10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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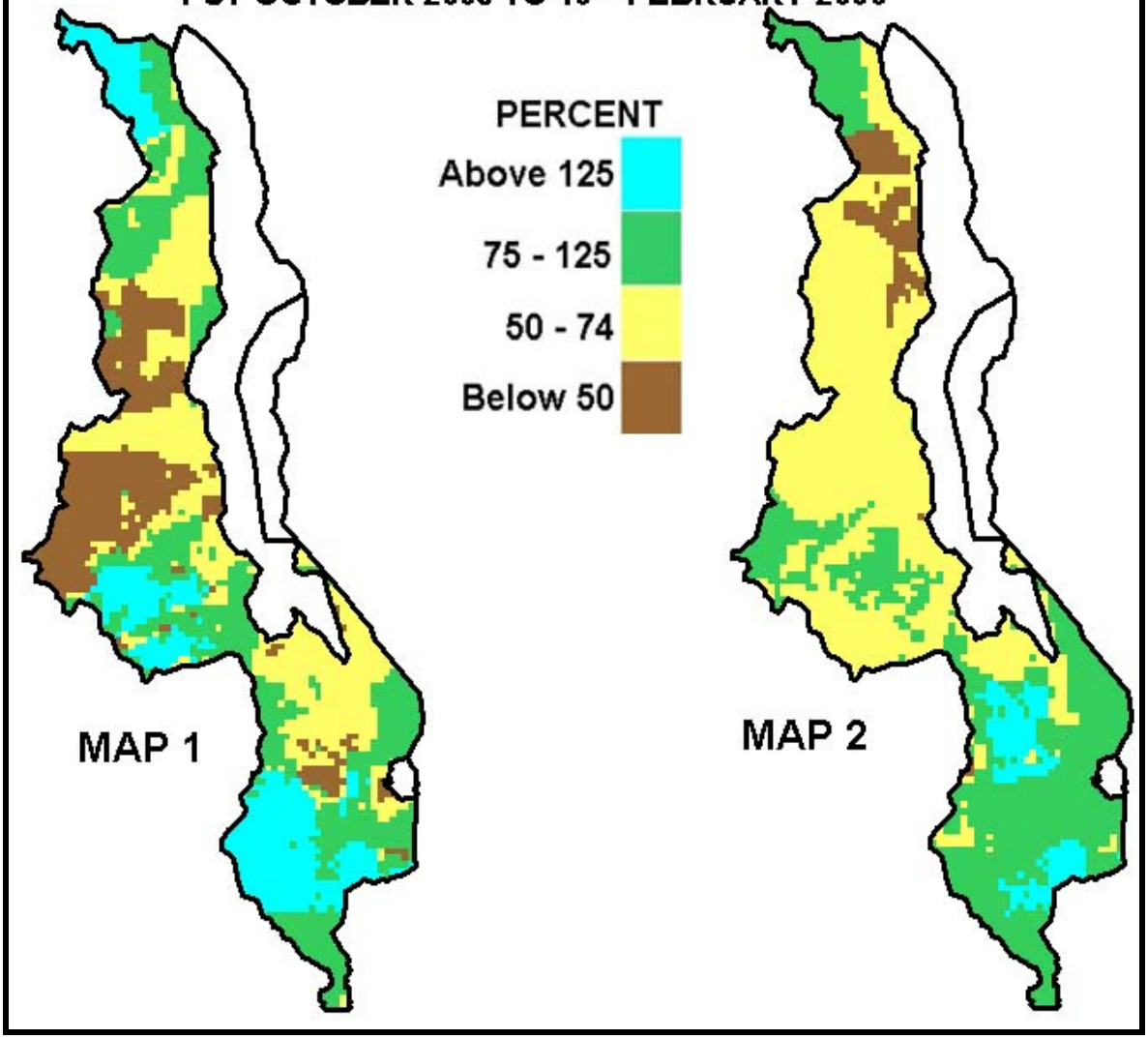
HIGHLIGHTS

- **Relatively dry weather persisted in most parts of Malawi…**
- **Dry spells cause crop wilting in some parts of Malawi…**
- **Rainfall situation likely to improve during 11 to 20 February 2006…**

