

# METEOROLOGICAL SERVICE



METEOROLOGICAL OFFICE,  
ROSSLARE,  
CO. WEXFORD

AGMETBL (02)460

DECEMBER 1986

## AGROMETEOROLOGICAL BULLETIN

### The Weather of December

For the most part, a strong southwesterly airflow associated with a series of deep North Atlantic depressions prevailed over Ireland to the 15th. The mild Atlantic influence was therefore dominant and frequent troughs affected the country, the more significant being the wave depression which affected southeastern areas on 9th and the major depression of the 12th. The latter depression centre approached northeastwards towards Scotland before finally swinging away towards Iceland; the southwesterly winds associated with the frontal troughs were particularly strong for a spell. The quieter periods occurred as a ridge developed on 1st, 5th and 9th.

After the 15th the airflow became more westerly or northwesterly for a time with continuing spells of rain or blustery showers. However, high pressure developed from the Atlantic on 21st and declined towards the Azores ahead of a frontal trough on 24th. Apart from the ridge on 25th a southwest to west airflow prevailed subsequently with frontal troughs and relatively mild conditions.

#### **Precipitation:**

Amounts were well above normal almost everywhere. Monthly percentages varied from 196% at Malin Head to 94% at Dublin Airport. Wettest days occurred on 2nd-4th, 7th/8th, 10th, 12th, 15th, 18th and 29th/30th. The driest periods generally were 20th-25th and 27th/28th.

#### **Temperature:**

Mean air temperature was above normal at most stations. Values, however, varied from 0.6C° above at a number of stations to 0.4C° below at Belmullet and Rosslare. While mean daily maximum temperatures were well above normal, the mean daily minima were below normal and well below in southern areas. Mean soil temperature (100mm) ranged from 2.0C° to 3.5C° above average during the first 5-day period to as much as 2.0C° below in the 5-day spell 21st-25th, there being a strong recovery in the final period of the month. Air frost occurred fairly frequently until 23rd; sharp air frost was most widespread on 22nd. Ground frost occurred frequently and an absolute minimum value of -11.8C° was reported at Mooncoin (Silverspring) on the 14th.

#### **Sunshine and Radiation:**

Sunshine hours varied from above to well above normal in the southeast (Rosslare had 120%), south and midlands, to below or well below normal in the west and north (minimum amount of 71% at Malin Head). Global radiation was 109% at Dublin Airport and 88% at Birr.

#### **Wind:**

Gales were frequent during the month being particularly widespread on 12th, 15th and 30th. Strong winds with gale gusts were prevalent throughout the month apart from the 9th and 20th-23rd.

#### **Summary:**

Very wet and mostly mild. Dull in the west and north but bright in the south and east.

Annual Summary: See page 8.

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.

