

Project: **Laurel**  
 Description:  
 Data from file(s)  
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**Meteo data report, height: 66.0 Feet**

Data from: 06/11/2001 12:00 PM Data to: 08/03/2002 10:00 AM Observations: 60187 Observations per day: 144 Recovery rate: 100%

day	06/01	07/01	08/01	09/01	10/01	11/01	12/01	01/02	02/02	03/02	04/02	05/02	06/02	07/02	08/02
1		144	(150)	144	144	144	144	144	144	144	144	144	144	144	144
2		144	144	144	144	144	144	144	144	144	144	144	144	144	144
3		144	144	144	144	144	144	144	144	144	144	144	144	144	(61)
4		144	144	144	144	144	144	144	144	144	144	144	144	144	
5		144	144	144	144	144	144	144	144	144	144	144	144	144	
6		144	144	144	144	144	144	144	144	144	144	144	144	144	
7		144	144	144	144	144	144	144	144	144	144	144	144	144	
8		144	144	144	144	144	144	144	144	144	144	144	144	144	
9		144	144	144	144	144	144	144	144	144	144	144	144	144	
10		144	144	144	144	144	144	144	144	144	144	144	144	144	
11	(72)	144	144	144	144	144	144	144	144	144	144	144	144	144	
12	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
13	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
14	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
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21	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
22	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
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30	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
31	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
%	100	100	(100)	100	100	100	100	100	100	100	100	100	100	100	(100)

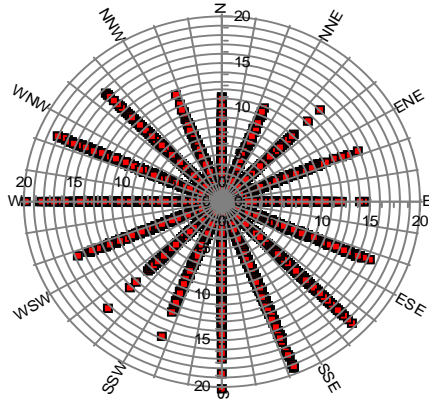
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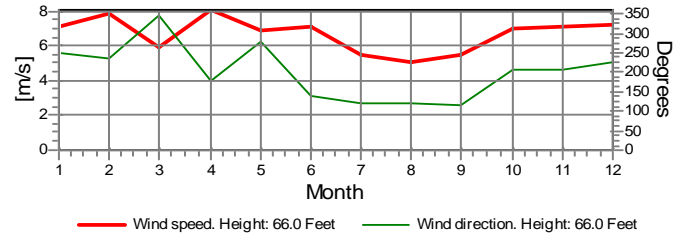
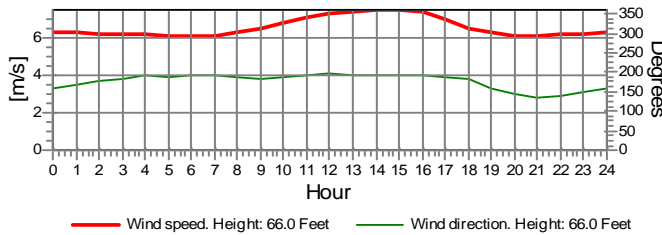
**Meteo data report, height: 66.0 Feet**



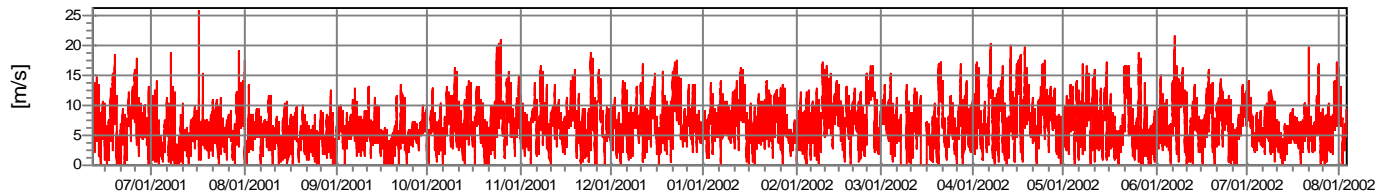
**Monthly mean values of wind speed in m/s**

