

High winds during a mild wet November

Southwesterly or westerly winds prevailed as the Atlantic low pressure systems moved eastwards mostly on a track to the north of Ireland. The rainbelts associated with the low-pressure systems usually moved steadily eastwards across the country but occasionally wave disturbances caused them to become slow-moving and gave heavy rain as on the 7th and the 18th. Daytime temperatures were above normal and in contrast to last November, air frost was widespread only on the 2nd and on the 21st but the number of days with strong gales was exceptionally high and the number of days with gale gusts was the highest ever at many of our stations.

HIGH RAINFALL TOTALS

Except in the northwest the period 27th to 30th was dry and mild. However, the month was characterised by a high number of wet days (days with a rainfall total of at least one millimetre) and some heavy falls on the 7th, 11th/12th and in the period 16th to 23rd. This persistent rain during the month ended the spell of weather which promoted the harvesting of both peat and sugar beet.

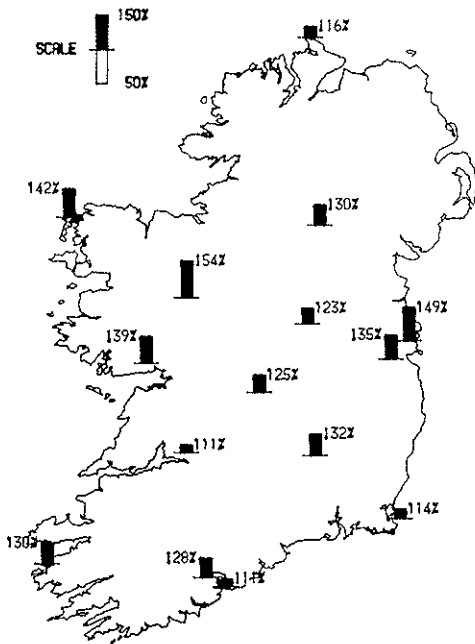
Monthly totals ranged from 111% of normal at Roche's Point and Shannon Airport to 154% of normal at Clernorrills which recorded a fall of 40.2 millimetres on 7th, its highest daily fall in November for eighteen years. The monthly total over the country averaged about 130% of normal.

STORMS AND HIGH WINDS

The number of days with gale gusts was 9 at Birr and Clones, 13 at Mullingar but 25 to 28 on the northwest coast. Particularly windy periods were 9th/10th, 12th/13th, 15th/16th, 18th and especially 21st to 23rd when gusts of 70 to 73 knots (80 to 84 miles per hour) were recorded on the southwest, west and north coasts. On 9th/10th gusts of 40 to 60 knots were recorded with gusts of 60 to 66 knots at Balmullet, Malin Head and Casement Aerodrome.

The particularly strong southwesterly winds over the south of the country on Tuesday 18th, which were strong gale force 9 to storm force 10 caused the two ships the Kowloon Bridge and the Capo Emma to shelter in Bantry Bay. The ill-fated Kowloon Bridge set out again but was demaged by the storm of Saturday 22nd when winds

