10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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HIGHLIGHTS

- **Sporadic light rains continue…**
- **Farmers intensify land preparation ready for planting rains…**
- **Thunderly showers to cover more areas by 2nd Dekad of November…**

1. WEATHER SUMMARY

1.1 RAINFALL

The past 10-days of November 2003 were hot and dry over most areas except few places mainly in the southern region which experienced isolated thunderly activities. Occurrences of pre-season rains that are locally known as *Chizimalupsya* were reported in the southern region of the country which were heavy over some places. During this period, Mimosa reported 104mm of rains and Thyolo reported 66mm.

1.2 MEAN AIR TEMPERATURE

Hot conditions continued to be experienced in the country with marked very hot air temperatures over Lakeshore and Shire valley areas. For instance daily average maximum air temperatures of 36°C were observed over Mangochi along Lakeshore areas and 38°C at Ngabu in the Shire Valley. The ten-day average minimum temperatures also increased as compared to the last Dekadal ranging from 16°C at Mzuzu to 24°C at Salima (Table 1) .

1.3 MEAN SUNSHINE HOURS

The whole country observed bright sunshine. Longer sunshine hours durations ranged from 8 at Karonga to 11 hours per day at Kasungu.

1.4 MEAN DAILY WIND SPEEDS

Observed wind speeds at height of 2 meters above the ground during the first dekad of November ranged between 2 – 4 metres per second over the country. Chitipa and Chileka recorded the highest mean value of 3.9m/s followed by Ngabu which recorded 3.8m/s (Table 1).

1.5 MEAN RELATIVE HUMIDITY

During the period under review, daily average relative humidity values indicated a gradual increase over most areas. This may be attributed to the pre- season rains. The daily average relative humidity ranged from 42% to 63%.

2. AGROMETEOROLOGICAL ASSESSMENT

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 over south and central areas, but stretching into early December over some parts of northern Malawi. The pre-season rains which have so far occurred have prompted farmers to intensify land preparation ready for planting rains. To utilize the rains well, farmers are advised to 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 11 – 21 NOVEMBER 2003

Meanwhile, frontal systems punctuated by high pressure areas will continue to cross the southern tip of South Africa creating convergence ahead of pressure surge. Therefore, conditions are favourable for sporadic thunderly showers that could be locally heavy over southern and central Malawi during the forecast period.

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TABLE 1 FOR AGROMETEOROLOGICAL PARAMETERS

DEKADAL 1 OF NOVEMBER 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	29.7	16.4	33.9	13.8	2.4	59	10.1	7.8	6.2	11.0
BOLERO	32.8	21.1	34.8	16.2	2.5	42	N/A	5.7	5.0	N/A
CHICHIRI	29.9	18.4	34.5	16.5	2.2	54	9.4	7.8	6.2	10.5
CHILEKA	32.9	21.2	36.8	17.6	3.9	56	9.2	8.9	7.2	10.4
NTAJA	33.9	22.7	37.5	20.0	3.2	51	11.0	9.6	7.8	11.6
CHITIPA	32.3	17.4	33.0	17.1	3.9	44	N/A	6.0	5.3	N/A
DEDZA	27.3	16.7	28.9	15.7	1.9	55	N/A	4.5	3.9	N/A
KASUNGU	32.2	19.6	34.9	16.9	3.2	44	11.9	9.4	7.5	12.2
KARONGA	35.0	23.7	36.5	23.0	2.2	51	7.5	8.2	6.7	9.3
L I A	31.0	17.0	33.8	15.1	2.3	52	10.3	8.1	6.4	11.1
MAKOKA	31.1	18.2	34.8	15.0	1.8	56	9.9	7.9	6.3	10.9
MANGOCHI	36.0	23.2	37.5	22.0	2.5	49	10.4	9.4	7.7	11.2
MIMOSA	32.9	18.0	38.3	15.9	1.9	62	9.4	7.9	6.3	10.5
MONKEY BAY	34.7	N/A	36.7	N/A	2.8	48	N/A	4.7	4.1	N/A
MZIMBA	30.7	19.3	34.2	17.8	1.7	53	N/A	4.8	4.1	N/A
MZUZU	29.3	15.5	32.5	13.0	2.2	63	N/A	4.4	3.7	N/A
NGABU	37.5	23.8	43.0	21.5	3.8	52	10.7	10.4	8.5	11.4
NKHATA BAY	34.5	19.4	27.4	17.5	N/A	53	N/A	4.4	3.7	N/A
NKHOTAKOTA	33.0	23.8	35.1	21.1	N/A	53	N/A	4.6	3.9	N/A
SALIMA	34.6	24.4	36.4	22.6	2.8	49	11.2	9.6	7.8	11.7
THYOLO	31.6	18.3	36.5	15.8	2.0	N/A	N/A	6.9	6.2	N/A

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).