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Weather Tables Rothamsted; Woburn; Broom's Barn; Saxmundham

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WEATHER TABLES

(The following text is a transcription of the weather tables, which are extremely faint and difficult to read. The content appears to be a list of weather observations or data points, possibly organized by date or location. The text is largely illegible due to the quality of the scan.)

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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 |
| TEMPERATURE (°C) | | | | | | | | | | | | | | | | |
| 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 |
| RADIATION | | | | | | | | | | | | | | | | |
| 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 (MJ m ⁻² day ⁻¹) | 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 |
| WIND (km day⁻¹) | | | | | | | | | | | | | | | | |
| Wind run at 2 m | 222 | 216 | 215 | 242 | 210 | 281 | 214 | 192 | 151 | 185 | 179 | 144 | 162 | 242 | 244 | 258 |
| WATER (mm per month) | | | | | | | | | | | | | | | | |
| 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 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.

WOBURN WEATHER 1981-82

Latitude 52° 1' 5" N; Longitude 0° 35' 35" W; Altitude 89 m

| | 1981 | | | 1982 | | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Year |
| TEMPERATURE (°C) | | | | | | | | | | | | | | | | |
| Mean screen maximum | 12.0 | 10.5 | 2.9 | 5.6 | 7.5 | 10.2 | 13.2 | 17.1 | 20.4 | 21.6 | 20.9 | 19.5 | 13.3 | 10.4 | 7.1 | 13.9 |
| Difference from average | -1.9 | +1.2 | -3.9 | -0.3 | +1.1 | +0.8 | +0.8 | +1.2 | +1.1 | +0.7 | +0.2 | +1.4 | -0.5 | +1.1 | +0.4 | +0.7 |
| Mean screen minimum | 4.8 | 3.7 | -3.3 | -1.5 | 1.4 | 1.5 | 3.0 | 5.3 | 11.2 | 11.1 | 11.7 | 9.0 | 6.9 | 5.3 | 1.0 | 5.5 |
| Difference from average | -1.4 | +0.5 | -4.6 | -1.9 | +1.0 | +0.1 | -0.5 | -0.8 | +2.1 | 0.0 | +0.8 | -0.2 | +0.8 | +2.1 | -0.3 | +0.3 |
| Soil at 10 cm | 7.8 | 6.2 | 1.6 | 2.7 | 3.6 | 4.2 | 7.8 | 12.3 | 16.7 | 16.9 | 16.0 | 13.5 | 9.7 | 7.3 | 3.3 | 9.5 |
| Dew point | 5.9 | 4.8 | -1.8 | 0.2 | 4.7 | 3.3 | 4.4 | 7.1 | 12.7 | 12.7 | 11.7 | 11.5 | 8.5 | 5.9 | 2.2 | 7.1 |
| No. of days with ground frost | 7 | 14 | 25 | 19 | 15 | 18 | 17 | 9 | 0 | 0 | 0 | 0 | 2 | 10 | 18 | 108 |
| RADIATION | | | | | | | | | | | | | | | | |
| Sunshine (h per month) | 99 | 41 | 37 | 43 | 33 | 150 | 155 | 204 | 135 | 151 | 157 | 151 | 74 | 57 | 38 | 1348 |
| Difference from average | -2 | -20 | -7 | -7 | -31 | +37 | +16 | +21 | -60 | -28 | -14 | +15 | -28 | -4 | -6 | -89 |
| Mean daily radiation (MJ m ⁻² day ⁻¹) | 6.3 | 3.1 | 2.2 | 2.8 | 3.9 | 9.9 | 13.7 | N/A | N/A | 15.4 | 14.5 | 10.8 | 5.5 | 3.0 | 2.0 | — |
| WIND (km day⁻¹) | | | | | | | | | | | | | | | | |
| Wind run at 2 m | 239 | 257 | 159 | 220 | 213 | 276 | 174 | 179 | 144 | 172 | 226 | 163 | 179 | 269 | 268 | 207 |
| WATER (mm per month) | | | | | | | | | | | | | | | | |
| Rainfall (5 inch gauge) | 79 | 34 | 47 | 42 | 26 | 90 | 27 | 44 | 106 | 28 | 45 | 31 | 109 | 80 | 53 | 681 |
| Difference from average | +25 | -29 | -7 | -12 | -15 | +44 | -18 | -10 | +55 | -26 | -18 | -20 | +54 | +18 | -1 | +51 |
| Rain days | 22 | 12 | 16 | 13 | 10 | 20 | 7 | 13 | 17 | 8 | 14 | 12 | 17 | 17 | 12 | 160 |

