

METEOROLOGICAL SERVICE



AGROMETEOROLOGICAL BULLETIN

JANUARY 1980

The Weather of January

The weather was cold on the 1st and the 2nd. Air and ground frost was widespread on both days; on the 2nd the grass minimum temperature reached -13.6°C at Clones. A strong southwesterly airflow developed between the 3rd and the 5th bringing milder weather and spells of rain to all regions. Rain was heavy on the 3rd, especially in the East and Southeast. From the 6th to the 9th the weather was changeable. Outbreaks of rain were heavy in Southern regions on the 7th and heavy in all regions on the 9th.

A ridge of high pressure dominated from the 10th to the 17th. This period was cold and extensive air and severe ground frost occurred on most nights. Weak rainbelts affected the country on the 13th and 14th but the cold weather returned again for a short spell.

From the 18th to the 23rd the weather was very wet, especially in eastern regions. Extensive falls of snow occurred in the Midlands and East on the 19th and early 20th but little of it remained on the ground following widespread heavy rain on the 21st.

A ridge of high pressure developed for a short period from the 24th to the 26th. The weather was cold, and sharp to severe frost occurred at night. From the 27th to the end of the month the weather was again changeable; it was wet and windy at times and temperatures returned to near normal.

Mean Monthly Amounts of Precipitation ranged from 66% of normal at Ballyshannon to 165% of normal at Dublin Airport. Generally amounts varied from below normal in most regions, and above normal in extreme southern and southeastern regions, to well above normal in the East. Up to 30 mm of rain was recorded at Dublin Airport on the 19th and on the 30th.

Mean Monthly Air Temperatures were below normal everywhere, varying from 0.5°C below normal in eastern regions to 1.1°C below normal in the West and North Midlands. Soil temperatures at (10 cm) varied from 0.4°C below normal in the Southwest to 1.2°C below normal at many inland stations.

Mean Daily Duration of Bright Sunshine was normal or above normal for most of the country, but was below normal in regions West and Southwest. It varied from 80% of normal at Kilkenny to 129% of normal at Valentia and at Shannon Airport.

Winds were strong and gusty in the periods from the 3rd/5th, 14th/15th, 20th/22nd and 30th/31st.

Summary. The mean daily temperature for January was below normal, sunshine and rainfall were mostly near normal, except in the east where rainfall was well above normal.

The data contained in this Bulletin are provisional. Some of the material in Table 1 will be published in its final form later in the Monthly Weather Report; final values of Solar Radiation at stations; marked "e" in Table 2 will be published in the Annual Summary of Solar Radiation.

