10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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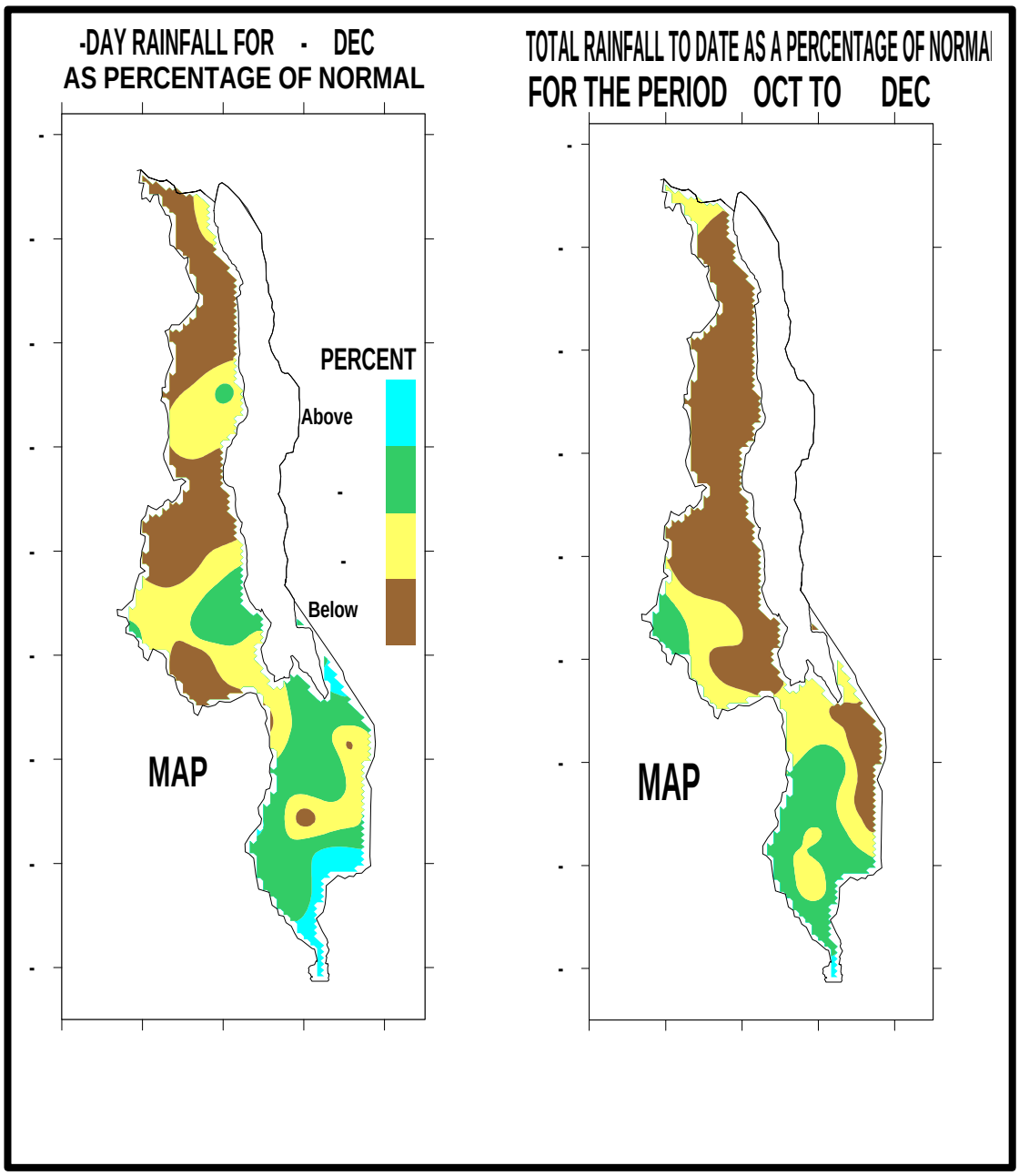
HIGHLIGHTS

- **Slight improvement in rainfall poor distribution experienced…**
- **Land preparation and weeding remained major activities…**
- **A pick up in activity is expected during 21 to 31 December 2005…**



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. WEATHER SUMMARY

1.1 RAINFALL

The period under review showed some significant pick up in rainfall activities as compared to the previous one, especially in the southern region of Malawi. The northern region remained relatively dry with poor distribution during the dekadal period. Small pockets of rains were reported around Chitipa and some parts over Mzimba. Southern Malawi benefited from the trough that transicated the southern half of South Africa during the period under review. For instance, Nsanje Boma received above normal rainfall amounts (260%) as the highest. Kasinthula had (252%) well above normal. See Table 1 and Map 1.

Cumulative rainfall for the period 1st October to 10th December 2005 expressed as a percentage of normal rainfall indicates that southern region, parts of Mchinji and Lilongwe were under wet conditions. Significant rains were reported over northern tip of the country. See Table 1 and Map 2.

. MEAN AIR TEMPERATURE

Temperatures over Malawi were in the range of hot to very hot during the period. The mean maximum temperatures ranged between of between 28 and 36°C. However low temperatures were reported at Bvumbwe and Mzuzu. Ngabu was very hot up to (40°C) absolute maximum temperature, while the rest faired below this. 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 0.9 to 2.6 m/s (See Table 2) reported at Chitipa and Ngabu respectively.

. MEAN RELATIVE HUMIDITY

The daily average relative humidity values over Malawi were a bit higher this time with 55% at Bolero and 79% at Bvumbwe in Thyolo. See Table 2.

