

Project: **YKHC** Description: Data from file(s)  
 Y:\5000\shared\Anemometer\_Loan\_Programs\WPA.NA.Loans\YKHC - Bethel Hospital - AK\Wind Data\YKHC-Bethel 030223.csv  
 Y:\5000\shared\Anemometer\_Loan\_Programs\WPA.NA.Loans\YKHC - Bethel Hospital - AK\Wind Data\YKHC-Bethel 030327.csv  
 Y:\5000\shared\Anemometer\_Loan\_Programs\WPA.NA.Loans\YKHC - Bethel Hospital - AK\Wind Data\YKHC-Bethel 030506.csv  
 Y:\5000\shared\Anemometer\_Loan\_Programs\WPA.NA.Loans\YKHC - Bethel Hospital - AK\Wind Data\YKHC-Bethel 030603.csv  
 Y:\5000\shared\Anemometer\_Loan\_Programs\WPA.NA.Loans\YKHC - Bethel Hospital - AK\Wind Data\YKHC-Bethel 030701.csv  
 Y:\5000\shared\Anemometer\_Loan\_Programs\WPA.NA.Loans\YKHC - Bethel Hospital - AK\Wind Data\YKHC-Bethel 030806.csv  
 Y:\5000\shared\Anemometer\_Loan\_Programs\WPA.NA.Loans\YKHC - Bethel Hospital - AK\Wind Data\YKHC-Bethel 030903.csv  
 Y:\5000\shared\Anemometer\_Loan\_Programs\WPA.NA.Loans\YKHC - Bethel Hospital - AK\Wind Data\YKHC-Bethel 031010.csv  
 Y:\5000\shared\Anemometer\_Loan\_Programs\WPA.NA.Loans\YKHC - Bethel Hospital - AK\Wind Data\YKHC-Bethel 031215.csv

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 Calculated:  
 07/24/2006 11:04 AM/

**Meteo data report, height: 20.0 m**

Name of meteo object: YKHC - Bethel Hospital

Data from: 02/23/2003 4:00 PM Data to: 04/15/2004 1:50 PM Observations: 60036 Observations per day: 144 Recovery rate: 100%

day	02/03	03/03	04/03	05/03	06/03	07/03	08/03	09/03	10/03	11/03	12/03	01/04	02/04	03/04	04/04
1		(143)	144	144	144	144	144	144	144	(142)	(135)	144	(142)	144	144
2		144	144	(136)	144	144	144	144	144	(134)	(139)	144	(16)	144	144
3		144	(142)	144	144	144	144	144	144	(122)	144	(0)	144	(143)	144
4		144	144	144	(138)	144	144	(139)	144	(138)	144	(24)	144	(128)	(129)
5		144	144	144	(132)	(143)	144	144	144	144	144	144	144	(141)	(143)
6		144	144	(143)	(141)	144	144	144	144	144	144	144	144	144	144
7		144	144	144	(143)	144	144	144	144	144	(110)	144	144	144	144
8		144	144	144	144	144	(142)	144	144	144	(136)	144	144	144	144
9		144	144	(139)	144	144	144	144	144	(124)	144	144	144	144	144
10		144	144	(143)	(126)	144	(143)	144	144	(0)	144	144	144	144	144
11		144	144	144	144	144	144	144	144	(0)	(142)	144	144	144	144
12		144	144	(143)	144	144	144	144	144	(17)	(80)	144	144	144	144
13		144	144	144	144	144	144	144	144	144	(13)	144	144	144	144
14		144	144	144	144	144	(139)	144	144	(55)	(140)	144	144	(108)	144
15		144	144	(141)	144	144	144	144	144	(10)	144	(139)	144	144	(84)
16		144	144	(134)	144	144	144	144	144	(85)	144	144	144	(142)	
17		144	(141)	144	(137)	144	(142)	144	144	144	144	144	144	144	144
18		144	144	144	(124)	144	(143)	144	144	144	144	144	144	144	144
19		144	(142)	144	144	144	144	144	144	144	144	144	144	144	144
20		144	144	144	(135)	144	144	144	144	144	144	144	144	144	144
21		144	(133)	144	(97)	144	144	(143)	144	144	144	144	144	144	144
22		144	144	144	144	(141)	144	144	144	144	144	144	(124)	144	
23	(48)	144	144	144	144	(143)	144	144	144	144	144	144	(139)	(137)	
24	144	144	144	144	144	(142)	144	144	144	144	(115)	144	144	(134)	
25	144	144	144	144	144	(140)	144	144	144	144	(3)	144	144	144	144
26	144	144	(130)	144	144	144	144	(139)	144	(140)	(96)	144	144	144	144
27	144	144	144	(136)	(139)	(143)	(129)	(141)	(142)	144	144	144	(127)	144	144
28	(141)	144	(142)	144	144	144	144	144	144	144	144	144	144	144	144
29		144	144	144	144	144	144	144	144	(142)	144	144	144	144	144
30		144	144	144	144	144	(141)	144	144	(140)	144	144		144	144
31		144		144		(135)	144		144		(103)	144		(143)	
%	(100)	(100)	(99)	(99)	(97)	(100)	(99)	(100)	(100)	(82)	(89)	(91)	(99)	(98)	(99)