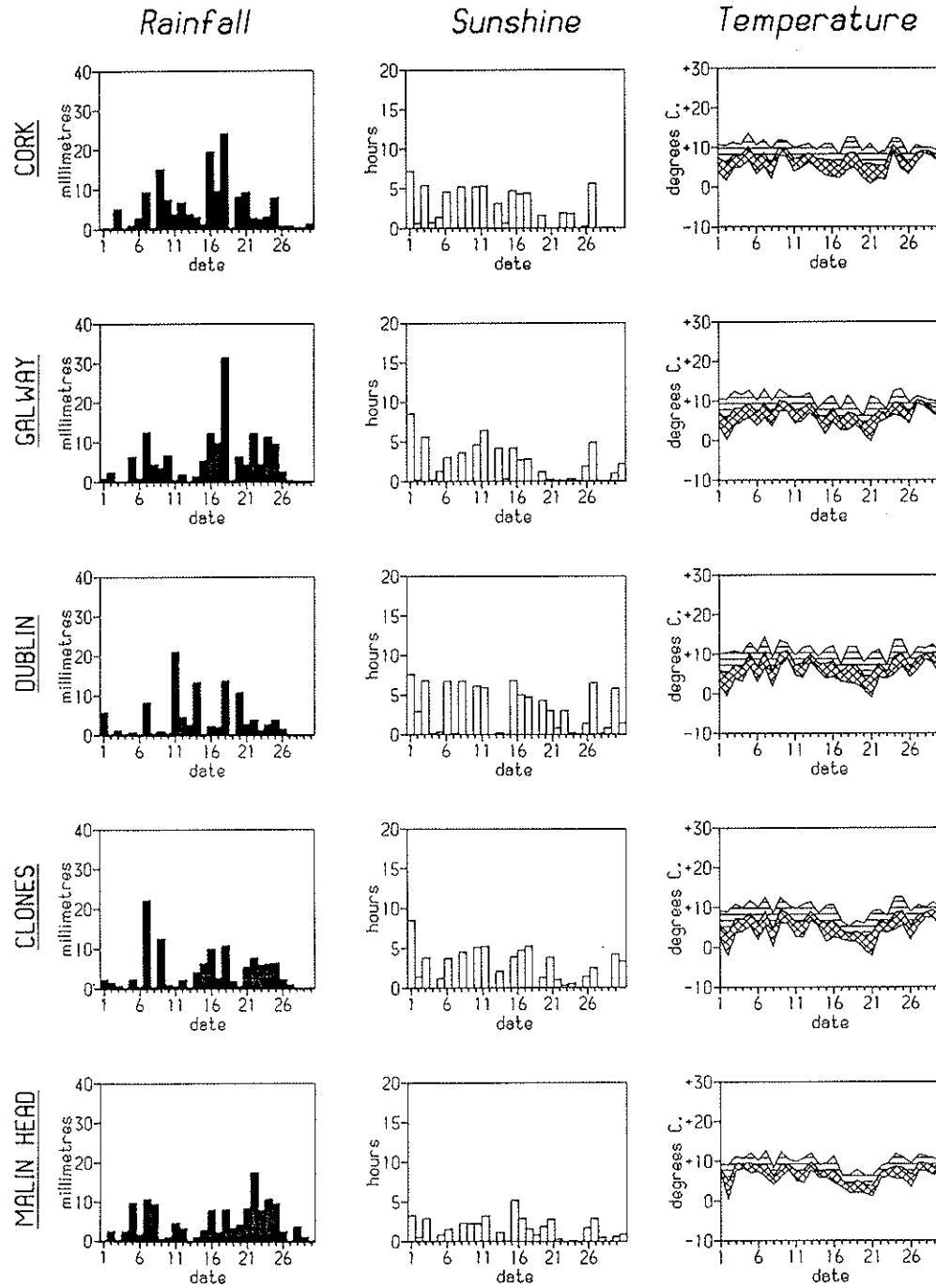
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