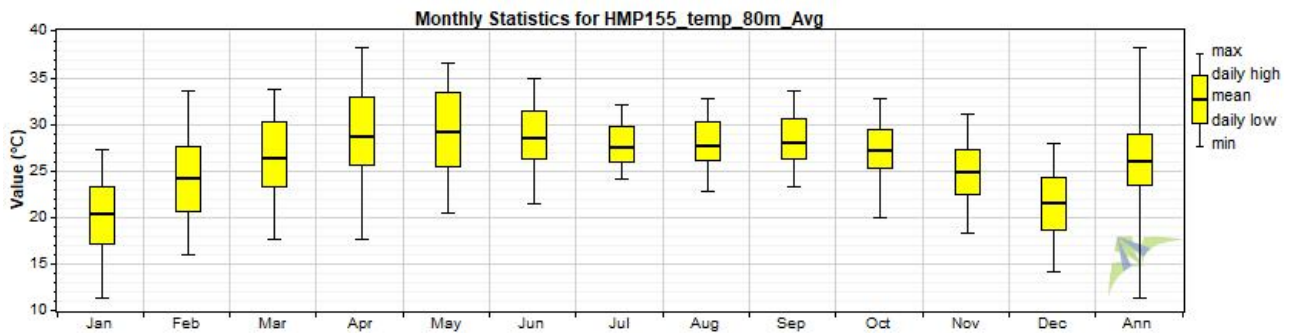


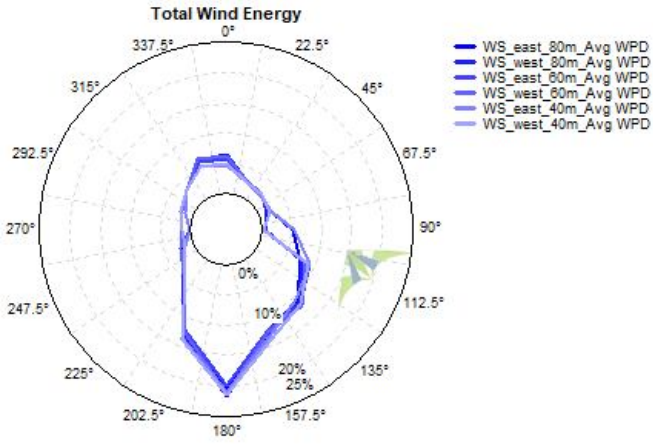
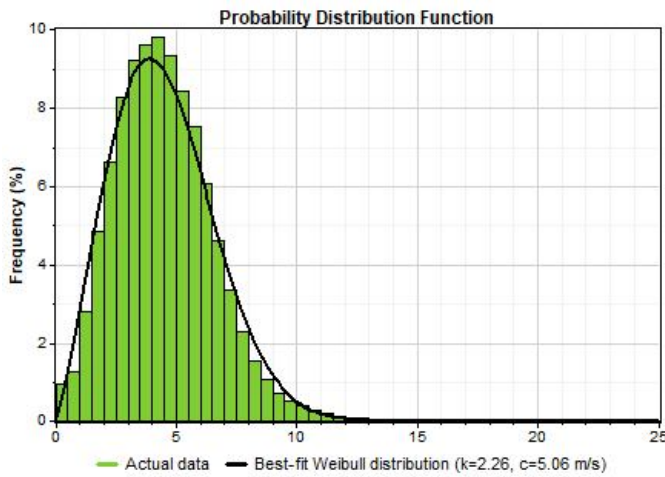
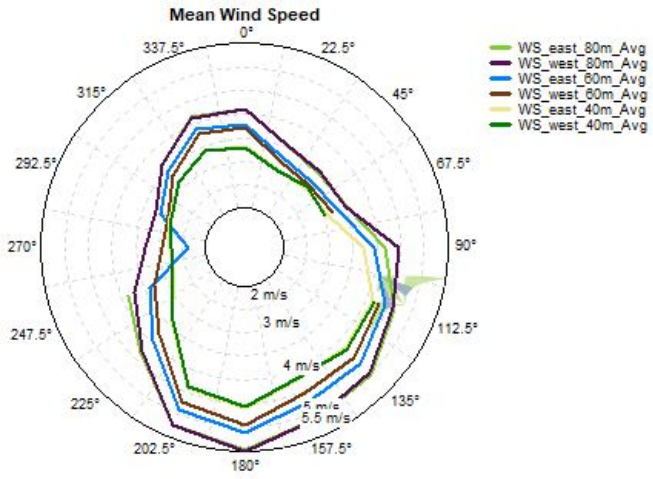
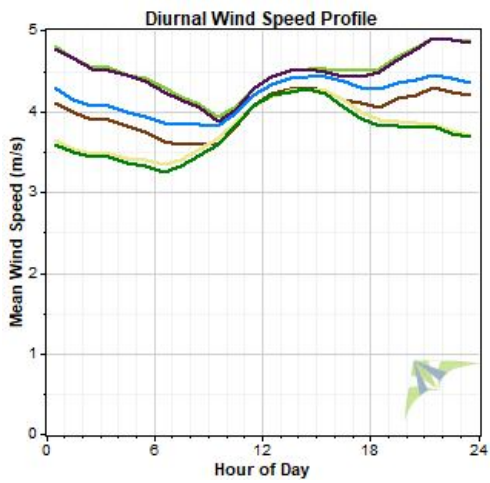
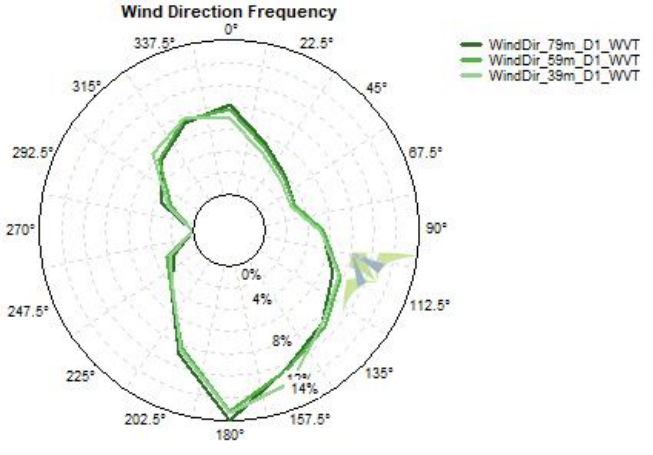
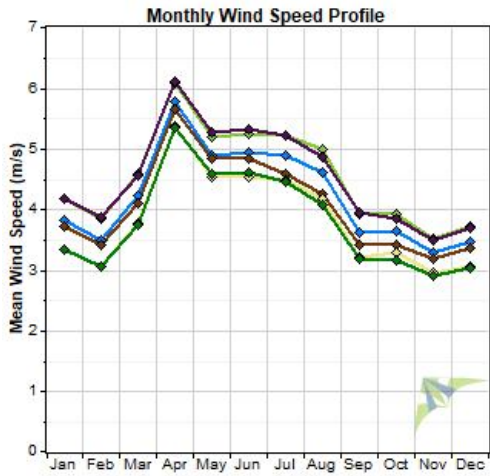
**Data Set Properties**

Report Created: 4/11/2018 10:16 using Windographer 3.3.10  
 Filter Settings: <Unflagged data>

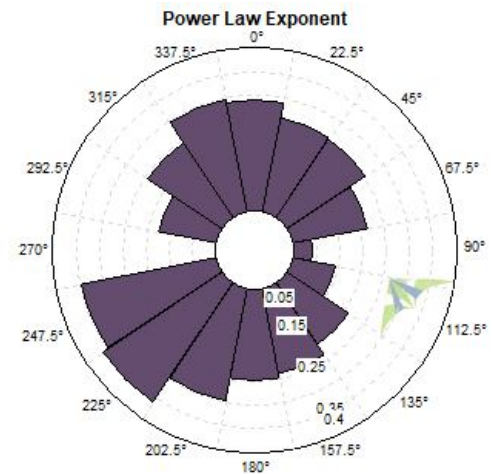
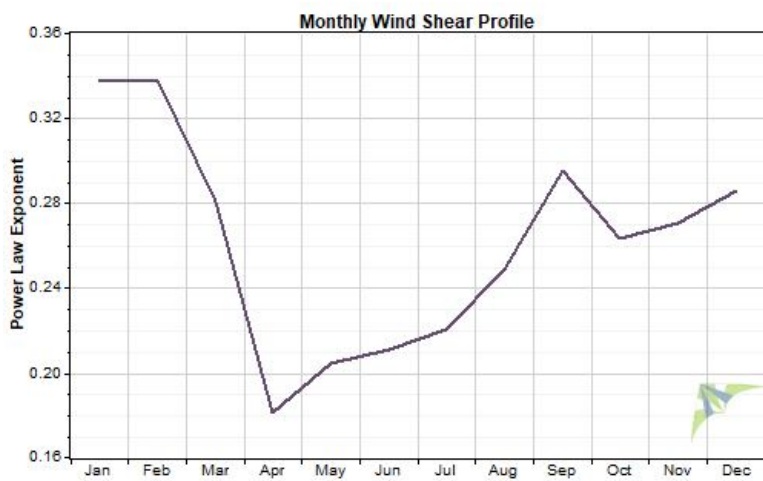
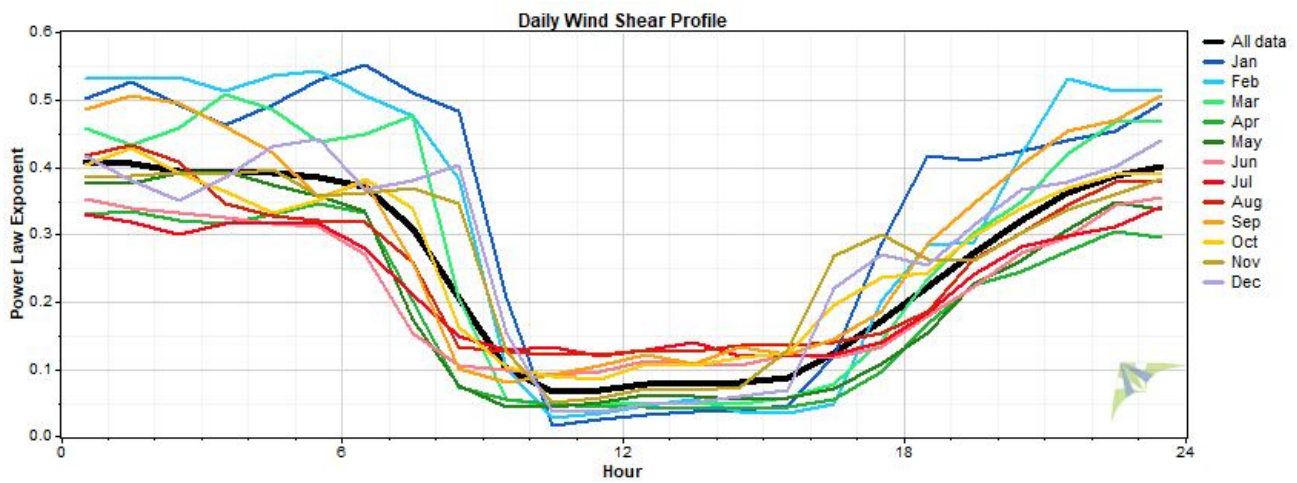
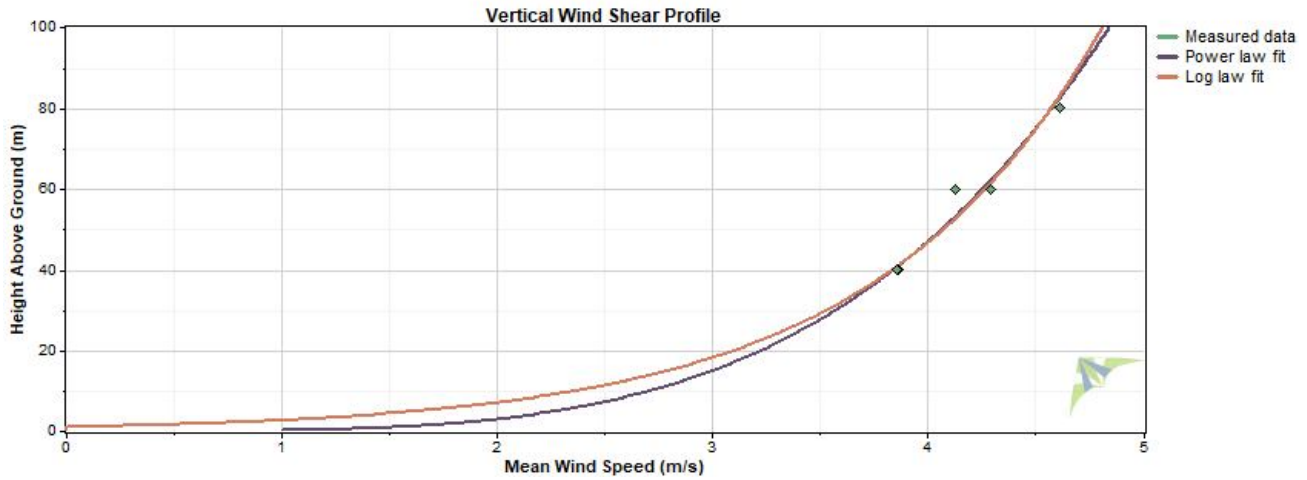
Variable	Value
Latitude	N 22.473420
Longitude	E 89.568260
Elevation	3.05 m
Start date	10/31/2015 13:20
End date	12/25/2017 10:50
Duration	26 months
Length of time step	10 minutes
Calm threshold	1 m/s
Mean temperature	26.1 °C
Mean pressure	1,000 mbar
Mean air density	1.165 kg/m <sup>3</sup>
Power density at 50m	67 W/m <sup>2</sup>
Wind power class	1
Power law exponent	0.253
Surface roughness	1.1 m
Roughness class	3.99



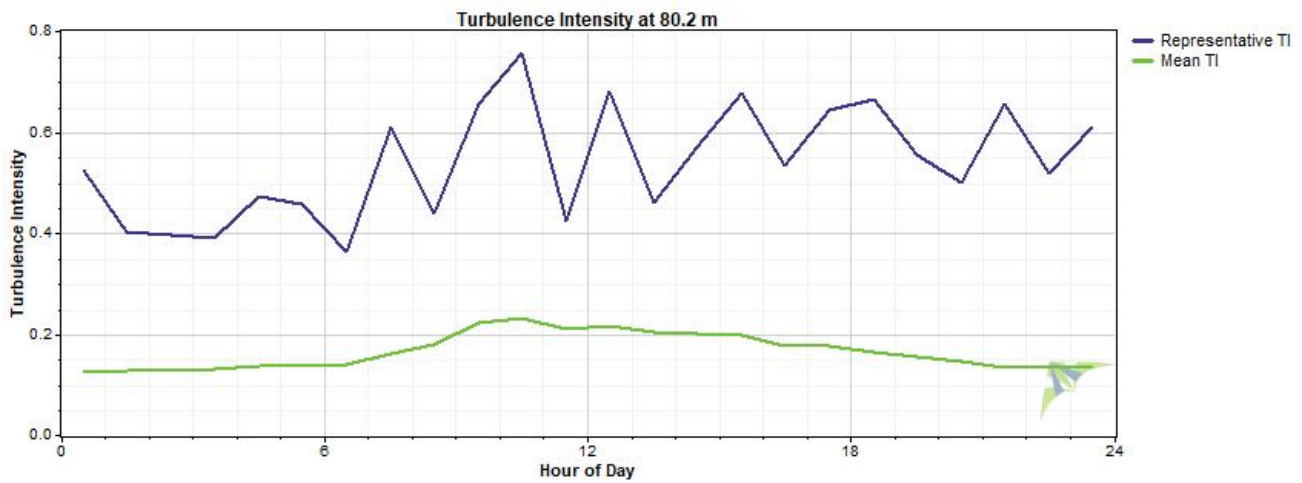