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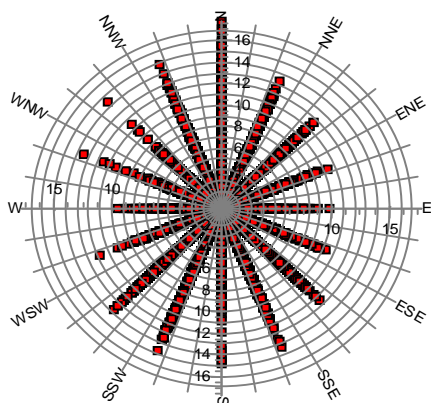
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### Meteo data report, height: 20.0 m

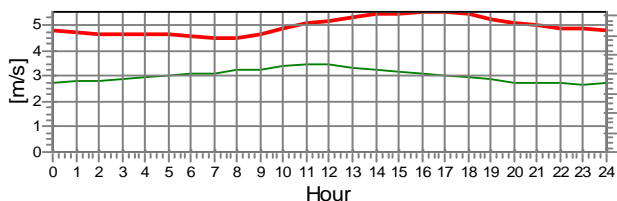
Name of meteo object: YKHC - Bethel Hospital



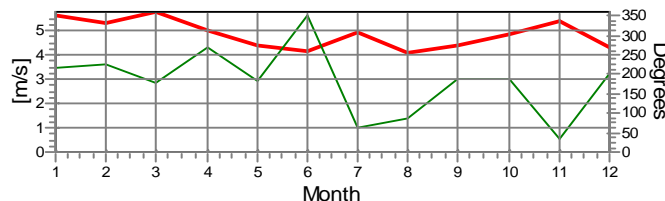
Wind speed [m/s]

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

Month	2003	2004	mean	mean of months
Jan		5.6	5.6	5.6
Feb	4.8	5.4	5.3	5.1
Mar	6.7	4.9	5.8	5.8
Apr	5.2	4.7	5.1	5.0
May	4.4		4.4	4.4
Jun	4.2		4.2	4.2
Jul	4.9		4.9	4.9
Aug	4.1		4.1	4.1
Sep	4.4		4.4	4.4
Oct	4.9		4.9	4.9
Nov	5.4		5.4	5.4
Dec	4.4		4.4	4.4
mean, all data	4.9	5.2	4.9	
mean of months	4.9	5.2		4.8

