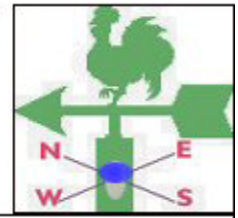




# TANZANIA METEOROLOGICAL AGENCY



## MONTHLY WEATHER BULLETIN

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### JULY - HIGHLIGHTS

- Seasonal dry conditions favored drying of matured crops

### SYNOPTIC SUMMARY

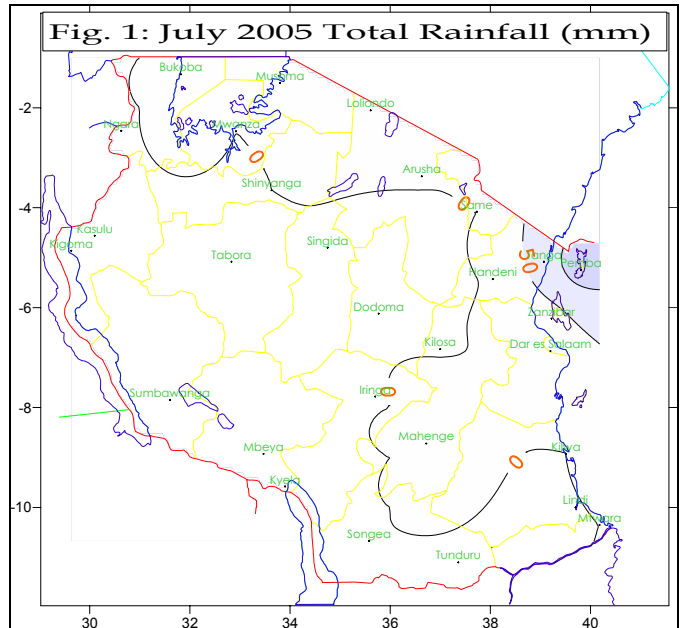
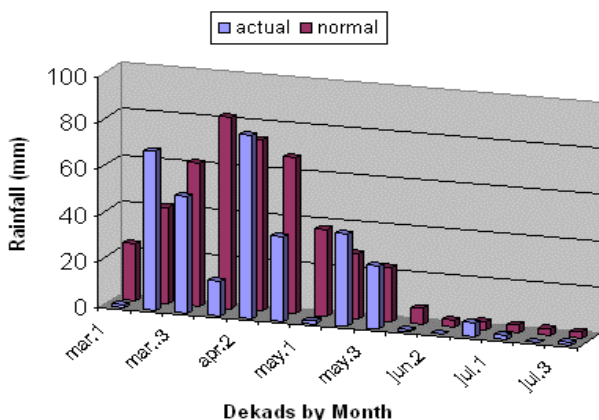
During the month of July, the Arabian, St. Helena and Azores anticyclones were generally weak while the Mascarene anticyclone and the associated ridge (East African) were strong. The near equatorial trough was active over the north eastern sector of the country. The southeasterly to southerly wind flow south of 5°S becoming southwesterly flow north of 5°S over the eastern coast of East Africa were evident.

