

Weather Statistics for Danish Airports 2009-2018

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Abstract

This report contains statistics on visibility, ceiling, wind speed and wind direction observed at Danish airports, 01.01.2009 to 31.12.2018.

Resumé

Rapporten indeholder statistik for sigtbarhed, ceiling, vindhastighed og vindretning fra danske lufthavne, 01.01.2009 to 31.12.2018.

Introduction

This report presents 10 years of airport weather statistics from Danish airports (*Table 1*) in the period 01.01.2009 to 31.12.2018. The present report, along with DMI Report 20-16 *Weather Statistics for Vága Floghavn 2009-2018, Faroe Islands*, answers a growing need for an update of the 2003-2012 airport weather statistics (Laursen, 2012), and the aim has been to publish statistics on recent data in a design suitable for aeronautical meteorologists' everyday work and educating purposes.

The statistics should be interpreted as the average weather conditions experienced during the operation hours of the airport in the 10 years period from 01.01.2009 to 31.12.2018. This means that when comparing airports, the reader should always have the differences in airport operation hours in mind, and confer with the airport's total availability. Airport availability information on the yearly, monthly and hourly distribution of the observations is supplied in the Availability chapter of this report.

<i>Table 1: Airport availability, relevant remarks on airport weather statistics and start date of AUTO METAR.</i>		
Airport	Availability (%)*	Remarks
EKAH Aarhus Lufthavn	97.1	AUTO METAR/Manual METAR
EKBI Billund Airport	97.5	AUTO METAR/Manual METAR
EKCH Københavns Lufthavn, Kastrup	98.6	Manual METAR
EKEB Esbjerg Lufthavn	98.2	AUTO METAR/Manual METAR
EKGF Thyra East	55.9	Manual METAR Low availability is caused by no flight operations/METAR during night hours.
EKKA Midtjyllands Lufthavn/Flyvestation Karup	98.6	AUTO METAR/Manual METAR
EKOD Hans Christian Andersens Airport	28.7	Manual METAR Low availability is caused by no flight operations/METAR during night hours, and mostly hourly METAR during daytime.
EKRK Københavns Lufthavn, Roskilde	97.4	AUTO METAR/Manual METAR

EKRN Bornholms Lufthavn, Rønne	97.9	AUTO METAR/Manual METAR
EKSB Sønderborg Lufthavn	54.5	AUTO METAR/Manual METAR Low availability is caused by no flight operations/METAR during night hours. Mostly hourly METAR during daytime after late 2015.
EKSN Sindal Lufthavn	11.5	Manual METAR Low availability is caused by no flight operations/METAR during night hours, and mostly hourly METAR during daytime.
EKSP Vojens Lufthavn/Flyvestation Skrydstrup	98.3	Manual METAR
EKVD Kolding Lufthavn	20.5	AUTO METAR/Manual METAR Low availability is caused by no flight operations/METAR during night hours, and mostly hourly METAR during daytime.
EKVJ Stauning Lufthavn	12.7	Manual METAR Low availability is caused by no flight operations/METAR during night hours, and mostly hourly METAR during daytime.
EKYT Aalborg Lufthavn/Flyvestation Aalborg	98.5	AUTO METAR/Manual METAR

*Availability when expecting half hourly observations around the clock from 01.01.2009 to 01.01.2019 (total 175,295 observations).

METAR and SPECI

The regularity of air traffic at an airport depends, among other things, on the existing conditions of visibility and cloud cover. Observations of visibility and cloud cover are part of the weather reports that airports issue on a regular basis via the weather code reports METAR and SPECI.

METAR and SPECI are above all meant to be used for flight planning and they contain information that is representative of the airport and the immediate vicinity of the airport. The code in METAR and SPECI is defined in the WMO-No. 306 'Manual on Codes', under the headings:

- *FM 15 METAR Aerodrome routine meteorological report (with or without trend forecast)*
- *FM 16 SPECI Aerodrome special meteorological report (with or without trend forecast)*

METAR is a routine weather report sent from the airport every half hour or every hour according to agreement between the meteorological authority, the appropriate air traffic service authority (ATS) and the operator concerned. SPECI is a special weather report that is reported in addition to the METAR when special conditions agreed upon are met. For a thorough description of METAR and SPECI, see WMO-No. 306 'Manual on Codes'.

MetafDB

The Danish Meteorological Institute (DMI) receives and stores METAR and SPECI from the entire world in an internal database called MetafDB. MetafDB is the source of observations in this report.

Wind Direction and Wind Speed

The wind direction is the mean true direction from which the wind is blowing. The direction is given in true degrees rounded off to the nearest 10 degrees. True north is 360 degrees. In case of calm, both wind speed and wind direction have the value '0'. In case of wind from variable directions, wind direction is reported using the code value 'VRB' and wind speed is reported as usual.

Wind measurements are generally taken as the mean over the 10-minutes period immediately preceding the observation. The time period in the METAR may be shorter than 10 minutes. The reason for this is that when the 10-minute period includes a marked discontinuity in the wind direction or wind speed, instructions for reporting METAR say that only data after the discontinuity is used to obtain the mean wind speed, mean wind direction and variations of the wind direction.

Cloud Cover

METAR and SPECI contain information on cloud amount and cloud height. The cloud amount is reported for each individual cloud layer, starting with the lowest individual layer

(mass) of cloud amount. The cloud amount is reported using an abbreviation of three letters to describe the amount of clouds (in oktas) that covers the sky.

FEW (few) - clouds covering 1-2 oktas

SCT (scattered) – clouds covering 3-4 oktas

BKN (broken) – clouds covering 5-7 oktas

OVC (overcast) – clouds covering 8 oktas

The height of the cloud base is reported together with the cloud amount. The height of the cloud base is measured as the vertical distance from the airport to the bottom of the relevant cloud layer. The height of the cloud base is reported in steps of 100 ft up to 10000 ft and in steps of 1000 ft from 10000 ft and up to the maximum cloud height of interest to aviation. The code word '0' means 'less than 100 ft'.

In case of clear sky or no cloud layers of significance for aviation, and if 'CAVOK' is not appropriate (e.g. if visibility is poor), the information on cloud amount and height is replaced by a three letter abbreviation as follows:

NSC (no significant cloud) or

NCD (no clouds detected) – report by automated cloud observing system

*[Previously used: **SKC** (Sky clear) – indication of clear sky]*

Vertical Visibility

When the clouds are at ground level and obscure the sky, METAR and SPECI may contain reports on 'vertical visibility' *instead* of cloud amount and height. When conditions for 'vertical visibility' apply, a special code is used to report the vertical visibility into the cloud in feet. This provides the user with more information for flight planning compared to the following: '0 feet height of cloud base'.

Ceiling

When a cloud layer covers more than half of the sky pilots call it ceiling. Ceiling is the height in feet from the airport to the lower edge of the bottom cloud layer. The bottom cloud layer has to be more than 4/8.

The present airport weather statistics is made from observations of ceiling from MetafDB. The ceiling parameter in MetafDB is calculated using information about cloud cover in METAR and SPECI, and covers the three situations described in **Error! Reference source not found.** below.

Table 2: The three situations that determine the ceiling value in MetafDB.

Ceiling value in MetafDB (feet)	Significance	Situation
0-900	<u>Either:</u> The cloud height (feet) of the bottom cloud layer, which covers more than 4/8. <u>Or:</u> Vertical visibility (feet).	METAR and SPECI have reported BKN or OVC or vertical visibility.
1,000-29,000	The cloud height (feet) of the bottom cloud layer, which covers more than 4/8.	METAR and SPECI have reported BKN or OVC.
30,000	<u>Either:</u> The cloud height is at least 30,000 feet to the bottom cloud layer, which covers more than 4/8. <u>Or:</u> CAVOK. <u>Or:</u> No ceiling.	METAR and SPECI have reported: <ul style="list-style-type: none"> • CAVOK or SKC or NSC or NCD or • Only cloud cover with FEW or SCT or • Bottom cloud cover with BKN or OVC with cloud height 30,000 feet or more.

Visibility

METAR and SPECI report the prevailing horizontal visibility at the surface in meters. The resolution of reported visibility is 50 m up to and including 500 m, then 100 m up to and including 5 km, 1 km up to 10 km visibility, while 10 km or more is reported using the same code word.

In MetafDB, the reported visibility from METAR and SPECI is stored in number of meter up until the code word 9999, which means '9999 m visibility or more or CAVOK'.

CAVOK

The code word CAVOK indicates '**C**eiling **A**nd **V**isibility **OK**', which means that both ceiling and visibility are favorable in terms of the air traffic needs. CAVOK *replaces* the specific observations of ceiling, visibility and present weather in a METAR or SPECI. WMO-No. 306 'Manual on Codes' explains the conditions that need to be met during the observation period in order to report CAVOK.

Data Behind the Airport Weather Statistics

The airport weather statistics has been calculated from METAR and SPECI issued by Danish airports, received by DMI, then decoded and stored in the DMI Weather Service Department's MySQL database, MetafDB. The decoded data in MetafDB is the most complete and reliable source of decoded recent METAR at DMI.

To ensure the best representative coverage of the statistical period, data was selected as one observation each half hour through the 120 consecutive months starting with January 2009 and ending with, and including, December 2018, which amounts to 10 complete years of statistics. To ensure sound coverage of less favorable conditions, each half hour observation was selected among quality assured observations as the one METAR or SPECI with the lowest visibility during that half hour period. In case of a tie, the observation with the lowest ceiling was chosen, and in case both visibility and ceiling were constant, then the most recent observation was chosen.

Quality assurance involved exclusion of observations, which, during the automated decoding process, were flagged as having syntax errors. Quality assurance also involved the exclusion of erroneous observations identified through a manual screening of extremes, outliers and plots of time series of the various parameters, one year at a time.

EKAH Aarhus Lufthavn (Tirstrup)

Airport location: 56,308°N 10,625°E Elevation: 20 m above MSL.

EKAH observations in statistics: 170,182 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 97.1 %. For more information, please go to the 'Availability' section.

EKAH METAR are both AUTO METAR and manual METAR.

Cross Tables Visibility – Ceiling

Table 3: EKAH Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 170,182	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.0018	0.14	0.17	0.18	0.18	0.19	0.048	0.23
<350m	0.0041	0.60	0.72	0.76	0.78	0.79	0.35	1.14
<600m	0.0047	0.83	1.09	1.15	1.18	1.19	0.65	1.84
<800 m	0.0053	0.92	1.34	1.41	1.43	1.45	0.84	2.29
<1.5 km	0.0053	1.17	1.91	2.03	2.08	2.11	1.17	3.28
<3.0 km	0.0053	1.69	3.69	4.22	4.38	4.48	2.10	6.58
< 5.0 km	0.0053	1.89	5.41	7.18	7.64	7.89	3.66	11.55
< 8.0 km	0.0053	1.95	6.65	10.66	11.92	12.52	6.59	19.11
>= 8.0 km or CAVOK	0	0.033	0.84	5.34	10.89	15.47	65.42	80.89
Total	0.0053	1.99	7.49	16.00	22.81	28.00	72.00	100

Table 4: EKAH - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,043	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.11	0.14	0.16	0.16	0.18	0.045	0.22
<350m	0	0.78	0.91	0.94	0.96	0.98	0.24	1.22
<600m	0	1.15	1.65	1.69	1.72	1.74	0.39	2.13
<800 m	0.0024	1.27	2.13	2.18	2.21	2.23	0.52	2.75
<1.5 km	0.0024	1.79	3.43	3.60	3.67	3.72	0.75	4.46
<3.0 km	0.0024	2.78	6.92	7.91	8.18	8.39	1.90	10.29
< 5.0 km	0.0024	3.16	9.66	12.59	13.41	13.88	3.91	17.79
< 8.0 km	0.0024	3.28	11.62	18.09	20.07	21.15	7.85	29.00
>= 8.0 km or CAVOK	0	0.048	1.23	7.45	14.72	20.81	50.18	71.00
Total	0.0024	3.33	12.85	25.54	34.79	41.96	58.04	100

Table 5: EKAH - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,442	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.075	0.090	0.090	0.090	0.090	0.049	0.14
<350m	0	0.30	0.37	0.38	0.39	0.39	0.34	0.73
<600m	0	0.37	0.48	0.50	0.50	0.51	0.55	1.06
<800 m	0	0.43	0.57	0.59	0.60	0.60	0.68	1.28
<1.5 km	0	0.53	0.78	0.81	0.83	0.84	1.00	1.84
<3.0 km	0	0.68	1.42	1.55	1.59	1.62	1.84	3.45
< 5.0 km	0	0.73	2.26	2.80	2.95	3.02	3.33	6.36
< 8.0 km	0	0.75	2.90	4.41	4.83	5.08	6.00	11.08
>= 8.0 km or CAVOK	0	0.019	0.50	3.52	7.17	10.04	78.88	88.92
Total	0	0.77	3.40	7.93	11.99	15.12	84.88	100

Table 6: EKAH - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,442	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.075	0.090	0.090	0.090	0.090	0.049	0.14
<350m	0	0.30	0.37	0.38	0.39	0.39	0.34	0.73
<600m	0	0.37	0.48	0.50	0.50	0.51	0.55	1.06
<800 m	0	0.43	0.57	0.59	0.60	0.60	0.68	1.28
<1.5 km	0	0.53	0.78	0.81	0.83	0.84	1.00	1.84
<3.0 km	0	0.68	1.42	1.55	1.59	1.62	1.84	3.45
< 5.0 km	0	0.73	2.26	2.80	2.95	3.02	3.33	6.36
< 8.0 km	0	0.75	2.90	4.41	4.83	5.08	6.00	11.08
>= 8.0 km or CAVOK	0	0.019	0.50	3.52	7.17	10.04	78.88	88.92
Total	0	0.77	3.40	7.93	11.99	15.12	84.88	100

Table 7: EKAH - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,714	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.14	0.18	0.20	0.20	0.20	0.033	0.23
<350m	0	0.60	0.74	0.83	0.86	0.86	0.36	1.22
<600m	0	0.93	1.20	1.31	1.35	1.36	0.74	2.10
<800 m	0	1.07	1.55	1.69	1.73	1.74	0.95	2.69
<1.5 km	0	1.41	2.27	2.47	2.55	2.58	1.29	3.87
<3.0 km	0	2.23	4.91	5.79	6.03	6.17	2.29	8.47
< 5.0 km	0	2.53	7.72	10.80	11.55	11.90	4.01	15.91
< 8.0 km	0	2.61	9.43	16.20	18.41	19.30	7.00	26.30
>= 8.0 km or CAVOK	0	0.028	0.98	7.05	15.21	22.14	51.56	73.70
Total	0	2.64	10.41	23.26	33.62	41.44	58.56	100

Wind Direction Histograms

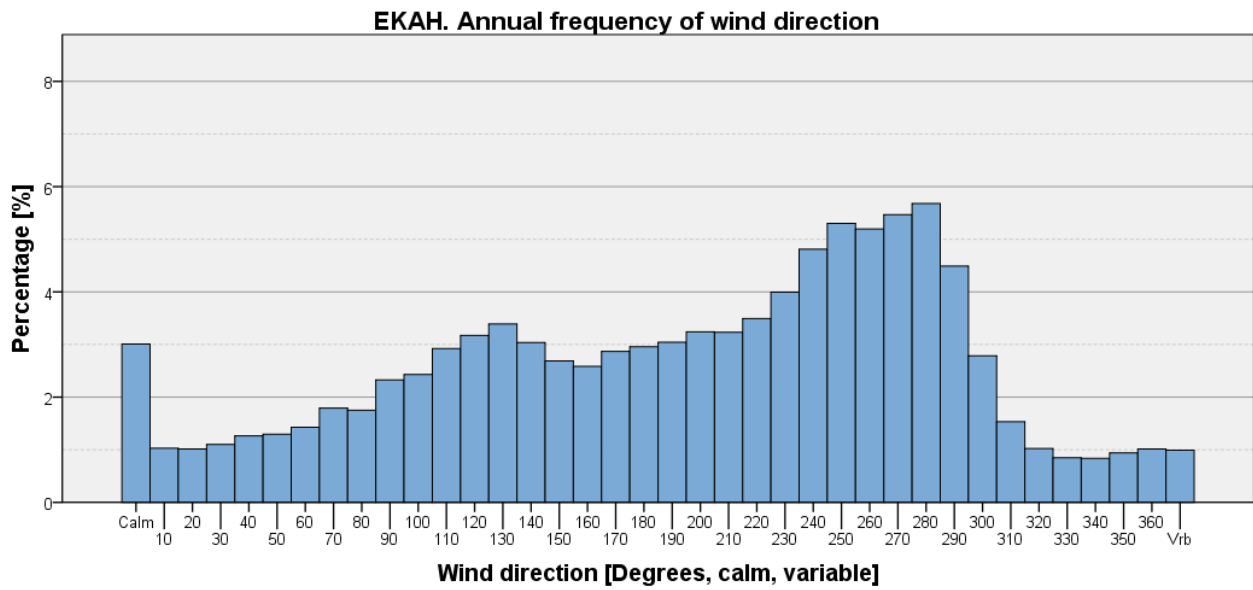


Figure 1

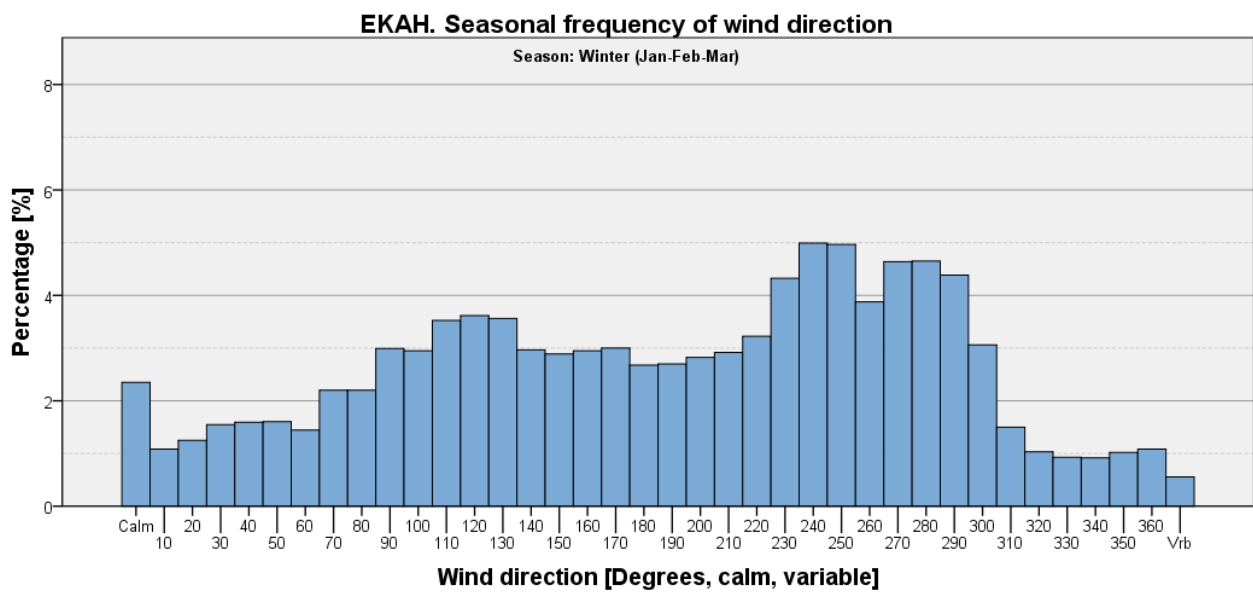


Figure 2

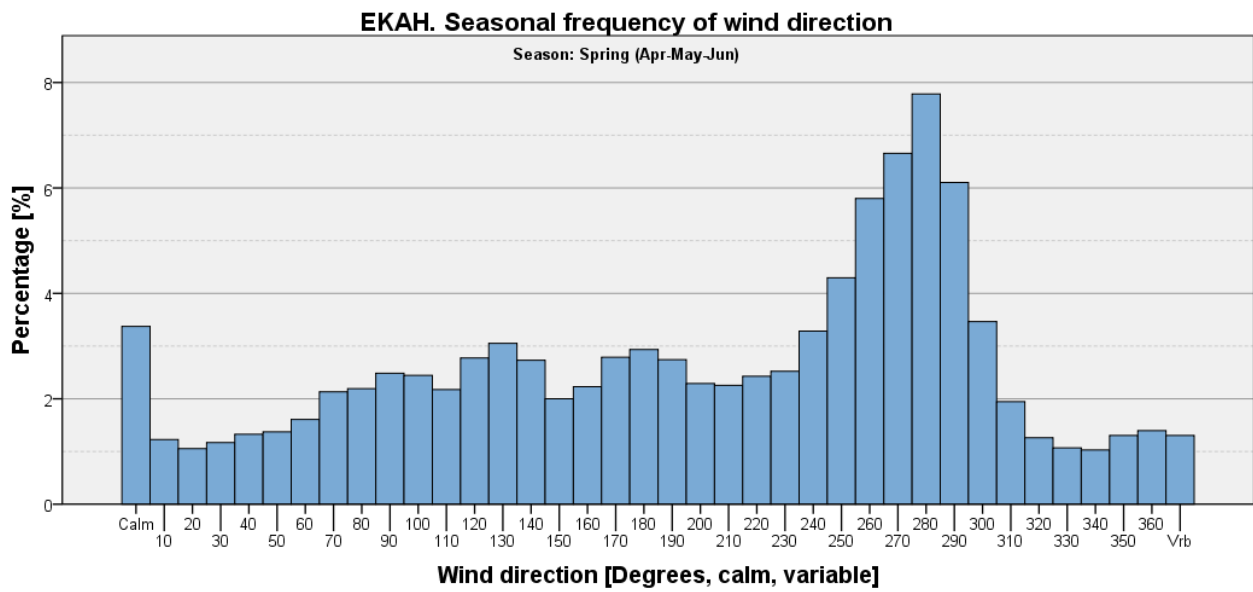


Figure 3

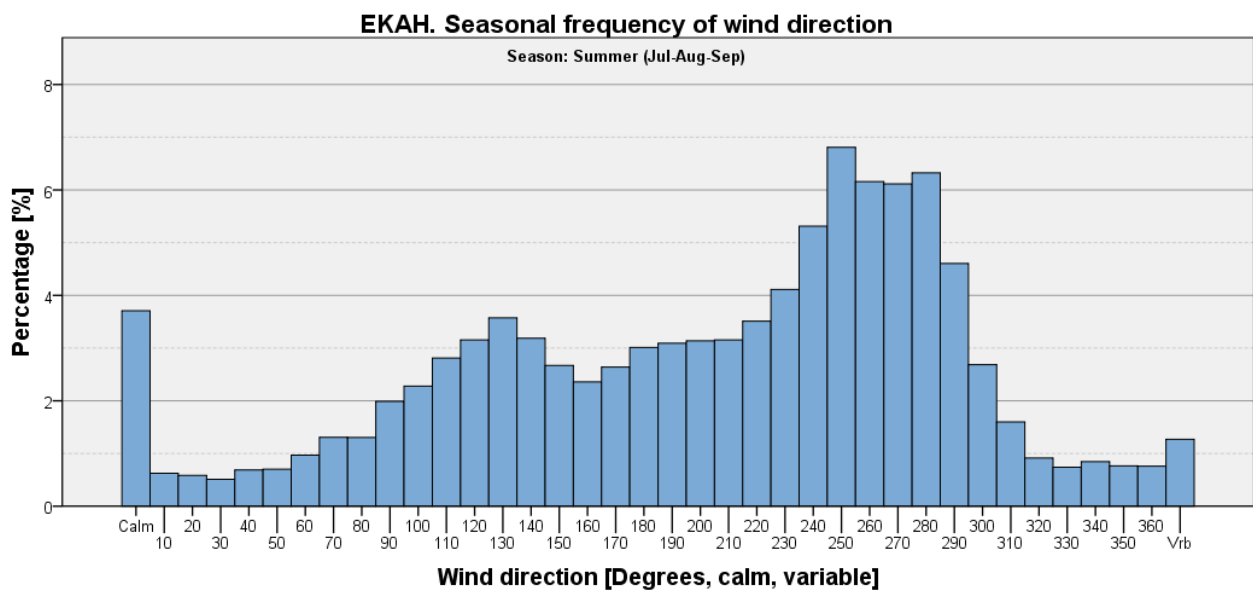


Figure 4

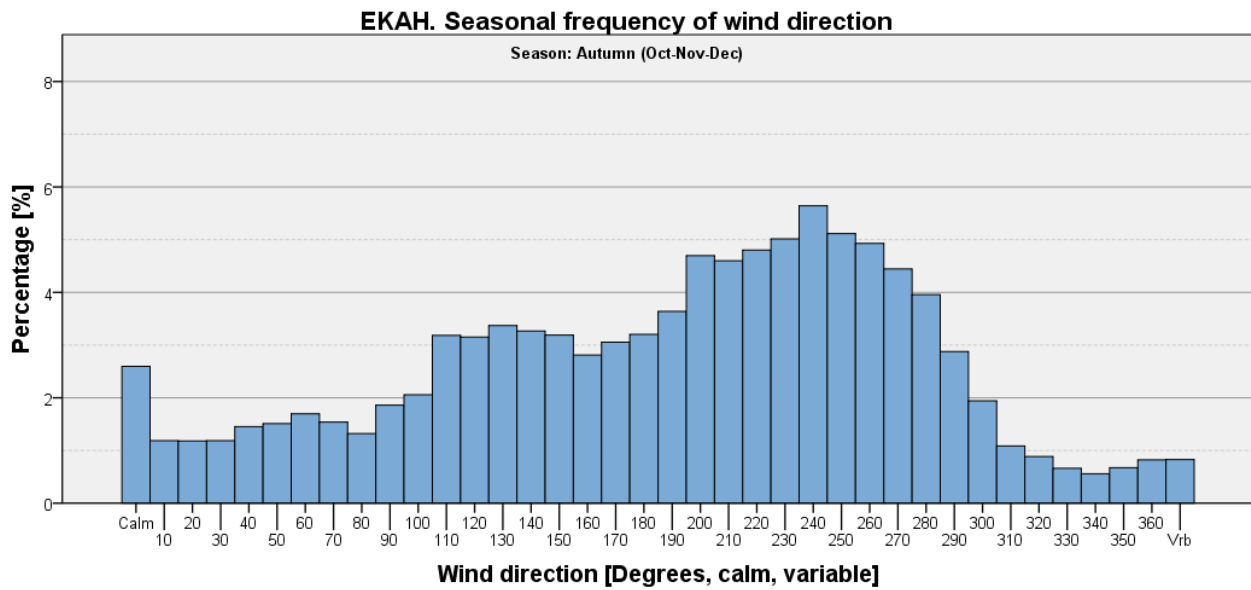


Figure 5

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 8: EKAH - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	2.75	1.28	2.42	2.69	2.29
All other observations	97.25	98.72	97.58	97.31	97.71
Total	100	100	100	100	100

