



Agrometeorological Bulletin

The Weather of September 1989

Summary

*1st - 12th : High pressure and mainly dry
13th - 22nd : Unsettled and wet with some strong winds
23rd - end : Rising pressure becoming settled.*

Meteorological Situation

An Atlantic high pressure cell dominated until receding towards Scandinavia on 12th; the weather was mainly dry although weak frontal troughs with drizzle and rain affected the country on 1st, 4th (early) and 6th.

Following the high an unsettled spell set in and a series of frontal troughs or warm sector conditions from the Atlantic became prominent; southwest to west winds freshened on occasion, especially on 15th as a very deep low (with origins in hurricane "Gabrielle") swept out of the North Atlantic via the northwest of Scotland. Further weather systems associated with active depression systems affected the country from 18th to 21st, the final low centre passing over the country on 22nd.

The succeeding lows were held to the west of Ireland as high pressure over the continent extended westwards; for a time the west and northwest coastal regions continued to receive spells of drizzle. Finally from 27th high pressure dominated through the end of the month.

Precipitation

Monthly precipitation amounts were well below normal everywhere ranging from 34% of normal at Dublin Airport to 88% of normal at J.F.K park Wexord. The spell from 13th to 22nd was wet — the wettest days were 21st / 22nd. Otherwise the rest of the month tended to be dry. Soil moisture deficits although less than average gave very good ground conditions for harvesting and autumn ploughing throughout the month except in the west and southmidlands for a short spell.

Sunshine and Radiation

Sunshine hours were mostly well below normal. They varied from 70% at Birr to 114% at Caherciveen. Global radiation varied from 114% of normal at Valentia to 89% of normal at Birr.

Temperature

Mean air temperature was mostly above normal but below normal in the extreme west. Values varied from 0.5°C above normal at Dublin Airport and Rosslare to 0.4°C below at Belmullet. Night-time values also tended to be above average.

Wind

Winds were strong with gale to storm gusts on 15th, and 18th to 20th.

NOTE: The data contained in this bulletin are provisional. Some of the material in Table 1 will be published in its final form in the Monthly Weather Report ; final values of Global Radiation at stations in Table 2 will be published in the annual Solar Radiation Observations.

