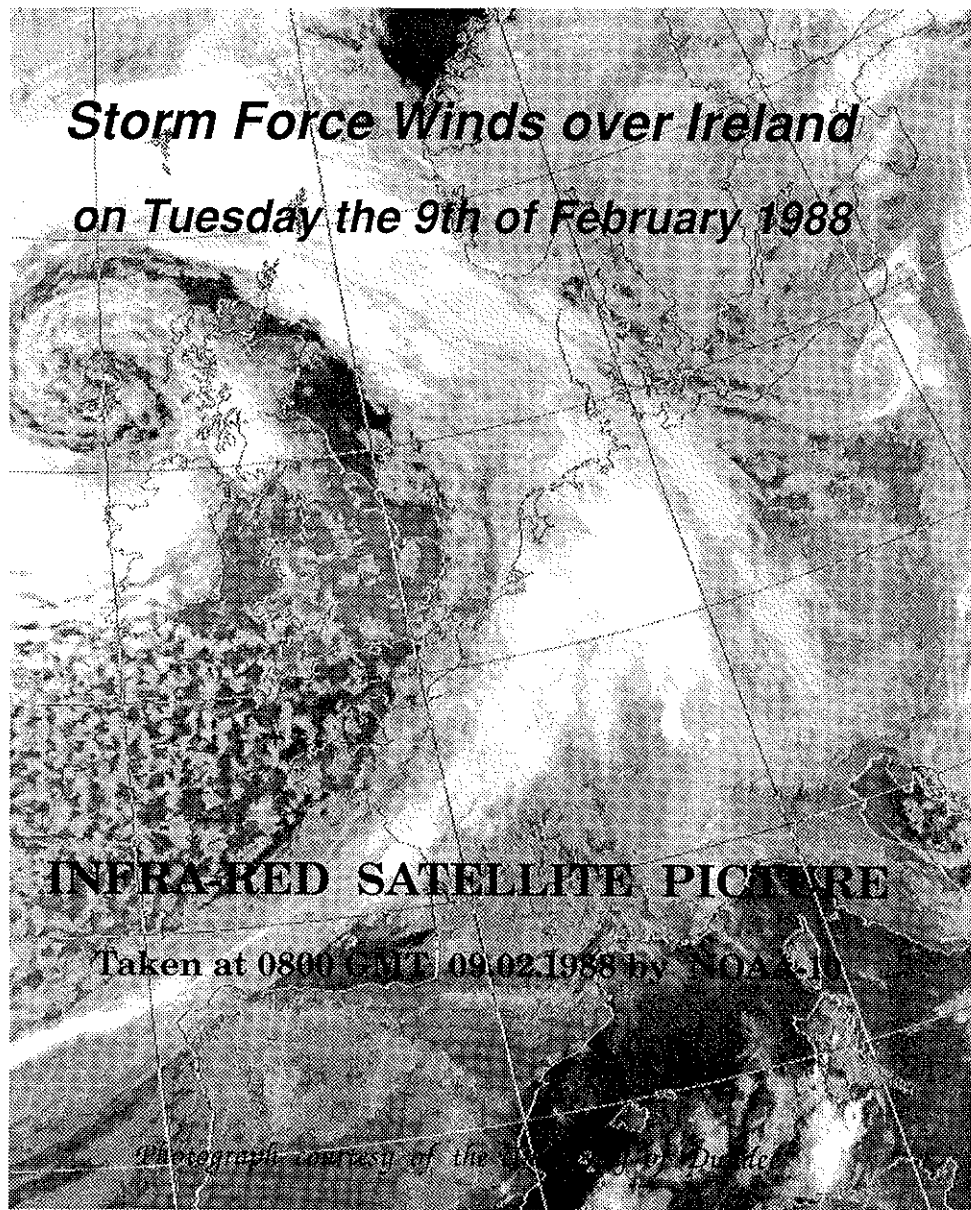


Weather of February 1988

*Storm Force Winds over Ireland
on Tuesday the 9th of February 1988*



INFRARED SATELLITE PICTURE

Taken at 0800 GMT 09.02.1988 by NOAA-10

Photograph courtesy of the Met Office, Exeter

Station	Rainfall		Air Temperature				Sunshine		Wind		Number of days with									
	Total	Most in a Day	Means of	Extreme Temperature			Total	Most in a Day	Max Gale Gust	Max Gale Gust	Rain*	Snow	Air Frost	Hail	Thunder	Fog	Gale Gusts			
		Amount		Date(s)	Max	Min												Mean	Highest	Date(s)
Belmullet	126.6	21.7	14	8.7	3.7	6.2	10.6	27	0.6	10	58.0	5.5	23	93	26	11	-	-	-	15
Birr	59.6	14.1	2	8.1	1.7	4.9	11.5	14	-1.6	6	57.5	7.7	12	74	17	8	-	-	-	12
Cahiriveen	96.9	20.1	3	9.6	3.8	6.7	12.5	20	0.2	6	63.9	7.9	16	77	18	1	-	-	-	15
Casement	42.7	12.8	15	7.5	1.9	4.7	11.7	14	-1.9	25	66.5	8.1	24	78	15	9	-	-	-	16
Claremorris	116.1	14.9	3	8.1	1.9	5.0	12.4	21	-1.5	14	54.9	6.3	12	85	21	12	-	-	-	13
Clones	87.1	20.4	9	7.6	1.6	4.6	11.5	21	-2.0	6	62.3	5.8	11	71	21	12	-	-	-	11
Cork Airport	80.3	15.8	1	7.9	2.2	5.1	10.0	18,28	-0.8	12	80.8	8.7	16	90	17	8	-	-	-	15
Dublin Airport	34.3	8.3	15	7.9	2.4	5.2	11.3	14	-1.0	12	81.8	8.6	24	70	16	8	-	-	-	7
Galway	81.8	14.0	1	8.7	3.0	5.9	11.2	14	-1.0	16	63.9	7.3	12	83	17	5	-	-	-	13
Kilkenny	74.3	14.8	1	8.2	1.2	4.7	11.0	14	-4.5	6	73.4	7.9	12	72	18	9	-	-	-	14
