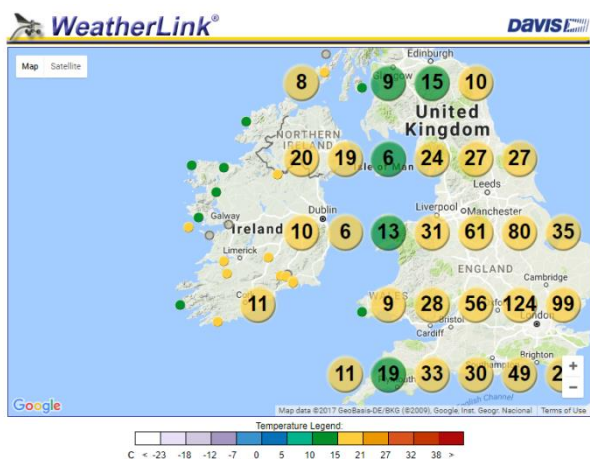


July 2017 Beaufort Weather Station Summary

The WeatherLink Network

The MaREI Weather Observing System (WOS) is comprised of an integrated sensor suite (ISS) of instruments which transmits wirelessly to a receiver, these data are then transmitted directly to the web. The sensors onboard the ISS are manufactured by Davis instruments Global. As such, the MaREI WOS is part of the Davis global WeatherLink® network, hosted at www.Weatherlink.com.

WeatherLink is Davis' global weather network with thousands of weather stations reporting (25,884 active stations reporting as of August 1st 2017). Anyone can query a station on WeatherLink network (pictured below) – simply click on a dot on the map to see current weather conditions for that station. Each WeatherLink.com account also includes a private page with enough storage capacity to store up to two years' worth of weather data.



Weather Summary

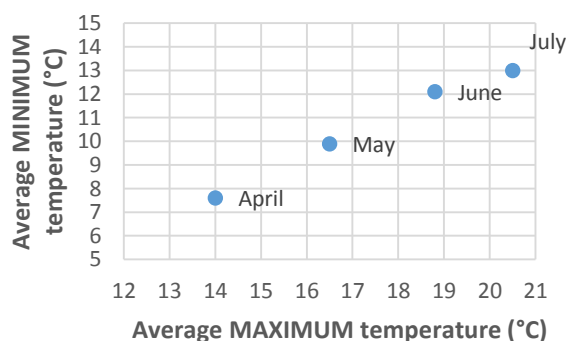
Temperature – Warm at the start of the month then gradually becoming cooler

The highest temperature recorded during the month was 25.1°C (July 15), the lowest was 8.8°C (July 1). The mean temperature for the month was 16.4°C: +1.3°C compared to the Climate Normal (1961-1990) for Cork harbour, this has replaced June as the lowest temperature departure recorded so far this year since observations began in April:

Month	Departure from Normal Temperature (1961-1990)
April*	+2.2°C
May	+2.4°C
June	+1.8°C
July	+1.3°C

* Beaufort weather station began recording April 11 2017

The Highest Diurnal Temperature Range (DTR) was 12.5°C on July 1st (Maximum daily temperature [MxDT] 21.3°C Minimum daily temperature [MnDT] 8.8°C), the lowest DTR was 3.6°C on July 25, (MxDT 17.1°C, MnDT 13.1°C). Mean DTR for the month of July was 7.5°C.



Rainfall – Close to July LTA at Roches Point

In total, the weather station recorded 45.8mm of rain during the month of July; this represents 86% of the July Long Term Average (LTA) of the nearest station operated by Met Éireann (Roches Point, 1961-1990 53.1mm).

