

Winds at Altitude

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Wind Patterns

Problem Statement

- Find wind patterns at 18 – 25 km
 - Wind speed, wind direction, time of year
 - Steady winds, not turbulence
- Internet.org countries within +/- 35 deg latitude
 - Find reporting stations inside these countries at this latitude range
 - Stations separated in latitude increments of 5 deg
- Limitations
 - Nearest station might be hundreds of kilometers away
 - Stations can have missing data
 - There is better data outside area of interest

Test Stations

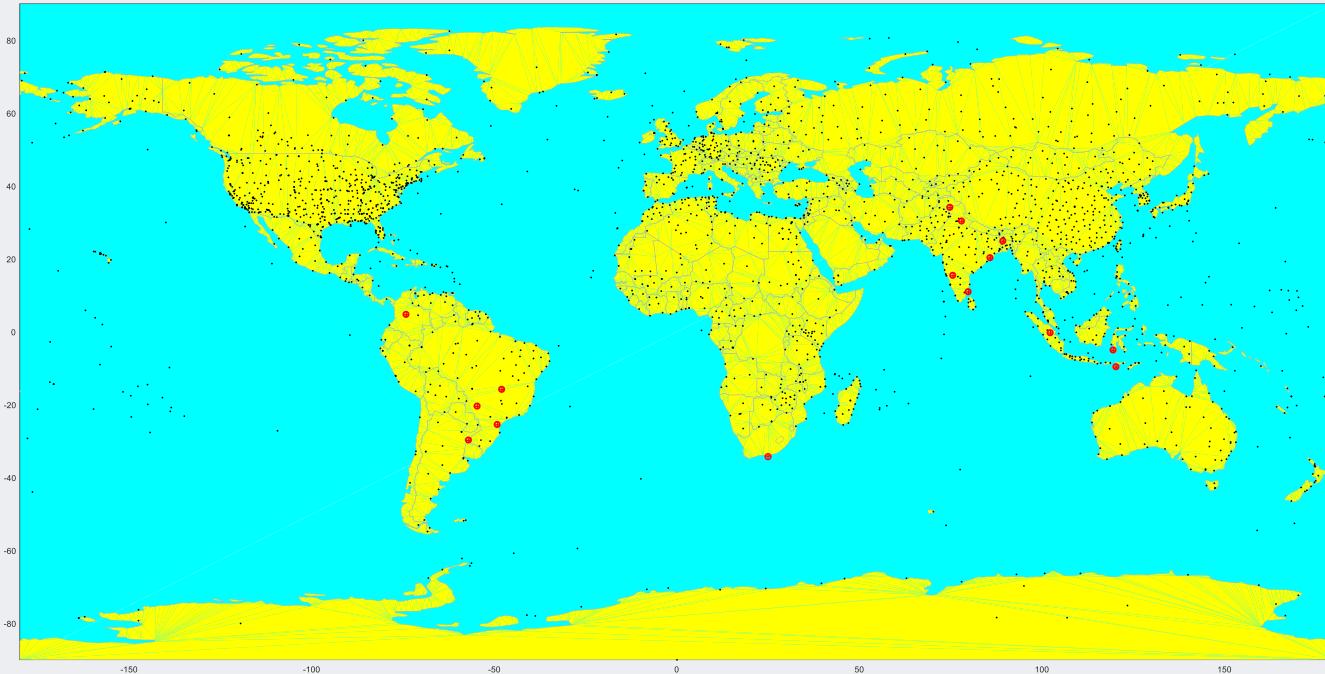
Station Selection

- Selected 15 stations, each located inside Internet.org country, as close as possible to an exact latitude in the range [-35:5:35], and with as much recent data as possible
- No reporting station near Lat 35 S, manually selected Cape St Francis in South Africa

Station List

IGRA Station ID	Latitude	Longitude	Alt MSL [m]	Country	Name	Active Since	Latest Activity
	-34.1899	24.7972	45	South Africa	CAPE ST FRANCIS		
BRM00083928	-29.7833	-57.0333	74	Brazil	URUGUAIANA	1973	2018
BRM00083840	-25.5167	-49.1667	908	Brazil	CURITIBA	1965	2018
BRM00083612	-20.4667	-54.6667	567	Brazil	CAMPO GRANDE	1966	2018
BRM00083378	-15.8667	-47.9333	1061	Brazil	BRASILIA	1966	2018
IDM00097340	-9.6667	120.3333	12	Indonesia	WAINGAPU/MAU	1974	2018
IDM00097180	-5.0667	119.5500	14	Indonesia	UJUNG	1973	2018
IDM00096171	-0.3333	102.3167	46	Indonesia	RENGAT/JAPURA	1975	2018
COM00080222	4.7000	-74.1500	2547	Colombia	BOGOTA/ELDORADO	1960	2018
INM00043346	10.9167	79.8333	6.9	India	KARAikal	1973	2018
INM00043201	15.4167	75.6333	670	India	GADAG	1973	2018
INM00042971	20.2500	85.8333	45	India	BHUBANESHWAR	1971	2018
BGM00041883	24.8500	89.3667	18	Bangladesh	BOGRA	1949	2018
INM00042111	30.3167	78.0333	683	India	DEHRA DUN	1973	2018
INM00042027	34.0833	74.8333	1585	India	SRINAGAR	1962	2018

Test Stations



Stations

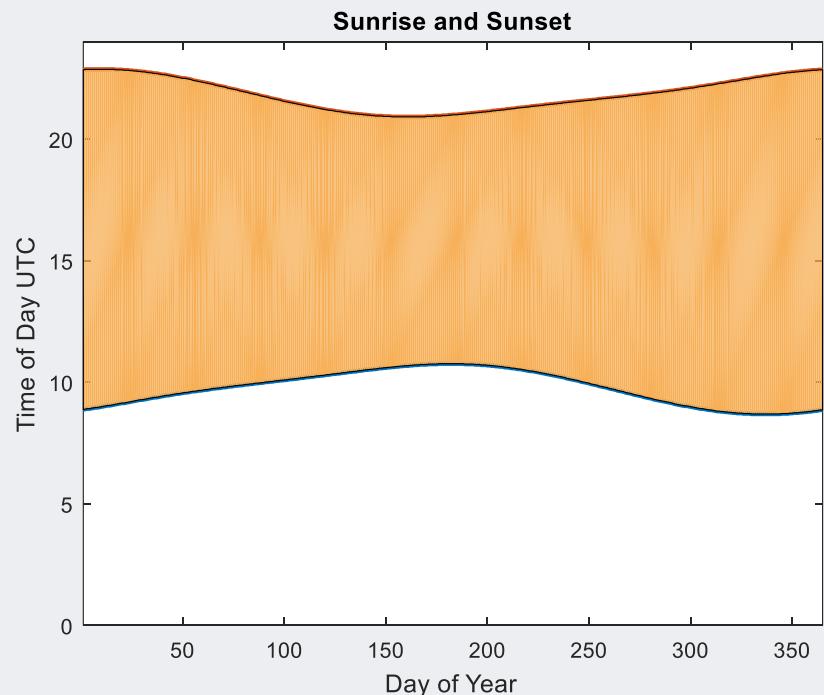
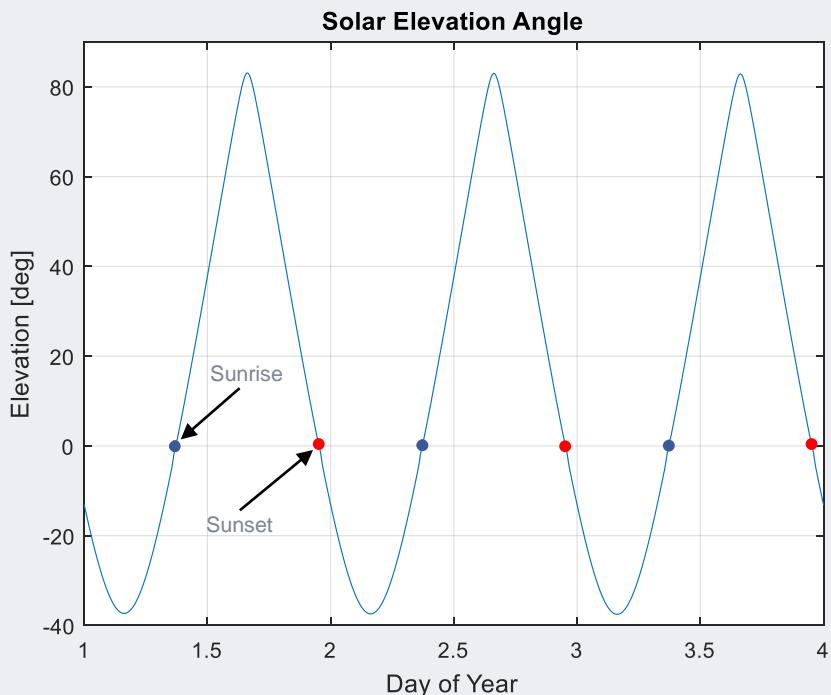
Station Data Structure

```
>> tst_station

tst_station =
    struct with fields:
        wnd_mag: [365x7x6 double]           3D wind magnitude LUT: day x percentile x altitude
        wnd_dir: [365x7x6 double]           3D wind direction LUT: day x percentile x altitude
        npts: [365x6 double]                Number of data points/day
        lat: -29.7833 } Station Location
        lon: -57.0333 } Station Location
        ID: 'BRM00083928' IGRA ID
        name: 'URUGUAIANA' Station Name
        alts: [15790 17662 19314 21630 23313 25907] Range of Altitudes
        percs: [0.2500 0.5000 0.6827 0.7500 0.9000 0.9500 0.9900] Percentiles
        dayIdx: [83 172 266 359] Day of year (seasons)
        sunrise: [9.9333 10.7500 9.6333 8.8000] Sunrise Time
        sunset: [21.8833 20.9333 21.7333 22.8167] Sunset Time
        dayLength: [11.9500 10.1833 12.1000 14.0167] Hours of Sunlight
```

Sunrise/Sunset Times

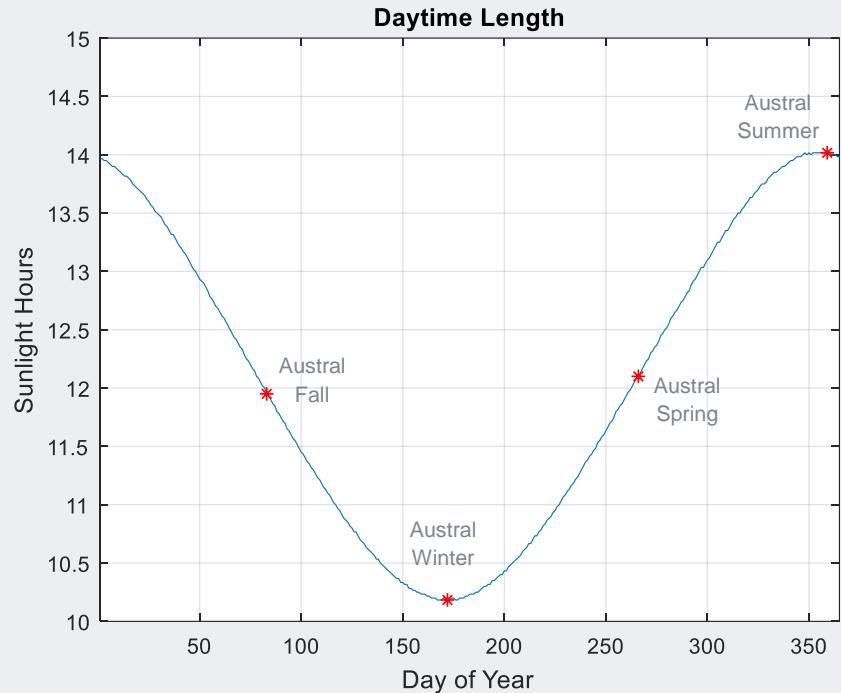
URUGUAIANA Lat = 29.78 S, Lon = 57.03 W



Day Length

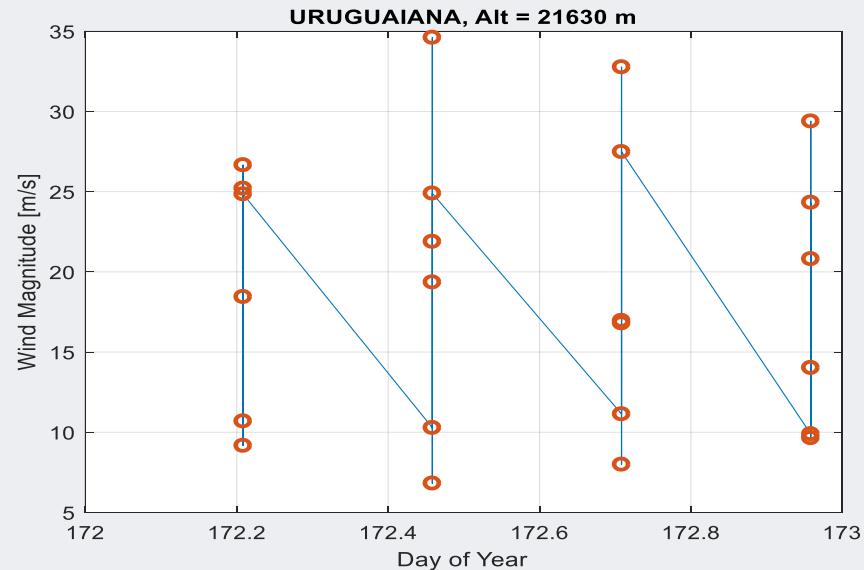
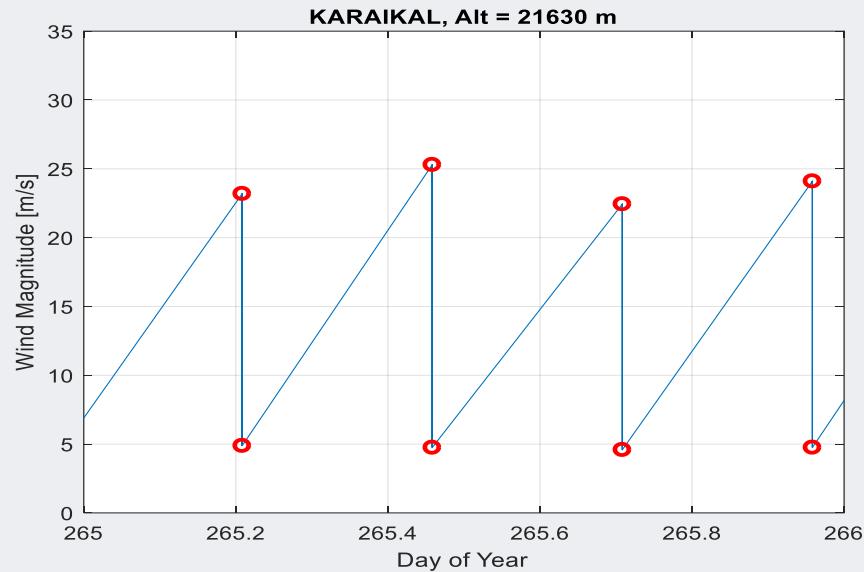
URUGUAIANA

- Difference between sunrise and sunset times is the daily number of sunlight hours
- Daytime length identifies the four seasons
 - Summer is the longest day
 - Winter is the shortest day
 - Fall & Spring are midpoints



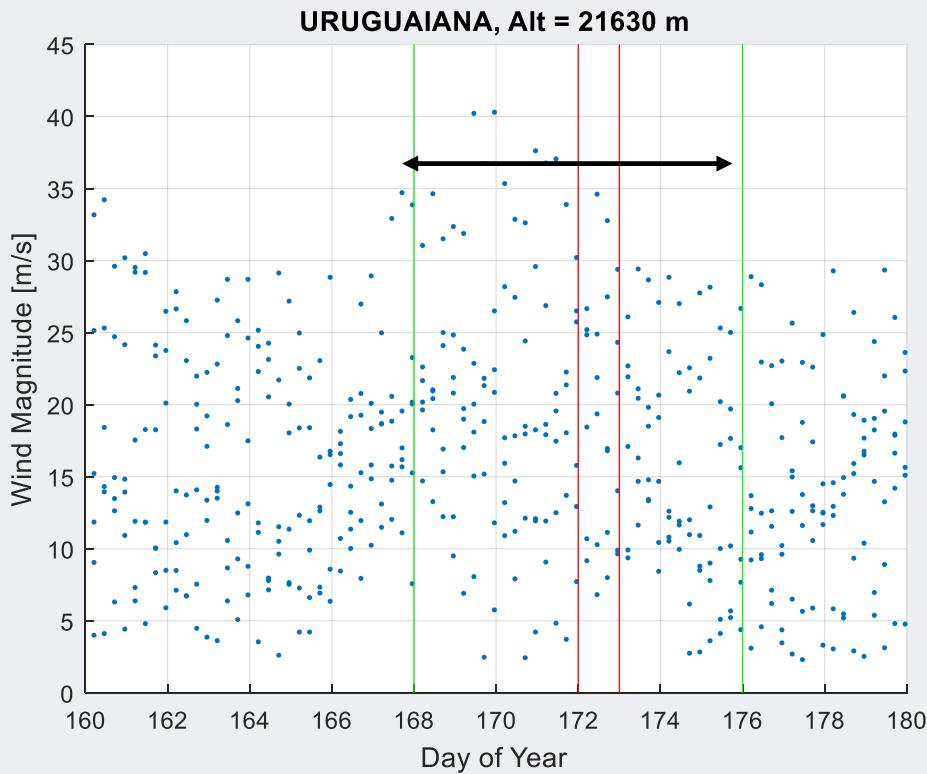
Wind Measurements

- Distribution on any given day is not Gaussian
 - Multimodal
 - Inconsistent
- Can not be represented as a mean and standard deviation
- Not enough data on a given day to estimate worst case wind



Wind Measurements

- To estimate 99th percentile winds, need at least 100 samples on a given day
- At worst, there are about 16 measurements/day
 - Need to average over a moving window about the day of interest
 - Averaging over 7 days guarantees at least 100 samples
 - Prefer more than twice as many samples on average



Data Processing

- How many daily measurements?
 - 2010 – 2013 & 2014 – 2017
 - Over all altitudes (6/station)
 - Min/Max not integers because there are 2 leap days in the 8 year period

Station	Raw Measurements/day		
	Average	Min	Max
SRINAGAR	26.31	24.125	29.25
DEHRA DUN	26.31	24.125	29.25
BOGRA	26.31	24.125	29.25
BHUBANESHWAR	19.63	16.25	24.75
GADAG	19.63	16.25	24.75
KARAikal	19.63	16.25	24.75
BOGOTA/ELDORADO	19.63	16.25	24.75
RENGAT/JAPURA	26.31	24.125	29.25
UJUNG	19.63	16.25	24.75
WAINGAPU/MAU	19.63	16.25	24.75
BRASILIA	19.63	16.25	24.75
CAMPO GRANDE	19.63	16.25	24.75
CURITIBA	26.31	24.125	29.25
URUGUAIANA	26.31	24.125	29.25
CAPE ST FRANCIS	26.31	24.125	29.25

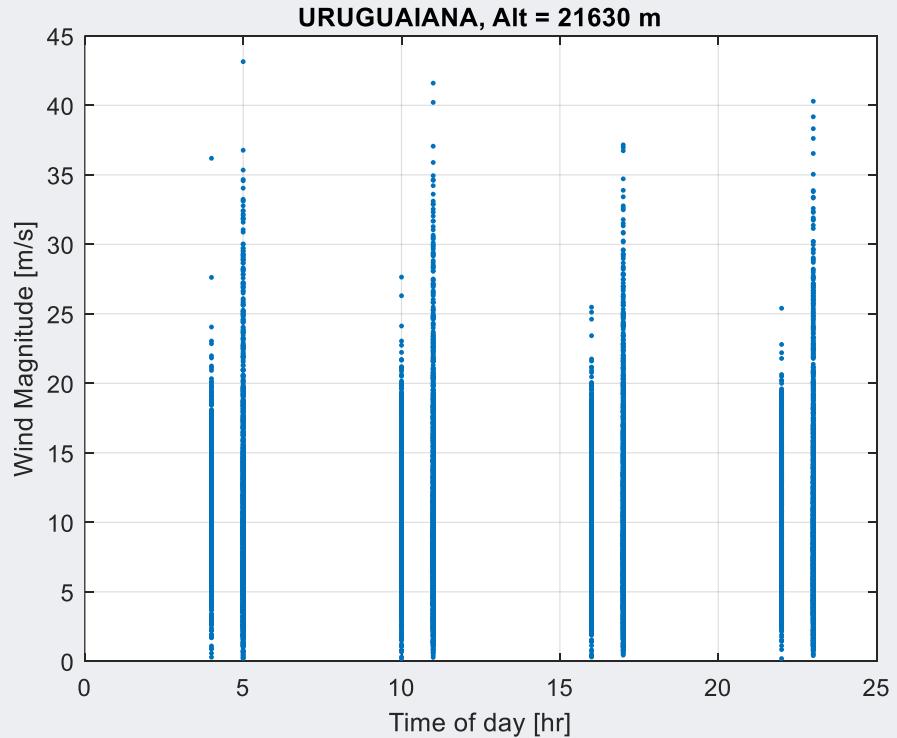
Wind Magnitude

- How many measurements needed to estimate 99th percentile winds?
 - At least 100, preferably twice as many
 - At any given day, averaging over a +3/-4 day window (8 days total) gives at least 130 measurements, on average about 200
- To characterize winds, at each station, at each altitude, for each day of the year, we average wind measurements over an 8 day window

Station	Windowed Measurements/day		
	Average	Min	Max
SRINAGAR	210.48	193	234
DEHRA DUN	210.48	193	234
BOGRA	210.48	193	234
BHUBANESHWAR	157.05	130	198
GADAG	157.05	130	198
KARAikal	157.05	130	198
BOGOTA/ELDORADO	157.05	130	198
RENGAT/JAPURA	210.48	193	234
UJUNG	157.05	130	198
WAINGAPU/MAU	157.05	130	198
BRASILIA	157.05	130	198
CAMPO GRANDE	157.05	130	198
CURITIBA	210.48	193	234
URUGUAIANA	210.48	193	234
CAPE ST FRANCIS	210.48	193	234

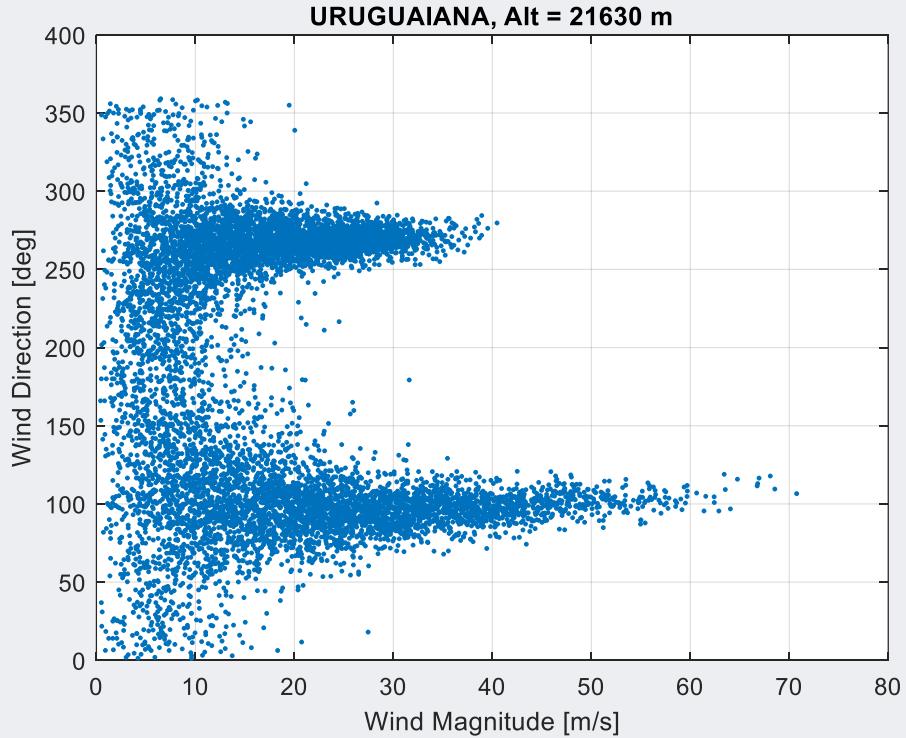
Wind Magnitude

- Are daytime and night time winds different (e.g. wind mag vs time of day)?
- Can not be ruled out, but all times of day appear as likely to have the same range of magnitudes
- Same conclusion applies to wind direction



Wind Direction

- Average direction would not necessarily correspond to direction of average winds
- There seems to be a strong relationship between wind magnitude and wind direction
- The relationship is different at different altitudes and locations
- To estimate a typical wind direction, at each percentile wind, we pick the most common wind direction of all winds of equal or lesser magnitude



Results Summary

SRINAGAR/INM00042027
Lat = 34.0833, Lon = 74.8333

Wind Magnitude

Day of Year	82
Sunrise (GMT)	3/23/2017 1:01
Sunset (GMT)	3/23/2017 13:14
Day Length (Hrs)	12.2

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	20.63	24.84	28.79	29.99	36.50	38.80	43.56
17662	9.89	12.43	15.62	16.71	20.59	23.67	28.02
19314	4.48	6.40	9.04	10.45	14.48	16.12	18.70
21630	4.61	6.45	8.30	9.20	14.14	15.85	20.38
23313	6.40	9.93	12.43	13.92	18.10	20.66	24.39
25907	10.20	16.28	20.28	21.38	26.97	31.96	39.28

Day of Year	172
Sunrise (GMT)	6/21/2017 23:52
Sunset (GMT)	6/21/2017 14:14
Day Length (Hrs)	14.366667

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	6.72	9.29	11.59	12.67	14.85	16.49	20.30
17662	2.75	4.04	5.29	5.61	6.78	8.27	10.48
19314	6.95	8.34	9.00	9.34	10.22	10.78	12.00
21630	11.70	12.80	13.60	13.92	15.17	15.66	17.20
23313	11.25	12.40	13.42	13.99	15.21	16.12	17.89
25907	17.01	18.93	20.90	21.43	23.27	24.52	26.56

Day of Year	265
Sunrise (GMT)	9/22/2017 0:49
Sunset (GMT)	9/22/2017 12:56
Day Length (Hrs)	12.116667

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	17.80	20.80	22.50	23.41	25.65	28.70	31.31
17662	5.95	7.92	8.98	9.95	11.71	12.90	15.29
19314	2.51	3.57	4.43	4.81	6.02	6.80	8.95
21630	2.14	3.44	4.55	5.20	6.60	8.61	10.27
23313	2.16	3.55	4.96	5.51	7.54	8.63	12.33
25907	2.92	4.25	6.02	6.77	7.92	8.96	11.81

Day of Year	357
Sunrise (GMT)	12/23/2017 2:05
Sunset (GMT)	12/23/2017 11:54
Day Length (Hrs)	9.833333

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	28.08	33.77	37.03	38.62	44.54	48.95	57.23
17662	18.92	22.04	26.60	27.88	34.26	38.88	46.88
19314	13.11	17.17	20.98	22.40	30.11	35.58	45.50
21630	11.95	16.93	23.20	27.91	35.62	38.21	46.53
23313	12.37	17.72	32.73	35.60	44.00	50.23	54.11
25907	9.37	25.50	37.22	42.09	49.52	55.53	70.11

SRINAGAR/INM00042027

Lat = 34.0833, Lon = 74.8333

Wind Direction

Day of Year	82
Sunrise (GMT)	3/23/2017 1:01
Sunset (GMT)	3/23/2017 13:14
Day Length (Hrs)	12.2

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	88.10	86.90	86.37	86.53	87.00	87.15	87.44
17662	84.70	83.81	81.46	81.30	82.61	83.07	83.80
19314	118.00	104.21	95.44	92.22	94.51	95.61	95.84
21630	181.59	171.87	162.30	161.56	121.69	115.77	112.83
23313	147.55	130.49	121.55	113.36	108.34	101.78	101.07
25907	112.34	121.09	128.80	110.77	98.18	97.64	97.64

SUMMER

Day of Year	172
Sunrise (GMT)	6/21/2017 23:52
Sunset (GMT)	6/21/2017 14:14
Day Length (Hrs)	14.366667

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	91.84	87.71	85.10	86.91	84.12	82.97	82.56
17662	263.27	265.76	272.05	278.13	282.94	286.57	289.68
19314	270.88	271.76	272.29	272.29	273.30	272.91	272.83
21630	272.39	271.06	272.29	272.01	272.39	271.89	271.67
23313	262.12	262.21	262.37	262.82	262.79	263.01	263.01
25907	265.77	268.29	268.89	269.62	270.31	270.29	270.29

Day of Year	265
Sunrise (GMT)	9/22/2017 0:49
Sunset (GMT)	9/22/2017 12:56
Day Length (Hrs)	12.116667

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	71.74	80.40	81.65	81.65	82.35	81.89	81.61
17662	85.16	83.56	82.97	82.98	82.92	82.98	83.00
19314	133.09	136.27	133.60	132.51	125.06	125.06	123.92
21630	126.72	143.75	149.93	150.26	154.74	159.07	173.60
23313	211.49	195.07	213.69	223.45	246.90	251.10	253.83
25907	222.62	259.99	270.00	263.88	264.00	264.68	264.00

Day of Year	357
Sunrise (GMT)	12/23/2017 2:05
Sunset (GMT)	12/23/2017 11:54
Day Length (Hrs)	9.833333

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	90.63	91.71	90.82	91.39	91.52	92.10	92.32
17662	90.00	89.37	90.79	91.31	93.18	94.22	94.70
19314	98.15	95.87	94.18	93.69	94.91	95.39	95.75
21630	90.00	94.57	92.97	92.97	94.11	93.88	94.11
23313	86.69	89.44	88.22	88.67	89.01	89.01	88.95
25907	82.31	85.16	85.16	85.60	86.49	86.89	87.87

DEHRA DUN/INM00042111
Lat = 30.3167, Lon = 78.0333

Wind Magnitude

Day of Year	82
Sunrise (GMT)	3/23/2017 0:49
Sunset (GMT)	3/23/2017 13:00
Day Length (Hrs)	12.166667

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	20.36	24.21	27.64	28.88	32.09	33.56	39.85
17662	9.95	13.16	15.06	16.18	19.25	20.43	24.18
19314	4.39	7.07	9.05	10.03	14.20	15.90	19.35
21630	4.84	7.37	9.48	10.77	15.55	16.71	21.72
23313	6.58	10.94	14.54	15.95	19.00	21.00	25.26
25907	8.01	12.17	17.61	19.39	25.54	29.30	35.86

Day of Year	173
Sunrise (GMT)	6/22/2017 23:48
Sunset (GMT)	6/22/2017 13:52
Day Length (Hrs)	14.05

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	3.49	5.22	6.84	7.37	9.92	11.29	12.64
17662	4.07	5.73	7.49	8.11	9.84	10.98	14.55
19314	9.27	10.79	11.97	12.41	13.55	14.40	15.52
21630	12.22	13.65	14.80	15.21	16.69	17.37	18.75
23313	13.48	15.12	16.61	16.92	19.10	19.76	21.97
25907	20.11	23.36	25.40	26.23	30.61	33.32	39.85

Day of Year	265
Sunrise (GMT)	9/22/2017 0:37
Sunset (GMT)	9/22/2017 12:44
Day Length (Hrs)	12.1

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	8.73	12.39	14.37	15.32	17.74	18.75	21.35
17662	3.22	5.08	6.20	6.94	9.15	9.94	11.05
19314	2.53	4.04	5.28	5.78	7.69	8.92	9.81
21630	4.55	6.57	8.17	10.22	12.51	13.44	16.30
23313	5.55	8.04	10.60	11.60	13.46	15.06	16.62
25907	6.32	8.66	10.69	11.43	13.55	14.68	18.12

Day of Year	356
Sunrise (GMT)	12/22/2017 1:43
Sunset (GMT)	12/22/2017 11:51
Day Length (Hrs)	10.133333

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	37.38	40.90	42.93	44.12	50.55	54.37	61.61
17662	21.54	24.42	27.44	29.00	33.95	37.60	50.86
19314	12.41	16.03	20.46	21.80	27.52	30.78	45.56
21630	8.72	14.30	16.81	18.26	24.75	27.68	40.38
23313	8.22	14.51	20.80	21.82	26.42	32.21	35.35
25907	8.71	14.55	21.48	24.60	31.54	35.68	41.64

DEHRA DUN/INM00042111
Lat = 30.3167, Lon = 78.0333

Wind Direction

Day of Year	82
Sunrise (GMT)	3/23/2017 0:49
Sunset (GMT)	3/23/2017 13:00
Day Length (Hrs)	12.166667

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	89.55	89.69	90.99	91.07	90.77	90.73	90.17
17662	88.94	88.94	89.78	89.24	89.21	89.26	89.66
19314	114.26	105.68	105.26	103.39	101.54	100.74	100.62
21630	138.81	129.56	124.37	124.35	119.65	117.78	115.44
23313	171.02	154.60	145.83	139.64	123.15	112.46	110.56
25907	189.86	225.44	230.27	230.01	230.27	224.34	220.31

Day of Year	173
Sunrise (GMT)	6/22/2017 23:48
Sunset (GMT)	6/22/2017 13:52
Day Length (Hrs)	14.05

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	133.87	125.22	101.89	99.27	99.37	98.63	98.63
17662	298.78	296.57	292.11	291.80	289.21	287.09	286.23
19314	268.86	268.45	268.97	268.97	269.08	269.33	269.21
21630	266.47	268.59	269.56	269.56	269.61	269.61	269.61
23313	263.49	263.29	263.40	263.66	263.56	263.66	263.66
25907	272.12	273.37	274.46	275.00	275.07	274.86	274.86

Day of Year	265
Sunrise (GMT)	9/22/2017 0:37
Sunset (GMT)	9/22/2017 12:44
Day Length (Hrs)	12.1

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	74.67	73.24	74.05	73.34	73.29	72.82	73.16
17662	127.14	127.40	118.52	118.30	107.83	104.39	101.58
19314	185.39	189.46	195.07	198.43	216.36	222.77	224.46
21630	271.39	271.30	270.00	268.92	267.64	267.84	267.94
23313	269.42	269.22	268.83	269.01	269.02	269.01	268.89
25907	277.81	276.63	277.56	276.63	276.49	276.82	276.84

Day of Year	356
Sunrise (GMT)	12/22/2017 1:43
Sunset (GMT)	12/22/2017 11:51
Day Length (Hrs)	10.133333

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	91.35	90.78	90.90	91.10	90.91	91.18	91.27
17662	89.25	90.95	90.95	91.36	92.14	92.43	93.28
19314	94.75	92.31	92.74	93.22	94.25	94.49	94.68
21630	106.71	101.07	96.71	96.41	95.74	95.12	95.04
23313	88.06	84.29	85.76	87.36	87.91	87.72	87.91
25907	96.37	83.66	84.96	84.38	87.95	87.64	87.94

BOGRA/BGM00041883
Lat = 24.85, Lon = 89.3667

Wind Magnitude

Day of Year	82
Sunrise (GMT)	3/23/2017 0:04
Sunset (GMT)	3/23/2017 12:14
Day Length (Hrs)	12.15

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	17.59	21.81	25.14	26.53	30.02	31.54	34.62
17662	10.57	14.83	17.16	18.10	20.62	22.21	26.01
19314	6.00	8.90	11.77	12.48	15.01	16.14	22.31
21630	3.18	5.19	7.57	8.72	12.16	13.33	15.53
23313	3.51	5.42	7.81	9.39	15.84	17.26	20.62
25907	4.46	7.57	10.13	11.70	18.44	22.87	26.60

Day of Year	264
Sunrise (GMT)	9/21/2017 23:52
Sunset (GMT)	9/21/2017 12:00
Day Length (Hrs)	12.133333

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	4.73	7.11	8.94	9.99	12.61	14.37	16.00
17662	5.56	7.85	10.21	11.34	13.61	15.12	17.83
19314	5.14	7.29	8.83	10.00	12.83	14.07	16.01
21630	10.36	12.89	14.09	14.74	16.99	17.97	19.70
23313	11.04	13.51	15.07	15.48	17.02	18.53	20.40
25907	11.88	15.34	16.92	17.67	19.90	21.47	24.62

Day of Year	175
Sunrise (GMT)	6/24/2017 23:15
Sunset (GMT)	6/24/2017 12:55
Day Length (Hrs)	13.65

SUMMER

Day of Year	353
Sunrise (GMT)	12/19/2017 0:43
Sunset (GMT)	12/19/2017 11:16
Day Length (Hrs)	10.566667

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	12.14	14.66	16.20	17.27	19.79	21.97	25.81
17662	16.29	18.71	19.97	20.63	22.18	23.21	28.33
19314	14.88	16.61	17.61	18.22	19.40	20.47	22.34
21630	13.40	16.16	17.38	17.91	20.00	22.03	25.72
23313	13.51	16.61	19.26	20.10	24.41	27.53	31.71
25907	15.65	18.60	20.71	22.36	26.43	29.90	34.98

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	31.11	34.47	38.79	40.04	43.53	46.79	50.91
17662	22.85	26.12	27.87	29.09	32.41	34.34	36.94
19314	15.83	18.91	22.14	23.02	24.97	26.64	29.42
21630	5.99	9.44	11.94	13.66	16.85	17.96	19.74
23313	5.17	7.90	11.31	12.51	15.78	17.65	20.41
25907	6.30	9.58	12.18	13.61	16.23	17.72	24.20

BOGRA/BGM00041883
Lat = 24.85, Lon = 89.3667

Wind Direction

Day of Year	82
Sunrise (GMT)	3/23/2017 0:04
Sunset (GMT)	3/23/2017 12:14
Day Length (Hrs)	12.15

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	98.13	96.78	95.04	94.73	94.44	94.42	94.29
17662	100.59	97.34	96.70	96.66	96.55	95.81	95.71
19314	126.99	109.67	103.81	102.58	101.08	100.15	99.73
21630	114.19	120.35	114.10	112.01	103.56	104.04	104.04
23313	181.30	181.30	165.84	156.80	155.62	157.91	154.44
25907	156.37	171.92	214.99	214.99	236.86	236.55	230.36

Day of Year	175
Sunrise (GMT)	6/24/2017 23:15
Sunset (GMT)	6/24/2017 12:55
Day Length (Hrs)	13.65

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	252.52	250.58	251.00	251.00	251.57	251.86	252.82
17662	255.05	256.53	258.03	258.45	259.44	259.44	259.95
19314	269.38	268.68	268.64	268.93	269.06	268.88	269.00
21630	266.78	266.59	267.05	267.73	267.66	267.49	267.82
23313	272.32	274.69	274.84	274.84	274.44	273.73	273.73
25907	278.70	276.74	276.45	276.07	276.26	276.06	276.06

Day of Year	264
Sunrise (GMT)	9/21/2017 23:52
Sunset (GMT)	9/21/2017 12:00
Day Length (Hrs)	12.133333

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	226.12	260.54	258.87	258.69	259.70	259.70	258.78
17662	261.42	261.03	259.96	260.96	261.81	261.81	262.53
19314	285.60	284.93	283.54	282.85	279.21	277.63	277.16
21630	277.66	275.62	275.77	277.28	275.16	275.11	274.97
23313	271.92	273.81	274.51	273.79	273.95	273.95	273.80
25907	279.64	278.07	276.77	276.62	275.68	275.57	275.31

Day of Year	353
Sunrise (GMT)	12/19/2017 0:43
Sunset (GMT)	12/19/2017 11:16
Day Length (Hrs)	10.566667

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	77.76	82.62	82.62	83.46	83.99	84.42	84.72
17662	92.81	90.45	89.58	89.80	89.50	89.50	89.40
19314	94.49	93.06	92.39	92.49	93.07	93.07	93.11
21630	105.01	95.57	94.35	93.01	92.27	91.76	91.52
23313	102.37	94.18	91.47	90.97	87.07	85.83	83.70
25907	120.95	104.30	104.30	112.38	97.18	97.18	96.73

BHUBANESHWAR/INM00042971
 Lat = 20.25, Lon = 85.8333

Wind Magnitude

Day of Year	81
Sunrise (GMT)	3/22/2017 0:20
Sunset (GMT)	3/22/2017 12:28
Day Length (Hrs)	12.116667

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	14.44	18.91	21.76	22.61	24.91	25.61	27.24
17662	6.93	11.29	13.11	13.71	15.41	16.18	19.16
19314	3.18	4.88	6.02	6.30	7.51	8.11	9.08
21630	3.76	5.15	7.20	7.44	9.86	10.48	13.29
23313	4.43	6.44	8.42	9.12	12.24	14.12	15.05
25907	4.30	6.59	8.46	9.78	12.01	14.86	16.50

Day of Year	172
Sunrise (GMT)	6/21/2017 23:38
Sunset (GMT)	6/21/2017 12:57
Day Length (Hrs)	13.316667

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	19.28	21.71	23.04	24.32	25.64	26.46	30.01
17662	18.36	20.21	21.11	21.97	23.57	24.62	27.19
19314	13.88	15.59	16.98	17.11	18.92	19.73	23.94
21630	11.43	13.17	15.04	15.74	16.83	17.64	21.80
23313	17.80	20.31	21.41	22.78	25.13	26.62	30.28
25907	11.80	13.49	14.95	15.94	17.46	18.32	20.93

Day of Year	264
Sunrise (GMT)	9/21/2017 0:07
Sunset (GMT)	9/21/2017 12:12
Day Length (Hrs)	12.1

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	17.29	21.48	23.90	24.81	26.17	28.43	30.60
17662	14.26	16.86	18.72	19.45	21.61	24.00	26.21
19314	9.75	10.92	12.10	12.78	14.98	17.03	21.83
21630	7.47	9.90	10.75	11.62	13.61	15.00	16.48
23313	10.00	13.72	16.83	19.05	21.55	23.19	27.79
25907	11.94	16.75	19.52	20.77	23.02	23.21	26.00

Day of Year	355
Sunrise (GMT)	12/21/2017 0:49
Sunset (GMT)	12/21/2017 11:40
Day Length (Hrs)	10.866667

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	15.18	21.34	23.49	24.43	29.32	30.70	32.33
17662	11.91	15.18	16.59	17.03	21.10	21.51	24.62
19314	8.52	10.12	11.68	12.62	14.13	14.67	16.28
21630	3.03	4.23	5.37	6.14	9.21	10.30	12.63
23313	3.35	5.00	6.92	7.96	9.26	10.36	13.13
25907	4.06	5.51	7.47	8.20	10.88	12.09	14.01

BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333

Wind Direction

Day of Year	81
Sunrise (GMT)	3/22/2017 0:20
Sunset (GMT)	3/22/2017 12:28
Day Length (Hrs)	12.116667

SPRING

Day of Year	264
Sunrise (GMT)	9/21/2017 0:07
Sunset (GMT)	9/21/2017 12:12
Day Length (Hrs)	12.1

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	97.21	95.51	95.44	95.25	95.36	95.37	95.30
17662	101.66	95.83	90.00	91.83	92.99	93.43	93.18
19314	77.91	92.12	90.00	88.83	90.00	89.42	90.00
21630	192.53	236.69	241.14	241.14	244.09	245.90	245.90
23313	251.57	258.34	279.21	279.21	265.70	265.29	264.37
25907	165.96	138.58	148.57	165.96	165.96	180.03	209.68

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	282.43	271.73	269.28	267.95	267.95	267.38	267.38
17662	276.92	272.35	270.00	270.00	270.00	269.68	269.68
19314	271.77	271.85	272.56	272.56	272.73	272.73	272.73
21630	274.70	271.51	271.38	271.16	271.38	271.13	270.76
23313	280.12	278.71	278.29	278.04	277.54	277.43	277.43
25907	267.11	267.11	267.04	267.11	267.11	267.36	267.11

Day of Year	172
Sunrise (GMT)	6/21/2017 23:38
Sunset (GMT)	6/21/2017 12:57
Day Length (Hrs)	13.316667

SUMMER

Day of Year	355
Sunrise (GMT)	12/21/2017 0:49
Sunset (GMT)	12/21/2017 11:40
Day Length (Hrs)	10.866667

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	263.73	265.46	265.46	265.46	265.48	265.48	265.48
17662	269.67	269.67	268.58	268.64	267.40	267.40	267.70
19314	274.40	270.00	268.13	268.13	268.22	268.55	268.55
21630	261.30	253.99	254.05	255.30	255.96	256.76	256.76
23313	278.07	275.12	275.32	275.32	275.32	275.32	275.32
25907	254.26	254.26	256.84	256.84	258.11	258.11	258.11

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	97.62	90.00	87.27	87.27	86.78	88.11	88.36
17662	110.45	100.51	96.86	96.86	93.84	93.20	93.20
19314	105.57	105.57	103.67	103.67	97.38	95.65	94.32
21630	142.13	136.47	104.83	104.83	89.38	93.65	99.46
23313	258.23	258.69	271.79	262.87	262.87	262.87	271.79
25907	187.13	172.87	166.50	170.68	163.66	162.78	162.05

GADAG/INM00043201
Lat = 15.4167, Lon = 75.6333

Wind Magnitude

Day of Year	81
Sunrise (GMT)	3/22/2017 1:01
Sunset (GMT)	3/22/2017 13:08
Day Length (Hrs)	12.1

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	7.32	12.03	15.26	16.24	19.70	20.43	24.46
17662	3.26	5.31	6.66	7.25	8.57	9.82	12.35
19314	3.18	5.19	6.16	6.50	7.78	9.00	10.86
21630	3.16	5.22	7.79	9.75	18.75	20.19	21.41
23313	3.91	6.99	8.81	12.30	18.28	19.58	21.83
25907	6.62	9.92	11.96	12.63	15.44	17.77	20.63

Day of Year	171
Sunrise (GMT)	6/20/2017 0:28
Sunset (GMT)	6/20/2017 13:30
Day Length (Hrs)	13.016667

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	21.99	24.58	26.76	28.14	31.52	33.16	34.52
17662	17.13	19.41	20.93	22.19	24.16	24.94	25.53
19314	12.26	14.09	15.95	16.40	17.33	18.05	20.50
21630	14.89	18.30	19.55	21.32	23.57	24.16	25.46
23313	14.45	18.00	20.90	22.77	25.72	26.21	30.32
25907	19.49	25.01	29.48	30.39	32.71	34.37	38.30

Day of Year	263
Sunrise (GMT)	9/20/2017 0:48
Sunset (GMT)	9/20/2017 12:55
Day Length (Hrs)	12.116667

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	22.94	25.47	27.78	28.70	31.91	32.75	34.91
17662	13.00	15.22	17.16	17.90	20.08	20.63	22.45
19314	8.51	11.12	13.51	14.88	18.66	20.04	21.91
21630	6.22	11.78	17.00	17.38	20.12	21.13	23.74
23313	5.00	11.56	24.72	25.61	27.05	27.90	29.03
25907	14.04	21.98	28.70	30.30	33.02	34.23	35.33

Day of Year	355
Sunrise (GMT)	12/21/2017 1:21
Sunset (GMT)	12/21/2017 12:30
Day Length (Hrs)	11.166667

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	4.39	7.14	8.98	9.41	12.43	13.71	15.37
17662	3.57	6.40	7.75	8.60	10.94	11.43	13.81
19314	3.55	5.50	7.71	9.24	11.68	12.61	14.35
21630	5.80	7.47	9.73	10.55	13.74	14.60	19.41
23313	3.96	7.65	12.72	14.50	17.03	18.50	19.71
25907	5.73	7.79	9.20	10.62	13.01	14.20	19.29

GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333

Wind Direction

Day of Year	81
Sunrise (GMT)	3/22/2017 1:01
Sunset (GMT)	3/22/2017 13:08
Day Length (Hrs)	12.1

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	103.78	84.81	87.32	86.19	84.14	83.89	83.23
17662	115.46	107.88	103.32	97.59	90.73	90.00	90.00
19314	151.82	151.82	141.34	127.87	127.87	129.79	129.79
21630	264.29	270.00	270.00	266.68	266.68	266.95	266.95
23313	265.60	258.69	250.79	258.11	264.66	262.65	263.35
25907	236.31	261.63	275.01	272.68	272.94	272.08	270.65

Day of Year	171
Sunrise (GMT)	6/20/2017 0:28
Sunset (GMT)	6/20/2017 13:30
Day Length (Hrs)	13.016667

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	274.54	270.00	268.31	270.00	268.31	267.83	267.82
17662	263.33	265.09	268.70	267.94	263.72	263.57	263.72
19314	270.00	270.00	270.00	270.00	270.00	269.51	269.51
21630	265.31	266.38	268.16	268.04	268.16	268.16	268.16
23313	264.99	264.33	264.51	264.99	266.53	266.53	266.63
25907	275.01	275.01	274.28	274.20	273.62	272.66	272.55

Day of Year	263
Sunrise (GMT)	9/20/2017 0:48
Sunset (GMT)	9/20/2017 12:55
Day Length (Hrs)	12.116667

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	284.11	280.13	278.46	276.43	275.51	276.20	275.51
17662	272.46	272.46	272.23	271.48	272.23	272.28	272.23
19314	258.23	263.11	264.03	265.17	265.63	265.17	265.17
21630	258.87	266.19	265.78	265.78	266.19	266.50	266.50
23313	246.25	254.62	266.28	266.36	266.79	267.59	267.59
25907	269.56	270.00	271.10	271.10	270.95	270.95	270.95

Day of Year	355
Sunrise (GMT)	12/21/2017 1:21
Sunset (GMT)	12/21/2017 12:30
Day Length (Hrs)	11.166667

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	64.18	64.18	77.28	81.87	81.87	81.87	81.87
17662	129.56	125.36	107.27	120.10	113.45	107.27	106.39
19314	231.01	227.49	178.70	153.43	113.10	112.11	108.43
21630	73.14	84.37	92.96	99.46	117.35	143.39	143.62
23313	228.24	202.83	253.56	255.96	268.18	268.76	268.76
25907	253.54	253.30	259.11	259.38	260.39	261.06	263.88

KARAIKAL/INM00043346
Lat = 10.9167, Lon = 79.8333

Wind Magnitude

Day of Year	82
Sunrise (GMT)	3/23/2017 0:45
Sunset (GMT)	3/23/2017 12:50
Day Length (Hrs)	12.1

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	4.90	6.66	8.30	9.20	12.95	15.29	16.98
17662	2.08	3.40	4.43	4.90	6.18	7.26	14.19
19314	4.20	7.36	8.63	9.31	11.10	11.73	13.01
21630	6.26	10.10	16.37	17.20	20.90	23.32	27.99
23313	3.96	8.76	13.06	14.13	18.00	21.72	27.25
25907	6.71	11.79	15.87	17.30	22.79	24.64	29.11

Day of Year	172
Sunrise (GMT)	6/21/2017 0:21
Sunset (GMT)	6/21/2017 13:04
Day Length (Hrs)	12.733333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	20.55	23.63	26.61	27.92	32.62	33.60	35.34
17662	12.34	14.29	16.10	16.77	18.60	19.80	23.81
19314	12.06	15.93	18.70	21.51	24.86	25.71	27.40
21630	13.54	15.95	17.87	19.32	21.34	23.19	24.62
23313	9.73	18.13	27.54	29.17	32.62	34.60	37.72
25907	7.50	19.23	31.61	33.83	37.64	38.25	41.90

Day of Year	265
Sunrise (GMT)	9/22/2017 0:30
Sunset (GMT)	9/22/2017 12:36
Day Length (Hrs)	12.083333

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	13.35	18.09	23.93	25.82	30.25	32.52	38.08
17662	4.20	8.60	11.23	12.38	14.29	14.53	15.30
19314	3.83	7.11	10.72	10.98	14.87	16.84	19.32
21630	4.75	9.56	22.44	23.80	25.99	27.16	28.91
23313	4.70	9.54	30.52	31.60	35.22	35.63	38.64
25907	5.16	12.06	31.19	32.76	37.04	38.59	43.81

Day of Year	357
Sunrise (GMT)	12/23/2017 0:57
Sunset (GMT)	12/23/2017 12:23
Day Length (Hrs)	11.45

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	4.88	6.50	7.61	8.54	12.39	13.36	15.31
17662	3.82	6.82	9.49	11.32	12.79	12.98	13.44
19314	5.06	7.89	9.50	10.27	14.16	14.78	16.57
21630	10.74	15.20	18.45	19.03	20.28	20.85	22.01
23313	5.59	10.73	22.23	24.30	27.31	29.20	31.76
25907	7.13	9.84	12.35	13.53	16.77	17.86	20.34

KARAIKAL/INM00043346
Lat = 10.9167, Lon = 79.8333

Wind Direction

Day of Year	82
Sunrise (GMT)	3/23/2017 0:45
Sunset (GMT)	3/23/2017 12:50
Day Length (Hrs)	12.1

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	127.15	120.96	117.26	113.70	113.20	112.71	112.19
17662	145.30	137.73	142.52	142.52	137.73	139.26	137.61
19314	110.22	94.33	100.24	102.00	110.22	110.39	110.64
21630	99.78	91.22	90.43	91.70	102.76	107.11	110.50
23313	225.00	230.19	199.36	199.36	253.45	258.59	260.80
25907	264.09	262.97	262.97	264.09	269.28	269.16	268.94

Day of Year	172
Sunrise (GMT)	6/21/2017 0:21
Sunset (GMT)	6/21/2017 13:04
Day Length (Hrs)	12.733333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	270.42	272.91	271.08	270.42	270.42	270.42	270.52
17662	260.29	260.17	258.52	256.47	258.81	259.67	259.67
19314	270.00	270.00	270.33	270.30	270.33	270.36	270.36
21630	257.20	258.23	260.54	260.54	262.75	263.32	263.69
23313	270.60	269.01	270.60	271.66	270.60	270.60	270.00
25907	227.64	250.35	264.53	264.53	265.18	265.79	266.35

Day of Year	265
Sunrise (GMT)	9/22/2017 0:30
Sunset (GMT)	9/22/2017 12:36
Day Length (Hrs)	12.083333

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	283.50	282.91	280.30	278.37	275.71	275.26	275.08
17662	237.53	254.05	267.30	268.58	272.70	272.70	272.70
19314	130.76	135.00	142.85	176.35	247.02	249.32	249.32
21630	113.20	106.48	120.34	125.06	141.07	180.00	199.09
23313	96.63	112.86	136.85	145.08	180.00	259.59	259.06
25907	229.64	244.13	255.96	258.04	263.29	265.03	265.74

Day of Year	357
Sunrise (GMT)	12/23/2017 0:57
Sunset (GMT)	12/23/2017 12:23
Day Length (Hrs)	11.45

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	203.75	188.13	193.45	188.13	188.13	196.26	203.75
17662	161.57	145.10	179.08	180.74	200.34	221.99	221.99
19314	104.04	119.17	146.82	152.18	205.41	205.41	176.82
21630	94.35	89.37	97.13	98.67	112.66	116.19	125.26
23313	111.25	76.91	258.75	262.39	266.78	267.65	269.53
25907	208.24	223.32	243.00	244.32	244.74	246.71	246.88

BOGOTA/ELDORADO/COM00080222
 Lat = 4.7, Lon = -74.15

Wind Magnitude

Day of Year	83
Sunrise (GMT)	3/24/2017 11:00
Sunset (GMT)	3/24/2017 23:05
Day Length (Hrs)	12.1

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	6.06	9.22	11.75	12.72	15.20	16.48	20.65
17662	5.24	8.32	11.37	12.43	15.45	17.14	18.94
19314	8.30	11.93	13.52	14.43	15.85	17.30	17.97
21630	6.71	11.66	21.10	24.29	28.73	30.84	35.70
23313	5.02	8.41	11.95	13.88	16.80	18.32	22.00
25907	8.18	13.20	23.71	27.92	31.71	34.62	35.81

Day of Year	174
Sunrise (GMT)	6/23/2017 10:48
Sunset (GMT)	6/23/2017 23:10
Day Length (Hrs)	12.35

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	10.67	12.21	13.37	14.00	16.50	17.21	20.09
17662	3.25	5.75	7.16	7.72	9.83	10.55	11.76
19314	6.36	10.50	14.31	15.43	19.08	19.65	22.23
21630	5.15	9.55	16.81	18.36	20.97	22.22	24.71
23313	5.15	9.69	27.67	29.18	32.20	33.11	35.18
25907	9.39	14.74	36.34	37.35	40.39	41.68	47.30

Day of Year	265
Sunrise (GMT)	9/22/2017 10:47
Sunset (GMT)	9/22/2017 22:52
Day Length (Hrs)	12.083333

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	5.66	7.40	10.02	11.24	15.11	17.51	19.51
17662	5.19	7.84	9.90	10.80	14.55	16.00	17.77
19314	3.18	4.81	6.72	7.17	9.32	10.03	11.68
21630	5.81	9.87	23.67	25.21	26.61	27.22	28.64
23313	9.07	13.70	31.00	31.93	36.13	36.65	37.28
25907	5.29	13.26	33.42	35.40	37.44	38.25	41.74

Day of Year	356
Sunrise (GMT)	12/22/2017 11:00
Sunset (GMT)	12/22/2017 22:50
Day Length (Hrs)	11.816667

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	8.71	14.76	17.81	18.89	22.00	24.11	26.73
17662	5.54	6.96	9.25	10.14	12.45	14.85	18.74
19314	9.37	11.49	13.04	13.39	14.75	15.79	17.23
21630	9.80	14.71	23.11	24.24	27.12	28.20	30.15
23313	13.90	19.43	24.29	25.14	27.52	28.43	33.10
25907	10.41	12.57	15.87	17.62	21.38	22.38	23.61

BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15

Wind Direction

Day of Year	83
Sunrise (GMT)	3/24/2017 11:00
Sunset (GMT)	3/24/2017 23:05
Day Length (Hrs)	12.1

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	118.18	122.14	103.90	100.86	103.26	104.81	105.85
17662	163.01	129.29	116.57	113.96	109.95	102.50	102.50
19314	103.24	103.24	103.24	102.53	99.15	99.65	97.90
21630	106.26	90.94	89.36	93.52	99.66	103.17	106.14
23313	197.10	183.90	155.43	168.23	200.43	227.25	235.19
25907	254.20	254.39	266.42	266.44	266.44	266.86	267.69

Day of Year	174
Sunrise (GMT)	6/23/2017 10:48
Sunset (GMT)	6/23/2017 23:10
Day Length (Hrs)	12.35

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	86.57	88.12	90.00	89.14	88.00	88.12	88.12
17662	163.07	181.79	167.91	176.19	181.79	181.79	184.76
19314	231.55	224.05	239.88	247.95	264.08	265.34	266.84
21630	270.00	274.57	267.38	267.14	267.14	267.38	267.38
23313	181.68	177.93	209.05	216.57	243.43	258.32	259.60
25907	256.13	253.16	261.76	263.11	265.57	265.96	266.92

Day of Year	265
Sunrise (GMT)	9/22/2017 10:47
Sunset (GMT)	9/22/2017 22:52
Day Length (Hrs)	12.083333

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	69.93	73.39	73.50	75.14	79.70	80.44	81.08
17662	81.12	79.22	80.54	80.54	82.01	82.15	82.75
19314	211.76	151.39	151.39	158.20	144.03	151.39	151.39
21630	85.52	84.51	99.78	105.95	130.82	132.27	145.89
23313	110.90	107.07	116.10	120.49	131.35	150.38	151.48
25907	196.19	203.79	227.01	235.01	265.30	265.30	265.80

Day of Year	356
Sunrise (GMT)	12/22/2017 11:00
Sunset (GMT)	12/22/2017 22:50
Day Length (Hrs)	11.816667

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	124.24	127.08	115.70	109.60	105.79	104.40	103.56
17662	93.95	98.26	96.34	95.44	95.44	95.44	95.44
19314	97.91	107.88	111.34	117.72	121.33	229.50	229.50
21630	74.31	72.37	77.60	84.45	107.10	114.57	116.57
23313	82.41	73.92	82.87	85.20	111.08	134.24	134.70
25907	260.34	281.59	274.11	272.75	272.09	269.14	269.14

RENGAT/JAPURA/IDM00096171
Lat = -0.3333, Lon = 102.3167

Wind Magnitude

Day of Year	65
Sunrise (GMT)	3/6/2017 23:19
Sunset (GMT)	3/6/2017 11:25
Day Length (Hrs)	12.083333

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	4.34	7.03	9.23	10.62	25.53	30.30	33.49
17662	2.97	4.94	7.07	7.71	9.85	11.10	12.81
19314	3.51	6.08	8.19	9.11	11.10	13.35	16.10
21630	7.57	14.58	20.70	22.78	31.75	34.25	37.88
23313	9.30	15.10	21.89	28.69	33.64	35.96	39.42
25907	16.22	23.09	27.96	29.22	34.25	36.49	40.31

Day of Year	156
Sunrise (GMT)	6/5/2017 23:07
Sunset (GMT)	6/5/2017 11:11
Day Length (Hrs)	12.066667

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	5.64	10.02	13.56	16.41	26.47	29.32	33.53
17662	6.20	10.18	12.47	13.30	17.43	19.71	21.00
19314	4.65	10.54	14.56	17.13	23.70	25.70	28.30
21630	9.81	17.83	22.60	23.99	29.23	32.36	36.52
23313	16.93	22.40	26.64	28.45	31.36	33.04	36.28
25907	13.01	20.67	25.65	27.09	31.90	33.72	36.66

Day of Year	247
Sunrise (GMT)	9/4/2017 23:07
Sunset (GMT)	9/4/2017 11:11
Day Length (Hrs)	12.066667

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	5.41	10.78	12.73	14.12	16.87	19.50	22.71
17662	4.18	8.03	9.97	11.62	13.51	14.29	15.30
19314	6.30	9.24	10.67	11.50	13.37	14.67	16.25
21630	8.30	14.24	25.59	28.82	32.45	34.80	38.13
23313	14.12	20.19	27.51	29.21	32.23	33.02	34.30
25907	12.39	17.70	25.52	30.13	35.40	37.28	40.75

Day of Year	338
Sunrise (GMT)	12/4/2017 22:59
Sunset (GMT)	12/4/2017 11:04
Day Length (Hrs)	12.1

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	4.97	8.52	13.15	14.12	17.87	19.50	21.86
17662	5.14	7.80	9.63	10.50	12.80	14.75	15.86
19314	6.42	9.14	11.46	12.46	15.21	17.08	21.40
21630	10.12	14.20	19.24	21.52	25.66	26.83	29.48
23313	10.58	14.40	27.87	34.11	38.13	39.38	42.19
25907	9.34	14.20	18.56	21.34	28.04	30.69	32.76

RENGAT/JAPURA/IDM00096171
 Lat = -0.3333, Lon = 102.3167

Wind Direction

Day of Year	65
Sunrise (GMT)	3/6/2017 23:19
Sunset (GMT)	3/6/2017 11:25
Day Length (Hrs)	12.083333

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	239.89	242.60	247.89	253.47	264.10	267.08	267.61
17662	134.34	143.07	127.88	126.87	118.27	115.51	114.15
19314	89.52	96.28	92.94	93.01	99.66	105.95	110.38
21630	109.87	93.08	96.88	99.46	121.02	137.94	189.32
23313	112.71	98.85	98.85	101.46	121.32	130.60	142.12
25907	252.27	249.04	259.82	261.78	263.93	264.39	264.64

Day of Year	156
Sunrise (GMT)	6/5/2017 23:07
Sunset (GMT)	6/5/2017 11:11
Day Length (Hrs)	12.066667

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	236.98	240.57	248.63	249.89	252.60	254.59	255.21
17662	123.25	112.11	112.93	117.55	235.53	253.66	257.28
19314	194.87	113.11	104.48	104.78	123.14	135.35	172.73
21630	90.90	92.29	99.87	113.03	223.24	246.84	261.26
23313	89.35	102.70	125.87	260.50	263.81	264.53	265.34
25907	94.81	85.56	85.94	89.42	95.30	97.59	99.29

Day of Year	247
Sunrise (GMT)	9/4/2017 23:07
Sunset (GMT)	9/4/2017 11:11
Day Length (Hrs)	12.066667

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	199.44	235.89	251.24	252.41	254.66	255.42	255.96
17662	155.81	158.96	141.07	117.30	106.18	106.18	104.60
19314	115.48	109.33	109.33	109.69	109.51	108.43	107.21
21630	207.75	107.88	101.40	106.59	116.07	119.11	126.11
23313	192.79	96.67	95.00	96.23	102.21	105.10	105.77
25907	92.40	93.74	94.76	96.99	104.50	107.95	110.64

Day of Year	338
Sunrise (GMT)	12/4/2017 22:59
Sunset (GMT)	12/4/2017 11:04
Day Length (Hrs)	12.1

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	184.83	164.58	211.70	242.05	255.57	256.57	259.42
17662	114.24	102.53	100.44	100.41	98.09	97.68	96.99
19314	114.80	111.80	111.80	108.64	107.36	106.79	107.45
21630	109.11	101.17	101.85	107.33	121.14	149.07	215.74
23313	85.55	83.57	82.82	86.07	93.37	94.08	94.70
25907	173.95	243.44	256.68	256.68	256.63	256.32	255.82

UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55

Wind Magnitude

Day of Year	83
Sunrise (GMT)	3/24/2017 22:06
Sunset (GMT)	3/24/2017 10:10
Day Length (Hrs)	12.05

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	3.11	4.68	6.31	7.22	10.70	12.38	14.29
17662	4.42	5.73	6.87	7.67	9.36	10.48	11.07
19314	4.50	8.30	10.24	11.16	14.00	14.79	16.60
21630	4.82	7.56	25.90	28.70	31.52	33.17	36.28
23313	4.44	9.28	14.30	19.00	23.70	27.37	30.36
25907	13.29	19.26	32.62	36.51	39.40	41.86	44.56

Day of Year	174
Sunrise (GMT)	6/23/2017 22:11
Sunset (GMT)	6/23/2017 9:57
Day Length (Hrs)	11.783333

WINTER

Day of Year	266
Sunrise (GMT)	9/23/2017 21:52
Sunset (GMT)	9/23/2017 9:56
Day Length (Hrs)	12.083333

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	5.57	10.42	12.30	12.75	17.41	21.02	23.14
17662	3.58	5.99	8.10	8.50	11.13	12.03	14.10
19314	3.69	6.73	8.35	9.21	12.47	13.04	13.99
21630	16.11	23.70	27.81	28.66	31.42	32.41	35.21
23313	21.44	25.73	31.60	32.57	35.46	36.50	37.95
25907	18.93	23.96	25.93	28.18	32.01	33.60	34.20

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	3.94	5.32	6.94	7.22	9.35	10.48	12.04
17662	6.31	9.59	11.34	11.67	14.20	16.18	19.18
19314	8.96	11.50	14.36	15.11	17.93	18.43	21.33
21630	12.57	16.76	21.01	21.41	23.85	24.82	28.72
23313	15.37	21.12	24.81	25.71	27.25	28.03	30.00
25907	15.01	22.07	25.35	25.94	28.68	30.60	33.70

Day of Year	357
Sunrise (GMT)	12/23/2017 21:50
Sunset (GMT)	12/23/2017 10:13
Day Length (Hrs)	12.383333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	13.13	15.31	17.60	18.09	20.91	21.23	24.70
17662	6.38	8.01	9.24	9.62	11.92	12.81	15.16
19314	7.45	9.10	11.40	12.85	15.16	16.51	17.92
21630	6.96	19.21	23.86	25.44	27.84	29.92	33.02
23313	4.00	11.40	31.51	31.81	35.20	35.40	37.85
25907	10.74	18.32	23.26	24.55	27.90	28.89	32.90

UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55

Wind Direction

Day of Year	83
Sunrise (GMT)	3/24/2017 22:06
Sunset (GMT)	3/24/2017 10:10
Day Length (Hrs)	12.05

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	184.57	174.47	184.57	184.57	180.00	182.29	179.39
17662	135.00	103.45	103.50	103.50	103.45	103.14	103.47
19314	228.99	198.43	133.45	127.82	220.97	234.74	241.31
21630	220.91	220.91	221.19	258.69	266.81	268.34	268.34
23313	162.12	199.98	248.20	254.05	260.79	262.10	263.28
25907	263.42	257.22	262.84	263.46	267.97	267.47	268.00

Day of Year	174
Sunrise (GMT)	6/23/2017 22:11
Sunset (GMT)	6/23/2017 9:57
Day Length (Hrs)	11.783333

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	248.20	248.20	248.20	264.96	269.19	269.19	274.76
17662	252.53	256.69	253.39	246.60	242.65	211.61	114.68
19314	88.59	94.55	99.63	101.31	108.75	110.14	123.48
21630	102.02	102.02	106.84	107.82	112.01	115.99	119.81
23313	87.40	89.71	92.17	92.54	101.31	103.11	103.11
25907	76.27	87.63	93.56	97.81	105.42	107.69	126.87

Day of Year	266
Sunrise (GMT)	9/23/2017 21:52
Sunset (GMT)	9/23/2017 9:56
Day Length (Hrs)	12.083333

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	243.43	268.57	270.00	270.47	268.80	267.70	266.04
17662	203.96	102.91	97.00	97.00	97.00	96.84	96.84
19314	199.65	101.04	90.71	90.71	90.71	90.71	90.73
21630	92.08	93.81	95.40	96.97	101.84	102.84	106.05
23313	90.90	94.31	97.62	99.17	102.61	103.21	103.85
25907	98.23	112.93	115.31	112.93	115.31	119.23	119.23

Day of Year	357
Sunrise (GMT)	12/23/2017 21:50
Sunset (GMT)	12/23/2017 10:13
Day Length (Hrs)	12.383333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	251.97	252.85	255.16	256.05	256.52	257.51	257.51
17662	260.75	256.40	251.57	251.57	247.25	246.88	246.70
19314	81.42	88.34	93.14	90.92	93.61	94.76	124.29
21630	97.43	94.66	107.35	109.56	151.19	259.58	260.23
23313	113.96	85.84	113.20	115.11	190.78	265.12	265.59
25907	218.50	218.50	255.53	259.00	261.77	262.81	263.44

WAINGAPU/MAU/IDM00097340
Lat = -9.6667, Lon = 120.3333

Wind Magnitude

Day of Year	85
Sunrise (GMT)	3/26/2017 22:03
Sunset (GMT)	3/26/2017 10:04
Day Length (Hrs)	12.016667

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	3.20	4.90	6.04	6.44	7.79	9.12	11.36
17662	2.36	3.91	5.38	5.70	6.99	7.71	8.61
19314	4.26	8.99	11.14	11.90	14.93	16.37	17.11
21630	8.04	14.27	22.64	26.37	30.90	33.00	36.44
23313	12.54	16.48	20.73	22.30	28.00	30.72	32.82
25907	20.41	29.35	33.93	36.07	40.27	41.06	45.08

Day of Year	174
Sunrise (GMT)	6/23/2017 22:15
Sunset (GMT)	6/23/2017 9:47
Day Length (Hrs)	11.516667

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	3.58	5.32	6.30	6.46	7.43	7.78	9.58
17662	3.38	4.61	5.66	6.16	7.81	8.32	9.92
19314	4.43	8.04	12.72	13.76	15.62	16.54	20.44
21630	3.83	7.79	14.81	15.87	17.62	19.38	25.25
23313	7.12	15.07	17.20	17.88	20.02	20.62	22.91
25907	11.20	15.57	17.30	18.40	19.76	21.47	22.84

Day of Year	267
Sunrise (GMT)	9/24/2017 21:48
Sunset (GMT)	9/24/2017 9:53
Day Length (Hrs)	12.1

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	6.33	8.66	10.53	11.23	13.40	16.39	19.40
17662	1.51	2.56	3.58	3.81	6.44	7.66	9.21
19314	3.20	4.90	6.57	6.77	7.47	8.12	8.54
21630	7.13	18.68	22.00	24.71	27.68	28.71	31.84
23313	11.97	19.29	23.58	25.45	30.63	32.90	34.05
25907	13.54	18.78	22.30	23.63	26.66	29.30	31.81

Day of Year	360
Sunrise (GMT)	12/26/2017 21:40
Sunset (GMT)	12/26/2017 10:19
Day Length (Hrs)	12.633333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	11.40	14.83	16.76	17.62	19.74	22.52	26.57
17662	5.28	7.91	10.02	11.92	15.26	15.75	17.20
19314	3.38	7.18	11.69	12.66	16.40	16.92	20.58
21630	4.74	10.38	25.17	26.91	33.33	36.03	39.31
23313	9.68	15.54	30.11	32.85	40.60	42.25	45.40
25907	20.83	23.50	26.41	28.32	31.90	33.40	39.29

WAINGAPU/MAU/IDM00097340
Lat = -9.6667, Lon = 120.3333

Wind Direction

Day of Year	85
Sunrise (GMT)	3/26/2017 22:03
Sunset (GMT)	3/26/2017 10:04
Day Length (Hrs)	12.016667

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	141.34	146.31	159.78	159.78	176.57	191.77	182.09
17662	199.65	197.82	227.49	234.16	252.35	251.35	253.14
19314	125.54	138.58	236.79	254.64	259.95	263.45	263.45
21630	263.33	267.84	270.73	273.07	272.60	272.74	272.45
23313	275.15	273.24	275.15	272.77	271.93	271.48	271.48
25907	264.92	267.36	268.99	268.99	268.51	268.40	268.25

Day of Year	174
Sunrise (GMT)	6/23/2017 22:15
Sunset (GMT)	6/23/2017 9:47
Day Length (Hrs)	11.516667

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	262.41	274.76	274.76	274.76	277.77	284.83	284.83
17662	72.12	87.40	106.14	154.54	157.38	236.31	157.38
19314	97.31	96.48	104.04	111.14	126.87	173.29	185.44
21630	230.39	272.25	272.86	275.23	272.94	272.25	272.86
23313	81.47	81.76	92.35	93.72	104.93	139.24	175.91
25907	262.30	259.95	256.45	256.45	259.95	260.84	260.84

Day of Year	267
Sunrise (GMT)	9/24/2017 21:48
Sunset (GMT)	9/24/2017 9:53
Day Length (Hrs)	12.1

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	130.16	231.47	253.87	255.15	259.22	262.35	262.35
17662	225.00	236.31	236.31	248.20	248.20	236.31	228.58
19314	174.09	222.80	222.80	227.12	227.12	227.12	227.12
21630	87.40	87.40	94.83	107.70	146.31	255.74	258.81
23313	93.99	96.54	102.06	106.45	110.32	113.20	114.78
25907	106.50	108.23	112.41	114.33	171.51	247.04	250.95

Day of Year	360
Sunrise (GMT)	12/26/2017 21:40
Sunset (GMT)	12/26/2017 10:19
Day Length (Hrs)	12.633333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	246.91	246.91	246.91	246.50	247.55	247.55	247.66
17662	260.18	269.17	271.15	269.17	265.60	262.77	261.19
19314	263.88	267.61	270.00	269.19	269.19	269.19	268.68
21630	222.80	253.20	265.52	269.10	270.73	271.95	271.95
23313	275.19	276.68	273.54	273.54	271.97	270.61	270.32
25907	269.72	269.51	269.72	269.72	270.21	270.21	270.27

BRASILIA/BRM00083378
Lat = -15.8667, Lon = -47.9333

Wind Magnitude

Day of Year	82
Sunrise (GMT)	3/23/2017 9:17
Sunset (GMT)	3/23/2017 21:18
Day Length (Hrs)	12.016667

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	4.64	6.94	9.22	12.87	18.60	21.98	24.10
17662	4.18	6.10	9.03	10.00	13.35	13.68	15.40
19314	7.00	9.11	11.03	12.25	16.80	17.85	21.90
21630	13.96	16.92	19.65	22.10	25.68	27.63	32.13
23313	18.12	21.30	23.20	24.50	26.40	29.50	32.02
25907	26.35	31.01	33.43	34.31	35.89	37.64	40.59

Day of Year	264
Sunrise (GMT)	9/21/2017 9:03
Sunset (GMT)	9/21/2017 21:07
Day Length (Hrs)	12.05

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	4.32	7.28	8.45	9.63	12.61	14.12	17.66
17662	3.31	4.55	5.62	6.22	7.07	7.63	9.81
19314	2.62	3.70	5.20	5.44	6.98	7.58	10.33
21630	3.32	8.45	14.20	15.86	18.07	19.82	22.63
23313	4.53	9.67	12.72	13.74	17.68	19.75	25.62
25907	7.52	10.31	14.79	16.37	18.94	20.27	24.05

Day of Year	172
Sunrise (GMT)	6/21/2017 9:40
Sunset (GMT)	6/21/2017 20:48
Day Length (Hrs)	11.133333

WINTER

Day of Year	356
Sunrise (GMT)	12/22/2017 8:39
Sunset (GMT)	12/22/2017 21:42
Day Length (Hrs)	13.033333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	8.73	12.95	16.10	17.37	20.34	22.31	23.67
17662	6.04	8.62	11.37	14.06	18.19	20.55	23.61
19314	3.60	5.34	7.50	8.60	10.42	11.29	12.59
21630	4.72	6.10	7.88	8.27	9.79	10.26	10.90
23313	3.20	6.15	8.91	9.73	11.19	11.84	13.56
25907	5.48	8.56	10.60	11.32	15.34	16.45	17.58

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	9.20	11.29	13.56	14.56	21.78	23.13	25.89
17662	6.91	9.70	13.12	13.81	15.72	16.12	17.60
19314	9.21	11.04	12.60	13.54	15.10	16.57	17.62
21630	12.30	16.35	18.60	19.62	22.61	24.00	27.62
23313	11.46	16.28	19.68	20.69	22.51	24.63	28.62
25907	23.01	26.31	29.13	29.91	32.06	32.90	34.17

BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333

Wind Direction

Day of Year	82
Sunrise (GMT)	3/23/2017 9:17
Sunset (GMT)	3/23/2017 21:18
Day Length (Hrs)	12.016667

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	143.13	103.39	103.39	99.46	78.20	77.69	77.19
17662	237.26	239.47	244.23	249.18	250.11	253.95	254.22
19314	255.74	259.14	260.07	260.62	260.62	261.85	264.65
21630	278.33	278.33	278.34	278.33	276.60	276.30	276.21
23313	271.95	268.55	268.19	268.22	268.22	268.34	268.51
25907	267.93	271.38	271.13	272.04	272.23	272.43	272.43

Day of Year	172
Sunrise (GMT)	6/21/2017 9:40
Sunset (GMT)	6/21/2017 20:48
Day Length (Hrs)	11.133333

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	108.02	113.96	99.72	94.40	95.11	98.88	98.88
17662	170.75	180.00	178.90	171.25	136.93	128.29	126.25
19314	241.70	241.70	241.70	238.24	220.24	175.60	161.56
21630	267.95	267.95	268.03	267.03	268.03	267.95	268.03
23313	135.00	141.19	242.57	246.04	252.28	252.28	252.55
25907	235.30	237.09	249.00	249.78	241.39	239.84	237.09

Day of Year	264
Sunrise (GMT)	9/21/2017 9:03
Sunset (GMT)	9/21/2017 21:07
Day Length (Hrs)	12.05

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	233.97	233.97	212.35	208.61	181.55	156.50	150.52
17662	112.38	115.28	115.28	140.01	150.07	150.07	146.31
19314	238.39	235.01	226.97	230.01	238.39	243.43	243.43
21630	90.00	106.26	239.04	241.01	258.37	262.17	262.87
23313	202.83	245.56	266.63	271.41	269.64	269.64	267.98
25907	264.47	264.47	269.33	269.36	271.93	271.93	273.74

Day of Year	356
Sunrise (GMT)	12/22/2017 8:39
Sunset (GMT)	12/22/2017 21:42
Day Length (Hrs)	13.033333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	320.44	316.30	317.64	316.30	316.30	316.30	315.41
17662	274.93	269.41	271.62	273.32	273.32	273.79	273.98
19314	274.24	278.37	274.24	274.24	269.58	269.55	269.55
21630	257.35	264.29	270.97	269.12	271.88	271.80	271.80
23313	277.06	275.99	277.06	277.06	275.34	273.85	273.31
25907	272.62	271.52	272.54	272.54	272.59	272.62	273.07

CAMPO GRANDE/BRM00083612
Lat = -20.4667, Lon = -54.6667

Wind Magnitude

Day of Year	85
Sunrise (GMT)	3/26/2017 9:45
Sunset (GMT)	3/26/2017 21:43
Day Length (Hrs)	11.95

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	8.22	12.59	16.45	17.78	20.80	25.66	31.93
17662	4.06	5.03	6.69	7.36	8.54	10.11	10.86
19314	6.78	9.09	10.54	11.29	13.56	14.73	16.54
21630	15.05	17.22	18.56	19.00	21.30	22.14	24.13
23313	16.51	18.22	19.24	19.71	21.42	22.01	24.50
25907	20.98	25.63	27.73	29.24	32.18	33.94	36.67

Day of Year	267
Sunrise (GMT)	9/24/2017 9:27
Sunset (GMT)	9/24/2017 21:34
Day Length (Hrs)	12.116667

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	9.08	13.75	15.80	17.00	19.36	19.86	23.25
17662	5.64	7.42	9.24	10.04	11.40	11.68	13.03
19314	1.96	3.91	4.84	5.76	8.63	9.11	12.34
21630	3.10	6.19	8.00	8.61	10.90	12.46	18.24
23313	3.94	7.00	7.93	8.93	11.18	12.42	17.93
25907	4.42	8.65	11.18	13.51	16.77	18.31	20.79

Day of Year	179
Sunrise (GMT)	6/28/2017 10:17
Sunset (GMT)	6/28/2017 21:07
Day Length (Hrs)	10.85

WINTER

Day of Year	355
Sunrise (GMT)	12/21/2017 8:57
Sunset (GMT)	12/21/2017 22:16
Day Length (Hrs)	13.333333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	18.77	23.56	25.02	25.61	28.30	30.13	33.15
17662	7.72	13.19	14.80	15.50	17.79	19.30	22.16
19314	3.35	5.13	8.07	9.41	12.65	12.89	15.04
21630	3.67	5.31	6.40	6.72	8.30	8.96	12.75
23313	3.30	5.59	10.38	11.43	13.07	14.32	16.42
25907	6.89	14.75	19.10	20.41	22.27	23.11	25.50

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	3.54	5.55	6.76	7.89	9.35	9.95	10.18
17662	3.60	6.61	8.34	9.32	10.83	11.67	13.62
19314	5.81	8.13	9.62	10.30	12.15	13.10	15.33
21630	10.22	12.84	14.17	15.42	16.76	17.42	19.49
23313	11.30	13.53	15.12	15.96	17.51	18.42	20.26
25907	19.19	21.91	24.11	24.94	27.01	28.04	28.71

CAMPO GRANDE/BRM00083612
 Lat = -20.4667, Lon = -54.6667

Wind Direction

Day of Year	85
Sunrise (GMT)	3/26/2017 9:45
Sunset (GMT)	3/26/2017 21:43
Day Length (Hrs)	11.95

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	128.45	98.41	91.83	86.82	82.71	81.59	81.24
17662	172.15	174.69	195.95	208.44	207.58	206.29	206.29
19314	256.61	267.09	271.70	271.57	273.08	272.34	273.03
21630	265.82	266.37	264.42	265.36	264.42	264.56	265.03
23313	275.76	276.73	276.26	276.26	275.89	276.05	276.05
25907	268.34	265.95	266.32	266.32	266.32	266.20	266.20

Day of Year	179
Sunrise (GMT)	6/28/2017 10:17
Sunset (GMT)	6/28/2017 21:07
Day Length (Hrs)	10.85

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	87.80	85.84	87.46	87.80	90.00	89.19	89.19
17662	69.03	91.66	99.33	99.46	99.46	99.46	99.52
19314	115.46	94.57	107.42	109.80	113.32	113.78	113.78
21630	210.96	207.07	149.04	149.04	148.08	145.67	137.91
23313	186.71	184.97	110.56	110.92	110.56	110.92	110.92
25907	142.96	142.96	110.48	105.79	102.09	98.17	98.17

Day of Year	267
Sunrise (GMT)	9/24/2017 9:27
Sunset (GMT)	9/24/2017 21:34
Day Length (Hrs)	12.116667

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	108.73	102.28	102.28	102.00	100.90	100.20	100.20
17662	114.08	108.74	108.43	108.43	109.80	108.74	109.80
19314	173.66	173.66	156.16	148.30	139.97	135.00	134.06
21630	168.69	217.87	214.51	217.87	217.87	223.60	226.79
23313	239.04	241.82	241.82	246.41	246.41	247.44	248.60
25907	200.73	213.15	201.96	209.45	221.95	222.83	223.85

Day of Year	355
Sunrise (GMT)	12/21/2017 8:57
Sunset (GMT)	12/21/2017 22:16
Day Length (Hrs)	13.333333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	215.54	241.26	216.10	215.54	208.30	215.54	216.10
17662	254.05	254.05	255.58	255.58	259.49	261.87	262.80
19314	254.74	254.74	262.41	263.85	268.33	266.93	266.93
21630	258.26	258.26	258.44	258.44	258.95	258.54	258.54
23313	281.06	276.15	279.38	279.38	280.80	279.96	280.80
25907	264.50	265.26	265.26	265.26	267.67	267.75	268.19

CURITIBA/BRM00083840
 Lat = -25.5167, Lon = -49.1667

Wind Magnitude

Day of Year	81
Sunrise (GMT)	3/22/2017 9:23
Sunset (GMT)	3/22/2017 21:25
Day Length (Hrs)	12.033333

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	8.05	13.16	16.19	16.74	19.13	20.52	25.37
17662	3.00	5.00	6.22	6.67	9.06	10.68	13.54
19314	5.24	6.93	8.20	8.46	10.24	10.83	12.61
21630	11.26	13.32	14.51	15.13	16.72	17.40	19.15
23313	13.14	15.36	17.83	18.33	20.40	21.22	23.46
25907	16.40	19.93	23.31	24.33	27.92	29.68	31.41

Day of Year	172
Sunrise (GMT)	6/21/2017 10:03
Sunset (GMT)	6/21/2017 20:33
Day Length (Hrs)	10.5

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	20.29	24.86	27.19	27.93	33.68	37.50	42.43
17662	9.14	12.72	16.27	17.54	20.72	22.13	27.30
19314	5.40	9.35	11.61	12.18	15.48	19.35	21.81
21630	4.55	8.32	12.62	13.58	15.94	17.60	20.50
23313	7.37	11.63	13.75	14.82	17.83	19.69	27.11
25907	19.56	26.56	30.87	32.78	38.35	45.50	51.67

Day of Year	264
Sunrise (GMT)	9/21/2017 9:08
Sunset (GMT)	9/21/2017 21:11
Day Length (Hrs)	12.05

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	16.42	20.65	23.52	24.53	27.55	29.82	33.34
17662	7.40	10.74	13.33	14.30	17.52	18.92	21.77
19314	3.72	5.69	7.84	9.58	13.50	16.19	18.28
21630	3.83	5.94	8.07	9.65	13.45	15.57	18.20
23313	5.41	8.86	11.28	12.34	15.60	16.76	19.01
25907	8.08	13.06	16.46	17.51	22.42	25.01	26.97

Day of Year	355
Sunrise (GMT)	12/21/2017 8:24
Sunset (GMT)	12/21/2017 22:06
Day Length (Hrs)	13.683333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	6.44	9.22	11.82	13.02	15.93	17.74	19.09
17662	3.68	6.08	8.10	9.04	11.18	12.18	13.61
19314	5.89	8.06	9.39	9.68	11.20	12.01	13.54
21630	7.52	9.62	10.94	11.43	13.15	14.21	15.46
23313	9.27	11.56	12.88	13.44	14.86	15.95	17.25
25907	15.69	18.79	20.55	21.79	24.80	26.49	29.43

CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667

Wind Direction

Day of Year	81
Sunrise (GMT)	3/22/2017 9:23
Sunset (GMT)	3/22/2017 21:25
Day Length (Hrs)	12.033333

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	94.84	97.10	96.34	96.71	97.44	97.21	97.21
17662	202.03	170.43	168.69	162.98	165.95	162.80	160.64
19314	246.12	249.45	252.69	253.30	253.63	254.58	255.11
21630	265.48	265.80	266.11	266.19	267.44	267.71	267.71
23313	265.19	267.60	266.42	266.82	267.60	268.08	268.32
25907	266.71	268.59	269.61	270.00	270.70	271.16	271.40

Day of Year	172
Sunrise (GMT)	6/21/2017 10:03
Sunset (GMT)	6/21/2017 20:33
Day Length (Hrs)	10.5

WINTER

Day of Year	264
Sunrise (GMT)	9/21/2017 9:08
Sunset (GMT)	9/21/2017 21:11
Day Length (Hrs)	12.05

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	97.28	97.80	97.80	97.80	98.34	98.34	98.34
17662	115.57	114.20	113.39	113.39	114.02	113.62	113.34
19314	139.40	126.43	124.29	124.89	124.27	123.27	121.09
21630	113.66	115.20	120.14	116.03	112.65	111.42	109.24
23313	187.11	156.80	120.04	118.96	110.43	110.43	107.46
25907	167.59	130.45	118.81	113.89	109.52	108.37	107.85

Day of Year	355
Sunrise (GMT)	12/21/2017 8:24
Sunset (GMT)	12/21/2017 22:06
Day Length (Hrs)	13.683333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	215.56	174.61	160.27	155.77	142.73	139.12	136.06
17662	180.00	211.68	244.72	248.52	257.32	261.08	261.08
19314	254.88	261.36	264.09	264.09	264.02	264.22	264.22
21630	265.95	268.75	269.14	269.19	269.11	269.00	269.00
23313	258.69	264.70	266.47	265.50	265.49	266.61	266.75
25907	272.79	275.53	276.09	275.27	275.22	275.16	275.16

URUGUAIANA/BRM00083928
Lat = -29.7833, Lon = -57.0333

Wind Magnitude

Day of Year	83
Sunrise (GMT)	3/24/2017 9:56
Sunset (GMT)	3/24/2017 21:53
Day Length (Hrs)	11.95

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	13.06	16.87	20.12	21.27	25.43	28.52	31.83
17662	4.88	7.15	8.68	9.66	12.21	13.44	15.77
19314	2.28	3.60	4.48	4.83	6.15	7.22	9.49
21630	6.05	8.26	10.07	10.71	12.68	13.41	14.50
23313	7.52	10.15	11.83	12.46	15.00	16.58	17.95
25907	7.34	10.84	13.50	14.24	18.21	20.43	22.22

Day of Year	172
Sunrise (GMT)	6/21/2017 10:45
Sunset (GMT)	6/21/2017 20:56
Day Length (Hrs)	10.183333

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	19.93	24.16	28.30	29.37	36.00	41.60	51.82
17662	10.77	14.77	18.63	20.40	24.29	27.04	33.53
19314	9.00	15.21	17.63	18.92	22.12	23.68	25.23
21630	11.64	18.05	21.83	23.68	29.42	33.87	37.62
23313	17.52	23.08	27.44	29.16	35.16	39.16	42.61
25907	28.20	35.12	39.13	42.51	55.00	59.16	66.81

Day of Year	266
Sunrise (GMT)	9/23/2017 9:37
Sunset (GMT)	9/23/2017 21:44
Day Length (Hrs)	12.1

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	16.14	20.53	23.90	25.54	29.68	32.41	35.51
17662	8.53	11.46	13.44	14.32	19.23	21.88	26.07
19314	5.72	8.70	11.81	14.09	18.13	20.59	24.38
21630	4.83	8.55	12.85	14.59	21.81	26.58	29.74
23313	5.76	10.62	15.40	18.16	27.29	30.07	33.34
25907	9.13	16.56	22.88	25.89	34.89	38.52	45.30

Day of Year	359
Sunrise (GMT)	12/25/2017 8:47
Sunset (GMT)	12/25/2017 22:49
Day Length (Hrs)	14.016667

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	10.85	15.29	18.48	20.75	25.50	28.02	36.48
17662	4.31	6.81	8.77	9.35	11.58	14.01	17.07
19314	3.52	5.20	6.20	6.75	8.56	9.48	12.98
21630	4.34	6.22	7.63	8.71	10.48	11.30	12.73
23313	6.35	8.42	10.26	11.24	13.19	14.82	16.38
25907	12.88	15.50	17.28	17.90	20.05	21.21	24.10

URUGUAIANA/BRM00083928
Lat = -29.7833, Lon = -57.0333

Wind Direction

Day of Year	83
Sunrise (GMT)	3/24/2017 9:56
Sunset (GMT)	3/24/2017 21:53
Day Length (Hrs)	11.95

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	85.75	85.52	86.67	88.89	90.49	90.74	91.12
17662	90.00	93.91	92.41	93.58	94.77	94.34	96.12
19314	225.00	219.76	220.89	221.19	222.84	221.19	220.24
21630	241.51	245.97	252.35	253.01	255.71	256.22	257.66
23313	259.00	265.71	267.13	267.61	267.76	268.17	268.47
25907	251.14	256.13	261.98	261.14	263.74	263.82	264.75

Day of Year	172
Sunrise (GMT)	6/21/2017 10:45
Sunset (GMT)	6/21/2017 20:56
Day Length (Hrs)	10.183333

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	97.78	95.15	94.54	94.73	93.19	92.88	92.85
17662	100.70	99.37	98.82	98.62	97.78	97.59	97.59
19314	99.32	100.08	101.44	101.59	101.73	101.73	101.82
21630	103.03	100.47	101.31	102.17	102.75	102.91	103.45
23313	90.85	91.46	94.44	95.42	95.51	95.51	96.05
25907	89.14	90.00	90.75	91.29	93.37	94.03	94.90

Day of Year	266
Sunrise (GMT)	9/23/2017 9:37
Sunset (GMT)	9/23/2017 21:44
Day Length (Hrs)	12.1

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	95.63	92.29	95.10	93.75	94.95	95.25	94.95
17662	106.60	102.53	102.53	104.44	102.77	102.23	100.18
19314	116.91	113.81	109.24	111.04	108.25	107.30	106.87
21630	187.89	121.79	115.77	113.20	110.68	109.81	109.34
23313	155.55	105.55	96.44	96.39	94.62	95.64	96.22
25907	124.78	108.60	104.39	104.27	103.15	101.94	100.52

Day of Year	359
Sunrise (GMT)	12/25/2017 8:47
Sunset (GMT)	12/25/2017 22:49
Day Length (Hrs)	14.016667

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	98.78	95.71	90.00	91.05	94.46	97.29	98.07
17662	139.47	97.67	109.80	110.07	112.85	111.53	111.53
19314	247.15	250.02	253.69	254.48	260.24	262.86	264.21
21630	259.53	261.16	260.41	260.41	259.12	261.30	261.37
23313	268.42	271.51	271.83	271.83	272.30	272.30	272.12
25907	262.02	268.05	268.05	268.17	268.04	267.92	267.47

CAPE ST FRANCIS/
Lat = -34.1899, Lon = 24.7972

Wind Magnitude

Day of Year	81
Sunrise (GMT)	3/22/2017 4:27
Sunset (GMT)	3/22/2017 16:28
Day Length (Hrs)	12.016667

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	11.94	16.76	21.37	23.08	27.12	29.14	38.39
17662	5.77	8.72	10.96	11.80	15.98	18.13	22.99
19314	3.01	4.80	6.04	6.44	8.25	9.22	11.50
21630	2.21	3.84	5.11	5.73	8.04	10.50	13.16
23313	2.79	4.40	6.30	7.20	10.37	11.61	15.48
25907	3.94	5.57	7.60	8.23	10.21	11.74	14.79

Day of Year	264
Sunrise (GMT)	9/21/2017 4:12
Sunset (GMT)	9/21/2017 16:15
Day Length (Hrs)	12.05

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	19.60	23.54	27.18	28.60	32.33	35.56	41.76
17662	11.16	15.14	18.28	19.04	23.08	25.01	29.02
19314	6.14	10.21	12.90	14.58	16.65	18.76	22.76
21630	4.64	7.02	9.66	10.83	15.80	17.50	20.74
23313	4.94	7.44	11.48	12.79	16.52	17.46	20.72
25907	7.55	11.86	15.33	16.67	24.04	31.83	41.77

Day of Year	172
Sunrise (GMT)	6/21/2017 5:27
Sunset (GMT)	6/21/2017 15:18
Day Length (Hrs)	9.833333

WINTER

Day of Year	355
Sunrise (GMT)	12/21/2017 3:07
Sunset (GMT)	12/21/2017 17:30
Day Length (Hrs)	14.383333

SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	23.34	28.26	31.95	33.23	38.12	41.33	43.70
17662	17.05	21.02	23.48	24.81	28.02	31.55	33.80
19314	14.38	18.41	20.51	21.67	26.11	28.26	29.76
21630	15.73	20.30	23.15	24.32	28.11	29.92	34.25
23313	19.43	25.43	29.15	30.16	33.42	36.22	39.26
25907	34.77	45.88	51.25	52.31	55.88	58.71	63.18

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	15.47	20.51	25.76	27.71	31.30	33.14	36.91
17662	5.98	11.30	14.90	16.03	19.91	23.21	27.66
19314	3.44	5.56	7.08	8.37	11.20	14.57	18.70
21630	2.90	5.02	6.71	7.65	9.28	11.19	12.60
23313	5.47	7.90	10.33	11.31	13.91	15.03	17.11
25907	12.59	15.14	17.06	18.05	21.05	22.49	25.19

CAPE ST FRANCIS/
Lat = -34.1899, Lon = 24.7972

Wind Direction

Day of Year	81
Sunrise (GMT)	3/22/2017 4:27
Sunset (GMT)	3/22/2017 16:28
Day Length (Hrs)	12.016667

FALL

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	87.34	97.19	98.23	98.27	102.08	102.16	102.16
17662	103.90	111.27	108.45	109.33	108.93	108.68	108.68
19314	148.52	168.02	157.28	150.95	143.66	141.20	138.61
21630	186.27	200.41	201.67	207.65	223.97	232.35	236.77
23313	184.98	217.21	226.43	233.88	247.85	254.69	255.43
25907	188.70	192.44	197.34	218.66	234.21	243.43	247.01

Day of Year	172
Sunrise (GMT)	6/21/2017 5:27
Sunset (GMT)	6/21/2017 15:18
Day Length (Hrs)	9.833333

WINTER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	86.26	93.52	94.73	96.21	97.21	97.25	97.23
17662	92.51	94.00	95.90	95.91	96.67	96.67	96.94
19314	88.90	93.67	93.09	93.09	92.11	92.36	92.09
21630	93.56	94.00	92.93	92.89	92.93	92.60	92.60
23313	94.29	92.53	88.60	88.07	87.81	87.33	87.11
25907	86.35	87.31	87.86	87.86	88.00	88.03	88.06

