

# METEOROLOGICAL SERVICE



## AGROMETEOROLOGICAL BULLETIN

FEBRUARY 1984

### The Weather of February

The period from 1st-8th was windy and changeable. Mild and rather cloudy spells of weather with rain and drizzle were followed by bright intervals and showers in quick succession in this period. Winds were frequently strong to gale force (as was the case throughout January) and they varied in direction from southwest to northwest; northwest winds, however, prevailed from 6th to 8th.

Pressure rose steadily during the 8th and subsequently weak frontal rainbelts gave generally cloudy conditions and a little rain or drizzle from 9th-11th. The high pressure cell drifted towards Scandinavia but a ridge extended westwards over Ireland up to 15th. The period was mainly dry and rather cloudy, but where skies cleared at night frost developed. A little rain also occurred from a weak slow-moving trough on 16th.

Pressure declined on 17th and a south to southwest airflow prevailed over the following days; conditions were cloudy. A southerly airflow freshened on 18th and a trough crossed the country on 21st giving spells of rain and strong winds, variable in direction; northeast winds developed in northern regions. A ridge on 23rd resulted in overnight frost occurring but there were further weak frontal systems in northwestern areas on 24th and 25th. Subsequently the high was maintained to the end of the month. Because of the cloudy conditions generally, frost was infrequent but where skies cleared air frost and severe ground frost occurred locally and were especially widespread on the 28th.

Monthly Amounts of Precipitation were above normal generally, and well above normal in parts of the midlands, but well below normal in extreme southern areas. Amounts varied from 165% of normal at Mallow to 70% of normal at Roches Point. The wettest spell occurred from 1st to 8th (1st to 6th in southern areas) and 19th to 22nd.

Mean Monthly Air Temperature was above normal everywhere, varying from 1.2°C at a number of stations to 0.5°C above at Malin Head. Soil temperatures (100mm) were also above normal although at Rosslare they were only 0.3°C above. Cumulative degree days, threshold 4.4°C, varied from 129% of average at Belmullet to 105% at Rosslare. Air frost occurred only on 3 to 6 days at inland places, 30% to 40% of average occasions in February. Ground frost was most widespread on 5th, 9th, 14th/15th, 20th, 24th and 27th to 29th. Its occurrence locally, however, frequently depended on the cloud cover.

Mean Duration of Bright Sunshine was well below normal almost everywhere. Values generally ranged from about 50% to 75% of normal, varying from 77% of normal at Dublin Airport to 51% at Clones and Claremorris. Global radiation was 99% of average at Valentia Observatory and 87% at Birr and Kilkenny.

Strong Winds with Gale Gusts were widespread from 1st to 8th and 18th to 21st and on 22nd, except in north midlands.

Summary Very mild, wet or very wet especially in parts of the midlands, and very dull.

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 in Table 2 will be published in the Annual Summary of Solar Radiation.

