

METEOROLOGICAL SERVICE



APRIL 1987 AGROMETEOROLOGICAL BULLETIN

The Weather of April

Troughs of low pressure affected the country during the first ten days: with a centre of low pressure located north of Biscay an easterly airflow was first dominant over the country with spells of rain; the northward shift of the centre on 6th induced mild air in a southerly airflow over the country and subsequent troughs approached from the Atlantic in a southwesterly airflow. A ridge on 11th/12th preceded a frontal rainbelt early on 13th. With continuing pressure rise on 14th and a mild southerly airflow, spells of rain or drizzle were light and fog patches occurred. High pressure became the dominant feature until 16th. As the high receded into Europe a mild southerly airflow developed with passing troughs of rain or showers. Freshening south to southwest winds set in on 19th as a deepening Atlantic low approached the country and turned off to the northwest. High pressure recovered from the European mainland, the troughs skirting the northwest. This high became the dominant feature and by 26th stretched from the Azores to Scandinavia. The weather was quiet with overnight mist or fog. As pressure weakened a trough from the south moved northwards bringing outbreaks of rain to the country.

Precipitation:

Monthly totals of precipitation ranged from below normal in the northwest, west and southwest to well above in the south and east. The latter condition was due to very heavy falls during the first week. Amounts varied from 227% of normal at Casement Aerodrome (much of it occurring in the wet spell to 5th) to 63% at Valentia. Wettest days occurred on the 2nd to 4th (or to 5th in the east) and the 30th.

Temperature:

Mean air temperature was well above normal and varied from 1.8C° above at Birr to 0.8C° above at Belmullet. Soil temperature (100mm) varied from below normal during first eleven days (by an average of about 1C°) to 3-4C° above average in the final days of the month. Ground frost mostly occurred early in the month particularly on 2nd, and 10th-12th; widespread air and sharp to severe ground frost occurred on 12th.

Sunshine and Radiation:

Despite the dominance of high pressure during the month, sunshine amounts were well below normal everywhere. The first ten days were dull. Hours of sunshine for the month varied from 49% of normal at Belmullet to 77% at Rosslare. Global radiation was 84% of average at Valentia and 92% at Kilkenny.

Wind:

Strong winds with gale gusts occurred on 3rd, 4th, 9th, 10th and 19th, the latter occasion being windiest.

Summary:

Dry in the northwest half of the country, wet in the southeast mainly due to the first week which was cold and very wet. Very dull but temperatures were well above normal.

The data contained in this Bulletin are provisional. Some of the material in Table 1 will be published in its final form 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