Month	2001	2002	mean	mean of months
Jan		7.1	7.1	7.1
Feb		7.9	7.9	7.9
Mar		5.9	5.9	5.9
Apr		8.1	8.1	8.1
May		6.9	6.9	6.9
Jun	6.8	7.2	7.1	7.0
Jul	5.1	5.9	5.5	5.5
Aug	4.9	6.1	5.0	5.5
Sep	5.5		5.5	5.5
Oct	7.0	7.0	7.0	7.0
Nov	7.1	7.1	7.1	7.1
Dec	7.2	7.2	7.2	7.2
mean, all data	6.2	7.0	6.6	
mean of months	6.2	6.9		6.7

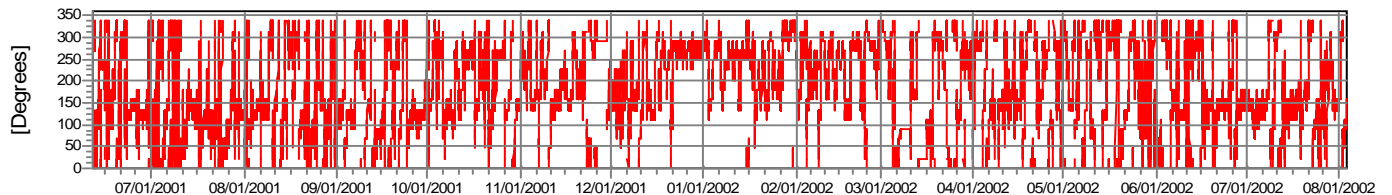
Wind speed [m/s]



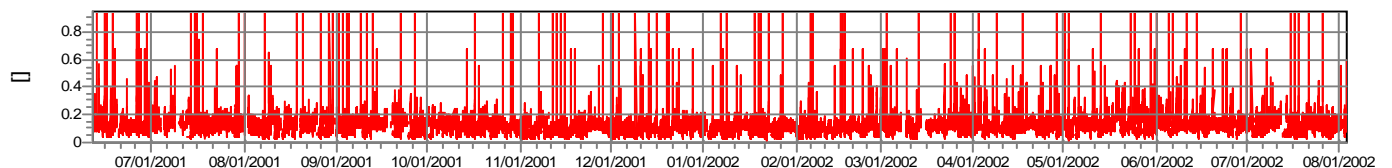
Wind speed



Wind direction



Turbulence intensity  
 V>4.0 m/s



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**Meteo data report, height: 66.0 Feet**

