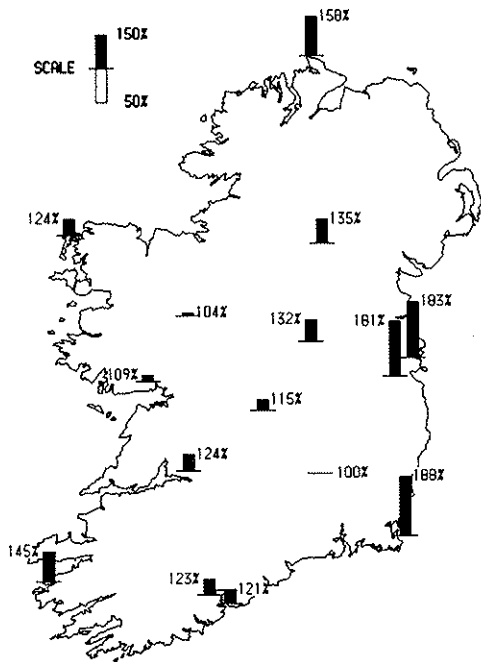


Cool and sunny with heavy falls of rain

For the first four days of the month winds were easterly or southeasterly and, with air coming from the continent, we had hazy conditions with occasional rain during the Nissan cycle race. On the 5th the Atlantic influence reasserted itself as a cold front moved eastwards causing outbreaks of thundery rain and a veer of wind to southwesterly. The low pressure systems in the Atlantic then became the dominant influence with winds mostly southwesterly or westerly until Wednesday the 14th. Gradually cold air pushed southwards in the Atlantic and wave depressions forming on the boundary between warm and cold airmasses became an important feature as they began to move northeastwards, fortunately passing to the south of Ireland. Explosive deepening of one of these depressions wrought havoc over England on 16th. A rainbelt from the Atlantic crossed Ireland during 17th and early on 18th but intensification of the high pressure area over the east of Europe caused this front to become slow-moving over Wales. A wave depression forming on the front, deepened as it moved northwards in the Irish Sea and caused heavy falls of rain on 20th and 21st. The blocking effect of high pressure to the east remained an important factor in determining our weather for the rest of the month.



BANK HOLIDAY WEEK-END

The bank holiday weekend started with dry, bright weather on Friday the 23rd which continued the following day (see satellite picture). On Sunday the 25th the rainbelt came in on the west coast and was slow moving there for much of the day. It finally pushed eastwards late on 25th and early on Monday the 26th to again become quasi-stationary just to the east of Ireland. While much of the country had a pleasant bank holiday Monday, there was rain at Rosslare which spread northwards late on 26th and early on 27th before the wave disturbance on the front moved away eastwards and a westerly airflow developed. Between 28th and 31st a depression to the southwest of Ireland became slow-moving and then slipped southwards towards Portugal as pressure rose over Ireland.

HIGH RAINFALL TOTALS

Rainfall for the month was above normal, by over 80% along the east coast; Casement Aerodrome having its wettest October for 20 years. The pattern for the month consisted of spells of heavy rain followed by brighter weather with scattered showers. Heavy falls occurred at a number of stations on the 5th, 9th, 14th, 17th, 25th, 27th and 29th. Most notable were the falls on Wednesday

(Continued on back page)

