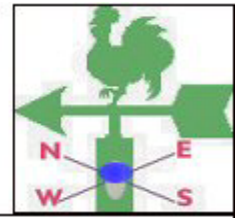




TANZANIA METEOROLOGICAL AGENCY



MONTHLY WEATHER BULLETIN

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AUGUST - HIGHLIGHTS

- Farmers finalized harvesting 2005 *masika* crops.
- Off season rainfall received over Tanga, Kilimanjaro and Mwanza.

SYNOPTIC SUMMARY

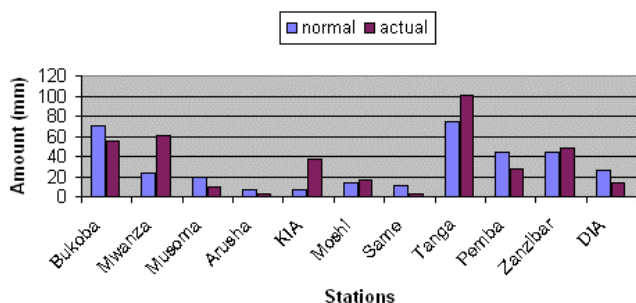
During the month of August, the Arabian and Azores anticyclones maintained a weakness near our area while the Mascarene anticyclone associated with East African ridge were relatively strong thus creating south-easterly to southerly wind flow over the eastern coast of East Africa hence causing some influxes of moist air from the Indian Ocean. The St. Helena anticyclone was fairly weak due to a series of frontal systems propagating from west to east thus weakening the pressure system.

WEATHER SUMMARY

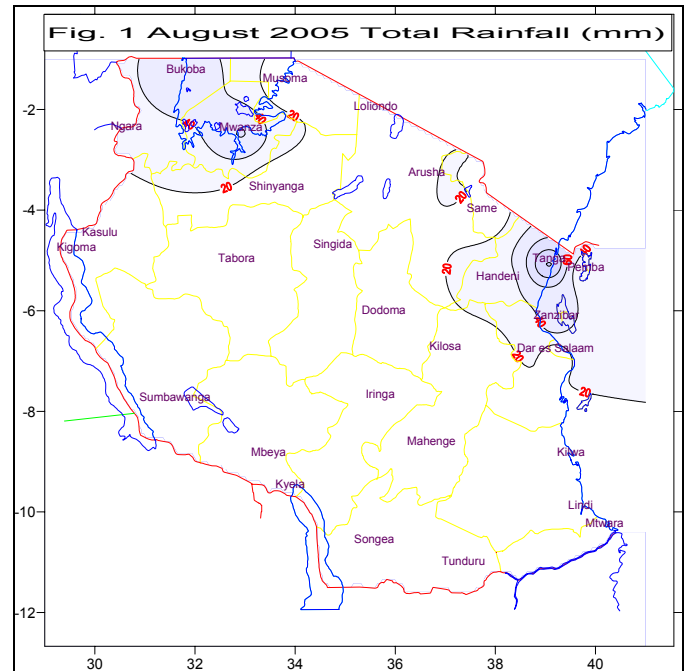
RAINFALL

Seasonal dry conditions continued to prevail over most parts of the country during the month except for a few areas on the northern coast,

Graph 1: August 2005 Rainfall compared to Normal



the islands of Zanzibar and Pemba, and the shores of Lake Victoria Basin where monthly rainfall records were above 20mm with a maximum of