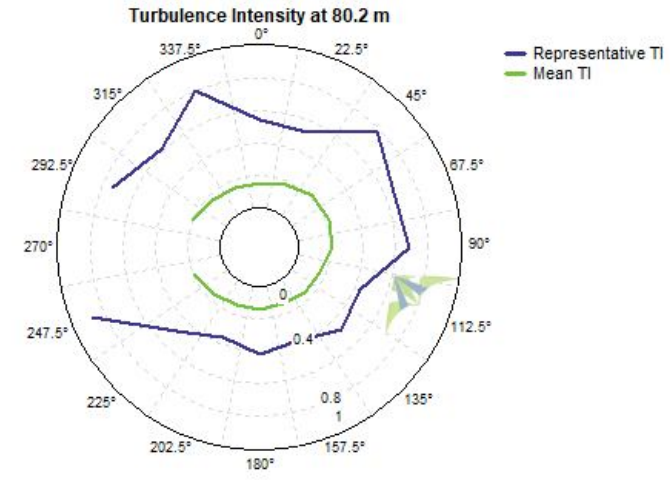
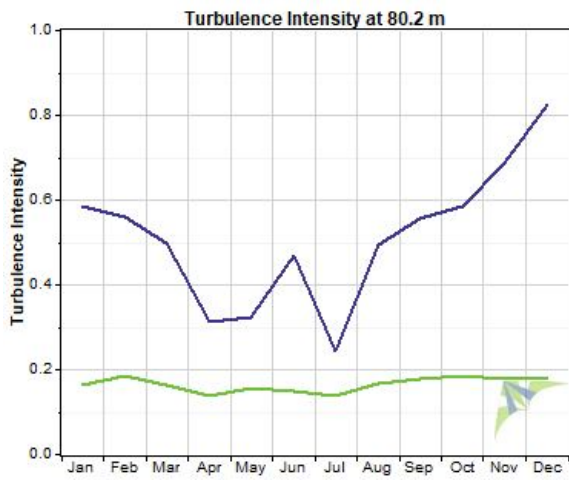
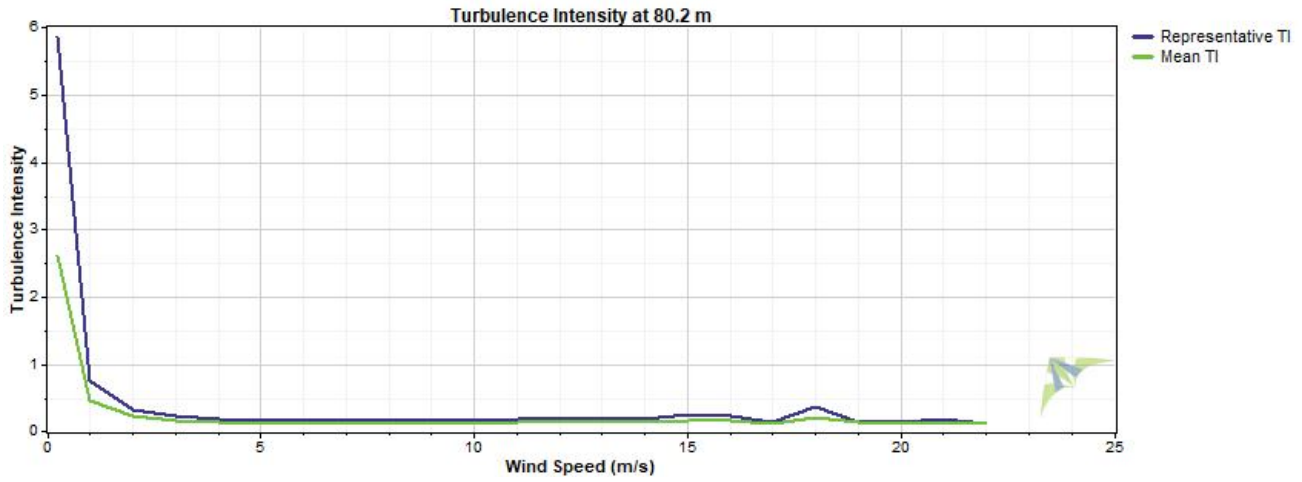
**Wind Speed and Direction**



Wind Shear



**Turbulence Intensity**



## Data Column Properties

#	Label	Units	Height	Possible Data Points	Valid Data Points	Recovery Rate (%)	Mean	Min	Max	Std. Dev
1	RECORD	m/s		113,169	111,576	98.59	50.232	0	105.680	31.681
2	WS_east_80m_Avg	m/s	80.2 m	113,169	107,141	94.67	4.494	0.000	23.920	2.069
3	WS_east_80m_Max	m/s	80.2 m	113,169	107,141	94.67	5.891	0.000	40.280	2.615
4	WS_east_80m_Min	m/s	80.2 m	113,169	107,141	94.67	3.097	0.000	15.640	1.702
5	WS_east_80m_Std	m/s	80.2 m	113,169	107,141	94.67	0.575	0.000	7.920	0.280
6	WS_west_80m_Avg	m/s	80.2 m	113,169	104,972	92.76	4.470	0.000	24.000	2.062
7	WS_west_80m_Max	m/s	80.2 m	113,169	104,972	92.76	5.847	0.000	39.500	2.604
8	WS_west_80m_Min	m/s	80.2 m	113,169	104,972	92.76	3.096	0.000	15.630	1.705
9	WS_west_80m_Std	m/s	80.2 m	113,169	104,972	92.76	0.568	0.000	7.912	0.281
