

METEOROLOGICAL SERVICE



JANUARY 1985

AGROMETEOROLOGICAL BULLETIN

The weather of January

Mainly cold, dry and very bright weather to the 16th. This spell was associated with high pressure which first centred to the northwest of Ireland and subsequently drifted over the country before it temporarily receded to Scandinavia. Occasional troughs however, over Britain and the Irish Sea, marginally affected eastern regions but as the high receded a more active trough moved inland westwards on 13th and was followed by a recovery of the high. Sharp to severe ground frost and sharp air frost were widespread in the period.

About the middle of the month a North Atlantic depression moved towards the Bay of Biscay while deepening and a freshening easterly airflow developed with widespread snow or snow showers in the east and north from 16th to 18th. Many areas in the east, midlands and north reported considerable variation in snow depth from 5 to 22cm but drifting snow was not a problem.

A thaw set in later on 18th as milder air reached the country except in the north, with strong and gusty southeast winds and outbreaks of rain on 19th and 20th. Following the passage over Ireland of the depression centre on 21st, a strong and gusty northwest airflow developed in its wake and there were widespread snow showers in the north, northmidlands and northwest on 22nd/23rd.

Changeable conditions occurred on 24th but winds generally backed on 25th as a trough, remaining to the south of the country, moved to the English Channel and a ridge developed on 26th. Subsequently a mild but strong southwesterly airflow dominated to the end of the month; there were frontal passages and spells of rain and drizzle.

Precipitation:

Monthly rainfall amounts were generally well below normal. Values varied from 100% of normal at Malin Head to 31% at Birr. The period from 1st to 17th was without rain. Subsequently wettest days were 18th (in the east), 20th (except the south and west midlands) and 27th. Snow was widespread except in the south and parts of the west, on 17th/18th and further snow occurred in northern areas on 20th to 24th and 27th.

Temperature:

Mean monthly air temperature was below normal varying from 3.2°C below at Belmullet to 1.8°C below at Dublin Airport and Rosslare. Air frost was most severe from 15th to 18th; widespread severe to very severe ground frost occurred throughout the month to 18th and again on 24th. The absolute minimum air temperature of the month of -9.5°C occurred at Ballinrobe (Creagh) on 18th and a minimum ground temperature of -17.8°C was recorded at Glenties on the 6th. Soil temperature (100mm) varied from 3.7°C below normal at Shannon Airport to -1.7°C at Cork Airport. For example, soil temperatures were below zero throughout the decade 11th-20th at Claremorris with a mean value of -0.6°C but recovered to a mean of +3.3°C in the period 26th-31st.

Sunshine and Radiation:

Mean duration of bright sunshine was well above normal except in the south and east. Duration varied from 198% of normal at Galway to 136% at Birr but in the south and east values varied from 106% at Cork Airport to 91% at Casement Aerodrome; Dublin Airport with 145% was an exception however. The first period generally was brightest except that Dublin Airport had an average of over 5 hours in the last decade.

Wind:

Gales were mostly absent during the month except at some coastal areas but strong winds with gale gusts occurred 20th to 22nd, 24th, 27th and 30th.

Summary:

Very cold with frequent severe ground frost to 18th, bright and very dry. A spell of snow after the middle of the month.

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 Global Radiation at stations in Table 2 will be published in the annual Solar Radiation Observations.

