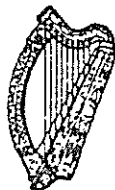


METEOROLOGICAL SERVICE



AGROMETEOROLOGICAL BULLETIN

MAY 1981

The Weather of May

Frequent troughs of low pressure in the vicinity of Ireland throughout much of May resulted in generally broken weather with frequent spells of heavy rain and showers. Drying conditions were poor and fields became waterlogged in many instances before the end of the month.

Sharp ground frost occurred in some inland places on the 2nd when skies cleared, due to the influence of a minor ridge of high pressure, but for most days up to the 7th there were spells of heavy rain, and variable winds; Maximum daytime temperatures were below normal.

An influx of warm and humid conditions on the 8th preceded a short spell of dry and sunny weather which occurred between the 9th and 12th. Daytime maximum temperatures in this period rose to between 17°C and 20°C , reaching 23°C at Clones on the 12th.

A thundery trough over the country for most of the time from the 13th to the 18th brought periods of heavy rain and thundery showers to all places. Daytime maximum temperatures were below normal however, in this spell, mostly ranging from 13°C to 15°C , and sunshine amounts were variable.

With the onset of warm humid weather conditions on the 19th there were prolonged spells of heavy rain and drizzle up to the 22nd; daily maximum temperatures in this period varied between 16°C and 18°C .

Further thundery troughs affected the country between the 23rd, and 27th, giving widespread heavy rain or showers, some of hail. Humid conditions returned again on the 30th and 31st.

Monthly Amounts of Precipitation varied from 278% of normal at Mallow to 149% of normal at Dublin Airport. The number of raindays and wetdays were both well above average, in many instances ranging between 80% and 100% above average. Weather conditions were frequently favourable for the spread of potato blight, especially in southern regions during the second half of the month. The number of effective blight hours at Roche's point was 60% above average, much of it occurring in the period 19th to 22nd. Following this spell a number of observations were made of blight in the early potato crop.

Mean Monthly Air Temperature was near or below normal. values varied from 0.5°C to 0.6°C below normal in the south and west to 0.2°C above normal in the east. Soil temperatures (100mm) varied from 1.0°C below normal at Shannon Airport to 0.1°C below normal at Malin Head.

Mean Duration of Bright Sunshine was below normal everywhere and well below normal in the southwest. Values varied from 56% of normal at Valentia to 85% of normal at Rosslare.

Gale Gusts occurred on the 3rd, 15th, 18th, 21st, 23rd and 24th.

Summary Rainfall was well above normal everywhere. It was the wettest May at Cahirciveen since 1913. Mean air temperature was below normal in the south and west and near normal elsewhere. The month was dull, it being the dullest May at Cahirciveen since records began in the area in 1880.

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 Solar Radiation at stations; marked "e" in Table 2 will be published in the Annual Summary of Solar Radiation.