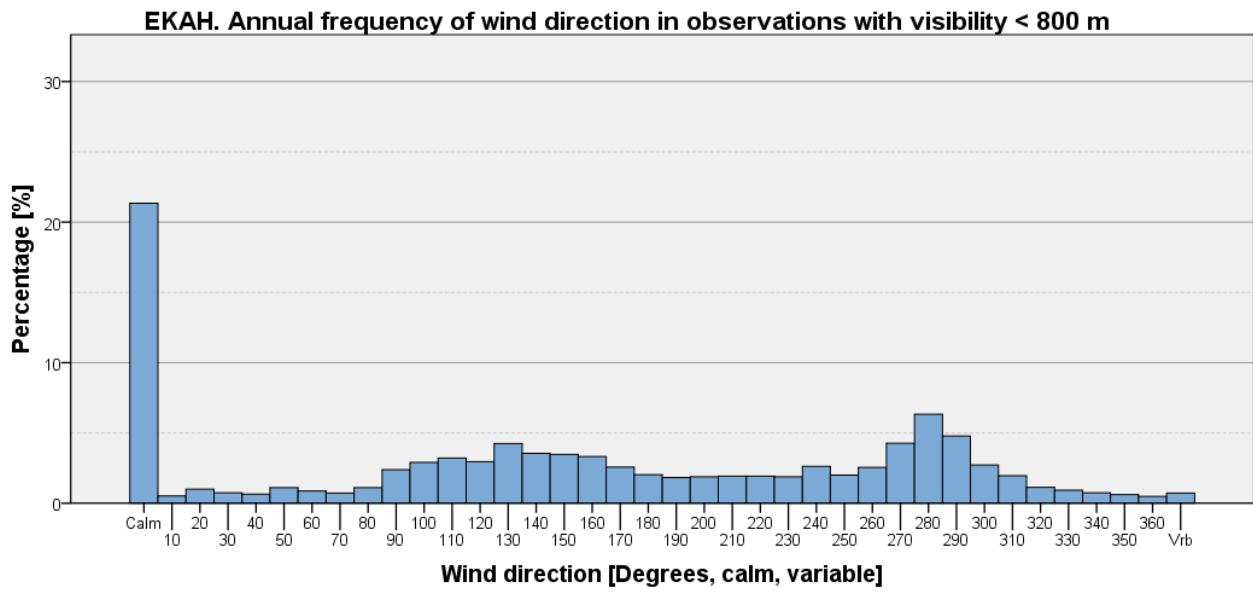


Figure 6

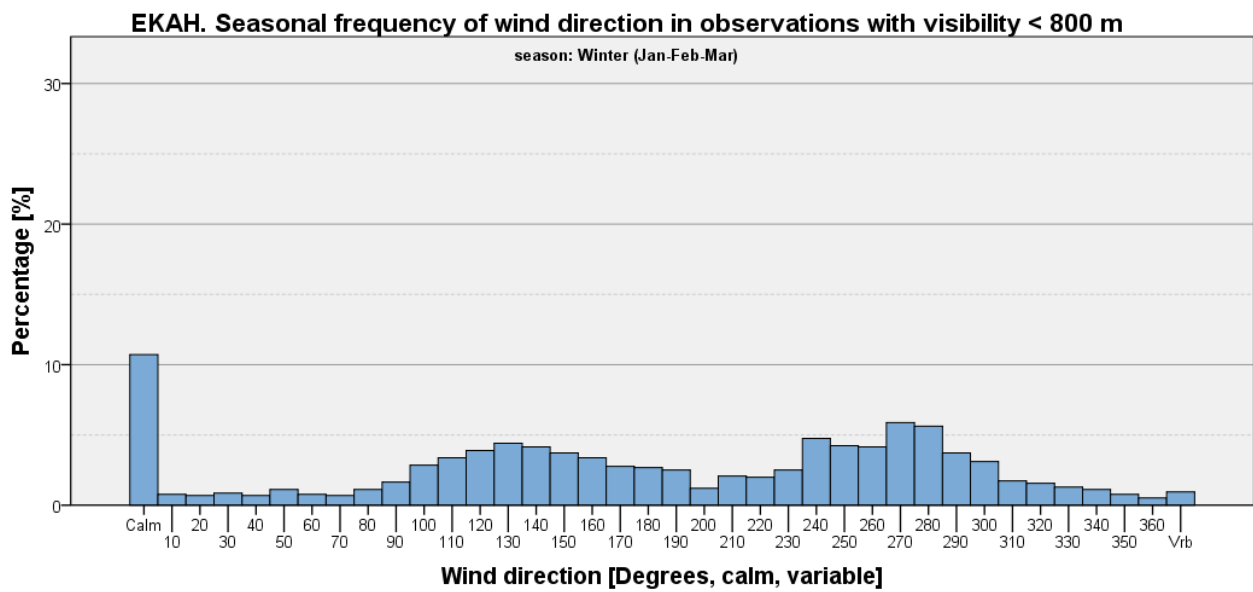


Figure 7

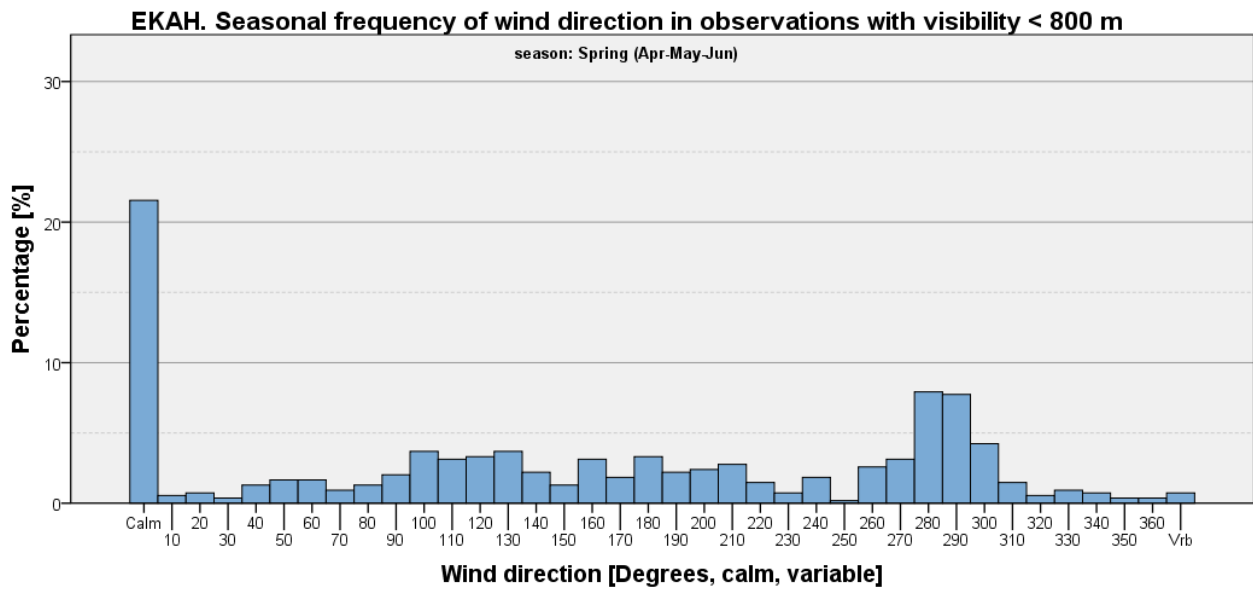


Figure 8

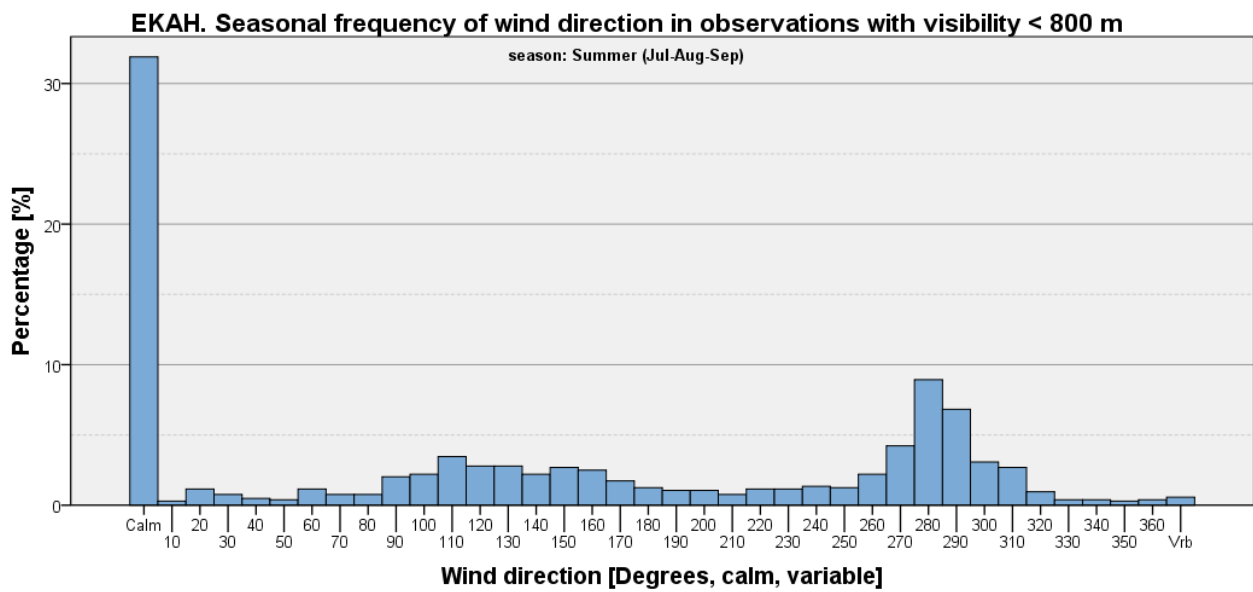


Figure 9

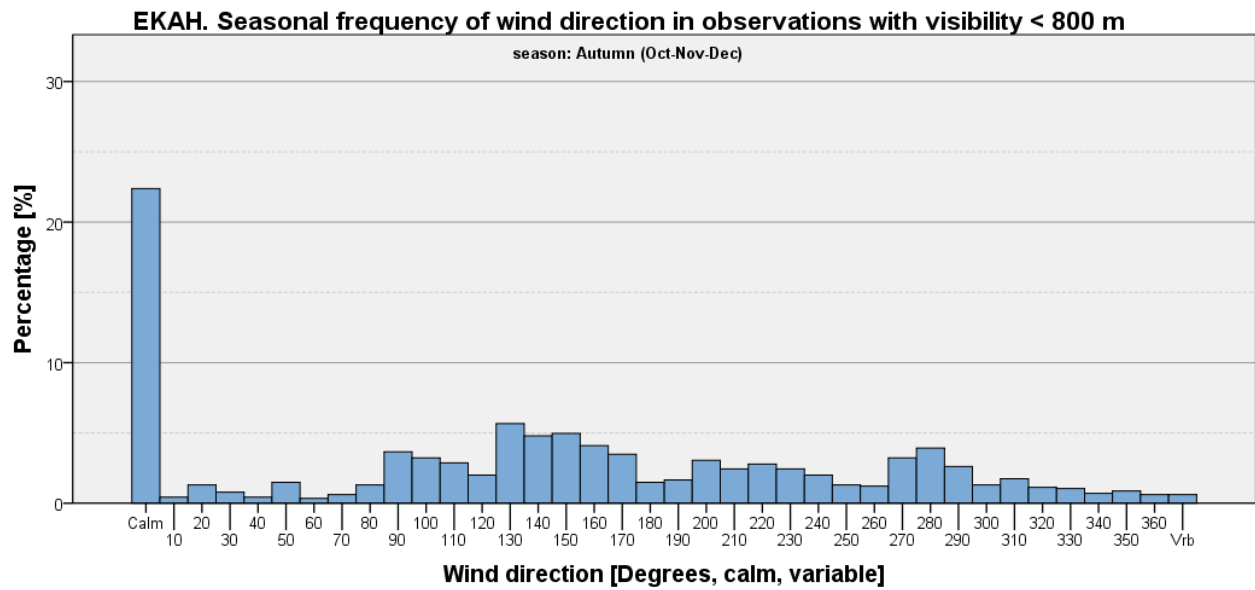


Figure 10

Visibility < 800 m and Wind Speed <= 5 kts

Table 9: EKAH - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	2.24	1.20	2.40	2.40	2.06
All other observations	97.76	98.80	97.60	97.60	97.94
Total	100	100	100	100	100

EKAH. Annual frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

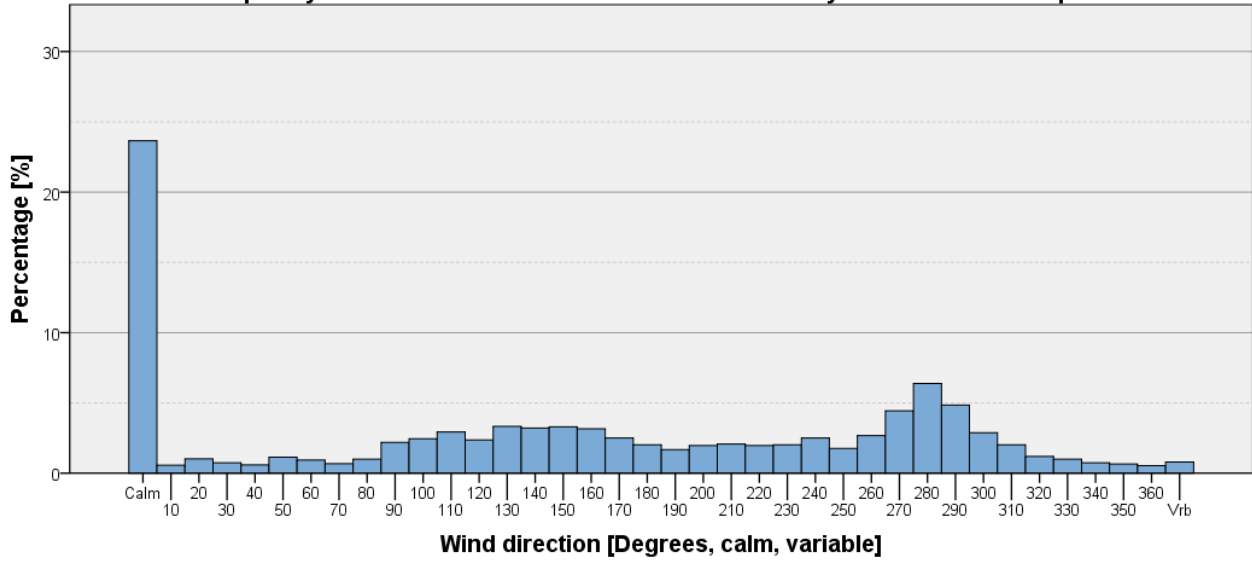


Figure 11

EKAH. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

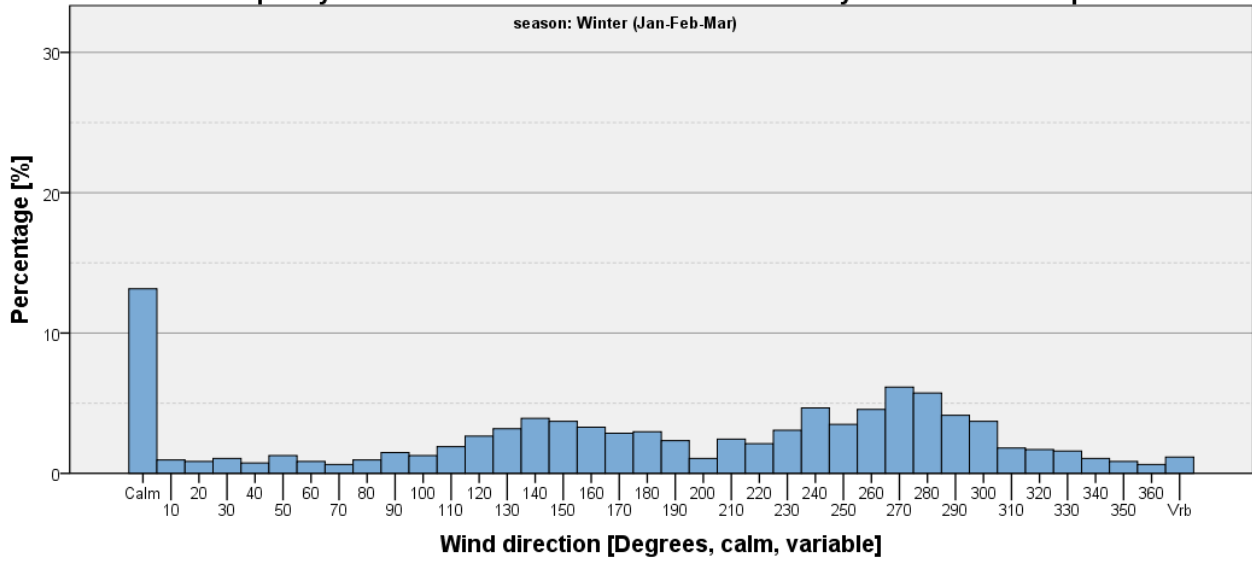


Figure 12

EKAH. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

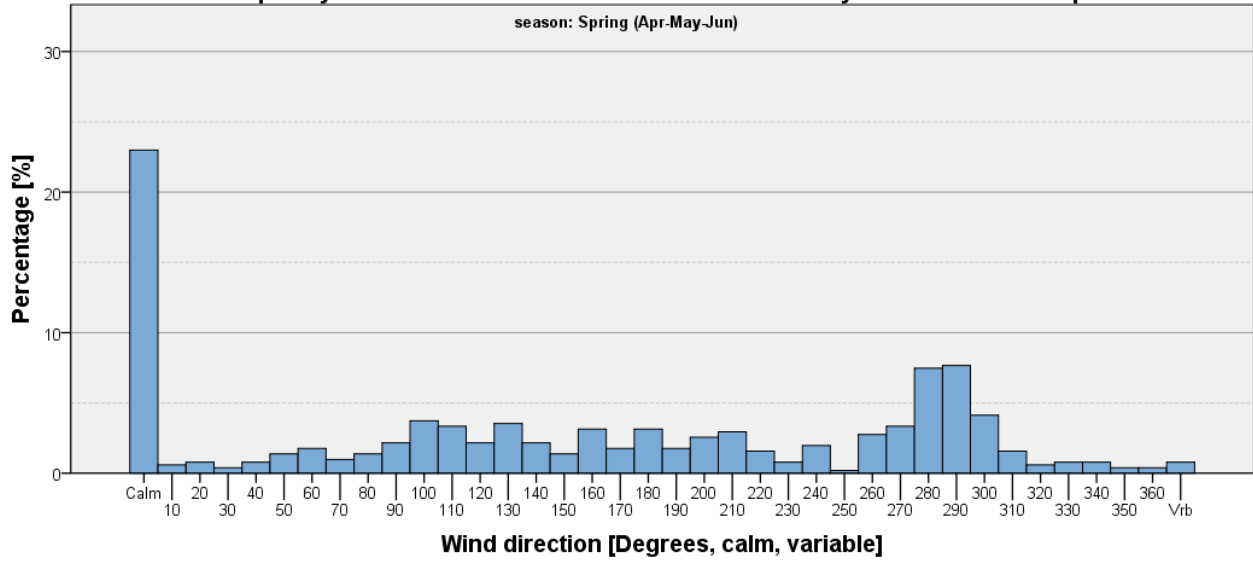


Figure 13

EKAH. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

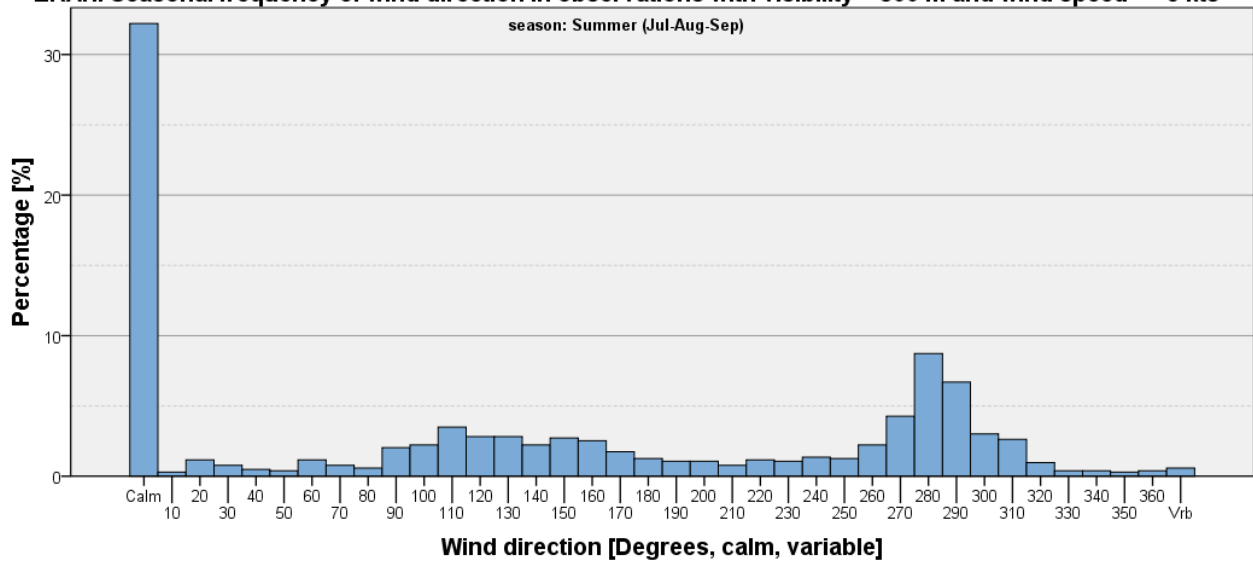


Figure 14

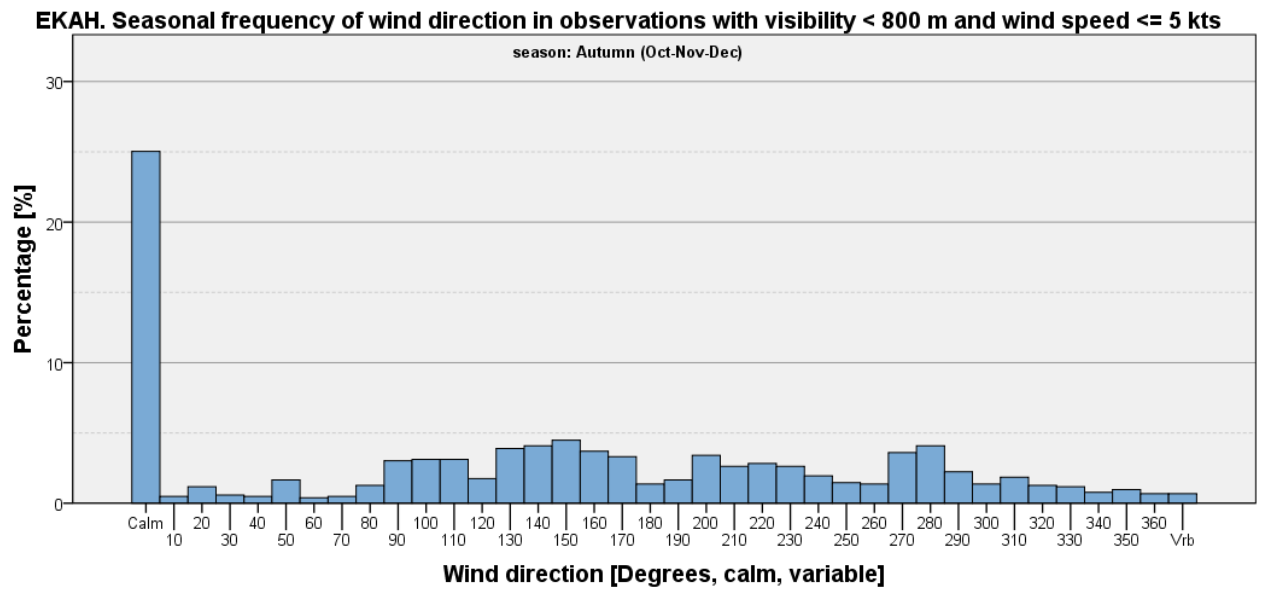


Figure 15

Visibility < 800 m and Wind Speed > 5 kts

Table 10: EKAH - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	0.51	0.080	0.023	0.28	0.22
All other observations	99.49	99.92	99.98	99.72	99.78
Total	100	100	100	100	100

EKAH. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

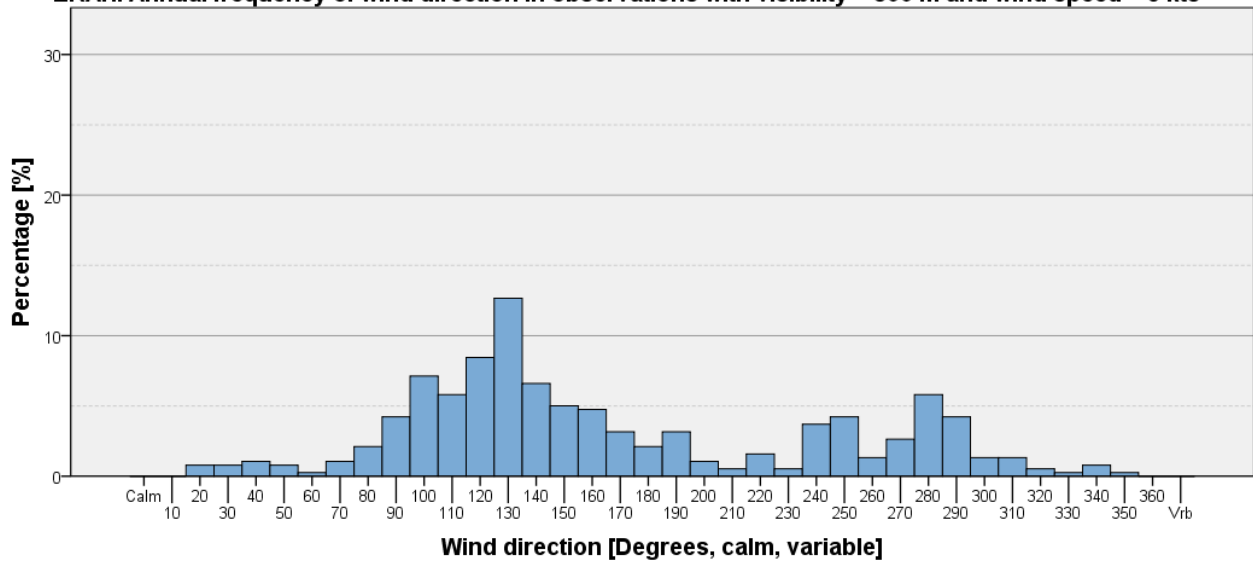


Figure 16

EKAH. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

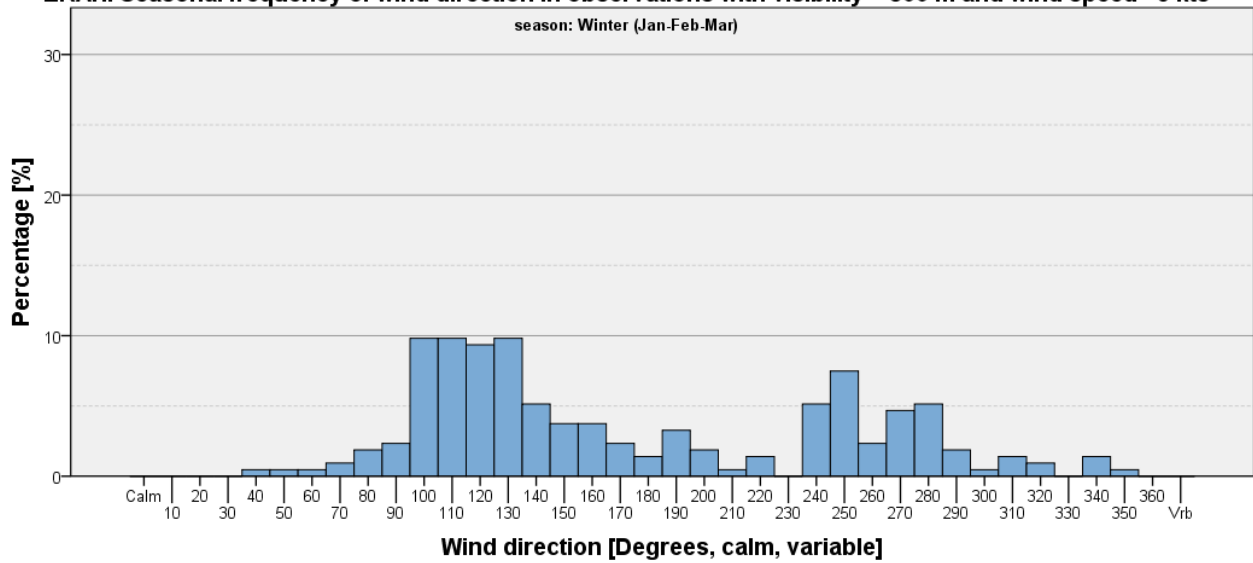


Figure 17

EKAH. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

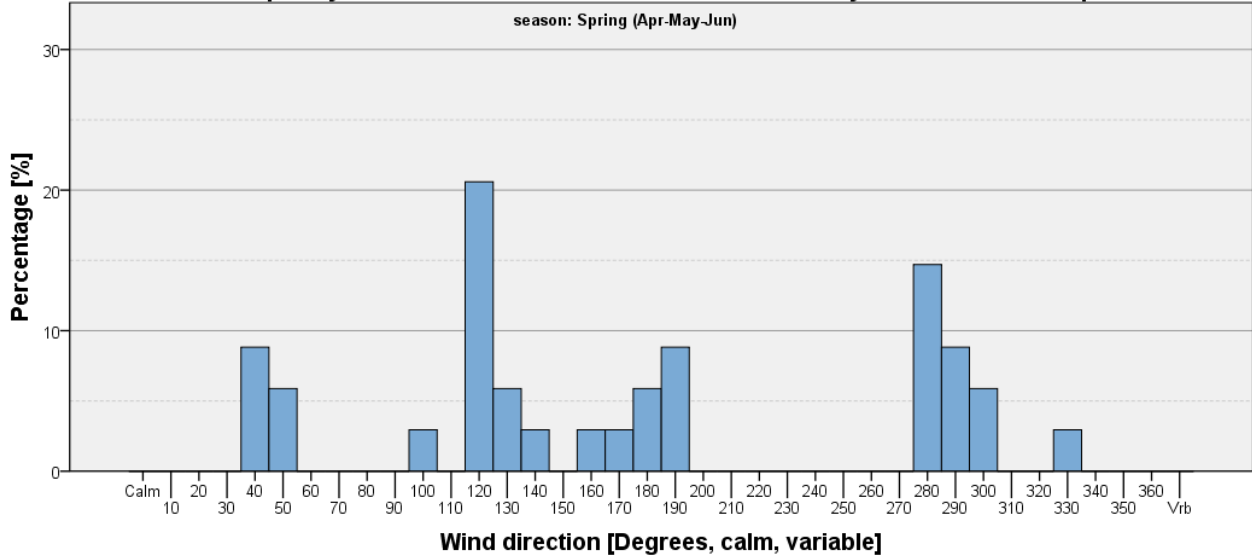


Figure 18

EKAH. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

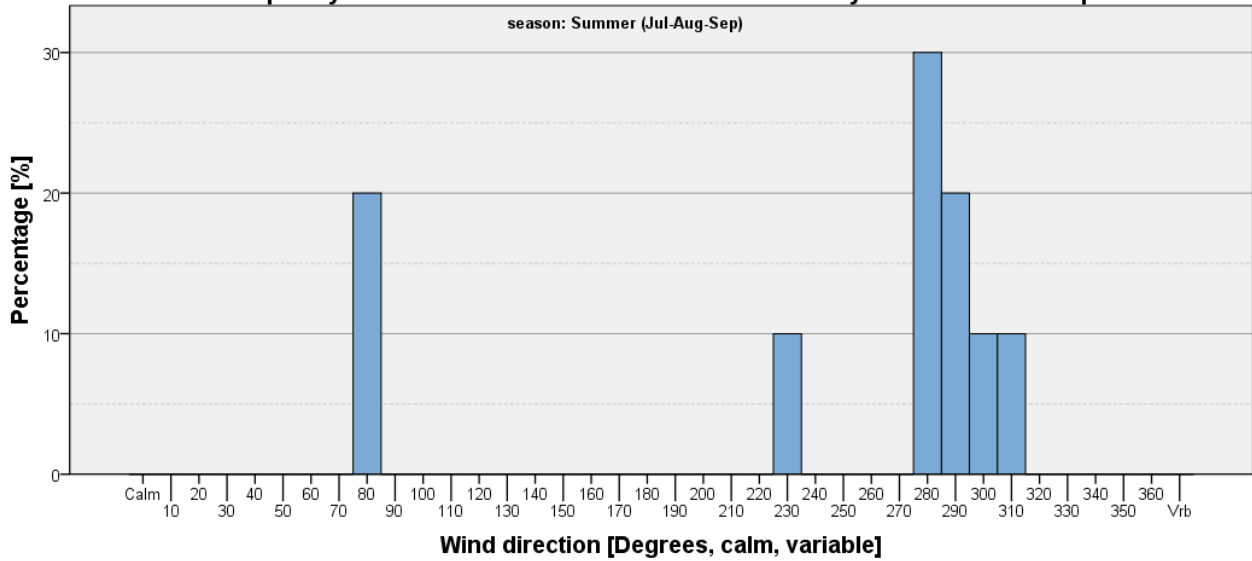


Figure 19

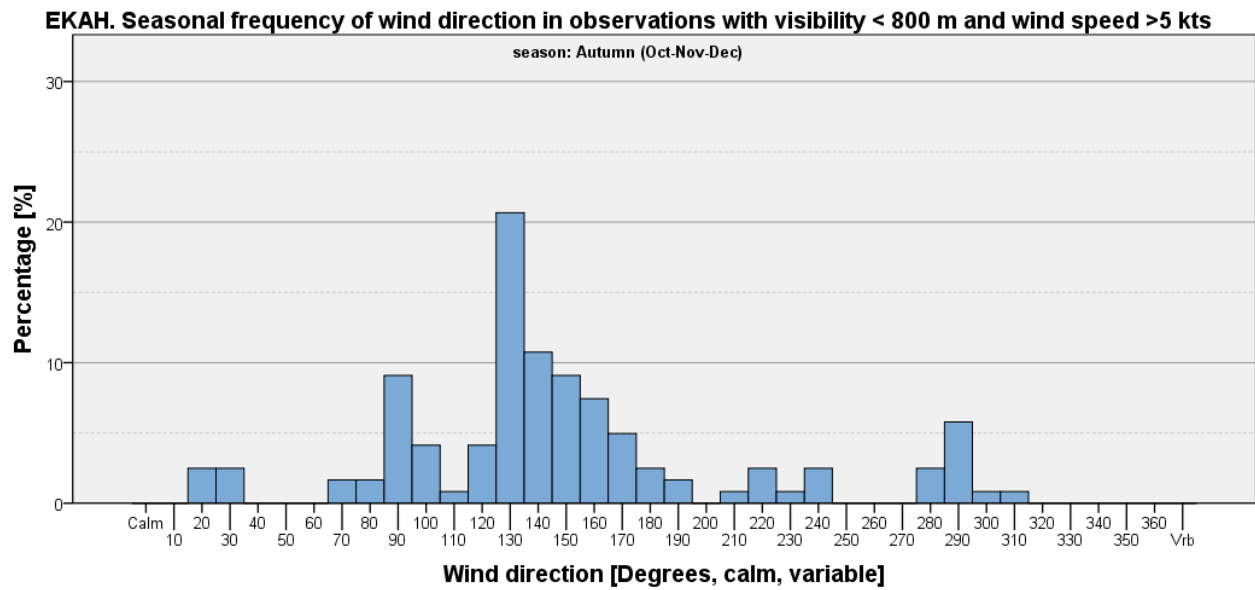


Figure 20

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 11: EKAH - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	25.54	7.93	7.42	23.26	16.00
All other observations	74.46	92.07	92.58	76.74	84.00
Total	100	100	100	100	100