TABLE 1

JANUARY 1985

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND				
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR								GROUND		SOIL (10cm)		MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (m/s)	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	0.8	-	1	0	2.0	-3.0	-0.5	-	-8.0	3	8	0	-	0	-	-12.6	3	10	-	-	1.76	-	1.5	-	-
	11-20	12.9	-	6	4	2.4	-3.4	-0.5	-	-8.6	18	9	1	-	0	-	-9.8	18	9	-	-	1.13	-	2.0	-	-
	21-END	26.2	-	7	7	8.2	1.6	4.9	-	-3.2	23	4	19	-	1	-	-8.6	23	7	-	-	1.95	-	4.3	-	-
	MONTH	39.9	49	13	11	4.3	-1.5	1.4	-	-8.6	18	21	20	-	1	-	-12.6	3	26	-	-	1.63	-	2.6	-	-3
Shannon Airport Co. Clare	1-10	2.0	-	2	1	4.5	-2.1	1.2	-	-4.0	4	9	1	-	0	-	-8.4	4	9	1.4	-	3.51	-	1.7	0	-
	11-20	5.3	-	2	2	3.2	-2.9	0.1	-	-6.5	11	9	2	-	0	-	-10.4	18	10	0.2	-	3.16	-	3.3	1	-
	21-END	26.9	-	10	6	8.3	2.5	5.4	-	-1.8	23	2	21	-	1	-	-6.7	23	5	4.0	-	1.56	-	4.5	3	-
	MONTH	34.2	37	14	9	5.4	-0.7	2.4	-2.7	-6.5	11	20	24	32	1	-	-10.4	18	24	2.0	-2.7	2.71	159	3.2	4	-1
Cork Airport Co. Cork	1-10	1.4	-	1	1	5.0	-0.7	2.1	-	-2.7	6	6	2	-	0	-	-5.8	2	9	3.0	-	3.71	-	4.8	1	-
	11-20	45.0	-	3	3	3.6	-1.9	0.9	-	-7.2	18	8	3	-	0	-	-9.6	18	10	1.9	-	0.96	-	6.0	2	-
	21-END	55.3	-	11	7	8.2	2.3	5.2	-	-1.4	23	4	21	-	1	-	-4.2	27	5	4.7	-	1.26	-	7.1	7	-
	MONTH	101.7	69	15	11	5.7	-0.0	2.8	-2.2	-7.2	18	18	26	39	1	-	-9.6	18	24	3.2	-1.1	1.95	106	6.0	10	3
Fermoy (Coolnekillia) Co. Cork	1-10	1.1	-	1	1	3.2	-1.0	1.1	-	-3.1	6	9	0	-	0	-	-8.9	4	9	-	-	3.54	-	2.0	-	-
	11-20	36.3	-	2	2	2.5	-3.1	-0.3	-	-7.9	18	9	1	-	0	-	-11.6	16	9	-	-	1.31	-	3.4	-	-
	21-END	45.1	-	10	8	7.9	2.0	4.9	-	-1.5	24	4	18	-	0	-	-4.5	27	5	-	-	1.34	-	5.3	-	-
	MONTH	82.5	-	13	11	4.6	-0.6	2.0	-	-7.9	18	22	19	-	0	-	-11.6	16	23	-	-	2.04	-	3.6	-	-2
Fermoy (Moore Park) Co. Cork	1-10	0.3	-	1	0	4.2	-3.6	0.3	-	-6.2	4	9	1	-	0	-	-10.5	4	9	-	-	3.16	-	1.1	-	-
	11-20	34.1	-	3	2	3.3	-4.6	-0.7	-	-7.6	11	9	2	-	0	-	-11.4	18	9	-	-	0.75	-	2.4	-	-
	21-END	31.2	-	10	8	9.1	1.5	5.3	-	-2.1	24	5	22	-	1	-	-7.6	24	9	-	-	1.17	-	3.1	-	-
	MONTH	65.6	58	14	10	5.6	-2.1	1.8	-	-7.6	11	23	25	-	1	-	-11.4	18	27	-	-	1.68	-	2.2	-	-2
Roches Point Co. Cork	1-10	1.0	-	1	0	5.9	0.9	3.4	-	-0.5	6	1	4	-	0	-	-2.6	6	8	3.5	-	3.76	-	4.6	1	-
	11-20	23.9	-	4	4	5.0	0.0	2.5	-	-4.4	18	6	7	-	0	-	-6.7	18	10	2.8	-	0.86	-	6.0	2	-
	21-END	42.8	-	8	7	8.7	3.9	6.3	-	0.9	23	0	26	-	1	-	-2.3	22	5	5.5	-	1.37	-	6.9	6	-
	MONTH	67.7	66	13	11	6.6	1.7	4.2	-2.0	-4.4	18	7	37	43	1	-	-6.7	18	23	4.0	-1.9	1.98	99	5.8	9	5
Glencolumbkille Co. Donegal	1-10	7.0	-	5	3	6.2	-0.0	3.1	-	-1.8	4	6	5	-	0	-	-11.5	6	10	-	-	3.35	-	1.4	-	-
	11-20	29.3	-	4	4	3.4	-2.5	0.5	-	-5.0	18	10	1	-	0	-	-12.5	14	10	-	-	2.19	-	3.2	-	-
	21-END	73.1	-	11	9	7.5	1.3	4.4	-	-2.4	26	5	15	-	1	-	-10.5	26	8	-	-	N/A	-	4.7	-	-
	MONTH	109.4	-	20	16	5.7	-0.3	2.7	-	-5.0	18	21	22	-	1	-	-12.5	14	29	-	-	N/A	-	3.1	-	N/A

TABLE 1 (CONTINUED)

