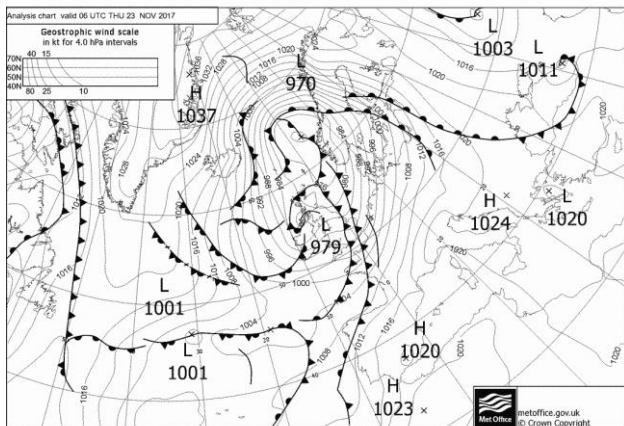


## November 2017 Beaufort Weather Station Summary

### Weather Summary

In comparison to events in October, with the impact of ex-hurricane Ophelia and Storm Brian, November was a relatively quiet month in terms of weather. The most notable feature was the drop in temperature towards the end of the month, to be expected at this time of year.

From the 23<sup>rd</sup> of November, there was a noticeable drop in temperature as the country was affected by a polar low, bringing cooler temperatures, and replacing unseasonably milder weather that had been dominating the weather until that point.



This was also marked by an increase in wind speeds, with the average wind speed from November 1<sup>st</sup> to 21<sup>st</sup> being 1.6ms<sup>-1</sup>, increasing to an average of 2.6ms<sup>-1</sup> from the 22<sup>nd</sup> – 30<sup>th</sup> of the month.

Overall, November was a month of minimal extremes, characterised by unseasonably

mild temperatures until the 22<sup>nd</sup>, followed by a cooler period.

### Temperature

Temperatures continued to drop in November, with the average temperature now in the single figures at 9°C. The station recorded a maximum daily temperature (MxDT) of 15.2°C on November 11<sup>th</sup>, and a low (MnDT) of just 1.2°C at 08:45 on November 24<sup>th</sup>. Taking our monthly historic averages from the Roches Point station, the average monthly temperature comes in at 0.7°C above the 1961-1990 averages, making this the eighth consecutive month that the temperature recorded on the Beaufort station has come in above the long-term average.

Month	Departure from Normal Mean Temperature (1961-1990)
April*	+2.2°C
May	+2.4°C
June	+1.8°C
July	+1.3°C
August	+0.4°C
September	+0.5°C
October	+1.6°C
November	+0.7°C

\* Beaufort weather station began recording April 11 2017

The Highest Diurnal Temperature Range (DTR) was 9.3°C on November 22<sup>nd</sup>, with a MnDT of 4.8°C rising to an MxDT of 14.1°C.

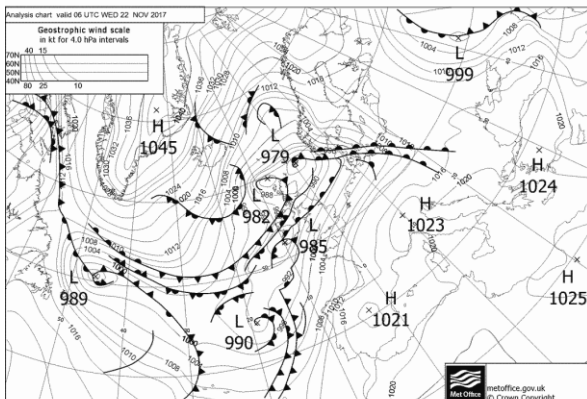
The lowest DTR was on the 3<sup>rd</sup> of November, when DTR was just 2°C (MnDT 8.3°C, MxDT 0.6°C).

## Rainfall

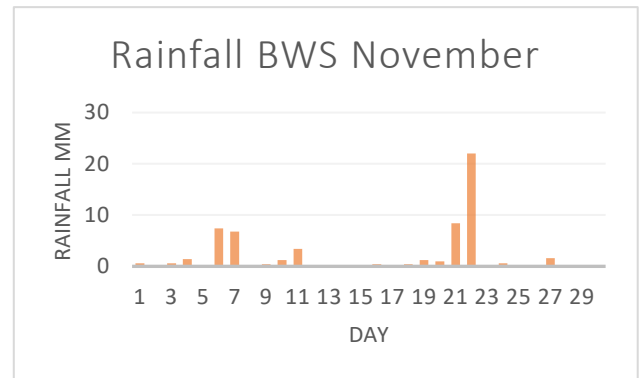
November was not a particularly wet month, with a total of 58.4mm of rain recorded (as compared to 137mm recorded in the month of October). This is quite a bit less than the LTA taken from Roches Point (87.8mm).

The greatest daily amount recorded was on the 22<sup>nd</sup> of November, when 22mm of rain was recorded. This represents 38% of the month's rainfall on just one day. This was the same day as the highest DTR, discussed in the above section on temperature.