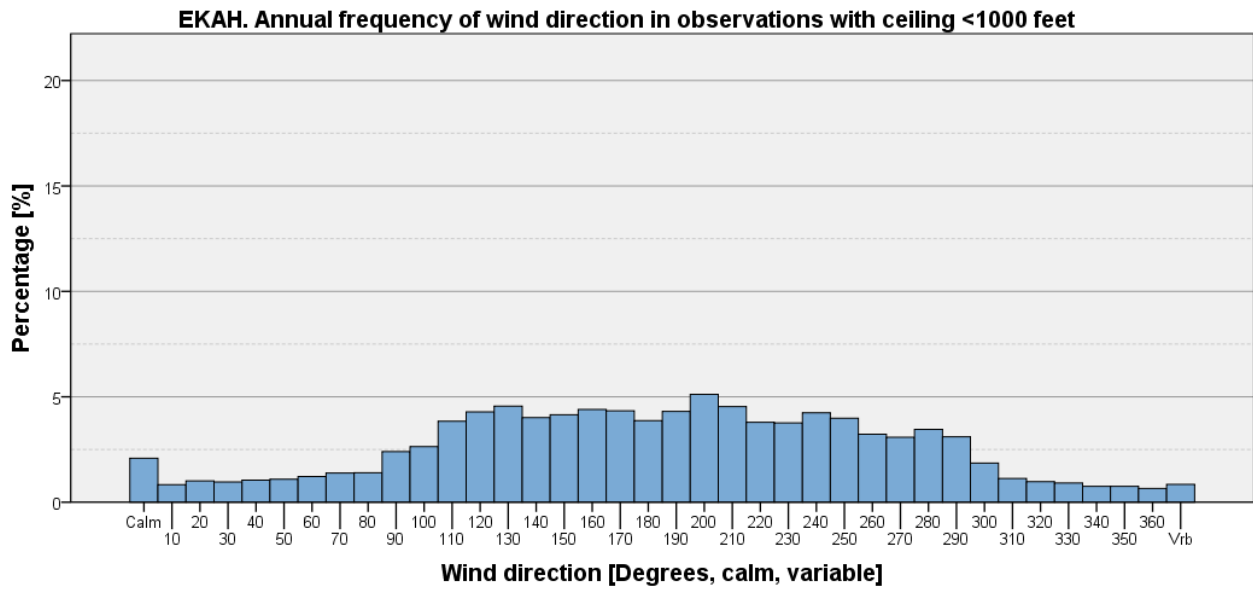


Figure 21

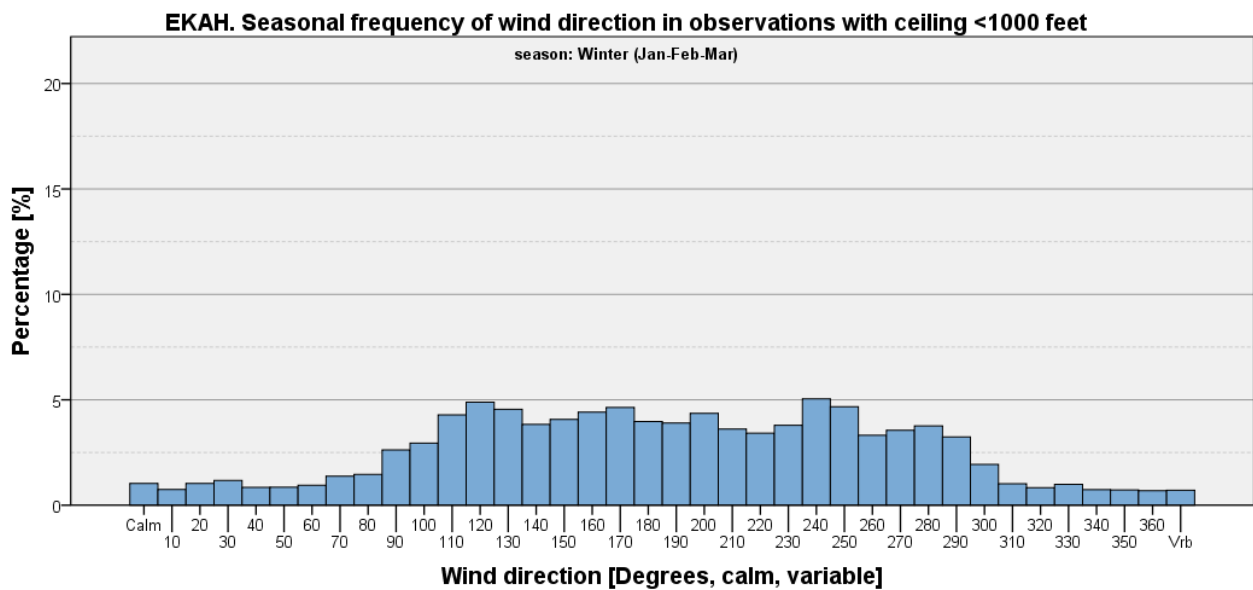


Figure 22

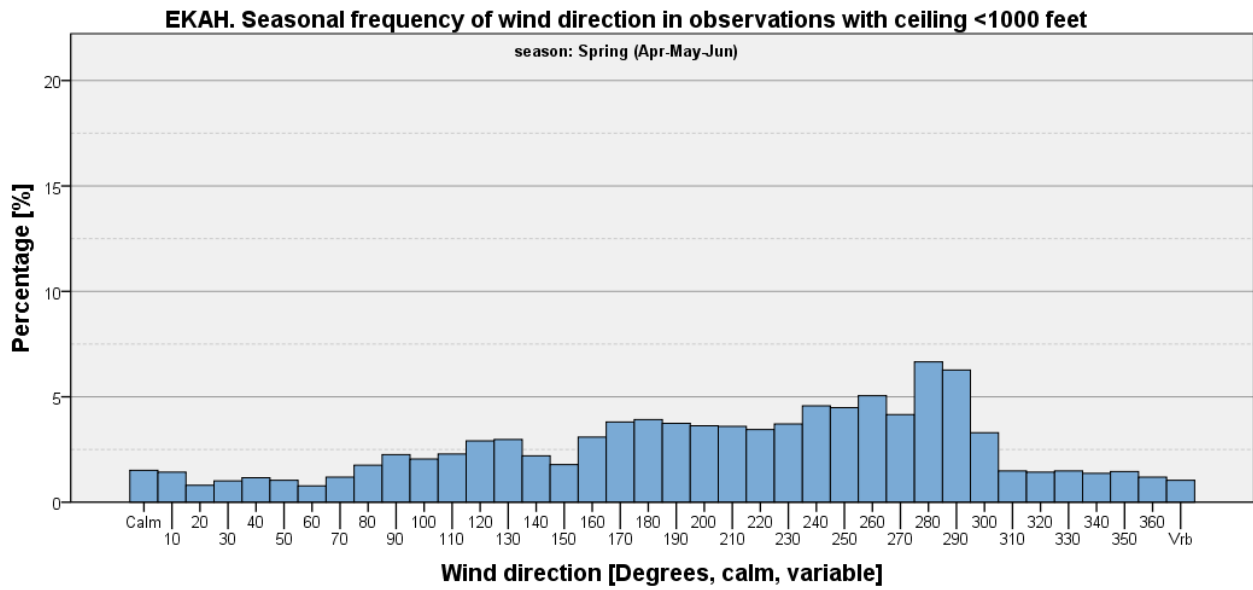


Figure 23

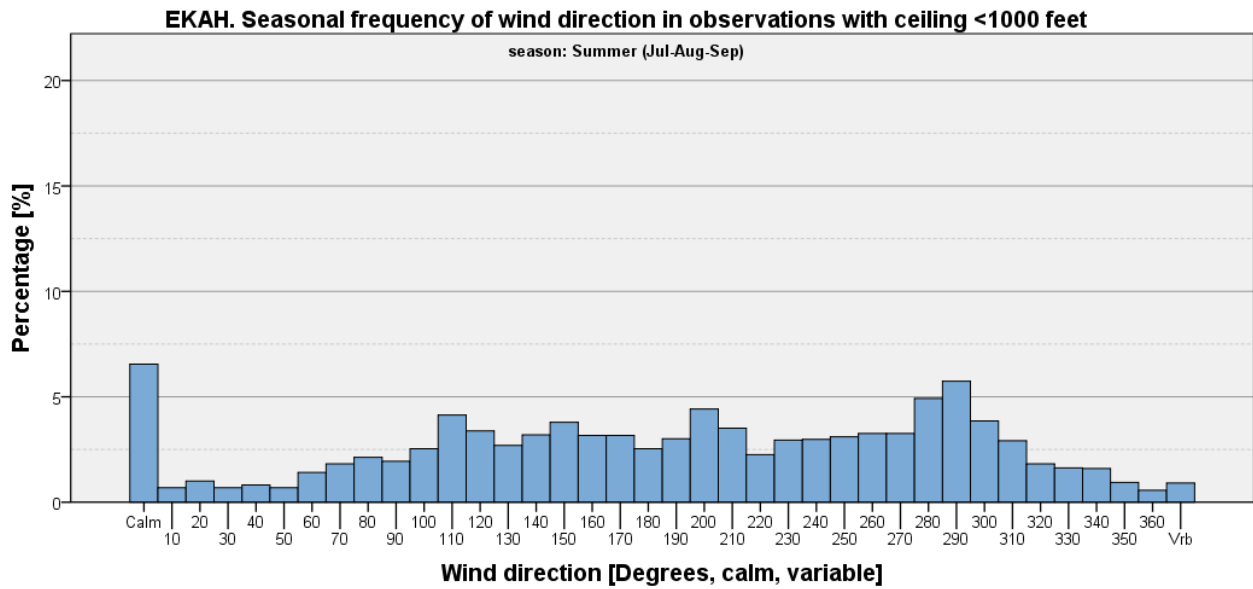


Figure 24

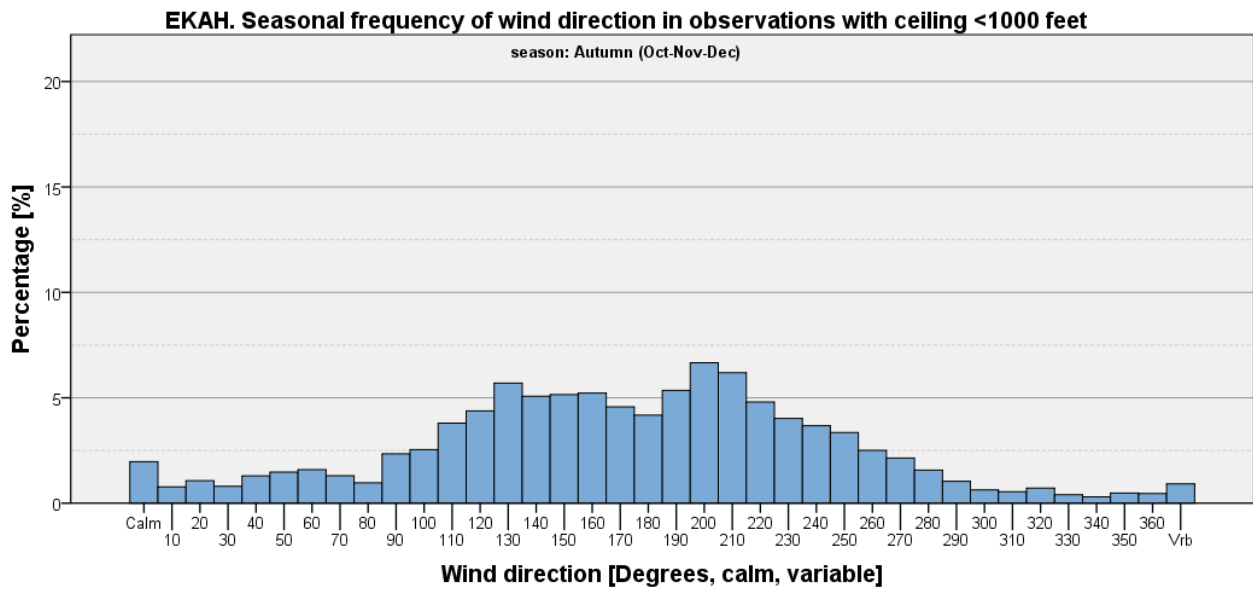


Figure 25

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 12: EKAH - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	9.19	2.83	3.43	7.86	5.82
All other observations	90.81	97.17	96.57	92.14	94.18
Total	100	100	100	100	100

EKAH. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

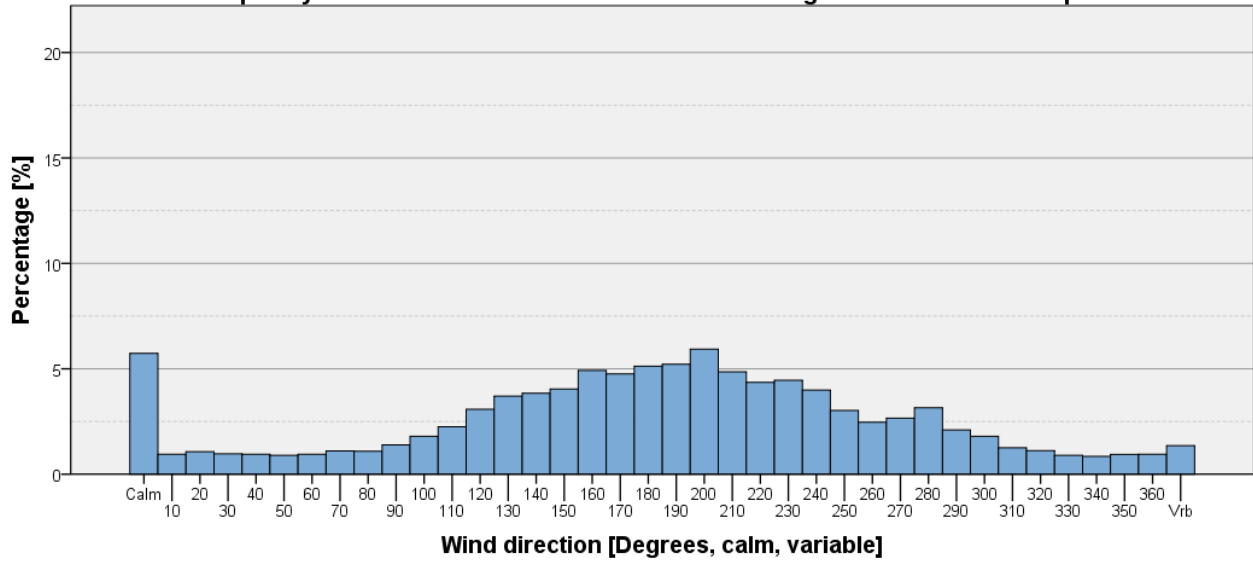


Figure 26

EKAH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

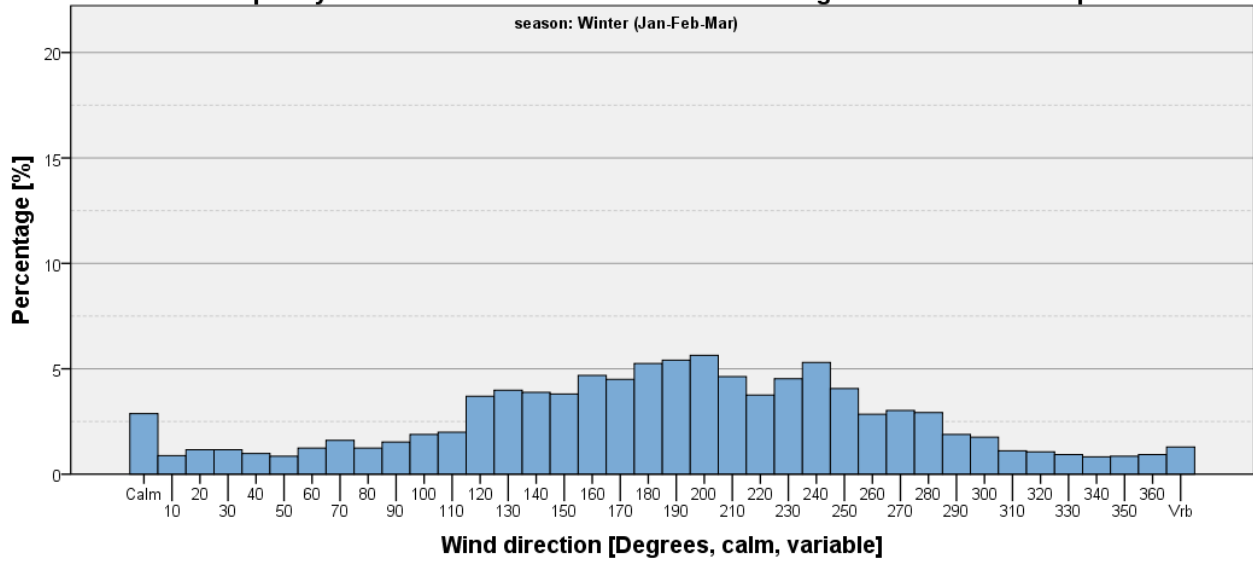


Figure 27

EKAH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

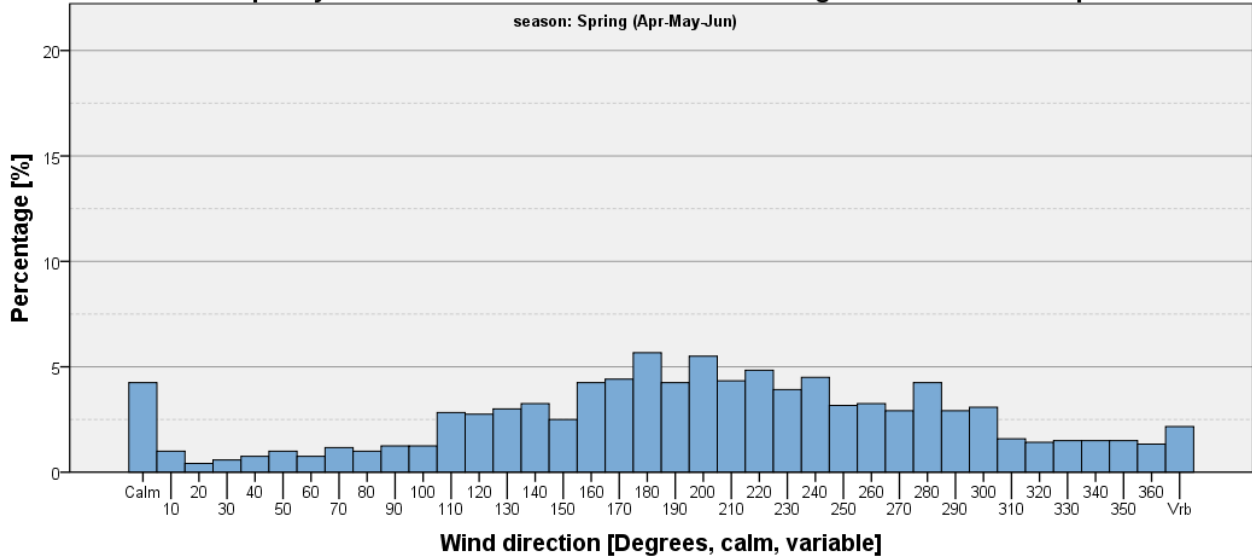


Figure 28

EKAH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

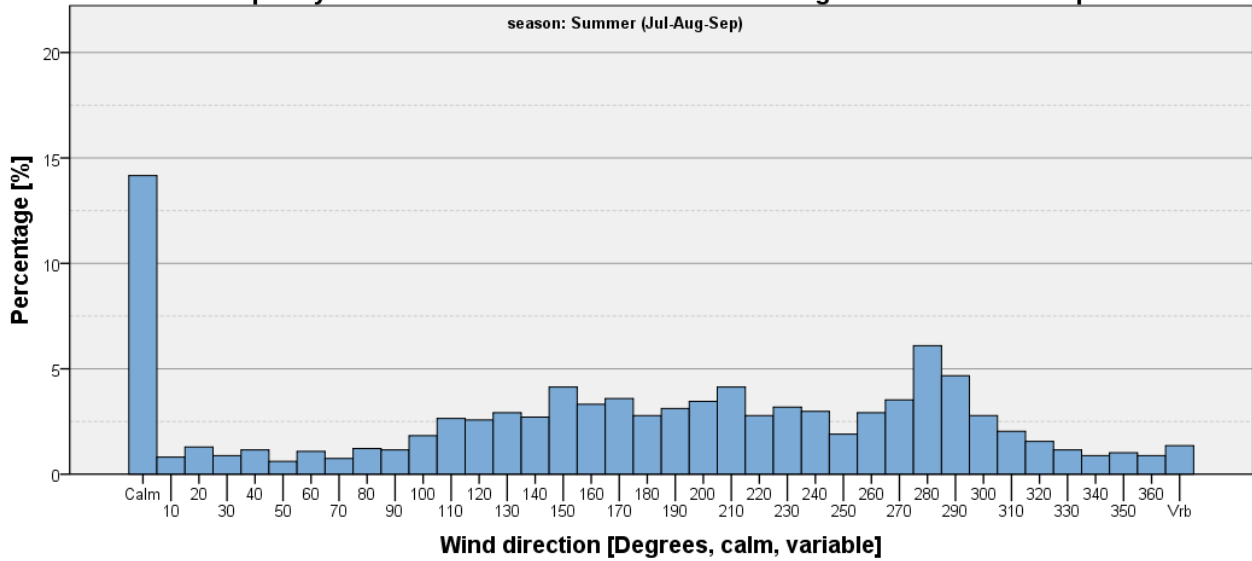


Figure 29

EKAH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

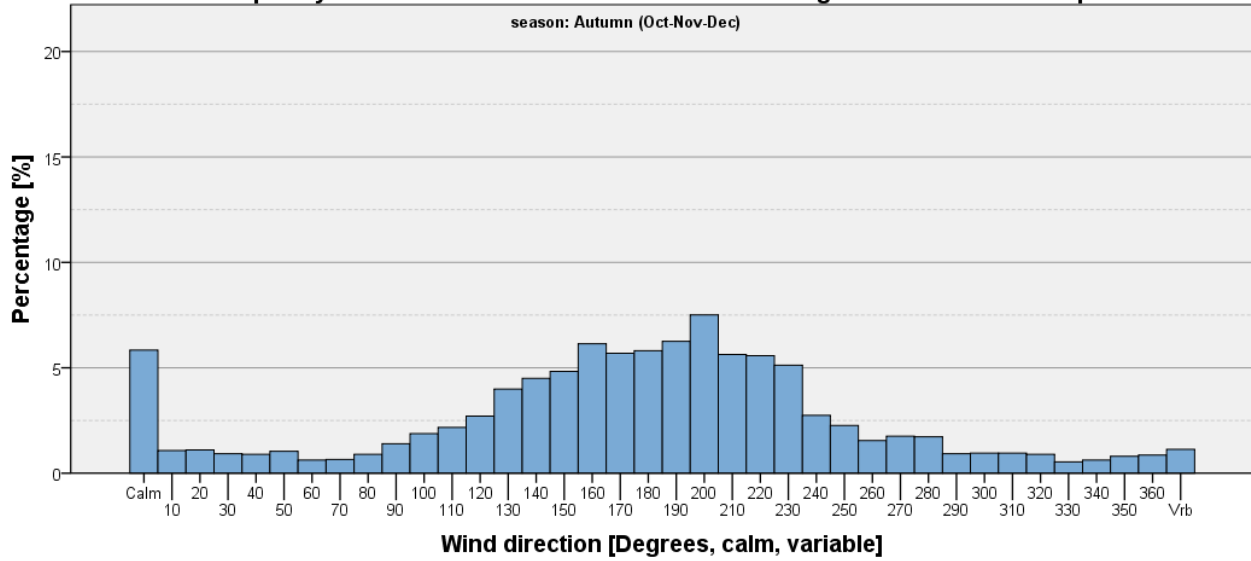


Figure 30

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 13: EKAH - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	16.35	5.10	3.99	15.40	10.18
All other observations	83.65	94.90	96.01	84.60	89.82
Total	100	100	100	100	100

EKAH. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

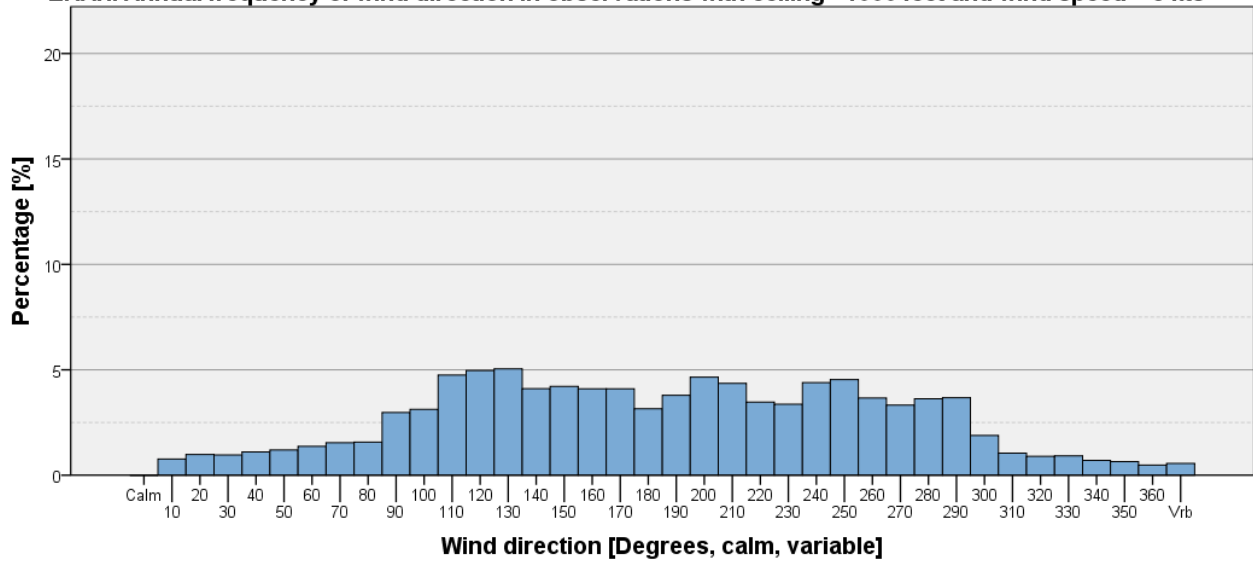


Figure 31

EKAH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

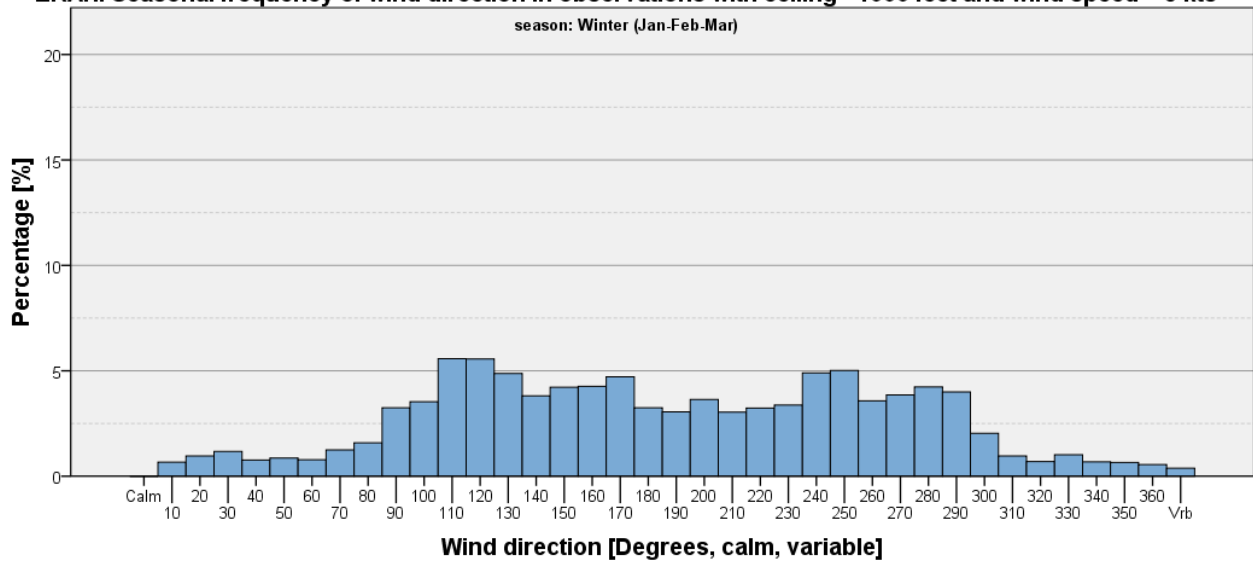


Figure 32

EKAH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

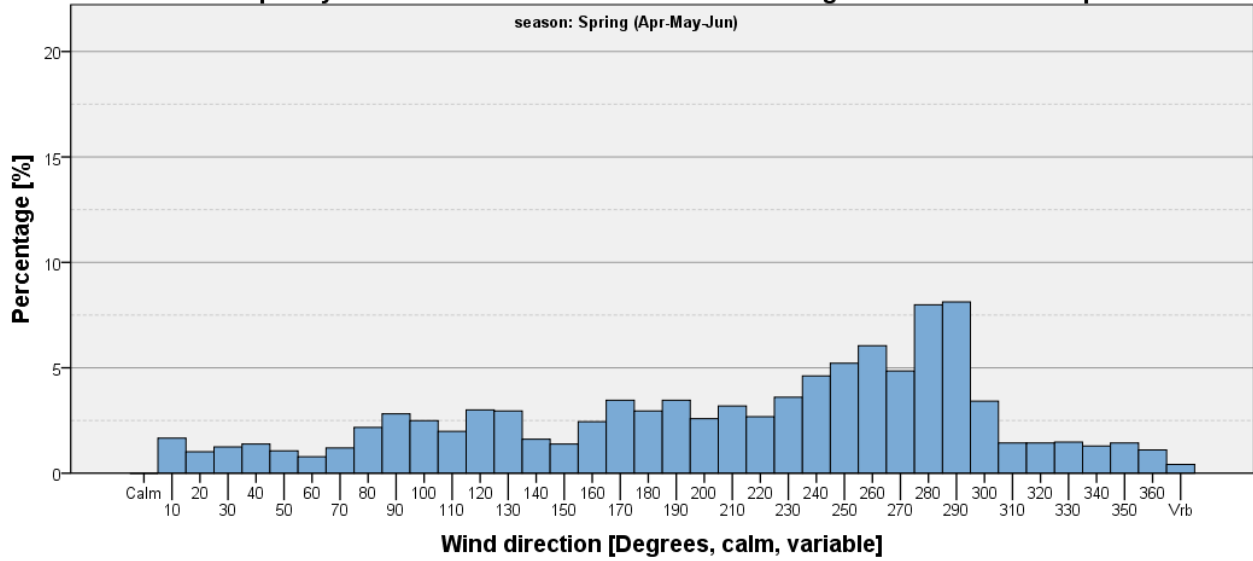


Figure 33

EKAH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

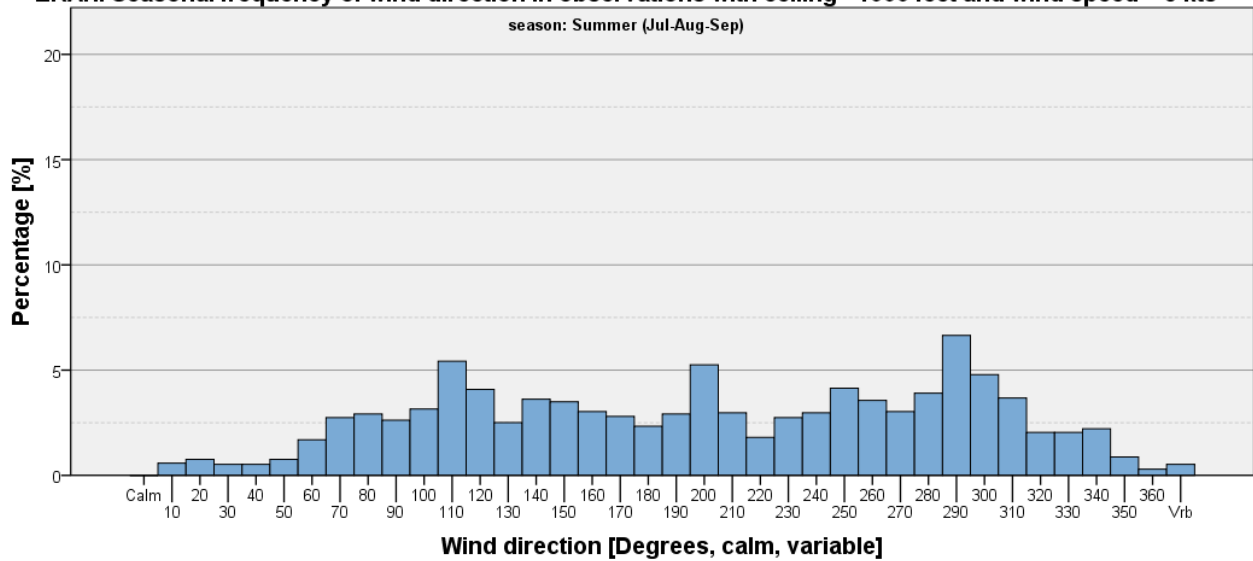


Figure 34

EKAH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

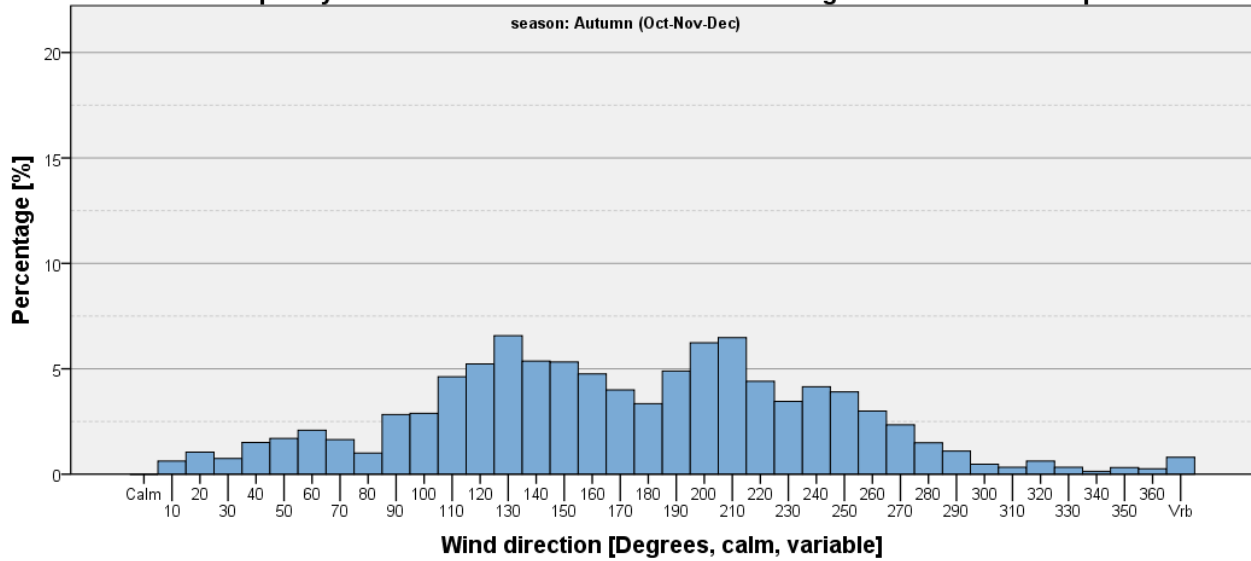


Figure 35

Ceiling < 500 feet

Table 14: EKAH - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	12.85	3.40	3.37	10.41	7.49
All other observations	87.15	96.60	96.63	89.59	92.51
Total	100	100	100	100	100