JANUARY 1985

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND				
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND			SOIL (10cm)				MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (m/s)	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
Glenties Co. Donegal	1-10	2.3	-	2	1	4.4	-4.2	0.1	-	-6.0	3	10	1	-	0	-	-17.8	6	10	-	-	1.72	-	-	-	-
	11-20	15.1	-	3	2	2.4	-4.2	-0.9	-	-6.9	15	9	0	-	0	-	-10.8	16	10	-	-	1.72	-	-	-	-
	21-END	61.1	-	10	9	6.5	-0.4	3.1	-	-5.4	26	6	11	-	0	-	-9.9	26	9	-	-	1.39	-	-	-	-
	MONTH	78.5	48	15	12	4.5	-2.9	0.8	-	-6.9	15	25	12	-	0	-	-17.8	6	29	-	-	1.60	-	-	-	-
Malin Head Co. Donegal	1-10	6.2	-	5	4	6.7	1.2	3.9	-	-1.7	3	4	8	-	0	-	-5.6	3	7	2.3	-	3.30	-	5.4	0	-
	11-20	30.8	-	7	4	4.3	-0.7	1.8	-	-2.5	17	7	1	-	0	-	-6.9	12	9	0.6	-	1.61	-	6.8	3	-
	21-END	69.3	-	8	8	6.6	1.6	4.1	-	-2.8	26	3	12	-	0	-	-6.1	27	6	2.8	-	0.99	-	9.7	6	-
	MONTH	106.3	100	20	16	5.9	0.7	3.3	-2.0	-2.8	26	14	21	34	0	-	-6.9	12	22	1.9	-2.6	1.94	147	7.4	9	13
Casement Aerodrome Co. Dublin	1-10	0.2	-	0	0	3.7	-2.0	0.8	-	-5.5	3	7	0	-	0	-	-11.0	3	10	1.4	-	2.19	-	2.4	0	-
	11-20	16.9	-	6	4	3.3	-2.1	0.6	-	-5.9	18	8	1	-	0	-	-10.6	18	10	1.2	-	0.99	-	3.2	1	-
	21-END	13.3	-	8	5	8.1	1.4	4.7	-	-2.9	26	5	20	-	1	-	-9.2	27	6	3.6	-	1.67	-	7.9	7	-
	MONTH	30.4	46	14	9	5.1	-0.8	2.2	-2.2	-5.9	18	20	21	33	1	-	-11.0	3	26	2.1	-	1.62	91	4.6	8	5
Dublin Airport Co. Dublin	1-10	1.6	-	3	0	4.8	-0.4	2.2	-	-2.2	2	6	2	-	0	-	-7.5	3	9	2.0	-	2.45	-	3.7	0	-
	11-20	44.2	-	7	6	3.5	-0.8	1.4	-	-3.5	17	5	1	-	0	-	-8.0	18	10	1.3	-	0.30	-	3.8	0	-
	21-END	21.0	-	10	8	8.0	1.6	4.8	-	-3.0	23	5	20	-	1	-	-6.6	27	6	3.5	-	2.42	-	6.6	6	-
	MONTH	66.8	99	20	14	5.6	0.2	2.9	-1.8	-3.5	17	16	22	35	1	-	-9.0	18	25	2.3	-1.8	1.75	93	4.8	6	6
Kinsealy Co. Dublin	1-10	1.0	-	1	1	5.1	-0.4	2.3	-	-2.7	3	6	2	-	0	-	-6.5	3	10	-	-	2.16	-	2.8	-	-
	11-20	36.4	-	6	5	4.2	-0.8	1.7	-	-3.5	13	7	2	-	0	-	-8.0	13	9	-	-	0.48	-	3.5	-	-
	21-END	21.6	-	10	8	8.2	1.2	4.7	-	-3.3	27	4	20	-	2	-	-6.2	27	6	-	-	2.35	-	4.6	-	-
	MONTH	59.0	89	17	14	5.9	0.1	3.0	-	-3.5	13	17	23	-	2	-	-8.0	13	25	-	-	1.69	-	3.6	-	1
Galway Co. Galway	1-10	0.3	-	0	0	4.7	-2.2	1.3	-	-4.5	4	10	2	-	0	-	-8.0	6	10	1.2	-	4.68	-	2.6	0	-
	11-20	9.7	-	3	2	2.9	-3.6	-0.4	-	-7.0	17	9	1	-	0	-	-10.1	18	10	-0.1	-	3.43	-	4.1	1	-
	21-END	30.5	-	9	6	7.8	1.9	4.9	-	-2.0	23	5	19	-	1	-	-8.0	24	5	3.3	-	2.40	-	5.4	5	-
	MONTH	40.5	36	12	8	5.2	-1.2	2.0	-2.7	-7.0	17	24	22	-	1	-	-10.1	18	25	1.5	-	3.47	198	4.1	6	-4
Killarney (Muckross House) Co. Kerry	1-10	2.0	-	2	1	4.8	-1.2	1.8	-	-4.0	7	8	4	-	0	-	-7.7	6	9	-	-	1.90	-	-	-	-
	11-20	44.1	-	4	2	4.9	-2.9	1.0	-	-7.6	18	8	4	-	0	-	-10.6	18	10	-	-	2.24	-	-	-	-
	21-END	55.6	-	10	10	10.1	4.0	7.1	-	-0.6	27	3	35	-	3	-	-3.9	23	4	-	-	1.30	-	-	-	-
	MONTH	101.7	49	16	13	6.7	0.1	3.4	-	-7.6	18	19	43	-	3	-	-10.6	18	23	-	-	1.80	-	-	-	-