Malin Head	122.5	19.4	9	8.0	3.4	5.7	11.4	15	0.3	16	47.9	4.5	23	81	24	8	-	-	-	23
Mullingar	78.3	11.3	9	7.4	1.5	4.5	10.8	14	-2.4	6	63.8	6.7	23	71	20	11	-	-	-	9
Roche's Point	44.7	9.1	3	8.6	3.5	6.1	10.5	18	0.6	6	78.5	7.5	6	82	14	2	-	-	-	15
Rosslare	38.5	7.2	13	8.2	3.5	5.9	10.1	9	-0.7	7	104.1	8.6	12,24	76	13	3	-	-	-	12
Shannon Airport	97.1	15.3	2	8.9	2.7	5.8	11.7	14	-0.4	16	60.2	8.5	16	78	17	7	-	-	-	11

NOTES: Rainfall in millimetres. Temperatures in Degrees Celsius. Sunshine in Hours and Wind in Knots. Gale Gust = Gust of > 33.5 knots. * = days with 0.2mm or more

Major Storms on 1st and 9th Cause Considerable Damage

The first half of the month was wet and windy. Westerly winds were dominant and on 1st and 9th major storms passed close by the northwest of the country, causing record low pressures. Both storms wreaked havoc over the country, bringing down telephone and power lines and causing widespread disruption of road, rail, air and sea transport. During the second half of the month high pressure dominated to weather charts in the region of Ireland. The centre of the anti-cyclone was mostly out to the west in the Atlantic but between 19th and 21st the centre was quite close to the country. As winds were mostly from the northwest or north and amounts of precipitation were small we got improved drying which was much needed after the wet January.

