



AGROMETEOROLOGICAL BULLETIN

The Weather of December 1988

Summary

Unsettled during the first week and again from 17th to 26th. Otherwise high pressure and settled conditions dominated. The month was very mild, dry but very dull particularly in the northwest and south.

Meteorological Situation

The 1st and 3rd of the month were under the influence of low pressure while a ridge from a Scandinavian high extended over the country on 2nd. A strong northwesterly set in on 4th but this subsequently weakened under the influence of Azores high pressure drifting northwards. A preliminary ridge on 7th declined and southwesterly winds set in on 8th as a frontal trough approached from the northwest.

Subsequent to this high pressure, off the south of Ireland (with a central pressure exceeding 1040 hpa) became dominant. The weather over the country was cloudy and mild; winds were southwesterly but there was little or no precipitation apart from a little rain associated with the passage southwards of a front on 11th. There was also further enhanced rain in an inter-high trough on 15th as the original high pressure centre declined into Europe and a high centre from the Atlantic followed.

From the 17th the high pressure cell gradually receded southwards and extended further in towards Europe. A spell of southwest to west winds set in. The airmass was mostly very mild and humid and unsettled conditions became dominant until 27th. For the remainder of the month the influence of the European high pressure extended over Ireland and the spell was mild but settled.

Precipitation

The month was very dry almost everywhere. Precipitation amounts varied from 90% of normal at Ballinamore to 35% of normal at J.F.K park. Most of the rainfall occurred during the first week and again from about 19th to 26th. The number of wet days (1mm or more) varied from about 20 in the northwest to 8 in the east.

Temperature

The month was remarkably mild. Mean air temperature varied from 3.0°C above normal at Clones to 1.7°C at Rosslare. The minimum values contributed most, the mean minimum values varied from 3.6°C above normal at Claremorris to 2.0°C at Rosslare. Lowest air temperature of only -1.5°C occurred at Kilkenny on 17th. There was a general tendency for temperatures to increase through the month, e.g. 5-day mean soil temperature (100mm) at Claremorris increased from 5.2°C (1st - 5th) to 8.6°C (26th - 31st).

Sunshine and Radiation

Bright sunshine hours were below normal except in parts of the mid-west, midlands and east. Amounts varied from 49% of normal at Malin Head to 105% at Dublin Airport.

Wind

Strong winds with gale gusts occurred on 3rd and at times between 22nd to 28th.

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.