TABLE 1

January, 1980

| STATION | PERIOD | RAINFALL (MM.) | | | | TEMPERATURE °C | | | | | | | | | | | | | | BRIGHT SUNSHINE | | WIND | | |
|------------------------------------|--------|----------------|--------------|-----------|----------|----------------|-----------|------------|-----------------------------|-------------|------|---------------------------------|--------------------------|---------------------|-------|------------------------|------------|-------------------------|------------|-------------------|--------------|--------------------------------|----------------------|-------------------------|
| | | AMOUNT | % OF AVERAGE | RAIN DAYS | WET DAYS | AIR | | | | | | | GROUND | | | SOIL (10 CM) | | | | MEAN DAILY (HRS.) | % OF AVERAGE | MEAN SPEED (ms ⁻¹) | DAYS WITH GALE GUSTS | |
| | | | | | | MEAN MAX. | MEAN MIN. | MEAN DAILY | AND DIFFERENCE FROM AVERAGE | LOWEST MIN. | DATE | DAYS WITH AIR FROST ABOVE 4.4°C | DEGREE DAYS ABOVE 10.0°C | LOWEST "GRASS-MIN." | DATE | DAYS WITH GROUND FROST | MEAN DAILY | DIFFERENCE FROM AVERAGE | MEAN DAILY | | | | | DIFFERENCE FROM AVERAGE |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| Carlow (Oak Park) Co. Carlow | 1-10 | 30.6 | / | 5 | 4 | 7.0 | -0.6 | 3.2 | / | -6.0 | 02 | 5 | 3 | 0 | -10.0 | 02 | 5 | / | / | 1.51 | / | 3 | / | |
| | 11-20 | 48.6 | / | 6 | 4 | 4.3 | -0.7 | 1.8 | / | -3.0 | 20 | 5 | 0 | 0 | -5.0 | 20 | 8 | / | / | 1.36 | / | 3 | / | |
| | 21-end | 26.8 | / | 5 | 4 | 7.1 | 0.9 | 4.0 | / | -4.4 | 26 | 4 | 9 | 0 | -6.6 | 25 | 5 | / | / | 1.71 | / | 4 | / | |
| | Month | 106.0 | / | 16 | 12 | 6.1 | -0.1 | 3.0 | / | -6.0 | 02 | 14 | 12 | 0 | -10.0 | 02 | 18 | / | / | 1.53 | / | 3 | / | |
| Shannon Airport Co. Clare | 1-10 | 36.5 | - | 9 | 8 | 7.8 | 2.8 | 5.3 | - | -3.3 | 02 | 3 | 17 | 0 | -6.8 | 02 | 4 | 4.3 | - | 0.82 | - | 4 | 0 | |
| | 11-20 | 12.8 | - | 3 | 2 | 5.2 | -0.8 | 2.2 | - | -5.7 | 17 | 6 | 1 | 0 | -7.5 | 17 | 7 | 2.6 | - | 2.69 | - | 3 | 1 | |
| | 21-end | 21.8 | - | 8 | 4 | 8.1 | 2.8 | 5.5 | - | -2.8 | 26 | 2 | 18 | 0 | -4.6 | 26 | 3 | 3.9 | - | 3.01 | - | 5 | 0 | |
| | Month | 71.1 | 76 | 20 | 14 | 7.1 | 1.6 | 4.4 | -0.7 | -5.7 | 17 | 11 | 36 | 0 | -7.5 | 17 | 14 | 3.6 | -1.1 | 2.20 | 129 | 4 | 1 | |
| Fermoy (Moore Park) Co. Cork | 1-10 | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | |
| | 11-20 | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | |
| | 21-end | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | |
| | Month | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | |
| Mallow Co. Cork | 1-10 | 28.7 | - | 8 | 7 | 8.3 | 0.4 | 4.3 | / | -5.0 | 02 | 5 | 8 | 0 | -8.2 | 02 | 7 | / | / | 0.61 | / | / | / | |
| | 11-20 | 29.8 | - | 4 | 3 | 5.6 | -2.5 | 1.5 | / | -5.7 | 18 | 8 | 0 | 0 | -9.0 | 20 | 7 | / | / | 1.50 | / | / | / | |
| | 21-end | 25.2 | - | 8 | 6 | 8.4 | 0.4 | 4.4 | / | -5.5 | 25 | 5 | 14 | 0 | -13.2 | 26 | 8 | / | / | 2.12 | / | / | / | |
| | Month | 83.7 | 68 | 20 | 16 | 7.5 | -0.5 | 3.5 | / | -5.7 | 18 | 18 | 22 | 0 | -13.2 | 26 | 22 | / | / | 1.43 | / | / | / | |
| Rocha's Point Co. Cork | 1-10 | 67.7 | - | 8 | 7 | 8.3 | 4.2 | 6.3 | - | -0.3 | 02 | 1 | 20 | 0 | -3.5 | 02 | 2 | 5.8 | - | 0.94 | - | 7 | 3 | |
| | 11-20 | 15.0 | - | 5 | 3 | 6.5 | 2.0 | 4.2 | - | -0.3 | 20 | 1 | 4 | 0 | -2.9 | 20 | 5 | 4.6 | - | 2.00 | - | 4 | 3 | |
| | 21-end | 43.7 | - | 7 | 4 | 8.5 | 4.0 | 6.3 | - | 1.1 | 25 | 0 | 21 | 0 | -2.0 | 25 | 3 | 5.2 | - | 2.99 | - | 7 | 6 | |
| | Month | 126.4 | 130 | 20 | 14 | 7.8 | 3.4 | 5.6 | -0.9 | -6.3 | 20 | 2 | 45 | 0 | -3.5 | 02 | 10 | 5.2 | -0.7 | 2.01 | 101 | 6 | 12 | |
| Glencolumbkille Co. Donegal | 1-10 | 80.9 | / | 7 | 7 | 7.9 | NA | / | / | NA | / | NA | NA | -5.2 | 01 | 5 | / | / | 0.94 | / | 5 | / | | |
| | 11-20 | 33.0 | / | 6 | 5 | 5.6 | NA | / | / | NA | / | NA | NA | -5.7 | 16 | 7 | / | / | 1.44 | / | 3 | / | | |
| | 21-end | 49.4 | / | 9 | 7 | 7.9 | 2.4 | 5.2 | / | 1.0 | 27 | 0 | 12 | 0 | -3.0 | 27 | 9 | / | / | 1.38 | / | 4 | / | |
| | Month | 163.3 | / | 22 | 19 | 7.2 | / | / | / | / | / | / | / | / | -5.7 | 16 | 21 | / | / | 1.26 | / | 4 | / | |
| Glenties Co. Donegal | 1-10 | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | |
| | 11-20 | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | |
| | 21-end | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | |
| | Month | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | |

Notes on the tables in January issue

TABLE 1 (Continued)