Amount	LTA Roches Point	July Beaufort WOS
Mean no. of days with $\geq 0.2\text{mm}$	11	12
Mean no. of days with $\geq 1.0\text{mm}$	8	7
Mean no. of days with $\geq 5.0\text{mm}$	3	3
Greatest Daily Amount	46.9mm	24.2mm*

*24 hour period used instead of midnight

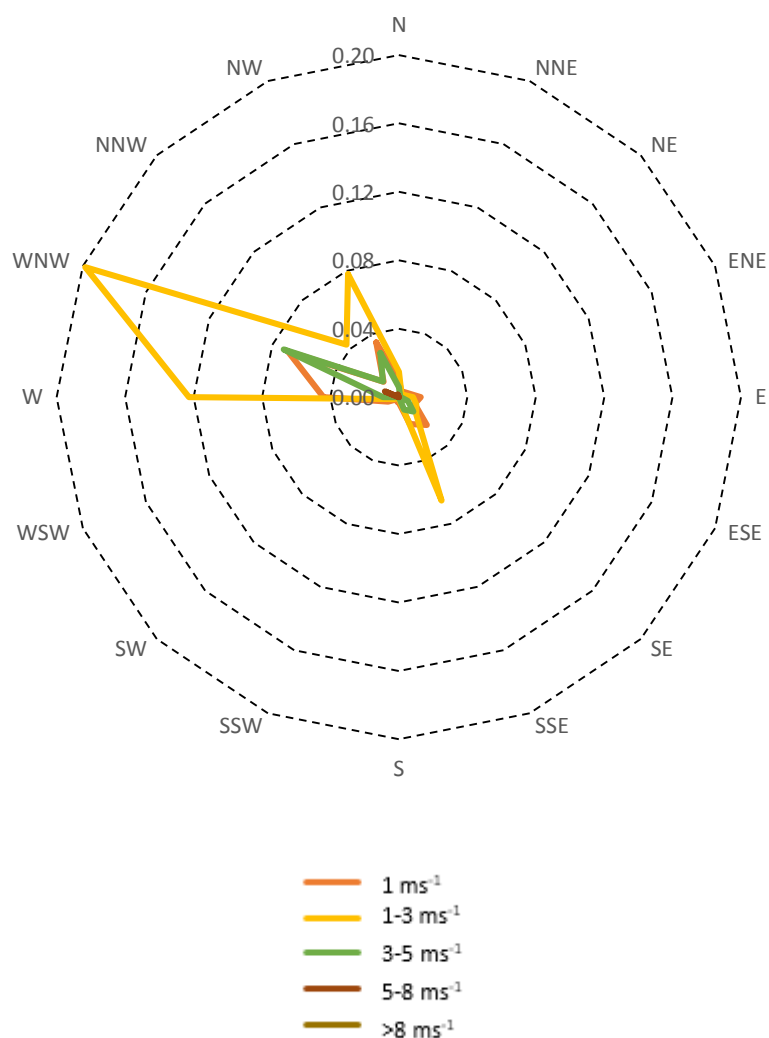
The wettest day was Thursday July 20 with 13.0 mm of rain, followed by June 19 with 11.2mm of rain. The highest consecutive period with recorded rain was 4 days (between July 19-22 and July 25-28) a total of 33.6mm of rain (or 74% of the total amount recorded in July) fell during July 19-22, whereas 10.2mm fell between July 25-28 (22% of the total amount for the month). The longest consecutive period with no rain recorded was 8 days (between July 1-8).

Month	Amount	Departure from Normal (1961-1990)
April*	10.8mm	-43.9mm
May	53.2mm	-10.7mm
June	99.4mm	+45.5mm
July	45.8mm	-7.3mm

Wind – Light at the start of the month, becoming fresher towards the end

Overall, recorded wind speeds were low for the entire month of July, the mean wind speed was 1.85 ms^{-1} . The average gust speed was 7.6 ms^{-1} for the month, with the highest gust occurring on Wednesday July 26 at 11.6 ms^{-1} (23 knots, 41.76 kmh^{-1}).

Wind direction was predominantly from the WNW.