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

JANUARY 1985

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND				
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR								GROUND				SOIL (10cm)		MEAN DAILY (HRS.)	% 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
Cahirciveen (Valentia Obsy.) Co. Kerry	1-10	6.2	-	2	1	7.3	1.0	4.1	-	-2.5	6	4	11	-	0	-	-4.0	6	6	3.7	-	2.92	-	2.8	2	-
	11-20	29.6	-	3	3	6.1	-0.8	2.7	-	-4.7	15	7	9	-	0	-	-7.2	15	8	1.7	-	2.73	-	5.0	3	-
	21-END	74.7	-	11	10	9.7	4.6	7.1	-	0.8	23	0	34	-	3	-	-1.4	23	1	6.2	-	1.49	-	6.1	7	-
	MONTH	110.5	68	16	14	7.8	1.7	4.7	-1.9	-4.7	15	11	53	52	3	-	-7.2	15	15	3.9	-2.0	2.35	151	4.7	12	2
Ardfert (Liscahane) Co. Kerry	1-10	3.4	-	3	1	5.8	-1.1	2.4	-	-5.7	6	6	6	-	0	-	-14.5	6	9	-	-	3.74	-	-	-	-
	11-20	7.3	-	2	2	4.3	-2.5	0.9	-	-7.3	18	7	3	-	0	-	-15.7	18	10	-	-	2.72	-	-	-	-
	21-END	34.4	-	10	9	9.5	3.6	6.5	-	-1.9	23	2	30	-	2	-	-9.3	23	7	-	-	1.31	-	-	-	-
	MONTH	45.1	-	15	12	6.7	0.1	3.4	-	-7.3	18	15	38	-	2	-	-15.7	18	26	-	-	2.55	-	-	-	-
Lullymore Co. Kildare	1-10	0.0	-	0	0	2.4	-4.5	-1.1	-	-7.9	2	10	0	-	0	-	-12.0	3	10	-	-	1.67	-	0.9	-	-
	11-20	5.0	-	2	2	2.2	-3.7	-0.8	-	-6.0	13	9	0	-	0	-	-10.4	13	10	-	-	1.53	-	2.4	-	-
	21-END	24.2	-	8	8	7.5	0.4	3.9	-	-4.0	23	5	15	-	1	-	-7.5	27	9	-	-	1.95	-	4.4	-	-
	MONTH	29.2	37	10	10	4.1	-2.5	0.8	-	-7.9	2	24	15	-	1	-	-12.0	3	29	-	-	1.73	-	2.6	-	N/A
Kilkenny Co. Kilkenny	1-10	0.2	-	1	0	4.0	-3.0	0.5	-	-8.2	3	10	1	-	0	-	-13.2	3	10	0.9	-	4.13	-	1.7	0	-
	11-20	9.4	-	4	2	2.6	-3.1	-0.3	-	-7.0	18	9	1	-	0	-	-12.1	18	10	0.0	-	1.71	-	2.0	0	-
	21-END	26.3	-	10	7	8.4	0.8	4.6	-	-2.7	27	6	20	-	1	-	-7.8	23	8	3.1	-	2.22	-	3.8	3	-
	MONTH	35.9	41	15	9	5.1	-1.7	1.7	-2.5	-8.2	3	25	21	32	1	-	-13.2	3	28	1.4	-2.5	2.67	150	2.5	3	-3
Mooncoin (Silverspring) Co. Kilkenny	1-10	0.1	-	0	0	4.0	-2.2	0.9	-	-7.0	3	8	0	-	0	-	-11.5	3	10	-	-	N/A	-	-	-	-
	11-20	43.0	-	4	4	3.2	-3.8	-0.3	-	-8.0	19	9	2	-	0	-	-11.5	16	10	-	-	0.67	-	-	-	-
	21-END	49.1	-	10	9	9.4	1.6	5.5	-	-2.6	27	5	25	-	2	-	-7.9	22	6	-	-	1.57	-	-	-	-
	MONTH	92.2	82	14	13	5.7	-1.3	2.2	-	-8.0	19	22	27	-	2	-	-11.5	16	26	-	-	N/A	-	-	-	-
Ballinamore Co. Leitrim	1-10	0.8	-	1	0	4.1	-3.7	0.2	-	-8.4	3	10	2	-	0	-	-11.9	2	10	-	-	N/A	-	1.0	-	-
	11-20	26.6	-	4	3	1.9	-4.3	-1.2	-	-8.1	11	10	0	-	0	-	-12.9	11	10	-	-	1.20	-	1.5	-	-
	21-END	55.5	-	10	9	6.1	-0.3	2.9	-	-4.0	24	5	11	-	1	-	-11.4	27	9	-	-	1.85	-	2.7	-	-
	MONTH	82.9	70	15	12	4.1	-2.7	0.7	-	-8.4	3	25	13	-	1	-	-12.9	11	29	-	-	N/A	-	1.7	-	N/A
Ardee (Bohernamoe) Co. Louth	1-10	0.2	-	0	0	4.1	-3.7	0.2	-	-7.5	3	10	1	-	0	-	-8.0	3	10	-	-	-	-	-	-	-
	11-20	19.1	-	7	5	3.4	-2.9	0.3	-	-5.6	13	8	1	-	0	-	-8.1	12	10	-	-	-	-	-	-	-
	21-END	29.0	-	10	8	7.1	1.2	4.1	-	-3.3	23	3	15	-	1	-	-6.1	23	8	-	-	-	-	-	-	-
	MONTH	48.3	56	17	13	4.9	-1.7	1.6	-	-7.5	3	21	17	-	1	-	-8.1	12	28	-	-	-	-	-	-	-

