10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services



Period: 1 – 10 October 2003

Season: 2003/2004 Release date: 15 October 2003

HIGHLIGHTS

- Hot and dry weather persists over Malawi...
- Land preparation was the major agricultural activity over Malawi...
- Favourable amounts of rainfall expected over Malawi during 2003/04

1. WEATHER SUMMARY

1.1 RAINFALL

During the first 10-days of October 2003, dry weather prevailed over Malawi.

1.2 MEAN AIR TEMPERATURE

High mean maximum air temperatures continued over most parts of the country. Higher temperatures were experienced in Shire valley and along the Lakeshore while lower values occurred over the highlands. Mean maximum air temperature ranged from 24°C at Dedza Met. Station to 34°C at Mangochi Met. Station. Mean minimum temperatures indicated that cold temperatures persisted over northern highlands where Mzuzu reported a mean minmum temperature of 10°C while elsewhere minimum temperatures ranged between 13 and 20°C.

1.3 MEAN SUNSHINE HOURS

Clear skies dominated most parts of as indicated by higher daily mean sunshine hours. Most areas experienced over 10 hours of bright sunshine on daily basis.

1.4 MEAN DAILY WIND SPEEDS

Wind speeds observed across the country ranged between 1 and 5 metres per second (Table). The highest wind speeds was reported at Chitipa (5m/s).

1.5 MEAN RELATIVE HUMIDITY

Daily average relative humidity values were below 50% over most parts of the country implying the atmosphere was mostly dry.

2. AGROMETEOROLOGICAL ASSESSMENT

Dry weather conditions existed over the country and main activity on ground was land preparation.

3. 2003/2004 RAINFALL OUTLOOK FOR MALAWI

Largely average (normal) rainfall amounts are expected over Malawi during the period October to December 2003. Southern half of Malawi is expected to receive average to above average rainfall amounts while average to below average amounts are expected over the other half of the country. During January to March 2004 season, the country is expected to receive average rainfall with decreased rainfall amounts over the some parts of the north.

4. FORECAST FOR 11 – 20 OCTOBER 2003

Rain bearing systems are not expected to get established over Malawi. Therefore, hot and dry weather is likely to persist over Malawi during the period.

TABLE FOR AGROMETEOROLOGICAL PARAMETERSDEKAD 1 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
BOLERO	30.7	17.8	31.7	12.8	2.5	41	10.0	8.0	6.4	10.8
CHILEKA	31.9	20.3	34.3	18.2	3.6	41	9.5	8.7	7.1	10.4
NTAJA	32.3	19.3	35.4	18.4	2.6	47	10.6	8.5	6.8	11.1
CHITIPA	29.4	15.6	30.3	14.3	4.5	46	10.0	8.5	6.8	10.9
DEDZA	24.4	13.6	26.4	12.4	1.5	52	10.5	6.8	5.2	11.1
KARONGA	33.0	20.6	36.0	19.1	1.9	50	10.5	8.5	6.8	11.2
LIA	28.7	13.2	30.6	11.5	1.8	52	10.5	7.2	5.6	11.1
MAKOKA	29.6	15.6	31.2	13.5	1.6	48	10.6	7.5	5.8	11.1
MANGOCHI	34.2	20.1	36.5	16.8	1.7	43	10.7	8.4	6.7	11.2
MIMOSA	32.4	15.7	34.9	15.6	1.2	49	10.3	7.5	5.9	10.9
MONKEY BAY	33.4	N/a	34.6	N/a	1.9	41	10.1	6.5	5.0	10.8
MZIMBA	28.4	15.6	30.0	9.9	1.6	46	10.9	7.5	5.8	11.4
MZUZU	27.1	10.2	28.4	7.5	1.9	56	9.6	6.5	5.1	10.5
NKHATA BAY	32.6	14.3	33.7	12.1	1.0	54	11.2	7.6	5.9	11.5
NKHOTAKOTA	31.8	19.3	32.9	17.5	2.0	46	10.4	8.3	6.6	11.0
SALIMA	33.0	20.3	34.6	17.3	1.5	42	11.0	8.2	6.5	11.4
THYOLO	31.2	14.9	33.3	14.0	1.7	50	10.4	7.5	5.9	10.8

Glossary of some terms on this table

- E₀ = 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).