

Project: **City of Beloit**
 Description: Data from file(s)
 Y:\5000\IS\shared\Anemometer_Loan_Programs\Completed_Sites\WAPA\City of Beloit - KS\Wind Data\Beloit 030513.csv
 Y:\5000\IS\shared\Anemometer_Loan_Programs\Completed_Sites\WAPA\City of Beloit - KS\Wind Data\Beloit 030613.csv
 Y:\5000\IS\shared\Anemometer_Loan_Programs\Completed_Sites\WAPA\City of Beloit - KS\Wind Data\Beloit 030915.csv
 Y:\5000\IS\shared\Anemometer_Loan_Programs\Completed_Sites\WAPA\City of Beloit - KS\Wind Data\Beloit 031121.csv
 Y:\5000\IS\shared\Anemometer_Loan_Programs\Completed_Sites\WAPA\City of Beloit - KS\Wind Data\Beloit 040120.csv

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Meteo data report, height: 20.0 Feet

Name of meteo object: Beloit

Data from: 05/13/2003 1:50 PM Data to: 06/14/2004 8:00 AM Observations: 57283 Observations per day: 144 Recovery rate: 100%

day	05/03	06/03	07/03	08/03	09/03	10/03	11/03	12/03	01/04	02/04	03/04	04/04	05/04	06/04	07/04
1		144	144	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	144
4		144	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	144
6		144	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	144
8		144	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	144
10		144	144	144	144	144	144	144	144	144	144	144	144	144	144
11		144	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	(61)	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	(49)
15	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
16	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
17	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
18	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
19	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
20	144	144	144	144	144	144	144	144	(149)	144	144	144	144	144	
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	
23	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
24	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
25	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
26	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
27	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
28	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
29	144	144	144	144	144	144	144	144	144	144	144	144	144	144	
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	
%	100	100	100	100	100	100	100	100	(100)	100	100	100	100	(44)	(0)

Project:

City of Beloit

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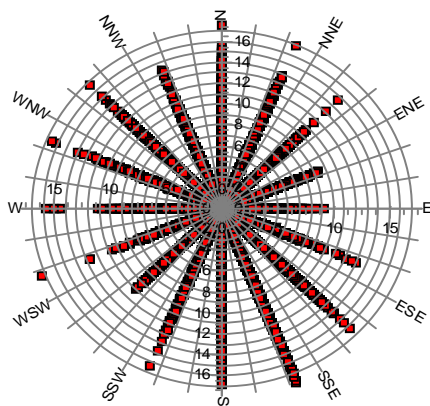
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Meteo data report, height: 20.0 Feet

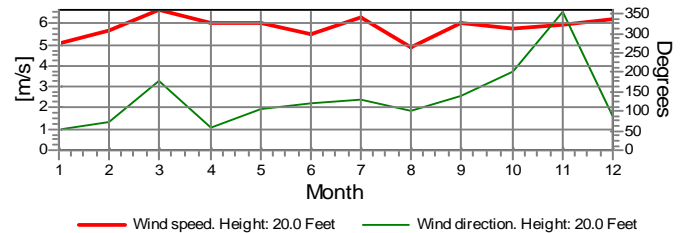
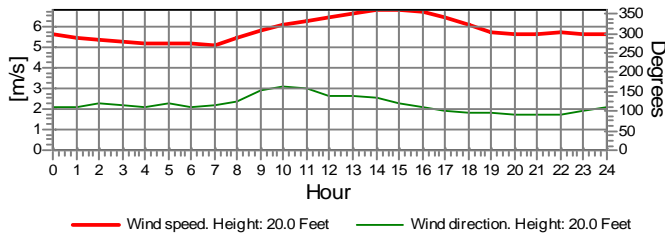
Name of meteo object: Beloit



Wind speed [m/s]