APRIL 1987

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	59.9	-	9	7	9.9	3.5	6.7	-	-0.8	2	1	28	-	2	-	-1.5	10	4	-	-	21.4	-	3.8	-	-	
	11-20	2.0	-	4	1	13.8	6.0	9.9	-	-1.5	12	1	57	-	14	-	-5.2	12	1	-	-	37.0	-	3.9	-	-	
	21-END	1.6	-	2	1	17.6	7.1	12.3	-	3.5	24	0	80	-	22	-	-0.6	21	1	-	-	46.6	-	2.4	-	-	
	MONTH	63.5	135	15	9	13.8	5.5	9.6	-	-1.6	12	2	164	-	47	-	-5.2	12	6	-	-	105.0	-	3.4	-	46	
Shannon Airport Co. Clare	1-10	39.9	-	10	10	10.3	4.7	7.5	-	1.6	2	0	33	-	2	-	-2.2	2	2	7.4	-	28.8	-	5.1	3	-	
	11-20	6.5	-	4	3	14.3	7.6	10.9	-	1.8	12	0	66	-	19	-	-5.1	12	1	10.4	-	28.8	-	4.1	1	-	
	21-END	7.5	-	4	1	17.4	8.6	13.0	-	5.9	28	0	86	-	34	-	0.6	21	0	13.4	-	46.6	-	3.8	0	-	
	MONTH	53.9	95	18	14	14.0	7.0	10.5	+1.6	1.6	2	0	185	119	55	134	-5.1	12	3	10.4	+0.7	96.2	63	4.3	4	53	
Cork Airport Co. Cork	1-10	74.4	-	10	8	9.5	3.9	6.7	-	0.9	2	0	26	-	1	-	-0.1	10	1	7.9	-	26.6	-	6.1	3	-	
	11-20	9.2	-	4	4	12.1	6.5	9.3	-	2.1	12	0	50	-	8	-	-3.4	12	1	10.0	-	24.7	-	5.5	2	-	
	21-END	9.2	-	5	2	14.6	8.0	11.3	-	3.9	21	0	69	-	20	-	0.1	21	0	12.0	-	47.3	-	5.1	0	-	
	MONTH	92.8	133	19	14	12.1	6.1	9.1	+1.1	0.9	2	0	146	116	29	116	-3.4	12	2	9.9	+0.7	98.6	61	5.6	5	46	
Fermoy (Coolskille) Co. Cork	1-10	59.5	-	10	9	8.6	3.3	6.0	-	1.0	2	0	20	-	1	-	-1.2	10	1	-	-	22.1	-	5.1	-	-	
	11-20	11.1	-	6	3	12.1	7.2	9.6	-	2.6	12	0	53	-	9	-	-3.5	12	2	-	-	26.7	-	3.8	-	-	
	21-END	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A			N/A	N/A	-	N/A	-	1.5	21	0	-	-	39.0	-	3.8	-	-
	MONTH	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A			N/A	N/A	-	N/A	-	-3.5	12	3	-	-	87.8	-	4.2	-	N/A
Fermoy (Moore Park) Co. Cork	1-10	65.6	-	10	9	10.3	3.7	7.0	-	-0.6	10	1	29	-	2	-	-7.0	10	3	-	-	22.4	-	4.0	-	-	
	11-20	6.6	-	4	2	13.7	5.5	9.6	-	-2.9	12	1	55	-	14	-	-7.0	12	4	-	-	23.1	-	2.9	-	-	
	21-END	5.6	-	4	2	16.4	7.5	11.9	-	1.4	21	0	76	-	27	-	-4.8	21	1	-	-	48.3	-	2.1	-	-	
	MONTH	77.8	136	18	13	13.4	5.5	9.5	-	-2.9	12	2	160	-	43	-	-7.0	12	8	-	-	93.9	-	3.0	-	41	
Roches Point Co. Cork	1-10	84.4	-	9	8	10.2	5.2	7.7	-	2.5	2	0	34	-	2	-	1.8	2	0	8.5	-	22.5	-	6.3	5	-	
	11-20	2.5	-	4	1	12.1	7.4	9.8	-	2.2	12	0	54	-	8	-	0.7	20	0	10.5	-	27.7	-	5.1	1	-	
	21-END	5.0	-	4	3	14.2	8.9	11.6	-	5.9	21	0	72	-	20	-	-1.5	21	1	12.8	-	48.5	-	4.7	0	-	
	MONTH	91.9	173	17	12	12.2	7.2	9.7	+0.9	2.2	12	0	160	111	30	120	-1.5	21	1	10.5	+0.7	98.7	61	5.3	6	47	
Glencolumbkille Co. Donegal	1-10	15.7	-	7	5	9.3	3.3	6.3	-	0.6	2	0	22	-	1	-	-4.0	3	4	-	-	N/A	-	3.9	-	-	
	11-20	22.7	-	8	5	12.8	6.0	9.4	-	0.9	12	0	51	-	11	-	-3.9	12	3	-	-	N/A	-	3.6	-	-	
	21-END	22.3	-	4	2	16.7	9.0	12.9	-	6.4	28	0	85	-	33	-	2.4	28	0	-	-	N/A	-	2.3	-	-	
	MONTH	60.7	-	19	12	12.9	6.1	9.5	-	0.6	2	0	158	-	44	-	-4.0	3	7	-	-	N/A	-	3.3	-	N/A	