Rainfall percentage of (1951-1980) normals

Distribution of Daily Values



 Max

 Mean

 Min



 Max

 Mean

 Min

Rainfall

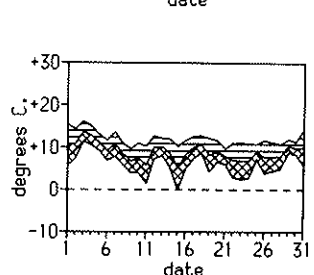
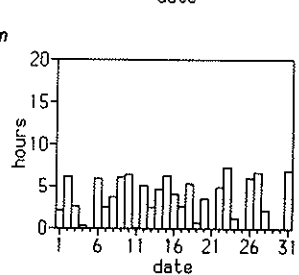
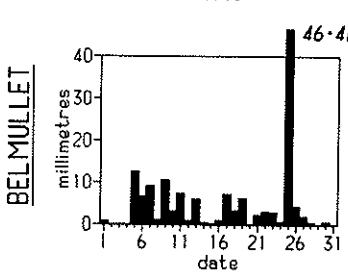
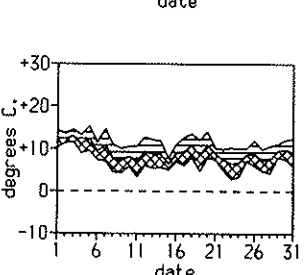
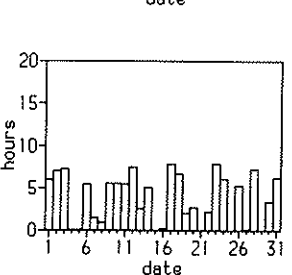
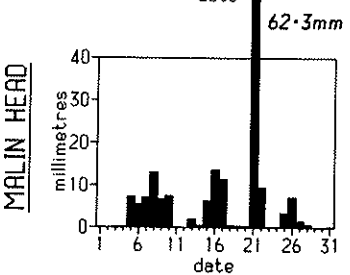
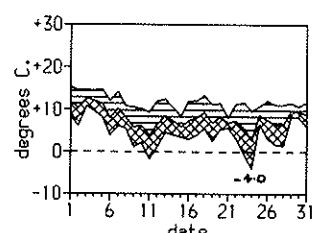
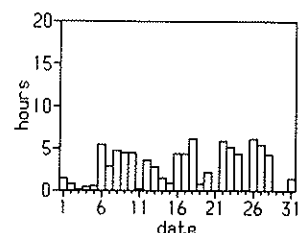
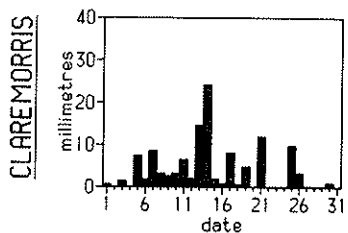
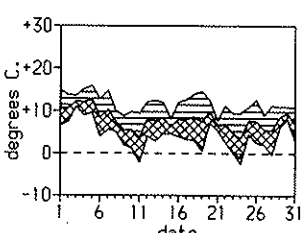
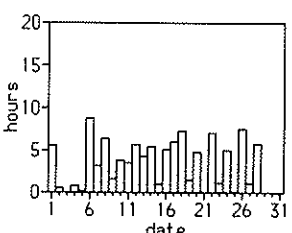
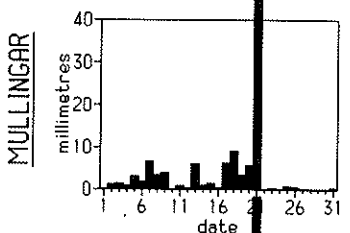
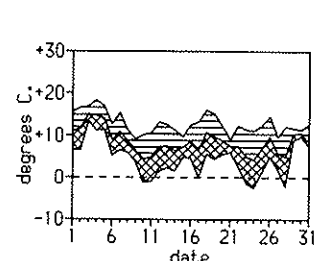
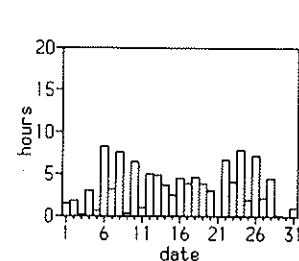