Day of Year	264
Sunrise (GMT)	9/21/2017 4:12
Sunset (GMT)	9/21/2017 16:15
Day Length (Hrs)	12.05

SPRING

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	97.40	96.84	96.84	96.91	97.92	97.64	98.32
17662	102.34	104.16	104.53	104.16	103.36	102.93	102.86
19314	115.40	111.19	106.89	106.89	104.72	104.55	104.08
21630	150.66	167.35	162.15	158.20	146.48	141.31	137.86
23313	180.21	182.39	189.16	189.87	180.64	175.93	172.13
25907	204.88	195.31	187.12	183.95	178.76	186.66	196.48

Day of Year	355
Sunrise (GMT)	12/21/2017 3:07
Sunset (GMT)	12/21/2017 17:30
Day Length (Hrs)	14.383333

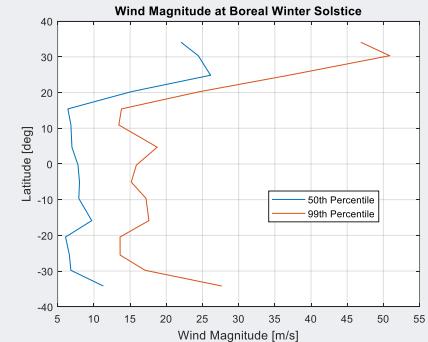
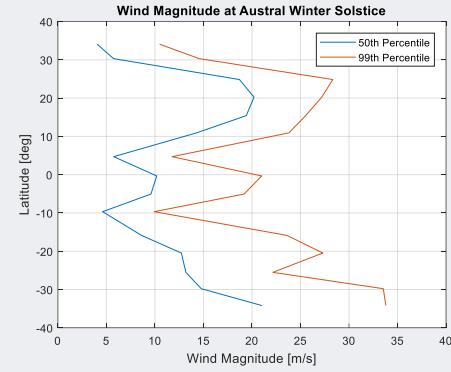
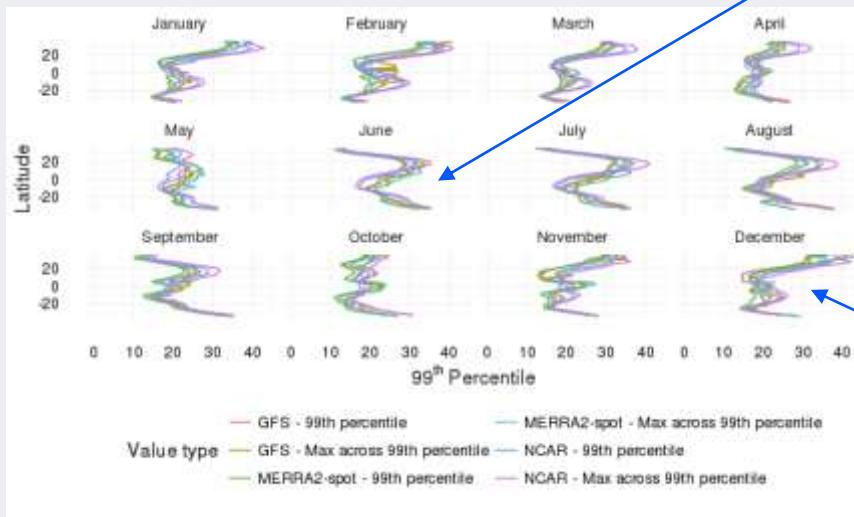
SUMMER

Altitude [m]	Wind Percentile [%]						
	25%	50%	68.3%	75%	90%	95%	99%
15790	87.43	82.42	84.94	86.17	89.41	89.58	90.14
17662	116.06	86.76	90.00	90.00	93.31	94.05	93.37
19314	163.42	160.35	160.35	151.80	134.74	130.24	125.18
21630	200.96	214.99	219.17	228.58	243.53	251.01	253.12
23313	266.95	265.10	265.24	265.71	266.19	266.19	266.62
25907	270.00	270.00	270.00	270.00	269.53	269.81	269.54

Comparison

99th Percentile Wind Analysis

<https://fb.facebook.com/groups/1659229310997706/permalink/1716812225239414/>

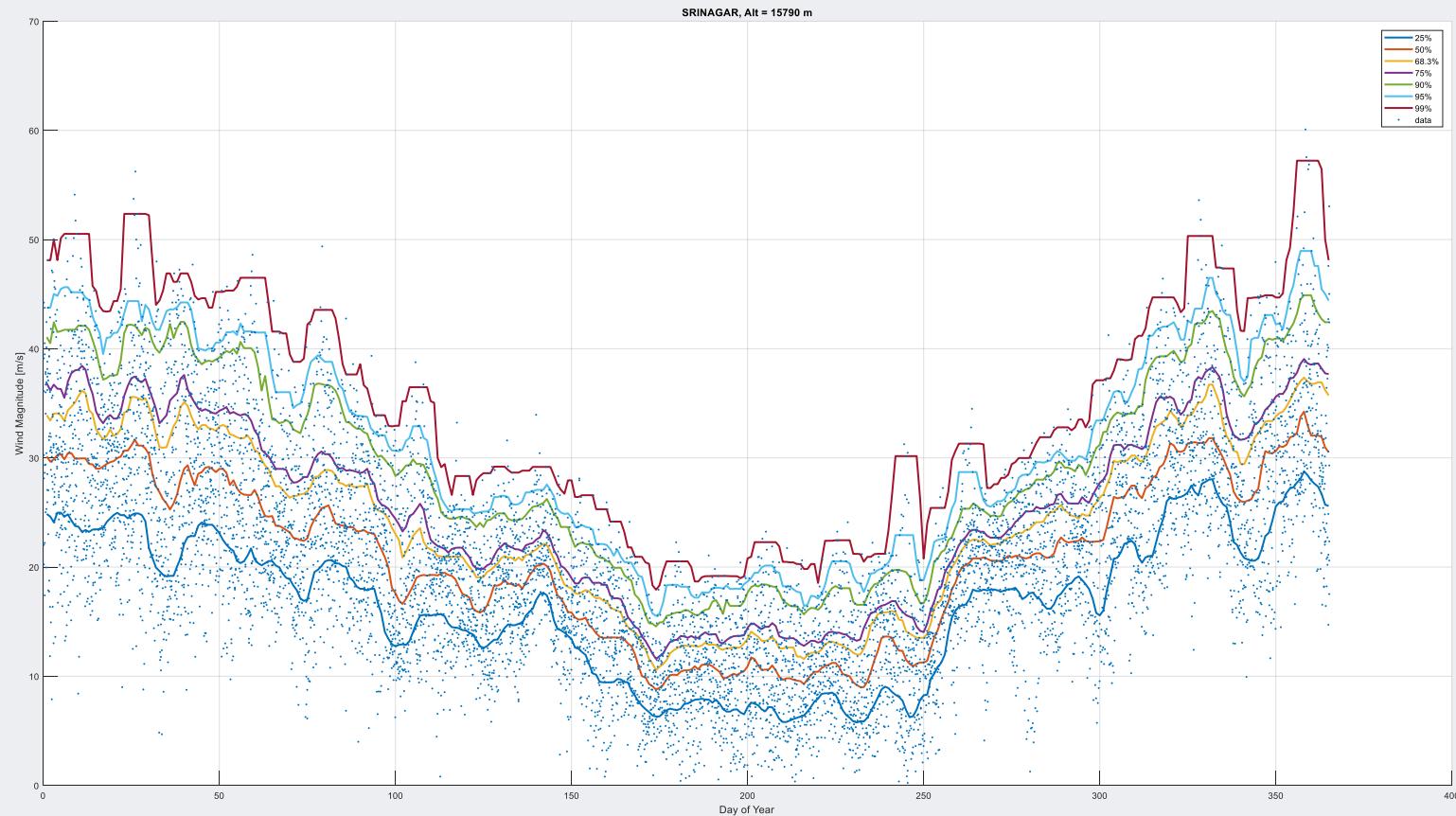


Results

SRINAGAR/INM00042027

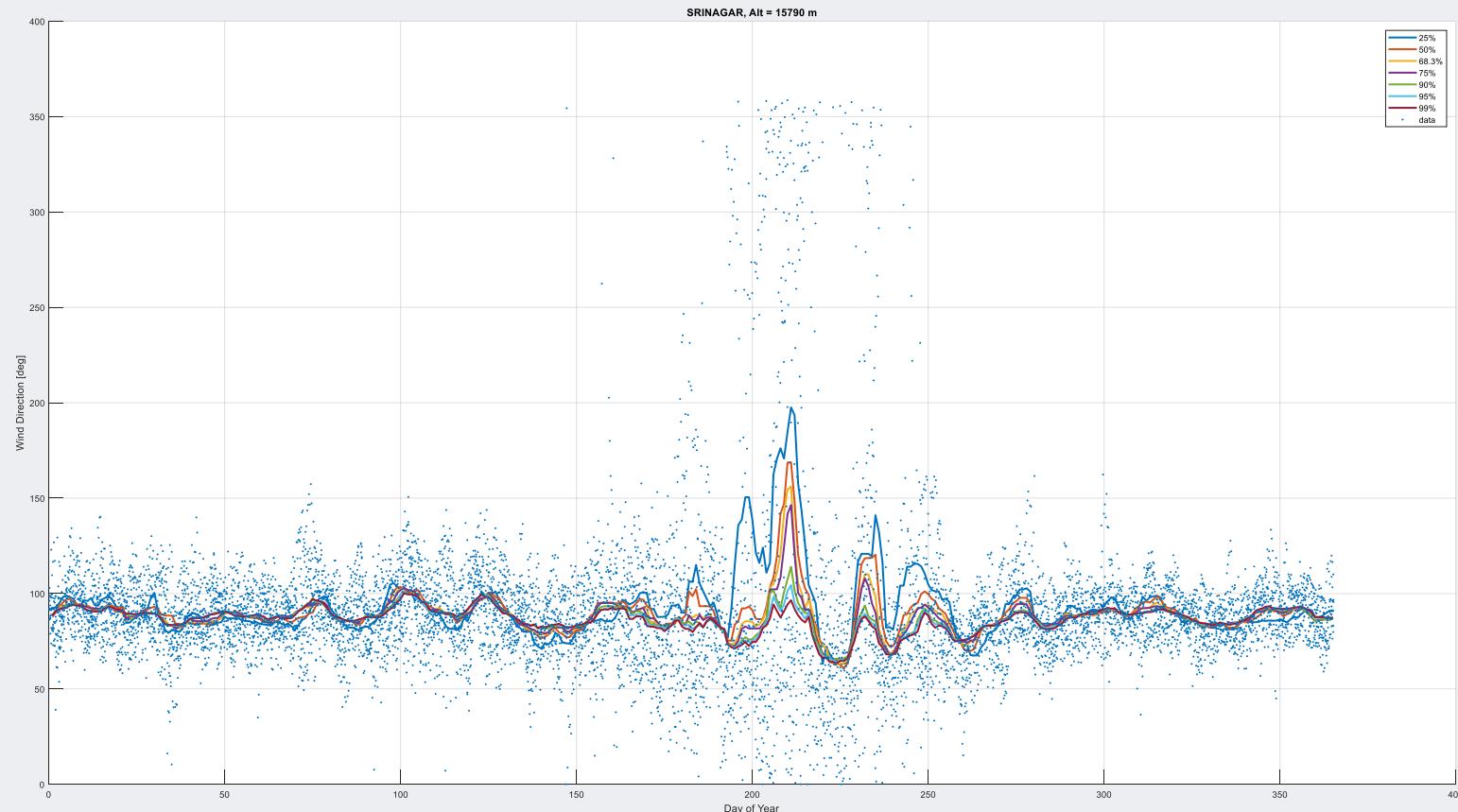
Lat = 34.0833, Lon = 74.8333, Alt = 15790 m

Wind Magnitude



SRINAGAR/INM00042027

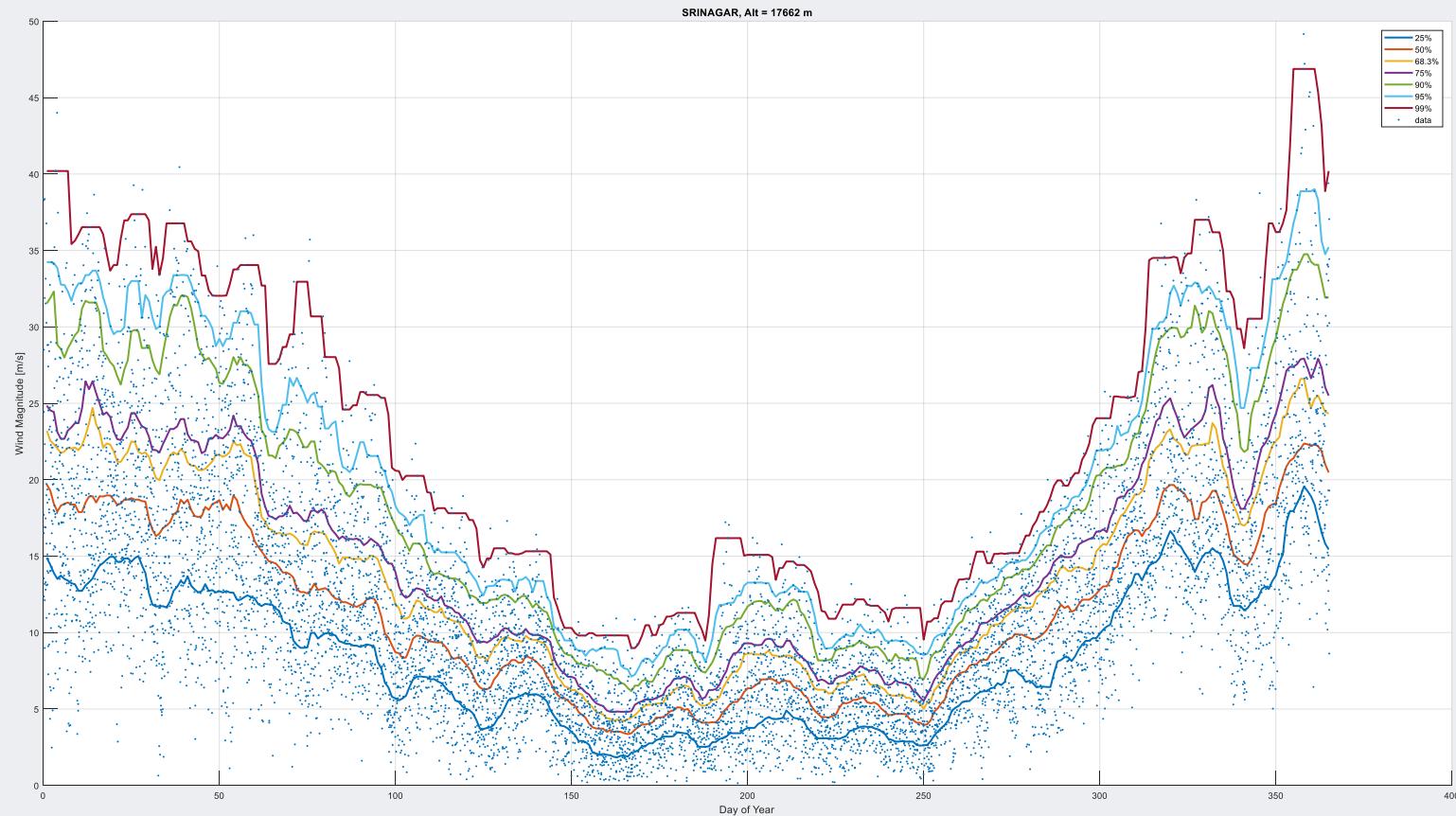
Lat = 34.0833, Lon = 74.8333, Alt = 15790 m



SRINAGAR/INM00042027

Lat = 34.0833, Lon = 74.8333, Alt = 17662 m

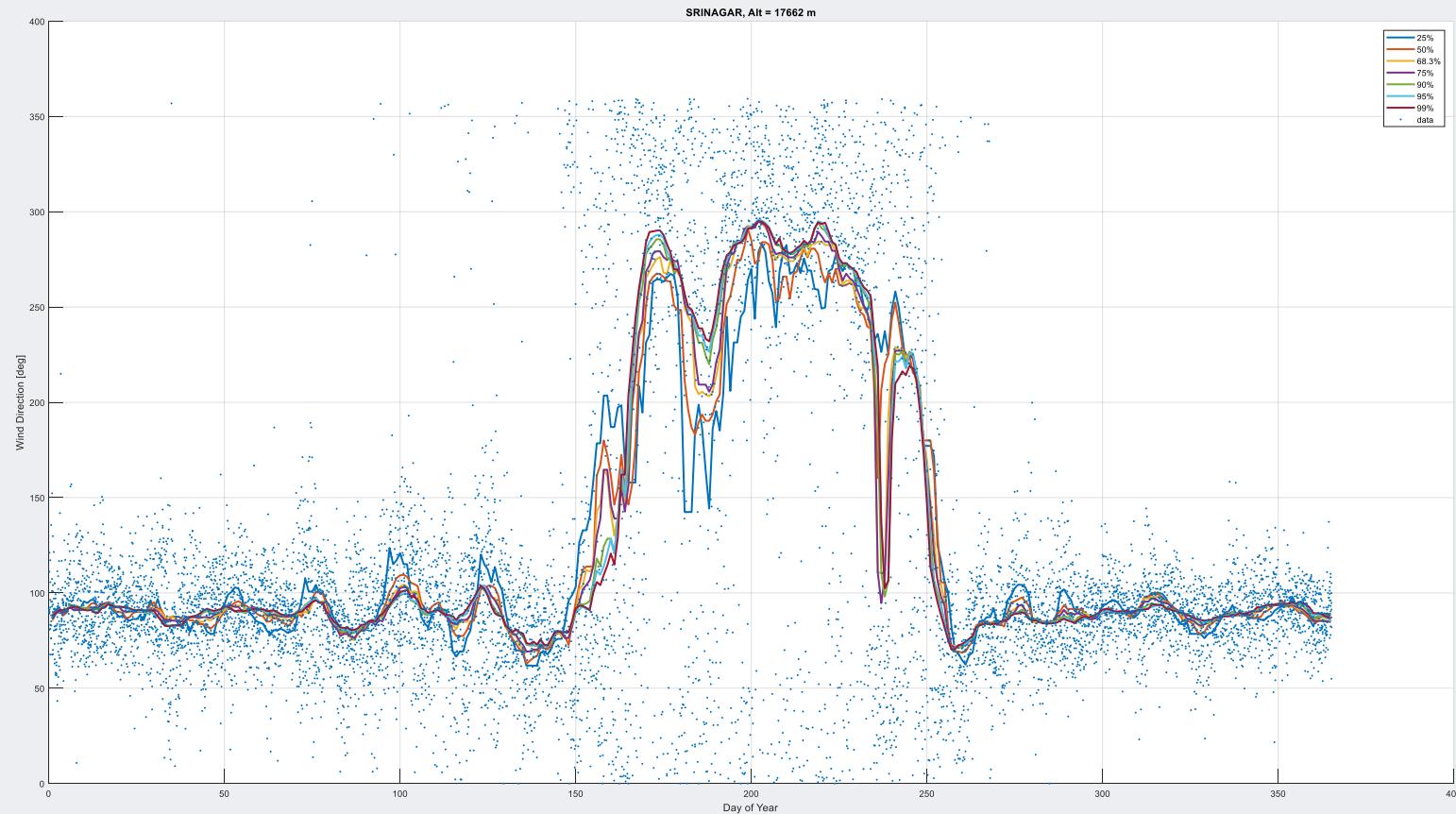
Wind Magnitude



SRINAGAR/INM00042027

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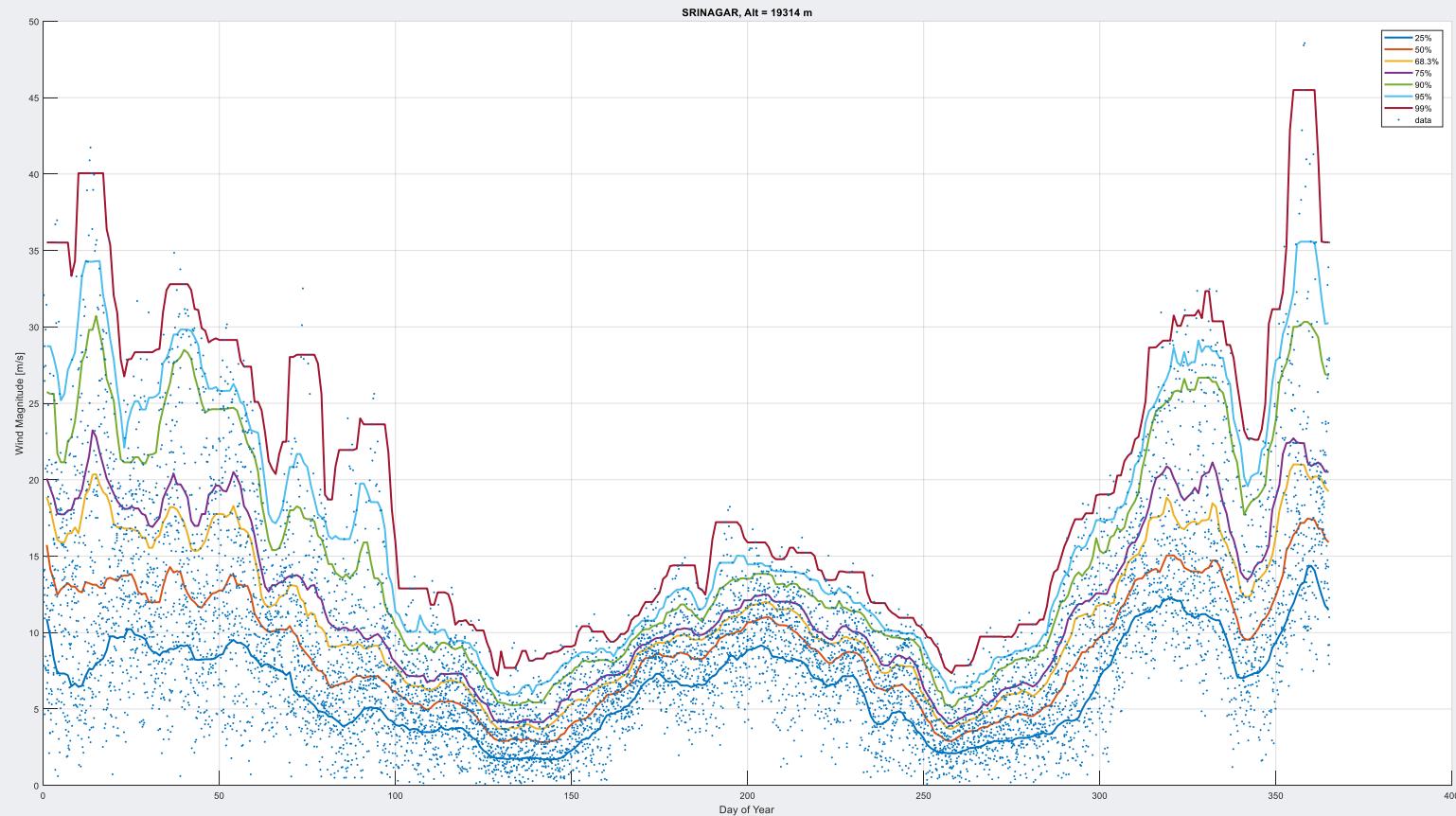
Wind Direction



