10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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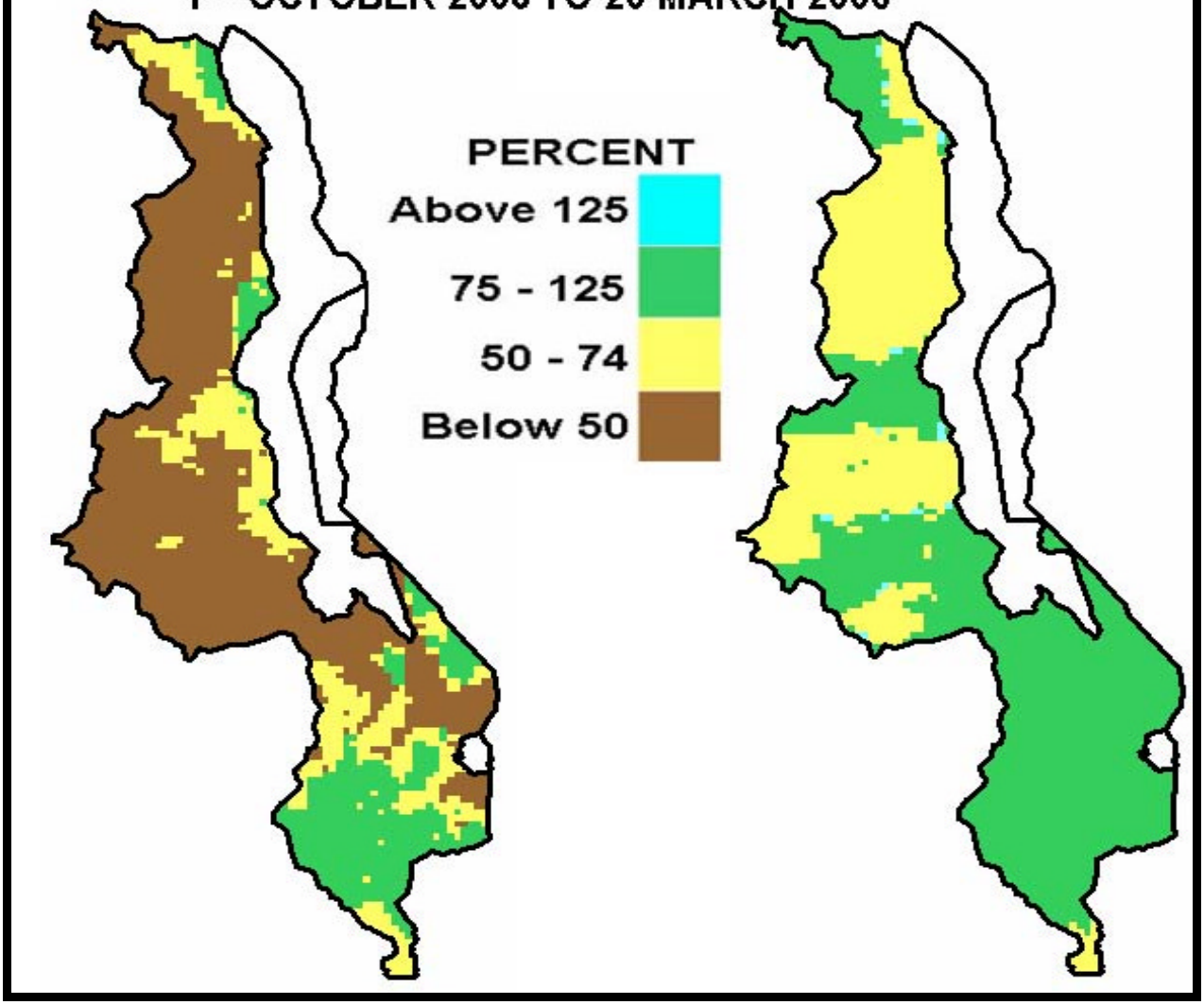
HIGHLIGHTS

- **Low rainfall received in most parts of the country…**
- **Incessant rains cause drying and harvesting problems…**
- **Isolated light rains expected during 21 to 31 March 2006…**

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

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



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. WEATHER SUMMARY

1.1 RAINFALL

During the second 10-days of March 2006, Malawi was frequently under a broad trough. As a result most parts of Malawi received less rainfall amounts than they would normal get during the period under review. Some areas like Lisasadzi in Kasungu and Dedza RTC reported nil rainfall throughout the period. Map 1 show that actually very few areas had received between 75 and 125% of the expected rainfall amounts. Notable 10-day total rainfall amounts above 100mm in the south were reported at Mulanje Boma (132mm) and Chancellor College in Zomba (124mm) and Karonga Met (108mm) in the north. See Table 1 and Map 1.

Cumulative rainfall performance since the season started on1st October 2005 indicates that as at 20th 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 the expected cumulative rainfall. See Table 1 and Map 2.

. MEAN AIR TEMPERATURE

Warm to hot temperatures were experienced during the day. The nights were mild to cool. Mean maximum temperatures ranged from 25°C to 31°C while mean minimum temperatures were in the range of 16 to 23°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 0.7 (2.5 Km/hr) at Chitedze Met to 2.8 m/s (10.1 Km/hr) at Chitipa Met. See Table 2.

. MEAN RELATIVE HUMIDITY

The observed mean relative humidity values in the period under discussion were lower than in the previous10-day period. This time the values ranged from 53% at Dedza to 84% at Chileka. In the previous 10-day period Malawi registered relative humidity values ranging from 75 to 90%. See Table 2.