TABLE 1

May 1981

STATION	PERIOD	RAINFALL (MM.)				TEMPERATURE °C													BRIGHT SUNSHINE		WIND		
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	MEAN MAX.	MEAN MIN.	MEAN DAILY	AND DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST ABOVE 4.0°C	DAYS WITH AIR FROST ABOVE 10.0°C	LOWEST "GRASS-MIN." #	DATE	DAYS WITH GROUND FROST	MEAN DAILY SOIL (10 CM)	DIFFERENCE FROM AVERAGE	MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (ms ⁻¹)	DAYS WITH GALE GUSTS	
Carlow (Oak Park) Co. Carlow	1-10	24.4		8	7	12.7	5.7	9.2		0.0	02	0	48	5	0.0	05			4.82		2		
	11-20	62.5		8	8	14.7	7.6	11.2		4.0	11	0	68	13	0.5	11			4.58		2		
	21-end	33.5		8	7	15.0	8.0	11.5		3.0	25	0	79	19	-0.5	25	1		4.27		4		
	Month	120.4		24	22	14.1	7.1	10.6		0.0	02	0	195	37	-0.5	25	1		4.55		3		
Shannon Airport Co. Clare	1-10	48.2	-	8	8	12.9	7.1	10.0		1.3	02	0	56	7	-0.9	02	1	10.7		4.18		6	4
	11-20	38.1	-	7	7	15.1	8.6	11.9		7.2	16	0	75	19	2.1	19	0	12.6		5.00		6	2
	21-end	54.8	-	9	8	14.9	9.3	12.1		4.4	25	0	85	25	-0.5	25	1	13.1		2.88		5	2
	Month	141.1	221	24	23	14.3	8.3	11.3	-0.2	1.3	02	0	216	51	-0.9	02	2	12.2	-1.0	3.98	62	6	8
Fermoy (Moore Park) Co. Cork	1-10	51.2		9	8	13.6	6.4	10.0		1.4	02	0	56	7	-1.4	02	1		4.28		4		
	11-20	63.8		8	7	14.6	6.9	10.8		4.3	16	0	64	11	0.0	14	0		5.47		4		
	21-end	62.3		11	8	14.9	8.0	11.5		0.6	25	0	78	20	-3.4	25	1		3.86		3		
	Month	177.3	261	28	23	14.4	7.1	10.8		0.6	25	0	198	38	-3.4	25	2		4.52		4		
Mallow Co. Cork	1-10	62.4	-	9	9	13.7	6.9	10.3		1.2	02	0	59	9	-0.3	02	1		3.63				
	11-20	92.1	-	6	6	14.8	7.2	11.0		3.9	14	0	66	13	1.5	14	0		4.78				
	21-end	56.8	-	11	8	14.7	7.9	11.3		0.7	25	0	76	17	-1.2	25	1		3.52				
	Month	211.3	278	26	23	14.4	7.3	10.9		0.7	25	0	201	39	-1.2	25	2		3.96				
Roche's Point Co. Cork	1-10	46.7	-	10	8	12.7	7.4	10.0		3.0	02	0	56	5	1.1	02	0	11.0		5.22		7	4
	11-20	56.0	-	7	7	13.6	8.9	11.2		6.9	14	0	68	13	3.6	14	0	12.4		6.08		6	4
	21-end	34.0	-	9	4	13.4	9.0	11.2		5.0	25	0	75	14	-0.8	25	2	13.0		5.52		6	3
	Month	136.7	210	26	19	13.2	8.4	10.8	-0.5	3.0	02	0	199	32	-0.8	25	2	12.2	-0.7	5.60	84	6	11
Glencolumbkille Co. Donegal	1-10	49.4		8	7	11.5	4.9	8.2		2.5	02	0	38	2	-4.3	02	3		5.13		4		
	11-20	93.4		9	9	13.7	7.9	10.8		7.0	17	0	64	9	0.2	11	0		4.58		4		
	21-end	46.8		10	8	14.7	8.4	11.6		5.0	25	0	80	18	-2.0	25	2		4.81		3		
	Month	189.6		27	24	13.3	7.1	10.2		2.5	02	0	182	29	-4.3	02	5		4.84		4		
Glenties Co. Donegal	1-10	43.8	-	7	7	12.3	3.6	8.0		-2.5	02	2	36	2	-6.7	02	4		4.10				
	11-20	83.1	-	9	9	14.8	7.3	11.1		5.0	11	0	66	13	0.0	11	0		4.32				
	21-end	34.3	-	8	6	15.4	7.9	11.7		4.5	28	0	80	19	0.0	28	0		3.44				
	Month	161.2	181	24	22	14.2	6.3	10.3		-2.5	02	2	182	34	-6.7	02	4		3.90				

Notes on the tables in January issue

TABLE 1 (Continued)

