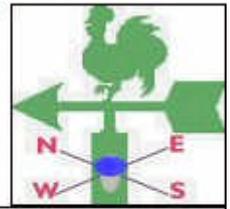




TANZANIA METEOROLOGICAL AGENCY



MONTHLY WEATHER BULLETIN

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HIGHLIGHTS

- Off-season rains over bimodal areas of northeastern areas (Arusha and Kilimanjaro regions) and coastal belt (Tanga, Coast, Dar-es-Salaam and eastern Morogoro regions) beneficial for soil moisture replenishment and pastures.

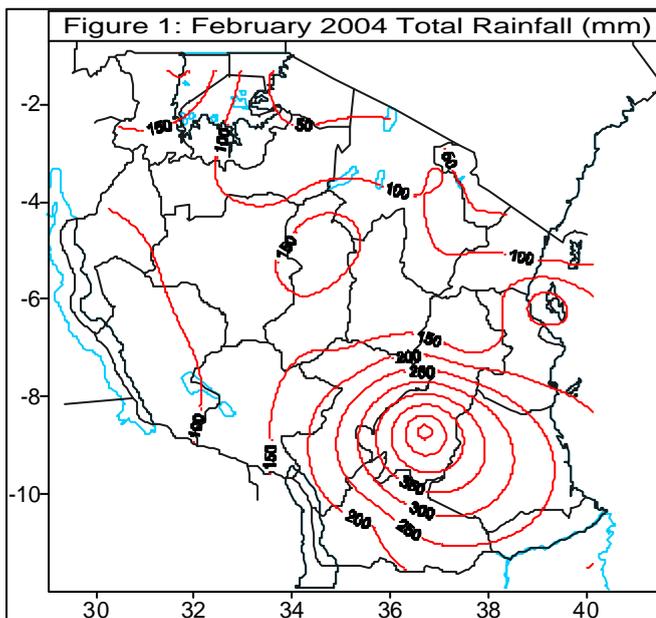
SYNOPTIC SUMMARY

During the month of February, the Azores anticyclone and the Mascarin anticyclone were weak. The Arabian ridge and the St. Helena anticyclone were strong. The meridional component of the Inter Tropical Convergence Zone (I.T.C.Z) was active over the western and southwestern areas of the country.

WEATHER SUMMARY

RAINFALL

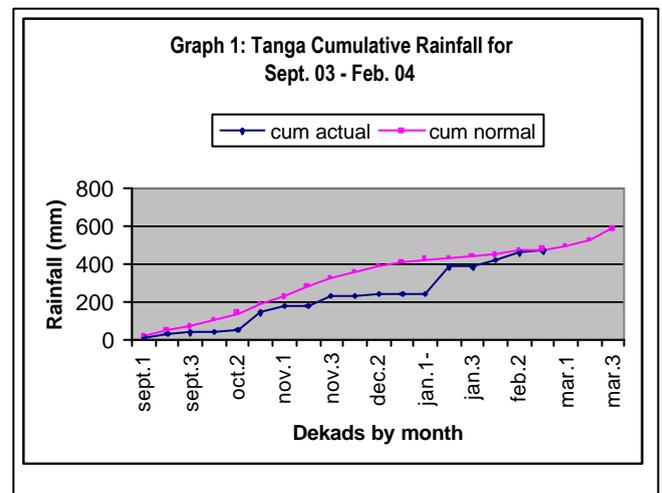
Most areas recorded above 100mm during the month of February as shown in Figure 1. Higher rainfall values above 200mm covered most



parts over the south. Off-season rains concentrated over bimodal areas of northeastern areas (Arusha

and Kilimanjaro regions), coastal belt (Tanga, Coast, Dar-es-Salaam and eastern Morogoro regions). Below normal rains were recorded over the eastern parts of Lake Victoria Basin, western areas and parts of southwestern highlands (Rukwa region). Remaining areas mostly over unimodal rainfall mode (central and southern regions) observed near normal rainfall conditions.