TABLE 1

DECEMBER 1988

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							
						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DEGREE DAYS ABOVE 4°C	% OF AVERAGE	DEGREE DAYS ABOVE 10.0°C	% OF AVERAGE											
Carlow (Oak Park) Co. Carlow	1-10	13.0	-	2	2	9.2	3.6	6.4	-	-1.2	7	1	25	-	1	-	-5.0	7	3	-	-	11.8	-	4.5	-	-
	11-20	6.4	-	3	2	10.0	4.7	7.4	-	-0.5	17	1	32	-	1	-	-4.0	17	1	-	-	10.8	-	3.3	-	-
	21-END	18.6	-	5	4	11.7	7.0	9.4	-	2.6	27	0	55	-	6	-	-1.3	27	1	-	-	19.6	-	4.7	-	-
	MONTH	38.0	44	10	8	10.4	5.2	7.8	-	-1.2	7	2	112	-	9	-	-5.0	7	5	-	-	42.2	-	4.1	-	1
Shannon Airport e Co. Clare	1-10	20.5	-	5	4	9.8	5.7	7.7	-	1.5	7	0	35	-	2	-	-4.1	7	5	6.9	-	13.2	-	4.3	2	-
	11-20	10.0	-	6	4	10.6	5.6	8.1	-	1.6	17	0	39	-	2	-	-4.0	17	3	8.0	-	10.5	-	3.4	0	-
	21-END	40.4	-	5	4	12.4	8.7	10.6	-	5.6	27	0	68	-	11	-	0.9	31	0	8.9	-	21.5	-	5.1	5	-
	MONTH	70.9	67	16	12	11.0	6.7	8.9	+2.7	1.5	7	0	141	162	15	188	-4.1	7	8	8.0	+2.2	45.2	101	4.3	7	5
Cork Airport e Co. Cork	1-10	36.0	-	6	4	9.0	5.1	7.1	-	2.5	7	0	28	-	1	-	-1.6	7	1	6.8	-	14.2	-	5.5	3	-
	11-20	2.8	-	3	1	10.5	6.0	8.2	-	2.3	17	0	39	-	2	-	-1.5	17	1	7.6	-	18.1	-	5.1	2	-
	21-END	26.8	-	4	4	11.4	8.2	9.8	-	4.1	27	0	60	-	6	-	0.4	27	0	9.0	-	5.2	-	7.8	5	-
	MONTH	65.6	47	13	9	10.4	6.5	8.4	+2.4	2.3	17	0	127	161	8	-	-1.6	7	2	7.8	+2.3	37.5	76	6.2	10	3
Fermoy (Coolnacilla) Co. Cork	1-10	31.0	-	6	3	8.2	4.6	6.4	-	2.1	7	0	22	-	0	-	-4.0	7	1	-	-	12.8	-	N/A	-	-
