

10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services



Period: 21 – 31 October 2003

Season: 2003/2004

Issue No.:

Release date: 5 November 2003

HIGHLIGHTS

- Sporadic light rains experienced...
- Farmers advised to speed up land preparation and procurement of inputs...
- Sporadic thunder showers to cover more areas by 10th November 2003...

1. WEATHER SUMMARY

Chitipa registered the highest daily average wind speed (4.9m/s).

1.1 RAINFALL

The last 10-days of October 2003 remained hot and dry over most areas except very few places which experienced isolated thunderly showers. Usually the start of the rainfall season in Malawi is more often a building process; starting with very isolated thunderly showers and moving towards more widely spread thunderly showers over time. So far, the country has been experiencing very isolated thunderly showers which are part of pre-season rains that are locally known as *Chizimalupsya*. Pre-season rains are generally light but can be locally heavy at times. During the period under review only isolated light rains were reported. The highest total rainfall amount was around **9mm** reported at Mwanza Boma in the south.

1.2 MEAN AIR TEMPERATURE

Hot to very hot weather prevailed over Malawi. Shire valley continued to experience hottest weather (above 36°C). Daily average maximum air temperatures ranged from 29°C at Bvumbwe over Shire highlands to around 37°C at Ngabu in Shire Valley. Daily average minimum temperatures indicated that generally cool to mild conditions were experienced during early morning.

1.3 MEAN SUNSHINE HOURS

Almost clear sky conditions dominated most parts of Malawi. Longer bright sunshine hours during the period ranged between 9 and 11 hours per day. Very few places experienced daily average sunshine hours of less than 8 hours.

1.4 MEAN DAILY WIND SPEEDS

Observed wind speeds at a height of 2 meters were light (2 - 5 metres per second) over the country (Table).

1.5 MEAN RELATIVE HUMIDITY

During the period under review, daily average relative humidity values ranged from 43 to 60% over most areas except for 74% reported at Nchalo Sugar Estate. The 74% reported at Nchalo could be attributed to local micro-climate created by irrigation activities. Otherwise, daily average relative humidity values indicated a gradual upward trend over most areas.

2. AGROMETEOROLOGICAL ASSESSMENT

The isolated thunderly showers being experienced in some parts of Malawi should propel farmers to speed up land preparation and procurement of farm inputs if they are to plant with first main rains. According to 2003/2004 rainfall forecast for Malawi, favourable rains for crop production are expected. The onset of main rains is expected during November 2003, stretching into early December over some parts of northern Malawi. To utilize the rains well, farmers should adhere to principles of good husbandry as advised by agricultural extension officers. Good husbandry practices include early land preparation, use of improved seed, timely planting, implementation of proper plant population and spacing, control of weeds, pests and diseases, and fertilizer application.

3. FORECAST FOR 1 – 10 NOVEMBER 2003

Meanwhile, weather models indicate that a convergence ahead of pressure surge will be established along the Limpopo on 6th November. This is anticipated to gradually move into southern and central Malawi. Therefore, conditions are favourable for more widely spread thunderly showers over southern and central Malawi during the last days of the outlook period.

TABLE FOR AGROMETEOROLOGICAL PARAMETERS

DEKAD 3 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	29.0	15.8	32.1	6.8	2.5	59	9.2	7.3	5.8	10.3
BOLERO	32.0	21.6	33.7	19.2	2.8	43	10.0	8.8	7.1	11.0
CHICHIRI	28.8	17.4	32.4	15.2	2.1	58	7.7	6.9	5.5	9.3
CHILEKA	34.9	22.3	35.9	18.1	4.2	49	9.4	9.4	7.8	10.4
CHITEDZE	31.0	16.6	33.1	15.2	1.3	44	10.0	7.6	5.9	10.9
CHITIPA	30.9	16.6	31.8	15.4	4.9	48	9.8	8.8	7.2	10.8
KASUNGU	31.0	18.4	32.6	16.4	3.3	43	11.4	8.9	7.2	11.8
KARONGA	34.8	22.7	33.7	22.0	3.0	43	11.4	9.7	7.9	11.8
LIA	30.0	16.9	31.9	13.8	2.3	50	10.9	8.1	6.4	11.5
MAKOKA	30.0	17.8	32.8	15.3	1.8	58	9.5	7.5	5.9	10.5
MANGOCHI	35.1	22.6	37.4	21.3	2.2	50	10.6	9.1	7.4	11.3
MONKEY BAY	34.3	n/a	35.6	n/a	2.5	46	11.0	7.0	5.5	11.5
MZIMBA	29.4	18.7	31.5	17.2	1.8	51	9.5	7.7	6.1	10.7
MZUZU	28.4	14.5	29.9	11.5	2.2	60	9.0	7.1	5.6	10.3
NGABU	36.6	23.8	41.6	21.0	3.7	51	9.2	9.5	7.9	10.3
NKHATA BAY	34.0	17.8	35.1	16.4	3.0	56	11.3	9.0	7.2	11.8
NKHOTAKOTA	32.3	22.8	34.0	20.0	2.5	53	9.5	8.8	7.1	10.6
SALIMA	34.1	22.5	35.8	20.2	2.3	46	11.7	9.2	7.4	12.0
NCHALO	35.5	21.7	40.5	20.0	2.6	74	8.9	4.9	3.7	10.2

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).