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

APRIL 1987

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									
Glenties Co. Donegal	1-10	12.1	-	5	3	8.6	3.2	5.9	-	-1.0	3	1	19	-	1	-	-2.4	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11-20	34.9	-	6	5	13.0	5.8	9.4	-	-2.6	12	1	52	-	11	-	-4.4	12	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21-END	21.8	-	3	3	17.3	7.5	12.4	-	5.4	28	0	80	-	30	-	3.9	26	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	MONTH	68.8	85	14	11	13.0	5.5	9.2	-	-2.6	12	2	151	-	43	-	-4.4	12	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malin Head Co. Donegal	1-10	15.7	-	8	5	7.8	4.6	6.2	-	2.3	2	0	19	-	0	-	-1.5	2	2	6.8	-	22.0	-	9.4	6	-	-	-	-	-	-	-	-	-	-
	11-20	8.4	-	6	3	12.7	6.3	9.5	-	0.1	12	0	52	-	10	-	-2.5	12	1	9.8	-	42.2	-	7.2	6	-	-	-	-	-	-	-	-	-	-
	21-END	15.1	-	2	2	14.0	7.7	10.9	-	5.6	28	0	65	-	16	-	1.5	25	0	12.2	-	31.2	-	4.5	1	-	-	-	-	-	-	-	-	-	-
	MONTH	39.2	69	16	10	11.5	6.2	8.9	+1.1	0.1	12	0	136	114	26	173	-2.5	12	3	9.6	+0.8	95.4	60	7.0	13	57	-	-	-	-	-	-	-	-	
Casement Aerodrome Co. Dublin	1-10	99.1	-	10	9	8.8	3.9	6.3	-	1.6	2	0	22	-	1	-	-1.0	2	1	6.6	-	10.3	-	6.5	5	-	-	-	-	-	-	-	-	-	-
	11-20	2.7	-	2	2	14.6	5.5	10.1	-	-2.8	12	1	60	-	17	-	-6.1	12	3	9.8	-	50.2	-	6.1	2	-	-	-	-	-	-	-	-	-	-
	21-END	4.7	-	1	1	17.7	6.6	12.1	-	3.4	24	0	78	-	31	-	0.7	24	0	12.4	-	49.4	-	3.3	0	-	-	-	-	-	-	-	-	-	-
	MONTH	106.5	227	13	12	13.7	5.3	9.5	+1.7	-2.8	12	1	159	128	49	158	-6.1	12	4	9.6	-	109.9	71	5.3	7	54	-	-	-	-	-	-	-	-	-
Dublin Airport Co. Dublin	1-10	64.8	-	10	10	9.0	4.1	6.5	-	2.1	10	0	23	-	0	-	-0.9	10	1	7.1	-	13.5	-	5.8	4	-	-	-	-	-	-	-	-	-	
	11-20	3.5	-	2	1	14.2	6.1	10.2	-	0.4	12	0	60	-	16	-	-4.0	12	2	10.3	-	50.4	-	5.0	2	-	-	-	-	-	-	-	-	-	-
	21-END	4.0	-	2	1	16.5	7.9	12.2	-	5.5	22	0	78	-	27	-	0.6	24	0	13.3	-	51.4	-	2.9	0	-	-	-	-	-	-	-	-	-	-
	MONTH	72.3	154	14	12	13.2	6.0	9.6	+1.5	0.4	12	0	161	125	44	169	-4.0	12	3	10.2	+1.0	115.3	71	4.6	6	56	-	-	-	-	-	-	-	-	-
Kinsealy Co. Dublin	1-10	58.5	-	9	8	9.1	4.7	6.9	-	2.4	2	0	26	-	1	-	-1.6	2	2	-	-	16.1	-	4.6	-	-	-	-	-	-	-	-	-	-	-
	11-20	2.6	-	2	1	13.9	6.1	10.0	-	0.0	12	0	58	-	15	-	-5.5	12	3	-	-	51.3	-	3.9	-	-	-	-	-	-	-	-	-	-	-
	21-END	2.5	-	1	1	15.5	6.8	11.1	-	3.6	24	0	67	-	21	-	-1.9	24	2	-	-	56.9	-	2.6	-	-	-	-	-	-	-	-	-	-	-
	MONTH	63.6	141	12	10	12.8	5.9	9.3	-	0.0	12	0	152	-	36	-	-5.5	12	7	-	-	124.3	-	3.9	-	51	-	-	-	-	-	-	-	-	-
Galway Co. Galway	1-10	38.9	-	10	9	9.7	4.2	6.9	-	1.7	2	0	27	-	2	-	-0.8	2	1	7.3	-	18.9	-	5.2	3	-	-	-	-	-	-	-	-	-	-
	11-20	10.1	-	4	3	13.4	6.9	10.1	-	-0.1	12	1	58	-	14	-	-3.2	12	2	10.3	-	26.2	-	4.2	1	-	-	-	-	-	-	-	-	-	-
	21-END	11.0	-	4	2	17.6	8.2	12.9	-	6.4	28	0	85	-	33	-	3.9	28	0	13.1	-	46.5	-	3.1	0	-	-	-	-	-	-	-	-	-	-
	MONTH	60.0	91	18	14	13.5	6.4	10.0	+1.5	-0.1	12	1	171	-	49	-	-3.2	12	3	10.3	-	91.6	58	4.1	4	50	-	-	-	-	-	-	-	-	-
Killerney (Muckross House) Co. Kerry	1-10	49.7	-	10	9	10.3	4.1	7.2	-	1.6	2	0	30	-	2	-	-1.6	2	4	-	-	17.9	-	-	-	-	-	-	-	-	-	-	-	-	-
	11-20	12.6	-	5	5	13.5	7.6	10.6	-	2.0	12	0	62	-	15	-	-1.2	12	1	-	-	30.2	-	-	-	-	-	-	-	-	-	-	-	-	-
	21-END	15.3	-	4	3	16.7	9.2	12.9	-	6.6	21	0	85	-	32	-	1.0	21	0	-	-	49.8	-	-	-	-	-	-	-	-	-	-	-	-	-
	MONTH	77.6	85	19	15	13.5	7.0	10.2	-	1.6	2	0	177	-	50	-	-1.6	2	5	-	-	97.9	-	-	-	-	-	-	-	-	-	-	-	-	-