TABLE 1

FEBRUARY 1984

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)												BRIGHT SUNSHINE		WIND					
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR				LOWEST MIN.	DATE	DAYS WITH AIR FROST		% OF AVERAGE	GROUND		SOIL (10cm)		MEAN DAILY (HRS.)		M.E. (PENMAN) (mm)				
						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE			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	MEAN DAILY (HRS.)	% OF AVERAGE	M.E. (PENMAN) (mm)	DAYS WITH GALE GUSTS		
Carlow (Oak Park) Co. Carlow	1-10	33.2	-	8	6	10.2	2.5	6.3	-	-1.0	9	1	24	-	1	-7.4	9	2	-	-	2.17	-	6.7	-	-
	11-20	28.0	-	3	3	7.9	2.5	5.2	-	-0.5	15	2	15	-	0	-7.0	15	5	-	-	1.64	-	4.0	-	-
	21-END	15.0	-	4	3	6.6	1.4	4.0	-	-0.5	23	1	7	-	0	-0.5	23	1	-	-	1.01	-	2.8	-	-
	MONTH	76.2	123	15	12	8.3	2.2	5.2	-	-1.0	9	4	46	-	2	-7.4	9	8	-	-	1.63	-	4.6	-	14
Shannon Airport Co. Clare	1-10	64.0	-	9	6	10.0	4.7	7.4	-	2.0	5	0	31	-	1	-0.1	5	1	6.1	-	1.24	-	7.5	B	-
	11-20	21.6	-	4	3	9.6	4.2	6.9	-	0.6	20	0	27	-	0	-4.4	20	4	6.1	-	1.91	-	4.7	3	-
	21-END	7.1	-	1	1	8.2	2.1	5.2	-	-2.2	28	3	14	-	1	-7.7	28	6	5.1	-	2.11	-	3.8	2	-
	MONTH	92.7	147	14	10	9.3	3.7	6.5	+1.2	-2.2	28	3	72	114	2	-	-7.7	28	11	5.8	+0.8	1.74	66	5.4	13
Fermoy (Coolnakilla) Co. Cork	1-10	58.4	-	N/A	N/R	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	-	N/A	-	8.4	-	-	
	11-20	37.3	-	6	2	7.6	N/A	N/A	-	N/A	N/A	N/A	N/A	-	N/A	-5.0	20	3	-	-	1.12	-	6.0	-	-
	21-END	16.7	-	4	2	6.9	N/A	N/A	-	N/A	N/A	N/A	N/A	-	N/A	-5.1	28	5	-	-	N/A	-	4.3	-	-
	MONTH	112.4	-	N/R	N/R	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	-	N/A	-	6.4	-	N/A	
Fermoy (Moore Park) Co. Cork	1-10	47.3	-	9	5	10.3	3.9	7.1	-	0.9	9	0	29	-	2	-5.0	9	3	-	-	1.67	-	6.0	-	-
	11-20	35.0	-	3	3	8.9	2.8	5.8	-	-3.0	20	3	22	-	0	-9.5	20	5	-	-	1.17	-	2.8	-	-
	21-END	9.2	-	4	2	7.6	1.5	4.5	-	-2.9	28	3	11	-	0	-8.1	28	6	-	-	2.10	-	3.0	-	-
	MONTH	91.5	129	16	10	8.9	2.8	5.9	-	-3.0	20	6	62	-	2	-9.5	20	14	-	-	1.63	-	4.0	-	17
Mallow Co. Cork	1-10	67.1	-	8	6	10.4	3.9	7.1	-	1.0	5	0	30	-	2	N/A	N/A	-	-	-	1.28	-	-	-	-
	11-20	54.3	-	6	2	9.3	4.2	6.8	-	-1.0	20	1	27	-	0	N/A	N/A	-	-	-	1.19	-	-	-	-
	21-END	18.9	-	6	1	8.1	N/A	N/A	-	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	-	N/A	-	-	-	-	
	MONTH	140.3	165	20	9	9.3	N/A	N/A	-	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	-	N/A	-	-	-	-	
Roches Point Co. Cork	1-10	26.8	-	7	6	10.5	5.5	8.0	-	2.0	5	0	37	-	2	-0.2	5	1	6.8	-	1.77	-	9.8	8	-
	11-20	21.2	-	4	3	9.0	5.8	7.4	-	1.8	20	0	31	-	0	-2.7	20	1	7.1	-	1.43	-	6.1	3	-
	21-END	8.3	-	3	1	8.1	2.8	5.5	-	0.9	28	0	14	-	0	-2.9	29	4	5.6	-	2.93	-	5.3	2	-
	MONTH	56.3	70	14	10	9.3	4.8	7.0	+0.9	0.9	28	0	82	119	2	-	-2.9	29	6	6.5	+0.6	2.01	76	7.2	13
Glencolumbkille Co. Donegal	1-10	56.2	-	9	8	8.8	3.7	6.3	-	0.1	5	0	21	-	0	-1.5	9	2	-	-	0.71	-	7.5	-	-
	11-20	30.3	-	8	5	8.4	4.3	6.4	-	0.5	20	0	23	-	0	-2.1	20	2	-	-	1.60	-	4.8	-	-
	21-END	9.6	-	5	4	8.1	2.5	5.3	-	-1.0	28	1	14	-	0	-5.1	28	4	-	-	1.80	-	2.2	-	-
	MONTH	96.1	-	22	17	8.5	3.6	6.0	-	-1.0	28	1	58	-	0	-5.1	28	8	-	-	1.36	-	5.0	-	14

TABLE 1 (CONTINUED)