	11-20	4.5	-	7	1	9.7	4.9	7.3	-	1.2	19	0	31	-	1	-	-2.2	17	2	-	-	12.8	-	N/A	-	-
	21-END	37.6	-	7	4	11.0	7.4	9.2	-	4.1	27	0	53	-	3	-	1.2	27	0	-	-	9.2	-	N/A	-	-
	MONTH	73.1	-	20	8	9.7	5.7	7.7	-	1.2	19	0	106	-	4	-	-4.0	7	3	-	-	34.8	-	N/A	-	N/A
Fermoy (Moore Park) Co. Cork	1-10	24.4	-	5	3	9.4	4.1	6.7	-	-1.6	7	1	27	-	1	-	-5.4	7	5	-	-	10.0	-	3.2	-	-
	11-20	3.0	-	3	1	10.8	4.4	7.6	-	-2.4	17	2	36	-	3	-	-3.1	17	4	-	-	11.3	-	2.8	-	-
	21-END	24.7	-	7	5	12.4	8.5	10.4	-	6.2	27	0	66	-	10	-	0.4	31	0	-	-	11.6	-	3.4	-	-
	MONTH	52.1	46	15	9	10.9	5.8	8.3	-	-2.4	17	3	130	-	14	-	-5.4	7	9	-	-	32.9	-	3.1	-	1
Roches Point e Co. Cork	1-10	17.8	-	6	4	10.0	6.4	8.2	-	3.4	7	0	38	-	2	-	-1.8	7	1	7.5	-	15.6	-	5.8	4	-
	11-20	2.0	-	2	1	11.3	7.0	9.2	-	2.8	17	0	48	-	4	-	-1.1	17	1	8.4	-	23.0	-	4.6	2	-
	21-END	18.3	-	4	3	11.8	9.5	10.6	-	6.6	27	0	69	-	9	-	2.1	27	0	9.7	-	9.0	-	7.6	5	-
	MONTH	38.1	37	12	8	11.1	7.7	9.4	+2.1	2.8	17	0	155	153	15	214	-1.8	7	2	8.6	+1.9	47.6	87	6.1	11	0
Glencolumbkille Co. Donegal	1-10	30.7	-	9	8	9.3	5.5	7.4	-	3.3	2	0	31	-	1	-	-0.2	3	1	-	-	N/A	-	5.8	-	-
	11-20	38.6	-	7	6	10.6	6.7	8.6	-	1.4	16	0	43	-	2	-	1.0	17	0	-	-	N/A	-	4.2	-	-
	21-END	28.9	-	10	8	11.1	7.0	9.0	-	4.2	24	0	51	-	4	-	2.5	28	0	-	-	N/A	-	4.2	-	-
	MONTH	98.2	-	26	22	10.3	6.4	8.4	-	1.4	16	0	125	-	6	-	-0.2	3	1	-	-	N/A	-	4.7	-	N/A

TABLE 1 (CONTINUED)