10	WS_east_60m_Avg	m/s	60 m	113,169	106,845	94.41	4.186	0.000	23.050	1.956
11	WS_east_60m_Max	m/s	60 m	113,169	106,845	94.41	5.612	0.000	39.640	2.564
12	WS_east_60m_Min	m/s	60 m	113,169	106,845	94.41	2.785	0.000	14.910	1.542
13	WS_east_60m_Std	m/s	60 m	113,169	106,845	94.41	0.581	0.000	8.110	0.280
14	WS_west_60m_Avg	m/s	60 m	113,169	103,243	91.23	4.009	0.000	22.370	1.955
15	WS_west_60m_Max	m/s	60 m	113,169	103,243	91.23	5.419	0.000	36.900	2.531
16	WS_west_60m_Min	m/s	60 m	113,169	103,243	91.23	2.610	0.000	14.040	1.581
17	WS_west_60m_Std	m/s	60 m	113,169	103,243	91.23	0.579	0.000	7.878	0.283
18	WS_east_40m_Avg	m/s	40 m	113,169	106,770	94.35	3.781	0.000	21.690	1.843
19	WS_east_40m_Max	m/s	40 m	113,169	106,770	94.35	5.224	0.000	40.280	2.507
20	WS_east_40m_Min	m/s	40 m	113,169	106,770	94.35	2.393	0.000	14.870	1.387
21	WS_east_40m_Std	m/s	40 m	113,169	106,770	94.35	0.583	0.000	8.020	0.279
22	WS_west_40m_Avg	m/s	40 m	113,169	104,313	92.17	3.734	0.000	21.680	1.840
23	WS_west_40m_Max	m/s	40 m	113,169	104,313	92.17	5.165	0.000	38.970	2.510
