

METEOROLOGICAL SERVICE



FEBRUARY 1985

AGROMETEOROLOGICAL BULLETIN

The weather of February

Mild conditions in a southeast to southwest airflow prevailed from 1st to 9th with associated rainbelts. Rain was especially heavy on 6th and 7th. Rising pressure to the northeast of the country resulted in very cold and dry conditions, and moderate to fresh southeast winds dominated from 10th to 17th; occasional outbreaks of snow occurred in the extreme south and southwest in this spell. A ridge of high pressure on 18th gave way later in the day to a southwest airflow. Rain, first reaching the northwest, spread to all areas on 19th with fog in many places. This was followed by a clearance to bright conditions.

A ridge on 20th preceded generally milder conditions as a weak frontal rainbelt moved northwards over the country. A cold front followed from the west on 21st. A ridge overnight on 21st/22nd preceded the return of milder conditions in strong southwest winds and some outbreaks of rain. The mild conditions generally persisted although anticyclonic conditions became dominant and in light southeast winds some night frost occurred.

A southwesterly airflow set in as pressure declined to some intent on 25th and rain occurred with the passage of a frontal trough over the country. Subsequently a south to southeast airflow dominated; there was some rain on most days, especially on 28th.

Precipitation:

Monthly rainfall amounts were well below normal generally except in the coastal areas of the south and east. Values varied from 36% of normal at Glenties to 147% at Dungarvan (Carriglea). Wettest days occurred from 6th to 8th when falls were particularly heavy in the south, on 19th and in the southwest on 28th.

Temperature:

Mean monthly air temperature was near normal or above in most places. Values varied from 1.4°C above normal at Valentia Observatory to 0.4°C below at Belmullet. A cold spell dominated the second decade, otherwise conditions were mild. Soil temperatures (100mm) varied from 1.0°C and 3.0°C above normal in the first and third decade periods to 2.0°C and 3.5°C below in many places in the second decade. Ground conditions were frozen throughout much of this second decade; air frost and sharp to severe ground frost were widespread, the frost being particularly so on 13th, 17th and 18th.

Sunshine and Radiation:

Total duration of bright sunshine was particularly below normal except in the midlands, east and some coastal areas. Duration varied from 103% of normal at Malin Head to 31% at Cork Airport. Global radiation was 84% of average at Birr and Kilkenny and 119% at Dublin Airport.

Wind:

Strong winds with gale gusts were prevalent from 7th to 11th, 14th to 16th, 22nd/23rd and 28th.

Summary:

Very dry and dull except in the midlands and east. Temperature varied greatly, very mild early and late in the month with a very cold middle ten-days. The winter (December to February) was relatively cold and dry.