January, 1980

| STATION | PERIOD | RAINFALL (MM.) | | | | TEMPERATURE °C | | | | | | | | | | | | | | BRIGHT SUNSHINE | | WIND | |
|--|--------|----------------|--------------|-----------|----------|----------------|-----------|------------|-----------------------------|-------------|------|---------------------|-------------------------|--------------------------|---------------------|--------------|------------------------|------------|-------------------------|-------------------|--------------|--------------------------------|----------------------|
| | | AMOUNT | % OF AVERAGE | RAIN DAYS | WET DAYS | AIR | | | | | | | GROUND | | | SOIL (10 CM) | | | | MEAN DAILY (HRS.) | % OF AVERAGE | MEAN SPEED (ms ⁻¹) | DAYS WITH GALE GUSTS |
| | | | | | | MEAN MAX. | MEAN MIN. | MEAN DAILY | AND DIFFERENCE FROM AVERAGE | LOWEST MIN. | DATE | DAYS WITH AIR FROST | DEGREE DAYS ABOVE 4.4°C | DEGREE DAYS ABOVE 10.0°C | LOWEST *GRASS-ALL.* | DATE | DAYS WITH GROUND FROST | MEAN DAILY | DIFFERENCE FROM AVERAGE | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Malin Head e Co. Donegal | 1-10 | 21.4 | - | 7 | 5 | 7.4 | 2.7 | 5.1 | - | -1.5 | 02 | 1 | 12 | 0 | -4.5 | 02 | 4 | 3.7 | - | 1.44 | - | 8 | 8 |
| | 11-20 | 18.5 | - | 4 | 4 | 5.8 | 1.7 | 3.7 | - | -0.8 | 18 | 1 | 3 | 0 | -4.5 | 18 | 6 | 2.9 | - | 2.17 | - | 7 | 4 |
| | 21-end | 35.4 | - | 6 | 5 | 7.2 | 3.0 | 5.1 | - | -0.5 | 27 | 1 | 13 | 0 | -3.2 | 27 | 5 | 4.0 | - | 0.96 | - | 7 | 6 |
| | Month | 75.3 | 73 | 17 | 14 | 6.8 | 2.5 | 4.6 | -0.6 | -1.5 | 02 | 3 | 28 | 0 | -4.5 | 18 | 15 | 3.5 | -1.0 | 1.51 | 114 | 7 | 18 |
| Casement Aerodrome Co. Dublin | 1-10 | 10.7 | - | 3 | 3 | 7.3 | 0.9 | 4.1 | - | -6.2 | 02 | 4 | 11 | 0 | -10.8 | 02 | 5 | 3.0 | - | 2.00 | - | 6 | 5 |
| | 11-20 | 45.8 | - | 4 | 4 | 4.8 | -0.2 | 2.3 | - | -2.9 | 16 | 4 | 0 | 0 | -8.5 | 16 | 8 | 2.6 | - | 0.98 | - | 3 | 0 |
| | 21-end | 50.3 | - | 7 | 5 | 7.2 | 1.8 | 4.5 | - | -1.7 | 26 | 3 | 11 | 0 | -6.7 | 26 | 5 | 3.1 | - | 1.93 | - | 6 | 6 |
| | Month | 106.8 | 164 | 14 | 12 | 6.4 | 0.9 | 3.7 | -0.5 | -6.2 | 02 | 11 | 22 | 0 | -10.8 | 02 | 18 | 2.9 | - | 1.65 | 81 | 5 | 11 |
| Dublin Airport e Co. Dublin | 1-10 | 16.0 | - | 3 | 3 | 7.3 | 2.1 | 4.7 | - | -3.5 | 02 | 3 | 12 | 0 | -9.9 | 02 | 4 | 2.9 | - | 2.48 | - | 6 | 2 |
| | 11-20 | 53.1 | - | 6 | 4 | 5.0 | 0.8 | 2.9 | - | -1.8 | 12 | 3 | 2 | 0 | -5.0 | 16 | 7 | 2.7 | - | 0.96 | - | 4 | 1 |