Overall performance since September 2003, the short rains (October to December 2003) were a failure

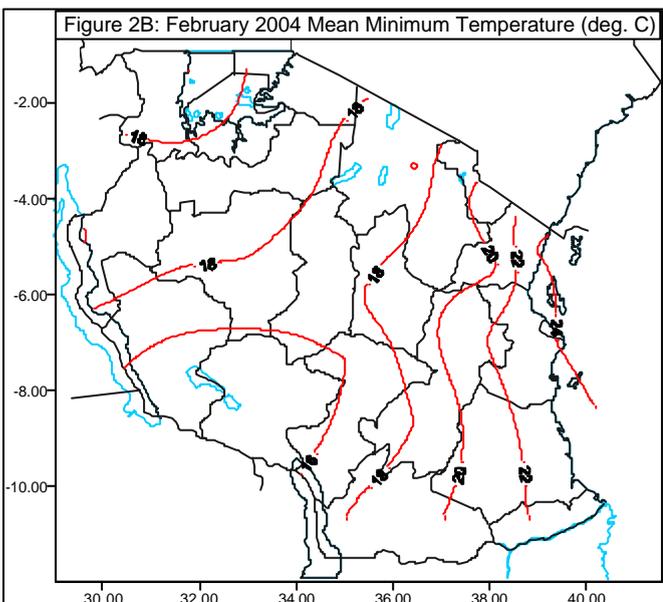
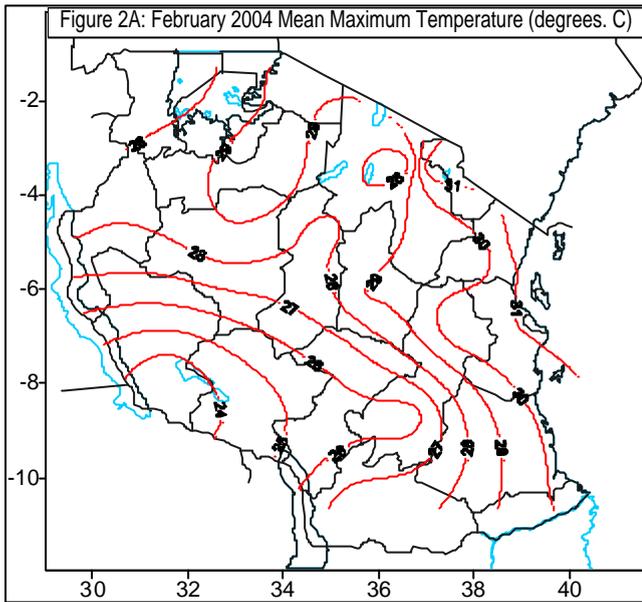


over bimodal areas (Graph 1), but off season rains have improved the situation to bring it to near normal levels on the cumulative curve.

MEAN AIR TEMPERATURE

During February mean air temperatures in terms of maximum and minimum observation in a day appear in Figures 2A and 2B respectively. Mean maximum temperatures ranged between 31.7 °C and 23.2 °C while mean minimum was between 24.4 °C and 14.4 °C. Both figures depict high values over

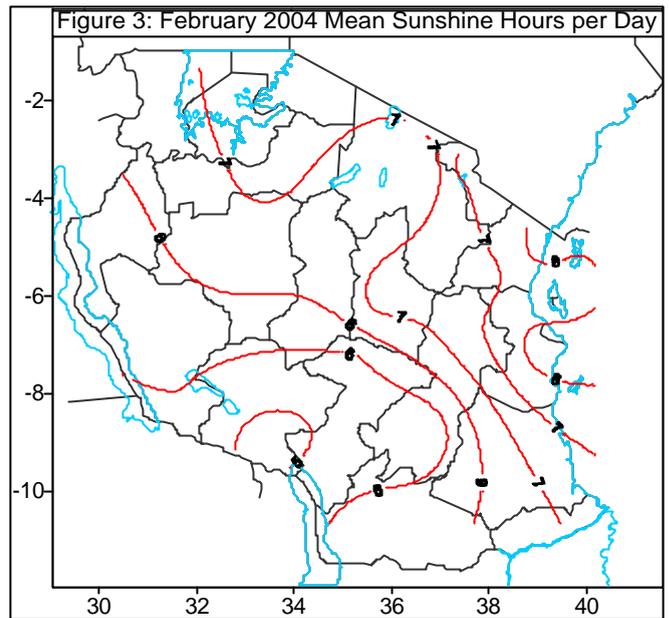
the northern coastal belt, while lower values,



generally also modified by altitude appear over the highlands. During the month lower values were over south western areas. Compared to the situation during January, there is no significant change as regards air temperature. in February.