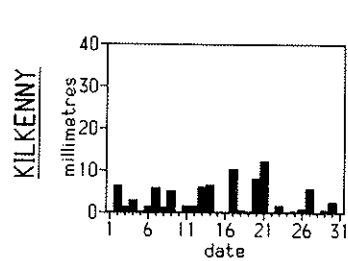
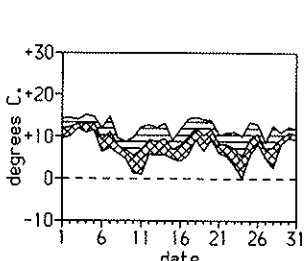
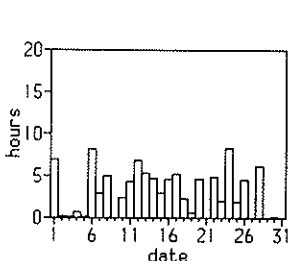
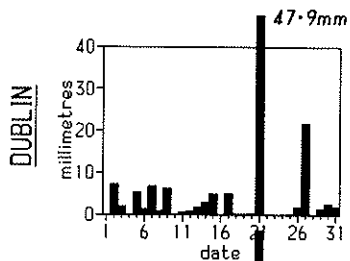
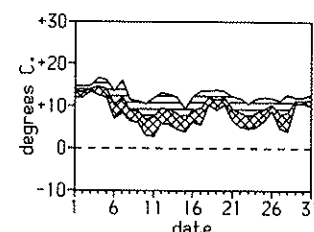
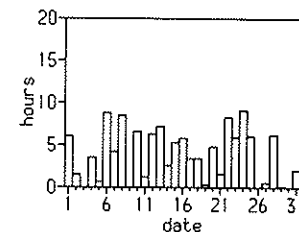
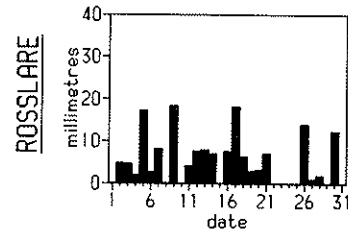
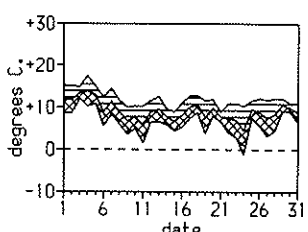
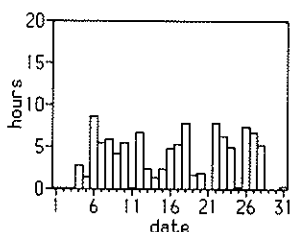
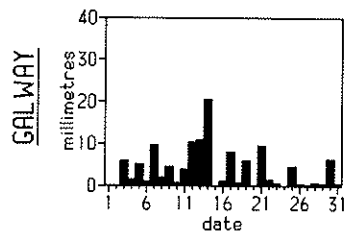
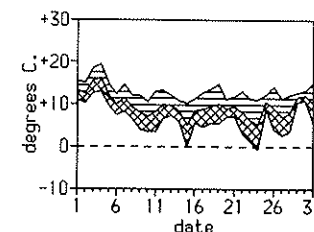
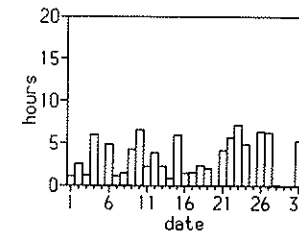
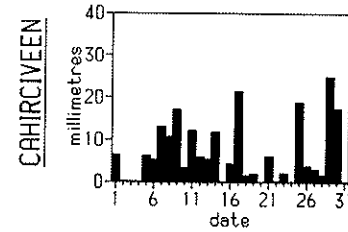
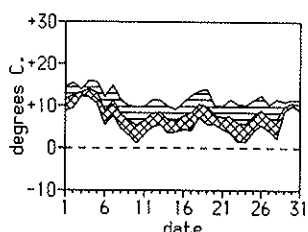
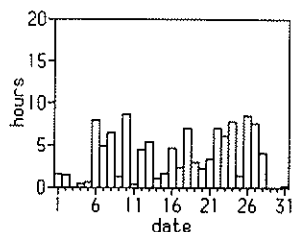
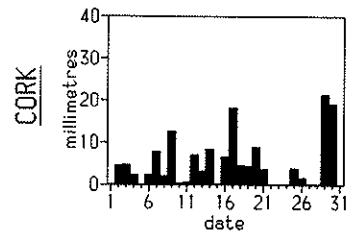
Sunshine

