10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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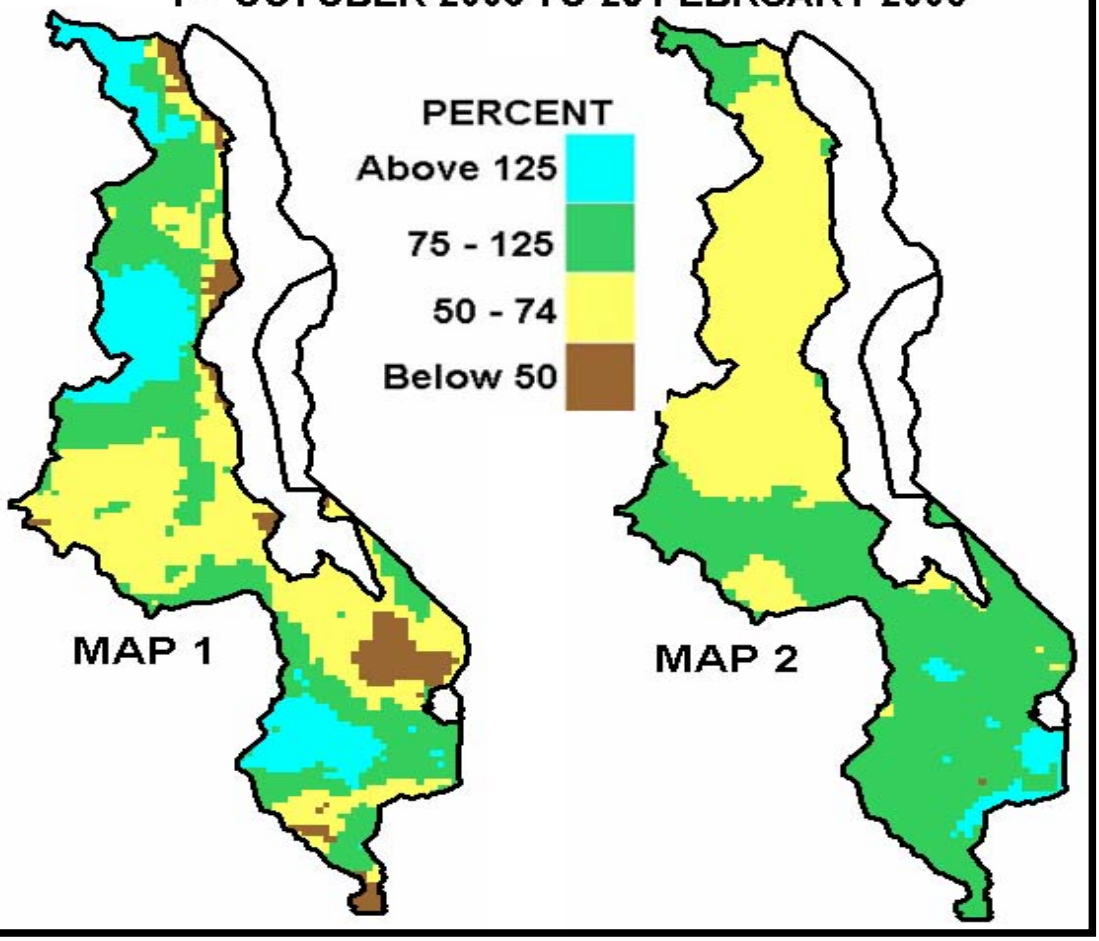
HIGHLIGHTS

- **Light to moderate rainfall received over Malawi…**
- **Dry spells continue to cause moisture stress in some parts of Malawi …**
- **Locally heavy rains expected during 01 to 10 March 2006…**