SUNSHINE HOURS

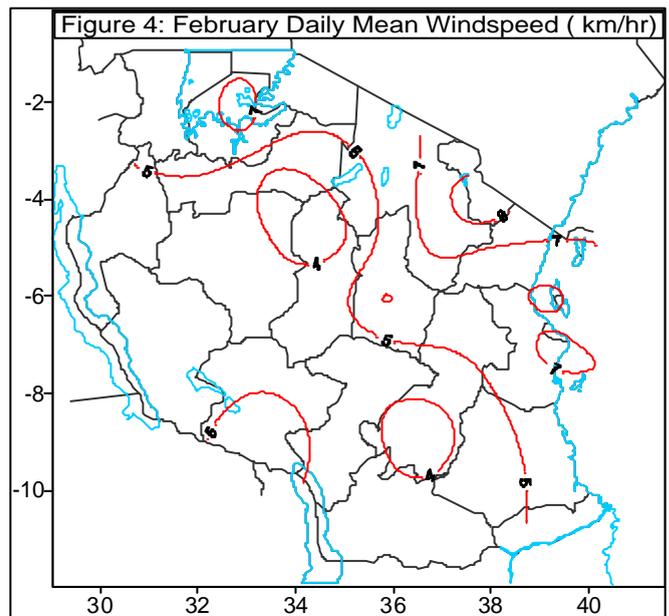
During the month mean sunshine hours across the country ranged from about 5 to just above 8 hours/day as shown in Figure 3. Shorter durations of bright sunshine at less than 6 hrs/day were experienced over the highlands of southwestern



areas. Maximum bright sunshine hours were experienced over eastern areas and along a southeastern to northwestern axis stretching over parts of southern, central and western regions.

MEAN DAILY WINDSPEED

Mean wind speeds across the country ranged from about 3 to just above 8 km/hr as shown in Figure 4. Northeastern highlands recorded the highest wind speeds (9 km/hr at Same Met. Station),

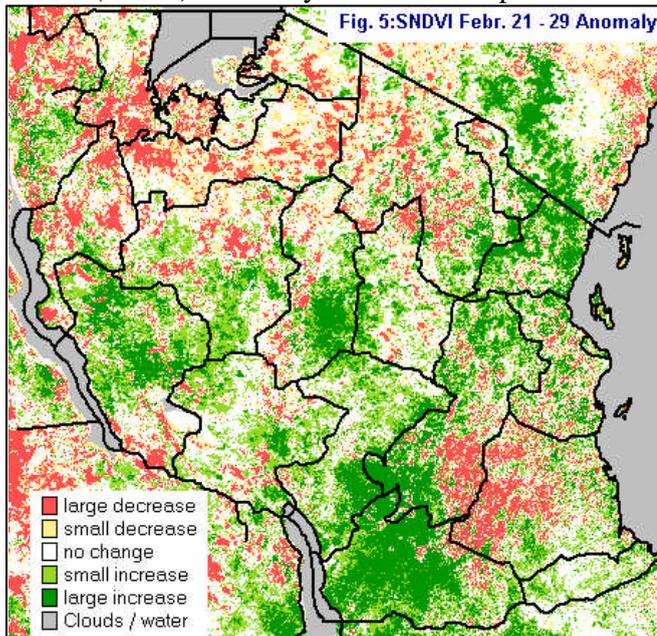


while minimum speed at around 3 km/day stretched from Mahenge over the southwestern highlands to

central areas (Singida) and also covered parts of western areas. Compared to the situation in January, no significant change appeared during February.