### WEATHER SUMMARY

#### RAINFALL

Seasonal dry conditions prevailed over most parts of the country,

Graph 1: Arusha Rainfall Performance from March-July 2005

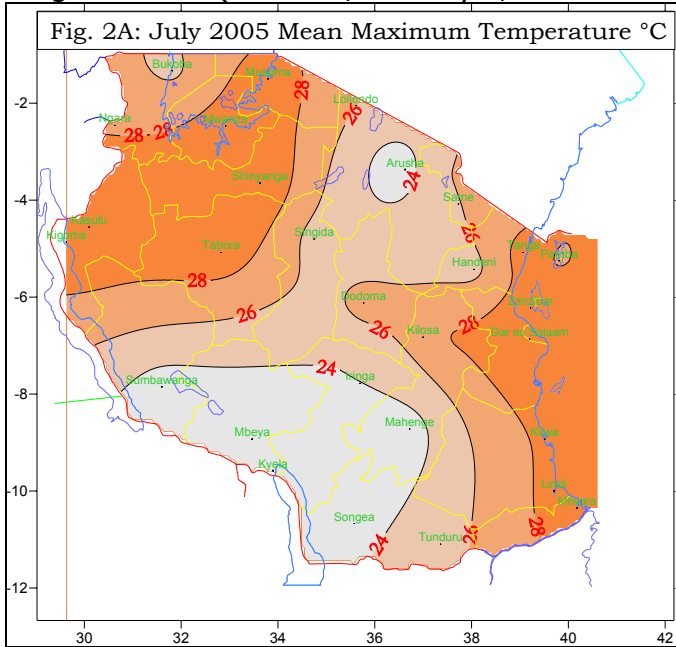


except for a few areas of extreme northerneastern coast, the islands of Zanzibar and Pemba, including shores of Lake Victoria Basin where monthly rainfall records were between 20 to 124 mm (Fig. 1). The Highest total monthly rainfall was 123.6 mm (Pemba). Grap 1, depicts the generally below normal 10-day rainfall distribution from March to May in Arusha.

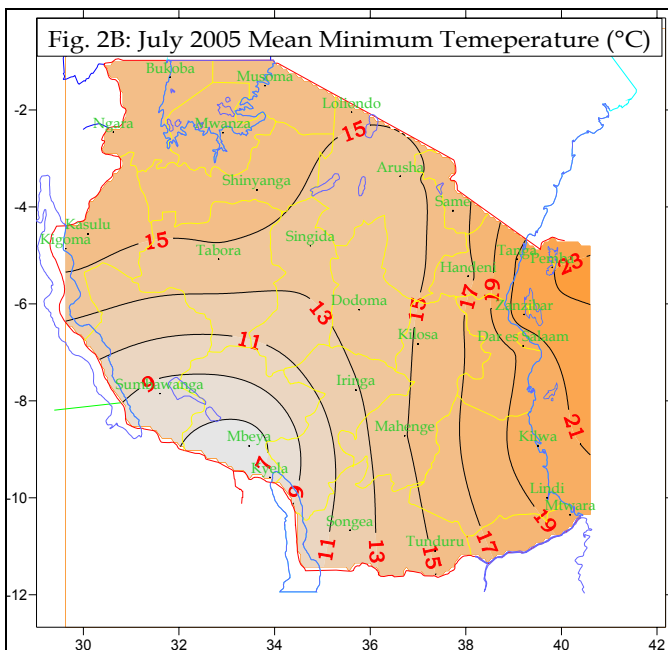
### MEAN AIR TEMPERATURE

Maximum and minimum air temperatures across the country during July are indicated in Figs. 2A and 2B respectively. Observed mean maximum temperature ranged between just above 30°C and just below 24°C as shown in Figure 2A. Areas over the southwestern

highlands (Rukwa, Mbeya, Ruvuma



and Iringa regions), Mahenge and Arusha continued experiencing lower maximum temperatures (slightly below 24°C), while higher values just above 28°C prevailed over the coastline and inland covering parts of the regions of Shinyanga, Mara, Mwanza, Kigoma and Kagera.