. AGROMETEOROLOGICAL ASSESSMENT

Rainfall activities were mainly confined to southern areas of the country. As a result major agricultural activities were weeding and land preparation continued in areas where sufficient rains for planting crops have not yet been received. Dry conditions in some areas contributed to poor germination of seeds. In the south and some parts of the centre where sufficient rains have been received maize is at various stages of development ranging from germination to early vegetative stage. To achieve good yields, agricultural extension officers should encourage farmers to adhere to principles of good crop husbandry. Good crop 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 timely fertiliser application. The rains have improved pasture availability in all communal grazing areas.

. FORECAST FOR – DECEMBER

The rain bearing systems in the country are gradually setting in. Currently, there will be a drop in rainfall activities but a pick up is projected to set in at the end of the dekadal period as the troughing from the southern tip of South Africa sets in again.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 2 OF DECEMBER 2005: PERIOD 11 - 21

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	
Bvumbwe Met.	61.5	59.5	103	259.8	274.1	95	5
Chancellor College	71.8	90	80	169.1	335.4	50	7
Chichiri Met.	68.8	57.2	120	190.7	279.4	68	8
Chileka Airport	13.3	57.3	23	181.8	237.1	77	3
Chiradzulu Forest	42.7	77	55	219.7	251.2	87	4
Kasinthula Res. Stn.	116.7	46.3	252	217.1	175.6	124	3
Liwonde Township	77	57.6	134	184	181.6	101	3
Mangochi Met.	45.5	52.3	87	79.8	183.9	43	4
Mulanje Boma	194.9	87.3	223	464.4	428.4	108	3
Mwanza Boma	82.9	62.5	133	203.8	249	82	2
Namiasi Agric	59.4	47	126	109.5	156.6	70	3
Naminjiwa Agric	52.4	70.5	74	129.5	249.4	52	5
Namwera Agric	104.4	76.5	136	132.9	245.1	54	4
Ngabu Met.	52.7	48	110	179.2	200.6	89	3
Nsanje Boma	135.1	51.9	260	295.6	223.6	132	5
Ntaja Met.	25.5	62.8	41	72.8	212.2	34	3
Satemwa Tea Est. No.1	86.9	87.8	99	211.4	354.8	60	5
Thyolo Boma	89.5	81.2	110	261.6	279.5	94	4
Thyolo Met	73	78.7	93	180.9	302.3	60	6
Zomba Land Hus.	73.9	95	78	219.9	316.5	69	4
CENTRAL REGION							
Chitedze Met.	20.6	66.9	31	88.8	220.7	40	6
Dwangwa Sugar Corp.	2.9	70.2	4	84.8	251.7	34	2
Kaluluma DTC	14	67.1	21	33	175.7	19	2
L.I.A. Met.	58.1	58	100	105.1	175.4	60	6
Lifuwu	75.1	66.3	113	91	200.9	45	4
Madisi Admarc	45.3	69.4	65	92.5	173.4	53	3
Mchinji Boma	62.4	74.3	84	313.7	245.1	128	4
Mlangeni Njolomole	27.4	69	40	116.4	217.7	53	3
Mwimba Research	20.2	69.9	29	20.2	194.8	10	1
Natural Res. College	14.5	46.3	31	72.1	189.9	38	5
Ntchisi Boma	59.2	67.5	88	59.2	166.4	36	3
NORTHERN REGION							
Salima Met	53.1	84.5	63	85.2	208.8	41	3
Baka Res. Stn.	54.8	85	64	61.5	182.3	34	2
Bolero Met	7.4	49.6	15	12.8	178.3	7	4
Chitipa Met	12.6	67.7	19	119.9	200.8	60	4
Emfeni Agric	29.5	55	54	29.5	170	17	3
Karonga Met.	70.8	85.8	83	75.8	171.7	44	2
Mzimba Met	44.7	68.5	65	87.8	187.9	47	5
Mzuzu Met.	68	82.6	82	76.9	279.7	27	3
NkhataBay Met.	61.2	98.8	62	84.8	457.5	19	3
Vinthukutu Agric	11	75.8	15	13.5	202.7	7	2

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 2 OF DECEMBER 2005

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BVUMBWE	**27**	**16.9**	**30.5**	**14.5**	**1.7**	**79**
BOLERO	**32.2**	**20.4**	**36.5**	**18**	**1.8**	**55**
CHICHIRI	**27.6**	**18.8**	**31.6**	**16.4**	**0.7**	**73**
CHIKWEO	**31.2**	**22.2**	**36.2**	**20.4**	**2.4**	**68**
CHITEDZE	**29.7**	**19**	**33.5**	**17.5**	**0.9**	**69**
CHITIPA	**30**	**19.2**	**33.5**	**15.6**	**2.6**	**61**
KARONGA	**33.3**	**23.4**	**37**	**20**	**2**	**58**
L I A	**28.3**	**18.5**	**32.4**	**17.2**	**1.7**	**70**
MANGOCHI	**32.9**	**23.4**	**38.1**	**21.8**	**2**	**65**
MZIMBA	**29.9**	**18.8**	**33.3**	**17.5**	**1.2**	**61**
MZUZU	**28.4**	**17.1**	**32.6**	**15.7**	**2.1**	**68**
NGABU	**35.8**	**24.1**	**40**	**21.6**	**2.6**	**61**
NKHATA BAY	**33.1**	**21.3**	**37.5**	**20.3**	**N/A**	**66**
SALIMA	**32.1**	**24.1**	**35.1**	**21**	**2.3**	**65**

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