MAP 1: 10-DAY RAINFALL FOR 01 – 10 FEBRUARY 2006 AS A PERCENTAGE OF NORMAL RAINFALL

MAP 2: TOTAL RAINFALL AS A PERCENTAGE OF NORMAL RAINFALL FOR THE PERIOD 1 ST OCTOBER 2005 TO 10TH FEBRUARY 2006



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1. WEATHER SUMMARY

1.1 RAINFALL

In the first 10-days of February 2006, weak Congo Air mass affected most parts of Malawi. As a result generally below normal rainfall with poor distribution and amount fell in most parts of the country. Very few areas registered above four rainy days. Areas that experienced significant rainfall amounts above 100mm in 10-days included Zomba RTC (157mm), Chancellor College (148mm), and Mulanje Boma (109mm) in the south. Chitedze Met (112mm) and Natural Resources College (101mm) in the centre and Chitipa Met (112mm) up north. Dry conditions persisted in most parts of the centre with Kasungu registering nil rainfall throughout the period. On the other hand lower Shire Valley in the south and most parts of the north experienced some relief as appreciable rainfall was received in some areas. See Table 1 and Map 1.

Cumulative rainfall from 1st October 2005 to 10th February 2006 indicates that most areas in the north and centre had received below normal cumulative rainfall. The south had generally received normal cumulative rainfall with pockets of above normal around Balaka Township and Thyolo Boma and below normal rainfall conditions existed at Mangochi. See Table 1 and Map 2.

1.2 MEAN AIR TEMPERATURE

The mean air temperatures during the first 10-days of February 2006 were warm over highlands and hot in low altitude areas. Mean maximum temperatures ranged from 26°C at Bvumbwe to 34°C at Ngabu. Mzuzu reported the lowest absolute maximum temperature (28°C) while Ngabu (36°C) was the hottest. See Table 2.

1.3 MEAN DAILY WIND SPEEDS

Mean daily wind speeds measured at a height of 2 meters above the ground continued to be light and variable. The average speeds ranged from 0.6 (2.2 Km/hr) at Chichiri to 2.8 m/s (10.1 Km/hr) at Chileka. See Table 2.

1.4 MEAN RELATIVE HUMIDITY

The daily average relative humidity values ranged from 69% at Kasungu to 84% at Bvumbwe. See Table 2.

2. AGROMETEOROLOGICAL ASSESSMENT

The general crop situation in the country has been threatened by dry spells that have been persistent in some parts of the country since end of January 2006. Reports indicate that some parts have experienced a dry spell of more than two weeks and crops are wilting at vegetative and flowering stages. The worse affected areas are in central and northern Malawi. Crop production in these areas will be significantly affected if dry spells continue up to the end of February 2006.

Cumulative rainfall assessment by 10 February 2006 indicates that in most parts of the south and a few areas in the centre rains have been favourable for good crop production. The north, however, has experienced late onset and poor rainfall distribution and amount resulting in below normal cumulative rainfall.

Maize crop in Malawi ranges from cobbing to maturity in most parts of the south and centre and mostly at vegetative stage in the north.

3. FORECAST FOR 11 – 20 FEBRUARY 2006

The current atmospheric pattern is favourable for active Congo air. Therefore, the rainfall situation is likely to improve over most parts of Malawi during 11 to 20 February, 2006.

