

Storm Atiyah

Sunday 8th and Monday 9th December 2019

Second named storm of the season, named by Met Éireann on Friday 6 December 2019.

A complex area of low pressure developed across the North Atlantic and moved between Ireland and Iceland on the morning of Sunday the 8th December 2019. A particularly strong zone of winds, associated with a tightening of the isobars south of the main low centre, developed across western Ireland early on Sunday the 8th and pushed eastwards, reaching the UK late Sunday and early Monday the 9th. Heavy, squally showers with a mixture of rain, hail and some thunder accompanied the strong winds.

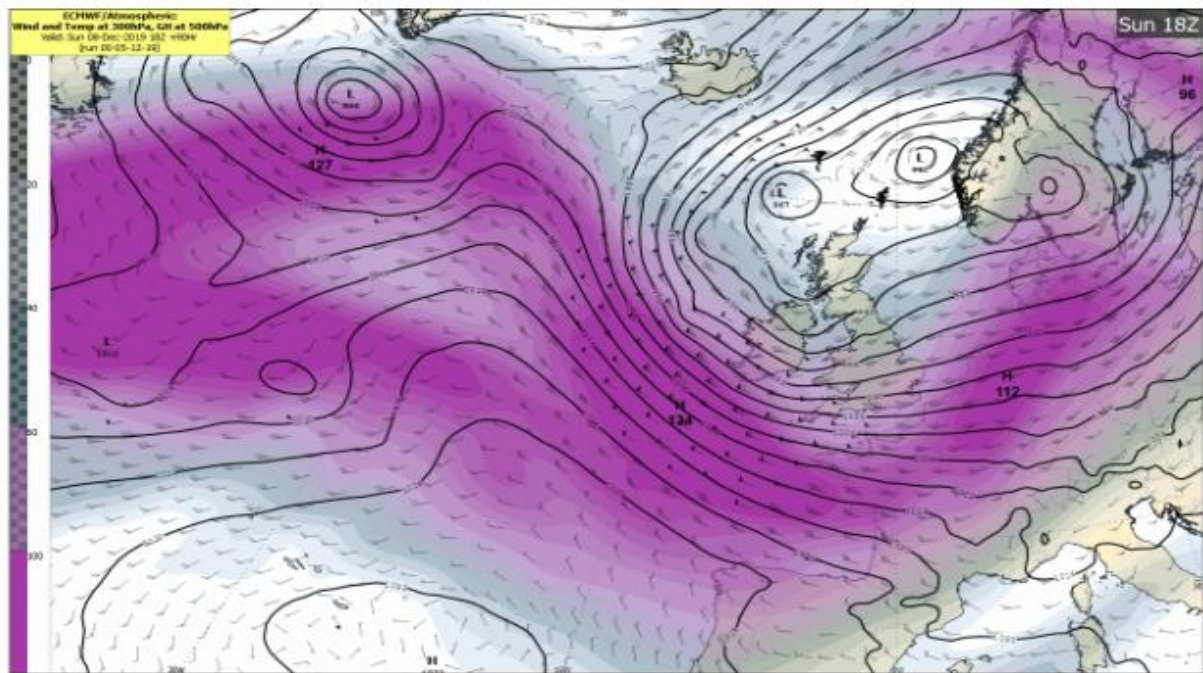


Figure 1. ECMWF Atlantic Chart for 8th December 2020 at 1800 utc.

Peak sustained wind speed was 91 km/h at Sherkin Island, Co Cork around 5 pm (17 UTC) on Sunday 8 December 2019. Two, out of 23, wind stations observed storm force 10 winds. The peak gust wind speed was 128 km/h at Roches Point and Newport at 6:46 pm (18:46 UTC) on Sunday. The highest UK gust observed was 134 km/h at their Isle of Wight station.

Fifteen stations (60% of total) observed gusts \geq 48 knots in Connacht, Munster. Two stations in each of Leinster and Ulster observed gusts of this strength also. The main impact day from damaging gusts was Sunday, however it remained gusty into Monday 9 December 2020.

Impacts:

- Up to 7,000 ESB customers without power
- Roads closed with reports of fallen trees and other debris
- Flights cancelled at Kerry Airport, Cork Airport and Shannon Airport

Station Name	Rainfall (mm)	minute mean wind speed (km/h).	Highest Gust (km/h)	Wind Direction (degree)	Hour of occurrence (utc)
SherkinIsland	6.8	91 (49 kt)	126 (68 kt)	250	1700
MACE HEAD	5.4	89 (48 kt)	120 (65 kt)	250	1500
ROCHES POINT	4.3	85 (46 kt)	128 (69 kt)	290	1800
FINNER	12.3	78 (42 kt)	107 (58 kt)	280	2000
NEWPORT	18.8	78 (42 kt)	128 (69 kt)	300	2200
VALENTIA	10.2	76 (41 kt)	115 (62 kt)	280	1700
BELMULLET	6.9	74 (40 kt)	100 (54 kt)	310	2000
KNOCK AIRPORT	14.1	72 (39 kt)	104 (56 kt)	310	2300
MALIN HEAD	12.0	70 (38 kt)	111 (60 kt)	240	1200
CORK AIRPORT	5.6	69 (37 kt)	100 (54 kt)	290	1900
SHANNON AIRPORT	7.8	69 (37 kt)	107 (58 kt)	290	2300
DUBLIN AIRPORT	6.0	63 (34 kt)	85 (46 kt)	280	2400
CASEMENT	8.9	61 (33 kt)	89 (48 kt)	270	2400
ATHENRY	11.8	57 (31 kt)	94 (51 kt)	310	2300
GURTEEN	8.0	56 (30 kt)	81 (44 kt)	290	2300
CLAREMORRIS	6.6	56 (30 kt)	91 (49 kt)	300	2200
OAK PARK	7.6	52 (28 kt)	81 (44 kt)	260	2200
MT DILLON	9.6	48 (26 kt)	81 (44 kt)	310	2300
MOORE PARK	5.8	46 (25 kt)	80 (43 kt)	280	2200
DUNSANY	6.4	44 (24 kt)	74 (40 kt)	250	2200
JOHNSTOWN CASTLE	0.8	43 (23 kt)	76 (41 kt)	280	2300
MULLINGAR	10.6	37 (20 kt)	67 (36 kt)	310	2300
BALLYHAISE	13.8	33 (18 kt)	76 (41 kt)	220	0800

Figure 2. Station data for 8 February 2020.