DECEMBER 1988

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)										BRIGHT SUNSHINE		WIND			
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR					GROUND					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					
Glenties Co. Donegal	1-10	33.4	-	9	5	9.0	3.8	6.4	-	0.2	7	0	23	-	1	-	-3.2	7	6	-	-
	11-20	43.5	-	8	7	10.5	5.7	8.1	-	1.2	16	0	38	-	2	-	-2.5	16	3	-	-
	21-END	36.8	-	8	7	10.8	7.3	9.0	-	3.8	24	0	51	-	4	-	0.7	27	0	-	-
	MONTH	113.7	66	25	19	10.1	5.6	7.9	-	0.2	7	0	113	-	7	-	-3.2	7	9	-	-
Malin Head Co. Donegal	1-10	31.7	-	6	4	9.6	5.8	7.7	-	3.6	2	0	33	-	1	-	1.6	2	0	6.5	-
	11-20	33.6	-	9	3	10.6	7.9	9.3	-	5.2	19	0	49	-	2	-	3.1	16	0	8.2	-
	21-END	16.6	-	8	7	11.7	7.8	9.7	-	5.5	23	0	59	-	8	-	3.3	31	0	8.1	-
	MONTH	81.9	73	23	14	10.7	7.2	8.9	+2.5	3.6	2	0	141	178	11	275	1.6	2	0	7.6	+2.1
Casement Aerodrome Co. Dublin	1-10	14.3	-	4	4	8.6	4.6	6.6	-	0.7	7	0	25	-	1	-	-1.8	7	1	5.5	-
	11-20	5.7	-	5	2	9.9	5.3	7.6	-	1.7	16	0	34	-	1	-	-1.4	16	2	6.9	-
	21-END	24.4	-	6	4	11.5	7.3	9.4	-	4.4	31	0	55	-	6	-	-0.3	31	1	7.7	-
	MONTH	44.4	58	15	10	10.1	5.8	7.9	+2.6	0.7	7	0	114	154	7	-	-1.8	7	4	6.7	-
Dublin Airport Co. Dublin	1-10	9.1	-	3	2	9.0	5.2	7.1	-	1.0	7	0	29	-	1	-	-2.0	7	2	6.0	-
	11-20	6.9	-	3	2	10.3	5.6	8.0	-	2.2	17	0	37	-	2	-	0.4	17	0	7.3	-
	21-END	24.5	-	6	4	12.0	7.8	9.9	-	4.2	24	0	61	-	8	-	-0.1	31	1	7.9	-
	MONTH	40.5	51	12	8	10.5	6.2	8.4	+2.6	1.0	7	0	126	173	12	171	-2.0	7	3	7.1	+2.3
Kinsealy Co. Dublin	1-10	10.7	-	4	2	9.6	5.0	7.3	-	1.2	7	0	31	-	2	-	-5.1	7	4	-	-
	11-20	6.6	-	3	1	10.7	5.3	8.0	-	2.3	17	0	38	-	3	-	-2.8	17	3	-	-
	21-END	23.7	-	5	5	12.6	4.8	8.7	-	5.0	31	2	52	-	7	-	-1.6	31	4	-	-
	MONTH	41.0	54	12	8	11.0	5.0	8.0	-	2	120	-	12	-	-	-	11	-	-	N/A	-
Galway Co. Galway	1-10	18.0	-	6	3	9.6	5.8	7.7	-	3.0	1	0	34	-	2	-	-1.5	7	2	-	-
	11-20	9.7	-	5	3	9.8	5.6	7.7	-	0	38	-	2	-	-	-2.7	16	1	-	17.8	
	21-END	60.4	-	6	5	10.7	8.0	9.3	-	0	59	-	8	-	-	-	14.4	-	6.3	6	
	MONTH	88.9	70	17	11	10.1	6.5	8.3	+2.5	0	131	-	13	-	-2.7	16	3	-	44.1	95	5.1
Killarney (Muckross House) Co. Kerry	1-10	41.9	-	6	5	10.3	6.6	8.5	-	2.1	7	0	41	-	4	-	-1.0	7	1	-	-
	11-20	11.0	-	3	2	12.2	5.6	8.9	-	-0.5	17	1	48	-	8	-	-3.0	17	4	-	-
	21-END	54.8	-	6	6	12.9	9.8	11.3	-	7.2	27	0	76	-	16	-	2.2	27	0	-	-
	MONTH	108.5	55	15	13	11.8	7.4	9.6	-	-0.5	17	1	165	-	28	-	-3.0	17	5	-	-