**Frequency**

Wind speed	Sum	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
0.00 - 0.49	1,010	15	330	72	27	299	18	13	12	12	25	27	46	28	30	23	33
0.50 - 1.49	1,317	78	90	63	90	67	58	56	61	66	82	114	105	106	107	99	75
1.50 - 2.49	2,661	177	197	210	193	132	110	78	87	117	105	202	216	197	205	238	197
2.50 - 3.49	4,919	320	317	357	380	362	232	185	176	227	145	337	328	379	450	387	337
3.50 - 4.49	6,243	275	280	303	482	526	558	329	304	283	244	513	443	427	506	457	313
4.50 - 5.49	7,691	211	260	275	364	615	1,046	698	398	325	319	612	584	642	664	467	211
5.50 - 6.49	8,262	217	213	159	260	482	1,175	1,275	686	422	335	527	527	777	622	394	191
6.50 - 7.49	7,056	176	146	82	167	264	859	1,383	908	400	298	328	373	603	626	325	118
7.50 - 8.49	5,822	150	107	60	109	266	446	1,069	995	341	268	230	236	502	636	274	133
8.50 - 9.49	4,544	85	76	49	98	172	310	822	917	301	144	131	165	387	599	187	101
9.50 - 10.49	3,251	25	40	34	67	100	195	563	702	277	89	54	129	314	428	183	51
10.50 - 11.49	2,510	12	10	15	43	53	160	463	542	207	45	19	93	355	360	115	18
11.50 - 12.49	1,774	0	1	3	13	25	115	297	379	131	28	3	62	337	317	56	7
12.50 - 13.49	1,255	0	0	0	11	7	91	224	292	76	11	2	54	204	235	48	0
13.50 - 14.49	805	0	0	1	11	10	85	106	155	36	1	0	27	158	187	27	1
14.50 - 15.49	517	0	0	0	3	5	38	76	95	15	3	0	10	122	119	31	0
15.50 - 16.49	303	0	0	0	2	0	16	48	53	15	1	1	6	58	70	33	0
16.50 - 17.49	150	0	0	1	0	0	2	31	25	11	0	1	2	35	33	9	0
17.50 - 18.49	57	0	0	0	0	0	0	11	23	2	0	0	0	10	10	1	0
18.50 - 19.49	28	0	0	0	0	0	0	6	10	1	0	0	2	8	1	0	0
19.50 - 20.49	9	0	0	0	0	0	0	3	1	1	0	0	2	2	0	0	0
20.50 - 21.49	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
21.50 - 22.49	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
22.50 - 23.49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.50 - 24.49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.50 - 25.49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.50 - 26.49	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Sum	60,187	1,741	2,067	1,684	2,320	3,385	5,514	7,736	6,822	3,266	2,144	3,101	3,410	5,652	6,205	3,354	1,786

**Turbulence**

Wind speed	Sum	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
0.00 - 0.49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.50 - 1.49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.50 - 2.49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.50 - 3.49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.50 - 4.49	0.131	0.165	0.155	0.150	0.121	0.111	0.114	0.126	0.128	0.125	0.145	0.117	0.115	0.124	0.143	0.150	0.168
4.50 - 5.49	0.117	0.154	0.149	0.141	0.125	0.097	0.099	0.111	0.114	0.099	0.112	0.101	0.098	0.126	0.138	0.144	0.152
5.50 - 6.49	0.117	0.158	0.149	0.142	0.125	0.108	0.104	0.104	0.110	0.109	0.111	0.099	0.101	0.123	0.149	0.142	0.151
6.50 - 7.49	0.107	0.138	0.143	0.137	0.118	0.104	0.106	0.096	0.083	0.093	0.100	0.096	0.101	0.117	0.133	0.137	0.139
7.50 - 8.49	0.109	0.134	0.144	0.138	0.120	0.107	0.112	0.099	0.085	0.094	0.107	0.097	0.108	0.122	0.131	0.135	0.135
8.50 - 9.49	0.116	0.134	0.148	0.140	0.127	0.116	0.124	0.108	0.095	0.105	0.098	0.114	0.114	0.131	0.134	0.133	0.143
9.50 - 10.49	0.114	0.131	0.145	0.141	0.126	0.113	0.114	0.109	0.101	0.090	0.097	0.110	0.115	0.131	0.130	0.132	0.133
10.50 - 11.49	0.118	0.125	0.142	0.137	0.123	0.123	0.124	0.113	0.102	0.096	0.117	0.110	0.116	0.134	0.130	0.144	0.134
11.50 - 12.49	0.118		0.172	0.166	0.131	0.120	0.118	0.113	0.107	0.100	0.113	0.171	0.129	0.132	0.123	0.135	0.133
12.50 - 13.49	0.119				0.120	0.116	0.119	0.112	0.111	0.098	0.109	0.230	0.137	0.130	0.128	0.128	
13.50 - 14.49	0.121			0.214	0.124	0.107	0.121	0.115	0.105	0.107	0.130		0.124	0.134	0.127	0.128	0.184
14.50 - 15.49	0.120				0.111	0.122	0.118	0.116	0.107	0.098	0.167		0.141	0.134	0.120	0.119	
15.50 - 16.49	0.116				0.139		0.117	0.110	0.101	0.108	0.113	0.377	0.120	0.127	0.120	0.111	
16.50 - 17.49	0.123			0.140			0.122	0.110	0.118	0.108		0.134	0.112	0.134	0.139	0.105	
17.50 - 18.49	0.116						0.111	0.103	0.095					0.140	0.122	0.224	
18.50 - 19.49	0.114						0.109	0.099	0.088				0.129	0.135	0.138		
19.50 - 20.49	0.112						0.092	0.146	0.108				0.126	0.114			
20.50 - 21.49	0.117													0.117			
21.50 - 22.49	0.092							0.092									
22.50 - 23.49																	
23.50 - 24.49																	
24.50 - 25.49																	
25.50 - 26.49	0.233									0.233							
Sum	0.115	0.148	0.148	0.142	0.123	0.106	0.108	0.105	0.099	0.100	0.110	0.103	0.106	0.126	0.134	0.139	0.148