*Annual
Sub. £ 20.00*

TABLE 1

SEPTEMBER 1989

| STATION | PERIOD | RAINFALL (mm) | | | | TEMPERATURE (°C) | | | | | | | | | | | | | | BRIGHT SUNSHINE | | WIND | | | | |
|-------------------------------------|--------|---------------|--------------|-----------|----------|------------------|-----------|------------|-------------------------|-------------|------|---------------------|-------------------------|--------------|--------------------------|--------------|--------------------|------|------------------------|--------------------|--------------|--------------------------------|----------------------|--------------------|------------|-------------------------|
| | | AMOUNT | % OF AVERAGE | RAIN DAYS | WET DAYS | AIR | | | | | | | GROUND | | | SOIL (10cm) | | | | TOTAL NO. OF HOURS | % OF AVERAGE | MEAN SPEED (ms ⁻¹) | DAYS WITH GALE GUSTS | P.E. (PENMAN) (mm) | | |
| | | | | | | MEAN MAX. | MEAN MIN. | MEAN DAILY | DIFFERENCE FROM AVERAGE | LOWEST MIN. | DATE | DAYS WITH AIR FROST | DEGREE DAYS ABOVE 4.4°C | % OF AVERAGE | DEGREE DAYS ABOVE 10.0°C | % OF AVERAGE | LOWEST "GRASS-MIN" | DATE | DAYS WITH GROUND FROST | | | | | | MEAN DAILY | DIFFERENCE FROM AVERAGE |
| Carlow (Oak Park) Co. Carlow | 1-10 | 0.3 | - | 1 | 0 | 18.0 | 8.6 | 13.3 | - | 3.8 | 3 | 0 | 89 | - | 37 | - | 0.0 | 3 | 0 | - | - | 40.5 | - | 0.5 | - | - |
| | 11-20 | 50.4 | - | 7 | 7 | 17.9 | 8.9 | 13.4 | - | 5.7 | 14 | 0 | 90 | - | 38 | - | 1.7 | 17 | 0 | - | - | 28.1 | - | 4.0 | - | - |
| | 21-END | 53.3 | - | 3 | 3 | 16.2 | 10.5 | 13.3 | - | 6.0 | 29 | 0 | 89 | - | 36 | - | 2.0 | 29 | 0 | - | - | 28.8 | - | 3.4 | - | - |
| | MONTH | 104.0 | - | 11 | 10 | 17.4 | 9.3 | 13.3 | - | 3.8 | 3 | 0 | 268 | - | 111 | - | 0.0 | 3 | 0 | - | - | 97.4 | - | 2.6 | - | 36 |
| Shannon Airport Co. Clare | 1-10 | 0.2 | - | 1 | 0 | 17.6 | 9.9 | 13.7 | - | 6.6 | 9 | 0 | 93 | - | 39 | - | 2.7 | 9 | 0 | 15.9 | - | 41.7 | - | 3.4 | 0 | - |
| | 11-20 | 44.3 | - | 7 | 7 | 17.7 | 10.5 | 14.1 | - | 6.4 | 11 | 0 | 97 | - | 42 | - | 1.3 | 17 | 0 | 14.6 | - | 32.6 | - | 4.5 | 4 | - |
| | 21-END | 7.0 | - | 2 | 1 | 16.4 | 11.1 | 13.8 | - | 6.5 | 30 | 0 | 94 | - | 40 | - | 0.3 | 30 | 0 | 14.4 | - | 27.6 | - | 3.5 | 0 | - |
| | MONTH | 51.5 | 57 | 10 | 8 | 17.2 | 10.5 | 13.9 | +0.2 | 6.4 | 11 | 0 | 284 | 97 | 121 | 97 | 0.3 | 30 | 0 | 14.9 | +0.3 | 101.9 | 91 | 3.8 | 4 | 49 |
| Cork Airport Co. Cork | 1-10 | 0.0 | - | 0 | 0 | 17.2 | 9.7 | 13.5 | - | 8.0 | 9 | 0 | 91 | - | 36 | - | 4.5 | 1 | 0 | 15.4 | - | 52.8 | - | 4.3 | 0 | - |
| | 11-20 | 49.3 | - | 6 | 6 | 16.7 | 10.3 | 13.5 | - | 7.5 | 11 | 0 | 91 | - | 38 | - | 3.3 | 14 | 0 | 14.6 | - | 25.4 | - | 6.4 | 4 | - |
| | 21-END | 22.4 | - | 2 | 1 | 15.8 | 9.9 | 12.8 | - | 5.4 | 30 | 0 | 84 | - | 31 | - | 3.9 | 30 | 0 | 14.3 | - | 46.9 | - | 5.3 | 0 | - |
| | MONTH | 71.7 | 62 | 8 | 7 | 16.6 | 10.0 | 13.3 | +0.4 | 5.4 | 30 | 0 | 266 | 101 | 105 | 106 | 3.3 | 14 | 0 | 14.7 | +1.1 | 125.1 | 104 | 5.3 | 4 | 51 |
| Fermoy (Coolnakilla) Co. Cork | 1-10 | 1.6 | - | 1 | 1 | 16.6 | 9.0 | 12.8 | - | 8.0 | 5 | 0 | 84 | - | 30 | - | 2.2 | 6 | 0 | - | - | 47.6 | - | N/A | - | - |
| | 11-20 | 32.7 | - | 7 | 6 | 16.1 | 8.4 | 12.3 | - | 5.3 | 14 | 0 | 79 | - | 27 | - | 1.0 | 17 | 0 | - | - | 27.9 | - | N/A | - | - |
| | 21-END | 28.6 | - | 4 | 2 | 15.4 | 10.1 | 12.8 | - | 6.2 | 29 | 0 | 84 | - | 31 | - | 1.2 | 29 | 0 | - | - | 29.4 | - | N/A | - | - |
| | MONTH | 62.9 | - | 12 | 9 | 16.0 | 9.2 | 12.6 | - | 5.3 | 14 | 0 | 246 | - | 88 | - | 1.0 | 17 | 0 | - | - | 113.9 | - | N/A | - | N/A |
| Fermoy (Moore Park) Co. Cork | 1-10 | 0.0 | - | 0 | 0 | 17.9 | 8.7 | 13.3 | - | 4.4 | 3 | 0 | 89 | - | 38 | - | -2.0 | 3 | 4 | - | - | 50.6 | - | 2.9 | - | - |
| | 11-20 | N/A | - | N/A | N/A | N/A | 7.6 | N/A | - | 3.7 | 14 | 0 | N/A | - | N/A | - | -4.5 | 14 | 3 | - | - | N/A | - | N/A | - | - |
| | 21-END | 11.6 | - | 2 | 1 | 16.6 | 10.5 | 13.5 | - | 4.0 | 30 | 0 | 91 | - | 39 | - | -2.5 | 30 | 2 | - | - | 40.5 | - | N/A | - | - |
| | MONTH | N/A | N/A | N/A | N/A | N/A | 8.9 | N/A | - | 3.7 | 14 | 0 | N/A | - | N/A | - | -4.5 | 14 | 9 | - | - | N/A | - | N/A | - | N/A |
| Roches Point Co. Cork | 1-10 | 0.0 | - | 0 | 0 | 17.5 | 10.6 | 14.1 | - | 9.6 | 6 | 0 | 97 | - | 41 | - | 3.0 | 1 | 0 | 16.4 | - | 54.9 | - | 4.3 | 0 | - |
| | 11-20 | 33.9 | - | 7 | 5 | 17.3 | 11.4 | 14.4 | - | 8.1 | 14 | 0 | 100 | - | 44 | - | 3.2 | 14 | 0 | 15.1 | - | 31.3 | - | 6.6 | 4 | - |
| | 21-END | 21.8 | - | 2 | 2 | 16.4 | 10.9 | 13.7 | - | 8.0 | 28 | 0 | 93 | - | 38 | - | 4.2 | 30 | 0 | 15.1 | - | 52.6 | - | 5.1 | 1 | - |
| | MONTH | 55.7 | 62 | 9 | 7 | 17.1 | 11.0 | 14.0 | +0.3 | 8.0 | 28 | 0 | 289 | 99 | 123 | 103 | 3.0 | 1 | 0 | 15.5 | +1.0 | 138.8 | 109 | 5.3 | 5 | 57 |
| Glencolumbkille Co. Donegal | 1-10 | 12.3 | - | 7 | 4 | 15.4 | 9.1 | 12.3 | - | 6.0 | 3 | 0 | 79 | - | 26 | - | 0.5 | 3 | 0 | - | - | N/A | - | 2.5 | - | - |
| | 11-20 | 63.3 | - | 8 | 8 | 16.6 | 8.4 | 12.5 | - | 5.5 | 11 | 0 | 81 | - | 29 | - | 1.5 | 11 | 0 | - | - | N/A | - | 3.6 | - | - |
| | 21-END | 17.4 | - | 8 | 6 | 15.4 | 10.0 | 12.7 | - | 7.0 | 26 | 0 | 83 | - | 29 | - | 2.3 | 23 | 0 | - | - | N/A | - | 2.6 | - | - |
| | MONTH | 93.0 | - | 23 | 18 | 15.8 | 9.2 | 12.5 | - | 5.5 | 11 | 0 | 243 | - | 84 | - | 0.5 | 3 | 0 | - | - | N/A | - | 2.9 | - | N/A |

TABLE 1 (CONTINUED)