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

DECEMBER 1980

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)												BRIGHT SUNSHINE		WIND						
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR						GROUND				SOIL (10cm)										
						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	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	TOTAL NO. OF HOURS		MEAN SPEED (ms⁻¹)	DATA WITH GALE GUSTS	P.E. (PENMAN) (mm)		
Cahirciveen (Valentia Obsy.) Co. Kerry	1-10	40.7	-	7	4	10.9	6.4	8.6	-	3.0	2	0	43	-	3	-	-0.8	2	1	7.9	-	10.4	-	5.5	4	-
	11-20	13.3	-	7	3	11.4	6.4	8.9	-	0.5	17	0	47	-	5	-	-1.3	17	2	8.6	-	11.4	-	3.5	1	-
	21-END	52.2	-	7	6	12.5	9.7	11.1	-	6.4	27	0	74	-	14	-	2.0	27	0	10.1	-	2.5	-	7.7	9	-
	MONTH	106.2	67	21	13	11.6	7.6	9.6	+1.9	0.5	17	0	164	141	22	169	-1.3	17	3	8.9	+2.0	24.3	64	5.6	14	3
Ardfert (Liscahane) Co. Kerry	1-10	29.3	-	6	5	10.1	6.4	8.3	-	2.4	7	0	39	-	2	-	-2.1	7	1	-	-	9.7	-	-	-	-
	11-20	21.1	-	6	5	11.2	5.9	8.6	-	0.9	16	0	44	-	4	-	-3.3	16	3	-	-	10.0	-	-	-	-
	21-END	37.6	-	6	5	12.9	8.5	10.7	-	6.4	27	0	70	-	12	-	1.1	27	0	-	-	12.1	-	-	-	-
	MONTH	68.0	-	18	15	11.5	7.0	9.2	-	0.9	16	0	152	-	19	-	-3.3	16	4	-	-	31.8	-	-	-	-
Lullymore Co. Kildare	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	-	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	-	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	-	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	-	N/A	-	
Kilkenny Co. Kilkenny	1-10	12.8	-	4	3	9.3	4.3	6.8	-	-1.2	7	1	27	-	1	-	-5.8	7	5	5.7	-	14.7	-	3.7	2	-
	11-20	4.5	-	4	2	10.5	3.9	7.2	-	-1.5	17	1	33	-	3	-	-6.2	17	5	6.8	-	14.4	-	2.5	1	-
	21-END	17.7	-	6	4	12.2	7.1	9.7	-	0.5	27	0	60	-	9	-	-4.9	27	4	8.2	-	17.9	-	4.0	4	-
	MONTH	35.0	38	14	9	10.7	5.2	7.9	+2.6	-1.5	17	2	121	159	13	163	-6.2	17	14	6.9	+2.3	47.0	102	3.4	7	1
Mooncoin (Silverspring) Co. Kilkenny	1-10	13.5	-	4	3	9.5	4.0	6.8	-	-0.2	7	1	27	-	1	-	-6.0	4	5	-	-	11.5	-	-	-	-
	11-20	5.6	-	4	2	11.0	5.0	8.0	-	-0.6	17	1	39	-	3	-	-4.9	20	2	-	-	19.4	-	-	-	-
	21-END	26.8	-	5	5	12.2	8.0	10.1	-	0.4	27	0	64	-	10	-	-3.4	27	2	-	-	9.5	-	-	-	-
	MONTH	45.9	42	13	10	10.9	5.8	8.3	-	-0.6	17	2	130	-	15	-	-6.0	4	9	-	-	40.4	-	-	-	-
Ballinamore Co. Leitrim	1-10	27.4	-	9	5	8.8	4.0	6.4	-	1.4	3	0	24	-	2	-	-6.1	7	6	-	-	N/A	-	3.3	-	-
	11-20	23.7	-	6	4	10.3	4.4	7.3	-	0.5	16	0	32	-	2	-	-6.5	16	7	-	-	N/A	-	2.8	-	-
	21-END	63.5	-	8	7	10.9	5.2	8.1	-	0.4	31	0	42	-	3	-	-5.6	31	4	-	-	N/A	-	3.4	-	-
	MONTH	114.6	90	23	16	10.0	4.6	7.3	-	0.4	31	0	99	-	6	-	-6.5	16	17	-	-	N/A	-	3.2	-	N/A
Ardee (Boharnamoe) Co. Louth	1-10	17.4	-	5	3	9.0	3.4	6.2	-	-0.1	7	1	21	-	0	-	-2.2	5	3	-	-	-	-	-	-	-
	11-20	6.7	-	2	2	11.3	4.3	7.8	-	0.1	16	0	37	-	3	-	-3.2	16	3	-	-	-	-	-	-	-
	21-END	30.5	-	6	4	11.1	5.8	8.5	-	3.8	27	0	45	-	3	-	1.5	28	0	-	-	-	-	-	-	-
	MONTH	54.6	61	13	9	10.5	4.5	7.5	-	-0.1	7	1	103	-	7	-	-3.2	16	6	-	-	-	-	-	-	-