MAP 1: 10-DAY RAINFALL FOR 21 – 28 FEBRUARY 2006 AS PERCENTAGE OF NORMAL RAINFALL

MAP 2: TOTAL RAINFALL TO DATE AS PERCENTAGE OF NORMAL RAINFALL FOR THE PERIOD 1ST OCTOBER 2005 TO 28 FEBRUARY 2006



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1. WEATHER SUMMARY

1.1 RAINFALL

During the last 8-days of February 2006, Malawi was under weak Congo Air mass. As a result light to moderate rainfall was received in most parts of the country. Very few places registered 10-day total rainfall amounts above 75mm. Such places in the south included Chichiri Met in Blantyre (120mm), Naminjiwa Agric in Phalombe (84mm) and Makoka Met in Zomba (77mm) and Mzimba Met in the north (106mm). On the other hand dry weather persisted in lower Shire Valley in the south, spread to Balaka in the south and Salima in the centre while Kasungu experienced some relief as light rains returns in some parts. During the entire period Nchalo, Kasinthula and Nsanje Boma in lower Shire Valley recorded nil rainfall. In the centre Salima Met along the lakeshore registered almost nil rainfall (0.2mm). See Table 1 and Map 1.

Cumulative rainfall performance since 1st October 2005 indicates that as at end of February most areas in the north and centre had received below normal (below 75% of the expected) cumulative rainfall. The south had generally received between normal (between 75 and 125% of normal) cumulative rainfall with pockets of above 125%. See Table 1 and Map 2.

1.2 MEAN AIR TEMPERATURE

The mean air temperatures during the last dekad of February 2006 were warm in the highlands and hot in low lying areas. Mean maximum temperatures ranged from 27°C to 36°C. The lowest absolute minimum temperature was reported at Mzuzu (15.0°C) while Ngabu registered a cool temperature of (23°C). See Table 2.

1.3 MEAN DAILY WIND SPEEDS

Daily mean wind speeds measured at a height of 2 meters above the ground were light and variable. The average speeds ranged from 0.4 (1.4 Km/hr) at Ntaja Met to 2.6 m/s (9.4 Km/hr) at Chichiri Met. See Table 2.

1.4 MEAN RELATIVE HUMIDITY

The daily average relative humidity values were slightly lower than in the second dekad. This time the lowest was 61% reported at Ngabu while the highest was 81% registered at Chitedze. See Table 2.

2. AGROMETEOROLOGICAL ASSESSMENT

Good rains favourable for crop growth and development were received in most parts of the country in the third dekad of February. However, localised dry spells while easing in some parts like Kasungu (in the centre of the country) spread to areas like Salima along the lakeshore and continued lower Shire valley (in the south). Poor dekadal rainfall amounts and dry conditions have persisted for up to a month in some parts of lower Shire in the south and Kasungu in the centre. Crop failure has been reported in parts of Kasungu. Other districts affected by dry spells include Rumphi, Mzimba, Karonga, Lilongwe, Mchinji, Dowa and Zomba.

Crop condition was reportedly satisfactory in parts of the centre and south where some of the crop has matured and started drying. In the northern parts crops were reportedly at vegetative stages.

3. FORECAST FOR 01 – 10 MARCH 2006

Trend in the current atmospheric pattern is favourable for active Congo air and Inter Tropical Convergence Zone particularly over central and northern Malawi. Therefore, locally heavy thunderstorms and rain showers are expected mainly over central and northern Malawi during the first dekad of March 2006.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 3 OF FEBRUARY 2006: PERIOD 21 - 28

