10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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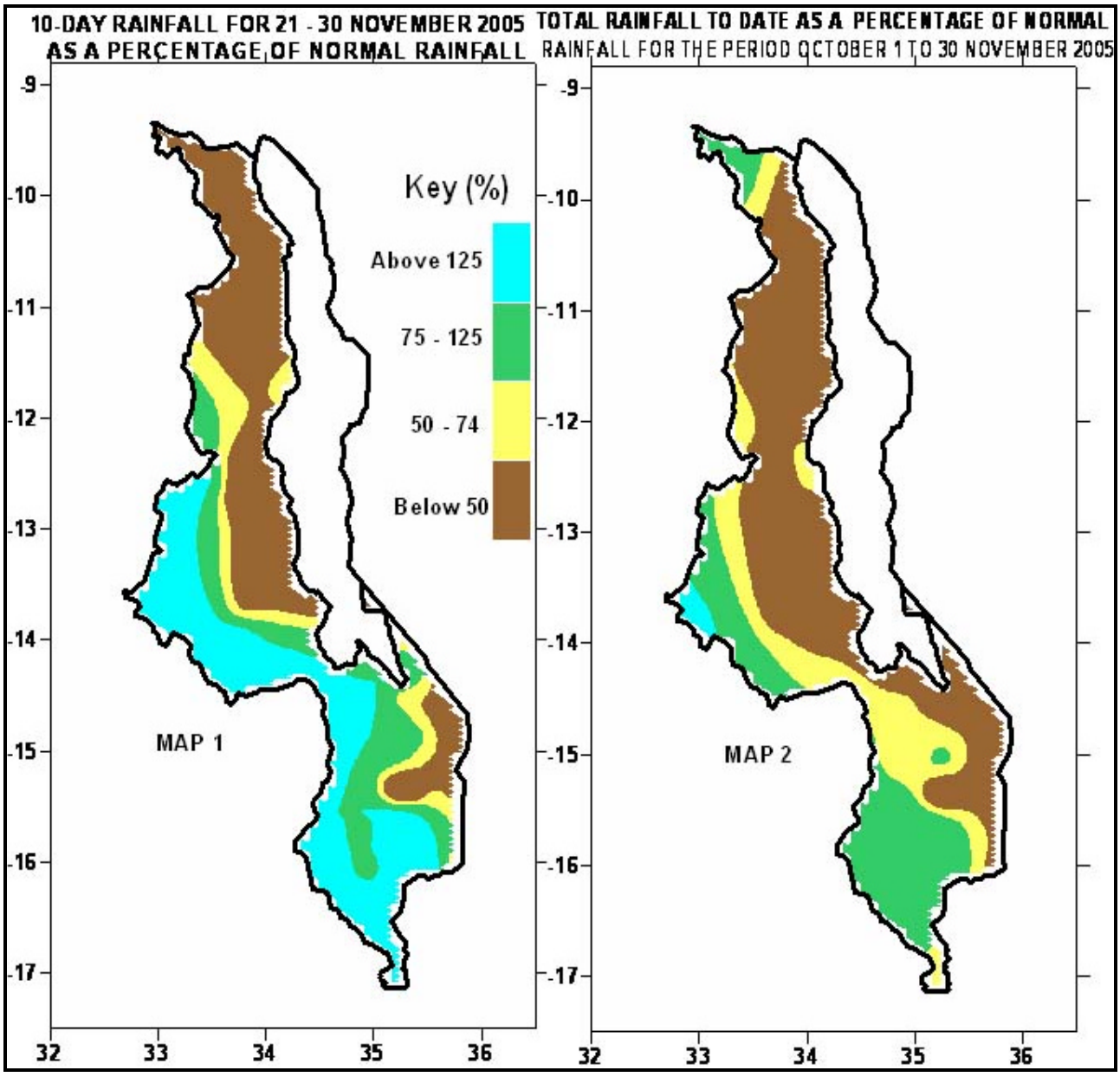
HIGHLIGHTS

