

10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services



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HIGHLIGHTS

- Dry conditions continued over Malawi...
- Major agricultural activity was land preparation
- Mostly sunny and hot to very hot weather expected to continue ...

1.1 RAINFALL SITUATION

Dry weather continued over Malawi during the first ten days of October 2007. This type of weather is likely to continue until major rain bearing systems get established over the country.

1.2 MEAN AIR TEMPERATURE

Mean maximum air temperatures were generally hot during the dekad under review. except at Ngabu in lower Shire Valley mean maximum temperatures reached very hot category (38.5 °C). Overall, mean maximum temperatures ranged from 27 °C at Mzuzu to 38.5 °C at Ngabu while mean minimum temperatures ranged from 12 °C at Mzuzu to 23 °C at Ngabu. For more details see Table.

1.4 MEAN DAILY WIND SPEEDS

Mean Wind speeds observed across the country ranged from 0.8 and 5.1 metres per second or 2.9 – 18.4 Km/hr (see table). The highest wind speeds were reported at Chitipa (5.1 m/s).

1.5 MEAN RELATIVE HUMIDITY

During the first ten days of October 2007, air over Malawi was fairly dry. Daily average relative humidity values ranged from 41% to 59%. Details are on the Table.

2. AGROMETEOROLOGICAL ASSESSMENT

The main agricultural activity was land preparation in readiness for the main rains.

3. PROSPECTS OF 2007/08 RAINFALL SEASON

Malawi has 35% chance of rainfall total being above normal, 40% chance of being normal and 25% chance of being below normal. During the period January to March 2008, the northern half of Malawi has 35% chance of above normal rainfall, 40% of normal rainfall and 25% chance of below normal rainfall while the Southern half has 40% chance of above normal rainfall, 35% of normal rainfall and 25% chance of below normal rainfall.

In summary, the models suggest that during 2007/2008 rainfall season, a greater part of Malawi will experience normal to above normal total rainfall amounts with an increased chance of floods.

4. OUTLOOK 11 - 20 OCTOBER 2007

Mostly sunny and hot to very hot weather to continue over Malawi during 11 - 20 October 2007

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TABLE: AGROMETEOROLOGICAL PARAMETERS FOR 1 - 10 OCTOBER 2007

| STATION | MAX TEMP | MIN TEMP | ABS MAX | ABS MIN | WIND SPEED | RH |
|------------|-------------|-------------|------------|------------|---------------|----|
| | (℃) | (℃) | (℃) | (℃) | m/s | % |
| BVUMBWE | 29.5 | 16.5 | 30.5 | 14.3 | 2.1 | 45 |
| BOLERO | 30.8 | 19.0 | 32.0 | 16.8 | 1.5 | 59 |
| CHICHIRI | 30.3 | 19.0 | 32.0 | 17.1 | 1.0 | 43 |
| CHILEKA | 33.3 | 21.2 | 34.5 | 19.3 | 3.9 | 41 |
| NTAJA | 33.2 | 20.1 | 34.4 | 17.0 | 2.6 | 43 |
| CHITEDZE | 30.1 | 15.3 | 31.3 | 14.3 | 1.4 | 47 |
| CHITIPA | 30.0 | 18.2 | 30.8 | 17.2 | 5.1 | 43 |
| KASUNGU | 30.2 | 17.7 | 31.4 | 16.4 | 3.3 | 46 |
| KARONGA | 32.7 | 21.5 | 33.8 | 21.0 | 2.5 | 47 |
| KIA | 28.7 | 16.1 | 29.6 | 15.1 | 2.1 | 48 |
| MONKEY BAY | 33.8 | 21.7 | 35.4 | 19.7 | 2.2 | 41 |
| MZIMBA | 29.3 | 17.4 | 30.5 | 14.9 | 1.5 | 45 |
| MZUZU | 27.1 | 12.1 | 28.0 | 10.3 | 1.6 | 54 |
| NGABU | 38.5 | 23.2 | 40.0 | 21.8 | 2.5 | 41 |
| NKHATA BAY | 32.9 | 15.4 | 33.8 | 14.4 | 8.0 | 53 |
| SALIMA | 32.7 | 20.2 | 33.8 | 19.0 | 1.7 | 45 |

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