SRINAGAR/INM00042027

Lat = 34.0833, Lon = 74.8333, , Alt = 19314 m

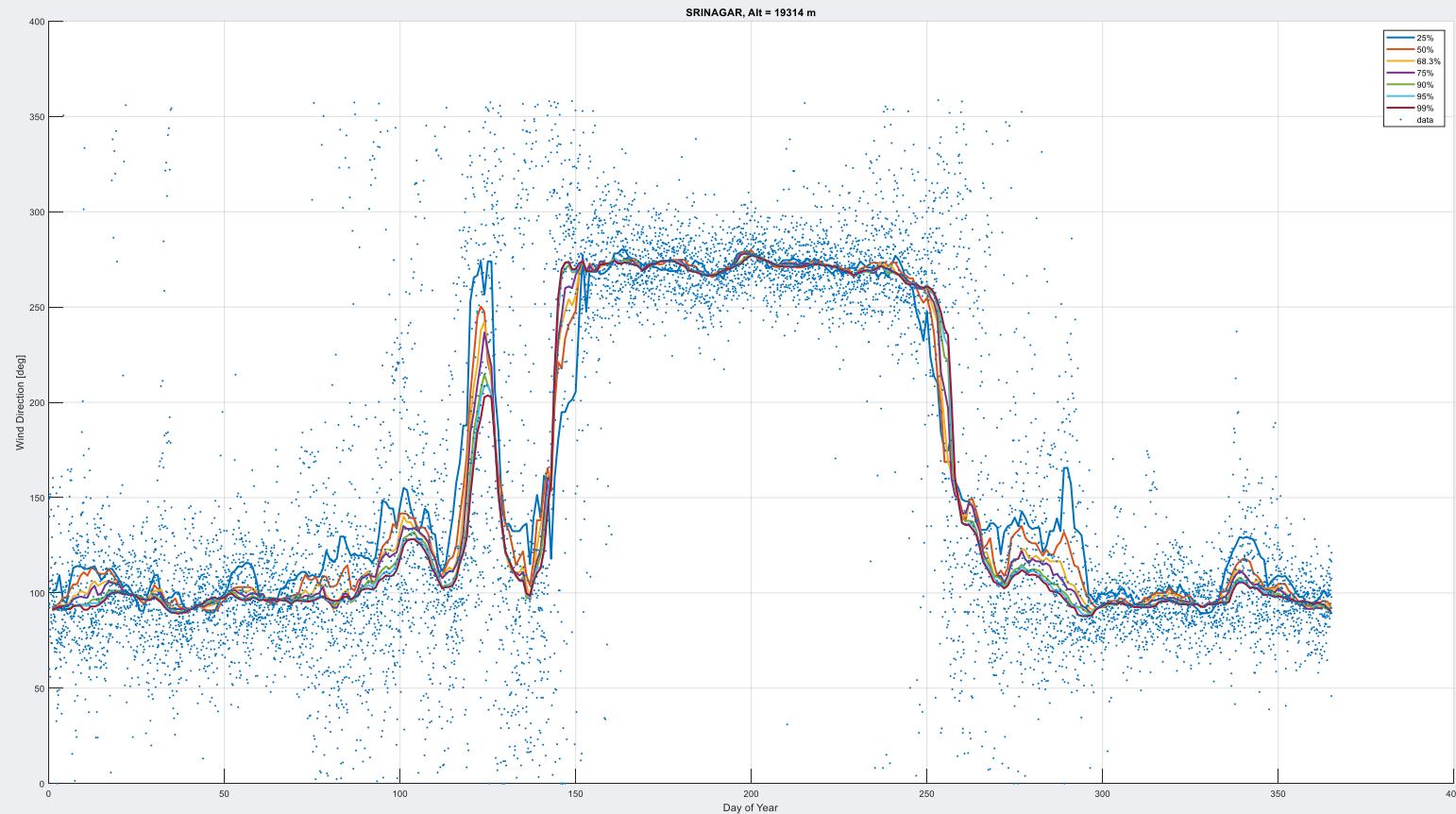
Wind Magnitude



SRINAGAR/INM00042027

Lat = 34.0833, Lon = 74.8333, , Alt = 19314 m

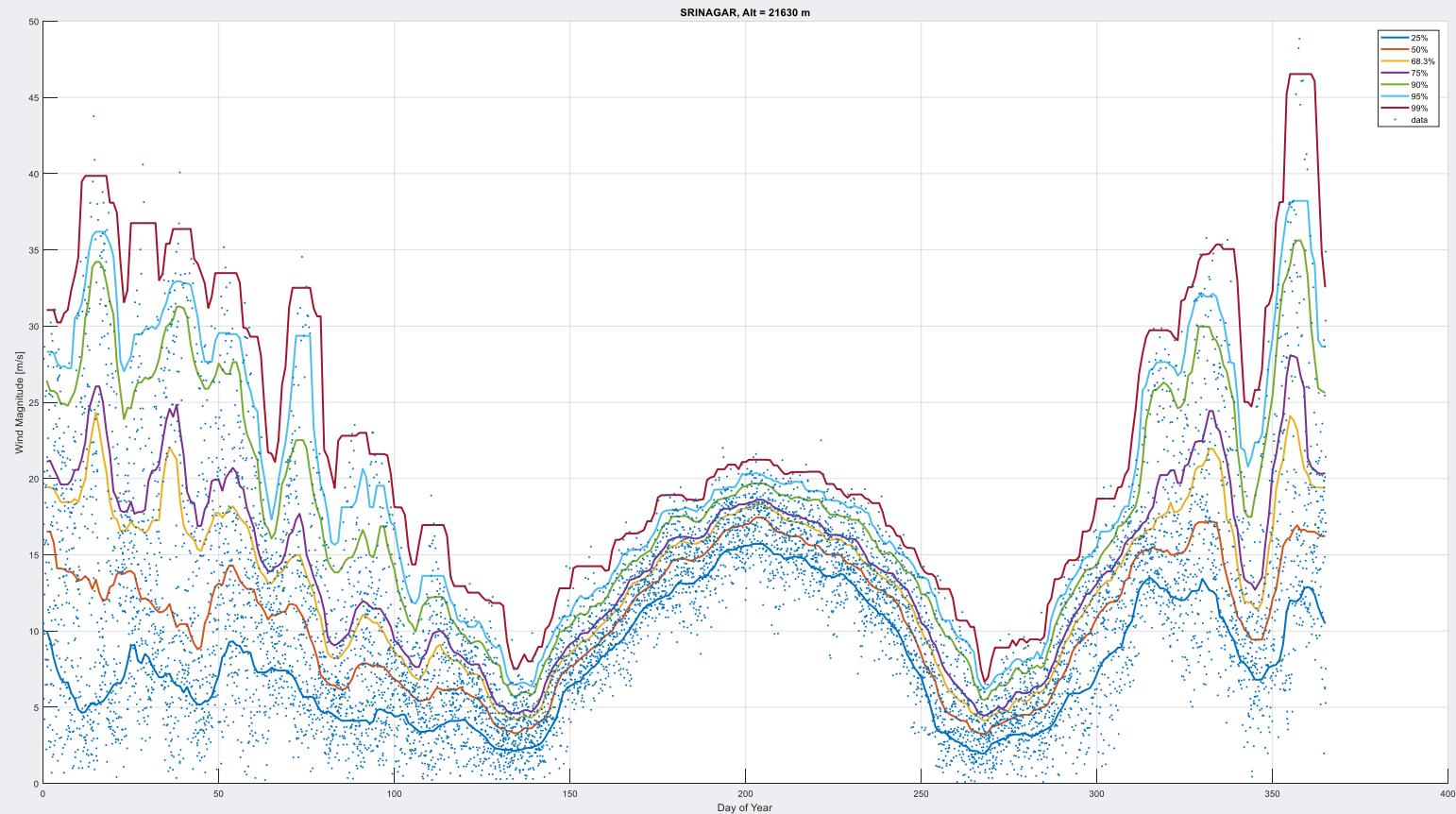
Wind Direction



SRINAGAR/INM00042027

Lat = 34.0833, Lon = 74.8333, , Alt = 21630 m

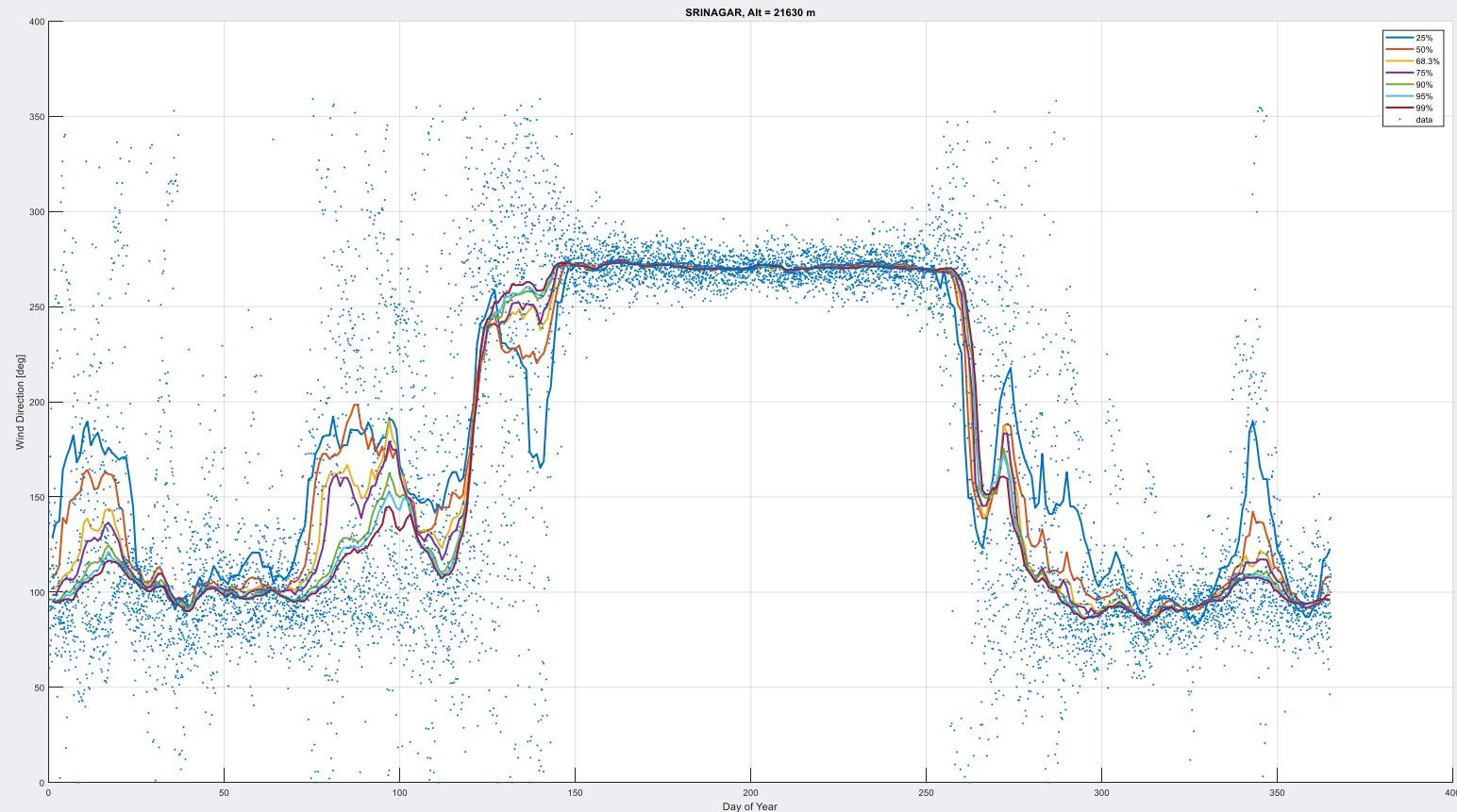
Wind Magnitude



SRINAGAR/INM00042027

Lat = 34.0833, Lon = 74.8333, , Alt = 21630 m

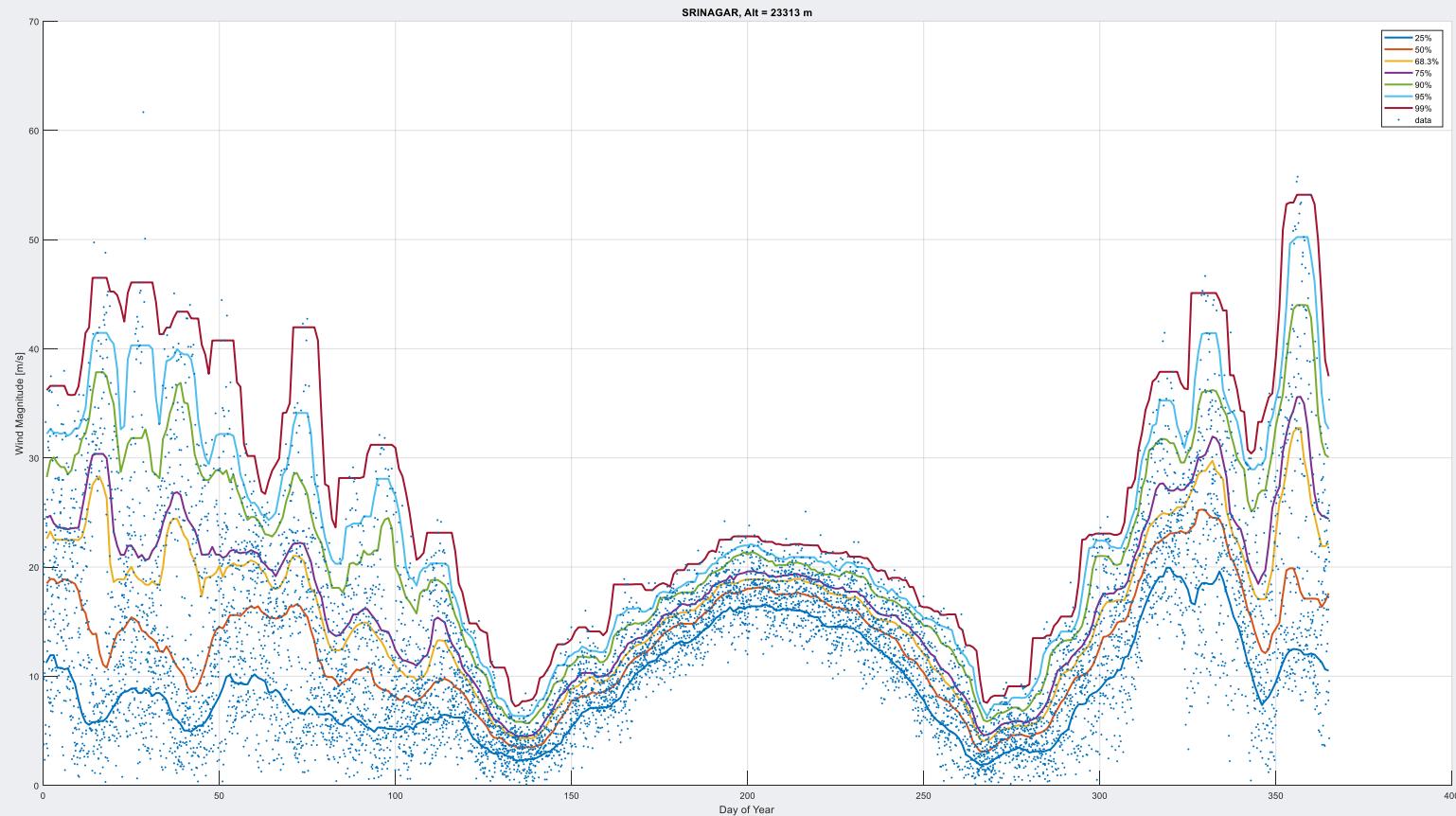
Wind Direction



SRINAGAR/INM00042027

Lat = 34.0833, Lon = 74.8333, Alt = 23313 m

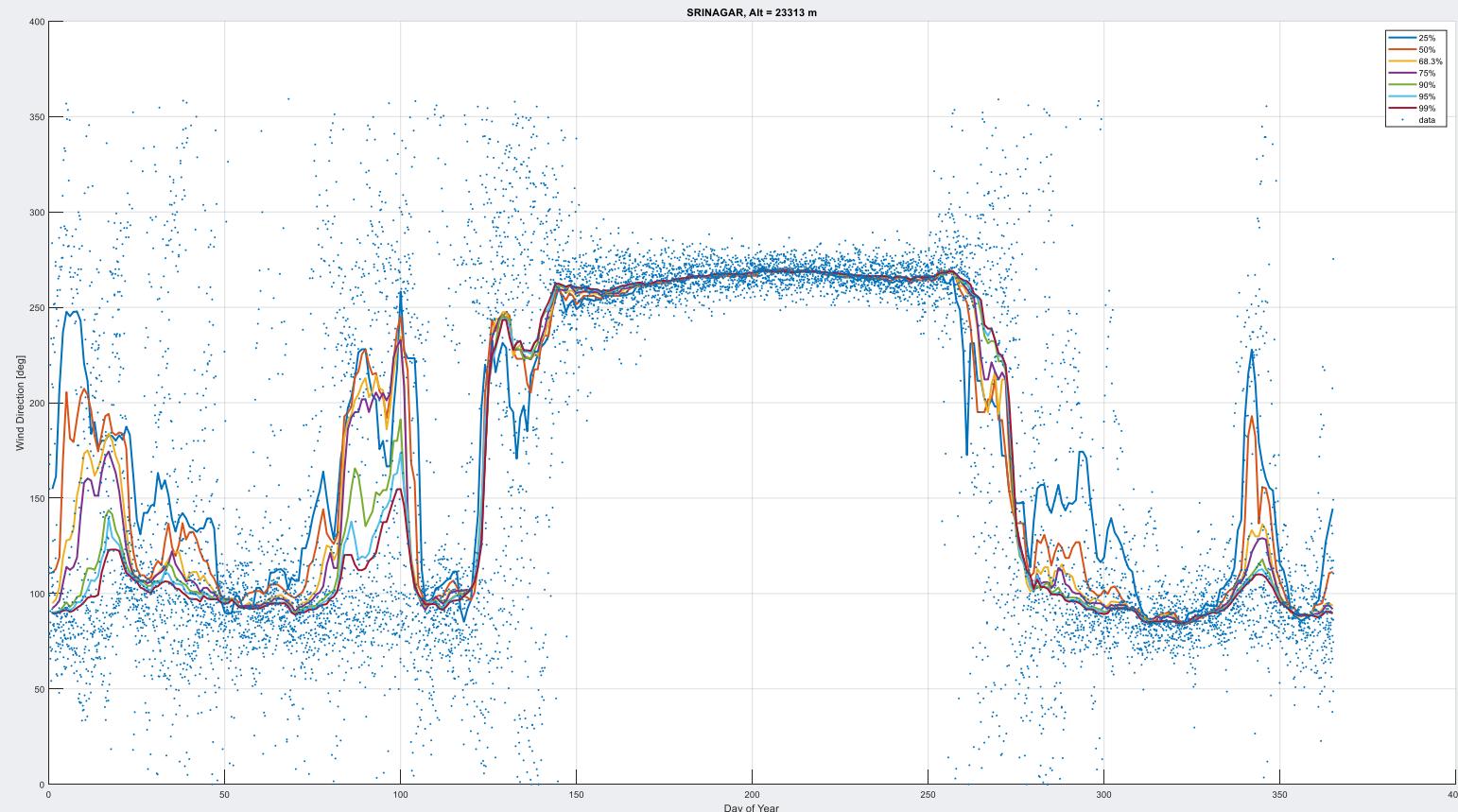
Wind Magnitude



SRINAGAR/INM00042027

Lat = 34.0833, Lon = 74.8333, Alt = 23313 m

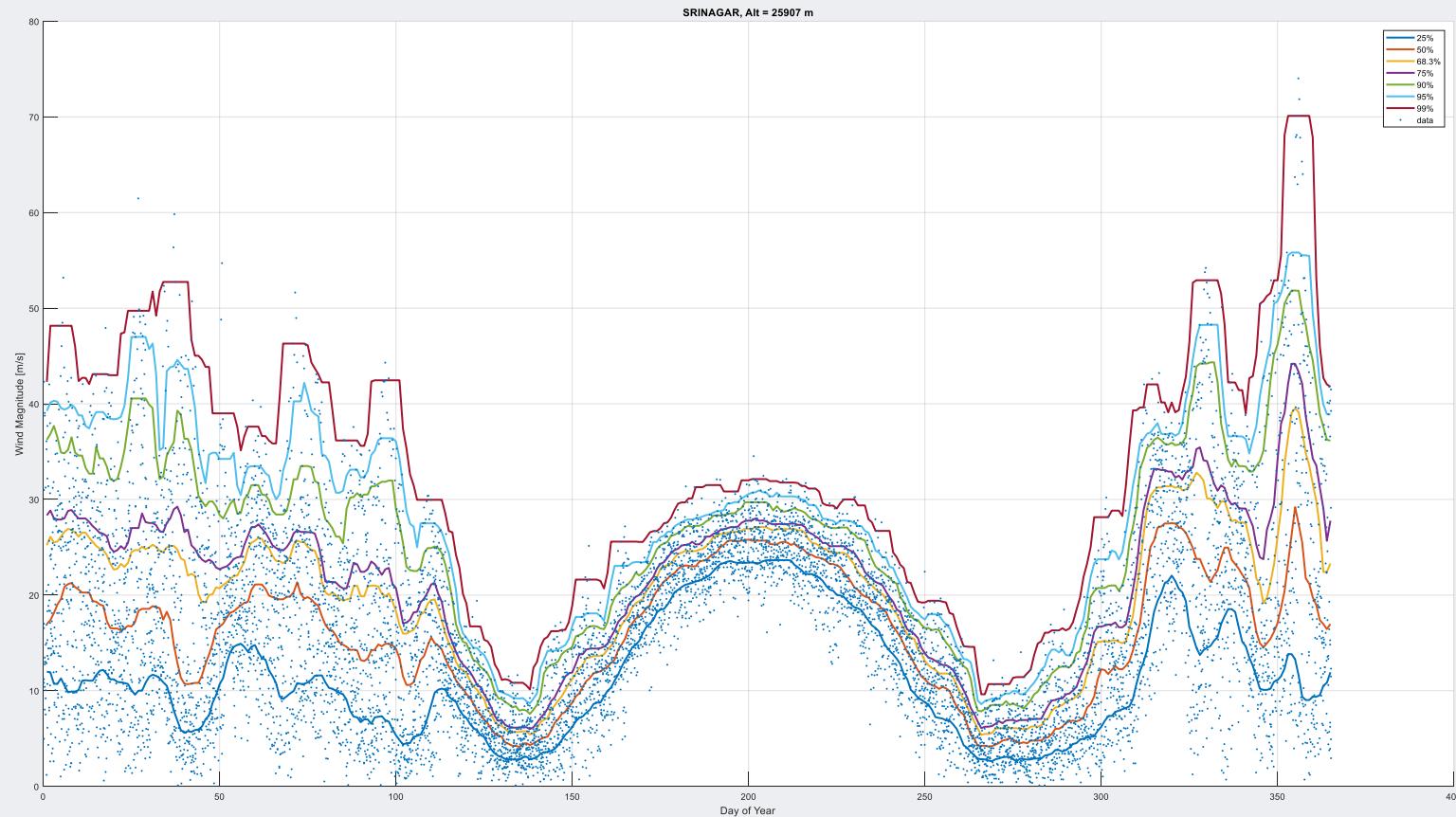
Wind Direction



SRINAGAR/INM00042027

Lat = 34.0833, Lon = 74.8333, Alt = 25907 m

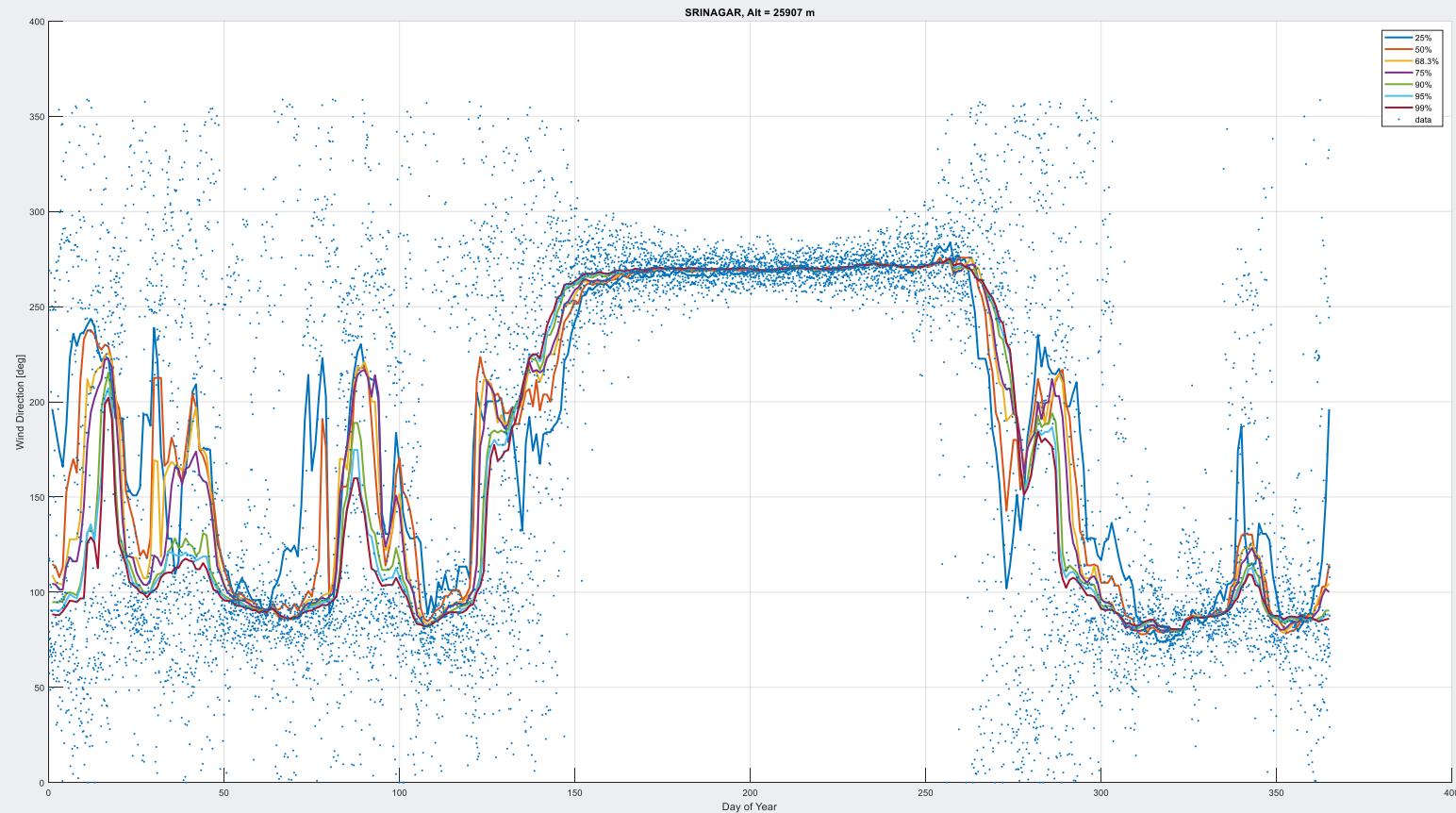
Wind Magnitude



SRINAGAR/INM00042027

Lat = 34.0833, Lon = 74.8333, Alt = 25907 m

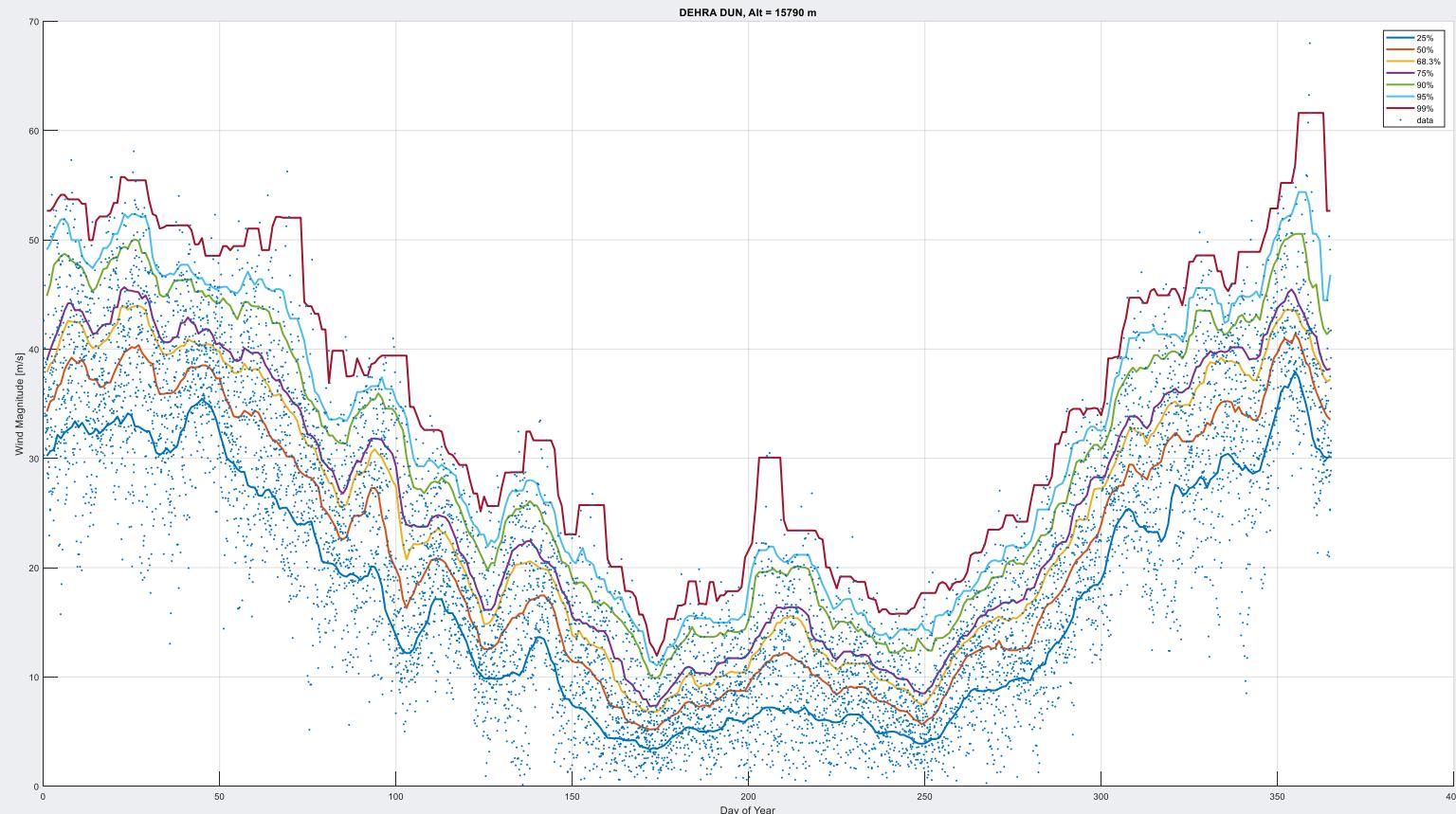
Wind Direction



DEHRA DUN/INM00042111

Lat = 30.3167, Lon = 78.0333, Alt = 15790 m

Wind Magnitude



DEHRA DUN/INM00042111

Lat = 30.3167, Lon = 78.0333, Alt = 15790 m

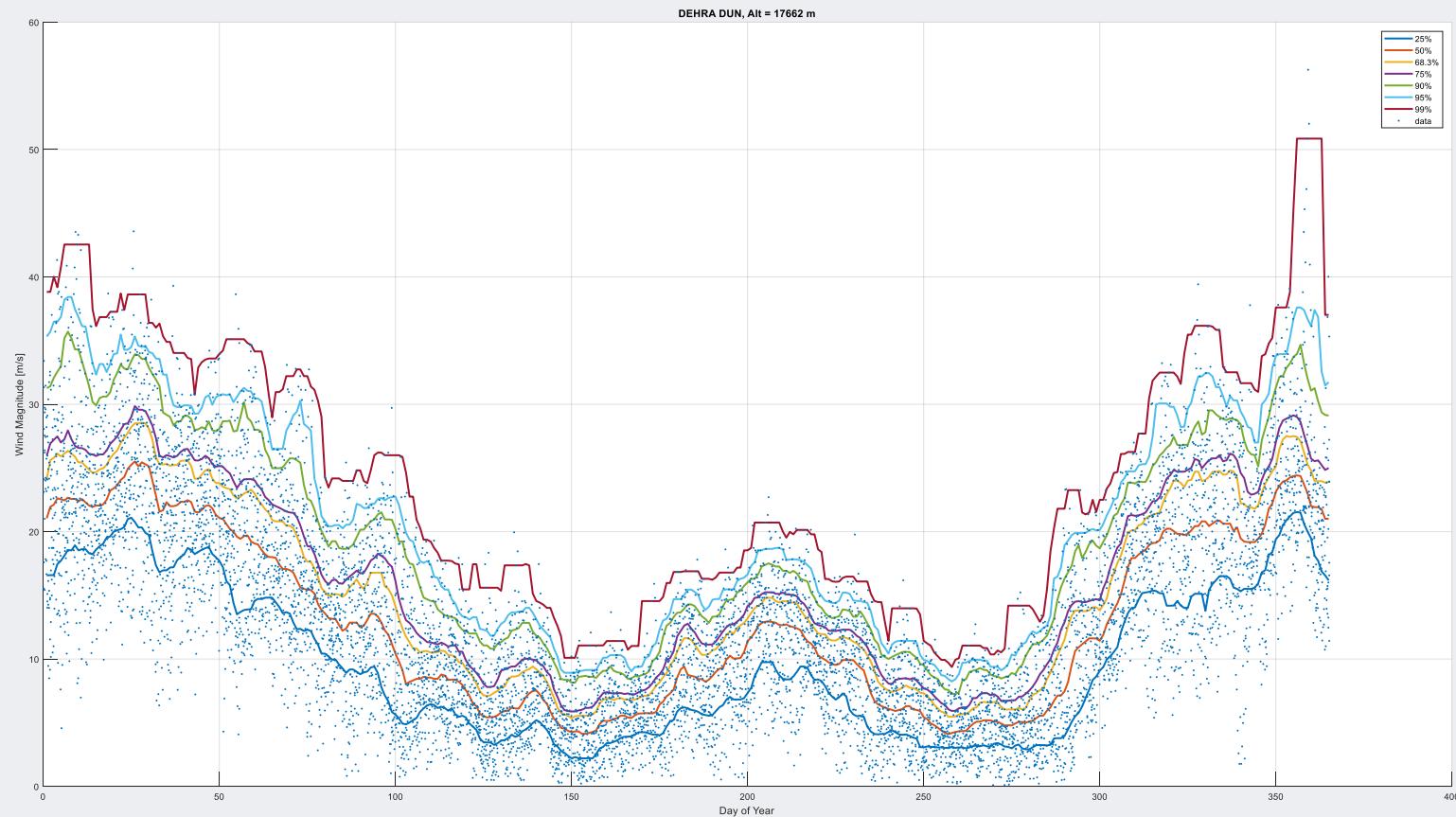
Wind Direction



DEHRA DUN/INM00042111

Lat = 30.3167, Lon = 78.0333, Alt = 17662 m

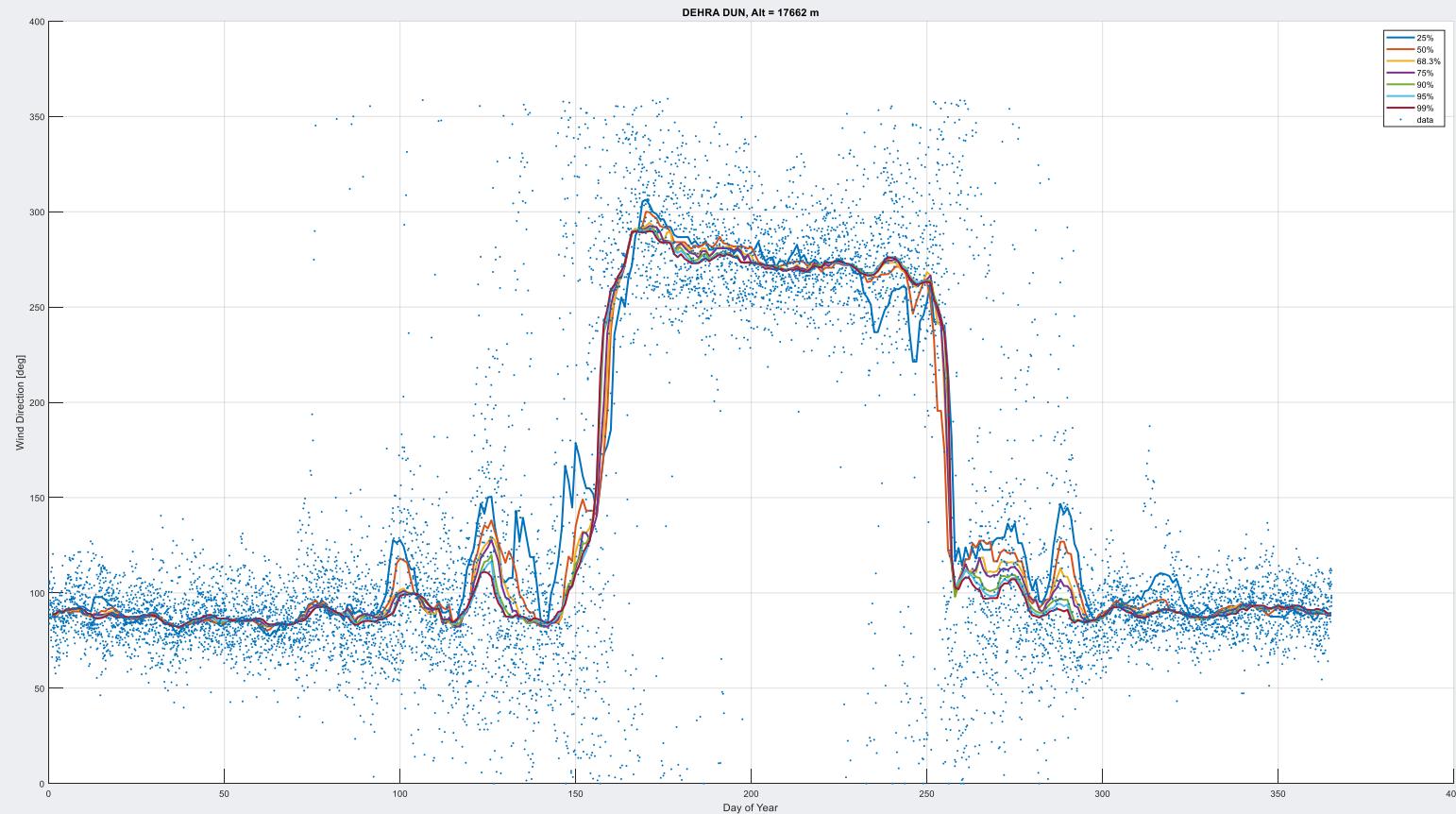
Wind Magnitude



DEHRA DUN/INM00042111

Lat = 30.3167, Lon = 78.0333, Alt = 17662 m

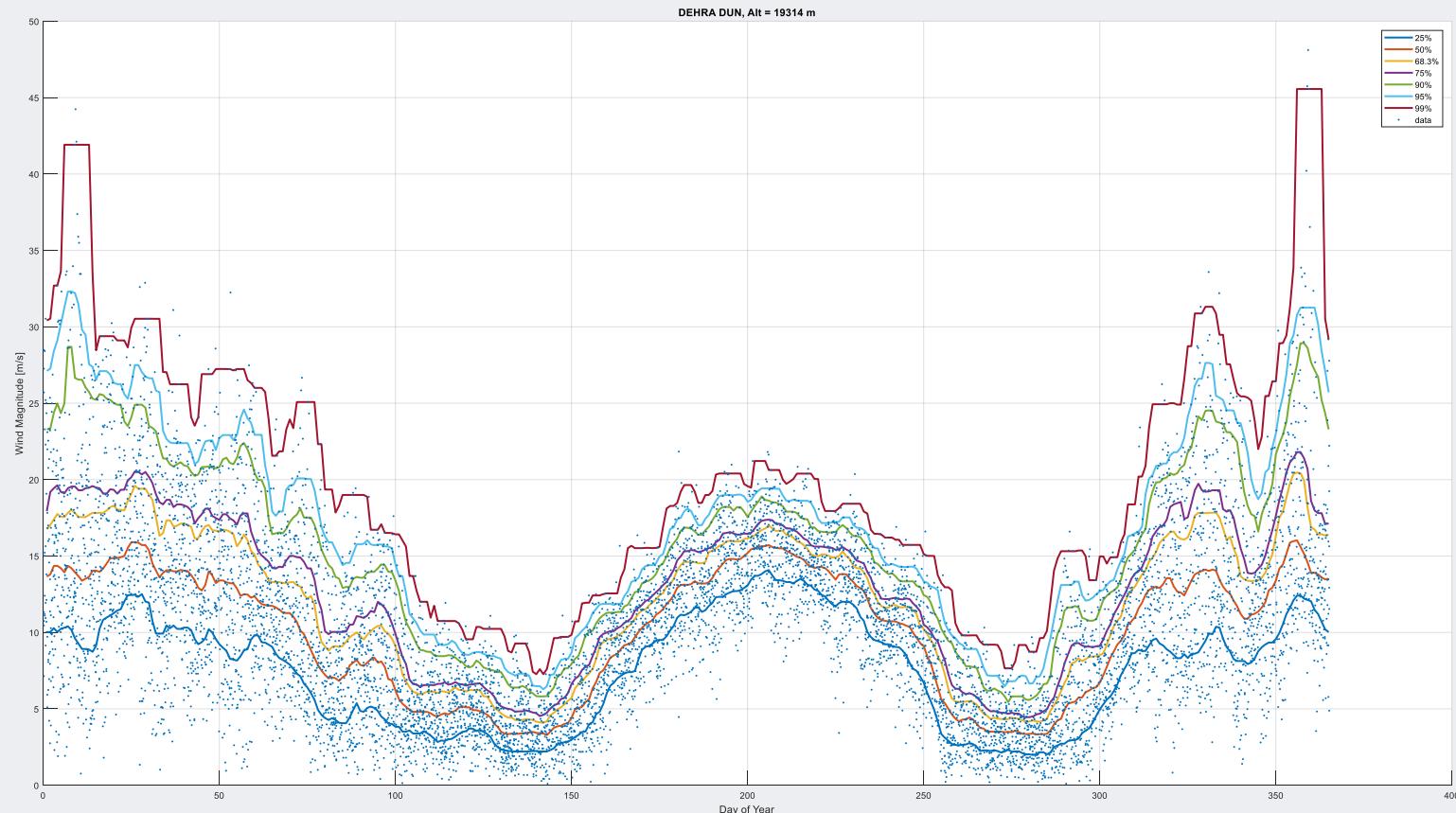
Wind Direction



DEHRA DUN/INM00042111

Lat = 30.3167, Lon = 78.0333, Alt = 19314 m

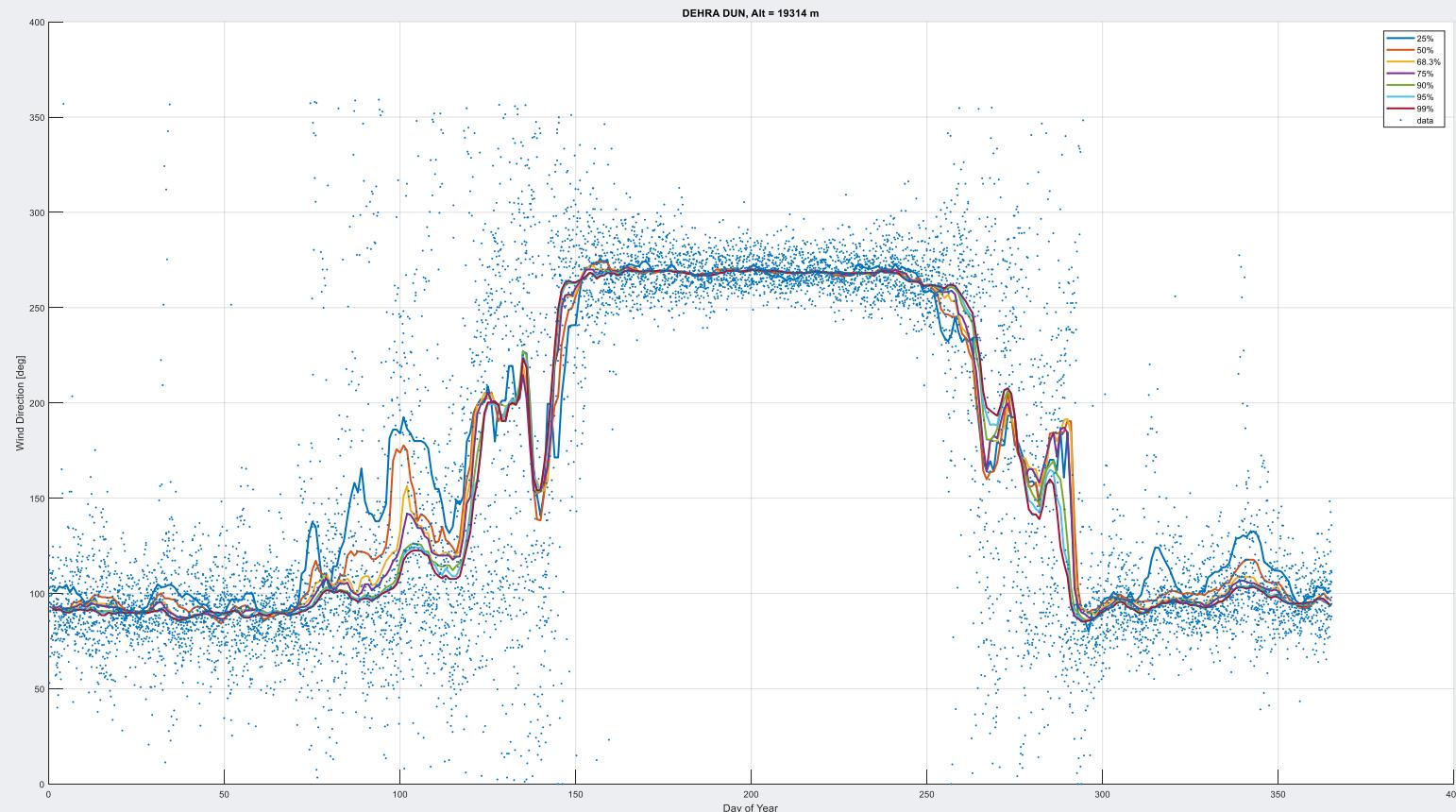
Wind Magnitude



DEHRA DUN/INM00042111

Lat = 30.3167, Lon = 78.0333, Alt = 19314 m

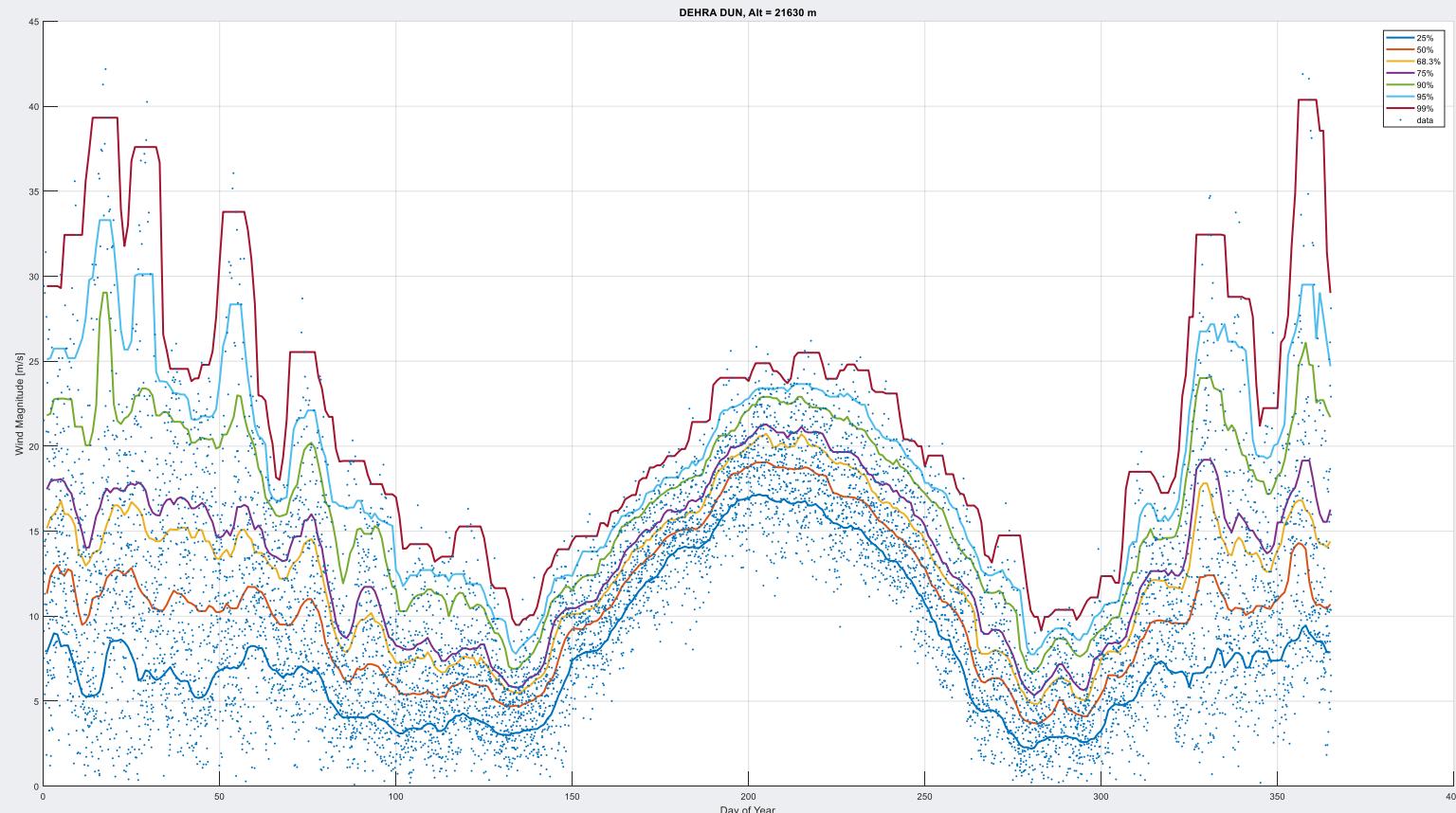
Wind Direction



DEHRA DUN/INM00042111

Lat = 30.3167, Lon = 78.0333, Alt = 21630 m

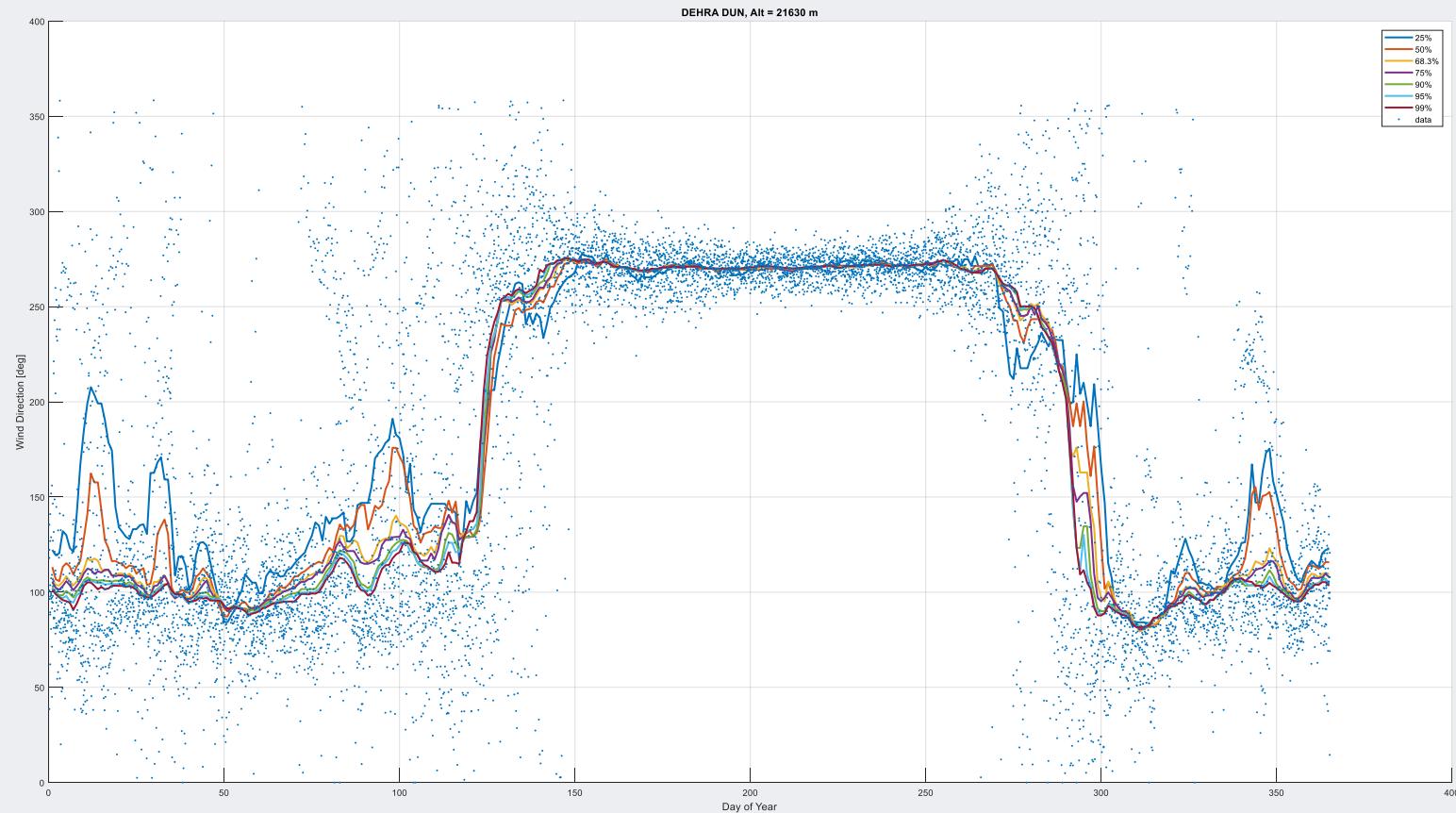
Wind Magnitude



DEHRA DUN/INM00042111

Lat = 30.3167, Lon = 78.0333, Alt = 21630 m

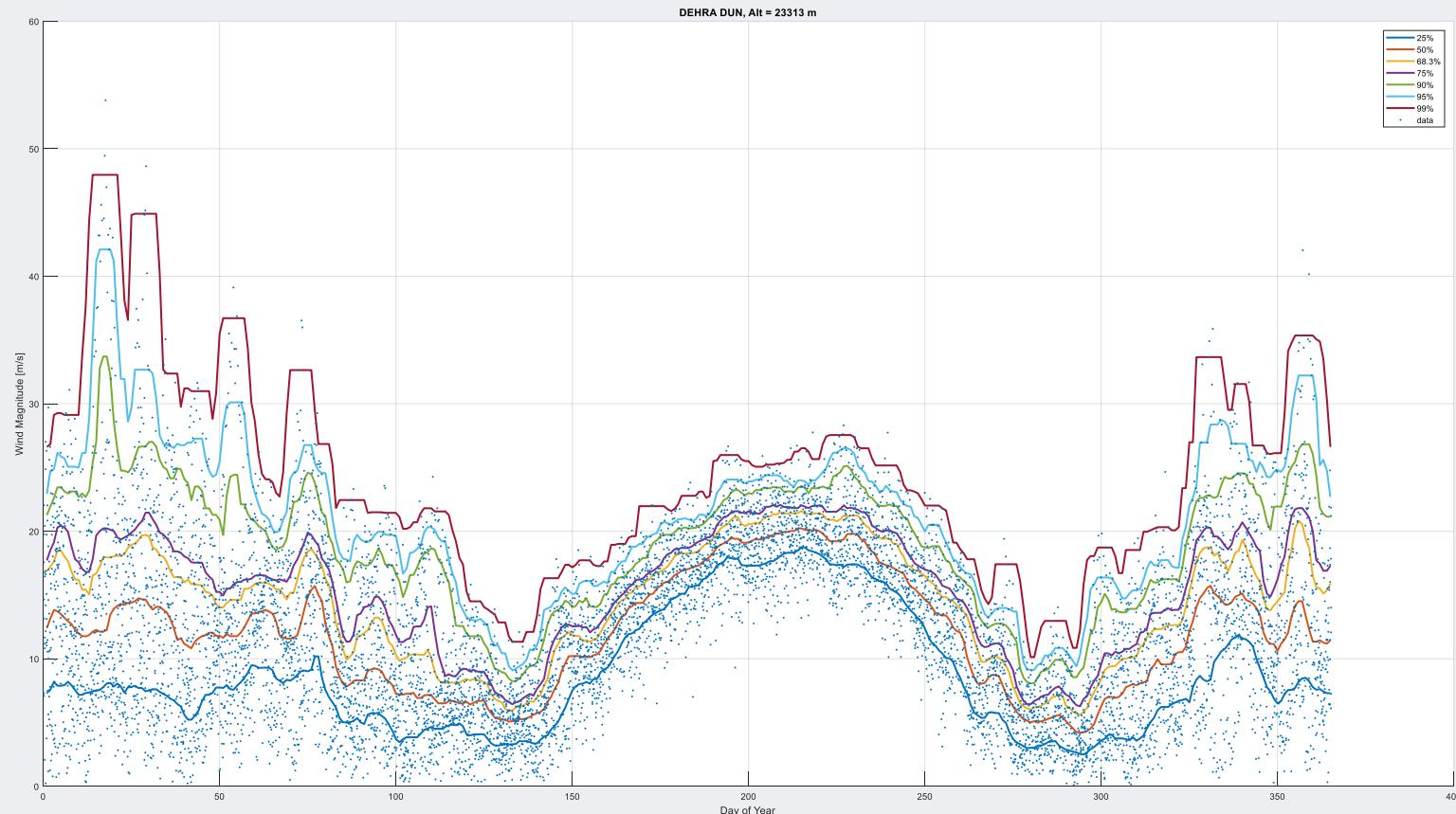
Wind Direction



DEHRA DUN/INM00042111

Lat = 30.3167, Lon = 78.0333, Alt = 23313 m

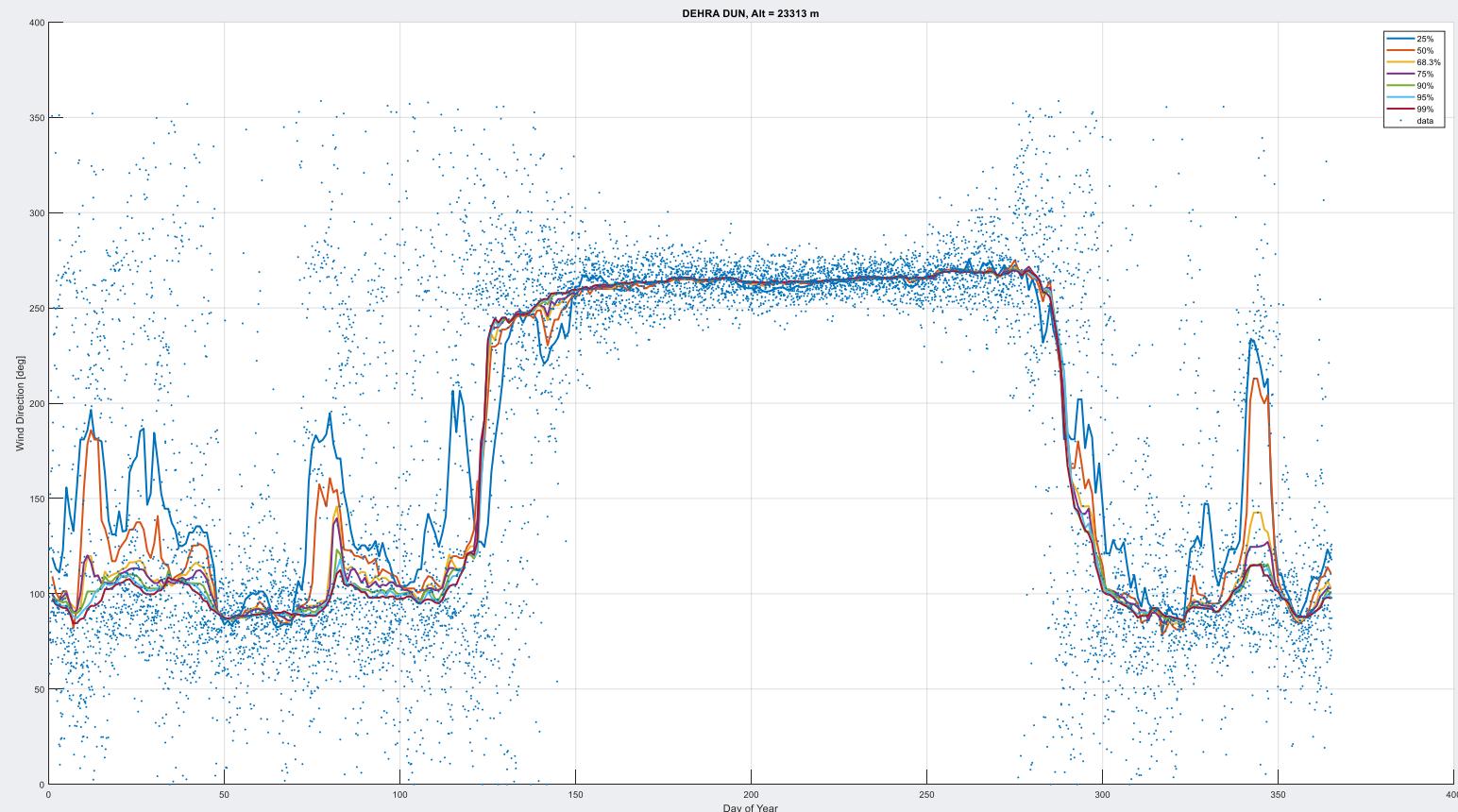
Wind Magnitude



DEHRA DUN/INM00042111

Lat = 30.3167, Lon = 78.0333, Alt = 23313 m

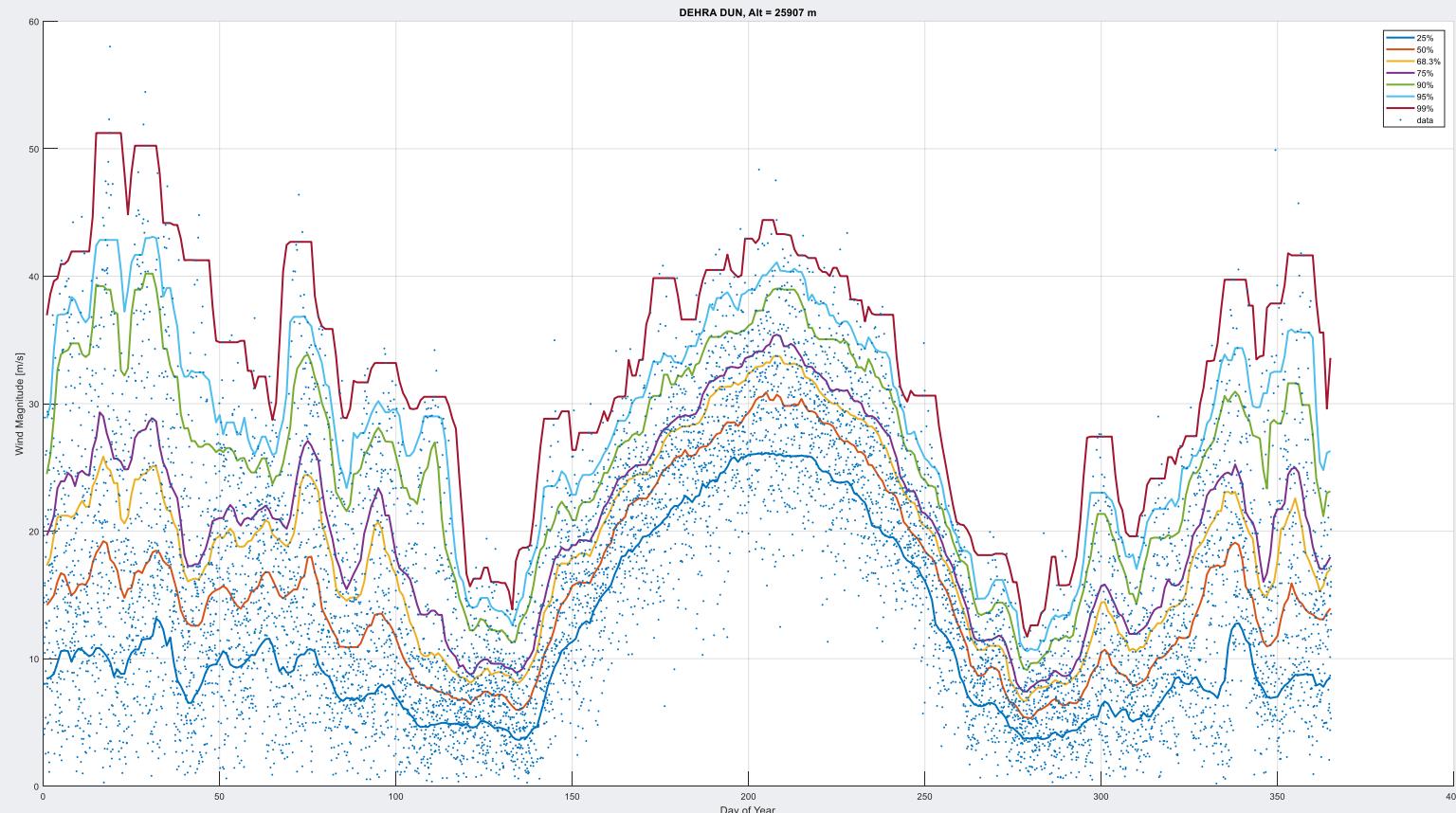
Wind Direction



DEHRA DUN/INM00042111

Lat = 30.3167, Lon = 78.0333, Alt = 25907 m

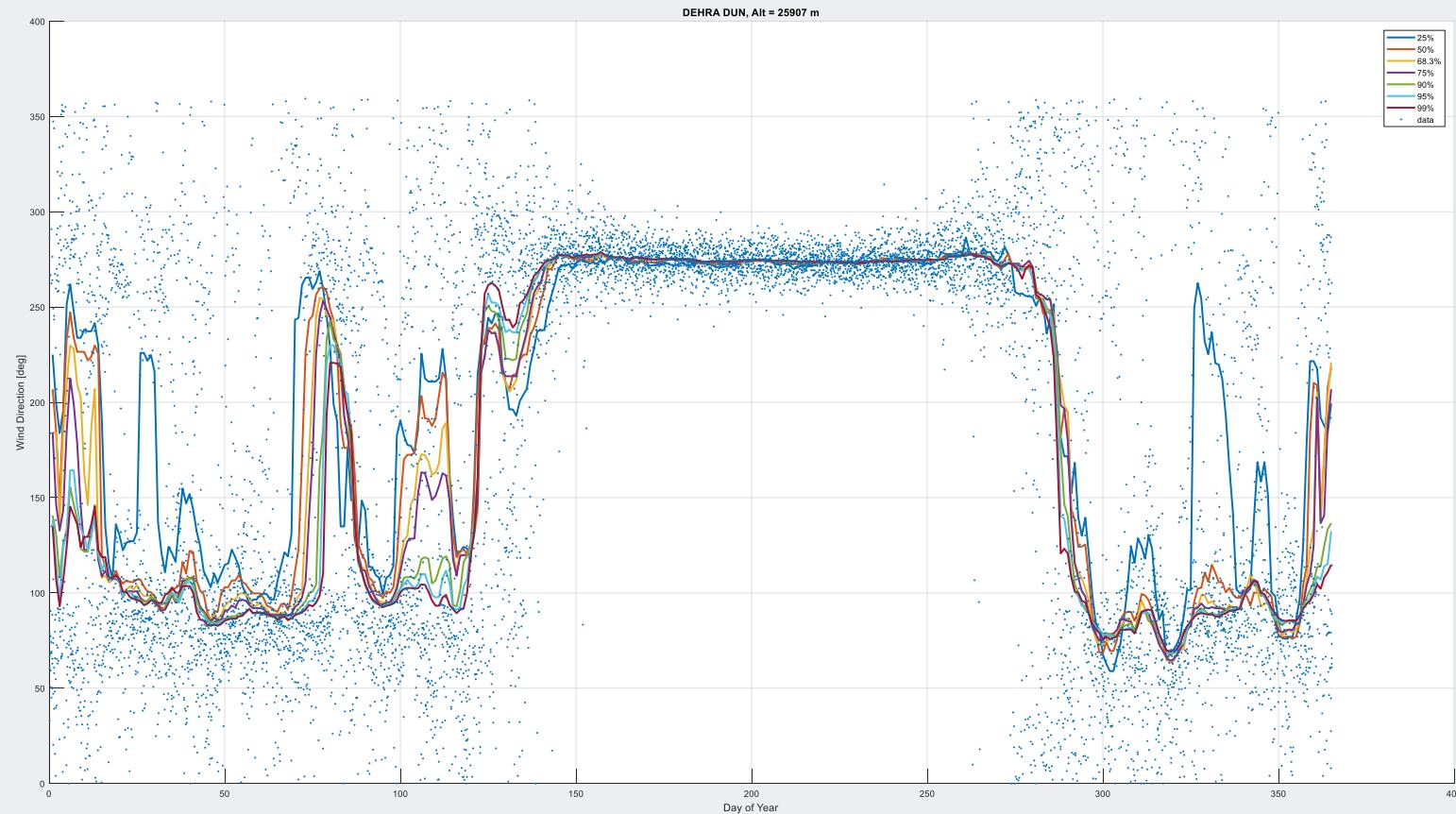
Wind Magnitude



DEHRA DUN/INM00042111

Lat = 30.3167, Lon = 78.0333, Alt = 25907 m

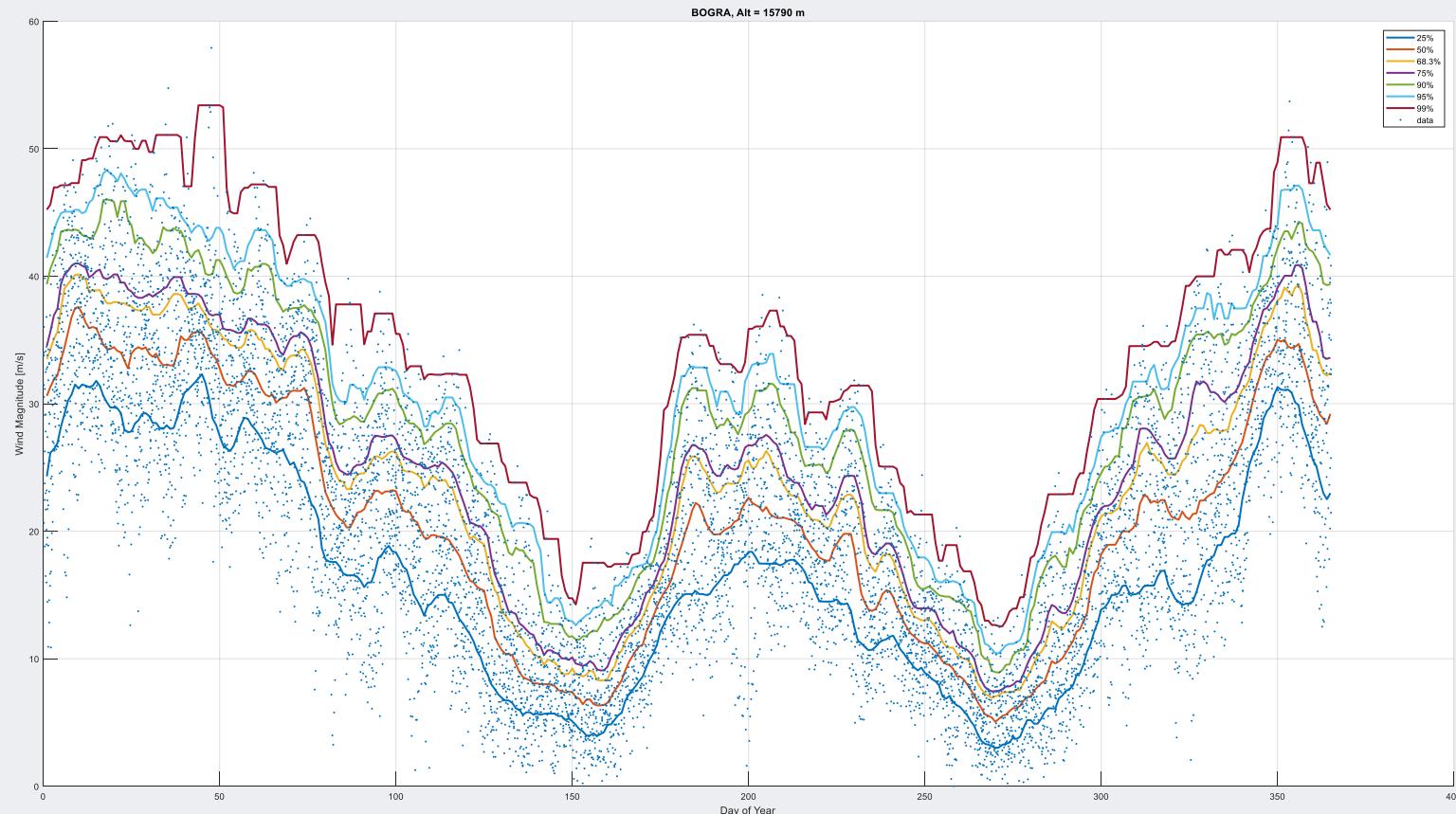
Wind Direction



BOGRA/BGM00041883

Lat = 24.85, Lon = 89.3667, Alt = 15790 m

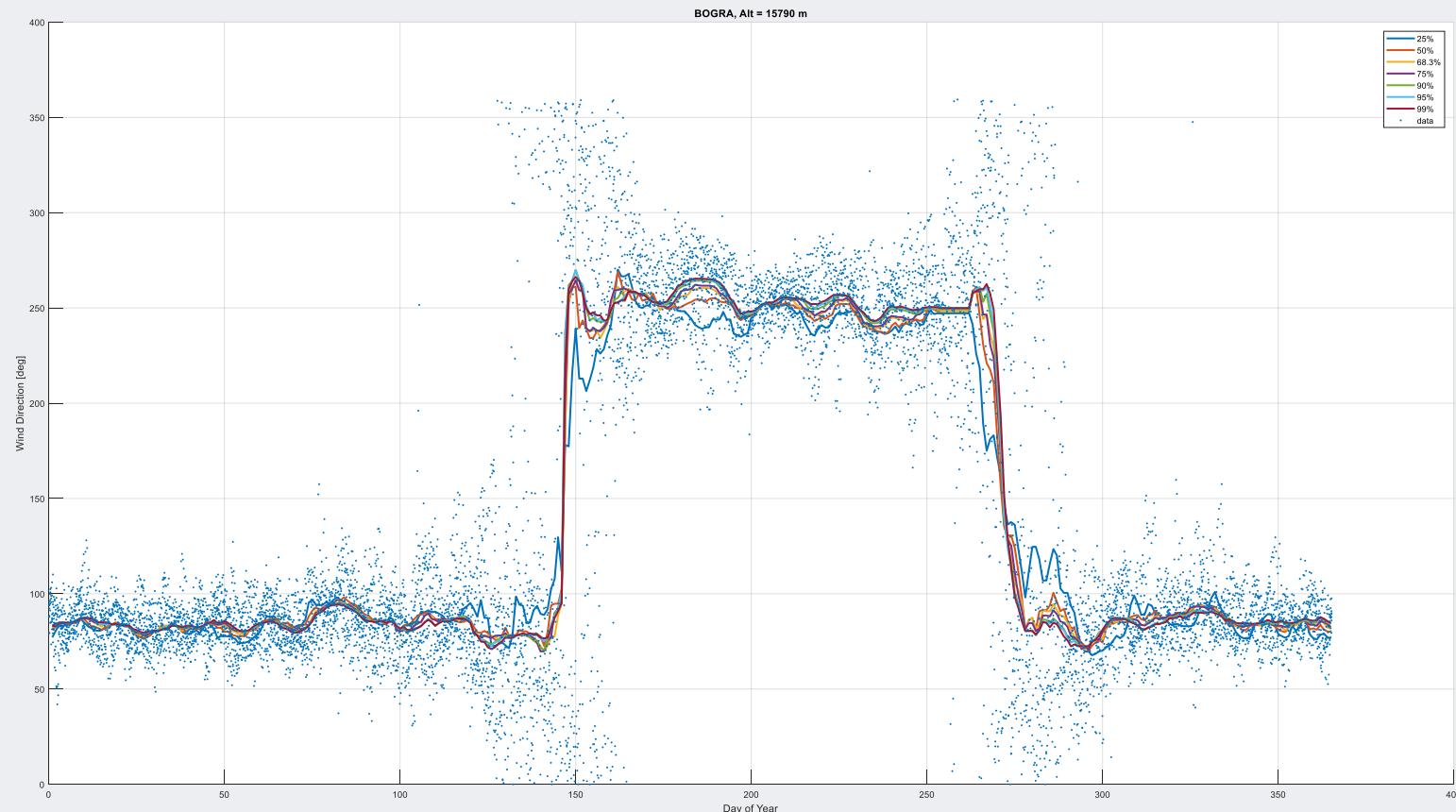
Wind Magnitude



BOGRA/BGM00041883

Lat = 24.85, Lon = 89.3667, Alt = 15790 m

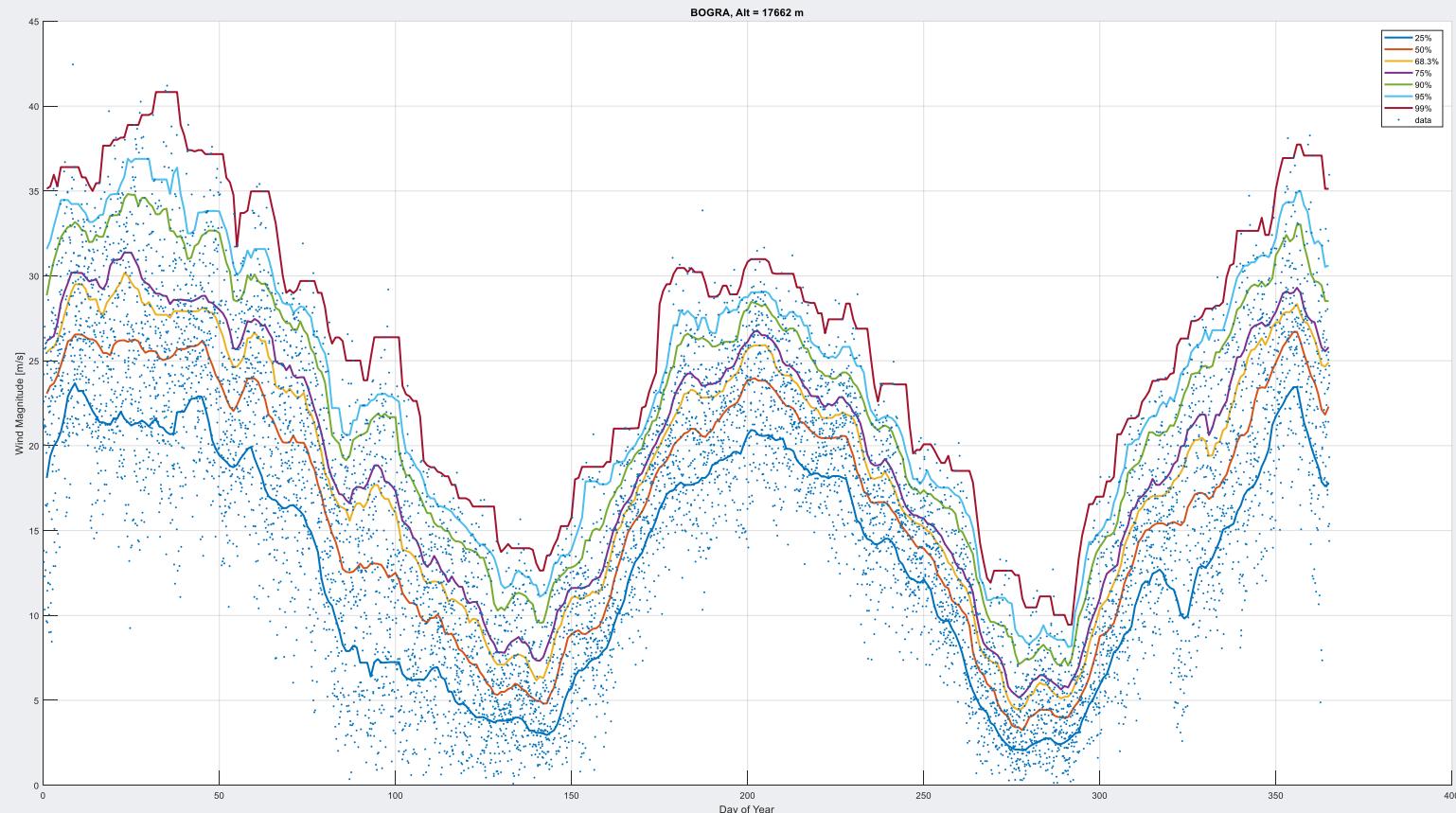
Wind Direction



BOGRA/BGM00041883

Lat = 24.85, Lon = 89.3667, Alt = 17662 m

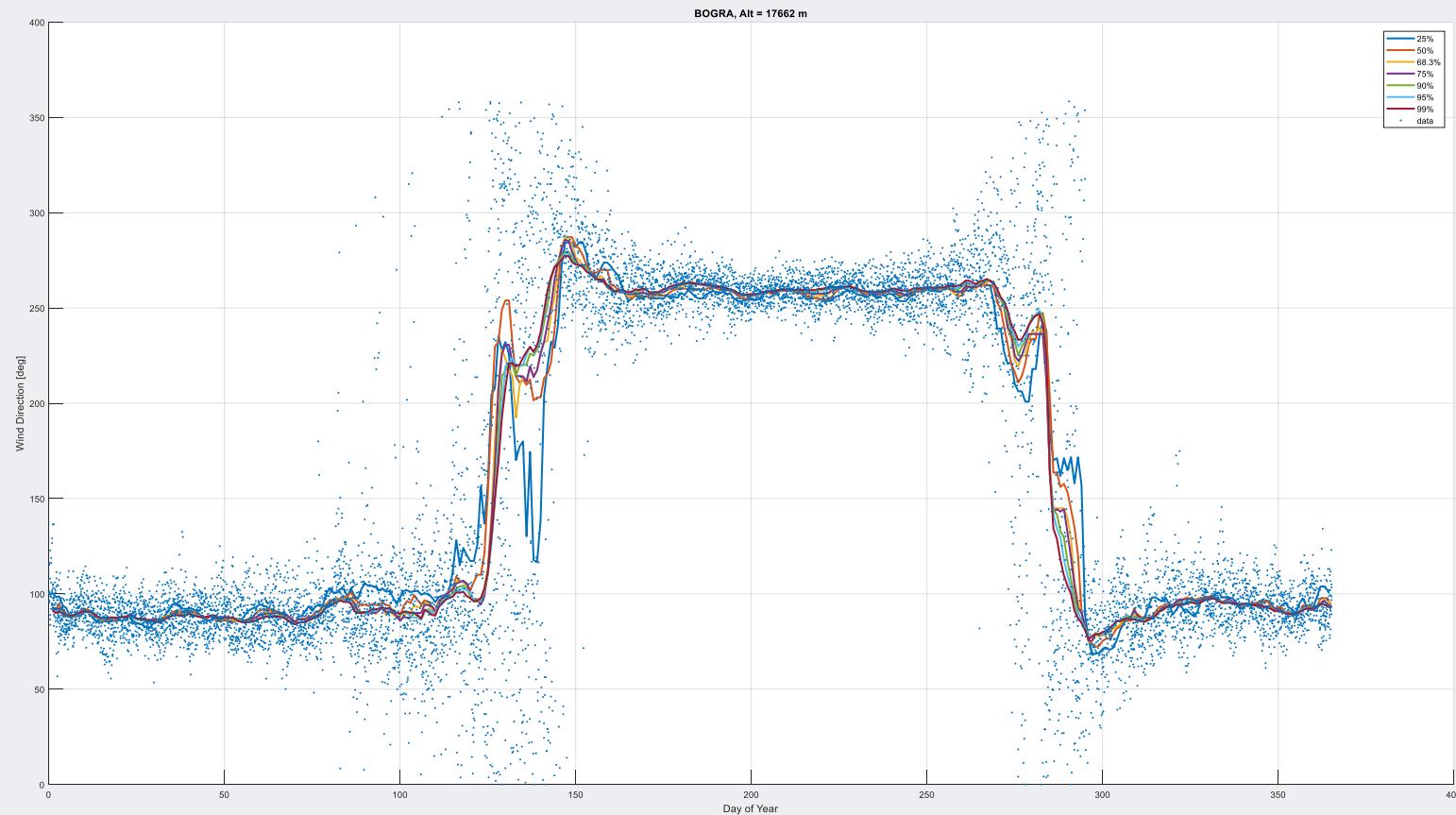
Wind Magnitude



BOGRA/BGM00041883

Lat = 24.85, Lon = 89.3667, Alt = 17662 m

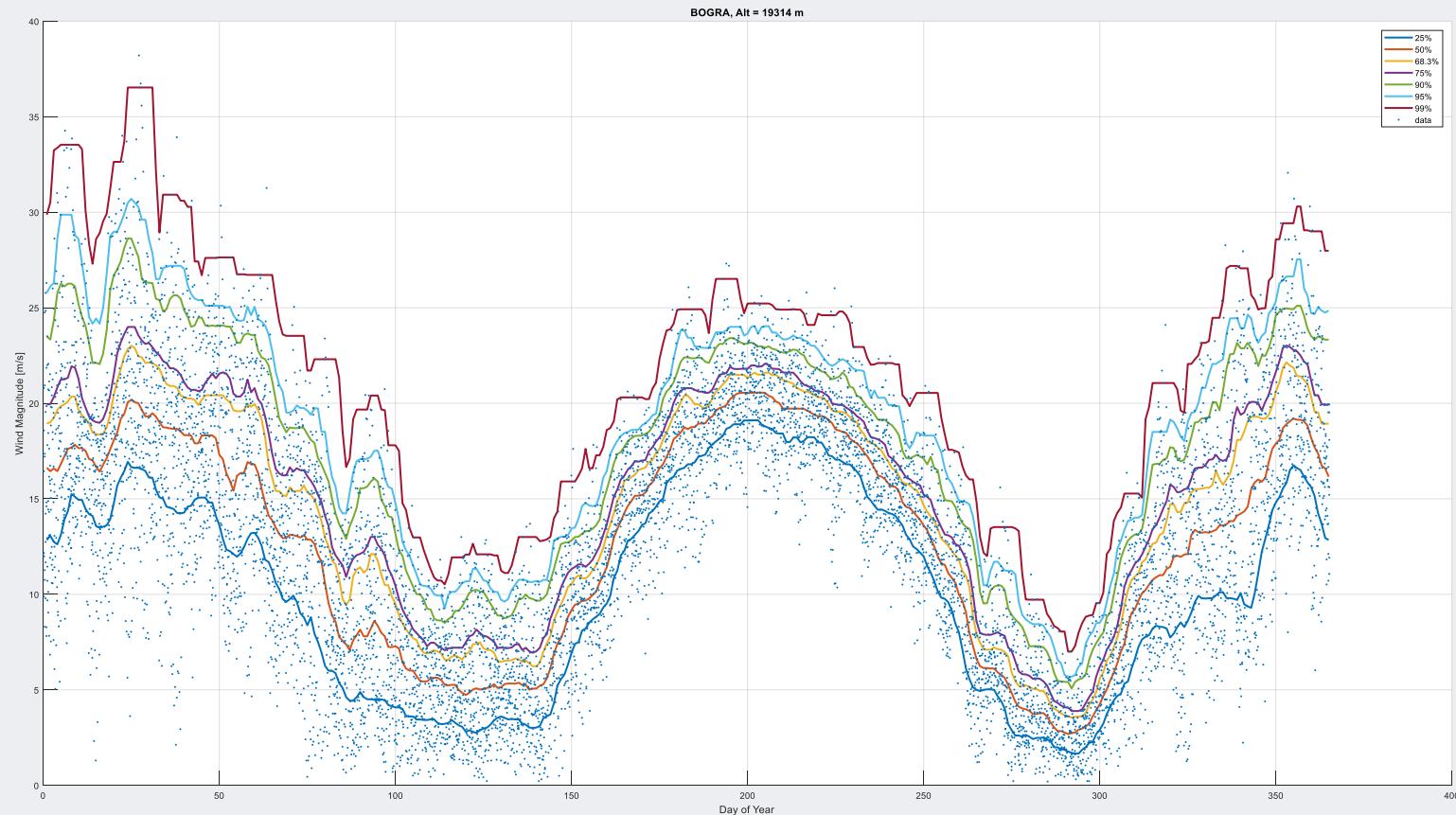
Wind Direction



BOGRA/BGM00041883

Lat = 24.85, Lon = 89.3667, Alt = 19314 m

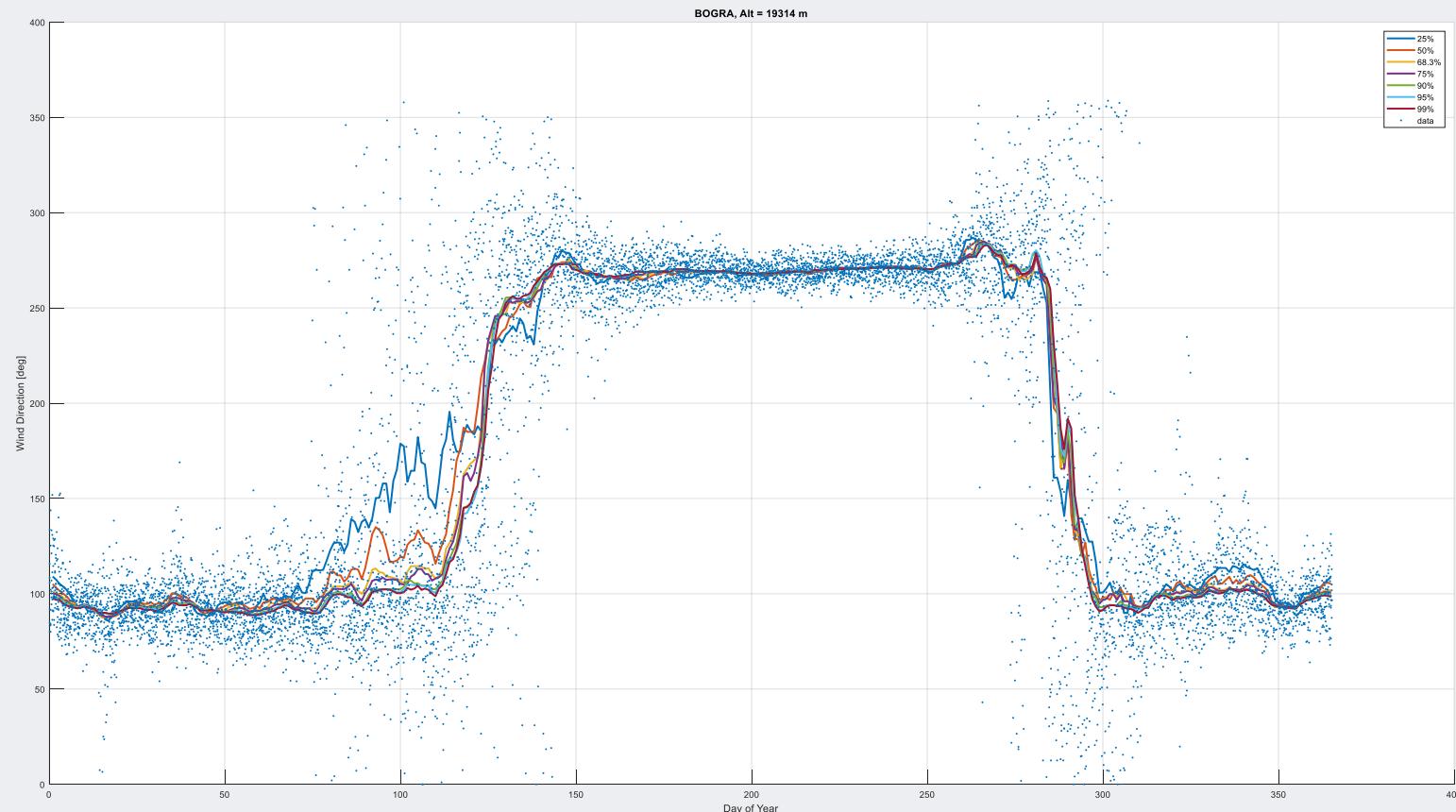
Wind Magnitude



BOGRA/BGM00041883

Lat = 24.85, Lon = 89.3667, Alt = 19314 m

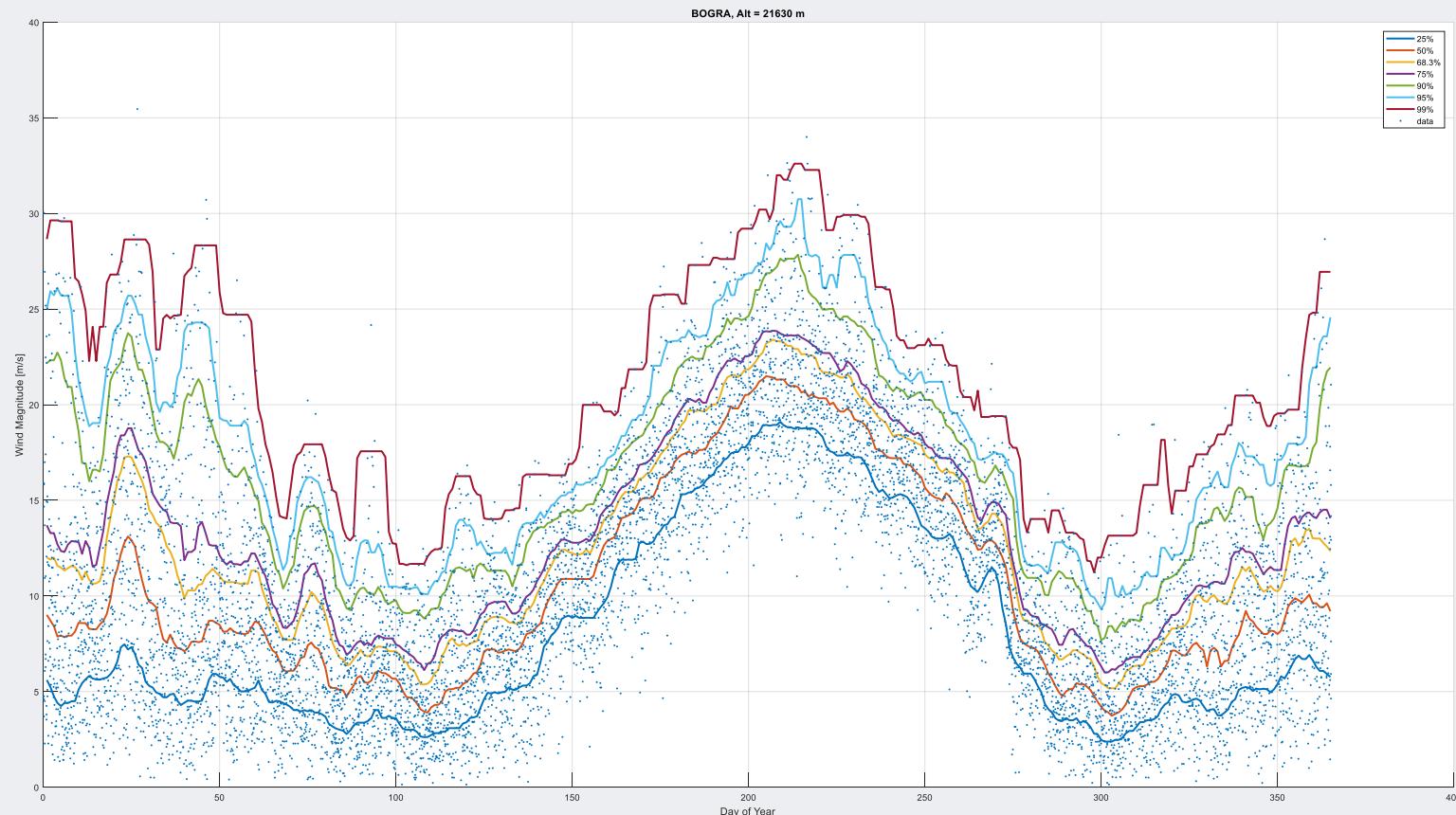
Wind Direction



BOGRA/BGM00041883

Lat = 24.85, Lon = 89.3667, Alt = 21630 m

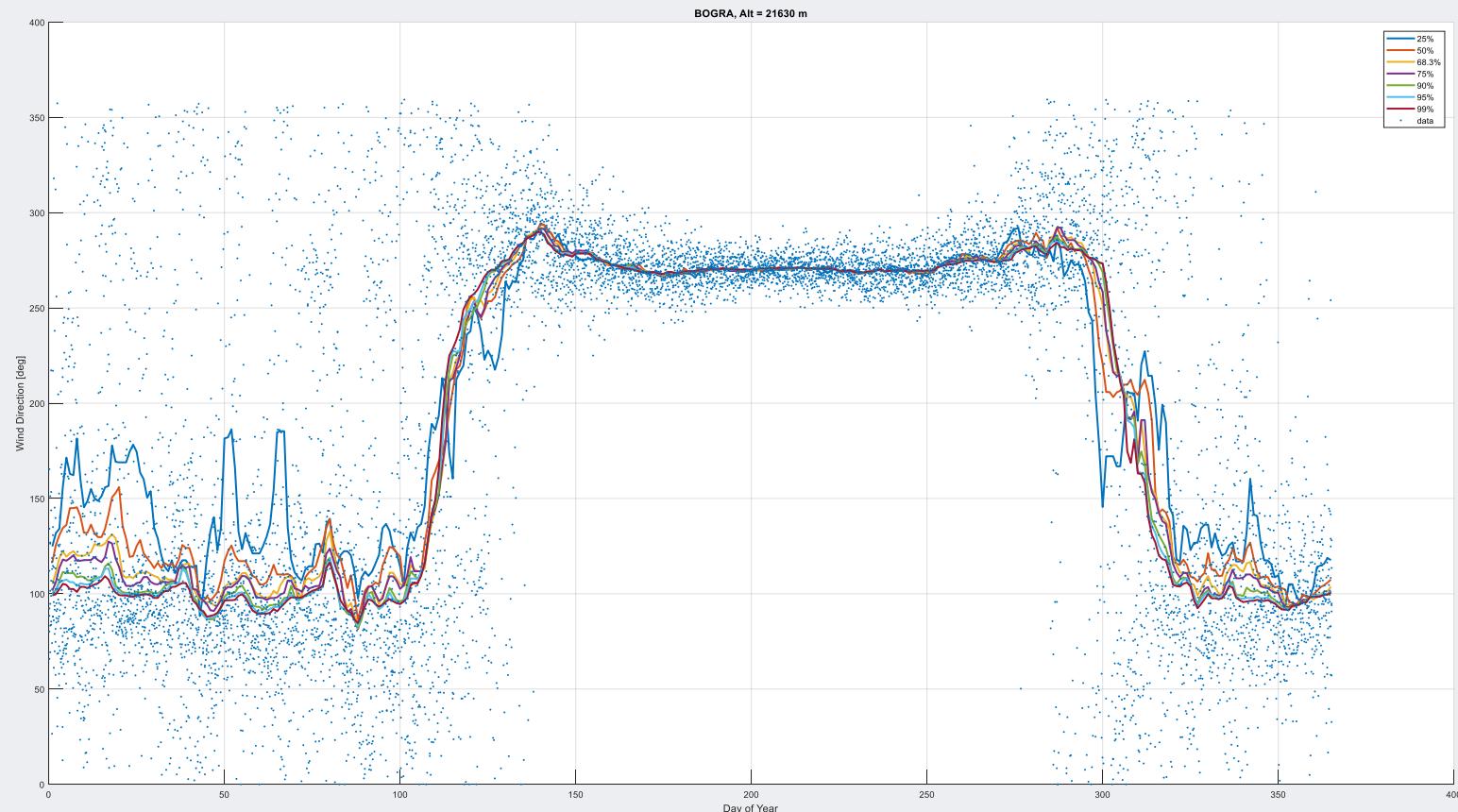
Wind Magnitude



BOGRA/BGM00041883

Lat = 24.85, Lon = 89.3667, Alt = 21630 m

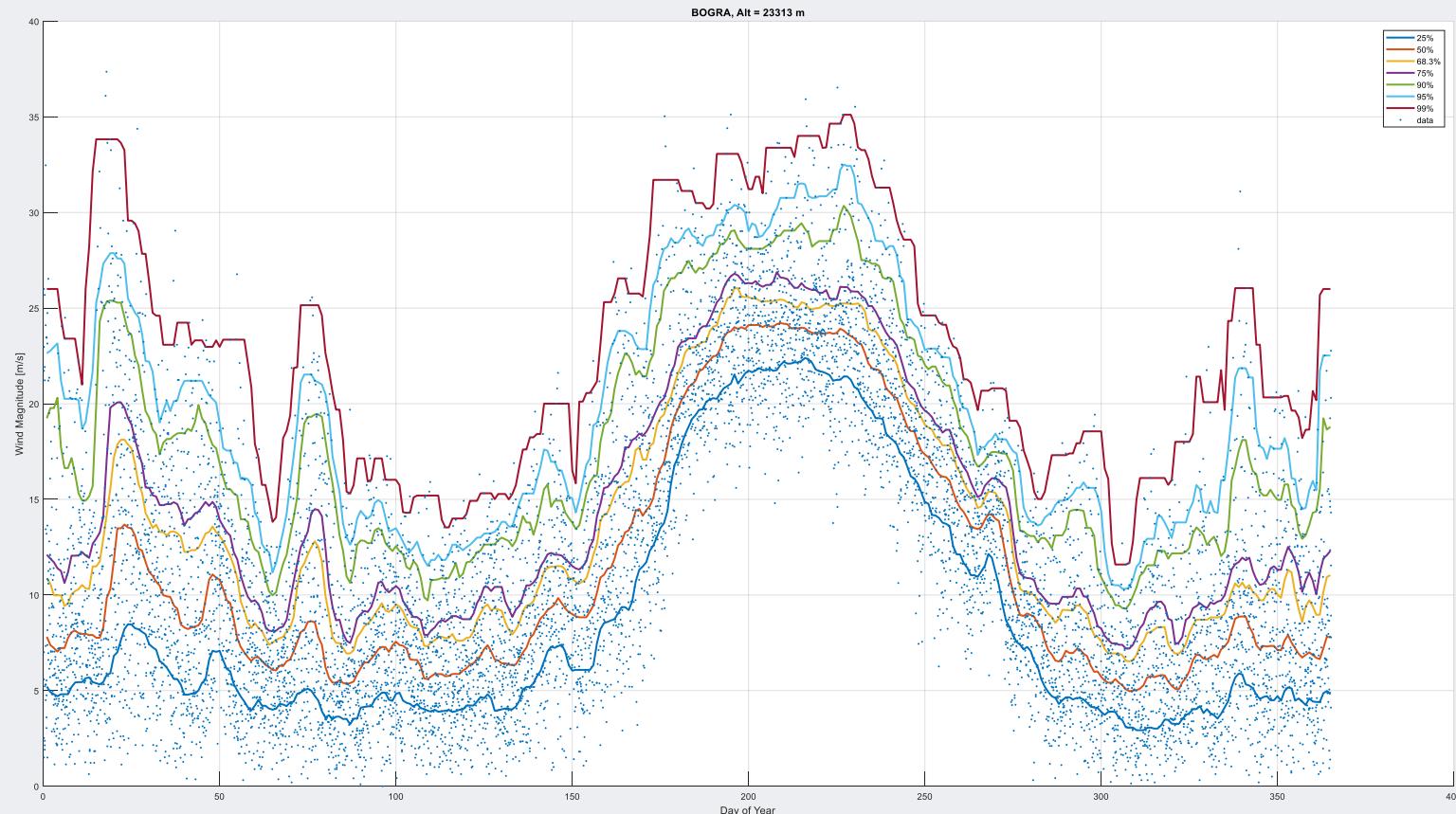
Wind Direction



BOGRA/BGM00041883

Lat = 24.85, Lon = 89.3667, Alt = 23313 m

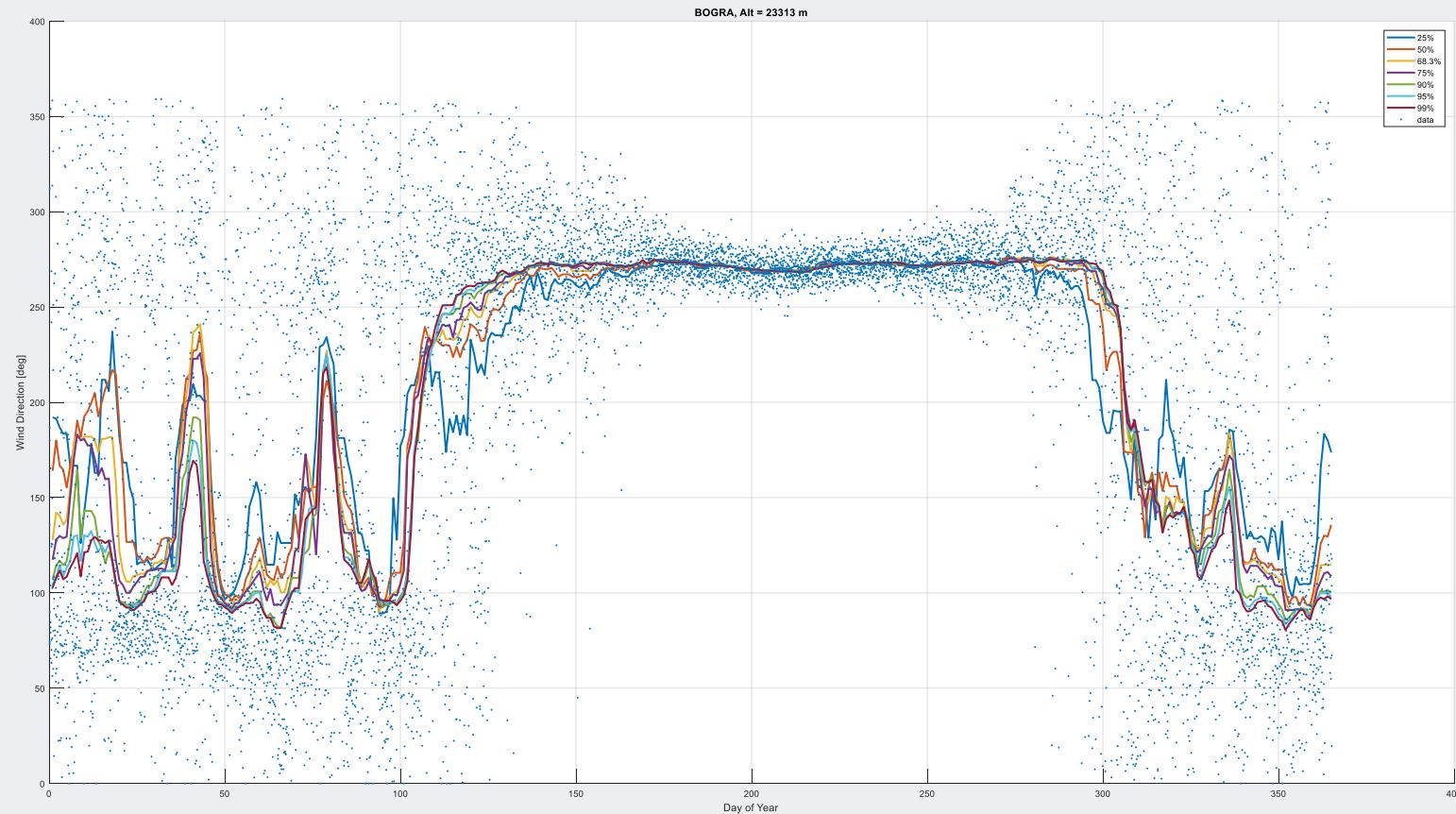
Wind Magnitude



BOGRA/BGM00041883

Lat = 24.85, Lon = 89.3667, Alt = 23313 m

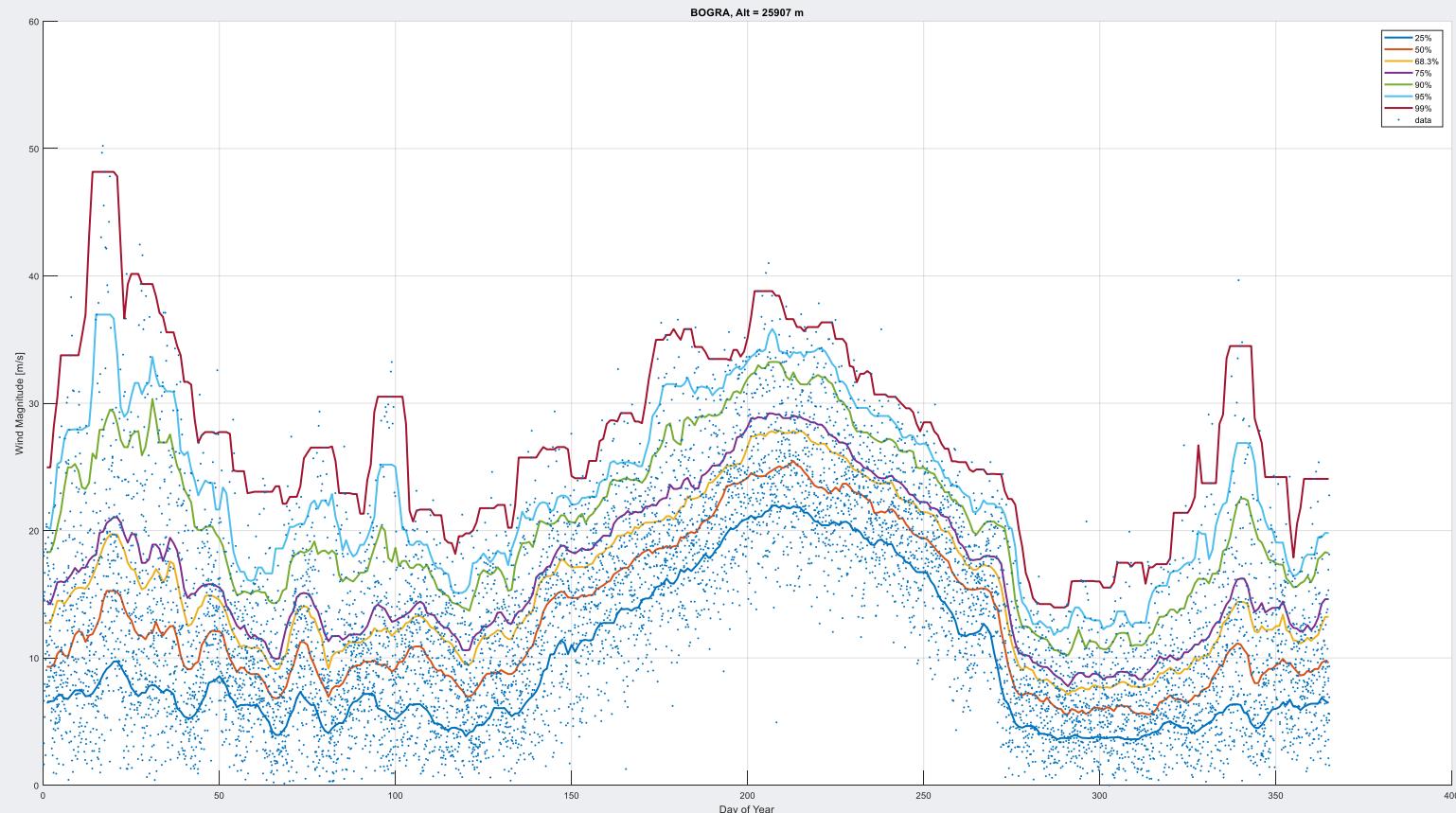
Wind Direction



BOGRA/BGM00041883

Lat = 24.85, Lon = 89.3667, Alt = 25907 m

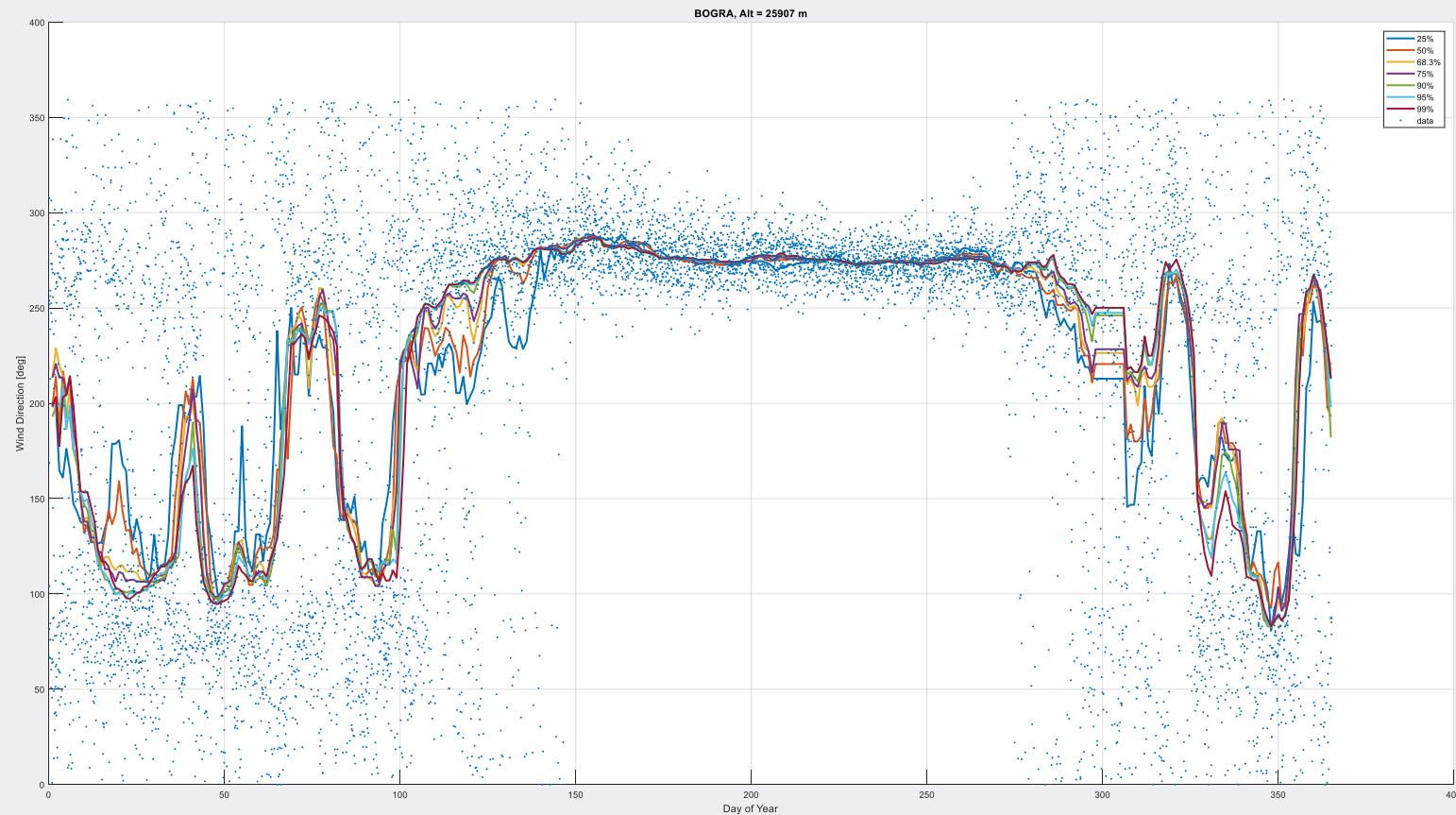
Wind Magnitude



BOGRA/BGM00041883

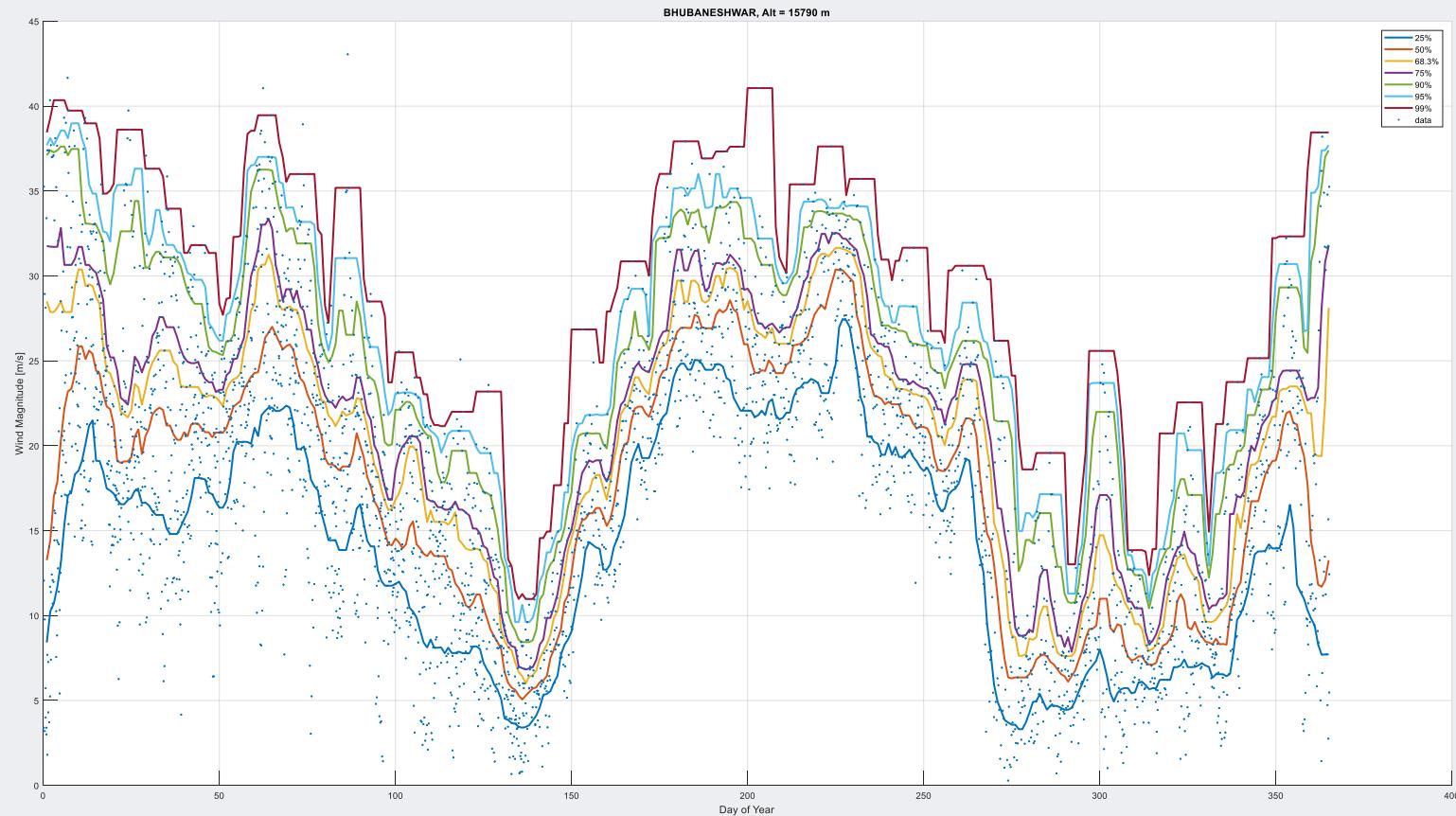
Lat = 24.85, Lon = 89.3667, Alt = 25907 m

Wind Direction



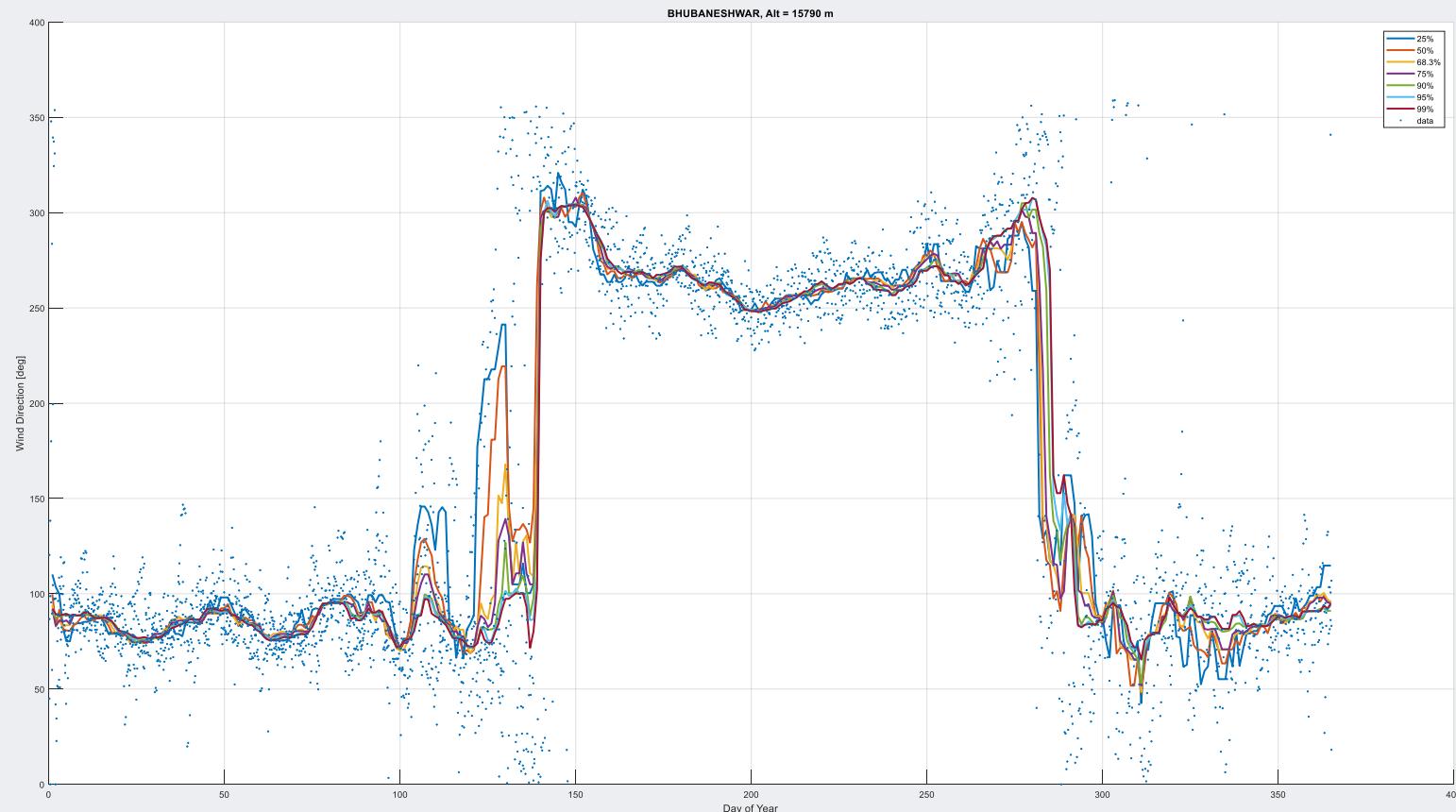
BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333, Alt = 15790 m

Wind Magnitude



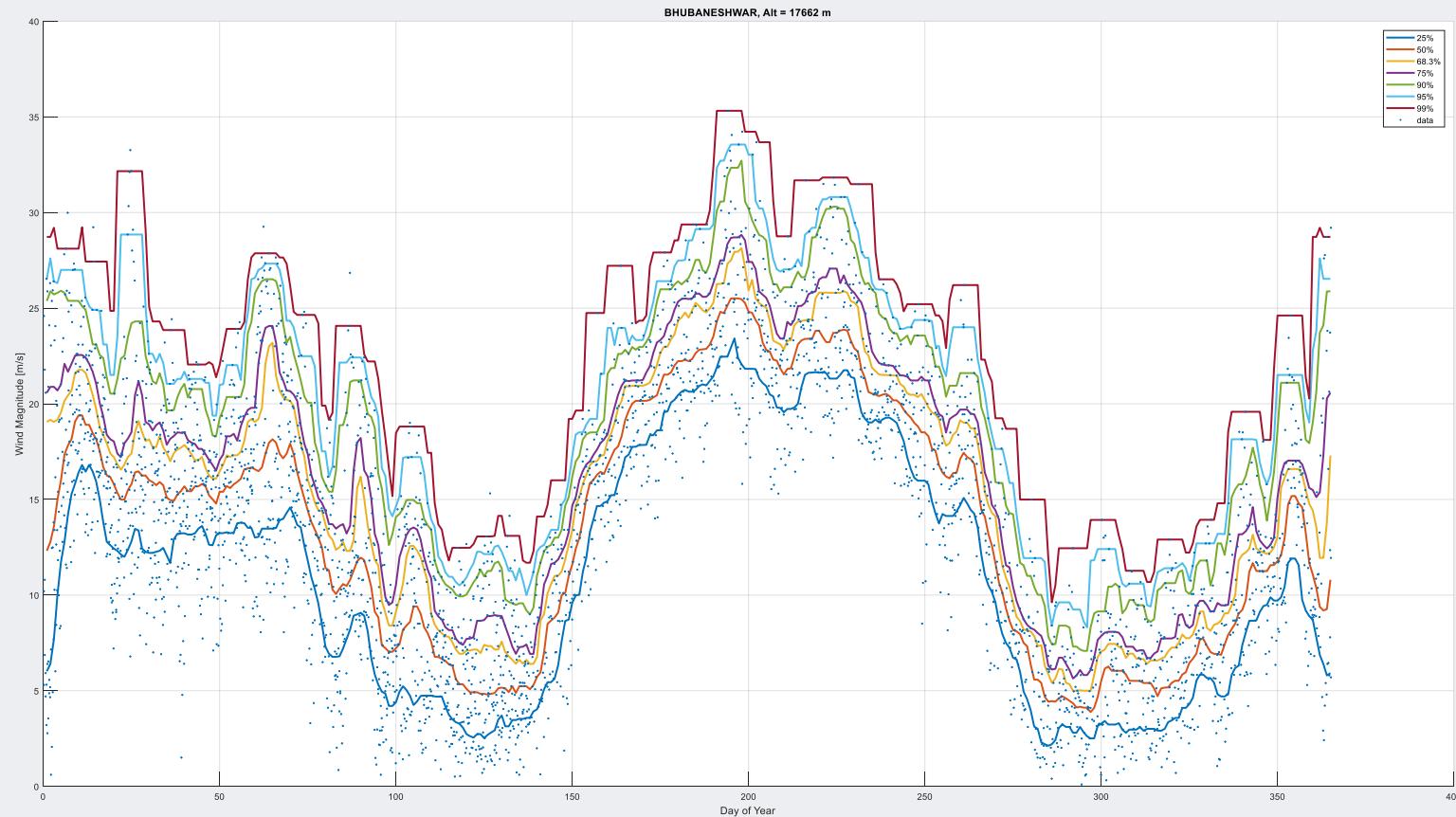
BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333, Alt = 15790 m

Wind Direction



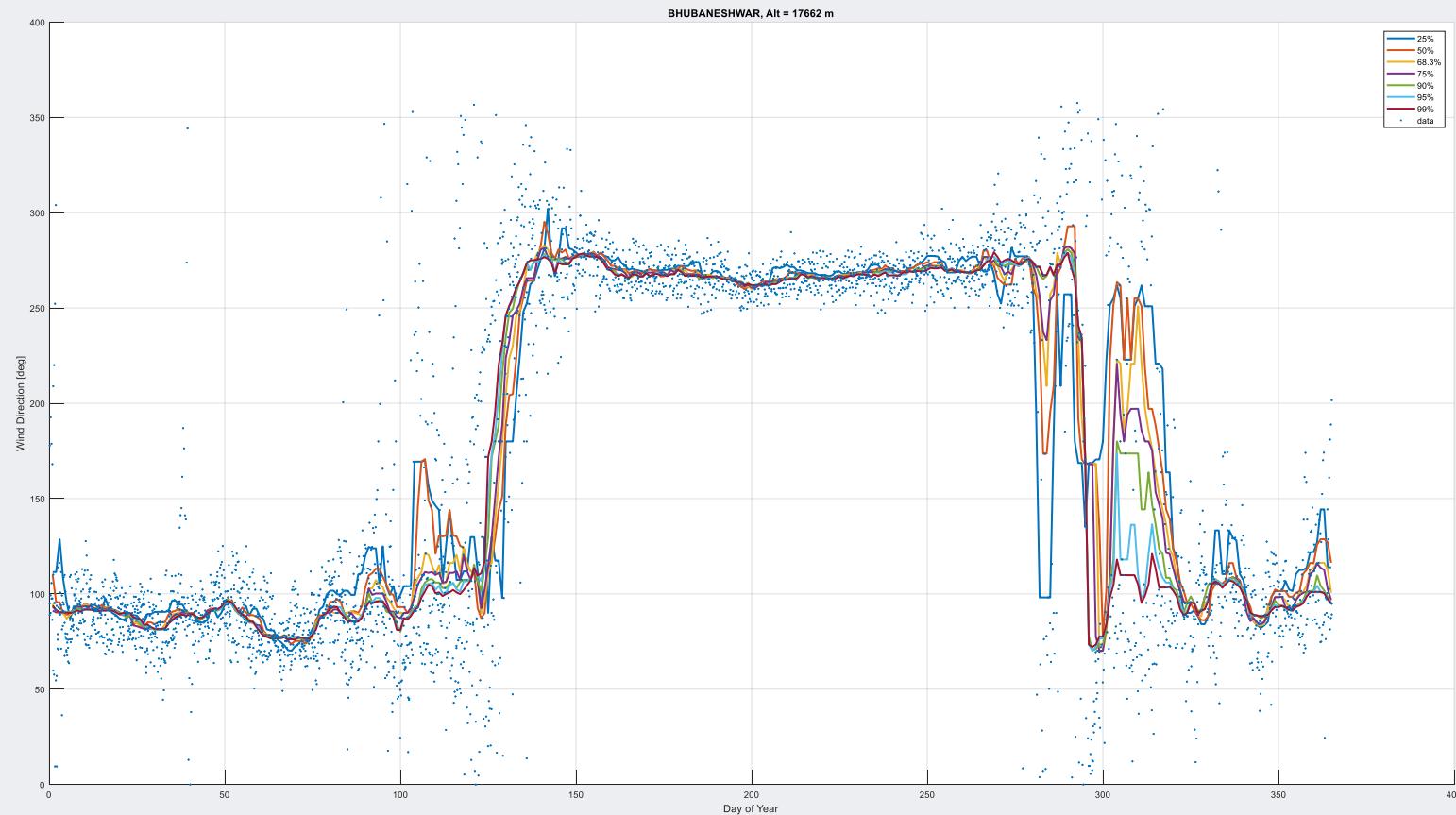
BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333, Alt = 17662 m

Wind Magnitude



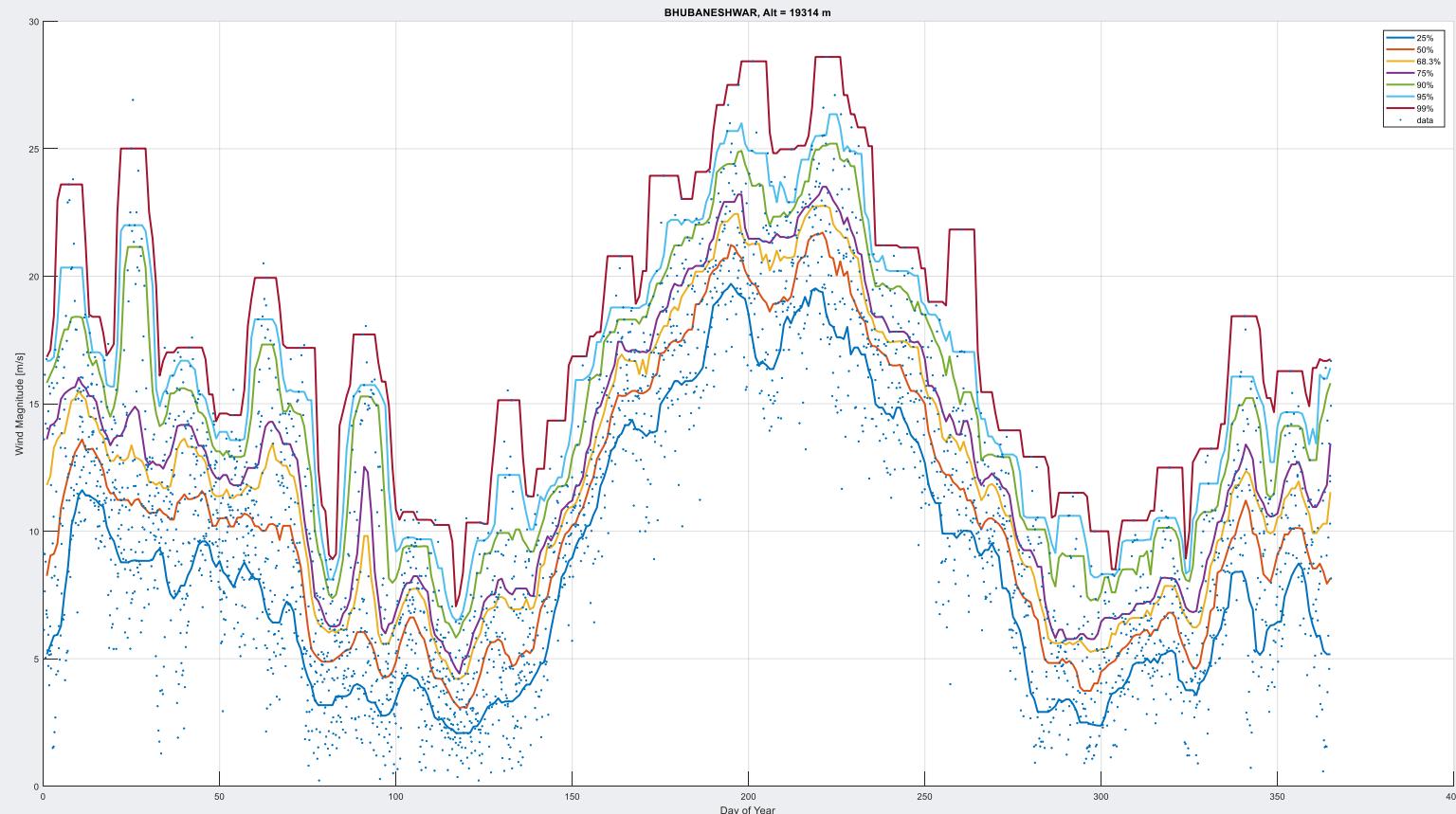
BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333, Alt = 17662 m

Wind Direction



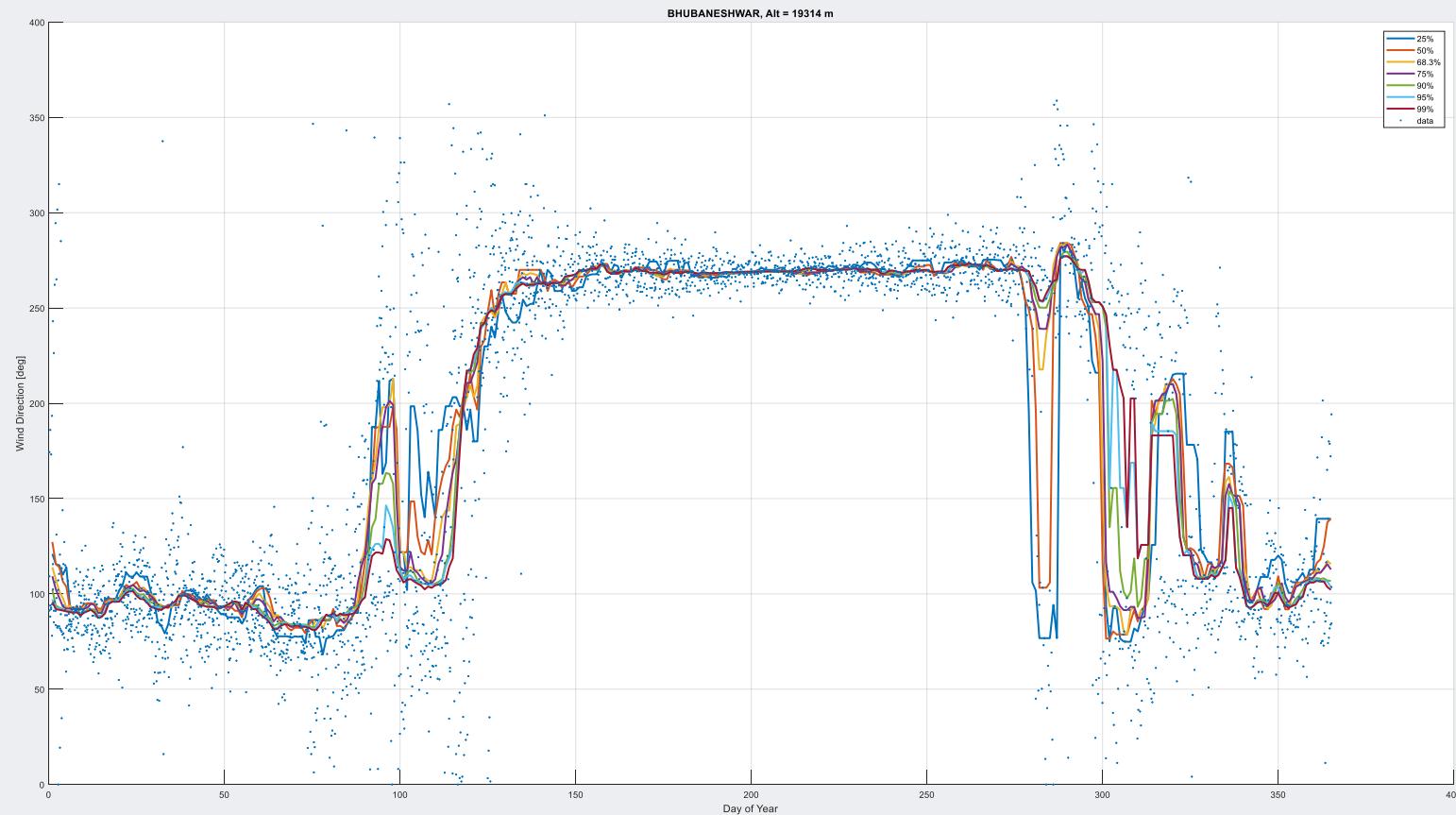
BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333, Alt = 19314 m

Wind Magnitude



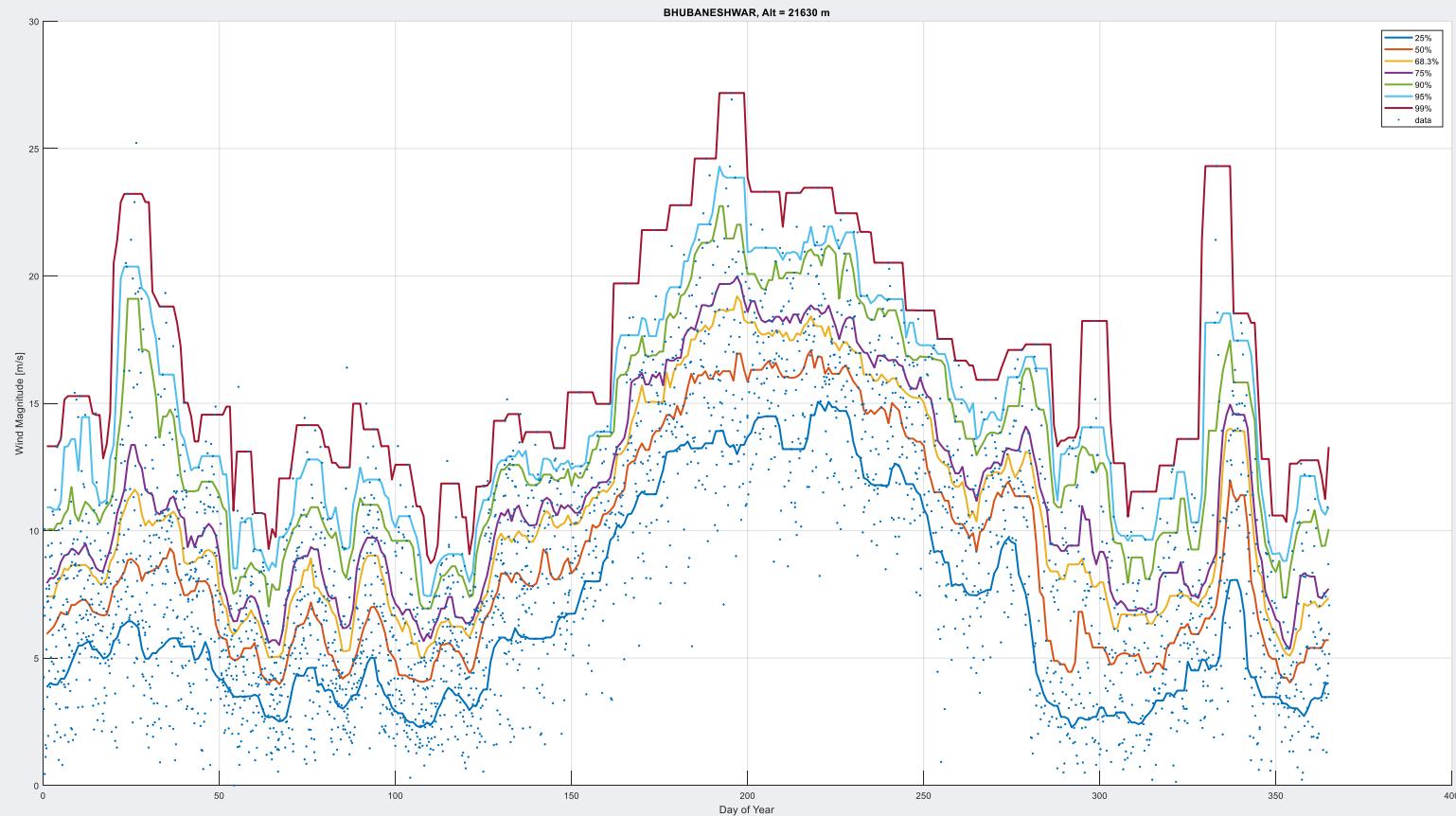
BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333, Alt = 19314 m

Wind Direction



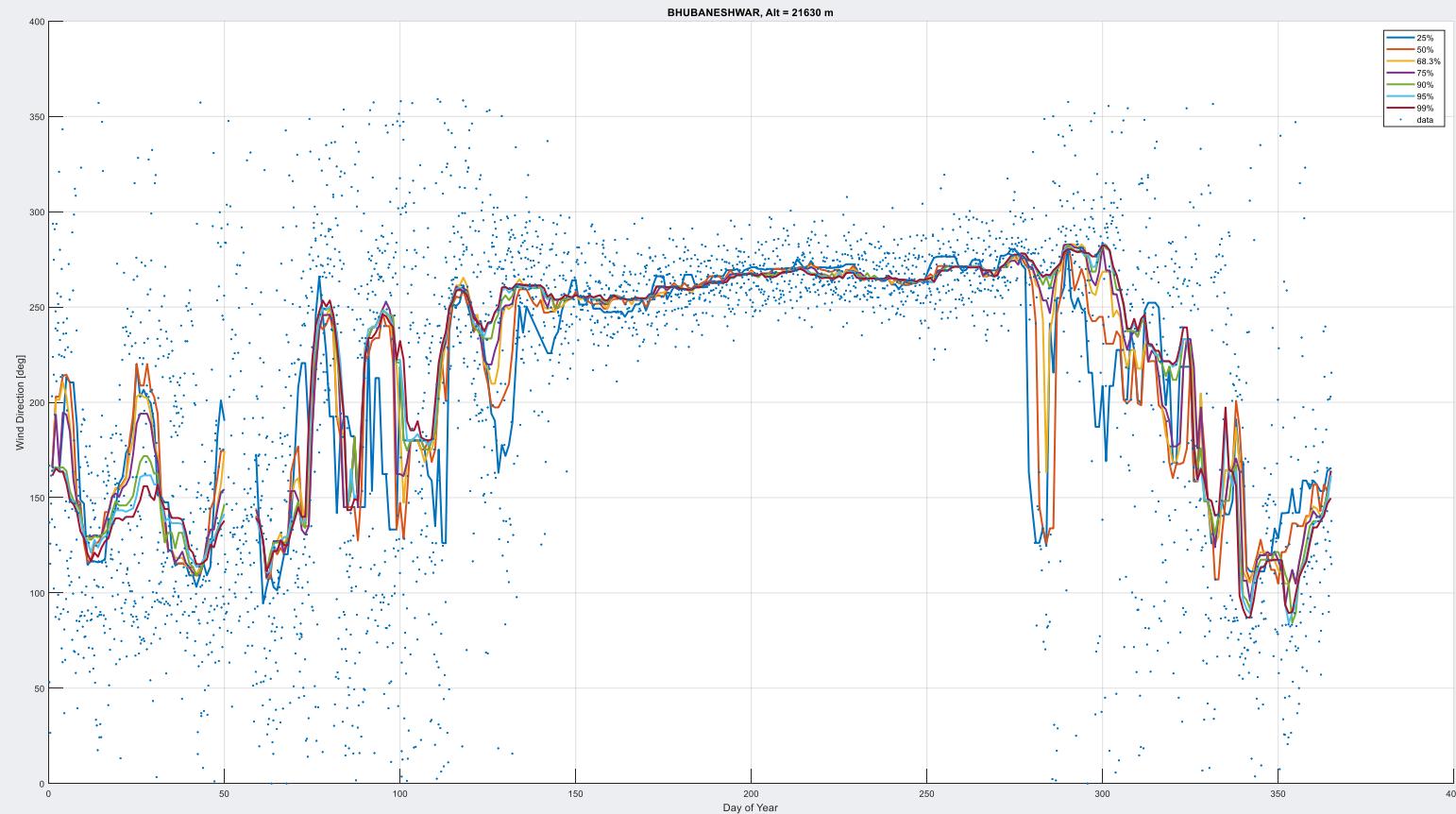
BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333, Alt = 21630 m

Wind Magnitude



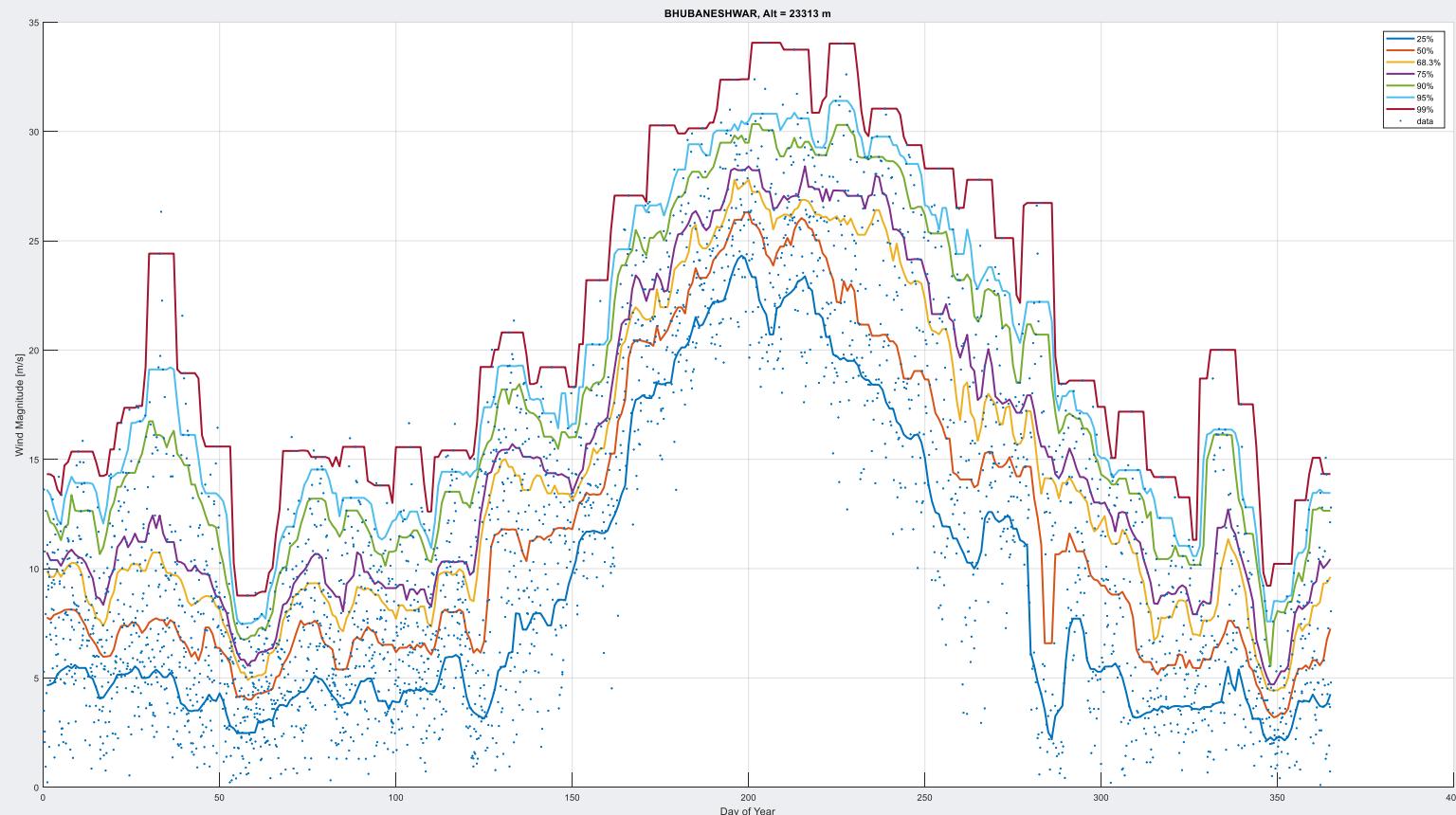
BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333, Alt = 21630 m

Wind Direction



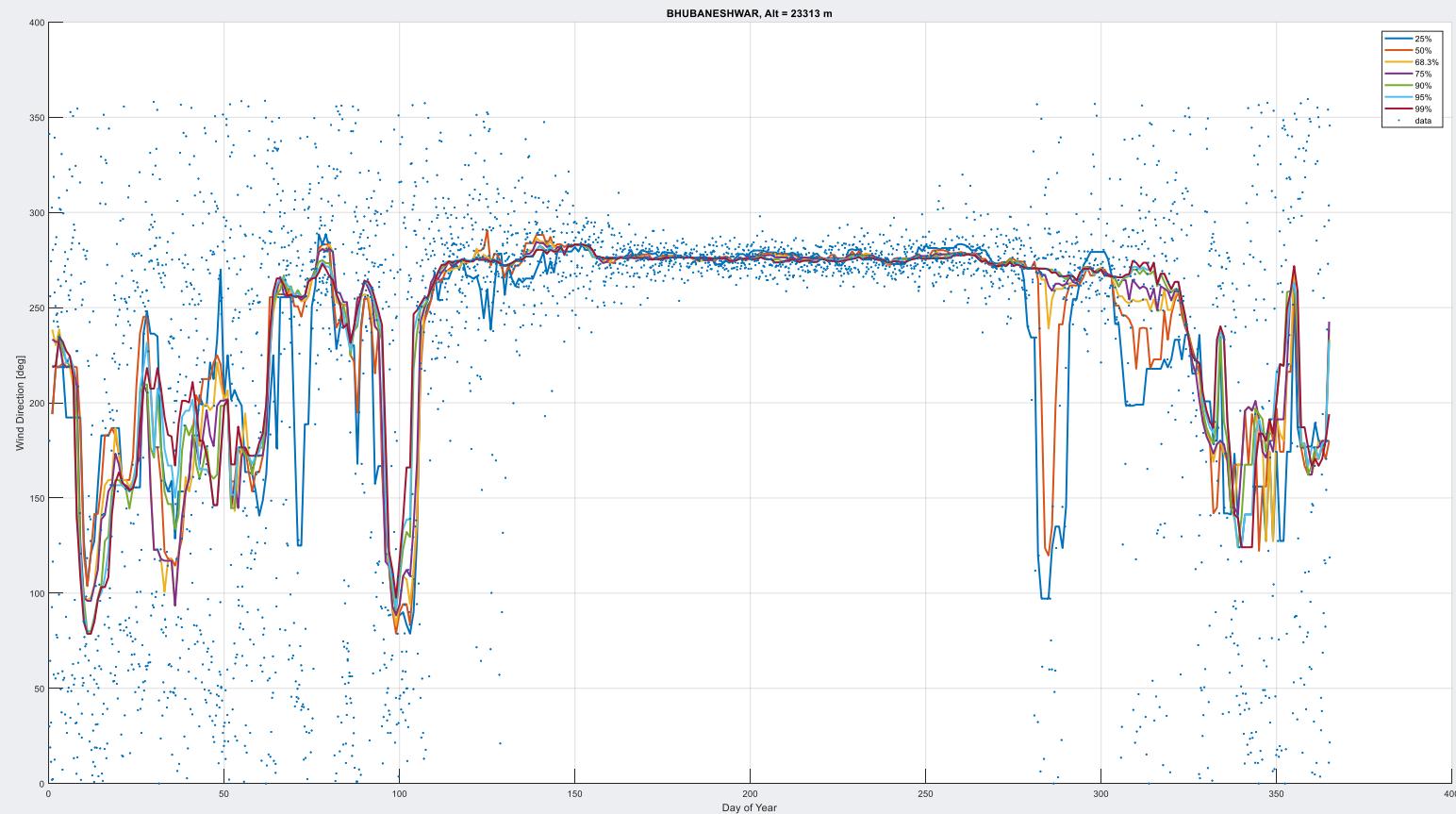
BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333, Alt = 23313 m

Wind Magnitude



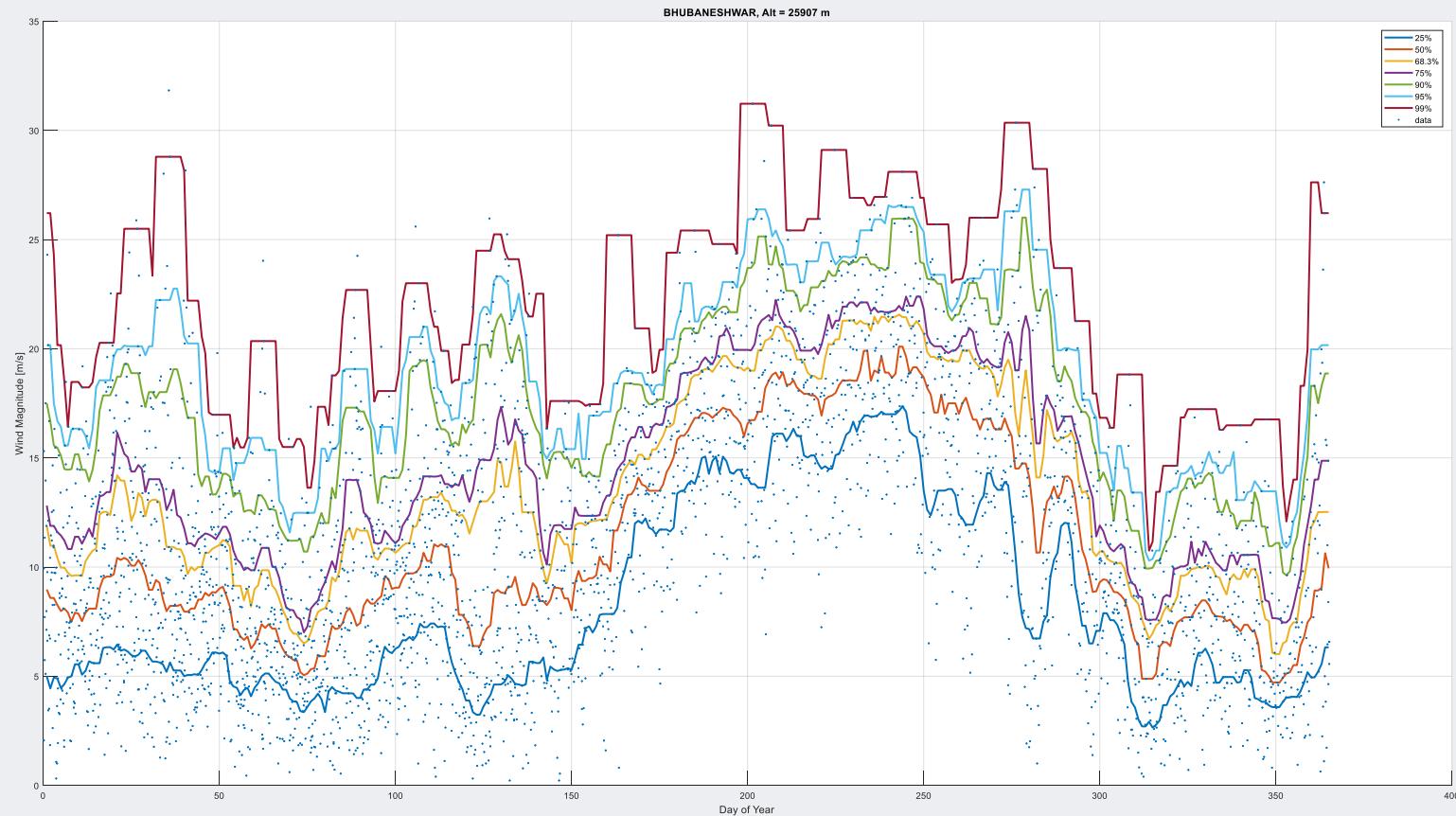
BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333, Alt = 23313 m

Wind Direction



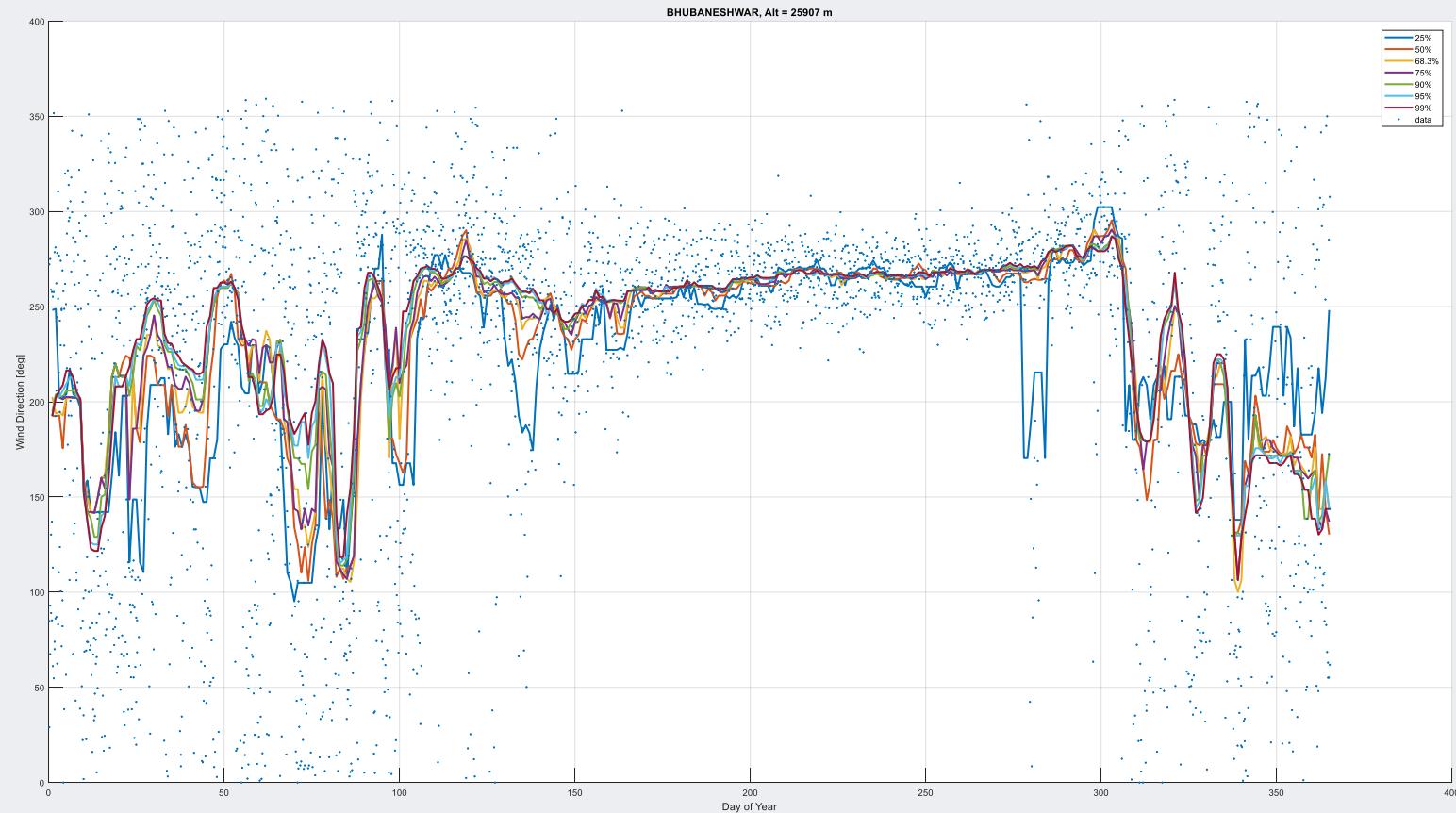
BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333, Alt = 25907 m