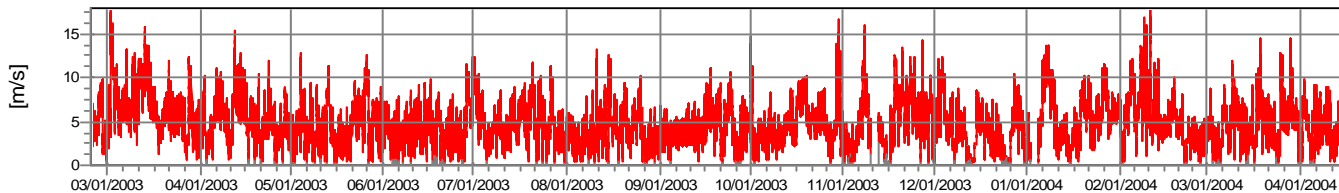


— Wind speed. Height: 20.0 m — Wind direction. Height: 20.0 m

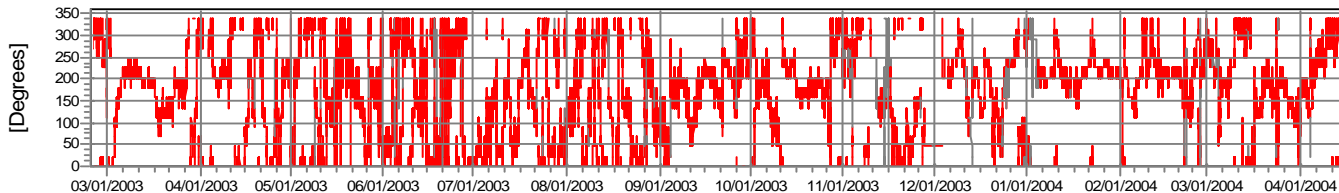


— Wind speed. Height: 20.0 m — Wind direction. Height: 20.0 m

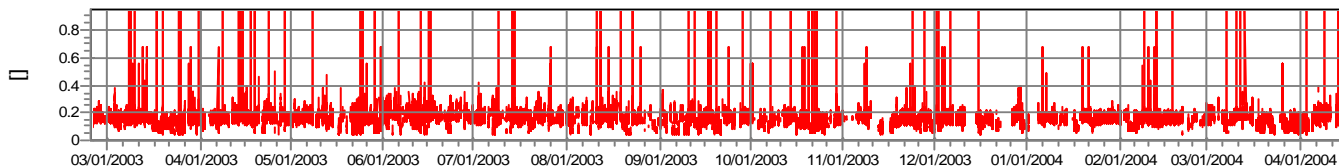
### Wind speed



### Wind direction



### Turbulence intensity V>4.0 m/s



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Name of meteo object: YKHC - Bethel Hospital

#### Frequency

Wind speed m/s	Sum	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
0.00 - 0.49	376	15	17	28	8	9	30	5	24	38	47	46	38	26	16	12	17
0.50 - 1.49	2,754	144	96	134	64	130	93	127	165	305	323	218	211	264	203	147	130
1.50 - 2.49	5,890	382	239	258	156	331	215	223	309	530	609	444	507	542	403	392	350
2.50 - 3.49	8,928	598	439	355	322	550	448	392	504	790	920	794	732	689	433	430	532
3.50 - 4.49	10,041	624	606	522	389	474	636	647	681	866	1,274	1,042	585	490	383	391	431
4.50 - 5.49	8,911	504	589	438	270	239	503	803	766	903	1,404	932	443	291	261	292	273
5.50 - 6.49	7,265	348	495	451	192	150	283	725	737	680	1,376	766	278	146	174	213	251
6.50 - 7.49	4,769	340	438	304	139	102	135	448	377	314	1,027	476	126	86	75	134	248
7.50 - 8.49	3,117	260	318	256	74	53	67	277	265	166	576	386	105	43	33	63	175
8.50 - 9.49	2,360	226	263	137	57	17	56	234	223	103	484	334	48	18	17	23	120
9.50 - 10.49	1,563	146	229	59	6	5	14	174	140	35	395	215	15	3	7	10	110
10.50 - 11.49	1,061	87	171	42	0	0	2	76	122	9	301	151	4	1	6	10	79
11.50 - 12.49	449	94	51	12	0	0	0	20	24	8	146	39	3	0	4	2	46
12.50 - 13.49	230	79	9	1	0	0	0	9	8	12	59	18	0	0	2	2	31
13.50 - 14.49	124	60	7	0	0	0	0	3	7	10	20	2	0	1	0	3	11
14.50 - 15.49	51	30	1	0	0	0	0	2	10	2	0	0	0	0	1	1	4
15.50 - 16.49	47	39	2	0	0	0	0	0	0	4	1	0	0	0	0	0	1
16.50 - 17.49	11	10	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
17.50 - 18.49	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	57,951	3,990	3,970	2,997	1,677	2,060	2,482	4,163	4,354	4,783	8,964	5,863	3,095	2,600	2,019	2,125	2,809