Temperature

Rainfall

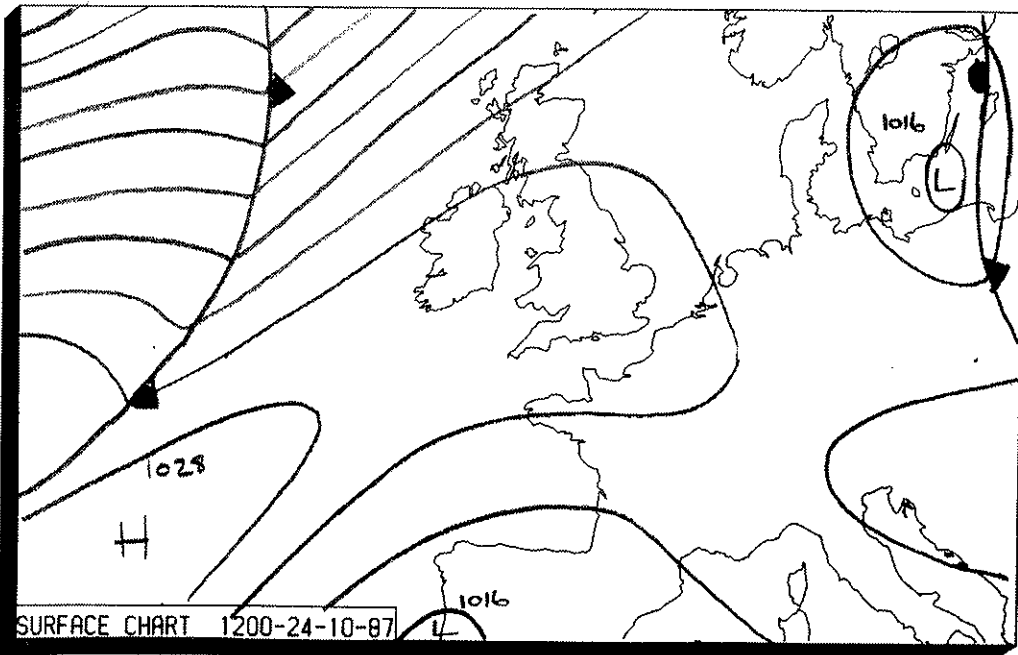
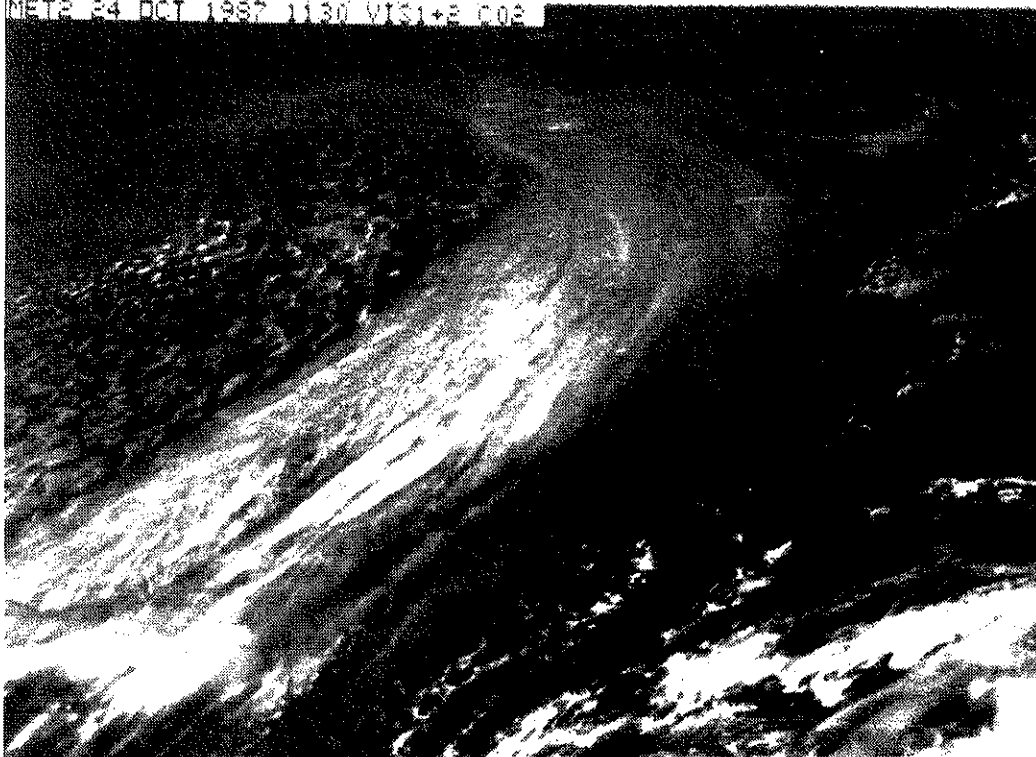
Sunshine

