10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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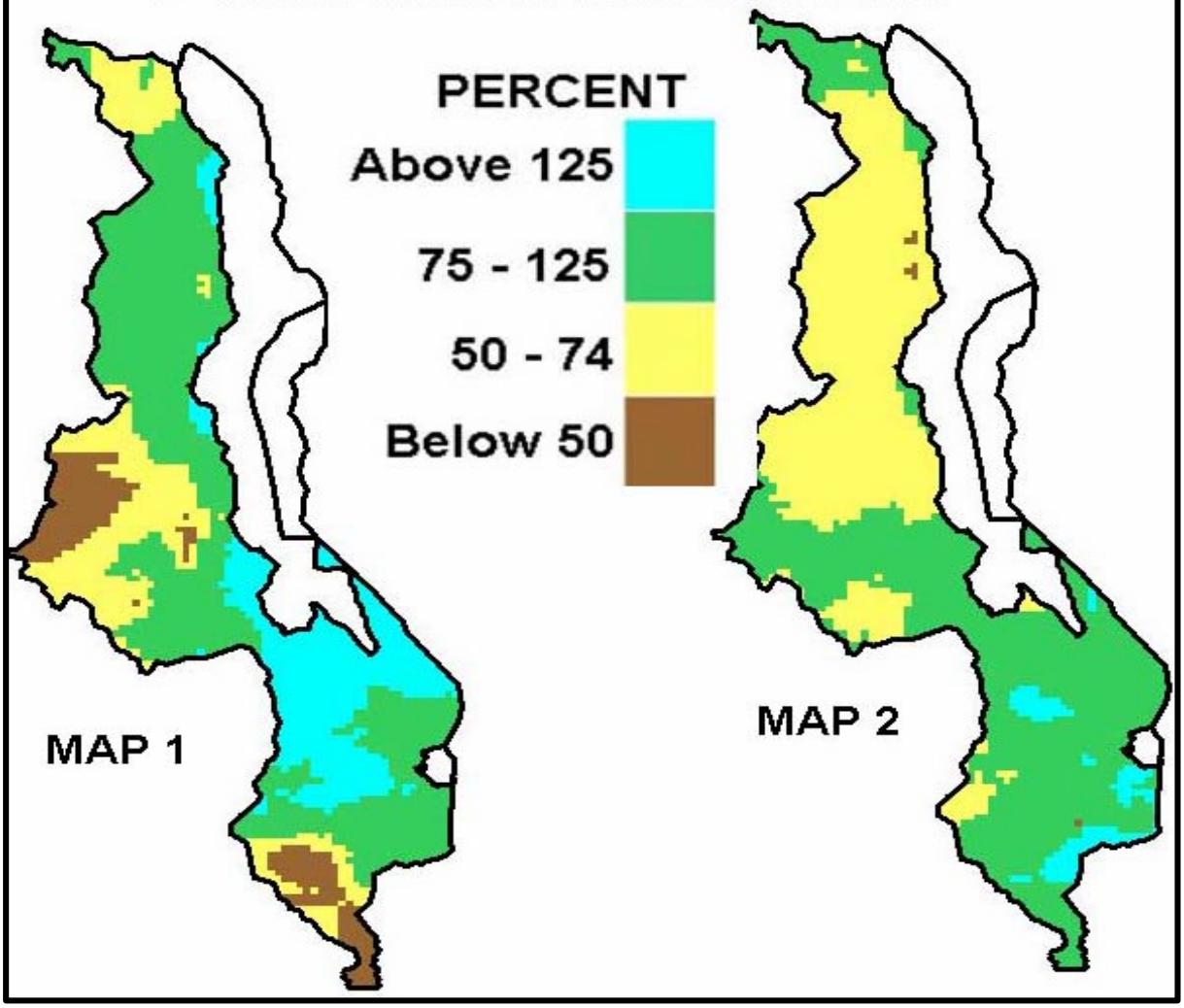
HIGHLIGHTS

- **Good rains received in most parts of Malawi…**
- **Localized dry spells persist in Kasungu and lower Shire Valley …**
- **Continued rainfall expected over most areas during 21 to 28 February 2006…**