TABLE 1

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 <sup>-1</sup> )	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
Carlow (Oak Park) Co. Carlow	1-10	62.4	-	7	6	10.2	3.6	6.9	-	-1.0	6	3	30	-	4	-	-4.5	6	4	-	-	10.4	-	3.5	-	-
	11-20	46.5	-	7	7	7.7	0.9	4.3	-	-3.0	14	3	11	-	1	-	-5.5	14	8	-	-	22.1	-	5.7	-	-
	21-END	24.4	-	7	4	8.4	2.7	5.5	-	-3.2	22	2	25	-	1	-	-6.6	22	5	-	-	16.3	-	4.6	-	-
	MONTH	133.3	153	21	17	8.8	2.4	5.6	-	-3.2	22	8	66	-	6	-	-6.6	22	17	-	-	48.8	-	4.6	-	0
Shannon Airport Co. Clare	1-10	49.8	-	8	8	11.4	5.0	8.2	-	1.1	6	0	40	-	7	-	-2.2	10	3	7.0	-	11.9	-	5.9	6	-
	11-20	62.5	-	10	10	9.0	2.4	5.7	-	0.6	14	0	18	-	1	-	-2.0	14	5	4.5	-	13.1	-	6.6	8	-
	21-END	45.2	-	8	5	9.1	4.1	6.6	-	-1.2	22	2	31	-	2	-	-7.2	22	3	5.2	-	18.1	-	5.0	3	-
	MONTH	157.5	149	26	23	9.8	3.8	6.8	+0.6	-1.2	22	2	89	102	10	125	-7.2	22	11	5.5	-0.3	43.1	96	5.8	17	8
Cork Airport Co. Cork	1-10	91.7	-	9	7	10.0	4.0	7.0	-	0.5	6	0	30	-	2	-	-5.5	10	5	7.1	-	12.7	-	9.1	8	-
	11-20	79.9	-	9	6	8.6	1.0	4.8	-	-0.4	14	1	14	-	1	-	-5.5	14	7	4.5	-	21.1	-	7.7	7	-
	21-END	50.2	-	7	5	8.3	3.3	5.8	-	-1.7	23	3	26	-	2	-	-4.5	23	3	4.8	-	22.0	-	6.5	4	-
	MONTH	221.8	160	25	18	8.9	2.8	5.9	-0.1	-1.7	23	4	69	87	5	-	-5.5	10	15	5.4	-0.1	55.8	113	7.7	19	2
Fermoy (Coolnakilla) Co. Cork	1-10	91.8	-	9	8	9.2	3.7	6.4	-	-0.5	7	2	25	-	2	-	-1.5	10	4	-	-	8.7	-	6.3	-	-
	11-20	70.5	-	10	7	7.5	1.1	4.3	-	-0.6	19	2	11	-	1	-	-3.2	14	7	-	-	25.1	-	6.5	-	-
	21-END	36.2	-	8	6	7.7	3.2	5.4	-	-1.1	22	3	22	-	1	-	-3.2	23	3	-	-	21.0	-	5.0	-	-
	MONTH	197.7	-	27	21	8.1	2.7	5.4	-	-1.1	22	7	58	-	3	-	-3.2	14	14	-	-	54.8	-	5.9	-	0
Fermoy (Moore Park) Co. Cork	1-10	73.6	-	9	7	10.8	3.5	7.1	-	-2.6	6	3	34	-	5	-	-8.5	6	5	-	-	13.2	-	4.3	-	-
	11-20	58.9	-	9	6	9.5	0.7	5.1	-	-5.0	14	1	17	-	2	-	-9.1	14	7	-	-	16.1	-	3.9	-	-
	21-END	20.9	-	5	3	9.4	3.2	6.3	-	-2.5	23	3	32	-	2	-	-8.5	21	5	-	-	19.1	-	3.7	-	-
	MONTH	153.4	136	23	16	9.9	2.5	6.2	-	-5.0	14	7	84	-	9	-	-9.1	14	17	-	-	48.4	-	3.9	-	1
Roches Point Co. Cork	1-10	72.6	-	8	6	10.6	5.6	8.1	-	1.8	6	0	39	-	3	-	-1.9	6	3	8.1	-	14.1	-	9.3	8	-
	11-20	53.9	-	7	6	9.5	2.8	6.1	-	1.0	14	0	22	-	1	-	-1.8	14	6	5.6	-	22.0	-	8.5	7	-
	21-END	39.6	-	6	5	8.9	4.9	6.9	-	0.9	23	0	31	-	2	-	-2.2	23	3	6.0	-	22.3	-	7.0	6	-
	MONTH	166.1	161	21	17	9.7	4.5	7.1	-0.2	0.9	23	0	92	91	6	-	-2.2	23	12	6.5	-0.2	58.4	107	8.2	21	4
Glencolumbkille Co. Donegal	1-10	127.1	-	10	9	9.3	4.9	7.1	-	2.0	8	0	29	-	1	-	-4.9	8	7	-	-	N/A	-	4.5	-	-
	11-20	95.2	-	10	10	7.6	2.6	5.1	-	0.0	14	0	12	-	0	-	-2.5	14	6	-	-	N/A	-	6.4	-	-
	21-END	67.0	-	11	11	8.9	4.0	6.5	-	0.0	22	0	27	-	1	-	-4.2	22	7	-	-	N/A	-	5.0	-	-
	MONTH	289.3	-	31	30	8.6	3.9	6.2	-	0.0	14	0	68	-	2	-	-4.9	8	20	-	-	N/A	-	5.3	-	N/A