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 I

FEBRUARY 1985

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	DEGREES DAYS ABOVE 4.4°C	% OF AVERAGE	DEGREES DAYS ABOVE 10.0°C	% OF AVERAGE	LOWEST "GRASS-MIN"	DATE	DEGREES DAYS ABOVE 4.4°C	% OF AVERAGE							
Carlow (Oak Park) Co. Carlow	1-10	27.5	-	4	3	7.8	5.0	6.4	-	-1.4	10	1	27	-	1	-2.0	10	1	-	-	3.7	-	4.6	-	-	
	11-20	1.5	-	2	1	3.9	-1.7	1.1	-	-5.4	18	9	4	-	0	-10.0	18	9	-	-	28.9	-	3.8	-	-	
	21-END	9.6	-	4	3	10.7	3.0	6.8	-	0.6	22	0	22	-	2	-3.6	22	4	-	-	16.2	-	4.2	-	-	
	MONTH	38.6	67	10	7	7.2	2.0	4.6	-	-5.4	18	10	53	-	2	-10.0	18	14	-	-	48.8	-	4.2	-	N/A	
Shannon Airport Co. Clare	1-10	24.8	-	5	4	9.5	6.1	7.8	-	0.3	10	0	37	-	2	0.4	10	0	7.0	-	3.5	-	6.2	3	-	
	11-20	4.4	-	3	1	4.8	-0.1	2.4	-	-1.6	18	7	6	-	0	-5.2	18	10	2.0	-	11.2	-	6.2	4	-	
	21-END	5.4	-	3	2	11.5	5.1	8.3	-	2.1	22	0	32	-	3	-1.7	22	3	6.1	-	15.7	-	5.0	1	-	
	MONTH	34.6	55	11	7	8.4	3.6	6.0	+0.7	-1.6	18	7	75	104	5	-5.2	18	13	5.0	-0.0	30.4	41	5.9	8	19	
Cork Airport Co. Cork	1-10	90.0	-	9	7	9.3	6.1	7.7	-	0.0	10	0	36	-	1	-0.6	9	1	7.3	-	4.6	-	8.0	5	-	
	11-20	12.3	-	7	3	4.0	0.3	2.2	-	-2.1	12	6	5	-	0	-7.1	18	8	2.7	-	4.3	-	8.5	4	-	
	21-END	25.6	-	3	1	9.8	5.4	7.6	-	0.8	22	0	27	-	1	-5.4	22	2	6.6	-	13.0	-	7.6	3	-	
	MONTH	127.9	121	19	11	7.6	3.8	5.7	+0.8	-2.1	12	6	67	120	2	-7.1	18	11	5.5	+0.8	21.9	31	8.1	12	12	
Fermoy (Coolnakillia) Co. Cork	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
Fermoy (Moore Park) Co. Cork	1-10	75.0	-	7	5	9.2	6.4	7.8	-	0.4	10	0	37	-	2	-0.5	9	2	-	-	20.0	-	3.9	-	-	
	11-20	7.5	-	3	3	4.4	-0.2	2.1	-	-5.9	18	6	6	-	0	-10.3	18	9	-	-	7.9	-	3.8	-	-	
	21-END	19.8	-	2	1	11.2	4.3	7.7	-	-0.7	22	1	29	-	2	-7.1	22	3	-	-	17.8	-	2.8	-	-	
	MONTH	102.3	129	12	9	8.0	3.4	5.7	-	-5.9	18	7	72	-	4	-10.3	18	14	-	-	27.7	-	3.6	-	6	
Roches Point Co. Cork	1-10	65.6	-	8	6	9.6	7.0	8.3	-	1.3	10	0	40	-	1	-1.5	10	0	8.0	-	4.9	-	7.0	4	-	
	11-20	8.0	-	3	3	5.0	2.0	3.5	-	-1.2	12	1	7	-	0	-2.2	18	3	3.5	-	6.7	-	8.1	5	-	
	21-END	15.5	-	2	1	9.8	7.1	8.4	-	3.9	22	0	32	-	0	-1.4	22	1	7.8	-	18.1	-	6.1	1	-	
	MONTH	89.1	111	13	10	8.0	5.3	6.6	+0.5	-1.2	12	1	80	103	1	-2.2	18	4	6.3	+0.4	29.7	40	7.1	10	16	
Glencolumbkille Co. Donegal	1-10	31.1	-	6	5	7.3	4.0	5.7	-	-0.5	9	1	22	-	1	-4.6	10	5	-	-	13.9	-	7.4	-	-	
	11-20	13.4	-	4	2	4.7	-1.0	1.8	-	-3.0	16	6	4	-	0	-8.8	13	10	-	-	32.4	-	5.5	-	-	
	21-END	8.5	-	4	2	10.5	4.2	7.3	-	2.0	22	0	25	-	1	-5.0	25	5	-	-	N/A	-	4.3	-	-	
	MONTH	53.0	-	14	9	7.2	2.3	4.8	-	-3.0	16	7	51	-	2	-8.8	13	20	-	-	N/A	-	5.9	-	N/A	

TABLE I (CONTINUED)

