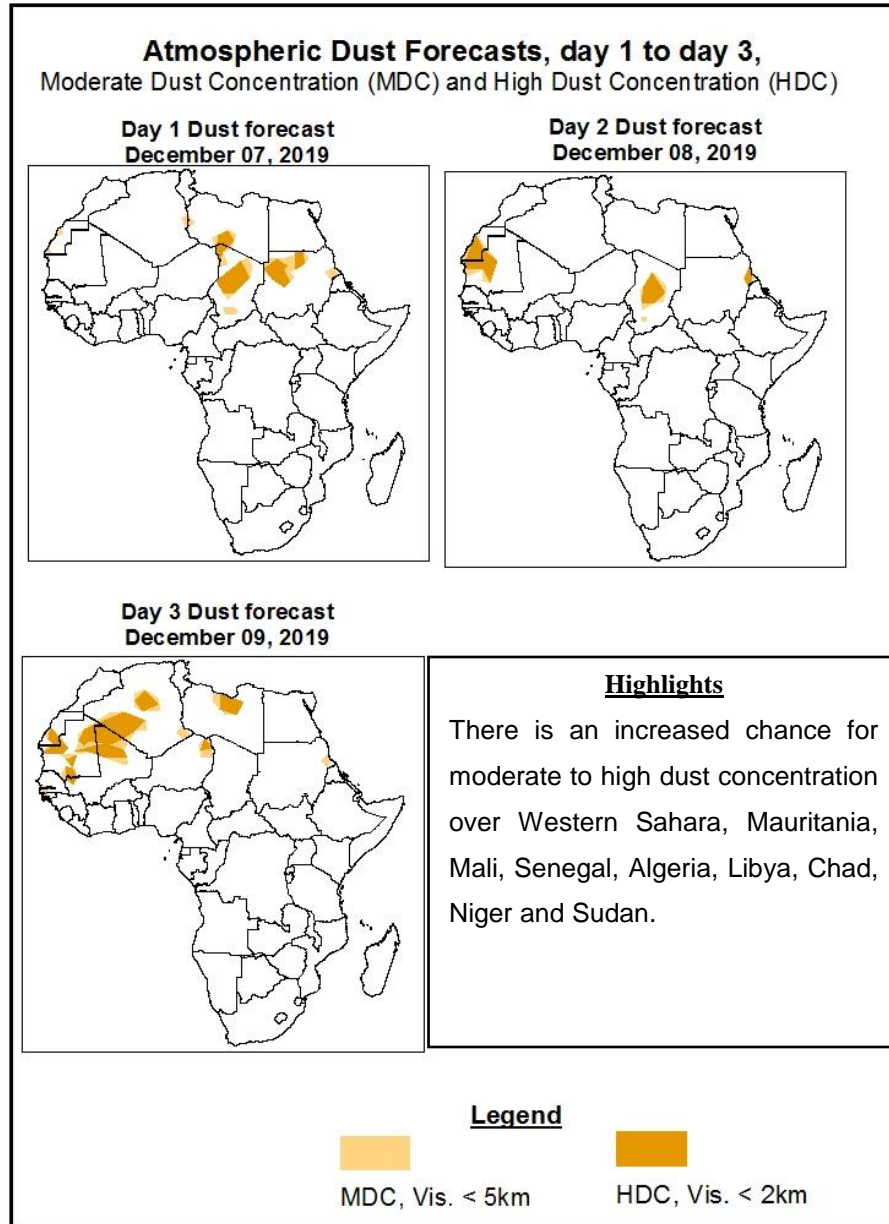


Highlights

- 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 eastern Africa. Tropical cyclone activities in the Indian Ocean are likely to enhance rainfall over portions of the Greater Horn of Africa and Southeast Africa.
- At least 25mm for two or more days is likely over portions of DRC, Angola, Botswana, South Africa, Lesotho, Eswatini, Zimbabwe, Mozambique, Madagascar, Zambia, Malawi, Tanzania, Burundi, Rwanda, Kenya, Ethiopia and Somalia.
- There is an increased likelihood for daily rainfall to exceed 50mm over local areas in DRC, Angola, South Africa, Lesotho, Zimbabwe, Zambia, Mozambique, Madagascar, Malawi, Tanzania, Kenya, Somalia and Ethiopia.

1.2. Atmospheric Dust Concentration Forecasts (valid: 07 Dec – 09 Dec 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: 07 December – 11 December 2019

The Azores High Pressure system over the Northeast Atlantic is generally expected to intensify with its central pressure value increasing from 1030hPa to 1042hPa during the forecast period. It is expected to shift eastwards during the first three days and then westwards during the remainder of the forecast period.

The St. Helena High Pressure system over the Southeast Atlantic Ocean is expected to slightly strengthen while shifting eastwards with its central pressure value increasing from 1021hPa to 1023hPa for the first two days of the forecast period and then it is expected to remain constant at 1023hPa during the rest of the forecast.

The Mascarene High Pressure system over Southwest of Indian Ocean is expected to intensify while shifting eastwards with its central pressure value increasing from 1021hPa to 1025hPa during the forecast.

The relatively strong Arabian Ridge is expected to remain active during the forecast period and hence, 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, western equatorial and southwestern Africa. On the other hand, the tropical cyclone at the tip of Somalia has made a landfall and hence, it is the other tropical storm (slightly above the tip of Madagascar) which is greatly depriving the eastern part of the Greater Horn of Africa with less moisture convergence. Otherwise, the combination of southeasterly and northeasterly flow from the Indian Ocean with their low-level convergences is expected to prevail across the inner parts of the Greater Horn of Africa, parts of Central Africa and most parts of southeastern 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, southern Cameroon, Gabon, Angola, CAR and South Sudan during the forecast period. Converging winds over Kenya, Tanzania, Uganda, DRC, Burundi, Rwanda, Ethiopia, South Sudan, Mozambique, Malawi, Zimbabwe, Zambia, Angola, Namibia, Botswana, Lesotho and South Africa; 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 eastern Africa. Tropical cyclone activities in the Indian Ocean are likely to enhance rainfall over portions of the Greater Horn of Africa and Southeast Africa. At least 25mm for two or more days is likely over portions of DRC, Angola, Botswana, South Africa, Lesotho, Eswatini, Zimbabwe, Mozambique, Madagascar, Zambia, Malawi, Tanzania, Burundi, Rwanda, Kenya, Ethiopia and Somalia. There is an increased likelihood for daily rainfall to exceed 50mm over local areas in DRC, Angola, South Africa, Lesotho, Zimbabwe, Zambia, Mozambique, Madagascar, Malawi, Tanzania, Kenya, Somalia and Ethiopia.

2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (Dec 05, 2019)

Daily rainfall amount exceeded 25mm over Morocco, Cote D'ivoire, Ghana, Republic of Congo, DRC, Uganda, Burundi, Kenya, Ethiopia, Tanzania, Zambia, Angola, Namibia, Botswana, Zimbabwe, South Africa and Mozambique; and exceeded 50mm over South Africa, Namibia, Botswana, Angola, Zambia, Mozambique, Tanzania, Kenya and DRC.

2.2. Weather assessment for the current day (Dec 06, 2019)

Deep convective clouds are observed over many places in the equatorial western and eastern Africa, Central Africa and portions in southern Africa. The tropical cyclone previous near the tip of Somalia has made a landfall and hence, only the tropical storm slightly above the tip of Madagascar is now the only one responsible for the reduction of most convective activities over the eastern parts of the Greater Horn of Africa.