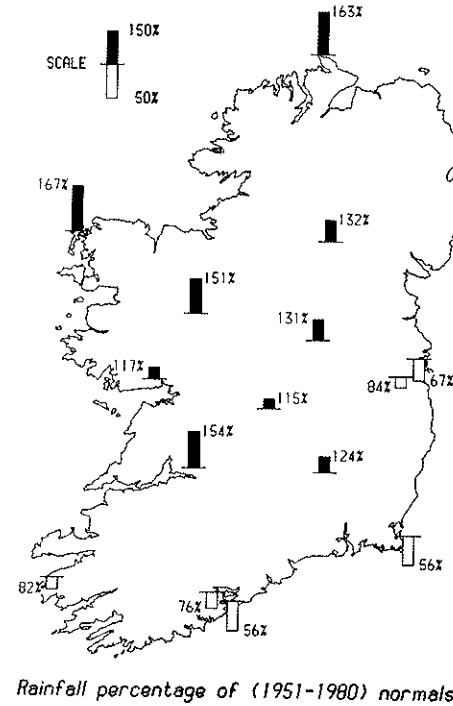
WINDSTORMS

In both cases a major Atlantic depression passed close by the northwest of the country. On 1st the centre of low pressure passed very near Belmullet and pressure there fell to 949.1 hectopascals (millibars). All but some southern areas could be said to have escaped lightly with maximum gusts of between 40 and 60 knots. However, along the whole south coast gusts of between 75 and 83 knots were recorded and Cork Airport had twelve successive hours with mean windspeed of at least gale force (34 to 40 knots) and two hours with storm force winds (48 to 55 knots). This resulted in over 40,000 homes in southern counties being without electricity as falling trees brought down power lines.

On 9th (see front page on which the storm centre is to the north of Ireland) the central pressure of the storm was lower than on 1st but the centre did not pass quite so close to any of our stations and the lowest pressure recorded was 953.5 hectopascals at Malin Head, the lowest February pressure there in over thirty years of record. Destructive winds affected the whole country. The west and northwest were worst affected but near southern coasts the storm of 1st was the more severe. Many areas had 20 to 24 hours with mean winds of at least gale force and Belmullet had eight hours with storm force winds. Maximum gusts ranged from 69 to 85 knots generally; Rosslare registered only 61 knots but Belmullet recorded 93 knots (107 mph), its highest gust since January 1957.

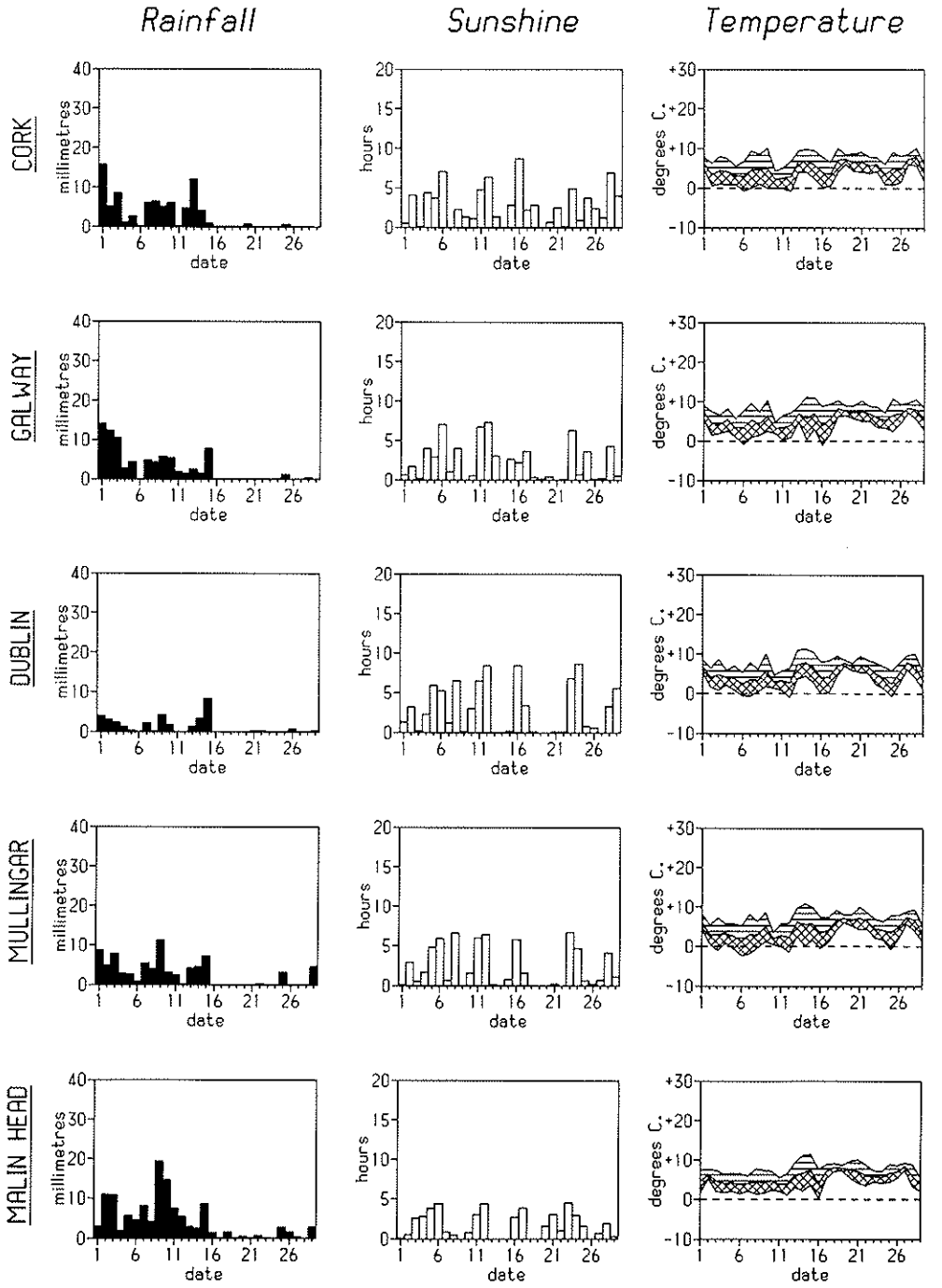
The windstorm of 9th bears comparison with the