SATELLITE INFORMATION

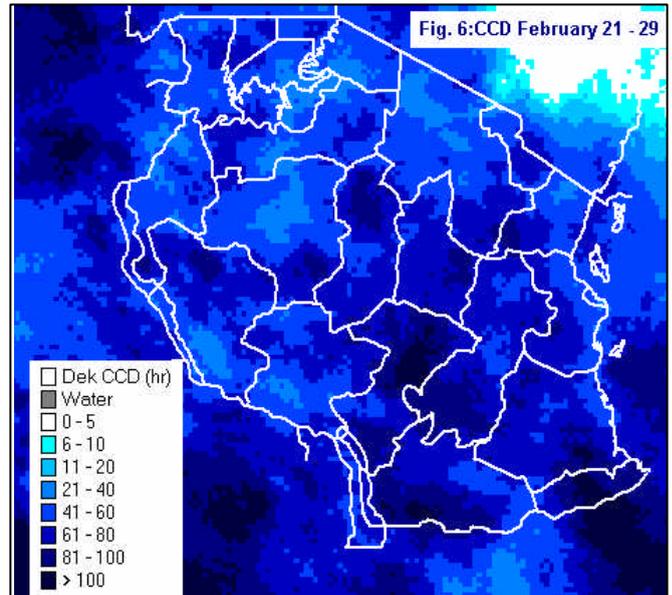
Satellite information during the month appears as in Figure 5, Normalized Difference Vegetation Index (NDVI) anomaly from the Spot satellite



depicting NDVI departure from the 5 year average during the period. Large decreases were experienced over the Lake Victoria Basin, parts of northeastern areas and southern areas. Decreases over southern Morogoro spilling into western Lindi region raise concern as vegetating crops in the fields are approaching the maximum soil water demanding stage of flowering. On the other hand, increase in green cover concentrated over southern (Ruvuma, Iringa regions), central (bordering areas between Singida and Dodoma regions) and eastern areas (north Morogoro and Tanga regions).

Cold Cloud Durations (CCD) appear as in Figure 6 covering February 21 to 29. Durations of above 20 hours to a maximum of about 120 hours were observed across the country during the last 10 days of February. On average longer durations occurred in patches over southern areas in Iringa, Mtwara and parts of Ruvuma regions. The extent of deep cloud coverage across the whole country corresponds to

the generally wetter conditions experienced during the period especially over bimodal areas of northern



coastal areas and northeastern areas.

AGROMETEOROLOGY

Most of the crops in western, central and southern regions of the country, where the rains are in full swing, were in advanced vegetative stage and in good condition. In the bimodal regions in Lake Zone, North-eastern and eastern regions land preparation and in some parts planting was being carried out in readiness for the long rains due to commence at various times during March.

Maize crop over unimodal rainfall areas (southern, southwestern and central regions) generally in good state has started to flower. But over western areas (western Tabora and Kigoma regions) the crop was being harvested including beans. Paddy being transplanted in Mbeya was in good condition.

Moisture replenishment from off seasonal rains over bimodal areas during the period benefited land preparations and perennials and improved pasture.

HYDROMETEOROLOGY

Rainfall that fell during the month contributed significantly to water levels in rivers and other water reservoirs in most parts of the country. Water levels in rivers and dams for water supply and

electricity generation have improved greatly over the areas receiving rains.

EXPECTED SYNOPTIC SYSTEMS FOR MARCH

The Arabian ridge is expected to relax and the zonal component of the Inter Tropical Convergence Zone (I.T.C.Z) will shift northwards. The Mascarene anticyclone and St. Helena anticyclone will strengthen. The Azores anticyclone is expected to weaken.

WEATHER OUTLOOK FOR MARCH

Southwestern highlands, southern and southern coast will experience partly cloudy conditions with showers and thunderstorms over some areas and sunny periods. Lake Victoria basin, western and central will have partly cloudy conditions with showers and thunderstorms over few areas and sunny periods. Northeastern highlands, northern coast and its hinterland and islands of Zanzibar and Pemba will experience partly cloudy conditions with showers and thunderstorms over some areas and sunny periods.

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