Monthly mean values of wind speed in m/s

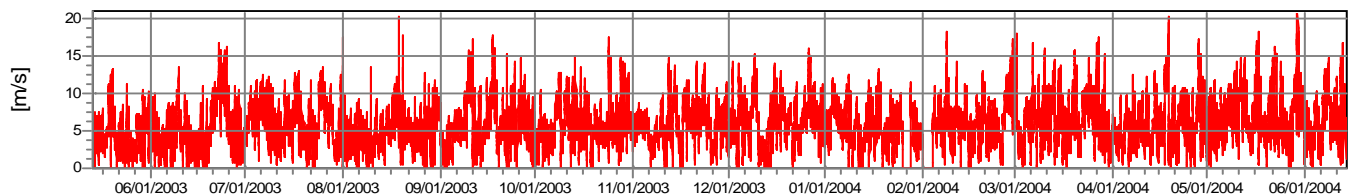
Month	2003	2004	mean	mean of months
Jan		5.1	5.1	5.1
Feb		5.6	5.6	5.6
Mar		6.7	6.7	6.7
Apr		6.0	6.0	6.0
May	4.5	6.9	6.0	5.7
Jun	5.2	6.3	5.5	5.8
Jul	6.3	6.3	6.3	6.3
Aug	4.9	4.9	4.9	4.9
Sep	6.0	6.0	6.0	6.0
Oct	5.8	5.8	5.8	5.8
Nov	6.0	6.0	6.0	6.0
Dec	6.2	6.2	6.2	6.2
mean, all data	5.7	6.1	5.8	
mean of months	5.6	6.1		5.8



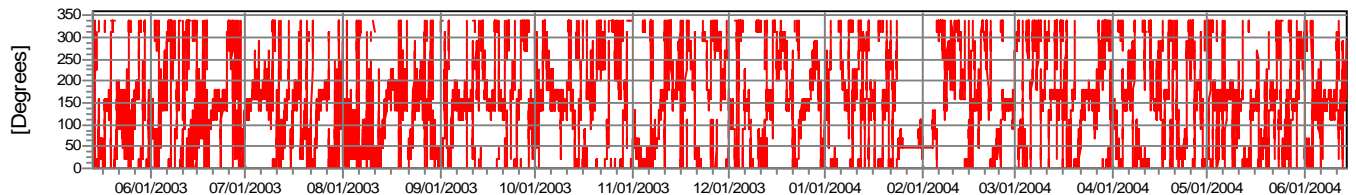
— Wind speed. Height: 20.0 Feet — Wind direction. Height: 20.0 Feet

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

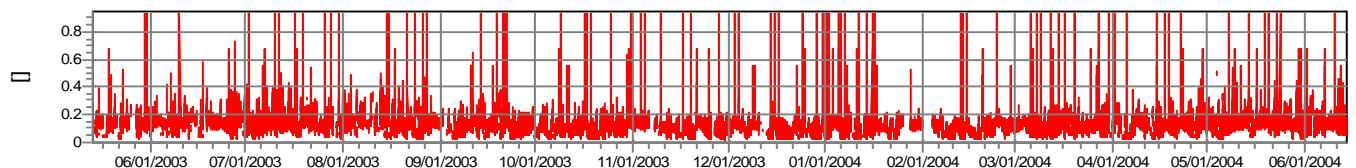
Wind speed



Wind direction



Turbulence intensity V>4.0 m/s



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Name of meteo object: Beloit