Temperature



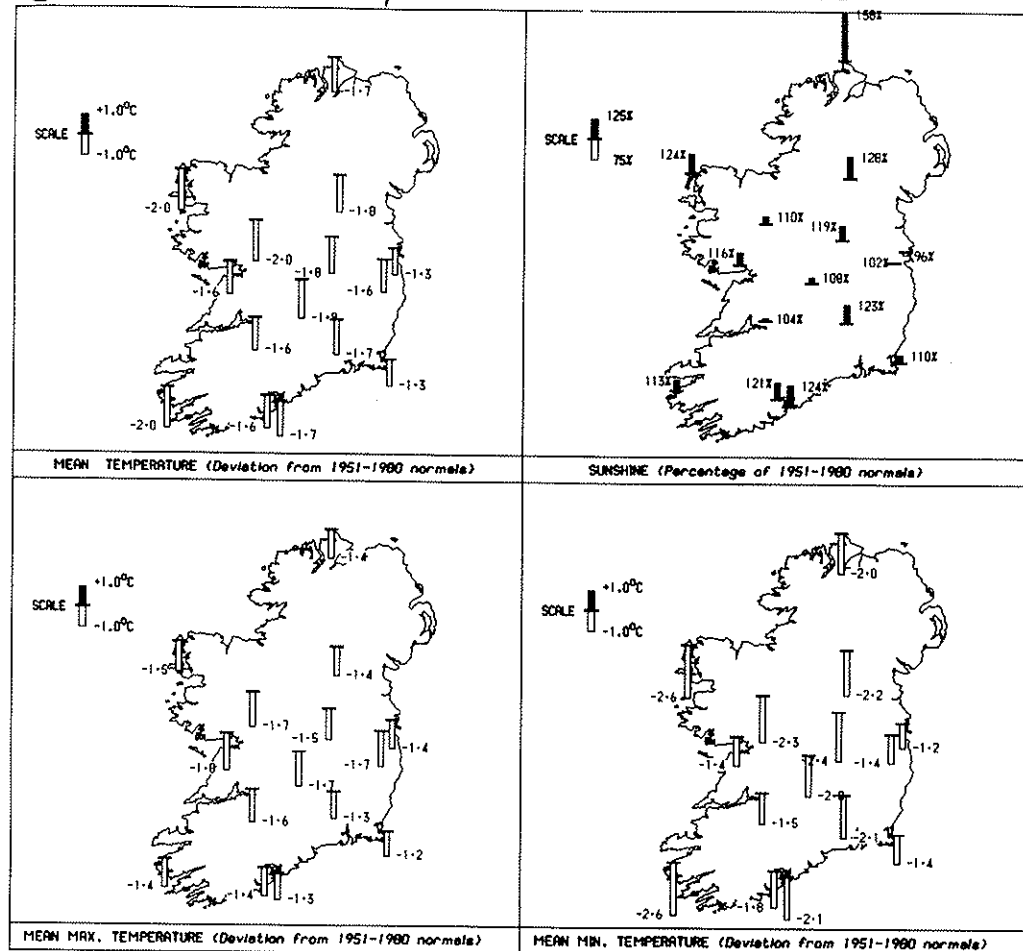
Dry and bright, but rain to the west

METE 24 OCT 1987 1130 VIS1+E 002



October 1987

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	Gale Gusts		
		Amount	Dates	Max	Min	Mean	Highest	Date(s)		Lowest	Date(s)									Amount	Dates
Belmullet	140.2	46.4	25	12.1	6.0	9.1	16.1	3	0.0	15	105.8	7.3	23	56	26	1	-	5	-	-	13
Birr	92.0	17.4	21	12.1	4.9	8.5	17.0	4	-1.9	24	93.9	8.3	26	44	20	-	3	-	-	-	3
Cahiriveen	205.5	24.9	29	13.1	6.3	9.7	19.4	4	-0.6	24	92.3	7.2	23	56	25	-	1	3	2	-	14
Cesement	123.4	43.0	21	12.1	5.3	8.7	16.6	5	-2.0	24	99.2	7.9	24,28	48	22	-	2	-	1	2	9
Claremorris	120.1	24.3	14	11.7	4.3	8.0	15.2	1	-4.0	24	85.4	6.2	18,26	54	22	-	3	1	1	7	3
Clones	119.2	76.8	21	11.8	4.5	8.2	16.0	3	-3.0	24	97.0	7.4	6	50	19	-	3	2	-	8	3
Cork Airport	147.4	21.3	29	11.6	5.0	8.7	16.0	4	1.2	10	112.1	8.7	10	54	22	-	-	-	1	6	8
Dublin Airport	124.1	47.5	21	12.3	6.5	9.4	15.2	4	0.2	24	95.7	8.3	24	46	25	-	-	-	-	4	4
Galway	118.8	20.6	14	12.1	6.5	9.3	17.5	4	-1.1	24	107.5	8.6	6	43	26	-	1	2	1	1	4
Kilkenny	82.8	12.2	21	12.8	4.4	8.6	18.3	4	-2.5	24	105.6	8.3	6	47	23	-	5	-	1	10	3
Malin Head	166.4	62.3	21	11.8	6.6	9.2	15.3	5	3.0	23	118.5	7.9	17,23	56	21	-	-	3	2	-	16
Mullingar	118.8	60.3	21	11.0	4.1	8.0	15.9	5	-2.5	24	103.1	8.8	6	43	23	-	3	2	-	8	2
Roche's Point	107.8	14.9	30	12.6	7.0	9.8	17.2	5	2.6	24	116.5	9.4	10	57	22	-	-	1	1	1	2
Rosslare	169.0	18.4	9	12.8	7.6	10.2	16.6	4	2.8	11	119.8	9.1	24	49	22	-	-	1	4	1	6
Shannon Airport	104.2	13.0	21	12.7	6.5	9.6	18.0	4	-0.3	24	89.1	8.2	22	48	23	-	1	1	1	1	5