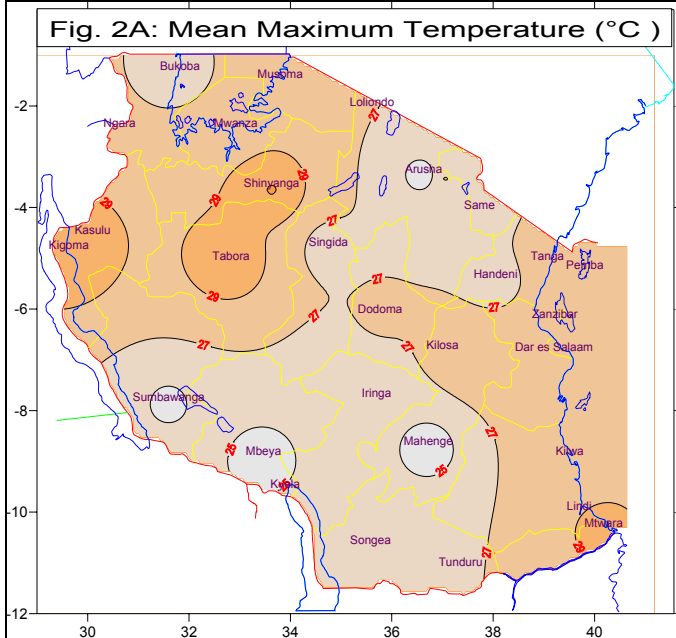
101.1mm recorded at Tanga airport (Fig. 1). The occasional rains were recorded mostly during the last week of the month creating spikes in records at airports of Tanga, Kilimanjaro and Mwanza, stations that depict above normal amounts in Graph 1.

MEAN AIR TEMPERATURE

Maximum and minimum air temperatures across the country during August are indicated in Figs. 2A and 2B respectively. Observed

mean maximum temperature ranged between just below 25°C and above 29°C as shown in Figure 2A. Areas over the southwestern highlands, Mahenge and northeastern highlands around Arusha continued experiencing

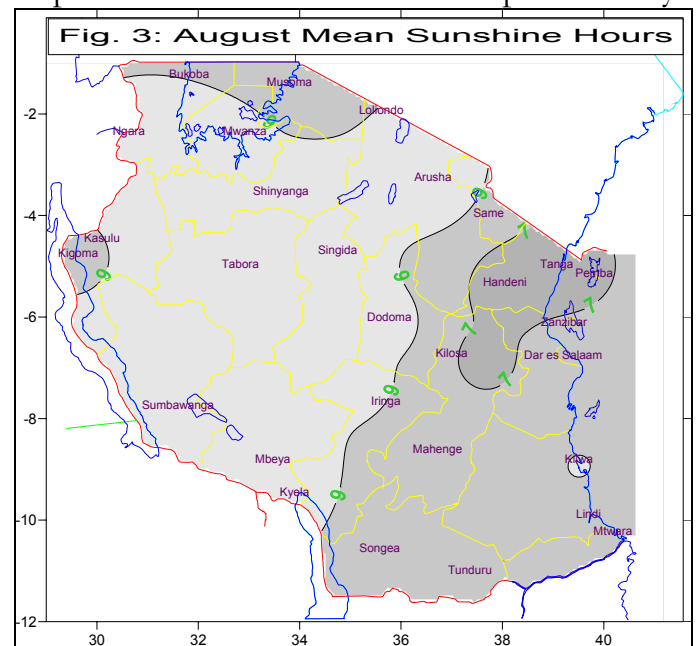
On the other hand, Figure 2B, depicts the mean minimum air temperatures during the month that ranged from just below 8°C to just above 22°C. Areas over the highlands of southwestern and parts of northeastern continued to experience relatively cooler conditions with the lowest mean minimum temperature of 6.5°C recorded at Mbeya airport, a rise by 1°C compared to July conditions.