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	1,400	33	40	879	38	40	46	39	18	47	33	34	20	35	37	24	37
0.50 - 1.49	1,794	111	135	153	126	160	164	125	118	105	84	90	71	76	74	91	111
1.50 - 2.49	3,381	201	319	352	299	291	291	252	203	147	144	176	124	106	107	175	194
2.50 - 3.49	5,969	445	523	665	556	593	483	393	394	249	212	226	220	201	205	259	345
3.50 - 4.49	7,340	524	681	578	503	657	602	672	551	310	257	309	345	286	248	376	441
4.50 - 5.49	7,888	501	720	520	422	352	574	1,059	928	472	258	301	372	290	248	377	494
5.50 - 6.49	8,077	624	718	402	263	161	384	1,227	1,289	646	255	208	390	273	286	410	541
6.50 - 7.49	6,293	515	582	277	135	69	196	842	1,168	629	226	89	316	198	305	395	351
7.50 - 8.49	4,853	441	381	186	62	34	94	582	1,277	570	175	64	112	129	219	255	272
8.50 - 9.49	3,582	352	317	75	33	7	39	415	1,000	455	137	53	20	67	139	212	261
9.50 - 10.49	2,515	270	184	34	9	5	19	303	656	379	78	30	9	38	83	194	224
10.50 - 11.49	1,802	232	105	10	2	0	14	163	518	332	66	16	5	17	63	146	113
11.50 - 12.49	1,079	134	46	5	0	0	10	97	387	182	38	4	3	6	29	74	64
12.50 - 13.49	589	84	29	2	0	0	3	61	214	85	17	0	10	6	15	37	26
13.50 - 14.49	356	50	22	1	0	0	0	26	141	68	10	3	1	6	8	10	10
14.50 - 15.49	198	29	2	2	1	0	0	12	78	52	3	0	0	9	5	5	0
15.50 - 16.49	90	10	0	0	0	0	0	6	39	19	4	0	0	9	3	0	0
16.50 - 17.49	51	1	1	0	0	0	0	3	28	9	1	0	2	1	4	1	0
17.50 - 18.49	21	1	1	0	0	0	0	0	16	1	0	0	0	1	1	0	0
18.50 - 19.49	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
19.50 - 20.49	3	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0
20.50 - 21.49	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Sum	57,283	4,558	4,806	4,141	2,449	2,369	2,919	6,277	9,025	4,759	1,998	1,603	2,020	1,755	2,079	3,041	3,484

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	0.126	0.131	0.139	0.150	0.172	0.158	0.123	0.102	0.105	0.114	0.110	0.112	0.105	0.113	0.116	0.116	0.124
4.50 - 5.49	0.116	0.134	0.134	0.151	0.168	0.167	0.113	0.089	0.087	0.095	0.104	0.107	0.088	0.106	0.104	0.119	0.128
5.50 - 6.49	0.119	0.137	0.142	0.152	0.170	0.171	0.129	0.097	0.093	0.099	0.096	0.097	0.095	0.108	0.125	0.133	0.153
6.50 - 7.49	0.108	0.131	0.140	0.148	0.165	0.155	0.118	0.094	0.082	0.085	0.094	0.102	0.067	0.090	0.109	0.129	0.142
7.50 - 8.49	0.112	0.131	0.138	0.142	0.152	0.163	0.123	0.102	0.092	0.099	0.115	0.125	0.071	0.087	0.108	0.140	0.143
8.50 - 9.49	0.124	0.136	0.142	0.152	0.149	0.193	0.126	0.116	0.105	0.118	0.120	0.129	0.091	0.118	0.130	0.141	0.151
9.50 - 10.49	0.124	0.136	0.131	0.144	0.171	0.253	0.109	0.112	0.116	0.118	0.121	0.117	0.118	0.118	0.123	0.137	0.143
10.50 - 11.49	0.130	0.141	0.133	0.139	0.165		0.137	0.120	0.127	0.127	0.119	0.113	0.124	0.117	0.116	0.140	0.145
11.50 - 12.49	0.124	0.133	0.131	0.142			0.118	0.115	0.120	0.122	0.109	0.197	0.135	0.122	0.109	0.135	0.143
12.50 - 13.49	0.125	0.139	0.128	0.142			0.119	0.115	0.124	0.116	0.115		0.110	0.100	0.115	0.146	0.142
13.50 - 14.49	0.122	0.134	0.145	0.155				0.120	0.118	0.112	0.116	0.197	0.093	0.106	0.105	0.134	0.124
14.50 - 15.49	0.125	0.132	0.157	0.165	0.146			0.137	0.121	0.124	0.144			0.100	0.124	0.141	
15.50 - 16.49	0.118	0.134						0.121	0.113	0.125	0.154			0.098	0.107		
16.50 - 17.49	0.122	0.118	0.192					0.116	0.117	0.117	0.116		0.195	0.193	0.106	0.108	
17.50 - 18.49	0.120	0.132	0.246					0.109	0.104					0.186	0.103		
18.50 - 19.49	0.105								0.105								
19.50 - 20.49	0.142								0.114					0.198			
20.50 - 21.49	0.114									0.114							
Sum	0.118	0.134	0.138	0.150	0.167	0.164	0.120	0.100	0.099	0.105	0.107	0.109	0.087	0.104	0.115	0.131	0.141