. AGROMETEOROLOGICAL ASSESSMENT

Light rainfall amounts were recorded in most parts of Malawi. This allowed flood waters in Salima (central Malawi), Mangochi and Mchinga to recede. 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

Trend in current atmospheric pattern and models projection show that air over Malawi will remain moist and unstable. There light to moderate rainfall will persist over isolated during the period 21 to 31 March 2006.

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

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	**DEKADAL TOTAL AS % NORMAL**	TOTAL TO DATE	NORMAL TO DATE	**TOTAL TO DATE AS % NORMAL**	RAINY DAYS
SOUTHERN REGION	mm	mm		mm	mm		[3] **0.3 mm**
Chancellor College	124.2	105.1	118	1172.7	1232.9	95	4
Chichiri Met.	50.9	65.0	78	1108.4	952.1	116	6
Chileka Airport	82.2	56.5	145	975.3	793.2	123	5
Chingale Agric	30.5	49.0	62	790.5	850.8	93	5
Chiradzulu Agric	40.0	52.0	77	960.9	929.4	103	5
Liwonde Township	20.9	45.6	46	775.3	754.8	103	3
Makoka Met	35.3	52.0	68	1148.0	905.1	127	6
Mangochi Met.	27.8	48.2	58	724.7	752.2	96	4
Mimosa Met.	78.6	99.9	79	1370.4	1210.9	113	7
Monkey Bay Met.	1.4	18.6	8	809.6	870.4	93	1
Mulanje Boma	132.1	81.6	162	2038.0	1333.1	153	6
Mwanza Boma	30.0	54.5	55	925.6	886.8	104	2
Namiasi Agric	5.0	44.4	11	780.6	754.7	103	2
Naminjiwa Agric	19.1	44.2	43	1037.5	859.9	121	2
Namwera Agric	71.9	59.5	121	1370.2	938.5	146	4
Ntaja Met.	7.3	45.9	16	792.3	786.8	101	3
CENTRAL REGION							
Chitedze Met.	5.2	46.8	11	641.6	815.4	79	3
Dedza Met	5.0	42.9	12	437.3	849.3	51	1
Dowa Agric	11.6	50.9	23	610.8	791.8	77	2
Dwangwa Sugar Corp.	81.4	86.7	94	850.6	1015.4	84	5
Kaluluma DTC	34.6	50.3	69	692.3	736.9	94	4
K.I.A Met	2.9	44.6	7	739.3	772.0	96	2
Kasungu Met	8.4	36.9	23	489.5	805.7	61	3
Lisasadzi	0.0	33.7	0	408.5	752.8	54	0
Madisi Agric	25.1	37.2	67	584.9	764.2	77	2
Mlangeni Njolomole	40.5	58.7	69	1018.4	902.4	113	2
Natural Res. College	2.6	51.4	5	593.5	769.3	77	3
Nkhotakota Met	28.8	132.4	22	774.8	1150.0	67	4
Ntcheu - Nkhande	24.4	47.7	51	1024.7	969.2	106	4
Ntchisi Boma	39.8	44.2	90	520.5	777.4	67	4
Salima Met	25.9	77.8	33	1493.2	1100.8	136	3
Dedza RTC	0.0	49.2	0	807.3	900.7	90	0
NORTHERN REGION							
Bolero Met	1.2	38.1	3	416.9	665.8	63	1
Bwengu Agric.	17.0	52.6	32	464.2	729.2	64	4
Chitipa Met	28.3	72.8	39	817.4	872.2	94	5
Karonga Met.	107.5	91.2	118	484.1	753.8	64	7
Mzimba Met	7.3	47.2	15	543.0	797.6	68	3
Mzuzu Met.	46.6	62.6	74	493.7	893.3	55	7
NkhataBay Met.	69.7	49.9	140	765.9	1096.4	70	9
Vinthukutu Agric	25.0	93.0	27	641.0	829.9	77	3
Zombwe Agric	4.8	40.2	12	418.4	659.0	63	2

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 2 OF MARCH 2006

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BOLERO	28.4	16.9	29.4	15.0	0.9	73
CHICHIRI	27.1	18.4	29.1	16.8	0.8	79
CHILEKA	28.5	19.6	30.9	17.8	2.3	84
NTAJA	29.0	20.8	30.4	19.9	0.9	80
CHITEDZE	27.3	17.2	28.3	15.5	0.7	76
CHITIPA	26.4	17.4	27.4	16.2	2.8	76
DEDZA	23.8	16.0	25.0	15.0	1.4	53
KASUNGU	27.8	18.4	29.3	17.3	1.7	73
KARONGA	30.0	21.9	32.0	18.9	1.5	77
K I A	26.4	16.6	27.5	15.2	1.7	77
MAKOKA	27.5	18.6	29.0	17.1	1.0	80
MANGOCHI	30.7	21.3	32.0	20.0	1.1	74
MIMOSA	30.0	20.2	31.6	17.8	1.9	83
MONKEY BAY	30.9	22.5	31.7	21.5	1.5	73
MZIMBA	26.9	16.9	29.3	16.2	0.9	70
MZUZU	25.6	16.9	27.8	14.5	1.6	80
NKHATA BAY	29.9	20.0	31.8	19.1	N/A	81
NKHOTAKOTA	29.8	21.8	30.6	20.5	1.4	61
SALIMA	30.2	22.7	31.1	21.6	2.1	73

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