May 1981

STATION	PERIOD	RAINFALL (MM.)				TEMPERATURE °C												BRIGHT SUNSHINE		WIND			
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR						GROUND						MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (m.s.-1)	DAYS WITH GALE GUSTS		
						MEAN MAX.	MEAN MIN.	MEAN DAILY	AND DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4°C	DEGREE DAYS ABOVE 10.0°C	LOWEST °GRASS-MIN. °	DATE	DAYS WITH GROUND FROST					MEAN DAILY	DIFFERENCE FROM AVERAGE
Malin Head Co. Donegal	1-10	47.2	-	8	7	10.4	6.0	8.2	-	1.6	05	0	38	0	-1.4	05	1	10.1	-	3.64	-	6	5
	11-20	49.6	-	9	6	13.5	8.4	10.9	-	6.8	18	0	65	0	4.0	11	0	12.1	-	4.50	-	6	5
	21-end	18.7	-	7	5	14.0	8.7	11.4	-	6.0	28	0	77	0	0.9	26	0	13.6	-	5.00	-	5	4
	Month	115.5	199	24	18	12.7	7.7	10.2	0.0	1.6	05	0	180	26	-1.4	05	1	12.0	-0.1	4.40	66	6	14
Casement Aerodrome Co. Dublin	1-10	36.2	-	7	6	12.7	4.3	8.5	-	-1.3	02	1	41	4	-5.6	02	4	9.9	-	4.88	-	5	4
	11-20	79.3	-	7	7	15.6	7.2	11.4	-	3.5	11	0	70	15	-0.3	11	1	12.4	-	5.61	-	5	3
	21-end	32.4	-	8	5	14.5	6.8	10.7	-	2.4	25	0	72	17	-1.9	25	1	13.1	-	4.52	-	4	3
	Month	147.9	247	22	18	14.3	6.1	10.2	-0.4	-1.3	02	1	183	36	-5.6	02	6	11.9	-	4.99	77	5	10
Dublin Airport Co. Dublin	1-10	29.1	-	8	6	12.5	5.6	9.1	-	0.8	02	0	47	5	-2.4	02	4	10.9	-	5.22	-	5	1
	11-20	37.7	-	9	7	14.8	8.0	11.4	-	5.2	11	0	70	16	0.6	11	0	13.3	-	5.60	-	5	3
	21-end	25.5	-	7	5	15.3	8.4	11.9	-	5.5	25	0	83	21	0.2	25	0	13.8	-	4.79	-	4	2
	Month	92.3	149	24	18	14.2	7.4	10.8	0.2	0.8	02	0	200	42	-2.4	02	4	12.7	-0.2	5.19	80	5	6
Kinsealy Co. Dublin	1-10	25.2	-	7	6	12.3	4.3	8.3	-	1.5	02	0	39	3	-3.8	09	5	4.00	-	4.00	-	4	4
	11-20	34.2	-	9	7	14.8	7.8	11.3	-	4.2	11	0	69	14	1.4	11	0	13.3	-	5.20	-	4	4
	21-end	34.1	-	7	7	15.6	7.5	11.5	-	2.2	25	0	78	20	-1.2	25	2	13.8	-	4.74	-	4	4
	Month	93.5	158	23	20	14.3	6.6	10.4	-	1.5	02	0	186	37	-3.8	09	7	12.7	-	4.65	-	4	4
Galway Co. Galway	1-10	56.6	-	9	8	12.6	6.1	9.3	-	1.1	02	0	50	4	-0.6	02	1	11.2	-	4.52	-	5	2
	11-20	42.0	-	8	6	15.1	7.9	11.5	-	5.1	16	0	71	15	4.5	16	0	13.1	-	6.09	-	5	2
	21-end	61.4	-	9	6	14.6	8.9	11.8	-	5.0	25	0	81	20	2.7	25	0	14.1	-	4.52	-	5	2
	Month	160.0	213	26	20	14.1	7.7	10.9	-0.5	1.1	02	0	202	39	-0.6	02	1	12.8	-	5.03	-	5	6
Killarney (Muckross Hill) Co. Kerry	1-10	83.4	-	9	8	12.4	7.3	9.9	-	1.1	02	0	55	6	-2.6	02	1	3.40	-	3.40	-	4	4
	11-20	107.8	-	9	8	13.8	8.0	10.9	-	5.9	14	0	66	12	0.5	14	0	3.99	-	3.99	-	6	4
	21-end	75.2	-	10	10	14.0	8.5	11.2	-	2.8	25	0	75	16	0.4	25	0	3.52	-	3.52	-	6	4
	Month	266.4	-	28	28	13.4	8.0	10.7	-	1.1	02	0	196	34	-2.6	02	1	3.63	-	3.63	-	6	1
Cahiriveen (Valentia Obay.) Co. Kerry	1-10	62.0	-	10	10	12.6	7.5	10.4	-	3.1	02	0	57	6	1.1	02	0	11.4	-	3.09	-	6	4
	11-20	34.0	-	7	7	14.9	8.3	11.3	-	6.0	14	0	69	13	4.0	14	0	13.1	-	4.48	-	6	4
	21-end	56.4	-	10	10	14.0	8.7	11.3	-	4.5	25	0	76	16	1.8	28	0	13.5	-	3.2	-	6	1
	Month	152.4	171	27	24	13.7	8.2	10.9	-0.6	3.1	02	0	202	35	1.1	02	0	12.7	-0.5	3.63	56	6	9