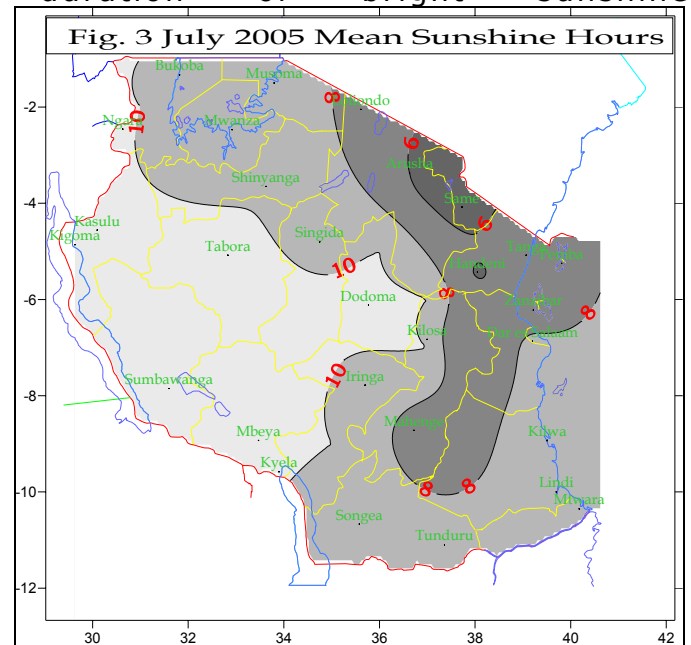


On the other hand, Figure 2B, depicts the mean minimum air temperatures during the month that ranged from just below 7.0 °C to just above 23°C.

Areas over the southwestern highlands continued to experience relatively cooler conditions with the lowest mean minimum temperature of 5.3°C recorded at Mbeya airport lower by 2°C compared to June conditions.

**SUNSHINE HOURS**

Figure 3 indicates the average duration of bright sunshine

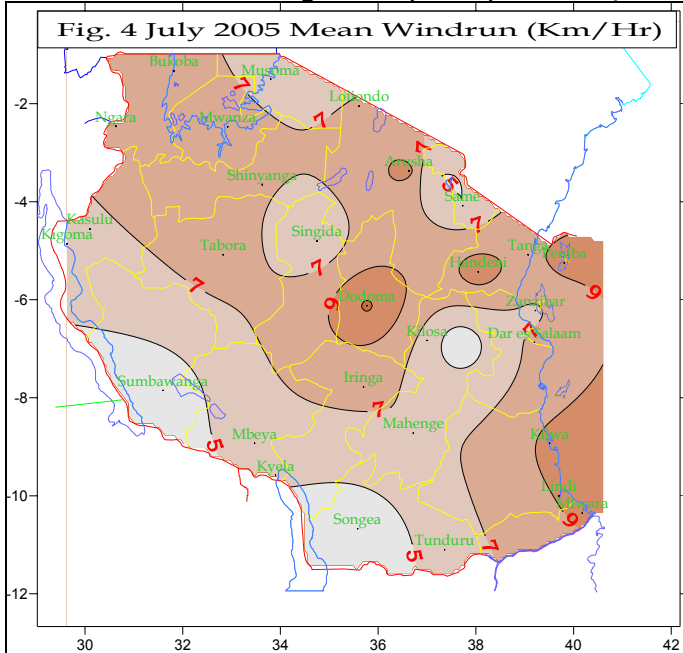


expressed in hours per day. The country experienced minimum bright sunshine durations averaged around 6 hours/day over Kilimanjaro region in the northeastern highlands. Longer durations around 10 hours/day persisted over central and western areas.

**MEAN DAILY WINDSPEED**

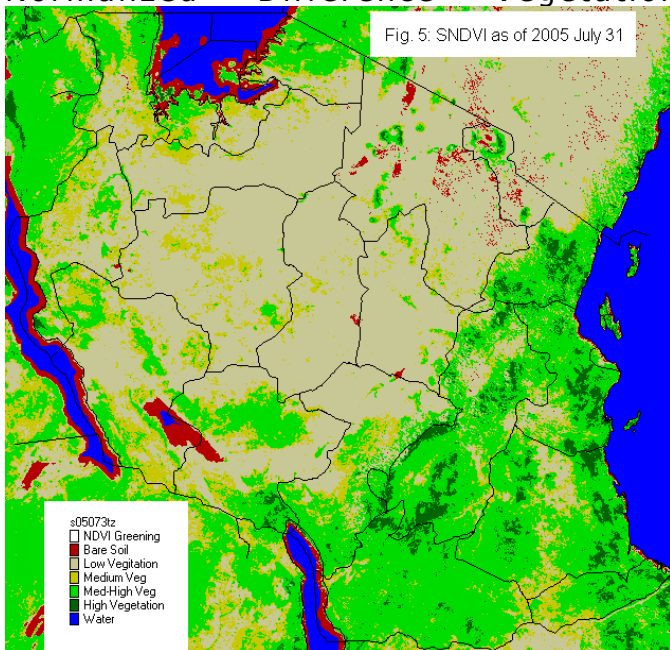
Mean wind run across the country during the month of July ranged from about 5 to 10 km/hr, figure 4. Minimum speeds occurred over parts of Rukwa, Ruvuma and Morogoro regions. Higher wind speeds were recorded at Dodoma, Mtwara and Pemba stations. Compared to the