24	WS_west_40m_Min	m/s	40 m	113,169	104,313	92.17	2.364	0.000	14.170	1.386
25	WS_west_40m_Std	m/s	40 m	113,169	104,313	92.17	0.579	0.000	8.100	0.282
26	WindDir_79m_D1_WVT	°	78 m	113,169	111,576	98.59	155.8	0.0	360.0	98.6
27	WindDir_79m_SD1_WVT	°	78 m	113,169	111,576	98.59	6.3	0.0	79.2	6.2
28	WindDir_59m_D1_WVT	°	57.9 m	113,169	111,576	98.59	152.8	0.0	360.0	98.5
29	WindDir_59m_SD1_WVT	°	57.9 m	113,169	111,576	98.59	6.5	0.0	79.2	6.3
30	WindDir_39m_D1_WVT	°	37.9 m	113,169	111,576	98.59	154.4	0.0	360.0	97.0
31	WindDir_39m_SD1_WVT	°	37.9 m	113,169	111,576	98.59	6.9	0.0	78.4	6.5
32	RTD_temp_C_80m_Avg	°C	78.4 m	113,169	111,575	98.59	26.2	11.7	38.3	3.6
33	RTD_temp_C_80m_Max	°C	78.4 m	113,169	111,575	98.59	26.4	11.8	38.7	3.6
34	RTD_temp_C_80m_Min	°C	78.4 m	113,169	111,575	98.59	26.0	11.1	38.0	3.6
35	RTD_temp_C_80m_Std	°C	78.4 m	113,169	111,575	98.59	0.1	0.0	4.1	0.1
36	RTD_temp_C_4m_Avg	°C	3.3 m	113,169	96,308	85.10	25.6	7.2	39.2	5.2
37	RTD_temp_C_4m_Max	°C	3.3 m	113,169	96,308	85.10	25.8	7.4	39.8	5.2
38	RTD_temp_C_4m_Min	°C	3.3 m	113,169	96,308	85.10	25.4	7.0	39.0	5.2