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	**DEKADAL TOTAL AS A % NORMAL**	TOTAL TO DATE	NORMAL TO DATE	**TOTAL TO DATE AS A % NORMAL**	RAINY DAYS
SOUTHERN REGION	mm	mm		mm	mm		≥ 0.3 mm
Chancellor College	41.6	79.3	**52**	910.3	1017.1	**89**	5
Chichiri Met.	120.1	50.7	**237**	932.7	810.3	**115**	6
Chileka Airport	72.4	44.7	**162**	827.5	683.1	**121**	3
Chingale Agric	28.0	48.4	**58**	612.5	744.1	**82**	3
Kasinthula Res. Stn.	0.0	41.4	**0**	829.5	529.2	**157**	0
Liwonde Township	1.0	54.8	**2**	587.2	646.2	**91**	1
Lujeri Tea Estate	46.4	110.3	**42**	1139.8	1451.5	**79**	3
Makoka Met	76.8	67.4	**114**	972.2	767.8	**127**	0
Monkey Bay Met.	35.3	42.0	**84**	456.5	791.2	**58**	2
Mulanje Boma	28.6	85.8	**33**	1634.5	1114.9	**147**	2
Namiasi Agric	12.5	47.3	**26**	495.2	669.0	**74**	1
Naminjiwa Agric	84.0	49.7	**169**	859.1	765.6	**112**	4
Namwera Agric	55.8	64.3	**87**	1019.3	808.6	**126**	5
Nchalo Sucoma	0.0	39.4	**0**	615.9	531.6	**116**	0
Ngabu Met.	0.2	44.7	**0**	588.8	592.9	**99**	0
Nsanje Boma	0.0	35.9	**0**	481.3	655.2	**73**	0
Ntaja Met.	3.7	55.9	**7**	567.1	685.1	**83**	3
Satemwa Tea Est.	55.9	55.8	**100**	789.3	909.8	**87**	4
Thyolo Met	10.6	42.8	**25**	914.0	828.1	**110**	3
Zomba RTC	69.7	70.6	**99**	1222.4	919.8	**133**	3
CENTRAL REGION							
Chitedze Met.	23.8	58.4	**41**	499.4	709.5	**70**	2
Dwangwa Sugar Corp.	3.0	68.9	**4**	603.7	800.3	**75**	1
K.I.A Met	32.8	49.6	**66**	577.1	655.0	**88**	5
Kasungu Met	48.2	58.9	**82**	370.1	706.7	**52**	7
Lifuwu	20.1	86.2	**23**	649.1	931.7	**70**	2
Lisasadzi	13.8	54.8	**25**	331.4	666.2	**50**	4
Madisi Admarc	23.2	59.9	**39**	459.8	667.5	**69**	5
Mlangeni Njolomole	50.8	47.6	**107**	755.4	768.7	**98**	4
Mponela Admarc	25.3	51.1	**50**	453.8	651.1	**70**	5
Mwimba Research	50.0	79.4	**63**	566.4	723.1	**78**	4
Natural Res. College	33.4	46.8	**71**	508.6	670.7	**76**	3
Nkhotakota Met	14.1	89.2	**16**	573.7	896.5	**64**	2
Ntcheu - Nkhande	48.9	63.5	**77**	804.0	841.6	**96**	6
Ntchisi Boma	63.2	62.8	**101**	365.7	679.7	**54**	5
Salima Met	0.2	80.0	**0**	867.7	911.7	**95**	0
Dedza RTC	30.0	42.3	**71**	608.0	764.7	**80**	5
NORTHERN REGION							
Bolero Met	7.9	30.6	**26**	309.2	571.5	**54**	3
Bwengu Agric.	18.9	38.2	**49**	351.3	635.4	**55**	2
Emfeni Agric	68.5	50.8	**135**	311.7	613.7	**51**	6
Karonga Met.	8.3	60.3	**14**	343.1	586.3	**58**	3
Mzimba Met	105.8	50.1	**211**	466.8	676.5	**69**	4
Mzuzu Met.	27.0	51.8	**52**	356.8	746.9	**48**	8
Vinthukutu Agric	28.0	49.9	**56**	549.3	653.3	**84**	4
Zombwe Agric	36.3	47.5	**76**	357.0	561.5	**64**	2

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 3 OF FEBRUARY 2006

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BOLERO	29.0	18.2	31.5	17.0	0.6	77
CHICHIRI	27.8	18.8	29.0	17.6	2.6	73
CHILEKA	29.8	16.5	31.0	19.5	2.1	75
NTAJA	30.5	18.7	31.8	20.6	0.4	74
CHITEDZE	28.6	17.9	29.4	16.9	0.5	81
KASUNGU	29.5	18.9	31.4	18.2	1.3	71
KARONGA	31.3	22.4	32.3	21.5	1.3	76
K I A	27.4	17.0	28.7	16.5	1.0	77
MAKOKA	28.9	18.5	29.8	17.1	0.7	N/A
MONKEY BAY	30.6	20.8	31.5	21.8	1.3	74
MZIMBA	27.1	16.8	29.0	15.1	0.7	78
MZUZU	27.0	16.1	28.6	15.0	1.4	81
NGABU	36.0	24.0	38.2	23.0	1.3	61
NKHOTAKOTA	29.1	22.2	30.0	21.0	1.4	77
SALIMA	30.1	21.8	31.5	20.8	1.3	78

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