SEPTEMBER 1989

| STATION | PERIOD | RAINFALL (mm) | | | | TEMPERATURE (°C) | | | | | | | | | | | | | | BRIGHT SUNSHINE | | WIND | | P.E. (PENMAN) (mm) | | | | | | | |
|--------------------------------------------|--------|---------------|--------------|-----------|----------|------------------|-----------|------------|-------------------------|-------------|------|---------------------|-------------------------|--------------|--------------------------|--------------|--------------------|------|------------------------|--------------------|--------------|--------------------------------|----------------------|--------------------|------------|-------------------------|---|---|---|---|--|
| | | AMOUNT | % OF AVERAGE | RAIN DAYS | WET DAYS | AIR | | | | | | | GROUND | | | SOIL (10cm) | | | | TOTAL NO. OF HOURS | % OF AVERAGE | MEAN SPEED (ms ⁻¹) | DAYS WITH GALE GUSTS | | | | | | | | |
| | | | | | | MEAN MAX. | MEAN MIN. | MEAN DAILY | DIFFERENCE FROM AVERAGE | LOWEST MIN. | DATE | DAYS WITH AIR FROST | DEGREE DAYS ABOVE 4.4°C | % OF AVERAGE | DEGREE DAYS ABOVE 10.0°C | % OF AVERAGE | LOWEST "GRASS-MIN" | DATE | DAYS WITH GROUND FROST | | | | | | MEAN DAILY | DIFFERENCE FROM AVERAGE | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glenties Co. Donegal | 1-10 | 11.2 | - | 5 | 4 | 15.5 | 7.7 | 11.6 | - | 1.5 | 9 | 0 | 73 | - | 24 | - | -4.9 | 9 | 3 | - | - | - | - | - | - | - | - | - | - | - | |
| | 11-20 | 46.3 | - | 8 | 7 | 16.1 | 8.2 | 12.2 | - | 1.6 | 11 | 0 | 78 | - | 27 | - | -5.7 | 11 | 3 | - | - | - | - | - | - | - | - | - | - | - | |
| | 21-END | 9.5 | - | 5 | 4 | 15.0 | 8.9 | 12.0 | - | 5.2 | 23 | 0 | 76 | - | 25 | - | -2.1 | 23 | 2 | - | - | - | - | - | - | - | - | - | - | - | |
| | MONTH | 67.0 | 46 | 18 | 15 | 15.5 | 8.3 | 11.9 | - | 1.5 | 9 | 0 | 227 | - | 75 | - | -5.7 | 11 | 8 | - | - | - | - | - | - | - | - | - | - | - | |
| Malin Head Co. Donegal | 1-10 | 8.3 | - | 5 | 1 | 14.8 | 10.9 | 12.9 | - | 9.3 | 3 | 0 | 85 | - | 29 | - | 6.5 | 3 | 0 | 13.9 | - | 44.4 | - | 6.6 | 3 | - | - | - | - | - | |
| | 11-20 | 26.2 | - | 9 | 7 | 16.5 | 10.2 | 13.4 | - | 8.9 | 15 | 0 | 90 | - | 34 | - | 6.9 | 11 | 0 | 13.1 | - | 37.2 | - | 9.0 | 6 | - | - | - | - | - | |
| | 21-END | 9.9 | - | 3 | 3 | 15.0 | 10.2 | 12.6 | - | 5.9 | 26 | 0 | 82 | - | 28 | - | 3.4 | 26 | 0 | 12.6 | - | 20.6 | - | 6.6 | 2 | - | - | - | - | - | |
| | MONTH | 44.4 | 44 | 17 | 11 | 15.5 | 10.4 | 12.9 | -0.1 | 5.9 | 26 | 0 | 256 | 95 | 91 | 93 | 3.4 | 26 | 0 | 13.2 | +0.1 | 102.2 | 93 | 7.4 | 11 | 54 | - | - | - | - | |
| Casement Aerodrome Co. Dublin | 1-10 | 1.1 | - | 2 | 0 | 16.5 | 9.1 | 12.8 | - | 5.0 | 3 | 0 | 84 | - | 31 | - | 2.1 | 3 | 0 | 14.4 | - | 46.6 | - | 4.5 | 0 | - | - | - | - | - | |
| | 11-20 | 13.6 | - | 7 | 5 | 17.3 | 9.7 | 13.5 | - | 5.2 | 17 | 0 | 91 | - | 38 | - | 2.3 | 17 | 0 | 14.0 | - | 31.0 | - | 6.9 | 4 | - | - | - | - | - | |
| | 21-END | 35.7 | - | 2 | 2 | 16.2 | 10.0 | 13.1 | - | 3.6 | 29 | 0 | 87 | - | 35 | - | 1.3 | 29 | 0 | 13.7 | - | 27.7 | - | 4.5 | 1 | - | - | - | - | - | |
| | MONTH | 50.4 | 73 | 11 | 7 | 16.7 | 9.6 | 13.1 | +0.1 | 3.6 | 29 | 0 | 262 | 96 | 104 | 94 | 1.3 | 29 | 0 | 14.0 | - | 105.3 | 85 | 5.3 | 5 | 46 | - | - | - | - | |
| Dublin Airport Co. Dublin | 1-10 | 0.7 | - | 1 | 0 | 17.0 | 10.2 | 13.6 | - | 7.7 | 3 | 0 | 92 | - | 37 | - | 4.5 | 3 | 0 | 15.7 | - | 49.2 | - | 3.6 | 0 | - | - | - | - | - | |
| | 11-20 | 8.7 | - | 7 | 4 | 17.3 | 10.7 | 14.0 | - | 6.5 | 14 | 0 | 96 | - | 42 | - | 1.8 | 14 | 0 | 14.7 | - | 26.9 | - | 5.4 | 4 | - | - | - | - | - | |
| | 21-END | 15.7 | - | 3 | 2 | 16.5 | 10.6 | 13.5 | - | 5.6 | 29 | 0 | 91 | - | 38 | - | 2.3 | 29 | 0 | 14.1 | - | 23.6 | - | 3.5 | 0 | - | - | - | - | - | |
| | MONTH | 25.1 | 34 | 11 | 6 | 16.9 | 10.5 | 13.7 | +0.5 | 5.6 | 29 | 0 | 279 | 100 | 116 | 104 | 1.8 | 14 | 0 | 14.9 | +0.9 | 99.7 | 78 | 4.2 | 4 | 48 | - | - | - | - | |
| Kinsealy Co. Dublin | 1-10 | 0.3 | - | 1 | 0 | 17.3 | 10.3 | 13.8 | - | 5.6 | 3 | 0 | 94 | - | 40 | - | -5.8 | 3 | 5 | - | - | N/A | - | 2.8 | - | - | - | - | - | - | |
| | 11-20 | 10.8 | - | 7 | 3 | 17.9 | 10.1 | 14.0 | - | 6.8 | 14 | 0 | 96 | - | 42 | - | -6.1 | 17 | 3 | - | - | N/A | - | 3.9 | - | - | - | - | - | - | |
| | 21-END | 15.9 | - | 3 | 2 | 17.1 | 9.7 | 13.4 | - | 5.4 | 29 | 0 | 90 | - | 36 | - | -4.2 | 29 | 5 | - | - | N/A | - | 2.9 | - | - | - | - | - | - | |
| | MONTH | 27.0 | 38 | 11 | 5 | 17.4 | 10.0 | 13.7 | - | 5.4 | 29 | 0 | 280 | - | 118 | - | -6.1 | 17 | 13 | - | - | N/A | - | 3.2 | - | N/A | - | - | - | - | |
| Galway Co. Galway | 1-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 11-20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 21-END | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | MONTH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Killarney (Muckross House) Co. Kerry | 1-10 | 0.8 | - | 3 | 0 | 17.0 | 9.0 | 13.0 | - | 6.4 | 5 | 0 | 86 | - | 34 | - | 4.3 | 10 | 0 | - | - | 40.9 | - | - | - | - | - | - | - | - | |
| | 11-20 | 110.1 | - | 8 | 7 | 17.2 | 9.3 | 13.2 | - | 4.6 | 17 | 0 | 89 | - | 36 | - | 4.6 | 17 | 0 | - | - | 22.2 | - | - | - | - | - | - | - | - | |
| | 21-END | 6.8 | - | 3 | 3 | 16.0 | 11.1 | 13.5 | - | 4.9 | 29 | 0 | 91 | - | 38 | - | 10.5 | 22 | 0 | - | - | 32.5 | - | - | - | - | - | - | - | - | |
| | MONTH | 117.7 | 87 | 14 | 10 | 16.7 | 9.8 | 13.3 | - | 4.6 | 17 | 0 | 266 | - | 108 | - | 4.3 | 10 | 0 | - | - | 95.6 | - | - | - | - | - | - | - | - | |