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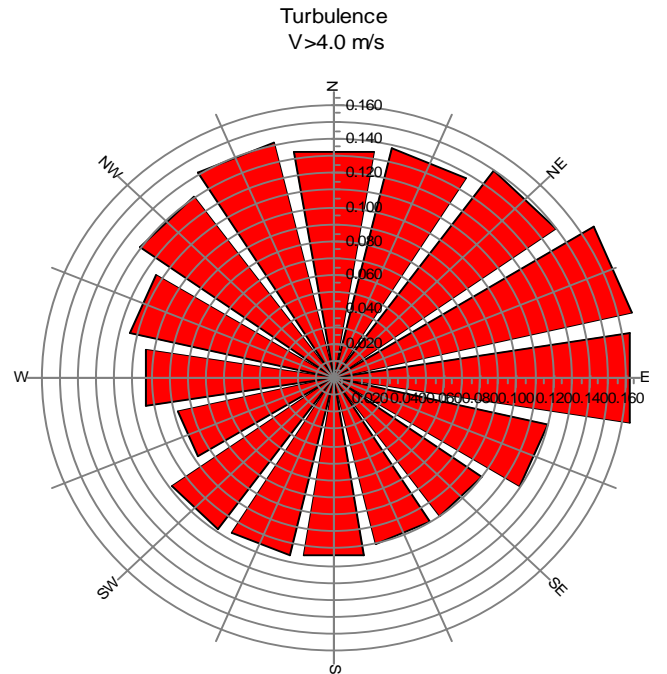
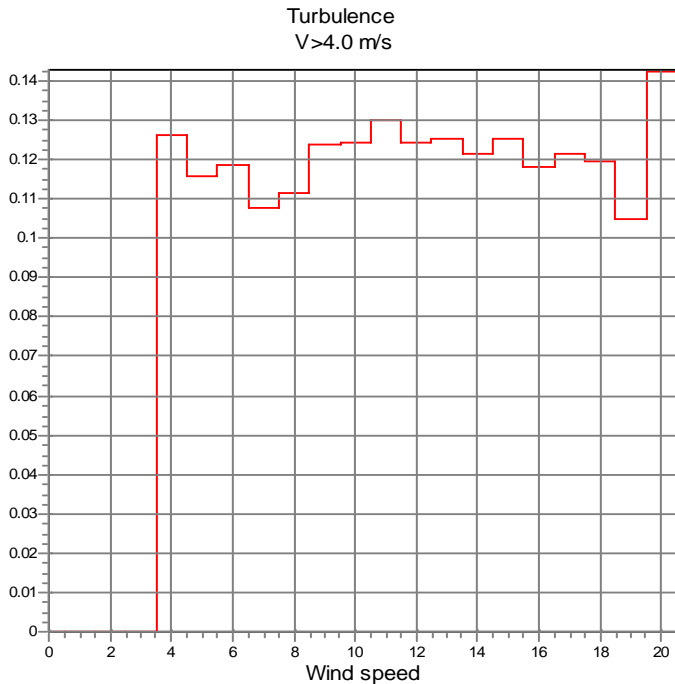
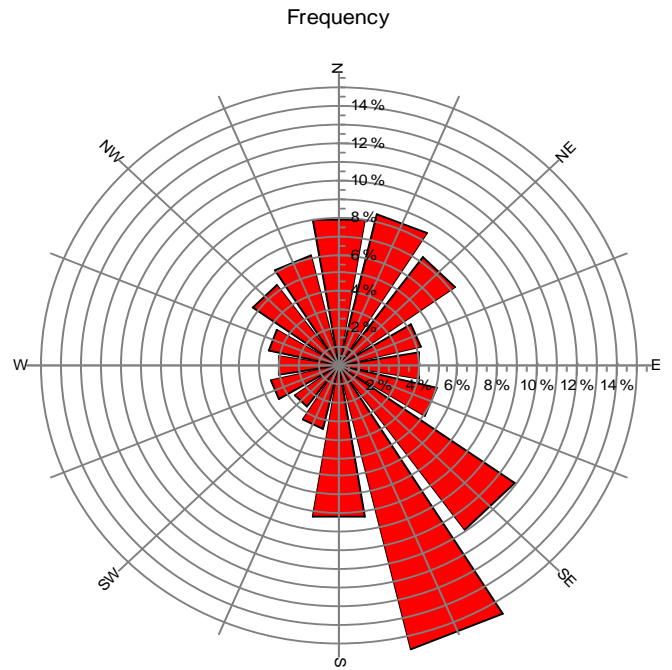