Wind Magnitude



BHUBANESHWAR/INM00042971
Lat = 20.25, Lon = 85.8333, Alt = 25907 m

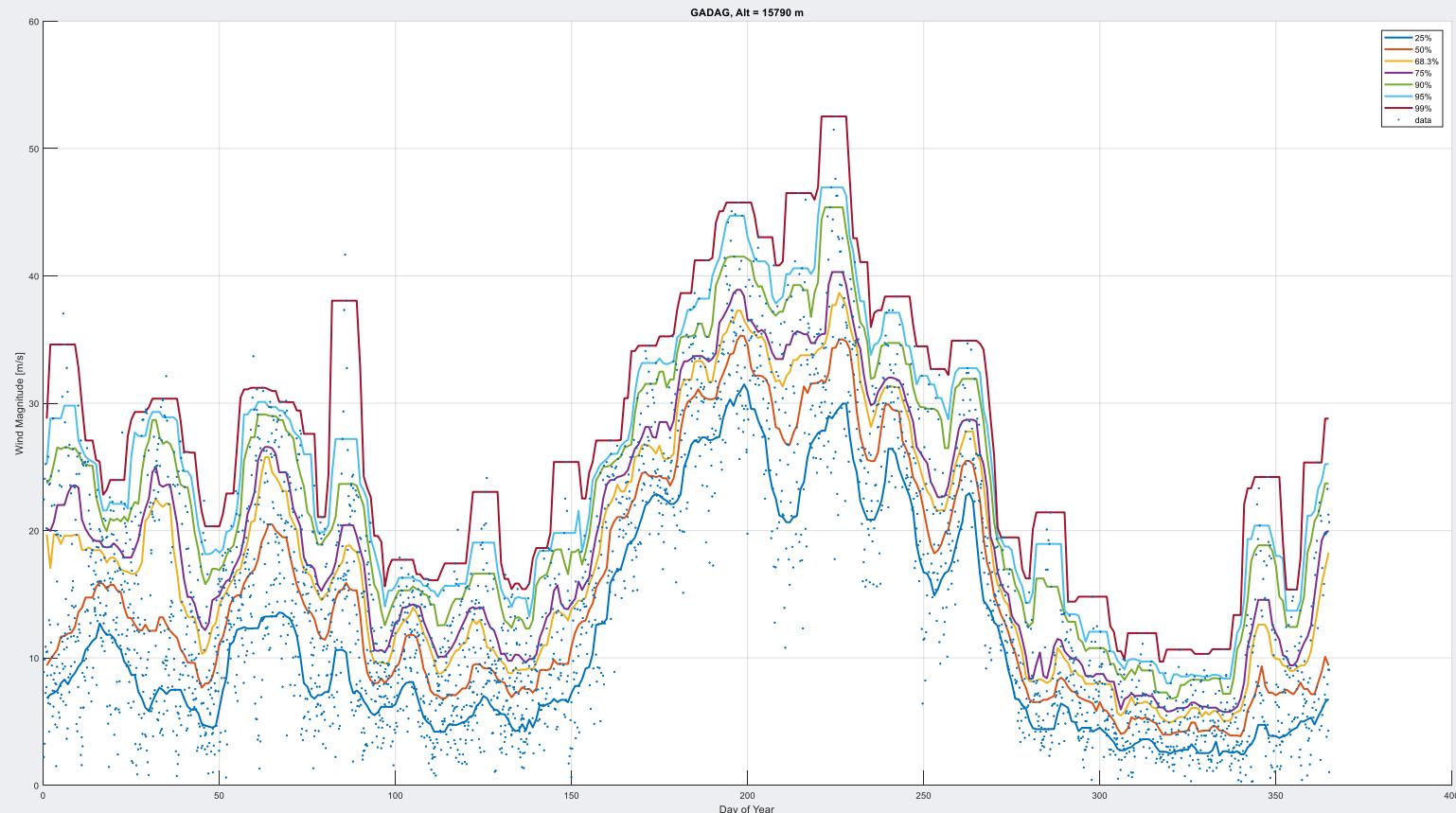
Wind Direction



GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333, Alt = 15790 m

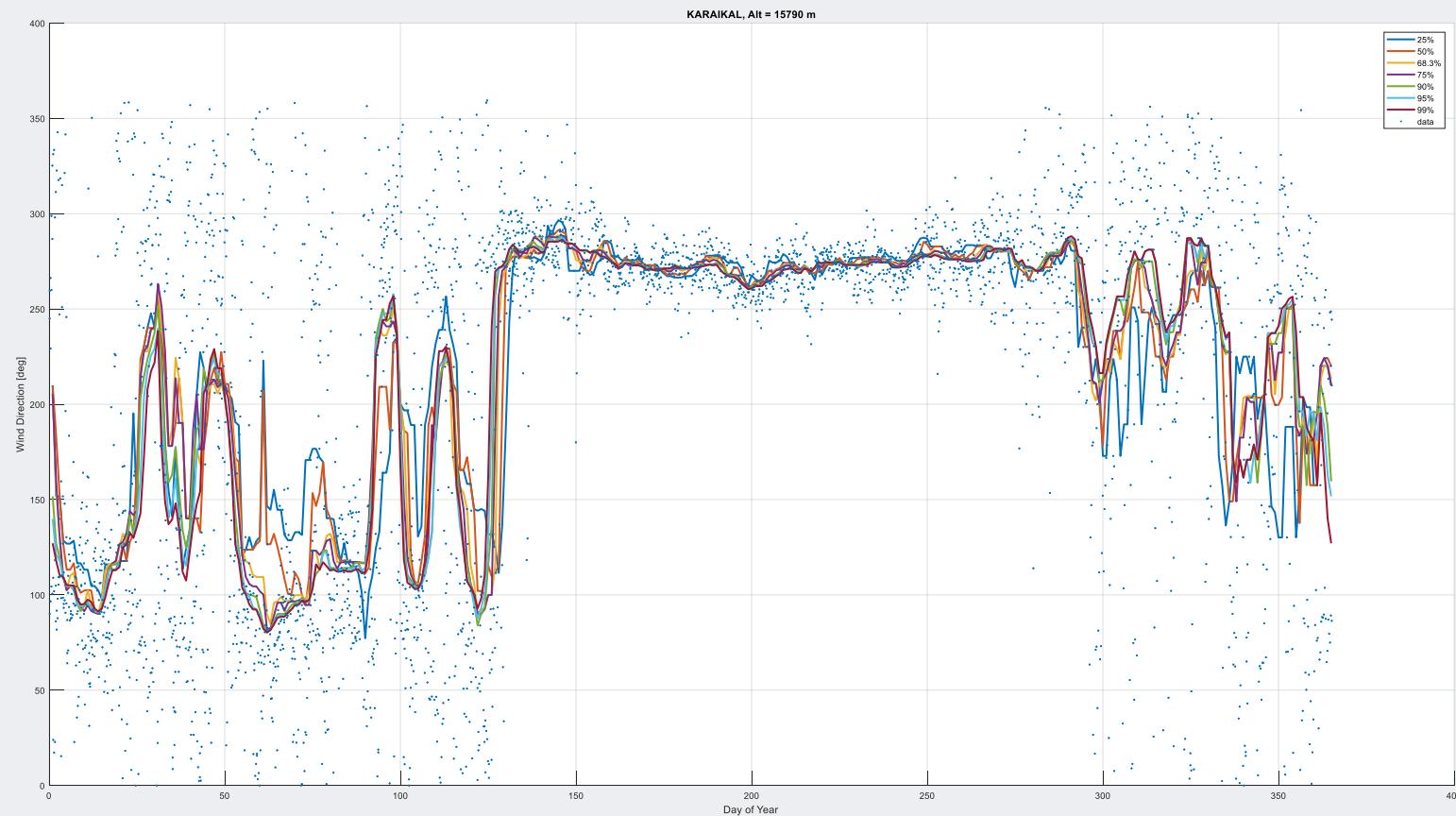
Wind Magnitude



GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333, Alt = 15790 m

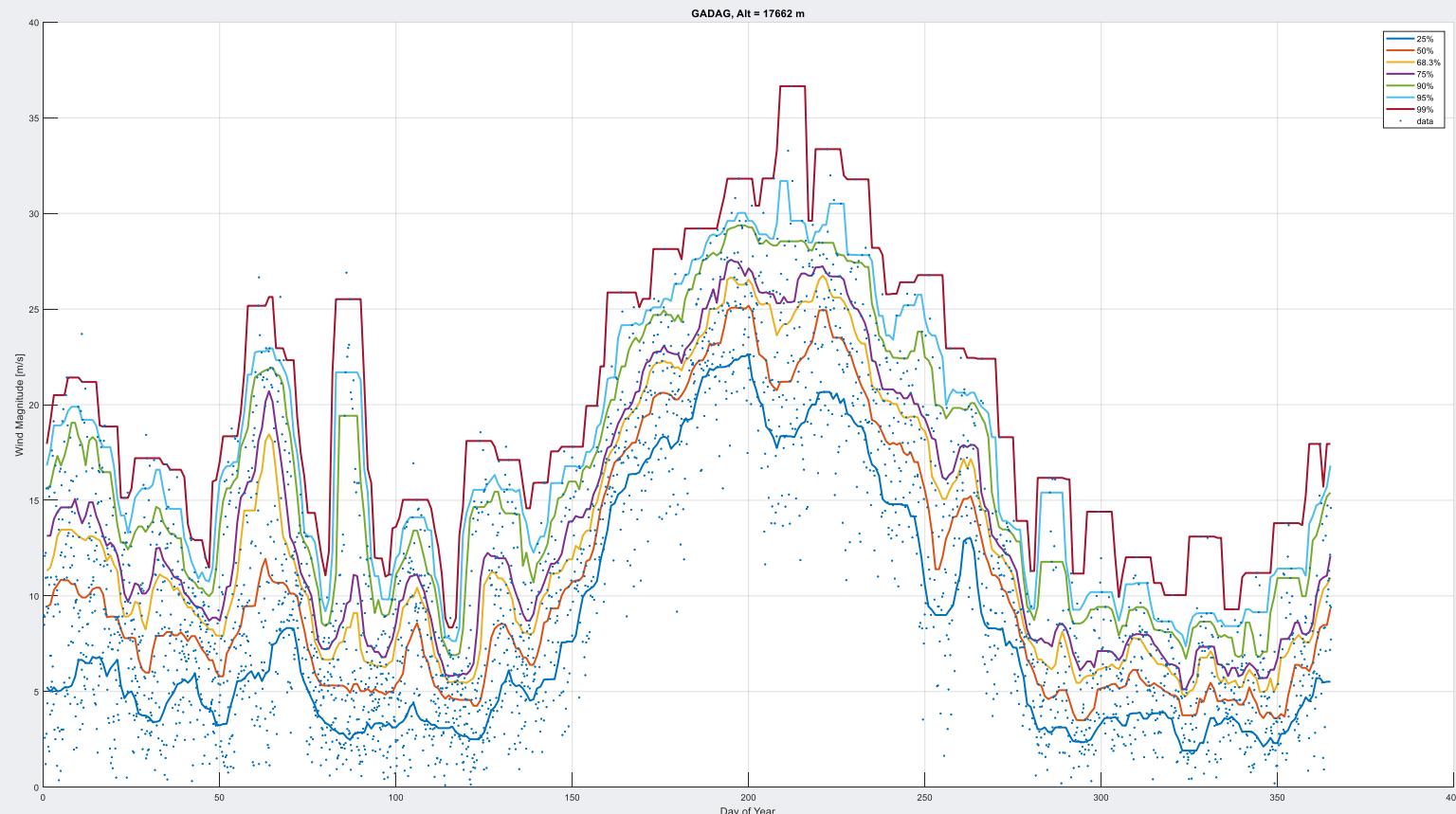
Wind Direction



GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333, Alt = 17662 m

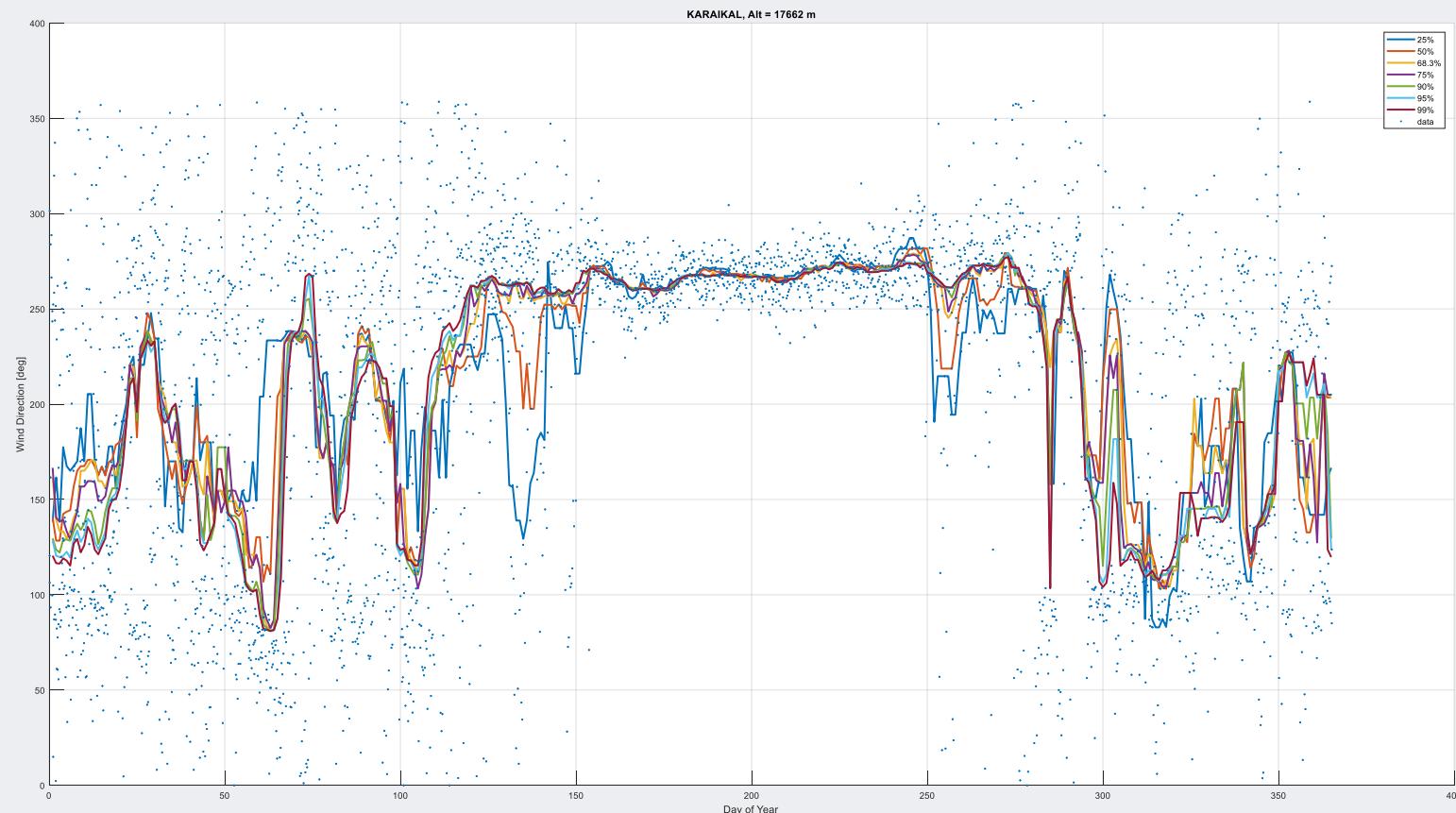
Wind Magnitude



GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333, Alt = 17662 m

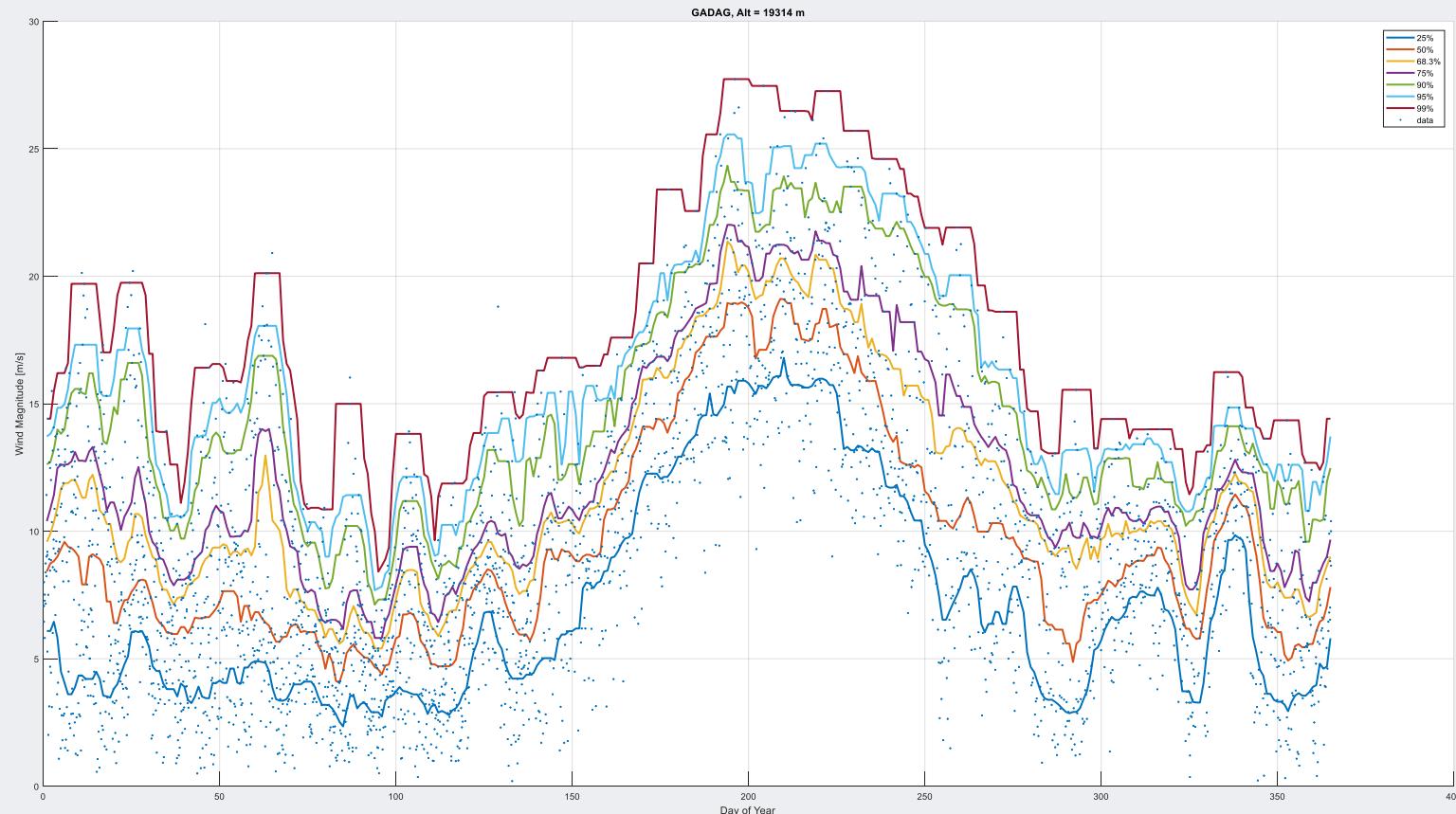
Wind Direction



GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333, Alt = 19314 m

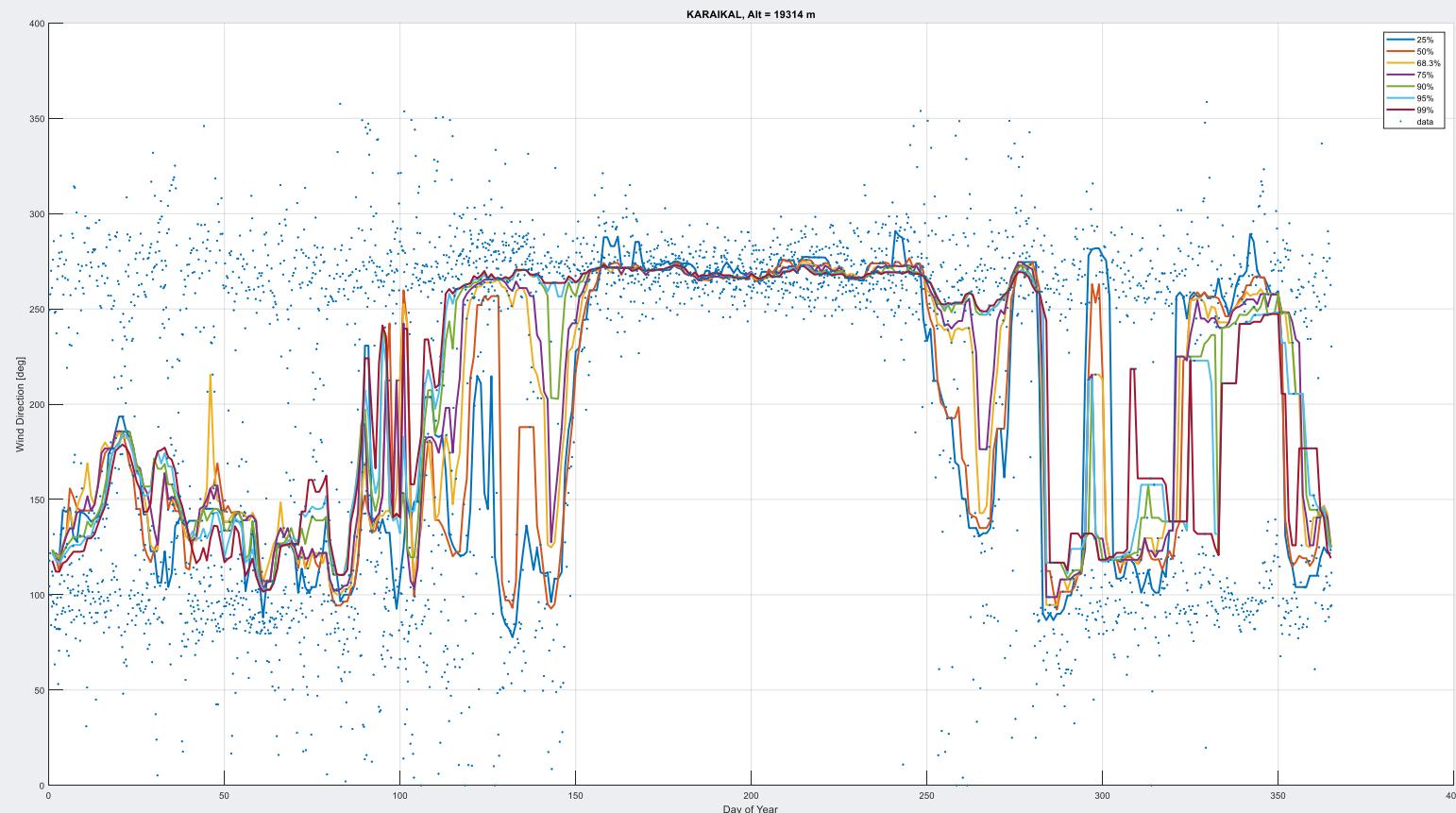
Wind Magnitude



GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333, Alt = 19314 m

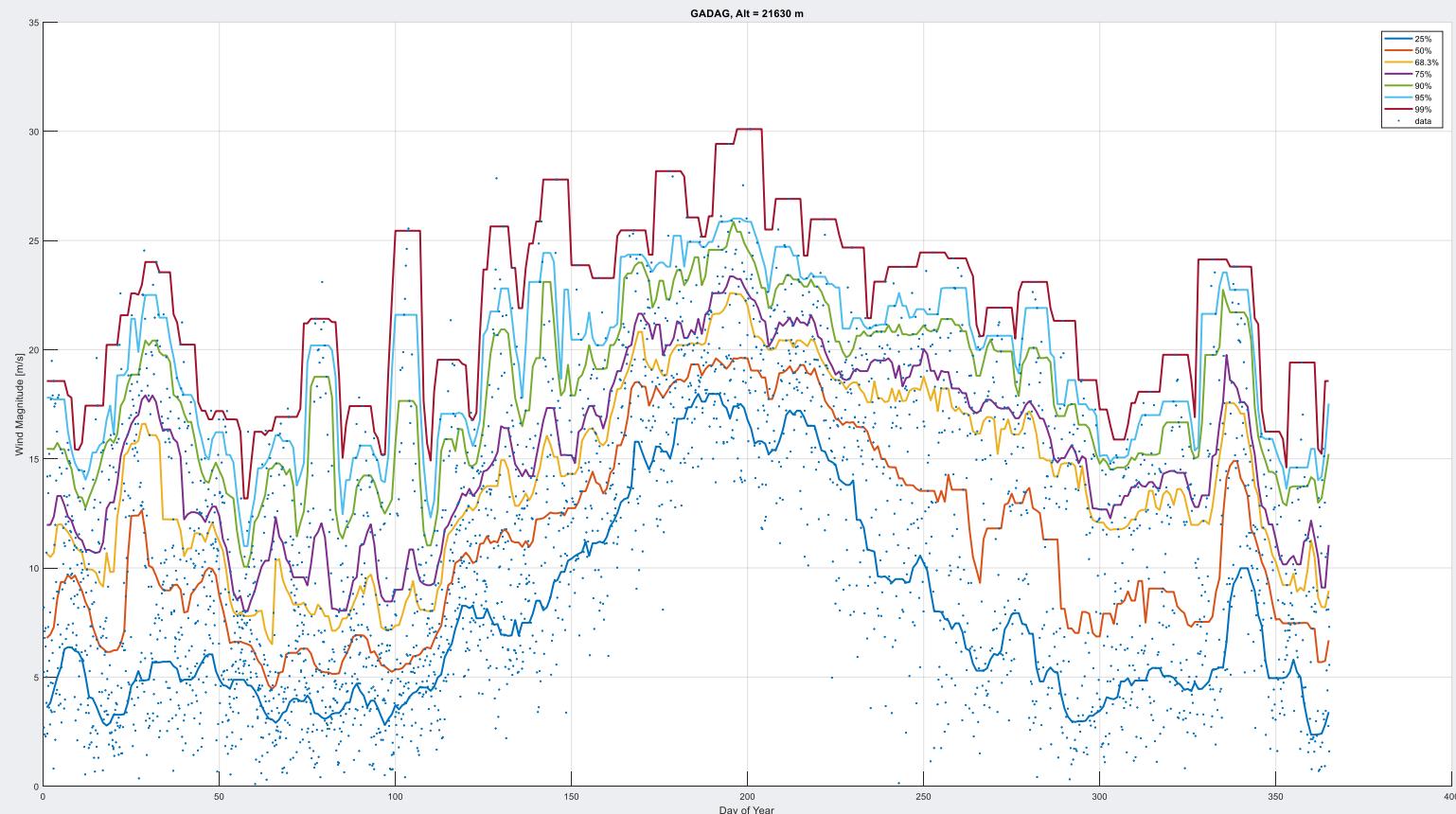
Wind Direction



GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333, Alt = 21630 m

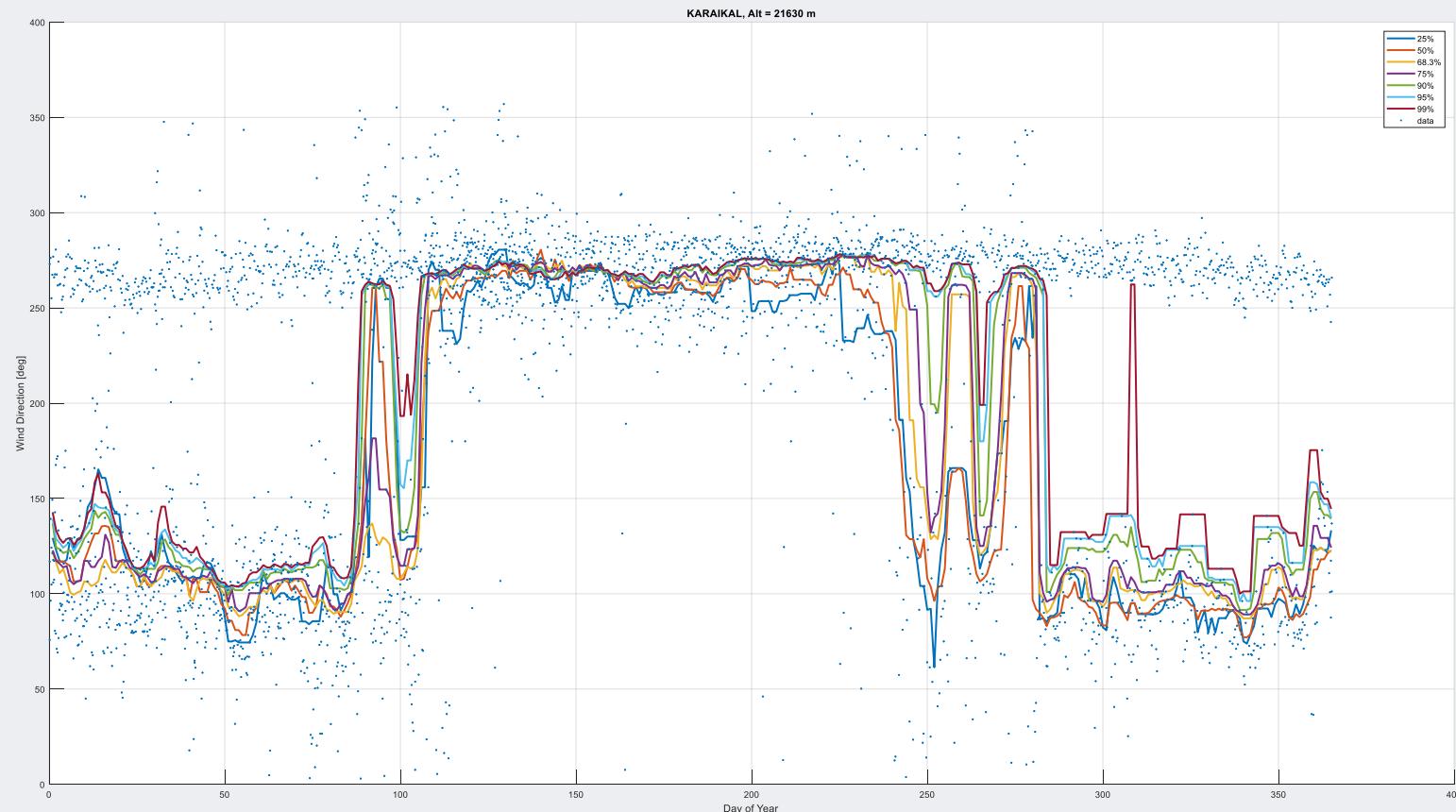
Wind Magnitude



GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333, Alt = 21630 m

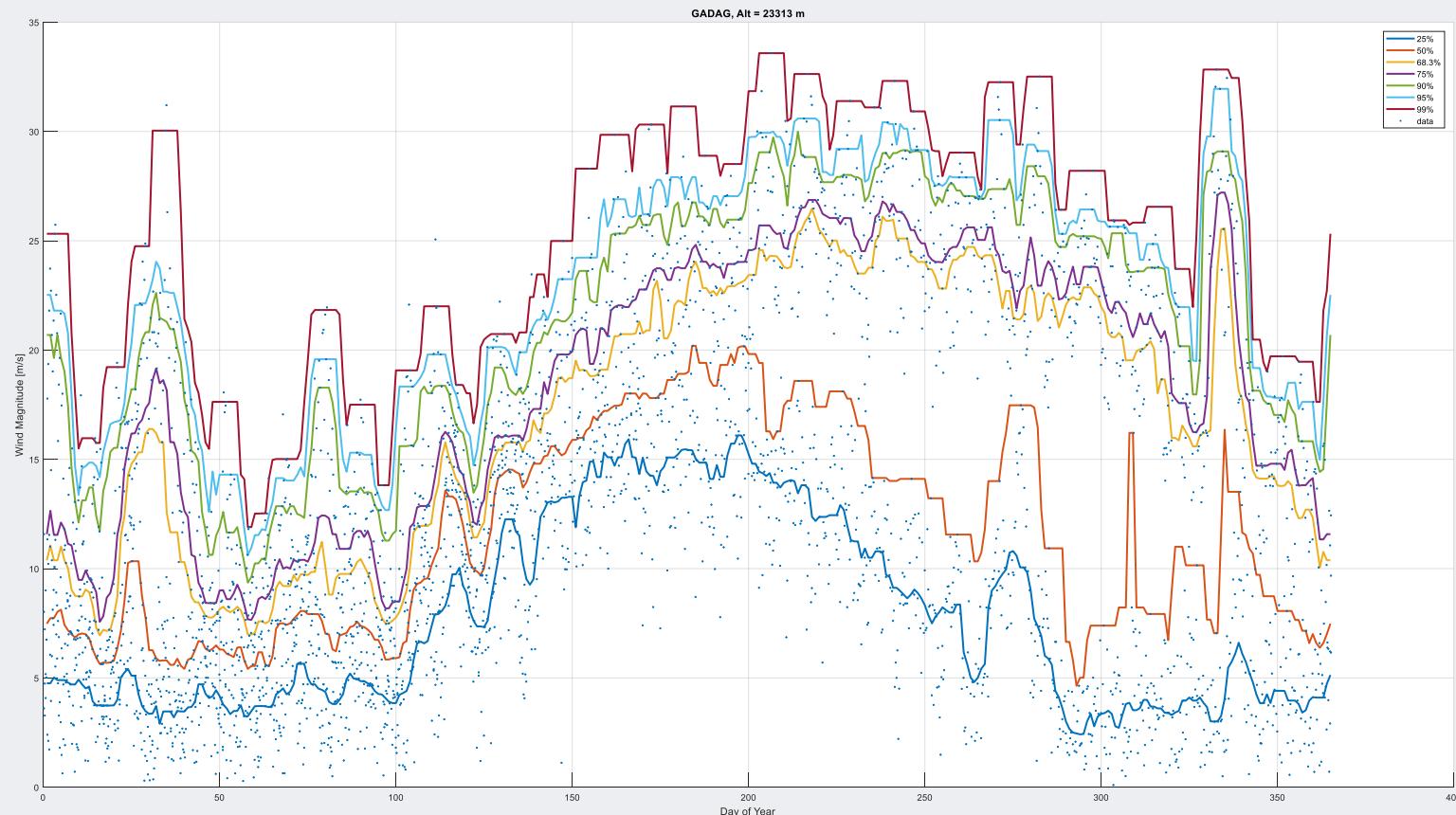
Wind Direction



GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333, Alt = 23313 m

Wind Magnitude



GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333, Alt = 23313 m

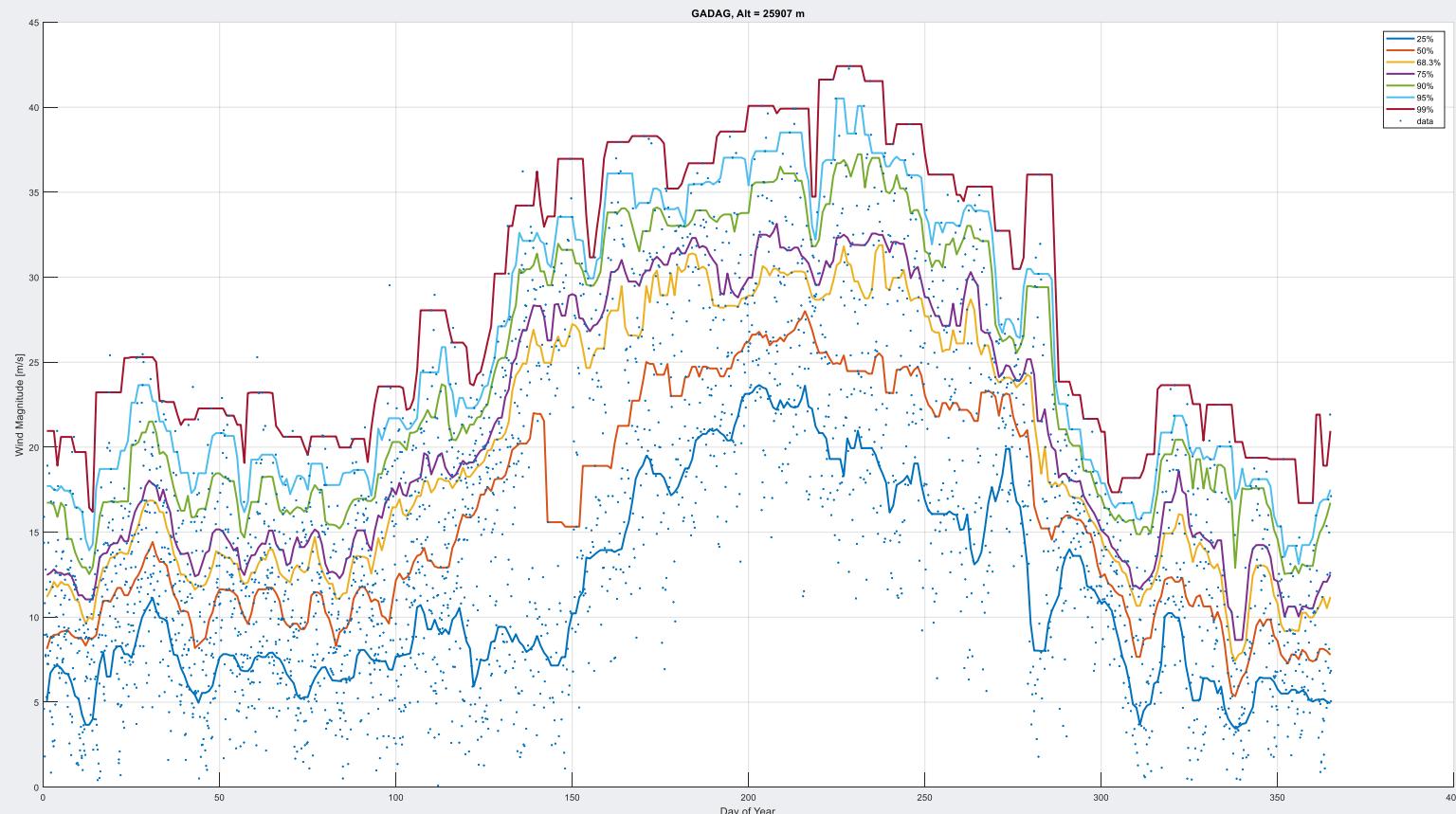
Wind Direction



GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333, Alt = 25907 m

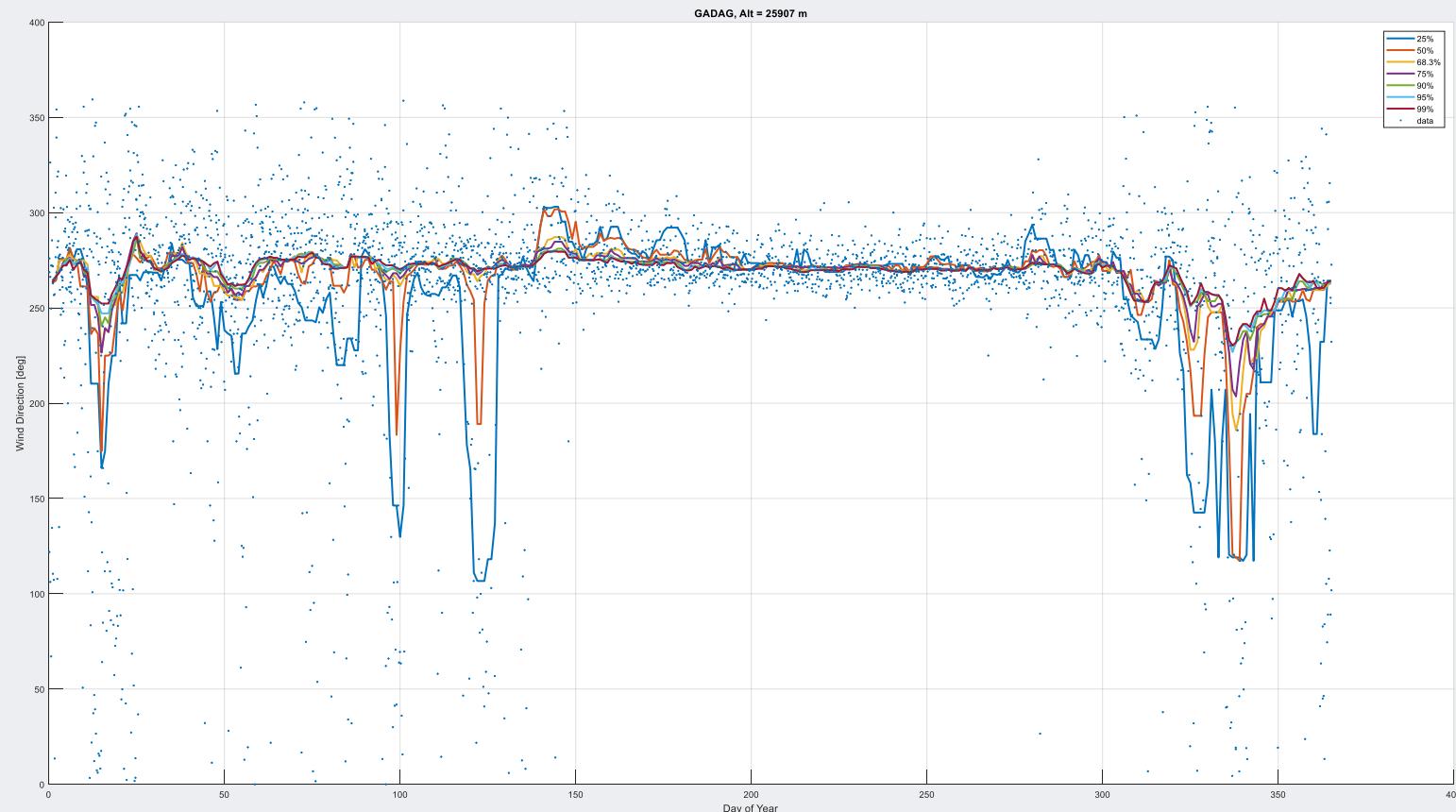
Wind Magnitude



GADAG/INM00043201

Lat = 15.4167, Lon = 75.6333, Alt = 25907 m

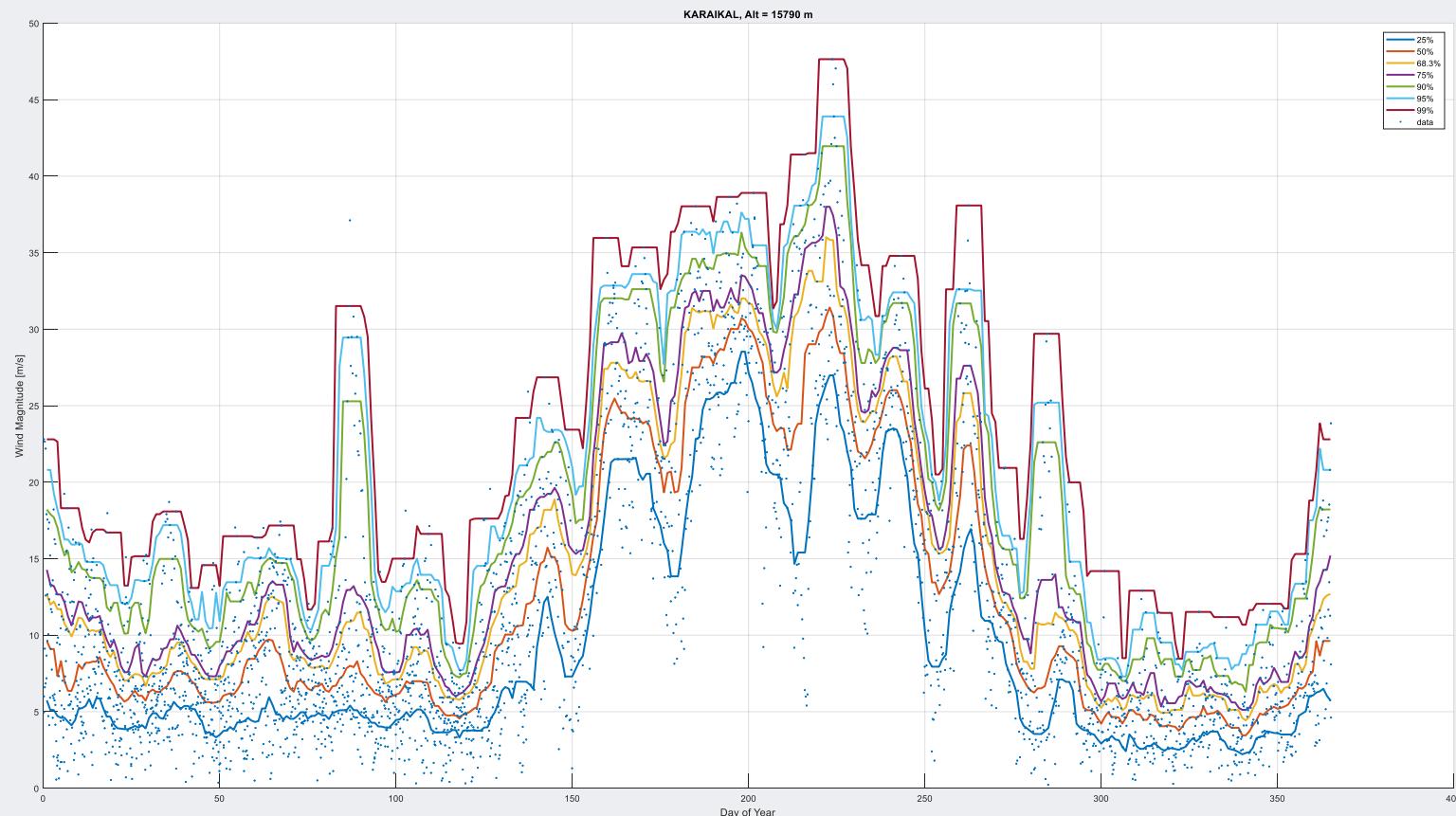
Wind Direction



KARAIKAL/INM00043346

Lat = 10.9167, Lon = 79.8333, Alt = 15790 m

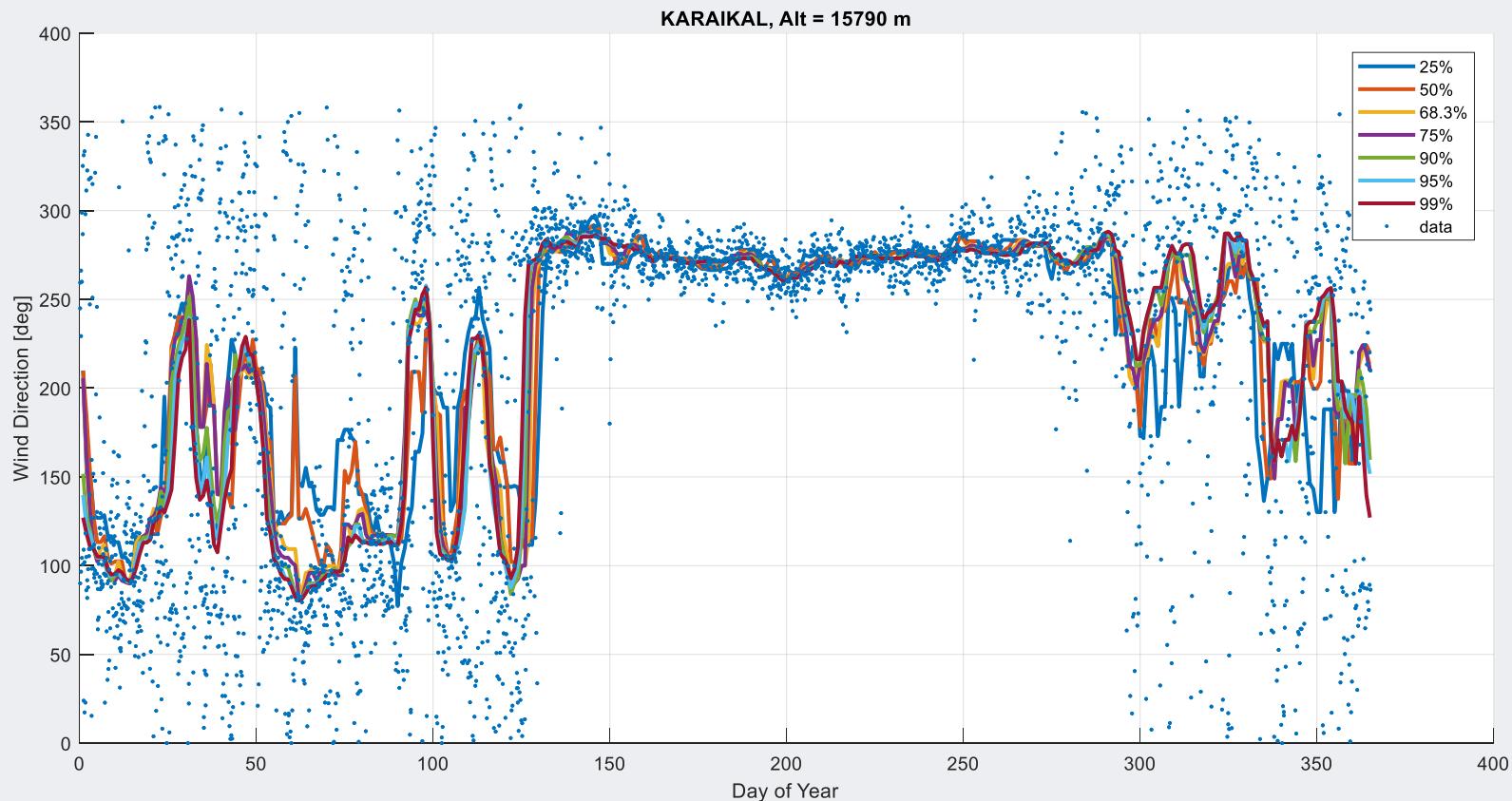
Wind Magnitude



KARAIKAL/INM00043346

Lat = 10.9167, Lon = 79.8333, Alt = 15790 m

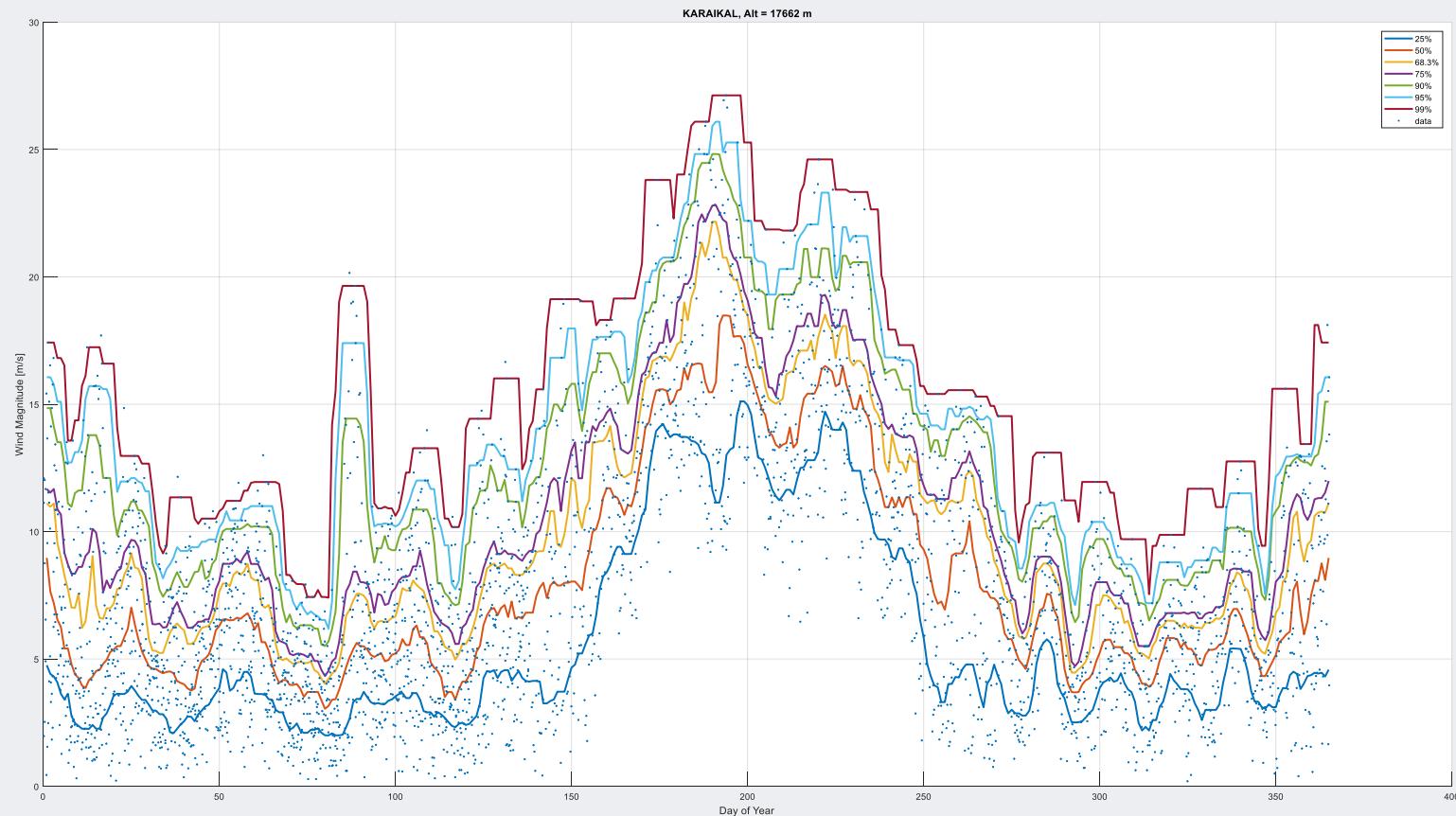
Wind Direction



KARAIKAL/INM00043346

Lat = 10.9167, Lon = 79.8333, Alt = 17662 m

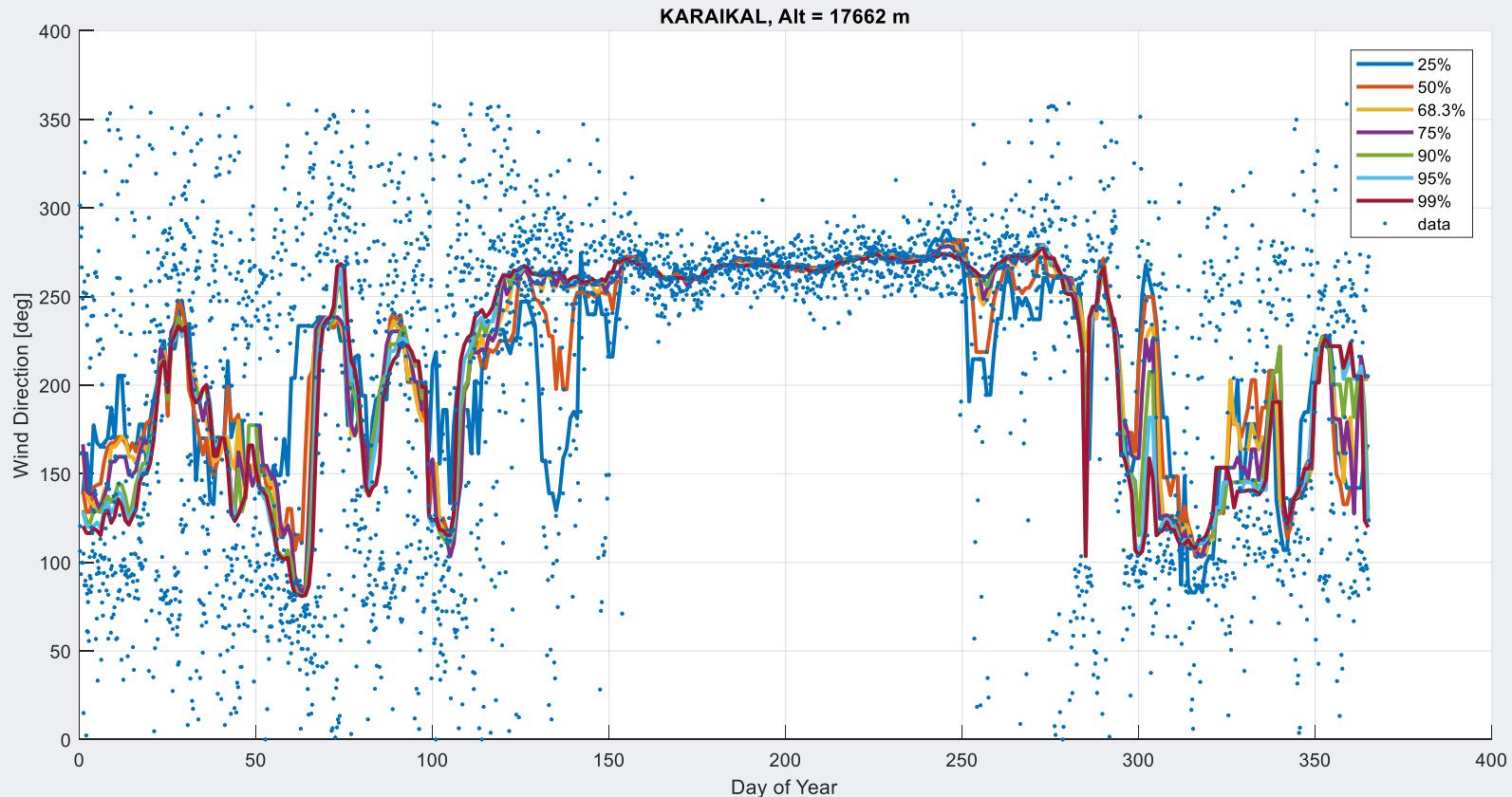
Wind Magnitude



KARAIKAL/INM00043346

Lat = 10.9167, Lon = 79.8333, Alt = 17662 m

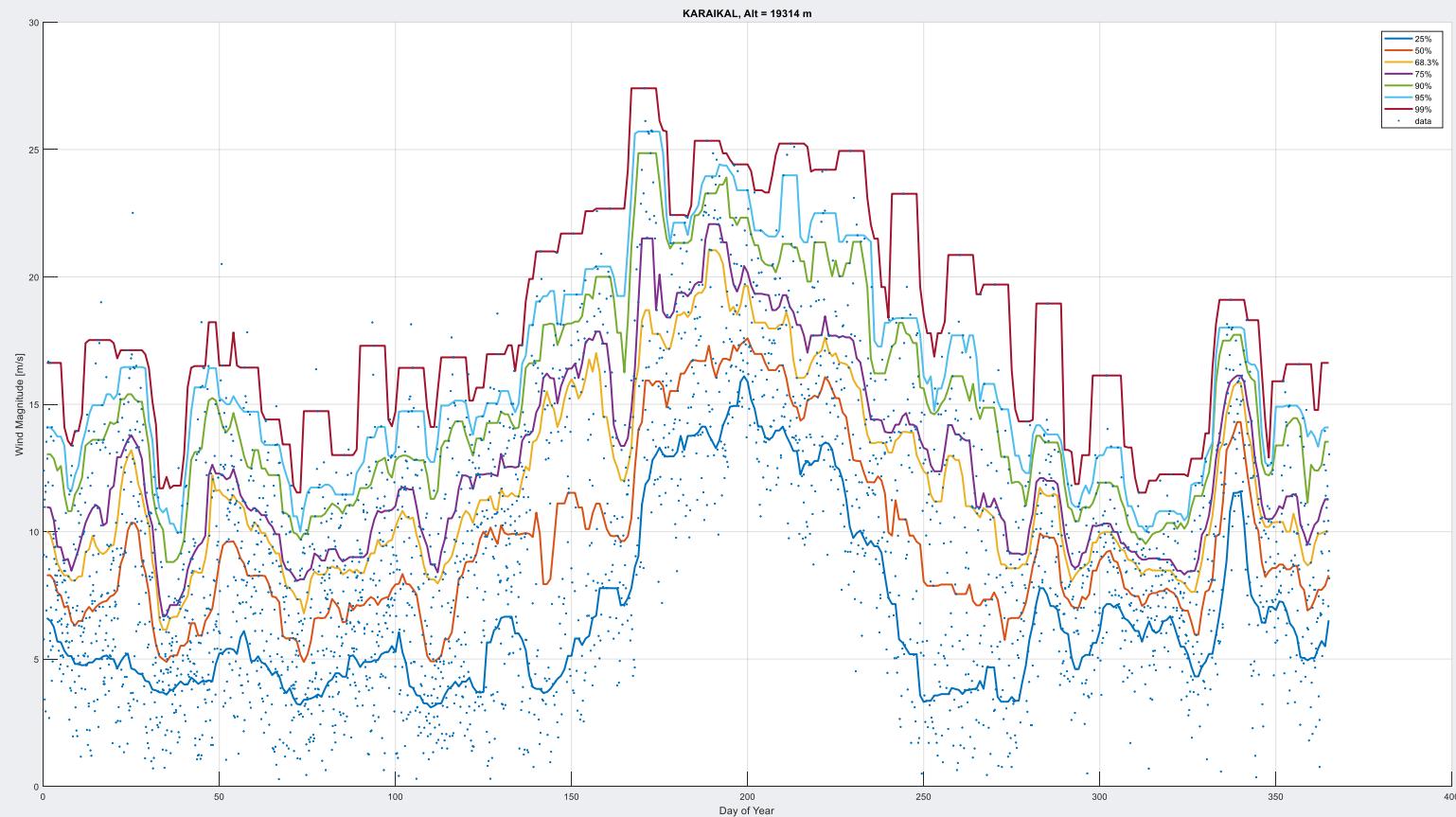
Wind Direction



KARAIKAL/INM00043346

Lat = 10.9167, Lon = 79.8333, Alt = 19314 m

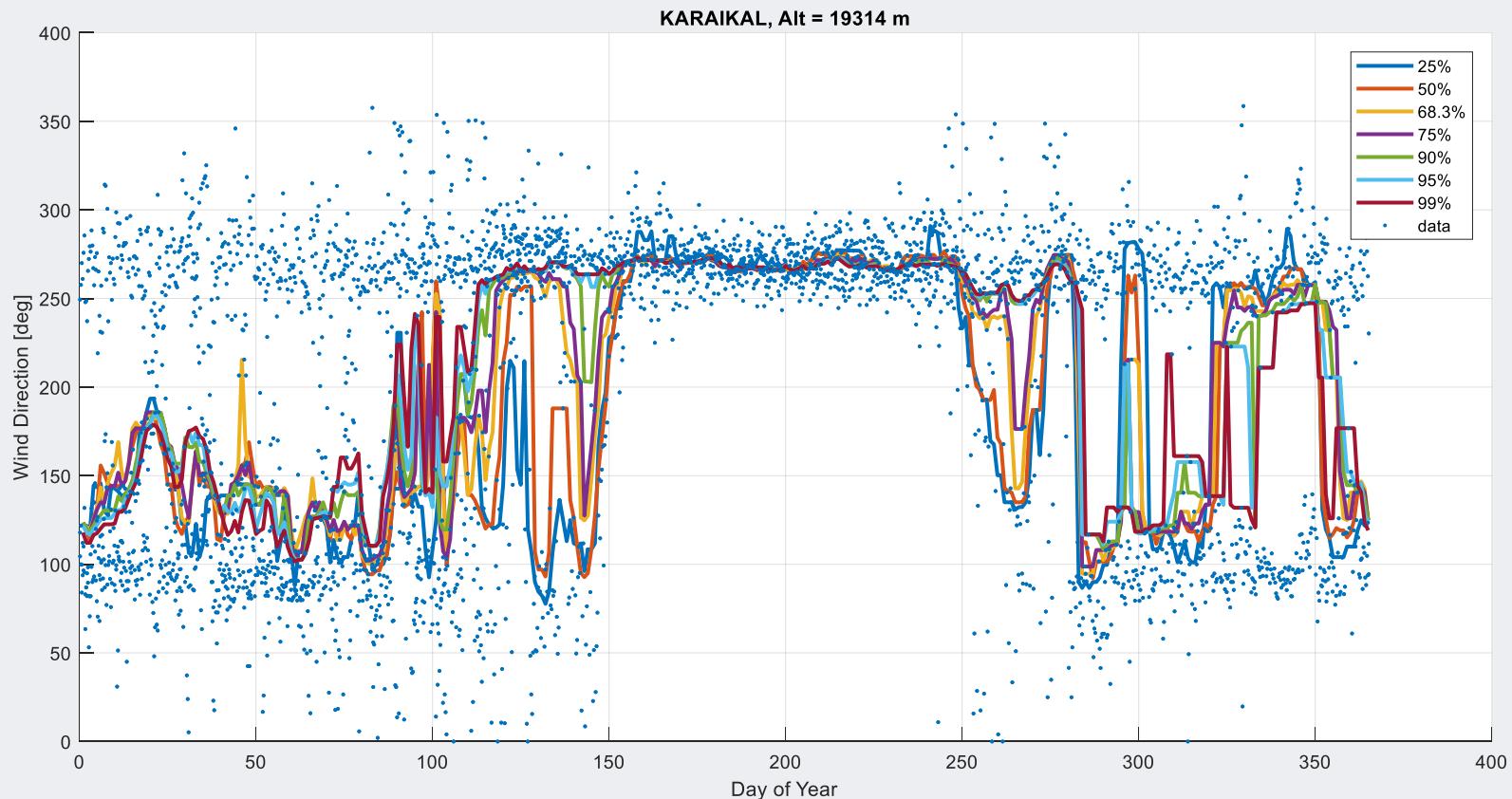
Wind Magnitude



KARAIKAL/INM00043346

Lat = 10.9167, Lon = 79.8333, Alt = 19314 m

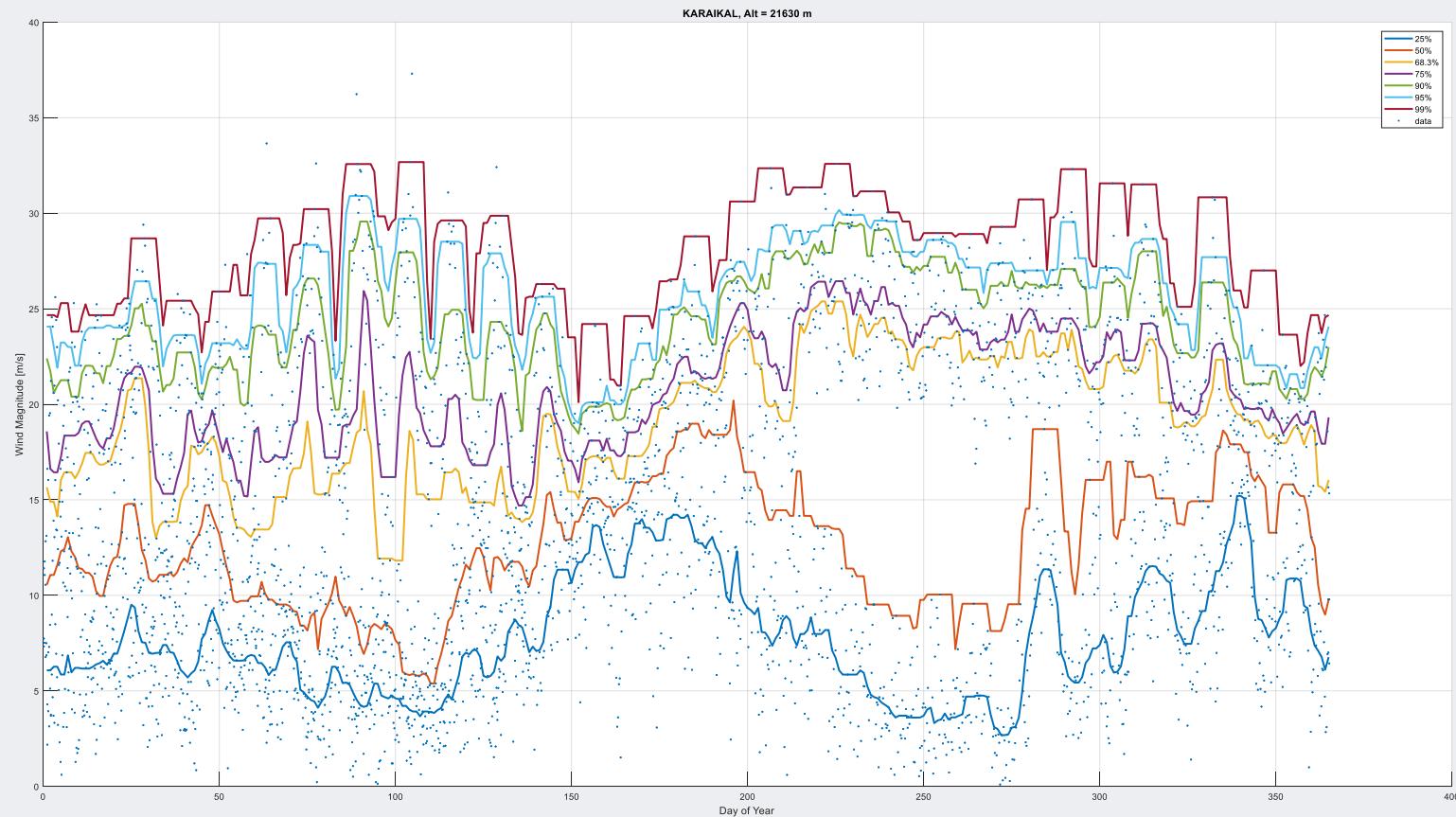
Wind Direction



KARAIKAL/INM00043346

Lat = 10.9167, Lon = 79.8333, Alt = 21630 m

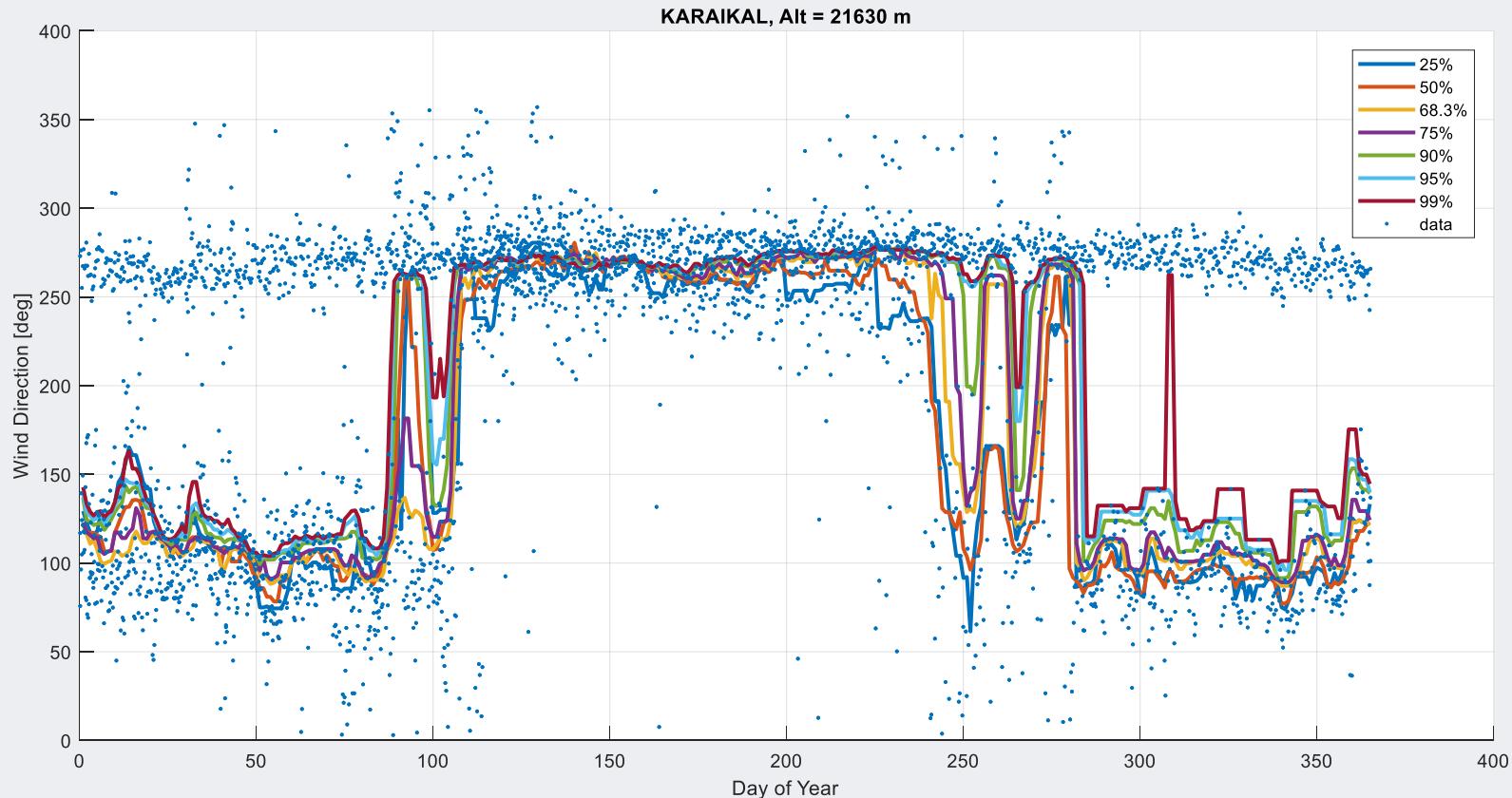
Wind Magnitude



KARAIKAL/INM00043346

Lat = 10.9167, Lon = 79.8333, Alt = 21630 m

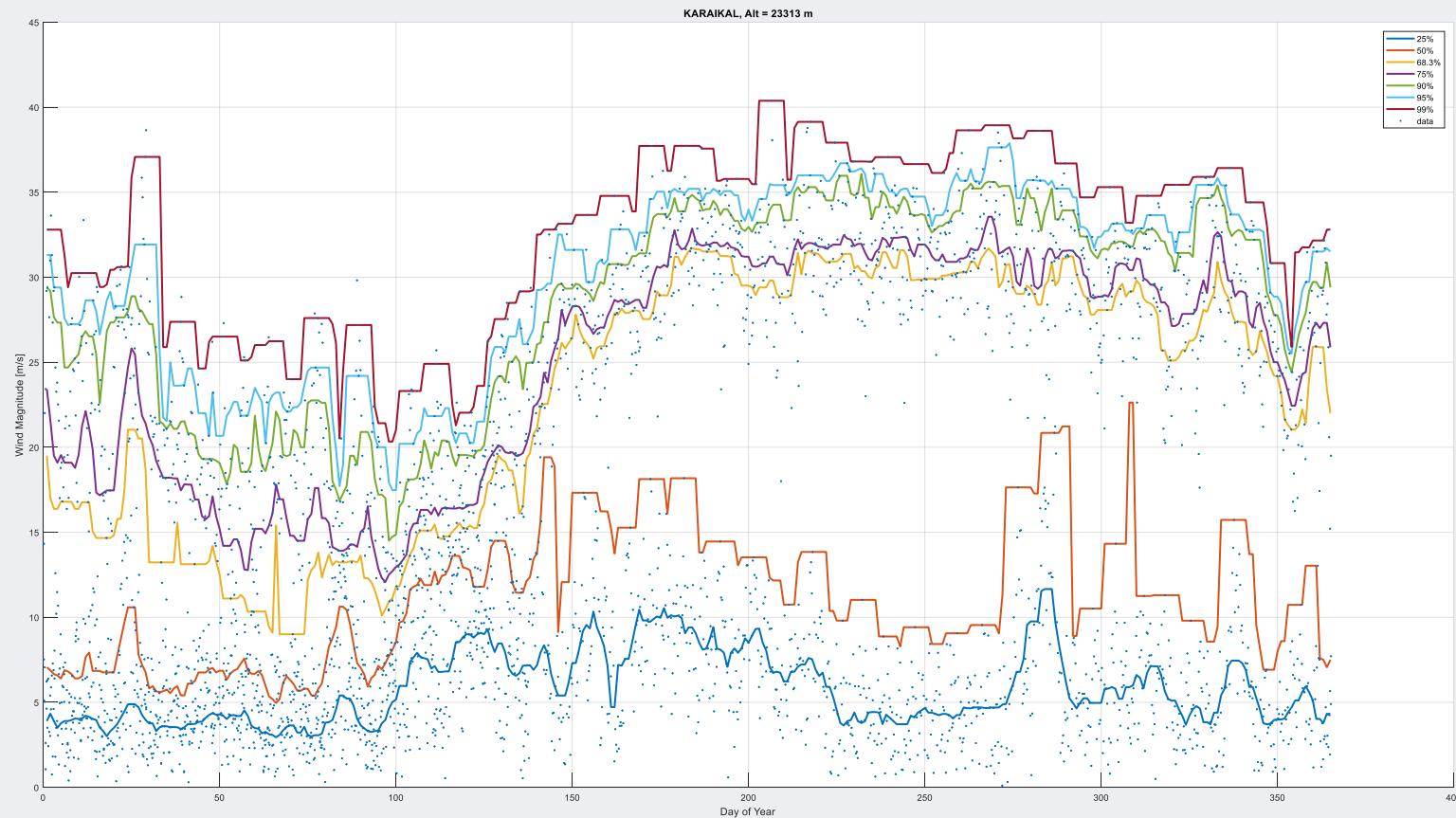
Wind Direction



KARAIKAL/INM00043346

Lat = 10.9167, Lon = 79.8333, Alt = 23313 m

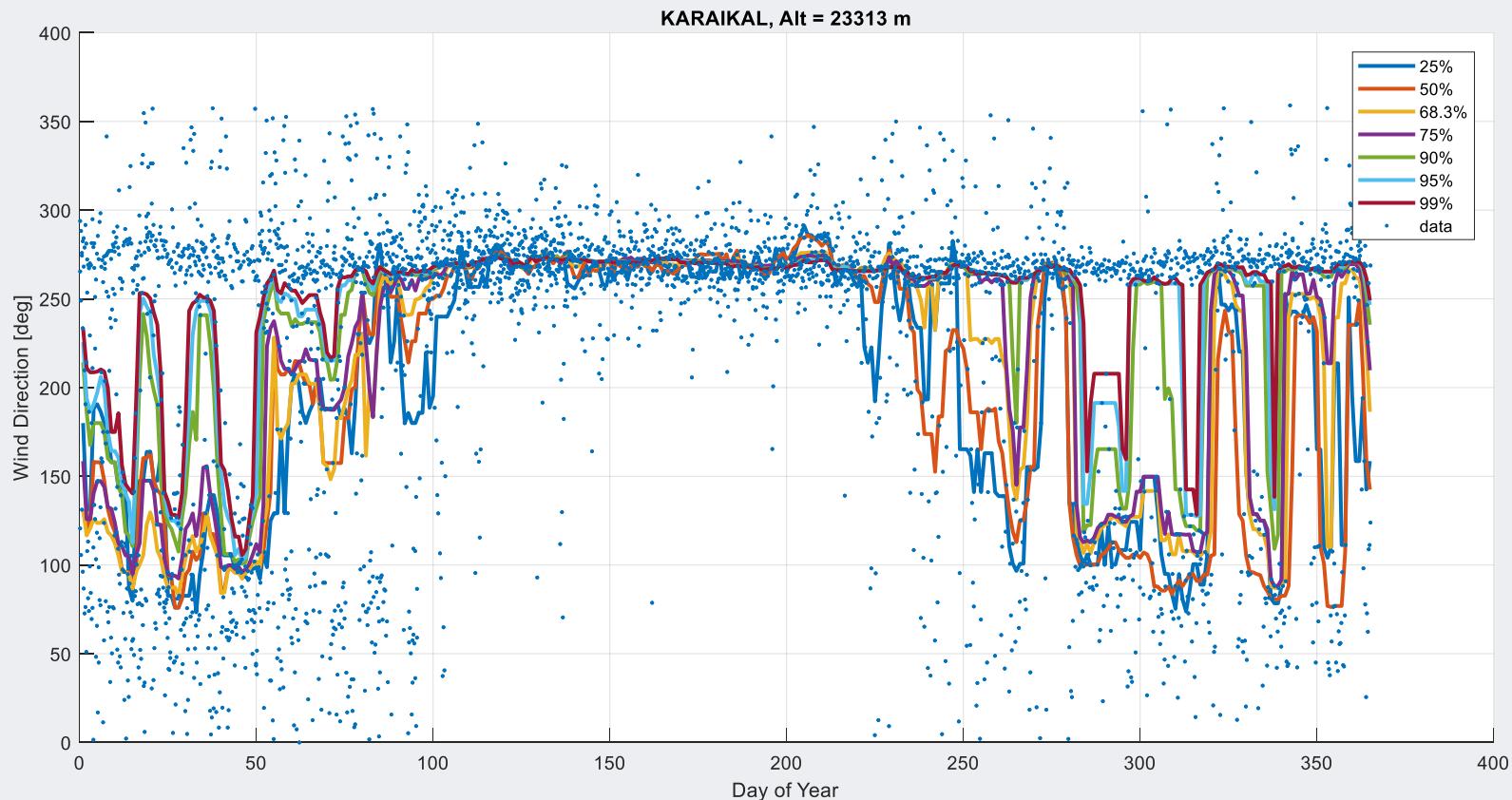
Wind Magnitude



KARAikal/INM00043346

Lat = 10.9167, Lon = 79.8333, Alt = 23313 m

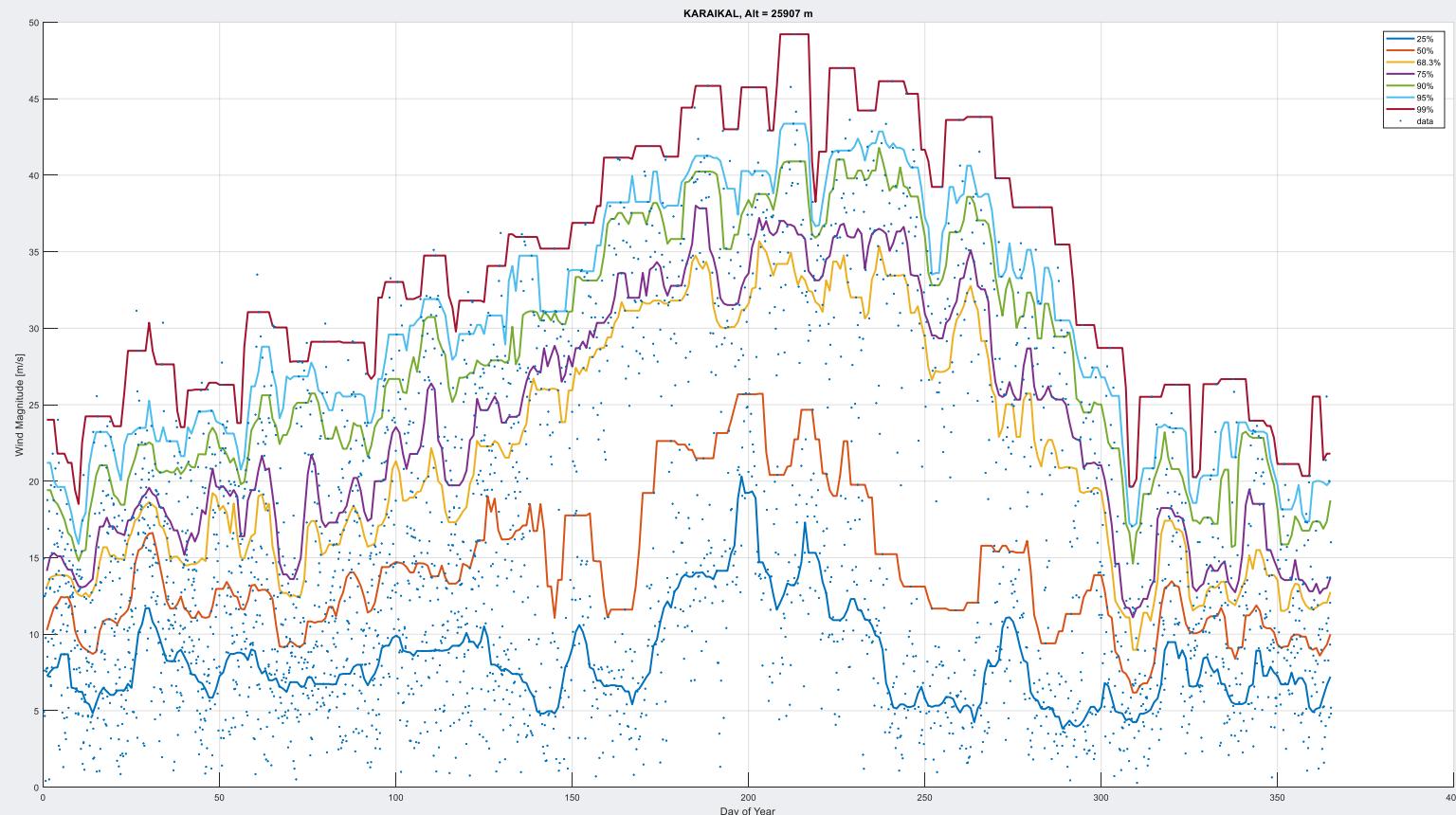
Wind Direction



KARAIKAL/INM00043346

Lat = 10.9167, Lon = 79.8333, Alt = 25907 m

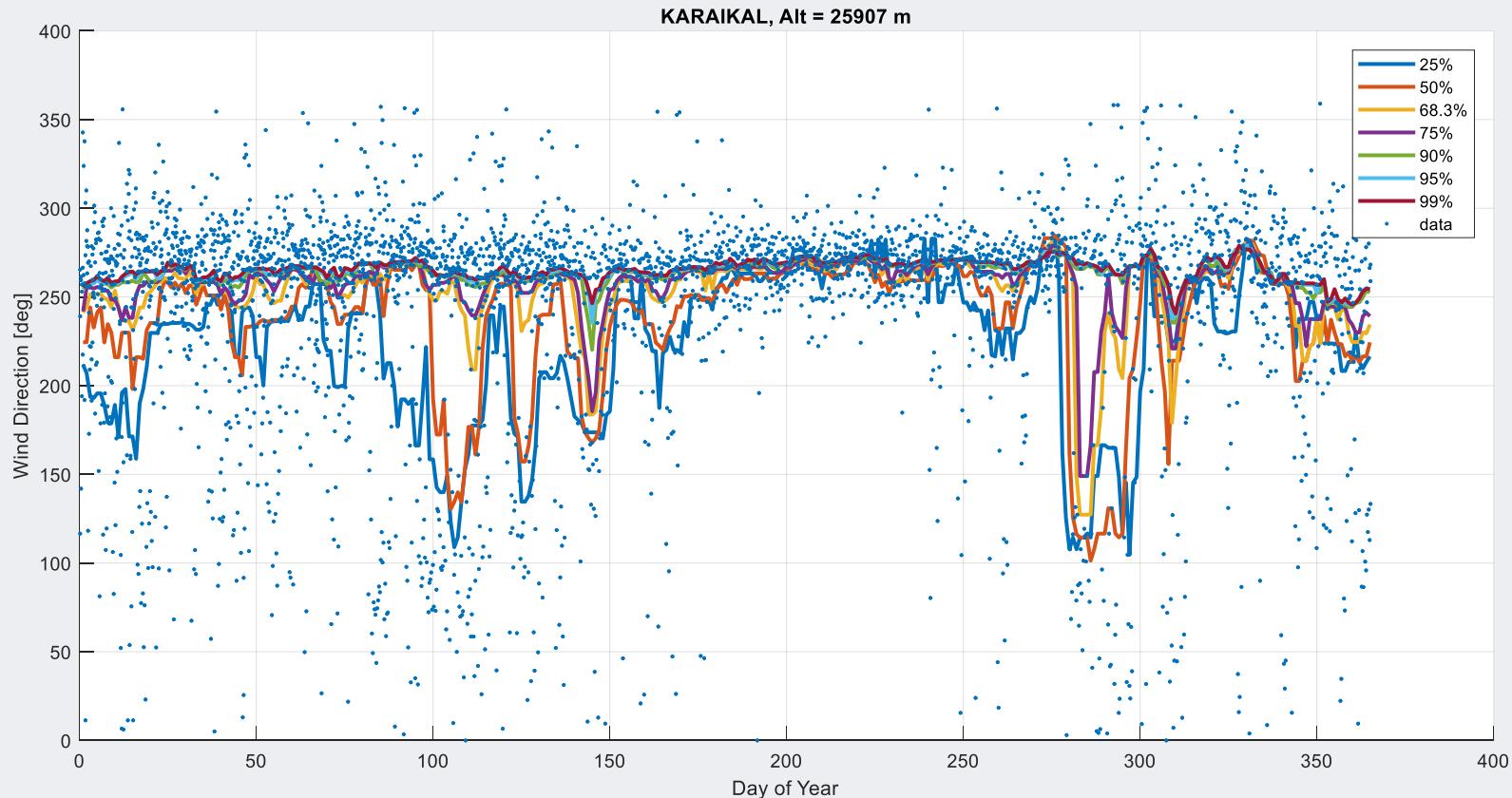
Wind Magnitude



KARAIKAL/INM00043346

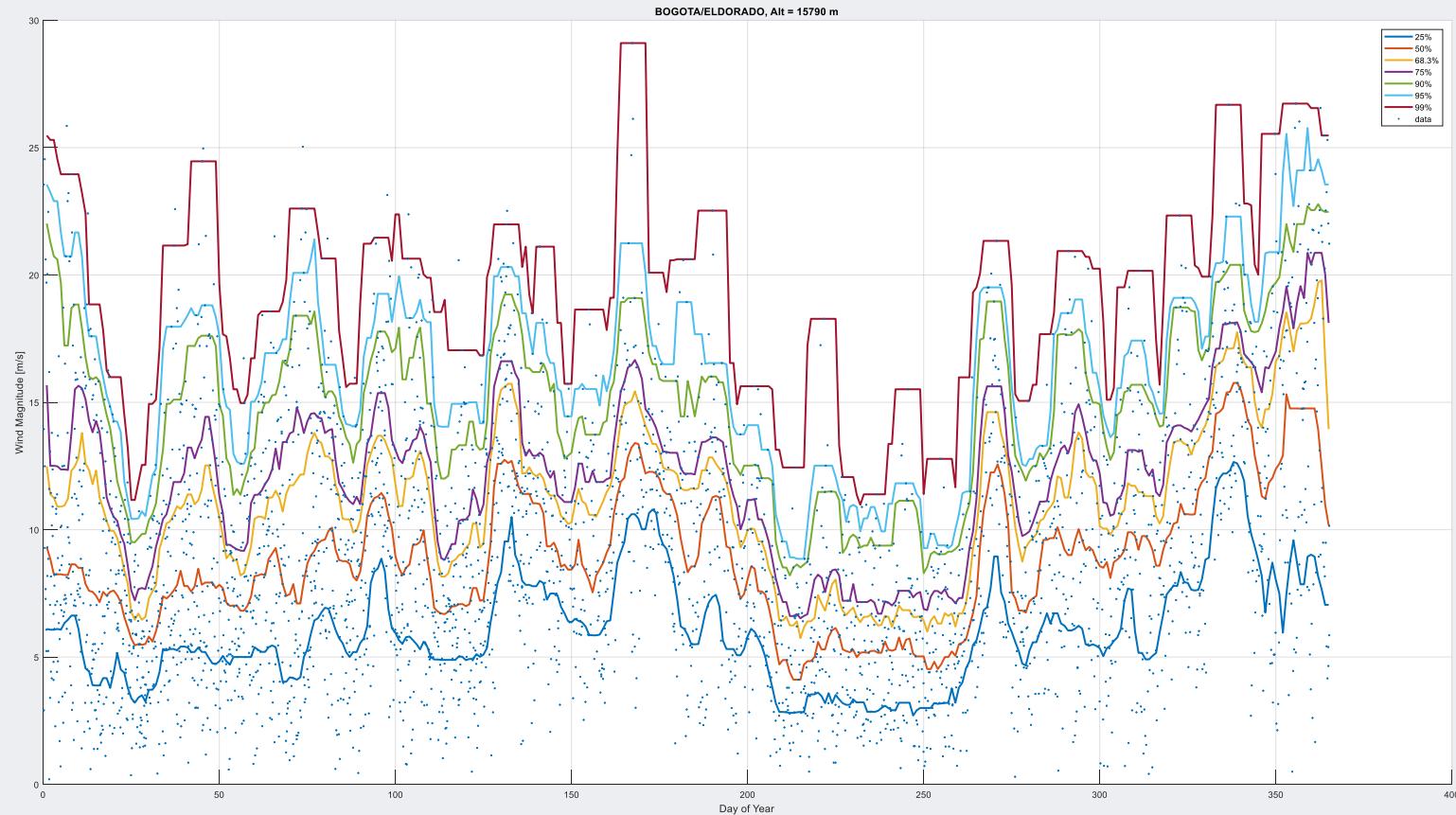
Lat = 10.9167, Lon = 79.8333, Alt = 25907 m

Wind Direction



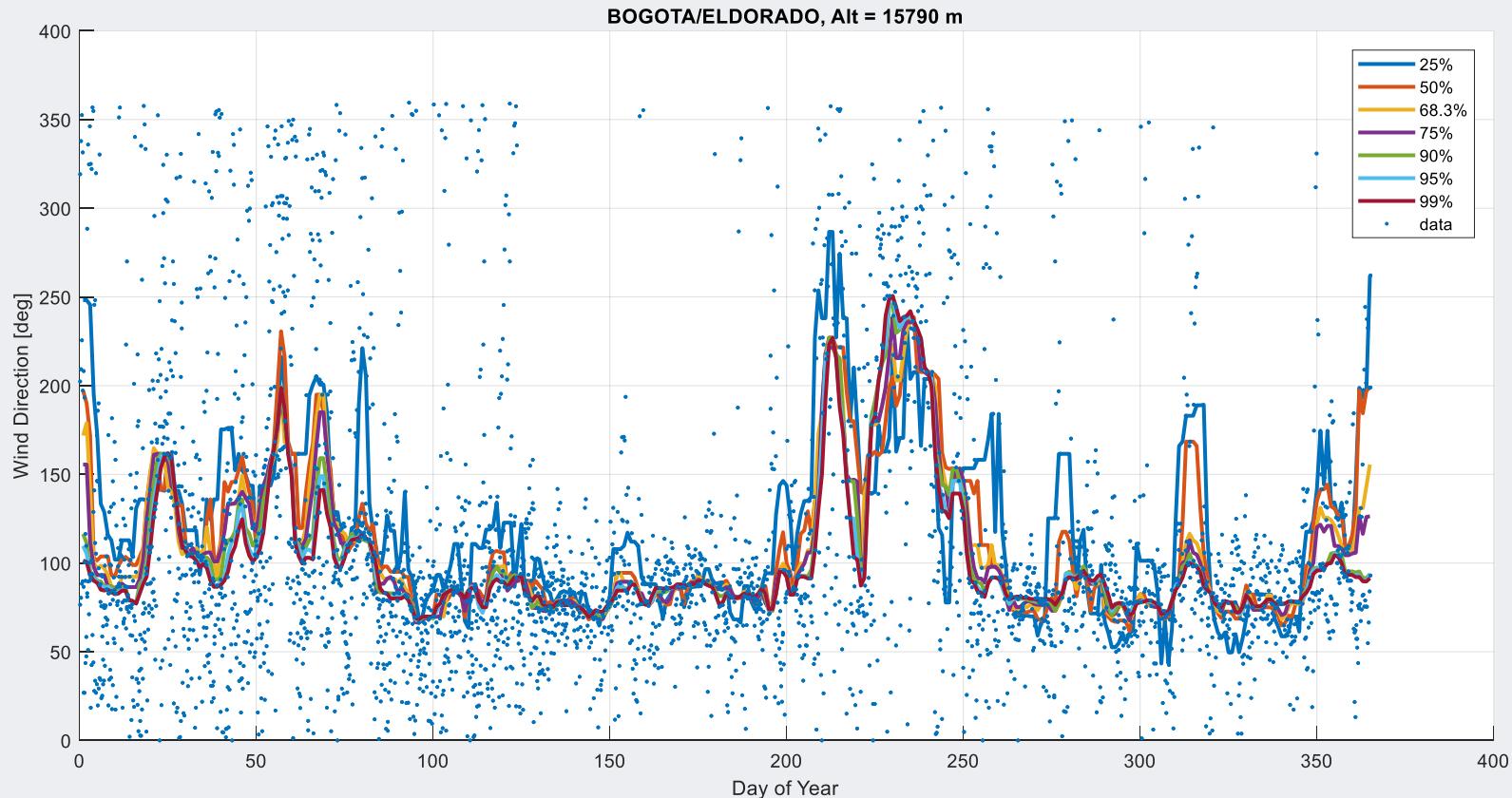
BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15, Alt = 15790 m

Wind Magnitude



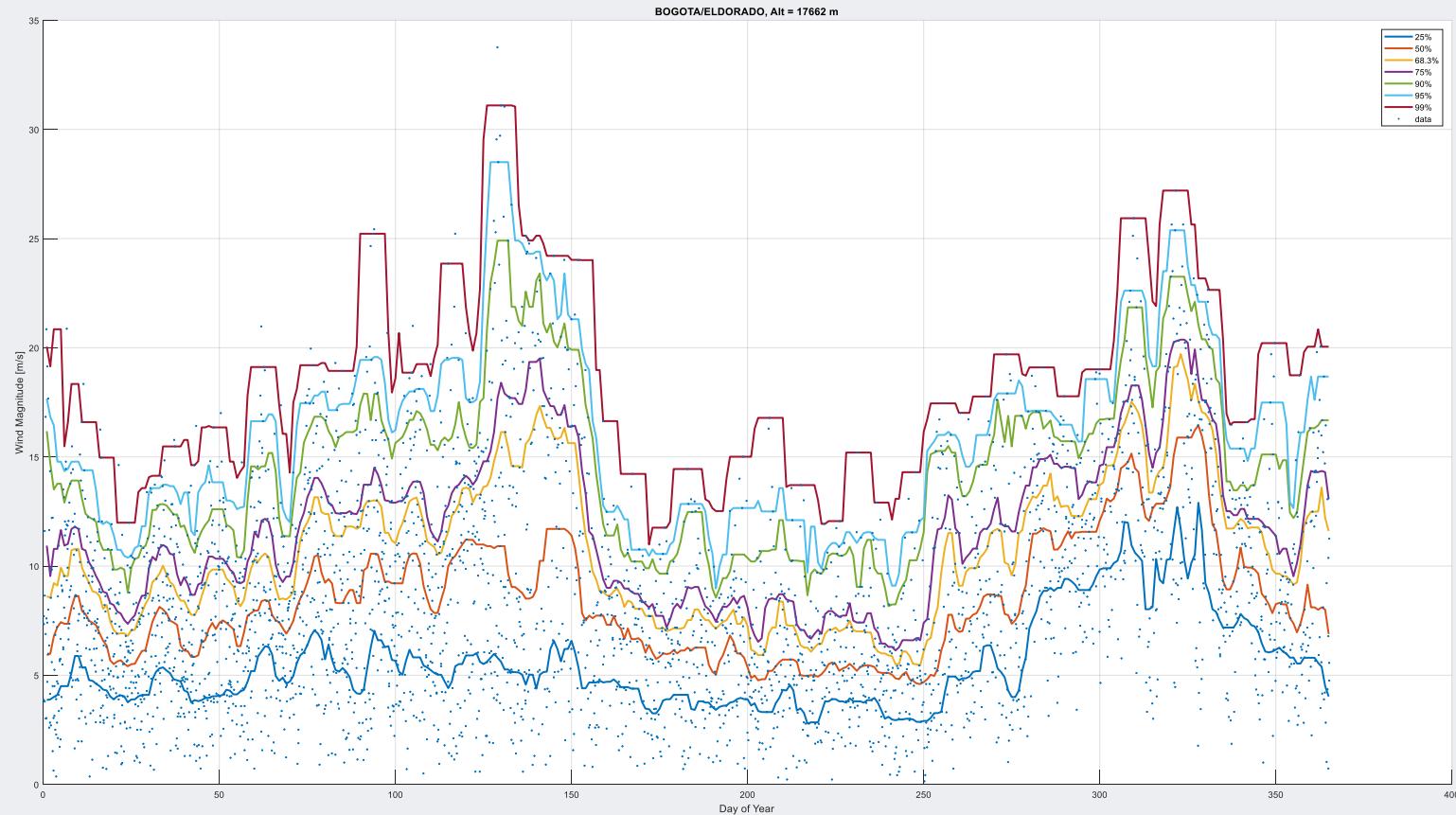
BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15, Alt = 15790 m

Wind Direction



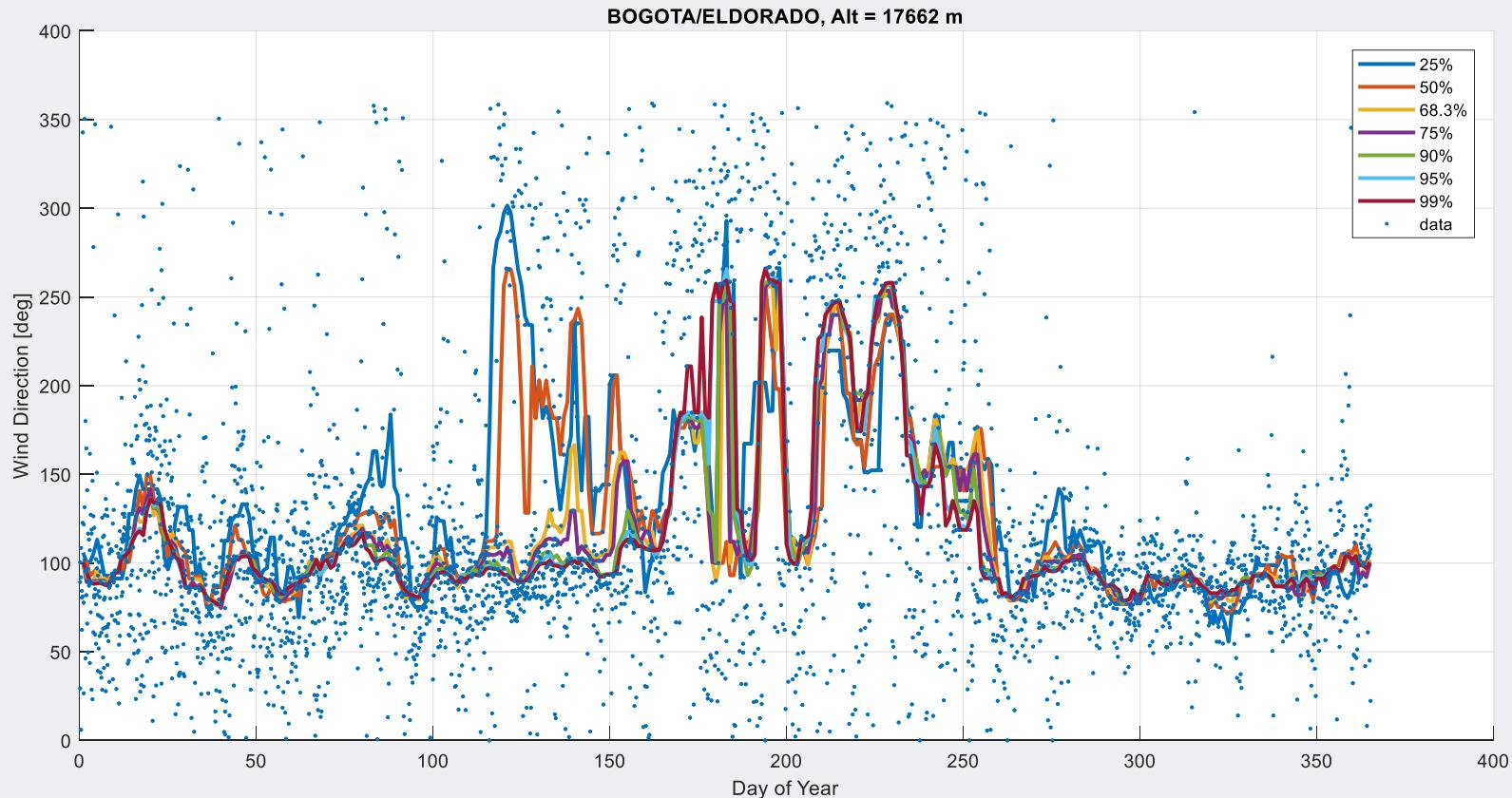
BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15, Alt = 17662 m

Wind Magnitude



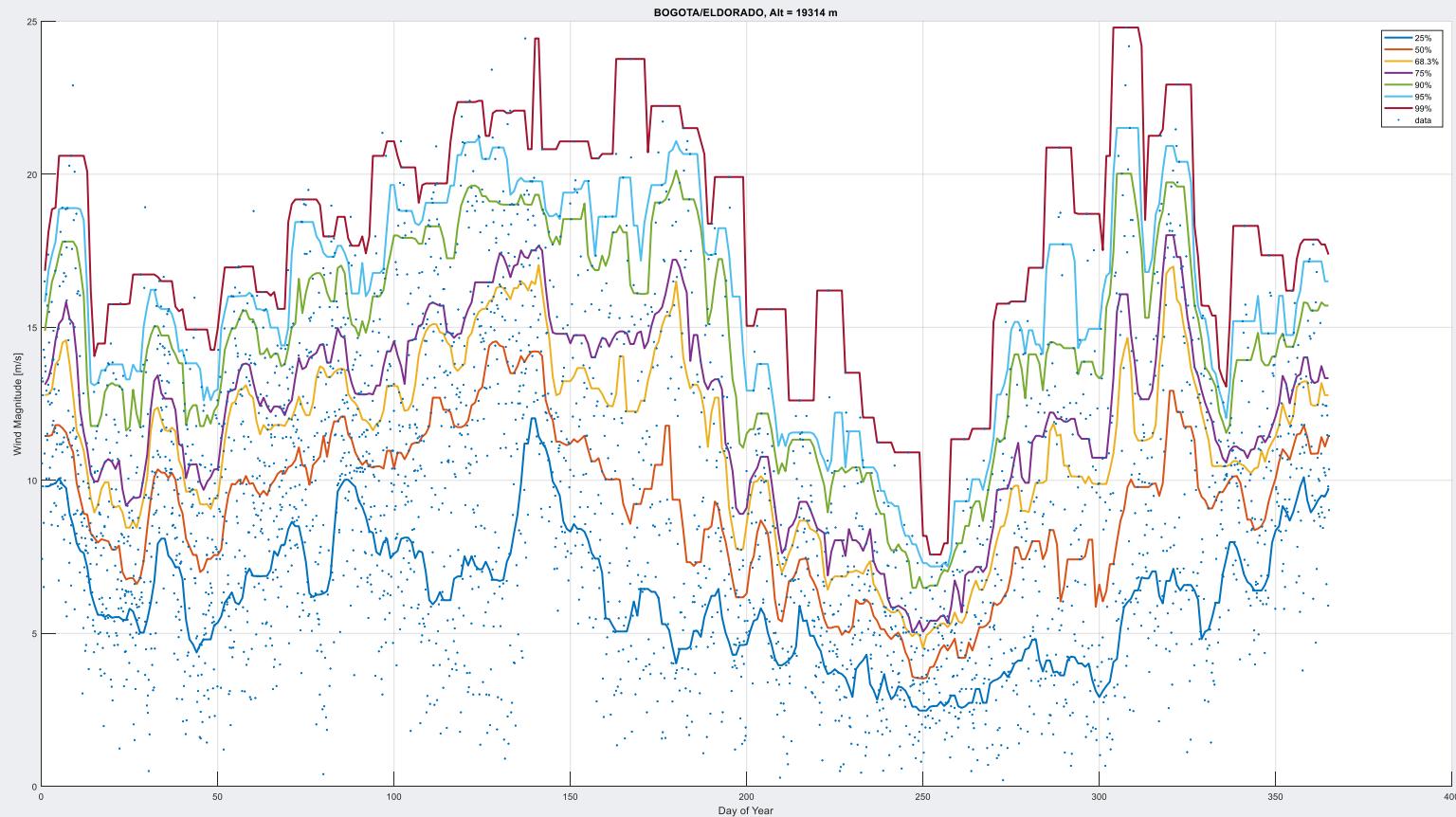
BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15, Alt = 17662 m

Wind Direction



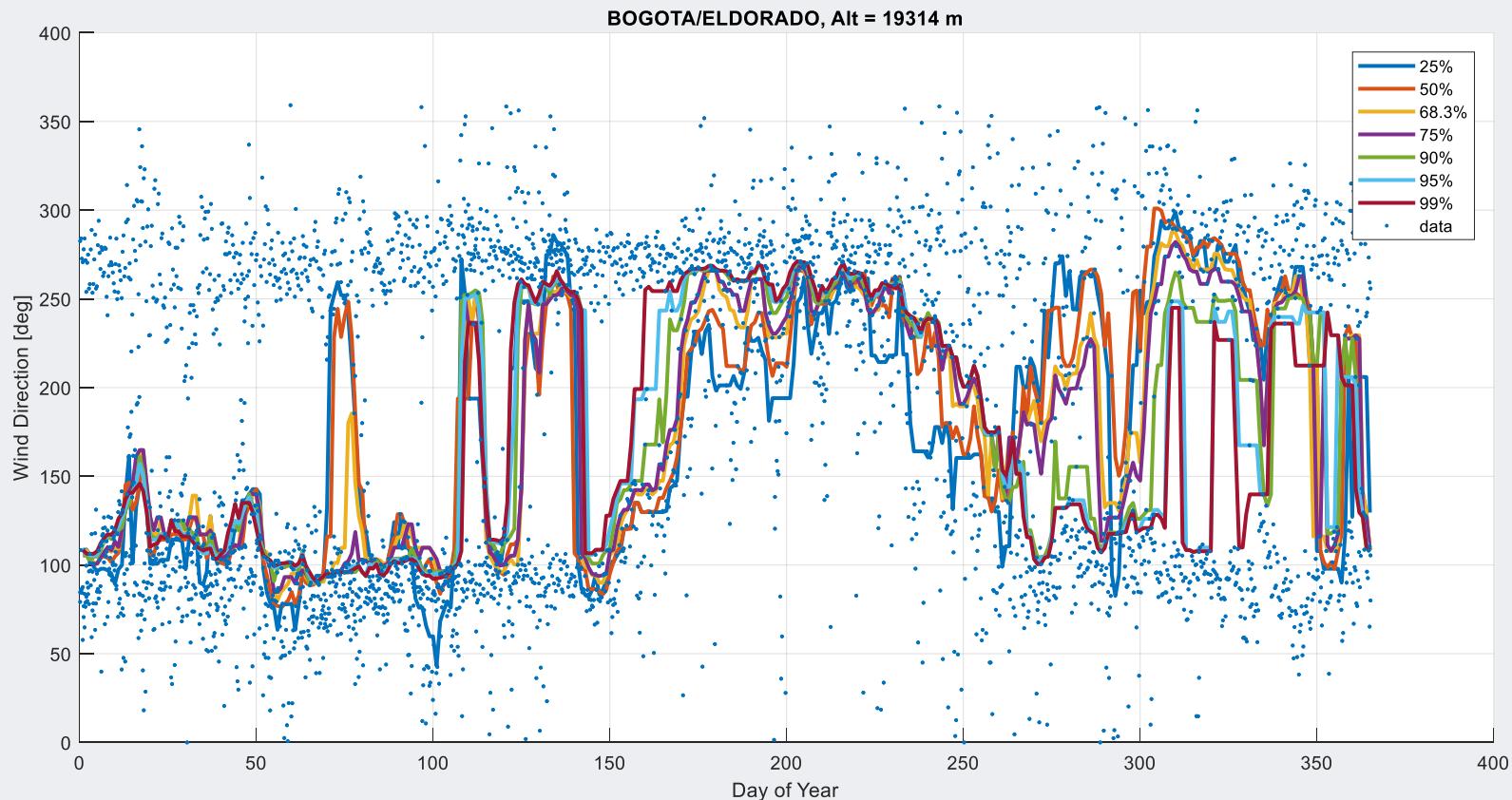
BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15, Alt = 19314 m