FEBRUARY 1964

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	MEAN DAILY	Difference from Average	MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (ms⁻¹)	Days with Gale GUSTS	P.E. (PENMAN) (mm)	
Glenties Co. Donegal	1-10	65.0	-	10	8	8.5	2.4	5.4	-	-0.7	9	1	16	-	0	-	-3.8	9	3	-	0.92	-	-	-	-	
	11-20	32.5	-	6	5	8.4	3.7	6.0	-	-0.2	14	1	21	-	0	-	-3.3	14	3	-	1.34	-	-	-	-	
	21-END	16.4	-	6	5	8.1	1.8	5.0	-	-2.9	28	2	14	-	0	-	-6.2	28	4	-	1.78	-	-	-	-	
	MONTH	113.9	106	22	18	8.3	2.7	5.5	-	-2.9	28	4	52	-	0	-	-6.2	28	10	-	1.33	-	-	-	-	
Malin Head Co. Donegal	1-10	69.9	-	9	8	8.2	2.7	5.4	-	0.9	7	0	16	-	0	-	-1.6	1	4	4.5	-	0.89	-	12.0	8	-
	11-20	19.5	-	3	3	8.1	3.7	5.9	-	1.4	20	0	20	-	0	-	-1.7	15	2	5.2	-	2.07	-	9.1	7	-
	21-END	21.7	-	6	3	7.9	3.1	5.5	-	-0.9	27	2	15	-	0	-	-3.9	27	4	5.5	-	1.69	-	6.2	1	-
	MONTH	111.1	148	18	14	8.1	3.2	5.6	+0.5	-0.9	27	2	50	109	0	-	-3.9	27	10	5.0	+0.6	1.54	68	9.2	16	19
Casement Aerodrome Co. Dublin	1-10	24.9	-	7	7	9.1	3.0	6.0	-	0.2	9	0	21	-	1	-	-3.2	9	4	4.9	-	1.97	-	9.8	8	-
	11-20	10.6	-	3	2	8.1	2.3	5.2	-	-6.6	15	2	18	-	0	-	-9.9	15	5	4.9	-	2.64	-	5.0	3	-
	21-END	4.3	-	4	2	6.8	2.3	4.6	-	-1.0	27	2	9	-	0	-	-5.3	27	5	4.5	-	1.09	-	3.8	1	-
	MONTH	39.8	78	14	11	8.0	2.6	5.3	+0.9	-6.6	15	4	48	109	1	-	-9.9	15	14	4.8	-	1.93	74	6.3	12	19
Dublin Airport Co. Dublin	1-10	24.5	-	9	6	9.3	3.1	6.2	-	0.4	9	0	22	-	1	-	-4.2	1	3	4.8	-	2.79	-	8.8	8	-
	11-20	23.7	-	2	2	8.2	3.6	5.9	-	0.0	15	0	18	-	1	-	-5.1	15	6	5.0	-	2.30	-	4.6	3	-
	21-END	10.7	-	4	4	7.0	3.1	5.1	-	1.4	27	0	10	-	0	-	-4.6	23	2	4.6	-	0.94	-	3.9	1	-
	MONTH	58.9	115	15	12	8.2	3.2	5.7	+0.9	0.0	15	0	51	104	2	-	-5.1	15	11	4.8	+0.5	2.05	77	5.8	12	20
Kinsealy Co. Dublin	1-10	23.2	-	8	6	10.4	2.2	6.3	-	0.0	1	0	24	-	2	-	-3.5	1	3	-	-	2.76	-	6.3	-	-
	11-20	25.3	-	4	3	8.4	2.6	5.5	-	-0.6	15	1	16	-	1	-	-6.5	15	7	-	-	1.17	-	4.6	-	-
	21-END	9.4	-	5	4	6.9	2.6	4.8	-	0.2	23	0	9	-	0	-	-2.6	23	4	-	-	2.10	-	2.8	-	-
	MONTH	57.9	123	17	13	8.6	2.5	5.5	-	-0.6	15	1	50	-	3	-	-6.5	15	14	-	-	1.63	-	4.7	-	16
Galway Co. Galway	1-10	61.7	-	9	8	9.3	4.5	6.9	-	1.4	5	0	27	-	0	-	-0.6	9	2	5.9	-	1.36	-	7.1	7	-
	11-20	11.7	-	4	3	9.1	3.0	6.0	-	-1.9	15	3	23	-	0	-	-5.2	15	3	6.0	-	1.99	-	4.6	4	-
	21-END	8.2	-	2	1	7.9	2.3	5.1	-	-3.2	28	3	14	-	0	-	-6.1	28	4	5.5	-	2.12	-	3.4	1	-
	MONTH	81.6	109	15	12	8.8	3.3	6.1	+1.1	-3.2	28	6	64	-	1	-	-6.1	28	9	5.8	-	1.81	69	5.1	12	16
Killarney (Muckross House) Co. Kerry	1-10	54.0	-	10	8	11.0	5.1	8.1	--	2.2	2	0	38	-	3	-	0.5	2	0	-	-	0.57	-	-	-	-
	11-20	63.8	-	6	4	9.9	5.1	7.5	-	-1.1	20	1	34	-	1	-	-4.4	20	3	-	-	1.82	-	-	-	-
	21-END	12.0	-	4	1	8.2	0.9	4.6	-	-3.5	28	4	12	-	0	-	-7.2	28	6	-	-	2.82	-	-	-	-
	MONTH	131.4	-	20	13	9.8	5.8	6.8	-	-3.5	28	5	84	-	5	-	-7.2	28	9	-	-	1.70	-	-	-	-