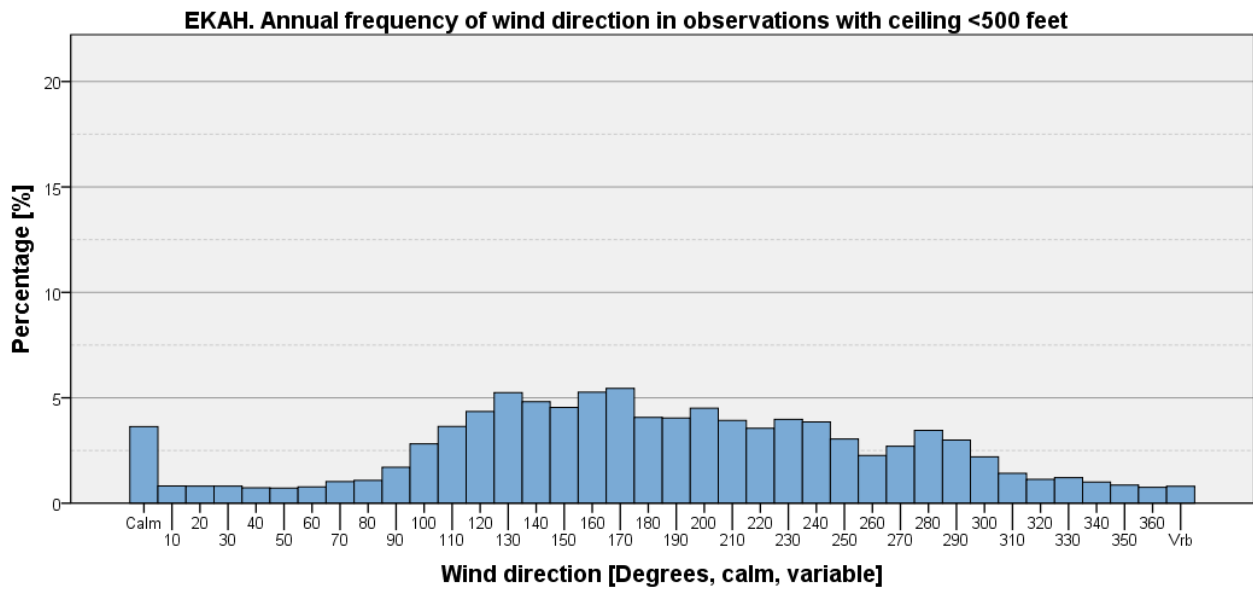


Figure 36

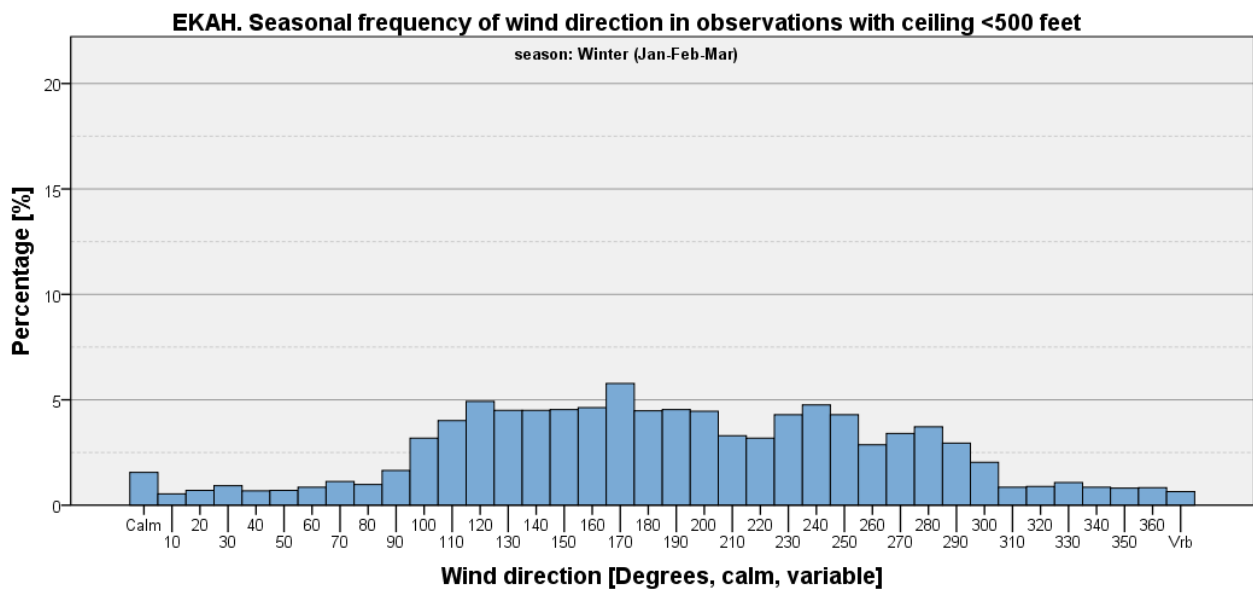


Figure 37

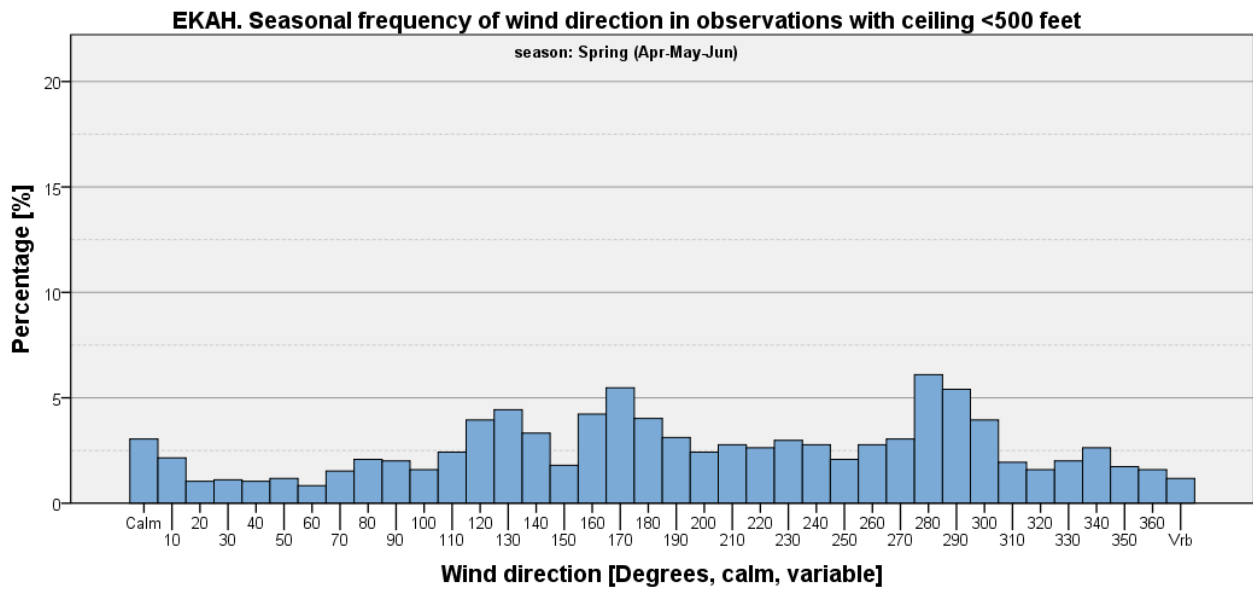


Figure 38

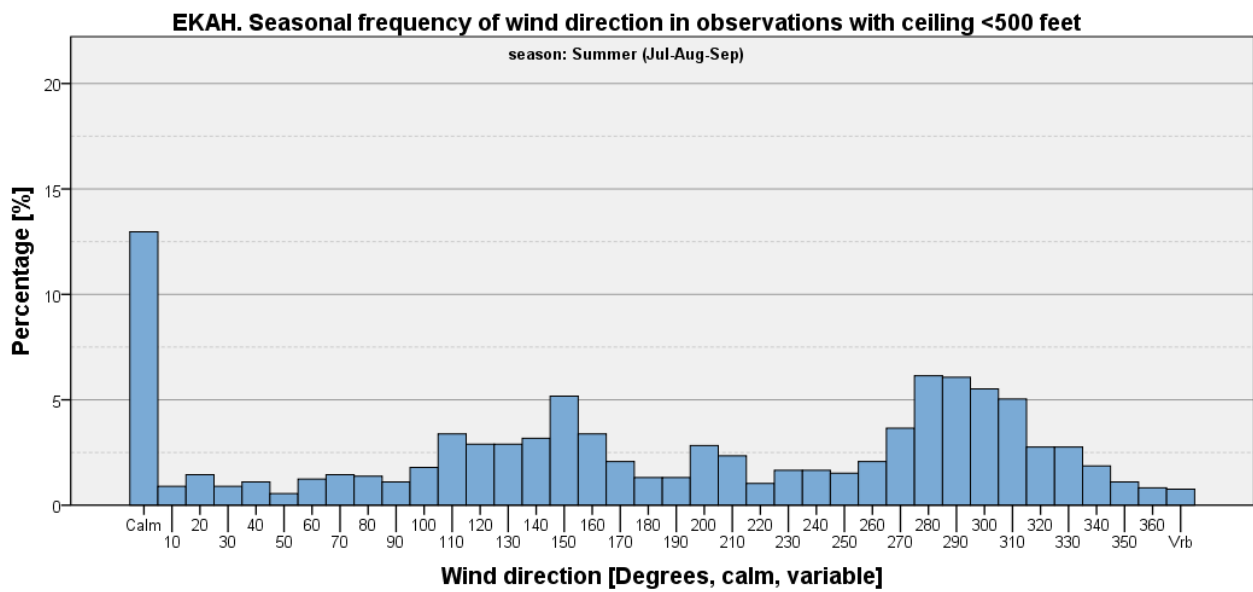


Figure 39

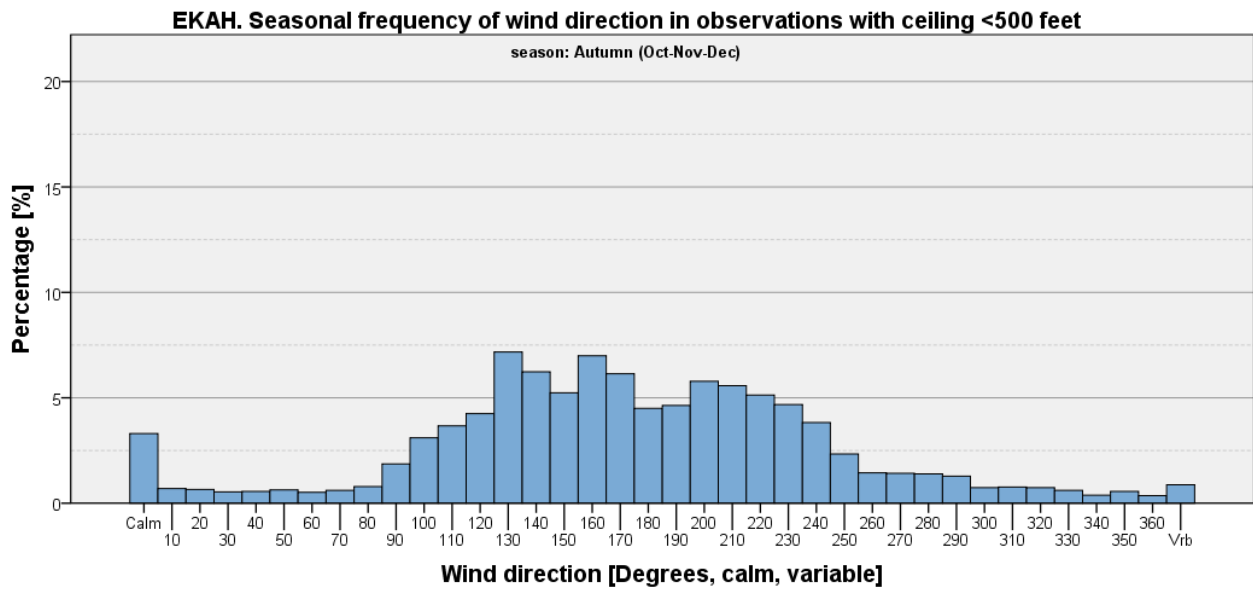


Figure 40

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 15: EKAH - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	6.05	1.56	2.16	4.89	3.65
All other Observations	93.95	98.44	97.84	95.11	96.35
Total	100	100	100	100	100

EKAH. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

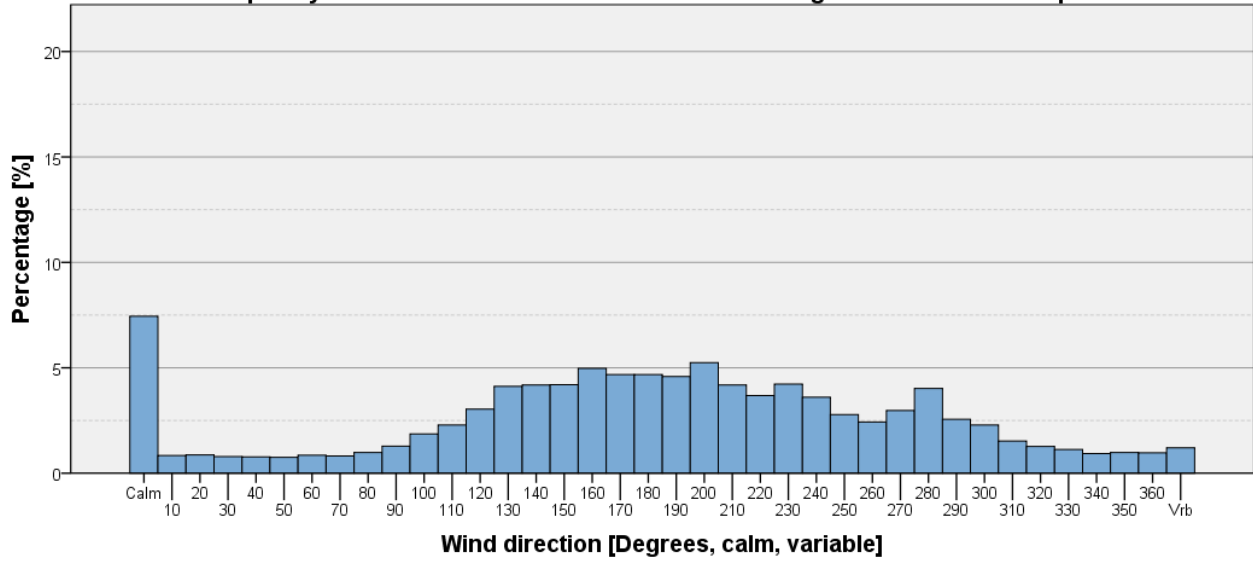


Figure 41

EKAH. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

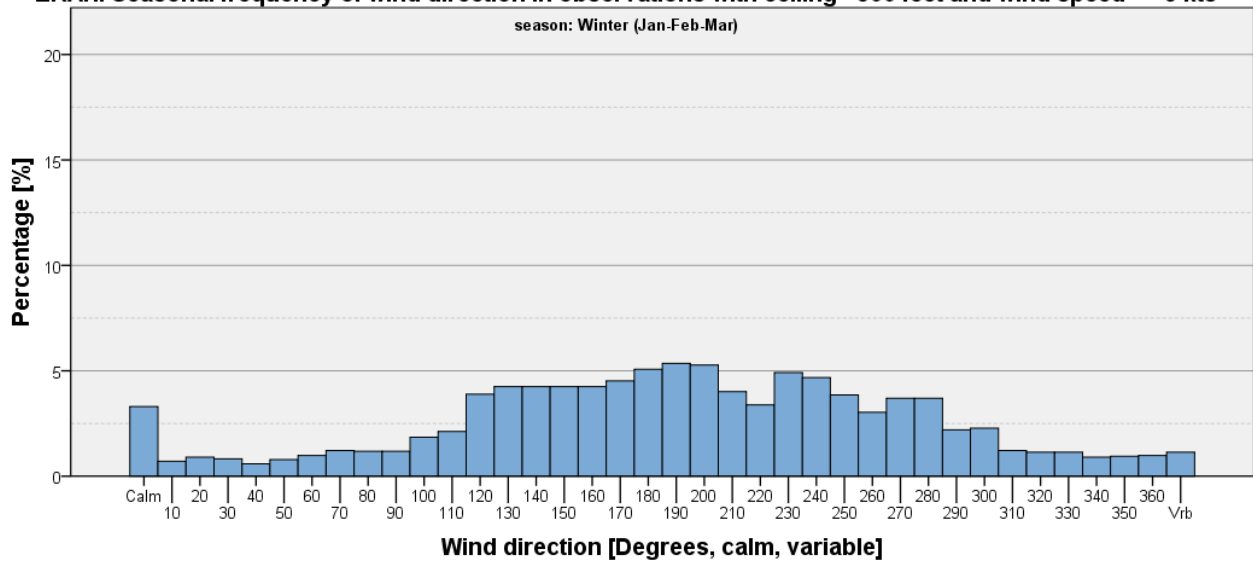


Figure 42

EKAH. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

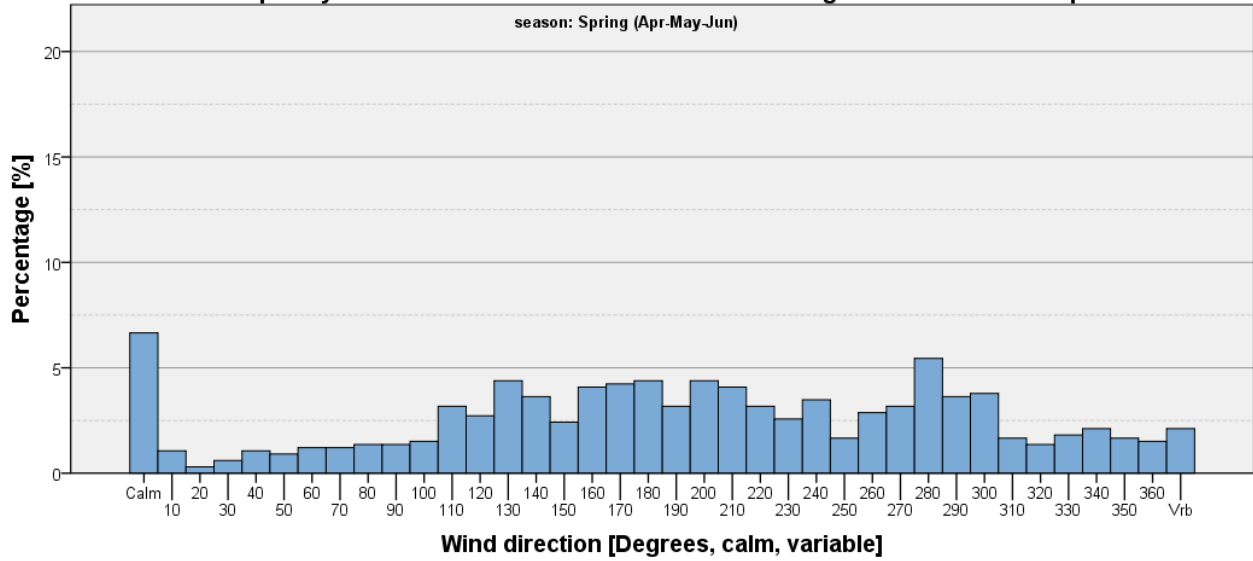


Figure 43

EKAH. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

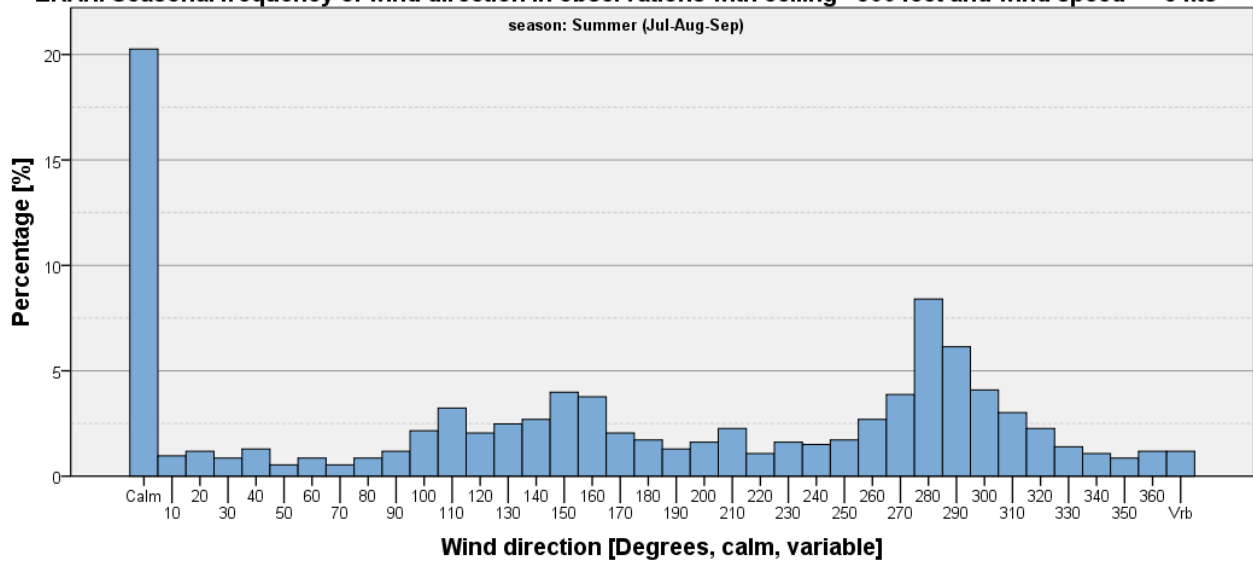


Figure 44

EKAH. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

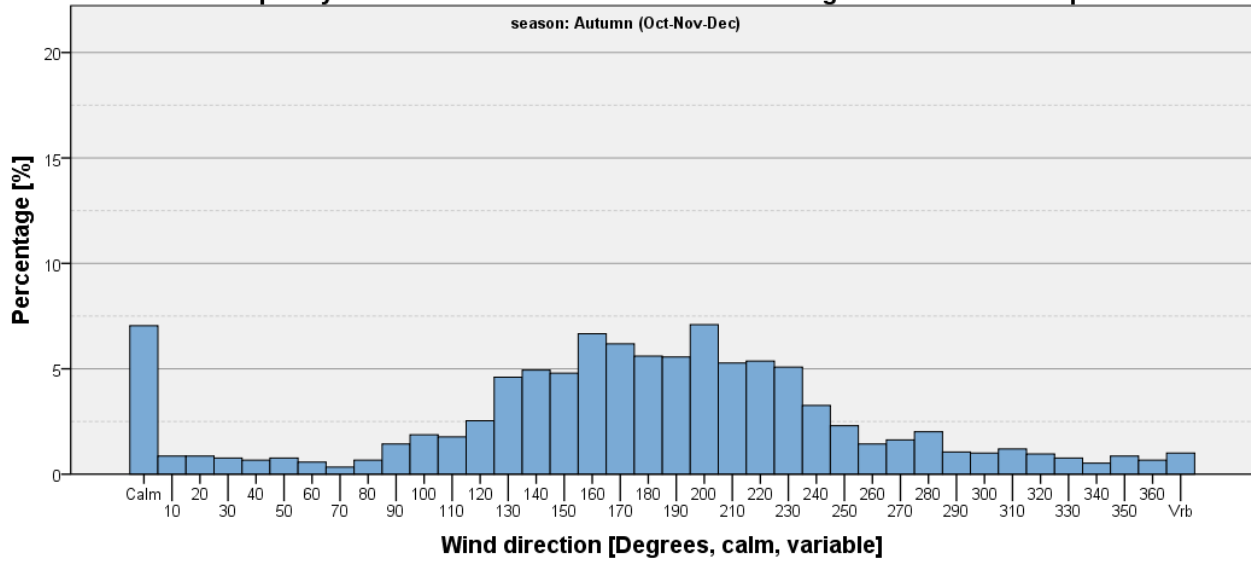


Figure 45

Ceiling < 500 feet and Wind Speed > 5 kts

Table 16: EKAH - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	6.80	1.84	1.21	5.52	3.83
All other observations	93.20	98.16	98.79	94.48	96.17
Total	100	100	100	100	100

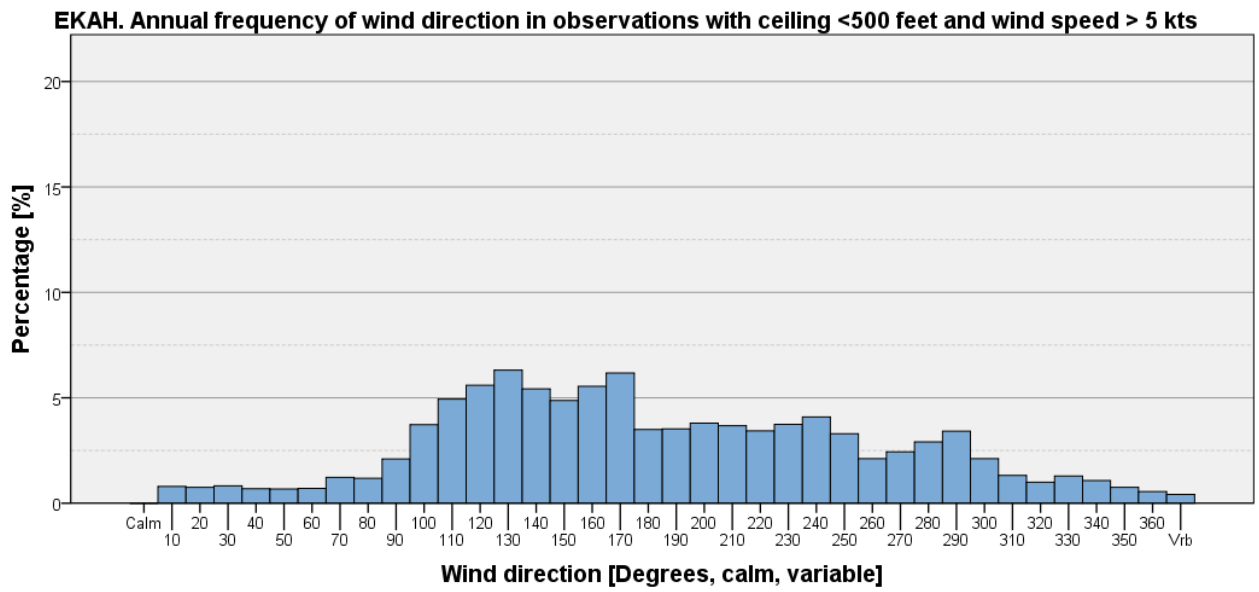


Figure 46

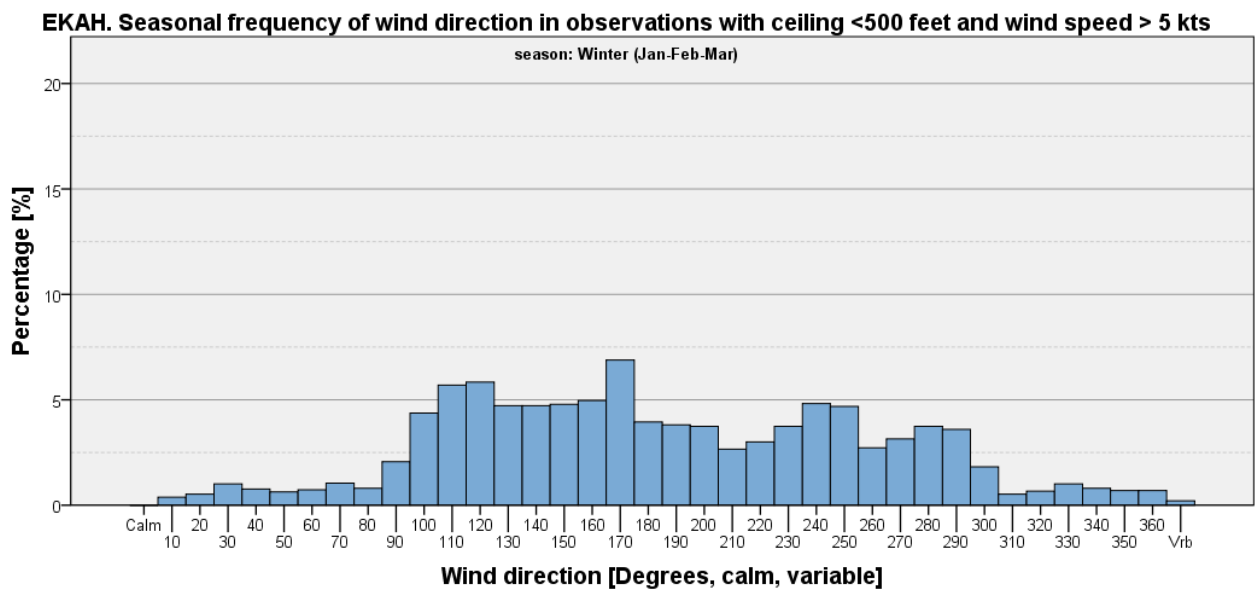


Figure 47

EKAH. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

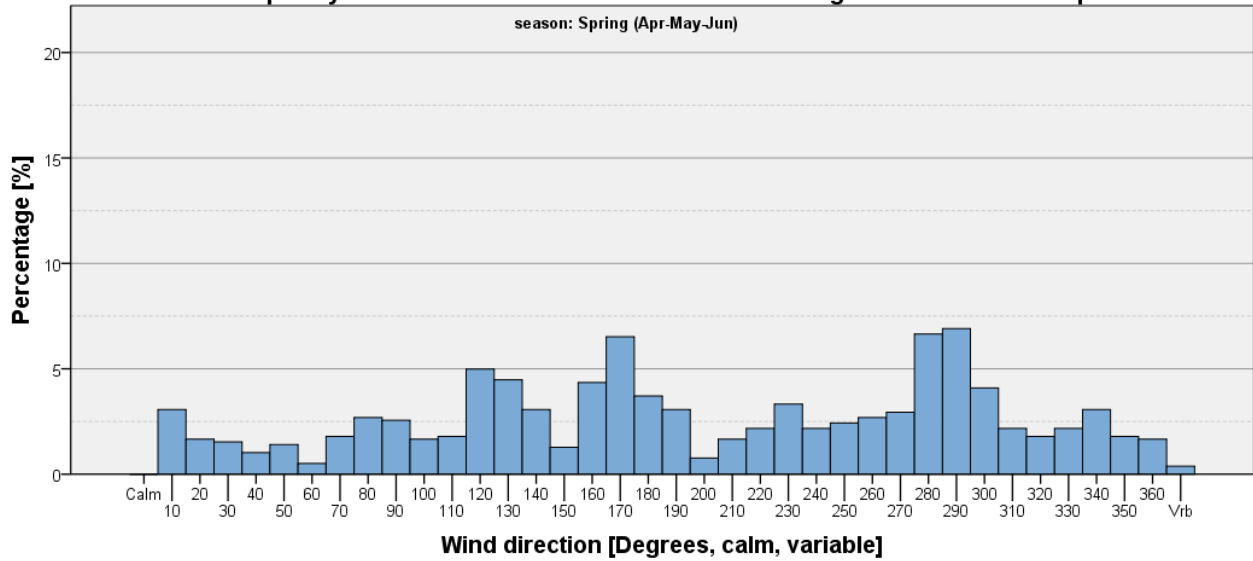


Figure 48

EKAH. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

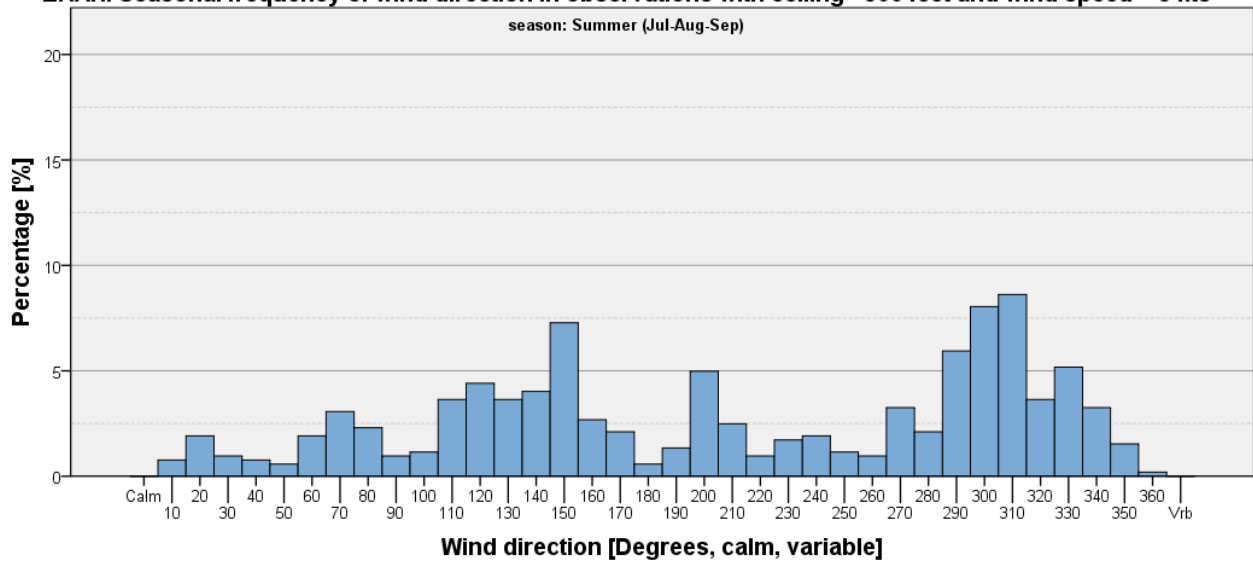


Figure 49

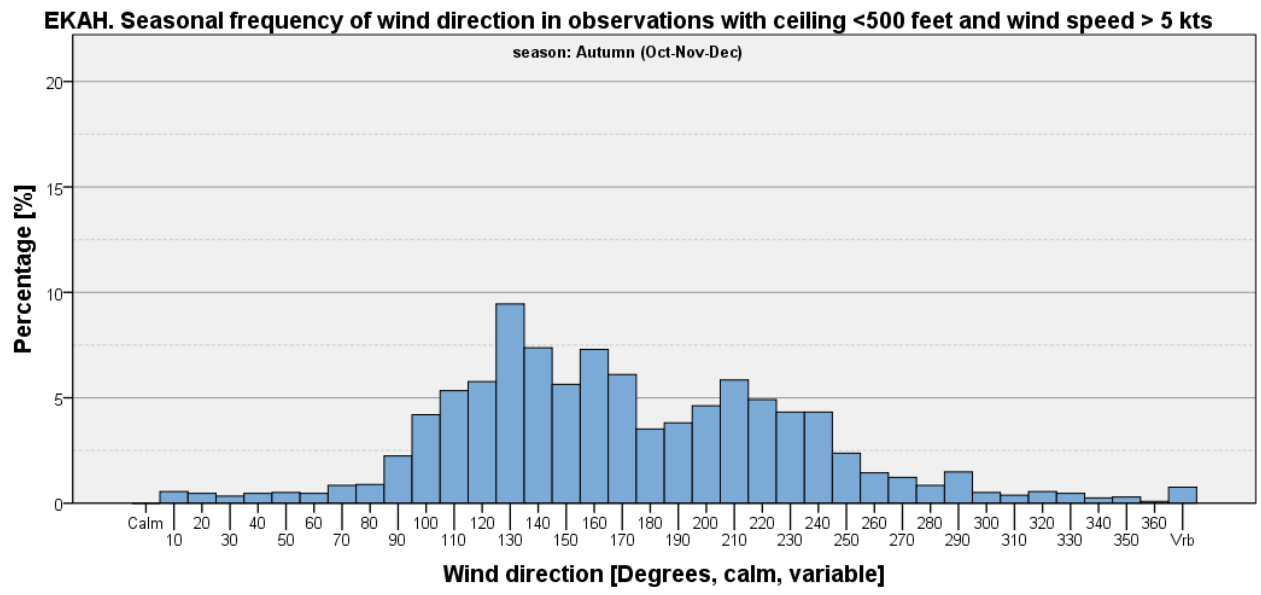
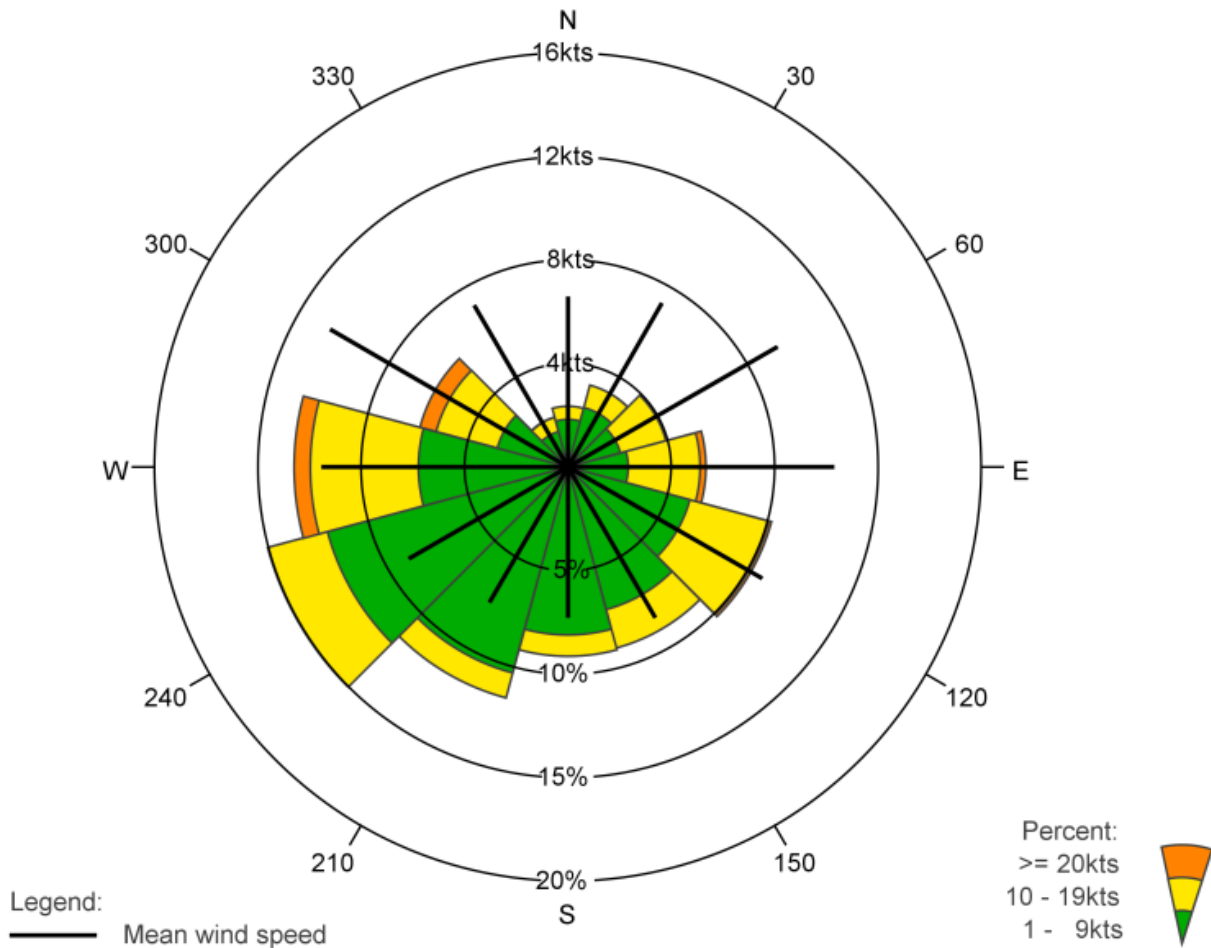