Notes on the tables in January issue

TABLE 1 (Continued)

May 1981

STATION	PERIOD	RAINFALL (MM.)				TEMPERATURE °C											WIND						
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR						GROUND						SOIL (10 CM)	BRIGHT SUNSHINE				
						MEAN MAX.	MEAN MIN.	MEAN DAILY	AND DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST ABOVE 4.0°C	DAYS WITH AIR FROST ABOVE 10.0°C	LOWEST "GRASS-MIN."	DATE	DAYS WITH GROUND FROST				MEAN DAILY	DIFFERENCE FROM AVERAGE		
Belmullet Co. Mayo	1-10	51.3	-	8	8	5.8	8.4	-	3.0	09	0	40	0	-0.1	09	1	10.7	-	3.85	-	7	4	
	11-20	22.1	-	8	6	7.7	11.3	-	6.5	17	0	69	14	4.3	12	0	12.7	-	4.99	-	6	3	
	21-end	41.6	-	10	6	8.4	11.5	-	6.7	25	0	78	17	1.4	28	0	13.8	-	4.28	-	6	2	
	Month	115.0	172	26	20	7.3	10.4	-0.6	3.0	09	0	187	31	-0.1	09	1	12.4	-0.2	4.37	64	9	9	
Claremorris Co. Mayo	1-10	38.0	-	8	6	4.9	8.7	-	0.2	02	0	43	2	-2.7	02	2	10.3	-	3.38	-	4	1	
	11-20	51.2	-	8	7	7.1	11.1	-	5.4	11	0	67	12	3.5	11	0	10.8	-	4.04	-	4	2	
	21-end	46.5	-	8	6	7.7	11.5	-	2.3	25	0	78	18	0.4	25	0	13.1	-	4.23	-	4	1	
	Month	135.7	186	24	19	6.6	10.5	0.0	0.2	02	0	188	32	-2.7	02	2	11.4	-0.6	3.89	-	4	4	
Glenamoy Co. Mayo	1-10	52.5	-	8	7	4.9	8.1	-	0.9	09	0	37	0	-0.7	09	1	-	-	3.72	-	NA	-	
	11-20	35.5	-	8	7	7.3	11.2	-	5.5	12	0	68	13	3.4	19	0	-	-	4.05	-	-	-	
	21-end	38.5	-	9	5	7.8	11.3	-	4.2	25	0	76	15	2.0	25	0	-	-	3.70	-	-	-	
	Month	126.5	149	25	19	6.7	10.2	-	0.9	09	0	181	28	-0.7	09	1	-	-	3.82	-	-	-	
Dunsany (Grange) Co. Meath	1-10	45.0	-	-	-	-	-	-	Not available						-	-	-	-	-	5.90	-	-	-
	11-20	53.2	-	-	-	-	-	-	Not available						-	-	-	-	-	5.01	-	-	-
	21-end	35.5	-	NA	NA	-	-	-	Not available						-	-	-	-	-	3.10	-	-	-
	Month	133.7	209	-	-	-	-	-	Not available						-	-	-	-	-	4.62	-	-	-
Clones Co. Monaghan	1-10	33.9	-	8	7	4.6	8.4	-	0.3	02	0	40	4	-2.6	02	3	10.0	-	5.31	-	4	2	
	11-20	77.1	-	9	8	7.3	11.6	-	5.5	18	0	72	17	2.7	11	0	12.1	-	4.87	-	4	1	
	21-end	23.0	-	9	7	7.6	11.6	-	4.7	26	0	79	17	1.2	26	0	12.7	-	3.13	-	3	1	
	Month	134.0	194	26	22	6.6	10.6	0.1	0.3	02	0	191	38	-2.6	02	3	11.6	-0.7	4.39	75	4	4	
Birr Co. Offaly	1-10	30.1	-	8	6	5.4	8.9	-	-0.1	02	1	45	3	-4.0	02	2	11.1	-	4.90	-	4	2	
	11-20	48.5	-	9	9	7.4	11.3	-	4.1	11	0	69	14	-0.2	11	1	13.0	-	5.38	-	4	2	
	21-end	37.4	-	8	7	8.1	11.7	-	2.7	25	0	80	19	-0.6	25	1	14.0	-	3.42	-	3	1	
	Month	116.0	176	25	22	7.0	10.7	-0.3	-0.1	02	1	194	36	-4.0	02	4	12.8	-0.2	4.53	72	4	5	
Thurles Co. Tipperary	1-10	-	-	-	-	-	-	-	Not available						-	-	-	-	-	-	-	-	-
	11-20	-	-	-	-	-	-	-	Not available						-	-	-	-	-	-	-	-	-
	21-end	-	-	-	-	-	-	-	Not available						-	-	-	-	-	-	-	-	