TABLE 1 (CONTINUED)

FEBRUARY 1984

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		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		MEAN DAILY (HRS.)		% OF AVERAGE		MEAN SPEED (m s⁻¹)		DAYS WITH GALE GUSTS		P.E. (PENMAN) (mm)	
				MEAN	MIN.	RAIN	DAYS	MEAN	MAX.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.	MEAN	MIN.															
Cahirciveen (Valentia Obsy.) Co. Kerry	1-10	36.4	-	10	7	11.0	5.5	8.3	-	2.8	5	0	39	-	2	-	2.1	5	0	7.6	-	0.50	-	8.5	8	-	1.60	-	6.1	3	-	3.73	-	4.4	2	-																		
	11-20	49.4	-	8	4	10.5	5.3	7.9	-	-0.2	20	1	37	-	2	-	-2.0	20	1	7.6	-	1.60	-	6.1	3	-	1.60	-	6.3	5	-	1.60	-	6.3	5	-																		
	21-END	13.7	-	2	2	9.0	2.4	5.7	-	-2.8	28	2	18	-	0	-	-4.1	28	5	6.3	-	3.73	-	4.4	2	-	3.73	-	4.4	2	-	3.73	-	4.4	2	-																		
	MONTH	99.5	84	20	13	10.2	4.5	7.3	+0.8	-2.8	28	3	95	116	4	-	-4.1	28	6	7.2	+1.1	1.88	75	6.4	13	19	1.88	75	6.4	13	19	1.88	75	6.4	13	19	1.88	75	6.4	13	19													
Ardfert (Liscahane) Co. Kerry	1-10	43.7	-	9	8	10.5	5.1	7.8	-	2.2	5	0	35	-	2	-	-0.5	10	1	-	-	0.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
	11-20	33.4	-	5	3	10.0	4.9	7.5	-	0.5	20	0	32	-	1	-	-6.0	20	5	-	-	2.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
	21-END	6.5	-	4	1	8.7	1.6	5.1	-	-1.4	27	4	15	-	0	-	-8.5	27	6	-	-	3.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
	MONTH	83.6	-	18	12	9.7	3.9	6.8	-	-1.4	27	4	82	-	4	-	-8.5	27	12	-	-	2.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
Lullymore Co. Kildare	1-10	33.3	-	8	7	9.3	1.4	5.3	-	-1.0	9	2	17	-	1	-	-4.5	9	3	-	-	1.42	-	6.9	-	-	1.42	-	6.9	-	-	1.42	-	6.9	-	-	1.42	-	6.9	-	-	1.42	-	6.9	-	-								
	11-20	14.8	-	3	3	7.8	2.2	5.0	-	-5.0	15	2	14	-	0	-	-7.5	15	3	-	-	1.49	-	4.1	-	-	1.49	-	4.1	-	-	1.49	-	4.1	-	-	1.49	-	4.1	-	-	1.49	-	4.1	-	-								
	21-END	12.6	-	4	3	6.9	0.8	3.9	-	-1.0	23	3	7	-	0	-	-5.0	23	4	-	-	1.66	-	2.7	-	-	1.66	-	2.7	-	-	1.66	-	2.7	-	-	1.66	-	2.7	-	-	1.66	-	2.7	-	-								
	MONTH	60.7	115	15	13	8.0	1.5	4.7	-	-5.0	15	7	39	-	1	-	-7.5	15	10	-	-	1.52	-	4.7	-	11	1.52	-	4.7	-	11	1.52	-	4.7	-	11	1.52	-	4.7	-	11													
Kilkenny Co. Kilkenny	1-10	55.2	-	8	6	10.1	3.9	7.0	-	-0.9	9	1	28	-	2	-	-6.7	9	2	5.2	-	2.14	-	6.1	8	-	2.14	-	6.1	8	-	2.14	-	6.1	8	-	2.14	-	6.1	8	-	2.14	-	6.1	8	-								
