



10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services



Period: 21 – 31 March 2007

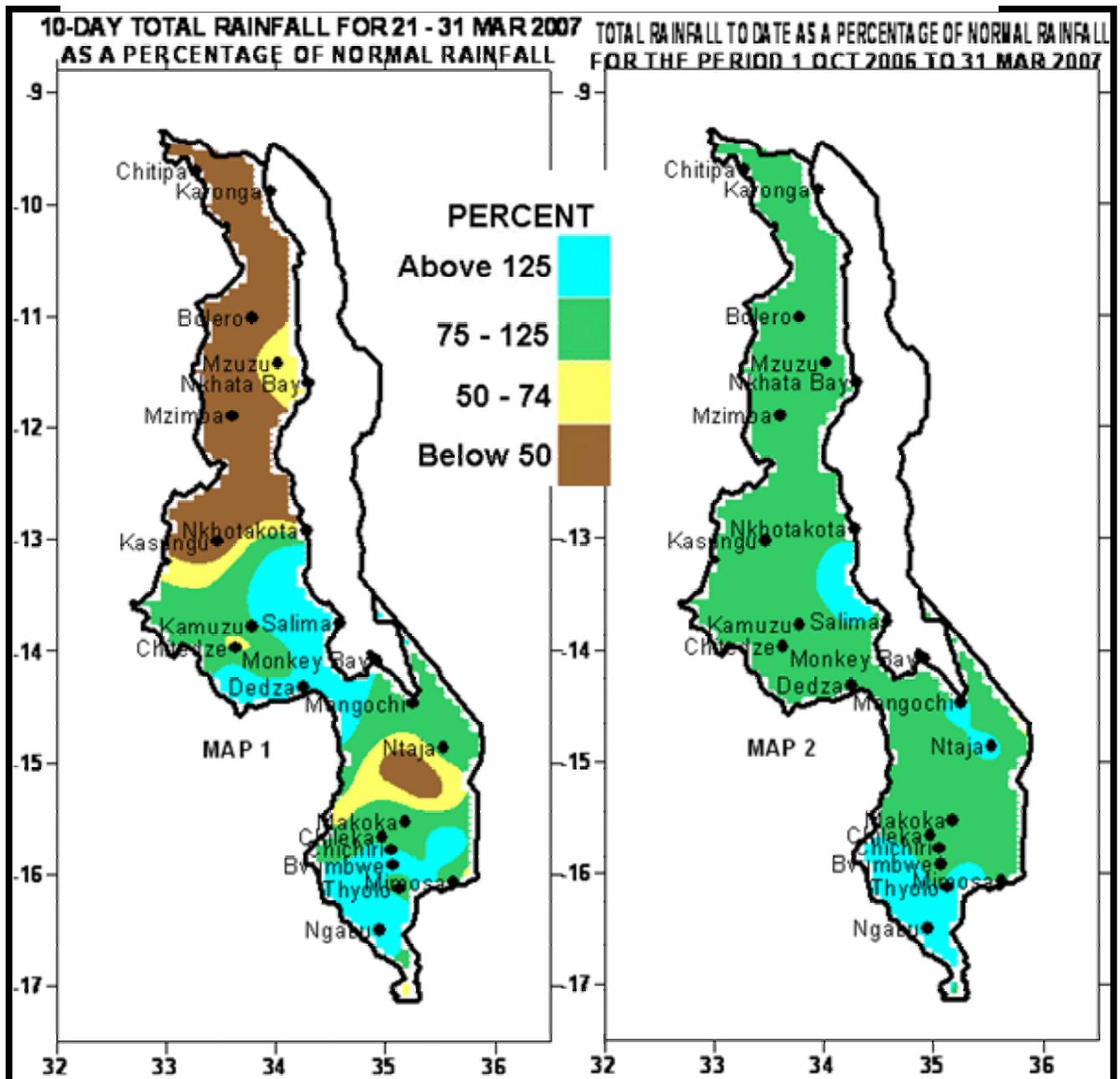
Season: 2006/2007

Issue No.18

Release date: 4 April 2007

HIGHLIGHTS

- Rainfall declined in the northern half and picked up over the south...
- Maize crop mostly at drying stage as harvesting start ...
- Enhanced rainfall expected over the south and centre during 1 – 10 April, 2007.