MAP 1: 10-DAY RAINFALL FOR 11 – 20 FEBRUARY 2006 AS A PERCENTAGE OF NORMAL RAINFALL

MAP 2: TOTAL RAINFALL TO DATE AS PERCENTAGE OF NORMAL RAINFALL FOR THE PERIOD 1ST OCTOBER 2005 TO 20 FEBRUARY 2006



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. WEATHER SUMMARY

1.1 RAINFALL

During the second 10-days of February 2006, Congo Air mass was active over most parts of Malawi. As a result rainfall distribution and amounts in both time and space improved significantly during the period. Substantial 10-day total rainfall amounts above 150mm reported in the south included Namwera Agric (228mm), and Lujeri in Mulanje (167mm), in the centre Salima Met registered 282mm, Lifuwu Agric 177mm and Ntcheu – Nkhande 151mm while in the north 154mm of rainfall was reported at Vinthukutu Agric. However, although most areas enjoyed good rainfall localised dry weather persisted over lower Shire Valley in the south and at Kasungu Boma in central region. During the entire period Nchalo recorded 3mm, Nsanje Boma 7mm and Kasungu Met 7mm. See Table 1 and Map 1.

Cumulative rainfall performance since 1st October 2005 indicates that by 20th February most areas in the north and centre had received below 75% of the expected cumulative rainfall. The south had received between 75 and 125% of normal cumulative rainfall with pockets of above 125%. See Table 1 and Map 2.

. MEAN AIR TEMPERATURE

The mean air temperatures during the second 10-days of February 2006 were warm over highlands and hot in low lying areas. Mean maximum temperatures ranged from 26°C to 34°C. The lowest absolute minimum temperature was reported at Mzuzu (15.7°C) while Ngabu registered a cool temperature of (22°C). See Table 2.

. 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 0.5 (1.8 Km/hr) at Chitedze to 2.0 m/s (7.2 Km/hr) at Chileka and Mimosa. See Table 2.

. MEAN RELATIVE HUMIDITY

The daily average relative humidity values ranged from 67% at Ngabu to 86% at Salima. See Table 2.

. AGROMETEOROLOGICAL ASSESSMENT

Most parts of the country enjoyed good rains for agriculture production in the second 10-days of February 2006. However, localised dry spells persisted at Kasungu and in lower Shire valley. The situation was worse at Kasungu Boma where reports indicate that dry conditions have persisted for about a month and some crops have reached permanent wilting point.

In most parts of the south and some parts of the centre, maize crop is at advanced flowering and grain filling stages while in some areas the crop has reached physiological maturity and drying stages and households are consuming green maize, pumpkins and other matured crops. However, in the north due to late onset of planting rains crops are mostly at vegetative stage. Crop production is some parts of the country has been threatened by prolonged dry spells in February 2006.

. FORECAST FOR – FEBRUARY

The current atmospheric pattern is favourable for active Congo air and Inter Tropical Convergence Zone. Therefore, the scattered rain showers and thunderstorms are expected over Malawi during last days of February 2006.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 2 OF FEBRUARY 2006: PERIOD 11 - 20