| | 21-end | 44.7 | - | 6 | 6 | 7.4 | 2.6 | 5.0 | - | -0.3 | 24 | 1 | 11 | 0 | -7.0 | 26 | 5 | 3.5 | - | 2.76 | - | 7 | 4 |
| | Month | 113.8 | 163 | 15 | 13 | 6.6 | 1.9 | 4.2 | -0.5 | -3.5 | 02 | 7 | 25 | 0 | -7.0 | 26 | 16 | 3.0 | -1.1 | 2.09 | 102 | 6 | 7 |
| Kinsealy Co. Dublin | 1-10 | 16.1 | / | 5 | 3 | 7.6 | 0.2 | 3.9 | / | -5.3 | 02 | 5 | 5 | 0 | -8.2 | 03 | 7 | / | / | 2.31 | / | 4 | / |
| | 11-20 | 63.0 | / | 7 | 7 | 5.2 | 0.4 | 2.8 | / | -1.7 | 12 | 5 | 0 | 0 | -5.5 | 16 | 5 | / | / | 0.93 | / | 4 | / |
| | 21-end | 25.5 | / | 5 | 4 | 7.6 | 2.1 | 4.8 | / | -1.0 | 27 | 3 | 10 | 0 | -4.3 | 26 | 6 | / | / | 2.79 | / | 5 | / |
| | Month | 104.6 | 156 | 17 | 14 | 6.8 | 0.9 | 3.9 | / | -1.7 | 12 | 13 | 15 | 0 | -8.2 | 03 | 18 | / | / | 2.04 | / | 4 | / |
| Galway Co. Galway | 1-10 | 47.8 | - | 8 | 7 | 7.6 | 2.2 | 4.9 | - | -4.0 | 02 | 4 | 14 | 0 | -7.6 | 02 | 4 | 3.9 | - | 1.20 | - | 5 | 2 |
| | 11-20 | 13.7 | - | 6 | 3 | 5.1 | -1.1 | 2.0 | - | -4.5 | 17 | 5 | 0 | 0 | -7.6 | 17 | 7 | 2.4 | - | 3.33 | - | 3 | 0 |
| | 21-end | 31.0 | - | 7 | 7 | 7.8 | 2.4 | 5.1 | - | -1.8 | 26 | 2 | 14 | 0 | -4.5 | 25 | 3 | 3.8 | - | 3.02 | - | 5 | 4 |
| | Month | 92.5 | - | 21 | 17 | 6.9 | 1.2 | 4.0 | - | -4.5 | 17 | 11 | 28 | 0 | -7.6 | 17 | 14 | 3.4 | - | 2.53 | - | 4 | 6 |
| Killarney (Huokross Hee) Co. Kerry | 1-10 | 52.7 | / | 10 | 8 | 9.1 | 3.3 | 6.2 | / | -1.3 | 02 | 2 | 21 | 0 | -6.0 | 10 | 4 | / | / | 0.46 | / | / | / |
| | 11-20 | 26.2 | / | 5 | 3 | 6.4 | -0.2 | 3.1 | / | -5.1 | 18 | 6 | 5 | 0 | -9.9 | 17 | 8 | / | / | 1.47 | / | / | / |
| | 21-end | 43.1 | / | 10 | 7 | 8.8 | 2.8 | 5.8 | / | -2.0 | 25 | 3 | 19 | 1 | -6.3 | 26 | 5 | / | / | 1.48 | / | / | / |
| | Month | 122.0 | / | 25 | 18 | 8.1 | 2.0 | 5.0 | / | -5.1 | 18 | 11 | 45 | 1 | -9.9 | 17 | 17 | / | / | 1.15 | / | / | / |
| Cahirciveen e (Valentia Obsy.) Co. Kerry | 1-10 | 53.8 | - | 9 | 8 | 9.7 | 4.9 | 7.3 | - | 0.5 | 10 | 0 | 30 | 1 | -2.8 | 02 | 2 | 6.5 | - | 0.03 | - | 6 | 5 |
| | 11-20 | 36.3 | - | 7 | 4 | 7.7 | 1.6 | 4.6 | - | -3.7 | 17 | 5 | 11 | 0 | -6.7 | 17 | 5 | 4.5 | - | 3.03 | - | 4 | 3 |
| | 21-end | 44.2 | - | 8 | 7 | 9.2 | 3.9 | 6.6 | - | -0.9 | 25 | 3 | 25 | 0 | -4.5 | 26 | 3 | 5.3 | - | 2.46 | - | 6 | 6 |
| | Month | 134.3 | 83 | 24 | 19 | 8.9 | 3.5 | 6.2 | -0.8 | -3.7 | 17 | 8 | 66 | 1 | -6.7 | 17 | 10 | 5.5 | -0.4 | 2.04 | 129 | 5 | 14 |