Figure 50

Wind Roses

EKAH: AARHUS LUFTHAVN (TIRSTRUP), AUTUMN & WINTER

01-01-2009 - 31-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	2.9	4.1	5.0	6.7	10.2	9.0	9.1	11.6	15.0	13.2	7.4	2.5	96.8
% 1 - 9kts	2.3	3.0	2.6	2.9	6.1	7.1	8.1	10.3	12.0	7.2	3.5	1.8	67.0
% 10 - 19kts	0.6	1.1	2.3	3.5	4.0	1.9	1.0	1.3	3.0	5.2	3.1	0.7	27.6
% >= 20kts	0.0	0.0	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.8	0.8	0.0	2.2
Mean wind speed	6.6	7.3	9.4	10.3	8.7	6.8	5.9	6.0	7.1	9.6	10.6	7.2	7.9
Max wind speed	21.0	26.0	26.0	29.0	29.0	18.0	19.0	19.0	26.0	51.0	45.0	26.0	51.0

Number of observations = 84757

Source: DMI

Calm defined as wind speed = 0kts

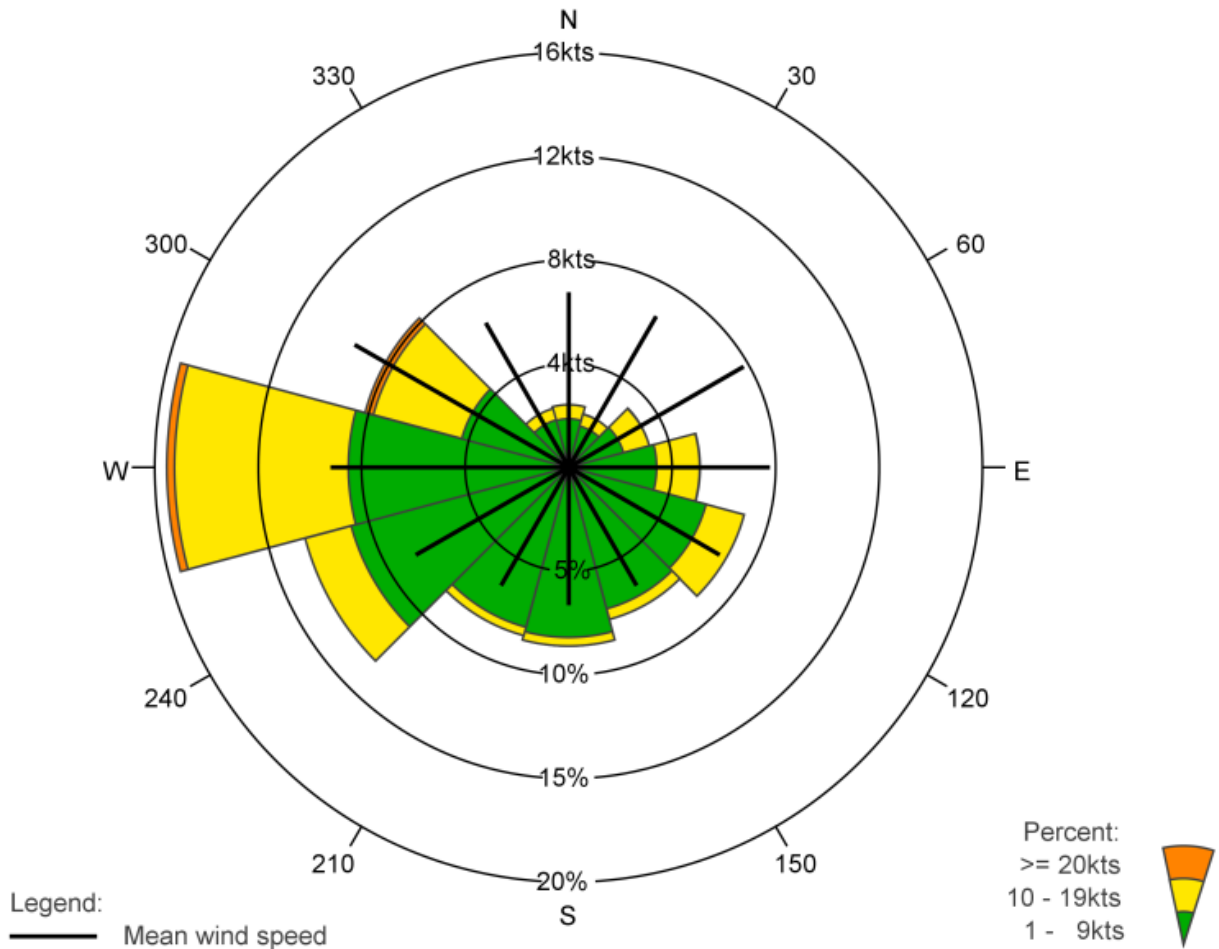
Number of observations with calm/varying wind direction: 2685=3.2%

Observations with calm/varying wind direction are not used in the statistics

Figure 51

EKAH: AARHUS LUFTHAVN (TIRSTRUP), SPRING & SUMMER

01-01-2009 - 31-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.0	2.7	4.0	6.3	8.8	7.6	8.6	8.4	13.2	19.4	10.2	2.9	95.2
% 1 - 9kts	2.3	2.1	2.7	4.2	6.9	7.1	8.2	8.0	10.9	10.6	5.3	2.4	70.7
% 10 - 19kts	0.7	0.6	1.3	2.1	1.9	0.5	0.4	0.4	2.3	8.4	4.4	0.6	23.6
% >= 20kts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.8
Mean wind speed	6.7	6.7	7.8	7.8	6.7	5.2	5.3	5.3	6.8	9.2	9.5	6.4	7.3
Max wind speed	18.0	25.0	23.0	23.0	19.0	16.0	14.0	17.0	22.0	30.0	36.0	21.0	36.0

Number of observations = 85425

Source: DMI

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 4125=4.8%

Observations with calm/varying wind direction are not used in the statistics

Figure 52

Availability

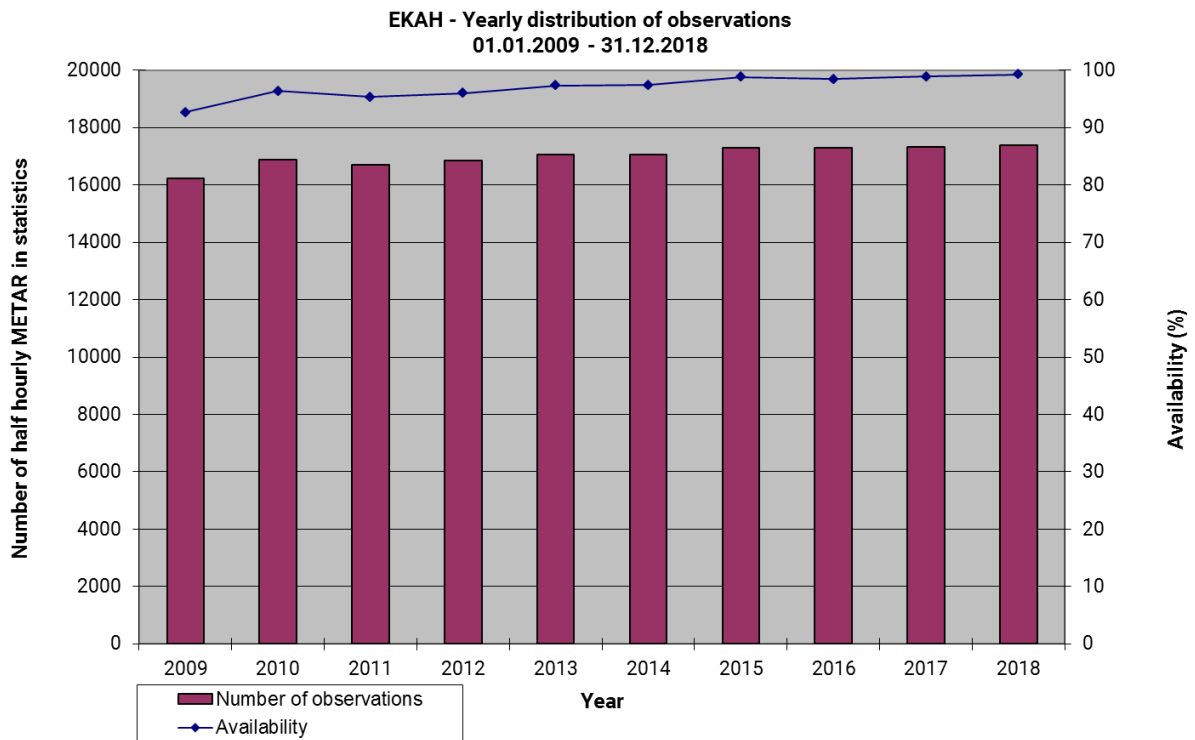


Figure 53

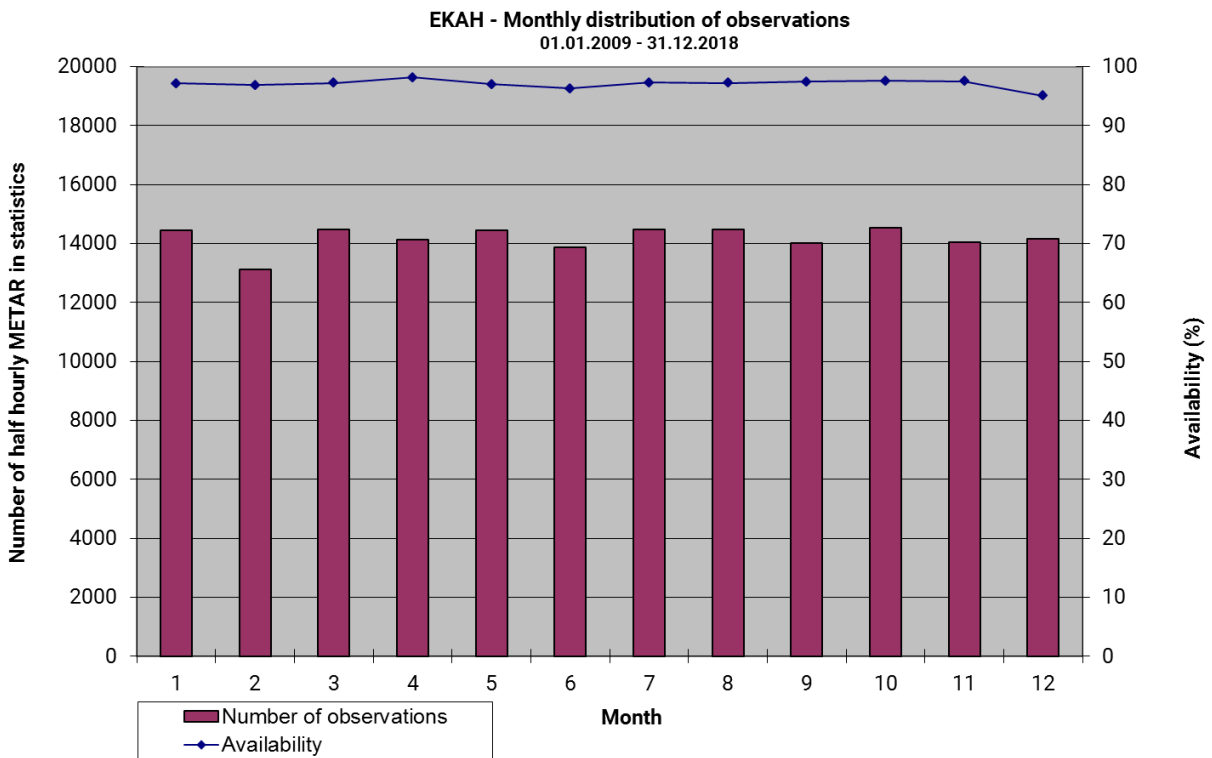


Figure 54

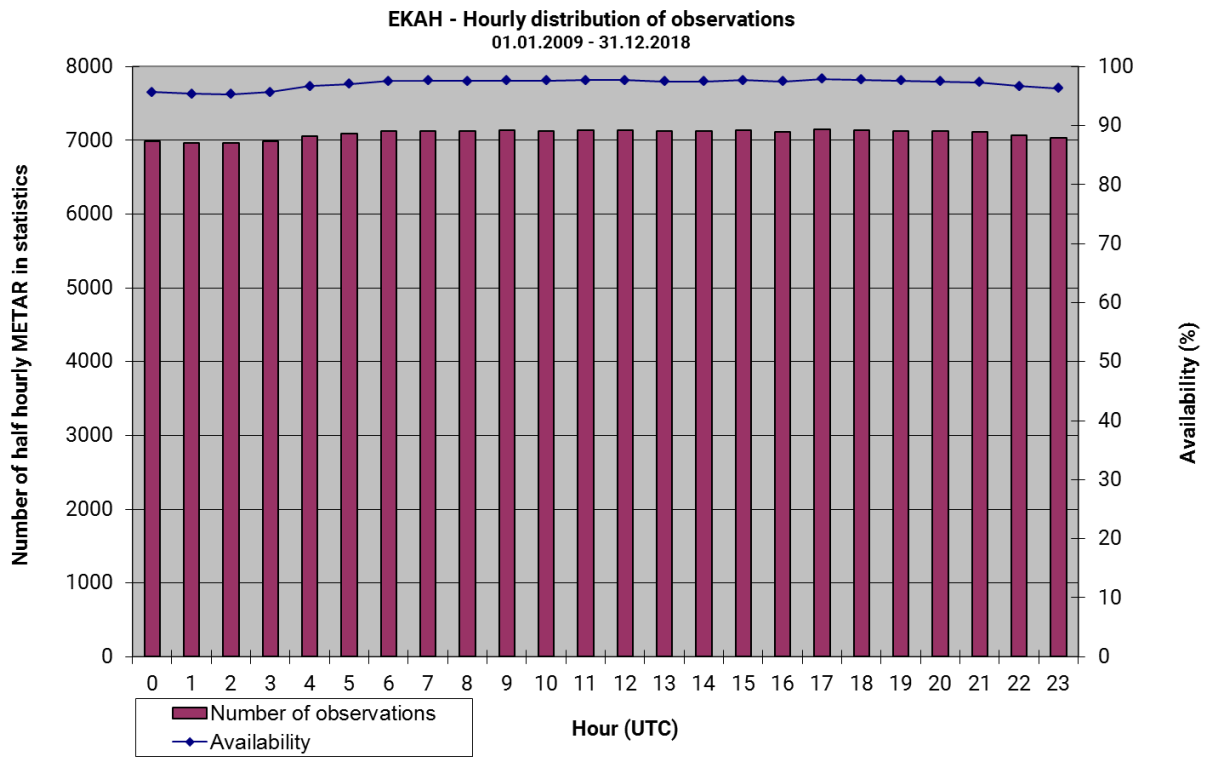


Figure 55

Table 17: EKAH. Average number of half hourly observations in statistics, 01.01.2009 – 31.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	1.7	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0
1	1.7	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0
2	1.8	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0
3	1.8	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0
4	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0
5	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0
6	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
7	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
8	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
10	1.9	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0
11	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
12	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
13	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
14	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0
15	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
16	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0
17	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
18	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
19	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
20	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
21	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
22	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
23	1.8	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0

EKBI Billund Airport

Airport location: 55,733°N 9,167°E Elevation: 75 m above MSL.

EKBI observations in statistics: 170,841 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 97.5 %. For more information, please go to the 'Availability' section.

EKBI METAR are both AUTO METAR and manual METAR.

Cross Tables Visibility – Ceiling

Table 18: EKBI Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 170,841	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.14	0.18	0.20	0.20	0.20	0.033	0.23
<350m	0	0.60	0.74	0.83	0.86	0.86	0.36	1.22
<600m	0	0.93	1.20	1.31	1.35	1.36	0.74	2.10
<800 m	0	1.07	1.55	1.69	1.73	1.74	0.95	2.69
<1.5 km	0	1.41	2.27	2.47	2.55	2.58	1.29	3.87
<3.0 km	0	2.23	4.91	5.79	6.03	6.17	2.29	8.47
< 5.0 km	0	2.53	7.72	10.80	11.55	11.90	4.01	15.91
< 8.0 km	0	2.61	9.43	16.20	18.41	19.30	7.00	26.30
>= 8.0 km or CAVOK	0	0.028	0.98	7.05	15.21	22.14	51.56	73.70
Total	0	2.64	10.41	23.26	33.62	41.44	58.56	100

Table 19: EKBI - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,189	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.17	0.36	0.36	0.36	0.36	0.014	0.37
<350m	0.0024	0.74	2.56	2.56	2.56	2.56	0.14	2.71
<600m	0.0024	1.05	4.08	4.11	4.11	4.11	0.28	4.39
<800 m	0.0024	1.19	5.02	5.07	5.07	5.08	0.37	5.45
<1.5 km	0.0024	1.42	7.46	7.74	7.82	7.87	0.67	8.54
<3.0 km	0.0047	1.47	11.75	13.66	14.03	14.25	1.66	15.91
< 5.0 km	0.0047	1.47	14.47	19.63	20.63	21.11	3.65	24.77
< 8.0 km	0.0047	1.48	15.91	25.44	28.01	28.97	7.17	36.14
>= 8.0 km or CAVOK	0.0024	0.0024	0.60	6.92	14.24	19.47	44.39	63.86
Total	0.0071	1.48	16.52	32.36	42.25	48.44	51.56	100

Table 20: EKBI - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,537	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.10	0.17	0.17	0.17	0.18	0.026	0.20
<350m	0	0.24	0.65	0.66	0.66	0.66	0.16	0.83
<600m	0	0.32	0.89	0.90	0.90	0.91	0.30	1.20
<800 m	0	0.35	1.04	1.05	1.05	1.06	0.38	1.44
<1.5 km	0	0.42	1.55	1.57	1.58	1.59	0.58	2.17
<3.0 km	0	0.43	2.76	3.23	3.29	3.34	1.14	4.48
< 5.0 km	0	0.43	3.74	5.28	5.48	5.61	2.27	7.88
< 8.0 km	0	0.44	4.24	7.43	8.02	8.33	4.49	12.82
>= 8.0 km or CAVOK	0	0	0.31	3.95	8.24	11.94	75.25	87.18
Total	0	0.44	4.55	11.38	16.26	20.27	79.73	100

Table 21: EKBI - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,032	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.049	0.13	0.13	0.13	0.13	0.072	0.21
<350m	0	0.18	0.55	0.56	0.56	0.57	0.45	1.02
<600m	0	0.23	0.74	0.75	0.75	0.76	0.72	1.48
<800 m	0.0023	0.25	0.88	0.89	0.89	0.90	0.92	1.82
<1.5 km	0.0023	0.30	1.10	1.13	1.14	1.15	1.36	2.51
<3.0 km	0.0023	0.32	1.73	2.07	2.13	2.17	2.00	4.16
< 5.0 km	0.0023	0.32	2.56	3.83	4.10	4.24	3.34	7.58
< 8.0 km	0.0023	0.33	2.98	5.76	6.42	6.80	5.86	12.66
>= 8.0 km or CAVOK	0	0	0.35	3.42	6.47	9.19	78.15	87.34
Total	0.0023	0.33	3.33	9.18	12.89	15.99	84.01	100

Table 22: EKBI - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,083	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.0	0.10	0.20	0.21	0.21	0.21	0.035	0.25
<350m	0.0	0.35	1.51	1.52	1.52	1.52	0.23	1.76
<600m	0.0	0.50	2.44	2.46	2.47	2.47	0.41	2.88
<800 m	0.0	0.58	3.02	3.05	3.06	3.06	0.55	3.61
<1.5 km	0.0	0.69	4.59	4.75	4.79	4.81	0.89	5.71
<3.0 km	0.0	0.73	8.82	10.30	10.51	10.61	1.87	12.47
< 5.0 km	0.0	0.74	11.53	17.04	17.80	18.12	3.66	21.79
< 8.0 km	0.0	0.74	12.62	23.19	25.38	26.21	7.10	33.31
>= 8.0 km or CAVOK	0.0046	0.007	0.57	6.76	13.61	17.98	48.71	66.69
Total	0.0046	0.75	13.19	29.95	38.99	44.19	55.81	100

Wind Direction Histograms

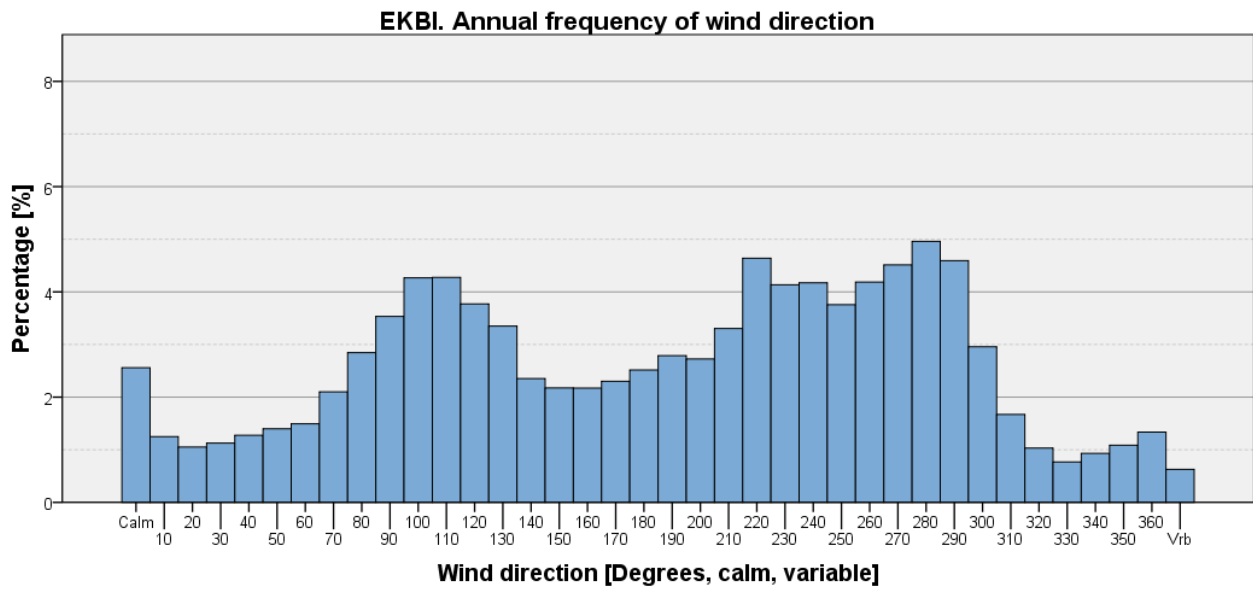


Figure 56

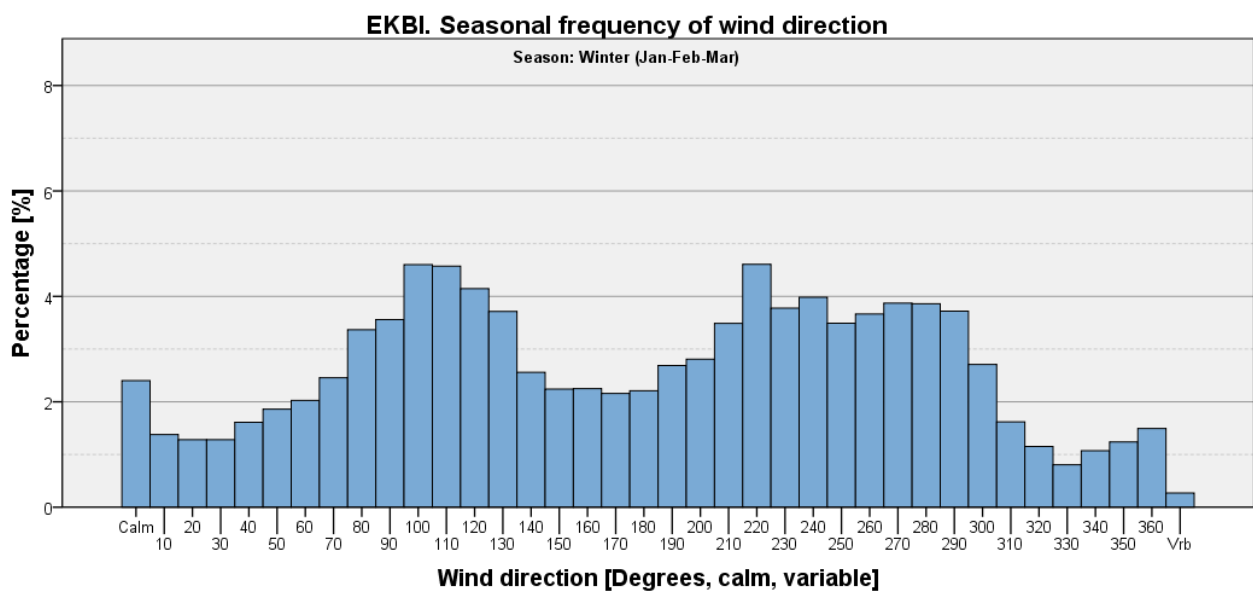


Figure 57

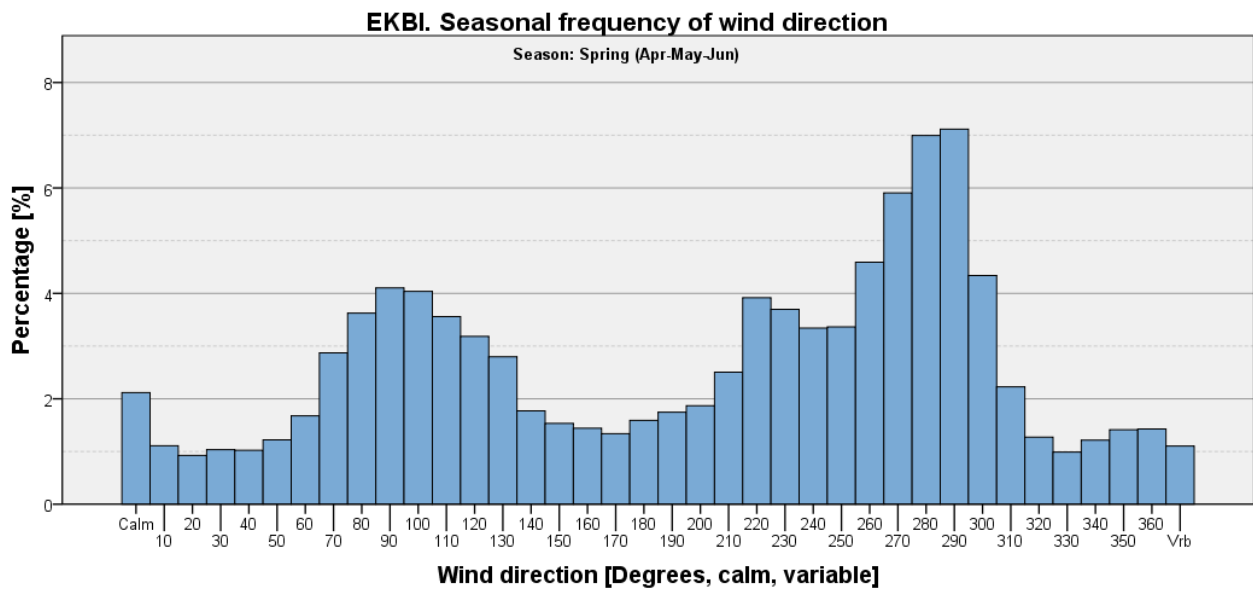


Figure 58

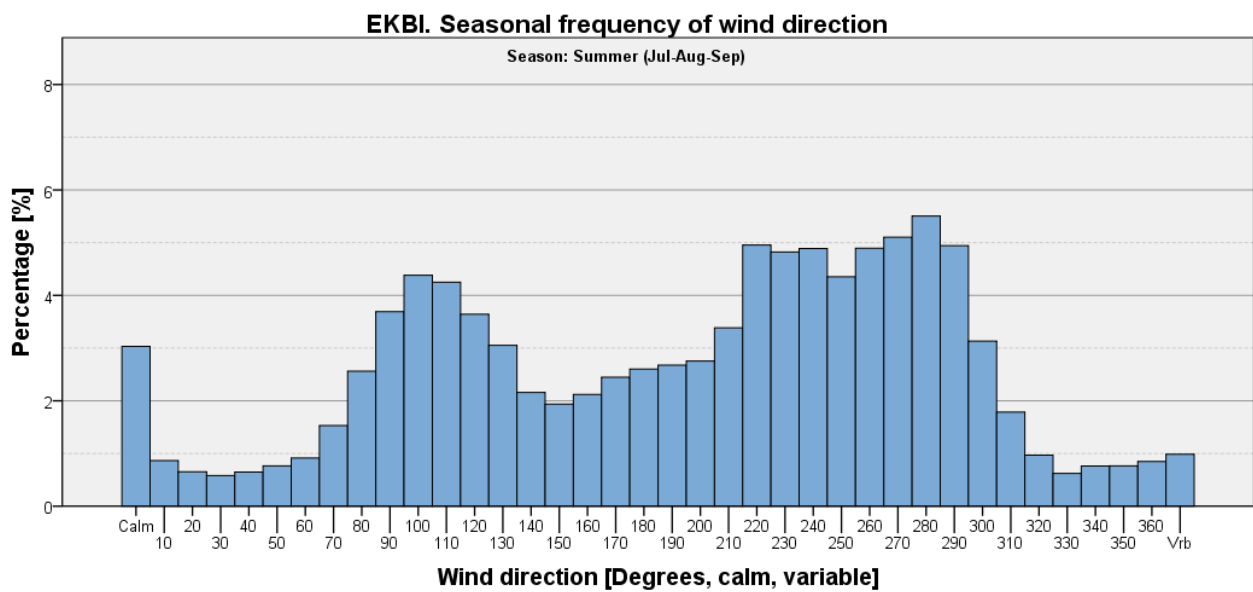


Figure 59

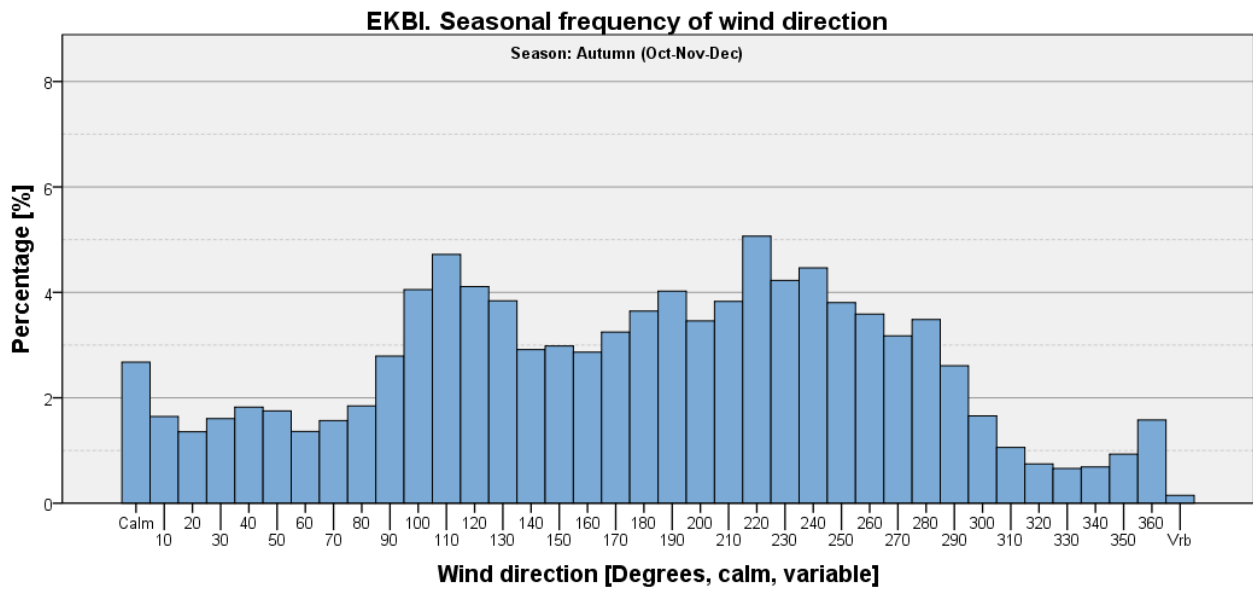


Figure 60

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 23: EKBI - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	5.45	1.44	1.82	3.61	3.07
All other observations	94.55	98.56	98.18	96.39	96.93
Total	100	100	100	100	100