Summary Table

Variable	Recording for July	Timing
Highest Temperature	25.1°C	July 15
Lowest Temperature	8.8°C	July 01
+/- Climate Normal (1961-1990)	+1.3°C	Fourth consecutive above average record since BMS started recording (April 2017)
Highest DTR	12.5°C (MxDT 21.3°C MnDT 8.8°C)	July 01
Lowest DTR	3.6°C (MxDT 18.5°C MnDT 14.9°C)	July 25
Mean DTR	7.6°C	
Rainfall	45.8mm	Total July
Rainfall Roches Pt.	50.9mm	BWS represents 90%
No. of days recorded rainfall	12	
No. of dry days	19	
Wettest day	13mm	July 20
Departure from normal rainfall (1961-1990)	-7.3mm	
Longest period no rain	8 days	July 01 – July 08
Dominant wind direction	W/WNW/NW	
Mean Wind Speed	1.85ms ⁻¹	
Average gust speed	7.6ms ⁻¹	
Highest gust	11.6ms ⁻¹	July 26
Longest period of wind from alternative direction	SE/SSE	July 17 – July 18

NOAA Report

MONTHLY CLIMATOLOGICAL SUMMARY for JUL. 2017

NAME: Beaufort Building CITY: Cork STATE: Munster, IRE
ELEV: 5 m LAT: 51° 50' 04" N LONG: 8° 18' 07" E



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	15.3	21.3	14:45	8.8	5:00	3.3	0.5	0.0	2.1	7.6	14:35	WNW
2	14.9	18.2	16:00	11.3	5:35	3.1	0.0	0.0	1.5	5.8	15:40	W
3	16.6	19.1	15:30	14.3	3:45	1.6	0.1	0.0	1.5	7.2	18:05	WNW
4	17.4	20.6	17:15	15.3	1:10	1.0	0.4	0.0	1.4	6.7	12:15	W
5	16.8	19.2	17:00	13.8	5:45	1.3	0.1	0.0	1.2	4.5	14:35	SSE
6	18.1	23.2	17:05	14.7	0:25	1.1	1.2	0.0	1.3	6.7	17:35	NW
7	18.1	21.6	16:55	14.8	4:05	0.8	0.9	0.0	1.1	4.9	14:10	WNW
8	16.8	20.3	14:20	13.8	3:35	1.6	0.4	0.0	1.1	4.9	11:25	SSE
9	17.5	22.4	14:20	14.4	2:45	1.3	0.9	0.2	1.5	6.3	16:15	NW
10	15.9	19.9	15:30	13.7	4:30	2.3	0.1	0.0	1.8	7.2	15:30	WNW
11	15.2	18.3	16:55	13.7	9:05	2.8	0.0	1.4	1.3	6.3	13:05	E
12	16.7	21.2	13:40	11.6	4:50	2.1	0.8	0.0	1.3	5.4	2:40	WNW
13	17.1	23.3	15:10	12.3	2:10	1.9	1.0	0.0	1.6	8.9	18:15	NW
14	16.7	21.2	14:40	13.9	5:25	1.8	0.6	0.0	2.4	9.4	15:45	WNW
15	19.3	25.1	14:20	15.9	0:05	0.5	1.9	0.0	2.6	11.2	15:35	WNW
16	18.6	22.8	16:00	14.5	23:55	0.6	1.2	0.0	2.1	6.3	7:30	NNW
17	16.8	21.0	17:40	11.7	5:15	2.1	0.9	0.2	1.4	4.9	0:20	SSE
18	17.9	22.6	17:15	13.3	1:05	1.3	1.2	0.0	2.4	8.9	14:55	SE
19	17.0	21.6	13:10	11.9	00:00	1.3	0.3	11.2	2.1	9.4	15:35	SSE
20	13.7	17.6	12:10	10.1	6:10	4.3	0.0	13.0	1.9	9.4	23:20	WNW
21	13.3	16.7	11:40	10.4	6:30	4.7	0.0	9.0	2.7	9.8	12:20	WNW
22	14.9	18.7	17:55	11.4	5:35	3.1	0.0	0.4	1.6	7.6	8:45	SSE
23	16.9	21.3	17:55	11.7	4:45	2.0	0.9	0.0	1.8	6.7	19:45	NNW
24	18.6	23.6	15:00	14.4	5:50	1.1	1.6	0.0	2.3	7.2	8:20	NW
25	16.7	18.5	13:30	14.9	5:35	1.3	0.0	3.4	1.3	4.9	15:35	SSE
26	17.1	20.1	14:30	13.1	00:00	1.2	0.2	4.6	3.4	11.6	17:40	WNW
27	15.2	19.2	13:20	12.7	23:35	2.9	0.0	0.4	2.9	10.7	12:00	WNW
28	15.5	19.8	16:40	12.8	0:05	2.6	0.1	1.8	2.1	8.9	18:25	WNW
29	15.3	18.5	13:40	12.9	23:50	2.7	0.0	0.0	1.7	8.0	15:55	WNW
30	14.9	19.2	13:20	12.1	2:35	3.2	0.1	0.2	2.2	11.2	17:50	WNW
31	15.2	19.2	16:00	12.5	6:40	2.8	0.1	0.0	2.0	7.2	0:55	W
<hr/>												
	16.4	25.1	15	8.8	1	63.7	15.6	45.8	1.9	11.6	26	WNW

