10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services



Period: 11 – 20 October 2003

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HIGHLIGHTS

- Dry weather persists as sporadic light rains start...
- Land preparation still major agricultural activity over Malawi...
- Malawi to remain predominantly dry till end of October 2003...

1. WEATHER SUMMARY

1.1 RAINFALL

During the second 10-days of October 2003, dry weather continued over most parts of Malawi except a few places where sporadic light rains were experienced. These rains were part of the first rains locally known as *Chizimalupsya* and the amounts reported were mostly below the average rainfall for the period. The highest total rainfall amount was received at Chitipa (**21mm**) in the north.

1.2 MEAN AIR TEMPERATURE

Mean maximum air temperatures indicated that hot weather prevailed over Malawi. Very hot temperatures (above 36°C) were confined to Shire valley. The highlands continued to experience relatively lower temperatures. Mean maximum air temperature over the country ranged from 28 to 36°C. Mean minimum temperatures show that most areas were getting warmer when compared to the first 10-days of Ocober 2003.

1.3 MEAN SUNSHINE HOURS

Daily mean sunshine hours were slightly lower than during the first 10-days of October. This was due to slight increase in cloudiness over Malawi. Most areas experienced an average of less than 10 hours of bright sunshine on daily basis.

1.4 MEAN DAILY WIND SPEEDS

Observed wind speeds at a height of 2 meters were light (1 - 4 metres per second) over the country (Table). The highest wind speed was reported at Chileka (4m/s).

1.5 MEAN RELATIVE HUMIDITY

There was a slight improvement in atmospheric moisture during the period under review. The daily average relative humidity values over the country ranged from 40% at Kasungu to 61% at Mimosa unlike in the first 10-days of October 2003 when relative humidity values in central Malawi were as low as 37% when the highest value at Mzuzu was 56%.

2. AGROMETEOROLOGICAL ASSESSMENT

Most areas in Malawi remained very dry and the major agricultural activity on ground was land preparation in readiness for main planting rains. Main planting rains start when either the Inter Tropical Convergence Zone or Congo Air mass is established over Malawi. Normally, planting rains are expected to start in the south and some parts of central Malawi from mid to late November and spread to the north by end of December.

3. FORECAST FOR 21 – 31 OCTOBER 2003

A westerly trough in middle levels coupled with deepening of the interior surface trough from the west will maintain sporadic light rains while dry conditions will persist over most areas in Malawi during the forecast period.

TABLE FOR AGROMETEOROLOGICAL PARAMETERSDEKAD 2 OF OCTOBER 2003

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %	SUN SHINE HOURS	Eo mm per day	Et mm per day	RAD- TION cal cm- ² p/day
BVUMBWE	29.2	15.9	32.9	14.6	2.1	58	9.3	7.2	5.7	10.3
BOLERO	32.6	18.2	35.6	14.6	1.7	42	9.0	7.7	6.1	10.2
CHICHIRI	28.4	17.8	34.0	14.5	2.1	58	9.6	7.4	5.8	10.5
CHILEKA	32.1	20.2	36.2	16.4	3.6	53	9.5	8.6	7.0	10.4
NTAJA	33.4	20.6	36.0	19.0	2.7	44	10.3	8.8	7.1	11.0
CHITEDZE	32.5	16.3	34.0	14.1	1.0	45	10.0	7.5	5.8	10.8
CHITIPA	30.9	16.4	33.5	15.0	3.4	48	9.4	8.1	6.5	10.5
DEDZA	26.6	16.5	28.0	13.0	1.8	51	9.2	7.0	5.5	10.3
KASUNGU	32.5	18.3	34.1	15.0	3.1	40	10.7	8.8	7.0	11.3
KARONGA	33.3	22.3	35.0	20.5	1.8	52	8.7	8.1	6.5	10.1
LIA	30.8	16.3	32.5	12.5	2.1	47	10.1	7.8	6.1	10.9
MAKOKA	30.9	16.3	33.9	13.5	1.8	56	9.1	7.3	5.8	10.2
MANGOCHI	34.9	21.2	37.0	19.0	2.6	52	11.0	9.2	7.4	11.5
MIMOSA	32.0	17.2	37.2	12.6	1.4	61	10.1	7.6	6.0	10.8
MONKEY BAY	33.6	n/a	35.3	n/a	2.7	48	11.0	8.7	7.0	11.5
MZIMBA	30.9	17.6	34.2	14.0	1.4	48	9.6	7.5	5.9	10.7
MZUZU	29.5	13.0	31.5	9.5	1.8	57	8.7	6.8	5.3	10.0
NGABU	36.0	22.8	42.0	19.5	3.0	56	7.9	8.4	7.0	9.4
NKHOTAKOTA	32.8	22.5	34.7	20.9	2.5	52	10.0	5.6	4.4	10.9
SALIMA	34.0	22.2	35.4	19.9	2.5	47	11.2	9.1	7.3	11.6

Glossary of some terms on this table

- E_O = Potential Evaporation
- E_T = Potential Evapotranspiration and RH = Relative Humidity
- Mean Temperature of the day =(Max of the day + Min of the same day)/2
- ABS Max (Min) = Absolute Maximum (minimum) is the highest (lowest) of maximum (minimum) temperatures observed for a given number of days (calendar month) of a specified period of months (years).