NOTE ON THE TABLE

1. Long period averages are for the period 1930-81

BROOM'S BARN WEATHER 1981-82

Latitude 52° 16' N; Longitude 0° 34' E; Altitude 75 m

| | 1981 | | | 1982 | | | | | | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Year |
| TEMPERATURE (°C) | | | | | | | | | | | | | | | | |
| Mean screen maximum | 12.0 | 10.5 | 2.5 | 5.7 | 7.2 | 10.0 | 12.7 | 17.0 | 19.9 | 21.3 | 21.4 | 19.9 | 13.2 | 10.2 | 6.9 | 13.8 |
| Difference from average | -2.3 | -1.5 | -4.3 | -0.2 | +0.9 | +1.2 | +1.2 | +1.1 | +0.8 | +0.6 | +0.3 | +1.4 | -1.0 | +1.1 | +0.3 | +0.6 |
| Mean screen minimum | 5.3 | 4.4 | -2.9 | -0.5 | 1.6 | 2.2 | 4.0 | 6.7 | 11.5 | 12.1 | 12.3 | 10.8 | 7.7 | 5.6 | 1.2 | 6.3 |
| Difference from average | -2.0 | +1.1 | -4.8 | -1.6 | +0.6 | +0.1 | +0.3 | -0.1 | +1.9 | +0.6 | +0.8 | +0.8 | +0.5 | +2.3 | -0.4 | +0.5 |
| Soil at 10 cm | 7.9 | 6.2 | 0.9 | 1.8 | 3.3 | 4.3 | 8.1 | 12.2 | 16.6 | 17.7 | 16.7 | 14.2 | 9.8 | 7.0 | 2.7 | 9.5 |
| Dew point | 5.7 | 4.7 | -1.4 | 0.9 | 2.3 | 2.7 | 4.2 | 7.3 | 13.0 | 13.1 | 12.3 | 12.0 | 9.2 | 5.9 | 1.8 | 7.1 |
| No. of days with ground frost | 4 | 5 | 24 | 18 | 13 | 13 | 8 | 1 | 0 | 0 | 0 | 0 | 2 | 5 | 16 | 76 |
| RADIATION | | | | | | | | | | | | | | | | |
| Sunshine (h per month) | 133 | 61 | 41 | 69 | 61 | 169 | 159 | 240 | 137 | 178 | 175 | 161 | 76 | 64 | 52 | 1541 |
| Difference from average | +25 | -10 | -6 | +21 | +1 | +62 | +20 | +46 | -69 | -1 | 0 | +11 | -33 | -6 | +6 | +58 |
| Mean daily radiation (MJ m ⁻² day ⁻¹) | 6.7 | 3.0 | 2.0 | 2.7 | 4.4 | 9.9 | 13.4 | 18.9 | 16.3 | 16.3 | 14.3 | 11.0 | 5.1 | 2.8 | 2.0 | 9.8 |
| Daily diffuse radiation (MJ m ⁻² day ⁻¹) | — | — | — | — | — | — | 8.1 | 9.8 | 11.0 | 10.1 | 8.2 | 6.0 | 3.6 | 2.0 | 1.5 | — |
| WIND (km day⁻¹) | | | | | | | | | | | | | | | | |
| Wind run at 2 m | 224 | 251 | 175 | 220 | 227 | 262 | 180 | 183 | 157 | 153 | 195 | 147 | 141 | 246 | 231 | 195 |
| WATER (mm per month) | | | | | | | | | | | | | | | | |
| Rainfall (5 inch gauge) | 83 | 34 | 51 | 36 | 19 | 49 | 11 | 61 | 73 | 25 | 49 | 58 | 119 | 71 | 51 | 622 |
| Difference from average | +38 | -28 | -5 | -10 | -16 | +5 | -32 | +16 | +21 | -20 | -3 | +7 | +72 | +11 | -5 | +46 |
| Rain days | 21 | 14 | 15 | 17 | 10 | 16 | 8 | 17 | 20 | 5 | 12 | 13 | 22 | 15 | 11 | 166 |
| Open water evaporation sunken tank | 41 | 19 | — | — | 11 | 46 | 73 | 120 | 104 | 123 | 127 | 84 | 21 | 23 | 10 | (742) |
| Class "A" pan | — | — | — | — | — | — | — | 128 | 98 | 121 | 124 | 81 | 25 | 21 | 12 | (610) |
| Potential transpiration | 22 | 12 | -1 | 1 | 13 | 38 | 59 | 93 | 87 | 99 | 97 | 56 | 13 | 6 | 2 | 564 |

NOTES ON THE TABLE

1. Except for potential evaporation, all quantities are measured.
2. Long period averages are for different periods; air temperatures 1964-81; sunshine 1965-81.
3. Evaporation pan Class "A" installed in May, 1982.
4. Diffuse radiation recording from April 1982.