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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	DAYS WITH GROUND FROST						MEAN DAILY	DIFFERENCE FROM AVERAGE
Cahirciveen (Valentia Obsy.) Co. Kerry	1-10	25.9	-	9	8	10.5	5.1	7.8	-	0.8	2	0	35	-	2	-	-0.6	2	1	8.7	-	24.9	-	5.2	2	-
	11-20	14.3	-	6	4	13.7	7.9	10.8	-	5.2	16	0	64	-	15	-	3.9	11	0	11.7	-	22.8	-	4.9	2	-
	21-END	9.5	-	4	2	16.3	9.0	12.6	-	6.6	28	0	82	-	30	-	4.5	28	0	13.9	-	41.0	-	4.0	0	-
	MONTH	49.7	63	19	14	13.5	7.3	10.4	+1.2	0.8	2	0	181	116	47	138	-0.6	2	1	11.5	+1.2	88.7	57	4.7	4	50
Ardfert (Liscahane) Co. Kerry	1-10	51.9	-	9	9	10.3	4.0	7.1	-	-0.3	2	1	30	-	2	-	-2.5	2	2	-	-	27.4	-	-	-	-
	11-20	8.3	-	5	2	14.3	7.8	11.1	-	2.5	12	0	67	-	19	-	-2.8	12	1	-	-	37.4	-	-	-	-
	21-END	14.1	-	4	1	17.2	8.4	12.8	-	5.0	28	0	84	-	32	-	1.3	23	0	-	-	47.8	-	-	-	-
	MONTH	74.3	-	18	12	14.0	6.7	10.3	-	-0.3	2	1	181	-	53	-	-2.8	12	3	-	-	112.6	-	-	-	-
Lullymore Co. Kildare	1-10	43.7	-	10	9	9.0	3.1	6.0	-	0.3	10	0	20	-	1	-	-2.9	10	3	-	-	11.4	-	5.1	-	-
	11-20	2.9	-	3	2	14.1	4.5	9.3	-	-2.9	12	1	53	-	14	-	-8.6	12	5	-	-	39.3	-	3.6	-	-
	21-END	9.1	-	3	1	17.5	5.4	11.4	-	2.5	26	0	72	-	27	-	-2.0	21	3	-	-	44.7	-	2.6	-	-
	MONTH	55.7	103	16	12	13.5	4.3	8.9	-	-2.9	12	1	146	-	42	-	-8.6	12	11	-	-	95.4	-	3.8	-	41
Kilkenny Co. Kilkenny	1-10	58.6	-	8	7	9.9	3.9	6.9	-	0.0	10	0	29	-	2	-	-6.0	10	2	7.4	-	16.5	-	3.4	2	-
	11-20	1.4	-	3	0	14.0	5.6	9.8	-	-2.0	12	1	57	-	14	-	-7.4	12	3	10.2	-	33.4	-	3.1	1	-
	21-END	3.1	-	3	2	17.8	7.0	12.4	-	2.0	21	0	81	-	34	-	-2.8	21	2	12.7	-	49.6	-	2.2	0	-
	MONTH	63.1	121	14	9	13.9	5.5	9.7	+1.5	-2.0	12	1	167	120	50	128	-7.4	12	7	10.1	+0.8	99.5	65	2.9	3	48
Mooncoin (Silverspring) Co. Kilkenny	1-10	86.5	-	10	9	10.1	4.2	7.2	-	0.7	10	0	30	-	2	-	-7.0	10	5	-	-	22.9	-	-	-	-
	11-20	4.7	-	4	2	13.4	5.3	9.3	-	-2.4	12	1	53	-	12	-	-7.5	12	5	-	-	33.8	-	-	-	-
	21-END	4.2	-	3	3	16.5	6.4	11.5	-	0.5	21	0	72	-	25	-	-6.0	21	5	-	-	51.7	-	-	-	-
	MONTH	95.4	159	17	14	13.3	5.3	9.3	-	-2.4	12	1	155	-	40	-	-7.5	12	15	-	-	108.4	-	-	-	-
Bellinamore Co. Leitrim	1-10	26.7	-	9	4	8.8	2.7	5.8	-	-0.3	2	2	18	-	1	-	-5.0	10	4	-	-	13.5	-	2.8	-	-
	11-20	6.6	-	5	3	14.0	5.2	9.6	-	-3.5	12	1	55	-	15	-	-9.0	12	4	-	-	29.8	-	2.8	-	-
	21-END	11.6	-	2	1	17.7	6.5	12.1	-	4.2	28	0	77	-	31	-	0.0	28	0	-	-	38.0	-	1.5	-	-
	MONTH	44.9	69	16	8	13.5	4.8	9.1	-	-3.5	12	3	151	-	46	-	-9.0	12	8	-	-	81.3	-	2.4	-	38
Ardee (Bohernamoe) Co. Louth	1-10	49.0	-	9	9	9.0	3.2	6.1	-	-0.2	10	1	20	-	1	-	-5.0	10	6	-	-	-	-	-	-	-
	11-20	2.1	-	2	1	14.7	5.8	10.2	-	1.6	11	0	60	-	17	-	-3.1	11	3	-	-	-	-	-	-	-
	21-END	11.7	-	4	2	17.6	5.2	11.4	-	1.7	24	0	72	-	28	-	-3.8	22	4	-	-	-	-	-	-	-
	MONTH	62.8	118	15	12	13.8	4.7	9.2	-	-0.2	10	1	152	-	45	-	-5.0	10	13	-	-	-	-	-	-	-