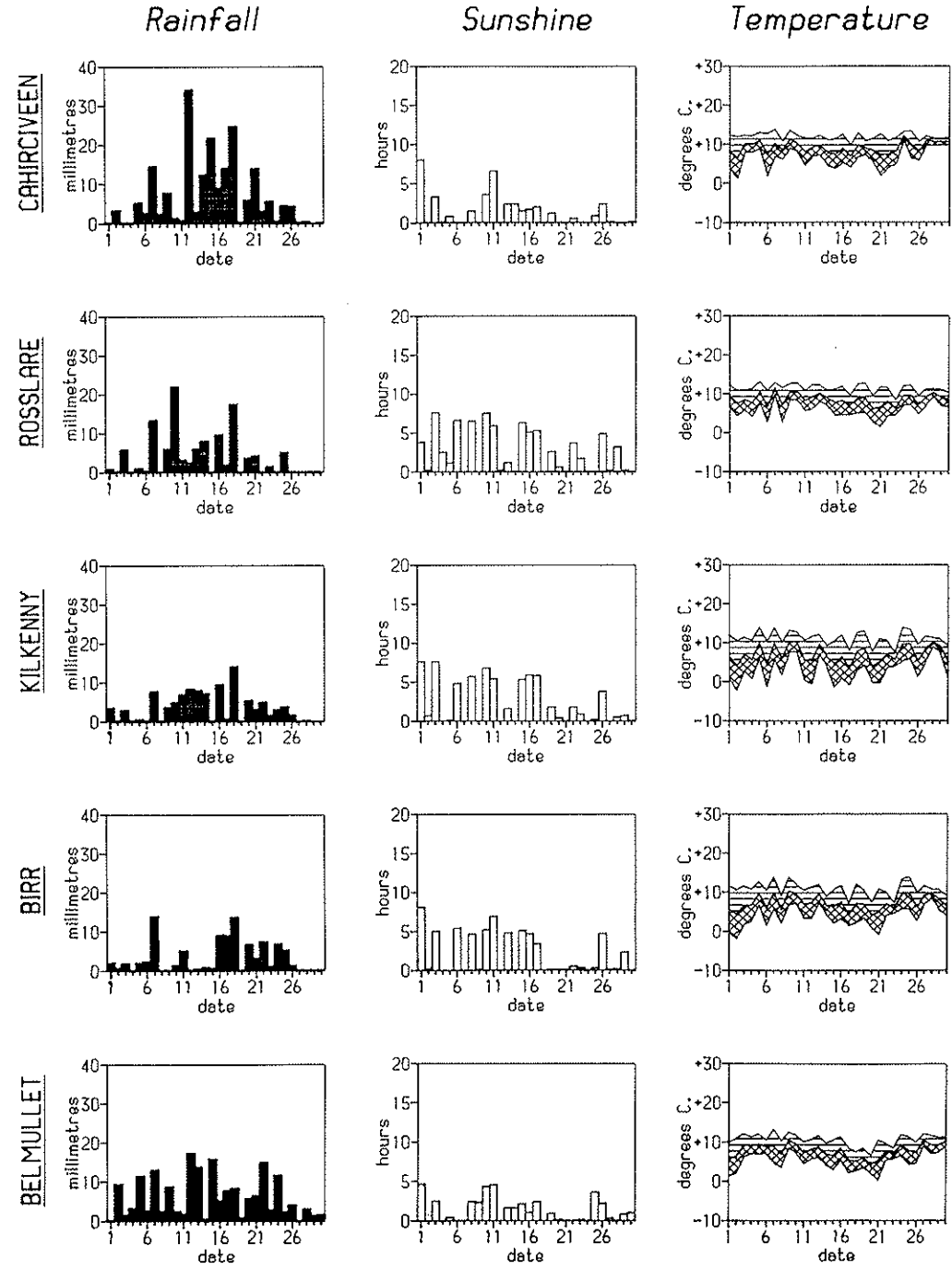
Rainfall percentage of (1951-1980) normals