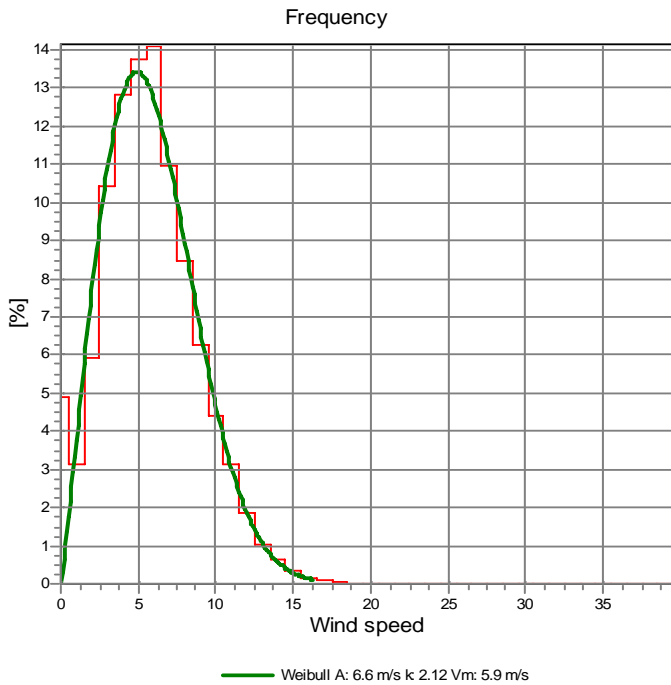
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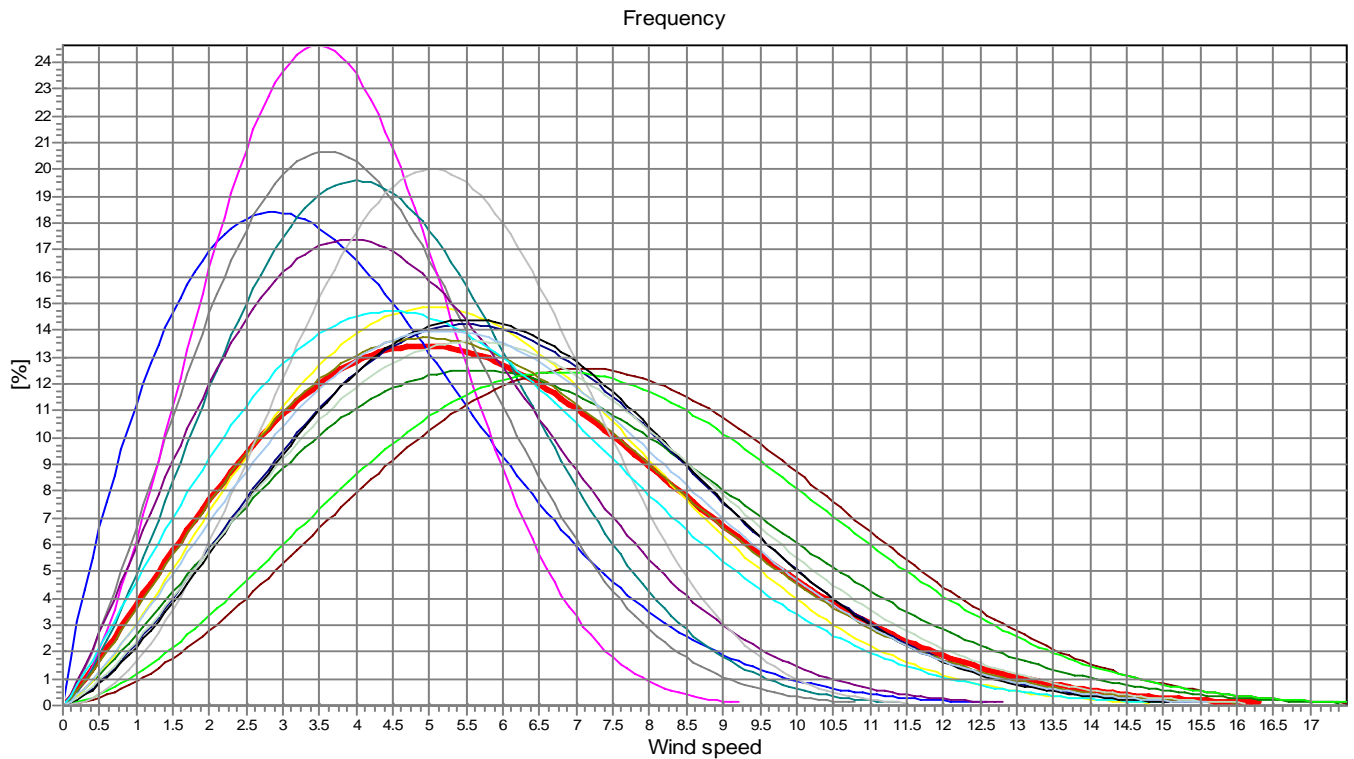
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Weibull Data

