

Exceptional weather events

Type of event: Storm

Date: December 1998

The Storm of 26th December 1998

Synoptic Situation

An intense depression continued to deepen as it moved quickly northeastwards past Ireland during the afternoon and evening of St Stephen's Day. At noon it was centred at 55 1/2˚N, 12W, to the n01thwest of Belmullet; at 1800 it was to the north of Malin Head at 57N, 8W and by midnight it was over the northeast corner of Scotland. It was an unusually deep depression with a central pressure below 950 hPa (hecto Pascals or millibars) and as it was moved quickly past the northwest of Ireland there were unusually large pressure falls of 15 to 19 hPa in 3 hours ahead of the centre and rises of 14 to 16 hPa behind it. At Malin Head the peak pressure falls were the highest recorded there in over 40 years of record.

Winds

Southerly winds increased over the country during the morning of 26th but veered southwesterly before noon on the west coast and in all areas before mid-afternoon as they continued to increase. At Belmullet winds had increased from strong (force 6) and gusty at 9 a.m. to storm force 10 with gusts to about 74 knots (85 m.p.hr.) by noon. Over the southeast at noon winds were generally strong with gusts of 35 to 50 knots (40 to 60 m.p.hr.). For the remainder of the day this contrast was maintained with Ulster and Connaught having the more severe winds; this was in sharp contrast with conditions during the storm of 24th December 1997 when Munster and Leinster had considerably more severe winds than Ulster and Connaught. As the table shows the period from noon to 9 p.m. saw the most damaging winds.

Station	Mean Hourly Maximum (kt)	Mean 10-minute	Maximum Gust kt	Time of Maximum Gust GMT
Malin Head	61	67	96	1914
Belmullet	57	59	93	1552
Claremorris	48*	---	78*	1530*
Finner Camp	60*	---	90*	-----
Knock Airport	50	55	79	1535
Clones	38b	----	66	-----
Dublin Airport	38	44	65	1648
Casement Aerodrome	41	49	69	1351
Mullingar	34	39	64	1430
Birr	33	38	60	163
Shannon Airport	44	49	72	1610
Valentia Observatory	40	50	70	1509
Cork Airport	33	38	60	1540
Roches Point	44	47	65	1415
Kilkenny	36	40	59	1536
Rosslare	28	33	56	1555

* Estimated; 1kt= I 1/7 miles an hour

Station	Max 10-min	Mean wind	Max. Gust Knots	Max. Gust Record	Max. Gust M.P.H.	Max. Gust Record	Max. Gust set
Malin Head	67	77	96	98	110	113	1961
Belmullet	59	68	93	94	108	108	1957
Finner	66	76	86		99		
N.I. Castlederg	48	55	84		97		
N.I. Ballykelly	48	55	81		93		
Knock Airport	55	63	79	71	91	82	1997
N.I. Aldergrove Airport	45	52	74		85		
Shannon Airport	49	56	72	93	83	107	1961
N.I. Bangor	43	49	72		83		
Valentia	50	58	70	88	81	10	1997
N.I. Belfast City Airport	47	54	69	82	79	94	1997
Casement Aerodrome	49	56	66	87	76	100	1961
Clones	41	47	66		76		
N.I. Portglenone	30	35	66		76		

Station	Max 10-min	Mean wind	Max. Gust Knots	Max. Gust Record	Max. Gust M.P.H.	Max. Gust Record	Max. Gust set
N.I. Hillsborough	29	33	65	91	75	105	1957
Roches Point	47	54	65	91	75	105	1957
Dublin Airport	44	51	65	76	75	87	1997
Mullingar	39	41	64	79	74	91	1961
N.I. Glenanne	38	44	62		71		
Cork Airport	38	44	60	94	69	108	1974
Birr	38	44	60	85	69	98	1974
Kilkenny	40	46	59	77	68	89	1974
N.I. Ballypatrick	28	32	59		68		
Rosslare	67	77	56	96	64	110	1995

Met Éireann and N. I. Met Office. Storm of 26th December 1998