Distribution of Daily Values

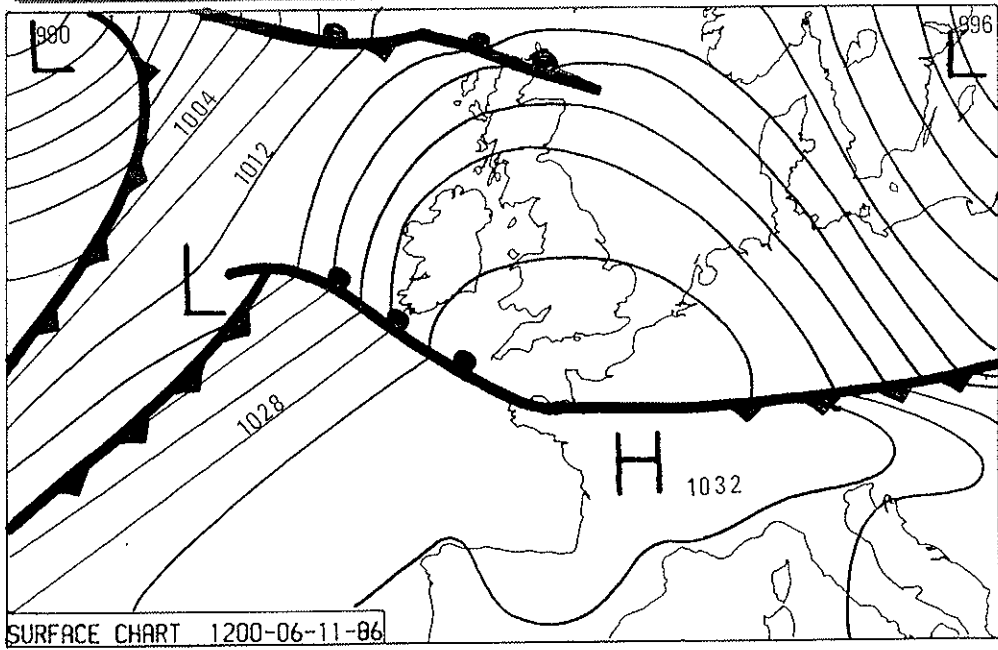
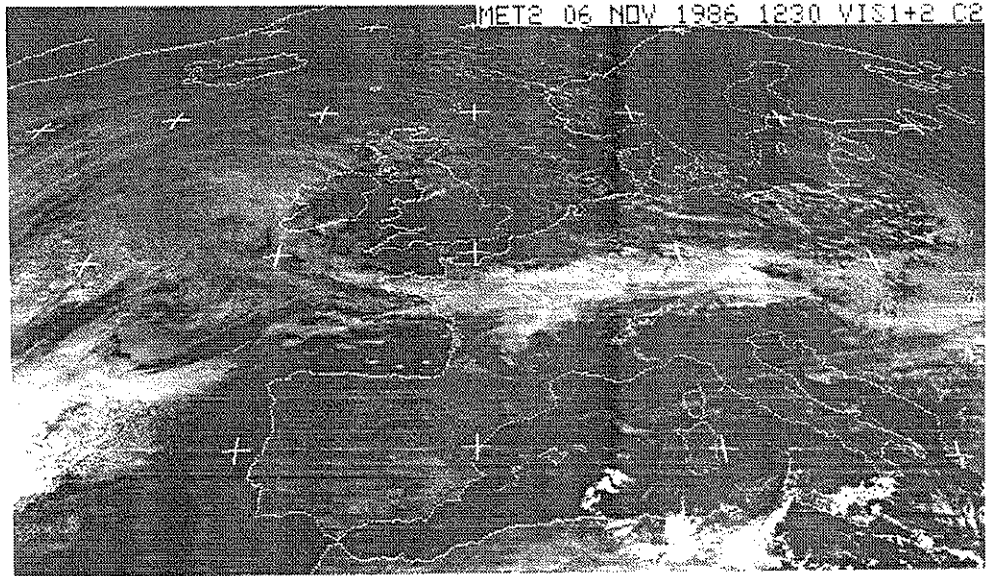

