

# 10-Day Rainfall & Agromet Bulletin

# **Department of Meteorological Services**



Period: 1 – 10 November 2005

Season: 2005/2006

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### HIGHLIGHTS

- Increased rainfall received particularly over the south...
- Rains prompted some farmers in the south to start planting crops ...
- Isolated rains expected during the next 10-days...

#### . WEATHER SUMMARY

#### 1.1 RAINFALL

In the first 10 days of November 2005 moist unstable northweasterly air mass caused locally heavy rains over some parts of the country. As a result some areas received rainfall greater than 20mm. Significant rainfall amounts during the period were reported at Thyolo Boma (126mm), Chileka Airport (89mm), Chitipa (87mm), Dwangwa (76mm), Satemwa (58mm), Chichiri (34mm) and Makoka (32mm). Due to locally heavy downpour some areas received more than 100% above normal such as Chitipa (1342%), Dwangwa (434%), Thyolo Boma (427%), Chileka (338%), Byumbwe (303%), Lifuwu (220%), Mulanje Boma (167%) and Makoka (156%). Cumulative rainfall as total todate since October 1<sup>st</sup> shows that few areas have so far received above normal rainfall. Substantial rainfall as a percentage of normal were reported at Chitipa (721%), Dwangwa (270%), Thyolo Boma (193%), Chileka (161%), Bvumbwe 152%) and Lifuwu (137%). See Table 1.

#### **MEAN AIR TEMPERATURE**

The country continued to experience hot temperatures during the dekad under review. Maximum temperatures ranged from 30° C (Bvumbwe & Mzuzu) to 39° C (Ngabu). Highest absolute temperature was reported at Ngabu (41°C) on 7 November and lowest absolute temperature was reported at Mzuzu (12°C) on 1st November.

# **MEAN DAILY WIND SPEEDS**

At 2 meters height, observed wind speeds ranged from 1 to 4 metres per second or 3 to 14 Km/hr (Table 2). The highest wind speed was reported at Chileka Airport (4m/s or 14Km/hr), with the lowest at Chichiri (1m/s or 3.6Km/hr).

#### MEAN RELATIVE HUMIDITY

Mean relative humidity slightly increased over the country. The daily average relative humidity values over Malawi ranged from 42% at Mangochi to 67% at Bvumbwe. The values show a build up of moisture in the atmosphere over the country.

# . AGROMETEOROLOGICAL ASSESSMENT

Land preparation and acquisition of farm inputs and equipment continued to be the major agricultural activities in Malawi in readiness for the main rains. The substantial rains that were received over some areas of the country resulted in build up of soil moisture such that some farmers particularly in the south were promoted to start planting crops.

#### FORECAST FOR - NOVEMBER

Meanwhile pressure systems indicate favourable conditions for isolated rains over the country during the period 11 –20 November 2005.

# TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 1 OF NOVEMBER 2005: PERIOD 1 - 10

STATION NAME	DEKADAL	DEKADAL	DEKADAL	TOTAL	NORMAL	TOTAL	RAINY
017(1101(10)01)2	TOTAL	NORMAL		TO	TO		DAYS
		NORWAL	TOTAL			TO DATE	DATS
	RAINFALL		AS %	DATE	DATE	AS %	
SOUTHERN REGION	mm	mm	NORMAL	mm	mm	NORMAL	<sup>з</sup> 0.3 mm
Bvumbwe Met.	71.0	23.4	303	83.2	54.8	152	6
Chancellor College	16.0	20.1	80	20.0	47.9	42	11
Chichiri Met.	33.8	38.5	88	33.8	72.1	47	4
Chileka Airport	88.9	26.3	338	88.9	55.3	161	5
Liwonde Township	3.0	13.6	22	16.0	27.0	59	2
Lujeri Tea Estate	19.5	57.9	34	40.2	157.9	25	4
Makoka Met	32.1	20.6	156	45.8	47.5	96	5
Mangochi Met.	0.0	18.3	0	0.0	33.5	0	0
Monkey Bay Met.	0.0	13.6	0	0.0	22.5	0	0
Mulanje Boma	63.2	37.8	167	75.7	139.7	54	3
Namiasi Agric	0.0	5.0	0	0.0	15.1	0	0
Namwera Agric	0.0	20.3	0	0.0	34.5	0	0
Nchalo Sucoma	13.7	22.0	62	13.7	49.5	28	1
Ngabu Met.	0.0	19.1	0	0.0	45.5	0	2
Nsanje Boma	2.5	27.1	9	2.5	55.6	4	1
Ntaja Met.	5.8	11.5	50	5.8	26.9	22	1
Satemwa Tea Est.							
No.1	57.9	38.8	149	76.5	87.8	87	4
Toleza Farm	15.9	21.9	73	15.9	37.7	42	2
Thyolo Boma	126.0	29.5	427	126.0	65.4	193	2
CENTRAL REGION							
Dedza Met	6.8	13.7	50	6.8	24.3	28	2
Dwangwa Sugar	70.4	47.0	40.4	70.4	00.0	070	4
Corp.	76.4	17.6	434	76.4	28.3	270	1
L.I.A. Met.	3.3	11.0	30	3.3	22.1	15	2
Kasungu Met	1.5	18.3	8	1.5	27.7	5	1
Lifuwu	11.2	5.1	220	11.2	8.2	137	1
Natural Res. College	2.7	11.1	24	2.7	20.5	13	2
Ntcheu - Nkhande	2.2	16.0	14	2.2	38.6	6	11
Salima Met	8.3	12.2	68	8.5	18.3	46	1
NORTHERN REGION							
Bolero Met	2.8	44.0	6	2.8	50.7	6	2
Chikangawa forest	7.6	19.8	38	15.9	33.4	48	3
Chitipa Met	87.2	6.5	1342	87.2	12.1	721	5
Euthini Agric.	8.5	11.1	77	8.5	20.0	43	2
Karonga Met.	0.0	3.9	0	0.0	4.8	0	0
Mzimba Met	11.3	12.8	88	11.3	17.5	65	1
Mzuzu Met.	0.0	20.3	0	0.2	54.4	0	0
NkhataBay Met.	0.0	69.1	0	0.0	138.5	0	0
Vinthukutu Agric	0.0	8.9	0	0.0	18.5	0	0

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 1 OF NOVEMBER 2005

STATION	MAX TEMP	MIN TEMP	ABS MAX	ABS MIN	WIND SPEED	RH
	(°C)	(°C)	(°C)	(°C)	m/s	%
BVUMBWE	29.8	18.4	31.6	15.5	2.0	67
CHICHIRI	30.4	19.5	33.0	17.0	0.9	56
CHILEKA	32.2	22.2	34.6	18.4	4.0	54
NTAJA	33.7	23.0	35.1	21.2	3.0	48
CHITEDZE	31.8	18.8	33.2	16.8	1.2	53
CHITIPA	30.2	17.8	33.8	15.8	2.8	60
KASUNGU	31.7	20.4	32.9	19.3	3.1	50
KARONGA	33.9	24.1	33.6	22.9	1.8	44
KIA	30.3	18.6	31.3	16.5	2.0	52
MAKOKA	30.3	19.8	32.2	17.3	1.6	58
MANGOCHI	32.5	21.4	34.6	19.0	1.3	61
MONKEY BAY	34.1	25.9	34.8	22.3	2.9	46
MZIMBA	30.5	18.9	32.2	17.2	1.2	51
MZUZU	29.8	15.7	31.3	12.3	1.8	52
NGABU	38.8	25.1	41.0	23.0	3.3	45
NKHATA BAY	34.8	20.2	36.2	17.9	-	50
SALIMA	34.2	24.2	35.0	22.0	2.9	47

# 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) = mpsx3.6