Notes on the tables in January issue

TABLE 1 (Continued)

| | | RAINFALL (MM.) | | | | TEMPERATURE °C | | | | | | | | | | | | | BRIGHT SUNSHINE | | WIND | | |
|----------------------------------|--------|----------------|--------------|-----------|----------|----------------|-----------|------------|-----------------------------|-------------|------|---------------------|-------------------------|--------------------------|---------------------|-------------------|--------------|--------------------------------|----------------------|------|------------------------|------------|-------------------------|
| STATION | PERIOD | AMOUNT | % OF AVERAGE | RAIN DAYS | WET DAYS | AIR | | | | | | GROUND | | SOIL (10 CM) | | MEAN DAILY (HRS.) | % OF AVERAGE | MEAN SPEED (ms ⁻¹) | DAYS WITH GALE GUSTS | | | | |
| | | | | | | MEAN MAX. | MEAN MIN. | MEAN DAILY | AND DIFFERENCE FROM AVERAGE | LOWEST MIN. | DATE | DAYS WITH AIR FROST | DEGREE DAYS ABOVE 4.4°C | DEGREE DAYS ABOVE 10.0°C | LOWEST "GRASS-MIN." | | | | | DATE | DAYS WITH GROUND FROST | MEAN DAILY | DIFFERENCE FROM AVERAGE |
| Belmullet e Co. Mayo | 1-10 | 32.5 | - | 7 | 6 | 8.0 | 2.8 | 5.4 | - | -1.6 | 01 | 2 | 15 | 0 | -6.1 | 02 | 4 | 4.8 | - | 0.96 | - | 7 | 4 |
| | 11-20 | 23.5 | - | 6 | 5 | 6.5 | 0.5 | 3.5 | - | -2.7 | 16 | 4 | 4 | 0 | -6.8 | 16 | 4 | 3.8 | - | 1.22 | - | 5 | 2 |
| | 21-end | 35.7 | - | 8 | 7 | 7.8 | 2.7 | 5.3 | - | -0.9 | 26 | 2 | 13 | 0 | -4.4 | 26 | 2 | 4.3 | - | 1.83 | - | 6 | 4 |
| | Month | 91.7 | 82 | 21 | 18 | 7.4 | 2.0 | 4.7 | -1.1 | -2.7 | 16 | 8 | 32 | 0 | -6.8 | 16 | 10 | 4.3 | -0.7 | 1.35 | 83 | 6 | 10 |
| Claremorris e Co. Mayo | 1-10 | 47.3 | - | 8 | 6 | 6.8 | 1.0 | 3.9 | - | -4.5 | 02 | 5 | 9 | 0 | -9.4 | 02 | 5 | 3.1 | - | 0.91 | - | 4 | 0 |
| | 11-20 | 14.5 | - | 5 | 3 | 4.7 | -1.7 | 1.5 | - | -4.7 | 16 | 7 | 0 | 0 | -9.7 | 16 | 9 | 1.7 | - | 2.62 | - | 3 | 0 |
| | 21-end | 41.6 | - | 9 | 6 | 6.9 | 1.5 | 4.2 | - | -3.0 | 26 | 3 | 10 | 0 | -7.9 | 26 | 7 | 2.8 | - | 1.75 | - | 4 | 3 |
| | Month | 103.4 | 92 | 22 | 15 | 6.1 | 0.3 | 3.2 | -1.0 | -4.7 | 16 | 15 | 19 | 0 | -9.7 | 16 | 21 | 2.6 | -1.2 | 1.76 | 104 | 4 | 3 |