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 front page)

the 21st when many places in Ulster and north Leinster had their highest ever daily fall for October (see back page). The rainbelt seen in the satellite picture taken on Saturday the 24th, gave a fall of over 46mm at Belmullet on 25th (its highest daily total for October in over thirty years of record), while Shannon Airport only recorded a 1mm fall. In south Munster the most sustained spell of rain was during the period 29th-30th when over 40 millimetres fell at some stations. Thunder was recorded on 5th and at times in the period 12th to 18th. Sleet was reported at Belmullet on Friday the 9th. Totals for the month ranged from 206mm at Cahirciveen to 83mm at Kilkenny which escaped relatively lightly on the 21st.

LOW TEMPERATURES

The first five days were the warmest of the month. Thereafter daytime temperatures were above normal only on 7th, 18th, 19th and 26th. Mean maximum temperatures ranged from 1.3°C to 2.0°C below normal. Nighttime minima showed even larger deviations with mean minima 2.6°C below normal being recorded at Belmullet and Cahirciveen. Air frost was recorded at some stations on 10th, 11th, 23rd, 24th and 28th. At Claremorris the -4.0°C recorded on the 24th was the lowest for October since records began in 1944, while Clones had its lowest October temperature since 1955. In general it was the coldest October since the remarkably cold 1981, indeed Cahirciveen's mean minimum temperature equalled that of 1981.

SUNSHINE UP ON NORMAL

Malin Head with a total of 118.5 hours (158% of normal) had its sunniest October since 1922 while Clones had its sunniest October in 21 years. Only at Dublin Airport was sunshine below normal and quite a number of stations had in excess of 120% of normal sunshine. Totals ranged from 120 hours at Rosslare to 85 hours at Claremorris. Sunniest days were 6th, 8th, 10th, 17th, 18th and 26th. The highest daily sunshine for the month was 9.4 hours recorded at Roche's Point on the 10th.

WINDS

During the ploughing championships on the 7th and 8th there were just occasional showers but it was blustery with winds gusting 35 to 50 knots generally and up to 56 knots at some stations. Similar gusts were experienced on 17th and 18th when 57 knots, the highest gust of the month, was recorded at Roche's Point. On 21st winds were strong and gusty chiefly in the north and in the period 29-30th coastal areas of the southwest were subject to strong winds gusting 35 to 56 knots accompanied by persistent rain.

FOG

There were fog patches overnight and in the morning on the 23rd and 24th, and to a lesser extent on the 4th, 5th, 19th and 20th. Fog was widespread and persistent in places on the 31st.

Autumn Rains

Notable storms are likely to occur at this time of year. A depression forming over a relatively warm ocean can deepen vigorously when it draws cold air into its circulation. Such a storm caused widespread damage over the south of England on 15th/16th of October 1987. We were more fortunate here in Ireland, although a depression moving slowly northwards in the Irish Sea gave heavy rain in places on the 21st and caused flooding chiefly in the north of the country.

Clones had 76.8mm of rain in a 24-hour period, the highest recorded there since records began in 1950. Malin Head (with 70 millimetres) also had its highest 24-hour total in over 30 years of record. The upland stations available had totals of between 100 and 150 millimetres. The return period of these 24-hour falls is 100 years or more.