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

SEPTEMBER 1989

| STATION | PERIOD | RAINFALL (mm) | | | | TEMPERATURE (°C) | | | | | | | | | | | | | | BRIGHT SUNSHINE | | WIND | | | | |
|------------------------------------|--------|---------------|--------------|-----------|----------|------------------|-----------|------------|-------------------------|-------------|------|---------------------|-------------------------|--------------|--------------------------|--------------|--------------------|------|------------------------|--------------------|--------------|--------------------------------|----------------------|--------------------|------------|-------------------------|
| | | AMOUNT | % OF AVERAGE | RAIN DAYS | WET DAYS | AIR | | | | | | | GROUND | | | SOIL (10cm) | | | | TOTAL NO. OF HOURS | % OF AVERAGE | MEAN SPEED (ms ⁻¹) | DAYS WITH GALE GUSTS | P.E. (PENMAN) (mm) | | |
| | | | | | | MEAN MAX. | MEAN MIN. | MEAN DAILY | DIFFERENCE FROM AVERAGE | LOWEST MIN. | DATE | DAYS WITH AIR FROST | DEGREE DAYS ABOVE 4.4°C | % OF AVERAGE | DEGREE DAYS ABOVE 10.0°C | % OF AVERAGE | LOWEST "GRASS-MIN" | DATE | DAYS WITH GROUND FROST | | | | | | MEAN DAILY | DIFFERENCE FROM AVERAGE |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ballinrobe (Creagh) Co. Mayo | 1-10 | N/A | - | N/A | N/A | N/A | N/A | N/A | - | N/A | N/A | N/A | - | N/A | - | N/A | N/A | - | - | N/A | - | N/A | - | - | - | - |
| | 11-20 | N/A | - | N/A | N/A | N/A | N/A | N/A | - | N/A | N/A | N/A | - | N/A | - | N/A | N/A | - | - | N/A | - | N/A | - | - | - | - |
| | 21-END | N/A | - | N/A | N/A | N/A | N/A | N/A | - | N/A | N/A | N/A | - | N/A | - | N/A | N/A | - | - | N/A | - | N/A | - | - | - | - |
| | MONTH | N/A | N/A | N/A | N/A | N/A | N/A | N/A | - | N/A | N/A | N/A | - | N/A | - | N/A | N/A | - | - | N/A | - | N/A | - | - | - | N/A |
| Belmullet Co. Mayo | 1-10 | 9.9 | - | 6 | 5 | 15.6 | 9.7 | 12.7 | - | 6.5 | 10 | 0 | 83 | - | 30 | - | 1.6 | 10 | 0 | 15.0 | - | 42.6 | - | 5.2 | 0 | - |
| | 11-20 | 46.2 | - | 9 | 7 | 16.3 | 9.8 | 13.0 | - | 5.4 | 11 | 0 | 86 | - | 32 | - | 0.1 | 11 | 0 | 14.1 | - | 35.7 | - | 8.1 | 5 | - |
| | 21-END | 5.5 | - | 7 | 1 | 15.3 | 11.0 | 13.1 | - | 6.9 | 22 | 0 | 87 | - | 32 | - | 3.8 | 22 | 0 | 14.2 | - | 18.7 | - | 5.8 | 4 | - |
| | MONTH | 61.6 | 58 | 22 | 13 | 15.7 | 10.1 | 12.9 | -0.4 | 5.4 | 11 | 0 | 256 | 93 | 94 | 90 | 0.1 | 11 | 0 | 14.4 | +0.6 | 97.0 | 84 | 6.4 | 9 | 46 |
| Claremorris Co. Mayo | 1-10 | 5.1 | - | 3 | 2 | 16.1 | 7.5 | 11.8 | - | 4.9 | 8 | 0 | 74 | - | 24 | - | 0.9 | 8 | 0 | 13.4 | - | 30.4 | - | 3.1 | 0 | - |
| | 11-20 | 61.0 | - | 8 | 7 | 16.5 | 7.7 | 12.1 | - | 4.4 | 11 | 0 | 77 | - | 27 | - | 0.6 | 14 | 0 | 13.0 | - | 34.3 | - | 4.4 | 4 | - |
| | 21-END | 4.2 | - | 4 | 2 | 15.6 | 10.2 | 12.9 | - | 5.1 | 29 | 0 | 85 | - | 32 | - | 2.0 | 29 | 0 | 13.4 | - | 18.4 | - | 3.4 | 0 | - |
| | MONTH | 70.3 | 66 | 15 | 11 | 16.1 | 8.5 | 12.3 | -0.1 | 4.4 | 11 | 0 | 237 | 93 | 83 | 86 | 0.6 | 14 | 0 | 13.3 | -0.0 | 83.1 | 85 | 3.6 | 4 | 32 |
| Glenamoy Co. Mayo | 1-10 | 9.3 | - | 4 | 3 | 15.3 | 7.9 | 11.6 | - | 3.2 | 3 | 0 | 73 | - | 23 | - | 1.1 | 10 | 0 | - | - | N/A | - | 2.0 | - | - |
| | 11-20 | 51.6 | - | 7 | 7 | 16.3 | 6.5 | 11.4 | - | 1.6 | 11 | 0 | 71 | - | 23 | - | 1.8 | 12 | 0 | - | - | N/A | - | 3.9 | - | - |
| | 21-END | 13.0 | - | 4 | 4 | 15.3 | 10.0 | 12.6 | - | 7.4 | 22 | 0 | 82 | - | 28 | - | 5.8 | 30 | 0 | - | - | N/A | - | 2.4 | - | - |
| | MONTH | 73.9 | 57 | 15 | 14 | 15.6 | 8.2 | 11.9 | - | 1.6 | 11 | 0 | 226 | - | 74 | - | 1.1 | 10 | 0 | - | - | N/A | - | 2.7 | - | N/A |
| Dunsany (Grange) Co. Meath | 1-10 | 4.6 | - | 4 | 2 | 15.7 | 8.2 | 11.9 | - | 4.0 | 3 | 0 | 75 | - | 25 | - | -1.3 | 3 | 1 | - | - | N/A | - | - | - | - |
| | 11-20 | 24.0 | - | 8 | 6 | 16.8 | 8.5 | 12.6 | - | 4.5 | 14 | 0 | 82 | - | 31 | - | -1.1 | 14 | 1 | - | - | N/A | - | - | - | - |
| | 21-END | 35.9 | - | 3 | 2 | 15.3 | 9.8 | 12.5 | - | 3.9 | 29 | 0 | 82 | - | 30 | - | -0.6 | 23 | 1 | - | - | N/A | - | - | - | - |
| | MONTH | 64.5 | 80 | 15 | 10 | 15.9 | 8.8 | 12.4 | - | 3.9 | 29 | 0 | 239 | - | 86 | - | -1.3 | 3 | 3 | - | - | N/A | - | - | - | - |
| Clones Co. Monaghan | 1-10 | 9.3 | - | 4 | 3 | 15.8 | 8.5 | 12.1 | - | 4.5 | 9 | 0 | 77 | - | 26 | - | -1.0 | 9 | 1 | 13.3 | - | 30.4 | - | 2.7 | 0 | - |
| | 11-20 | 32.3 | - | 7 | 6 | 17.0 | 8.3 | 12.6 | - | 5.0 | 11 | 0 | 82 | - | 32 | - | 0.1 | 11 | 0 | 13.1 | - | 37.4 | - | 4.0 | 3 | - |
| | 21-END | 12.3 | - | 4 | 2 | 15.4 | 9.0 | 12.2 | - | 4.7 | 29 | 0 | 78 | - | 26 | - | 0.1 | 29 | 0 | 12.9 | - | 16.3 | - | 2.8 | 0 | - |
| | MONTH | 53.9 | 63 | 15 | 11 | 16.0 | 8.6 | 12.3 | +0.0 | 4.5 | 9 | 0 | 238 | 94 | 84 | 88 | -1.0 | 9 | 1 | 13.1 | -0.2 | 84.1 | 86 | 3.2 | 3 | 34 |
| Birr Co. Offaly | 1-10 | 3.3 | - | 4 | 1 | 16.6 | 8.5 | 12.6 | - | 5.6 | 3 | 0 | 82 | - | 30 | - | 0.6 | 3 | 0 | 14.4 | - | 36.7 | - | 2.0 | 0 | - |
| | 11-20 | 45.3 | - | 7 | 5 | 17.3 | 8.9 | 13.1 | - | 4.0 | 11 | 0 | 87 | - | 36 | - | 1.5 | 11 | 0 | 13.8 | - | 23.3 | - | 3.4 | 4 | - |
| | 21-END | 13.6 | - | 4 | 2 | 15.5 | 9.7 | 12.6 | - | 3.1 | 29 | 0 | 82 | - | 30 | - | -0.8 | 29 | 1 | 13.7 | - | 17.5 | - | 2.3 | 0 | - |
| | MONTH | 62.2 | 79 | 15 | 8 | 16.5 | 9.0 | 12.8 | -0.2 | 3.1 | 29 | 0 | 251 | 93 | 96 | 88 | -0.8 | 29 | 1 | 14.0 | -0.0 | 77.5 | 70 | 2.6 | 4 | 35 |