TABLE 1 (CONTINUED)

JANUARY 1985

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND				
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND			SOIL (10cm)		MEAN DAILY (HRS.)	% 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	0.0	-	0	0	4.2	-4.4	-0.1	-	-7.5	3	10	2	-	0	-	-12.9	4	10	-	-	2.88	-	0.7	-	-
	11-20	31.4	-	2	2	2.3	-6.2	-2.0	-	-9.5	18	10	0	-	0	-	-13.0	12	10	-	-	1.50	-	N/A	-	-
	21-END	66.2	-	10	10	7.7	0.7	4.2	-	-4.0	24	4	18	-	1	-	-9.9	26	9	-	-	1.86	-	N/A	-	-
	MONTH	97.6	69	12	12	4.8	-3.2	0.8	-	-9.5	18	24	20	-	1	-	-13.0	12	29	-	-	2.07	-	N/A	-	N/A
Belmullet Co. Mayo	1-10	4.8	-	3	2	6.2	-1.5	2.3	-	-4.5	6	8	5	-	0	-	-7.6	6	10	3.2	-	3.11	-	2.7	0	-
	11-20	24.1	-	2	2	3.4	-3.0	0.2	-	-6.4	18	9	1	-	0	-	-8.5	17	10	1.5	-	3.72	-	4.4	1	-
	21-END	55.3	-	9	8	8.1	1.4	4.8	-	-1.5	23	5	17	-	1	-	-5.3	23	6	3.8	-	1.95	-	6.8	7	-
	MONTH	84.2	71	14	12	6.0	-0.9	2.5	-3.2	-6.4	18	22	22	29	1	-	-8.5	17	26	2.9	-2.1	2.89	185	4.7	8	1
Claremorris Co. Mayo	1-10	0.9	-	2	0	4.2	-3.9	0.2	-	-6.2	3	10	2	-	0	-	-11.2	4	10	0.6	-	4.03	-	2.8	0	-
	11-20	17.8	-	3	1	2.0	-4.8	-1.4	-	-8.5	18	9	0	-	0	-	-13.1	18	10	-0.6	-	2.53	-	4.5	1	-
	21-END	43.4	-	9	9	7.2	0.0	3.6	-	-5.2	23	6	15	-	1	-	-12.2	24	9	1.8	-	1.84	-	5.8	5	-
	MONTH	62.1	54	14	10	4.6	-2.8	0.9	-3.1	-8.5	18	25	16	29	1	-	-13.1	18	29	0.6	-3.2	2.77	172	4.4	6	-3
Glenamoy Co. Mayo	1-10	7.5	-	5	4	5.4	-1.7	1.8	-	-3.5	6	8	3	-	0	-	-8.2	6	10	-	-	2.75	-	0.6	-	-
	11-20	34.4	-	3	2	3.0	-2.6	0.2	-	-5.4	15	8	0	-	0	-	-9.8	15	10	-	-	3.26	-	3.4	-	-
	21-END	67.9	-	9	9	7.7	0.7	4.2	-	-2.3	27	6	15	-	1	-	-6.1	24	7	-	-	2.06	-	3.7	-	-
	MONTH	109.8	73	17	15	5.4	-1.2	2.1	-	-5.4	15	22	18	-	1	-	-9.8	15	27	-	-	2.67	-	2.6	-	-1
Dunsany (Grange) Co. Meath	1-10	0.4	-	1	0	3.4	-4.4	-0.5	-	-8.5	3	10	0	-	0	-	-9.7	3	10	-	-	2.20	-	-	-	-
	11-20	30.8	-	5	3	2.3	-4.4	-1.1	-	-6.5	11	10	0	-	0	-	-9.5	11	10	-	-	0.78	-	-	-	-
	21-END	31.0	-	10	8	7.2	-0.2	3.5	-	-5.7	23	6	14	-	1	-	-9.0	28	9	-	-	2.05	-	-	-	-
	MONTH	62.2	78	16	11	4.4	-2.9	0.7	-	-8.5	3	26	14	-	1	-	-9.7	3	29	-	-	1.69	-	-	-	-
Clones Co. Monaghan	1-10	0.0	-	0	0	3.7	-3.8	-0.0	-	-8.4	4	9	1	-	0	-	-12.8	4	10	0.9	-	3.48	-	1.7	0	-
	11-20	8.8	-	4	4	1.9	-3.6	-0.9	-	-6.0	18	9	0	-	0	-	-9.6	11	10	0.6	-	1.20	-	3.1	0	-
	21-END	47.5	-	8	8	6.2	-0.0	3.1	-	-3.8	27	6	12	-	1	-	-8.4	26	7	2.5	-	1.99	-	5.1	3	-
	MONTH	56.3	64	12	12	4.0	-2.4	0.8	-3.0	-8.4	4	24	13	27	1	-	-12.8	4	27	1.4	-2.1	2.22	143	3.3	3	-3
Birr Co. Offaly	1-10	0.0	-	0	0	3.5	-4.2	-0.3	-	-7.4	3	10	1	-	0	-	-11.9	3	10	0.9	-	2.86	-	0.7	0	-
	11-20	2.4	-	2	1	2.7	-4.2	-0.7	-	-8.9	18	9	1	-	0	-	-12.5	18	9	0.1	-	2.50	-	2.7	1	-
	21-END	20.8	-	9	6	7.8	1.3	4.5	-	-2.9	23	5	18	-	1	-	-9.4	23	6	3.6	-	1.92	-	4.7	4	-
	MONTH	23.2	31	11	7	4.8	-2.2	1.3	-3.1	-8.9	18	24	20	32	1	-	-12.5	18	25	1.6	-2.4	2.41	136	2.8	5	-2