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

DECEMBER 1988

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)												BRIGHT SUNSHINE		WIND						
		AMOUNT	% OF AVERAGE	RAIN DAYS		MEAN MAX.	MEAN MIN.	AIR			GROUND			SOIL (10cm)			TOTAL NO. OF HOURS	% OF AVERAGE	MEAN SPEED (ms⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)					
				%	.WET DAYS			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						
Ballinrobe (Creagh) Co. Mayo	1-10	29.7	-	5	4	9.7	4.6	7.2	-	1.5	1	0	30	-	3	-	-2.2	7	4	-	-	13.0	-	4.0	-	-
	11-20	8.9	-	4	3	11.0	4.9	7.9	-	0.8	12	0	38	-	4	-	-4.8	16	6	-	-	16.5	-	2.9	-	-
	21-END	64.9	-	8	8	11.9	7.2	9.6	-	4.0	31	0	57	-	7	-	-2.6	31	1	-	-	6.2	-	4.9	-	-
	MONTH	103.5	69	17	15	10.9	5.6	8.3	-	0.8	12	0	126	-	14	-	-4.8	16	11	-	-	35.7	-	3.9	-	0
Belmullet Co. Mayo	1-10	23.6	-	6	4	10.0	7.2	8.6	-	4.3	3	0	42	-	3	-	0.8	3	0	7.5	-	9.4	-	0.4	4	-
	11-20	16.8	-	6	6	11.1	7.8	9.4	-	4.2	16	0	50	-	4	-	-1.0	17	2	8.7	-	11.3	-	6.3	3	-
	21-END	24.8	-	7	4	11.7	8.6	10.2	-	5.1	24	0	64	-	9	-	4.5	24	0	9.0	-	2.1	-	10.4	9	-
	MONTH	65.2	53	19	14	11.0	7.9	9.4	+2.5	4.2	16	0	156	171	17	283	-1.0	17	2	8.4	+2.3	22.8	67	0.4	16	16
Claremorris Co. Mayo	1-10	23.4	-	6	4	9.2	4.5	6.8	-	2.0	1	0	28	-	2	-	-3.3	7	4	6.1	-	10.9	-	5.9	5	-
	11-20	9.0	-	6	3	10.7	4.4	7.5	-	-0.2	16	1	35	-	2	-	-5.7	17	4	7.3	-	14.3	-	4.7	3	-
	21-END	71.1	-	8	8	11.4	7.3	9.3	-	4.8	31	0	54	-	6	-	2.5	27	0	8.4	-	3.8	-	7.0	5	-
	MONTH	103.5	83	20	15	10.4	5.5	7.9	+2.8	-0.2	16	1	116	178	10	200	-5.7	17	8	7.3	+2.6	29.0	77	5.9	13	1
Glenamoy 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	
Dunsany (Grange) Co. Meath	1-10	9.6	-	5	4	8.4	3.9	6.2	-	-0.3	7	1	22	-	1	-	-4.6	7	3	-	-	12.7	-	-	-	-
	11-20	9.2	-	6	3	9.7	4.5	7.1	-	-0.1	17	1	30	-	1	-	-5.0	17	2	-	-	13.0	-	-	-	-
	21-END	29.9	-	7	4	10.8	6.3	8.6	-	3.2	27	0	46	-	3	-	2.0	28	0	-	-	17.3	-	-	-	-
	MONTH	48.7	54	18	11	9.7	4.9	7.3	-	-0.3	7	2	98	-	4	-	-5.0	17	5	-	-	43.0	-	-	-	-
Clones Co. Monaghan	1-10	20.6	-	8	5	8.7	4.4	6.6	-	1.1	5	0	25	-	1	-	-2.9	7	2	5.9	-	9.9	-	5.5	4	-
	11-20	15.7	-	5	3	10.3	5.4	7.8	-	0.8	17	0	36	-	2	-	-2.7	17	3	7.3	-	13.5	-	4.5	2	-
	21-END	49.1	-	7	7	11.2	6.7	8.9	-	3.7	24	0	50	-	5	-	-1.0	31	1	7.8	-	8.1	-	6.1	3	-
	MONTH	85.4	89	20	15	10.1	5.5	7.8	+3.0	0.8	17	0	111	195	8	-	-2.9	7	6	7.0	+2.6	31.5	88	5.4	9	4
Birr Co. Offaly	1-10	10.9	-	5	3	9.0	4.5	6.8	-	0.2	7	0	27	-	1	-	-2.6	5	3	6.1	-	11.4	-	3.6	2	-
	11-20	5.9	-	5	2	10.0	4.1	7.1	-	-0.4	16	1	31	-	1	-	-4.4	17	3	7.4	-	12.1	-	2.6	2	-
	21-END	20.6	-	5	4	12.0	7.7	9.8	-	3.2	27	0	60	-	8	-	-0.1	27	1	8.4	-	15.7	-	4.6	3	-
	MONTH	37.4	43	15	9	10.4	5.5	8.0	+2.6	-0.4	16	1	118	164	10	167	-4.4	17	7	7.3	+2.4	39.2	89	3.6	7	0