	11-20	33.8	-	5	3	8.8	2.6	5.7	-	-0.9	15	2	20	-	1	-	-8.3	15	6	5.3	-	1.29	-	3.0	3	-	1.29	-	3.0	3	-	1.29	-	3.0	3	-	1.29	-	3.0	3	-	1.29	-	3.0	3	-								
	21-END	3.9	-	2	2	7.4	2.7	5.0	-	0.8	24	0	12	-	0	-	-4.3	24	3	4.7	-	1.50	-	2.7	2	-	1.50	-	2.7	2	-	1.50	-	2.7	2	-	1.50	-	2.7	2	-	1.50	-	2.7	2	-								
	MONTH	92.9	155	15	11	8.8	3.1	5.9	+1.2	-0.9	9	3	60	115	3	-	-8.3	15	11	5.1	+0.7	1.65	65	4.0	13	17	1.65	65	4.0	13	17	1.65	65	4.0	13	17	1.65	65	4.0	13	17	1.65	65	4.0	13	17								
Mooncoin (Silverspring) Co. Kilkenny	1-10	31.1	-	7	5	11.0	3.2	7.1	-	-1.1	9	1	31	-	3	-	-3.5	9	2	-	-	2.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
	11-20	33.6	-	4	3	8.7	2.0	5.3	-	-2.1	15	3	18	-	0	-	-2.9	15	7	-	-	0.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
	21-END	3.2	-	4	1	7.1	1.8	4.4	-	-0.2	24	1	9	-	0	-	-2.8	21	6	-	-	1.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
	MONTH	67.9	97	15	9	9.0	2.3	5.7	-	-2.1	15	5	58	-	3	-	-3.5	9	15	-	-	1.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
Ballinamore Co. Leitrim	1-10	69.0	-	10	7	9.2	1.9	5.5	-	-0.1	5	1	18	-	1	-	-3.7	9	3	-	-	1.37	-	5.6	-	-	1.37	-	5.6	-	-	1.37	-	5.6	-	-	1.37	-	5.6	-	-	1.37	-	5.6	-	-								
	11-20	21.8	-	5	2	7.4	2.7	5.0	-	-2.1	14	2	15	-	0	-	-3.5	15	3	-	-	1.00	-	2.6	-	-	1.00	-	2.6	-	-	1.00	-	2.6	-	-	1.00	-	2.6	-	-	1.00	-	2.6	-	-								
	21-END	6.8	-	5	2	7.8	0.3	4.1	-	-4.5	28	3	10	-	0	-	-9.6	28	6	-	-	2.02	-	1.8	-	-	2.02	-	1.8	-	-	2.02	-	1.8	-	-	2.02	-	1.8	-	-	2.02	-	1.8	-	-								
	MONTH	97.6	130	20	11	8.1	1.7	4.9	-	-4.5	28	6	42	-	1	-	-9.6	28	12	-	-	1.13	-	3.4	-	10	1.13	-	3.4	-	10	1.13	-	3.4	-	10	1.13	-	3.4	-	10	1.13	-	3.4	-	10								
Ardee (Bohernamoe) Co. Louth	1-10	27.4	-	7	6	N/A	1.8	N/A	-	-0.9	9	3	N/A	-	N/A	-	-5.0	8	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
	11-20	30.8	-	4	3	8.4	2.4	5.4	-	-4.5	15	2	18	-	0	-	-6.1	15	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
	21-END	6.6	-	3	2	7.7	1.6	4.6	-	-1.7	28	3	11	-	0	-	-2.2	23	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
	MONTH	64.8	-	14	11	N/A	1.9	N/A	-	-4.5	15	8	N/A	-	N/A	-	-6.1	15	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