Wind Magnitude



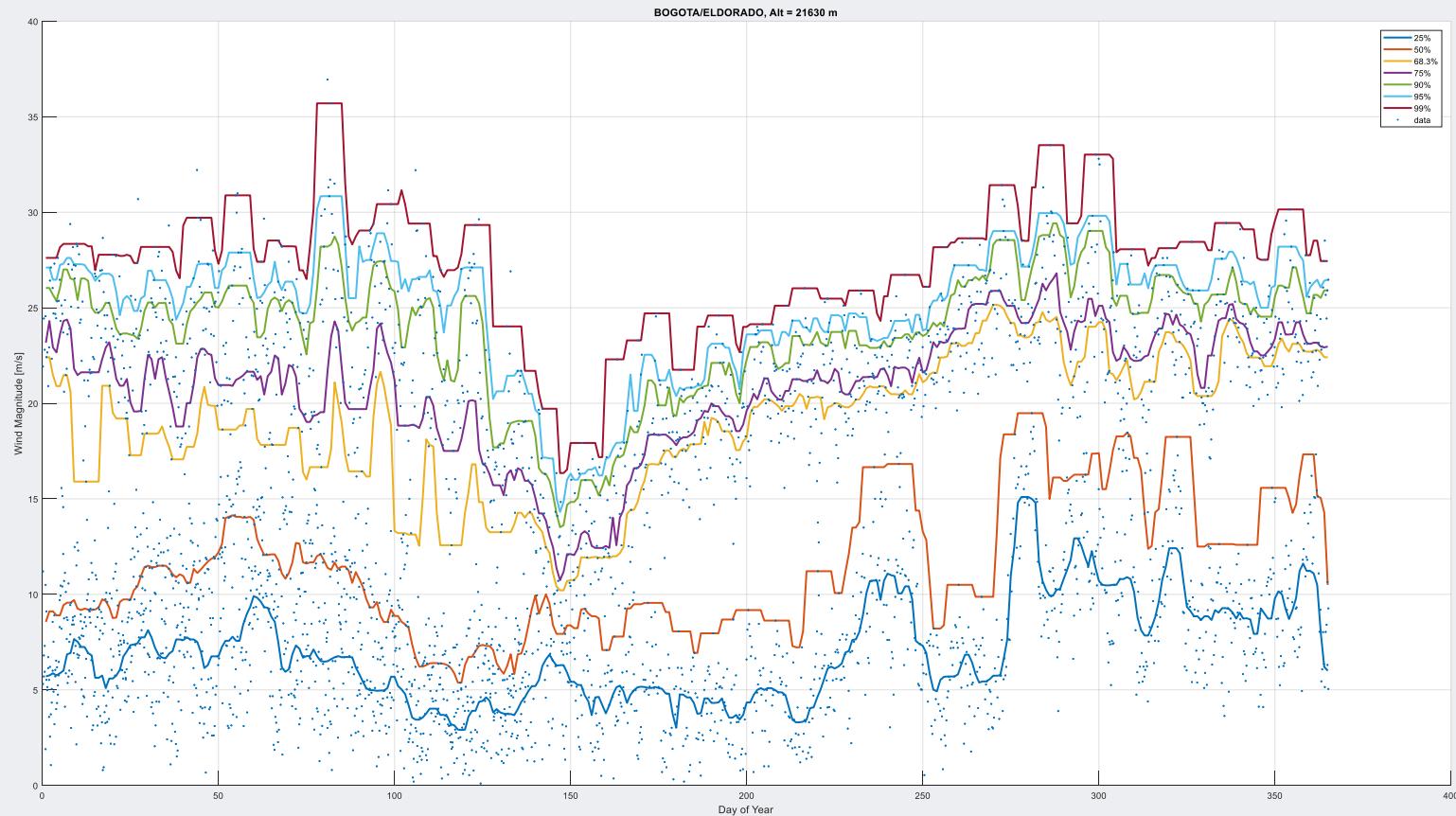
BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15, Alt = 19314 m

Wind Direction



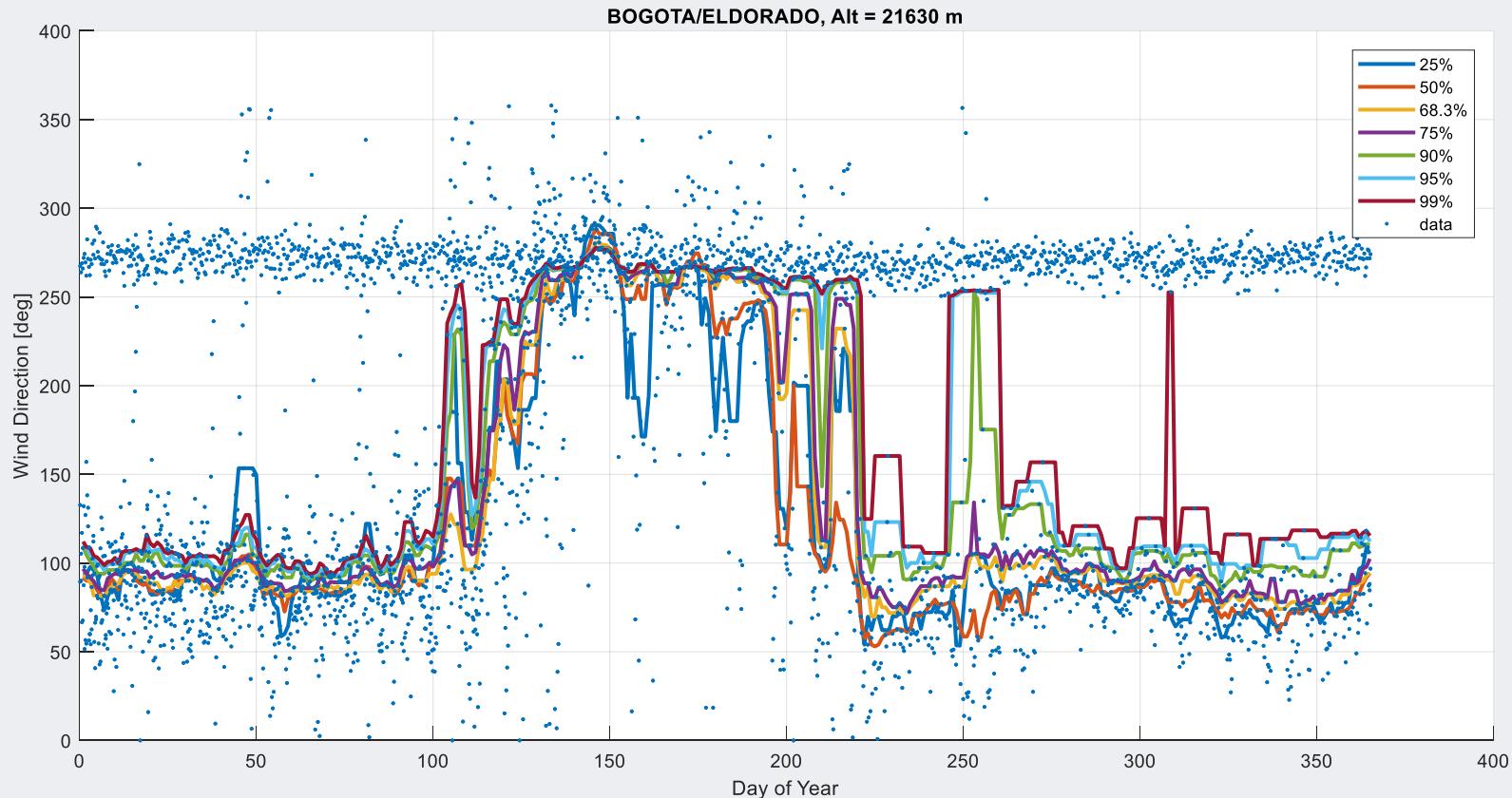
BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15, Alt = 21630 m

Wind Magnitude



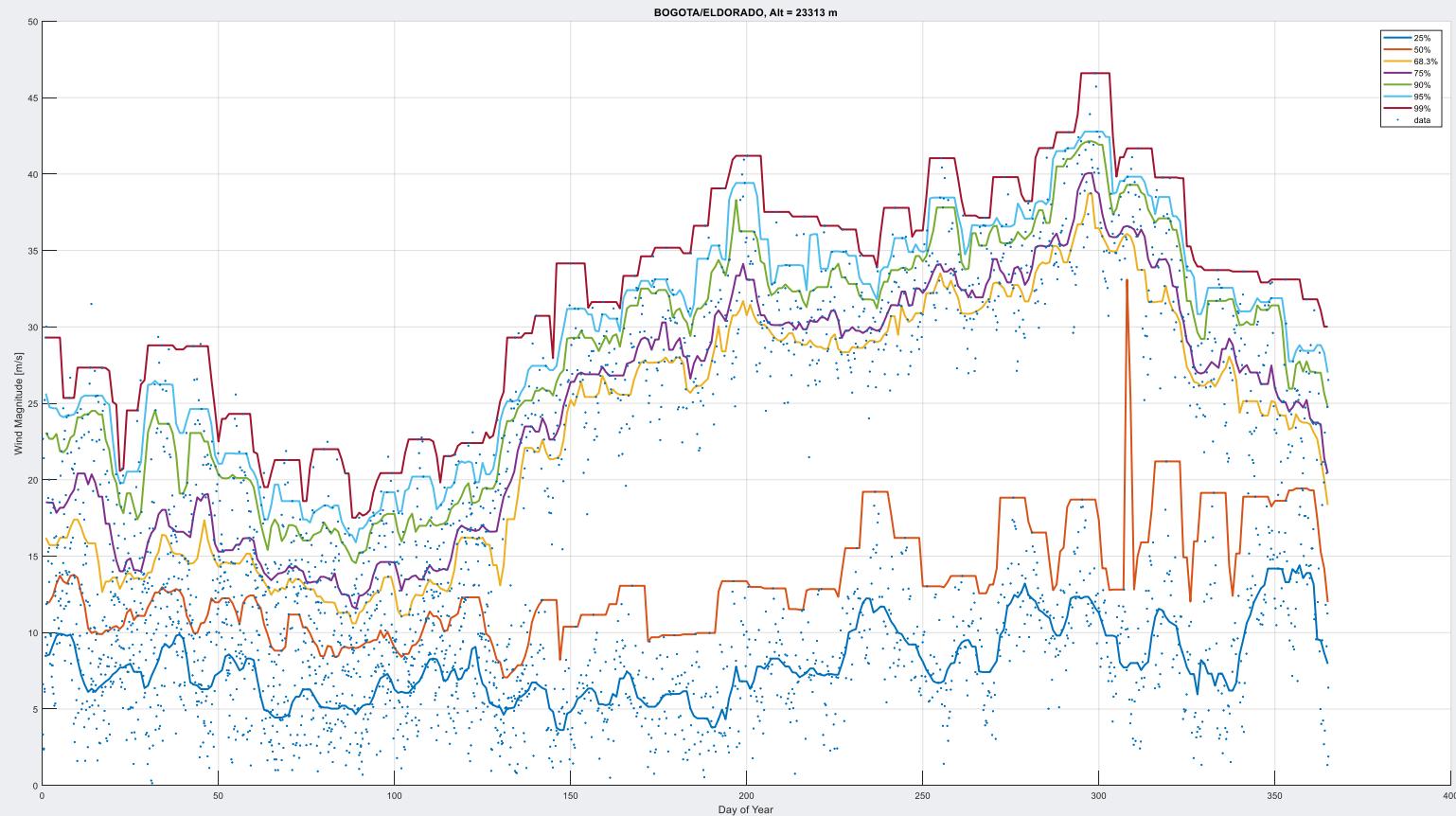
BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15, Alt = 21630 m

Wind Direction



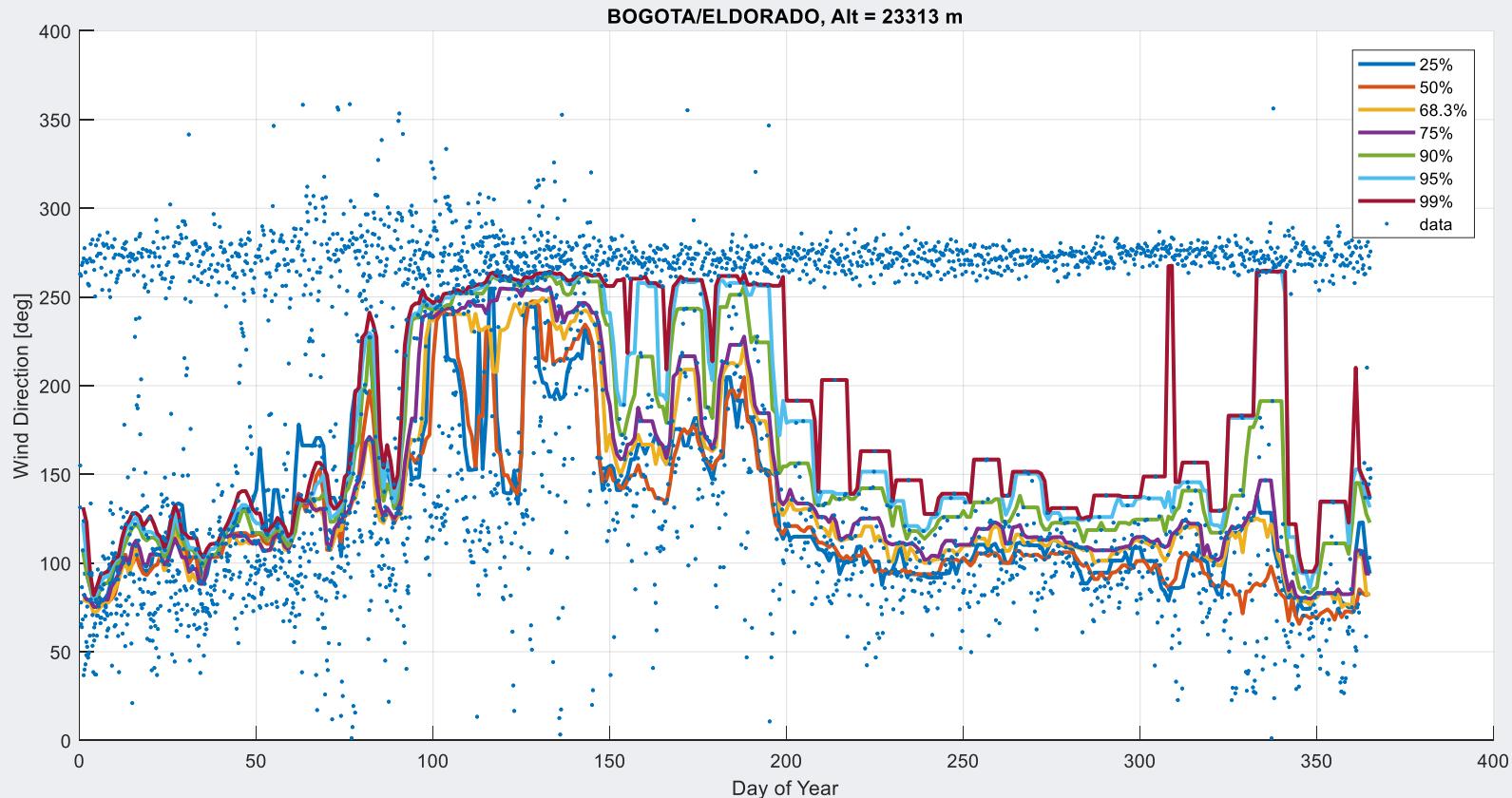
BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15, Alt = 23313 m

Wind Magnitude



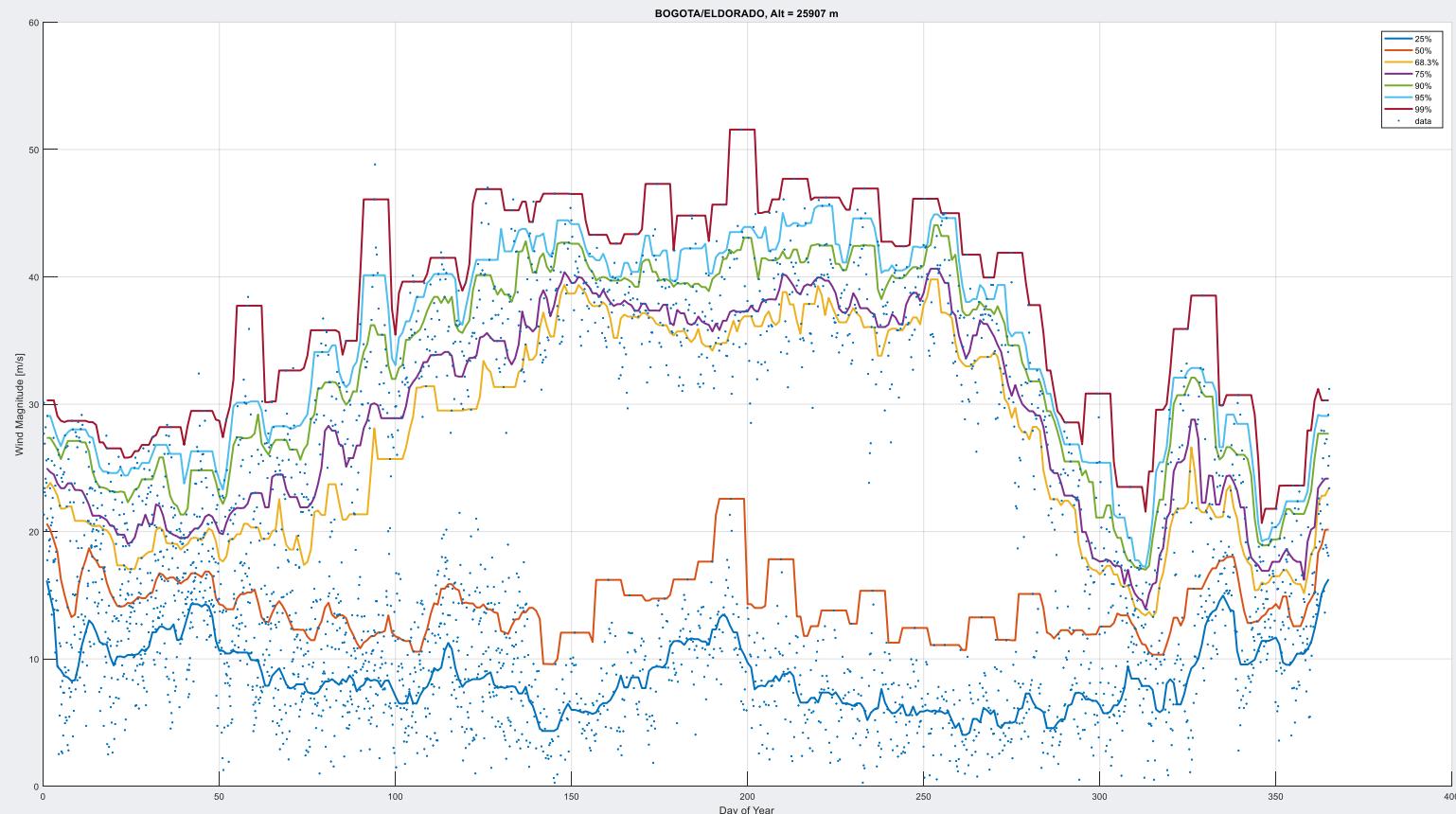
BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15, Alt = 23313 m

Wind Direction



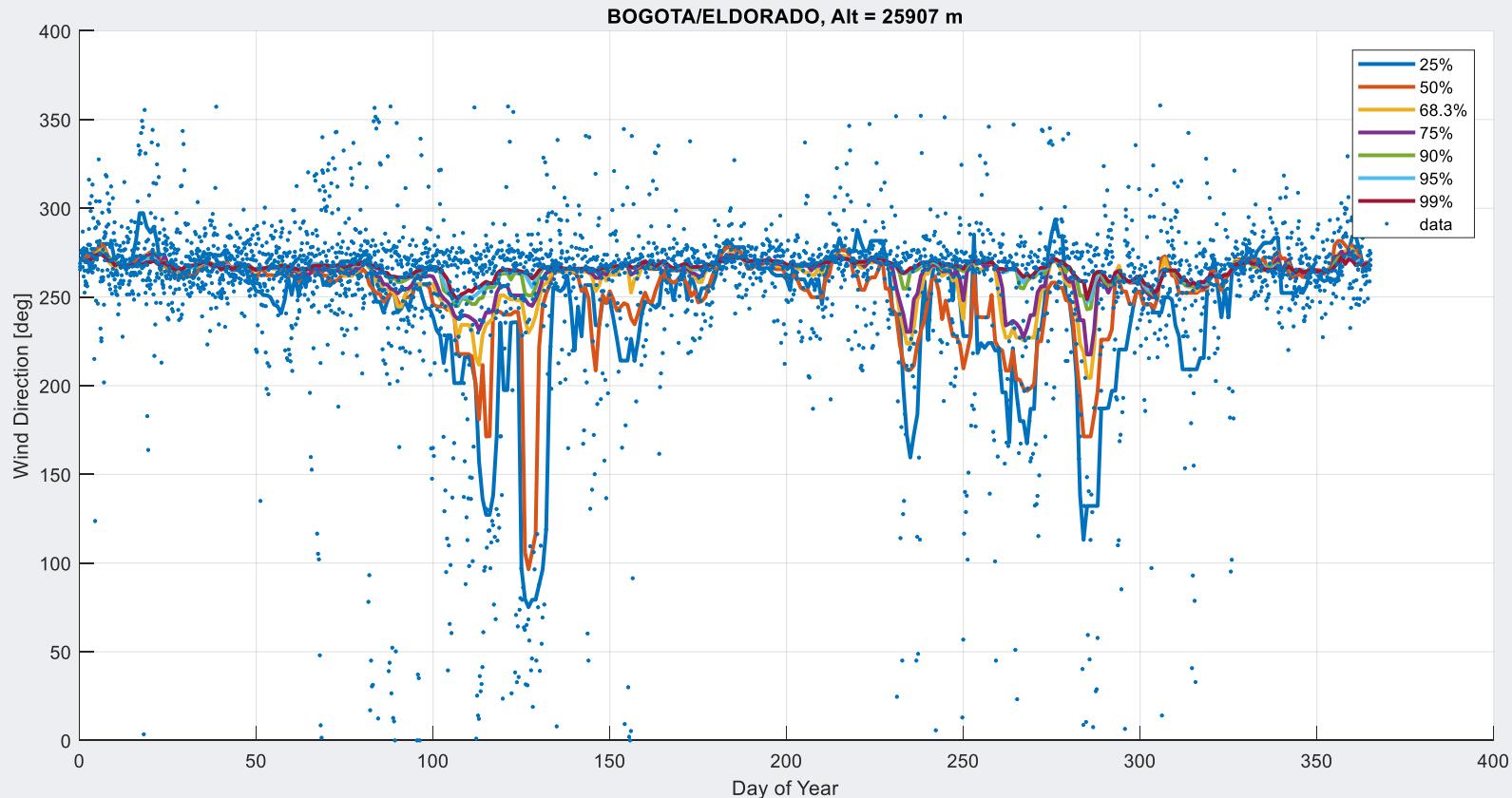
BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15, Alt = 25907 m