TABLE 1 (CONTINUED)

DECEMBER 1988

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)										BRIGHT SUNSHINE		WIND								
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR					GROUND					SOIL (10cm)										
						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	TOTAL NO. OF HOURS	% OF AVERAGE	MEAN SPEED (ms⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)
Dundrum (Knockavilla) Co. Tipperary	1-10	21.7	-	6	4	8.7	3.9	6.3	-	0.6	7	0	23	-	1	-	-3.5	7	5	-	-	-	-	-	-	-
	11-20	10.4	-	6	5	10.1	5.0	7.5	-	0.5	17	0	34	-	1	-	-2.9	20	3	-	-	-	-	-	-	-
	21-END	26.4	-	6	4	12.0	6.9	9.5	-	2.0	27	0	57	-	7	-	-3.6	27	3	-	-	-	-	-	-	-
	MONTH	58.5	-	18	13	10.3	5.3	7.8	-	0.5	17	0	114	-	9	-	-3.6	27	11	-	-	-	-	-	-	-
Dungarvan (Carraiglea) Co. Waterford	1-10	26.7	-	5	3	9.7	4.4	7.0	-	-2.0	7	1	30	-	1	-	-4.4	5	6	-	-	N/A	-	2.1	-	-
	11-20	4.4	-	6	2	11.3	4.8	8.0	-	-0.6	17	1	39	-	4	-	-7.1	17	6	-	-	N/A	-	1.8	-	-
	21-END	19.5	-	6	3	12.2	8.4	10.3	-	0.0	27	0	66	-	11	-	-5.8	27	1	-	-	N/A	-	4.0	-	-
	MONTH	50.6	40	17	8	11.1	5.9	8.5	-	-2.0	7	2	135	-	16	-	-7.1	17	13	-	-	N/A	-	2.6	-	N/A
Mullingar e Co. Westmeath	1-10	14.3	-	4	2	8.6	4.1	6.4	-	-0.4	7	1	24	-	1	-	-3.5	7	3	5.5	-	14.7	-	4.9	3	-
	11-20	8.9	-	4	3	10.0	4.8	7.4	-	0.1	17	0	33	-	1	-	-1.6	17	2	6.9	-	15.0	-	3.9	2	-
	21-END	50.1	-	7	7	11.1	6.5	8.8	-	3.4	27	0	49	-	4	-	0.2	31	0	7.5	-	18.2	-	4.9	3	-
	MONTH	73.3	75	15	12	10.0	5.2	7.6	+2.8	-0.4	7	1	106	183	6	-	-3.5	7	5	6.7	+2.3	47.9	100	4.6	8	0
J.F.K. Park Co. Wexford	1-10	13.8	-	3	2	9.1	4.5	6.8	-	0.6	7	0	26	-	1	-	-6.5	7	6	-	-	11.1	-	2.9	-	-
	11-20	5.8	-	3	2	10.4	5.2	7.8	-	0.9	17	0	36	-	2	-	-6.9	17	3	-	-	15.6	-	2.7	-	-
	21-END	19.6	-	5	4	12.1	8.1	10.1	-	4.8	27	0	63	-	9	-	-4.1	27	3	-	-	7.7	-	6.4	-	-
	MONTH	39.2	35	11	8	10.6	6.0	8.3	-	0.6	7	0	125	-	11	-	-6.9	17	12	-	-	34.4	-	4.0	-	2
Clonroche Co. Wexford	1-10	16.3	-	3	2	9.0	4.5	6.7	-	0.9	7	0	26	-	1	-	-4.0	7	5	-	-	9.6	-	2.1	-	-
	11-20	9.0	-	4	3	10.0	5.1	7.6	-	1.0	17	0	33	-	1	-	-1.0	13	4	-	-	15.6	-	2.0	-	-
	21-END	25.2	-	5	5	11.1	8.3	9.7	-	4.5	27	0	59	-	4	-	-1.4	31	2	-	-	9.1	-	3.0	-	-
	MONTH	50.5	41	12	10	10.1	6.0	8.1	-	0.9	7	0	117	-	6	-	-4.0	7	11	-	-	34.0	-	2.4	-	-3
Johnstown Castle Co. wexford	1-10	12.9	-	4	4	9.8	5.1	7.5	-	1.9	7	0	32	-	2	-	-2.8	7	3	-	-	8.3	-	1.6	-	-
	11-20	8.5	-	4	3	10.7	5.3	8.0	-	1.2	17	0	37	-	2	-	-2.0	17	5	-	-	15.7	-	1.2	-	-
	21-END	20.4	-	5	4	12.0	8.2	10.1	-	4.8	28	0	63	-	8	-	-0.5	27	1	-	-	3.1	-	2.5	-	-
	MONTH	41.8	38	13	11	10.9	6.2	8.6	-	1.2	17	0	131	-	12	-	-2.8	7	9	-	-	27.1	-	1.8	-	0
Rosslare e Co. Wexford	1-10	12.7	-	5	3	9.7	5.8	7.7	-	2.2	7	0	34	-	2	-	-0.9	7	2	6.7	-	11.9	-	5.4	2	-
	11-20	5.8	-	4	2	10.8	6.0	8.4	-	2.3	17	0	41	-	3	-	-1.7	17	1	7.6	-	18.6	-	4.3	2	-
	21-END	19.2	-	3	2	11.7	8.7	10.2	-	6.9	31	0	64	-	7	-	2.9	27	0	9.2	-	10.7	-	6.7	7	-
	MONTH	37.7	39	12	7	10.8	6.9	8.8	+1.7	2.2	7	0	139	146	12	171	-1.7	17	3	7.9	+1.8	41.2	72	5.5	11	4