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	[3] 0.3 mm
Bvumbwe Met.	67.8	79.1	86	918.4	748.9	123	7
Chancellor College	101.4	82.0	124	868.7	937.8	93	7
Chichiri Met.	113.2	80.1	141	812.6	759.6	107	8
Chileka Airport	105.2	67.8	155	755.1	638.4	118	9
Chingale Agric	130.0	79.5	164	584.5	695.7	84	8
Chiradzulu Agric	86.4	75.6	114	807.1	754.3	107	5
Kasinthula Res. Stn.	58.7	46.3	127	829.5	487.8	170	3
Liwonde Township	93.5	60.2	155	586.2	591.4	99	8
Lujeri Tea Estate	167.1	138.8	120	1093.4	1341.2	82	6
Makoka Met	130.1	70.0	186	895.4	700.4	128	7
Mimosa Met.	105.5	94.0	112	1070.6	938.5	114	6
Monkey Bay Met.	105.4	79.1	133	421.2	749.2	56	6
Namiasi Agric	115.9	69.7	166	482.7	621.7	78	6
Naminjiwa Agric	84.9	75.2	113	775.1	715.9	108	3
Namwera Agric	228.3	77.4	295	963.5	744.3	129	9
Nchalo Sucoma	2.5	56.6	4	615.9	492.2	125	1
Ngabu Met.	40.4	58.4	69	588.6	548.2	107	4
Nsanje Boma	6.7	66.8	10	481.3	619.3	78	1
Ntaja Met.	53.3	65.4	81	505.8	629.2	80	7
Satemwa Tea Est.	24.1	75.9	32	733.4	854.0	86	5
Thyolo Met	106.2	83.0	128	903.4	785.3	115	7
Zomba RTC	147.6	68.8	215	1152.7	849.2	136	8
CENTRAL REGION							
Bunda College	63.8	57.3	111	377.0	615.8	61	6
Chitedze Met.	17.0	64.5	26	475.6	651.1	73	4
Dowa Agric	30.0	72.1	42	512.3	620.4	83	6
Dwangwa Sugar Corp.	117.7	52.6	224	600.7	731.4	82	8
Kaluluma DTC	26.3	59.0	45	333.1	576.3	58	2
K.I.A Met	72.4	57.8	125	544.3	605.4	90	3
Kasungu Met	6.9	85.0	8	321.9	647.8	50	3
Lifuwu	176.5	102.4	172	629.0	845.5	74	9
Lisasadzi	15.1	63.9	24	317.6	611.4	52	4
Mlangeni Njolomole	167.5	93.3	180	704.6	721.1	98	7
Mponela Admarc	106.5	80.4	132	428.5	600.0	71	5
Nkhotakota Met	94.5	97.6	97	559.6	807.3	69	7
Ntcheu - Nkhande	151.2	80.3	188	755.1	778.1	97	6
Ntchisi Boma	53.9	71.8	75	302.5	616.9	49	6
Salima Met	282.0	96.4	293	867.5	831.7	104	8
Dedza RTC	103.3	68.8	150	578.0	722.4	80	8
NORTHERN REGION							
Baka Res. Stn.	28.0	63.4	44	431.2	560.9	77	3
Bolero Met	82.1	71.1	115	301.3	540.9	56	6
Bwengu Agric.	69.0	71.1	97	332.4	597.2	56	6
Chikangawa forest	88.4	74.8	118	349.6	683.8	51	8
Chitipa Met	71.9	75.4	95	556.8	680.6	82	9
Emfeni Agric	48.2	49.2	98	243.2	562.9	43	3
Karonga Met.	27.9	53.3	52	334.8	526.0	64	4
Mzimba Met	79.1	74.8	106	361.0	626.4	58	6
Mzuzu Met.	65.9	69.6	95	329.8	695.1	47	9
NkhataBay Met.	87.7	80.2	109	555.7	929.4	60	9
Vinthukutu Agric	154.2	65.4	236	521.3	603.4	86	10
Zombwe Agric	68.1	63.0	108	320.7	514.0	62	5

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 2 OF FEBRUARY 2006

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BVUMBWE	27.0	17.4	29.2	16.5	1.4	81
BOLERO	28.1	18.6	30.5	17.7	0.6	80
CHICHIRI	26.4	18.8	28.0	18.0	1.1	78
CHILEKA	27.5	20.5	30.5	18.5	2.0	84
CHITEDZE	26.9	18.5	28.2	17.5	0.5	80
CHITIPA	25.9	17.6	27.4	16.4	1.7	81
KASUNGU	29.0	19.1	30.6	18.3	1.3	74
KARONGA	30.0	22.4	31.7	21.5	1.3	78
K I A	26.2	17.9	27.6	16.5	1.3	83
MAKOKA	27.7	18.9	28.9	16.5	1.1	79
MIMOSA	31.1	20.3	32.0	18.2	2.0	79
MONKEY BAY	29.3	22.6	32.0	21.3	1.4	80
MZIMBA	27.0	17.4	28.5	16.8	0.6	79
MZUZU	25.8	17.5	27.1	15.7	1.4	83
NGABU	34.2	24.0	37.6	22.4	1.4	67
NKHATA BAY	29.5	21.3	31.3	20.0	N/A	84
NKHOTAKOTA	28.1	21.3	29.8	19.2	1.6	81
SALIMA	28.2	21.5	30.3	20.5	1.5	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