Wind Magnitude



BOGOTA/ELDORADO/COM00080222
Lat = 4.7, Lon = -74.15, Alt = 25907 m

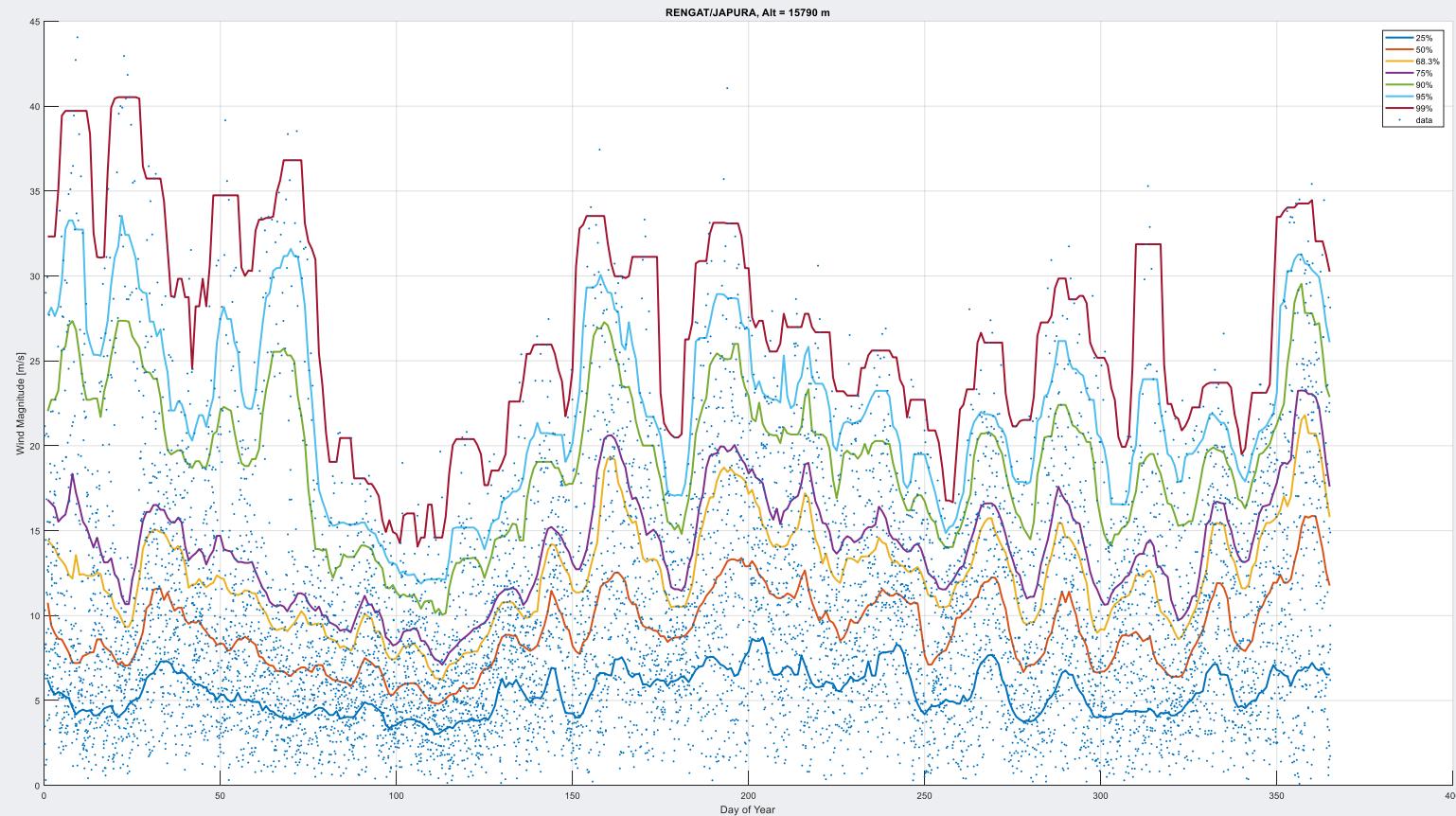
Wind Direction



RENGAT/JAPURA/IDM00096171

Lat = -0.3333, Lon = 102.3167, Alt = 15790 m

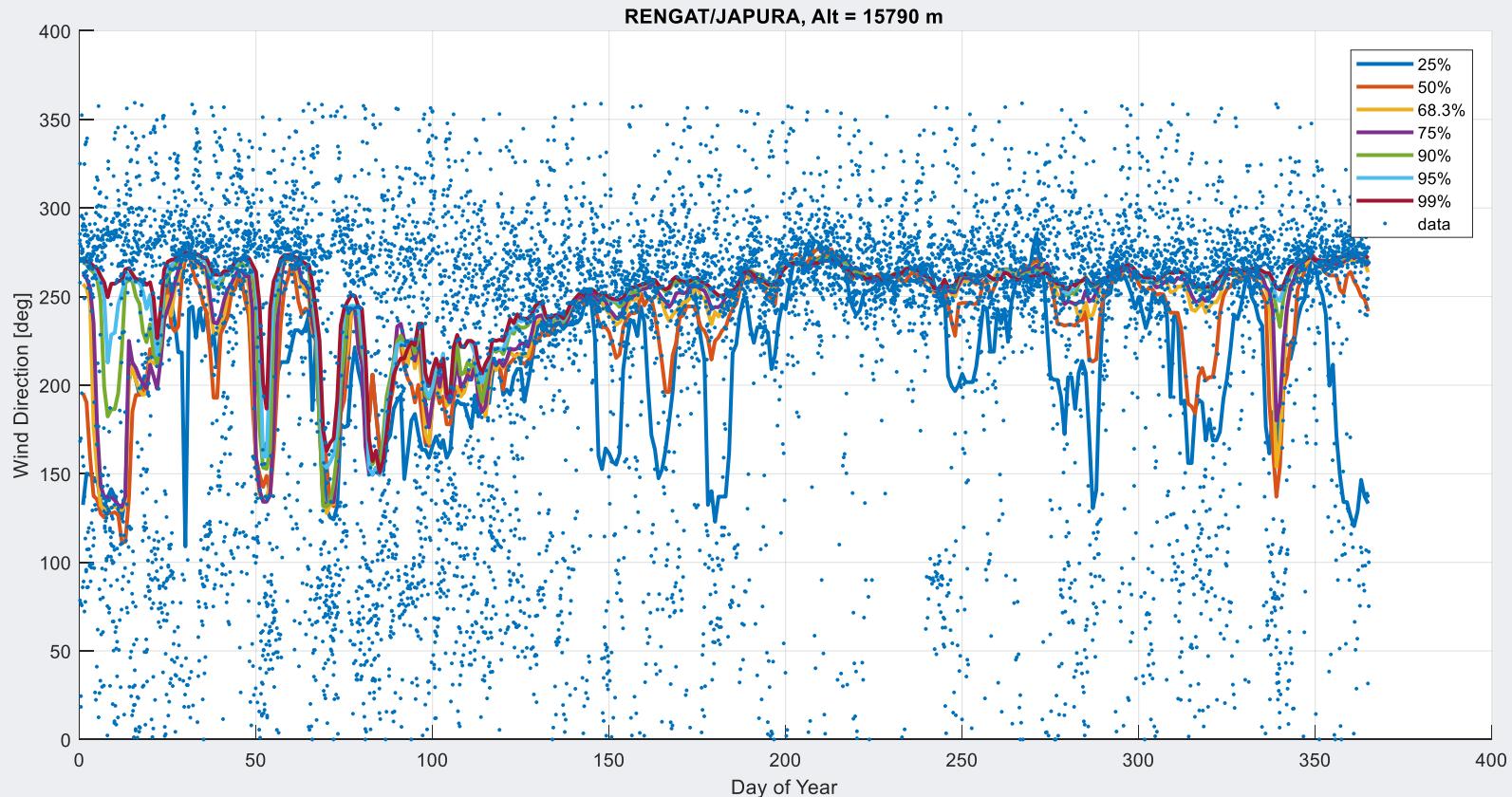
Wind Magnitude



RENGAT/JAPURA/IDM00096171

Lat = -0.3333, Lon = 102.3167, Alt = 15790 m

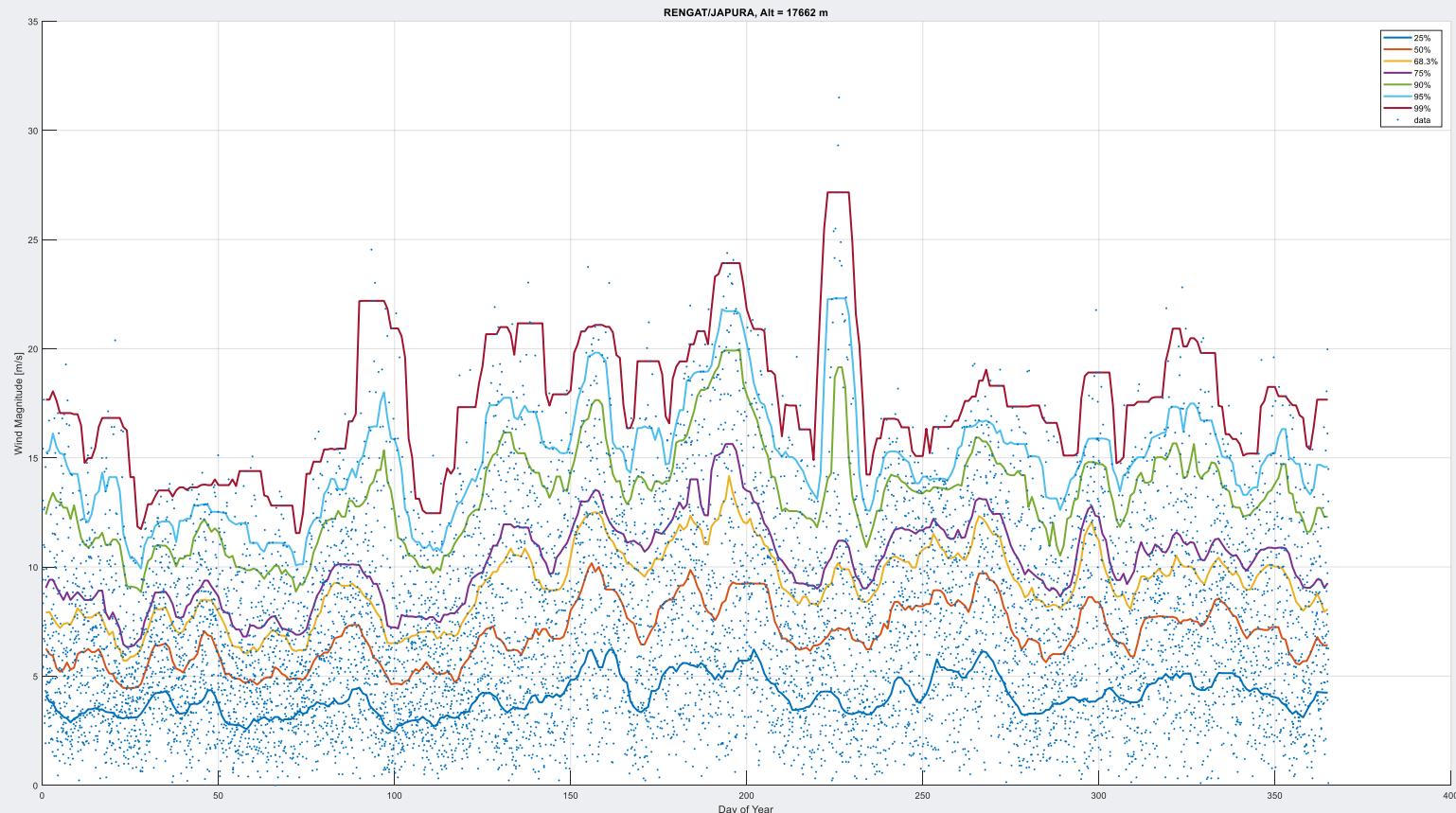
Wind Direction



RENGAT/JAPURA/IDM00096171

Lat = -0.3333, Lon = 102.3167, Alt = 17662 m

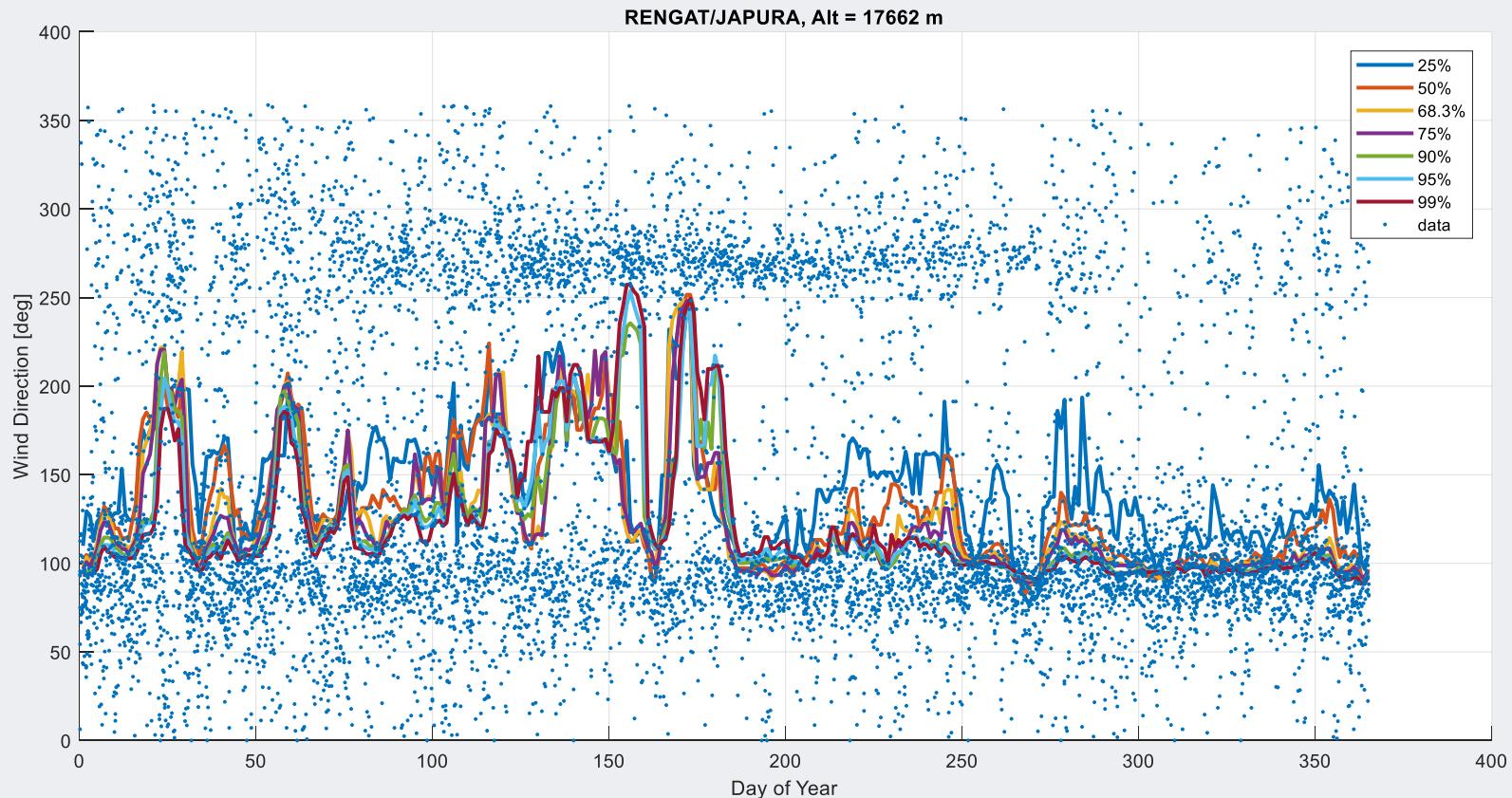
Wind Magnitude



RENGAT/JAPURA/IDM00096171

Lat = -0.3333, Lon = 102.3167, Alt = 17662 m

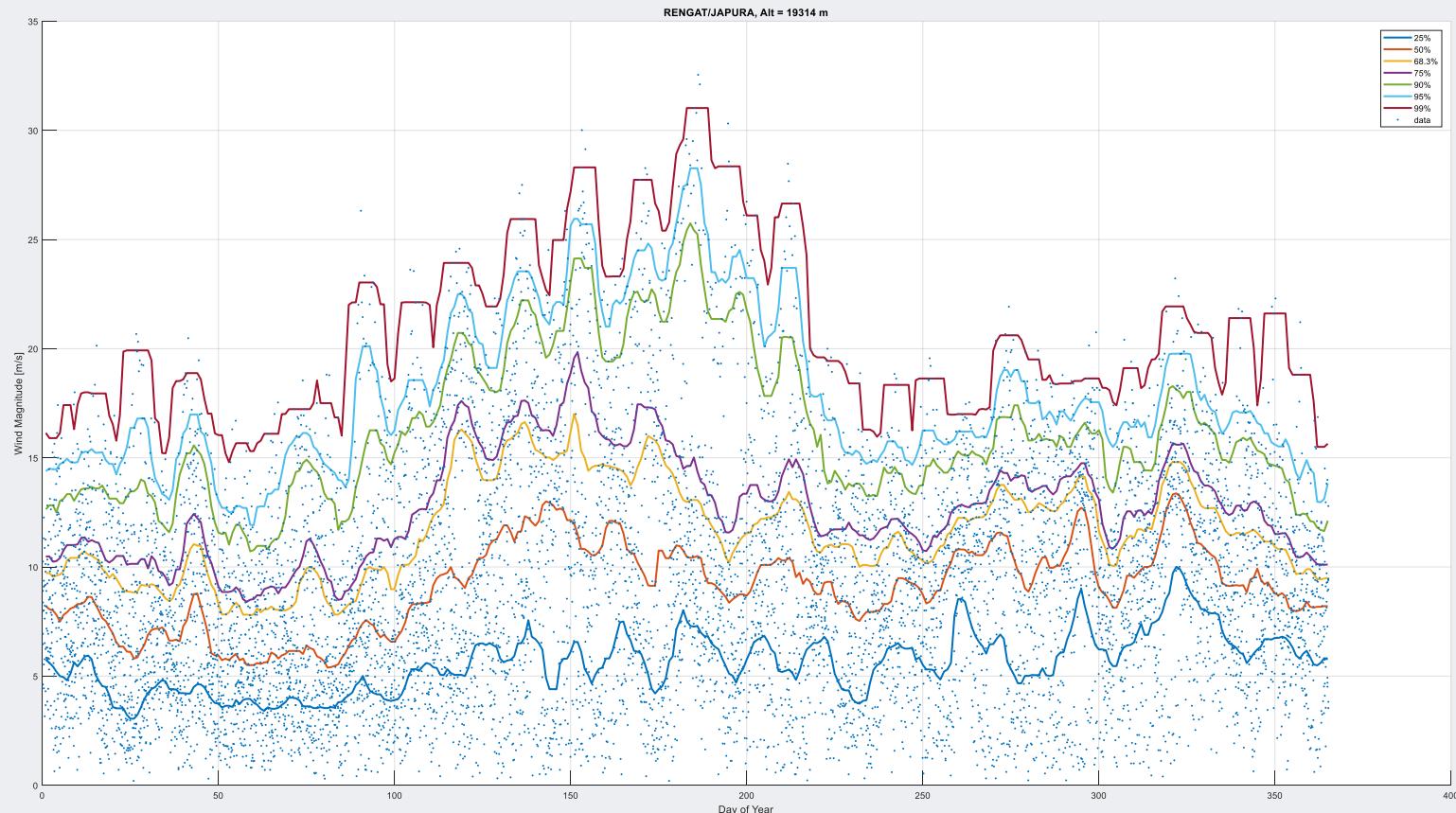
Wind Direction



RENGAT/JAPURA/IDM00096171

Lat = -0.3333, Lon = 102.3167, Alt = 19314 m

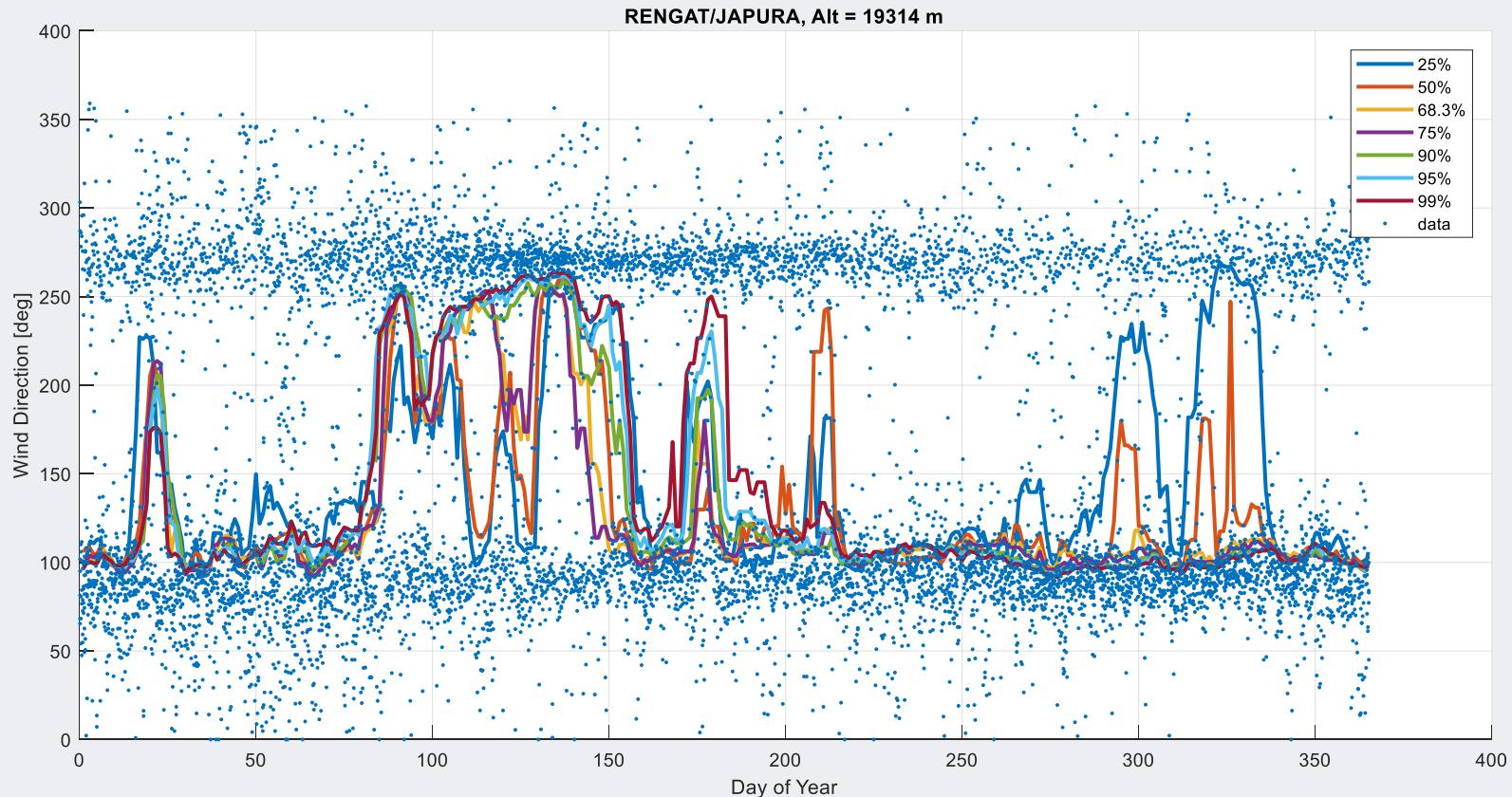
Wind Magnitude



RENGAT/JAPURA/IDM00096171

Lat = -0.3333, Lon = 102.3167, Alt = 19314 m

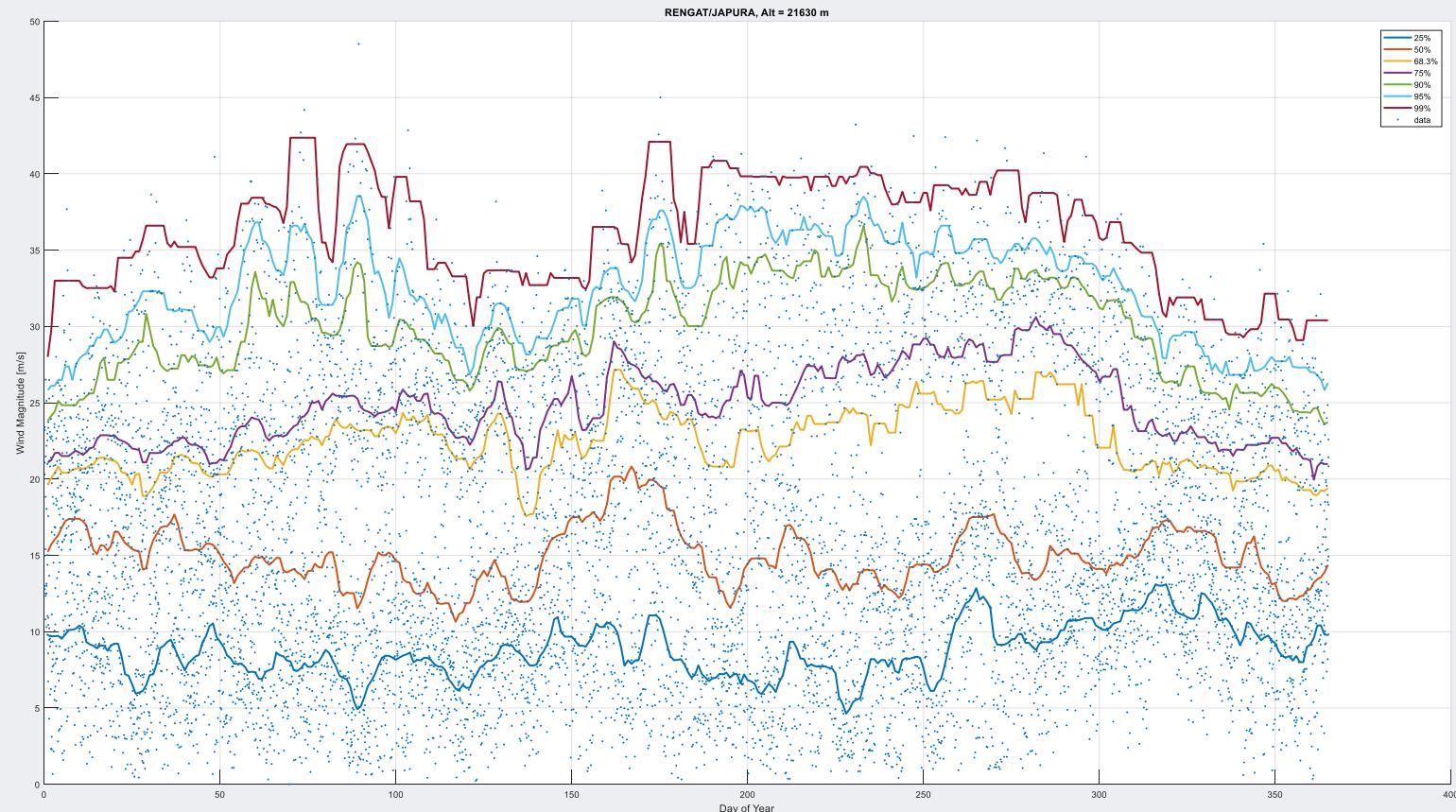
Wind Direction



RENGAT/JAPURA/IDM00096171

Lat = -0.3333, Lon = 102.3167, Alt = 21630 m

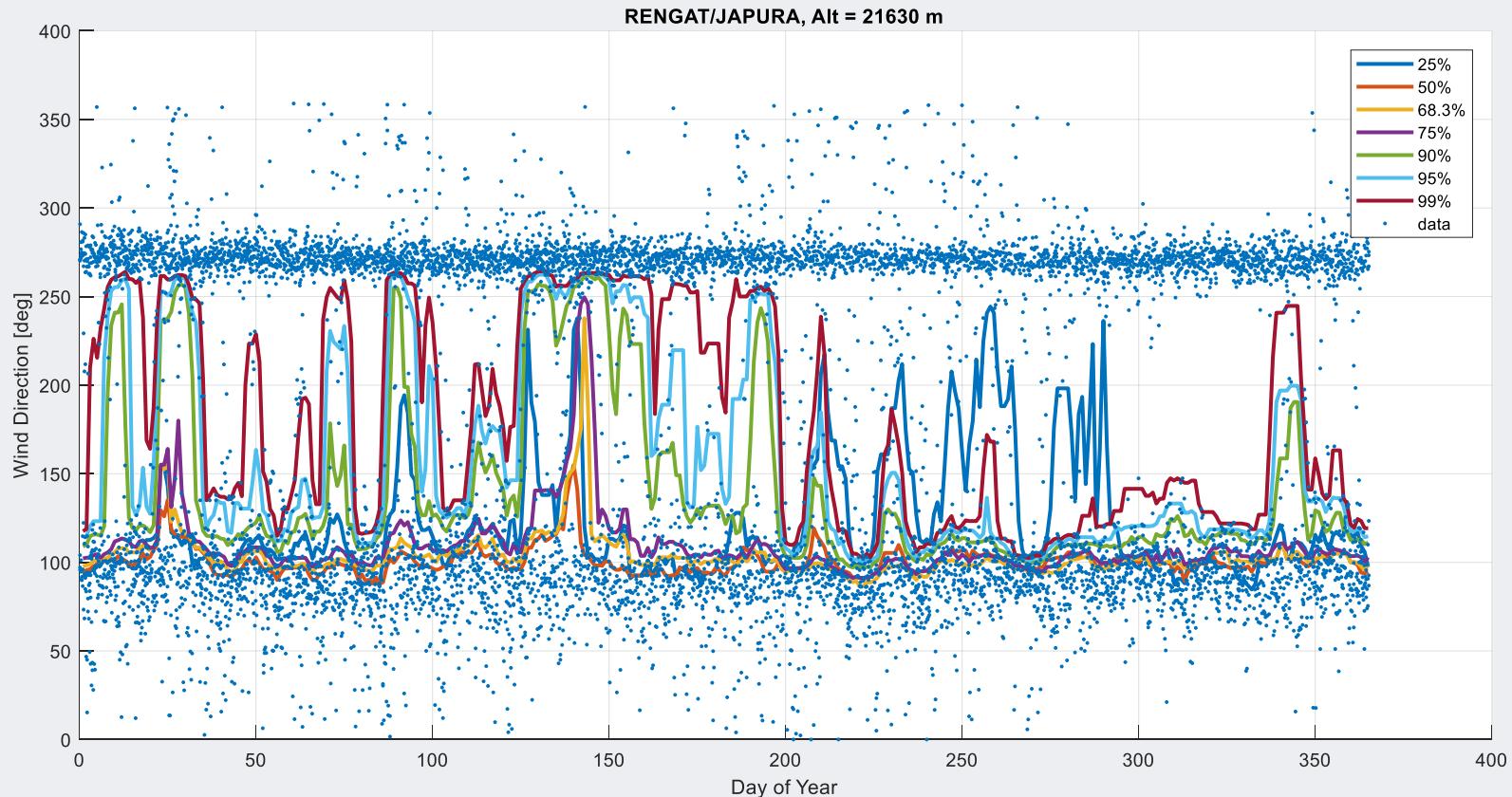
Wind Magnitude



RENGAT/JAPURA/IDM00096171

Lat = -0.3333, Lon = 102.3167, Alt = 21630 m

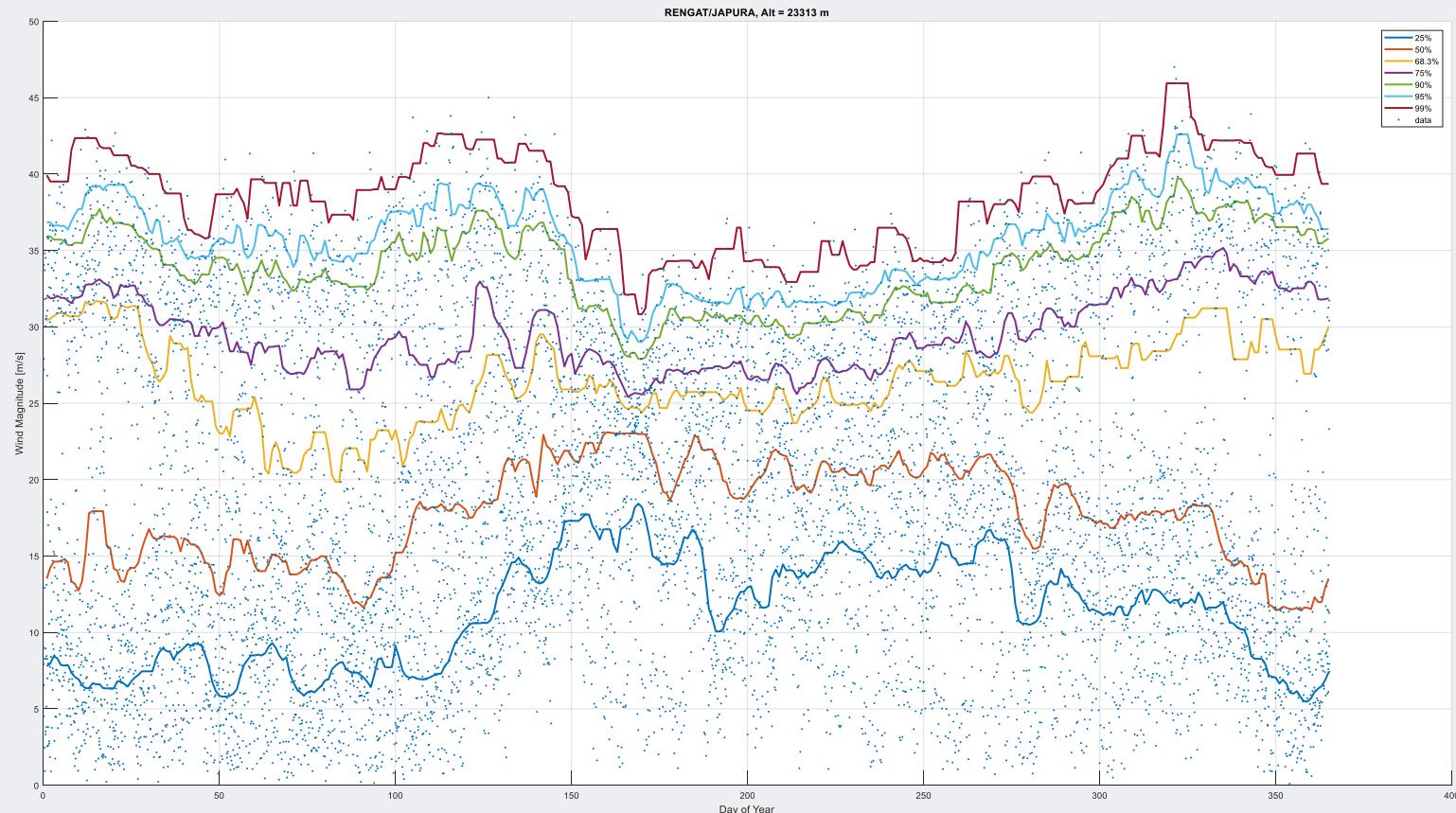
Wind Direction



RENGAT/JAPURA/IDM00096171

Lat = -0.3333, Lon = 102.3167, Alt = 23313 m

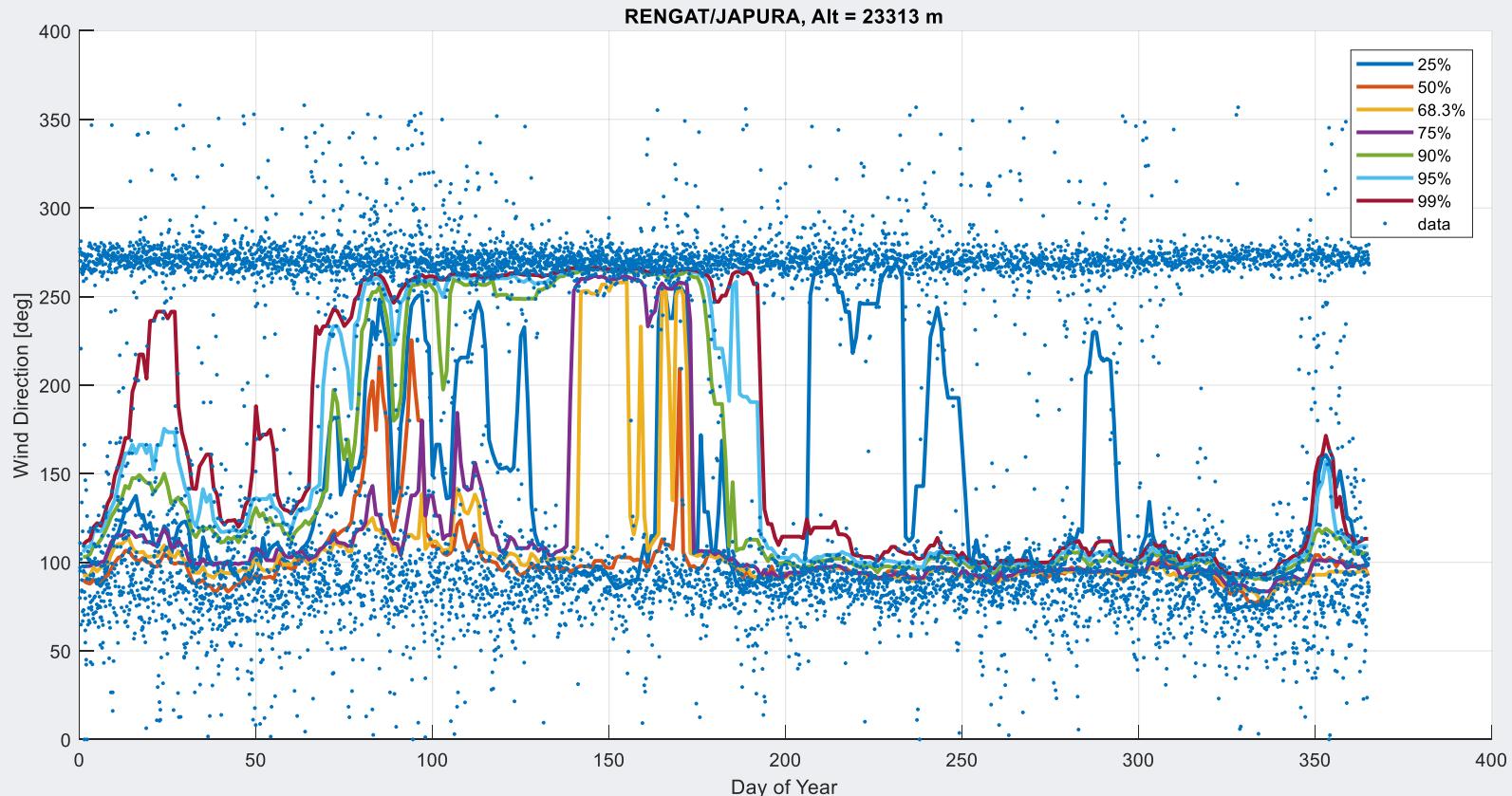
Wind Magnitude



RENGAT/JAPURA/IDM00096171

Lat = -0.3333, Lon = 102.3167, Alt = 23313 m

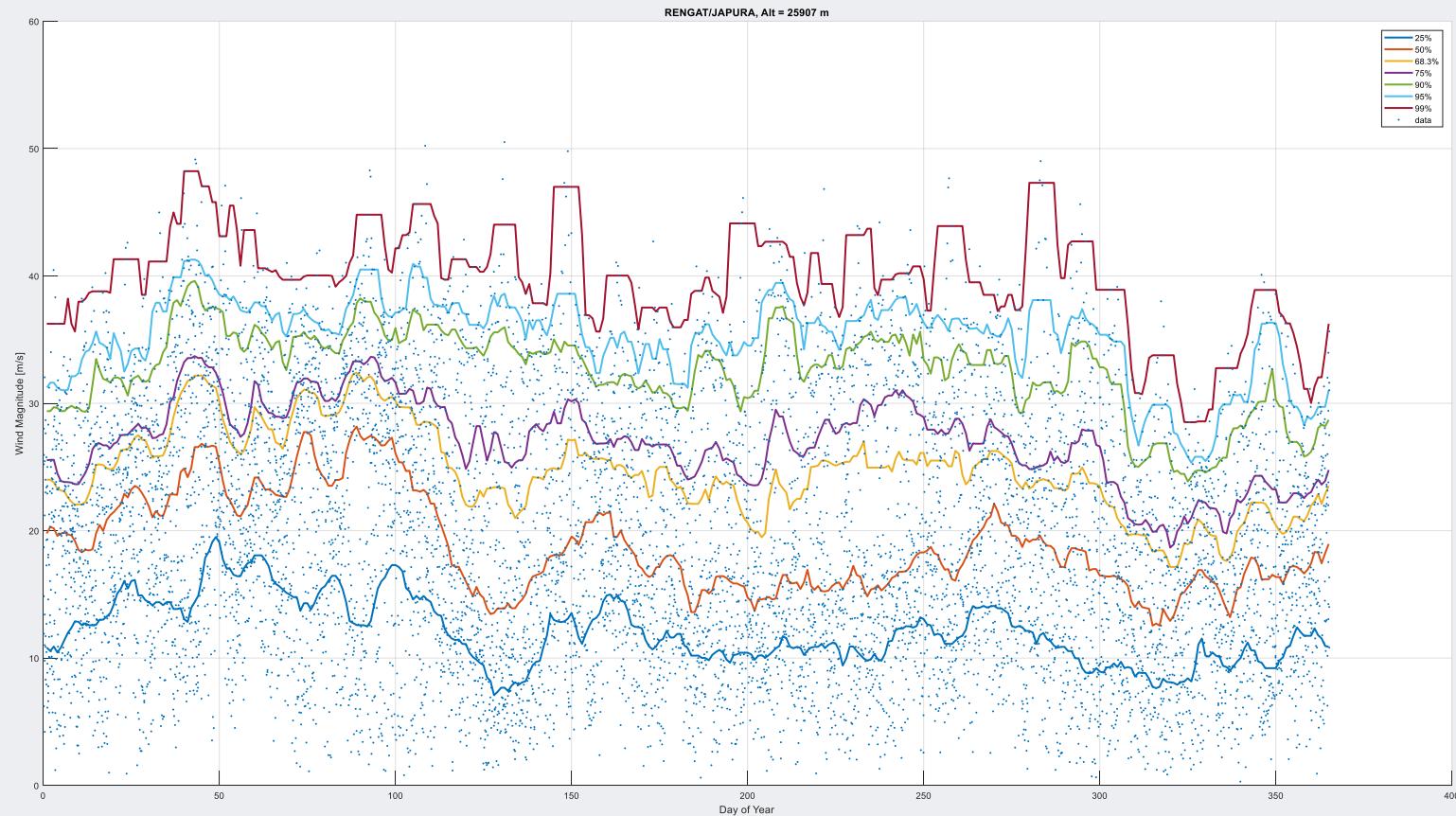
Wind Direction



RENGAT/JAPURA/IDM00096171

Lat = -0.3333, Lon = 102.3167, Alt = 25907 m

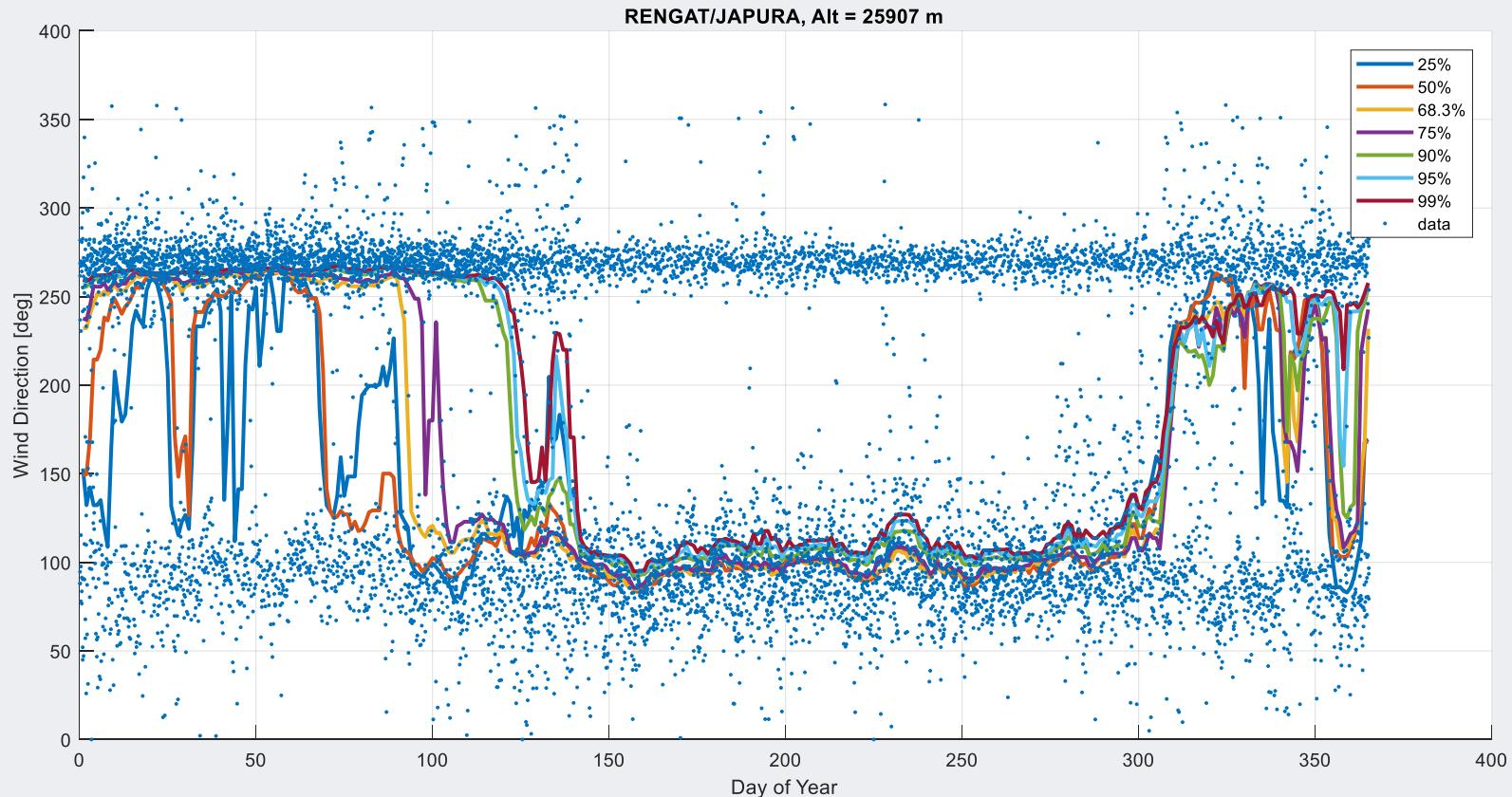
Wind Magnitude



RENGAT/JAPURA/IDM00096171

Lat = -0.3333, Lon = 102.3167, Alt = 25907 m

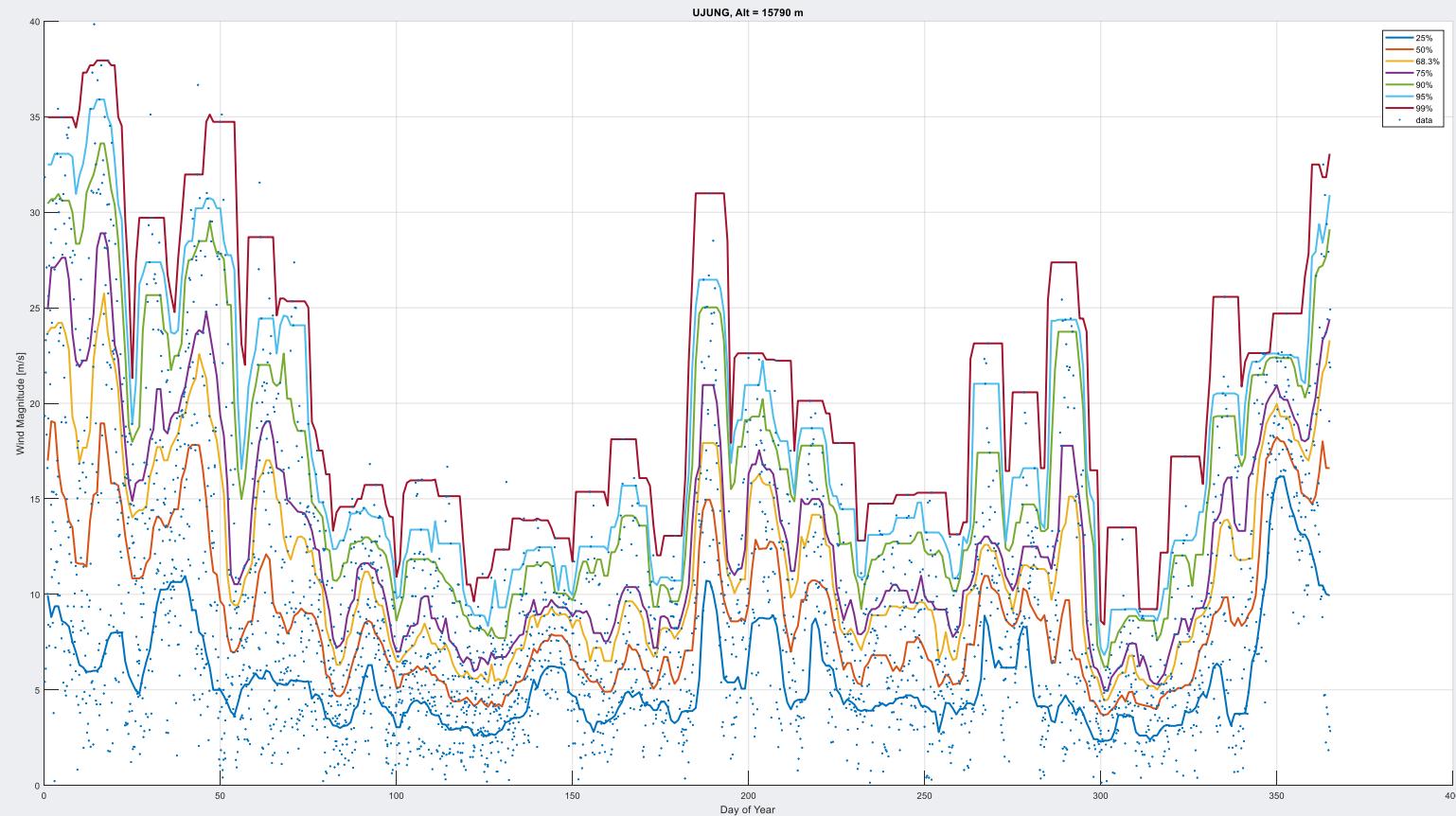
Wind Direction



UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55, Alt = 15790 m

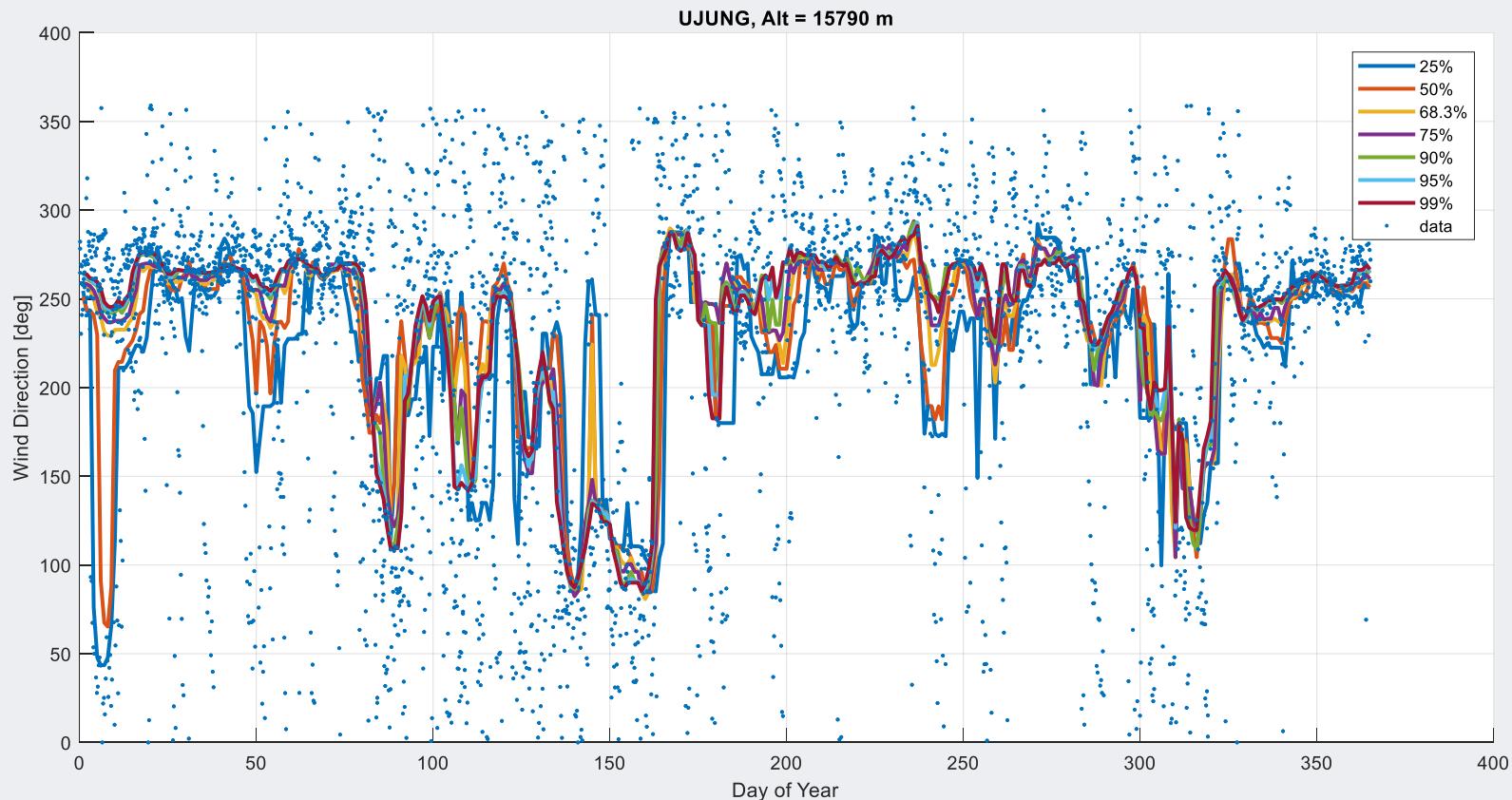
Wind Magnitude



UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55, Alt = 15790 m

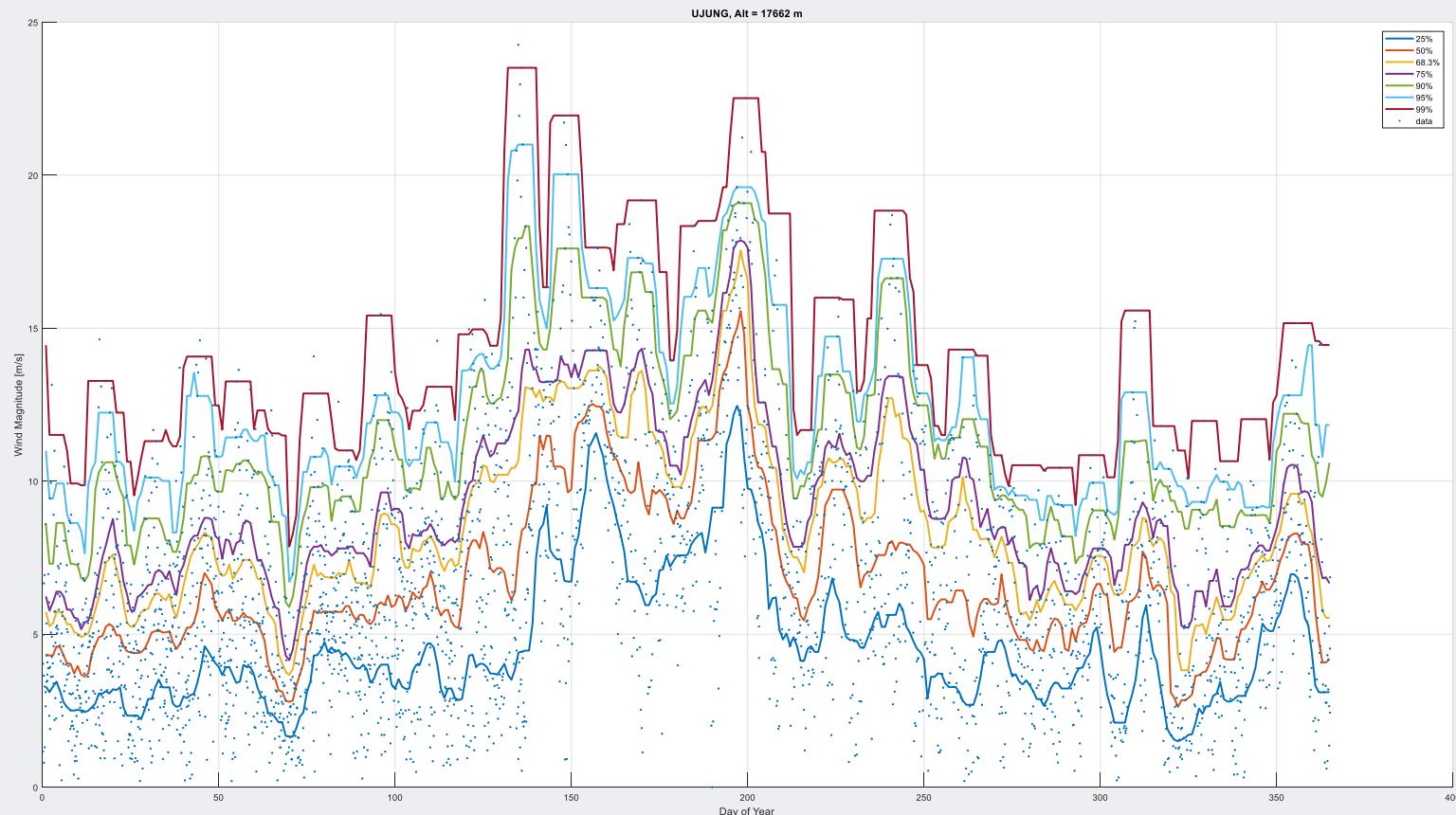
Wind Direction



UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55, Alt = 17662 m

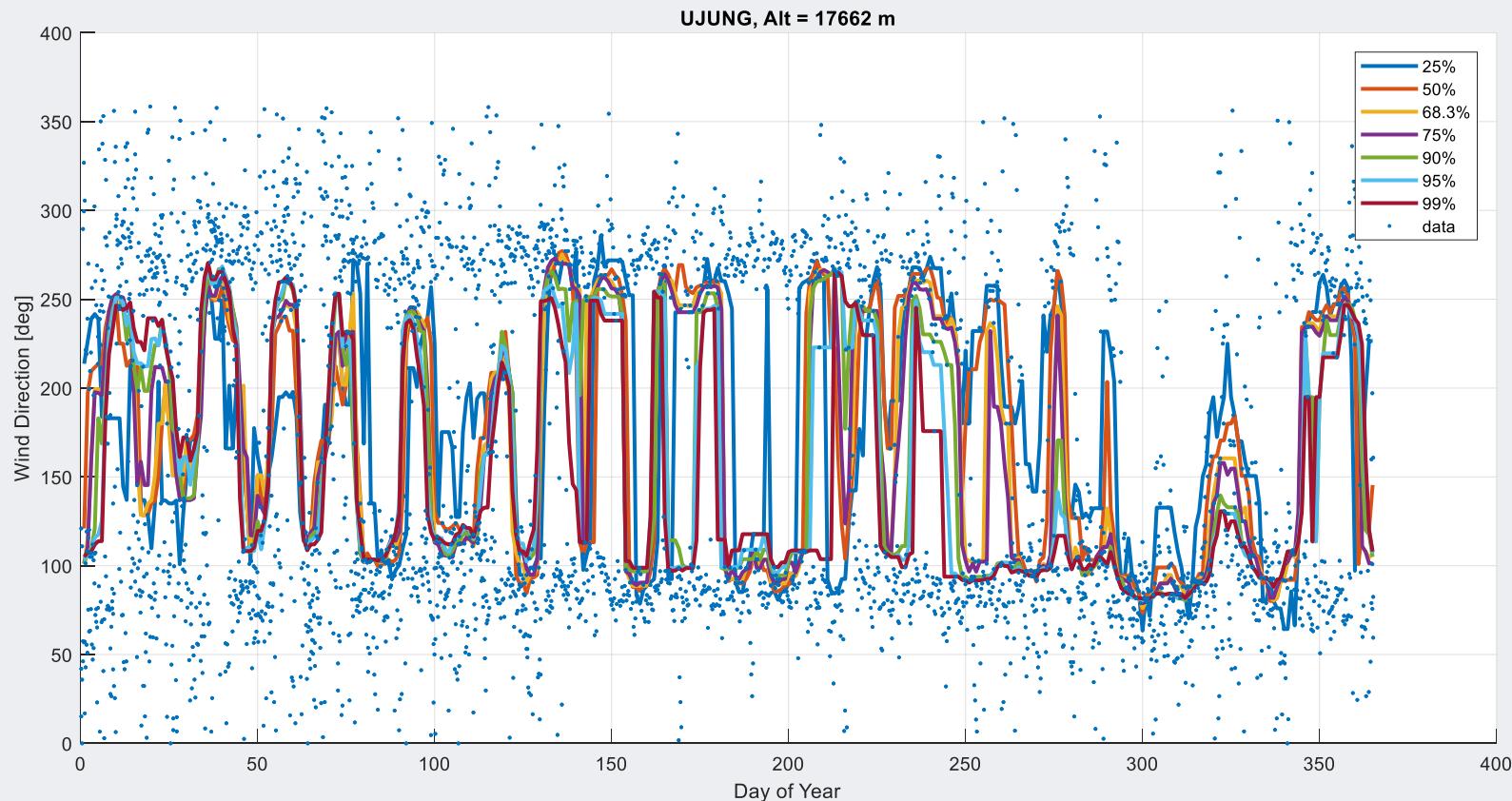
Wind Magnitude



UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55, Alt = 17662 m

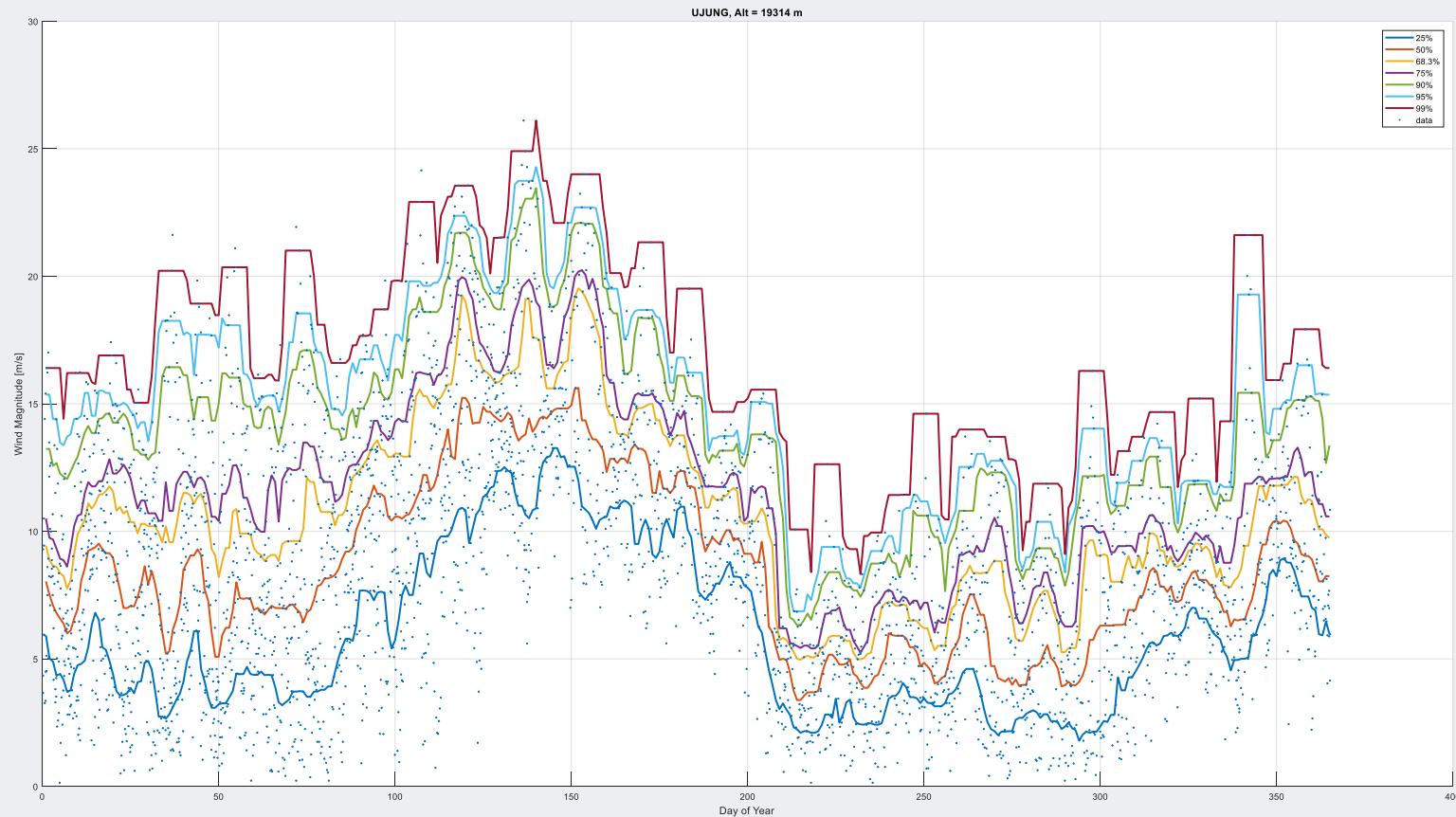
Wind Direction



UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55, Alt = 19314 m

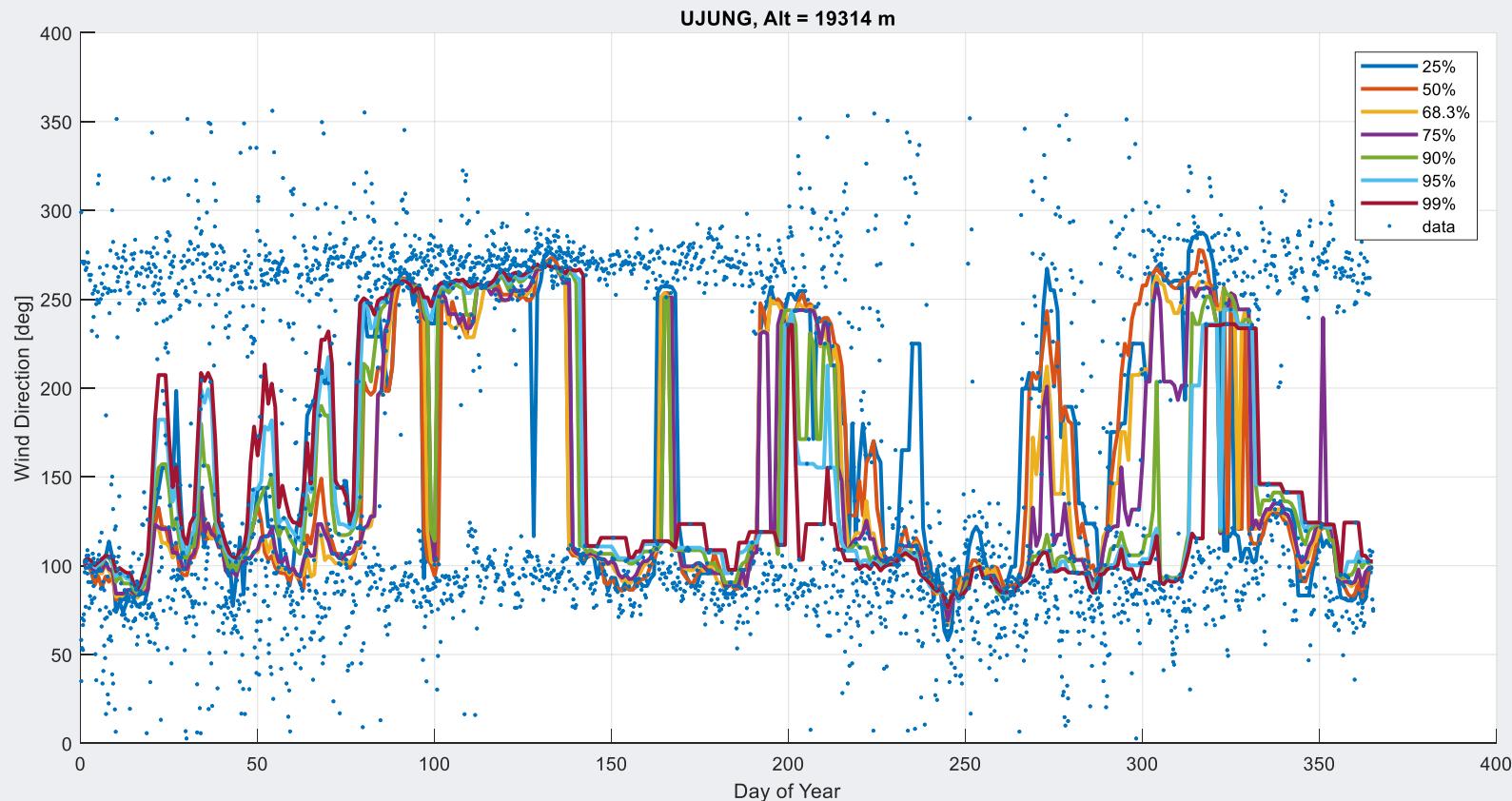
Wind Magnitude



UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55, Alt = 19314 m

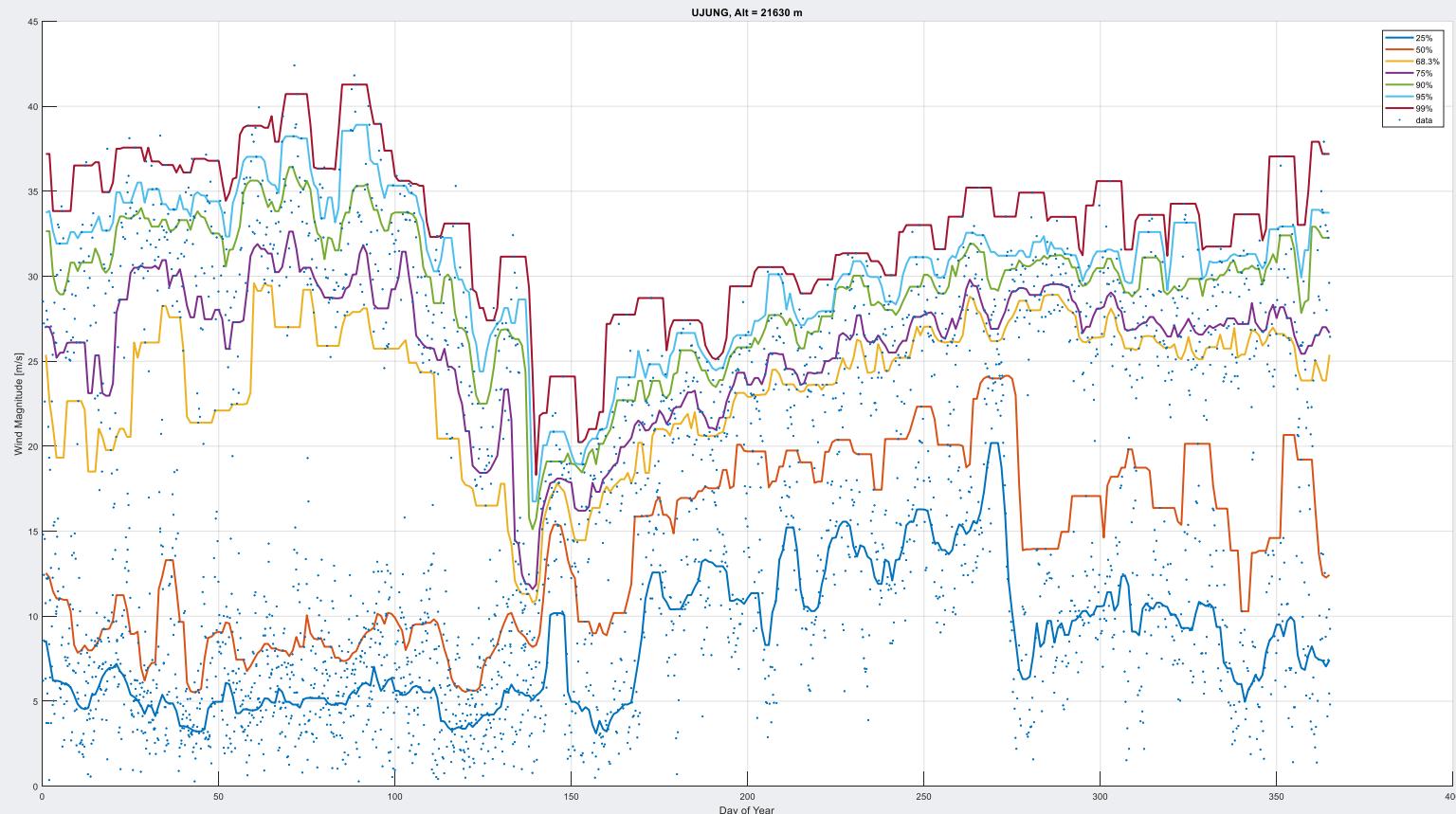
Wind Direction



UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55, Alt = 21630 m

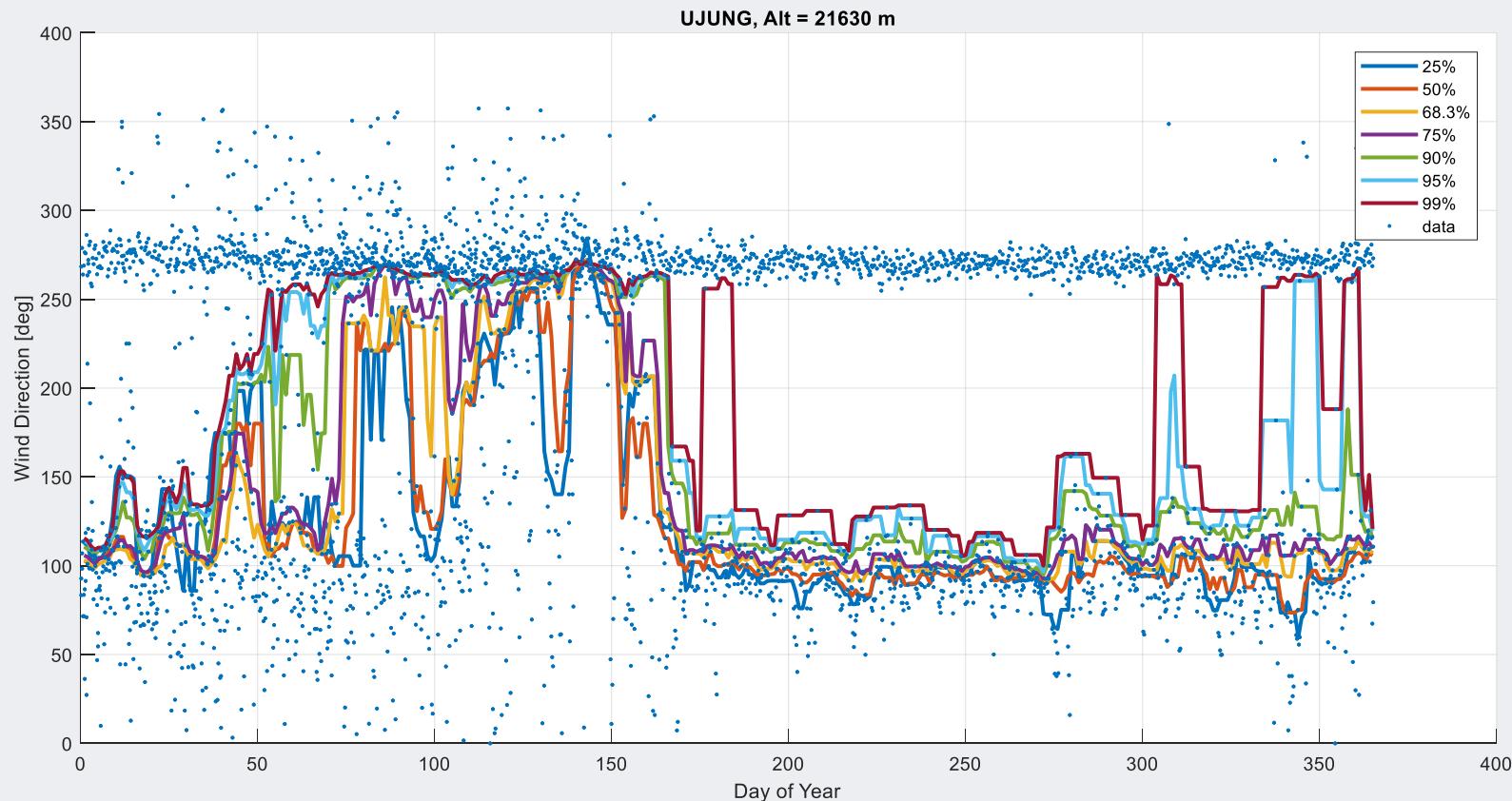
Wind Magnitude



UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55, Alt = 21630 m

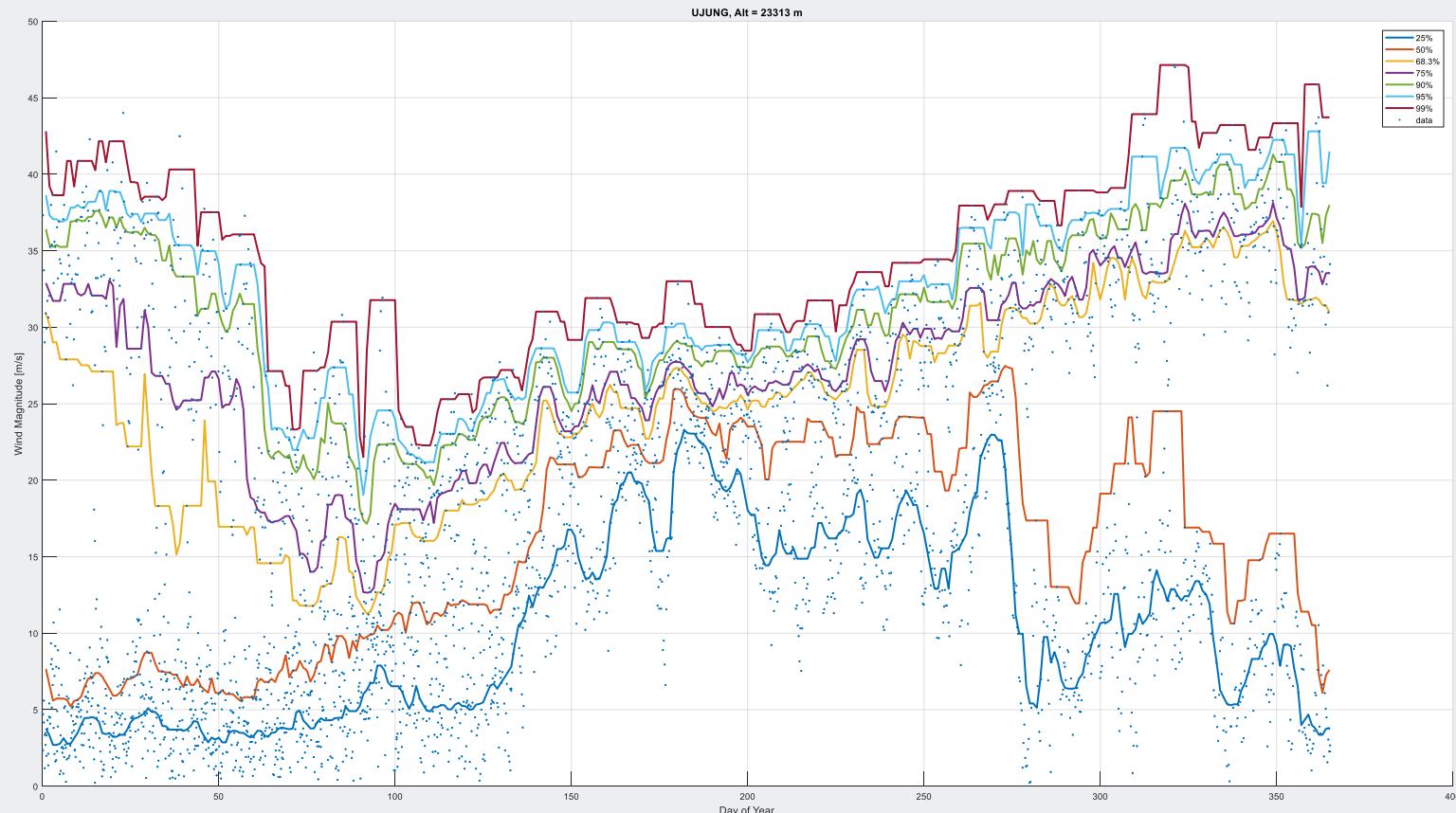
Wind Direction



UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55, Alt = 23313 m

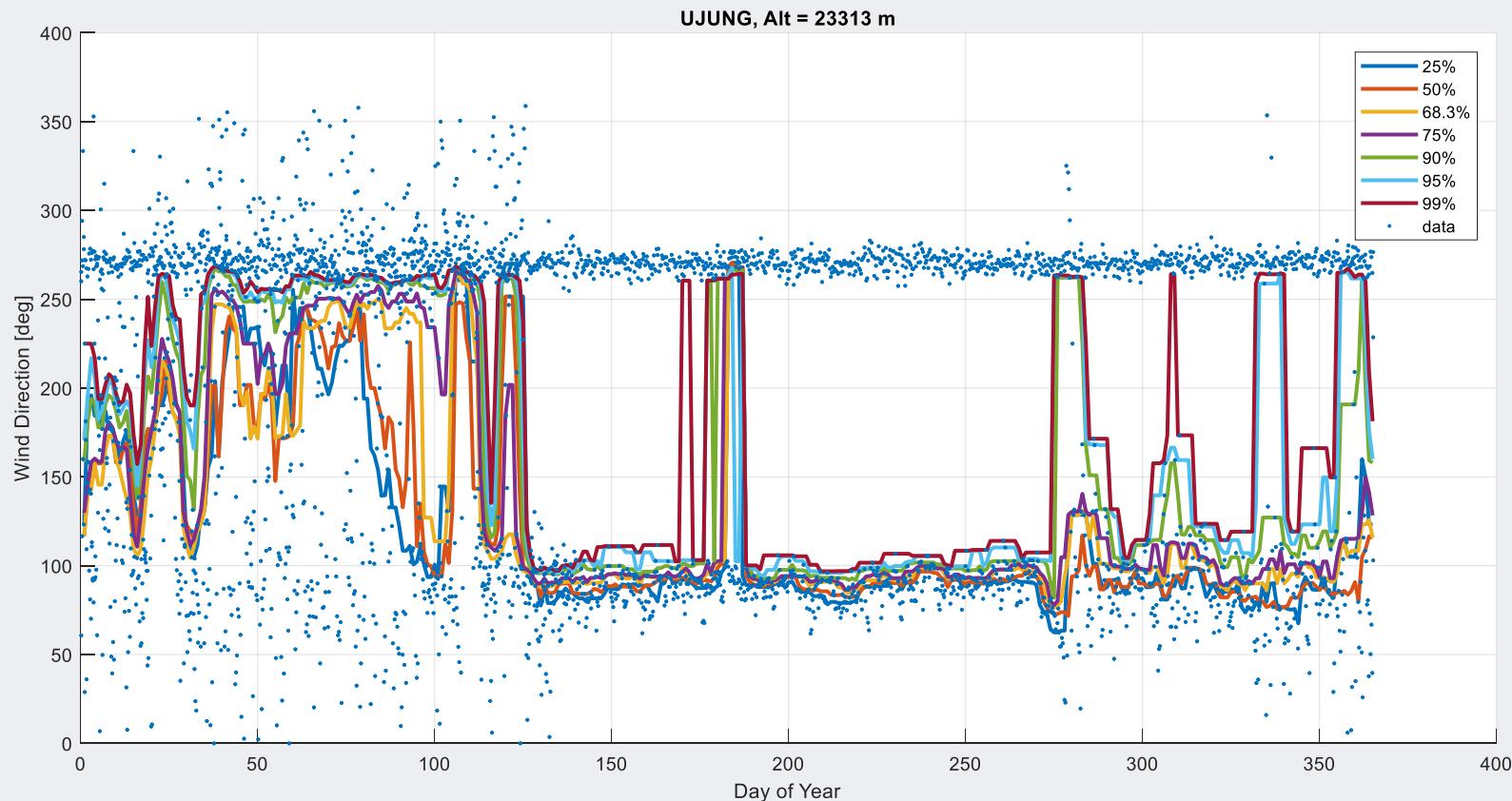
Wind Magnitude



UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55, Alt = 23313 m

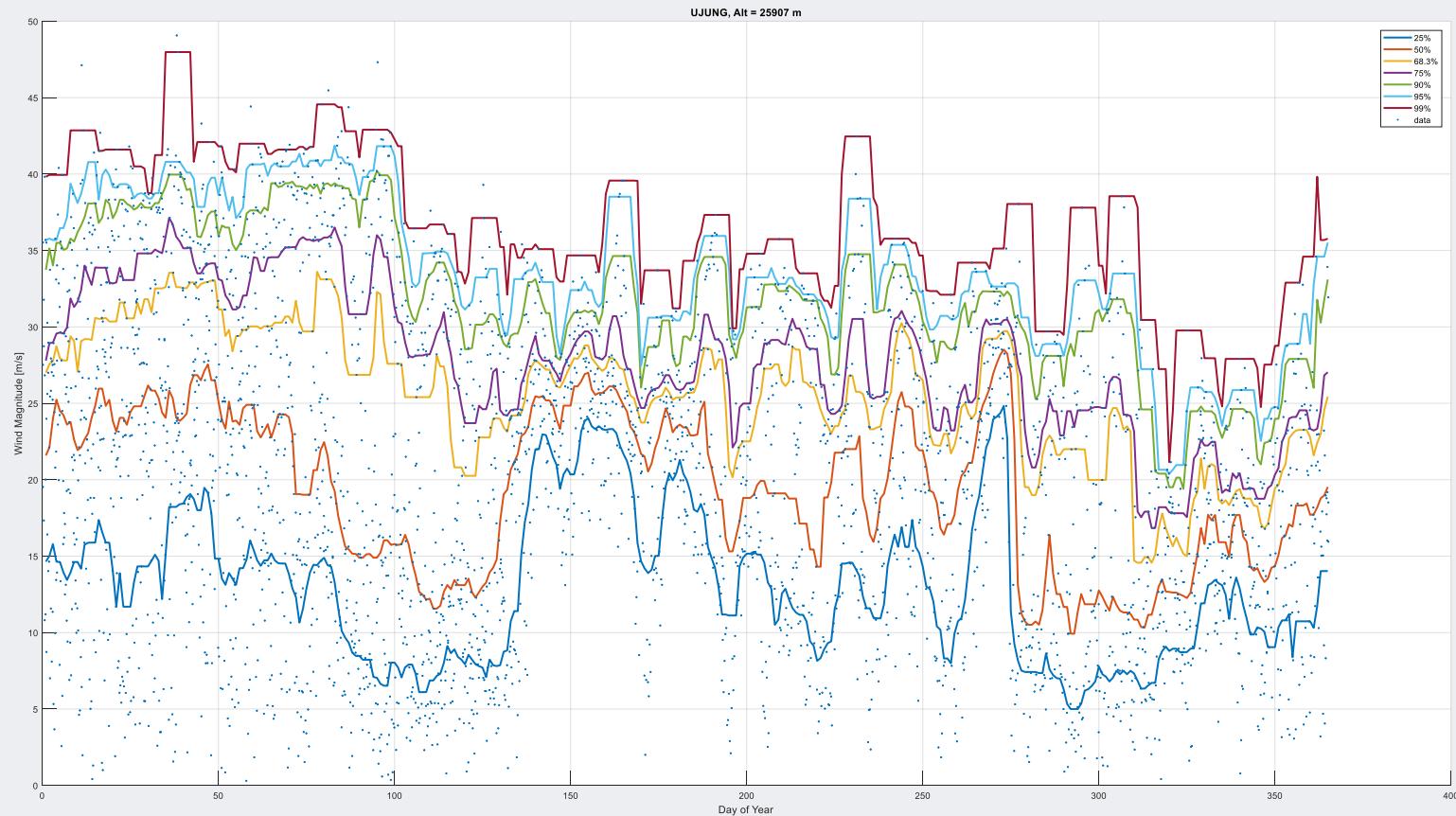
Wind Direction



UJUNG/IDM00097180

Lat = -5.0667, Lon = 119.55, Alt = 25907 m

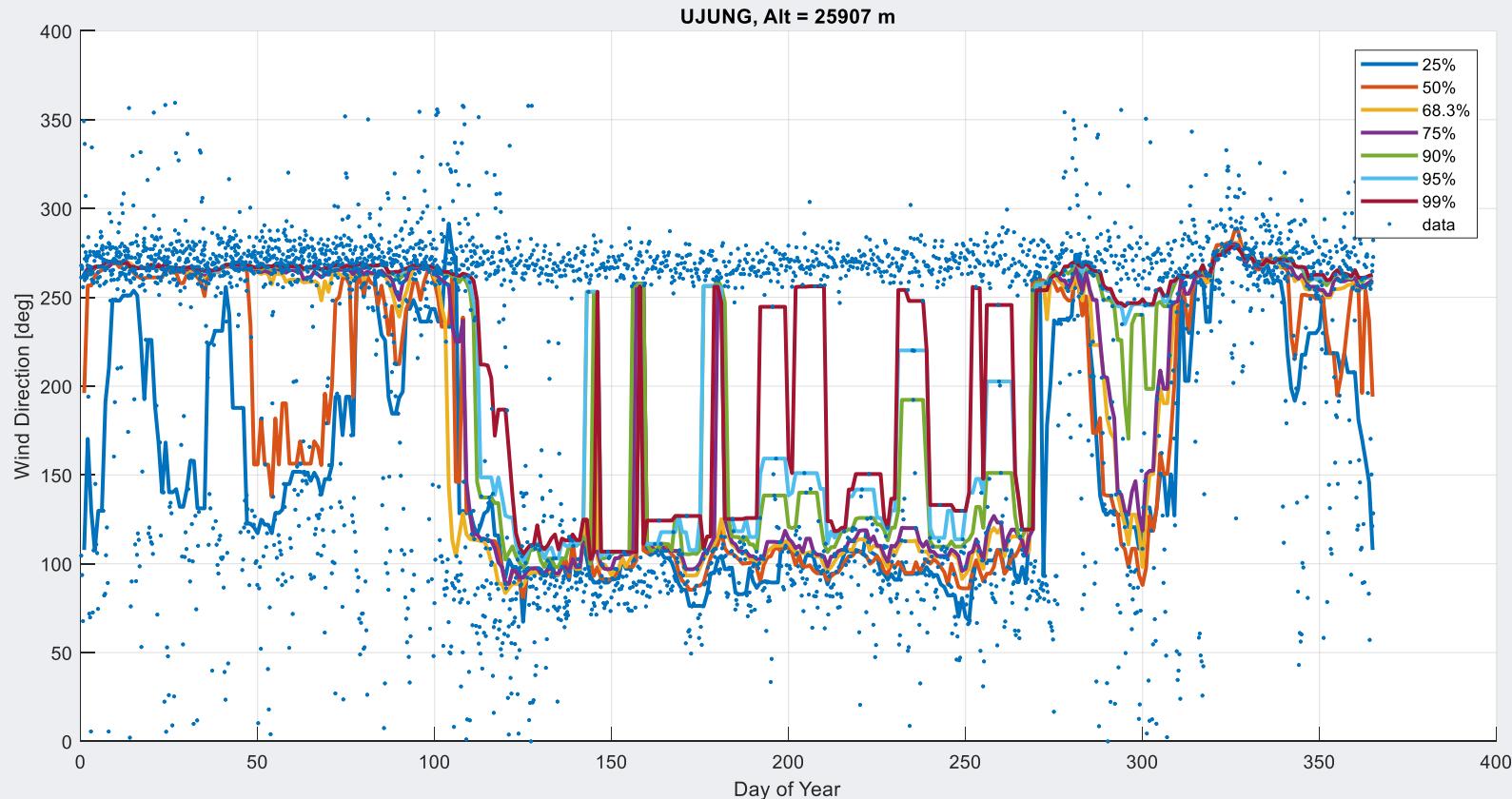
Wind Magnitude



UJUNG/IDM00097180

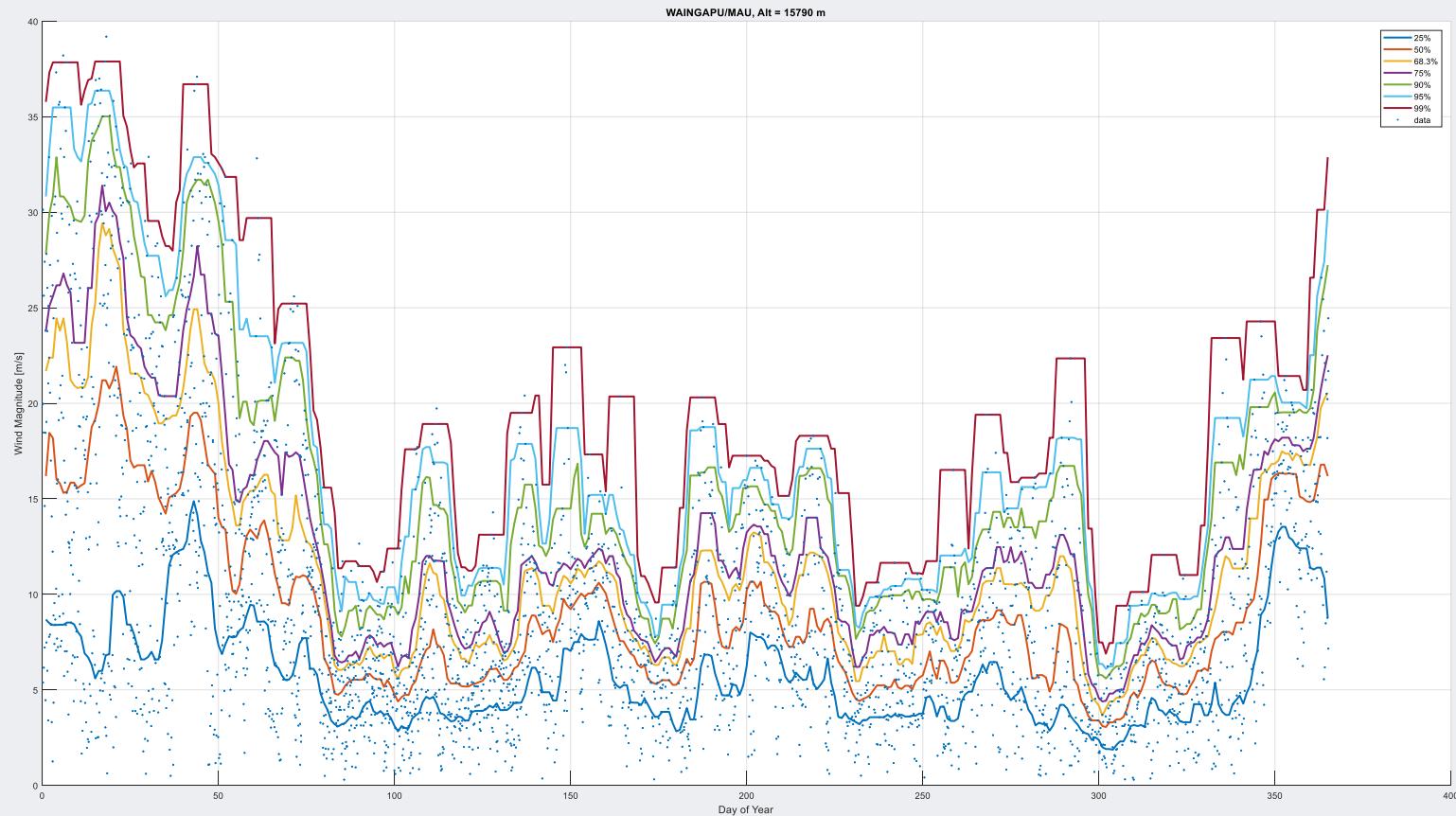
Lat = -5.0667, Lon = 119.55, Alt = 25907 m

Wind Direction



WAINGAPU/MAU/IDM00097340
Lat = -9.6667, Lon = 120.3333, Alt = 15790 m

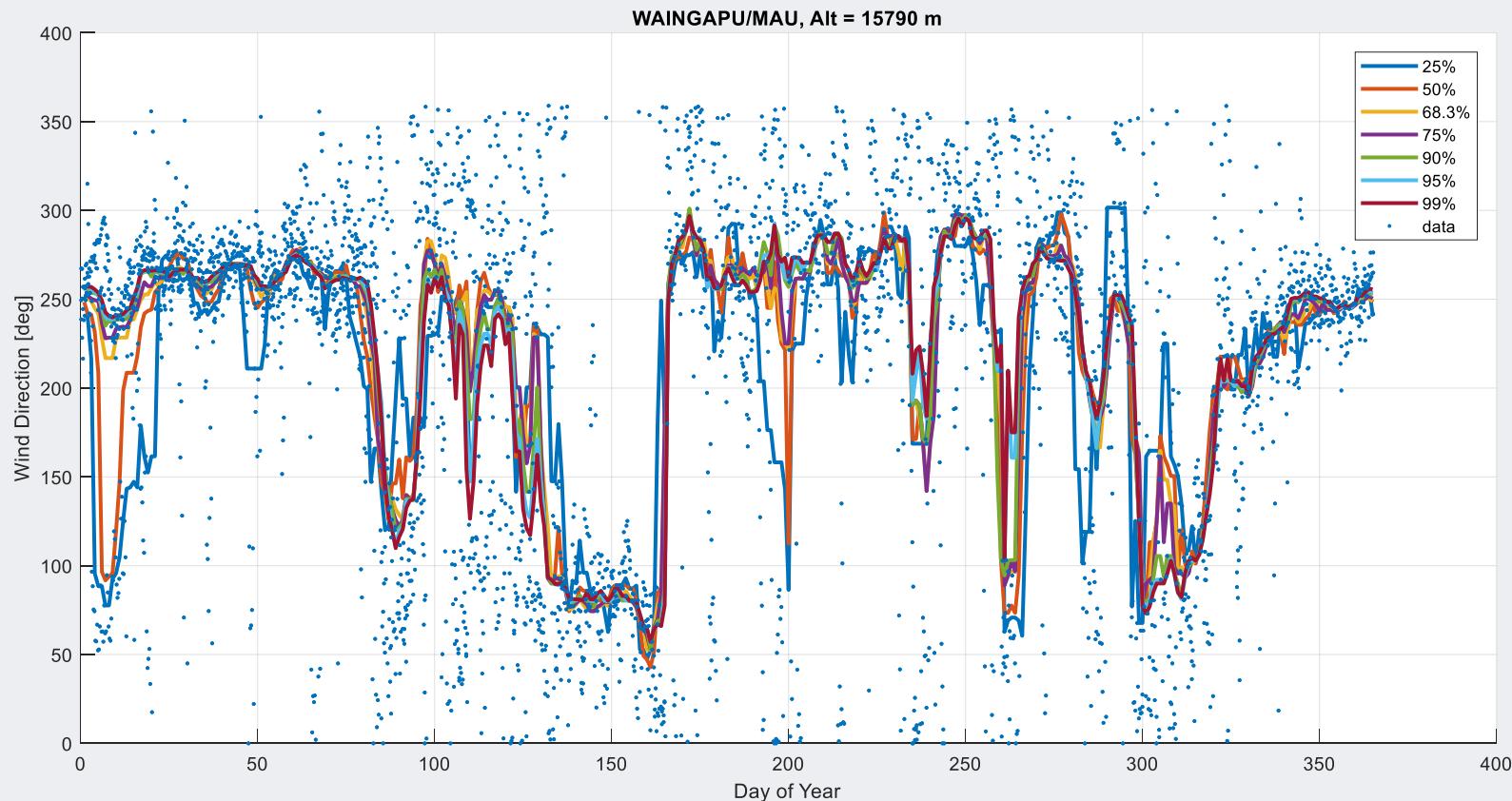
Wind Magnitude



WAINGAPU/MAU/IDM00097340

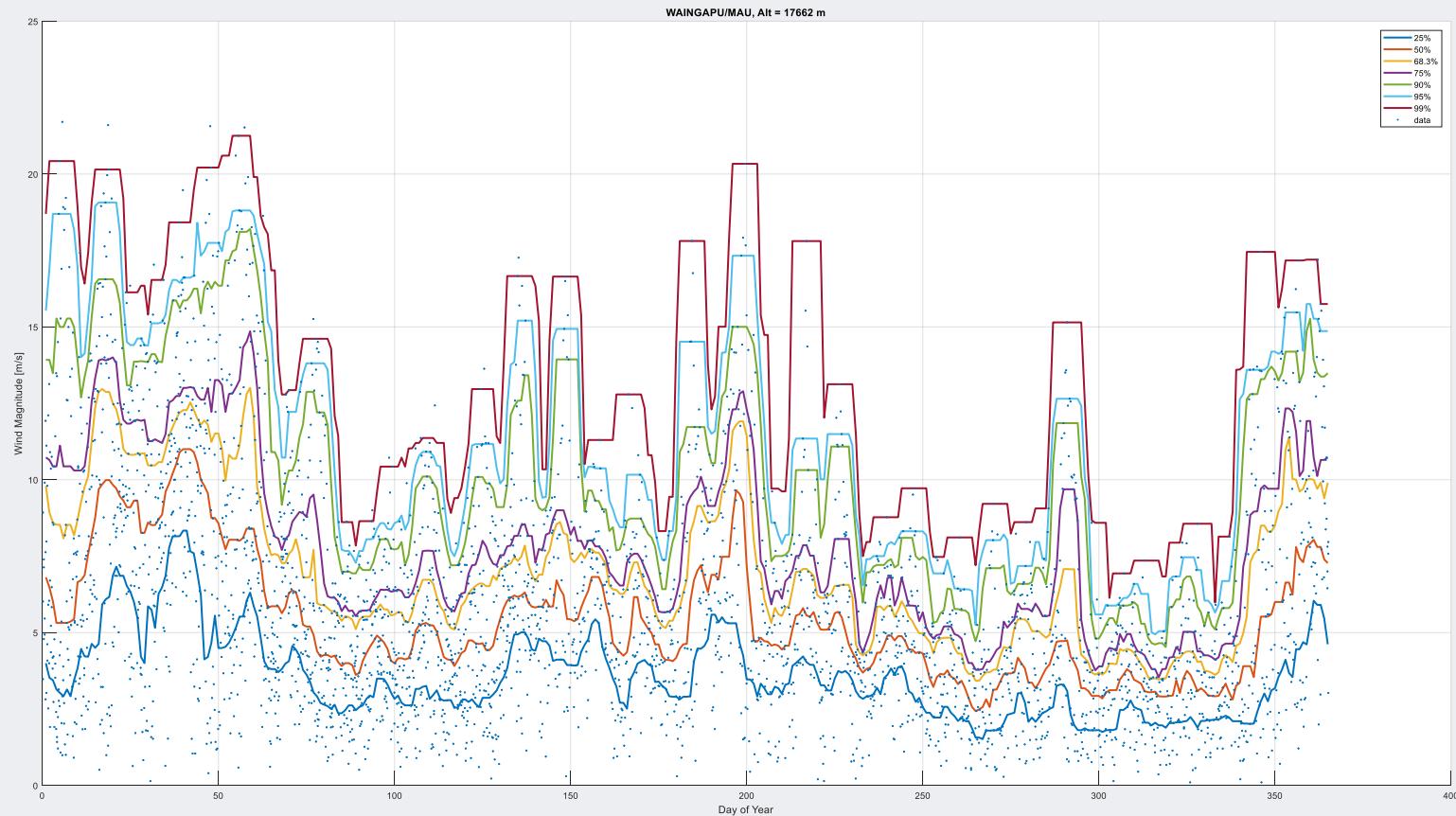
Lat = -9.6667, Lon = 120.3333, Alt = 15790 m

Wind Direction



WAINGAPU/MAU/IDM00097340
Lat = -9.6667, Lon = 120.3333, Alt = 17662 m

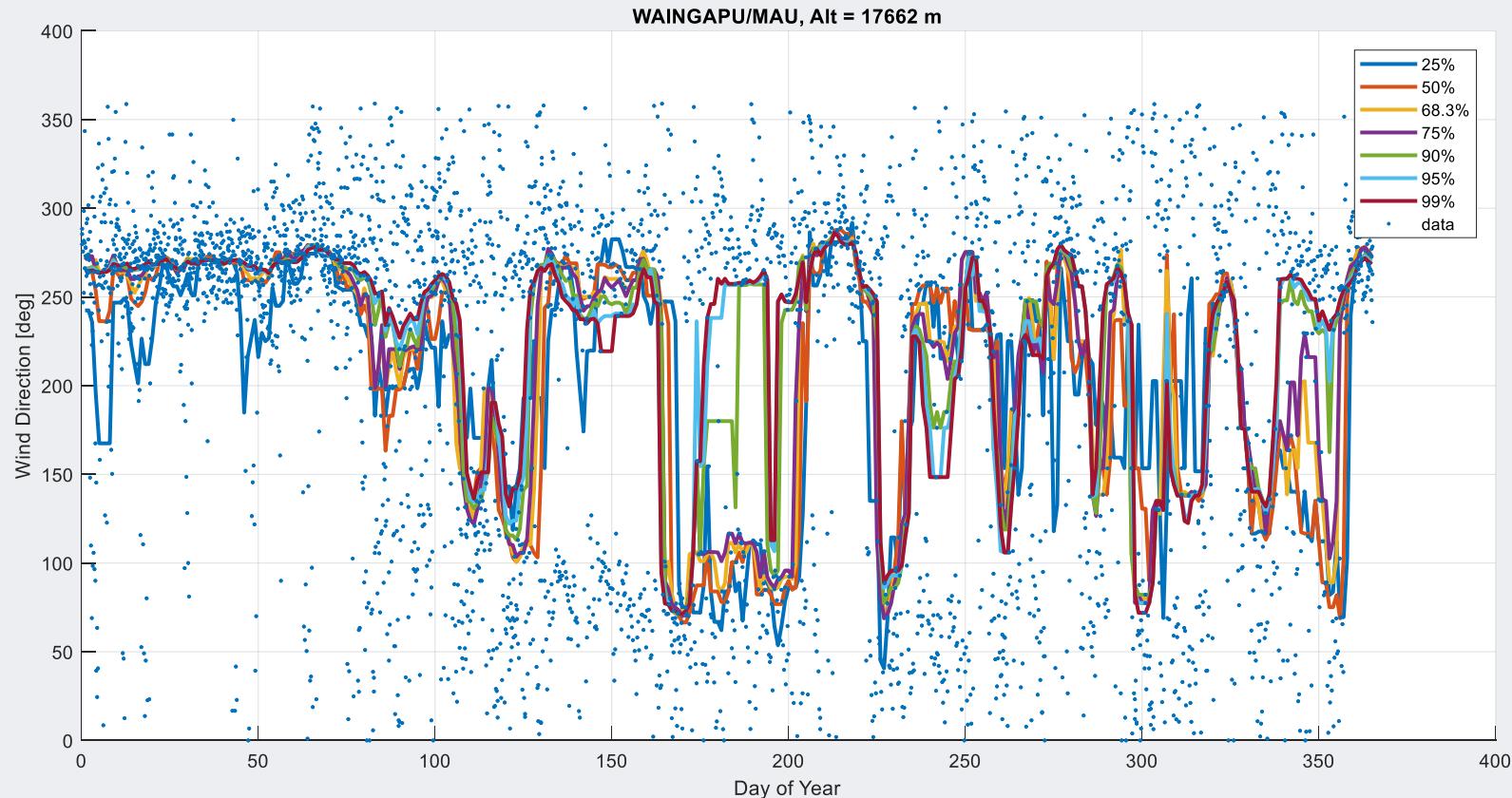
Wind Magnitude



WAINGAPU/MAU/IDM00097340

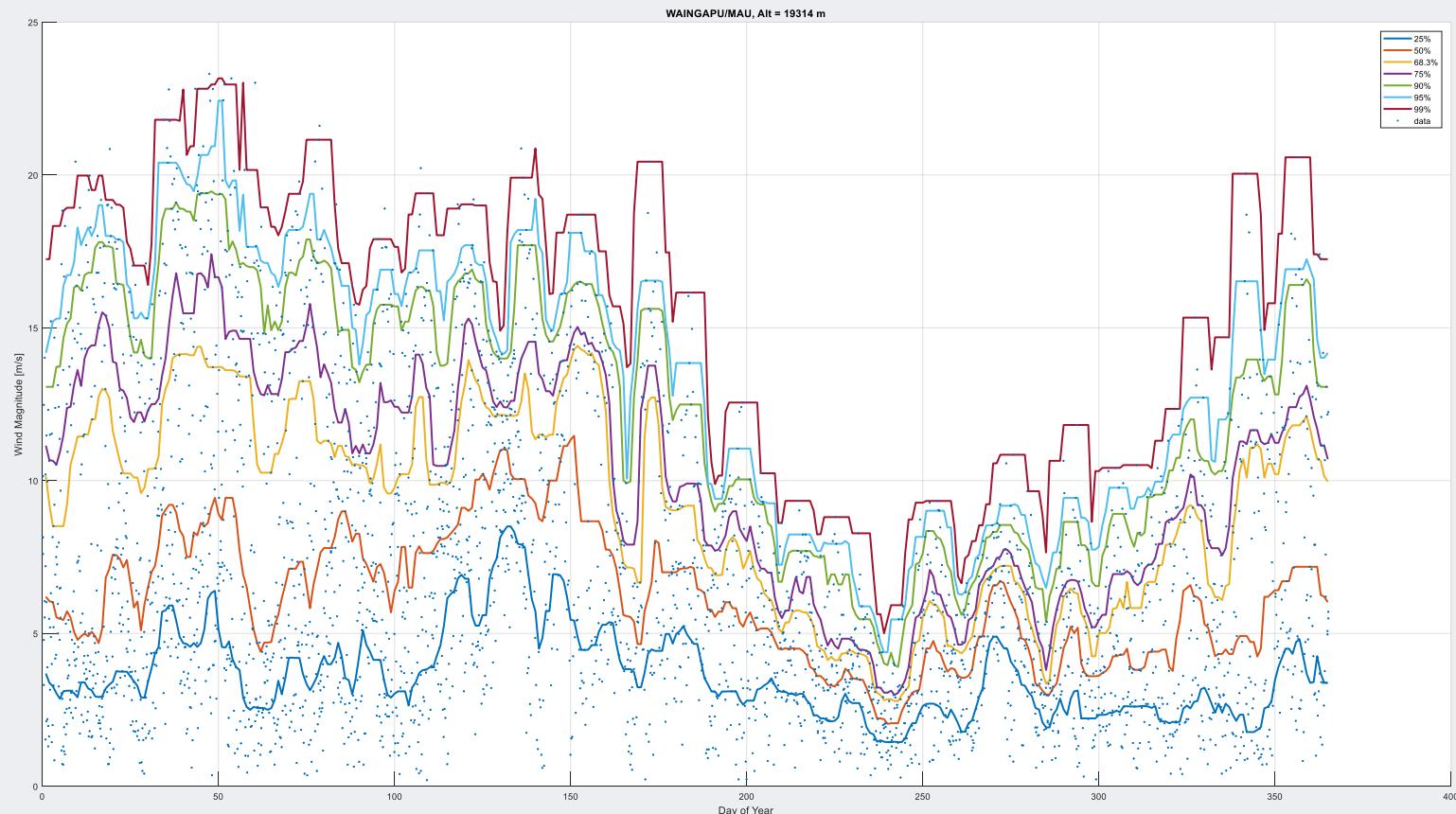
Lat = -9.6667, Lon = 120.3333, Alt = 17662 m

Wind Direction



WAINGAPU/MAU/IDM00097340
Lat = -9.6667, Lon = 120.3333, Alt = 19314 m

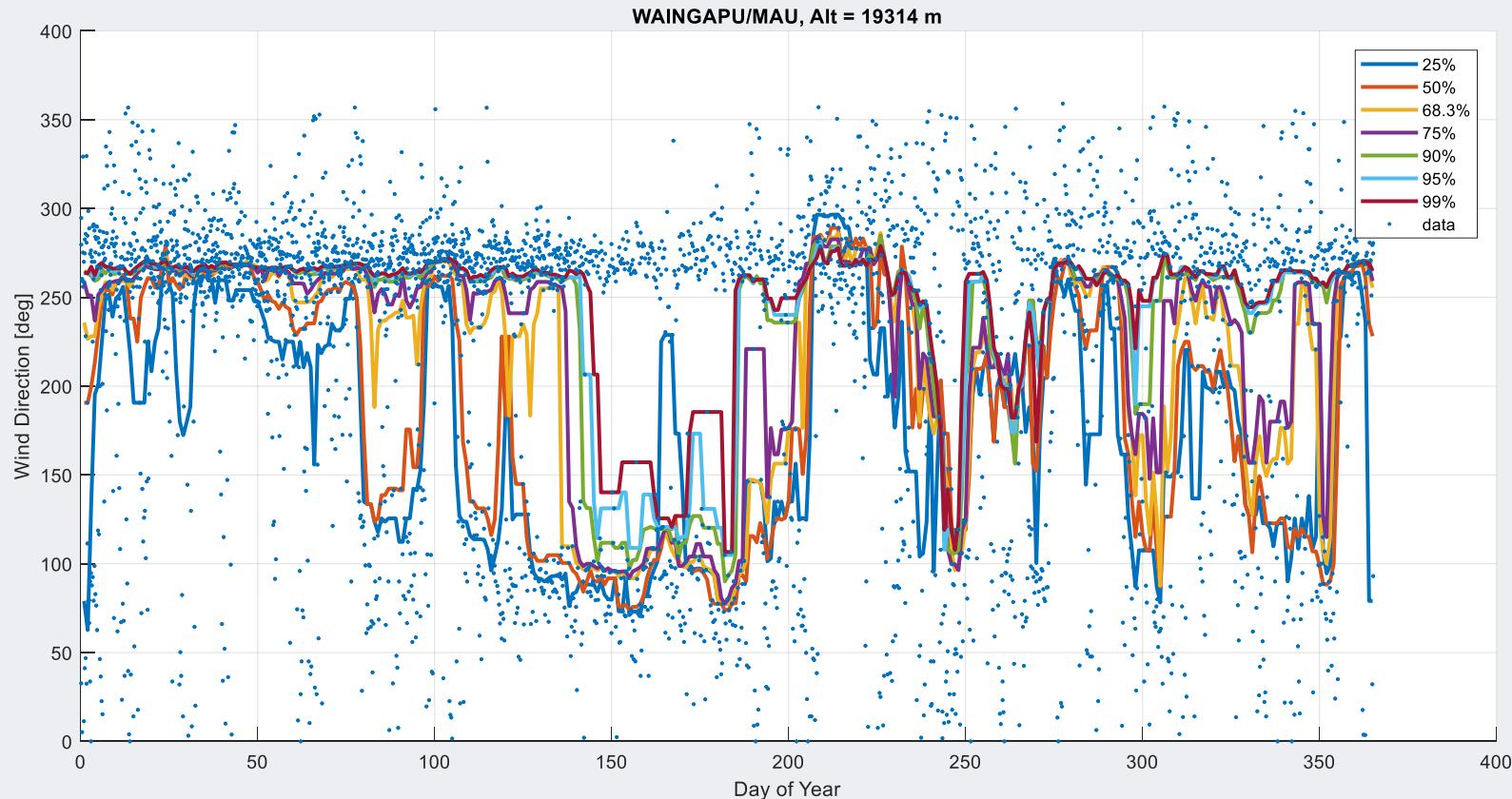
Wind Magnitude



WAINGAPU/MAU/IDM00097340

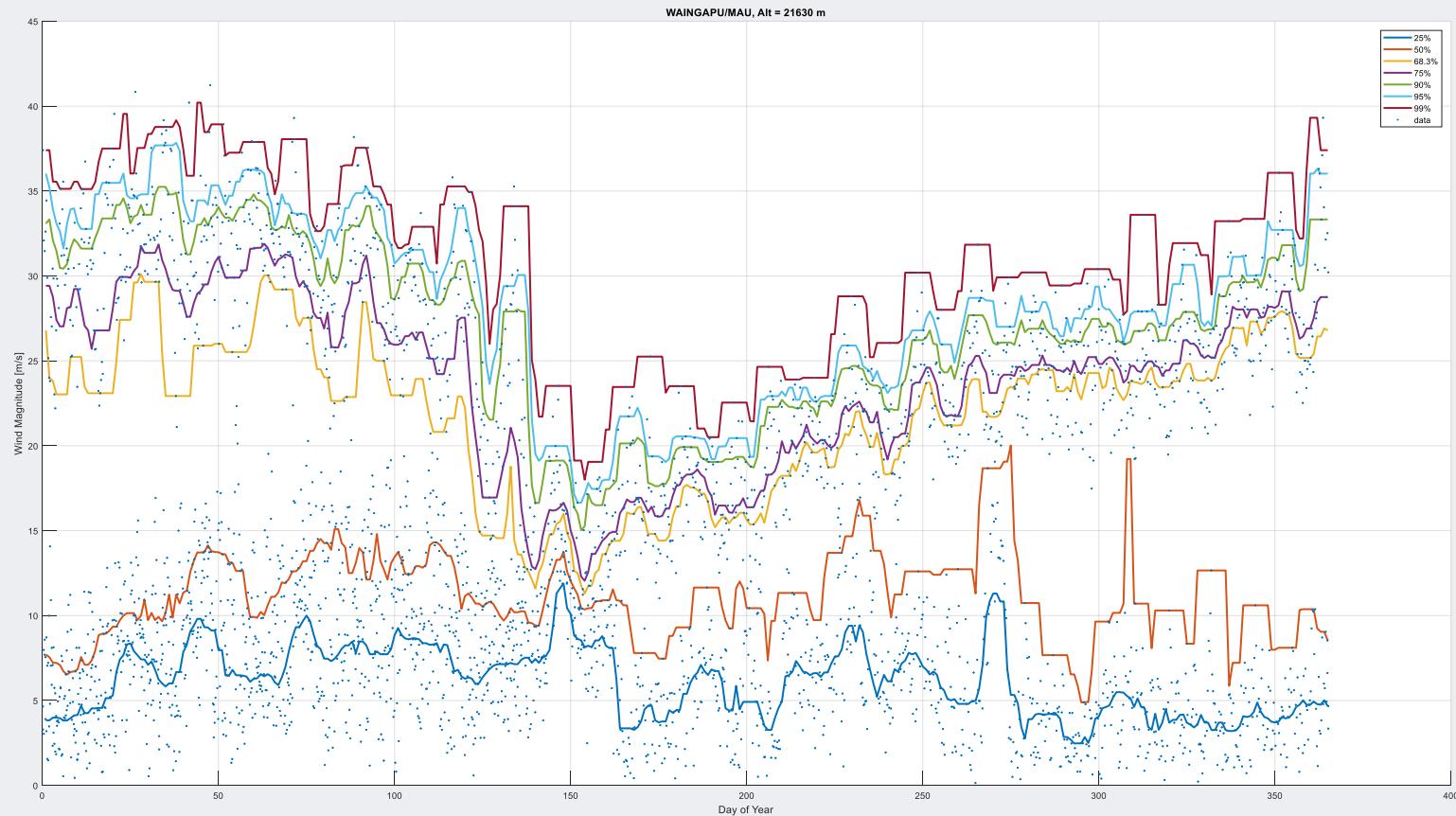
Lat = -9.6667, Lon = 120.3333, Alt = 19314 m