| Glenamoy Co. Mayo | 1-10 | 55.0 | | 7 | 6 | 7.9 | 1.2 | 4.6 | / | -3.0 | 02 | 4 | 8 | 0 | -6.0 | 02 | 4 | / | / | 1.01 | / | / | / |
| | 11-20 | 26.0 | | 5 | 4 | 5.9 | -1.5 | 2.2 | / | -5.7 | 16 | 8 | 1 | 0 | -7.6 | 16 | 8 | / | / | 1.32 | / | NA | / |
| | 21-end | 46.4 | | 9 | 9 | 7.8 | 1.8 | 4.8 | / | -3.6 | 26 | 2 | 10 | 0 | -6.3 | 26 | 6 | / | / | 1.50 | / | NA | / |
| | Month | 127.4 | 88 | 21 | 19 | 7.2 | 0.6 | 3.9 | / | -5.7 | 16 | 14 | 19 | 0 | -7.6 | 16 | 18 | / | / | 1.28 | / | NA | / |
| Dunsany (Grange) Co. Meath | 1-10 | 22.1 | - | 5 | 4 | | | | / | | | | | | | | | / | / | NA | / | NA | / |
| | 11-20 | 23.7 | - | 7 | 4 | | | | / | | | | | | | | | / | / | NA | / | NA | / |
| | 21-end | 37.2 | - | 6 | 4 | | | | / | | | | | | | | | / | / | 2.30 | / | NA | / |
| | Month | 83.0 | 106 | 18 | 12 | | | | / | | | | | | | | | / | / | - | / | NA | / |
| Clones e Co. Monaghan | 1-10 | 31.6 | - | 7 | 5 | 6.2 | 0.6 | 3.4 | - | -7.3 | 02 | 4 | 7 | 0 | -13.6 | 02 | 6 | 2.9 | - | 1.51 | - | 4 | 2 |
| | 11-20 | 20.8 | - | 6 | 5 | 3.6 | -1.5 | 1.0 | - | -5.4 | 16 | 8 | 0 | 0 | -13.6 | 16 | 9 | 2.0 | - | 1.30 | - | 3 | 0 |
| | 21-end | 24.7 | - | 7 | 5 | 6.3 | 1.0 | 3.7 | - | -2.2 | 27 | 5 | 8 | 0 | -6.3 | 25 | 6 | 2.8 | - | 1.87 | - | 4 | 1 |
| | Month | 77.1 | 87 | 20 | 15 | 5.4 | 0.1 | 2.7 | -1.1 | -7.3 | 02 | 17 | 15 | 0 | -13.6 | 16 | 21 | 2.6 | -0.9 | 1.57 | 93 | 4 | 3 |
| Birr e Co. Offaly | 1-10 | 23.3 | - | 8 | 6 | 7.0 | 1.2 | 4.1 | - | -6.3 | 02 | 4 | 11 | 0 | -10.2 | 02 | 4 | 3.2 | - | 1.30 | - | 4 | 2 |
| | 11-20 | 12.5 | - | 4 | 3 | 4.4 | -1.0 | 1.7 | - | -5.6 | 16 | 5 | 0 | 0 | -9.4 | 17 | 7 | 2.2 | - | 2.58 | - | 2 | 0 |
| | 21-end | 18.9 | - | 7 | 5 | 7.7 | 1.9 | 4.8 | - | -2.9 | 26 | 3 | 13 | 0 | -7.0 | 26 | 5 | 3.2 | - | 2.75 | - | 4 | 3 |
| | Month | 54.7 | 69 | 19 | 14 | 6.4 | 0.7 | 3.6 | -0.8 | -6.3 | 02 | 12 | 24 | 0 | -10.2 | 02 | 16 | 2.9 | -1.1 | 2.23 | 125 | 3 | 5 |
| Thurles Co. Tipperary | 1-10 | | | | | | | | / | | | | | | | | | / | / | / | / | / | / |
| | 11-20 | | | | | | | | / | | | | | | | | | / | / | / | / | / | / |
| | 21-end | | | | | | | | / | | | | | | | | | / | / | / | / | / | / |
| | Month | | | | | | | | / | | | | | | | | | / | / | / | / | / | / |