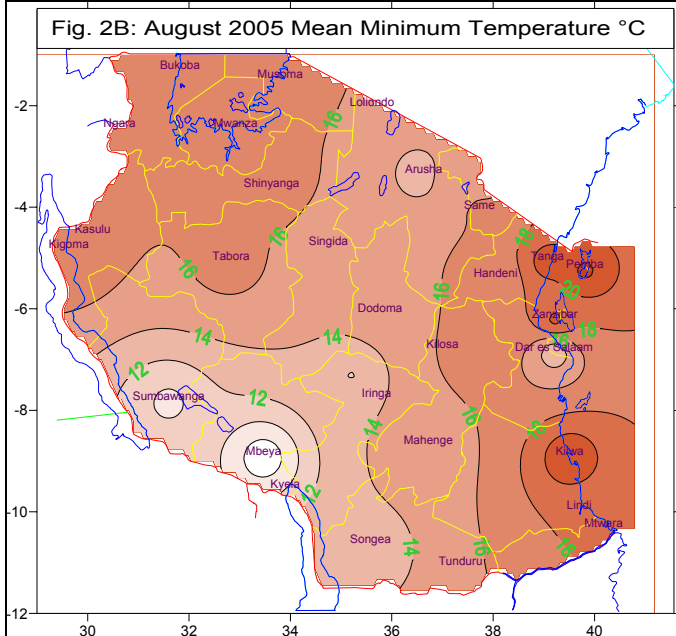
lower mean maximum temperatures below 25°C, while higher values above 28°C prevailed over the southern coast at Mtwara airport and inland areas covering parts of Shinyanga, Tabora

SUNSHINE HOURS

Figure 3 indicates the average duration of bright sunshine expressed in hours per day.



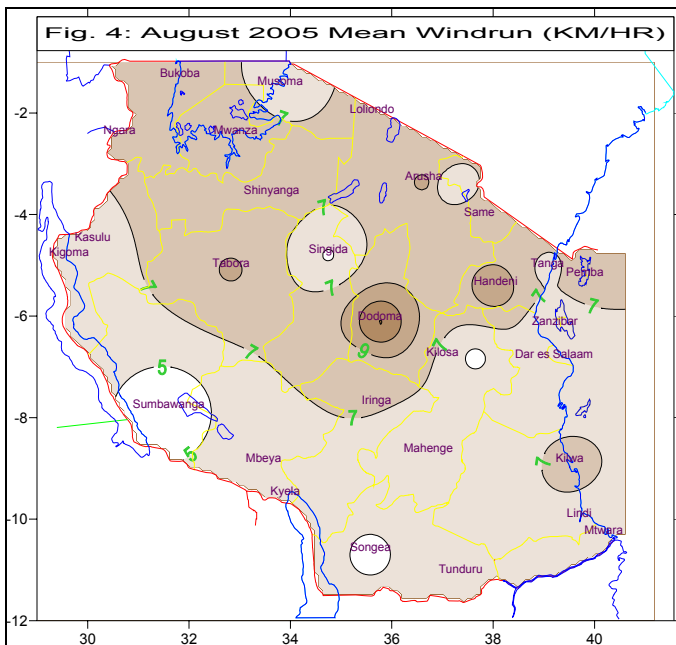
The country experienced minimum bright sunshine durations averaged around 7 hours/day over the northeastern sector of the country. Longer durations over 9 hours/day persisted over central, southwestern, western areas and parts of northeastern highlands.



and Kigoma.