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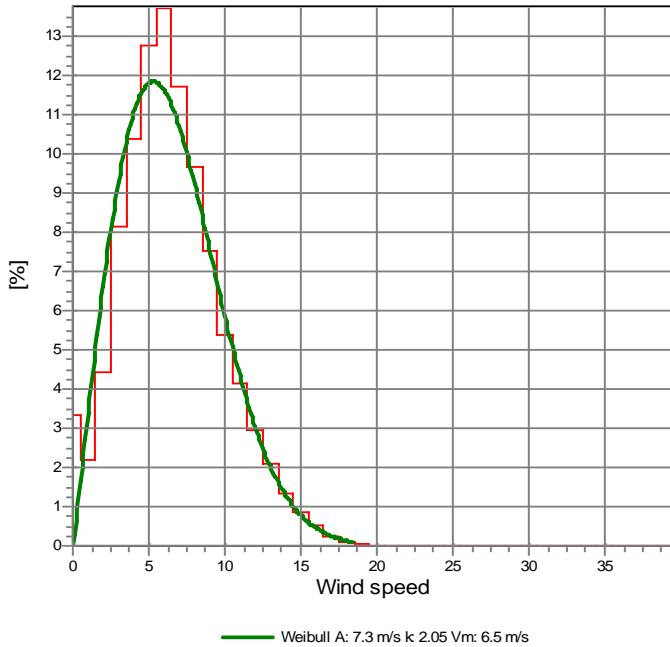
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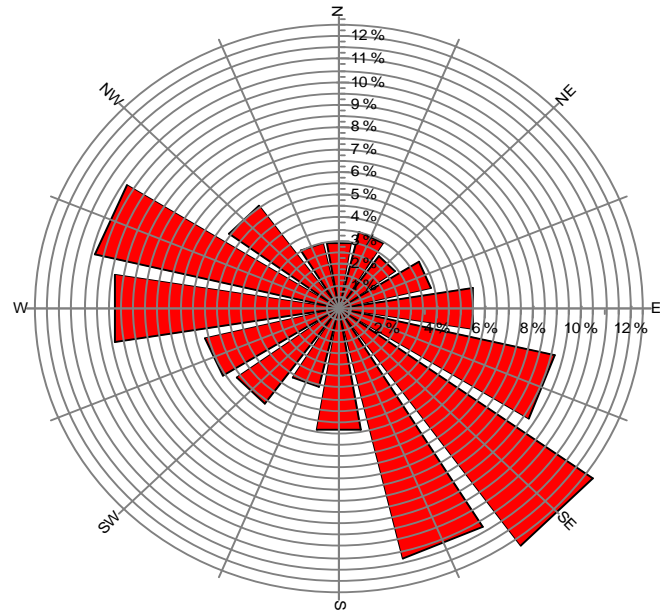
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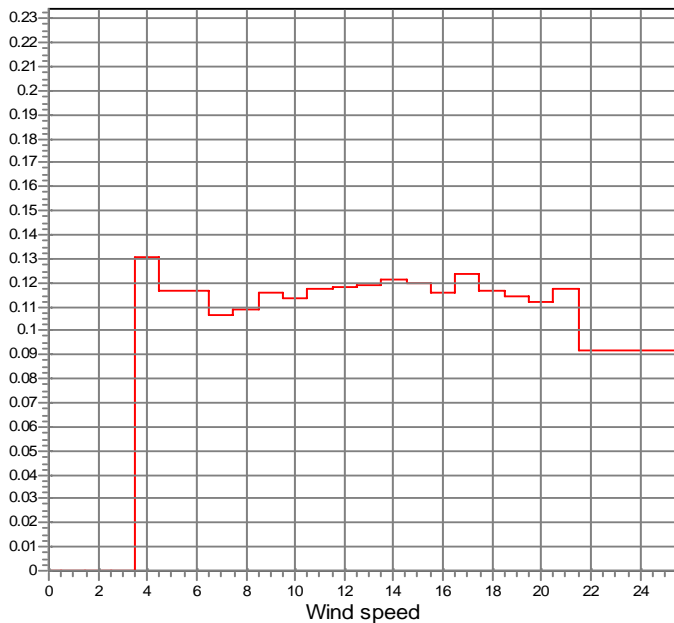
Frequency