- **Good rains cover the south and some parts of the centre…**
- **Land preparation, planting of crops and weeding were major activities…**
- **Further improvement in rainfall distribution anticipated in the next 10-days…**



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. WEATHER SUMMARY

1.1 RAINFALL

During the last ten-days of November 2005, moist and unstable Congo air mass which is one of the main rain bearing systems for Malawi got established over Malawi. This caused an improvement in rainfall distribution and amounts particularly over the south and some parts of the centre. Some areas reported up to seven rainy days during the period. However, generally light and sporadic rains continued to be experienced over the north and along the lakeshore. Moderate to heavy rainfall was registered elsewhere. Notable 10-day total rainfall amounts of more than 100mm were reported at Mchinji Boma (112mm) and Chiradzulu (108mm). See Table 1.
Cumulative rainfall amounts from October up to 30 November 2005 expressed as a percentage of normal rainfall show that significant rains have been received over the extreme south and some parts of Mchinji in the centre and Chitipa in the north. See Table 1 and Map 2.

. MEAN AIR TEMPERATURE

Temperatures over Malawi continued to be in the range of hot to very hot during the period. Maximum temperatures ranged from 29°C at Bvumbwe to 38°C at Ngabu. Highest absolute temperature was reported at Ngabu (42°C) on 22 November and lowest absolute temperature was reported at Mzuzu (12°C) on 23 November. See Table 2.

. MEAN DAILY WIND SPEEDS

Daily wind speeds measured at a height of 2 meters above the ground were in the range of 0.8 to 3.8 m/s (2.9 Km/hr to 13.7 Km/hr). See Table 2. The highest wind speed was reported at Ngabu (3.8m/s or 13.7 Km/hr) with the lowest at Chichiri (0.8 m/s or 2.9 Km/hr).

. MEAN RELATIVE HUMIDITY

The daily average relative humidity values over Malawi ranged from 42% at Chichiri and Nkhota kota to 65% at Bvumbwe. The northern half of the country was relatively drier compared to the southern parts of the country. See Table 2.

. AGROMETEOROLOGICAL ASSESSMENT

Moderate to heavy rainfall that fell over south and some parts of centre improved water resources and soil moisture reserves which facilitated land preparation and planting of crops. In some areas particularly in the south where sufficient rains for planting of crops started in the first and second ten-days of November, the rains supported germination of seeds, application of basal dressing fertiliser, crop growth and development. Light rainfall received in the north and along the lakeshore encouraged farmers to speed up land preparations in readiness for planting. The rains received so far have also increased pasture availability for communal grazing.
To utilize the rains well, farmers should be encouraged to adhere to principles of good husbandry as advised by agricultural extension officers. Good husbandry practices include early land preparation, use of improved seed, timely planting, implementation of proper plant population and spacing, control of weeds, pests and diseases and fertiliser application.

. FORECAST FOR – DECEMBER

Malawi is expected to be mainly under the influence of moist and unstable Congo air mass during the period 1 – 10 December 2005. Therefore a further improvement in rainfall distribution and amount is anticipated over Malawi during the forecast period.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 3 OF NOVEMBER 2005: PERIOD 21 - 30