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

JANUARY 1985

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND						
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR								GROUND		SOIL (10cm)		MEAN DAILY (HRS.)	% 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		
Dundrum (Knockavilla) Co. Tipperary	1-10 11-20 21-END MONTH	0.0 14.9 31.1 46.0	- - - -	0 3 10 13	0 2 7 9	3.0 2.2 8.4 4.7	-3.4 -5.2 0.9 -2.5	-0.2 -1.5 4.6 1.1	- - - -	-5.6 -8.4 -3.9 -8.4	3 18 24 18	9 9 5 23	0 1 19 20	- - - -	0 0 1 1	- - - -	-10.0 -13.7 N/A N/A	6 18 7 27	10 10 - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Dungervan (Carriglea) Co. Waterford	1-10 11-20 21-END MONTH	0.4 51.9 55.3 107.6	- - - 85	2 4 8 14	0 4 8 12	5.4 4.2 9.5 6.5	-2.4 -3.4 1.4 -1.4	1.5 0.4 5.4 2.5	- - - -	-6.8 -6.4 -2.5 -6.8	3 11 27 3	6 9 5 20	3 4 24 30	- - - -	0 0 2 2	- - - -	-6.9 -6.6 -3.5 -6.9	3 19 27 3	9 9 5 23	- - - -	- - - -	- - - -	3.61 0.57 1.45 1.86	- - - -	1.4 2.5 2.6 2.2	- - - -	- - - -3	- - - -
Mullingar Co. Westmeath	1-10 11-20 21-END MONTH	0.6 16.2 40.2 57.0	- - - 63	1 3 9 13	0 3 8 11	4.1 1.8 6.9 4.3	-2.7 -3.6 0.5 -1.9	0.7 -0.9 3.7 1.2	- - - -2.6	-7.1 -6.6 -4.6 -7.1	3 11 24 3	9 8 6 23	1 0 15 16	- - - 31	0 0 1 1	- - - -	-10.0 -11.2 -9.6 -11.2	3 17 24 17	10 10 6 26	0.3 0.0 2.3 0.9	- - - -2.7	- - - -	3.59 1.84 2.12 2.50	- - - 136	1.6 2.3 4.4 2.8	0 0 4 4	- - - -4	- - - -
J.F.K. Park Co. Wexford	1-10 11-20 21-END MONTH	0.1 43.7 48.6 92.4	- - - 85	0 5 9 14	0 4 8 12	5.0 3.3 8.6 5.7	-4.0 -4.5 -0.9 -3.1	0.5 -0.6 3.8 1.3	- - - -	-7.3 -6.8 -4.9 -7.3	3 19 24 3	10 10 5 25	2 2 15 19	- - - -	0 0 1 1	- - - -	-13.1 -10.6 -10.6 -13.1	3 11 24 3	10 10 9 29	- - - -	- - - -	4.15 0.35 1.75 2.07	- - - -	2.1 3.7 4.3 3.4	- - - -5	- - - -		