Notes on the tables in January issue

TABLE 1 (Continued)

January, 1980

| STATION | PERIOD | RAINFALL (MM.) | | | | TEMPERATURE °C | | | | | | | | | | | | | | BRIGHT SUNSHINE | | WIND | |
|--|--------|----------------|--------------|-----------|------|----------------|-----------|------------|-----------------------------|-------------|------|---------------------|-------------------------|--------------------------|---------------------|-------------------|--------------|--------------------------------|----------------------|-----------------|------------------------|------------|-------------------------|
| | | AMOUNT | % OF AVERAGE | RAIN DAYS | | AIR | | | | GROUND | | | | SOIL (10 CM) | | MEAN DAILY (HRS.) | % OF AVERAGE | MEAN SPEED (ms ⁻¹) | DAYS WITH GALE GUSTS | | | | |
| | | | | WET | DAYS | MEAN MAX. | MEAN MIN. | MEAN DAILY | AND DIFFERENCE FROM AVERAGE | LOWEST MIN. | DATE | DAYS WITH AIR FROST | DEGREE DAYS ABOVE 4.0°C | DEGREE DAYS ABOVE 10.0°C | LOWEST "GRASS-MIN." | | | | | DATE | DAYS WITH GROUND FROST | MEAN DAILY | DIFFERENCE FROM AVERAGE |
| Dungarvan (Ballygagin) Co. Waterford | 1-10 | 77.8 | | 8 | 6 | 7.9 | 1.5 | 4.7 | / | -3.9 | 03 | 4 | 10 | 0 | -9.0 | 02 | 5 | / | 0.92 | / | 5 | / | |
| | 11-20 | 27.7 | | 6 | 3 | 5.9 | 0.7 | 3.3 | / | -3.8 | 20 | 2 | 0 | 0 | -8.0 | 20 | 6 | / | 1.71 | / | 2 | / | |
| | 21-end | 49.9 | | 7 | 5 | 8.4 | 2.5 | 5.4 | / | -2.2 | 26 | 3 | 15 | 0 | -6.0 | 25 | 5 | / | 2.64 | / | 3 | / | |
| | Month | 155.4 | 128 | 21 | 14 | 7.4 | 1.6 | 4.5 | / | -3.9 | 03 | 9 | 25 | 0 | -9.0 | 02 | 16 | / | 1.78 | / | 3 | / | |
| Mullingar e Co. Westmeath | 1-10 | 24.7 | - | 6 | 4 | 6.2 | 0.5 | 3.3 | - | -8.1 | 02 | 4 | 7 | 0 | -10.6 | 02 | 4 | 2.7 | - | 2.26 | - | 4 | 1 |
| | 11-20 | 14.6 | - | 7 | 4 | 4.0 | -0.8 | 1.6 | - | -2.9 | 16 | 7 | 0 | 0 | -6.2 | 16 | 9 | 1.9 | - | 2.44 | - | 3 | 0 |
| | 21-end | 33.1 | - | 7 | 5 | 6.7 | 0.9 | 3.8 | - | -3.0 | 26 | 4 | 9 | 0 | -9.8 | 26 | 6 | 2.5 | - | 2.51 | - | 5 | 1 |
| | Month | 72.4 | 78 | 20 | 13 | 5.7 | 0.2 | 2.9 | -1.0 | -8.1 | 02 | 15 | 16 | 0 | -10.6 | 02 | 19 | 2.4 | -1.2 | 2.41 | 125 | 4 | 2 |
| Campile (Ballysop) Co. Wexford | 1-10 | 45.2 | | 7 | 5 | NA | 1.5 | - | / | -3.4 | 02 | 3 | NA | NA | -7.0 | 02 | 7 | / | 1.47 | / | NA | / | |
| | 11-20 | 75.2 | | 5 | 5 | 5.4 | 0.6 | 3.0 | / | -2.4 | 20 | 2 | 0 | 0 | -7.5 | 20 | 8 | / | 1.11 | / | NA | / | |
| | 21-end | 39.1 | | 5 | 5 | 7.9 | 2.0 | 5.0 | / | -1.9 | 25 | 4 | 12 | 0 | -7.1 | 25 | 8 | / | 2.53 | / | NA | / | |
| | Month | 159.5 | 140 | 17 | 15 | - | 1.4 | - | / | -3.4 | 02 | 9 | - | - | -7.5 | 20 | 23 | / | 1.73 | / | NA | / | |
| Clonroche Co. Wexford | 1-10 | 46.8 | | 7 | 5 | 7.1 | 0.8 | 3.9 | / | -4.0 | 02 | 4 | 4 | 0 | -11.5 | 02 | 8 | / | 1.27 | / | 3 | / | |
| | 11-20 | 74.0 | | 6 | 5 | 4.9 | -0.1 | 2.4 | / | -4.7 | 20 | 2 | 0 | 0 | -5.0 | 20 | 9 | / | 1.13 | / | 2 | / | |
| | 21-end | 50.0 | | 8 | 4 | 7.0 | 1.5 | 4.3 | / | -1.6 | 21 | 3 | 7 | 0 | -7.3 | 25 | 6 | / | 1.95 | / | 3 | / | |
| | Month | 170.8 | 132 | 21 | 14 | 6.4 | 0.8 | 3.6 | / | -4.7 | 20 | 9 | 11 | 0 | -11.5 | 02 | 23 | / | 1.46 | / | 3 | / | |
| Johnstown Castle Co. Wexford | 1-10 | 51.2 | - | 5 | 5 | 7.5 | 2.0 | 4.7 | / | -2.0 | 02 | 3 | 8 | 0 | -5.3 | 03 | 6 | / | 1.47 | / | 4 | / | |
| | 11-20 | 72.7 | - | 6 | 5 | 5.7 | 1.3 | 3.5 | / | -0.9 | 20 | 1 | 0 | 0 | -6.1 | 20 | 7 | / | 1.07 | / | 3 | / | |
| | 21-end | 35.4 | - | 6 | 3 | 7.7 | 2.4 | 5.1 | / | -0.9 | 21 | 1 | 11 | 0 | -7.2 | 25 | 5 | / | 2.72 | / | 4 | / | |
| | Month | 159.3 | 139 | 17 | 13 | 7.0 | 1.9 | 4.5 | / | -2.0 | 02 | 5 | 19 | 0 | -7.2 | 25 | 18 | / | 1.78 | / | 4 | / | |
| Rosslare e Co. Wexford | 1-10 | 40.2 | - | 5 | 4 | 8.1 | 4.0 | 6.0 | - | 0.5 | 02 | 0 | 17 | 0 | -5.6 | 02 | 3 | 4.4 | - | 1.42 | - | 6 | 3 |
| | 11-20 | 60.9 | - | 4 | 4 | 6.7 | 3.1 | 4.9 | - | 0.7 | 20 | 0 | 60 | 0 | -4.2 | 20 | 3 | 4.0 | - | 1.01 | - | 6 | 3 |
| | 21-end | 27.9 | - | 6 | 6 | 8.4 | 3.8 | 6.1 | - | 0.6 | 24 | 0 | 19 | 0 | -3.4 | 26 | 3 | 4.6 | - | 3.05 | - | 6 | 5 |
| | Month | 129.0 | 125 | 15 | 14 | 7.7 | 3.6 | 5.7 | -0.5 | 0.5 | 02 | 0 | 42 | 0 | -5.6 | 02 | 9 | 4.4 | -0.9 | 1.87 | 85 | 6 | 11 |