As we can see from the below chart of atmospheric pressure for the 22<sup>nd</sup>, there was quite a complex weather system over Ireland, that can be attributed to the unsettled conditions.



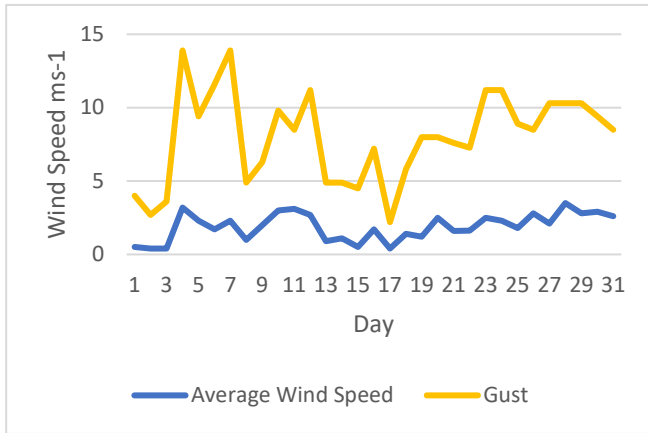
September Rainfall Amounts	BWS
No. of days with rain $\geq 0.2\text{mm}$	13
Mean no. of days with $\geq 1.0\text{mm}$	6
Mean no. of days with $\geq 5.0\text{mm}$	3
No. of days with no rain	8
Greatest Daily Amount	22mm



## Wind

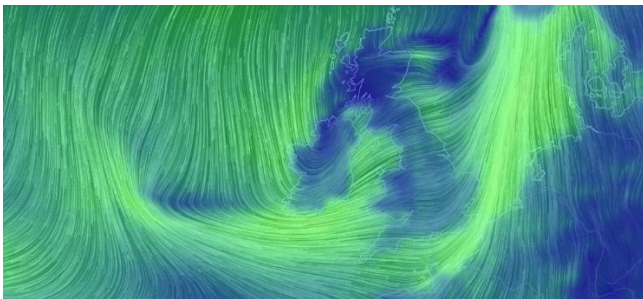
November was not a particularly windy month, with the average wind speed being just  $1.9\text{ms}^{-1}/6.84\text{kph}$ , and a high gust on the 7<sup>th</sup> of  $13.9\text{ms}^{-1}/49.68\text{kph}$  at 00:10. The dominant wind direction was WNW/W, with only 2 days where the wind was dominant from another direction – November 1<sup>st</sup> and 19<sup>th</sup>, where the dominant wind direction was SE.

The 27<sup>th</sup> was the windiest day, with average wind speeds of  $3.5\text{ms}^{-1}$ , by comparison, the windiest day in October was  $6\text{ms}^{-1}$ , with winds from ex-hurricane Ophelia.

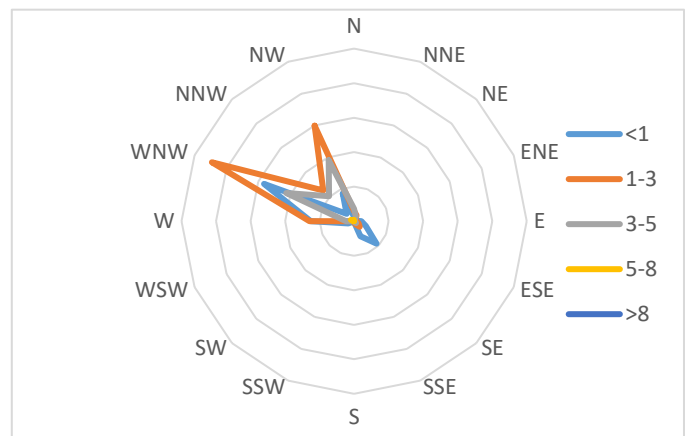


	October	November
Average Wind Speed	2.1ms <sup>-1</sup>	1.9ms <sup>-1</sup>
High Gust	21ms <sup>-1</sup> (16 <sup>th</sup> )	13.9ms <sup>-1</sup> (7 <sup>th</sup> )
Windiest Day	October 16 <sup>th</sup> – Avg speed 6ms <sup>-1</sup>	November 27 <sup>th</sup> – Avg speed 3.5ms <sup>-1</sup>

We can see how the dominant direction of the airflow shifts throughout the day from a more direct northerly to a more north-westerly direction.



Earth Nullschool map shows the northerly airflow affecting the country on the 23<sup>rd</sup> of November 0600h, and below, at 1200h.



Variable	Recording for November	Timing
Highest Temperature	15.2°C	November 11
Lowest Temperature	1.2°C	November 24
+/- Climate Normal (1961-1990)	+0.7°C	Eighth consecutive above average record since BMS started recording (April 2017)
Highest DTR	9.3°C (MxDT 14.1°C MnDT 4.8°C)	November 22
Lowest DTR	2.3°C (MxDT 10.6°C MnDT 8.3°C)	November 3
Mean DTR	5.6°C	
Rainfall	58.4mm	Total July
Rainfall Roches Pt.	87.8mm	BWS represents 66%
No. of days recorded rainfall	22	
No. of dry days	8	
Wettest day	22mm	November 22
Departure from normal rainfall (1961-1990)	-29.4mm	
Longest period no rain	3 days	November 12-14 and November 28-30
Dominant wind direction	WNW	
Mean Wind Speed	1.9ms <sup>-1</sup>	
Highest gust	13.9ms <sup>-1</sup>	November 7
Longest period of wind from alternative direction	SE	November 1 and November 19

MONTHLY CLIMATOLOGICAL SUMMARY for NOV.