Clonroche Co. Wexford	1-10 11-20 21-END MONTH	1.5 35.7 45.6 82.8	- - - 65	1 6 8 15	1 5 8 14	4.8 2.9 7.9 5.3	-1.3 -2.4 1.0 -0.9	1.8 0.2 4.5 2.2	- - - -	-3.2 -5.2 -2.4 -5.2	8 18 27 18	9 10 4 23	2 1 16 18	- - - -	0 0 0 0	- - - -	-7.5 -8.3 -8.2 -8.3	3 16 23 16	10 10 8 28	- - - -	- - - -	3.36 0.28 1.80 1.81	- - - -	1.0 1.4 2.3 1.6	- - - -3	- - - -		
Johnstown Castle Co. Wexford	1-10 11-20 21-END MONTH	0.4 31.6 49.4 81.4	- - - 75	1 6 9 16	0 5 8 13	5.5 N/A 8.1 N/A	-0.1 N/A 1.9 N/A	2.7 N/A 5.0 N/A	- - - -	-1.4 N/A -2.1 N/A	8 N/A 22 N/A	4 N/A 4 N/A	3 N/A 17 N/A	- - - -	0 N/A 0 N/A	- - - -	-7.2 N/A -7.1 N/A	8 N/A 22 N/A	10 N/A 6 N/A	- - - -	- - - -	4.12 0.31 1.75 2.05	- - - -	3.2 3.8 4.4 3.8	- - - N/A	- - - -		
Rosslare Co. Wexford	1-10 11-20 21-END MONTH	0.8 30.4 37.7 68.9	- - - 73	2 8 8 18	0 6 5 11	5.8 4.4 8.2 6.2	1.6 1.4 3.4 2.2	3.7 2.9 5.8 4.2	- - - -1.8	0.1 -1.2 -1.1 -1.2	8 17 23 17	0 3 3 6	4 3 23 30	- - - 38	0 0 0 0	- - - -	-4.3 -4.3 -3.8 -4.3	8 16 23 8	8 8 4 20	3.0 2.2 4.8 3.4	- - - -1.9	- - - -	4.05 0.44 1.76 2.07	- - - 102	4.7 5.5 6.3 5.5	0 3 6 9	- - - 9	- - - -

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 2 GLOBAL RADIATION

STATION	PERIOD	*AMOUNT MJ/m ²
Malin Head Co. Donegal	1-10	21.27
	11-20	16.62
	21-end	22.79
	Month	60.68
Dublin Airport Co. Dublin	1-10	22.46
	11-20	13.45
	21-end	32.22
	Month	68.13
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	27.15
	11-20	24.03
	21-end	26.49
	Month	77.67
Kilkenny Co. Kilkenny	1-10	31.17
	11-20	20.52
	21-end	30.60
	Month	82.29
Belmullet Co. Mayo	1-10	26.73
	11-20	28.11
	21-end	29.84
	Month	84.68
Clones Co. Monaghan	1-10	28.43
	11-20	18.17
	21-end	29.17
	Month	75.77
Birr Co. Offaly	1-10	24.90
	11-20	22.04
	21-end	24.30
	Month	71.24