Station Name	Rainfall (mm)	Highest 10-minute mean wind speed	Highest Gust (km/h)	Wind Direction (degree)	Hour of occurrence (utc)
ROCHES POINT	0.7	85 (46 kt)	109 (59 kt)	300	0100
MACE HEAD	0.3	81 (44 kt)	102 (55 kt)	300	0000
CORK AIRPORT	0.2	74 (40 kt)	100 (54 kt)	300	0100
MALIN HEAD	0.6	70 (38 kt)	91 (49 kt)	340	0000
SHERKIN ISLAND	0.1	65 (35 kt)	89 (48 kt)	300	0100
NEWPORT	0.9	65 (35 kt)	94 (51 kt)	320	0000
DUBLIN AIRPORT	0.0	63 (34 kt)	81 (44 kt)	290	0100
SHANNON AIRPORT	0.6	61 (33 kt)	91 (49 kt)	300	0100
FINNER	0.9	59 (32 kt)	85 (46 kt)	320	0000
BELMULLET	1.5	59 (32 kt)	80 (43 kt)	180	2300
OAK PARK	0.1	57 (31 kt)	98 (53 kt)	290	0000
KNOCK AIRPORT	2.1	56 (30 kt)	94 (51 kt)	310	0100
JOHNSTOWN CASTLE	0.1	54 (29 kt)	81 (44 kt)	290	0000
CASEMENT	0.1	52 (28 kt)	72 (39 kt)	290	0100
ATHENRY	0.9	50 (27 kt)	83 (45 kt)	310	0000
VALENTIA	3.0	50 (27 kt)	78 (42 kt)	320	0000
GURTEEN	0.1	48 (26 kt)	74 (40 kt)	290	0000
MOORE PARK	0.3	48 (26 kt)	80 (43 kt)	290	0100
MT DILLON	1.6	46 (25 kt)	76 (41 kt)	300	0000
CLAREMORRIS	1.4	43 (23 kt)	70 (38 kt)	290	0000
DUNSANY	0.2	41 (22 kt)	67 (36 kt)	310	0100
MULLINGAR	0.1	30 (16 kt)	61 (33 kt)	310	0000
BALLYHAISE	0.1	28 (15 kt)	56 (30 kt)	300	0000

Figure 3. Station data for 9 February 2020

Issue Time	Valid From	Valid To	Colour	Element	Location	Warning Text
06/12/2019 09:00	08/12/2019 15:00	09/12/2019 06:00	Yellow	Wind	Leinster, Cavan, Monaghan, Roscommon, Cork, Tipperary and Waterford	Storm Atiyah will track between Iceland and Ireland on Sunday generating a swathe of very strong winds across the country. Southwest winds later veering northwesterly will reach mean speeds of 50 to 60 km/h with gusts of up to 100 km/h.
06/12/2019 19:50	08/12/2019 15:00	09/12/2019 06:00	Yellow	Wind	Leinster, Cavan, Monaghan, Roscommon, Cork, Tipperary and Waterford	Southwest winds later veering northwesterly will reach mean speeds of 50 to 60 km/h with gusts of up to 100 km/h at times during the period.
07/12/2019 08:00	08/12/2019 13:00	09/12/2019 06:00	Yellow	Wind	Leinster, Cavan, Monaghan, Roscommon, Tipperary and Waterford	Storm Atiyah (Ah-tee-ya) will track between Iceland and Ireland on Sunday, generating very strong winds across the country. Southwesterly winds, later veering northwesterly, will reach mean speeds between 50 and 65km/h with gusts between 90 and 110
07/12/2019 08:00	08/12/2019 13:00	09/12/2019 06:00	Orange	Wind	Donegal, Galway, Leitrim, Mayo, Sligo, Clare, Cork, Kerry and Limerick	Storm Atiyah (Ah-tee-ya) will track between Iceland and Ireland on Sunday, generating very strong winds across the country. Southwesterly winds, later veering northwesterly, will reach mean speeds between 65 and 80 km/h with gusts between 110 and 130
07/12/2019 08:00	07/12/2019 19:00	08/12/2019 13:00	Yellow	Wind	Ireland	West to southwest winds will reach mean speeds of 50 to 65km/h with gusts of 90 to 110km/h in places this evening, tonight and Sunday.
08/12/2019 10:00	08/12/2019 16:00	08/12/2019 19:00	Red	Wind	Kerry	Storm Atiyah: West to southwest winds veering northwest will reach mean speeds in excess of 80km/h with gusts in excess of 130km/h for a time this evening. Extreme caution is advised, especially near the coast and on high ground.

Figure 4. Warnings issued by Met Éireann for Storm Atiyah

DEFINITIONS

Sustained wind speeds are an average of 10-minute wind speeds.

Gust wind speeds are an average of 3-second wind speeds.

For observations of sustained (10-min mean) wind speeds:

- Storm Force 10 \geq 89 km/h (48 kt)
- Violent Storm Force 11 \geq 103 km/h (56 kt)
- Hurricane Force 12 \geq 117 km/h (64 kt)