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

APRIL 1987

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										
Bellinrobe (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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belmullet Co. Mayo	1-10	23.3	-	8	8	9.7	3.9	6.8	-	0.7	2	0	27	-	1	-	-3.0	2	3	7.8	-	23.8	-	6.2	4	-	-	-	-	-	-	-	-	-	-	-
	11-20	9.6	-	4	4	12.8	6.6	9.7	-	0.4	12	0	54	-	11	-	-4.2	12	1	10.3	-	26.1	-	6.6	4	-	-	-	-	-	-	-	-	-	-	-
	21-END	14.5	-	4	1	15.9	8.0	11.9	-	6.0	30	0	76	-	25	-	2.1	24	0	12.3	-	27.7	-	4.3	0	-	-	-	-	-	-	-	-	-	-	-
	MONTH	47.4	83	16	13	12.8	6.2	9.5	+0.8	0.4	12	0	157	113	39	146	-4.2	12	4	10.1	+0.5	79.6	49	5.7	8	48	-	-	-	-	-	-	-	-	-	
Claremorris Co. Mayo	1-10	26.3	-	8	8	9.5	3.0	6.2	-	-1.4	2	1	23	-	1	-	-4.0	2	1	6.8	-	15.3	-	4.8	2	-	-	-	-	-	-	-	-	-	-	-
	11-20	26.1	-	5	4	13.7	5.7	9.7	-	-1.2	12	1	56	-	14	-	-6.0	12	2	9.6	-	21.4	-	3.8	2	-	-	-	-	-	-	-	-	-	-	-
	21-END	11.2	-	2	2	17.7	7.1	12.4	-	4.7	28	0	80	-	32	-	3.0	28	0	12.6	-	38.5	-	2.4	0	-	-	-	-	-	-	-	-	-	-	-
	MONTH	63.6	103	15	14	13.6	5.3	9.4	+1.5	-1.4	2	2	158	123	47	152	-6.0	12	3	9.7	+1.0	75.2	54	3.7	4	41	-	-	-	-	-	-	-	-	-	
Glenamoy Co. Mayo	1-10	17.6	-	8	6	9.6	3.6	6.6	-	-0.5	2	1	25	-	2	-	-2.1	2	3	-	-	27.3	-	4.2	-	-	-	-	-	-	-	-	-	-	-	-
	11-20	18.8	-	4	4	13.5	6.1	9.8	-	-3.1	12	1	56	-	14	-	-6.5	12	2	-	-	22.6	-	4.2	-	-	-	-	-	-	-	-	-	-	-	-
	21-END	12.8	-	2	2	17.2	7.7	12.4	-	4.2	26	0	80	-	30	-	2.1	22	0	-	-	37.9	-	1.6	-	-	-	-	-	-	-	-	-	-	-	-
	MONTH	49.2	66	14	12	13.4	5.8	9.6	-	-3.1	12	2	162	-	46	-	-5.5	12	5	-	-	87.8	-	3.4	-	43	-	-	-	-	-	-	-	-	-	
Dunsany (Grange) Co. Meath	1-10	53.8	-	10	9	8.4	3.6	6.0	-	0.5	10	0	19	-	0	-	-2.0	10	3	-	-	11.5	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11-20	3.6	-	3	2	14.0	5.3	9.6	-	-2.9	12	1	55	-	15	-	-8.1	12	3	-	-	41.5	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21-END	11.3	-	3	1	16.9	5.9	11.4	-	3.4	28	0	71	-	25	-	-1.0	22	2	-	-	43.5	-	-	-	-	-	-	-	-	-	-	-	-	-	
	MONTH	68.7	130	16	12	13.1	4.9	9.0	-	-2.9	12	1	145	-	40	-	-8.1	12	8	-	-	96.5	-	-	-	-	-	-	-	-	-	-	-	-	-	
Clones Co. Monaghan	1-10	22.8	-	7	5	8.3	3.4	5.9	-	0.5	10	0	18	-	0	-	-2.3	10	2	6.2	-	15.1	-	4.1	4	-	-	-	-	-	-	-	-	-	-	
	11-20	9.9	-	6	3	14.0	5.9	10.0	-	-1.5	12	1	58	-	16	-	-8.4	12	2	9.3	-	29.6	-	3.4	1	-	-	-	-	-	-	-	-	-	-	
	21-END	14.2	-	2	1	17.7	7.1	12.4	-	5.5	22	0	80	-	32	-	2.4	26	0	12.3	-	38.3	-	1.9	0	-	-	-	-	-	-	-	-	-	-	-
	MONTH	46.9	89	15	9	13.3	5.5	9.4	+1.7	-1.5	12	1	156	126	48	160	-8.4	12	4	9.3	+0.7	83.0	59	3.1	5	41	-	-	-	-	-	-	-	-	-	
Birr Co. Offaly	1-10	48.0	-	10	8	9.8	3.8	6.8	-	1.3	2	0	27	-	2	-	-1.0	10	1	7.3	-	20.4	-	4.1	4	-	-	-	-	-	-	-	-	-	-	
	11-20	3.7	-	2	2	14.1	6.5	10.3	-	-2.2	12	1	61	-	17	-	-6.8	12	2	10.4	-	29.3	-	3.1	1	-	-	-	-	-	-	-	-	-	-	
	21-END	10.9	-	1	1	17.7	7.3	12.5	-	3.3	21	0	81	-	33	-	-0.7	21	1	13.6	-	40.0	-	2.0	0	-	-	-	-	-	-	-	-	-	-	
	MONTH	62.6	114	13	11	13.9	5.8	9.9	+1.8	-2.2	12	1	169	124	52	149	-6.8	12	4	10.5	+1.1	69.7	61	3.1	5	47	-	-	-	-	-	-	-	-	-	