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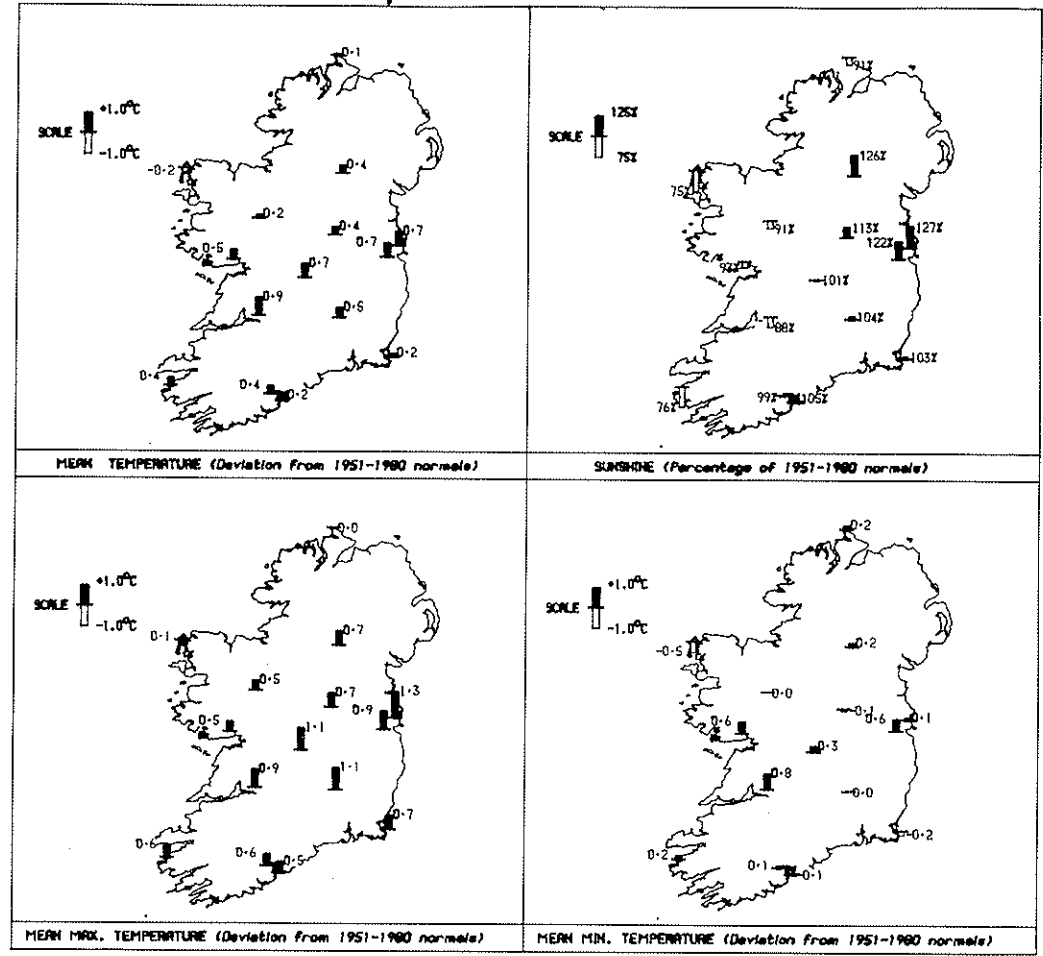


Weather Situation at noon 6th of November



The satellite picture was taken at 1230 GMT when there were still clear skies over much of Ireland. However the influence of the ridge of high pressure over Europe is weakening, as a warm-frontal band of cloud near the southwest is moving northeastwards. Disturbances developing on the cold fronts gave some heavy rain on the 7th.

November 1986 Totals, Means and Extremes



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	Rain	Snow	Frost	Hail	Thunder	Fog	Cale Gusts				
		Amount	Date(s)	Max	Min	Highest	Date(s)		Lowest									Date(s)	Amount	Date(s)	
Belmullet	180.3	17.4	12	10.6	5.1	7.9	13.3	7	0.3	21	38.7	4.6	1	73	29	3	-	8	1	-	25
Birr	96.1	14.0	7	10.9	3.7	7.3	14.0	7, 9	-2.0	2	62.2	8.1	1	45	24	1	3	-	-	-	9
Cahircolvaun	196.7	34.2	12	12.0	6.4	9.2	13.8	7	1.2	2	39.1	8.0	1	70	27	-	-	3	4	-	22
Cesement	94.2	13.6	7	10.7	4.1	7.4	14.3	7	-2.6	21	78.1	7.1	1	61	21	-	2	1	-	1	23
Claremorris	180.3	40.2	7	10.1	3.3	6.7	12.7	7	-2.3	21	49.8	7.1	1	60	26	-	3	3	-	-	18
Clones	114.5	22.0	7	9.8	3.4	6.6	12.7	7, 9	-2.2	2,21	67.6	8.5	1	46	26	1	3	1	-	2	9
Cork Airport	147.2	24.1	10	10.6	4.7	7.7	13.7	5	0.8	21	63.8	7.2	1	60	27	2	-	-	-	4	18
Dublin Airport	102.7	21.0	11	11.1	4.5	7.8	14.6	7	-1.0	21	87.2	7.6	1	48	21	-	2	-	-	2	13
Galway	149.9	31.4	18	10.6	4.8	7.7	13.1	7	-0.2	21	59.6	8.5	1	70	24	-	1	7	1	-	17
Kilkenny	102.0	14.1	18	11.2	3.0	7.1	14.1	5	-2.4	2	67.4	7.6	1, 3	51	23	-	7	-	-	3	14
Mallin Head	137.8	17.4	22	9.9	5.5	7.7	12.9	7	0.6	2	42.2	5.2	15	71	26	1	-	10	-	-	28
Mullinger	112.2	17.9	18	9.9	2.8	6.4	13.8	7	-3.9	21	71.7	8.3	1	49	24	-	3	1	-	4	13
Roche's Point	97.4	16.9	18	11.3	6.1	8.7	14.9	5	2.5	21	73.4	7.4	1	59	21	-	-	-	-	-	19
Rosslone	113.0	22.0	10	11.4	5.8	8.6	13.2	5	1.6	21	77.0	7.6	3	59	19	-	-	1	-	-	19
Shannon Airport	109.0	16.8	18	11.4	5.3	8.4	14.3	7, 9	0.0	21	51.3	7.3	1	65	22	-	-	5	1	1	13