FEBRUARY 1985

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)												BRIGHT SUNSHINE		WIND					
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR				LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4°C	% OF AVERAGE	DEGREE DAYS ABOVE 10.0°C	% OF AVERAGE	GROUND		SOIL (10cm)	TOTAL NO. OF HOURS	% OF AVERAGE	MEAN SPEED (m s⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)	
						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE								MEAN DAILY	DIFERENCE FROM AVERAGE							
Glenties Co. Donegal	1-10	19.6	-	4	4	7.3	3.9	5.6	-	-0.9	10	2	22	-	1	-	-2.5	10	3	-	-	16.7	-	-	-
	11-20	10.3	-	2	1	4.7	-1.6	1.6	-	-2.7	20	8	4	-	0	-	-7.9	14	9	-	-	31.8	-	-	-
	21-END	9.4	-	2	1	10.7	4.1	7.4	-	1.9	21	0	26	-	2	-	-1.7	21	5	-	-	15.0	-	-	-
	MONTH	39.3	36	6	6	7.4	2.0	4.7	-	-2.7	20	10	52	-	2	-	-7.9	14	17	-	-	63.5	-	-	-
Malin Head Co. Donegal	1-10	21.5	-	5	4	7.0	4.0	5.5	-	-0.7	10	1	20	-	0	-	-1.5	10	2	5.0	-	14.5	-	12.1	7
	11-20	8.2	-	2	2	4.5	0.0	2.3	-	-2.1	12	6	4	-	0	-	-6.5	12	10	0.9	-	30.9	-	10.3	8
	21-END	3.8	-	1	1	10.1	4.6	7.3	-	3.1	25	0	25	-	1	-	-2.4	25	3	5.7	-	20.3	-	9.2	6
	MONTH	33.5	45	8	7	7.0	2.8	4.9	-0.2	-2.1	12	7	49	89	2	-	-6.5	12	15	3.8	-0.6	65.7	103	10.6	21
Casement Aerodrome Co. Dublin	1-10	17.8	-	5	3	8.2	4.7	6.4	-	-2.1	10	1	29	-	1	-	-3.6	10	1	5.9	-	16.2	-	7.4	6
	11-20	1.5	-	1	1	4.3	-1.8	1.3	-	-6.0	18	8	4	-	0	-	-13.5	18	10	0.9	-	35.2	-	6.9	6
	21-END	5.1	-	2	1	11.4	3.3	7.4	-	0.1	21	0	27	-	3	-	-5.6	25	6	5.0	-	22.6	-	5.6	3
	MONTH	24.4	48	6	5	7.7	2.0	4.9	+0.5	-6.0	18	9	60	113	4	-	-13.5	18	17	3.9	-	74.0	102	6.7	21
Dublin Airport Co. Dublin	1-10	46.5	-	7	5	8.1	4.7	6.4	-	-1.9	10	1	27	-	1	-	-3.0	10	1	6.0	-	14.2	-	6.8	4
	11-20	2.5	-	1	1	4.4	-0.7	1.8	-	-4.0	18	5	3	-	0	-	-9.0	18	10	1.3	-	37.6	-	6.1	3
	21-END	7.2	-	2	2	10.2	4.3	7.5	-	2.5	21	0	24	-	1	-	-2.5	25	6	5.3	-	21.5	-	4.9	3
	MONTH	56.2	110	10	8	7.4	2.6	5.0	+0.2	-4.0	18	6	54	95	2	-	-9.0	18	17	4.1	-0.2	73.3	98	6.0	20
Kinsealy Co. Dublin	1-10	39.3	-	6	5	7.6	4.8	6.2	-	-1.2	10	1	25	-	1	-	-2.4	10	1	6.0	-	14.9	-	5.3	-
	11-20	3.8	-	2	1	4.3	-1.5	1.4	-	-5.5	18	8	2	-	0	-	-5.8	12	10	-	-	38.8	-	4.8	-
	21-END	9.2	-	2	2	9.9	3.1	6.5	-	-0.2	26	1	20	-	1	-	-4.6	26	6	-	-	22.4	-	3.8	-
	MONTH	52.3	105	10	8	7.1	2.0	4.6	-	-5.5	18	10	48	-	1	-	-5.8	12	17	-	-	76.1	-	4.8	N/R
Galway Co. Galway	1-10	30.7	-	6	3	8.6	5.4	7.0	-	-0.9	10	1	31	-	1	-	-0.2	10	1	6.7	-	3.3	-	6.1	4
	11-20	5.6	-	3	2	4.7	-1.4	1.7	-	-4.6	13	7	5	-	0	-	-6.0	13	9	1.2	-	15.3	-	6.0	4
	21-END	6.5	-	4	2	10.9	4.8	7.8	-	3.5	22	0	28	-	2	-	0.3	21	0	6.4	-	19.1	-	5.5	2
	MONTH	42.8	57	13	7	7.9	2.8	5.3	+0.3	-4.6	13	8	64	-	3	-	-6.0	13	10	4.7	-	37.7	51	5.9	17
Killarney (Muckross House) Co. Kerry	1-10	51.2	-	7	4	11.4	7.5	9.4	-	2.3	10	0	51	-	6	-	2.3	10	0	-	-	17.6	-	-	-
	11-20	4.8	-	5	1	5.5	1.0	3.3	-	-1.6	18	3	9	-	0	-	-6.1	18	7	-	-	8.2	-	-	-
	21-END	37.6	-	4	2	11.6	7.1	9.3	-	5.1	23	0	39	-	4	-	-1.3	21	1	-	-	14.1	-	-	-
	MONTH	93.6	68	16	7	9.3	5.1	7.2	-	-1.6	18	3	99	-	10	-	-6.1	18	8	-	-	39.9	-	-	-