1. WEATHER SUMMARY

1.1 RAINFALL SITUATION

During the third dekad of March 2007, there was a further reduction in rainfall over most parts of the northern half of Malawi while the south experienced an improvement in rainfall amounts as well as distribution. Cumulative dekadal rainfall amounts received during the period were below normal (brown colour on Map 1) in most parts of the northern half and normal to above normal in most parts of the southern half. (Green and light blue colours on Map 1). The reduction in rains over the northern half was due to the southward shift of the rain belt. According to climatology, rains are expected to start tailing off during end of March starting from the south progressing northwards and reaching the north between end of April and early May. So far, the rains had started tailing off only that the presence of Tropical cyclone JAYA in the Western Indian Ocean region enhanced rainfall over southern and central Malawi. Areas that received ten day rainfall amounts above 150% in the south included Nchalo (306%) in Chikwawa, Naminjiwa (198%) in Phalombe and Bvumbwe (171%) in Thyolo while in the centre such rains were reported at Ntchisi (260%), Salima (218%), Bunda College (174%) and Mlangeni (164%) in Ntcheu.

Cumulative rainfall performance from October 2006 to end March, 2007 suggests that the country has enjoyed good rainfall season (green and blue colours on Map 2).

1.2 MEAN AIR TEMPERATURE

During the period under review, Malawi experienced warm to hot temperatures during the day. Reported mean daily maximum temperatures ranged between 26°C and 33°C at Mzuzu and Ngabu, respectively. The highest absolute maximum temperature was again reported at Ngabu (35.0°C) while the lowest absolute minimum temperature was 14.4°C, reported at Mzuzu (Table 2).

1.3 MEAN DAILY WIND SPEEDS

Reported mean daily wind speeds measured at a height of two meters above the ground were light. The highest speed was reported at Chitipa (2.8 m/s or 10.1 Km/hr) while the lowest wind speed was recorded at Chichiri (0.6 m/s or 2.2 Km/hr). See

Table 2.

1.4 MEAN RELATIVE HUMIDITY

Relative humidity values were generally high in most areas. Reported mean daily values ranged from 62% at Ngabu to 86% at Makoka. See Table 2.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review, mostly dry weather conditions were experienced in the northern half as rains returned to the southern half. Harvesting of matured crops was in progress particularly over the south and some parts of the centre. However, the activity was hampered by the return of wet weather to these areas. On the other hand the wet weather supported growth and development of roots and tuber crops while dry conditions that were experienced in most parts of the northern half of country were good for harvesting and drying of matured crops.

The general crop stand in the fields was reported in good condition. Maize crop which is the staple food crop for Malawi was reported at mostly drying stage and harvesting has started in some parts of the south. Generally no major incidences of pests, diseases and extended dry spells have been experienced this season. There are high prospects of another good harvest this season. This could be mainly attributed to the Government of Malawi fertiliser and input programme and good rainfall performance. The first round crop production estimates from Ministry of Agriculture and Food Security suggested a national maize production forecast of around three million metric tonnes.

3. OUTLOOK FOR 01 – 10 April 2007

Short to medium-term forecasts suggest that the Tropical Cyclone JAYA will continue moving westwards and cross the northern tip of Madagascar before weakening in the Mozambique Channel within the ten day period. Therefore enhanced rainfall activities are expected particularly over the southern and central Malawi during the first ten days of April, 2007.

**TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR
DEKAD 3 OF MARCH 2007: PERIOD 21 - 31**

STATION NAME	DEKADAL	DEKADAL	DEKADAL	TOTAL	NORMAL	TOTAL	RAINY
	TOTAL	NORMAL	TOTAL	TO	TO	TODATE	DAYS
	RAINFALL		AS % OF	DATE	DATE	AS % OF	
SOUTHERN REGION	mm	mm	NORMAL	mm	mm	NORMAL	
Balaka Township	17.5	40.0	44	909.3	792.0	115	3
Bvumbwe Met.	85.7	50.2	171	1070.3	987.4	108	7
Chancellor College	12.4	82.9	15	1208.0	1315.8	92	6
Chichiri Met.	66.7	51.5	130	1129.0	1003.6	112	7
Chileka Airport	52.4	40.9	128	925.3	834.1	111	7
Chiradzulu Agric	33.0	48.1	69	869.6	977.5	89	2
Liwonde Township	9.0	37.2	24	757.9	792.0	96	2
Lujeri Tea Estate	76.4	131.2	58	1659.2	1744.0	95	7
Makoka Met	40.9	38.7	106	945.5	943.8	100	6
Mangochi Met.	39.3	37.5	105	1098.0	789.7	139	3
Mimosa Met.	81.5	78.0	104	1380.9	1288.9	107	5
Monkey Bay Met.	36.8	28.0	131	793.5	898.4	88	4
Mulanje Boma	108.2	105.4	103	1539.3	1438.5	107	5
Namiasi Agric	25.0	28.6	87	941.4	783.3	120	1
Naminjiwa Agric	66.5	33.6	198	903.8	893.5	101	5
Nchalo Illovo	68.5	22.4	306	1058.1	630.4	168	2
Nsanje Boma	13.4	24.9	54	975.2	786.6	124	1
Satemwa Tea Est.	56.7	63.9	89	1423.3	1165.3	122	4
Thyolo Met	23.9	56.0	43	1122.4	1046.0	107	3
Zomba R.T.C.	55.9	56.5	99	1501.4	1128.8	133	2
CENTRAL REGION							
Bunda College	49.0	28.2	174	907.5	805.2	113	1
Chitedze Met.	25.5	42.9	59	952.0	858.3	111	4
K.I.A Met	38.5	31.5	122	719.0	803.5	89	5
Kasungu Met	4.7	24.9	19	1146.1	830.6	138	3
Mchinji Agric	68.2	52.8	129	1153.2	971.9	119	4
Mlangeni Njolomole	67.6	41.1	164	818.8	943.5	87	5
Nathenje Agric	24.4	41.5	59	976.2	836.5	117	2
Natural Res. College	28.2	37.4	75	N/A	806.7	N/A	3
Nkhotakota Met	60.0	139.6	43	1180.0	1289.6	92	5
Ntchisi Agric	113.7	43.7	260	1726.3	821.1	210	5
Salima Met	142.0	65.1	218	1348.8	1165.9	116	7
NORTHERN REGION							
Baka Res. Stn.	0.0	188.6	0	511.8	1059.9	48	0
Bolero Met	6.3	26.6	24	745.8	692.4	108	3
Chitipa Met	8.3	50.5	16	1005.2	922.7	109	4
Karonga Met.	0.0	116.6	0	763.0	870.4	88	0
Mzimba Met	3.6	42.9	8	852.0	840.5	101	4
Mzuzu Met.	57.3	77.6	74	1030.7	970.9	106	7
Vinthukutu Agric	49.0	132.2	37	935.5	962.1	97	2

**TABLE 2: AGROMETEOROLOGICAL PARAMETERS
FOR DEKAD 3 OF MARCH 2007**

STATION	MAX TEMP	MIN TEMP	ABS MAX	ABS MIN	WIND SPEED	RH
	(°C)	(°C)	(°C)	(°C)	m/s	%
BOLERO	28.9	17.2	29.9	15.4	1.0	67
BVUMBWE	26.8	17.4	29.9	16.5	1.6	78
CHICHIRI	27.4	18.8	30.0	17.5	0.6	76
CHILEKA	29.4	20.6	31.7	19.6	2.2	77
CHITEDZE	28.0	18.0	29.8	16.0	0.7	75
CHITIPA	27.1	17.8	28.2	17.0	2.8	65
KASUNGU	29.3	18.6	33.9	17.5	2.0	69
KARONGA	31.9	22.8	33.1	20.0	2.0	73
K I A	26.6	17.2	28.6	15.5	1.6	79
MAKOKA	30.8	20.5	30.1	17.4	1.2	86
MANGOCHI	31.6	21.8	33.5	20.0	1.0	76
MIMOSA	30.9	18.9	32.9	15.4	1.0	70
MONKEY BAY	31.7	22.5	32.7	21.0	1.3	72
MZIMBA	27.3	17.5	29.4	15.6	0.8	71
MZUZU	25.9	17.4	27.2	14.4	1.4	78
NGABU	33.0	22.1	35.0	22.0	1.5	62
NKHOTAKOTA	32.6	24.2	31.4	20.3	1.9	72
SALIMA	30.7	21.9	32.1	20.5	1.3	74

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