*Notes on the tables in January issue

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

STATION	PERIOD	SOIL MOISTURE (mm)			
		P.E. (mm)	Deficit	Accumulated Deficit	Surplus
Carlow (Oak Park) Co. Carlow	1-10	-0.6	-	0	1
	11-19	5.9	-	0	3
	20-end	-11.5	-	0	42
	Month	-6.2	-	-	-
Kinsealy Co. Dublin	1-10	-0.3	-	0	1
	11-19	-1.6	-	0	33
	20-end	-1.2	-	0	28
	Month	-3.1	-	-	-
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	4.2	-	0	3
	11-19	8.1	6	6	-
	20-end	-2.0	-	0	103
	Month	10.3	-	-	-
Ballinamore Co. Leitrim	1-10	-2.3	-	0	3
	11-19	8.7	-	0	1
	20-end	1.1	-	0	71
	Month	7.5	-	-	-
Glenamoy Co. Mayo	1-10				
	11-20				
	21-end	N/A	N/A	N/A	N/A
	Month				
Johnstown Castle Co. Wexford	1-10	1.5	1	1	-
	11-21	11.4	-	0	20
	22-end	1.1	-	0	48
	Month	14.0	-	-	-

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	1.54	0.52	0.25	2.06		
	11-20	-0.01	-0.27	-0.47	1.34	N/A	N/A
	21-end	1.29	1.08	0.32	0.32		
Mineral	1-10	2.26	1.25	0.88	1.11		
	11-20	0.73	0.26	-0.06	0.98	N/A	N/A
	21-end	2.29	2.04	1.08	0.13		

AGROMETEOROLOGICAL BULLETIN - NOTES ON TABLES

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 0.2mm and 1.0mm respectively.
3. The mean daily air temperature over a period is taken as the average of the mean daily maximum and mean daily minimum temperature over the period.
4. Degree day totals are calculated using the method set out in an article by I.F.C. Mc Vicker in the Journal of Heating and Ventilating Engineers (Vol. 14 No. 18, Nov-Dec 1946).
- 5.*Monthly averages of degree days at stations marked "e" refer to the 25-year period 1958-1982 except at Casement Aerodrome (1964-1982) and Cork Airport (1962-1982). Percentages are not calculated for degree day totals less than 10.
6. Days with air frost are those during which the minimum air temperature was below 0.0°C.
7. "Ground" temperatures refer to temperatures measured with a thermometer placed horizontally on pegs just above the tips of short grass.
8. Days with ground frost are those during which the minimum "ground" temperature was below 0.0°C.
9. The mean daily soil temperature (at 10cm depth under a bare soil surface) over a period is taken as the average of the mean of four daily readings (at 0300, 0900, 1500 and 2100 GMT) over the period.
10. Mean daily wind speed over a period (ms^{-1}) is taken as the average of hourly values during the period at stations marked "e". Days with gale-gusts are those during which the wind speed exceeded 17.4 ms^{-1} at any time during the day. At other stations, mean daily wind speed is computed from once-daily readings of run-of-the-wind.
11. 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.
- 12.*Deviations of monthly values of rainfall, 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, bright sunshine and rainfall refer to the period 1951-1980. Averages of soil temperature refer to the period 1958-1982.
- 13.*Potential Evapotranspiration (P.E.) values given in Table 1 are calculated from values of temperature, sunshine, wind speed and vapour pressure using the Penman Formula. Because of formula limitations, negative values can occur in winter; these are replaced in Table 1 by zero. P.E. values given in Table 3 are those measured by means of soil-filled tanks sunk into the ground with their upper grass-covered ends at surface level.
- 14.*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. Memo 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. Where heavy rain occurs near the end of the fixed period, the date of cut-off may be adjusted to avoid error due to insufficient run-off time; dates of the end/beginning of such adjusted periods are encircled.
15. 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 which are 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.
16. Data on the soil climate of Mullingar is included in Table 4. Temperature (°C) and soil water potential (hPa) are measured daily in peat and mineral bare soil patches to depths of up to 200mm. The mean daily temperature is derived from the average of the mean of four daily readings (0300, 0900, 1500, and 2100 GMT) taken at 100mm depth. The temperature gradient is given in °C/100mm, positive values increasing with depth.
- 17.*Because of difficulties in providing continuity and quality of observations, the publication of data for Mallow, Co. Cork has been discontinued at the end of 1984. Beginning in January 1985 data for Cork Airport, Co Cork (154m) has been included instead.
- 18.*Beginning in January 1985 Global Radiation (formerly referred to as Global Solar Radiation) is given in MJ/m^2 correct to two decimal places (the value in J/cm^2 can be recovered by multiplying by 100). Percent of average is given for stations with long-term (10 years or more) records.
- 19.*Beginning in February 1985, total sunshine hours (whole numbers) will replace the currently published mean daily values. Mean daily values may be recovered by dividing the sunshine hours by the number of days in the period.

* denotes changes in 1985 notes.