TABLE 1 (CONTINUED)

FEBRUARY 1985

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)												BRIGHT SUNSHINE		WIND						
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DEGREES DAYS ABOVE 4.0°C	DEGREES DAYS ABOVE 10.0°C	DEGREE DAYS ABOVE 10.0°C	LOWEST "GRASS-MIN"	DATE	MEAN DAILY	Difference FROM AVERAGE	TOTAL NO. OF HOURS	% OF AVERAGE	MEAN SPEED (ms⁻¹)	Days with Gale Gusts	P.E. (Pennman) (mm)			
Cahirciveen 9 (Valentia Obsy.) Co. Kerry	1-10	48.7	-	7	4	11.5	7.6	9.6	-	2.4	10	0	52	-	3.2	9	0	8.7	-	10.3	-	6.6	5	-		
	11-20	10.5	-	4	2	6.9	2.7	4.8	-	1.5	15	0	12	-	-0.8	13	2	4.5	-	10.0	-	7.2	4	-		
	21-END	56.0	-	6	2	11.9	7.1	9.5	-	5.8	26	0	41	-	5	-	2.4	26	0	8.3	-	13.1	-	7.3	4	-
	MONTH	115.2	98	17	8	10.0	5.7	7.9	+1.4	1.5	15	0	106	115	11	138	-0.8	13	2	7.1	+1.0	33.4	48	7.0	13	25
Ardfert (Liscahane) Co. Kerry	1-10	19.8	-	4	3	10.8	6.9	8.9	-	1.6	10	0	47	-	5	-	-1.2	10	2	-	-	17.2	-	-	-	-
	11-20	2.8	-	2	2	5.3	0.7	3.0	-	-1.2	13	3	8	-	1	-	-5.2	13	9	-	-	9.7	-	-	-	-
	21-END	34.5	-	5	2	11.8	5.6	8.7	-	3.3	22	0	35	-	4	-	-4.2	24	4	-	-	14.5	-	-	-	-
	MONTH	57.1	-	11	7	9.1	4.3	6.7	-	-1.2	13	3	90	-	10	-	-5.2	13	15	-	-	41.4	-	-	-	-
Lullymore Co. Kildare	1-10	36.2	-	4	4	8.0	4.4	6.2	-	-2.2	10	1	26	-	1	-	-3.5	10	3	-	-	14.5	-	4.9	-	-
	11-20	8.4	-	2	2	3.9	-3.3	0.3	-	-5.8	18	10	2	-	0	-	-11.8	18	10	-	-	35.7	-	4.2	-	-
	21-END	3.3	-	3	2	10.4	2.1	6.3	-	1.1	22	8	20	-	2	-	-2.8	28	6	-	-	19.5	-	3.9	-	-
	MONTH	47.9	87	9	8	7.2	1.0	4.1	-	-5.8	18	11	47	-	2	-	-11.8	18	19	-	-	69.7	-	4.4	-	N/A
Kilkenny 8 Co. Kilkenny	1-10	41.1	-	5	4	8.7	5.5	7.1	-	-0.9	10	1	32	-	1	-	-0.5	10	1	6.3	-	2.6	-	4.1	1	-
	11-20	4.6	-	3	1	4.2	-1.2	1.5	-	-6.0	18	8	6	-	0	-	-12.2	18	9	1.3	-	22.8	-	3.8	2	-
	21-END	13.6	-	3	3	10.9	2.5	6.7	-	-2.7	22	2	24	-	2	-	-8.4	22	6	5.2	-	12.0	-	3.1	0	-
	MONTH	59.3	99	11	8	7.7	2.3	5.0	+0.3	-6.0	18	11	62	98	4	-	-12.2	18	16	4.2	-0.2	37.4	52	3.7	3	15
Mooncoin (Silverspring) Co. Kilkenny	1-10	95.0	-	4	3	8.6	5.7	7.2	-	-0.4	10	1	33	-	1	-	-1.8	5	2	-	-	1.4	-	-	-	-
	11-20	5.7	-	3	2	4.1	-1.0	1.5	-	-5.5	18	7	5	-	0	-	-10.8	18	8	-	-	11.2	-	-	-	-
	21-END	22.6	-	4	4	10.3	2.9	6.6	-	-2.2	22	1	22	-	1	-	-6.9	22	5	-	-	13.9	-	-	-	-
	MONTH	123.3	143	11	9	7.5	2.5	5.0	-	-5.5	18	9	60	-	3	-	-10.8	18	15	-	-	26.5	-	-	-	-
Bellinamore Co. Leitrim	1-10	44.2	-	5	4	7.4	4.2	5.8	-	-1.5	10	1	23	-	0	-	-3.1	10	3	-	-	11.4	-	3.2	-	-
	11-20	15.8	-	3	2	4.3	-3.4	0.5	-	-5.0	12	10	3	-	0	-	-11.4	18	10	-	-	30.7	-	2.4	-	-
	21-END	9.6	-	5	3	10.9	1.4	6.1	-	-2.3	21	2	21	-	2	-	-7.8	21	7	-	-	14.1	-	2.5	-	-
	MONTH	69.6	83	13	9	7.3	0.7	4.0	-	-5.0	12	13	46	-	3	-	-11.4	18	20	-	-	56.2	-	2.7	-	8
Ardee (Bohernamee) Co. Louth	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	-	-	-	-	-	-	-