(Continued on back page)

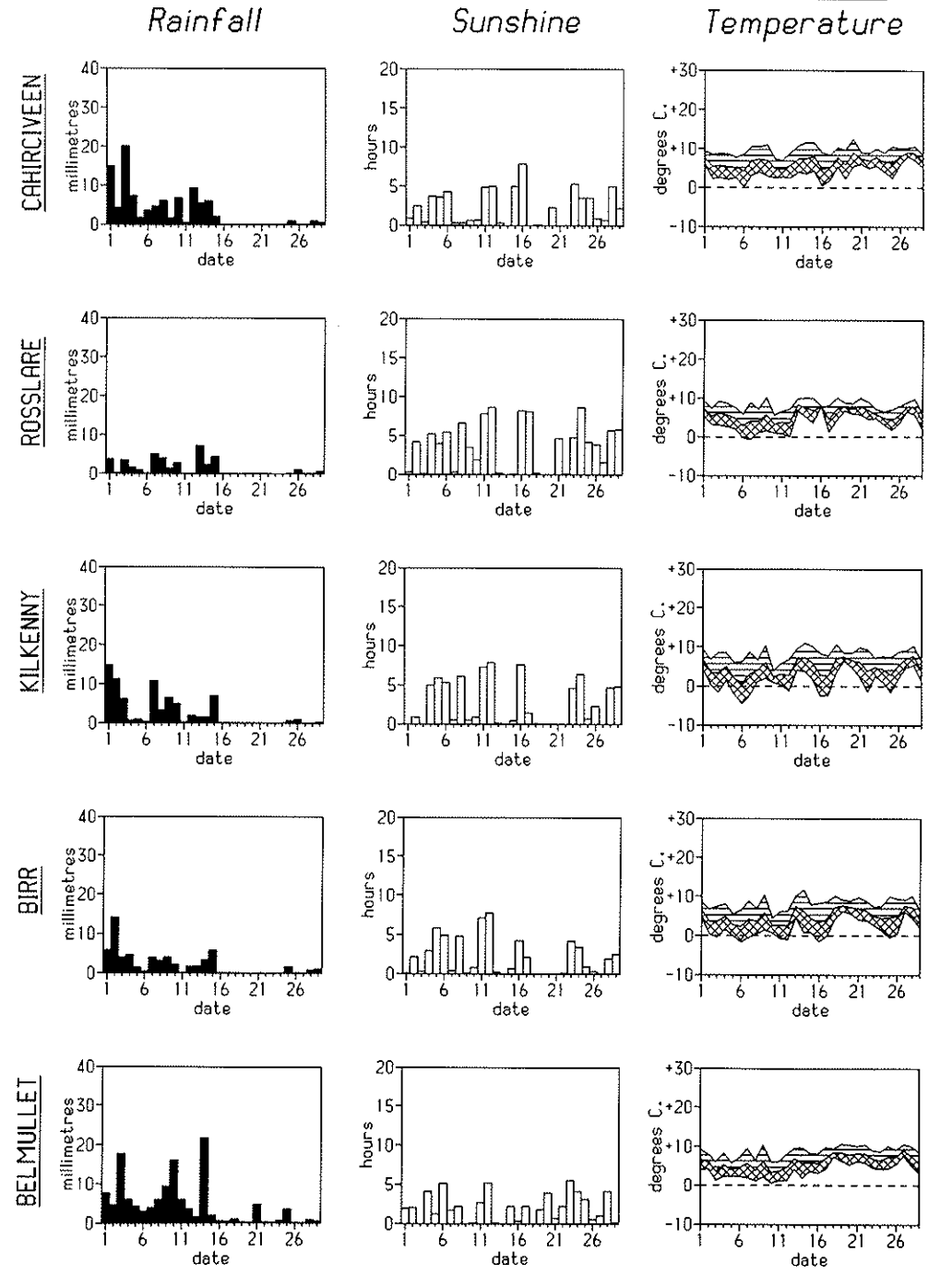


Distribution of daily values

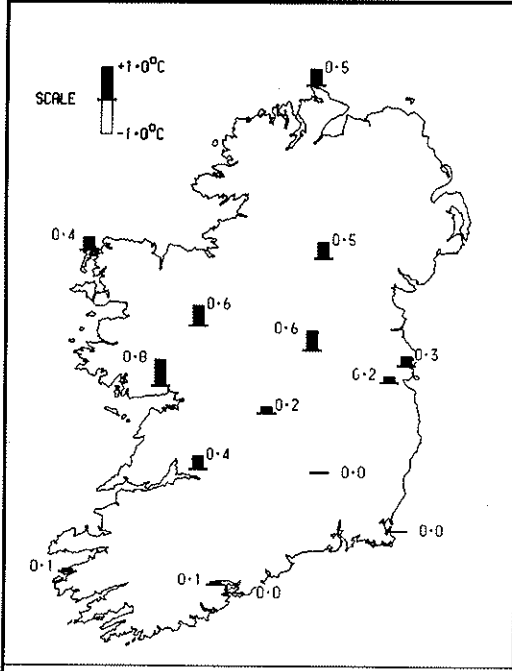
Max
 Mean
 Min