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

DECEMBER 1986

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 (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	131.1	-	10	8	6.7	3.8	6.2	-	-0.4	6	2	24	-	1	-	N/A	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11-20	100.1	-	10	10	6.7	1.6	4.2	-	0.1	14	0	7	-	0	-	-1.0	14	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21-END	41.5	-	10	9	8.5	3.0	5.8	-	-2.1	22	3	25	-	1	-	-3.3	22	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MONTH	272.7	159	30	27	8.0	2.8	5.4	-	-2.1	22	5	57	-	2	-	N/A	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malin Head Co. Donegal	1-10	86.7	-	10	6	9.8	4.6	7.2	-	1.8	6	0	30	-	3	-	-2.1	9	5	6.2	-	4.6	-	10.8	9	-	-	-	-	-	-	-	-	-
	11-20	74.0	-	10	10	7.8	2.4	5.1	-	1.1	14	0	13	-	0	-	-1.2	14	4	4.1	-	10.0	-	10.8	10	-	-	-	-	-	-	-	-	-
	21-END	58.9	-	10	8	8.8	5.0	6.9	-	2.3	26	0	28	-	1	-	0.3	21	0	5.7	-	6.0	-	9.7	8	-	-	-	-	-	-	-	-	-
	MONTH	219.6	196	30	24	8.8	4.0	6.4	-0.0	1.1	14	0	71	90	3	-	-2.1	9	9	5.3	-0.2	20.6	71	10.4	27	22	-	-	-	-	-	-	-	-
Casement Aerodrome Co. Dublin	1-10	46.8	-	8	5	10.9	4.3	7.6	-	0.9	6	0	36	-	5	-	-2.4	6	3	6.9	-	13.2	-	9.7	8	-	-	-	-	-	-	-	-	-
	11-20	33.2	-	8	5	8.2	1.1	4.7	-	-0.4	14	1	14	-	1	-	-3.5	14	7	4.0	-	22.9	-	9.6	8	-	-	-	-	-	-	-	-	-
	21-END	13.6	-	5	3	8.0	2.5	6.2	-	-3.8	22	3	22	-	1	-	-6.9	22	5	4.3	-	12.5	-	8.3	8	-	-	-	-	-	-	-	-	-
	MONTH	93.6	122	21	13	9.0	2.7	5.8	+0.5	-3.8	22	4	72	97	7	-	-6.9	22	15	5.0	-	48.6	103	9.2	24	9	-	-	-	-	-	-	-	-
Dublin Airport Co. Dublin	1-10	36.3	-	7	5	11.1	4.6	7.9	-	0.7	9	0	38	-	6	-	-2.7	10	3	6.6	-	14.3	-	7.0	8	-	-	-	-	-	-	-	-	-