TABLE I (CONTINUED)

FEBRUARY 1985

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	LOWEST "GRASS-MIN"	DATE	DAYS WITH GROUND FROST	MEAN DAILY	DIFFERENCE FROM AVERAGE	TOTAL NO. OF HOURS	% OF AVERAGE	MEAN SPEED (ms⁻¹)	DRYS WITH GALE GUSTS	P.E. (PENMAN) (mm)	
Ballinrobe (Creagh) Co. Mayo	1-10	29.7	-	5	4	8.7	4.4	6.6	-	-0.9	10	1	28	-	1	-	-2.8	5	3	-	-	3.0	-	5.8	-	-
	11-20	1.0	-	2	0	4.6	-2.7	0.9	-	-6.1	13	9	3	-	0	-	-11.0	14	10	-	-	21.0	-	4.3	-	-
	21-END	19.8	-	6	6	11.1	3.1	7.1	-	-0.2	21	1	25	-	2	-	-6.3	21	5	-	-	13.8	-	4.3	-	-
	MONTH	50.5	53	13	10	7.9	1.5	4.7	-	-6.1	13	11	57	-	4	-	-11.0	14	16	-	-	37.8	-	4.8	-	9
Belmullet Co. Mayo	1-10	12.7	-	4	3	8.6	5.2	6.9	-	-1.3	10	1	31	-	1	-	-2.0	10	1	6.7	-	11.9	-	7.1	5	-
	11-20	10.2	-	4	4	4.9	-1.5	1.7	-	-4.5	13	7	5	-	0	-	-7.9	14	9	2.6	-	35.2	-	6.3	4	-
	21-END	8.5	-	4	3	11.0	4.5	7.7	-	0.0	22	0	29	-	2	-	-5.5	22	1	6.4	-	17.9	-	7.2	2	-
	MONTH	31.4	41	12	10	8.0	2.6	5.3	-0.4	-4.5	13	8	65	94	4	-	-7.9	14	11	5.2	-0.1	65.0	90	6.9	11	17
Claremorris Co. Mayo	1-10	27.5	-	4	3	7.9	4.7	6.3	-	-1.9	10	1	26	-	0	-	-3.3	10	1	5.8	-	4.4	-	7.4	4	-
	11-20	3.7	-	3	2	4.3	-2.6	0.9	-	-6.1	13	9	3	-	0	-	-9.0	13	10	0.5	-	21.1	-	6.5	4	-
	21-END	9.8	-	6	3	10.6	3.5	7.1	-	0.4	27	0	24	-	2	-	-3.1	27	3	5.6	-	14.6	-	6.2	3	-
	MONTH	41.0	63	13	8	7.4	1.8	4.6	+0.3	-6.1	13	10	54	98	2	-	-9.0	13	14	3.8	-0.2	40.1	59	6.7	11	14
Glenamoy Co. Mayo	1-10	23.9	-	4	4	8.4	4.9	6.7	-	-1.4	10	1	29	-	1	-	-1.7	10	1	-	-	17.0	-	7.7	-	-
	11-20	16.7	-	4	3	5.2	-1.9	1.7	-	-5.2	13	8	6	-	0	-	-9.4	16	9	-	-	33.0	-	4.9	-	-
	21-END	21.0	-	4	4	11.2	4.1	7.6	-	-1.9	22	1	28	-	3	-	-5.4	22	3	-	-	18.1	-	6.0	-	-
	MONTH	61.6	65	12	11	8.1	2.2	5.2	-	-5.2	13	10	63	-	4	-	-9.4	16	13	-	-	68.1	-	6.2	-	12
Dunsany (Grange) Co. Meath	1-10	54.5	-	4	4	7.6	4.0	5.8	-	-0.5	10	1	23	-	0	-	-3.0	10	2	-	-	N/A	-	-	-	-
	11-20	4.7	-	2	1	3.8	-2.5	0.7	-	-5.9	18	9	2	-	0	-	-10.7	18	10	-	-	38.1	-	-	-	-
	21-END	6.9	-	5	3	10.7	1.7	6.2	-	-1.5	21	1	20	-	2	-	-7.2	25	6	-	-	23.9	-	-	-	-
	MONTH	66.1	116	11	8	7.2	1.0	4.1	-	-5.9	18	11	45	-	2	-	-10.7	18	18	-	-	N/A	-	-	-	-
Clones Co. Monaghan	1-10	22.8	-	6	2	7.4	4.3	5.8	-	-1.5	10	1	24	-	0	-	-1.7	10	1	5.3	-	8.5	-	6.4	5	-
	11-20	8.9	-	2	2	4.4	-2.2	1.1	-	-4.0	16	9	3	-	0	-	-8.9	17	10	1.3	-	33.7	-	5.3	2	-
	21-END	2.1	-	2	1	10.1	2.3	6.2	-	-1.3	21	1	20	-	2	-	-6.8	21	4	4.8	-	17.0	-	4.7	1	-
	MONTH	33.8	51	10	5	7.1	1.4	4.3	+0.3	-4.0	16	11	47	96	2	-	-8.9	17	15	3.7	+0.0	59.2	95	5.5	8	19
Birr Co. Offaly	1-10	18.1	-	4	4	9.0	5.4	7.2	-	-1.4	10	1	33	-	2	-	-1.5	10	1	6.6	-	8.0	-	6.0	4	-
	11-20	5.6	-	2	1	4.4	-1.7	1.4	-	-3.6	13	9	4	-	0	-	-7.4	13	10	1.3	-	23.9	-	5.7	3	-
	21-END	1.7	-	3	0	10.8	3.8	7.3	-	1.7	22	0	25	-	2	-	-2.3	22	6	5.7	-	15.7	-	5.3	1	-
	MONTH	25.4	49	9	5	7.9	2.4	5.1	+0.5	-3.6	13	10	62	102	4	-	-7.4	13	17	4.5	+0.2	47.6	66	5.7	8	19