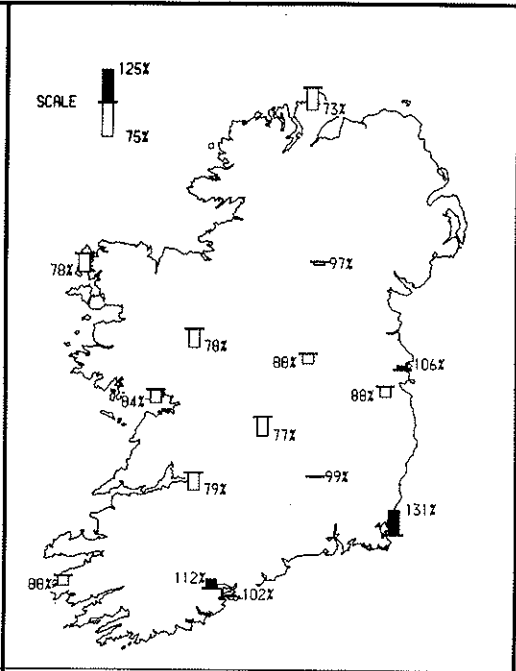
Max
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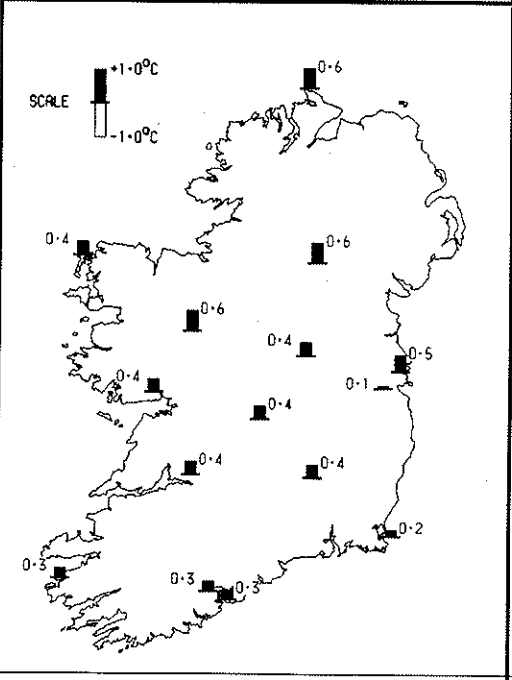
Differences from average