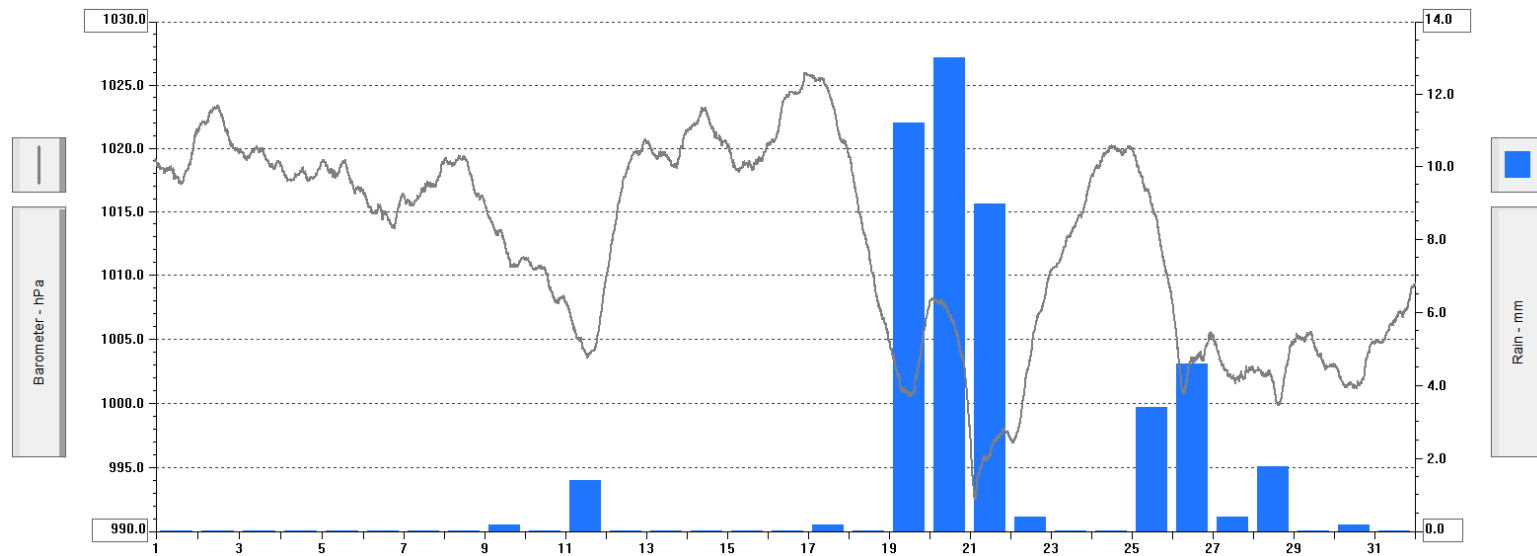
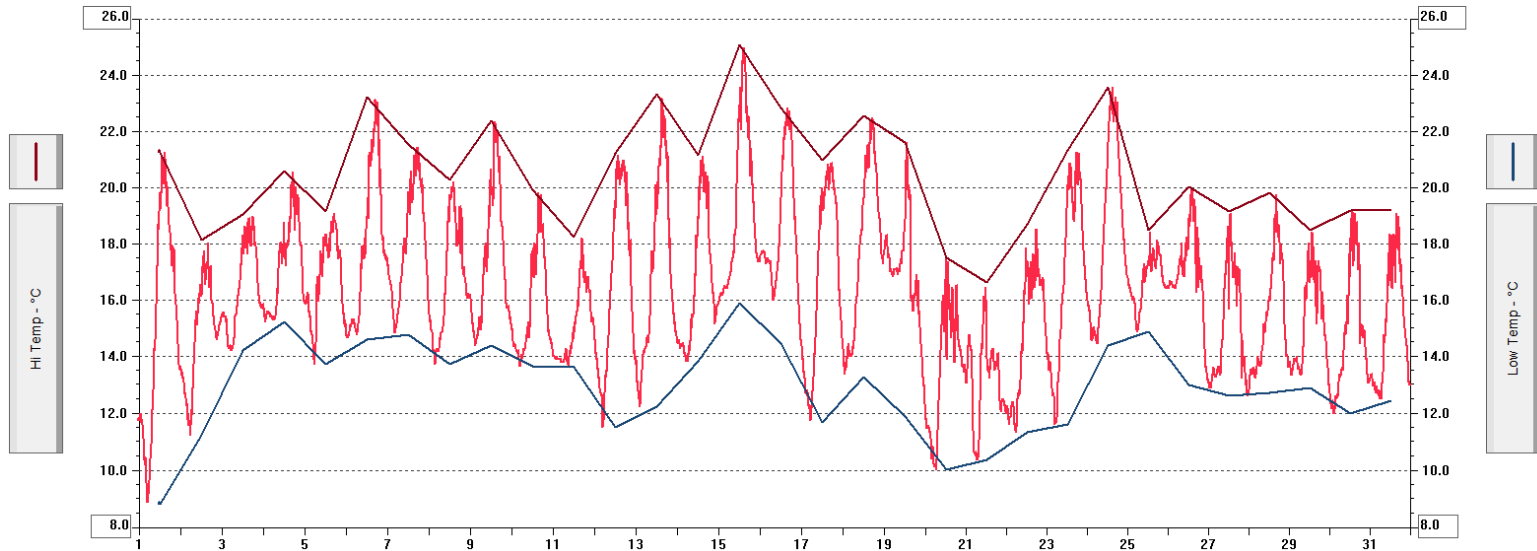
Max >= 32.0: 0
Max <= 0.0: 0
Min <= 0.0: 0
Min <= -18.0: 0