TABLE 1 (CONTINUED)

FEBRUARY 1985

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	DEGREES DAYS ABOVE 4.4°C	% OF AVERAGE	DEGREES DAYS ABOVE 10.0°C	% OF AVERAGE	LOWEST "GRASS-MIN"	DATE	DEGREES DAYS ABOVE 4.4°C	% OF AVERAGE		
Dundrum (Knockevilla) Co. Tipperary	1-10	41.5	-	5	4	8.5	5.3	6.9	-	-0.6	10/1	30	-	1	-1.2	10/10	1	-	-	-	-
	11-20	6.7	-	4	2	3.8	-2.8	0.5	-	-7.1	18/9	4	-	0	-10.4	18/10	10	-	-	-	-
	21-END	15.8	-	3	3	10.8	2.2	6.5	-	-2.3	22/2	23	-	2	-7.0	22/5	-	-	-	-	-
	MONTH	64.0	-	12	9	7.5	1.5	4.5	-	-7.1	18/12	57	-	3	-10.4	18/16	-	-	-	-	-
Dungarven (Carriglea) Co. Waterford	1-10	109.1	-	9	5	9.6	6.6	8.1	-	0.4	10/0	39	-	2	-0.4	10/0	0	-	-	3.3	-
	11-20	15.5	-	4	2	4.8	-0.1	2.3	-	-5.3	18/6	6	-	0	-5.8	18/7	-	-	-	7.8	-
	21-END	18.4	-	3	2	10.9	3.9	7.4	-	-2.3	22/1	27	-	2	-3.1	22/1	-	-	-	16.3	-
	MONTH	143.0	147	16	9	8.2	3.4	5.8	-	-5.3	18/7	72	-	4	-5.8	18/8	-	-	-	27.4	-
Mullingar Co. Westmeath	1-10	32.5	-	4	3	7.8	4.6	6.2	-	-2.6	10/1	26	-	1	-3.5	10/2	5.6	-	11.8	-	5.6
	11-20	7.9	-	3	1	3.8	-3.1	0.3	-	-5.2	18/9	2	-	0	-9.5	18/10	-0.0	-	34.1	-	5.2
	21-END	5.1	-	3	2	10.1	2.2	6.1	-	0.2	22/0	19	-	1	-4.2	22/6	4.4	-	17.7	-	4.6
	MONTH	45.5	76	10	6	7.0	1.1	4.1	+0.1	-5.2	18/10	47	92	2	-9.5	18/18	3.3	-0.6	63.6	90	5.2
J.F.K. Park Co. Wexford	1-10	80.4	-	6	4	8.1	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-4.6	10/3	-	-	5.9	-	6.3
	11-20	7.8	-	3	2	3.6	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-10.8	13/10	-	-	11.9	-	5.5
	21-END	19.0	-	4	3	9.9	4.7	7.3	-	2.1	22/0	24	-	1	-7.2	22/5	-	-	15.3	-	4.9
	MONTH	107.2	131	13	9	7.0	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-10.8	13/18	-	-	33.1	-	5.7