SAXMUNDHAM WEATHER 1981-82

Latitude 52° 13' N; Longitude 1° 28' E; Altitude 37 m

| | 1981 | | | 1982 | | | | | | | | | | | | Year |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | |
| TEMPERATURE (°C) | | | | | | | | | | | | | | | | |
| Mean screen maximum | 12.3 | 10.8 | 2.8 | 6.4 | 6.3 | 9.8 | 12.6 | 16.6 | 19.8 | 21.7 | 22.2 | 20.5 | 14.0 | 11.3 | 7.1 | 14.0 |
| Difference from average | -1.4 | +1.7 | -4.8 | +0.1 | -0.8 | +0.8 | +1.7 | +2.4 | +1.4 | +1.5 | +1.4 | +2.4 | +0.5 | +2.0 | 0.0 | +1.1 |
| Mean screen minimum | 5.4 | 4.7 | -1.6 | 0.7 | 1.9 | 1.2 | 3.3 | 6.6 | 11.0 | 12.4 | 12.3 | 10.8 | 7.1 | 5.7 | 1.7 | 6.2 |
| Difference from average | -2.1 | +0.8 | -4.5 | -1.0 | +0.2 | -1.7 | -0.5 | +0.4 | +1.3 | +0.7 | +0.5 | +0.6 | -0.1 | +1.7 | -0.7 | +0.1 |
| Soil at 10 cm | 10.0 | 7.8 | 2.3 | 2.5 | 3.3 | 5.9 | 9.5 | 15.7 | 18.2 | 19.9 | 19.1 | 14.7 | 11.0 | 8.1 | 2.9 | 10.9 |
| Dew point | 6.7 | 6.1 | 0.0 | 2.8 | 2.8 | 3.9 | 3.9 | 8.3 | 12.8 | 13.3 | 13.3 | 12.8 | 8.9 | 7.2 | 2.8 | 7.7 |
| No of days with ground frost | 9 | 11 | 21 | 23 | 13 | 17 | 16 | 6 | 0 | 0 | 0 | 1 | 6 | 7 | 14 | 103 |
| RADIATION | | | | | | | | | | | | | | | | |
| Mean daily radiation (MJ m ⁻² day ⁻¹) | 5.7 | 2.4 | 1.8 | 2.2 | 3.5 | 9.0 | 13.1 | 17.5 | 15.2 | 16.0 | 13.0 | 10.3 | 4.3 | 2.4 | 1.7 | 9.0 |
| WIND (km day⁻¹) | | | | | | | | | | | | | | | | |
| Wind run at 2 m | 261 | 270 | 238 | 254 | 291 | 317 | 234 | 197 | 157 | 178 | 210 | 198 | 229 | 382 | 283 | 244 |
| WATER (mm per month) | | | | | | | | | | | | | | | | |
| Rainfall (5 inch gauge) | 80 | 51 | 79 | 36 | 23 | 48 | 7 | 48 | 67 | 17 | 49 | 50 | 124 | 70 | 51 | 590 |
| Difference from average | +33 | -14 | +24 | -20 | -19 | -1 | -35 | +11 | +23 | -31 | +11 | -19 | +75 | +10 | -9 | -4 |
| Rain days | 18 | 11 | 13 | 11 | 4 | 13 | 7 | 10 | 12 | 9 | 12 | 14 | 24 | 17 | 13 | 146 |
| Open water (tank) evaporation | 40 | 17 | — | — | — | — | 72 | 115 | 102 | 107 | 116 | 81 | 35 | 35 | — | — |

NOTES ON THE TABLE

1. All quantities are measured.
2. Temperatures were measured in °F.
3. 'Soil at 10 cm' and 'Dewpoint' are 0900 GMT.
4. Radiation was measured with a Kipp solarimeter.
5. Rain and evaporation were measured in inches.
6. 'Evaporation' is the mean of two open water tanks, 56 cm diameter, 30 cm deep and set 15 cm in the ground, installed on 23 March 1982. Water level is about 6 cm below the rim.
7. Long period averages are for the period 1972-81.