NAME: Beaufort Weather Station CITY: STATE:  
ELEV: 0 m LAT: 51- 50' 04" N LONG: 8- 18' 08" W

TEMPERATURE (-C), RAIN (mm), WIND SPEED (m/s)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	10.6	13.8	13:55	7.4	3:05	24.1	0.0	0.6	0.5	4.0	1:10	SE
2	10.9	13.3	13:10	7.4	3:05	7.4	0.0	0.2	0.4	2.7	0:10	WNW
3	9.8	10.6	0:05	8.3	7:45	8.6	0.0	0.6	0.4	3.6	23:50	WNW
4	7.9	10.7	12:15	4.7	21:45	10.4	0.0	1.4	3.2	13.9	12:20	WNW
5	7.5	10.8	14:05	5.2	22:45	10.8	0.0	0.2	2.3	9.4	1:45	NW
6	11.3	13.1	11:40	5.8	0:05	7.1	0.0	7.4	1.7	11.6	21:20	WNW
7	7.6	12.4	0:05	4.0	21:20	10.8	0.0	6.8	2.3	13.9	0:10	WNW
8	8.3	12.2	14:00	3.7	7:35	10.1	0.0	0.0	1.0	4.9	1:05	WNW
9	11.7	13.4	15:15	9.7	1:45	6.7	0.0	0.4	2.0	6.3	12:10	WNW
10	12.0	13.2	22:30	10.6	8:15	6.3	0.0	1.2	3.0	9.8	23:15	WNW
11	13.3	15.2	13:50	8.9	00:00	5.0	0.0	3.4	3.1	8.5	14:30	WNW
12	7.8	9.9	15:20	5.7	22:30	10.6	0.0	0.0	2.7	11.2	13:25	NNW
13	7.3	11.1	16:00	2.2	7:15	11.0	0.0	0.0	0.9	4.9	22:05	WNW
14	12.2	14.7	15:05	10.7	23:55	6.2	0.0	0.0	1.1	4.9	15:10	WNW
15	11.1	13.2	13:15	9.8	6:35	7.2	0.0	0.2	0.5	4.5	17:05	WNW
16	9.1	11.8	2:15	3.4	23:45	9.2	0.0	0.4	1.7	7.2	3:25	WNW
17	6.3	9.4	14:45	2.3	6:45	12.0	0.0	0.2	0.4	2.2	8:30	WNW
18	11.7	14.7	13:35	8.8	23:55	6.6	0.0	0.4	1.4	5.8	13:50	WNW
19	10.6	12.4	13:30	8.4	1:00	7.8	0.0	1.2	1.2	8.0	00:00	SE
20	13.6	15.0	13:50	12.1	0:05	4.8	0.0	1.0	2.5	8.0	1:00	W
21	13.1	14.6	13:35	11.9	4:35	5.3	0.0	8.4	1.6	7.6	11:00	W
22	11.1	14.1	7:35	4.8	00:00	7.2	0.0	22.0	2.5	11.2	6:45	WNW
23	6.9	9.9	12:35	3.7	2:25	11.4	0.0	0.0	2.3	11.2	7:10	WNW
24	3.8	7.2	13:55	1.2	8:45	14.6	0.0	0.6	1.8	8.9	16:10	NW
25	4.2	6.6	15:20	1.8	7:55	14.2	0.0	0.0	2.8	8.5	10:05	NW
26	7.1	11.2	23:40	2.4	0:35	11.3	0.0	0.2	2.1	10.3	23:30	WNW
27	8.5	11.6	1:05	5.6	20:55	9.8	0.0	1.6	3.5	10.3	1:00	NW
28	5.6	7.6	15:15	4.2	22:40	12.7	0.0	0.0	2.8	10.3	14:25	NNW
29	4.4	6.5	15:25	3.2	20:20	13.9	0.0	0.0	2.9	9.4	13:50	NNW
30	5.4	8.5	15:20	3.7	0:05	12.9	0.0	0.0	2.6	8.5	17:20	NNW
-----												
	9.0	15.2	11	1.2	24	295.8	0.0	58.4	1.9	13.9	4	WNW

Max >= 32.0: 0  
 Max <= 0.0: 0  
 Min <= 0.0: 0  
 Min <= -18.0: 0  
 Max Rain: 22.00 ON 22/11/17  
 Days of Rain: 21 (> .2 mm) 5 (> 2 mm) 1 (> 20 mm)  
 Heat Base: 18.3 Cool Base: 18.3 Method: Integration

The Beaufort WOS was funded internally by



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This report was undertaken voluntarily please contact either of the authors directly for more information