39	RTD_temp_C_4m_Std	°C	3.3 m	113,169	96,308	85.10	0.1	0.0	3.6	0.1
40	HMP155_temp_80m_Avg	°C	79.2 m	113,169	111,521	98.54	26.1	11.4	38.2	3.6
41	HMP155_temp_80m_Max	°C	79.2 m	113,169	111,521	98.54	26.2	11.4	38.7	3.6
42	HMP155_temp_80m_Min	°C	79.2 m	113,169	111,521	98.54	26.0	11.3	37.8	3.6
43	HMP155_temp_80m_Std	°C	79.2 m	113,169	111,521	98.54	0.1	0.0	3.8	0.1
44	RH_80m_Avg	%		113,169	111,576	98.59	76.2	17.2	99.9	16.9
45	RH_80m_Max	%		113,169	111,576	98.59	77.5	17.6	100.0	16.5
46	RH_80m_Min	%		113,169	111,576	98.59	74.99	15.65	99.90	17.37
47	RH_80m_Std	%		113,169	111,576	98.59	0.65	0.03	16.50	0.70
48	HMP155_temp_4m_Avg	°C	4.1 m	113,169	111,459	98.49	25.5	7.9	39.1	5.1
49	HMP155_temp_4m_Max	°C	4.1 m	113,169	111,459	98.49	25.6	8.1	39.5	5.1
50	HMP155_temp_4m_Min	°C	4.1 m	113,169	111,459	98.49	25.3	7.7	38.9	5.1
51	HMP155_temp_4m_Std	°C	4.1 m	113,169	111,459	98.49	0.1	0.0	3.4	0.1
52	RH_4m_Avg	Avg		113,169	111,576	98.59	84.0	19.0	100.0	15.6