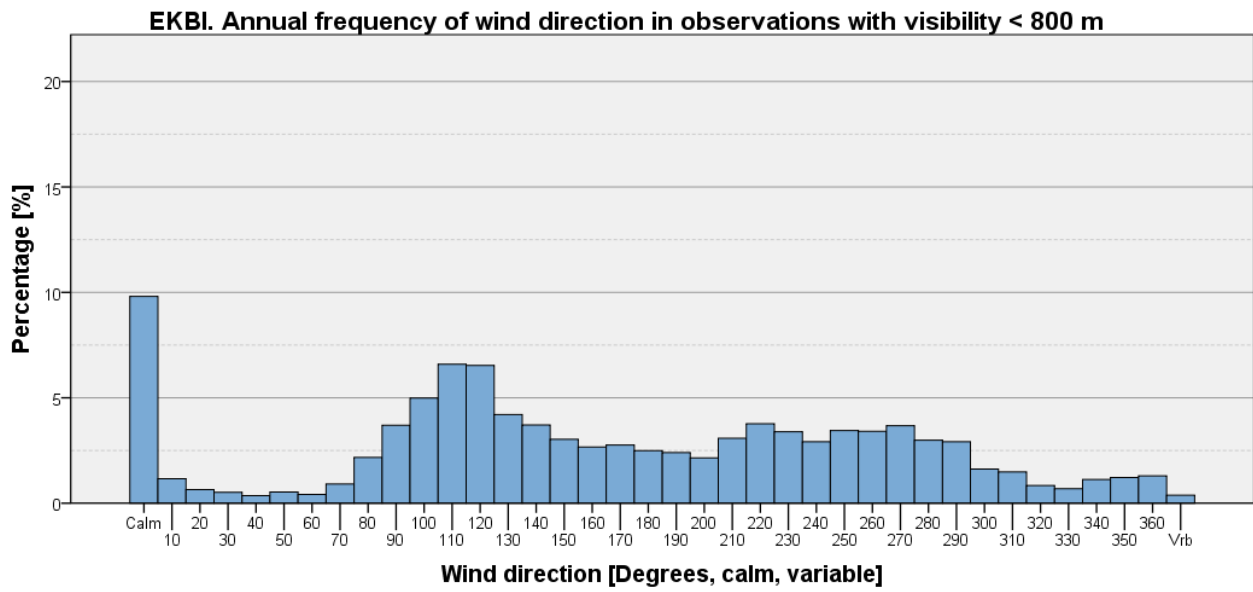


Figure 61

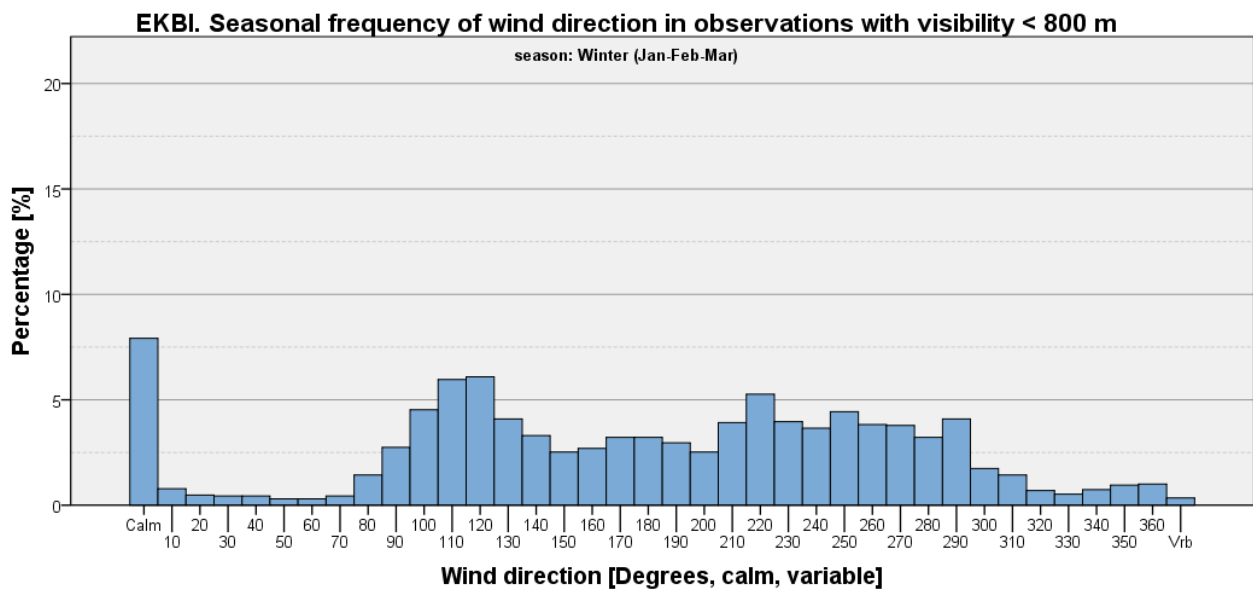


Figure 62

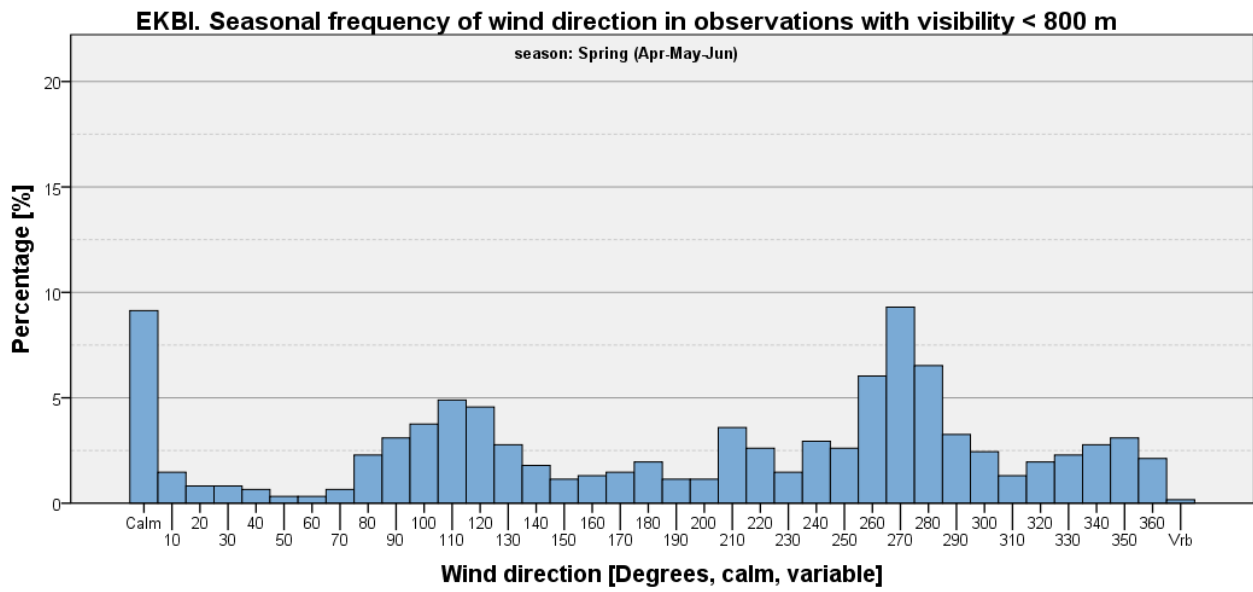


Figure 63

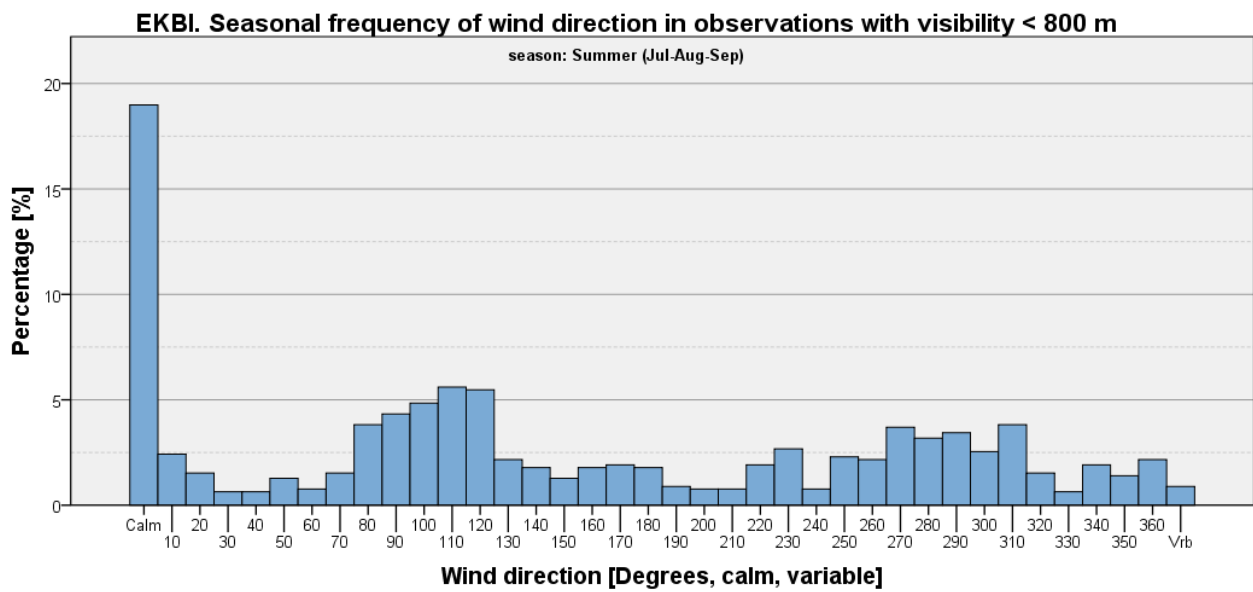


Figure 64

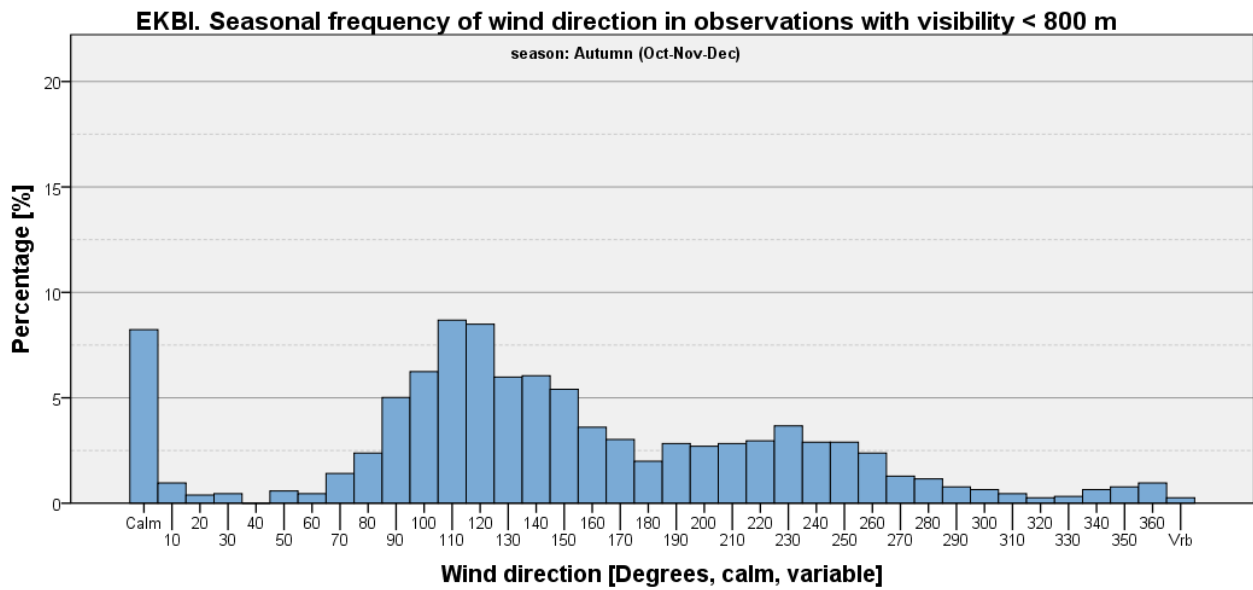


Figure 65

Visibility < 800 m and Wind Speed <= 5 kts

Table 24: EKBI - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	3.53	1.22	1.72	2.74	2.30
All other observations	96.47	98.78	98.28	97.26	97.70
Total	100	100	100	100	100

EKBI. Annual frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

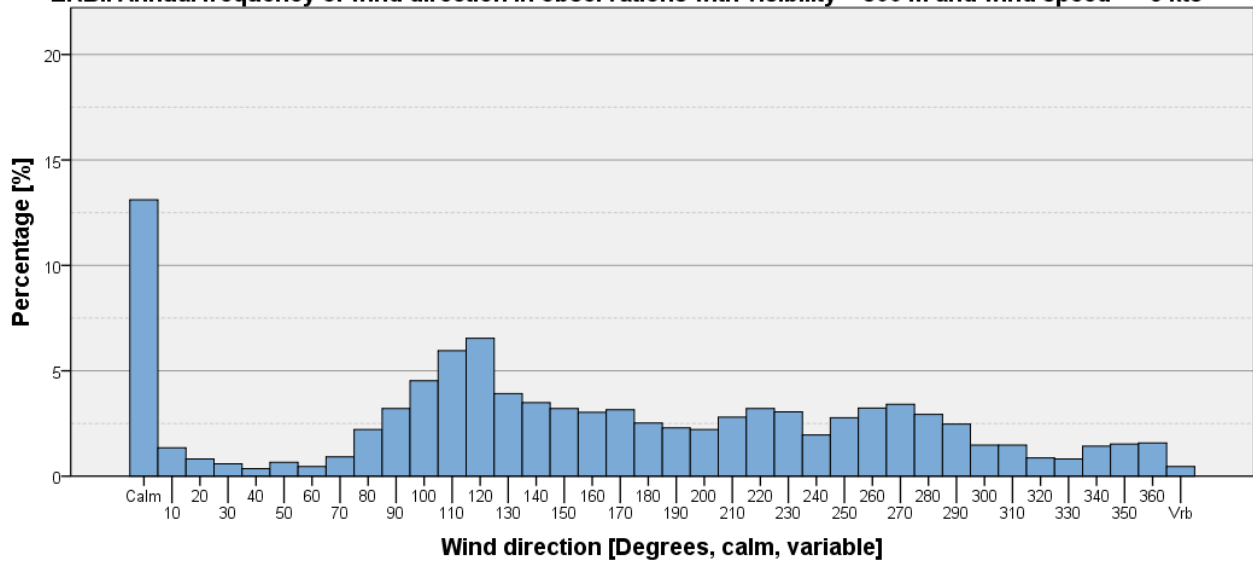


Figure 66

EKBI. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

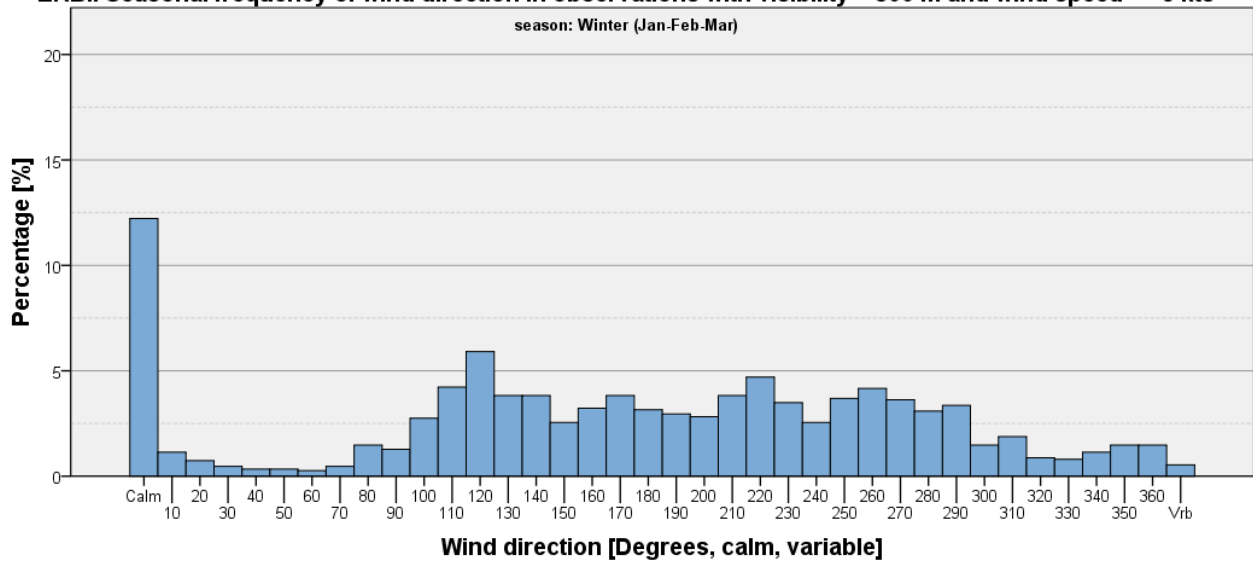


Figure 67

EKBI. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

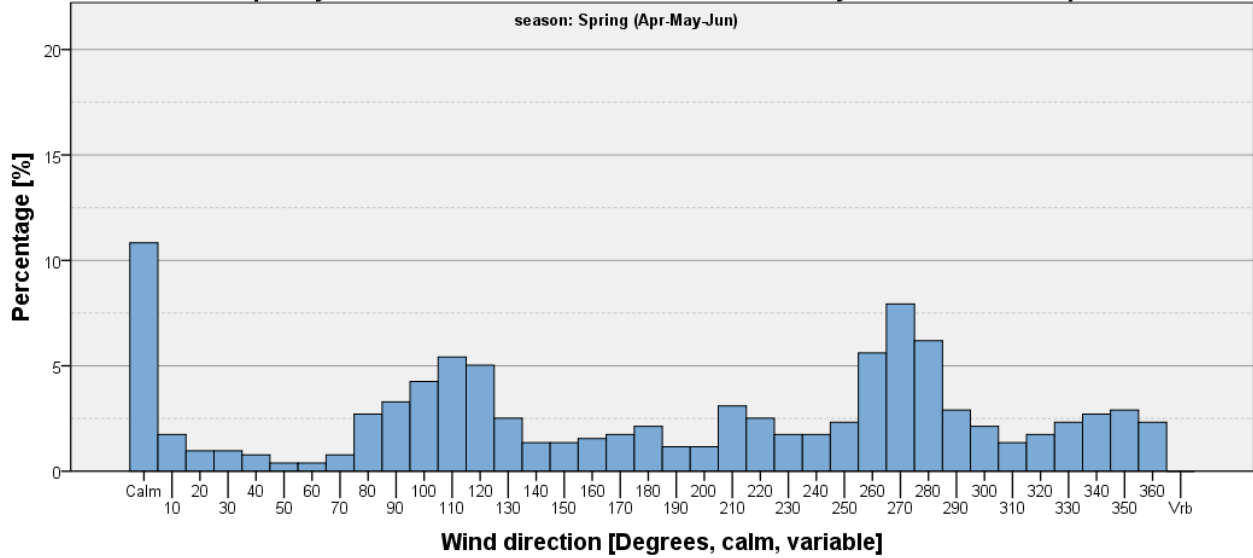


Figure 68

EKBI. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

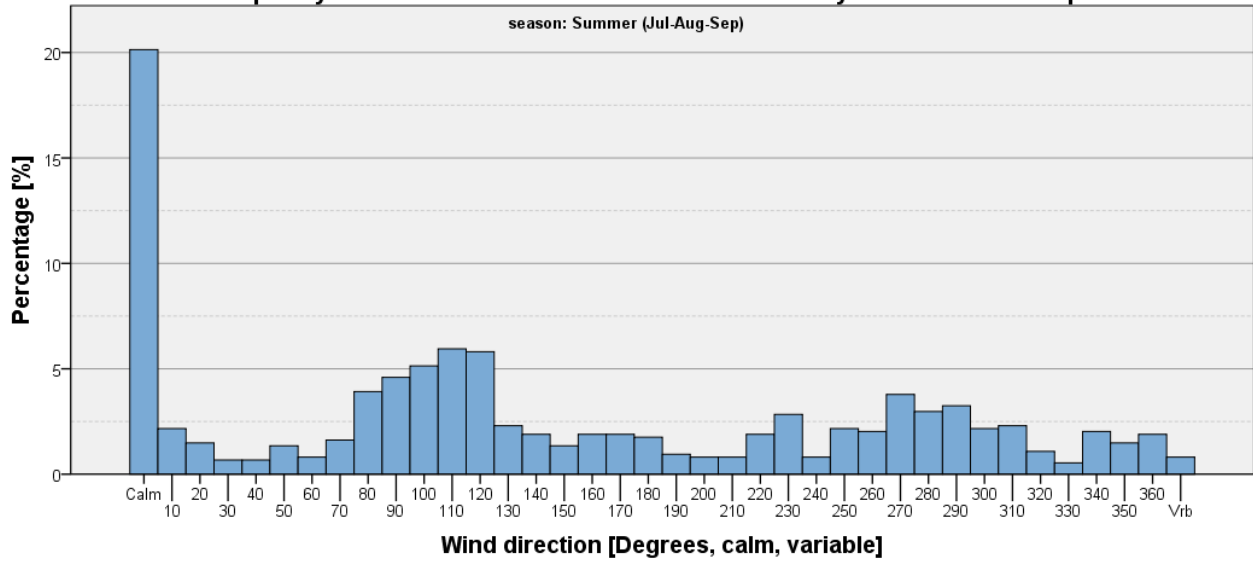


Figure 69

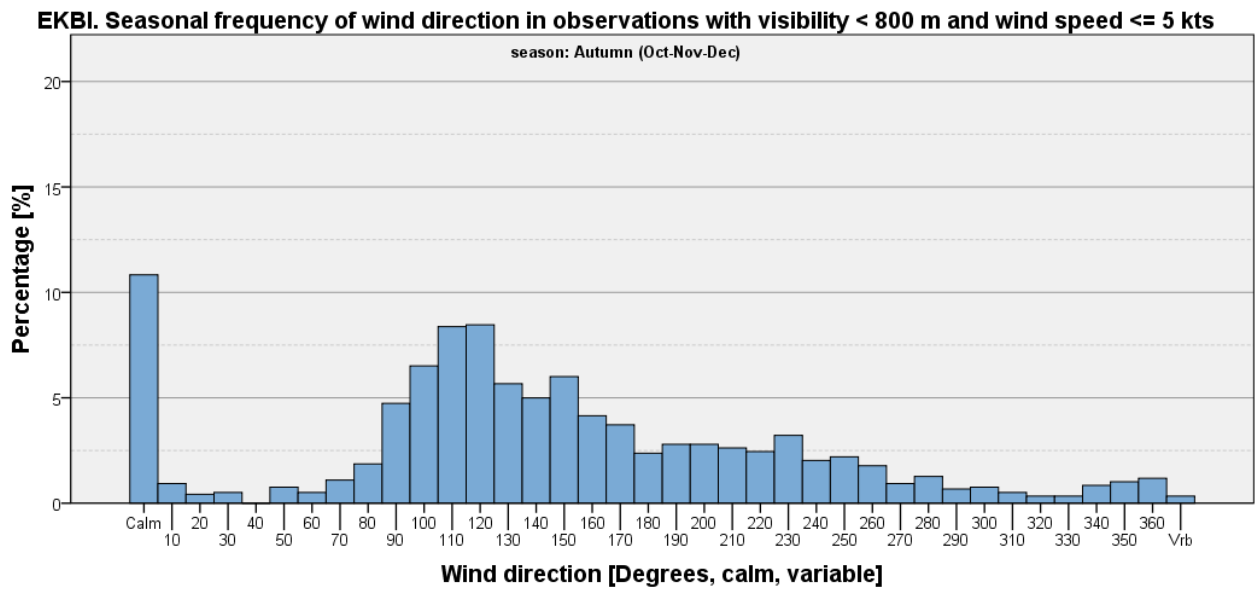


Figure 70

Visibility < 800 m and Wind Speed > 5 kts

Table 25: EKBI - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	1.92	0.23	0.10	0.87	0.77
All other observations	98.08	99.77	99.90	99.13	99.23
Total	100	100	100	100	100