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

APRIL 1997

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									
Dundrum (Knockavilla) Co. Tipperary	1-10	53.8	-	10	9	9.9	3.9	6.9	-	0.0	10	0	28	-	2	-	-4.5	10	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11-20	7.9	-	6	3	13.6	5.5	9.5	-	-2.2	12	2	55	-	13	-	-6.4	12	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	21-END	6.9	-	3	2	16.6	7.3	12.0	-	1.7	21	0	76	-	28	-	-3.7	21	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	MONTH	68.6	-	19	14	13.4	5.6	9.5	-	-2.2	12	2	159	-	44	-	-6.4	12	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Dungarven (Carriglea) Co. Waterford	1-10	98.3	-	10	10	10.8	4.4	7.6	-	-1.1	10	1	34	-	2	-	-1.2	10	1	-	-	24.0	-	3.3	-	-	-	-	-	-	-	-	-		
	11-20	5.3	-	4	3	13.9	6.5	10.2	-	-1.5	12	1	60	-	15	-	-1.7	12	1	-	-	30.4	-	2.5	-	-	-	-	-	-	-	-	-	-	
	21-END	6.0	-	4	4	15.9	7.4	11.6	-	1.8	21	0	73	-	25	-	-0.9	21	1	-	-	46.9	-	2.2	-	-	-	-	-	-	-	-	-	-	
	MONTH	109.6	157	18	17	13.5	6.1	9.8	-	-1.5	12	2	167	-	42	-	-1.7	12	3	-	-	101.3	-	2.7	-	40	-	-	-	-	-	-	-	-	
Mullingar Co. Westmeath	1-10	34.5	-	9	6	8.5	3.3	5.9	-	0.4	2	0	19	-	0	-	-2.0	10	1	6.4	-	9.4	-	4.3	3	-	-	-	-	-	-	-	-	-	
	11-20	4.3	-	4	2	14.0	6.0	10.0	-	-2.4	12	1	58	-	16	-	-6.0	12	2	9.8	-	41.4	-	3.5	1	-	-	-	-	-	-	-	-	-	-
	21-END	9.5	-	2	2	16.9	6.6	11.8	-	3.5	21	0	74	-	27	-	0.2	21	0	12.3	-	46.2	-	2.6	0	-	-	-	-	-	-	-	-	-	-
	MONTH	48.3	82	15	10	13.1	5.3	9.2	+1.5	-2.4	12	1	151	117	44	133	-6.0	12	3	9.5	+0.7	97.0	65	3.5	4	44	-	-	-	-	-	-	-	-	
J.F.K. Park Co. Wexford	1-10	96.5	-	10	9	9.7	3.9	6.8	-	1.2	10	0	27	-	1	-	-2.6	2	3	-	-	21.3	-	4.3	-	-	-	-	-	-	-	-	-	-	-
	11-20	5.0	-	5	2	12.9	6.3	9.6	-	1.0	12	0	54	-	10	-	-6.5	12	3	-	-	39.7	-	5.0	-	-	-	-	-	-	-	-	-	-	-
	21-END	3.4	-	3	2	16.6	8.2	11.9	-	3.8	21	0	75	-	26	-	1.0	26	0	-	-	50.1	-	4.4	-	-	-	-	-	-	-	-	-	-	-
	MONTH	104.9	172	18	13	12.7	6.1	9.4	-	1.0	12	0	156	-	38	-	-6.5	12	6	-	-	111.1	-	4.6	-	47	-	-	-	-	-	-	-	-	-
