



# 10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services



Period: 11 – 20 October 2004

Season: 2004/2005

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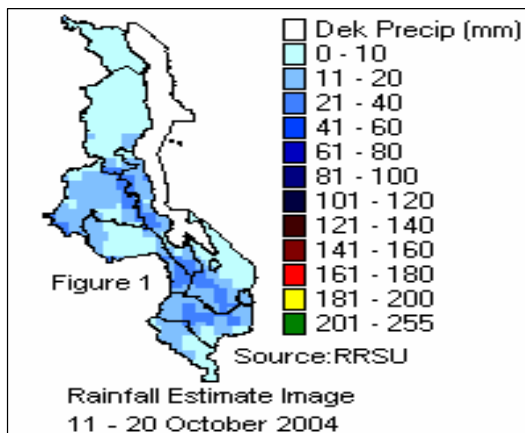
## HIGHLIGHTS

- South and central Malawi receive *Chizimalupsya*, heavy in some areas...
- Wet conditions to improve grazing conditions for livestock...
- Prospects for sporadic rains to improve towards the end of 21 – 31 October 2004...

## 1. WEATHER SUMMARY

### 1.1 RAINFALL

Analysis of rainfall using satellite based information (Figure 1) and available ground reports indicate that during the period 11 - 20 October 2004 most parts of southern and central Malawi received part of the first rains that are locally known as *Chizimalupsya*. Ground information indicate that the rains were above normal in most parts. Some areas reported up to 4 rainy days. Notable rainfall totals received from selected stations



included: 105.9mm at Lujeri Tea Estate in Mulanje District, 50.3mm at Chichiri Met in Blantyre, 47.4mm at Mangochi Met, and 41.4mm at Chancellor College in Zomba.

### 1.2 MEAN AIR TEMPERATURE

Mean maximum air temperatures indicated that hot weather prevailed over most parts of Malawi except at Mzuzu, Dedza and Bvumbwe where warm temperatures were reported. Mean maximum air temperature

over the country ranged from 24°C at Dedza to 35°C at Karonga. Mean minimum temperatures showed cool to mild conditions over most areas.

### 1.3 MEAN SUNSHINE HOURS

Daily mean sunshine hours in the south and central Malawi were slightly lower than during the first 10-days of October while in the north were slightly higher. Most areas in the south and centre 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 ranged from 1 to 5 metres per second or 3 to 18 Km/hr over the country (Table). The highest wind speed was reported at Chitipa (5m/s or 18Km/hr).

### 1.5 MEAN RELATIVE HUMIDITY

The daily average relative humidity values over the country ranged from 43% at Karonga to 75% at Bvumbwe. The values showed relatively moist air covered most areas in the south and centre with a gradual decrease northwards.

## 2. AGROMETEOROLOGICAL ASSESSMENT

In the second 10-days of October 2004, the north remained relatively dry except for a few drops of rain over Mzuzu and Mzimba. In the south and central Malawi while the rainfall situation improved significantly. Most areas received part of the first rains that are locally known as *Chizimalupsya*. Heavy amounts

were registered in some areas. These rains acted as a wake up call for farmers to speed up land preparations in readiness for main planting rains. Reports indicate that around Mulanje mountain in southern Malawi, where heavy rains were received, some farmers have started planting crops at a very small scale. The wet situation will improve grazing conditions for livestock and facilitate farm operations like ploughing and making of ridges.

### 3. FORECAST FOR 21 – 31 OCTOBER 2004

A westerly trough in middle levels coupled with deepening of the interior surface trough from the west will improve chances of sporadic rains over Malawi towards the end of the forecast period. Otherwise, dry conditions will still persist in most areas.

**TABLE 2: AGROMETEOROLOGICAL PARAMETERS**

**DEKAD 2 OF OCTOBER 2004**

STATION	MAX TEMP	MIN TEMP	ABS MAX	ABS MIN	WIND SPEED	RH
	(°C)	(°C)	(°C)	(°C)	m/s	%
BVUMBWE	25.8	15.1	27.9	13.6	2.0	75
BOLERO	30.5	20.7	31.8	19.6	2.9	45
CHICHIRI	29.7	17.5	30.5	16.2	0.8	71
CHILEKA	29.8	20.0	34.0	17.5	2.4	65
NTAJA	31.6	21.1	34.5	20.4	3.1	47
CHITEDZE	29.2	17.5	31.3	16.5	1.5	60
CHITIPA	30.5	15.7	31.6	15.0	5.0	47
DEDZA	24.2	16.7	25.5	15.0	1.9	72
KASUNGU	29.6	18.6	30.6	17.2	3.3	55
KARONGA	34.5	23.4	35.2	21.3	3.4	43
K I A	28.8	17.5	30.5	16.2	2.1	61
MANGOCHI	33.3	22.5	35.7	20.5	2.3	58
MONKEY BAY	32.7	23.3	34.5	20.4	2.6	54
MZIMBA	28.3	17.3	29.8	14.2	1.6	57
MZUZU	27.4	15.4	28.3	14.0	2.4	60
NGABU	34.1	23.0	39.6	20.9	3.7	60
NKHATA BAY	32.5	18.1	33.8	16.6	2.0	60
NKHOTAKOTA	30.6	22.4	32.6	20.6	2.0	60
SALIMA	32.2	21.8	34.2	20.6	3.3	60

**Glossary of some terms on this table**

- 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).
- To convert Meters Per Second (mps) to Kilometers per hour (Km/hr) = mps x 3.6