10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

Period: 01 – 10 March 2006 Season: 2005/2006 Issue No.16

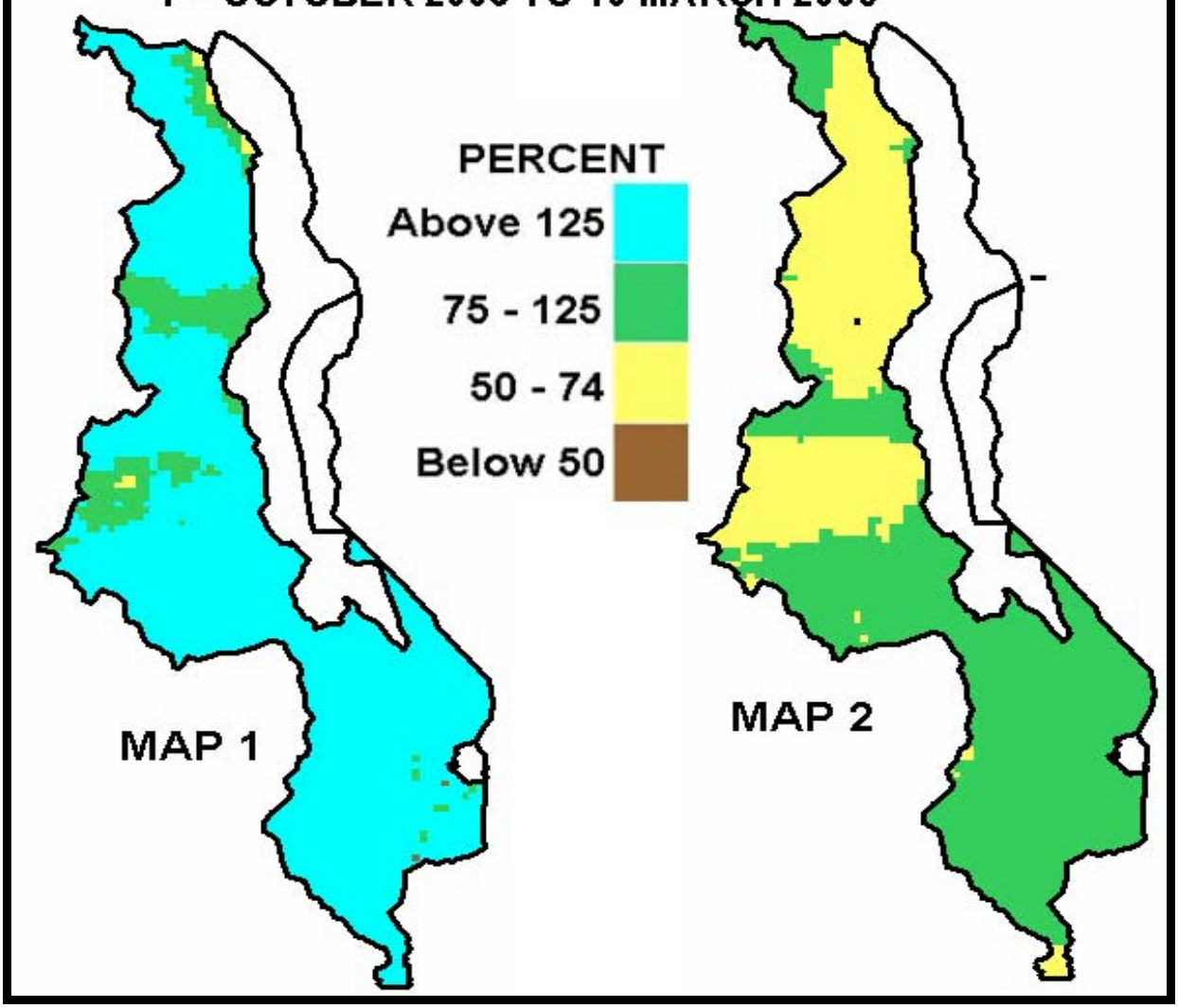
Release date: 15 March 2006

HIGHLIGHTS

- **Heavy rains cause floods in Salima, Mangochi and Machinga…**
- **Incessant rains cause drying and harvesting problems…**
- **Isolated light rains expected during 11 to 20 March 2006…**

MAP 1: 10-DAY RAINFALL FOR 01 – 10 MARCH 2006 AS PECENTAGE OF NORMAL RAINFALL

MAP 2: TOTAL RAINFALL TO DATE AS PERCENTAGE OF NORMAL RAINFALL FOR THE PERIOD 1ST OCTOBER 2005 TO 10 MARCH 2006



All inquiries should be addressed to: The Director of Meteorological Services, P.O. Box 1808, Blantyre, MALAWI
Tel: (265) 1 822 014 Fax: (265) 1 822 215 E-mail: metdept@metmalawi.com Homepage: www.metmalawi.com