#	Label	Units	Height	Possible Data Points	Valid Data Points	Recovery Rate (%)	Mean	Min	Max	Std. Dev
53	RH_4m_Max	Max		113,169	111,576	98.59	85.4	21.4	100.0	14.7
54	RH_4m_Min	Min		113,169	111,576	98.59	82.76	16.34	99.90	16.40
55	RH_4m_Std	Std		113,169	111,576	98.59	0.64	0.02	10.65	0.67
56	BP_80m_Avg	mbar	78.7 m	113,169	111,576	98.59	1,000.4	978.0	1,015.0	5.6
57	BP_80m_Max	mbar	78.7 m	113,169	111,576	98.59	1,000.5	978.0	1,016.0	5.6
58	BP_80m_Min	mbar	78.7 m	113,169	111,576	98.59	1,000.2	804.0	1,014.0	5.8
59	BP_80m_Std	mbar	78.7 m	113,169	111,576	98.59	0.1	0.0	12.2	0.1
60	BP_4m_Avg	mbar	3.9 m	113,169	111,576	98.59	1,008.1	986.0	1,022.0	5.7
61	BP_4m_Max	mbar	3.9 m	113,169	111,576	98.59	1,008.2	986.0	1,022.0	5.7
62	BP_4m_Min	mbar	3.9 m	113,169	111,576	98.59	1,007.9	985.0	1,022.0	5.7
63	BP_4m_Std	mbar	3.9 m	113,169	111,576	98.59	0.0	0.0	1.1	0.0
64	LWmV_Avg	Avg		113,169	111,576	98.59	290.1	151.0	910.0	69.3
65	LWmV	Smp		113,169	111,576	98.59	290.1	150.6	966.0	70.1
66	VBatt_Min	°C		113,169	111,576	98.59	12.80	0.00	13.73	0.47
67	IBatt_Min	°C		113,169	111,576	98.59	0.000	-0.376	1.935	0.380