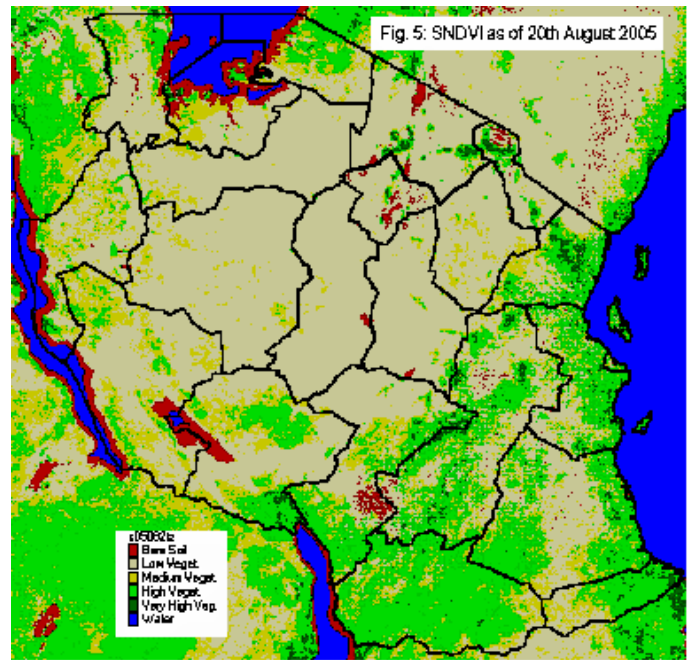
MEAN DAILY WINDSPEED

Mean wind run across the country during the month of July ranged from about 5 to just above 12km/hr, figure 4. Minimum speed occurred over parts of Rukwa, and isolated spots over Ruvuma, Kilimanjaro and Singida regions. Higher wind speeds were recorded at Dodoma airport (13km/hr) and Handeni Met. Station (10.5km/hr) followed by Tabora airport (9km/hr). Compared to the month of July conditions, minimum windspeeds around 5 - 6 km/hr during August over southern areas spread to include most of the southern coast.



SATELLITE INFORMATION

Figure 5, displays the 10-day satellite imagery depicting Spot Normalized Difference Vegetation Indices (SNDVI) as of 20th August 2005



Impact of a dry season, is shown by the vast minimal greening in the vegetation cover depicted over central, northeastern, western and parts of southwestern and southern parts of Lake Victoria Basin. On the other hand, southern highlands and the coastal belt depicted a higher normalized vegetation index of up to 80%, mostly a reflection of perennial growth. Compared to the situation during July, August conditions show a disorienting trend.

AGROMETEOROLOGY

Field activities were minimal over most parts of the country during the month of August. The continued spreads of dry conditions were ideal for final harvesting activities over most parts of bimodal rainfall areas and high altitude areas of unimodal pattern.

To most farmers, the period has generally been a breather as they gradually start to fetch the appropriate farming gear for the next growing season. Off season rains over in Tanga region help soil moisture replenishment

and were beneficial to perennials and gardening activities.

Overall, reports from bimodal rainfall areas (Lake Victoria Basin, Northeastern areas and Northern coastal belt) indicate that final yield levels of *masika* crop range from being good over northern coastal belt, moderate over parts of Lake Victoria Basin with pockets of poor yields reported in Magu and Kwimba districts. Over northeastern areas especially lowland areas of the districts of Same, Karatu, Monduli and Loliondo food crop yields were poor and following on similar conditions also reported last year. The main reason for the crop failure was due to prolonged occurrence of dry spells during the growing seasons.

HYDROMETEOROLOGY

There has been a decrease in water levels in rivers and water reservoirs due to the dry season. Water for industrial and domestic purposes should be used sparingly.

ENVIRONMENTAL

Windy, cooler and dry conditions across the country were maintained prevailed from previous month, thereby increasing cases for diseases such as colds, coughs, pneumonia and asthma.

EXPECTED SYNOPTIC SITUATION DURING SEPTEMBER 2005

The Arabian and Azores anticyclones over the northern hemisphere are expected

to intensify gradually while in the southern hemisphere the St. Helena, Mascarene anticyclones and the East African ridge are expected to weaken gradually. The Congo trough over the equatorial central Africa is expected to deepen. The equatorial low pressure belt is expected to start moving slowly southward displacement, thus the Inter Tropical Convergence Zone (I.T.C.Z) will also start shifting southward. The near equatorial trough will be active over the north west sector of the country. The southeasterly wind flow becoming southwesterly flow over the eastern coast of East Africa will tend to retreat backwards reducing the influx of moisture into our coastal areas.

EXPECTED WEATHER SITUATION DURING SEPTEMBER 2005

The Lake Victoria basin and few parts of the Kigoma region will experience partly cloudy to cloudy conditions at times with showers and thunderstorms over few areas and sunny intervals. The northern coast particularly the islands of Zanzibar and Pemba, Tanga region and few parts of Dar es Salaam region will feature partly cloudy conditions with some occasional light rains over few areas and sunny periods. Southern regions, South-western highlands, central and north-eastern highlands will be featuring partly cloudy conditions with some light rains mainly over high grounds of mount Kilimanjaro and Rungwe in Mbeya region. There is an expectation for on set of the short rains season over the Lake Victoria basin and surrounding areas.

Prepared by

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