#### 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	0.154	0.174	0.154	0.143	0.167	0.214	0.124	0.109	0.099	0.130	0.168	0.152	0.171	0.195	0.201	0.169	0.182
4.50 - 5.49	0.151	0.180	0.151	0.147	0.185	0.221	0.121	0.108	0.098	0.128	0.164	0.158	0.170	0.194	0.201	0.171	0.186
5.50 - 6.49	0.155	0.194	0.160	0.149	0.191	0.206	0.126	0.122	0.104	0.123	0.170	0.165	0.180	0.205	0.192	0.175	0.200
6.50 - 7.49	0.154	0.184	0.151	0.144	0.176	0.216	0.126	0.119	0.104	0.126	0.164	0.164	0.174	0.191	0.189	0.171	0.183
7.50 - 8.49	0.156	0.186	0.151	0.139	0.165	0.226	0.137	0.123	0.113	0.135	0.165	0.164	0.179	0.193	0.187	0.172	0.180
8.50 - 9.49	0.157	0.183	0.160	0.143	0.129	0.205	0.146	0.118	0.117	0.138	0.171	0.170	0.174	0.189	0.189	0.162	0.182
9.50 - 10.49	0.150	0.176	0.151	0.113	0.133	0.234	0.132	0.110	0.107	0.130	0.165	0.156	0.158	0.181	0.196	0.156	0.181
10.50 - 11.49	0.156	0.193	0.161	0.113			0.160	0.111	0.105	0.137	0.169	0.156	0.153	0.233	0.187	0.156	0.194
11.50 - 12.49	0.155	0.171	0.149	0.091				0.100	0.109	0.137	0.161	0.150	0.164		0.186	0.163	0.178
12.50 - 13.49	0.162	0.177	0.151	0.136				0.097	0.105	0.137	0.162	0.154			0.182	0.174	0.174
13.50 - 14.49	0.167	0.181	0.161					0.087	0.092	0.115	0.180	0.135	0.174			0.152	0.200
14.50 - 15.49	0.160	0.167	0.175						0.090	0.142	0.142				0.240	0.157	0.177
15.50 - 16.49	0.157	0.159	0.160							0.139	0.156						0.162
16.50 - 17.49	0.159	0.154													0.211		
17.50 - 18.49	0.157	0.157															
Sum	0.154	0.182	0.154	0.143	0.176	0.216	0.125	0.115	0.104	0.128	0.167	0.160	0.174	0.196	0.197	0.171	0.186