Max Rain: 13.00 ON 20/07/17

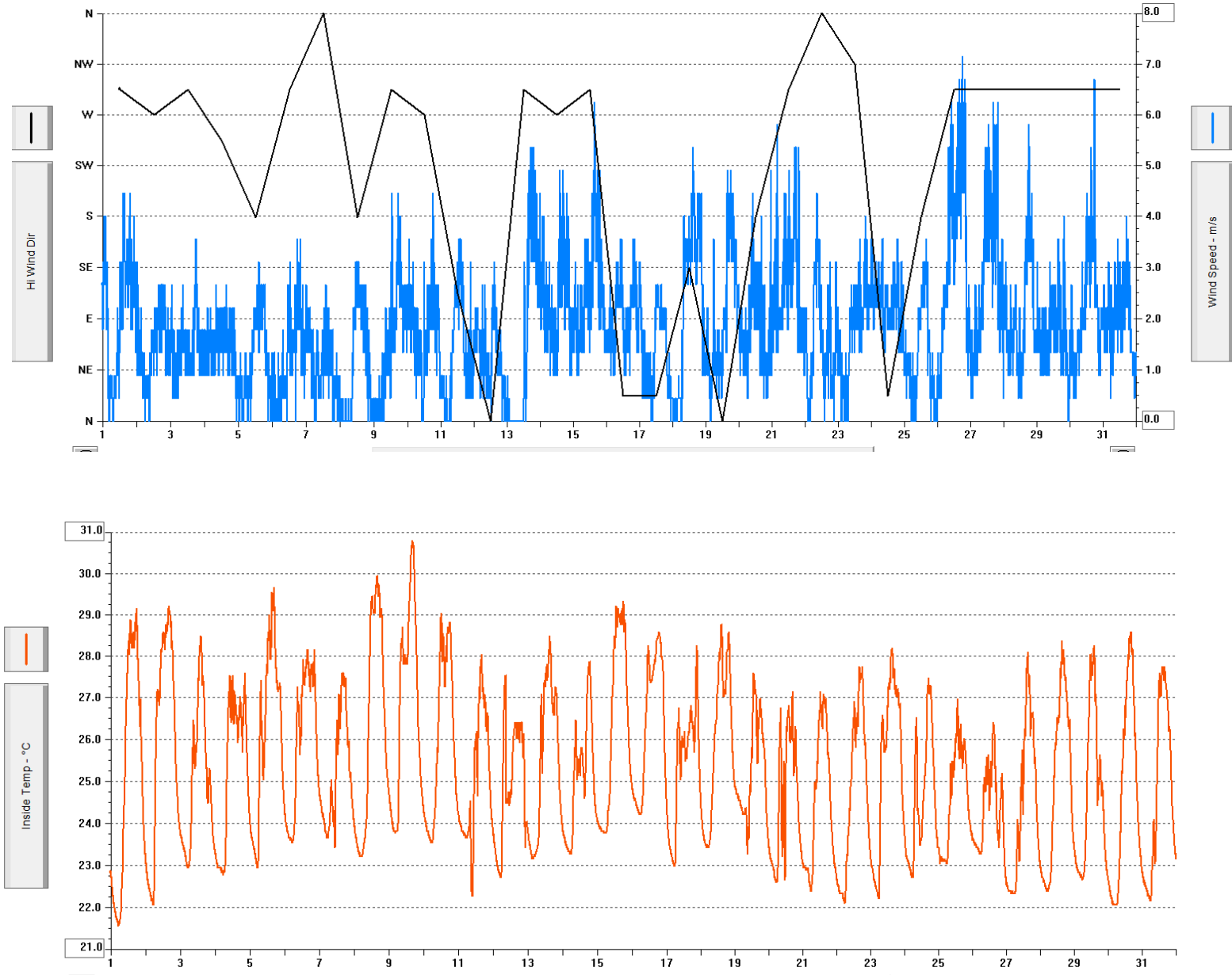
Days of Rain: 12 (> .2 mm) 5 (> 2 mm) 0 (> 20 mm)