FEBRUARY 1984

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)												BRIGHT SUNSHINE		WIND				
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR				GROUND				SOIL (10cm)		MEAN DAILY (HRS.)	% 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	MEAN DAILY	DIFFERENCE FROM AVERAGE					
Ballinrobe (Creagh) Co. Mayo	1-10	45.5	-	8	7	10.4	3.7	7.0	-	0.1	5	0	29	-	2	-1.6	9	2	-	N/A	-	6.1	-	
	11-20	16.4	-	6	3	8.8	2.0	5.4	-	-3.2	14	4	21	-	0	-7.9	15	4	-	1.14	-	3.9	-	
	21-END	11.1	-	5	2	8.9	0.9	4.9	-	-3.8	28	3	15	-	1	-9.6	28	6	-	1.71	-	1.8	-	
	MONTH	73.0	80	19	12	9.4	2.2	5.8	-	-3.8	28	7	64	-	3	-9.6	28	12	-	N/A	-	4.1	-	
Belmullet Co. Mayo	1-10	50.2	-	9	8	9.9	4.4	7.2	-	1.6	5	0	29	-	1	-0.4	5	0	5.9	-	0.92	-	8.5	8
	11-20	12.2	-	6	5	9.1	3.8	6.4	-	0.2	19	0	25	-	0	-4.6	20	3	6.6	-	2.29	-	6.0	6
	21-END	16.9	-	7	3	9.1	3.7	6.4	-	-0.2	23	1	21	-	0	-4.1	23	2	6.8	-	2.07	-	4.2	2
	MONTH	79.3	104	22	16	9.4	4.0	6.7	+1.0	-0.2	23	1	76	129	1	-4.6	20	5	6.4	+1.1	1.75	68	6.3	16
Claremorris Co. Mayo	1-10	42.7	-	8	8	9.5	3.2	6.4	-	0.5	5	0	24	-	1	-4.2	9	2	6.1	-	0.98	-	8.5	8
	11-20	12.8	-	5	4	8.5	2.2	5.3	-	-2.9	14	3	19	-	0	-5.7	14	4	5.4	-	1.18	-	5.7	3
	21-END	18.3	-	2	2	7.7	1.7	4.7	-	-3.8	28	3	12	-	0	-8.1	28	5	5.2	-	1.58	-	3.6	2
	MONTH	73.8	96	15	14	8.6	2.4	5.5	+1.2	-3.8	28	6	54	117	1	-8.1	28	11	5.2	+1.2	1.23	51	6.0	13
Glenamoy Co. Mayo	1-10	60.8	-	10	10	9.5	3.6	6.6	-	0.6	5	0	24	-	1	-0.8	5	2	-	-	0.99	-	6.5	-
	11-20	24.7	-	7	5	8.9	2.8	5.9	-	-2.5	20	3	23	-	0	-4.7	20	4	-	-	2.17	-	4.4	-
	21-END	16.6	-	7	4	8.8	2.2	5.5	-	-1.5	23	2	16	-	0	-3.8	28	3	-	-	1.82	-	2.1	-
	MONTH	102.1	104	24	19	9.1	2.9	6.0	-	-2.5	20	5	63	-	1	-4.7	20	9	-	-	1.66	-	4.5	-
Dunsany (Grange) Co. Meath	1-10	34.0	-	8	7	9.1	1.5	5.3	-	-0.2	9	3	17	-	1	-4.0	1	3	-	-	1.83	-	-	-
	11-20	16.5	-	3	3	7.5	2.4	5.0	-	-5.2	15	3	14	-	0	-8.4	15	4	-	-	N/A	-	-	-
	21-END	7.2	-	4	2	6.8	1.4	4.1	-	-0.5	23	2	7	-	0	N/A	N/A	-	-	1.62	-	-	-	
	MONTH	57.7	103	15	12	7.8	1.8	4.8	-	-5.2	15	8	38	-	1	N/A	N/A	-	-	N/A	-	-	-	
Clones Co. Monaghan	1-10	59.6	-	10	9	8.2	2.5	5.3	-	-0.5	9	1	16	-	0	-3.5	9	4	4.4	-	1.27	-	6.0	8
	11-20	28.2	-	5	3	7.4	3.1	5.2	-	-1.4	14	1	15	-	0	-1.8	15	2	5.2	-	0.25	-	3.4	2
	21-END	13.4	-	4	4	7.5	1.9	4.7	-	-3.3	28	2	11	-	0	-7.9	28	4	4.7	-	1.94	-	1.5	0
	MONTH	101.2	153	19	16	7.7	2.5	5.1	+1.1	-3.3	28	4	43	108	0	-7.9	28	10	4.8	+1.1	1.13	51	3.7	10
Birr Co. Offaly	1-10	33.8	-	9	7	9.6	3.8	6.7	-	0.5	5	0	26	-	1	-1.5	9	2	5.5	-	1.41	-	6.9	7
	11-20	18.9	-	4	3	8.9	3.5	6.2	-	0.5	20	0	22	-	0	-3.1	15	2	5.7	-	2.05	-	4.5	3
	21-END	3.0	-	3	1	7.6	1.4	4.5	-	-3.2	27	3	11	-	0	-7.7	27	5	5.1	-	1.67	-	2.7	1
	MONTH	55.7	107	16	11	8.7	3.0	5.8	+1.2	-3.2	27	3	60	115	2	-7.7	27	9	5.4	+1.1	1.71	67	4.8	11

TABLE 1 (CONTINUED)