	11-20	22.2	-	9	4	8.4	1.1	4.8	-	-1.5	14	1	15	-	1	-	-3.1	14	7	3.6	-	27.2	-	7.4	6	-	-	-	-	-	-	-	-	-
	21-END	15.7	-	6	4	8.2	2.9	5.5	-	-2.1	22	3	23	-	1	-	-3.6	22	5	4.2	-	19.0	-	6.7	6	-	-	-	-	-	-	-	-	-
	MONTH	74.2	94	22	13	9.2	2.9	6.0	+0.2	-2.1	22	4	76	104	8	-	-5.1	14	15	4.8	-0.0	60.5	115	7.0	20	6	-	-	-	-	-	-	-	-
Kinseely Co. Dublin	1-10	34.6	-	7	5	11.0	4.5	7.8	-	0.7	10	0	37	-	7	-	-4.3	10	6	-	-	14.0	-	5.4	-	-	-	-	-	-	-	-	-	
	11-20	24.3	-	8	4	8.6	2.2	5.4	-	-1.2	15	1	17	-	1	-	-8.2	14	8	-	-	24.9	-	6.0	-	-	-	-	-	-	-	-	-	-
	21-END	18.8	-	6	3	8.8	3.6	6.2	-	-1.1	22	1	28	-	3	-	-5.4	22	5	-	-	20.3	-	5.0	-	-	-	-	-	-	-	-	-	-
	MONTH	77.7	102	21	12	9.4	3.4	6.4	-	-1.2	15	2	82	-	12	-	-8.2	14	19	-	-	59.2	-	5.5	-	5	-	-	-	-	-	-	-	-
Galway Co. Galway	1-10	67.0	-	8	7	10.8	4.0	7.4	-	-0.4	9	2	34	-	4	-	-3.3	6	3	6.8	-	13.8	-	6.3	8	-	-	-	-	-	-	-	-	-
	11-20	64.4	-	10	9	8.4	2.8	5.2	-	0.4	13	0	15	-	0	-	-2.2	14	3	4.2	-	14.9	-	6.1	8	-	-	-	-	-	-	-	-	-
	21-END	48.4	-	8	5	8.6	4.8	6.7	-	0.6	22	0	29	-	1	-	-3.4	21	3	5.3	-	14.5	-	5.3	5	-	-	-	-	-	-	-	-	-
	MONTH	179.8	142	26	21	9.2	3.6	6.4	+0.6	-0.4	9	2	78	-	6	-	-3.4	21	9	5.5	-	43.2	93	5.9	21	7	-	-	-	-	-	-	-	-
Killarney (Muckross House) Co. Kerry	1-10	126.1	-	10	7	11.7	4.2	8.0	-	1.1	2	0	38	-	6	-	-7.5	6	7	-	-	5.9	-	-	-	-	-	-	-	-	-	-	-	-
	11-20	138.0	-	10	10	9.8	2.9	6.3	-	-0.6	14	1	24	-	2	-	-8.1	14	10	-	-	6.3	-	-	-	-	-	-	-	-	-	-	-	-
	21-END	63.9	-	9	6	10.1	4.0	7.1	-	-3.8	23	3	37	-	4	-	-11.4	23	8	-	-	12.9	-	-	-	-	-	-	-	-	-	-	-	-
	MONTH	328.0	166	29	23	10.5	3.7	7.1	-	-3.8	23	4	100	-	12	-	-11.4	23	25	-	-	25.1	-	-	-	-	-	-	-	-	-	-	-	-