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

SEPTEMBER 1989

| STATION | PERIOD | RAINFALL (mm) | | | | TEMPERATURE (°C) | | | | | | | | | | | | | | BRIGHT SUNSHINE | | WIND | | P.E. (PENMAN) (mm) | | | | | | | | | | | | | | |
|-------------------------------------------|--------|---------------|--------------|-----------|----------|------------------|-----------|------------|-------------------------|-------------|------|---------------------|-------------------------|--------------|--------------------------|--------------|--------------------|------|------------------------|--------------------|--------------|--------------------------------|----------------------|--------------------|------------|-------------------------|------------|-------------------------|------------|-------------------------|---|---|---|---|---|---|---|---|
| | | AMOUNT | % OF AVERAGE | RAIN DAYS | WET DAYS | AIR | | | | | | | GROUND | | | SOIL (10cm) | | | | TOTAL NO. OF HOURS | % OF AVERAGE | MEAN SPEED (ms ⁻¹) | DAYS WITH GALE GUSTS | | | | | | | | | | | | | | | |
| | | | | | | MEAN MAX. | MEAN MIN. | MEAN DAILY | DIFFERENCE FROM AVERAGE | LOWEST MIN. | DATE | DAYS WITH AIR FROST | DEGREE DAYS ABOVE 4.4°C | % OF AVERAGE | DEGREE DAYS ABOVE 10.0°C | % OF AVERAGE | LOWEST "GRASS-MIN" | DATE | DAYS WITH GROUND FROST | | | | | | MEAN DAILY | DIFFERENCE FROM AVERAGE | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | MEAN DAILY | DIFFERENCE FROM AVERAGE | MEAN DAILY | DIFFERENCE FROM AVERAGE | | | | | | | | |
| Dundrum (Knockavilla) Co. Tipperary | 1-10 | 0.7 | - | 1 | 0 | 17.2 | 8.0 | 12.6 | - | 3.8 | 3 | 0 | 82 | - | 31 | - | -1.0 | 3 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| | 11-20 | 29.2 | - | 7 | 5 | 17.4 | 8.4 | 12.9 | - | 4.4 | 17 | 0 | 85 | - | 33 | - | 1.1 | 14 | 0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| | 21-END | 17.9 | - | 5 | 2 | 16.1 | 10.1 | 13.1 | - | 3.6 | 30 | 0 | 87 | - | 36 | - | 0.5 | 30 | 0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | MONTH | 47.8 | - | 13 | 7 | 16.9 | 8.8 | 12.9 | - | 3.6 | 30 | 0 | 254 | - | 100 | - | -1.0 | 3 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Dungarvan (Carriglea) Co. Waterford | 1-10 | 0.0 | - | 0 | 0 | 19.3 | 7.3 | 13.3 | - | 0.2 | 2 | 0 | 90 | - | 41 | - | -4.2 | 4 | 4 | - | - | 47.1 | - | 1.6 | - | - | - | - | - | - | - | - | - | - | - | - | | |
| | 11-20 | 42.2 | - | 6 | 6 | 18.2 | 9.7 | 14.0 | - | 3.9 | 14 | 0 | 96 | - | 43 | - | -3.5 | 14 | 2 | - | - | 25.8 | - | 2.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 21-END | 7.0 | - | 2 | 1 | 18.0 | 10.2 | 14.1 | - | 5.0 | 30 | 0 | 97 | - | 45 | - | -3.1 | 30 | 3 | - | - | 41.4 | - | 2.1 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | MONTH | 49.2 | 48 | 8 | 7 | 18.5 | 9.1 | 13.8 | - | 0.2 | 2 | 0 | 283 | - | 129 | - | -4.2 | 4 | 9 | - | - | 114.3 | - | 2.1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Mullingar Co. Westmeath | 1-10 | 3.2 | - | 3 | 2 | 16.0 | 8.1 | 12.1 | - | 4.6 | 3 | 0 | 77 | - | 26 | - | 2.3 | 3 | 0 | 14.0 | - | 43.9 | - | 3.1 | 0 | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 11-20 | 40.8 | - | 7 | 7 | 16.8 | 7.8 | 12.3 | - | 2.8 | 14 | 0 | 79 | - | 30 | - | -0.4 | 14 | 1 | 13.1 | - | 26.6 | - | 4.2 | 4 | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 21-END | 9.6 | - | 3 | 2 | 15.4 | 9.3 | 12.4 | - | 3.0 | 29 | 0 | 80 | - | 28 | - | 1.1 | 29 | 0 | 13.2 | - | 20.3 | - | 3.3 | 0 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | MONTH | 53.6 | 60 | 13 | 11 | 16.0 | 8.4 | 12.2 | -0.2 | 2.8 | 14 | 0 | 236 | 91 | 84 | 82 | -0.4 | 14 | 1 | 13.5 | -0.1 | 90.8 | 82 | 3.5 | 4 | 34 | - | - | - | - | - | - | - | - | - | - | - | |