FEBRUARY 1984

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)												WIND	
		AMOUNT	% OF AVERAGE			AIR			GROUND			SOIL (10cm)			MEAN DAILY (HRS.)	% OF AVERAGE			
			RAIN DAYS	WET DAYS	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	DAYS WITH GROUND FROST		
Dundrum (Knockavilla) Co. Tipperary	1-10	66.2	-	8	6	10.1	3.2	6.7	-	0.2	5	0	26	-	-1.5	5	4	-	
	11-20	28.0	-	3	2	8.4	1.7	5.1	-	-3.4	20	2	15	-	0	-7.1	20	6	-
	21-END	13.0	-	3	1	7.1	1.5	4.3	-	-2.1	27	1	8	-	0	-5.1	27	5	-
	MONTH	107.2	-	14	9	8.6	2.2	5.4	-	-3.4	20	3	49	-	1	-7.1	20	15	-
Dungarvan (Carriglea) Co. Waterford	1-10	36.3	-	7	6	10.7	3.5	7.1	-	-1.2	9	1	31	-	2	-2.2	9	2	-
	11-20	47.5	-	4	2	9.3	2.2	5.8	-	-3.1	20	3	22	-	1	-3.5	20	4	-
	21-END	9.5	-	3	2	8.0	1.5	4.7	-	-0.1	24	1	10	-	0	-1.8	28	6	-
	MONTH	93.3	118	14	10	9.4	2.4	5.9	-	-3.1	20	5	63	-	3	-3.5	20	12	-
Mullingar Co. Westmeath	1-10	42.3	-	10	7	8.5	3.2	5.9	-	0.4	5	0	19	-	0	-1.8	9	4	4.8
	11-20	10.7	-	4	2	7.9	2.8	5.3	-	-2.9	15	1	16	-	0	-5.2	15	3	5.1
	21-END	11.1	-	4	4	7.5	1.3	4.4	-	-3.4	28	2	11	-	0	-5.7	28	4	4.8
	MONTH	64.1	107	18	13	8.0	2.4	5.2	+1.2	-3.4	28	3	46	112	1	-5.7	28	11	4.9
J.F.K. Park Co. Wexford	1-10	33.2	-	5	5	10.1	2.9	6.5	-	-0.3	9	1	25	-	1	-6.8	9	6	-
	11-20	33.4	-	4	3	8.2	3.1	5.6	-	-1.2	20	3	18	-	0	-7.8	20	6	-
	21-END	8.0	-	4	4	6.6	1.8	4.2	-	0.8	25	0	7	-	0	-5.2	24	8	-
	MONTH	74.6	101	13	12	8.3	2.7	5.5	-	-1.2	20	4	51	-	1	-7.8	20	20	-
Clonroche Co. Wexford	1-10	30.1	-	7	5	9.8	2.2	6.0	-	-0.4	9	1	22	-	1	-6.3	9	5	-
	11-20	33.7	-	5	3	7.7	2.5	5.1	-	-2.0	20	2	14	-	0	-7.9	20	7	-
	21-END	9.8	-	4	4	6.3	1.5	3.9	-	-0.3	24	1	6	-	0	-5.1	24	6	-
	MONTH	73.6	88	16	12	8.0	2.1	5.0	-	-2.0	20	4	42	-	1	-7.9	20	18	-
Johnstown Castle Co. wexford	1-10	27.9	-	6	5	10.0	3.8	6.9	-	0.7	5	0	27	-	1	-3.4	5	4	-
	11-20	21.6	-	3	3	7.9	3.2	5.5	-	-1.6	20	1	16	-	0	-6.4	15	8	-
	21-END	8.6	-	4	3	6.5	2.1	4.3	-	1.0	24	0	7	-	0	-4.1	29	6	-
	MONTH	58.1	83	13	11	8.2	3.1	5.6	-	-1.6	20	1	51	-	1	-6.4	15	18	-
Rosslare Co. Wexford	1-10	29.0	-	5	4	9.8	4.9	7.4	-	1.6	5	0	31	-	1	-1.4	5	3	6.1
	11-20	18.5	-	3	2	8.5	4.7	6.6	-	-0.1	20	1	24	-	0	-3.7	20	3	6.0
	21-END	8.5	-	3	3	6.8	3.5	5.1	-	2.1	28	0	10	-	0	-2.0	24	2	5.1
	MONTH	56.0	81	11	9	8.4	4.4	6.4	+0.6	-0.1	20	1	64	105	1	-3.7	20	8	5.8

TABLE 2 GLOBAL SOLAR RADIATION

STATION	PERIOD	AMOUNT Joule/cm <sup>2</sup>
Malin Head Co. Donegal	1-10	2640
	11-20	3889
	21-end	4474
	Month	11003
Dublin Airport Co. Dublin	1-10	3813
	11-20	3800
	21-end	3247
	Month	10860
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	2750
	11-20	4276
	21-end	6068
	Month	13094
Kilkenny Co. Kilkenny	1-10	3824
	11-20	3820
	21-end	3793
	Month	11437
Belmullet Co. Mayo	1-10	2733
	11-20	4576
	21-end	4727
	Month	12036
Clones Co. Monaghan	1-10	2900
	11-20	2730
	21-end	4483
	Month	10113
Birr Co. Offaly	1-10	3282
	11-20	4236
	21-end	4163
	Month	11681

Notes on the tables in January issue

\*Because of over-saturated conditions at some stations, run-off has been uneven, and the period Jan. 11 - Feb. 10 might best be taken as a unit.