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						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	MEAN DAILY	DIFFERENCE FROM AVERAGE		
Cahirclveen (Valentia Obsy.) Co. Kerry	1-10	98.4	-	10	8	11.6	5.8	8.7	-	2.1	6	0	44	-	6	-	0.2	6	0	8.4	-	9.4	-	7.9	9	-	-
	11-20	98.0	-	10	8	10.1	3.8	6.9	-	0.6	14	0	28	-	2	-	-0.5	14	1	6.3	-	8.4	-	8.6	9	-	-
	21-END	63.1	-	8	7	10.1	5.3	7.7	-	-2.3	23	2	41	-	4	-	-4.2	23	2	6.7	-	16.1	-	6.3	6	-	-
	MONTH	249.5	157	28	23	10.6	5.0	7.8	+0.1	-2.3	23	2	113	97	12	92	-4.2	23	3	7.1	+0.2	33.9	90	7.6	24	13	-
Ardfert (Liscahane) Co. Kerry	1-10	88.5	-	8	7	11.3	5.5	8.4	-	2.0	6	0	41	-	6	-	-1.5	9	2	-	-	8.7	-	-	-	-	-
	11-20	96.0	-	10	10	9.2	3.3	6.3	-	0.9	14	0	22	-	2	-	-1.3	14	2	-	-	10.1	-	-	-	-	-
	21-END	42.4	-	6	5	9.8	4.2	7.0	-	-2.2	22	2	35	-	3	-	-6.1	23	3	-	-	14.6	-	-	-	-	-
	MONTH	226.9	-	24	22	10.1	4.3	7.2	-	-2.2	22	2	98	-	11	-	-6.1	23	7	-	-	33.4	-	-	-	-	-
Lullymore Co. Kildare	1-10	64.4	-	8	7	9.8	3.2	6.5	-	-1.1	6	3	27	-	3	-	-6.2	6	5	-	-	11.9	-	5.6	-	-	-
	11-20	43.5	-	7	6	7.0	0.4	3.7	-	-2.7	14	5	8	-	0	-	-8.5	14	8	-	-	20.0	-	3.3	-	-	-
	21-END	21.2	-	5	4	7.8	1.8	4.8	-	-3.9	22	4	20	-	1	-	-6.1	23	6	-	-	14.5	-	4.5	-	-	-
	MONTH	129.1	150	20	17	8.2	1.8	5.0	-	-3.9	22	12	55	-	5	-	-8.5	14	19	-	-	46.4	-	5.1	-	-	0
Kilkenny Co. Kilkenny	1-10	53.9	-	7	6	11.1	2.5	6.8	-	-3.5	6	3	33	-	6	-	-8.8	6	6	6.9	-	9.0	-	5.6	8	-	-