k-parameter correction: 0.0080/m

Sector	A- parameter [m/s]	Mean wind speed [m/s]	k- parameter	Frequency	Frequency [%]	Wind shear
0-N	7.35	6.51	2.214	7.96	8.0	0.00
1-NNE	6.42	5.69	2.323	8.39	8.4	0.00
2-NE	4.42	3.93	1.836	7.23	7.2	0.00
3-ENE	4.59	4.07	2.310	4.28	4.3	0.00
4-E	4.21	3.74	2.583	4.14	4.1	0.00
5-ESE	5.01	4.44	2.408	5.10	5.1	0.00
6-SE	6.88	6.10	2.404	10.96	11.0	0.00
7-SSE	8.45	7.51	2.664	15.76	15.8	0.00
8-S	8.24	7.31	2.551	8.31	8.3	0.00
9-SSW	6.59	5.84	2.163	3.49	3.5	0.00
10-SW	5.21	4.61	2.166	2.80	2.8	0.00
11-WSW	5.79	5.17	2.952	3.53	3.5	0.00
12-W	6.05	5.36	2.114	3.06	3.1	0.00
13-WNW	6.89	6.11	2.442	3.63	3.6	0.00
14-NW	7.06	6.26	2.342	5.31	5.3	0.00
15-NNW	6.70	5.93	2.268	6.08	6.1	0.00
mean	6.65	5.89	2.121	100.00	100.0	0.00



- Total A: 6.6 m/s k 2.12 Vm: 5.9 m/s
- ENE A: 4.6 m/s k 2.31 Vm: 4.1 m/s
- SSE A: 8.4 m/s k 2.66 Vm: 7.5 m/s
- WSW A: 5.8 m/s k 2.95 Vm: 5.2 m/s
- NNW A: 6.7 m/s k 2.27 Vm: 5.9 m/s
- N A: 7.4 m/s k 2.21 Vm: 6.5 m/s
- E A: 4.2 m/s k 2.58 Vm: 3.7 m/s
- S A: 8.2 m/s k 2.55 Vm: 7.3 m/s
- WA: 6.1 m/s k 2.11 Vm: 5.4 m/s
- NNE A: 6.4 m/s k 2.32 Vm: 5.7 m/s
- ESE A: 5.0 m/s k 2.41 Vm: 4.4 m/s
- SSW A: 6.6 m/s k 2.16 Vm: 5.8 m/s
- WNW A: 6.9 m/s k 2.44 Vm: 6.1 m/s
- NE A: 4.4 m/s k 1.84 Vm: 3.9 m/s
- SE A: 6.9 m/s k 2.40 Vm: 6.1 m/s
- SW A: 5.2 m/s k 2.17 Vm: 4.6 m/s
- NW A: 7.1 m/s k 2.34 Vm: 6.3 m/s