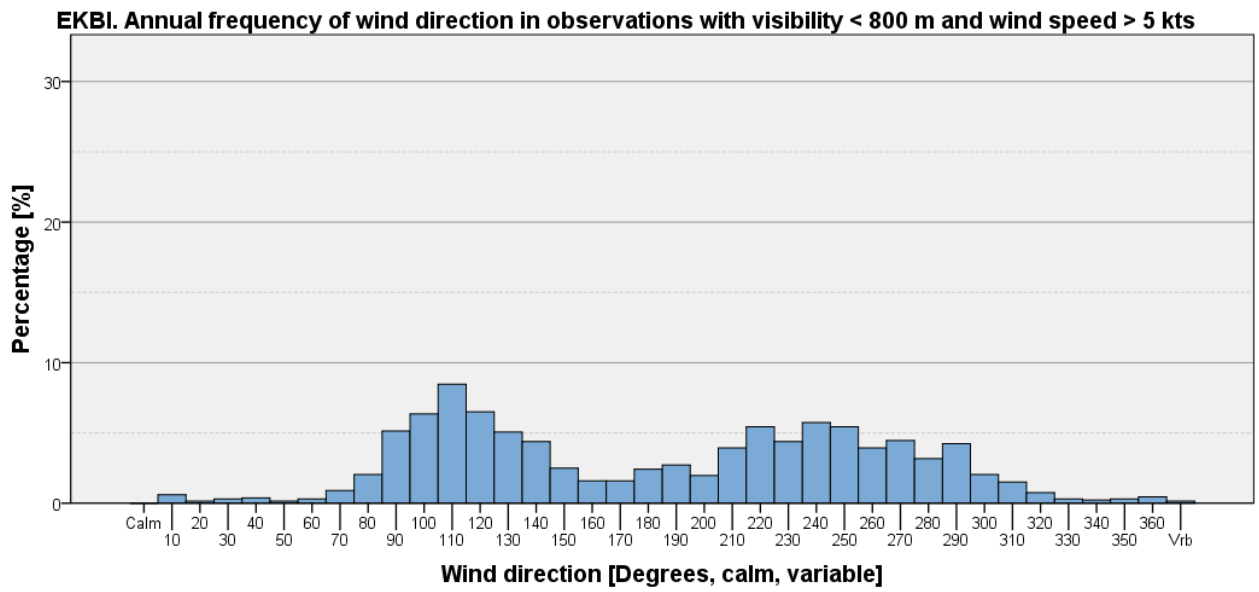


Figure 71

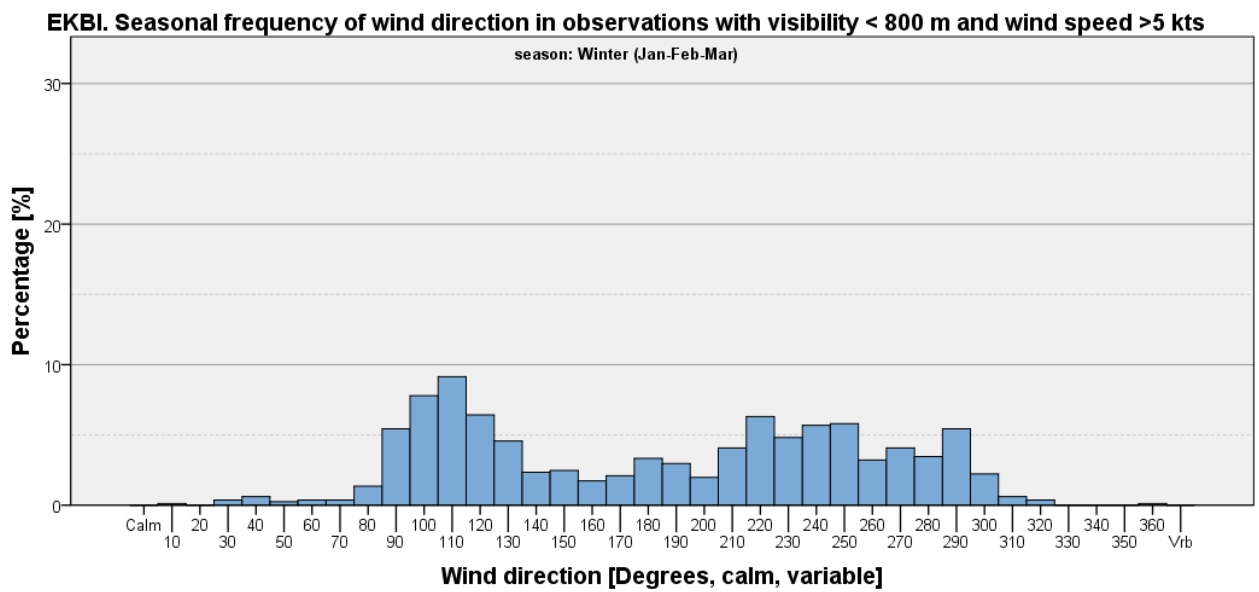


Figure 72

EKBI. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

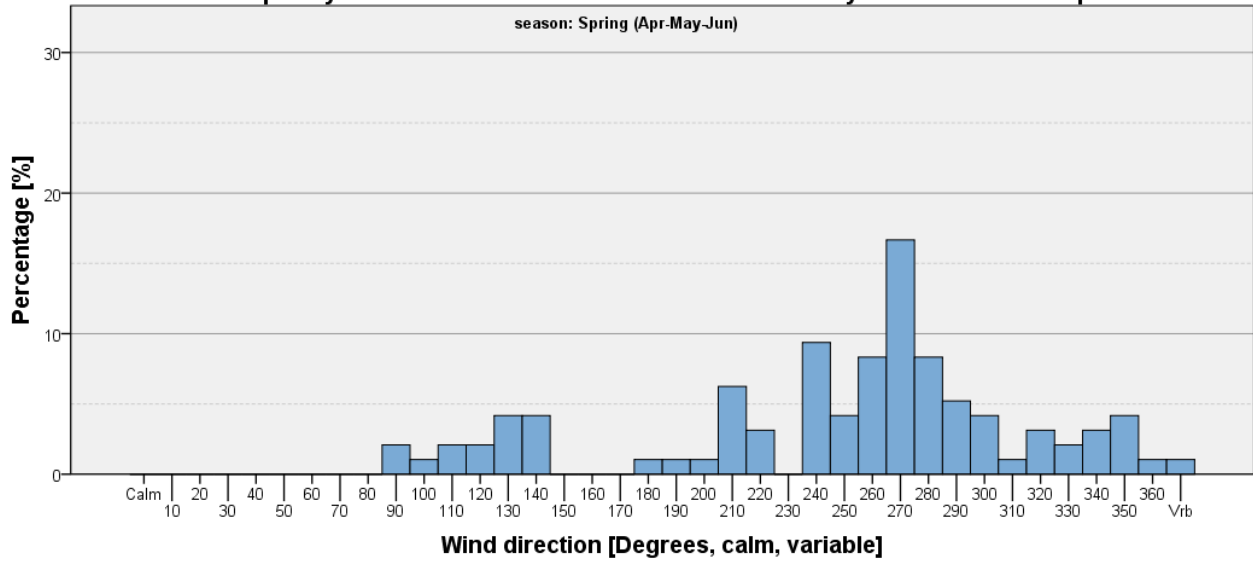


Figure 73

EKBI. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

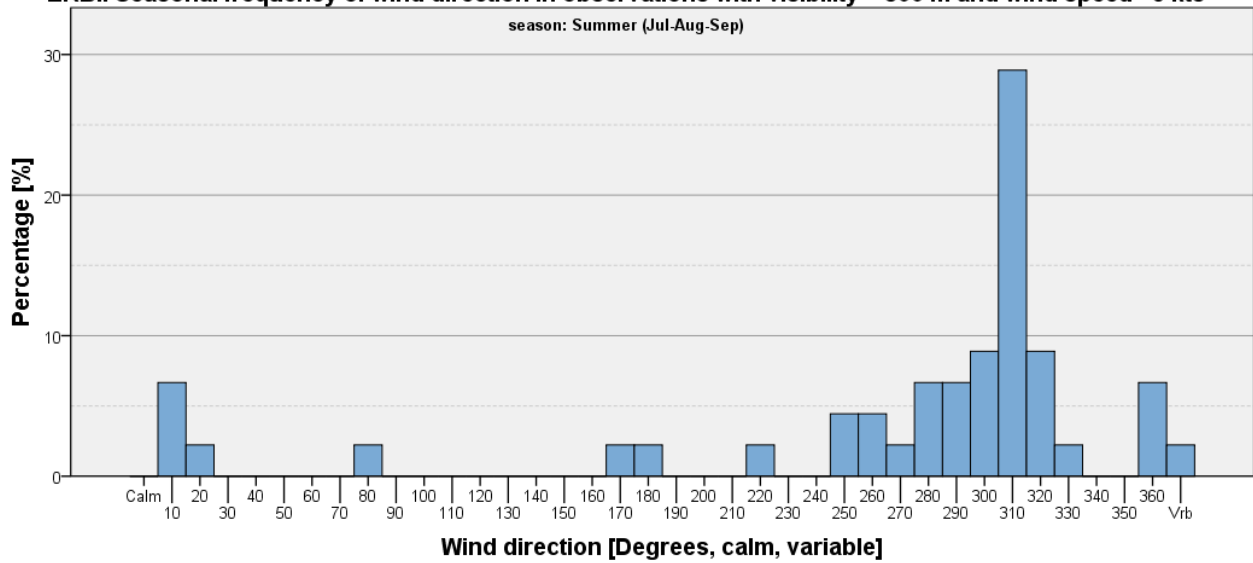


Figure 74

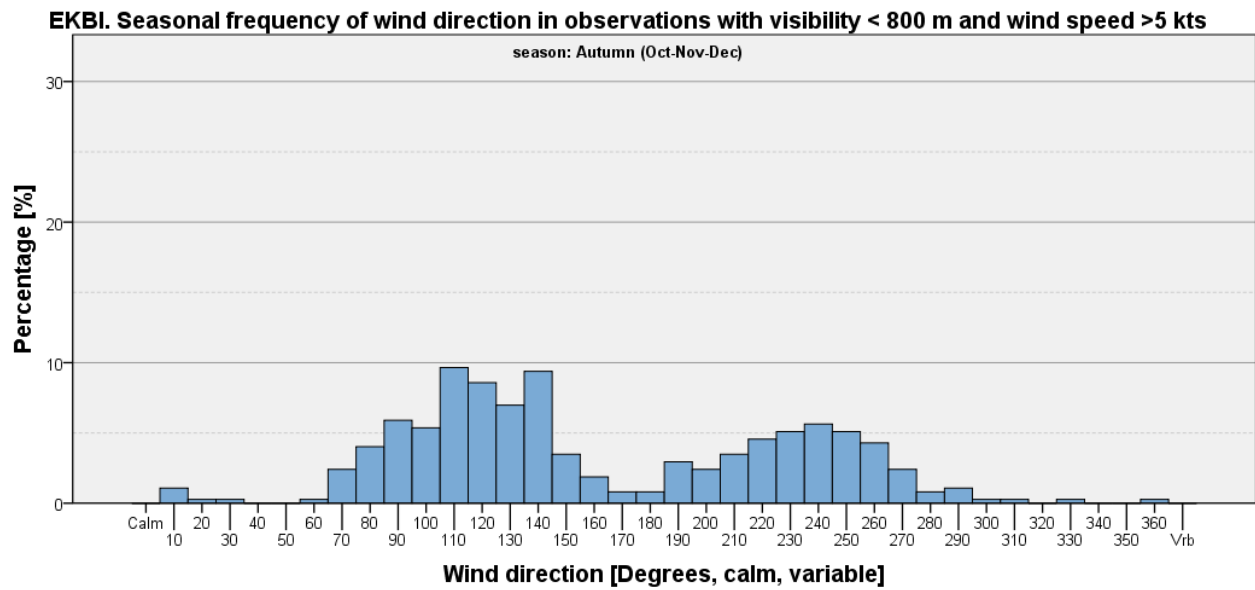


Figure 75

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 26: EKBI - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	32.36	11.38	9.18	29.95	20.69
All other observations	67.64	88.62	90.82	70.05	79.31
Total	100	100	100	100	100

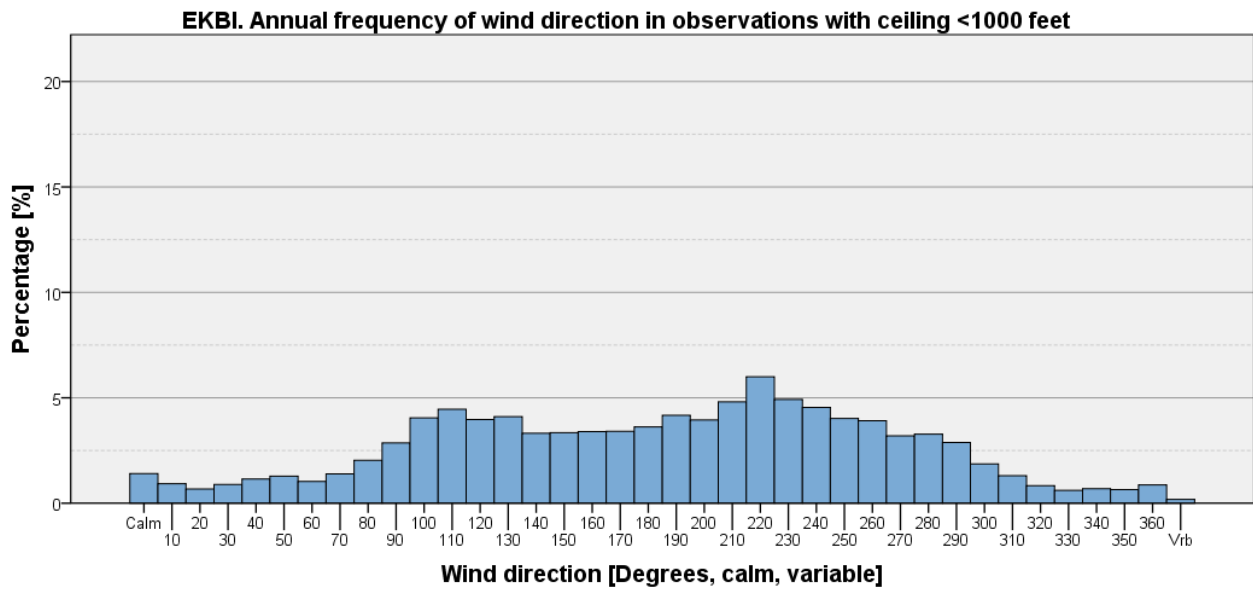


Figure 76

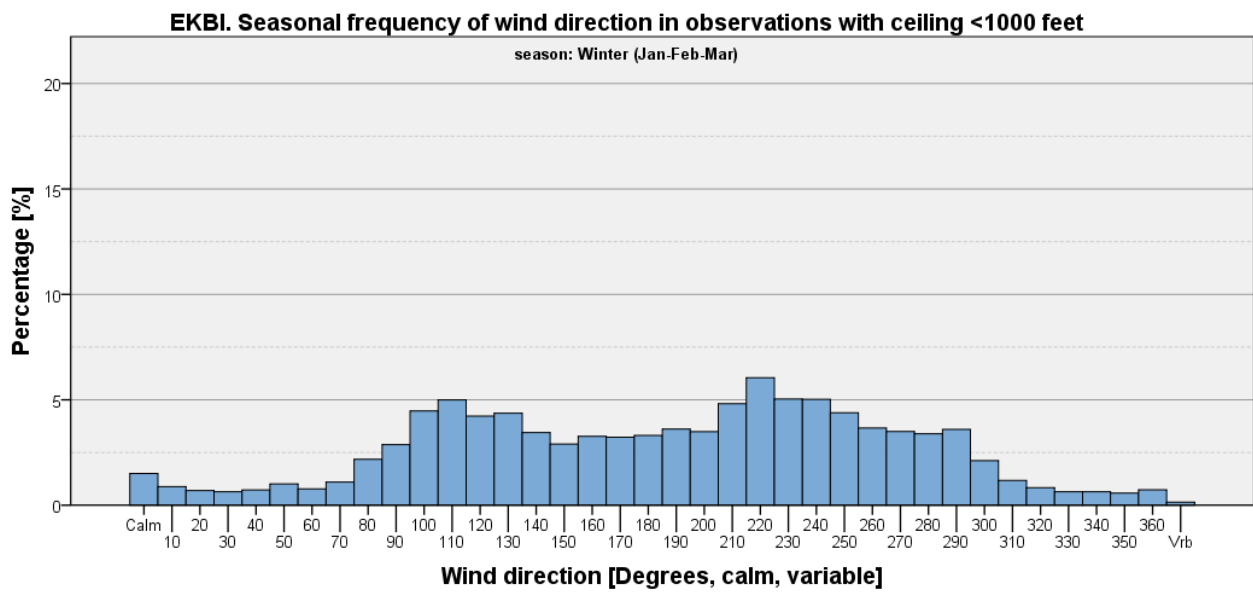


Figure 77

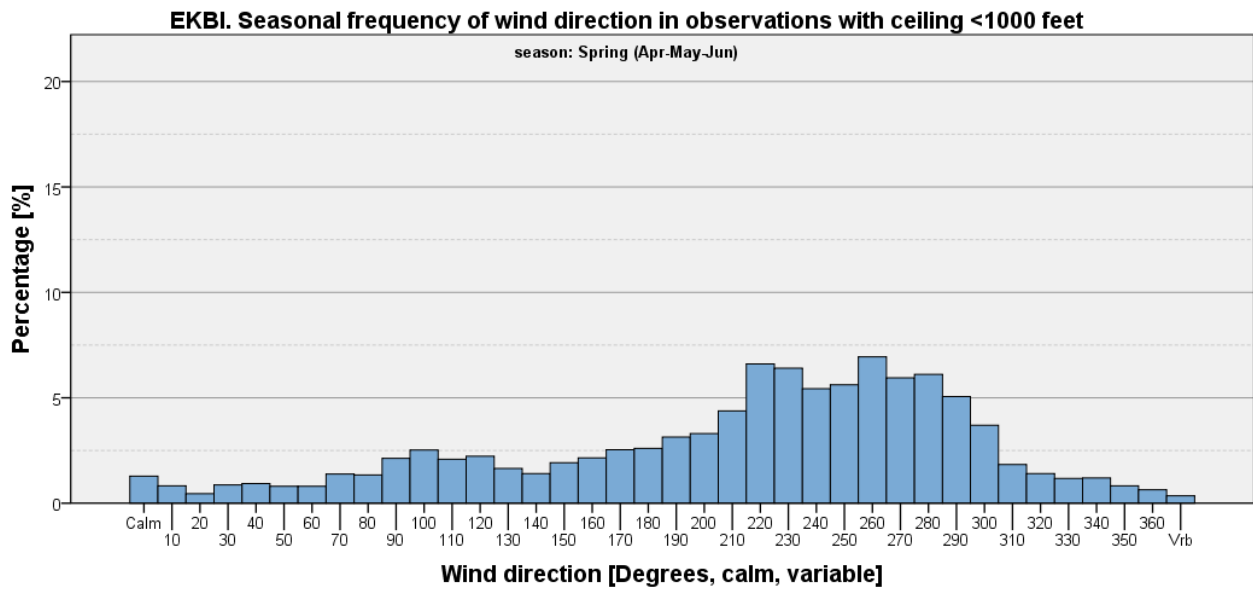


Figure 78

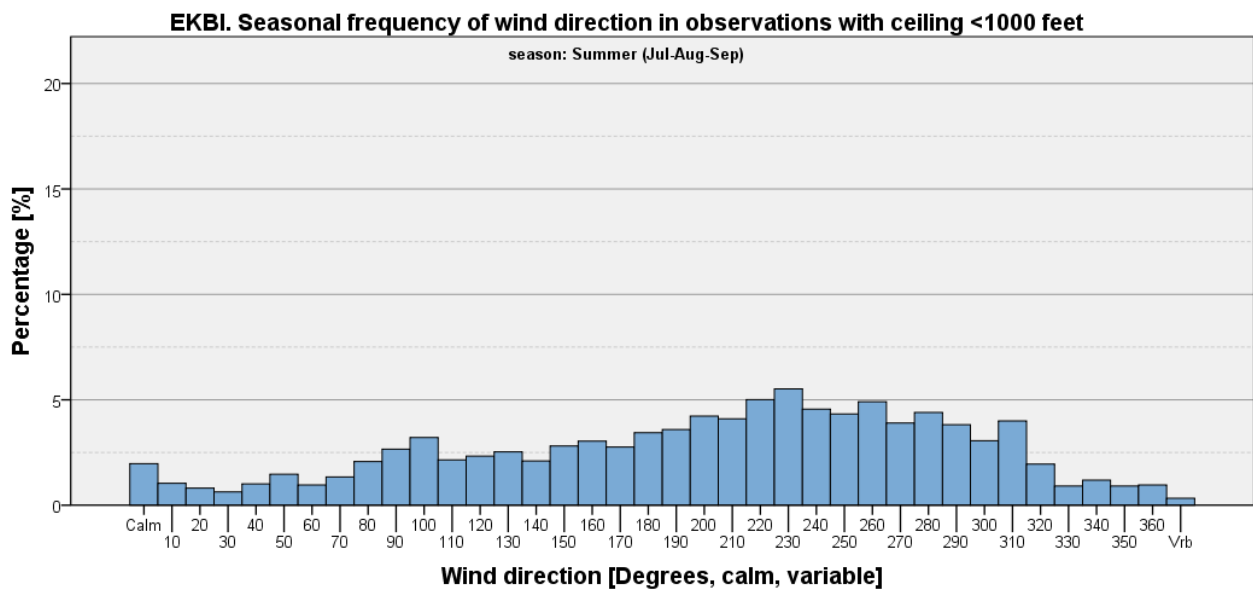


Figure 79

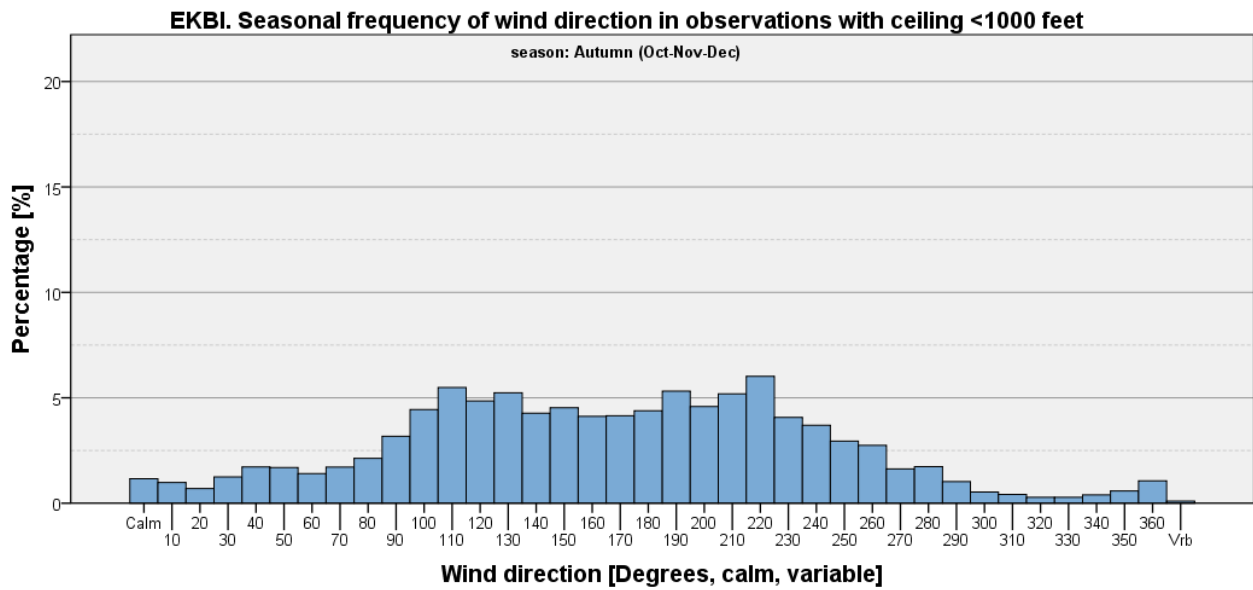


Figure 80

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 27: EKBI - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	22.93	7.86	6.15	22.01	14.72
All other observations	77.07	92.14	93.85	77.99	85.28
Total	100	100	100	100	100

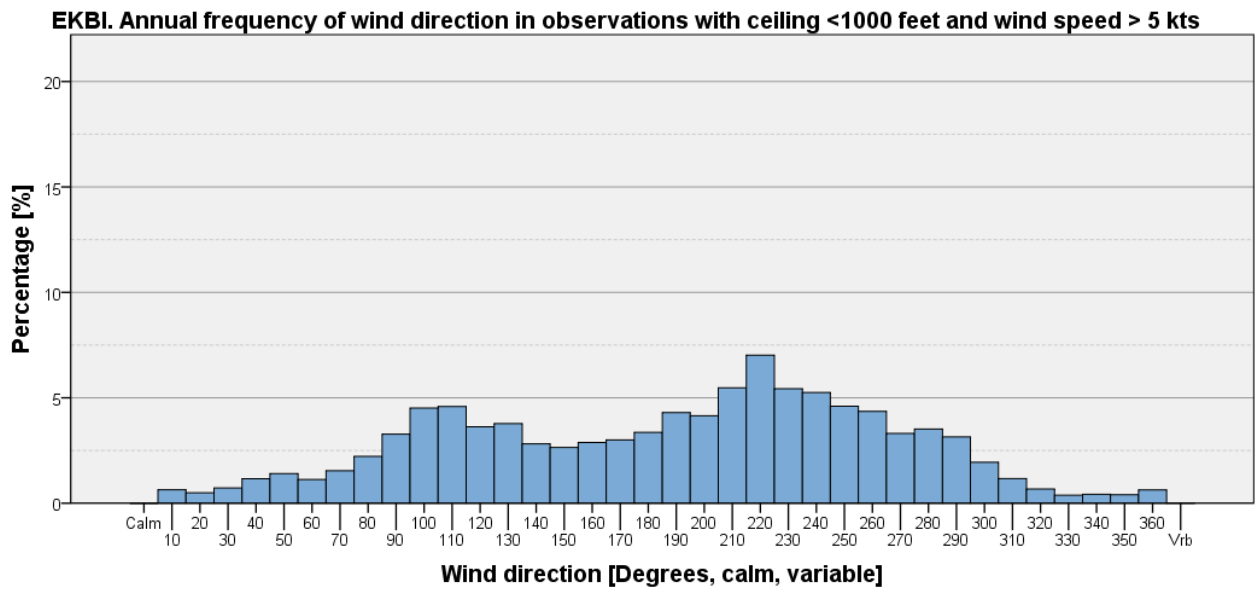


Figure 81

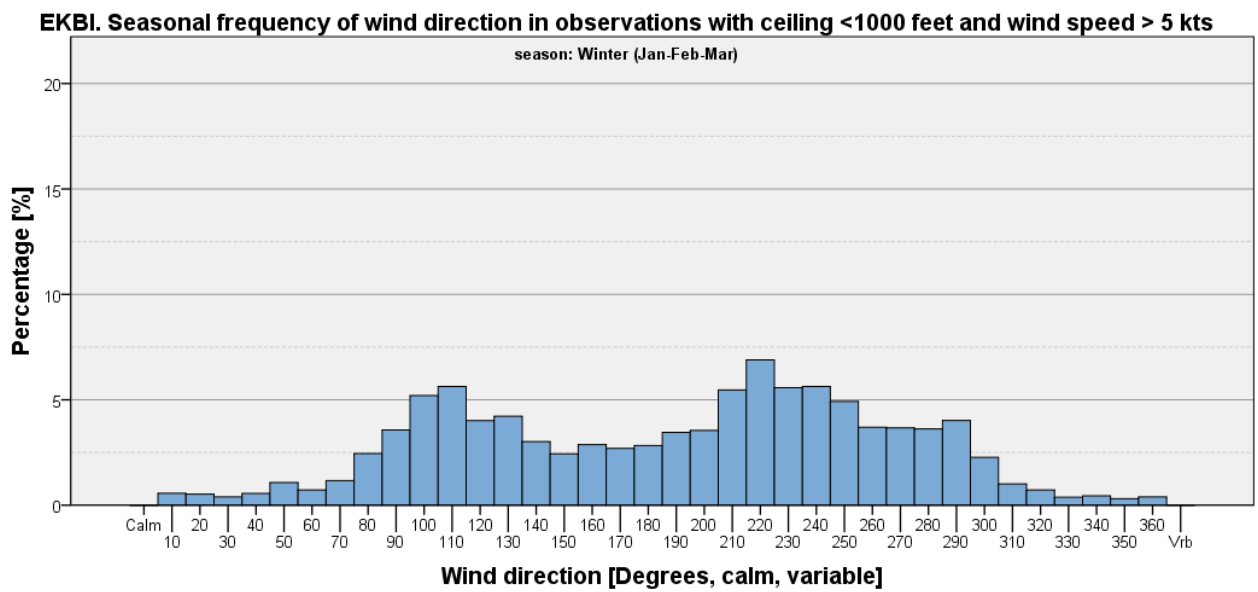


Figure 82

EKBI. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

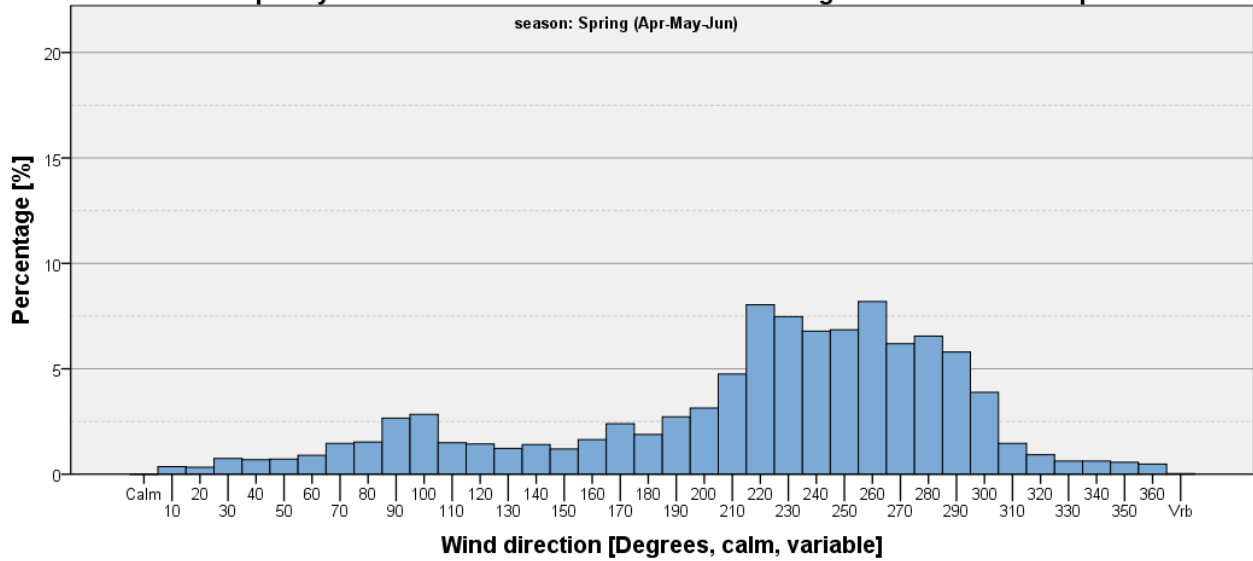


Figure 83

EKBI. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

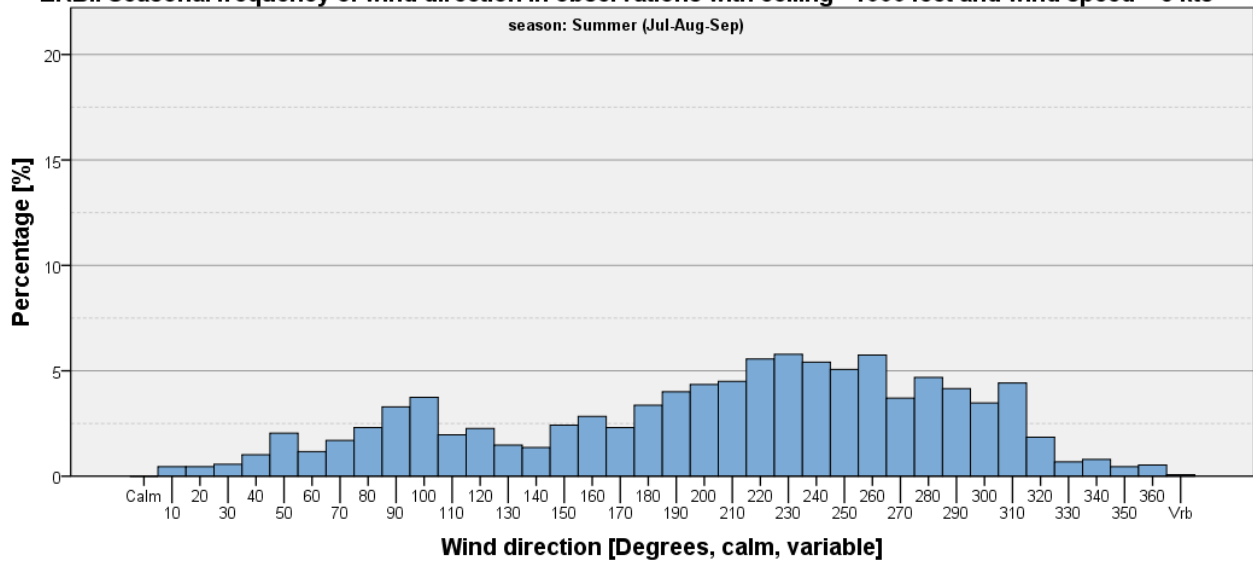


Figure 84

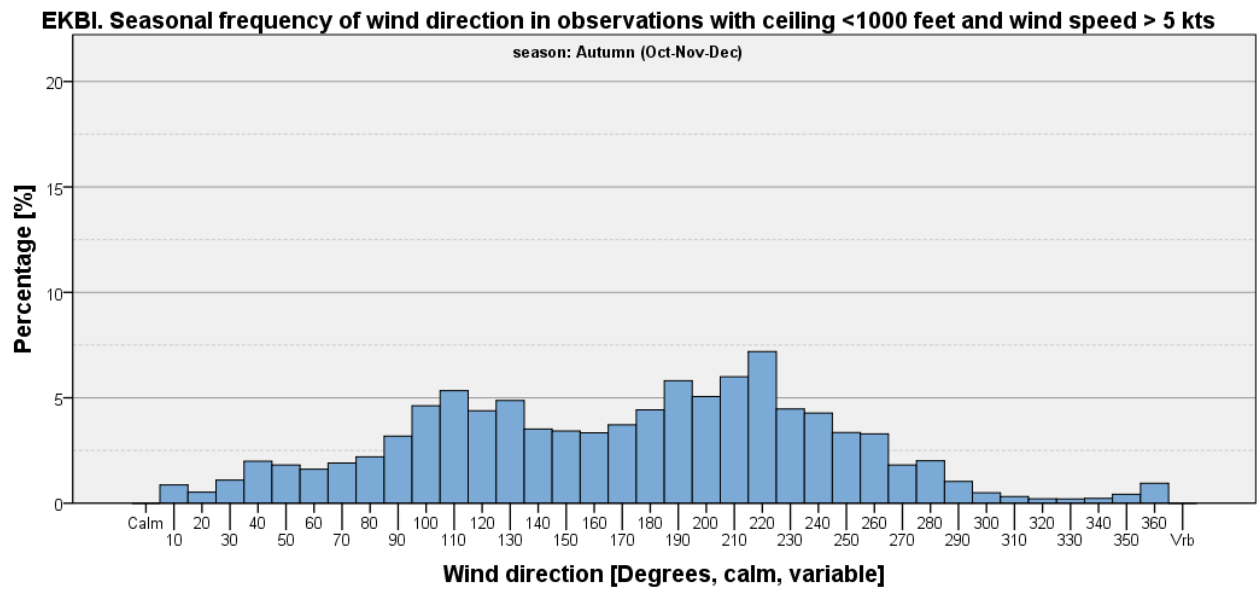


Figure 85

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 28: EKBI - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	22.93	7.86	6.15	22.01	14.72
All other observations	77.07	92.14	93.85	77.99	85.28
Total	100	100	100	100	100