| J.F.K. Park Co. Wexford | 1-10 | 0.0 | - | 0 | 0 | 18.1 | 8.8 | 13.5 | - | 5.7 | 3 | 0 | 91 | - | 38 | - | -3.2 | 3 | 5 | - | - | N/A | - | 2.6 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 11-20 | 41.6 | - | 6 | 3 | 17.5 | 9.9 | 13.7 | - | 5.0 | 14 | 0 | 93 | - | 39 | - | 1.9 | 17 | 0 | - | - | N/A | - | 5.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 21-END | 43.7 | - | 2 | 2 | 16.6 | 11.1 | 13.9 | - | 7.8 | 23 | 0 | 95 | - | 40 | - | 4.5 | 30 | 0 | - | - | N/A | - | 3.1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | MONTH | 85.3 | 88 | 8 | 5 | 17.4 | 9.9 | 13.7 | - | 5.0 | 14 | 0 | 278 | - | 117 | - | -3.2 | 3 | 5 | - | - | N/A | - | 3.7 | - | N/A | - | - | - | - | - | - | - | - | - | - | - | - |
| Clonroche Co. Wexford | 1-10 | 0.0 | - | 0 | 0 | 17.7 | 9.2 | 13.5 | - | 5.1 | 3 | 0 | 91 | - | 38 | - | -2.1 | 3 | 2 | - | - | N/A | - | 1.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 11-20 | 57.0 | - | 8 | 7 | 17.0 | 9.4 | 13.2 | - | 5.4 | 14 | 0 | 88 | - | 35 | - | -3.5 | 14 | 3 | - | - | N/A | - | 2.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 21-END | 14.3 | - | 2 | 2 | 16.7 | 9.9 | 13.3 | - | 5.7 | 29 | 0 | 89 | - | 36 | - | -1.5 | 29 | 3 | - | - | N/A | - | 1.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | MONTH | 71.3 | 65 | 10 | 9 | 17.1 | 9.5 | 13.3 | - | 5.1 | 3 | 0 | 267 | - | 109 | - | -3.5 | 14 | 8 | - | - | N/A | - | 1.6 | - | N/A | - | - | - | - | - | - | - | - | - | - | - | |
| Johnstown Castle Co. wexford | 1-10 | 0.0 | - | 0 | 0 | 17.4 | 10.3 | 13.9 | - | 6.2 | 3 | 0 | 95 | - | 40 | - | -1.2 | 3 | 1 | - | - | N/A | - | 1.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 11-20 | 28.4 | - | 8 | 4 | 17.1 | 10.5 | 13.8 | - | 7.3 | 14 | 0 | 94 | - | 40 | - | -0.8 | 14 | 1 | - | - | N/A | - | 1.9 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 21-END | 6.6 | - | 2 | 2 | 16.2 | 10.9 | 13.5 | - | 7.0 | 23 | 0 | 91 | - | 37 | - | 0.2 | 23 | 0 | - | - | N/A | - | 1.5 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | MONTH | 35.0 | 38 | 10 | 6 | 16.9 | 10.6 | 13.7 | - | 6.2 | 3 | 0 | 280 | - | 117 | - | -1.2 | 3 | 2 | - | - | N/A | - | 1.6 | - | N/A | - | - | - | - | - | - | - | - | - | - | - | |
| Rosslare Co. Wexford | 1-10 | 0.0 | - | 0 | 0 | 16.9 | 11.1 | 14.0 | - | 8.7 | 1 | 0 | 96 | - | 41 | - | 3.0 | 3 | 0 | 16.2 | - | 53.5 | - | 6.0 | 4 | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 11-20 | 19.8 | - | 7 | 6 | 17.1 | 12.0 | 14.6 | - | 8.1 | 14 | 0 | 102 | - | 46 | - | 5.9 | 14 | 0 | 15.4 | - | 30.4 | - | 6.1 | 4 | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 21-END | 7.8 | - | 2 | 2 | 16.0 | 12.0 | 14.0 | - | 8.6 | 23 | 0 | 96 | - | 41 | - | 6.4 | 23 | 0 | 14.8 | - | 32.5 | - | 6.0 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | |
| | MONTH | 27.6 | 35 | 9 | 8 | 16.7 | 11.7 | 14.2 | +0.5 | 8.1 | 14 | 0 | 294 | 100 | 127 | 105 | 3.0 | 3 | 0 | 15.5 | +0.6 | 116.4 | 81 | 6.0 | 9 | 51 | - | - | - | - | - | - | - | - | - | - | - | |

TABLE 2 GLOBAL RADIATION

| STATION | PERIOD | AMOUNT MJ/m ² |
|---------------------------------------------|--------|-----------------------------|
| Malin Head Co. Donegal | 1-10 | 119.50 |
| | 11-20 | 96.53 |
| | 21-end | 63.63 |
| | Month | 279.66 |
| Dublin Airport Co. Dublin | 1-10 | 122.95 |
| | 11-20 | 87.57 |
| | 21-end | 68.32 |
| | Month | 278.84 |
| Cahirciveen (Valentia Obs.) Co. Kerry | 1-10 | 136.28 |
| | 11-20 | 102.92 |
| | 21-end | 100.14 |
| | Month | 339.34 |
| Kilkenny Co. Kilkenny | 1-10 | 129.74 |
| | 11-20 | 89.14 |
| | 21-end | 81.24 |
| | Month | 300.12 |
| Beimullet Co. Mayo | 1-10 | 106.97 |
| | 11-20 | 92.79 |
| | 21-end | 66.10 |
| | Month | 265.86 |
| Clones Co. Monaghan | 1-10 | 99.59 |
| | 11-20 | 99.26 |
| | 21-end | 61.73 |
| | Month | 260.58 |
| Birr Co. Offaly | 1-10 | 110.40 |
| | 11-20 | 92.05 |
| | 21-end | 68.41 |
| | Month | 270.86 |