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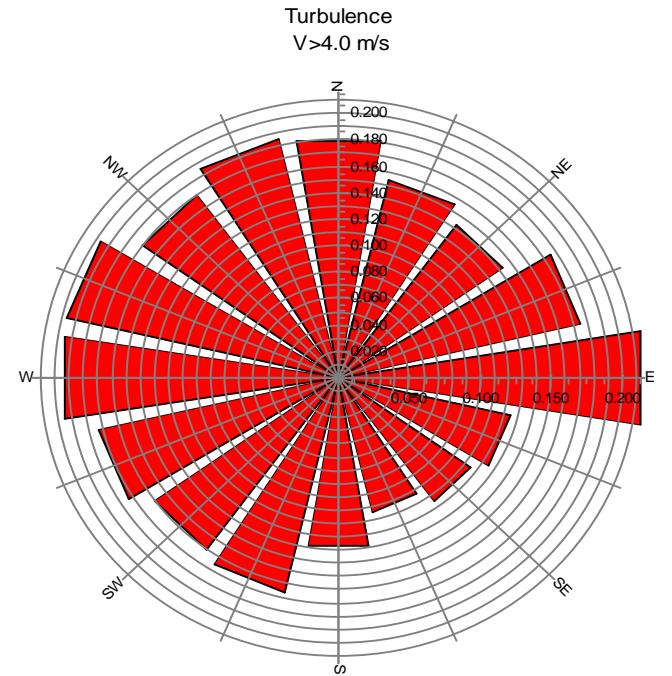
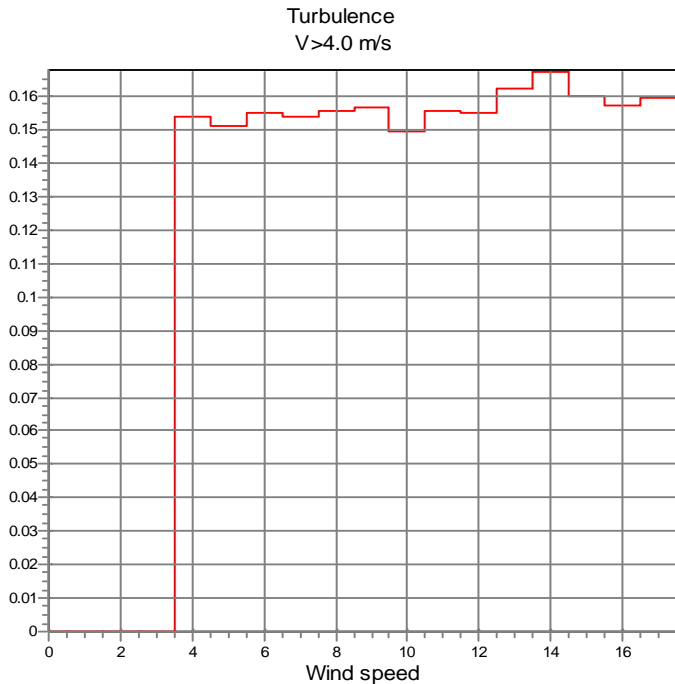
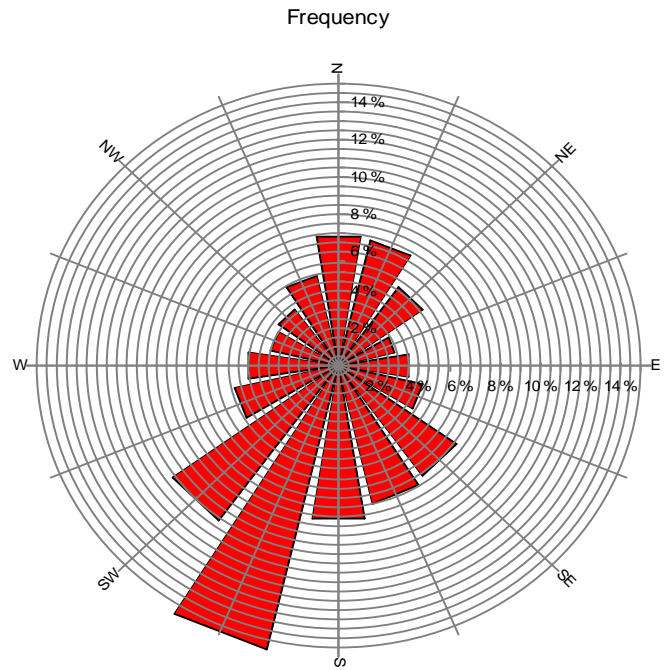