	11-20	47.9	-	9	7	8.7	-0.2	4.2	-	-5.1	14	3	14	-	1	-	-10.5	14	8	3.9	-	22.7	-	4.8	5	-	-
	21-END	23.1	-	5	4	8.5	2.3	5.4	-	-2.3	22	3	24	-	2	-	-8.6	23	5	4.0	-	19.2	-	4.1	3	-	-
	MONTH	124.9	136	21	17	9.4	1.6	5.5	+0.2	-5.1	14	9	71	93	9	-	-10.5	14	19	4.9	+0.3	50.9	110	4.8	16	0	-
Moancoin (Silverspring) Co. Kilkenny	1-10	73.3	-	8	6	10.7	2.9	6.8	-	-3.2	6	4	33	-	4	-	-10.2	6	6	-	-	11.1	-	-	-	-	-
	11-20	58.3	-	8	6	8.8	0.9	4.8	-	-5.0	14	3	16	-	1	-	-11.8	14	10	-	-	24.4	-	-	-	-	-
	21-END	23.8	-	4	3	9.3	2.8	6.0	-	-2.0	23	3	29	-	3	-	-10.6	23	8	-	-	18.5	-	-	-	-	-
	MONTH	155.4	141	20	15	9.6	2.2	5.9	-	-5.0	14	10	78	-	8	-	-11.8	14	24	-	-	54.0	-	-	-	-	-
Bellinamore Co. Leitrim	1-10	72.9	-	9	8	9.6	0.8	5.2	-	-3.1	6	5	22	-	2	-	-8.5	6	7	-	-	10.5	-	3.8	-	-	-
	11-20	65.5	-	10	9	7.0	-0.1	3.4	-	-2.6	14	7	7	-	0	-	-7.6	14	9	-	-	14.6	-	3.7	-	-	-
	21-END	49.2	-	8	6	8.5	2.7	5.6	-	-1.0	22	3	23	-	1	-	-8.6	22	7	-	-	12.3	-	3.0	-	-	-
	MONTH	187.6	149	27	23	8.4	1.2	4.8	-	-3.1	6	15	51	-	3	-	-8.6	22	25	-	-	37.4	-	3.5	-	-	0
Ardee (Boharnamos) Co. Louth	1-10	45.7	-	9	6	10.5	3.6	7.0	-	-1.2	6	3	32	-	5	-	-7.2	10	5	-	-	-	-	-	-	-	-
	11-20	48.0	-	7	6	7.7	0.6	4.1	-	-2.5	14	4	18	-	0	-	-10.1	14	9	-	-	-	-	-	-	-	-
	21-END	12.3	-	7	5	8.4	2.1	5.3	-	-2.7	22	3	20	-	1	-	-10.1	22	6	-	-	-	-	-	-	-	-
	MONTH	106.0	119	23	17	8.8	2.1	5.5	-	-2.7	22	10	63	-	6	-	-10.1	14	20	-	-	-	-	-	-	-	-