Heat Base: 18.0 Cool Base: 18.0 Method: Integration

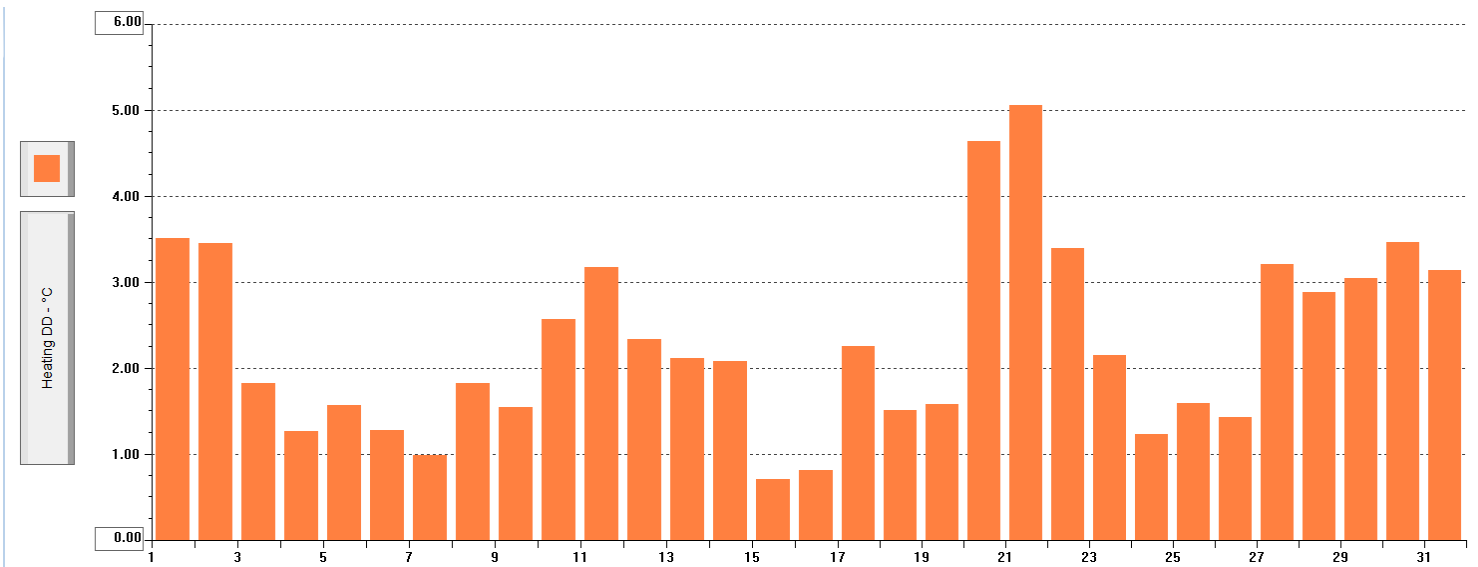
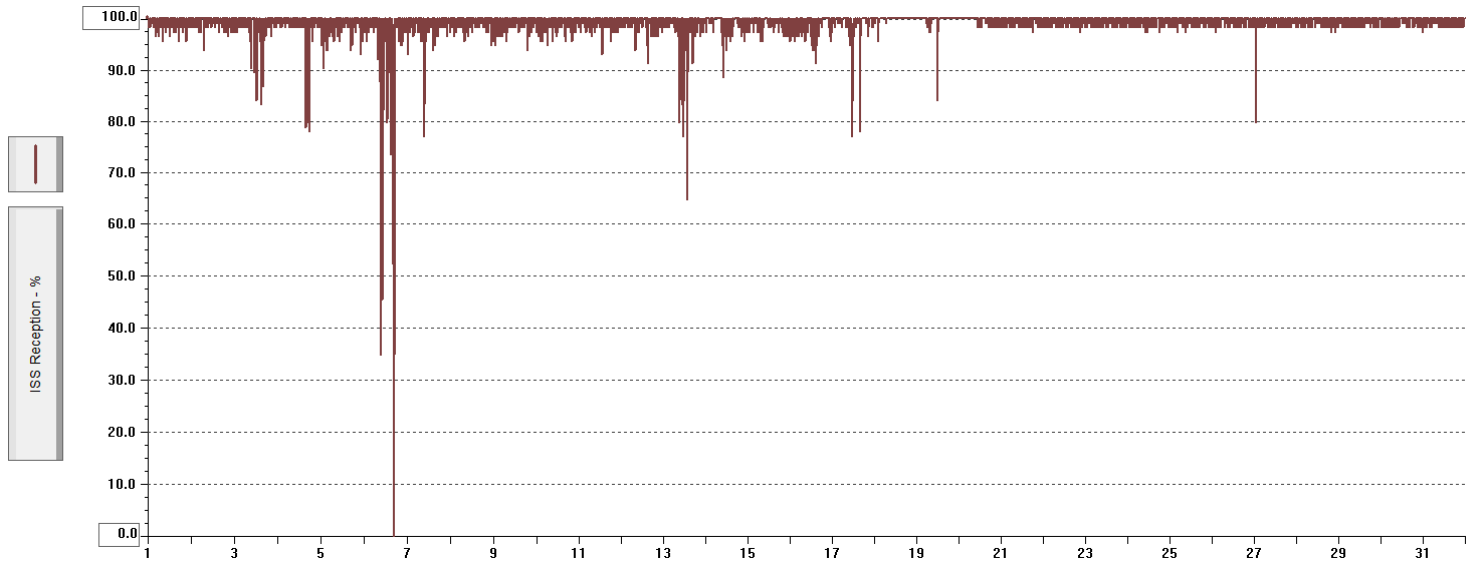
Time Series for July 1 to July 31 2017 for Min, Mean and Max Temperature (top), Precipitation and Pressure (bottom)



Time Series for July 1 to July 31 2017 for Wind speed and high wind direction (top) and inside air temperature (bottom)



Time Series for July 1 to July 31 2017 for ISS data packet receipt (top) and heating degree-days (bottom)



Real-time information from the station can be viewed at:

<http://www.weatherlink.com/user/marei/index.php?view=main&headers=0>

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