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

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were westerly, again strong gale force 9 to storm force 10. This storm also caused widespread disruption to many sailings of the passenger ferry services.

HIGH DAYTIME TEMPERATURES

The daytime temperatures were just about normal on the north and northwest coasts but elsewhere they ranged from 0.5°C to 1.3°C above normal, the higher deviations from normal occurring at midland and eastern stations. Although there were clear skies on quite a number of nights, winds were strong enough to prevent frequent air frosts. Indeed only on the 2nd and the 21st was airfrost widespread at inland stations and the lowest temperatures were recorded on these two days.

Kilkenny had the highest number of days with air-frost but even its seven nights with frost is two below its long-term average. Mean minimum air temperatures ranged from 0.5°C below normal at Belmullet to 0.8°C above normal at Shannon Airport but at most stations they were normal or just above. The mean air temperature was about 0.5°C above normal generally but values ranged from 0.2°C below normal at Belmullet to 0.9°C above normal at Shannon Airport. The highest temperature of the month, 14.9°C was recorded on the 5th at Roche's Point and the lowest temperature, -3.9°C on the 21st at Mullingar.

SUNNIEST IN EAST AND NORTH

In Munster, Connaught and west Ulster sunshine totals were below normal but elsewhere they were normal or above. Totals ranged from 38.7 hours at Belmullet to 87.2 hours at Dublin Airport. Percentages of normal ranged from 75% at Belmullet to over 120% in the parts of the east and north but in most places they were between 90% and 115% of normal.

The 1st was the sunniest day of the month, Birr and Clones both recording 8.5 hours of sunshine : the sunniest ever November day at both stations.

AUTUMN 1986

The enclosed summary of the weather for Autumn compares the values of sunshine, rainfall and air temperature with the average values of these elements over the three months. Recall that September was sunny and remarkably dry but cool mainly because of low night-time temperatures. The first half of October was mild, sunny and fairly dry but the second half was cool, windy and very changeable. The resultant mean October temperatures were somewhat below normal, sunshine totals were above normal in most places and rainfall amounts ranged from 150% of normal at Belmullet to 69% of normal at Kilkenny.

RADIOSONDES

Measurements of upper-air pressure, temperature and humidity are important in weather forecasting. In the past, kites, balloons, aircraft and rockets have been used to carry instruments aloft. Upper-air soundings began in 1749 in Glasgow when a thermometer was attached to a kite. Bigger and better kites carried instruments to greater heights, but it was the invention of the balloon late in the 18th century which led to measurements at substantial heights.

The first radiosonde was launched in 1927 sending readings of pressure, temperature and humidity at the various pressure levels back to the ground. By the year 1940 they were in general use. The early models were heavy and cumbersome with valve radios and heavy batteries in contrast to today's sondes which are small light and accurate and can reach heights of 30km. Ireland's radiosonde station is in Valentia Observatory in Co. Kerry where four ascents are done every day, two of them (midday and midnight) carrying radiosonde packages. The British Met. Service also do ascents from Long Kesh in Co. Down.

FOR LATEST FORECAST RING

- Dublin area : 1199
- Leinster and Cavan/Monaghan : (01) 425555
- North Munster/South Connaught : (061) 62677
- South Munster : (021) 964600
- North Connaught/Donegal : (01) 424655