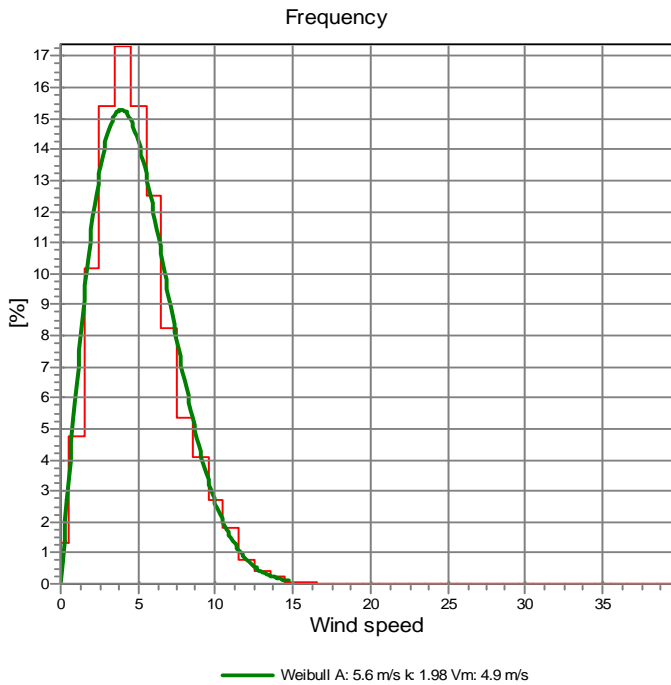
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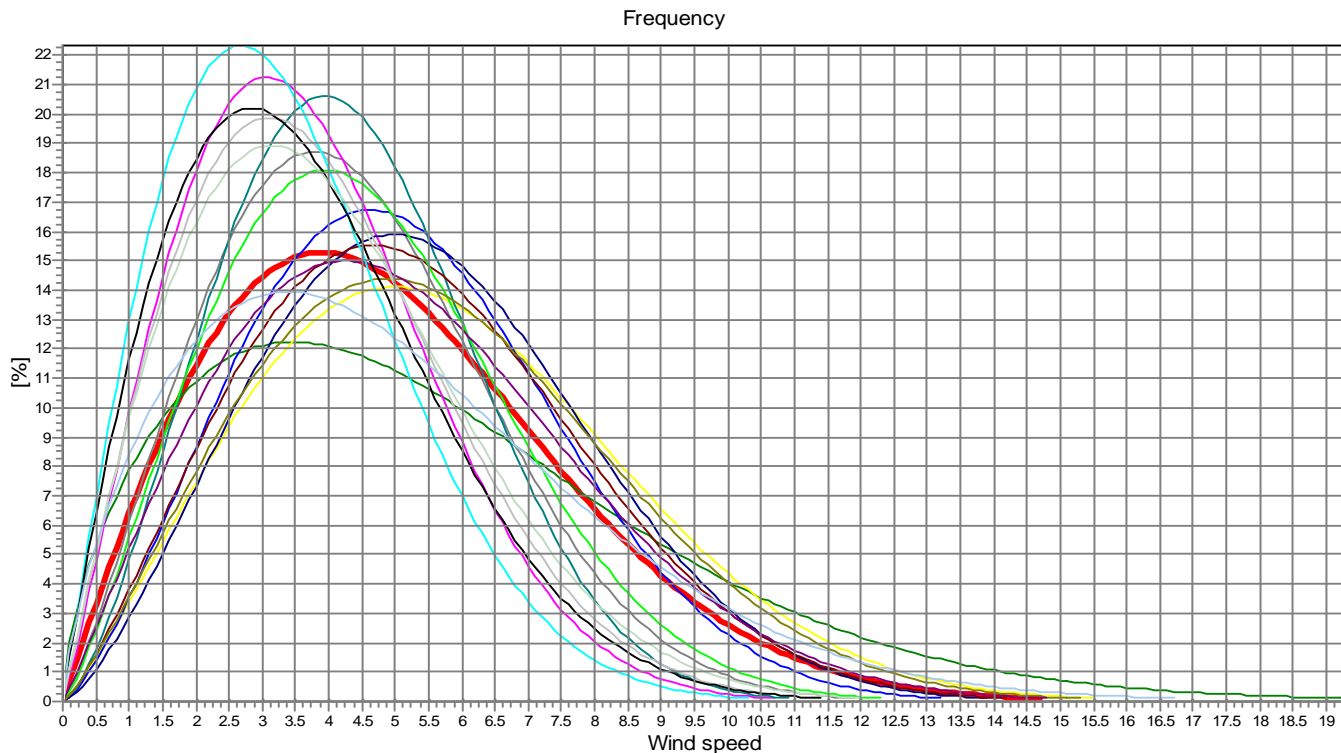
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#### Weibull Data