Clonroche Co. Wexford	1-10	86.8	-	7	5	7.6	4.5	6.0	-	-1.5	10/1	23	-	1	-1.6	10/1	-	-	5.9	-	3.7
	11-20	8.1	-	3	2	3.5	-2.2	0.6	-	-5.8	13/9	3	-	0	N/A	N/A	-	-	17.6	-	3.0
	21-END	18.6	-	3	3	10.0	2.9	6.5	-	-0.5	22/1	20	-	1	-5.4	22/4	-	-	18.3	-	1.8
	MONTH	113.5	121	13	10	6.8	1.6	4.2	-	-5.8	13/11	47	-	1	N/A	N/A	-	-	41.8	-	2.9
Johnstown Castle Co. Wexford	1-10	78.0	-	7	6	8.2	5.2	6.7	-	-0.9	10/1	28	-	0	-1.0	10/1	-	-	5.5	-	5.9
	11-20	6.1	-	3	2	3.9	-0.7	1.6	-	-3.1	13/8	4	-	0	-11.5	18/8	-	-	16.0	-	5.8
	21-END	9.7	-	3	2	9.6	5.0	7.3	-	-3.4	22/0	24	-	0	-3.0	22/5	-	-	18.7	-	3.7
	MONTH	93.8	119	13	10	7.1	3.0	5.1	-	-3.1	13/9	56	-	1	-11.5	18/14	-	-	40.2	-	5.3
Rosslare Co. Wexford	1-10	60.2	-	6	3	8.5	5.8	7.2	-	-0.2	10/1	31	-	1	-0.8	10/1	7.0	-	6.4	-	6.7
	11-20	5.8	-	4	2	4.7	1.0	2.8	-	-2.1	11/3	6	-	0	-3.6	13/8	2.0	-	15.7	-	7.1
	21-END	4.7	-	3	2	9.2	5.9	7.6	-	-3.2	22/0	26	-	0	-1.0	22/1	7.0	-	19.2	-	5.1
	MONTH	70.7	102	13	7	7.3	4.1	5.7	-0.1	-2.1	11/4	64	93	1	-3.6	13/10	5.2	-0.3	41.3	54	6.4

TABLE 2 GLOBAL RADIATION

STATION	PERIOD	AMOUNT MJ/m ²
Malin Head Co. Donegal	1-10	28.80
	11-20	51.03
	21-end	43.22
	Month	123.05
Dublin Airport Co. Dublin	1-10	28.46
	11-20	59.48
	21-end	46.17
	Month	134.11
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	31.33
	11-20	35.27
	21-end	41.96
	Month	108.56
Kilkenny Co. Kilkenny	1-10	18.02
	11-20	49.06
	21-end	42.34
	Month	109.42
Belmullet Co. Mayo	1-10	31.68
	11-20	50.53
	21-end	40.16
	Month	122.37
Clones Co. Monaghan	1-10	22.54
	11-20	54.00
	21-end	41.12
	Month	117.66
Birr Co. Offaly	1-10	25.96
	11-20	49.07
	21-end	37.52
	Month	112.55

