

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 northwest 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) () = 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*	ter Art and make	
Knock Airport	50	(55)	79	1535	
Clones	38b		66	10 M 00 10 M	
Dublin Airport	38	(44)	65	1648	
Casement Aerodrome	41	(49)	69	1351	
Mullingar	34	(39)	64	1430	
Birr	33	(38)	60	1637	
Shannon Airport	44	(49)	72	1610	
Valentia Observatory	40	(50)	70	1509	
Cork Airport	33	(38)	6 0	1540	
Roches Point	44	(47)	65	1415	
Kilkenny	36	(40)	59	1536	
Rosslare	28	(33)	56	1555	

^{*} Estimated; $1kt = 1 \frac{1}{7}$ miles an hour

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	Storm of 26th December 1998										
	Station	Max. 10-min Mean wind				Max. Gust					
		Knots	M.P.H.	Knots	Record	M.P.H	Record	Record 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					
	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	101	1997			
N.I.	Belfast City Airport	47	54	70		81	4.5.6.5.				
	Casement Aerodrome	49	56	69	82	79	94	1997			
	Clones	41	47	66	87	76	100	1961			
N.I.	Portglenone	30	35	66		76					
N.I.	Hillsborough	29	33	66		76					
	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	446	4005			
	Rosslare		0	56	96	64	110	1995			