. WEATHER SUMMARY

1.1 RAINFALL

During the first 10-days of March 2006, Inter Tropical Convergence Zone oscillated between southern and central Malawi while Congo Air mass was active in areas that were north of it. As a result there was an improvement in rainfall distribution and amounts in both time and space in over most parts of Malawi. Most areas experienced continuous rains with high intensities. On average eight rainy days were reported over Malawi. Torrential rains caused much above normal dekadal rainfall amounts in most areas particularly in the south where Lujeri reached 1939%, Namiasi Agric 679%, Monkey Bay 580% and Mangochi 486%. Notable 10-day total rainfall amounts above 300mm were reported as follows: Salima Met registered about 600mm of which 205mm was received on 4th March alone, Lifuwu collected 413mm and Monkey Bay Met 352mm. See Table 1 and Map 1.
Cumulative rainfall performance since 1st October 2005 indicates that as at 10th March 2006 most areas in the north and some parts of the centre had received below 75% of the expected cumulative rainfall. The south had received between 75 and 125% of normal cumulative rainfall. See Table 1 and Map 2.

. MEAN AIR TEMPERATURE

The highlands were warm while the hot weather was experienced in low lying areas. Mean maximum temperatures ranged from 24°C to 31°C. See Table 2.

. MEAN DAILY WIND SPEEDS

Daily mean wind speeds measured at a height of 2 meters above the ground remained light and variable. The average speeds ranged from 0.5 (1.8 Km/hr) at Ntaja Met to 2.3 m/s (8.3 Km/hr) at Chichiri Met. See Table 2.

. MEAN RELATIVE HUMIDITY

High daily average relative humidity values were experienced during the period under review. This time the values ranged from 75% reported at Ngabu to 90% registered at Bvumbwe. See Table 2.

. AGROMETEOROLOGICAL ASSESSMENT

Rains that resumed in most areas during the period under review came too late for crops in some parts of the country to recover from the effects of dry spells that lasted for over a month. Reports indicate that some households will harvest nothing. On the other hand, the rains have improved water resources and supported planting and growth and development of tuber crops. However, incessant rains caused drying and harvesting problems for matured crops particularly over the south and some parts of central region where most crops have reached maturity, dying and harvesting stages. Persistent high relatively humidity values experienced encouraged occurrence of fungal diseases that might increase pre-harvest crop loses this season. In Salima and Mangochi, torrential rains caused flash floods that left farm families homeless, destroyed crops and washed away bridges and roads. Crop production in flooded areas will significantly reduce as crops were washed away and the little that remained is already being harvested for immediate consumption. More details about the impact of the dry spells and floods on overall crop production this season will be provided by the Ministry of Agriculture and Food security when the second round production figures are presented in the first week of April.

. FORECAST FOR – MARCH

Current atmospheric pattern indicate that a general reduction in rainfall amounts is anticipated over Malawi. There expect rains to be confined to isolated areas during 11 to 20 March 2006.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 1 OF MARCH 2006: PERIOD 01 - 10