k-parameter correction: 0.0080/m

Sector	A- parameter [m/s]	Mean wind speed [m/s]	k- parameter	Frequency	Frequency [%]	Wind shear
0-N	6.26	5.60	1.622	6.89	6.9	0.00
1-NNE	6.53	5.79	2.220	6.85	6.9	0.00
2-NE	5.81	5.15	2.384	5.17	5.2	0.00
3-ESE	4.95	4.38	2.231	2.89	2.9	0.00
4-E	4.18	3.70	2.106	3.55	3.6	0.00
5-ESE	4.86	4.31	2.477	4.28	4.3	0.00
6-SE	6.20	5.49	2.422	7.18	7.2	0.00
7-SSE	6.03	5.34	2.264	7.51	7.5	0.00
8-S	5.14	4.55	2.243	8.25	8.3	0.00
9-SSW	6.39	5.66	2.215	15.47	15.5	0.00
10-SW	5.85	5.18	2.070	10.12	10.1	0.00
11-WSW	4.35	3.85	2.025	5.34	5.3	0.00
12-W	3.82	3.38	1.981	4.49	4.5	0.00
13-WNW	4.15	3.68	1.928	3.48	3.5	0.00
14-NW	4.49	3.98	1.974	3.67	3.7	0.00
15-NNW	5.63	5.02	1.714	4.85	4.8	0.00
mean	5.57	4.94	1.978	100.00	100.0	0.00



— Total A: 5.6 m/s k 1.98 Vm: 4.9 m/s	— N A: 6.3 m/s k 1.62 Vm: 5.6 m/s	— NNE A: 6.5 m/s k 2.22 Vm: 5.8 m/s	— NE A: 5.8 m/s k 2.38 Vm: 5.2 m/s
— ENE A: 4.9 m/s k 2.23 Vm: 4.4 m/s	— E A: 4.2 m/s k 2.11 Vm: 3.7 m/s	— ESE A: 4.9 m/s k 2.48 Vm: 4.3 m/s	— SE A: 6.2 m/s k 2.42 Vm: 5.5 m/s
— SSE A: 6.0 m/s k 2.26 Vm: 5.3 m/s	— S A: 5.1 m/s k 2.24 Vm: 4.5 m/s	— SSW A: 6.4 m/s k 2.21 Vm: 5.7 m/s	— SW A: 5.9 m/s k 2.21 Vm: 5.2 m/s
— WSW A: 4.4 m/s k 2.02 Vm: 3.9 m/s	— WA A: 3.8 m/s k 1.98 Vm: 3.4 m/s	— WNW A: 4.1 m/s k 1.93 Vm: 3.7 m/s	— NW A: 4.5 m/s k 1.97 Vm: 4.0 m/s
— NNW A: 5.6 m/s k 1.71 Vm: 5.0 m/s			