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	33
	11-20	4.5	-	0	9
	21-end	7.4	-	0	23
	Month	12.4	-	-	-
Kinsealy Co. Dublin	1-10	0.8	-	0	18
	11-20	4.0	3	3	-
	21-end	2.5	-	0	31
	Month	7.3	-	-	-
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	-9.4*	-	0	48
	11-20	4.9	-	0	4
	21-end	4.0	-	0	53
	Month	-0.5	-	-	-
Ballinamore Co. Leitrim	1-10	1.4	-	0	80
	11-20	7.0	-	0	2
	21-end	1.1	-	0	18
	Month	9.5	-	-	-
Glenamoy Co. Mayo	1-10	0.6	-	0	82
	11-20	3.1	-	0	9
	21-end	3.8	-	0	25
	Month	7.5	-	-	-
Johnstown Castle Co. Wexford	1-10	0.7	-	0	23
	11-20	8.0	3	3	-
	21-end	1.8	-	0	23
	Month	10.5	-	-	-

TABLE 4 SOIL CLIMATE (MULLINGAR)

BARE SOIL TYPE	PERIOD	MEAN (at 100mm)			TEMPERATURE GRADIENT (to 200mm)	SOIL WATER POTENTIAL (hPa) (at depths)	
		Max.	Daily	Min.		75mm	200mm
Peat	1-10	5.0	4.4.	3.6	+0.2	54	60
	11-20	5.7	5.1	4.4	+0.6	81	78
	21-end	5.2	4.5	4.2	+0.5	63	67
Mineral	1-10	6.3	5.2	3.6	+0.1	79	46
	11-20	6.9	5.5	4.3	+0.4	109	81
	21-end	5.9	5.2	3.7	+0.2	91	57

## special topic

WORLD METEOROLOGICAL DAY 1984



The theme for World Meteorological Day, March 23, this year is "Meteorology aids Food Production". This theme was adopted by the World Meteorological Organisation (W.M.O.) because of the importance of climate and weather in crop and animal production. The aim of the World Meteorological Day in 1984 is to call attention to the major contribution of agricultural meteorology towards increasing food production and to the important part that the National Meteorological Services can play in this undertaking.

Agrometeorology is that branch of the science of weather which endeavours to help farmers, livestock owners, horticulturists, market gardeners, foresters and all who are concerned with plant and animal growth. It is an interdisciplinary activity involving the skills and work of specialists in meteorology, agriculture, forestry, livestock husbandry, water sciences and in the economic and advisory services. Agricultural Meteorology is consulted when planning agricultural production systems such as land evaluation, crop and animal selection, and in the choice of agricultural machinery. It is used in day-to-day operations in agriculture such as ploughing, tilling, irrigation, application of fertilizers, crop and animal protection harvesting and storage. There is an increasing need for meteorological support in agriculture. For example in this country calls to the Meteorological Service on the automatic telephone weather service (ATWS), many of which originate from the agricultural community needing a regional weather forecast, now exceed 400,000 annually, representing a 25% increase each year.

Since the early days of the Meteorological Service in Ireland (founded in 1936), and in particular since the nineteen fifties, considerable collaboration in agrometeorology between the various Agricultural Departments, Institutes, Advisory Services and the Universities with the Meteorological Service has been built up both at the formal and informal level. Agricultural Meteorology has contributed significantly to potato blight forecasting, liver fluke advisories, foot and mouth disease emergency programmes, cereal disease control as well as providing a series of agroclimatologies and monthly bulletins.

In many respects however, the climate-weather factor in Ireland has not always been given the attention it deserves by agriculturists. Weather is often accounted for in agriculture in a general way. This view fails to see climate as a real resource in much the same way as, for instance, soil is regarded as a resource. Added to this, in an age of expensive and scarce resources in many other respects, new techniques and improved farm management practices need to be substituted. The place of weather and climate, and their role in agricultural strategy system, in the successful transfer of many of these technologies to the farm level holds much promise for improved quality and quantity of production as well as productivity in general.

Recently a group of experts representing the various institutes in this country met with the aim of providing support to agriculture at both the national level and at the farm level in the application of agricultural meteorology. The group, known as the Joint Working Group on Applied Meteorology, hopes to emphasise the importance of weather and climate to agriculture, to coordinate the interests of meteorology and agriculture, and to foster personal collaboration between meteorologists and agricultural scientists and advisors in their various professional and daily activities. The group has recognised the need to create an awareness and real understanding of the practical role of agrometeorology among scientists and advisors engaged in agriculture as well as among the farming community in general. A number of Task Groups have been set up by the Working Group to make special studies and undertake specified programmes. Areas to be studied include temperature and moisture climatologies, disease control strategies, weather forecasts and advisory services to agriculture, education in agrometeorology, and meteorological and phenological observations.

Ref: Meteorology aids Food Production; World Meteorological Organisation 1984.