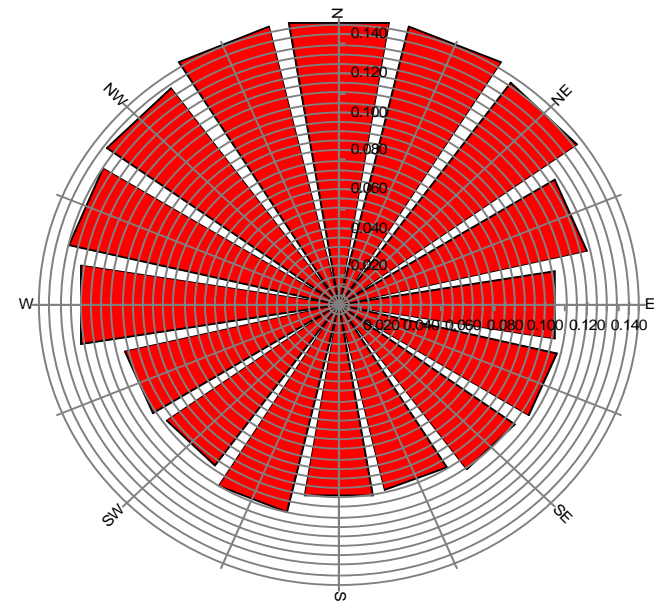
Frequency



Turbulence  
V > 4.0 m/s



Turbulence  
V > 4.0 m/s



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 Calculated:  
 07/15/2009 3:08 PM/

**Meteo data report, height: 66.0 Feet**

**Weibull Data**

k-parameter correction: 0.0080/m

Sector	A- parameter [m/s]	Mean wind speed [m/s]	k- parameter	Frequency	Frequency [%]	Wind shear
0-N	5.45	4.83	2.211	2.89	2.9	0.00
1-NNE	4.78	4.24	1.876	3.43	3.4	0.00
2-NE	4.81	4.27	1.919	2.80	2.8	0.00
3-ENE	5.43	4.82	1.824	3.85	3.9	0.00
4-E	5.90	5.23	2.183	5.62	5.6	0.00
5-ESE	6.97	6.17	2.049	9.16	9.2	0.00
6-SE	8.45	7.49	2.443	12.85	12.9	0.00
7-SSE	9.38	8.36	2.871	11.33	11.3	0.00
8-S	8.08	7.16	2.445	5.43	5.4	0.00
9-SSW	6.84	6.08	2.635	3.56	3.6	0.00
10-SW	5.84	5.19	2.641	5.15	5.2	0.00
11-WSW	6.50	5.76	1.996	5.67	5.7	0.00
12-W	8.31	7.36	2.028	9.39	9.4	0.00
13-WNW	8.62	7.64	2.305	10.31	10.3	0.00
14-NW	6.73	5.98	1.862	5.57	5.6	0.00
15-NNW	5.28	4.69	1.900	2.97	3.0	0.00
mean	7.35	6.51	2.048	100.00	100.0	0.00