TABLE 3 POTENTIAL EVAPOTRANSPIRATION (P.E.) AND SOIL MOISTURE

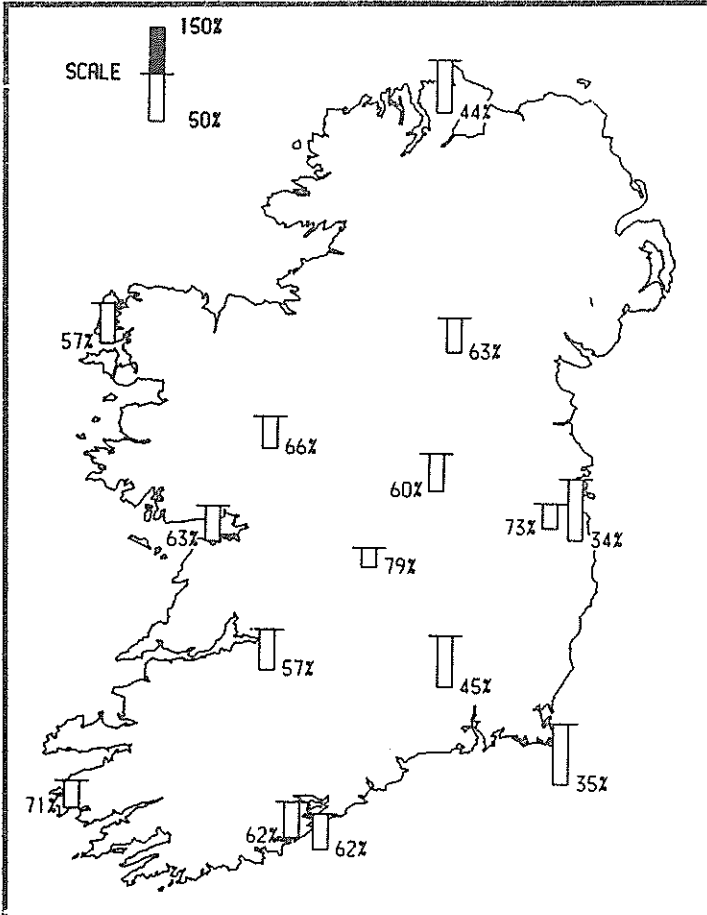
| STATION | PERIOD | P.E. (mm) | | SOIL MOISTURE (mm) | |
|---------------------------------------------|--------|-----------|---------|---------------------|---------|
| | | Amount | Deficit | Accumulated Deficit | Surplus |
| Carlow (Oak Park) Co. Carlow | 1-10 | 18.2 | 18 | 40 | -- |
| | 11-20 | 30.5 | -- | 17 | 23 |
| | 21-end | 20.0 | -- | 0 | 33 |
| | Month | -- | -- | -- | -- |
| Kinsealy Co. Dublin | 1-10 | 23.7 | 18 | 67 | -- |
| | 11-20 | 22.4 | 2 | 69 | -- |
| | 21-end | 14.1 | -- | 61 | 8 |
| | Month | -- | -- | -- | -- |
| Cahirciveen (Valentia Obs.) Co. Kerry | 1-10 | 10.9 | 8 | 8 | -- |
| | 11-20 | 18.5 | -- | 0 | 56 |
| | 21-end | 3.4 | -- | 0 | 4 |
| | Month | -- | -- | -- | -- |
| Ballinamore Co. Leitrim | 1-10 | 13.2 | 5 | 15 | -- |
| | 11-20 | 32.1 | -- | 0 | 28 |
| | 21-end | (-0.4) | -- | 0 | 12 |
| | Month | -- | -- | -- | -- |
| Glenamoy Co. Mayo | 1-10 | 6.4 | -- | 0 | 3 |
| | 11-20 | 39.9 | -- | 0 | 12 |
| | 21-end | 7.7 | -- | 0 | 5 |
| | Month | -- | -- | -- | -- |
| Johnstown Castle Co. Wexford | 1-10 | 23.6 | 16 | 73 | -- |
| | 11-20 | 20.6 | -- | 55 | 18 |
| | 21-end | 8.8 | -- | 54 | 1 |
| | Month | -- | -- | -- | -- |

TABLE 4 SOIL CLIMATE (MULLINGAR)

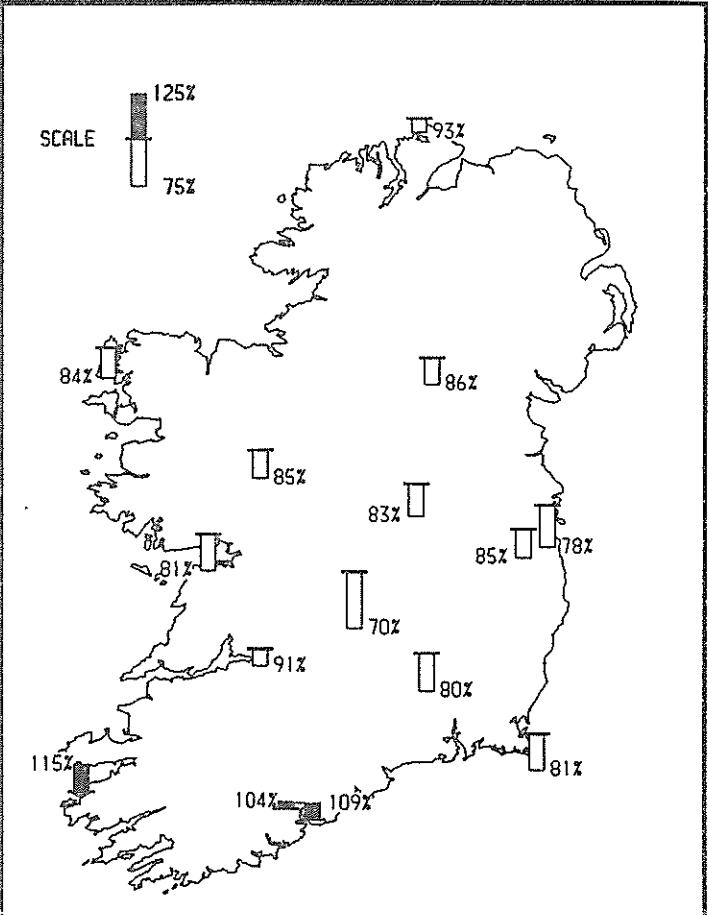
| BARE SOIL TYPE | PERIOD | MEAN TEMPERATURE (°C at 100mm) | | | TEMPERATURE GRADIENT (to 200mm) | SOIL WATER POTENTIAL (hPa) (at depths) | |
|----------------|--------|-----------------------------------|-------|------|---------------------------------------|-------------------------------------------|-------|
| | | Max. | Daily | Min. | | 75mm | 200mm |
| | | Peat | 1-10 | 15.7 | 14.1 | 11.9 | .58 |
| | 11-20 | 14.8 | 13.1 | 10.7 | .44 | 123.1 | 137.6 |
| | 21-end | 14.5 | 13.4 | 11.5 | .42 | 64.5 | 72.2 |
| Mineral | 1-10 | 16.7 | 13.9 | 11.6 | .01 | 315.2 | 197.6 |
| | 11-20 | 15.9 | 13.2 | 10.6 | .20 | 448.1 | 361.5 |
| | 21-end | 15.3 | 13.2 | 11.5 | .25 | 108.7 | 88.7 |