Notes on the tables in January issue

TABLE 1 (Continued)

May 1981

STATION	PERIOD	RAINFALL (MM.)			TEMPERATURE °C										BRIGHT SUNSHINE		WIND						
		AMOUNT	% OF AVERAGE	WET DAYS	AIR					GROUND					SOIL (10 CM)		MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (ms ⁻¹)	DAYS WITH GALE GUSTS			
					MEAN MAX.	MEAN MTN.	MEAN DAILY	DIFFERENCE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4°C	DEGREE DAYS ABOVE 10.0°C	LOWEST "GRASS-MIN."	DATE	DAYS WITH GROUND FROST	MEAN DAILY	DIFFERENCE					
Dungarvan (Ballygagin) Co. Waterford	1-10	57.3		9	13.4	7.6	10.5		2.7	02	0	61	8	-1.0	02	1							
	11-20	67.0		8	14.8	8.1	11.5		5.0	15	0	70	16	0.7	16	0							NA
	21-end	55.0		9	15.6	9.3	12.5		3.0	25	0	88	28	-0.8	25	1							
	Month	179.8	237	26	14.6	8.4	11.5		2.7	02	0	219	52	-1.0	02	2							
Mullingar Co. Westmeath	1-10	41.8		8	12.2	4.8	8.5		0.7	02	0	41	2	-1.8	02	4	10.1						5
	11-20	51.5		9	15.4	7.3	11.3		4.6	11	0	70	15	1.7	11	0	12.2						4
	21-end	42.9		10	15.3	7.6	11.4		2.9	25	0	77	17	0.7	26	0	12.8						4
	Month	136.2	195	27	14.3	6.6	10.4		0.7	02	0	188	34	-1.8	02	4	11.7	-0.7					4
Campile (Ballysop) Co. Wexford	1-10	32.9		10	12.9	6.2	9.6		1.6	02	0	52	4	-1.4	02	1							
	11-20	73.5		9	14.3	7.9	11.1		6.0	14	0	67	12	2.0	19	0							NA
	21-end	43.7		6	14.6	8.0	11.3		3.0	25	0	76	16	-1.1	25	1							
	Month	150.1	218	25	13.9	7.4	10.7		1.6	02	0	195	32	-1.4	02	2							
Clonroche Co. Wexford	1-10	38.0		9	12.1	5.8	9.0		1.6	02	0	46	1	-3.0	09	4							3
	11-20	72.3		9	14.3	7.6	11.0		6.0	19	0	66	11	-0.5	19	1							3
	21-end	58.5		8	14.4	7.7	11.1		2.0	25	0	74	14	-4.5	25	2							3
	Month	168.8	199	26	13.6	7.0	10.3		1.6	02	0	186	26	-4.5	25	7							3