June situations minimum windspeeds increased during July by 3km/hr.



**SATELLITE INFORMATION**

Figure 5, displays the 10-day satellite imagery depicting Spot Normalized Difference Vegetation



Indices (SNDVI) as of the end of July 2005.

Minimal greening in the vegetation cover persisted over central, northeastern, western and parts of southwestern and southern parts of Lake Victoria Basin, the picture depicting vividly the impact of a dry season. On the other hand, southern highlands and the coast belt depicted a higher normalized vegetation index of around 80%, mostly a reflection of perennial growth.

**AGROMETEOROLOGY**

Most crops (maize, sorghum, paddy and legumes) in mature state and moderate to poor condition were being harvested by the end of July in the *masika* rainfall receiving areas. Moderate crop yields are expected.

Over the same areas, cassava crop (Mwanza, Mara and northern coast) fared well at all stages.

Also maize crop over the cool southwestern highlands reached maturity during the period. On the other hand, field activities were minimal over central and western areas as harvesting of seasonal crops had already been completed.

**HYDROMETEOROLOGY**

There has not been any increase rather a decrease in water levels in rivers and water reservoirs. Water for industrial and domestic purposes should be used sparingly.

**ENVIRONMENTAL**

Windy, cooler and dry conditions across the country that prevailed during the month, enhanced prospects for diseases such as colds, coughs, pneumonia and asthma.

**EXPECTED SYNOPTIC SITUATION  
DURING AUGUST 2005**

The Arabian and Azores anticyclones are expected to remain relatively weak over the northern hemisphere while the St. Helena and Mascarene anticyclones and the East African ridge are expected to remain intense over the southern hemisphere. The Inter Tropical Convergence Zone (I.T.C.Z) will continue to remain north of equator while the influence of the near equatorial trough will be active over the north eastern sector of the country. The southeasterly wind flow south of 5°S becoming southwesterly flow north of 5°S over the eastern coast of East Africa will continue to persist during August.

**EXPECTED WEATHER SITUATION  
DURING AUGUST 2005**

The extreme northern coast (Tanga and islands of Zanzibar and Pemba) will experience partly cloudy conditions with occasions of light rains over few areas and sunny periods. Lake Victoria basin will feature partly cloudy conditions with few thunderstorms mainly over Kagera and Musoma and sunny periods. Southern, central and western areas will experience partly cloudy conditions with chilly morning weather and sunny periods. Southwestern and northeastern highlands will experience cloudy to partly cloudy mornings with chilly weather conditions breaking into sunny periods during the afternoon periods.

Prepared by  
**TANZANIA METEOROLOGICAL AGENCY**  
3<sup>rd</sup>, 4<sup>th</sup> & 10<sup>th</sup> Floors - Ubungo Plaza Ltd – Morogoro Road.  
P.O. Box 3056  
Tel. 255 -(0) 22 – 2460706-8 ; Fax: 255 - (0) 22 - 2460718  
E-mail: (1) [mef@meteo.go.tz](mailto:mef@meteo.go.tz) (2) [agromet\\_tz@meteo.go.tz](mailto:agromet_tz@meteo.go.tz)  
[Dar-es-Salaam](http://Dar-es-Salaam) UNITED REPUBLIC OF TANZANIA