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

DECEMBER 1986

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 <sup>-1</sup> )	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	144.0	-	10	7	10.4	4.2	7.3	-	-1.0	6	1	33	-	4	-	-7.4	6	4	-	-	9.6	-	4.7	-	-
	11-20	95.1	-	10	10	8.4	1.9	5.1	-	-1.9	14	1	14	-	1	-	-7.9	14	8	-	-	10.2	-	5.0	-	-
	21-END	37.9	-	9	6	9.5	3.6	6.5	-	-0.8	22	3	30	-	2	-	-7.4	22	5	-	-	11.0	-	4.0	-	-
	MONTH	277.0	186	29	23	9.4	3.3	6.3	-	-1.9	14	5	77	-	7	-	-7.9	14	17	-	-	30.8	-	4.6	-	7
Belmullet Co. Mayo	1-10	119.8	-	9	8	10.0	4.4	7.2	-	0.4	8	0	31	-	2	-	-2.8	8	3	7.7	-	10.6	-	8.9	8	-
	11-20	80.7	-	10	10	8.5	2.0	5.2	-	0.5	14	0	15	-	0	-	-2.5	14	2	5.7	-	8.3	-	9.7	10	-
	21-END	28.0	-	9	8	9.4	4.8	7.1	-	1.4	23	0	32	-	1	-	-3.1	23	2	6.5	-	8.3	-	7.5	7	-
	MONTH	228.5	186	28	26	9.3	3.8	6.5	-0.4	0.4	8	0	78	86	4	-	-3.1	23	7	6.6	+0.5	27.2	80	8.6	25	15
Claremorris Co. Mayo	1-10	104.1	-	9	9	10.2	2.8	6.5	-	-0.6	6	2	27	-	4	-	-6.5	9	4	6.3	-	9.3	-	6.2	8	-
	11-20	68.9	-	10	10	7.5	0.7	4.1	-	-1.4	14	3	10	-	0	-	-5.8	14	7	3.7	-	9.0	-	5.7	7	-
	21-END	36.9	-	9	7	8.5	3.5	6.0	-	-0.9	22	1	26	-	2	-	-4.7	22	4	4.9	-	9.2	-	5.0	5	-
	MONTH	209.9	169	28	26	8.7	2.4	5.6	+0.4	-1.4	14	6	63	97	6	-	-6.5	9	15	5.0	+0.3	27.5	73	5.6	20	1
Glenamoy Co. Mayo	1-10	146.1	-	8	8	9.5	3.7	6.6	-	-1.4	8	2	29	-	2	-	-4.1	8	4	-	-	10.9	-	4.9	-	-
	11-20	92.2	-	10	10	7.8	1.5	4.7	-	-1.5	14	1	11	-	0	-	-3.9	14	8	-	-	9.7	-	5.2	-	-
	21-END	48.2	-	11	8	9.2	4.0	6.6	-	0.6	22	0	29	-	1	-	-2.2	21	5	-	-	6.6	-	4.5	-	-
	MONTH	286.5	182	29	26	8.8	3.1	6.0	-	-1.5	14	3	68	-	3	-	-4.1	8	17	-	-	27.2	-	4.9	-	0
Dunsany (Grange) Co. Meath	1-10	48.9	-	8	6	9.9	3.3	6.6	-	-1.2	6	3	28	-	4	-	-5.5	6	4	-	-	10.9	-	-	-	-
	11-20	32.3	-	7	5	6.9	0.6	3.8	-	-3.1	14	4	9	-	0	-	-8.6	14	7	-	-	18.3	-	-	-	-
	21-END	26.6	-	7	5	7.9	2.1	5.0	-	-4.4	22	4	21	-	1	-	-8.5	22	5	-	-	16.6	-	-	-	-
	MONTH	107.8	120	22	16	8.2	2.0	5.1	-	-4.4	22	11	58	-	5	-	-8.6	14	16	-	-	45.8	-	-	-	-
Clones Co. Monaghan	1-10	53.8	-	9	8	10.1	3.1	6.6	-	-0.7	6	3	28	-	4	-	-6.5	9	4	6.5	-	10.5	-	6.1	8	-
	11-20	55.6	-	8	8	6.9	0.4	3.7	-	-1.1	14	4	8	-	0	-	-3.8	14	8	4.1	-	14.7	-	6.0	6	-
	21-END	23.5	-	7	6	8.1	3.2	5.6	-	-0.4	22	2	22	-	1	-	-4.4	22	3	4.8	-	11.3	-	4.6	5	-
	MONTH	132.9	138	24	22	8.4	2.2	5.3	+0.5	-1.1	14	9	58	102	5	-	-6.5	9	15	5.1	+0.7	36.5	102	5.5	19	2
Blirr Co. Offaly	1-10	53.7	-	8	6	11.1	3.8	7.5	-	0.0	6	0	35	-	6	-	-3.8	9	4	6.8	-	11.0	-	4.1	7	-
	11-20	46.9	-	9	8	8.4	0.9	4.7	-	-1.8	14	1	14	-	1	-	-7.6	14	6	4.2	-	15.5	-	3.4	4	-
	21-END	26.5	-	6	4	8.5	3.0	5.8	-	-3.7	22	2	26	-	2	-	-8.9	22	4	4.9	-	15.1	-	2.7	2	-
	MONTH	127.1	148	23	18	9.3	2.6	6.0	+0.6	-3.7	22	3	75	104	9	-	-8.9	22	14	5.3	+0.4	41.6	95	3.4	13	0