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	-3.2	-	0	31		
	11-20	3.5	2	2	-		
	21-end	4.6	-	0	5		
	Month	4.9	-	-	-		
Kinsealy Co. Dublin	1-⑨	1.3	-	0	38		
	⑩-20	9.4	6	6	-		
	21-end	6.7	-	3	3		
	Month	17.4	-	-	-		
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	1.3	-	0	47		
	11-20	11.9	1	1	-		
	21-end	9.0	-	0	12		
	Month	22.2	-	-	-		
Ballinamore Co. Leitrim	1-10	-0.9	-	0	45		
	11-20	6.1	-	0	10		
	21-end	2.2	-	0	7		
	Month	7.4	-	-	-		
Glenamoy Co. Mayo	1-10	2.5	-	0	21		
	11-20	4.6	-	0	12		
	21-end	7.9	-	0	13		
	Month	15.0	-	-	-		
Johnstown Castle Co. Wexford	1-10	1.6	-	0	76		
	11-20	8.1	2	2	-		
	21-end	5.4	-	0	3		
	Month	15.1	-	-	-		

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	6.1	5.3	4.7	+0.2	56	56
	11-20	0.5	0.1	-0.2	+1.8	N/A	N/A
	21-end	3.7	3.1	1.8	-0.2	53	57
Mineral	1-10	6.8	5.6	4.7	+0.3	46	44
	11-20	0.6	0.3	-0.2	+1.0	N/A	N/A
	21-end	5.6	4.4	2.7	-0.1	51	53

special topic

THE DISTRIBUTION OF AVERAGE ANNUAL RAINFALL OVER THE YEAR

It is well known that the average annual rainfall (AAR) varies widely from place to place in Ireland. The driest areas, receiving less than 800mm per annum, consist of the coastal strip from Dublin to Dundalk together with some parts of the east midlands. On the other hand, large areas near the Atlantic seaboard have AAR exceeding 1200mm even where the terrain is fairly low-lying and a few mountainous locations in the southwest receive over 3000mm. Less well known than the variation of the average annual amount of rain is the fact that the distribution of that amount over the different months also varies from one area to another, though in a less dramatic manner. It is with this distribution that the present article is concerned.

If we express the long-term average rainfall for each month as a percentage of the annual average and calculate the mean of these data over a representative selection of rainfall stations we will get a picture of the annual cycle of rainfall for the country as a whole (Fig.1). It may be seen that spring and early summer are the driest seasons and that autumn and winter are considerably wetter. The average rainfall of the wettest month (December) is about 80% greater than that of the driest (April). However, in considering the average annual cycle it is important not to lose sight of the large year-to-year variability which is characteristic of rainfall everywhere. The rainfall of a particular month may vary from near zero up to twice the average, or "expected" value. For example, in 1955, the month of June contributed over 13% of the annual total rather than about 6.5% as given by Fig.1 whereas July, in contrast, contributed only 2% rather than the expected 7.5%. It is only when the data are averaged over a long period of years (30 years is regarded as standard) that the pattern shown in Fig.1 emerges.

It has been noticed that divergences from the average distribution of rainfall (Fig.1) occur in certain parts of the country. For example, in the Dublin area the contrast between the dry and wet halves of the year is much less marked than in western and northwestern areas. In the south, the dry and wet periods occur later in the year than in the rest of the country; thus in Co. Cork June rather than April is the driest month and, in many parts of that country, January rather than December is the wettest.

In order to describe these variations in the simplest possible way, it has been found convenient to calculate two parameters, known as A and B, for each station. A is the ratio of the average rainfall for the "dry" period February-July to that of the "wet" period August-January and is a measure of the contrast between these two halves of the year. B is equal to the ratio of the average rainfall for the "warm" half-year May-October to that of the "cold" half November-April. B may be either greater or less than 1 and it is found that it is largely independent of A i.e. a station with, say, a high value of A may have either a high or a low value of B.

It may be shown that if we know the values of A, B and AAR for a given station we know practically all that there is worth knowing about the annual rainfall cycle for the station and we can, in fact, estimate the average rainfall for each of the 12 months from A, B and AAR.