Clonroche Co. Wexford	1-10	100.0	-	8	8	9.3	3.2	6.3	-	-0.9	10	1	24	-	1	-	-8.5	10	4	-	-	19.0	-	2.6	-	-	-	-	-	-	-	-	-	-	-
	11-20	8.3	-	4	3	12.9	5.5	9.2	-	0.3	11	0	50	-	9	-	-7.5	12	4	-	-	43.2	-	2.3	-	-	-	-	-	-	-	-	-	-	-
	21-END	3.9	-	3	2	16.4	7.7	12.1	-	2.4	21	0	77	-	28	-	-4.4	21	2	-	-	55.8	-	1.6	-	-	-	-	-	-	-	-	-	-	-
	MONTH	112.2	165	15	13	12.9	5.5	9.2	-	-0.9	10	1	151	-	38	-	-8.5	10	10	-	-	116.0	-	2.2	-	44	-	-	-	-	-	-	-	-	-
Johnstown Castle Co. Wexford	1-10	87.3	-	10	9	9.6	4.2	6.9	-	2.0	10	0	27	-	1	-	-4.0	10	2	-	-	19.9	-	4.0	-	-	-	-	-	-	-	-	-	-	-
	11-20	7.7	-	4	3	13.1	5.9	9.5	-	2.1	12	0	52	-	10	-	-4.5	12	3	-	-	49.7	-	3.7	-	-	-	-	-	-	-	-	-	-	-
	21-END	3.1	-	3	2	15.0	7.8	11.4	-	4.0	21	0	70	-	21	-	-0.9	22	2	-	-	51.1	-	2.3	-	-	-	-	-	-	-	-	-	-	-
	MONTH	98.1	156	17	14	12.6	6.0	9.3	-	2.0	10	0	150	-	32	-	-4.5	12	7	-	-	120.7	-	3.4	-	43	-	-	-	-	-	-	-	-	-
Rosslare Co. Wexford	1-10	72.6	-	9	9	9.7	5.2	7.5	-	2.0	2	0	32	-	2	-	-0.7	10	1	8.3	-	26.4	-	4.5	3	-	-	-	-	-	-	-	-	-	-
	11-20	4.9	-	4	2	12.6	6.9	9.8	-	2.8	11	0	54	-	9	-	-2.1	12	1	19.7	-	51.2	-	5.0	1	-	-	-	-	-	-	-	-	-	-
	21-END	2.9	-	3	1	13.7	8.5	11.1	-	5.1	21	0	67	-	16	-	1.1	21	0	13.1	-	59.8	-	4.0	0	-	-	-	-	-	-	-	-	-	-
	MONTH	80.4	149	16	12	12.0	6.8	9.4	+0.9	2.8	11	0	152	111	26	124	-2.1	12	2	10.7	+0.7	136.6	77	4.5	4	54	-	-	-	-	-	-	-	-	-

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 2 GLOBAL RADIATION

STATION	PERIOD	AMOUNT MJ/m ²
Malin Head Co. Donegal	1-10	84.71
	11-20	125.50
	21-end	116.87
	Month	327.08
Dublin Airport Co. Dublin	1-10	68.12
	11-20	131.00
	21-end	145.75
	Month	344.87
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	100.10
	11-20	105.24
	21-end	151.11
	Month	356.45
Kilkenny Co. Kilkenny	1-10	83.73
	11-20	133.73
	21-end	165.97
	Month	383.43
Belmullet Co. Mayo	1-10	88.11
	11-20	110.65
	21-end	115.94
	Month	314.70
Clones Co. Monaghan	1-10	67.41
	11-20	113.22
	21-end	133.09
	Month	313.72
Birr Co. Offaly	1-10	85.60
	11-20	120.89
	21-end	143.96
	Month	350.45