68	ILoad_Min	m/s		113,169	111,576	98.59	0.282	0.000	0.330	0.010
69	V_in_chg_Min	m/s		113,169	111,576	98.59	8.40	0.00	20.15	8.33
70	I_in_chg_Min	kW		113,169	111,576	98.59	0.249	-0.004	1.884	0.310
71	Chg_TmpC_Avg	m/s		113,169	111,576	98.59	29.93	8.62	47.51	7.39
72	Chg_State	m/s		113,169	111,576	98.59	1.194	0.000	3.000	1.367
73	Ck_Batt	Smp		113,169	111,576	98.59	0	0	0	0
74	BattV_Min	°C		113,169	111,576	98.59	12.44	11.12	13.41	0.49
75	PTemp_C_Avg	m/s		113,169	111,576	98.59	27.31	8.27	42.52	5.83
76	latitude_a	Smp		113,169	111,576	98.59	22	22	22	0
77	latitude_b	m/s		113,169	111,576	98.59	28.40	28.40	28.41	0.00
78	longitude_a	Smp		113,169	111,576	98.59	89	89	89	0
79	longitude_b	m/s		113,169	111,576	98.59	34.10	34.09	34.10	0.00
80	magnetic_variation	Smp		113,169	111,576	98.59	-0.6	-0.6	-0.6	0.0
81	fix_quality	Smp		113,169	111,576	98.59	2	2	2	0
82	nubr_satellites	m/s		113,169	111,576	98.59	9.29	6.00	12.00	0.87
83	altitude	m/s		113,169	111,576	98.59	5.05	-51.30	24.70	4.26
84	max_clock_change	m/s		113,169	111,576	98.59	-528	-1,000	980	486