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NOTES ON THE TABLES IN JANUARY ISSUE



TABLE 2 GLOBAL RADIATION

STATION	PERIOD	AMOUNT MJ/m <sup>2</sup>
Malin Head Co. Donegal	1-10	10.73
	11-20	13.09
	21-end	11.45
	Month	35.27
Dublin Airport Co. Dublin	1-10	15.66
	11-20	20.13
	21-end	21.21
	Month	57.00
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	16.69
	11-20	15.60
	21-end	21.20
	Month	53.49
Kilkenny Co. Kilkenny	1-10	15.42
	11-20	21.08
	21-end	22.27
	Month	58.77
Belmullet Co. Mayo	1-10	13.84
	11-20	12.97
	21-end	14.80
	Month	41.61
Clones Co. Monaghan	1-10	14.14
	11-20	15.41
	21-end	16.07
	Month	45.62
Birr Co. Offaly	1-10	15.70
	11-20	17.62
	21-end	20.55
	Month	53.87

Notes on the tables in January issue

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

STATION	PERIOD	SOIL MOISTURE (mm)			
		P.E. (mm) Amount *	Deficit	Accumulated Deficit	Surplus
Carlow (Oak Park) Co. Carlow	1-9	-5.7	-	0	45
	10-20	-11.2	-	0	81
	21-end	6.5	-	0	18
	Month	-10.4	-	-	-
Kinsealy Co. Dublin	1-11	4.6	-	0	30
	12-20	2.7	-	0	21
	21-end	5.7	-	0	13
	Month	13.0	-	-	-
Cahirciveen (Valentia Obs.) Co. Kerry	1-9	6.3	-	0	56
	10-20	-2.1	-	0	132
	21-end	4.8	-	0	61
	Month	9.0	-	-	-
Ballinamore Co. Leitrim	1-11	1.7	-	0	71
	12-20	0.0	-	0	65
	21-end	3.9	-	0	45
	Month	5.6	-	-	-
Glenamoy Co. Mayo	1-9	23.3	-	0	107
	10-20	10.0	-	0	105
	21-end	-3.7	-	0	52
	Month	29.6	-	-	-
Johnstown Castle Co. Wexford	1-11	5.7	-	0	96
	12-20	0.2	-	0	43
	21-end	7.7	-	0	29
	Month	13.6	-	-	-

\* Negative values of P.E. arise in winter due to the limitations of the lysimeter.

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	7.4	5.8	4.3	+0.3	50	59
	11-20	5.2	3.4	2.2	+0.7	47	59
	21-end	4.2	3.7	2.4	0.0	70	75
Mineral	1-10	7.7	6.1	4.4	+0.3	43	45
	11-20	5.3	3.4	1.8	+0.7	41	41
	21-end	5.1	4.3	2.9	0.0	56	54

AN AGROCLIMATOLOGICAL SUMMARY FOR 1986

ACCUMULATIONS OF GIVEN PARAMETERS OVER PERIODS (a) JANUARY TO MAY (i) AND  
(b) JUNE TO DECEMBER. BRACKETS SHOW PERCENTAGE OF AVERAGE, EXCEPT FOR DAYS WITH AIR FROST.

	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
	Valentia Obs Co Kerry		Claremorris Co Mayo		Kilkenny Co Kilkenny		Dublin Airport Dublin	
<u>DAY DEGREES</u> Threshold 6°C (ii)	296(64)	1263(97)	230(66)	1071(97)	274(72)	1187(97)	266(76)	1171(95)
Threshold 10°C (iii)	46(35)	540(87)	39(36)	456(91)	60(43)	558(86)	65(62)	523(107)
<u>GLOBAL RADIATION</u> KJoule/cm <sup>2</sup>	137(97)	201(96)	132*(-)	186*(-)	138(99)	208(97)	134(100)	208(103)
<u>PENMAN POTENTIAL EVAPOTRANSPIRATION</u> (mm)	223(100)	303(93)	158(87)	228(88)	192(107)	265(92)	234(111)	344(99)
<u>PRECIPITATION</u> (mm)	623(113)	949(117)	374(92)	848(135)	293(88)	551(104)	290(106)	534(111)
<u>DAYS WITH AIR FROST</u> (iv)	13(11)	2(3)	49(30)	9(15)	40(33)	19(23)	27(20)	6(8)
<u>SOIL MOISTURE DEFICIT</u>	VALENTIA CO KERRY		GLENAMOY CO MAYO		OAKPARK CO CARLOW		KINSEALY CO DUBLIN	
Maximum Value (mm)	13	25	21	14	20	57	15	63
Date of Maximum	28 Feb	20th Sep 30th Sep	28th Feb	20th Sep	28th Feb	30th Sep	20th Mar 31st May	10th Oct
Number of 10-day periods with 50 mm Deficit or more (v)	0	0	0	0	0	2	0	3

NOTES

- (i) Approximately coincides with the change from the reproductive to the flowering state in grass.
- (ii) Threshold temperature representing General Grass Growth.
- (iii) Threshold temperature representing strong growth.
- (iv) Average number of days with air frost shown in brackets.
- (v) Soil moisture Deficits in excess of 50 mm limit the growth of grass or shallow rooted crops.
- \* Global radiation at Belmullet Co Mayo
- Not available

Annual Weather Summary

Apart from February, which was extremely cold and dry, the year to the end of May was cold and wet. The summer was cool, dull and wet, and especially wet in August. A dry September and October was followed by a wet and windy November and December.