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	3.3	-	0	57
	11-20	12.8	11	11	-
	21-end	21.0	19	30	-
	Month	37.1	-	-	-
Kinsealy Co. Dublin	1-10	4.9	-	0	54
	11-20	13.5	11	11	-
	21-end	22.5	20	31	-
	Month	39.9	-	-	-
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	8.8	-	0	19
	11-20	5.8	-	0	10
	21-end	17.5	9	9	-
	Month	32.1	-	-	-
Ballinamore Co. Leitrim	1-11	8.3	-	0	19
	12-20	10.2	4	4	-
	21-29	15.8	15	19	-
	Month	34.3	-	-	-
Glenamoy Co. Mayo	1-10	2.5	-	0	15
	11-20	9.9	-	0	9
	21-end	13.9	1	1	-
	Month	26.3	-	-	-
Johnstown Castle Co. Wexford	1-10	4.7	-	0	83
	11-20	7.8	-	0	-
	21-end	17.9	15	15	-
	Month	30.4	-	-	-

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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	7.7	6.2	5.1	-0.2
	11-20	11.3	9.5	7.1	-0.9	N/A	N/A
	21-end	13.4	11.4	9.5	-1.0	N/A	N/A
Mineral	1-10	8.2	6.3	5.1	0.0	64	43
	11-20	12.1	9.6	6.9	-0.6	125	N/A
	21-end	14.8	11.8	9.3	-0.6	329	N/A

RECENT TRENDS IN SPRING TEMPERATURE

An examination of the long term averages of 5-day mean soil temperature (100mm) reveals minimum values in January and early February. A slow recovery later in February accelerates through March to May with an occasional check in the rise occurring. Start of grass growth (corresponding to 6°C) takes place early February in extreme southern areas and about mid-March in midland areas. Whereas the long term average soil temperature curve during spring (based on data over a period of twenty years 1957-'76) is fairly uniformly increasing, actual yearly values show considerable variation about the mean conditions representing a succession of cold and warm spells.

Comparisons with the data on cold and warm spells (negative or positive deviations from the average) for the first six months over the most recent eleven years (1977-'87) reveal interesting anomalies in the relative frequencies of the different spells (Table 1). These anomalies can have important consequences for the growth pattern of all crops during the first half of the year.

It is clear from Table 1 that there is a distinct tendency in recent years for cold spells to dominate around mid-January at Dublin Airport. This tendency is not as evident from the data at Birr and Cahirciveen although the high frequency of cold spells at the end of the month is reflected at all stations. There is no clear evidence from the data at Dublin Airport of any preferred states in February but at Cahirciveen, cold spells are predominant after the end of the second week. The situation in March is most illuminating; warm spells clearly dominate the early part of the month at all stations and cold spells are established during the latter stages of the month. The effect on growth may be visualized by considering that the normal curve of increasing temperature in March is thereby inclined more to the horizontal as the temperature recovery is terminated or reversed. The forward grass growth from the early high temperatures may be welcome but the momentum in grass production has not always been maintained in recent times or ceases entirely later in the month in some years.

The relative frequencies of cold and warm spells in April are little different from the expected values although the situation at Birr clearly shows that the tendency for cold spells, evident in early May, has already been established during the final ten day period of April. The predominance of cold spells from 6 to 15th June also suggests another substantial check to growth has very frequently occurred in recent years in early summer.

Table 1
(1977-'87*)

5-day spells	Dublin Airport						Birr						Cahirciveen					
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
January																		
Cold	5	7	9	9	6	8	5	7	7	6	6	8	4	5	5	6	6	7
Warm	6	4	2	2	5	3	6	4	4	5	5	3	7	6	6	5	5	4
February																		
Cold	5	4	7	6	5	5	5	4	6	7	5	4	4	5	8	6	5	4
Warm	6	7	4	5	6	6	6	7	4	4	6	7	7	6	3	5	6	7
March																		
Cold	1	3	4	7	8	9	2	2	4	7	8	9	2	2	5	8	8	8
Warm	10	8	7	4	3	2	9	9	6	4	2	2	9	9	6	3	3	3
April																		
Cold	6	7	6	5	6	7	6	6	7	5	8	7	7	6	6	6	7	6
Warm	5	4	5	6	5	4	5	5	4	6	3	4	4	5	5	5	4	5
May																		
Cold	8	7	3	4	4	5	9	7	4	4	5	5	7	6	5	5	4	5
Warm	2	3	7	6	6	5	1	3	6	5	5	5	3	4	5	5	6	5
June																		
Cold	5	6	8	6	5	7	5	8	9	6	7	6	5	8	8	6	6	6
Warm	5	4	2	3	4	3	5	2	1	4	3	3	5	2	2	4	4	4

*'86 for May and June

(to be continued)