TABLE 2

GLOBAL RADIATION

STATION	PERIOD	AMOUNT MJ/m ²
Malin Head Co. Donegal	1-10	10.80
	11-20	10.16
	21-end	12.30
	Month	33.26
Dublin Airport Co. Dublin	1-10	14.69
	11-20	14.86
	21-end	21.36
	Month	50.91
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	18.58
	11-20	15.48
	21-end	13.40
	Month	47.46
Kilkenny Co. Kilkenny	1-10	17.00
	11-20	17.24
	21-end	22.23
	Month	56.47
Belmullet Co. Mayo	1-10	12.95
	11-20	13.47
	21-end	10.78
	Month	37.20
Clones Co. Monaghan	1-10	14.68
	11-20	13.27
	21-end	17.43
	Month	45.38
Birr Co. Offaly	1-10	15.04
	11-20	14.12
	21-end	20.57
	Month	49.73

Notes on the tables in January issue

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	0.5	-	0	13
	11-20	3.8	-	0	3
	21-end	1.2	-	0	18
	Month	5.5	-	-	-
Kinsealy Co. Dublin	1-10	2.7	-	0	8
	11-20	3.2	-	0	3
	21-end	1.4	-	0	22
	Month	7.3	-	-	-
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	(-7.3)	-	0	48
	11-20	3.7	-	0	9
	21-end	(-9.0)	-	0	59
	Month	-	-	-	-
Ballinamore Co. Leitrim	1-10	1.4	-	0	24
	11-20	4.4	-	0	26
	21-end		overflow		19
	Month	-	-	-	-
Glenamoy Co. Mayo	1-10				
	11-20				
	21-end		Not available		
	Month				
Johnstown Castle Co. Wexford	1-10	(-1.3)	-	0	14
	11-20	+4.8	-	0	4
	21-end	1.0	-	0	19
	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	6.60	5.93	4.63	0.44	54.6	55.4
	11-20	7.99	7.17	6.13	0.27	61.2	61.4
	21-end	8.79	7.98	6.79	0.19	51.7	55.5
Mineral	1-10	6.53	5.60	4.10	0.01	47.5	49.0
	11-20	8.11	6.92	5.35	-0.04	59.5	61.2
	21-end	8.85	7.59	6.20	-0.03	43.5	46.1

AN AGROCLIMATOLOGICAL SUMMARY FOR 1988

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	
Day Degrees Threshold 6°C ⁽ⁱⁱ⁾	476 (102)	1353 (102)	379 (108)	1166 (105)	404 (106)	1287 (105)	390 (111)	1287 (104)
Threshold 10°C ⁽ⁱⁱⁱ⁾	109 (83)	578 (92)	95 (87)	491 (98)	104 (75)	597 (90)	98 (94)	580 (118)
Global Radiation kJoule/cm ²	143 (101)	204 (97)	128*(-)	N/A	143 (101)	211 (98)	N/A	N/A
Penman Potential Evapotranspiration (mm)	209 (93)	288 (88)	154 (85)	240 (92)	175 (94)	287 (99)	215 (78)	348 (99)
Precipitation (mm)	685 (133)	897 (110)	580 (140)	749 (118)	395 (118)	486 (92)	335 (137)	354 (73)
Days with Air Frost ^(iv)	1 (11)	3 (3)	22 (30)	13 (15)	23 (33)	14 (23)	10 (20)	4 (8)..
Soil Moisture Deficit	Valentia Obs. Co. Kerry		Glenamoy Co. Mayo		Oakpark Co. Carlow		Kinsealy Co. Dublin	
Maximum Value (mm)	12	59	56	71	40	30	13	58
Date of Maximum	10 April	20 December	20 May	30 June	20 May	30 June	10 April	30 June
Number of 10-day periods with 50mm Deficit or more ^(v) .	0	0	1	2	0	0	0	1

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 50mm limit the growth of grass or shallow rooted crops.

* Global radiation at Belmullet Co. Mayo

- Not Available

ANNUAL WEATHER SUMMARY

The winter/spring season was relatively free of frost but was below average at the higher threshold temperatures. There was also a succession of dry and very wet spells-dry: mid-February to mid-March, April and much of May and June. wet: January to mid-February, second half of March and during the rather cool July/August. This was followed by a mild but mixed Autumn, the wettest period occurring in October.