Notes on the tables in January issue

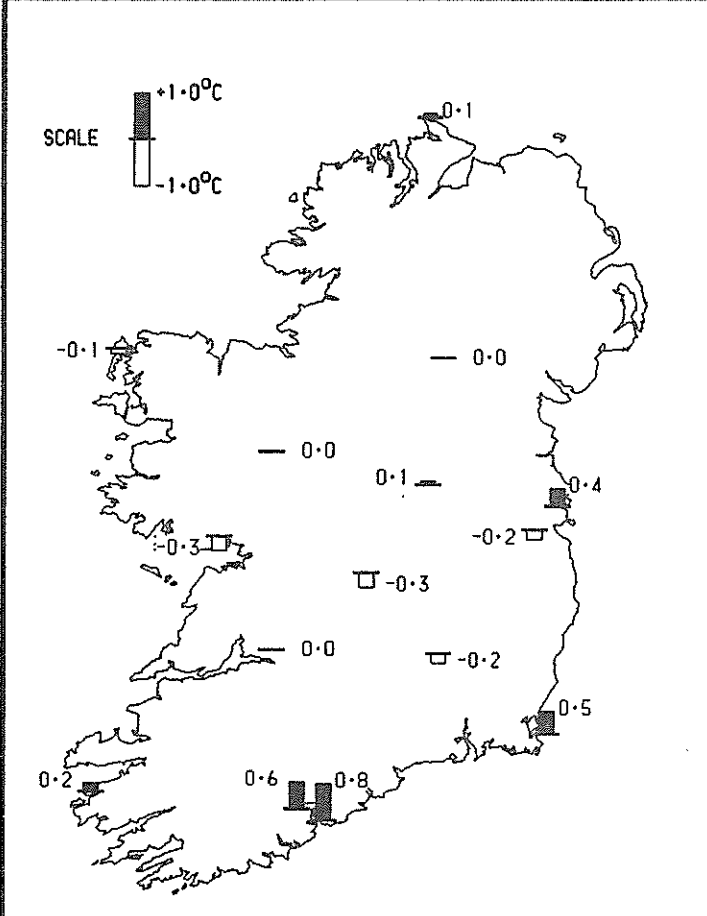
Differences from average



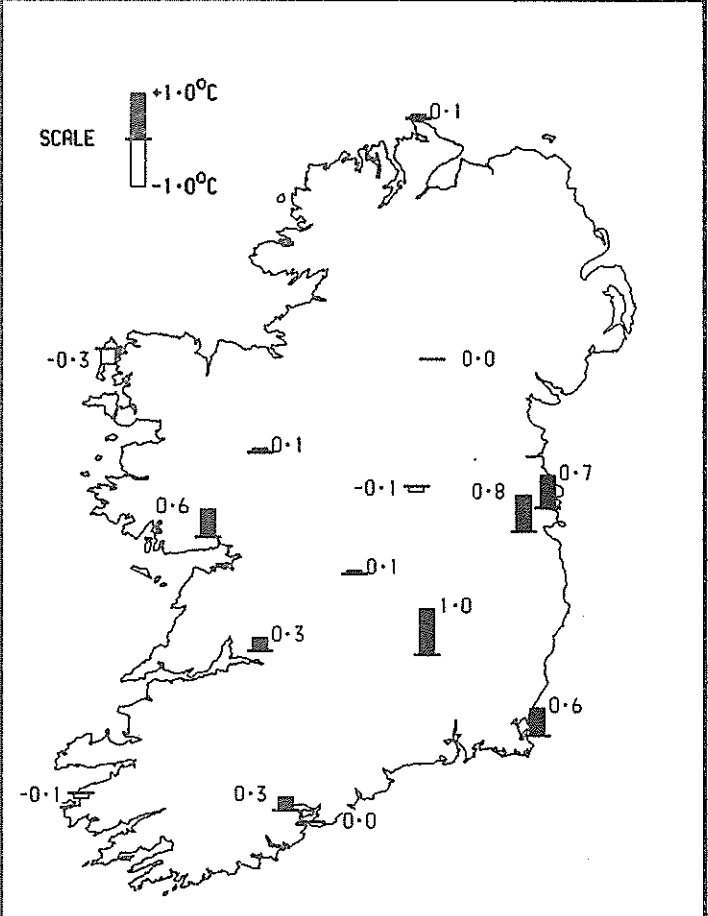
Rainfall percentage of (1951-80) normals



SUNSHINE (Percentage of 1951-1980 normals)



MEAN MAX. TEMPERATURE (Deviation from 1951-1980 normals)



MEAN MIN. TEMPERATURE (Deviation from 1951-1980 normals)

PRECIPITATION VALUES FOR September 1989

| MARKREE (CO. SLIGO) | | | | | LETTERKENNY (CO. DONEGAL) | | | |
|-----------------------|--------|-----------------|------------------|-----------------|-----------------------------|-----------------|------------------|-----------------|
| PERIOD | AMOUNT | % OF AVERAGE | RAIN DAYS NO. | WET DAYS NO. | AMOUNT | % OF AVERAGE | RAIN DAYS NO. | WET DAYS NO. |
| 1 - 10 | 10.9 | | 4 | 3 | 6.8 | | 5 | 2 |
| 11 - 20 | 34.2 | | 7 | 6 | 36.7 | | 8 | 5 |
| 21 - END | 13.9 | | 4 | 4 | 10.5 | | 4 | 2 |
| MONTH | 59.0 | 54 | 15 | 13 | 54.0 | 52 | 17 | 9 |

Outlook for October 18th - 27th

Deep low pressure will dominate in the east Atlantic for next five days giving a very distributed spell of weather . Strong to gale force southwest winds will become extremely high at times to 23rd. Remaining mild but wet or squally showers particularly over 20th / 21st.