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	DEKADAL TOTAL AS %	TOTAL TO DATE	NORMAL TO DATE	TOTAL TO DATE AS %	RAINY DAYS
SOUTHERN REGION	**mm**	**mm**	**NORMAL**	**mm**	**mm**	**NORMAL**	**[3] 0.3 mm**
Balaka Township	39.5	35.0	113	56.2	104.5	54	3
Bvumbwe Met.	72.8	46.0	158	174.6	128.6	136	7
Chancellor College	14.4	50.5	29	38.4	127.6	30	3
Chichiri Met.	41.3	40.9	101	81.9	142.1	58	5
Chileka Airport	64.0	45.4	141	162.5	124.1	131	4
Chiradzulu Agric	107.7	44.2	244	153.4	116.0	132	4
Kasinthula Res. Stn.	67.0	20.4	328	95.1	80.4	118	2
Liwonde Township	23.9	25.7	93	65.9	73.3	90	5
Lujeri Tea Estate	35.3	67.8	52	116.9	316.2	37	6
Mangochi Met.	23.3	32.2	72	23.3	78.0	30	4
Monkey Bay Met.	5.3	16.0	33	5.3	47.0	11	3
Mulanje Boma	90.3	51.7	175	176.3	247.6	71	4
Mwanza Boma	48.0	37.2	129	102.6	122.8	84	2
Namiasi Agric	27.9	16.9	165	27.9	47.7	58	3
Naminjiwa Agric	40.0	33.7	119	61.0	100.4	61	2
Ngabu Met.	86.0	29.7	290	95.4	88.7	108	4
Nsanje Boma	43.9	36.1	122	62.5	123.6	51	4
Ntaja Met.	29.0	40.3	72	34.8	81.5	43	4
Satemwa Tea Est. No.1	30.3	49.2	62	127.6	168.1	76	6
CENTRAL REGION							
Chitedze Met.	57.4	36.7	156	61.9	91.4	68	3
Dwangwa Sugar Corp.	0.6	26.3	2	77.0	99.6	77	1
Kaluluma DTC	19.0	12.3	154	19.0	40.3	47	1
L.I.A. Met.	11.7	19.9	59	15.0	68.9	22	4
Lifuwu	2.2	24.4	9	15.9	45.0	35	1
Mchinji Boma	112.4	37.7	298	181.1	109.4	166	5
Mlangeni Njolomole	68.2	27.4	249	68.2	92.1	74	3
Natural Res. College	54.9	28.1	195	57.6	84.5	68	4
Nkhotakota Met	4.8	31.9	15	4.8	71.8	7	2
Ntcheu – Nkhande	69.4	36.4	191	71.6	90.6	79	3
Salima Met	8.3	21.3	39	19.7	48.4	41	2
NORTHERN REGION							
Baka Res. Stn.	6.7	31.7	21	6.7	42.9	16	1
Bolero Met	1.9	22.0	9	4.7	84.9	6	1
Chitipa Met	12.3	50.8	24	99.5	81.9	121	1
Emfeni Agric	0.0	22.8	0	0.0	44.9	0	0
Karonga Met.	5.0	33.4	15	5.0	46.8	11	1
Mzimba Met	17.3	24.8	70	28.6	60.4	47	2
Mzuzu Met.	6.7	51.8	13	7.1	137.9	5	1
NkhataBay Met.	23.6	27.8	85	23.6	282.9	8	2
Vinthukutu Agric	0.0	30.9	0	2.5	79.9	3	0

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 3 OF NOVEMBER 2005

STATION	MAX TEMP	MIN TEMP	ABS MAX	ABS MIN	WIND SPEED	RH
	(°C)	(°C)	(°C)	(°C)	m/s	%
BVUMBWE	28.5	18.0	31.4	16.4	1.7	65
BOLERO	33.4	21.9	34.4	19.4	2.1	42
CHICHIRI	29.6	19.7	33.0	17.0	0.8	57
CHILEKA	31.7	22.1	35.1	20.4	3.1	60
NTAJA	33.5	22.7	36.6	20.7	2.8	52
CHITEDZE	31.8	19.2	34.8	18.0	1.2	50
CHITIPA	31.4	20.3	32.6	18.2	2.7	43
KARONGA	35.6	23.6	37.3	22.9	2.0	45
K I A	30.4	18.8	32.0	17.8	2.2	51
MANGOCHI	35.9	24.3	38.5	22.7	1.9	49
MONKEY BAY	34.5	25.5	36.6	23.8	2.4	50
MZIMBA	30.6	19.7	32.7	17.8	1.4	48
MZUZU	30.0	16.6	30.8	11.9	2.1	49
NGABU	37.7	25.3	41.6	23.7	3.8	49
NKHATA BAY	35.4	19.5	36.5	17.0	N/A	52
NKHOTAKOTA	34.5	23.7	25.5	21.4	2.9	42
SALIMA	33.7	24.7	35.4	21.2	2.9	52

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