Wind Direction



WAINGAPU/MAU/IDM00097340
Lat = -9.6667, Lon = 120.3333, Alt = 21630 m

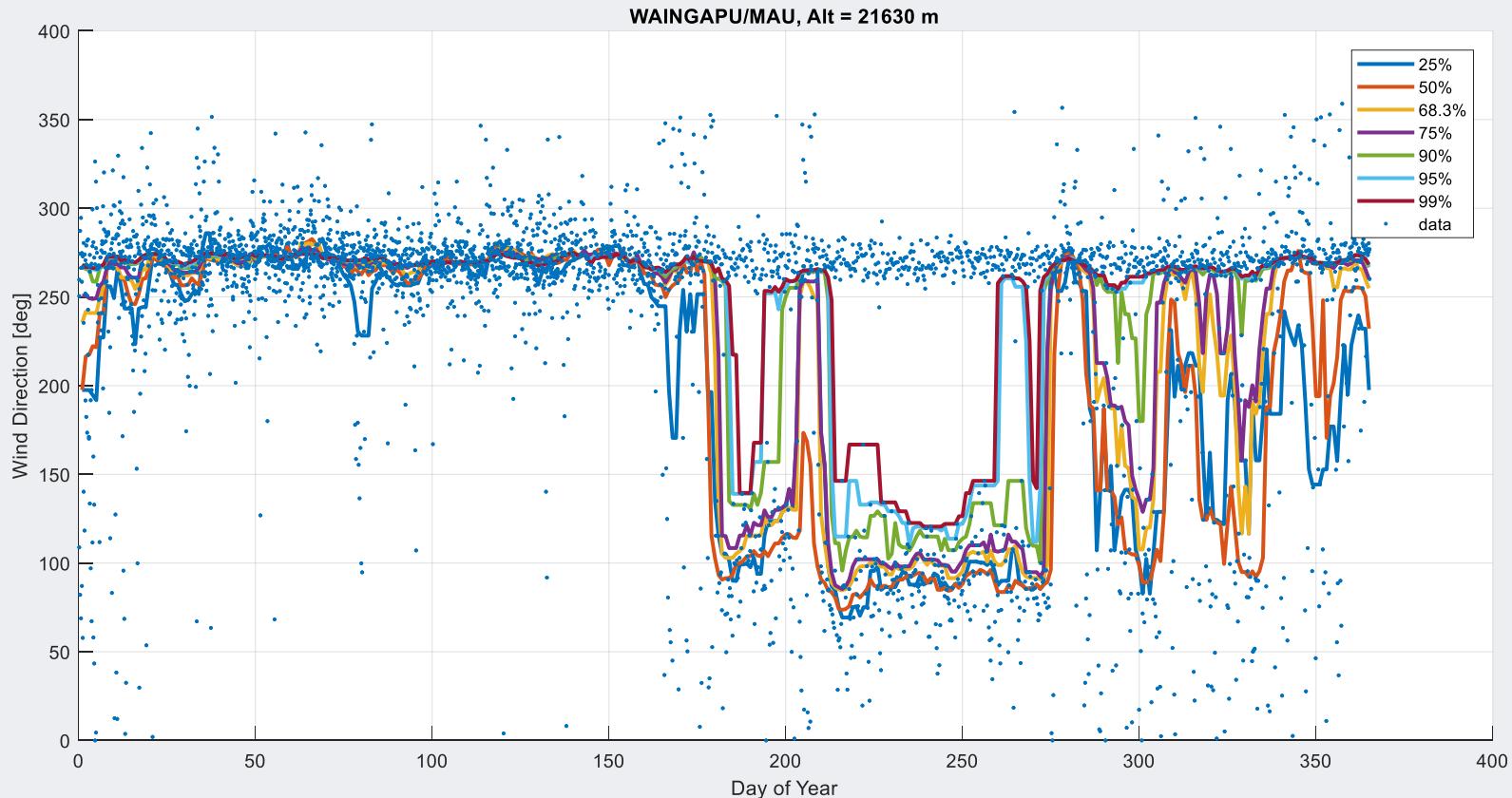
Wind Magnitude



WAINGAPU/MAU/IDM00097340

Lat = -9.6667, Lon = 120.3333, Alt = 21630 m

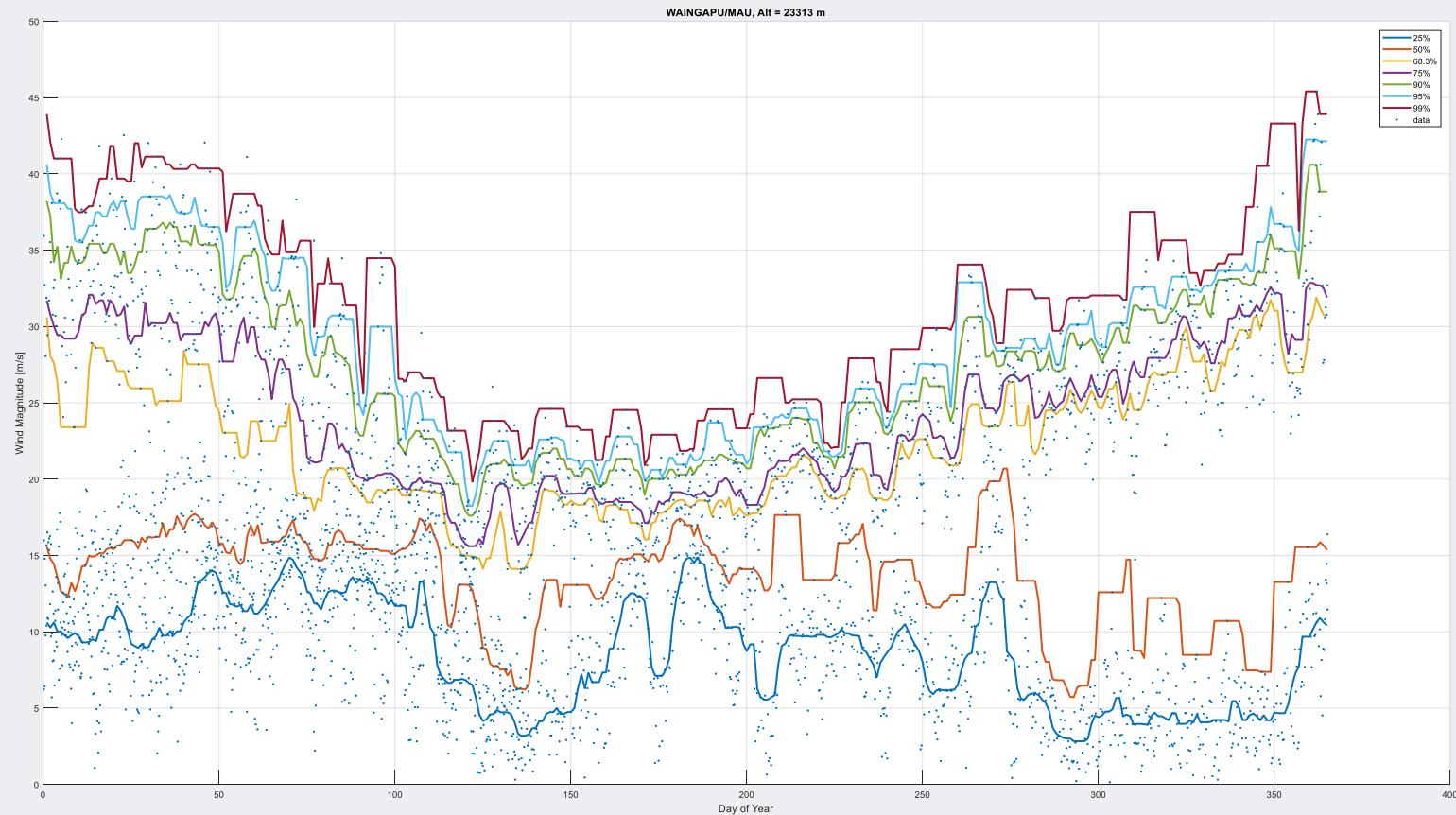
Wind Direction



WAINGAPU/MAU/IDM00097340

Lat = -9.6667, Lon = 120.3333, Alt = 23313 m

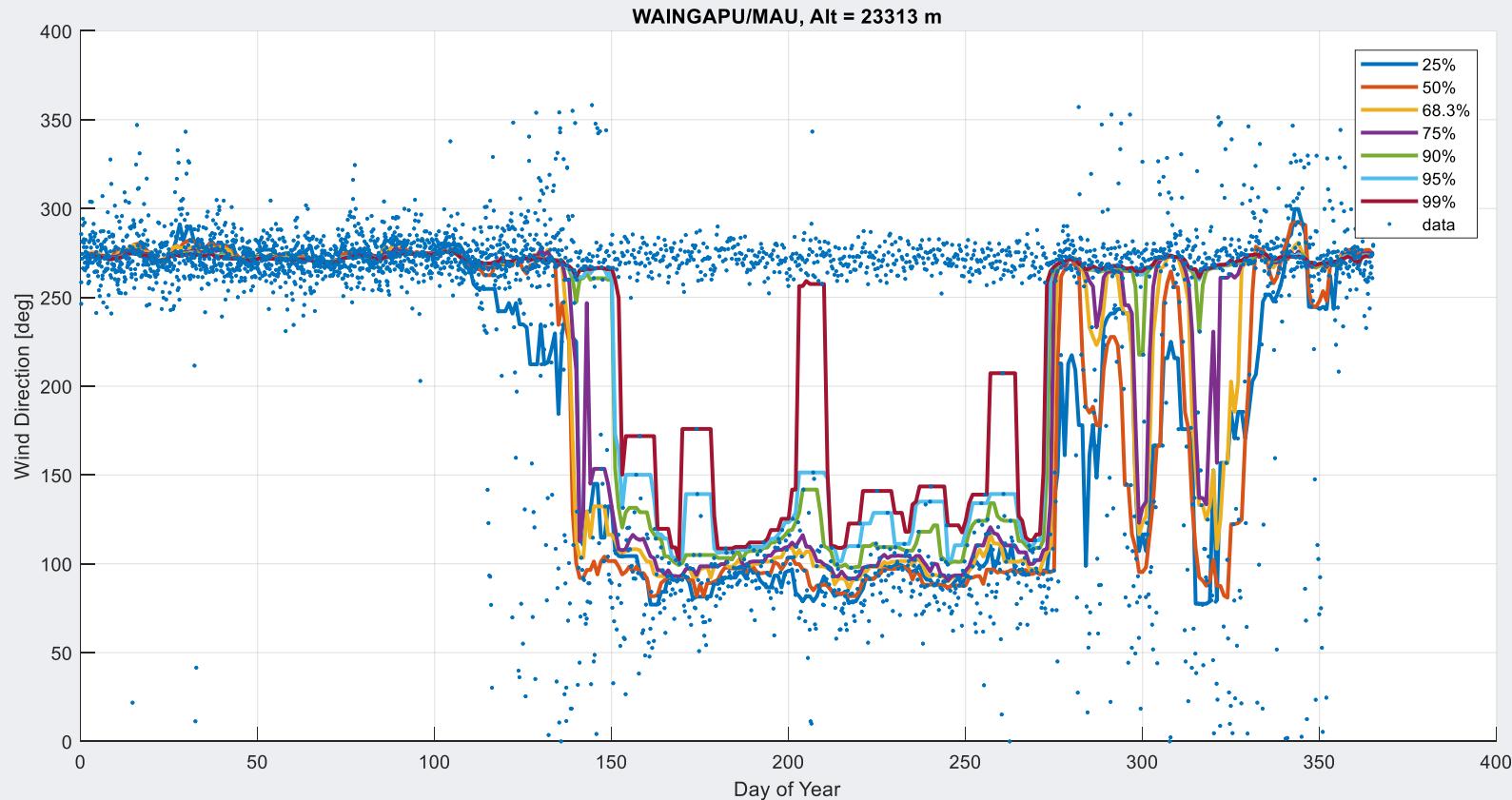
Wind Magnitude



WAINGAPU/MAU/IDM00097340

Lat = -9.6667, Lon = 120.3333, Alt = 23313 m

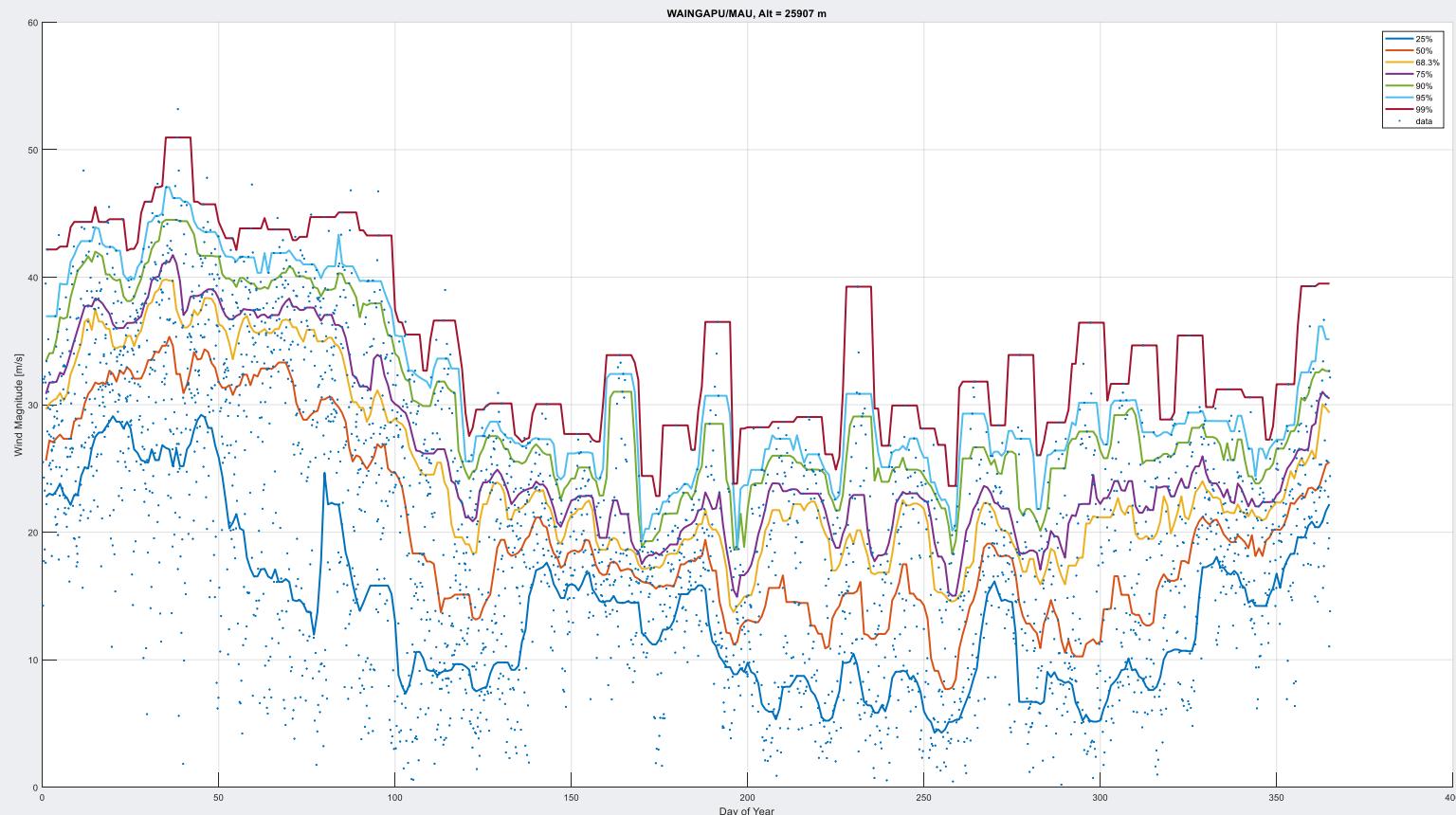
Wind Direction



WAINGAPU/MAU/IDM00097340

Lat = -9.6667, Lon = 120.3333, Alt = 25907 m

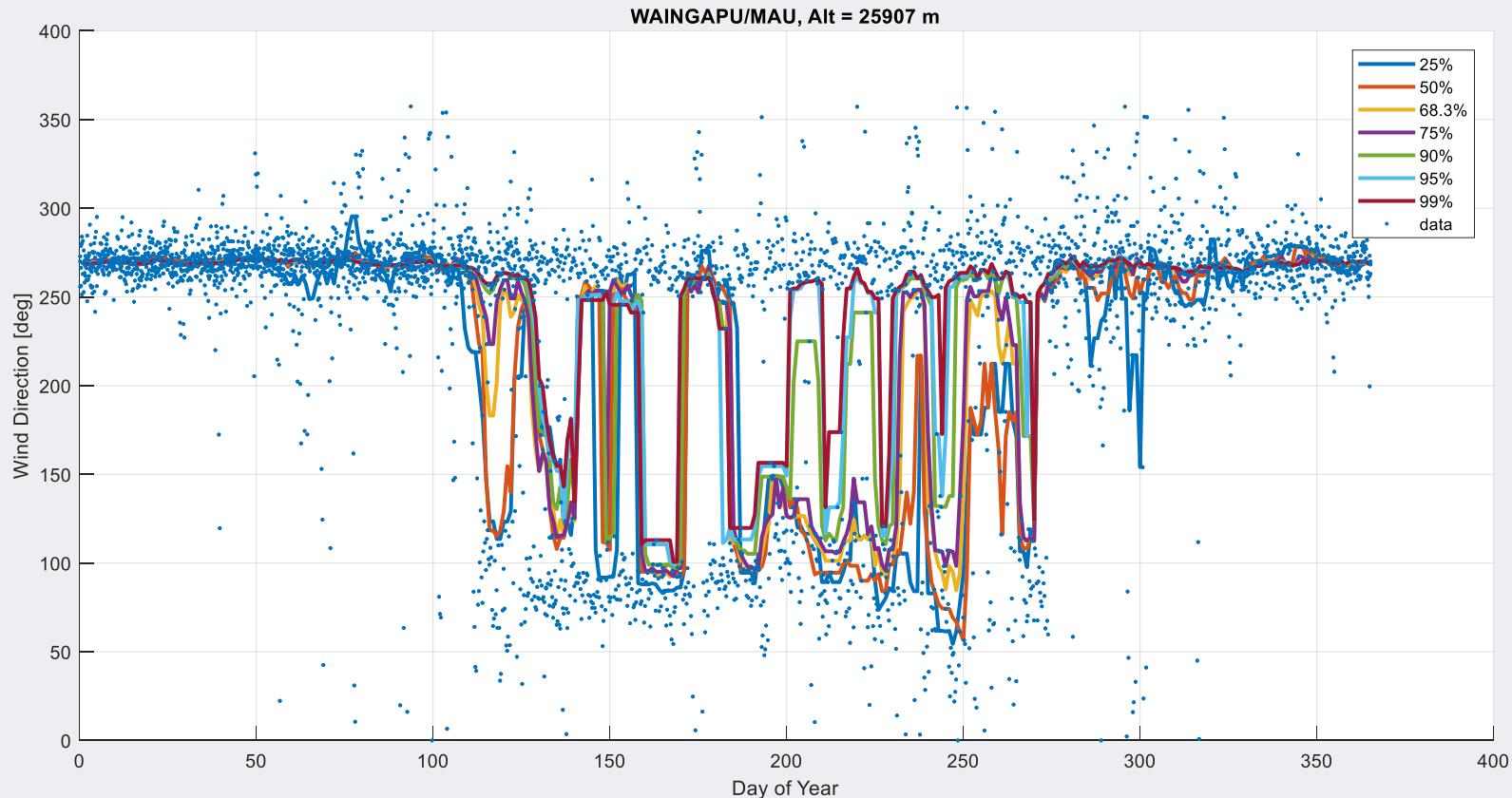
Wind Magnitude



WAINGAPU/MAU/IDM00097340

Lat = -9.6667, Lon = 120.3333, Alt = 25907 m

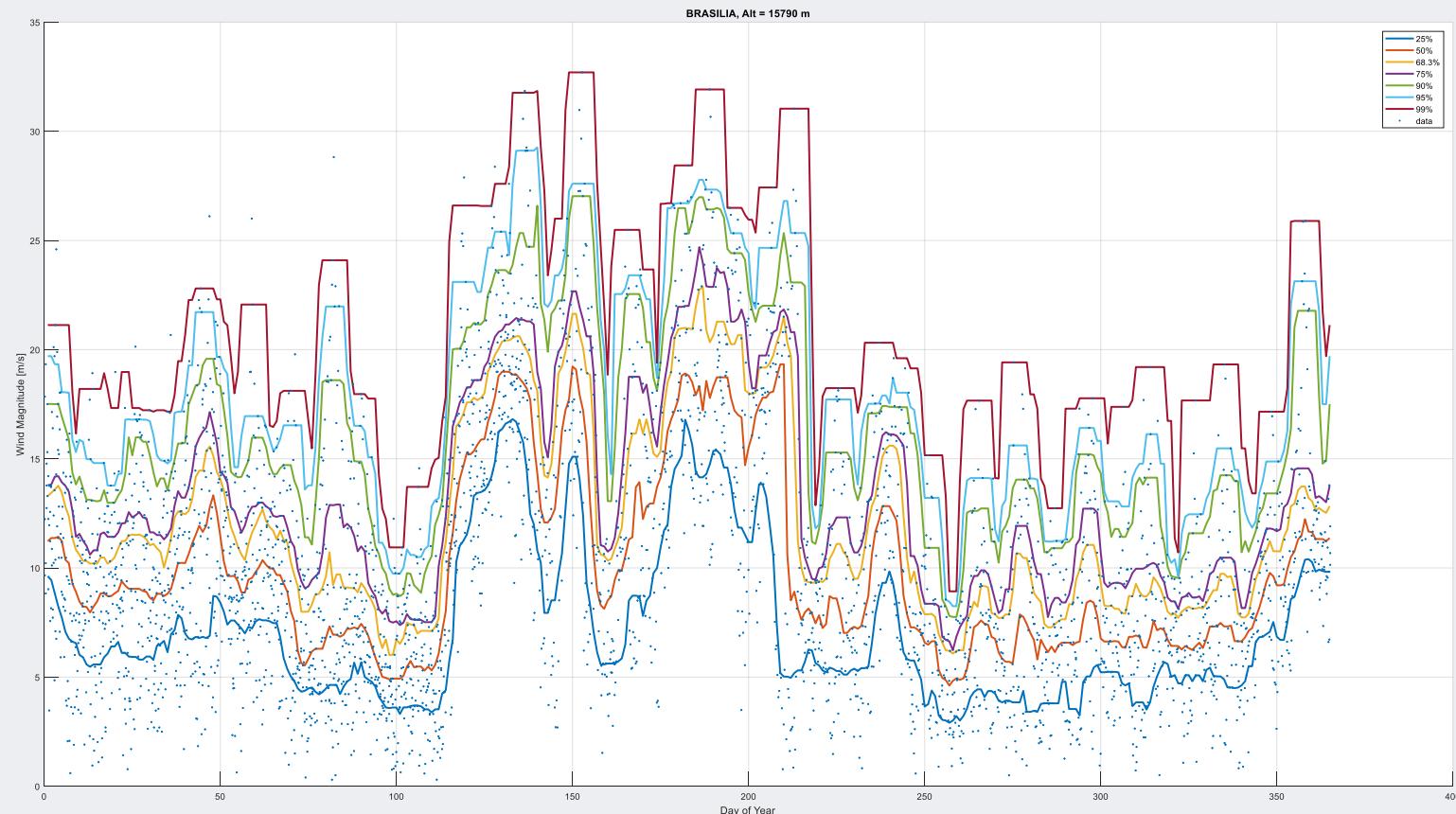
Wind Direction



BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333, Alt = 15790 m

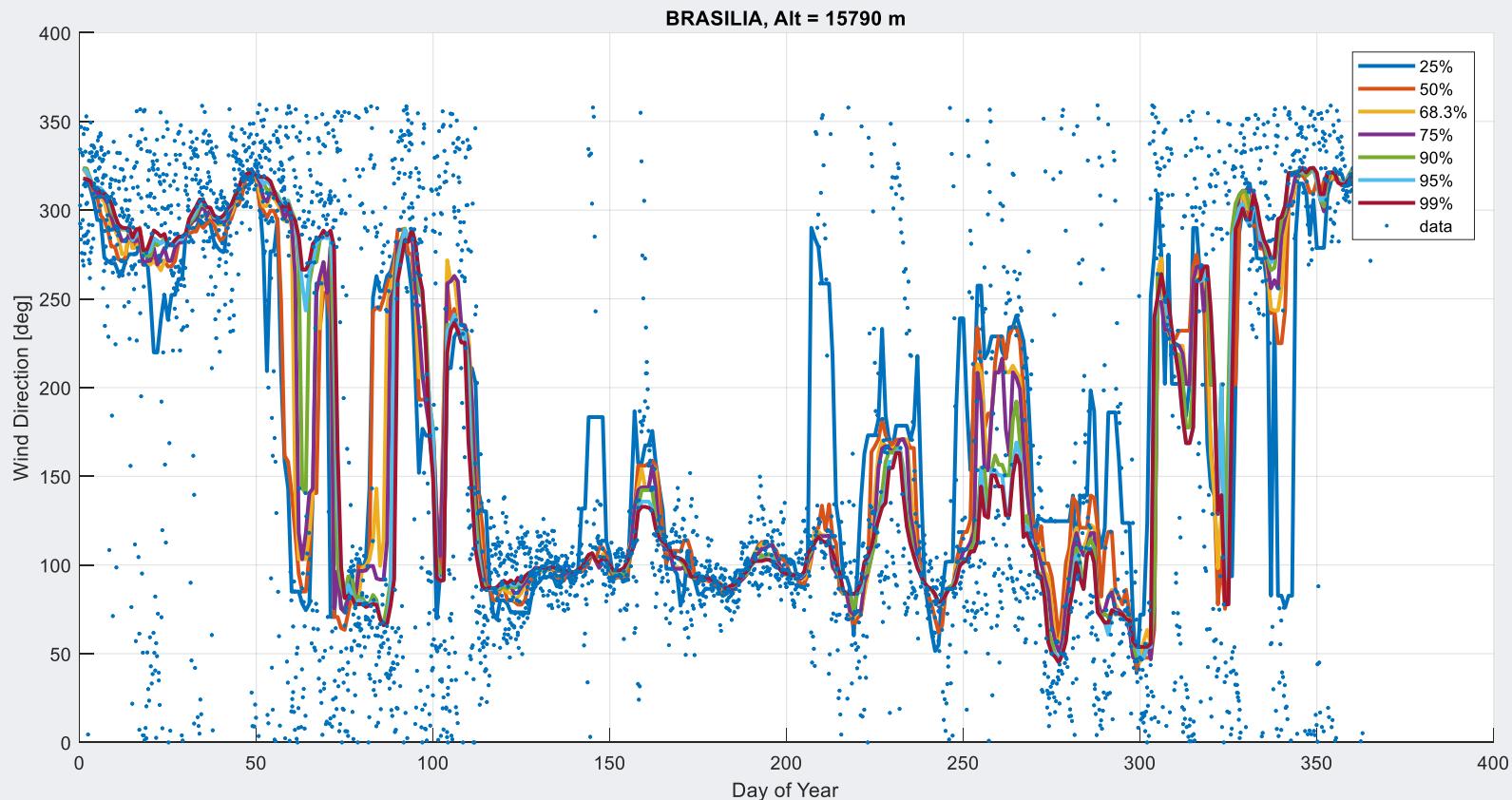
Wind Magnitude



BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333, Alt = 15790 m

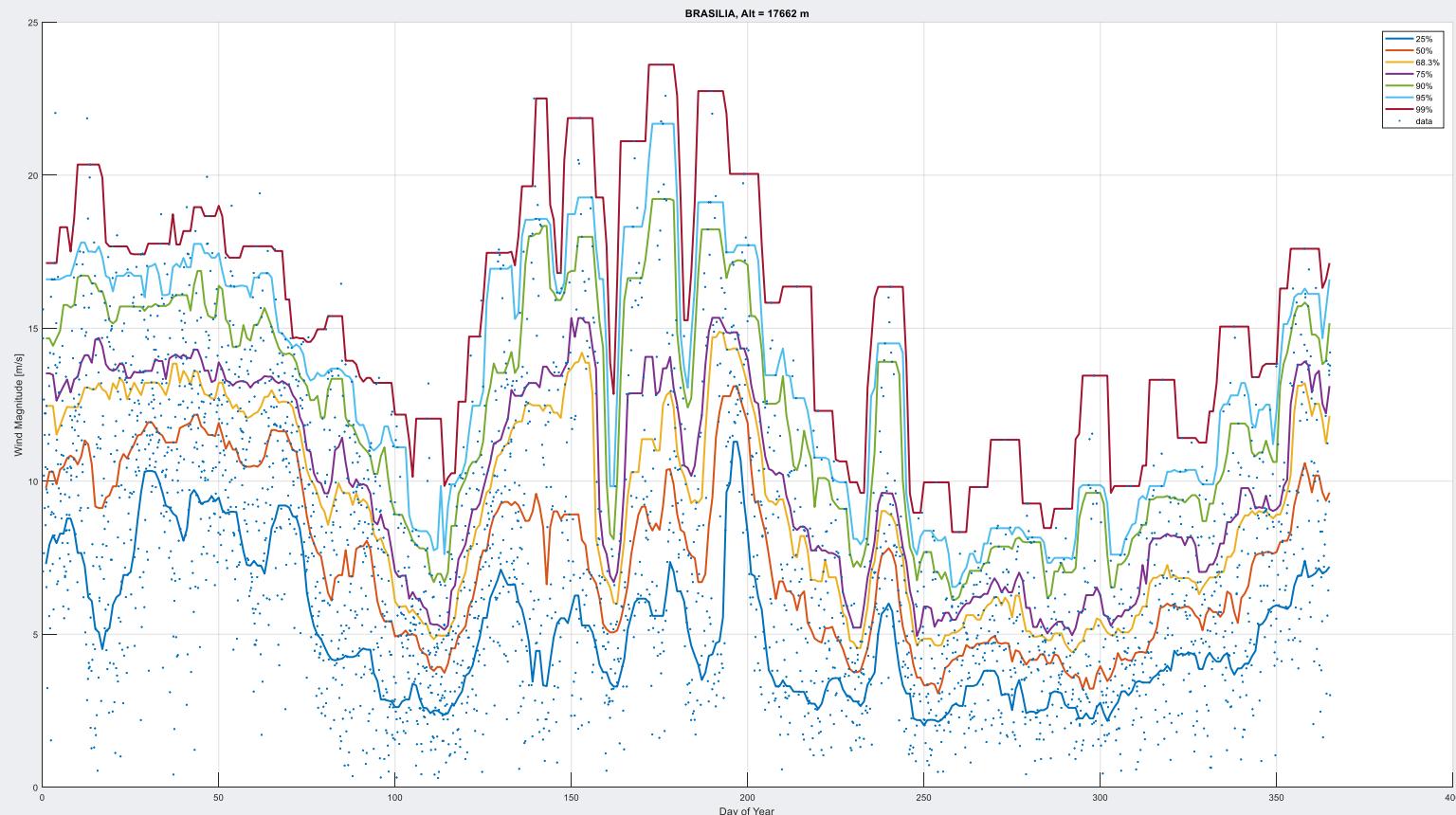
Wind Direction



BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333, Alt = 17662 m

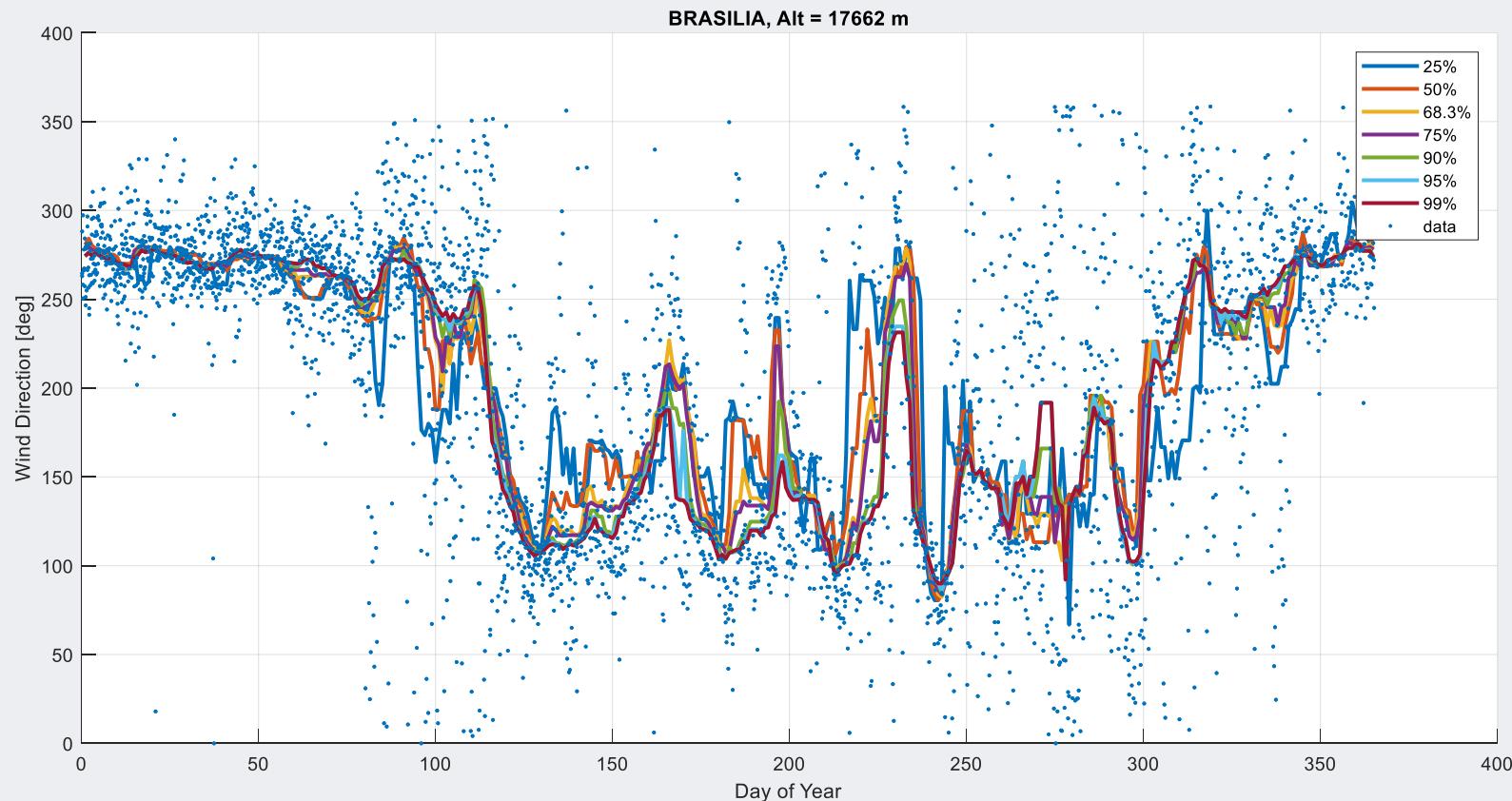
Wind Magnitude



BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333, Alt = 17662 m

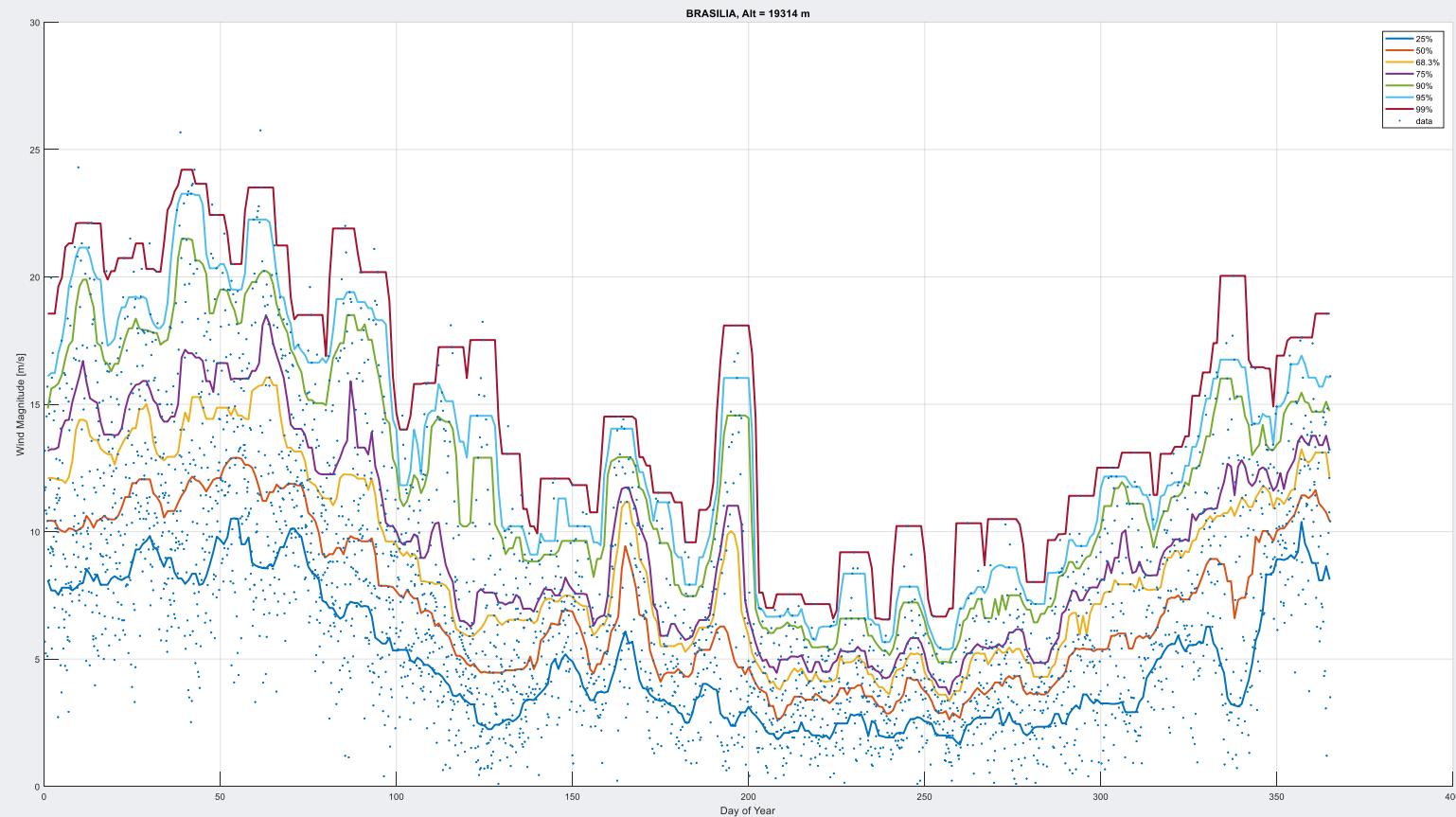
Wind Direction



BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333, Alt = 19314 m

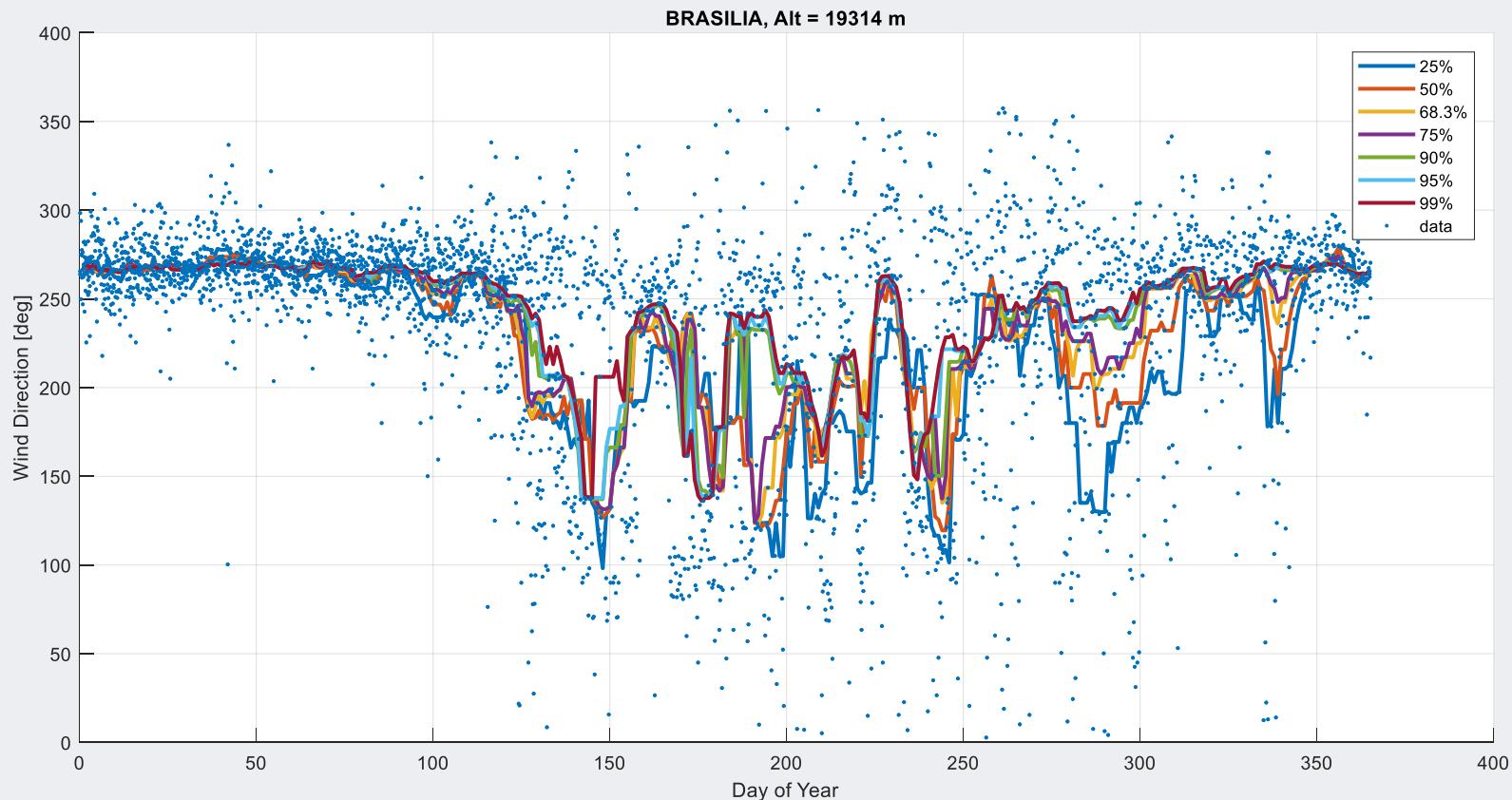
Wind Magnitude



BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333, Alt = 19314 m

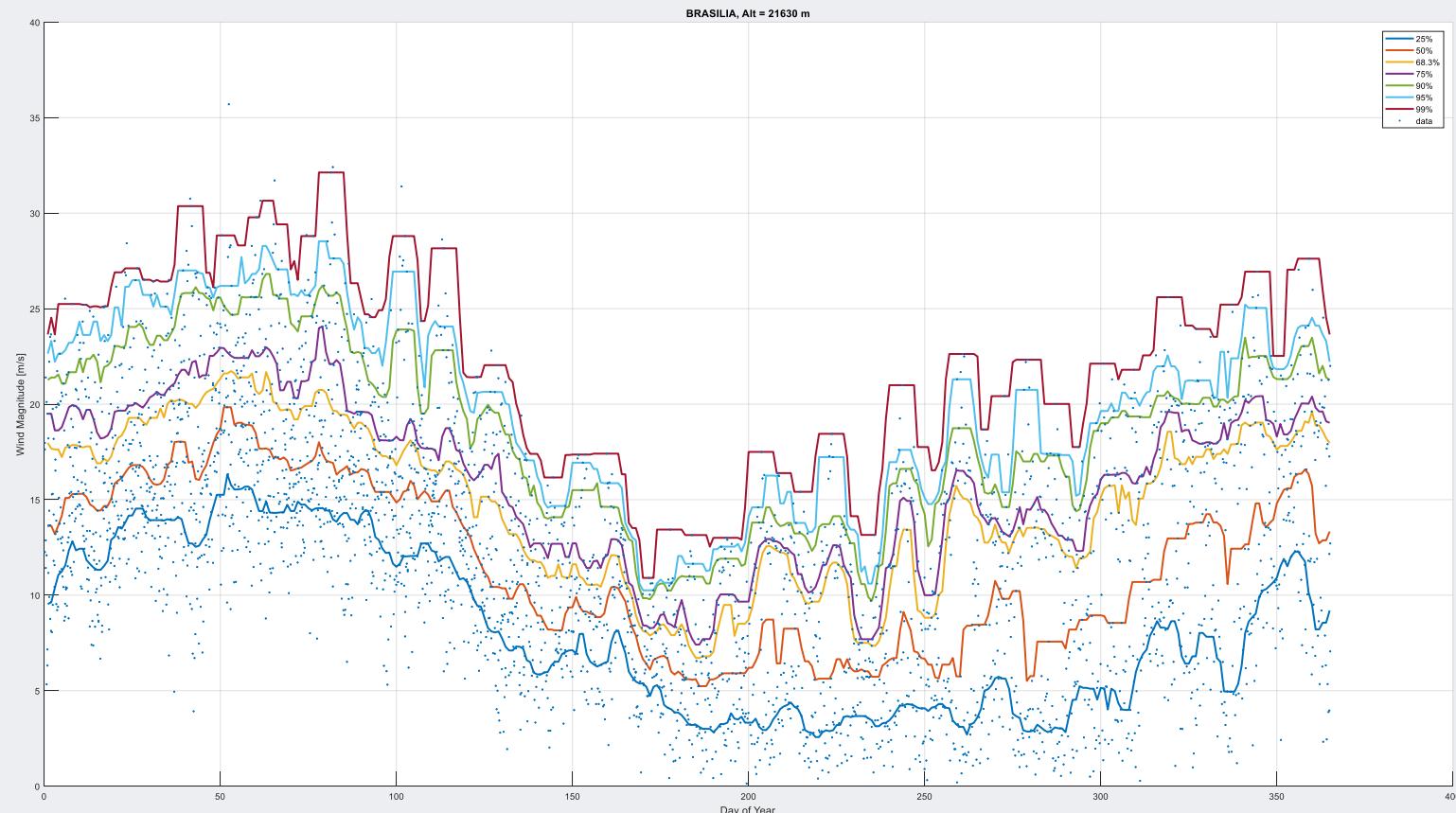
Wind Direction



BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333, Alt = 21630 m

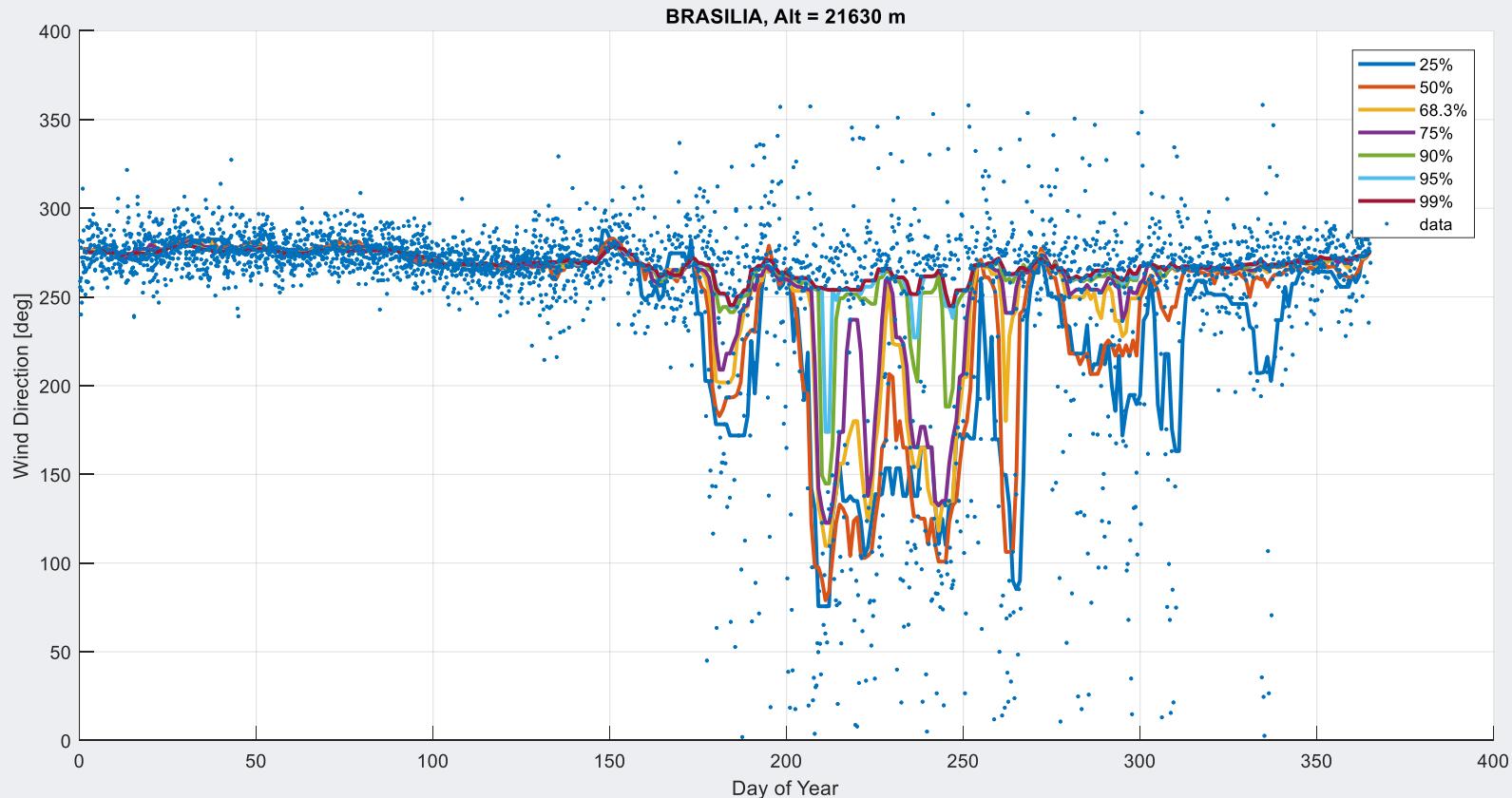
Wind Magnitude



BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333, Alt = 21630 m

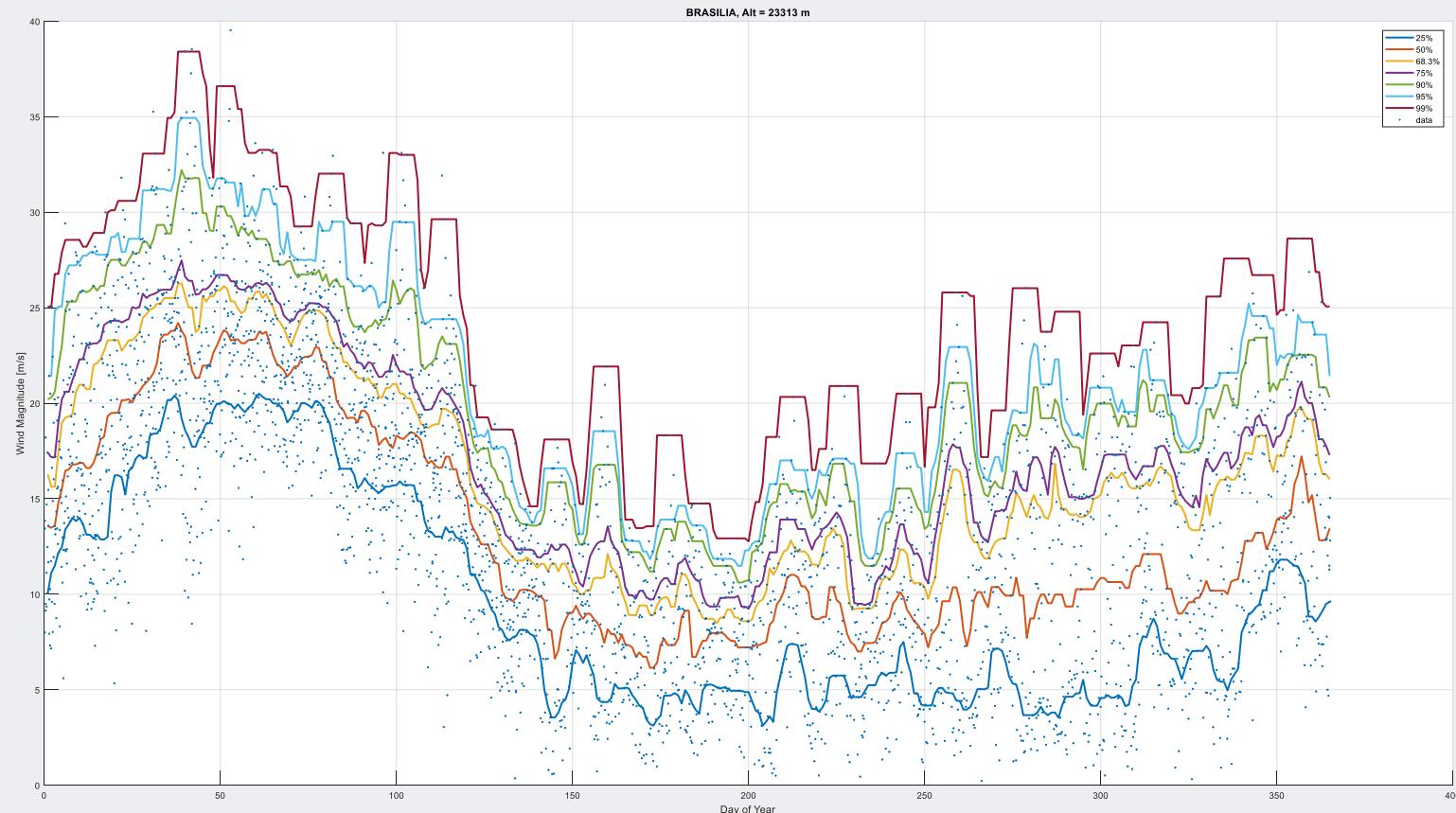
Wind Direction



BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333, Alt = 23313 m

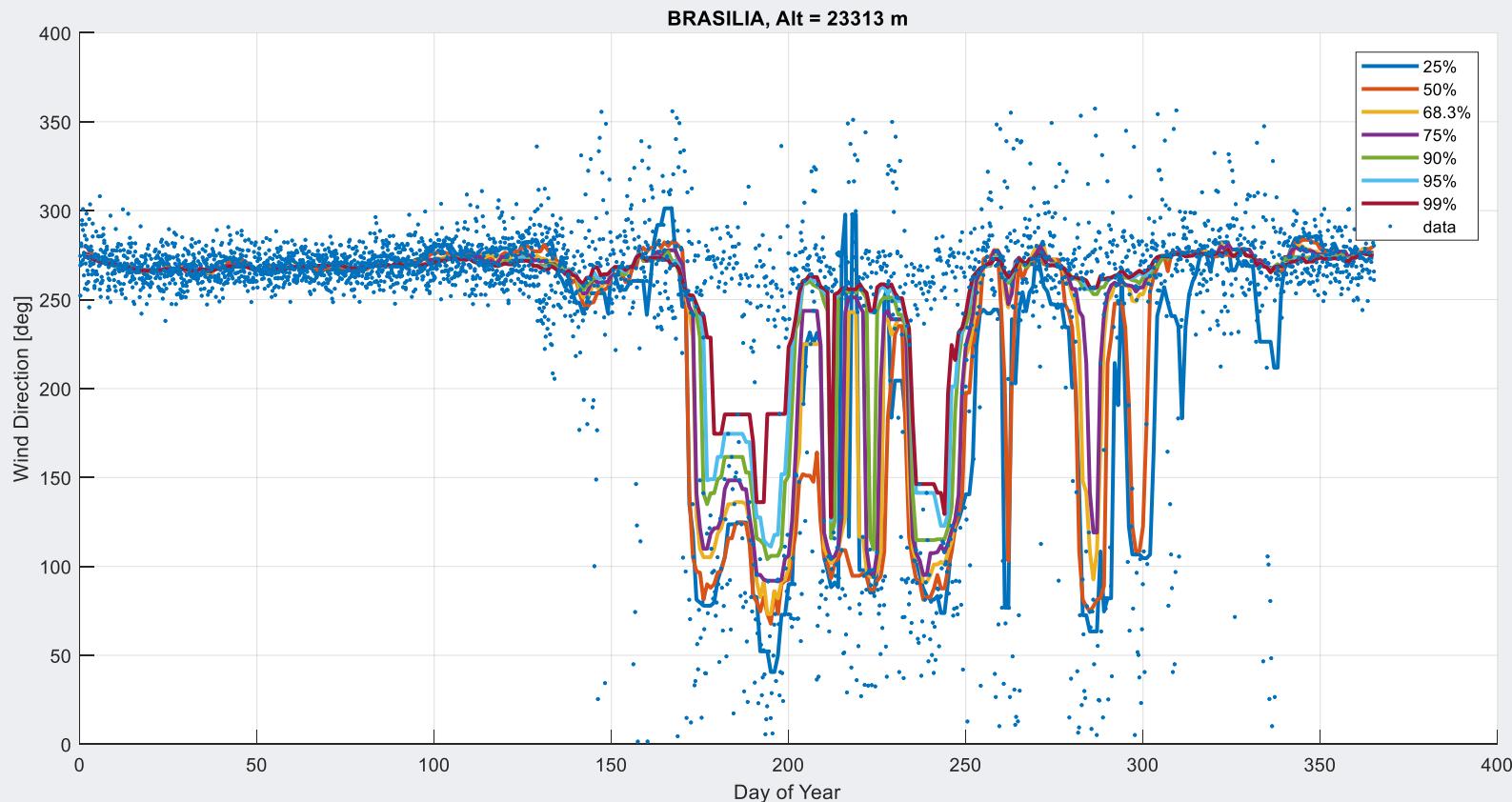
Wind Magnitude



BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333, Alt = 23313 m

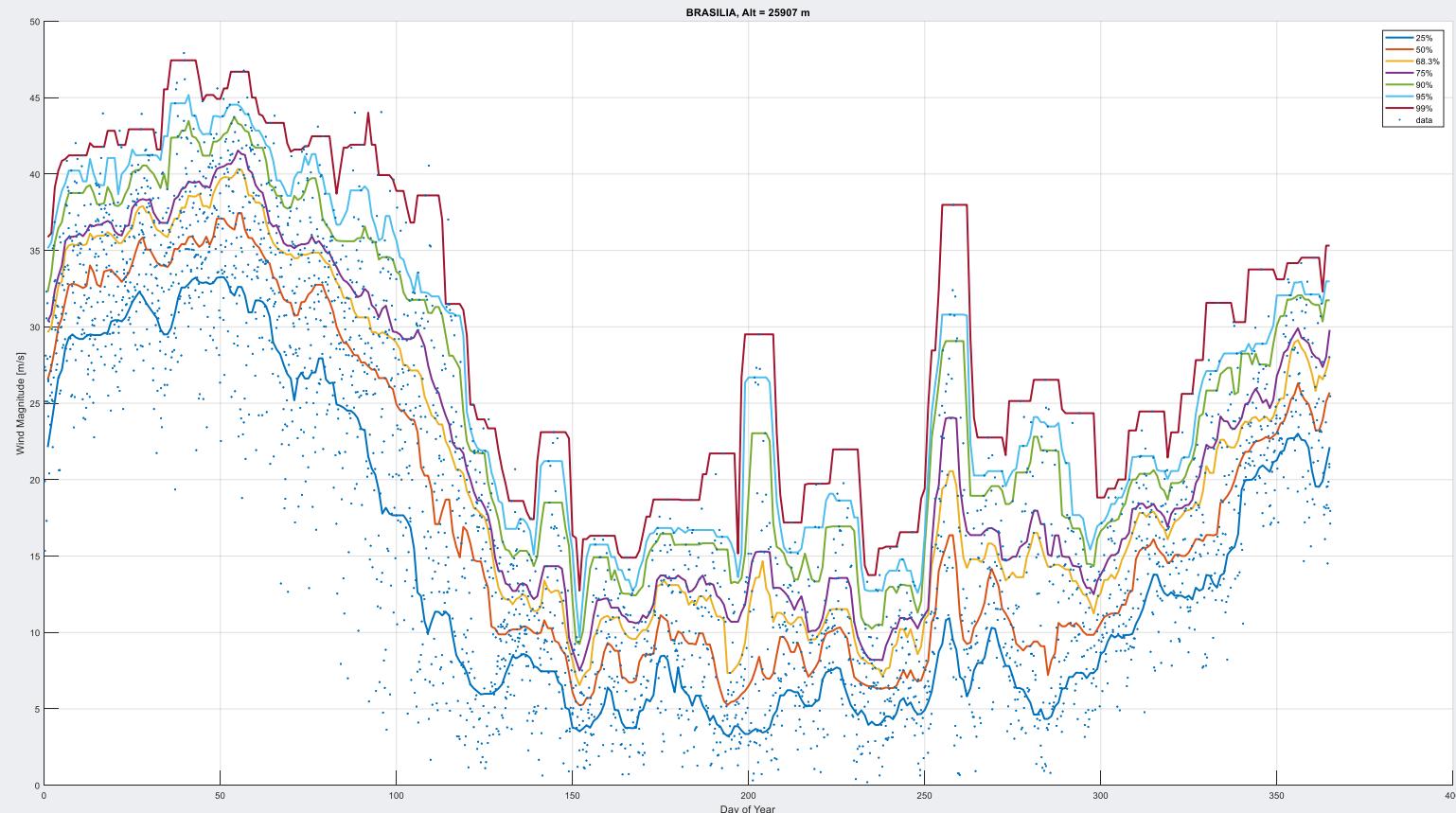
Wind Direction



BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333, Alt = 25907 m

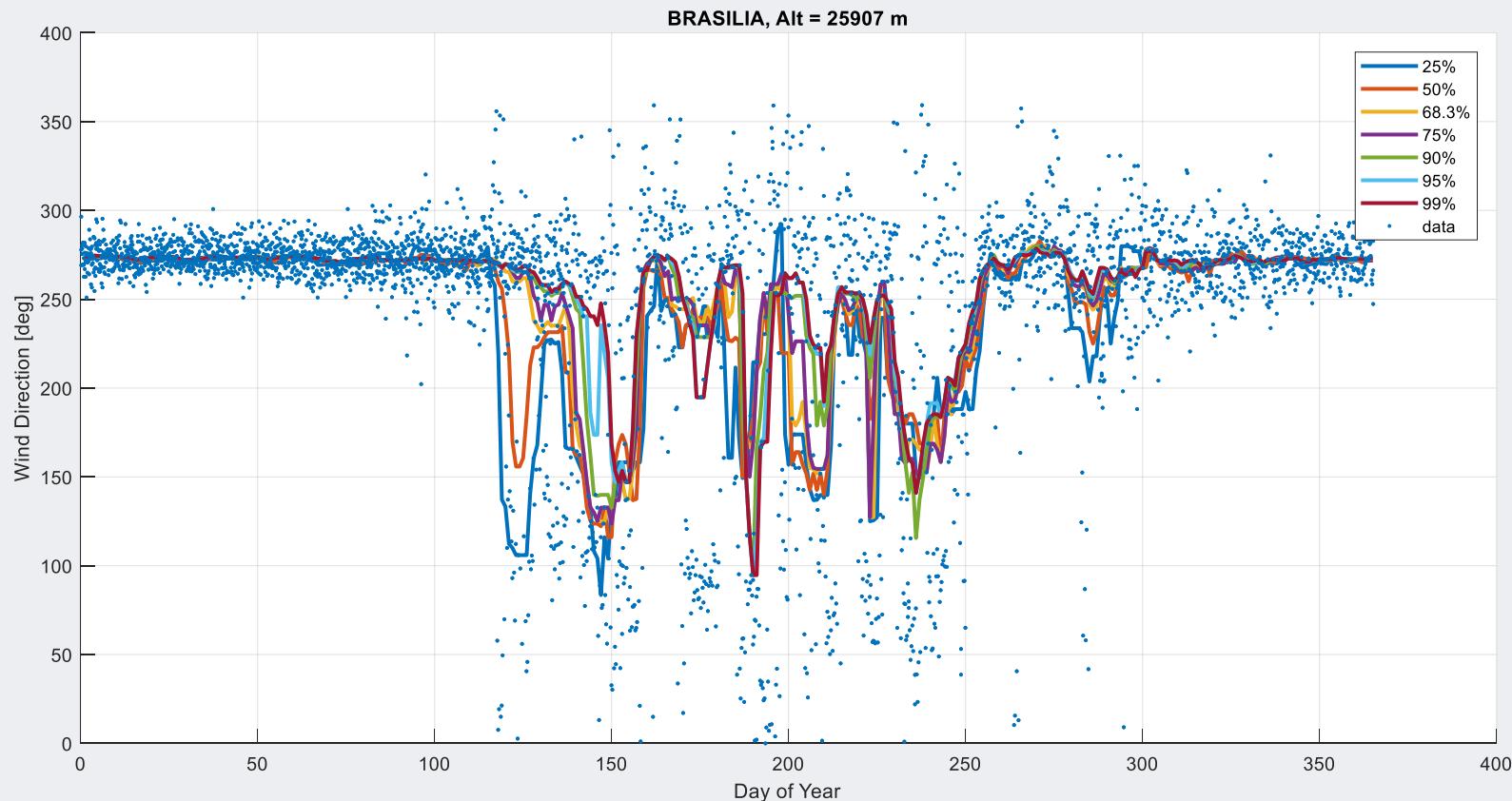
Wind Magnitude



BRASILIA/BRM00083378

Lat = -15.8667, Lon = -47.9333, Alt = 25907 m

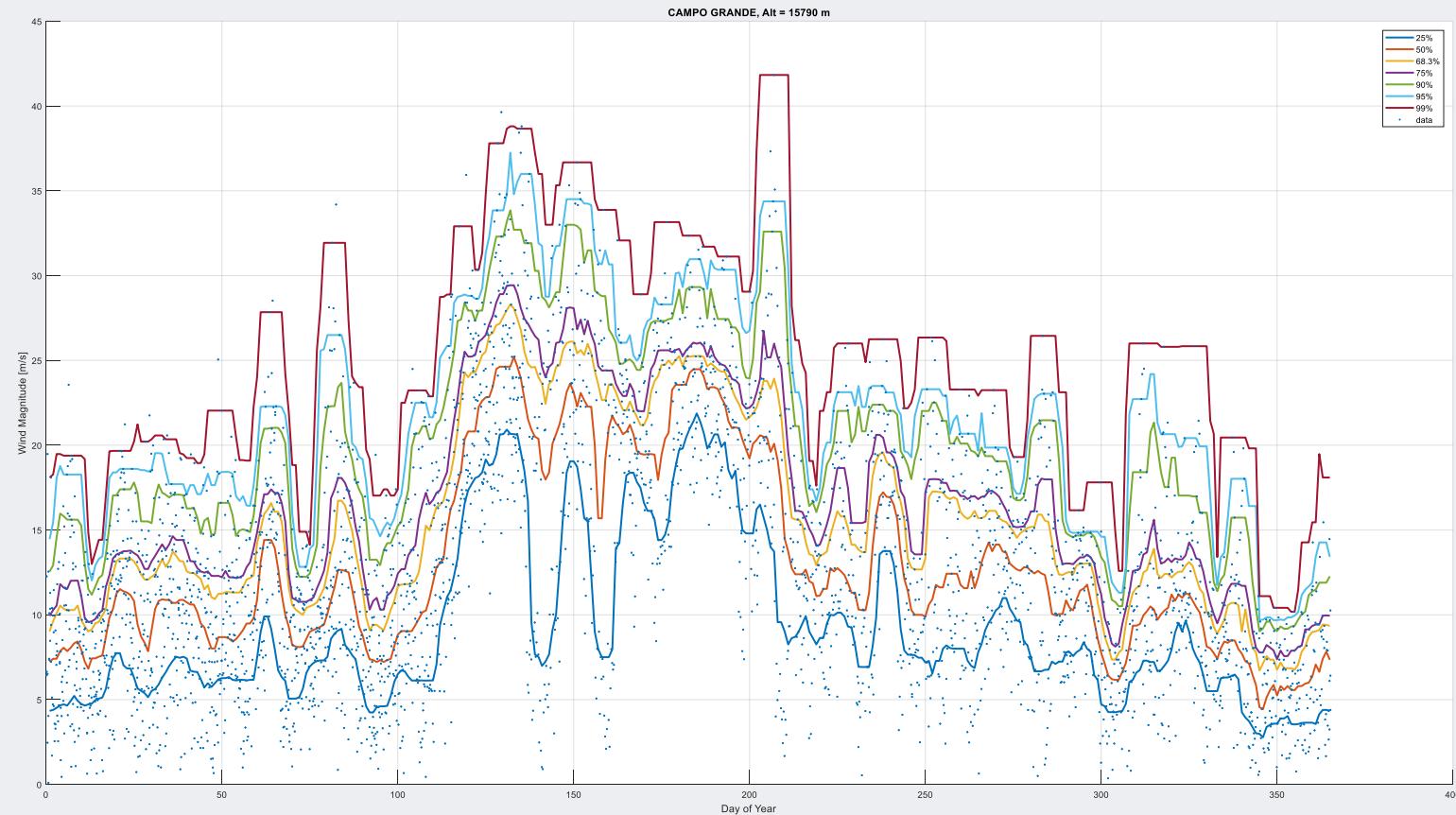
Wind Direction



CAMPO GRANDE/BRM00083612

Lat = -20.4667, Lon = -54.6667, Alt = 15790 m

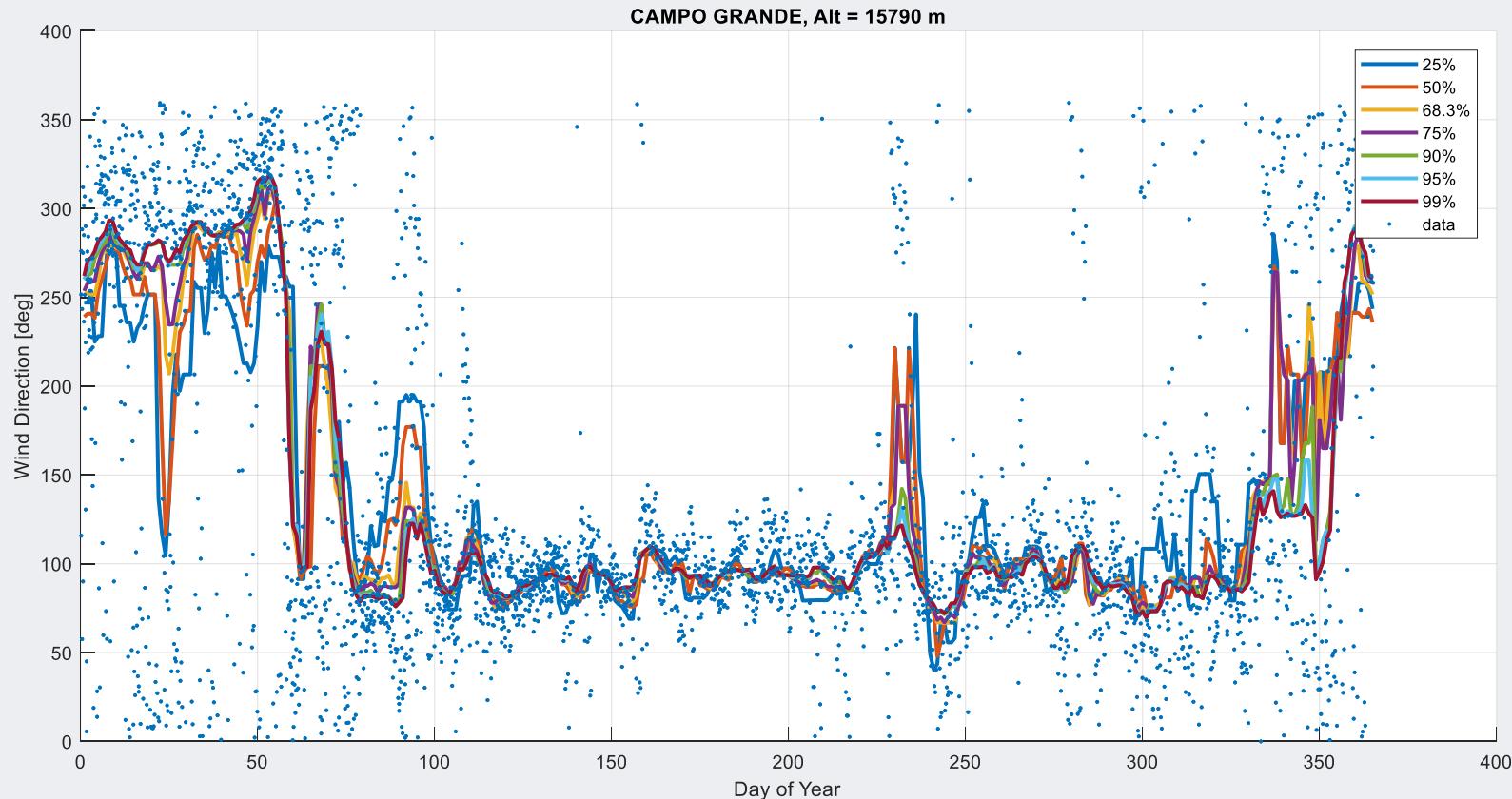
Wind Magnitude



CAMPO GRANDE/BRM00083612

Lat = -20.4667, Lon = -54.6667, Alt = 15790 m

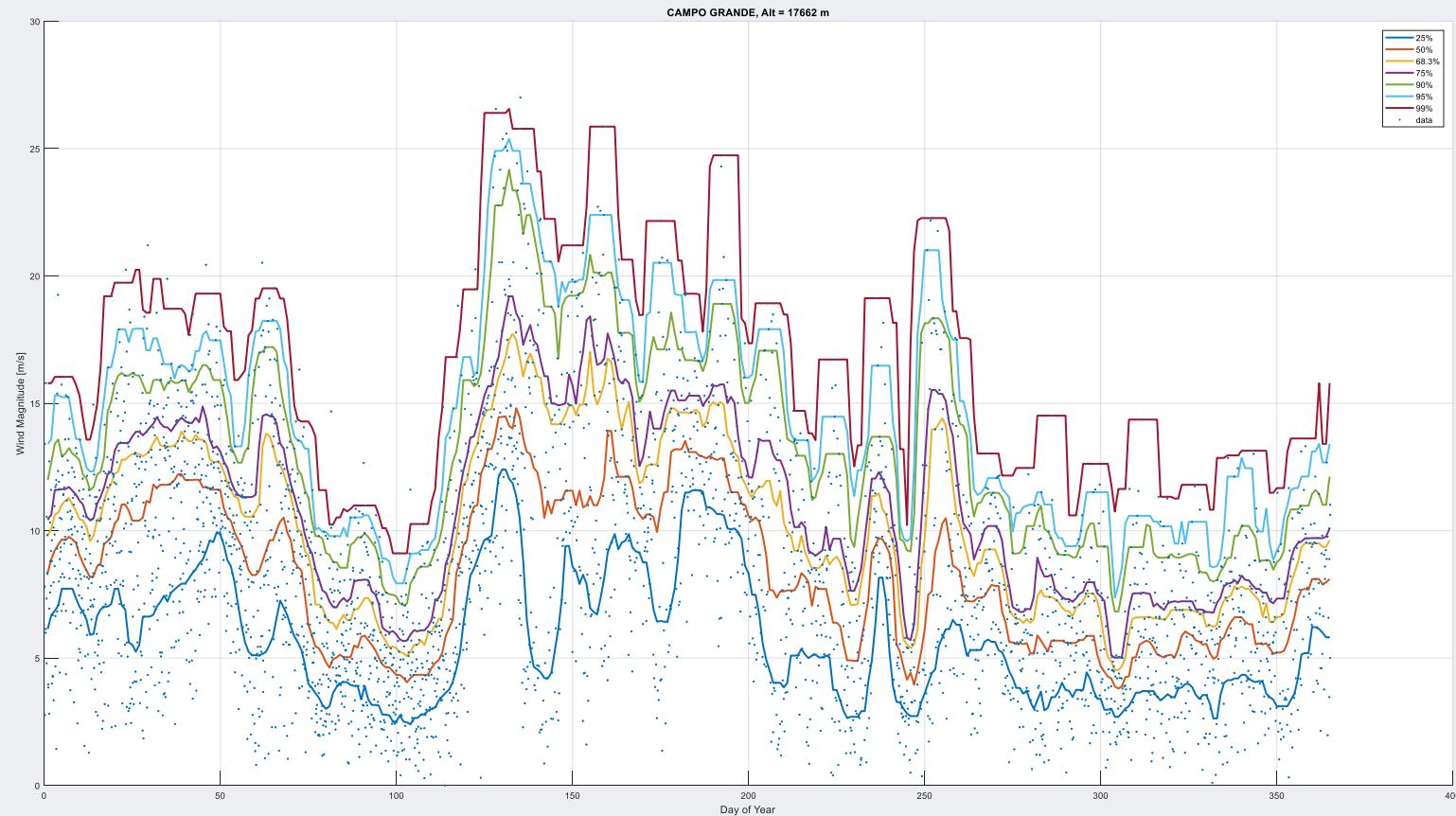
Wind Direction



CAMPO GRANDE/BRM00083612

Lat = -20.4667, Lon = -54.6667, Alt = 17662 m

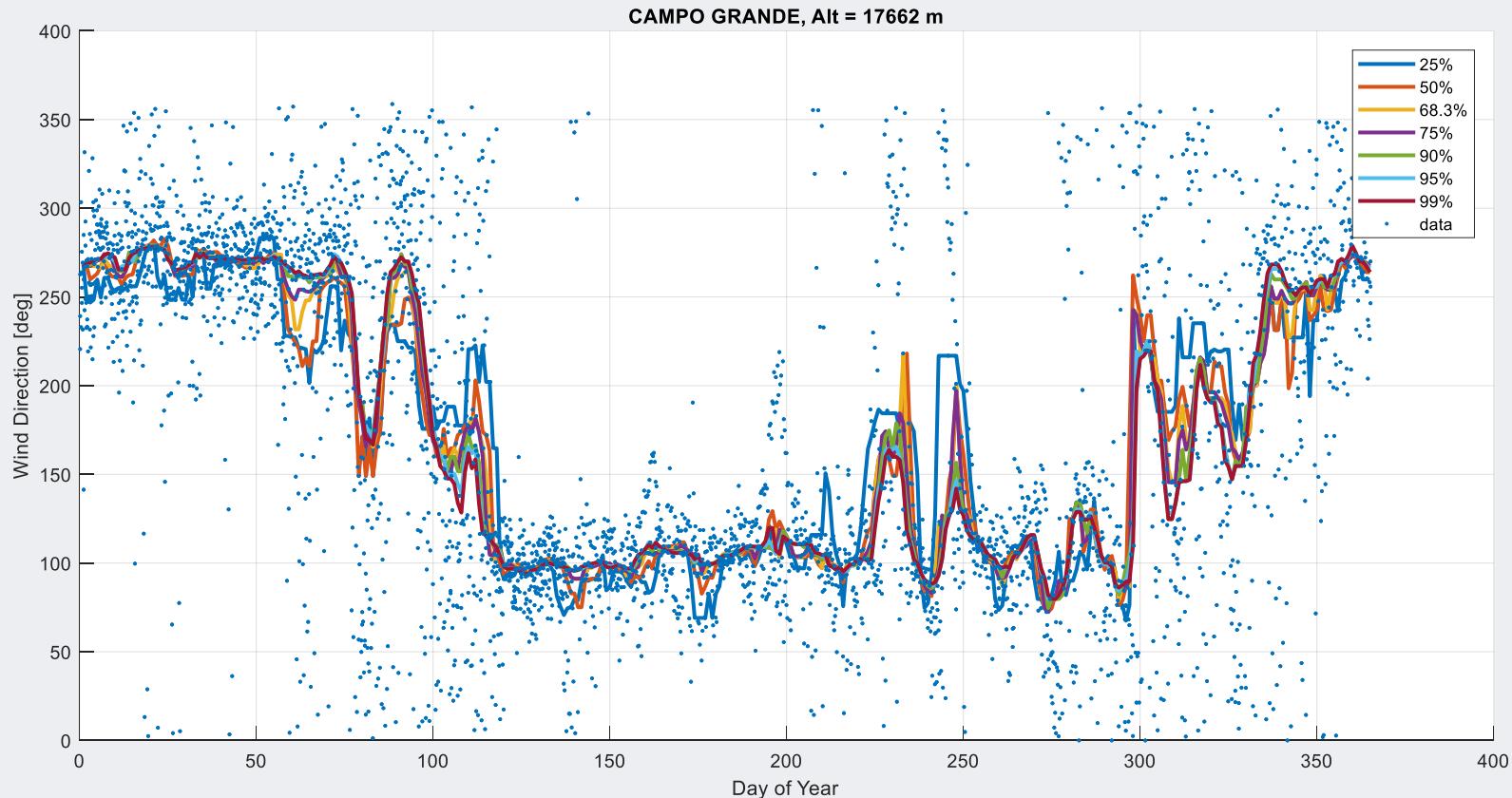
Wind Magnitude



CAMPO GRANDE/BRM00083612

Lat = -20.4667, Lon = -54.6667, Alt = 17662 m

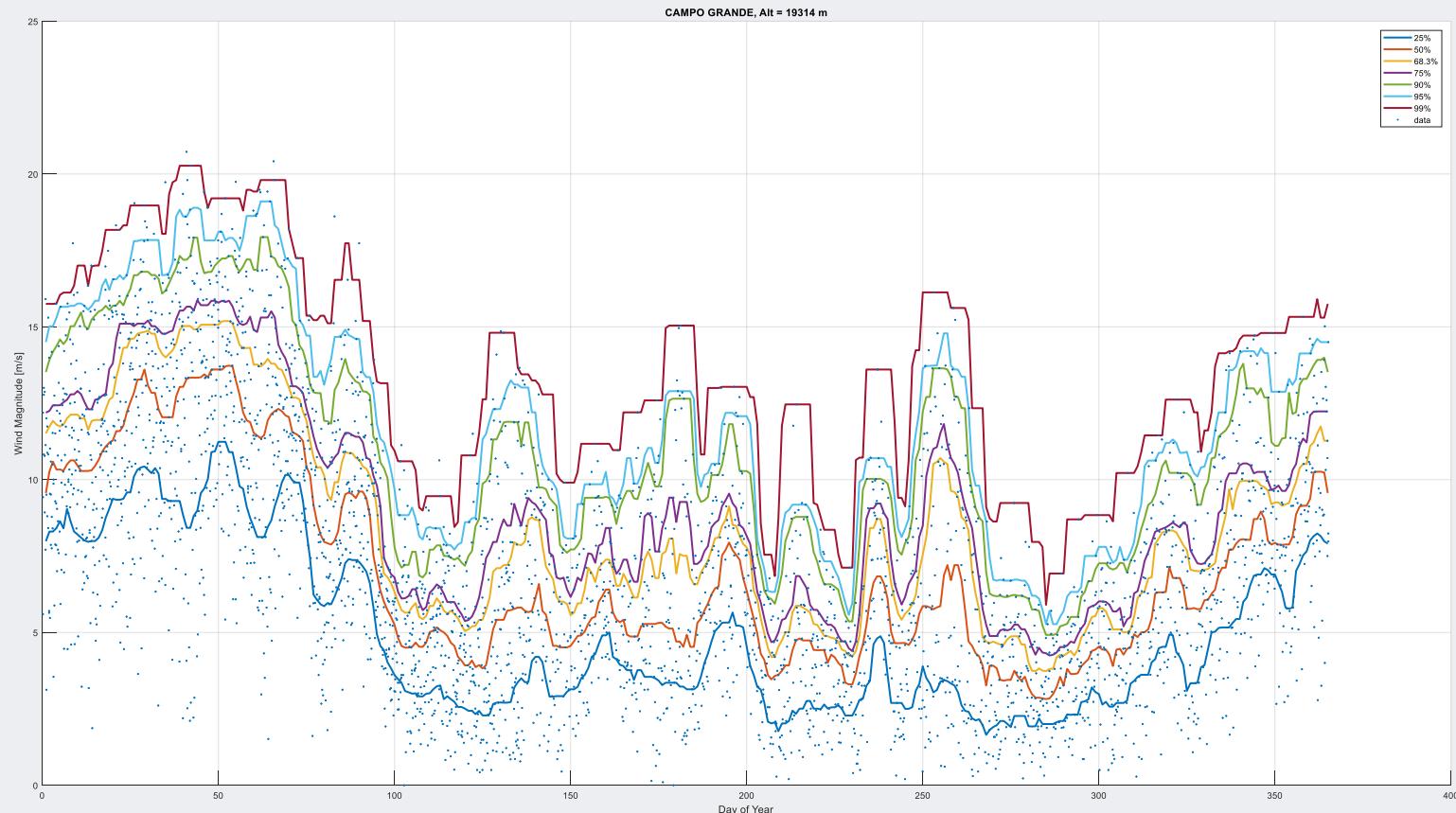
Wind Direction



CAMPO GRANDE/BRM00083612

Lat = -20.4667, Lon = -54.6667, Alt = 19314 m

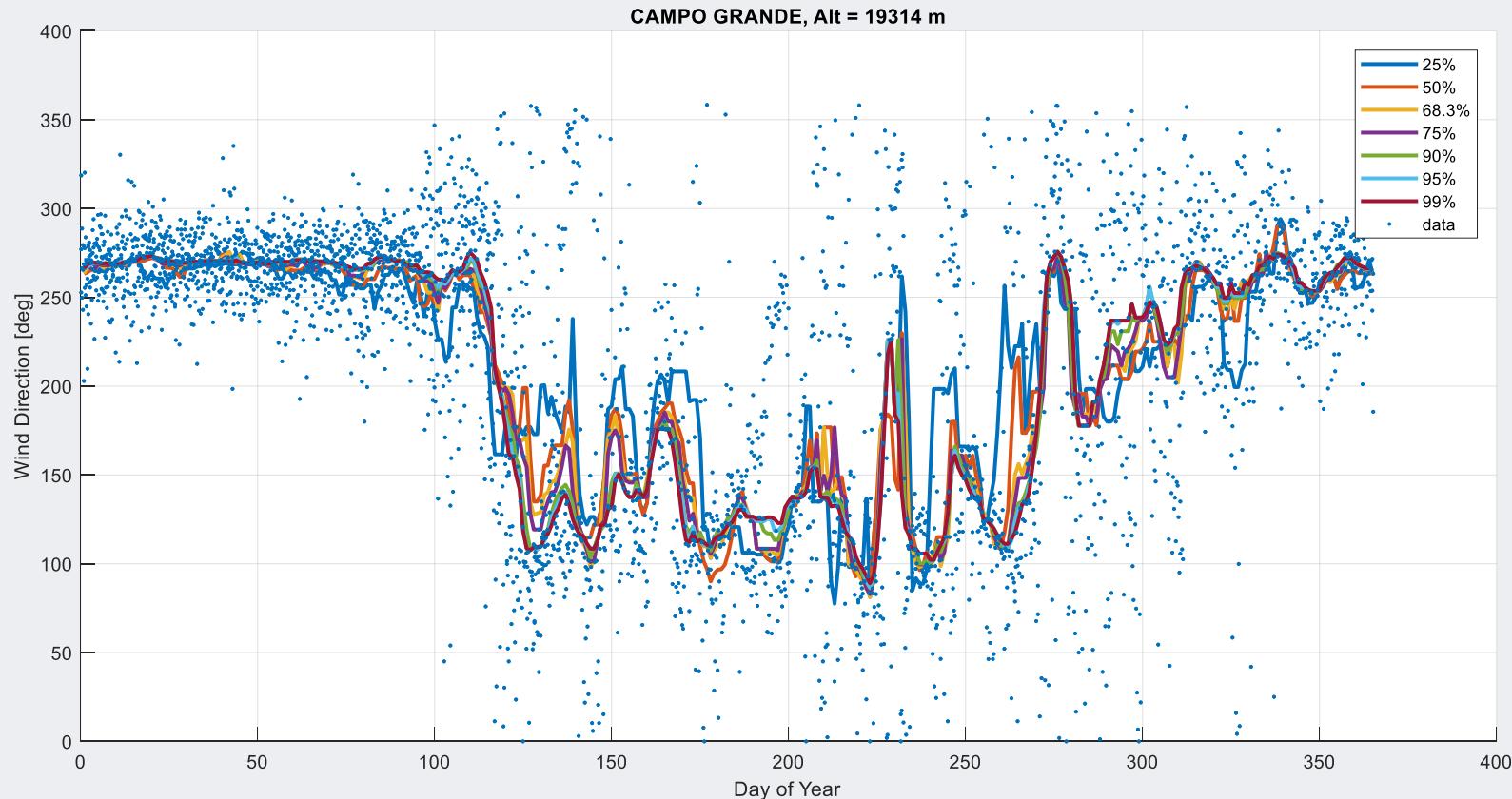
Wind Magnitude



CAMPO GRANDE/BRM00083612

Lat = -20.4667, Lon = -54.6667, Alt = 19314 m

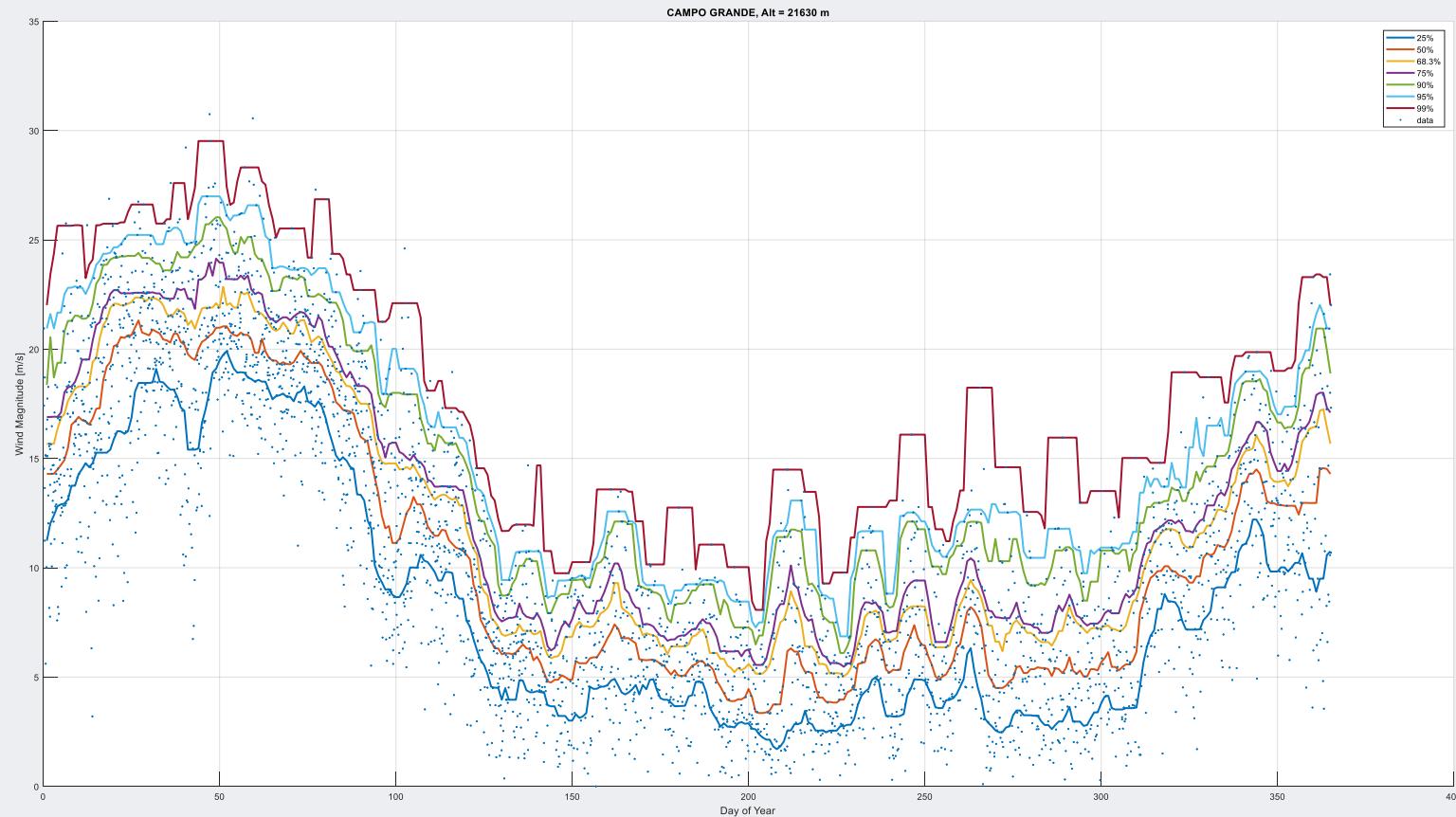
Wind Direction



CAMPO GRANDE/BRM00083612

Lat = -20.4667, Lon = -54.6667, Alt = 21630 m

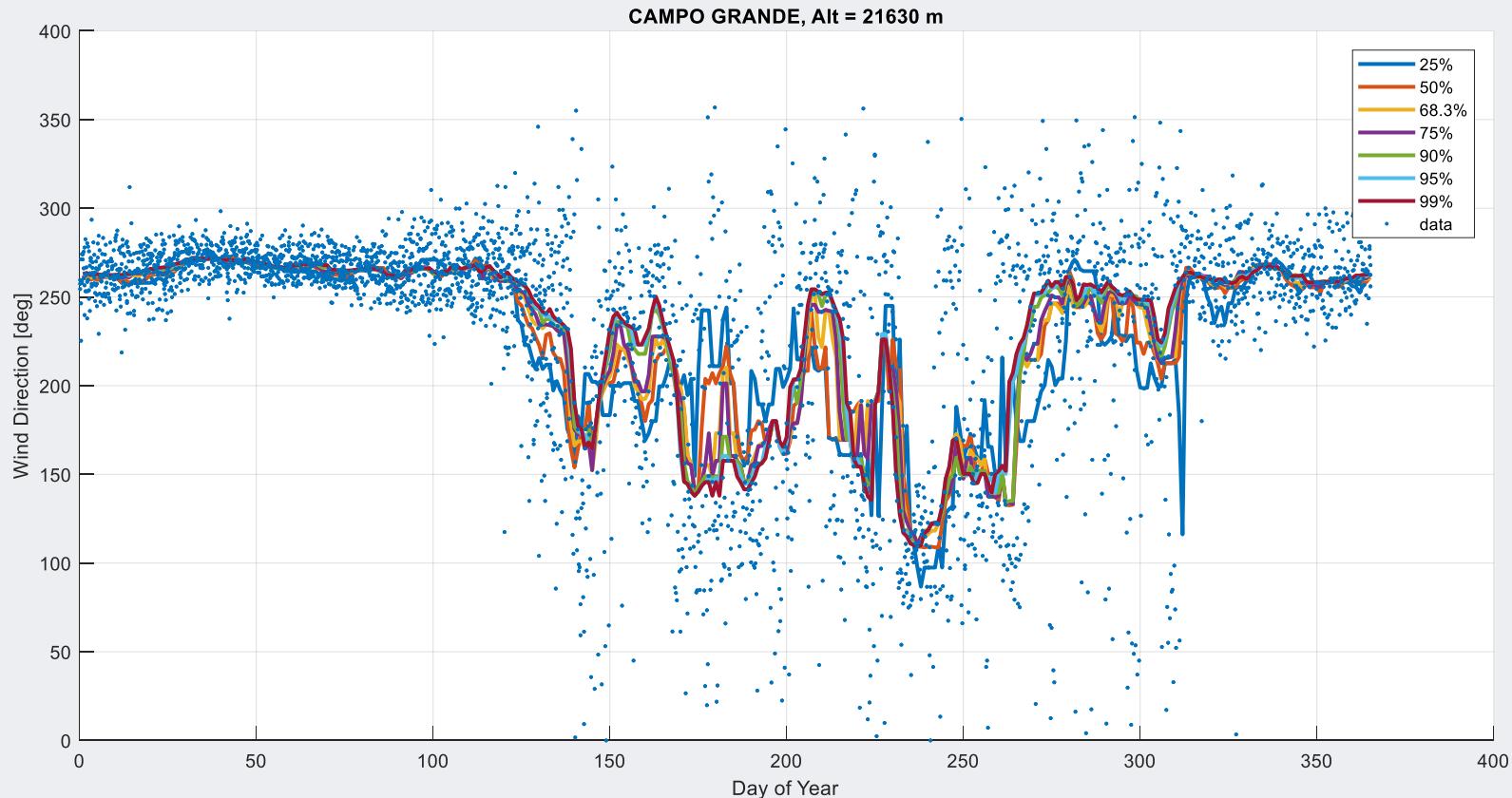
Wind Magnitude



CAMPO GRANDE/BRM00083612

Lat = -20.4667, Lon = -54.6667, Alt = 21630 m

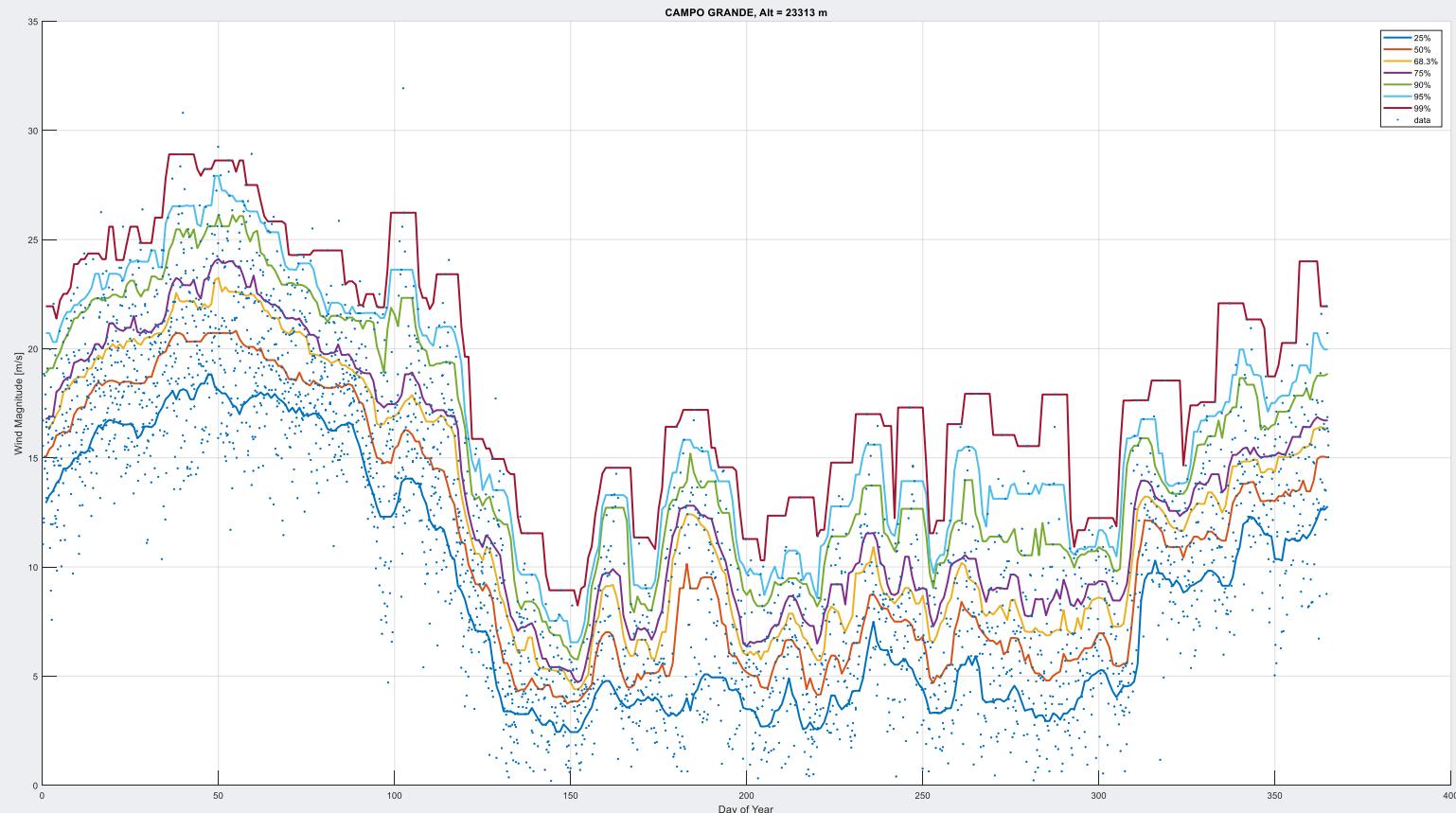
Wind Direction



CAMPO GRANDE/BRM00083612

Lat = -20.4667, Lon = -54.6667, Alt = 23313 m

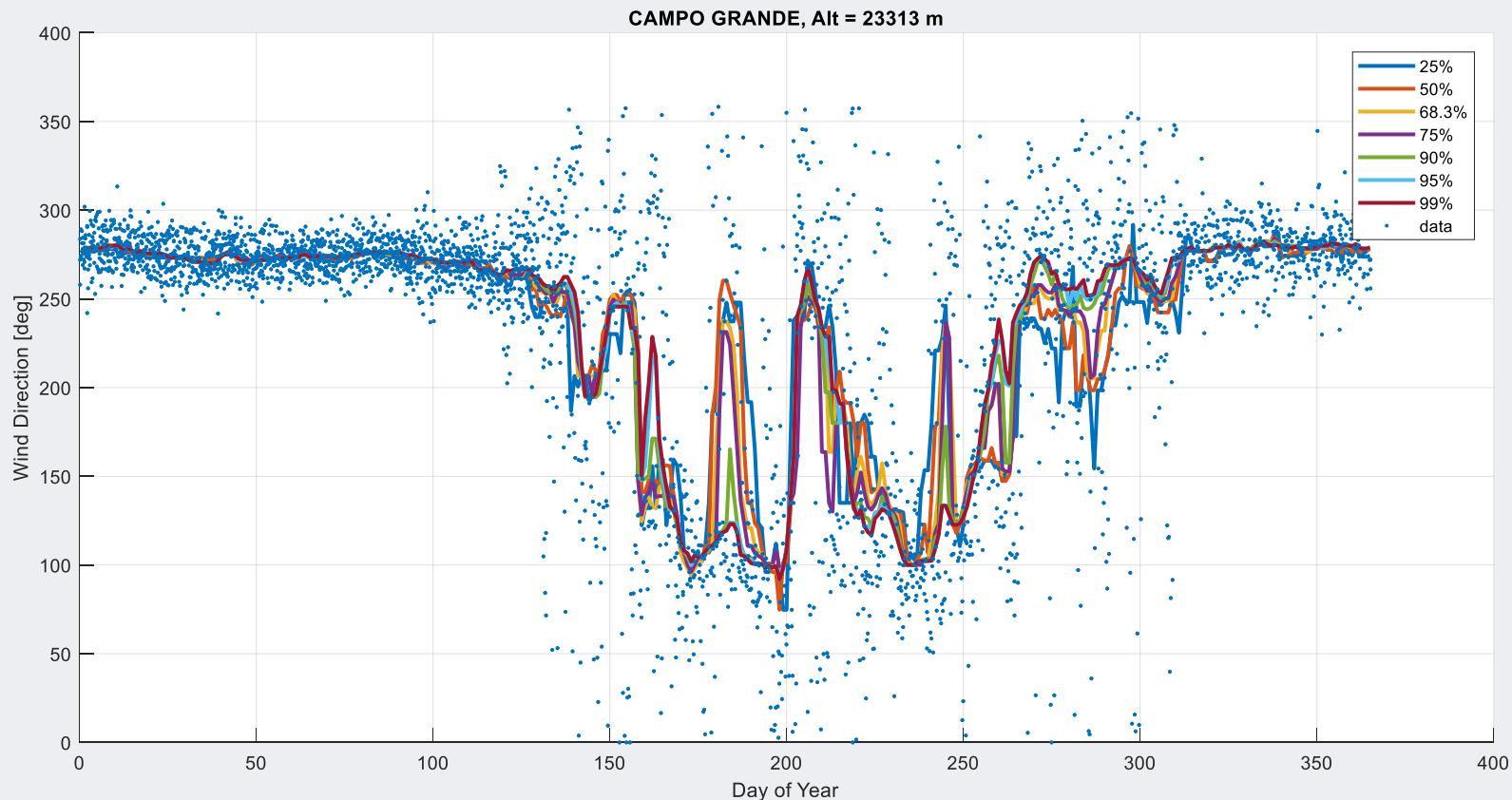
Wind Magnitude



CAMPO GRANDE/BRM00083612

Lat = -20.4667, Lon = -54.6667, Alt = 23313 m

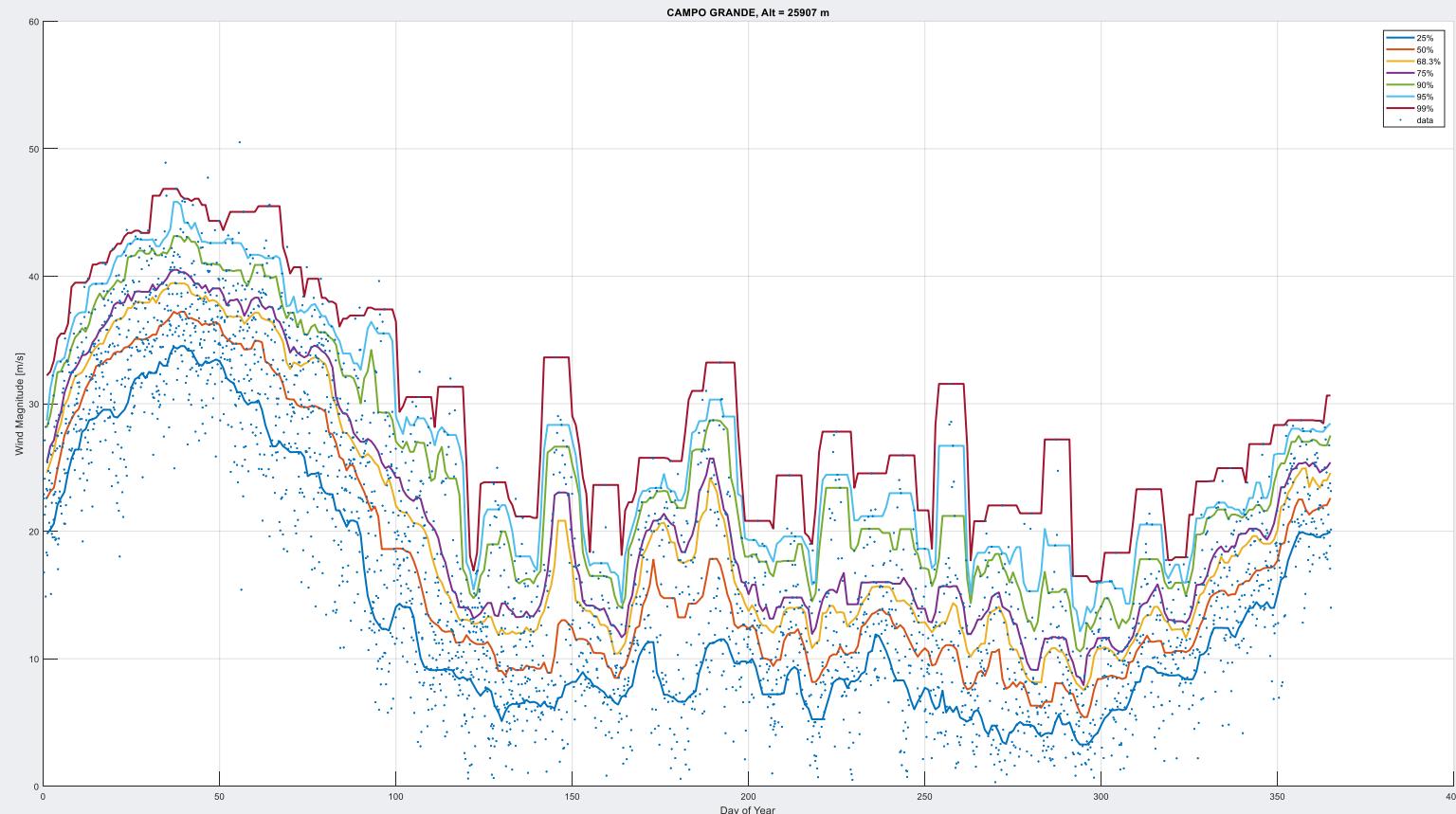
Wind Direction



CAMPO GRANDE/BRM00083612

Lat = -20.4667, Lon = -54.6667, Alt = 25907 m

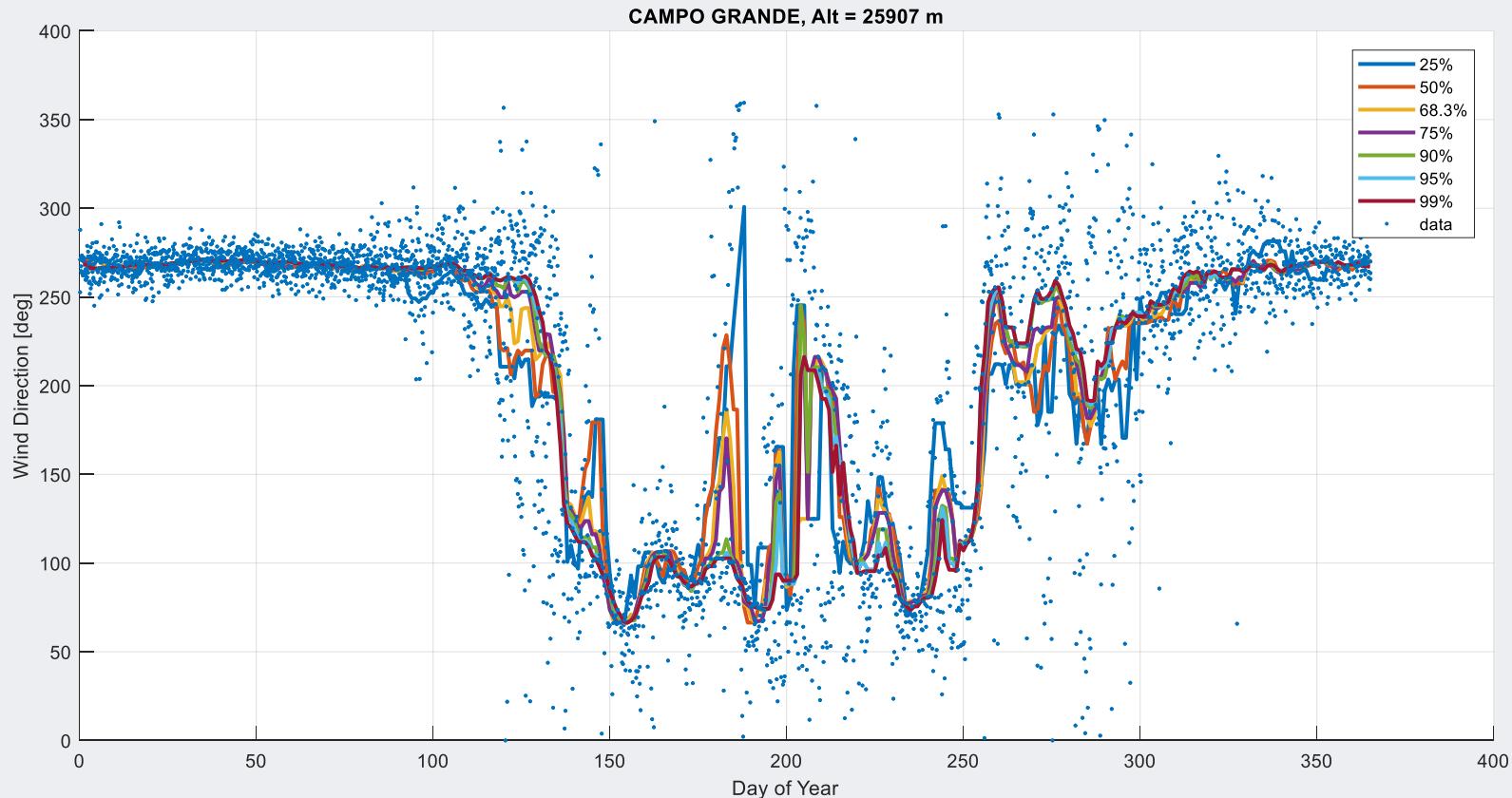
Wind Magnitude



CAMPO GRANDE/BRM00083612

Lat = -20.4667, Lon = -54.6667, Alt = 25907 m

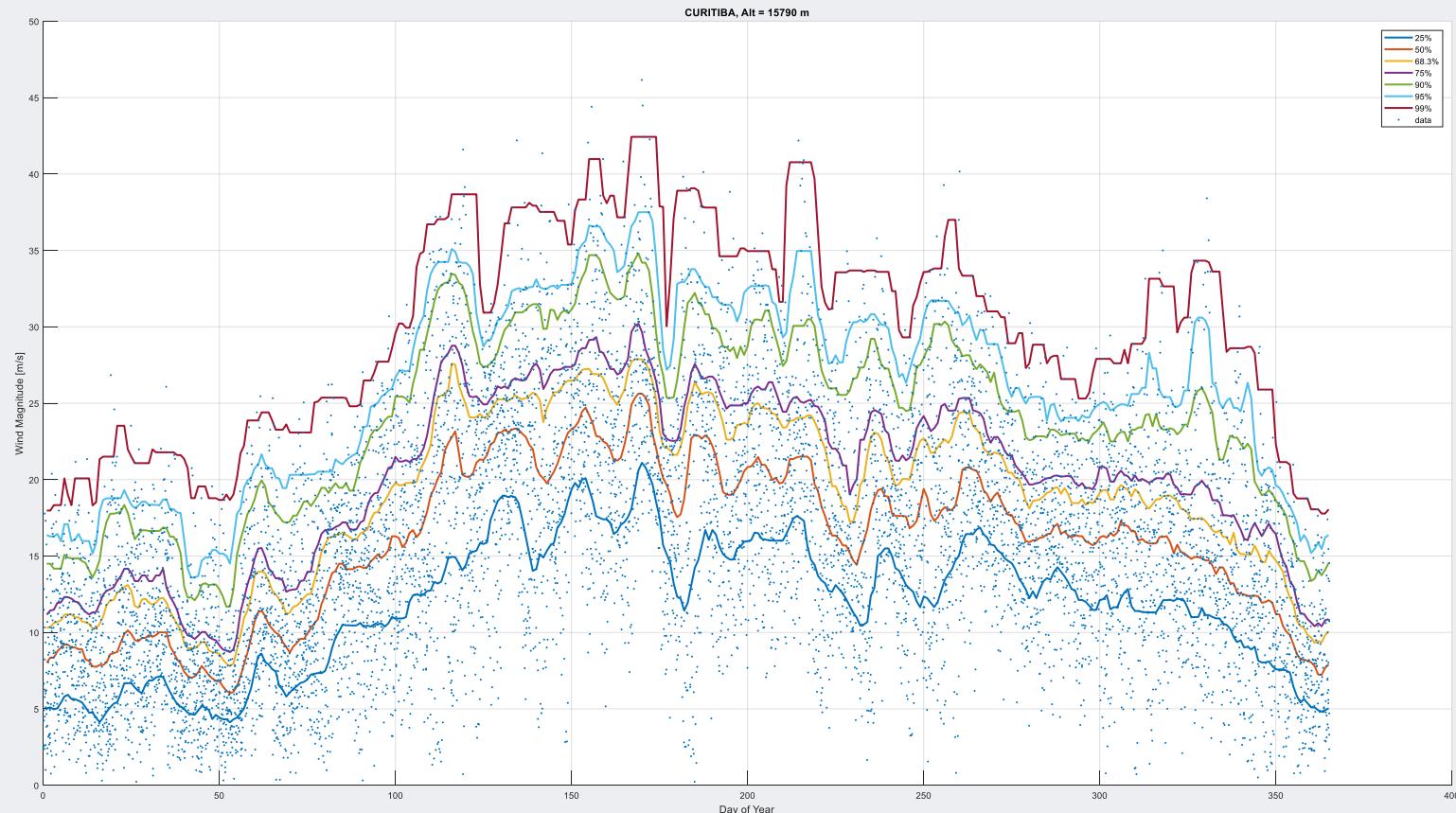
Wind Direction



CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667, Alt = 15790 m

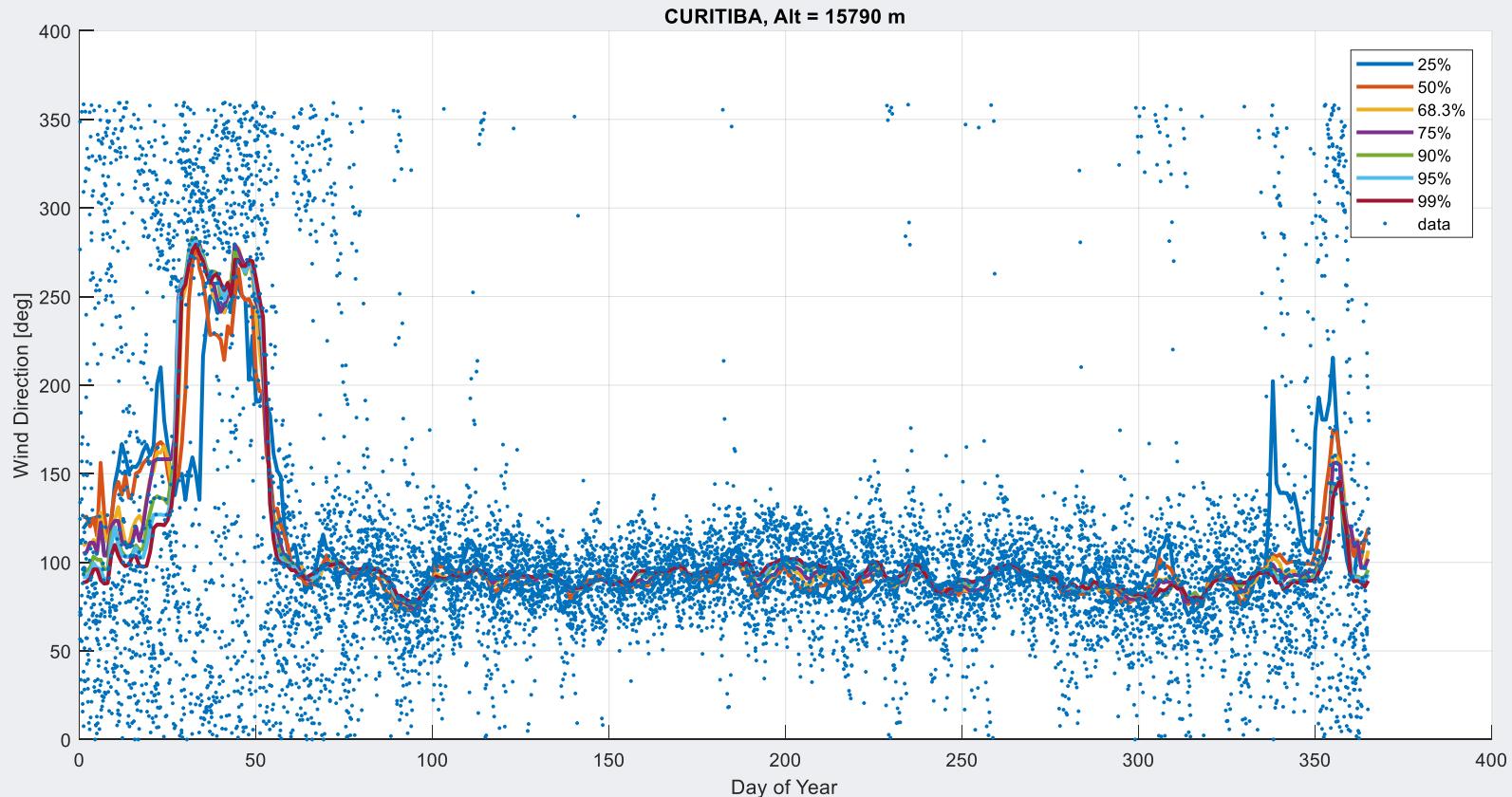
Wind Magnitude



CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667, Alt = 15790 m

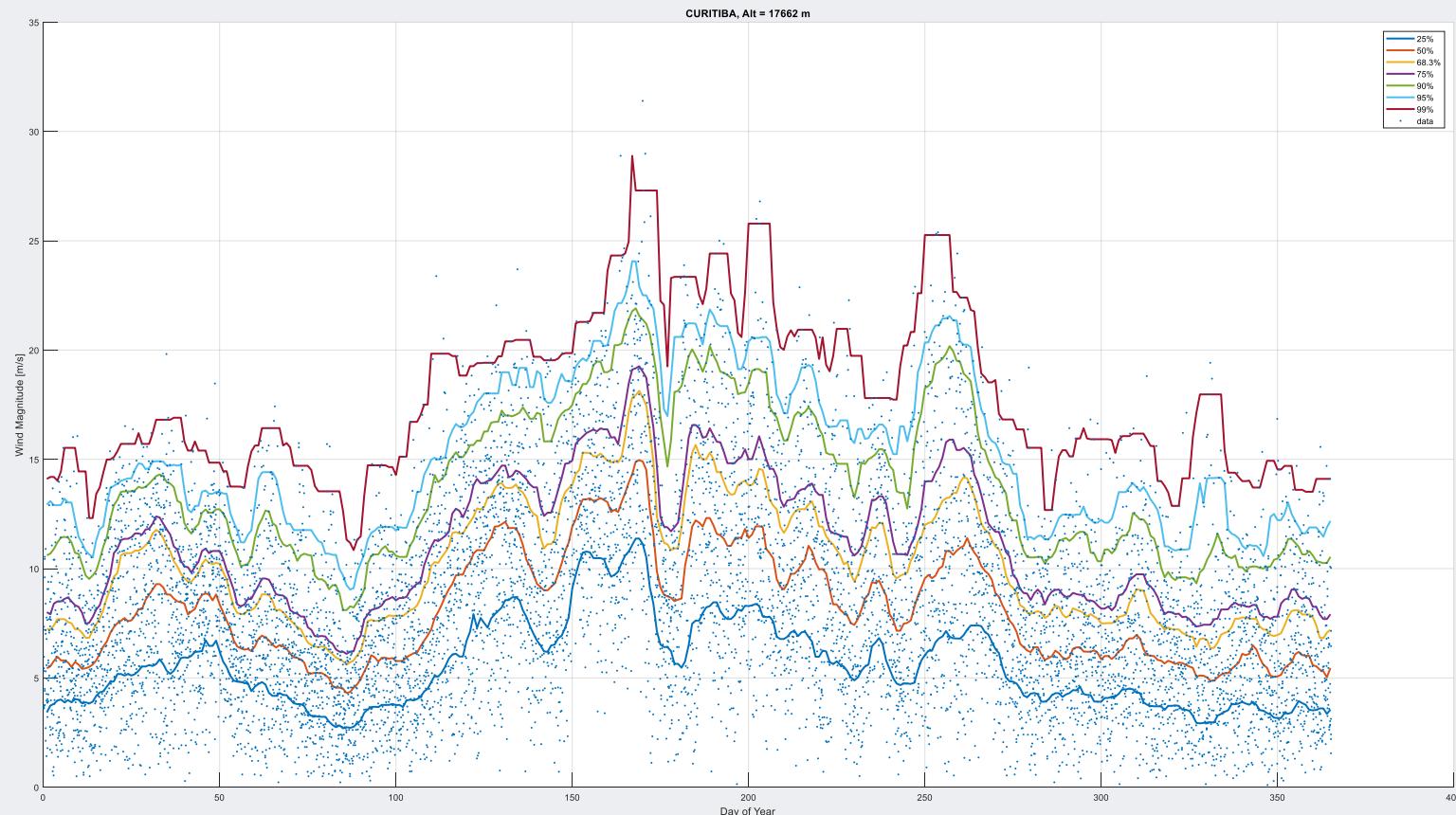
Wind Direction



CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667, Alt = 17662 m

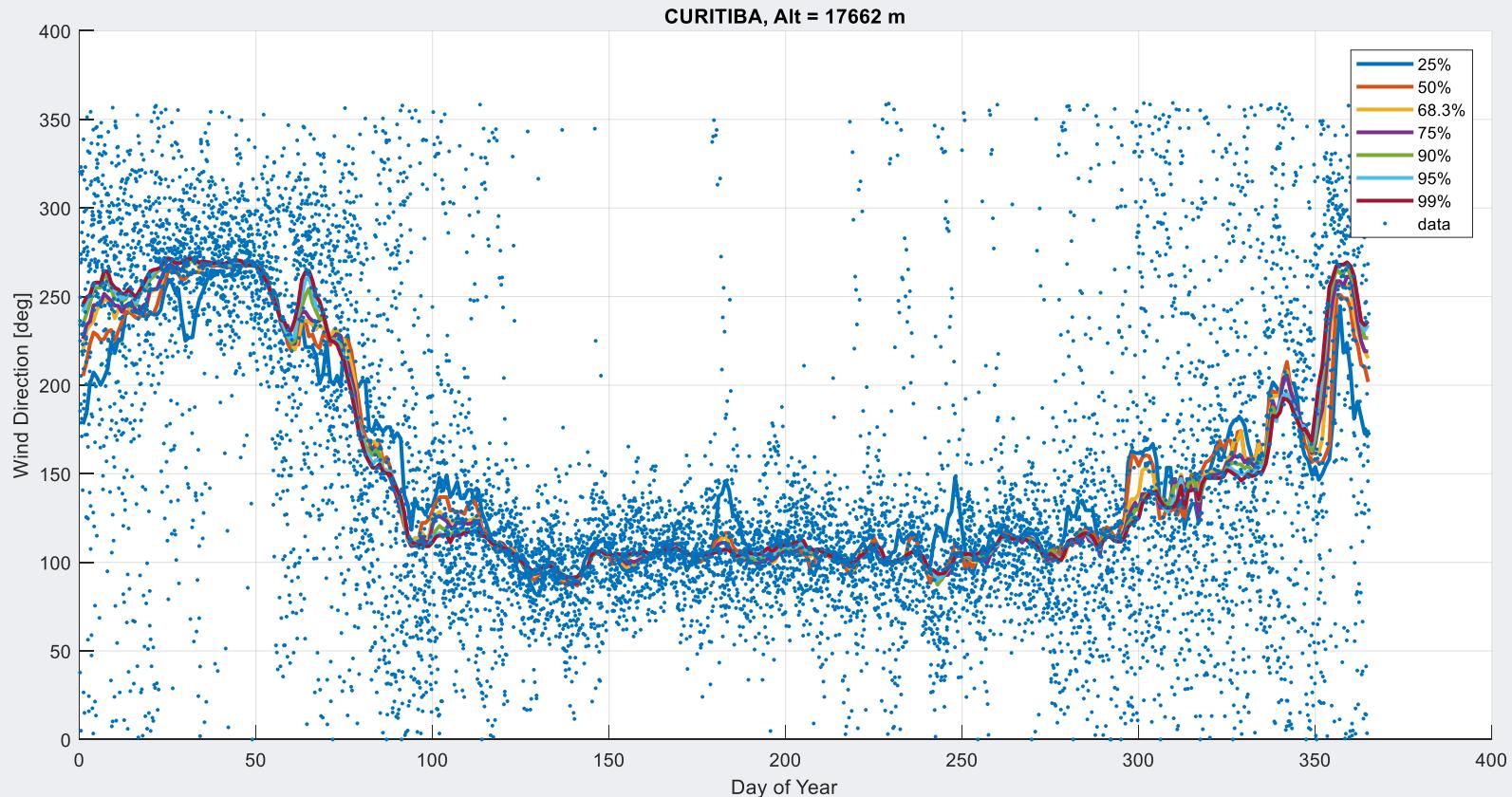
Wind Magnitude



CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667, Alt = 17662 m

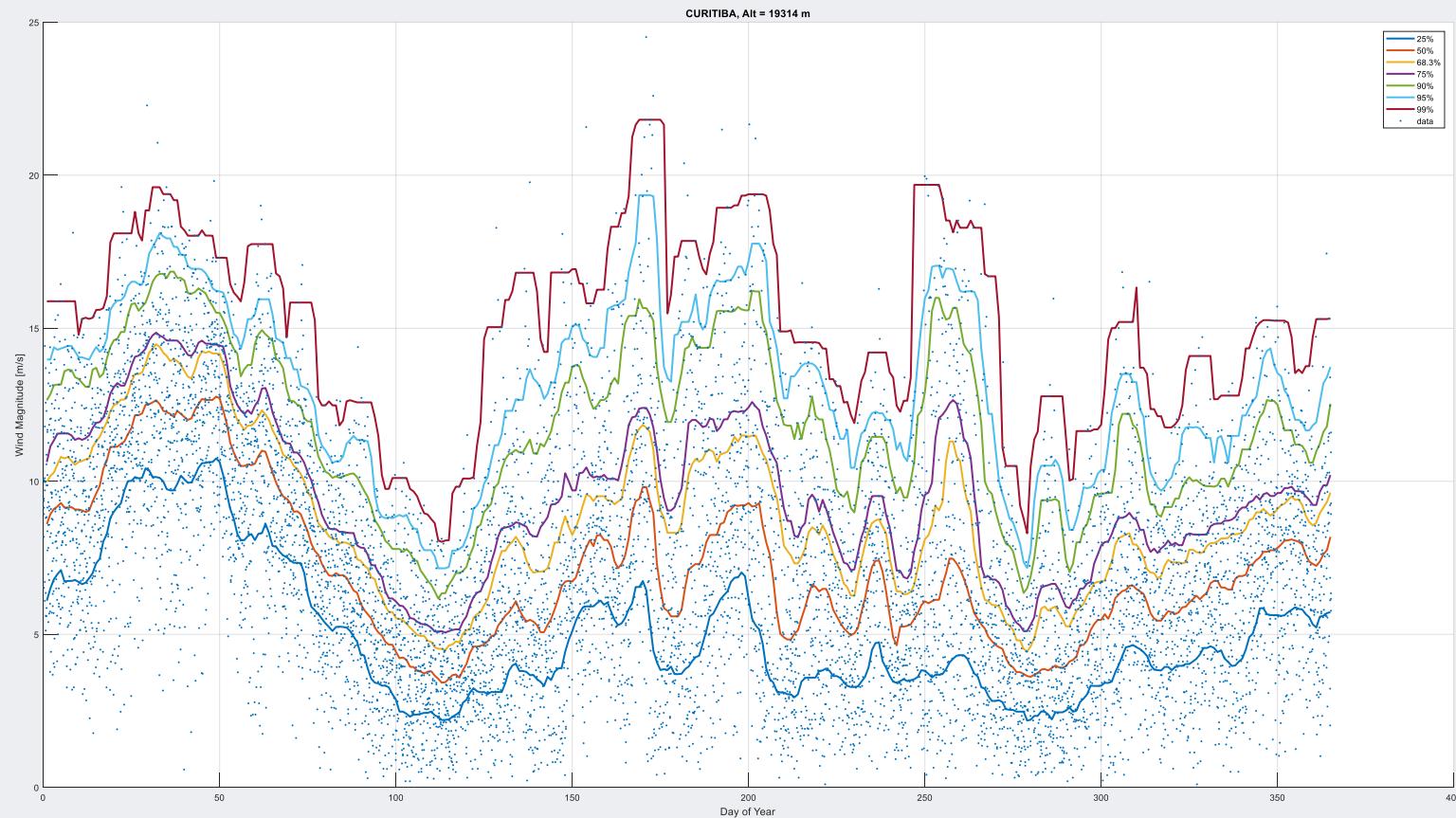
Wind Direction



CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667, Alt = 19314 m

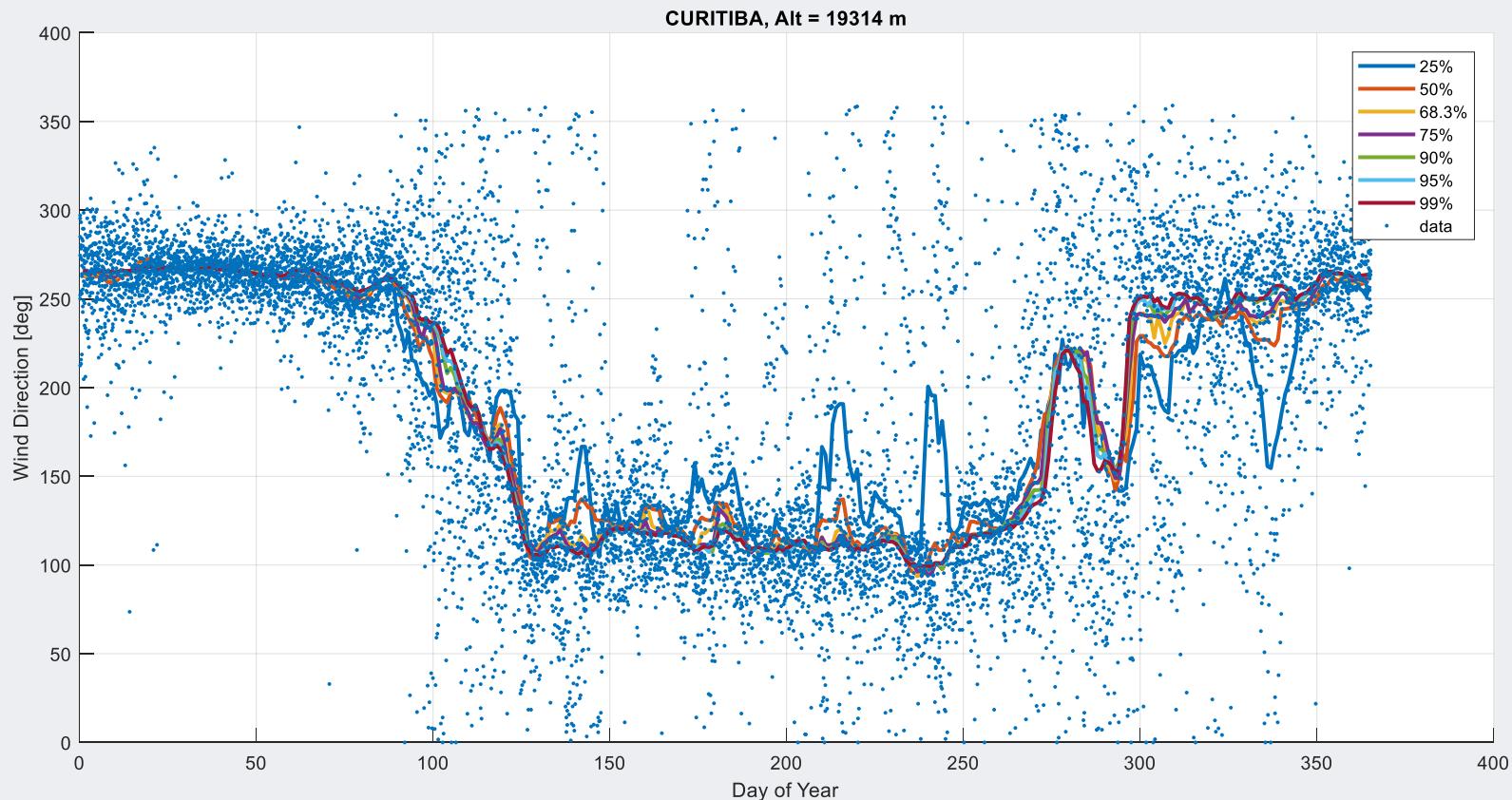
Wind Magnitude



CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667, Alt = 19314 m

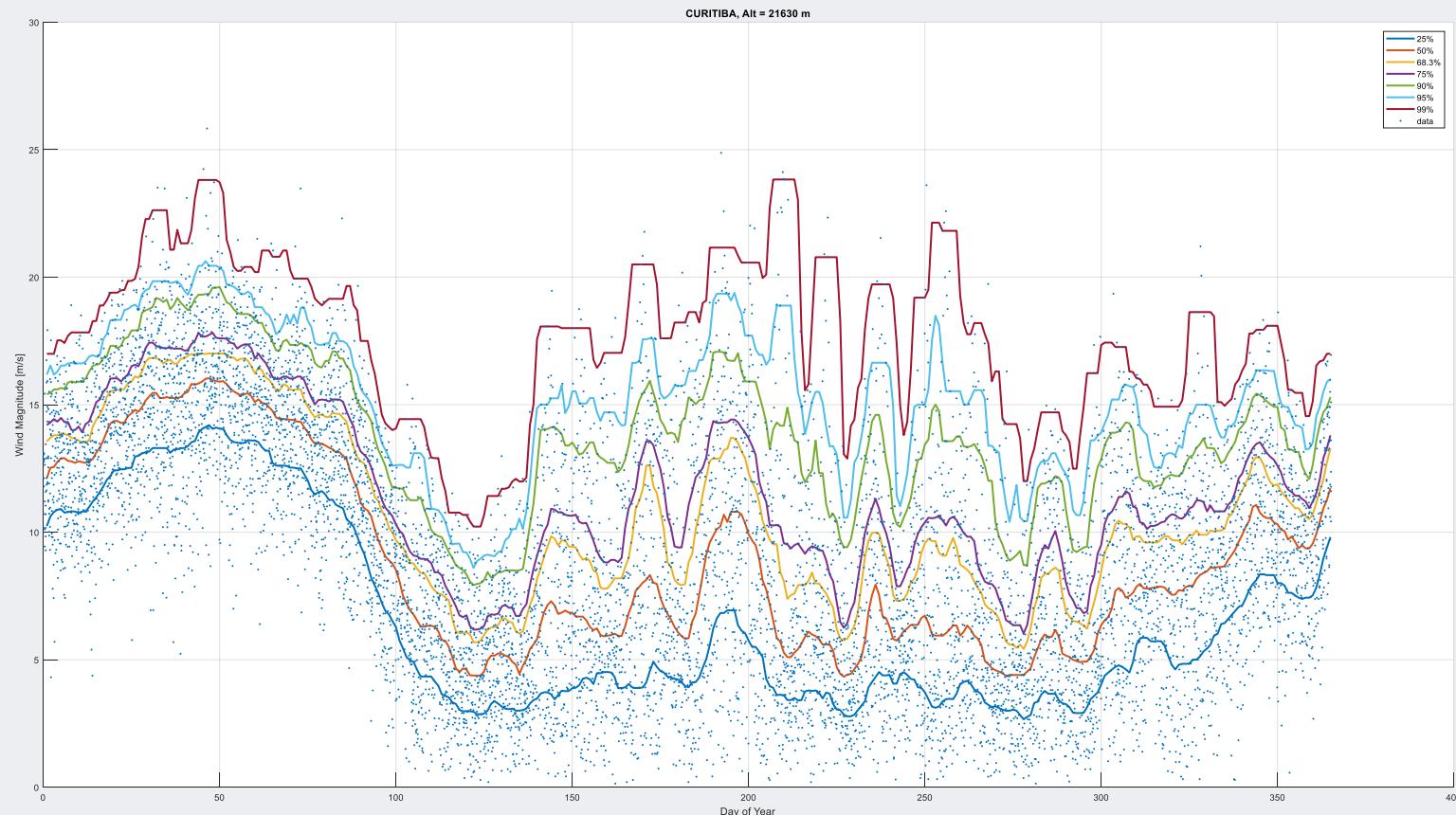
Wind Direction



CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667, Alt = 21630 m

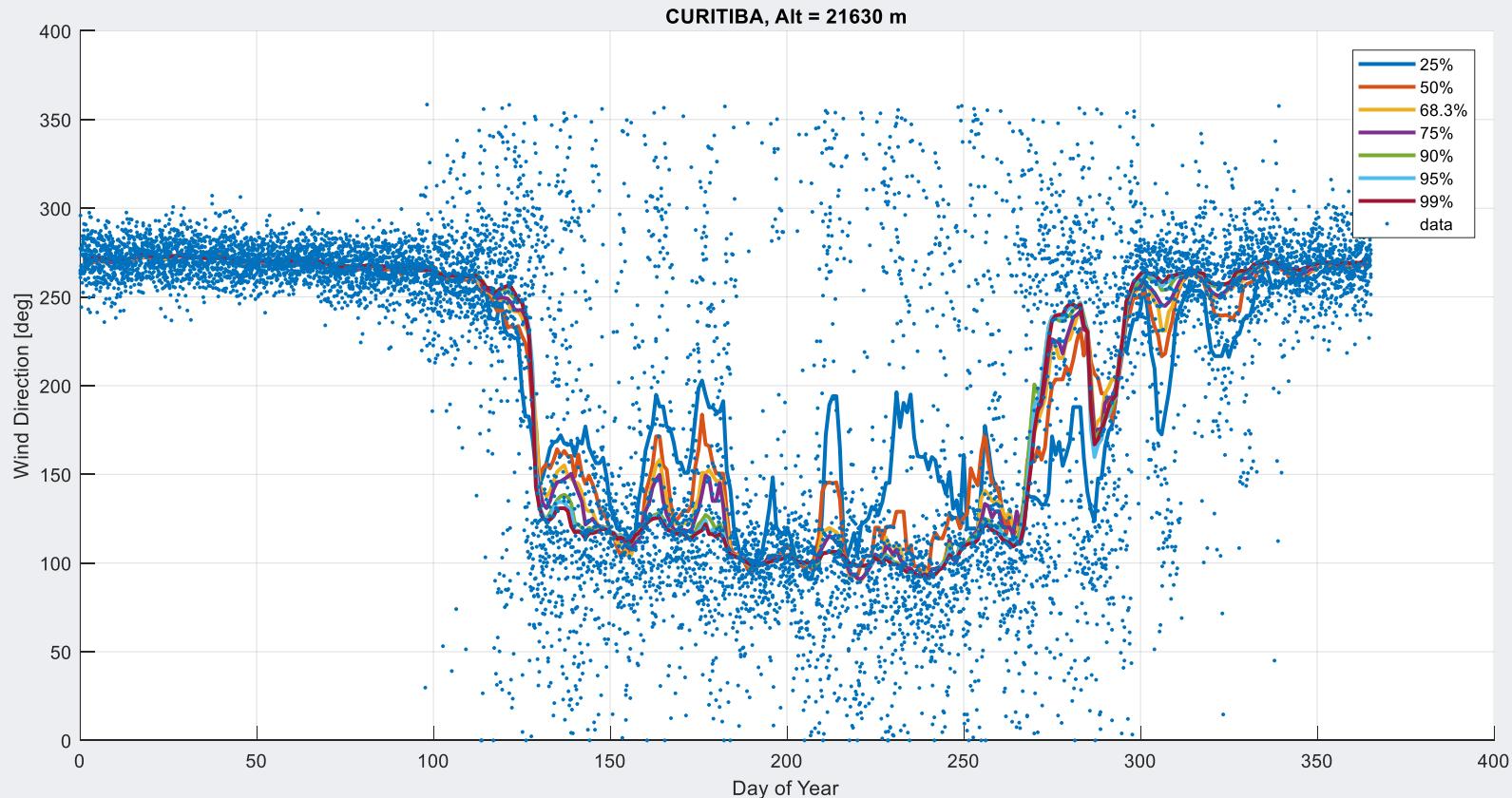
Wind Magnitude



CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667, Alt = 21630 m

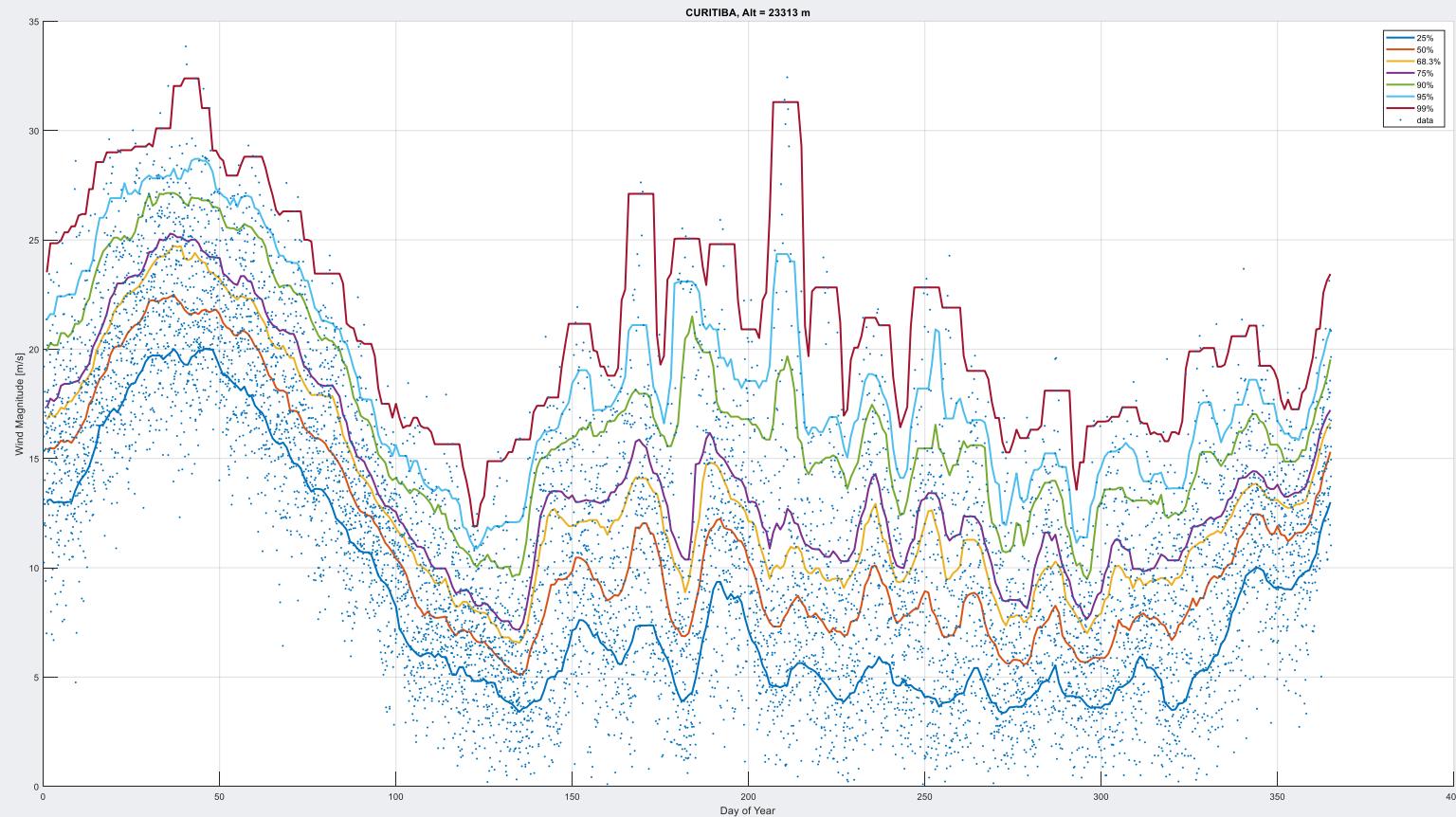
Wind Direction



CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667, Alt = 23313 m

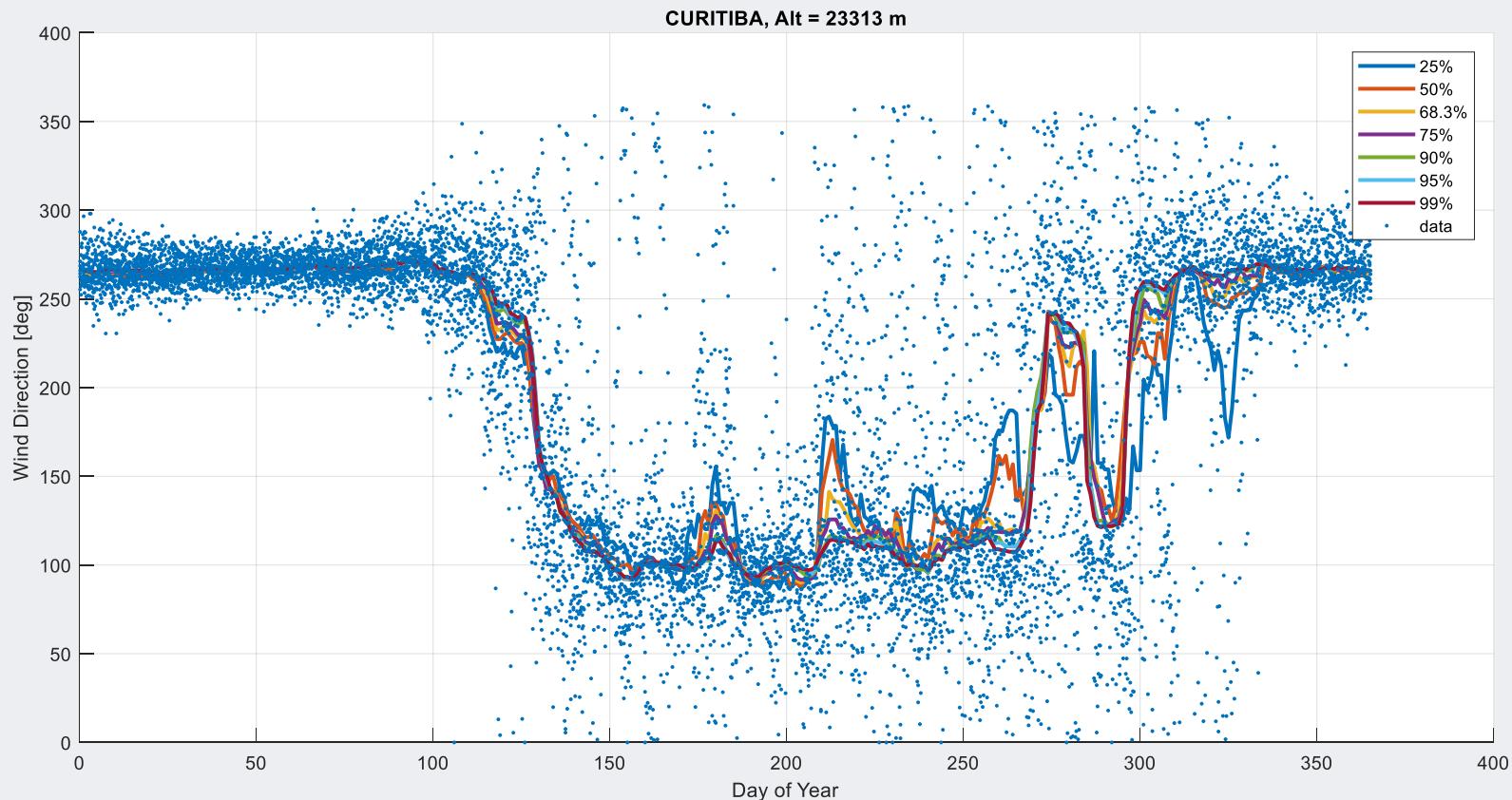
Wind Magnitude



CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667, Alt = 23313 m

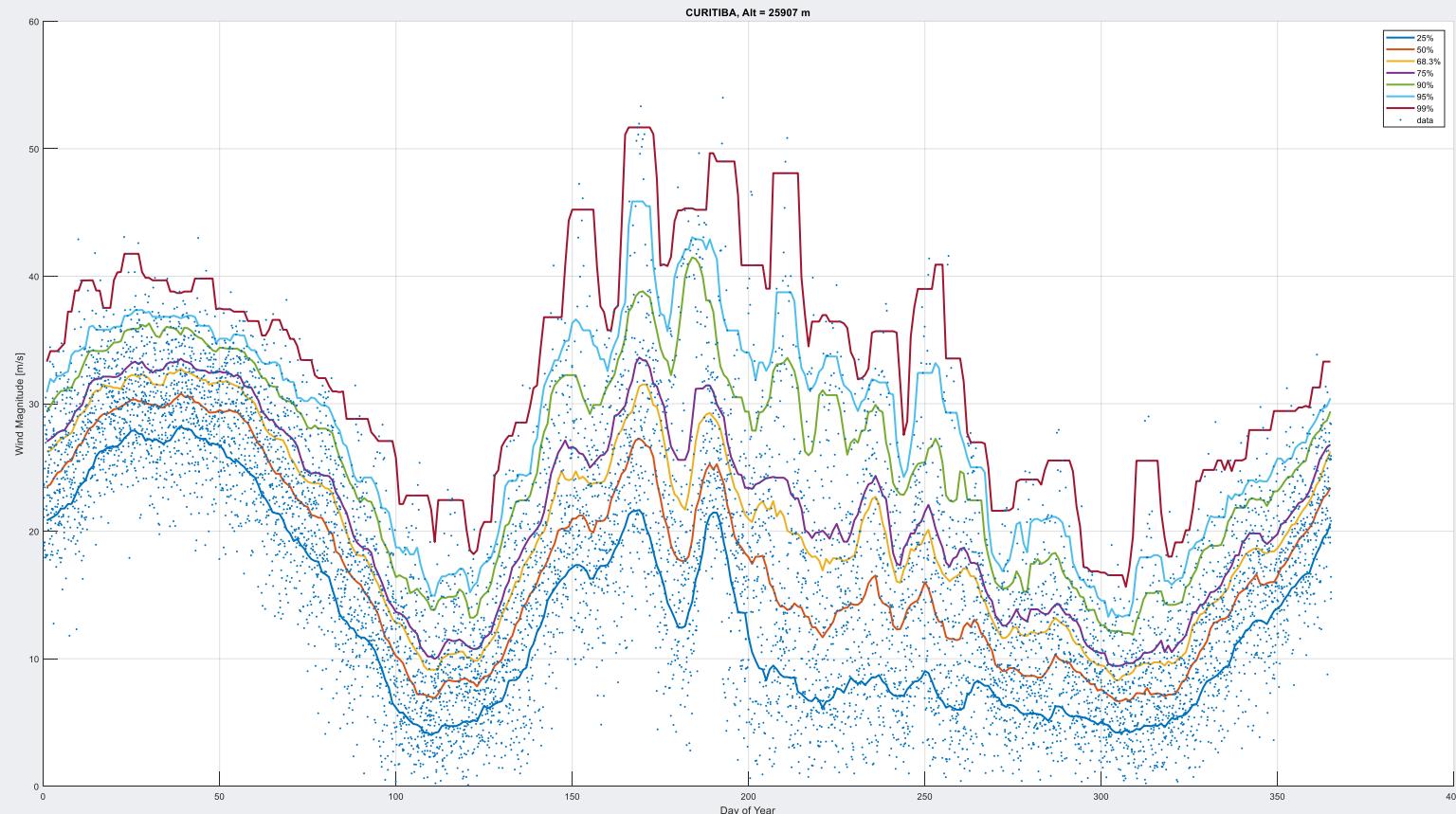
Wind Direction



CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667, Alt = 25907 m

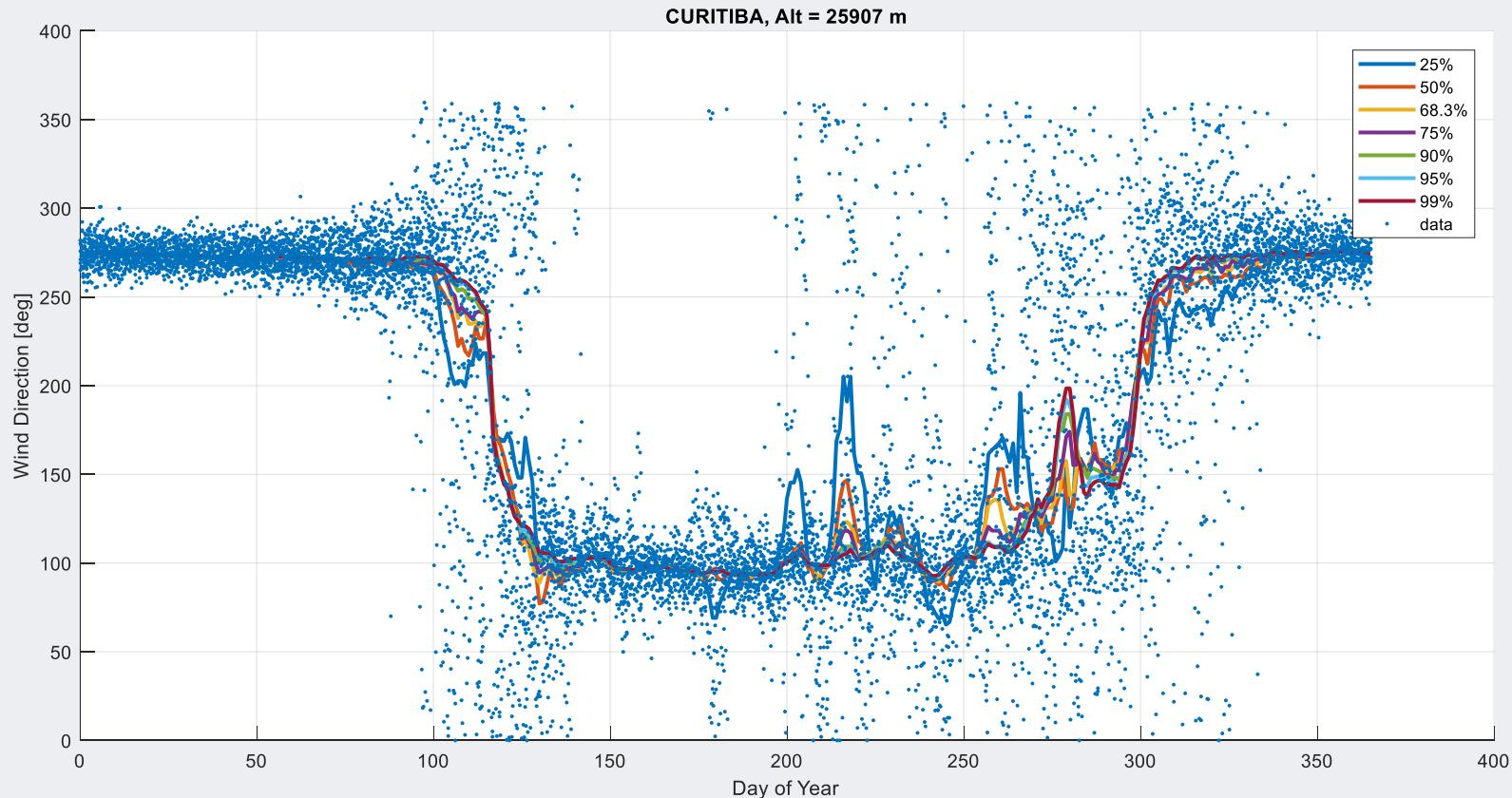
Wind Magnitude



CURITIBA/BRM00083840

Lat = -25.5167, Lon = -49.1667, Alt = 25907 m

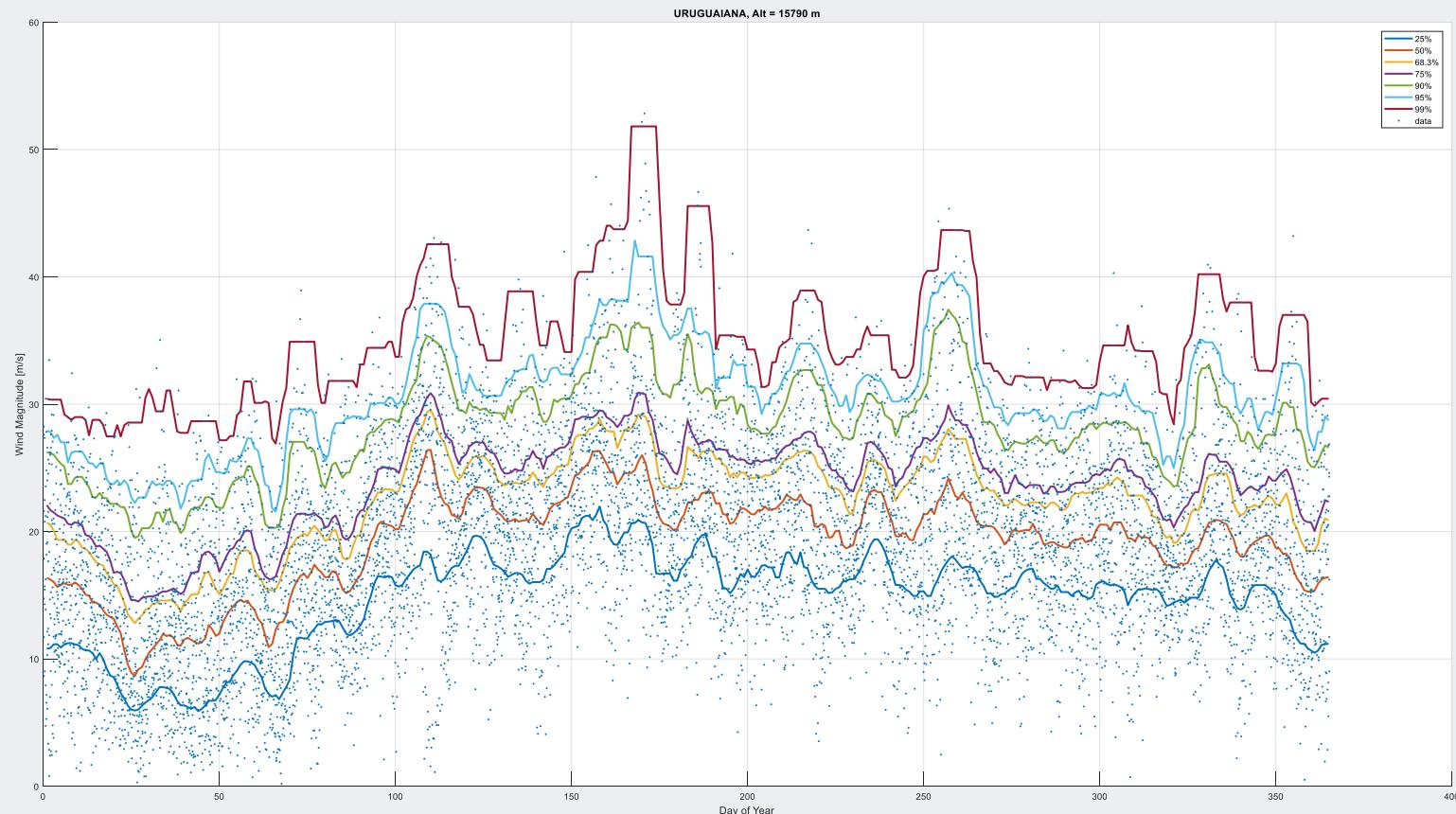
Wind Direction



URUGUAIANA/BRM00083928

Lat = -29.7833, Lon = -57.0333, Alt = 15790 m

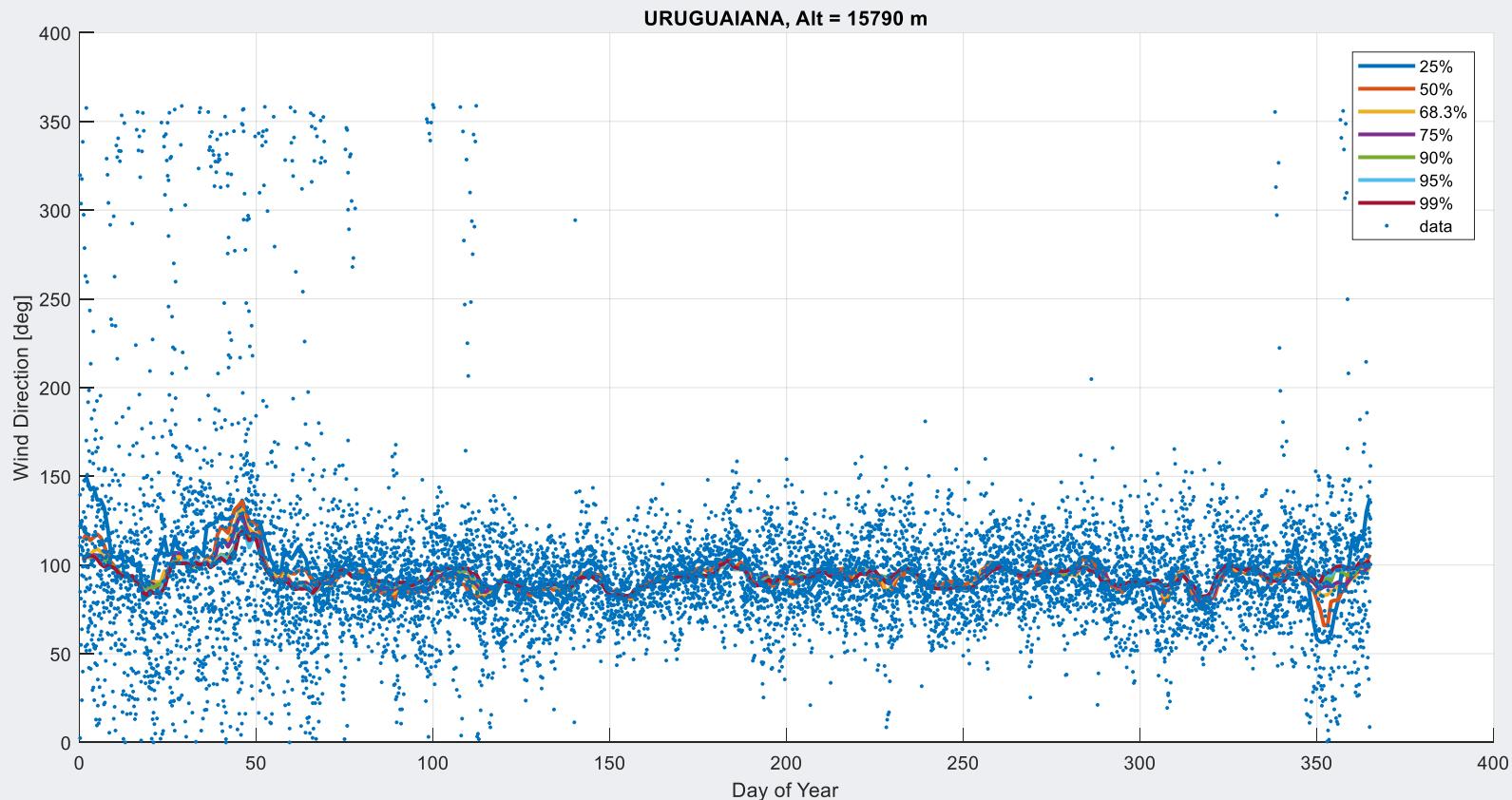
Wind Magnitude



URUGUAIANA/BRM00083928

Lat = -29.7833, Lon = -57.0333, Alt = 15790 m

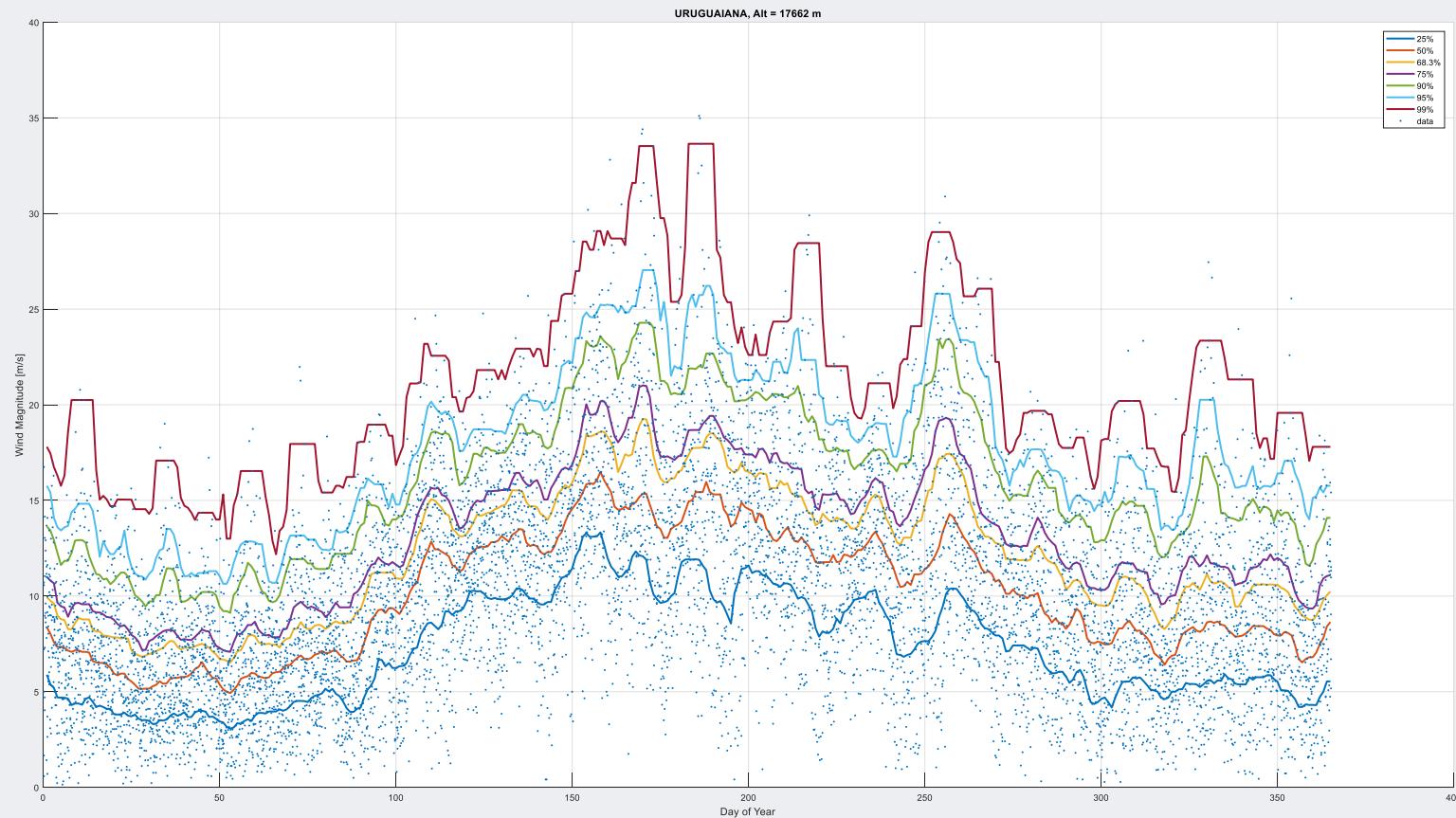
Wind Direction



URUGUAIANA/BRM00083928

Lat = -29.7833, Lon = -57.0333, Alt = 17662 m

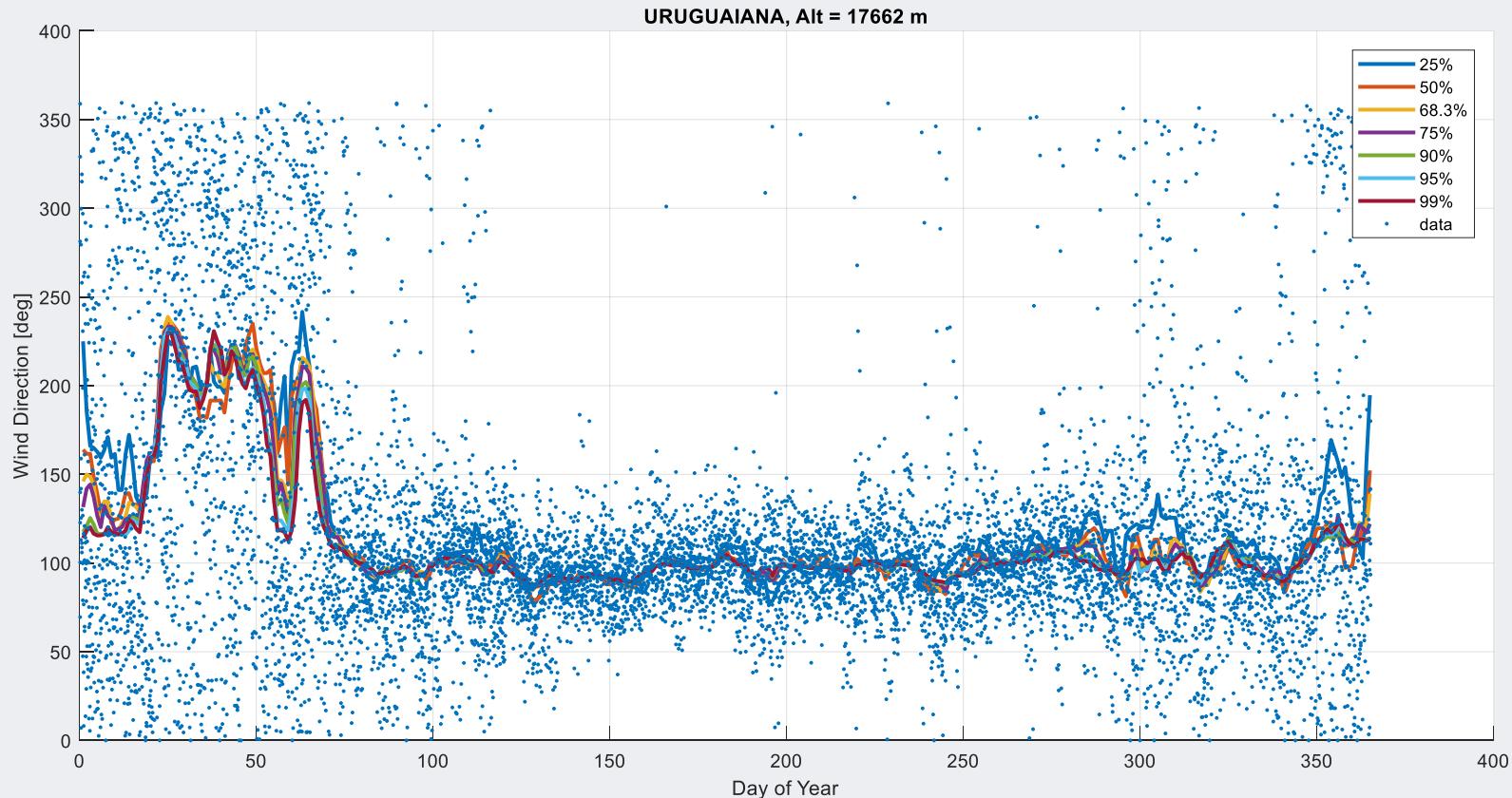
Wind Magnitude



URUGUAIANA/BRM00083928

Lat = -29.7833, Lon = -57.0333, Alt = 17662 m

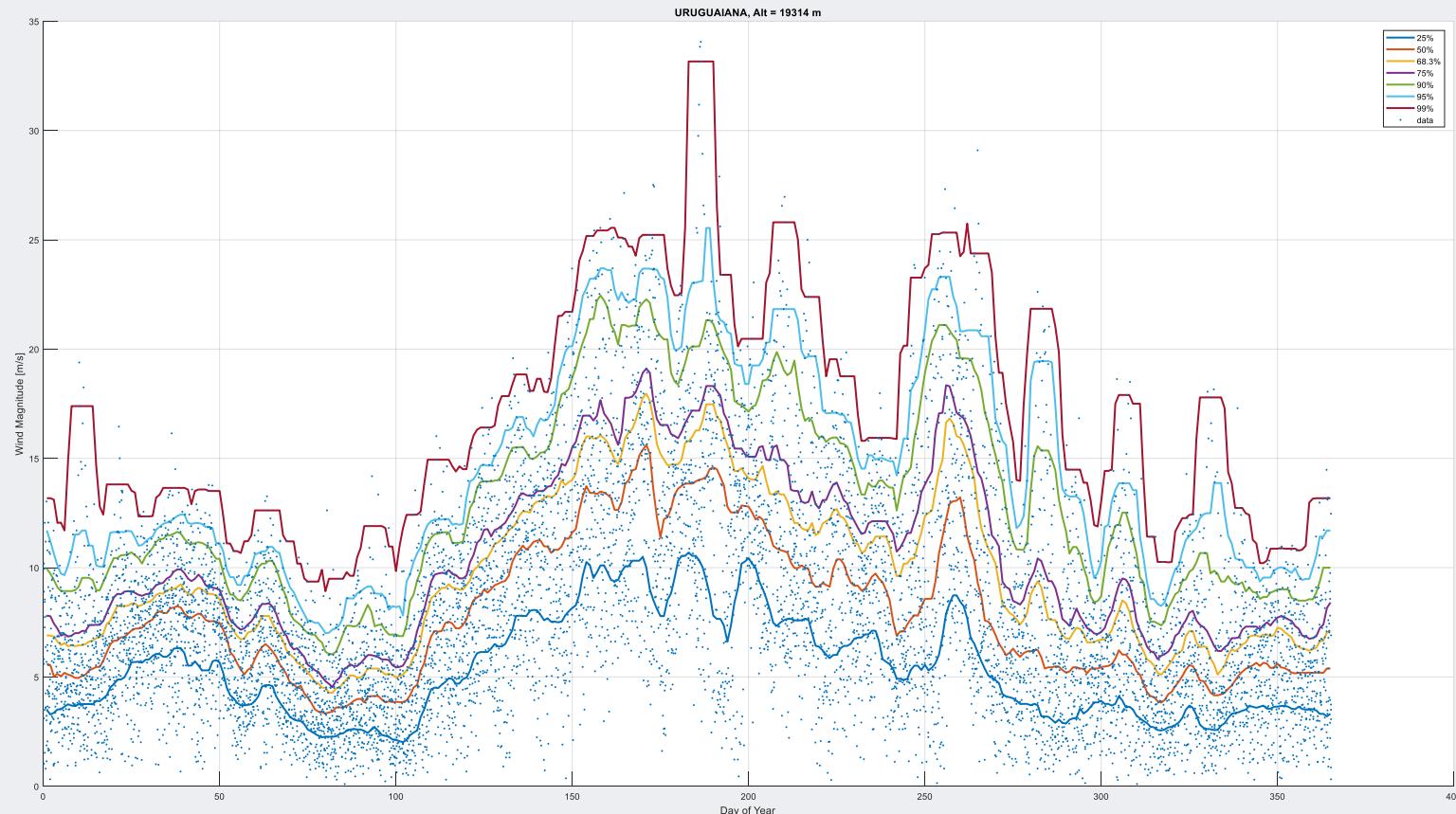
Wind Direction



URUGUAIANA/BRM00083928

Lat = -29.7833, Lon = -57.0333, Alt = 19314 m

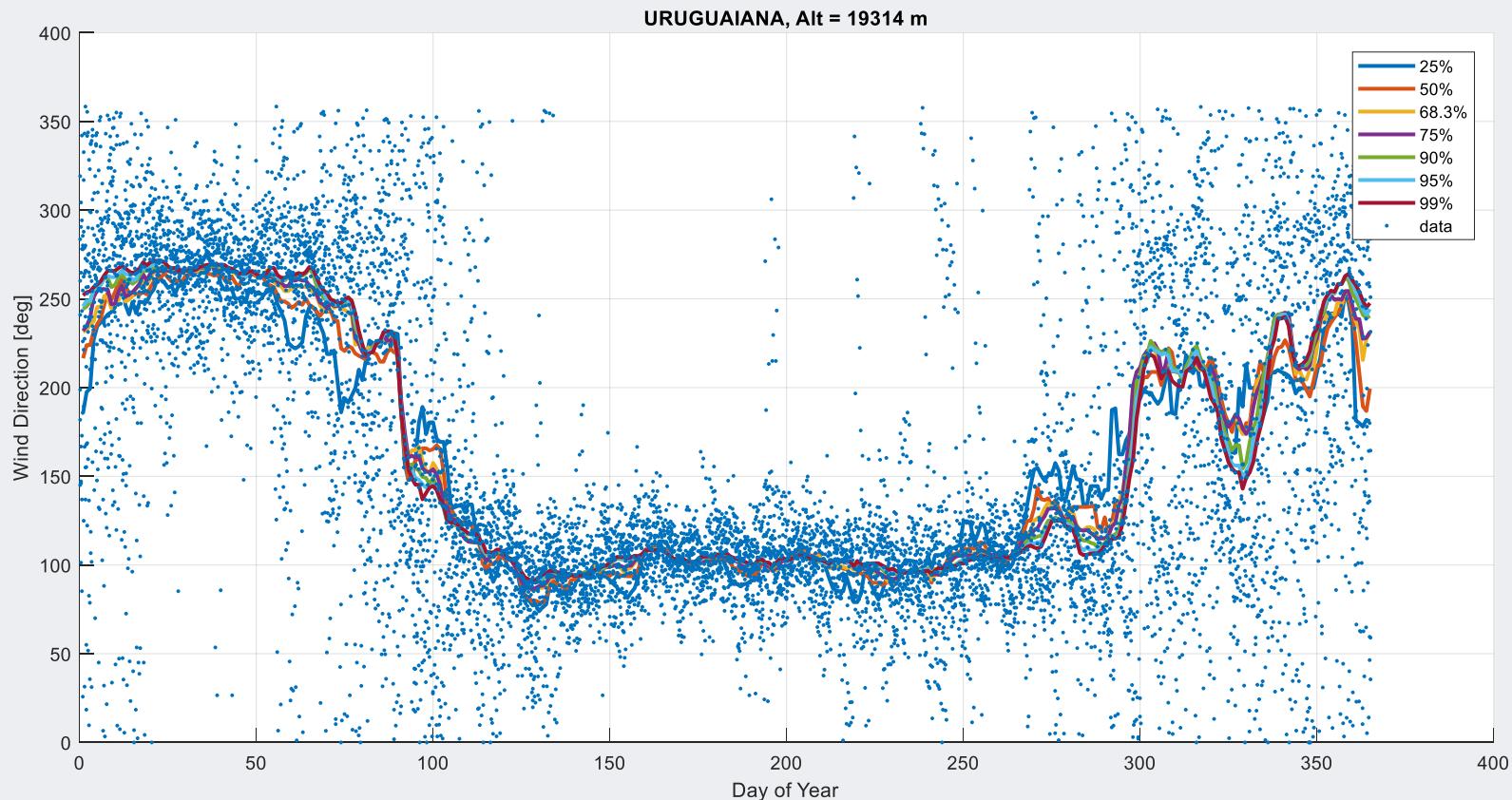
Wind Magnitude



URUGUAIANA/BRM00083928

Lat = -29.7833, Lon = -57.0333, Alt = 19314 m

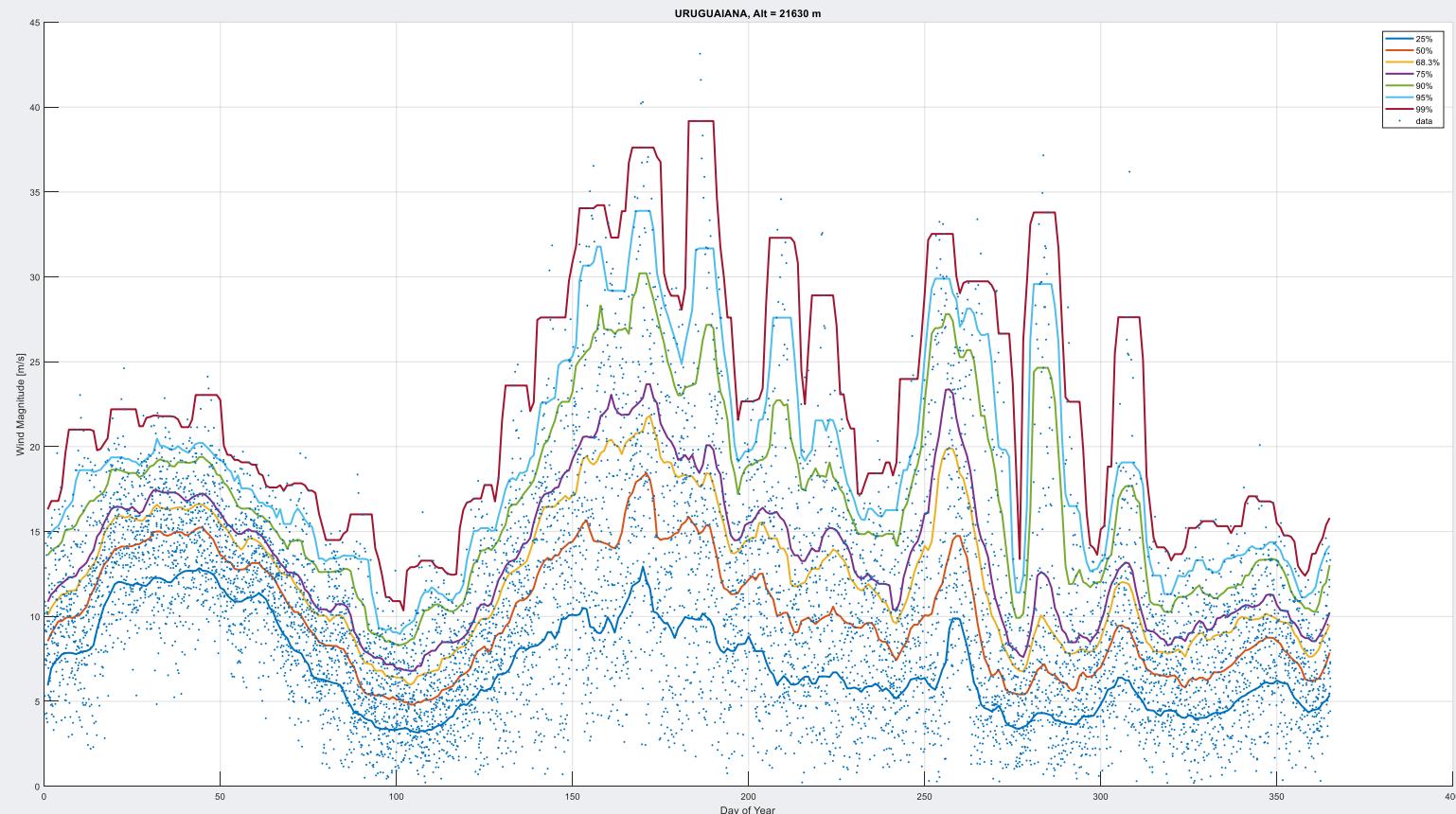
Wind Direction



URUGUAIANA/BRM00083928

Lat = -29.7833, Lon = -57.0333, Alt = 21630 m

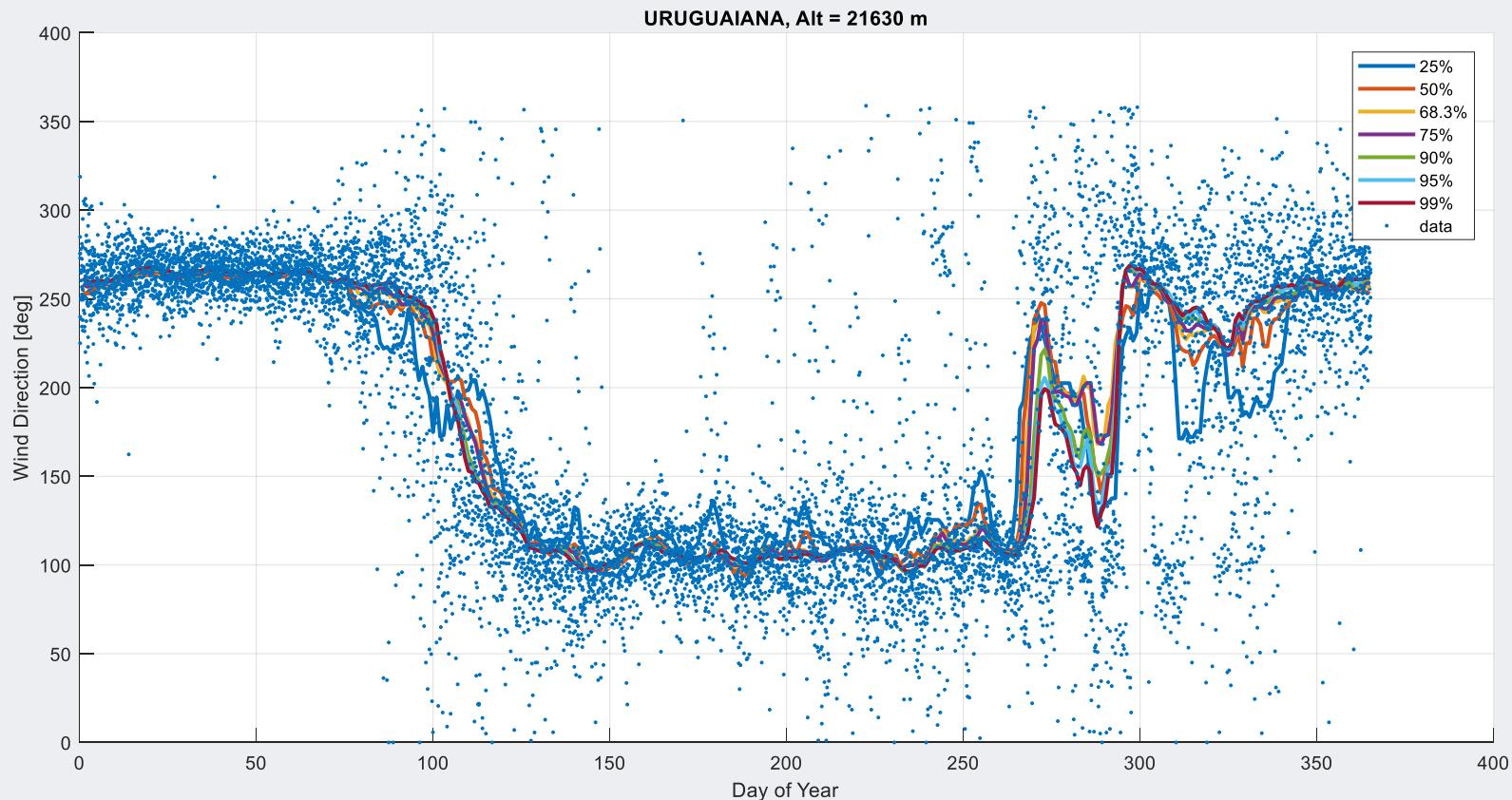
Wind Magnitude



URUGUAIANA/BRM00083928

Lat = -29.7833, Lon = -57.0333, Alt = 21630 m

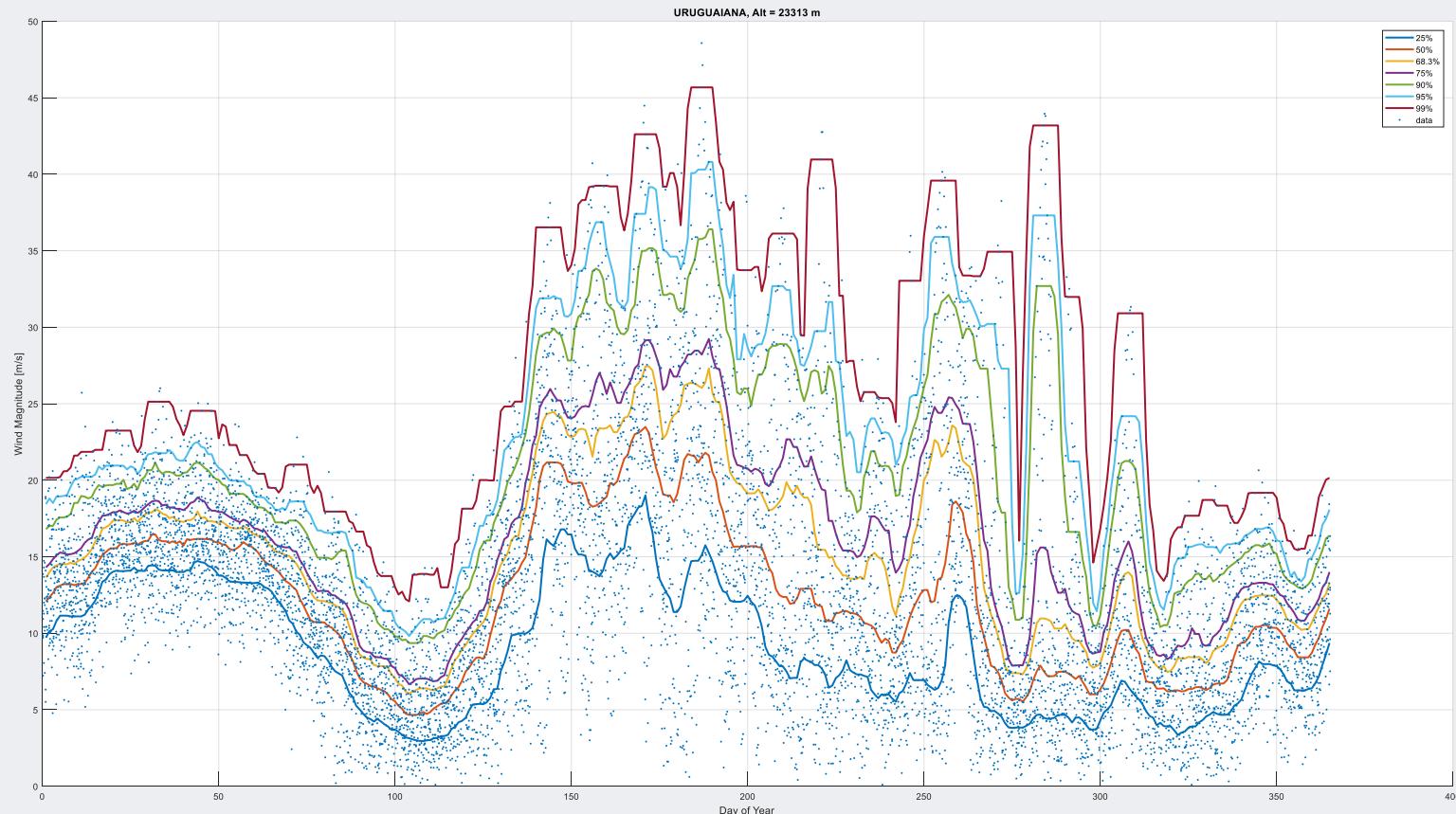
Wind Direction



URUGUAIANA/BRM00083928

Lat = -29.7833, Lon = -57.0333, Alt = 23313 m

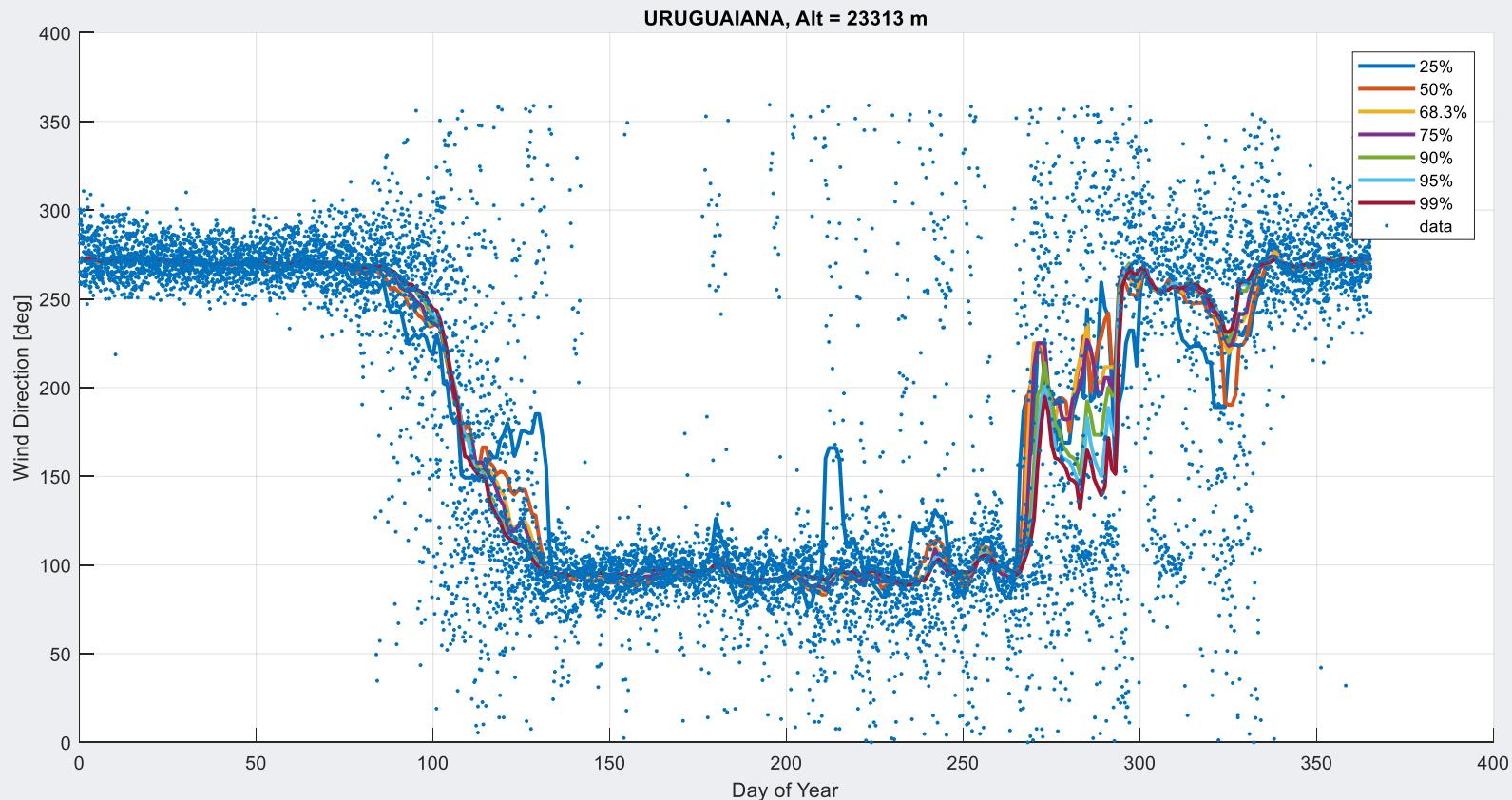
Wind Magnitude



URUGUAIANA/BRM00083928

Lat = -29.7833, Lon = -57.0333, Alt = 23313 m

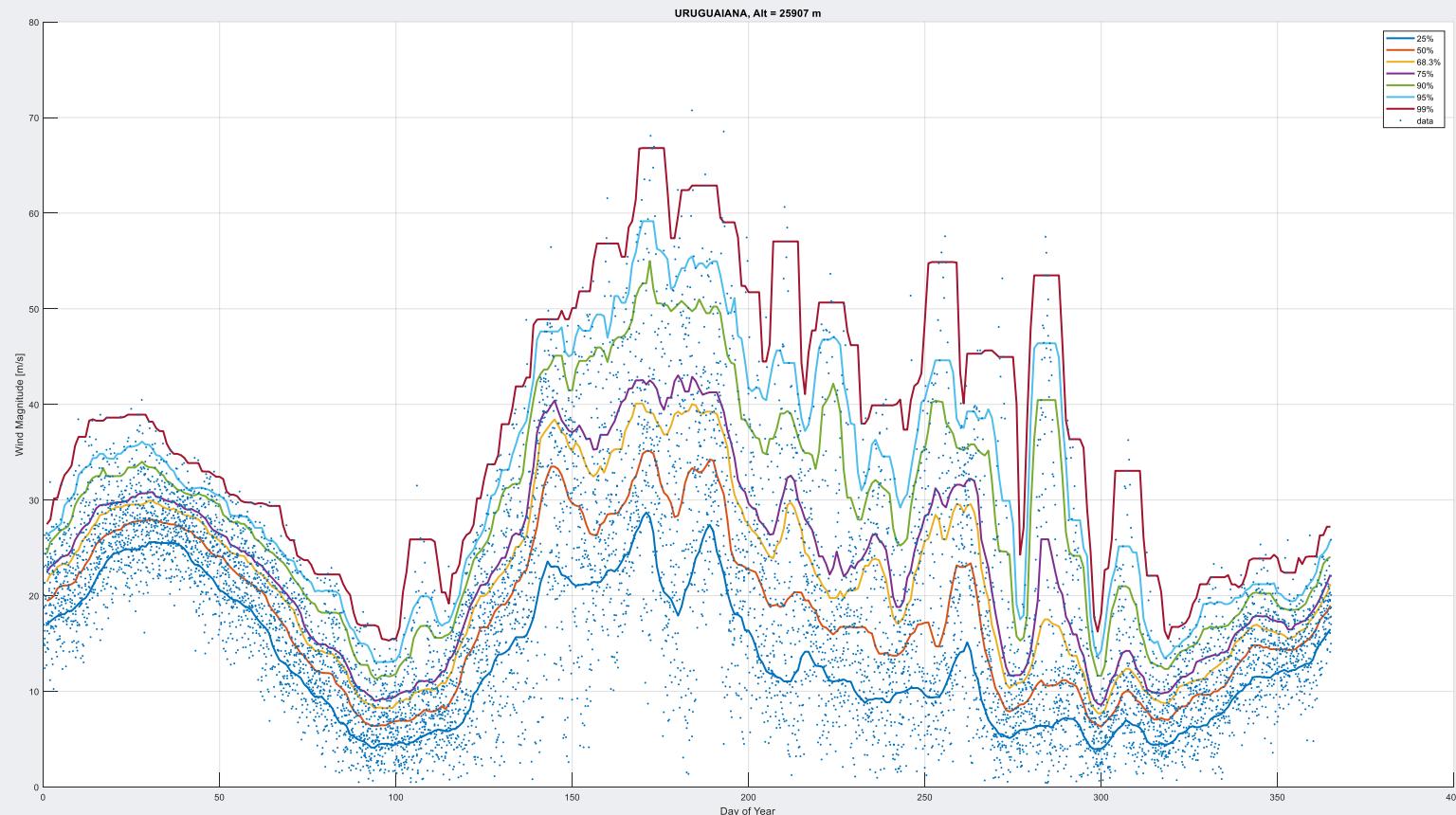
Wind Direction



URUGUAIANA/BRM00083928

Lat = -29.7833, Lon = -57.0333, Alt = 25907 m

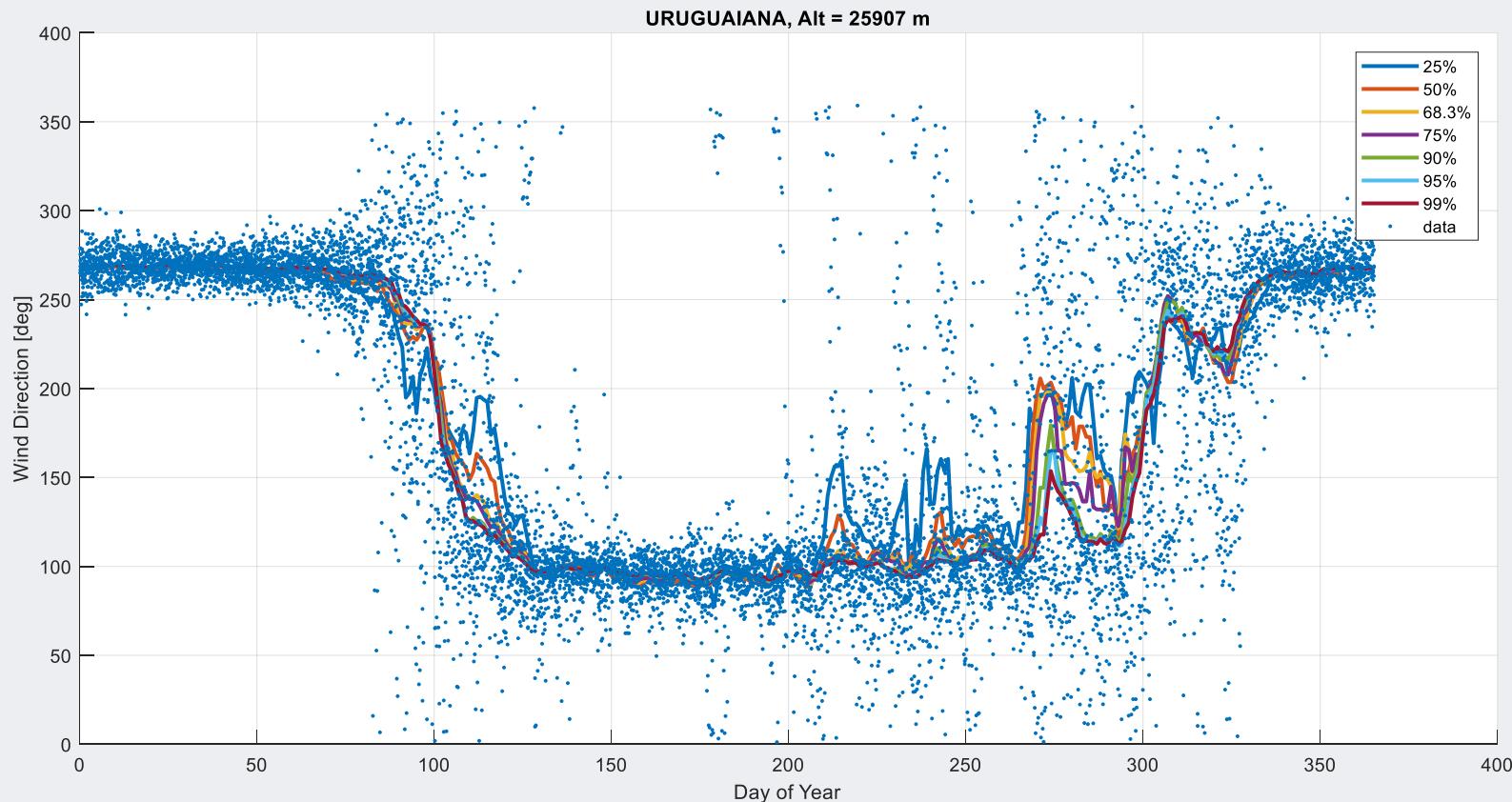
Wind Magnitude



URUGUAIANA/BRM00083928

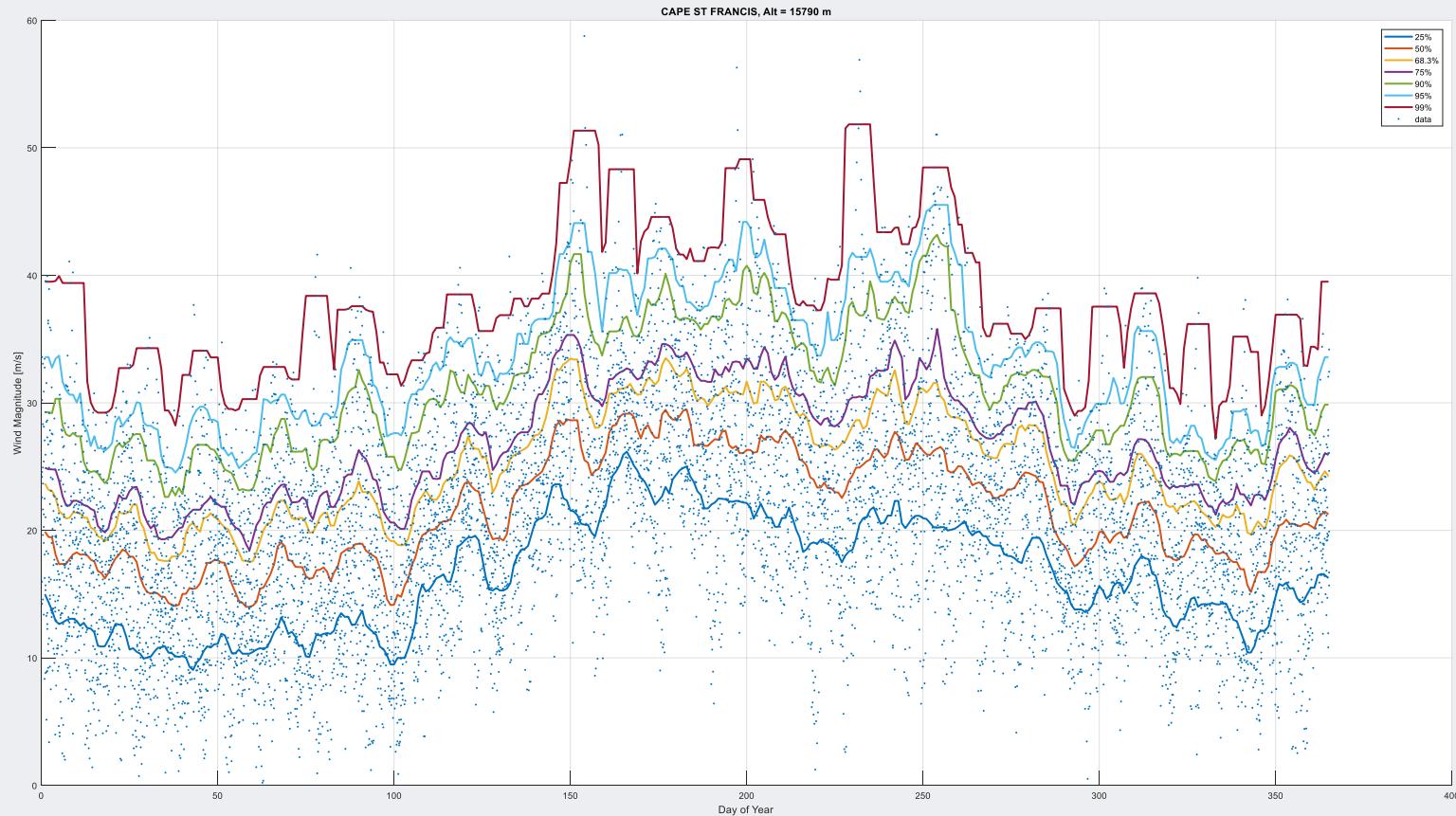
Lat = -29.7833, Lon = -57.0333, Alt = 25907 m

Wind Direction



CAPE ST FRANCIS/
Lat = -34.1899, Lon = 24.7972, Alt = 15790 m

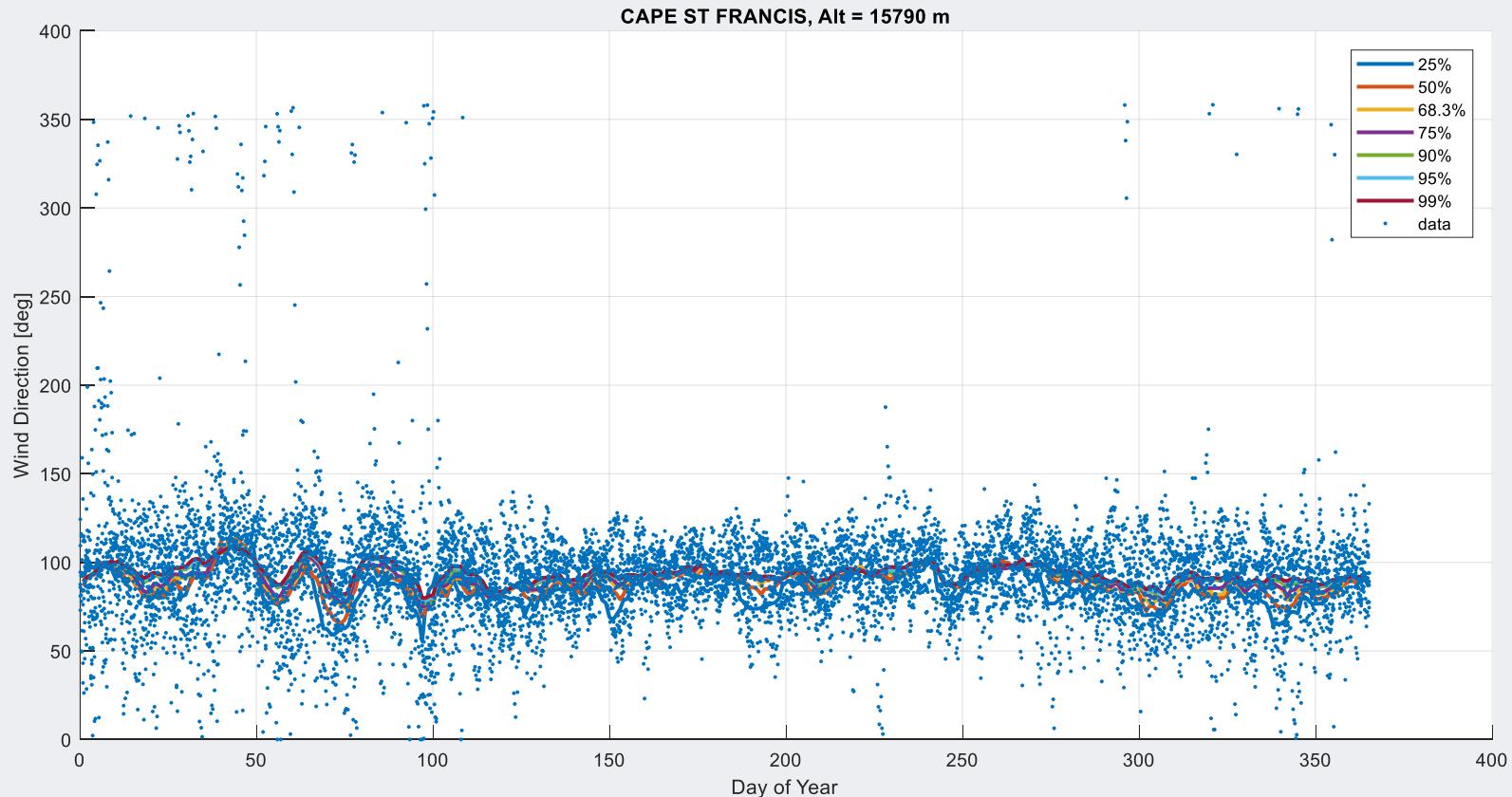
Wind Magnitude



CAPE ST FRANCIS/

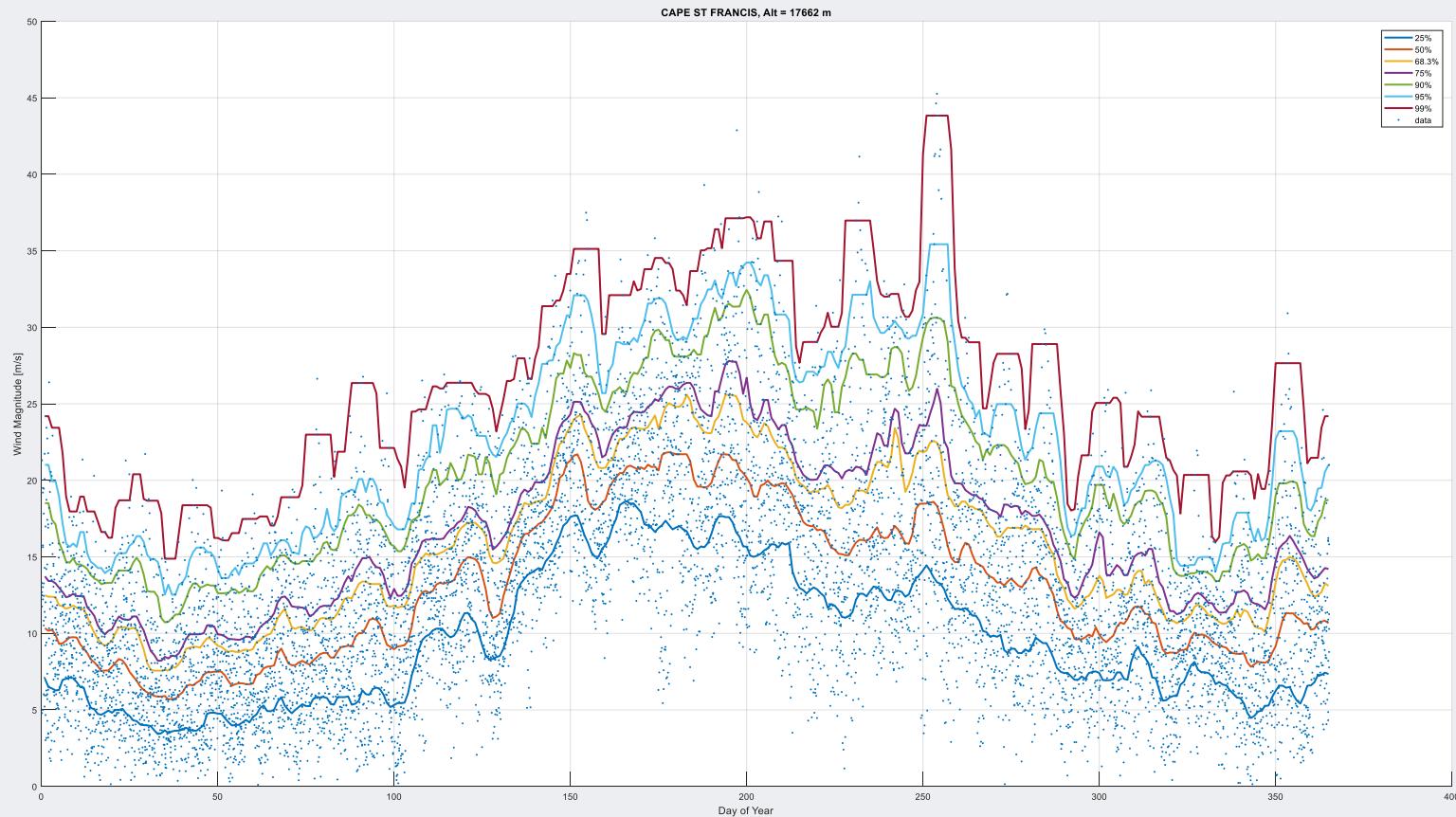
Lat = -34.1899, Lon = 24.7972, Alt = 15790 m

Wind Direction



CAPE ST FRANCIS/
Lat = -34.1899, Lon = 24.7972, Alt = 17662 m

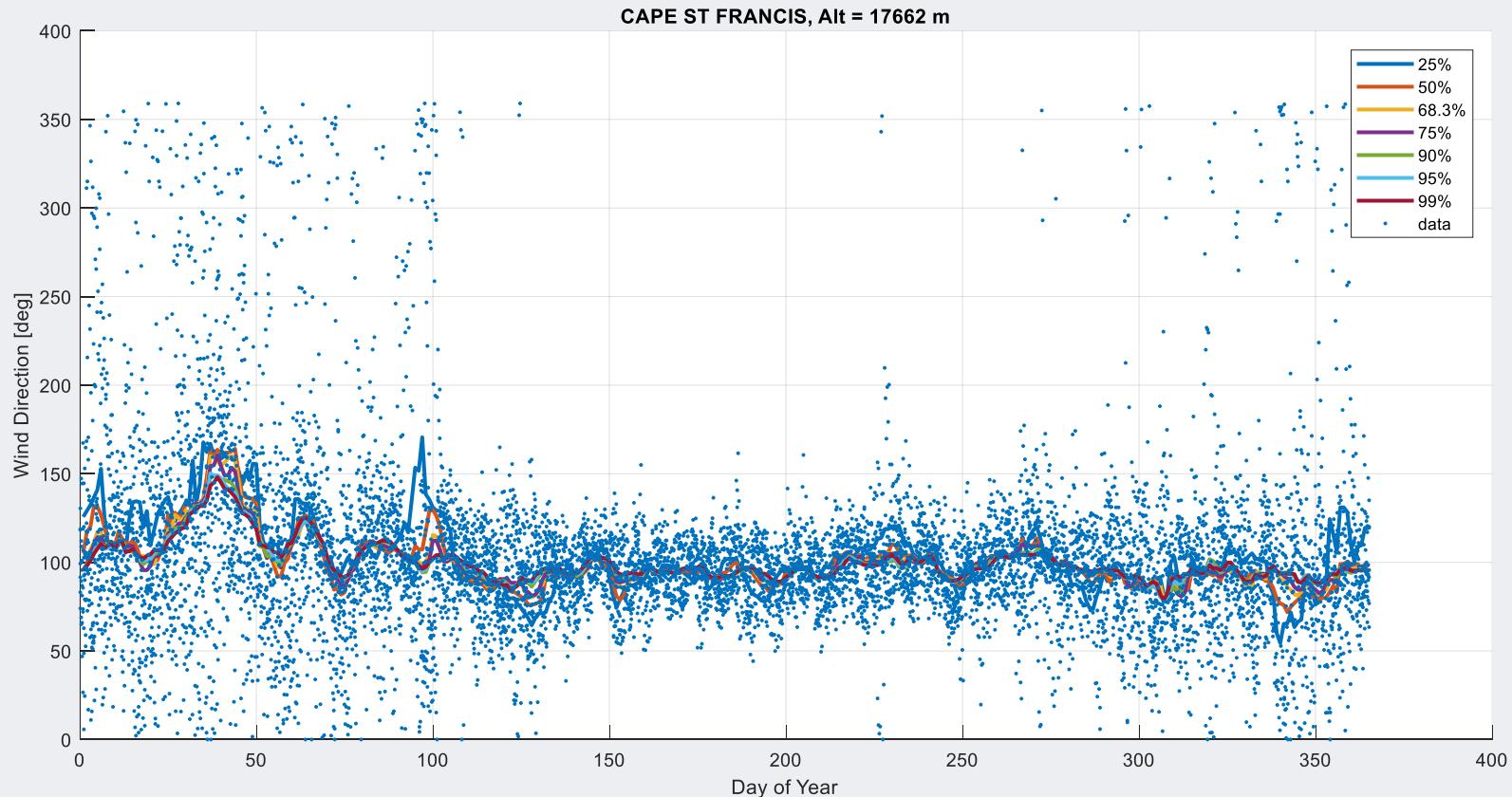
Wind Magnitude



CAPE ST FRANCIS/

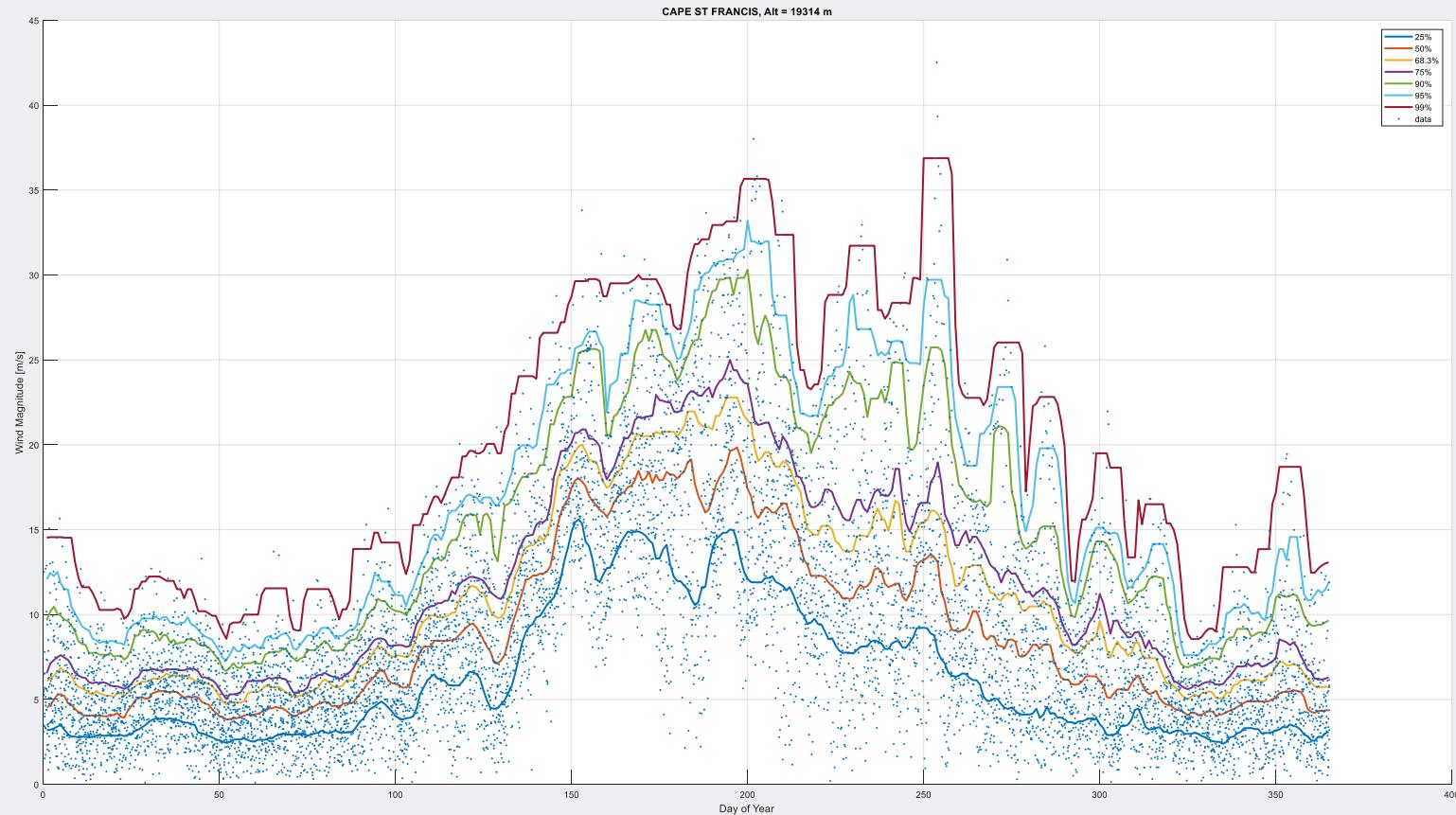
Lat = -34.1899, Lon = 24.7972, Alt = 17662 m

Wind Direction



CAPE ST FRANCIS/
Lat = -34.1899, Lon = 24.7972, Alt = 19314 m

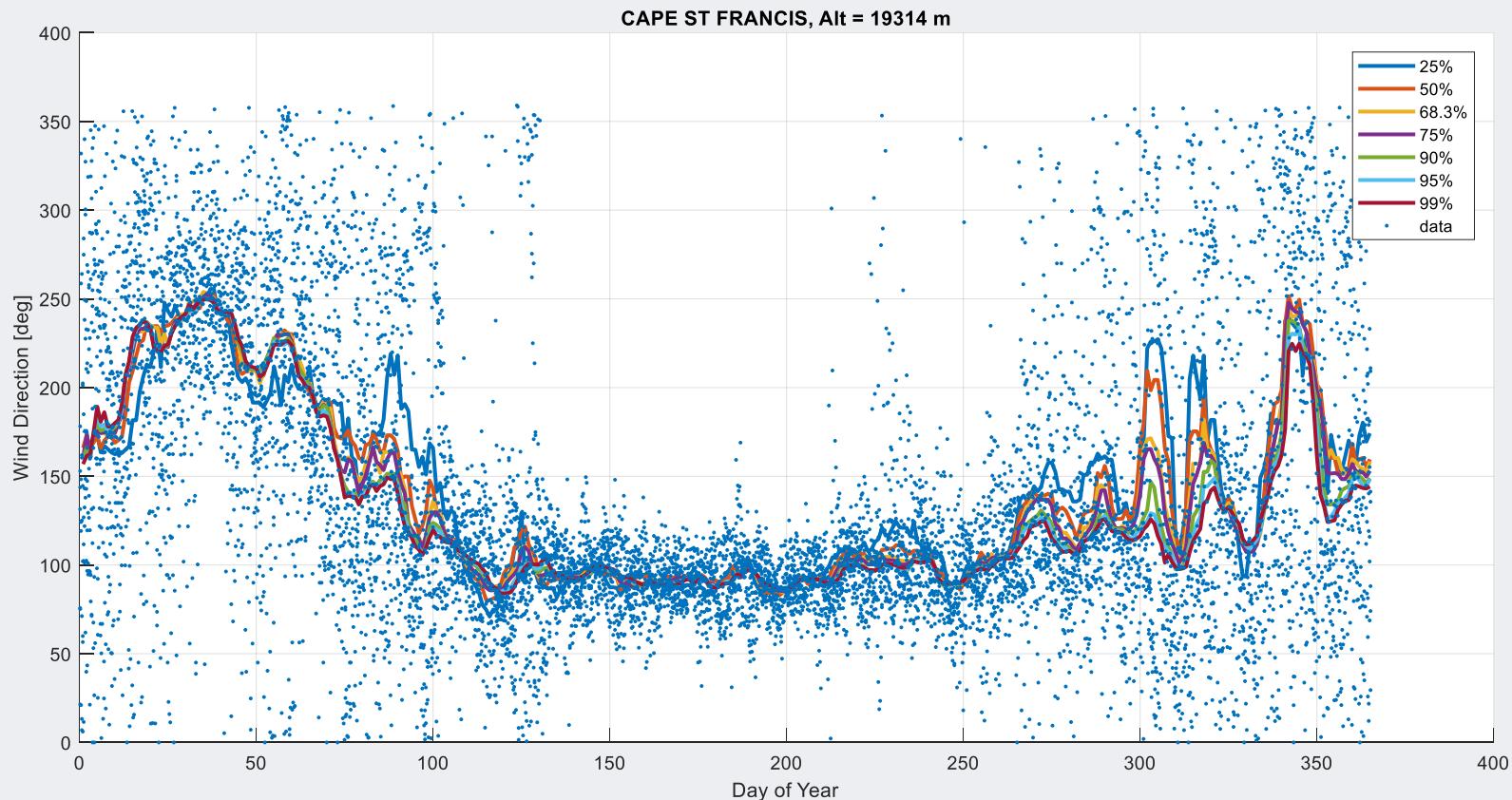
Wind Magnitude



CAPE ST FRANCIS/

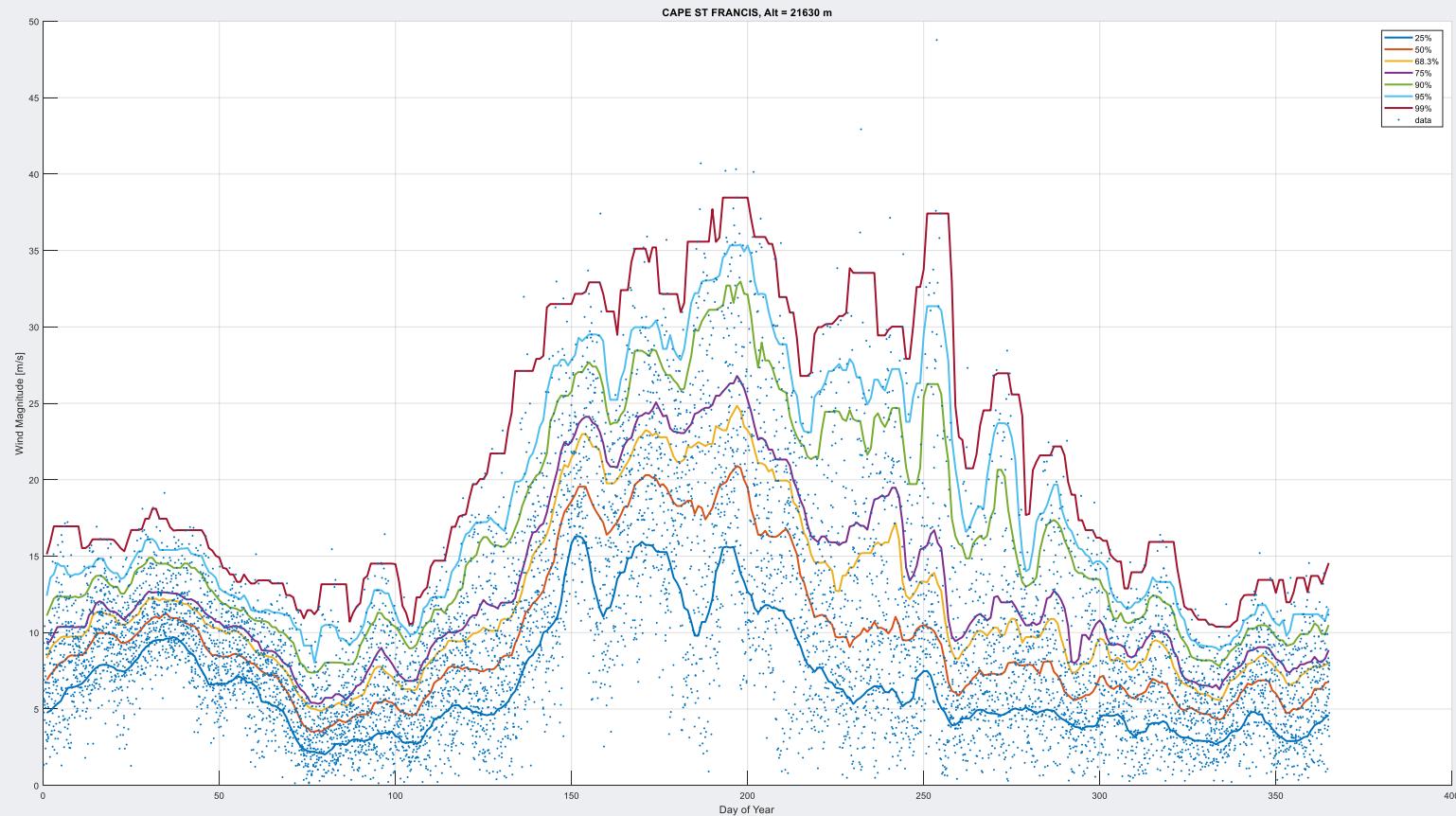
Lat = -34.1899, Lon = 24.7972, Alt = 19314 m

Wind Direction



CAPE ST FRANCIS/
Lat = -34.1899, Lon = 24.7972, Alt = 21630 m

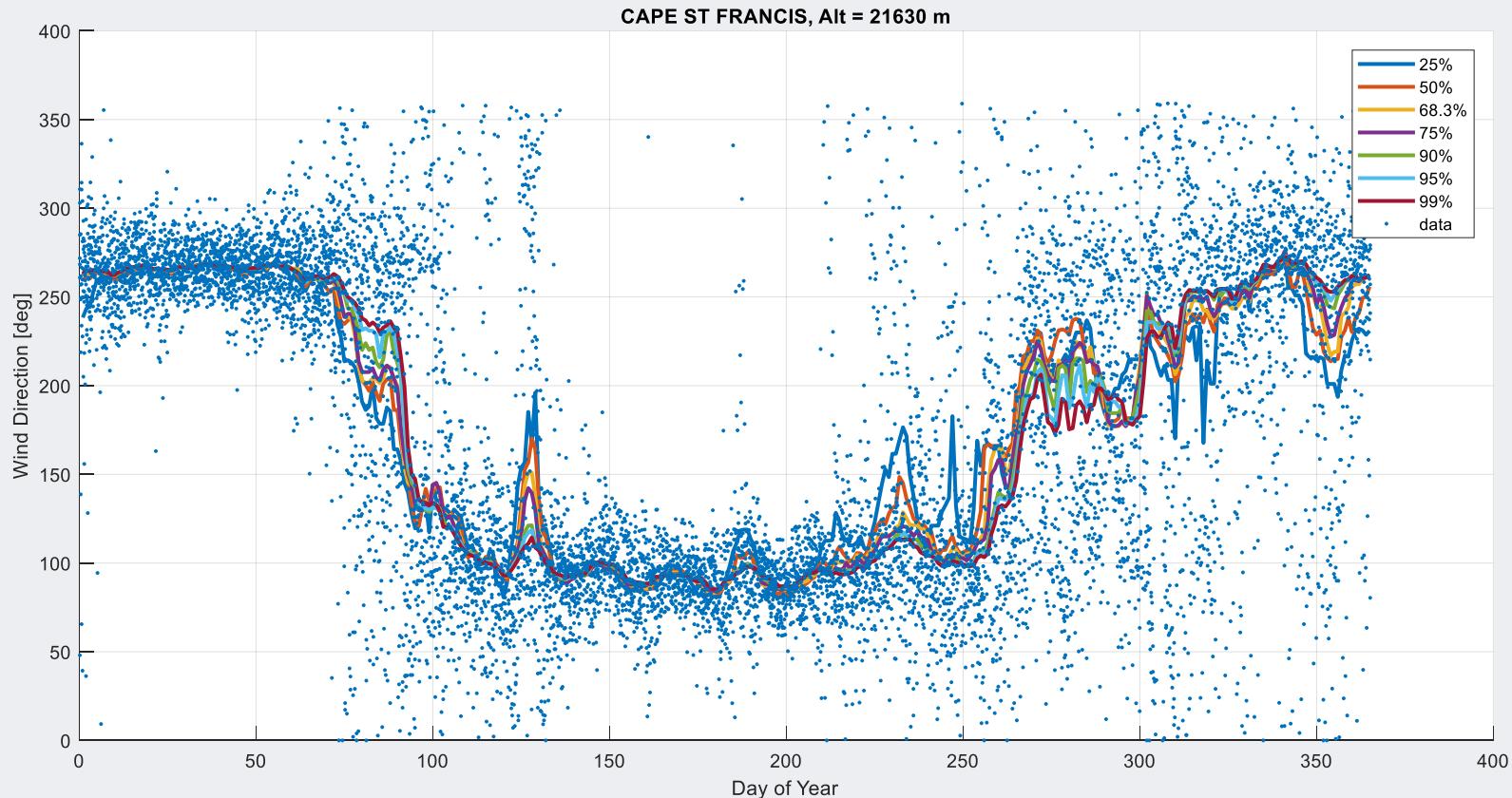
Wind Magnitude



CAPE ST FRANCIS/

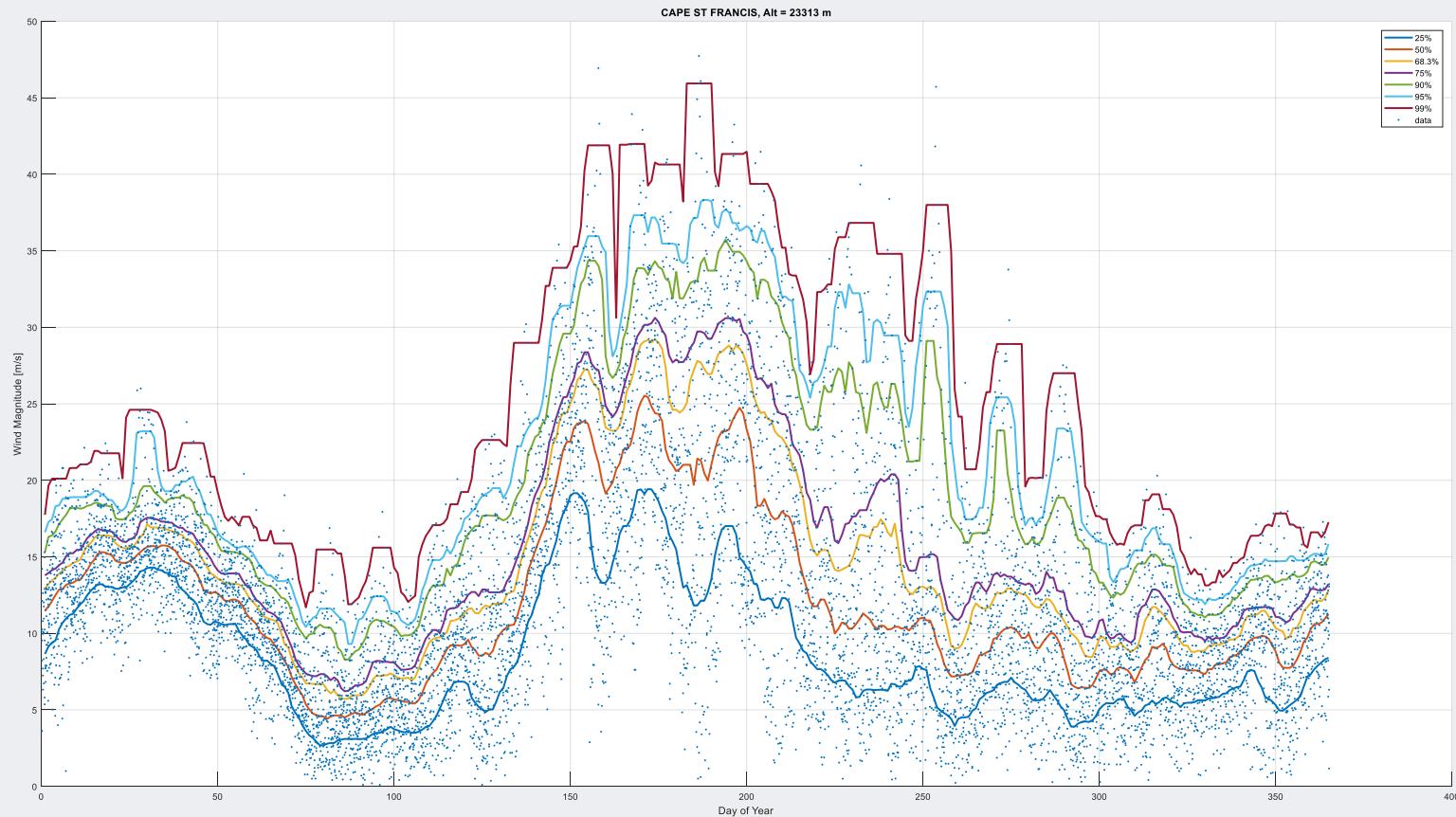
Lat = -34.1899, Lon = 24.7972, Alt = 21630 m

Wind Direction



CAPE ST FRANCIS/
Lat = -34.1899, Lon = 24.7972, Alt = 23313 m

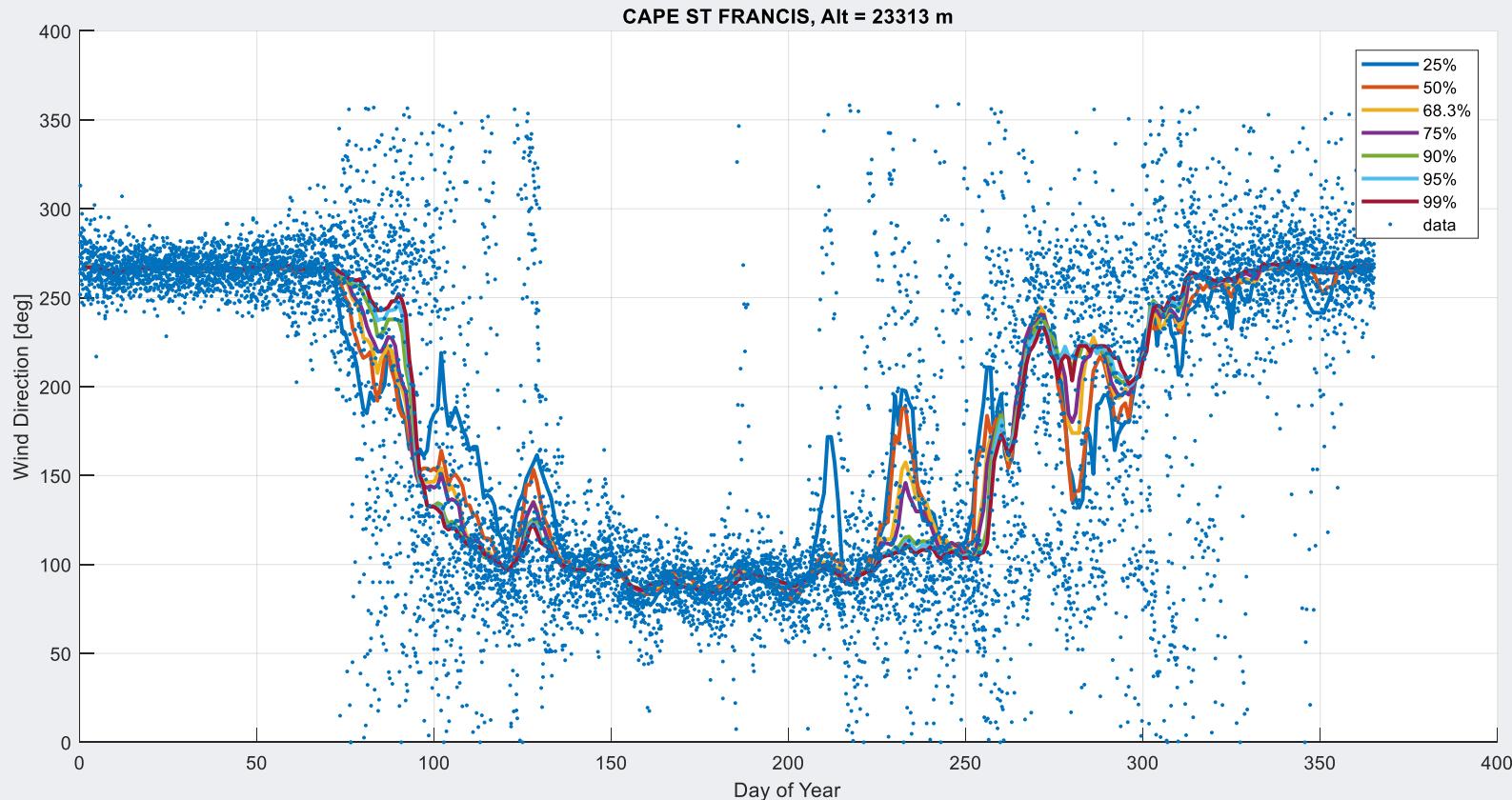
Wind Magnitude



CAPE ST FRANCIS/

Lat = -34.1899, Lon = 24.7972, Alt = 23313 m

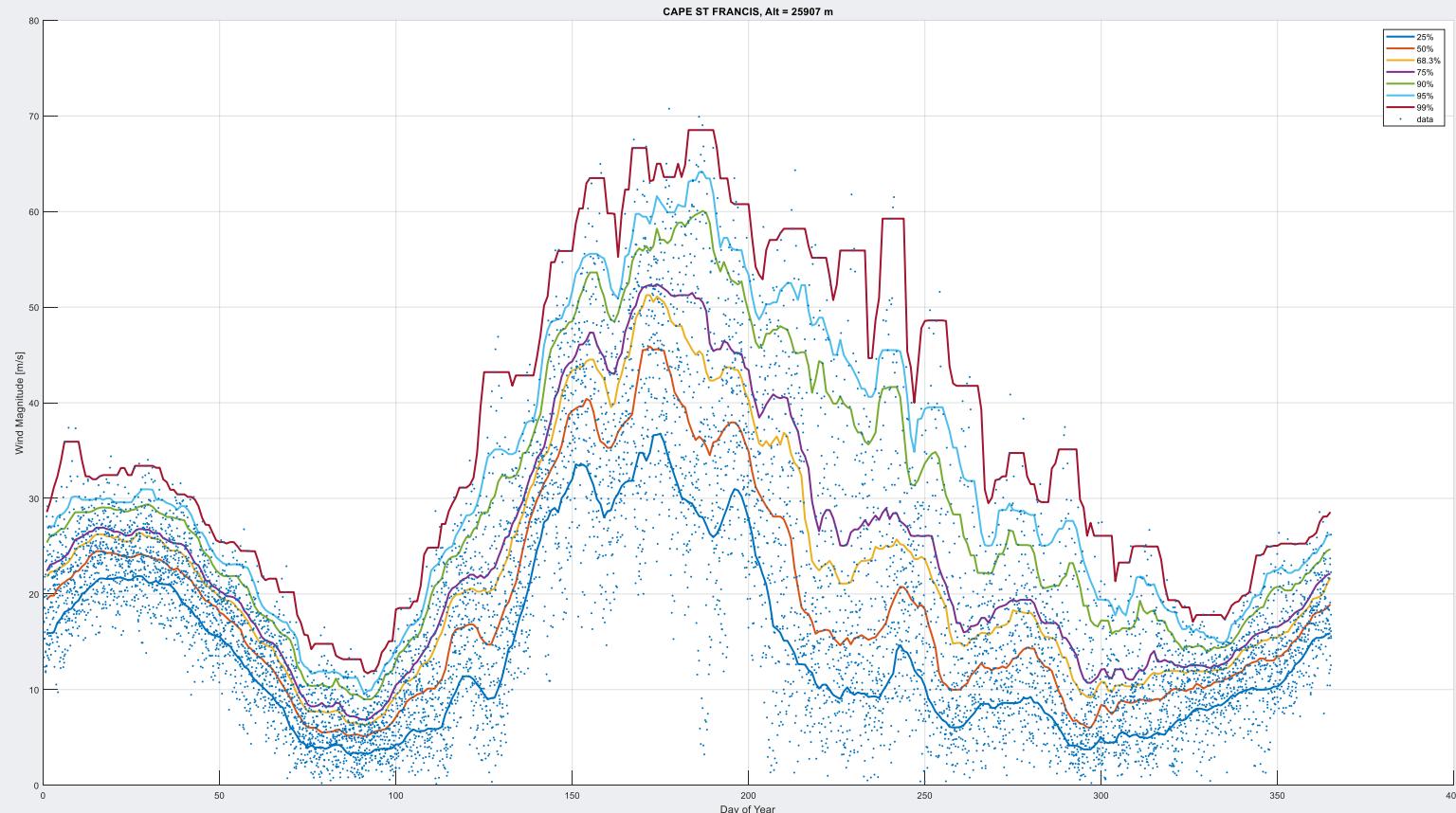
Wind Direction



CAPE ST FRANCIS/

Lat = -34.1899, Lon = 24.7972, Alt = 25907 m

Wind Magnitude



CAPE ST FRANCIS/

Lat = -34.1899, Lon = 24.7972, Alt = 25907 m

Wind Direction