Johnstown Castle Co. Wexford	1-10	31.4		8	11.9	6.1	9.0		2.6	02	0	46	2	-1.8	05	4							4
	11-20	54.3		9	14.1	7.9	11.0		5.7	11	0	66	12	1.3	11	0							5
	21-end	47.1		6	13.8	8.0	10.9		4.2	25	0	73	13	-0.5	25	1							5
	Month	132.8	182	23	13.3	7.3	10.3		2.6	02	0	185	27	-1.8	05	5							5
Rosslare Co. Wexford	1-10	28.2		6	11.7	7.2	9.4		4.7	02	0	50	2	-0.3	05	1	10.8						7
	11-20	51.6		8	13.5	9.1	11.3		7.6	14	0	68	13	2.1	11	0	13.4						5
	21-end	48.9		8	13.7	9.4	11.6		6.7	25	0	78	17	-0.3	25	1	14.0						6
	Month	128.7	201	22	13.0	8.6	10.8		4.7	02	0	198	32	-0.3	25	2	12.8	-0.5					6

Notes on the tables in January issue

TABLE 2 SOLAR RADIATION (GLOBAL), POTENTIAL EVAPOTRANSPIRATION (P.E.) AND SOIL MOISTURE

STATION	PERIOD	SOLAR RADIATION Amount 2 Joule/cm	P. E. (mm) Amount	SOIL MOISTURE (mm)		
				Deficit	Accumulated Deficit	Surplus
Carlow (Oak Park) Co. Carlow	1-10		19	-	5	5
	11-20		24	-	0	38
	21-end		9	-	0	25
	Month		52	-	-	-
Kinsealy* Co. Dublin	1-10	13581	20	-	0	5
	11-20	15176	16	-	0	18
	21-end	16982	19	-	0	15
	Month	45739	55	-	-	-
Cabirciveen ^e (Valentia Obsy.) Co. Kerry	1-10	11484	12	-	0	51
	11-20	17142	8	-	0	23
	21-end	17107	15	-	0	42
	Month	45733	35	-	-	-
Kilkenny ^e Co. Kilkenny	1-10	15363	-	-	-	-
	11-20	15744	-	-	-	-
	21-end	18115	-	-	-	-
	Month	49222	-	-	-	-
Ballinamore Co. Leitrim	1-10		15	-	0	34
	11-20		20	-	0	42
	21-end		16	-	0	27
	Month		51	-	-	-
Glenamoy/ Co. Mayo	1-10		14	-	0	38
	11-20		23	-	0	12
	21-end		18	-	0	21
	Month		55	-	-	-
Birr ^e Co. Offaly	1-10	13724	-	-	-	-
	11-20	15870	-	-	-	-
	21-end	17021	-	-	-	-
	Month	46615	-	-	-	-
Johnstown Castle Co. Wexford	1-10		24	-	0	7
	11-20		22	-	0	33
	21-end		24	-	0	24
	Month		70	-	-	-

* , /, See notes in January issue.