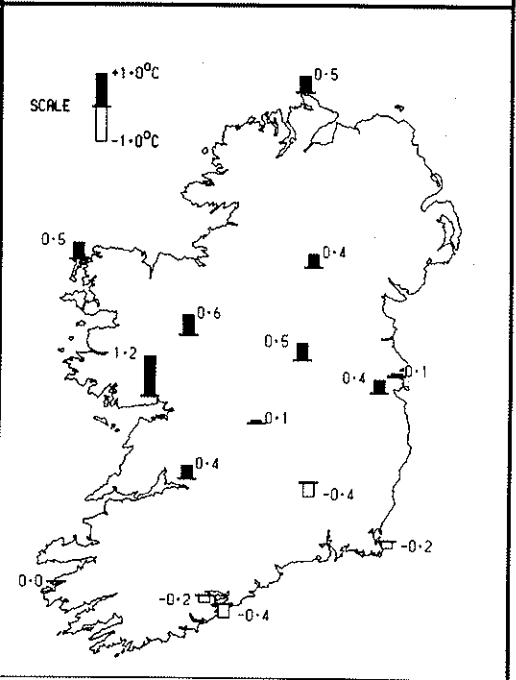
MEAN TEMPERATURE (Deviation from 1951-1980 normals)



SUNSHINE (Percentage of 1951-1980 normals)



MEAN MAX. TEMPERATURE (Deviation from 1951-1980 normals)



MEAN MIN. TEMPERATURE (Deviation from 1951-1980 normals)

METEOROLOGICAL SUMMARY

WINTER

1987/88

Station	Rainfall		Air Temperature			Sunshine		Wind	Number of days with							
	Total	Most in a Day Amount Date(s)	Means of Max Min	Mean	Extreme Temperature Highest Date(s) Lowest Date(s)	Total	Most in a Day Amount Date(s)	Max Gale Gust	Rain*	Snow	Frost	Air	Hail	Thunder	Fog	Gale Gusts
Belmullet	436.4	25.0 12 Jan	8.5 3.9	6.2	12.6 28 Dec	-2.6 10 Dec	134.5	6.7 9 Dec	93	75	18	4	2	2	-	43
Binn	230.6	15.8 4 Jan	8.5 2.8	5.7	13.9 28 Dec	-6.5 10 Dec	136.5	7.7 12 Feb	74	57	10	15	-	3	3	29
Cahiriveen	558.2	45.6 18 Jan	10.0 5.0	7.5	13.6 17 Dec	0.2 6 Feb	135.2	7.9 16 Feb	77	70	2	-	2	-	60	
Casement	176.6	12.8 15 Feb	8.3 3.0	5.7	14.0 17 Dec	-5.1 10 Dec	166.6	8.1 24 Feb	78	56	12	13	-	3	51	
Claremorris	426.1	24.5 18 Jan	7.9 2.4	5.2	13.1 28 Dec	-5.5 9 Dec	122.8	6.3 12 Feb	85	68	21	22	1	10	28	
Clones	300.1	23.4 23 Jan	7.5 2.2	4.9	13.2 17 Dec	-7.1 10 Dec	130.7	5.8 13 Jan	71	61	19	19	-	4	30	
Cork Airport	521.5	45.5 18 Jan	8.4 3.8	6.1	12.6 1 Jan	-0.8 12 Feb	167.5	8.7 16 Feb	90	68	12	2	3	1	53	
Dublin Airport	192.1	19.0 6 Jan	8.6 3.8	6.2	14.2 17 Dec	-1.1 10 Dec	184.4	8.6 24 Feb	70	56	13	7	-	6	26	
Galway	368.2	26.3 18 Jan	8.6 3.5	6.1	13.4 28 Dec	-4.0 9 Dec	145.7	7.3 12 Feb	83	64	9	10	1	7	36	
Kilkeny	271.6	21.1 18 Jan	8.6 2.6	5.6	14.0 17 Dec	-4.8 9 Dec	167.6	7.9 12 Feb	72	62	17	20	6	8	30	
Malin Head	351.8	25.3 19 Jan	8.4 3.9	6.2	13.6 28 Dec	-2.4 10 Dec	125.2	6.4 1 Dec	81	62	14	4	-	-	67	
Mullingar	273.1	24.1 18 Jan	7.8 2.2	5.0	13.0 28 Dec	-5.6 9 Dec	164.4	6.7 23 Feb	71	62	17	23	3	1	23	
Roche's Point	389.3	32.8 18 Jan	9.2 5.0	7.1	13.3 1 Jan	0.6 6 Feb	169.7	7.5 6 Feb	82	64	3	-	3	1	59	
Rosslare	307.8	22.3 18 Jan	9.0 4.9	7.0	12.5 28 Dec	-0.7 7 Feb	214.2	8.6 12 Feb	76	57	3	2	4	1	49	
Shannon Airport	326.8	18.8 1 Jan	9.1 3.7	6.4	14.2 28 Dec	-2.9 9 Dec	142.3	8.5 16 Feb	78	62	10	5	2	2	30	