Notes on the tables in January issue

TABLE 2

SOLAR RADIATION (GLOBAL), POTENTIAL EVAPOTRANSPIRATION (P.E.) AND SOIL MOISTURE January, 1980

| STATION | PERIOD | SOLAR RADIATION | P.E. (mm) | SOIL MOISTURE (mm) | | |
|---|--------|---------------------------------|-----------|--------------------|------------------------|---------|
| | | Amount Joule/cm ² | Amount | Deficit | Accumulated Deficit | Surplus |
| Carlow (Oak Park) Co. Carlow | 1-10 | | 9 | - | 0 | 22 |
| | 11-20 | | 4 | - | 0 | 47 |
| | 21-end | - | 2 | - | 0 | 22 |
| | Month | | 15 | - | - | - |
| Kinsealy* Co. Dublin | 1-10 | 1836 | 3 | - | 0 | 13 |
| | 11-20 | 1445 | 4 | - | 0 | 16 |
| | 21-end | 2935 | -1 | - | 0 | 24 |
| | Month | 6216 | 6 | - | - | - |
| Cahiriveen e (Valentia Obsy.) Co. Kerry | 1-10 | 1665 | -4 | - | 0 | 56 |
| | 11-20 | 3103 | -2 | - | 0 | 54 |
| | 21-end | 3732 | 2 | - | 0 | 23 |
| | Month | 8500 | -4 | - | - | - |
| Kilkenny e Co. Kilkenny | 1-10 | 2202 | | | | |
| | 11-20 | 2367 | | | | |
| | 21-end | 3489 | - | - | - | - |
| | Month | 8058 | | | | |
| Ballinamore Co. Leitrim | 1-10 | | 0 | - | 0 | 20 |
| | 11-20 | | -2 | - | 0 | 36 |
| | 21-end | - | 0 | - | 0 | 9 |
| | Month | | -2 | - | - | - |
| Glenamoy/ Co. Mayo | 1-10 | | -2 | - | 0 | 57 |
| | 11-20 | | -6 | - | 0 | 60 |
| | 21-end | | -2 | - | 0 | 20 |
| | Month | | -10 | - | - | - |
| Birr e Co. Offaly | 1-10 | 1994 | | | | |
| | 11-20 | 2687 | | | | |
| | 21-end | 3226 | - | - | - | - |
| | Month | 8007 | | | | |
| Johnstown Castle Co. Wexford | 1-10 | | 3 | - | 0 | 49 |
| | 11-20 | | 3 | - | 0 | 70 |
| | 21-end | | 6 | - | 0 | 29 |
| | Month | | 12 | - | - | - |

*, /, See notes in January issue.

AGROMETEOROLOGICAL BULLETIN - NOTES

1. The term "rainfall" includes all forms of precipitation (snow, hail, dew) measured as equivalent rain.
2. "Rain days" and "Wet days" are days during which the total rainfall is not less than 0.2 mm and 1.0 mm respectively.
3. The mean daily air temperature over a period is taken as the average of the daily maximum and daily minimum temperature over the period.
4. For a given daily mean temperature of $T^{\circ}\text{C}$ (See 3) the degree day total (DD) above the base temperature ($B^{\circ}\text{C}$) is given by $DD = (T - B)^{\circ}\text{C}$ days when T is greater than B . If T is less than B then $DD = 0$ for that day.
5. Days with air frost are those during which the minimum air temperature is below 0.0°C .
6. "Ground" temperatures refer to temperatures measured with a thermometer placed horizontally on pegs just above the tips of short grass.
7. Days with ground frost are those during which the minimum "ground" temperature is below 0.0°C .
8. The mean daily soil temperature (at 10 cm depth under a bare soil surface) over a period is taken as the average of four daily readings (at 0300, 0900, 1500 and 2100 GMT) over the period at stations marked "e" in the Tables.
9. Mean daily wind speed over a period is taken as the average of hourly values during the period at stations marked "e". At other stations, mean daily wind speed is computed from once-daily readings of run-of-the-wind. From January 1978 wind speed is published in metres per second. (One $\text{ms}^{-1} = 1.94$ knots or 2.24 mph).

All wind speeds refer to the wind at 10 metres effective height above the ground; where measurements are made at other heights the wind speed readings are corrected to a height of 10 metres.
10. Days with gale-gusts are those (at stations marked "e") during which the wind speed exceeded 17 ms^{-1} (33 knots) at any time during the day.
11. Potential evapotranspiration (P.E.) values given in Table 2 are those measured by means of soil-filled tanks sunk into the ground with their upper, grass-covered ends at surface level. The symbol * indicates that solar radiation values refer to Dublin Airport. The symbol / indicates that solar radiation values refer to Belmullet.
12. Soil moisture deficits and surpluses are computed from the differences between rainfall and actual evapotranspiration (A.E.). Estimates of A.E. are derived from measured values of P.E. (see Agmet. Mem. No. 1, 1968). Soil moisture surpluses are assumed to be removed by drainage and surface run-off and are not, therefore, carried forward from one period to the next. Soil moisture deficits are, however, regarded as being cumulative.
13. Deviations of monthly values of rainfall, air temperature, soil temperature and bright sunshine from long-term averages are shown in Table 1 in the case of stations for which those averages are known. Averages of air temperature and bright sunshine refer to the period 1931-1960. Due to a change of site at Mullingar, averages of air temperature used are estimates based on old site. Averages of soil temperature refer to the period 1956-1975. Averages of rainfall refer to the period 1941-1970.
14. In cases where elements are not normally measured or where long-term averages are not available, a dash (/) is inserted in the appropriate space in the Tables.

If, in a particular month, some data, normally given, are not included in the Bulletin, this omission will be indicated by the letters N/A in the appropriate space in the Tables.