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ROTHAMSTED  
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## Report for 1982 - Part 1

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## Weather Tables Rothamsted

### Rothamsted Research

Rothamsted Research (1983) *Weather Tables Rothamsted* ; Report For 1982 - Part 1, pp 304 - 304 -  
DOI: <https://doi.org/10.23637/ERADOC-1-129>

### ROTHAMSTED WEATHER 1981-82

Latitude 51° 48' 30" N; Longitude 0° 21' 10" W; Altitude 128 m

|   | 1981 |      |      | 1982 |      |      |      |      |      |      |      |      |      |      |      |      |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|   | Oct  | Nov  | Dec  | Jan  | Feb  | Mar  | Apr  | May  | June | July | Aug  | Sept | Oct  | Nov  | Dec  | Year |
| <b>TEMPERATURE (°C)</b>   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Mean screen maximum   | 11.7 | 10.1 | 2.7  | 5.3  | 6.9  | 9.7  | 12.7 | 16.6 | 19.8 | 21.4 | 20.7 | 19.4 | 12.9 | 10.2 | 6.6  | 13.5 |
| Difference from average   | -1.6 | +1.2 | -3.8 | -0.4 | +0.5 | +0.6 | +0.6 | +0.7 | +0.9 | +0.8 | +0.3 | +1.7 | -0.4 | +1.3 | +0.1 | +0.6 |
| Mean screen minimum   | 4.6  | 3.6  | -3.3 | -0.9 | 1.2  | 1.6  | 3.5  | 5.9  | 11.1 | 11.3 | 11.1 | 9.3  | 6.3  | 4.8  | 1.0  | 5.5  |
| Difference from average   | -1.3 | +0.9 | -4.3 | -1.0 | +0.8 | +0.3 | +0.3 | -0.3 | +1.9 | +0.2 | +0.2 | +0.2 | +0.5 | +2.1 | 0.0  | +0.4 |
| Soil at 10 cm   | 7.6  | 6.0  | 1.3  | 2.4  | 3.3  | 4.0  | 7.5  | 11.6 | 16.6 | 17.1 | 16.0 | 13.5 | 9.4  | 7.2  | 2.9  | 9.3  |
| Dew point   | 5.7  | 5.0  | -1.5 | 0.0  | 2.4  | 2.5  | 3.8  | 6.7  | 12.6 | 12.6 | 11.5 | 11.9 | 8.5  | 6.2  | 2.1  | 6.7  |
| No. of days with ground frost                                   | 15   | 18   | 29   | 22   | 15   | 23   | 15   | 11   | 0    | 0    | 0    | 2    | 9    | 13   | 22   | 132  |
| <b>RADIATION</b>  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Sunshine (h per month)  | 109  | 56   | 49   | 66   | 44   | 165  | 172  | 221  | 164  | 171  | 176  | 160  | 73   | 67   | 54   | 1533 |
| Difference from average   | +6   | -6   | +4   | +15  | -23  | +51  | +22  | +28  | -37  | -20  | -3   | +15  | -30  | +4   | +9   | +31  |
| Mean daily radiation<br>(MJ m <sup>-2</sup> day <sup>-1</sup> ) | 6.1  | 2.8  | 2.0  | 2.7  | 3.5  | 9.8  | 13.7 | 18.1 | 16.5 | 15.7 | 13.7 | 10.6 | 4.9  | 2.9  | 1.9  | 10.4 |
| <b>WIND (km day<sup>-1</sup>)</b>                               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Wind run at 2 m   | 222  | 216  | 215  | 242  | 210  | 281  | 214  | 192  | 151  | 185  | 179  | 144  | 162  | 242  | 244  | 258  |
| <b>WATER (mm per month)</b>                                     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Rainfall (5 inch walled gauge)                                  | 72   | 45   | 55   | 57   | 31   | 83   | 22   | 60   | 113  | 42   | 42   | 47   | 127  | 100  | 72   | 796  |
| Difference from average   | +11  | -26  | -12  | -5   | -20  | +31  | -25  | +7   | +58  | +11  | -19  | -12  | +65  | +30  | +6   | +105 |
| Rain days   | 20   | 16   | 16   | 15   | 11   | 20   | 6    | 11   | 21   | 9    | 15   | 12   | 20   | 23   | 17   | 180  |
| Drainage through 50 cm bare<br>undisturbed soil                 | 46   | 31   | 78   | 67   | 20   | 55   | 5    | 15   | 48   | 4    | TR   | 9    | 103  | 84   | 68   | 478  |
| Open water (tank) evaporation                                   | 35   | 18   | 2    | 3    | 12   | 38   | 68   | 90   | 79   | 103  | 100  | 74   | 29   | 17   | 14   | 627  |
| Potential evaporation   | 21   | 6    | 0    | 6    | 10   | 34   | 62   | 91   | 87   | 94   | 79   | 45   | 12   | 3    | 1    | 524  |

#### NOTES ON THE TABLE

1. Except for potential evaporation, all quantities are measured.
2. Drainage and evaporation are measured in inches.
3. Long period averages are for different periods: air temperatures 1878-1981; sunshine 1892-1981; rain 1948-81.