NOTES: Rainfall in millimetres. Temperatures in Degrees Celsius. Sunshine in Hours and Wind in Knots. Gale Gust = Gust of > 33.5 knots. * = days with 0.2mm or more

(Continued from Page 3)

the storms of February 1957, January 1974 and even 'Hurricane Debbie' of September 1961. Four people were killed and over a dozen injured as the storm swept over the country. Trees were down everywhere, roofs blown off and over 80,000 homes were without power during the day.

Records for February were broken at quite a number, but not all our stations. The only full-period record broken was at Galway where the 83-knot gust was the highest since the station opened in 1978. The lengthy duration of gale force winds was the most singular feature of this storm. On 28th and 29th in a fresh northerly airflow winds gusted from 35 to 50 knots over the country with gusts of up to 62 knots at Malin Head.

PRECIPITATION

In south Munster and east Leinster rainfall was below normal but elsewhere it was above normal. Amounts ranged from 127mm at Belmullet (167% of normal) to 39mm at Rosslare (56% of normal). The bulk of the rain fell in the first two weeks, when wettest spells were 1st to 3rd, 7th to 10th and 13th to 15th and showers of hail, sleet and snow were widely reported.

During the second half of the month drying conditions improved considerably as amounts of rain were small especially between 16th and 24th. With the centre of high pressure retreating slowly westwards troughs occasionally came down from the north between 25th and 29th but amounts of precipitation remained small. Showers of hail and sleet were reported especially in the north and west. Malin Head and Shannon Airport had their highest February totals for 11 years but Belmullet had its wettest February for 18 years.

AIR TEMPERATURE

Mean maximum air temperatures ranged from 0.1°C to 0.6°C above normal. Mean minimum air temperatures were below normal in south Munster and south Leinster but were above normal elsewhere. Air frost was recorded on 3rd between 5th and 8th, 10th and 12th and from 14th, 16th and 25th.

SUNSHINE

Totals ranged from 104 hours at Rosslare (131% of normal) to 48 hours (73% of normal) at Malin Head. Near the south and east coasts it was the sunniest February for 13 to 18 years.

WINTER OF 1987/88

December : Cold Start Becoming Mild

January : Wet and Mild

February : Wet and Stormy at First

In all but parts of the east rainfall was above normal. In the west it was the wettest winter for 14 years while near the south coast it was the wettest for 6 to 9 years and at some stations over 130% of normal rainfall was recorded. In parts of the east rainfall was below normal with Casement Aerodrome having only 91% of its normal total.

Mean maximum air temperatures were between 0.4°C and 0.9°C above normal in most areas while mean minimum air temperatures ranged from 0.5°C to 0.9°C above normal. In the east and parts of the southeast it was the mildest winter since 1975/76. However, at Belmullet mean air temperatures were just above normal.

Sunshine totals ranged from 214 hours at Rosslare to 123 hours at Claremorris representing percentages of normal varying from less than 80% at Birr and Claremorris to over 108% at Rosslare which had its sunniest winter for 18 years. Near the south and east coasts the highest winter sunshine totals for 6 to 9 years were recorded.

There was a notable windstorm on February 9th but there were no major snowfalls during the winter. Lowest temperatures were recorded during the cold spell of early December when -7.1°C was recorded at Clones.