STATION NAME **SOUTHERN REGION**	DEKADAL TOTAL RAINFALL mm	DEKADAL NORMAL mm	**DEKADAL TOTAL AS % NORMAL**	TOTAL TO DATE mm	NORMAL TO DATE mm	**TOTAL TO DATE AS % NORMAL**	RAINY DAYS
Bvumbwe Met.	116.1	73.2	**159**	1068.7	874.1	**122**	10
Chancellor College	138.2	110.7	**125**	1048.5	1127.8	**93**	7
Chichiri Met.	124.8	76.8	**163**	1057.5	887.1	**119**	9
Chileka Airport	65.6	53.6	**122**	893.1	736.7	**121**	6
Chingale Agric	147.5	57.7	**256**	760.0	801.8	**95**	8
Chiradzulu Agric	104.4	72.0	**145**	920.9	877.4	**105**	6
Kasinthula Res. Stn.	146.6	87.2	**168**	976.1	616.4	**158**	6
Liwonde Township	167.2	63.0	**265**	754.4	709.2	**106**	9
Lujeri Tea Estate	287.0	14.8	**1939**	1426.8	1466.3	**97**	10
Makoka Met	140.5	85.3	**165**	1112.7	853.1	**130**	9
Mangochi Met.	283.5	58.3	**486**	696.9	704.0	**99**	8
Mimosa Met.	221.2	112.2	**197**	1291.8	1111.0	**116**	9
Monkey Bay Met.	351.7	60.6	**580**	808.2	851.8	**95**	6
Mulanje Boma	271.4	136.6	**199**	1905.9	1251.5	**152**	8
Mwanza Boma	137.3	73.8	**186**	895.6	832.3	**108**	7
Namiasi Agric	280.4	41.3	**679**	775.6	710.3	**109**	8
Naminjiwa Agric	159.3	50.1	**318**	1018.4	815.7	**125**	8
Namwera Agric	279.0	70.4	**396**	1298.3	879.0	**148**	8
Nchalo Sucoma	142.2	57.0	**249**	758.1	588.6	**129**	6
Ngabu Met.	84.6	52.1	**162**	673.4	645.0	**104**	8
Ntaja Met.	217.9	55.8	**391**	785.0	740.9	**106**	8
Thyolo Met	151.7	87.7	**173**	1065.7	915.8	**116**	9
CENTRAL REGION							
Bunda College	150.8	60.7	**248**	533.4	743.5	**72**	5
Chitedze Met.	137.0	59.1	**232**	636.4	768.6	**83**	7
Dowa Agric	70.8	61.6	**115**	598.2	740.9	**81**	8
Dwangwa Sugar Corp.	165.5	128.4	**129**	769.2	928.7	**83**	9
Kaluluma DTC	231.6	69.5	**333**	657.7	686.6	**96**	9
K.I.A Met	159.3	72.4	**220**	736.4	727.4	**101**	8
Kasungu Met	111.0	62.1	**179**	481.1	768.8	**63**	4
Lifuwu	412.7	119.0	**347**	1061.8	1050.7	**101**	9
Lisasadzi	77.1	52.9	**146**	408.5	719.1	**57**	8
Madisi Agric	100.0	59.5	**168**	559.8	727.0	**77**	8
Mlangeni Njolomole	222.5	75.0	**297**	977.9	843.7	**116**	6
Mwimba Research	56.2	100.9	**56**	622.6	824.0	**76**	4
Nkhotakota Met	172.3	121.1	**142**	746.0	1017.6	**73**	7
Ntcheu – Nkhande	196.3	79.9	**246**	1000.3	921.5	**109**	6
Ntchisi Boma	115.0	53.5	**215**	480.7	733.2	**66**	8
Salima Met	599.6	111.3	**539**	1467.3	1023.0	**143**	9
Dedza RTC	199.3	86.8	**230**	807.3	851.5	**95**	8
NORTHERN REGION							
Bolero Met	106.5	56.2	**190**	415.7	627.7	**66**	7
Bwengu Agric.	95.9	41.2	**233**	447.2	676.6	**66**	8
Chitipa Met	153.4	68.2	**225**	789.1	799.4	**99**	8
Emfeni Agric	212.0	66.0	**321**	523.7	679.7	**77**	9
Karonga Met.	38.5	76.3	**50**	376.6	662.6	**57**	7
Mzimba Met	68.9	73.9	**93**	535.7	750.4	**71**	10
Mzuzu Met.	90.3	83.8	**108**	447.1	830.7	**54**	10
NkhataBay Met.	102.3	92.5	**111**	696.2	1046.5	**67**	10
Vinthukutu Agric	66.7	83.6	**80**	616.0	736.9	**84**	9

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 1 OF MARCH 2006

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BVUMBWE	25.4	17.2	27.2	15.0	1.0	90
BOLERO	26.5	18.9	29.1	18.0	0.5	85
CHICHIRI	25.6	18.8	27.6	17.0	0.6	85
CHILEKA	27.2	20.6	29.5	19.1	2.3	83
NTAJA	28.1	21.3	30.0	20.0	0.5	86
CHITEDZE	26.1	18.5	N/A	N/A	0.5	80
CHITIPA	25.3	17.5	27.6	16.2	1.1	83
KASUNGU	28.9	19.1	30.9	18.6	1.3	86
KARONGA	29.1	21.9	32.6	24.5	1.1	79
K.I.A	24.9	18.1	27.7	17.0	1.4	86
MAKOKA	26.4	19.1	28.4	18	1.4	86
MANGOCHI	29.9	22.3	31.0	21.0	1.1	81
MIMOSA	28.8	20.2	32.8	19.0	1.7	87
MONKEY BAY	29.0	22.4	30.8	29.9	1.4	87
MZIMBA	23.9	17.6	26.4	17.0	0.7	87
MZUZU	24.8	17.7	27.1	16.6	1.4	87
NGABU	31.1	23.6	36.4	22.4	1.3	75
NKHATA BAY	28.0	21.6	30.4	20.6	N/A	89
NKHOTAKOTA	27.1	21.8	29.8	20.5	1.4	81
SALIMA	28.1	21.9	30.4	20.9	1.6	86

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