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

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	DEKADAL TOTAL AS A %	TOTAL TO DATE	NORMAL TO DATE	TOTAL TO DATE AS A %	RAINY DAYS
SOUTHERN REGION	mm	mm	NORMAL	Mm	mm	NORMAL	≥ 0.3 mm
Bvumbwe Met.	79.0	80.0	**99**	850.6	669.8	**127**	5
Chancellor College	148.3	113.8	**130**	767.3	855.8	**90**	3
Chichiri Met.	56.1	82.3	**68**	699.4	679.5	**103**	6
Chileka Airport	80.1	70.9	**113**	649.9	570.6	**114**	3
Chingale Agric	2.0	80.4	**2**	454.5	616.2	**74**	1
Chiradzulu Agric	55.9	79.8	**70**	720.7	678.7	**106**	3
Kasinthula Res. Stn.	95.6	54.2	**176**	770.8	441.5	**175**	4
Liwonde Township	22.5	72.8	**31**	492.7	531.2	**93**	3
Makoka Met	37.5	82.3	**46**	765.3	630.4	**121**	4
Mangochi Met.	38.0	86.8	**44**	349.6	531.9	**66**	3
Mulanje Boma	108.8	96.8	**112**	1386.8	925.4	**150**	7
Namiasi Agric	20.9	115.9	**18**	366.8	552.0	**66**	2
Naminjiwa Agric	38.2	83.3	**46**	690.2	640.7	**108**	3
Nchalo Sucoma	88.5	69.4	**128**	613.4	435.6	**141**	4
Ngabu Met.	37.8	69.6	**54**	548.2	489.8	**112**	3
Nsanje Boma	42.1	66.1	**64**	474.6	552.5	**86**	4
Ntaja Met.	25.1	62.6	**40**	452.5	563.8	**80**	4
Satemwa Tea Est. No.1	77.2	105.7	**73**	709.3	778.1	**91**	6
Toleza Farm	29.0	75.8	**38**	637.2	548.6	**116**	2
Thyolo Boma	43.1	96.3	**45**	894.5	702.6	**127**	3
Thyolo Met	91.9	92.2	**100**	797.2	702.3	**114**	5
Zomba RTC	157.0	101.1	**155**	1005.1	780.4	**129**	6
CENTRAL REGION							
Bunda College	16.1	58.5	**28**	313.2	558.5	**56**	4
Chitedze Met.	112.2	72.1	**156**	458.6	586.6	**78**	4
Dowa Agric	42.1	66.7	**63**	482.3	548.3	**88**	4
Dwangwa Sugar Corp.	24.6	85.7	**29**	483.0	678.8	**71**	4
Kaluluma DTC	13.0	57.6	**23**	306.8	517.3	**59**	1
K.I.A Met	0.3	68.8	**0**	471.9	547.6	**86**	1
Kasungu Met	0.0	88.9	**0**	315.0	562.8	**56**	0
Lifuwu	42.7	123.5	**35**	452.5	743.1	**61**	4
Lisasadzi	4.0	77.8	**5**	302.5	547.5	**55**	2
Madisi Agric	10.5	72.0	**15**	411.8	526.9	**78**	1
Mkanda Met	3.8	80.7	**5**	525.6	622.3	**84**	1
Mlangeni Njolomole	56.1	92.9	**60**	537.1	627.8	**86**	3
Mponela Agric	85.0	85.1	**100**	322.0	519.6	**62**	3
Mwimba Research	27.0	76.5	**35**	455.2	569.1	**80**	4
Natural Res. College	100.8	57.8	**174**	451.8	547.7	**82**	6
Ntcheu – Nkhande	57.8	92.0	**63**	603.9	697.8	**87**	6
Ntchisi Boma	18.4	72.3	**25**	248.6	545.1	**46**	2
Salima Met	59.9	99.1	**60**	585.5	735.3	**80**	5
Dedza RTC	50.7	103.2	**49**	474.7	653.6	**73**	4
NORTHERN REGION							
Baka Res. Stn.	5.5	51.0	**11**	403.2	497.5	**81**	1
Bolero Met	49.4	59.2	**83**	219.2	469.8	**47**	4
Bwengu Agric.	1.4	57.5	**2**	263.4	526.1	**50**	1
Chitipa Met	112.2	89.9	**125**	484.9	605.2	**80**	6
Emfeni Agric	28.6	65.3	**44**	195.0	513.7	**38**	2
Karonga Met.	27.9	49.9	**56**	306.9	472.7	**65**	2
Mzimba Met	3.5	66.5	**5**	281.9	551.6	**51**	3
Mzuzu Met.	29.0	58.0	**50**	263.9	625.5	**42**	3
NkhataBay Met.	59.4	87.1	**68**	468.0	849.2	**55**	7
Vinthukutu Agric	42.2	57.7	**73**	367.1	538.0	**68**	3

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 1 OF FEBRUARY 2006

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BVUMBWE	26.3	17.5	28.4	16.0	1.4	84
BOLERO	28.6	19.3	30.5	18.0	1.1	74
CHICHIRI	27.2	18.6	29.3	17.0	0.6	77
CHILEKA	29.4	21.1	30.5	20.2	2.8	79
NTAJA	30.3	21.3	30.7	20.0	1.3	78
CHITEDZE	27.7	18.9	29.4	17.5	0.7	79
CHITIPA	27.4	18.3	28.2	15.9	2.2	78
KASUNGU	29.4	19.5	30.4	18.2	1.8	69
KARONGA	31.1	22.8	33.1	20.6	1.5	72
K.I.A.	27.4	18.6	28.3	17.6	1.5	77
MANGOCHI	31.5	23.3	33.0	21.3	0.9	72
MAKOKA	27.9	19.2	29.8	18.4	0.9	78
MZIMBA	28.1	18.0	29.0	16.0	0.9	71
MZUZU	26.7	17.6	27.6	16.2	1.5	76
NGABU	34.4	23.9	36.7	23.2	1.5	70
NKHATA BAY	31.2	21.3	32.6	20.0	N/A	76
SALIMA	30.5	21.8	31.5	21.6	1.3	75

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