85	nubr_clock_change	Smp		113,169	111,576	98.59	1.855	0.000	6.000	1.731
86	Air Density	kg/m <sup>3</sup>		113,169	113,169	100.00	1.165	1.110	1.238	0.020
87	WS_east_80m_Avg TI			113,169	106,844	94.41	0.17	0.02	20.50	0.30
88	WS_west_80m_Avg TI			113,169	104,642	92.47	0.17	0.02	20.50	0.30
89	WS_east_60m_Avg TI			113,169	106,525	94.13	0.18	0.03	19.00	0.28
90	WS_west_60m_Avg TI			113,169	102,227	90.33	0.21	0.03	22.00	0.49
91	WS_east_40m_Avg TI			113,169	106,273	93.91	0.20	0.03	20.50	0.36
92	WS_west_40m_Avg TI			113,169	103,755	91.68	0.20	0.03	20.50	0.40
93	WS_east_80m_Avg WPD	W/m <sup>2</sup>		113,169	107,141	94.67	90	0	8,018	154
94	WS_west_80m_Avg WPD	W/m <sup>2</sup>		113,169	104,972	92.76	89	0	8,098	150
95	WS_east_60m_Avg WPD	W/m <sup>2</sup>		113,169	106,845	94.41	74	0	7,174	133
96	WS_west_60m_Avg WPD	W/m <sup>2</sup>		113,169	103,243	91.23	67	0	6,558	123
97	WS_east_40m_Avg WPD	W/m <sup>2</sup>		113,169	106,770	94.35	57	0	5,978	111
98	WS_west_40m_Avg WPD	W/m <sup>2</sup>		113,169	104,313	92.17	56	0	5,969	110