EKBI. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

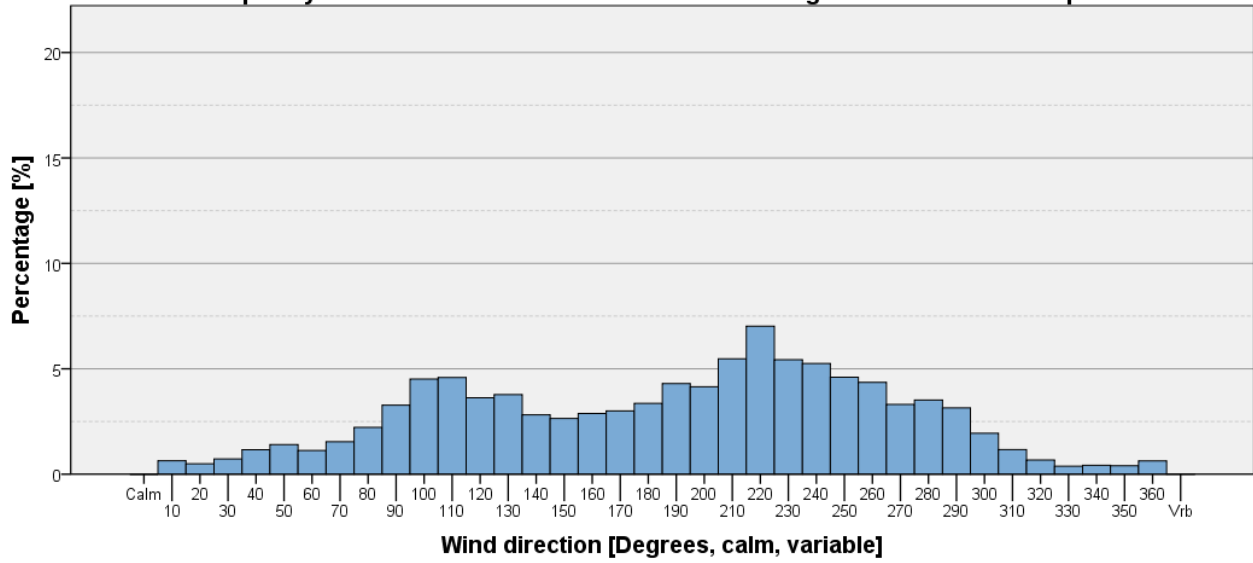


Figure 86

EKBI. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

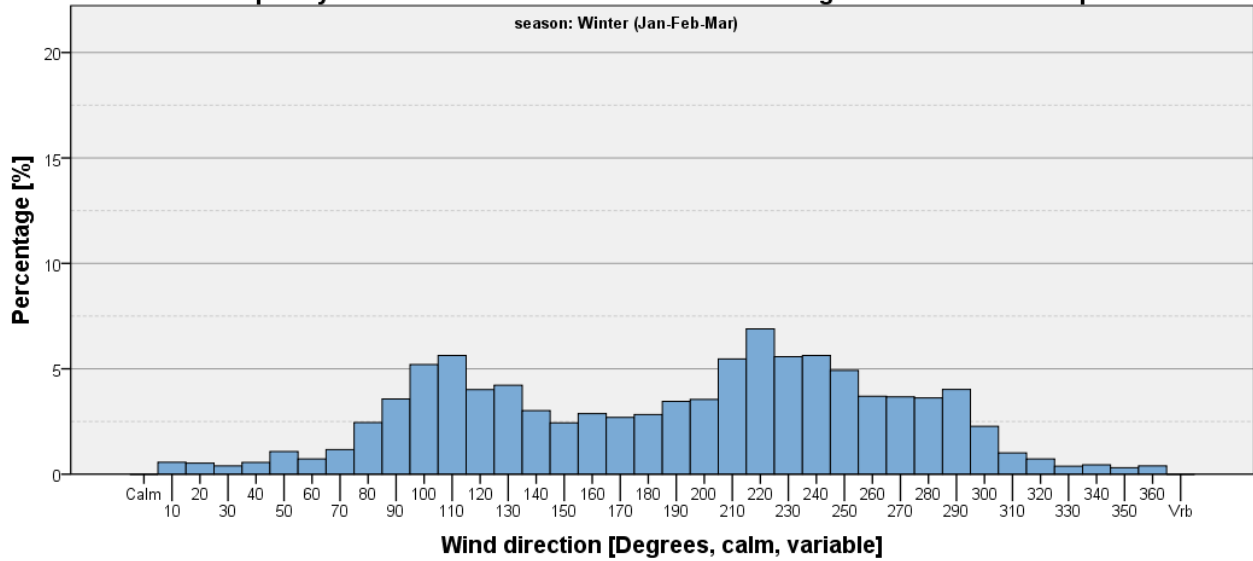


Figure 87

EKBI. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

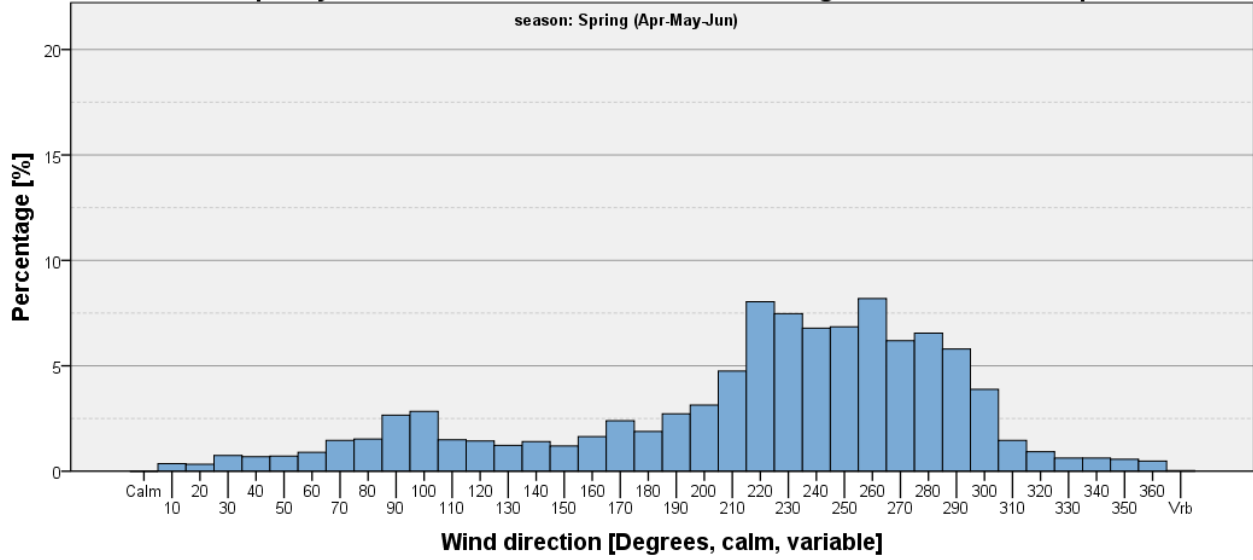


Figure 88

EKBI. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

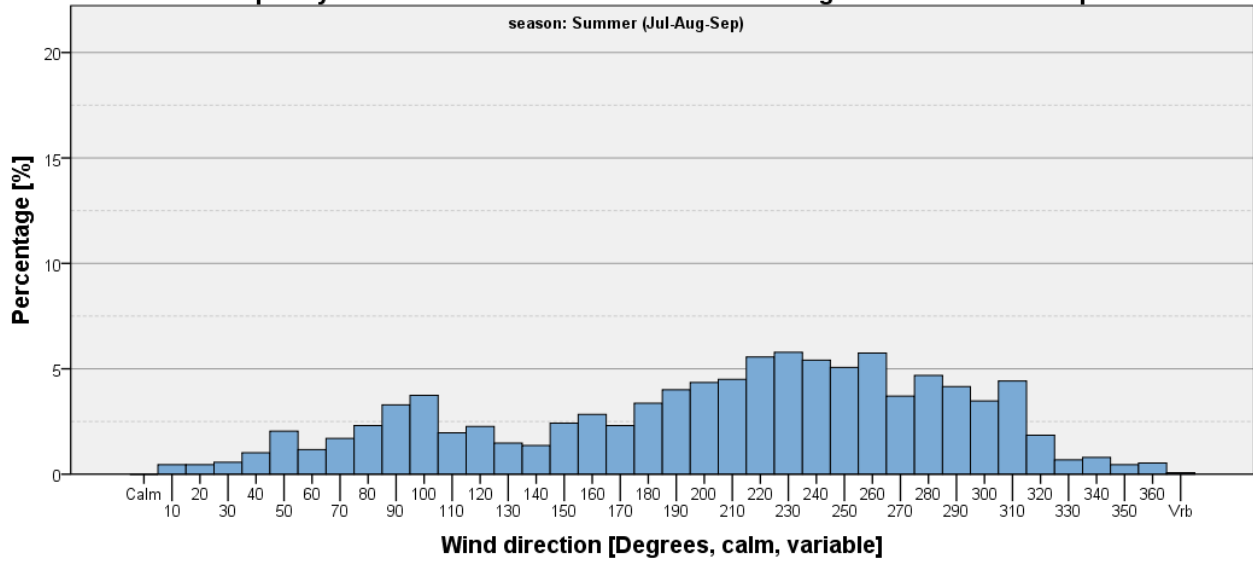


Figure 89

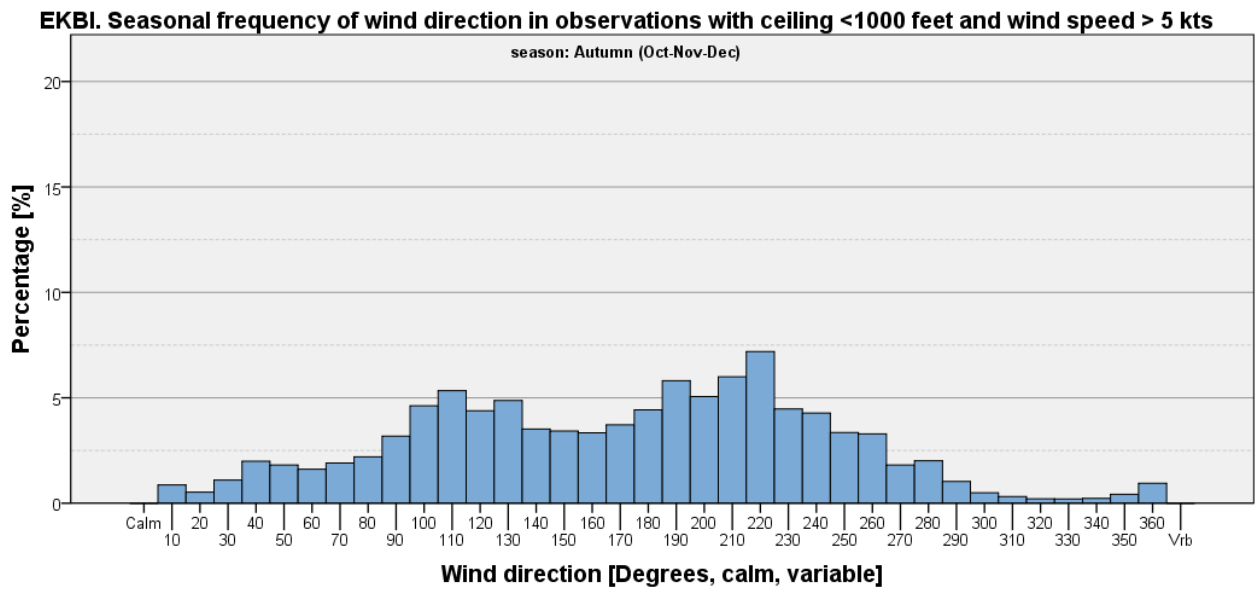


Figure 90

Ceiling < 500 feet

Table 29: EKBI - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	16.52	4.55	3.33	13.19	9.38
All other observations	83.48	95.45	96.67	86.81	90.62
Total	100	100	100	100	100

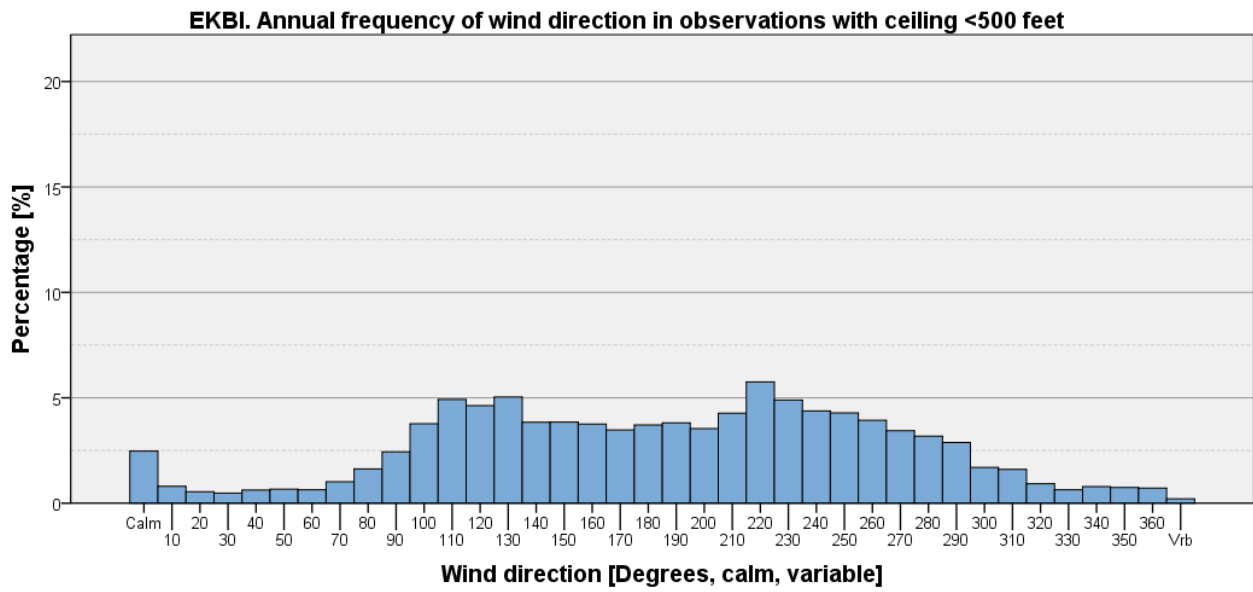


Figure 91

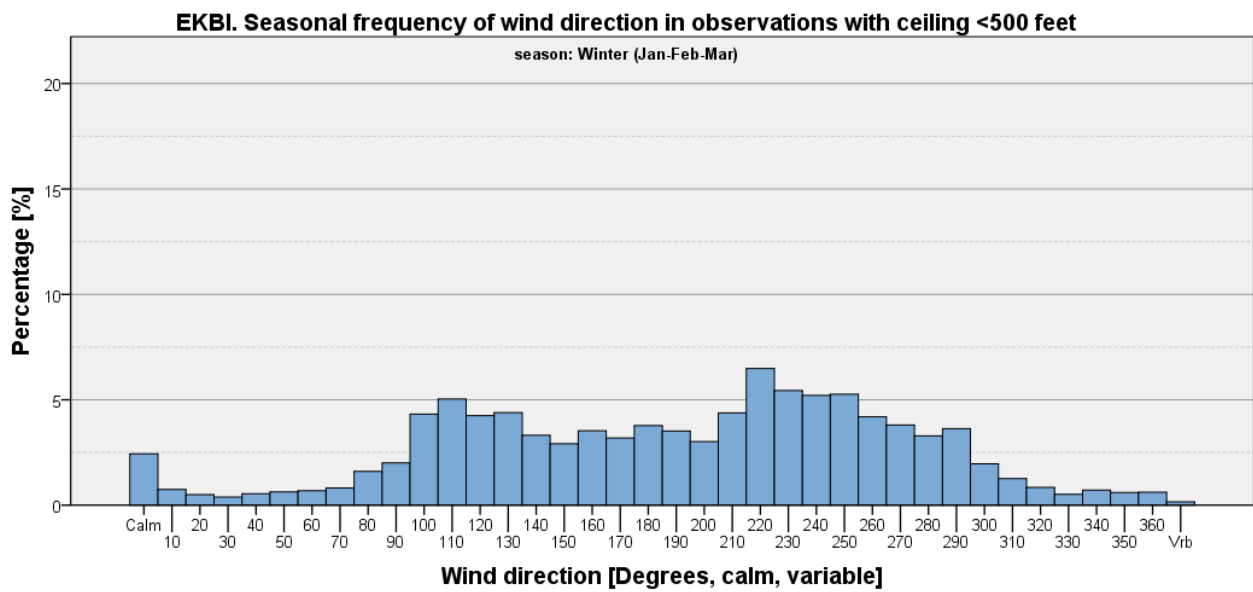


Figure 92

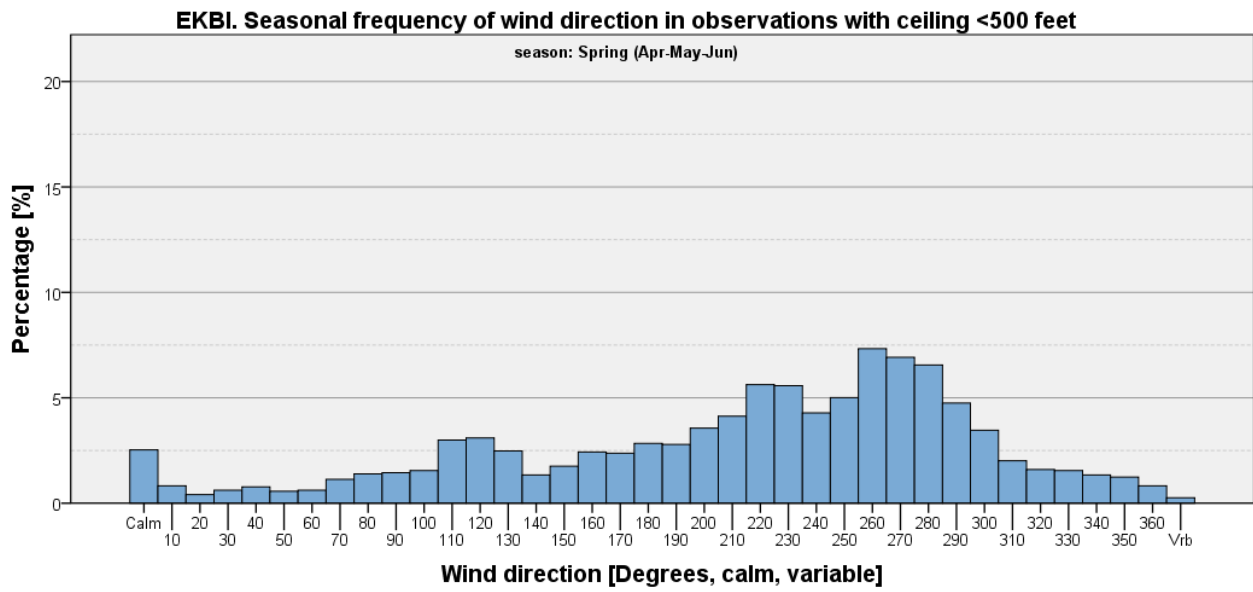


Figure 93

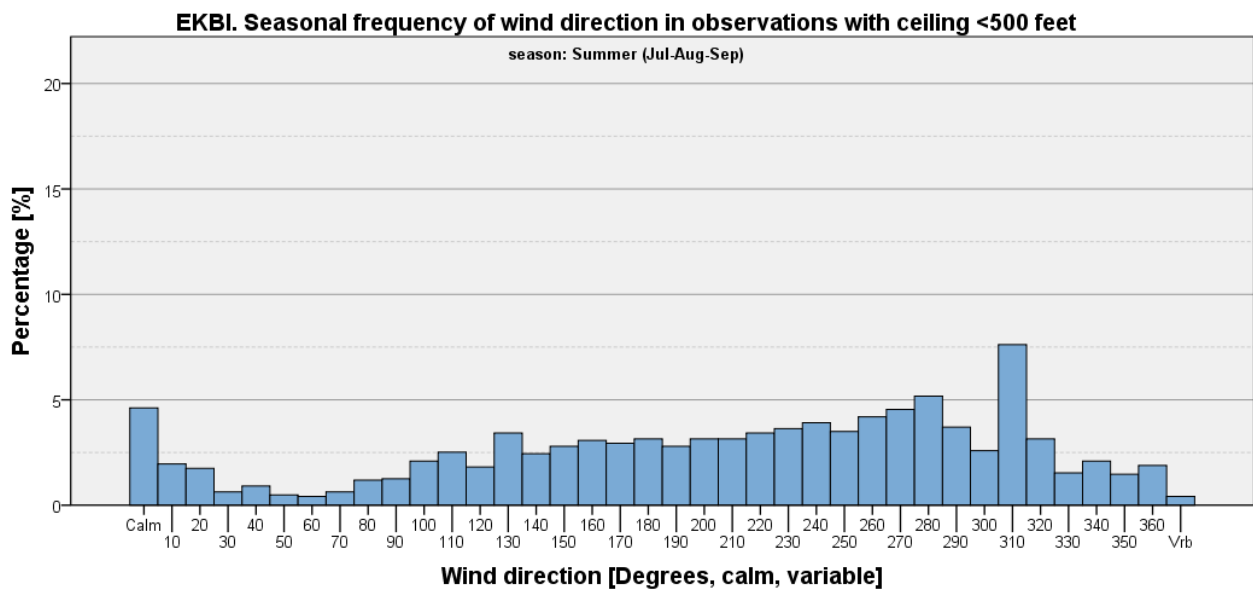


Figure 94

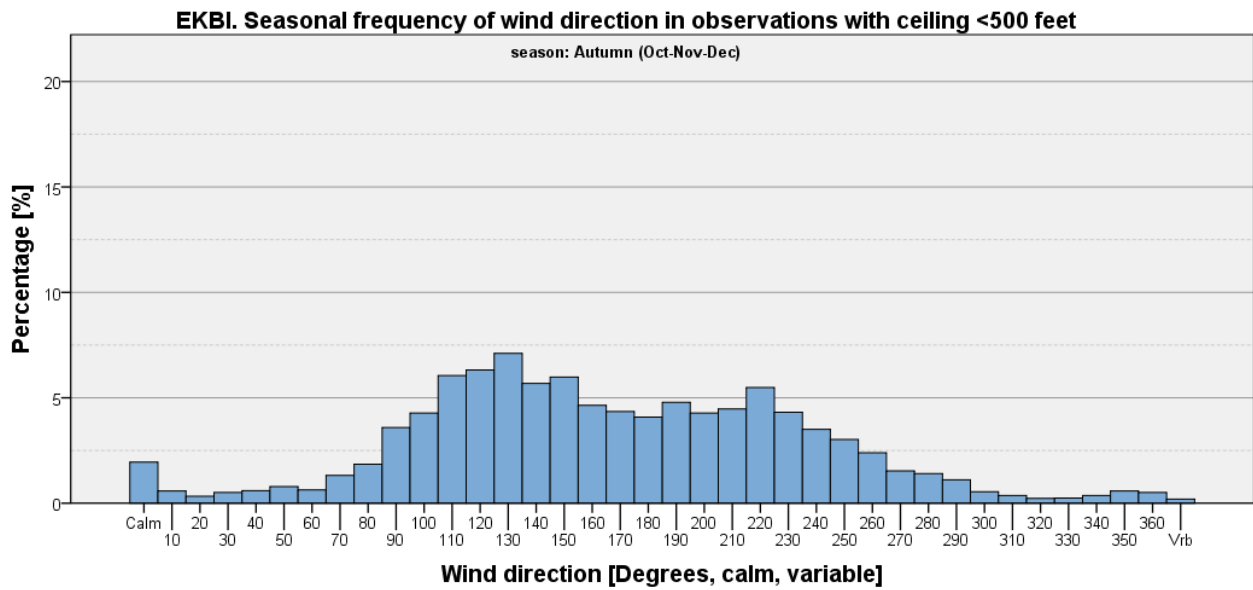


Figure 95

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 30: EKBI - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	6.94	2.24	1.92	5.53	4.15
All other Observations	93.06	97.76	98.08	94.47	95.85
Total	100	100	100	100	100

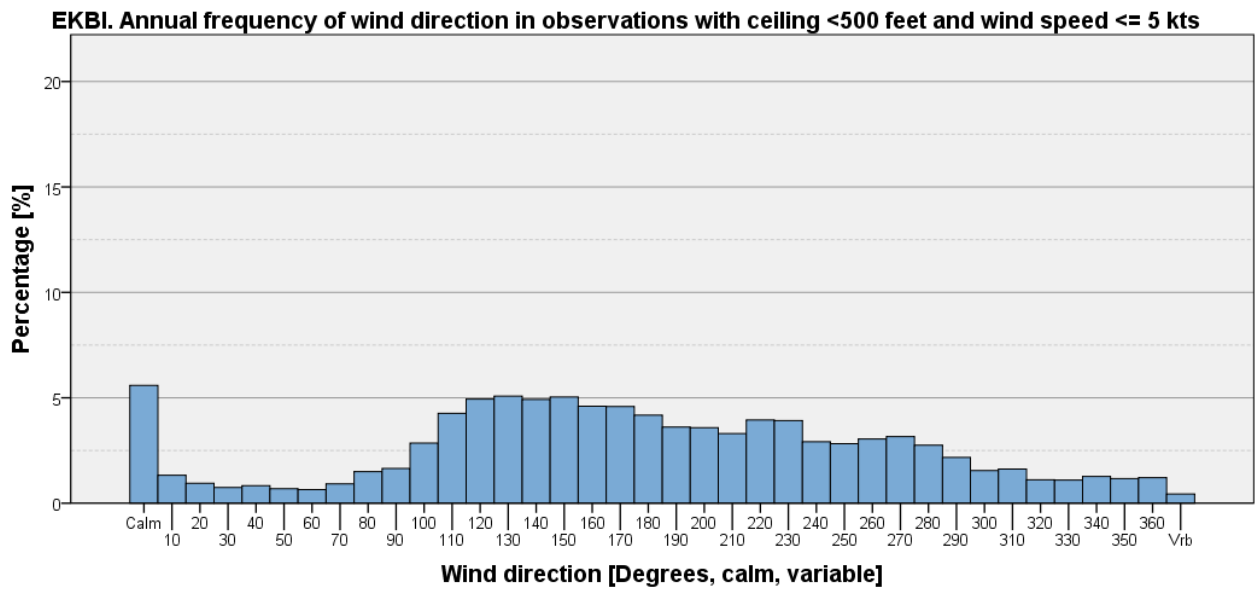


Figure 96

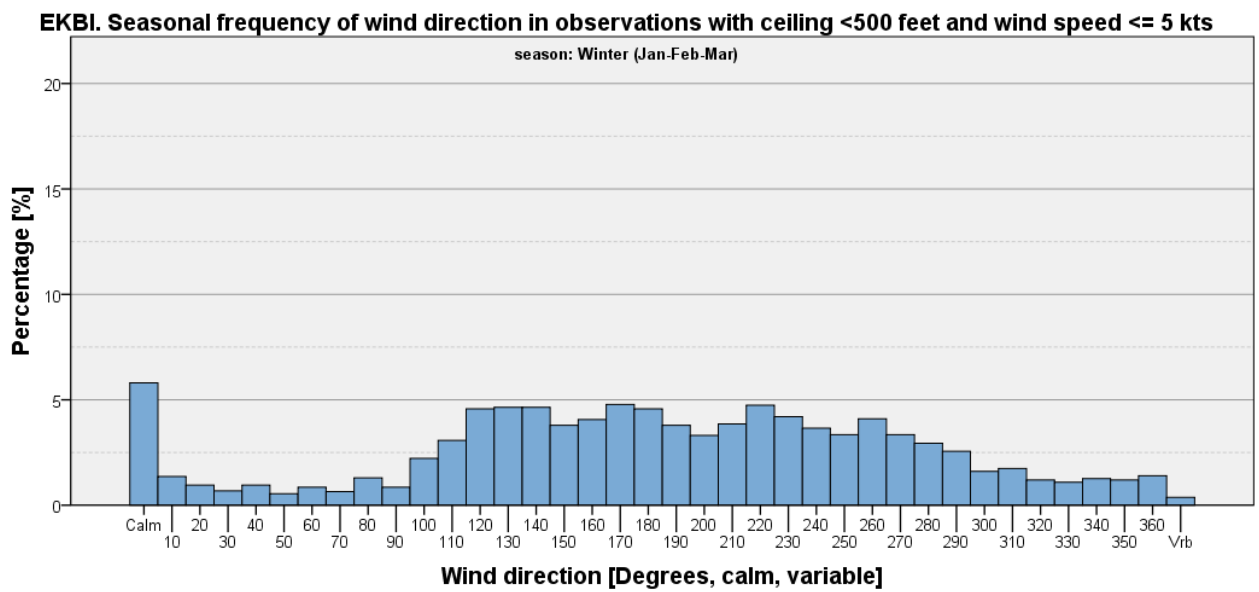


Figure 97

EKBI. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed ≤ 5 kts

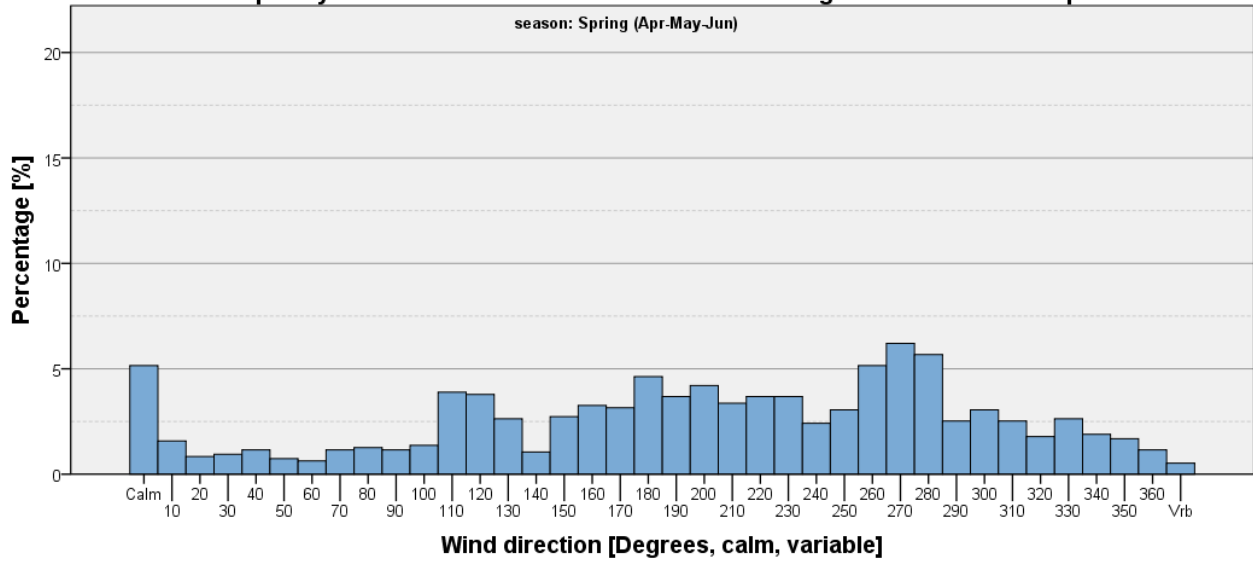


Figure 98

EKBI. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed ≤ 5 kts

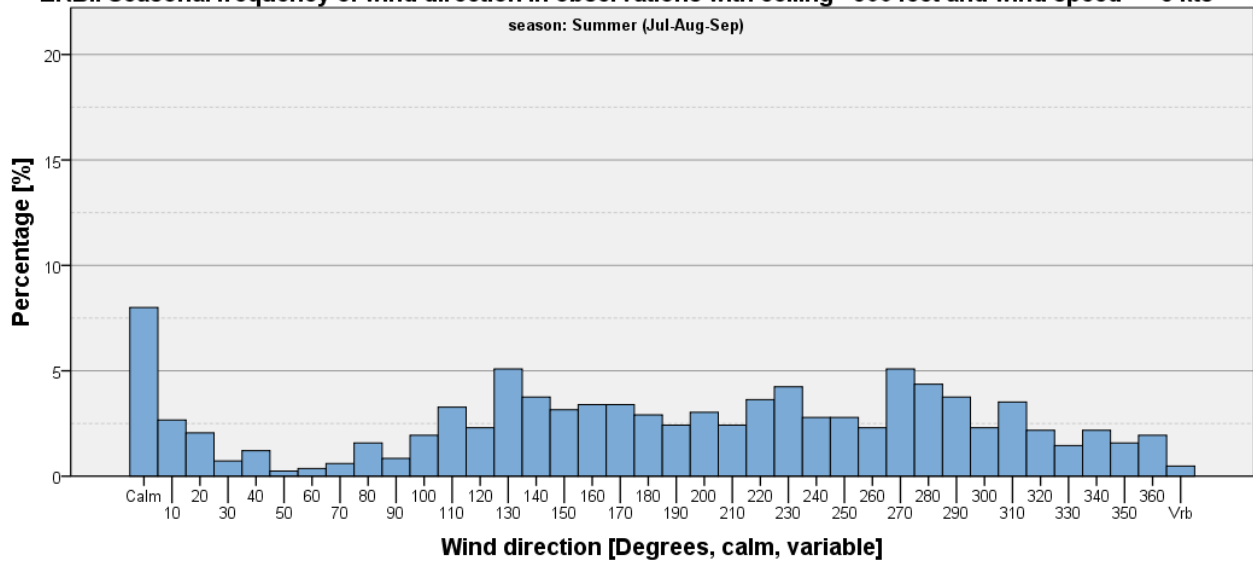


Figure 99

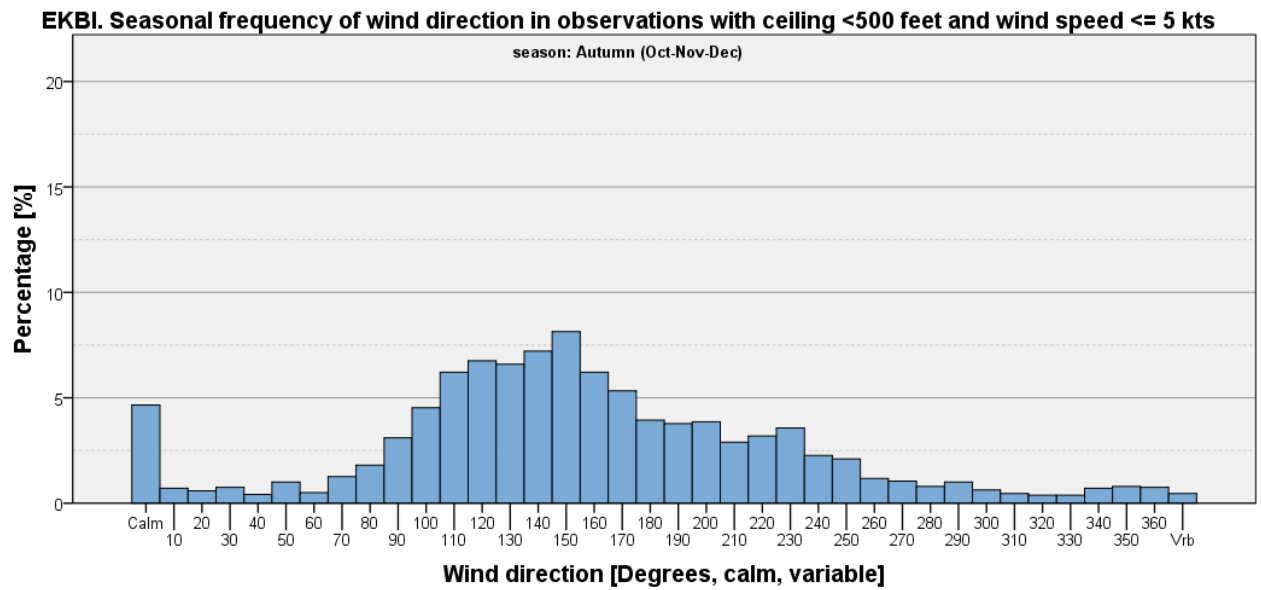


Figure 100

Ceiling < 500 feet and Wind Speed > 5 kts

Table 31: EKBI - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	9.57	2.32	1.41	7.66	5.23
All other observations	90.43	97.68	98.59	92.34	94.77
Total	100	100	100	100	100

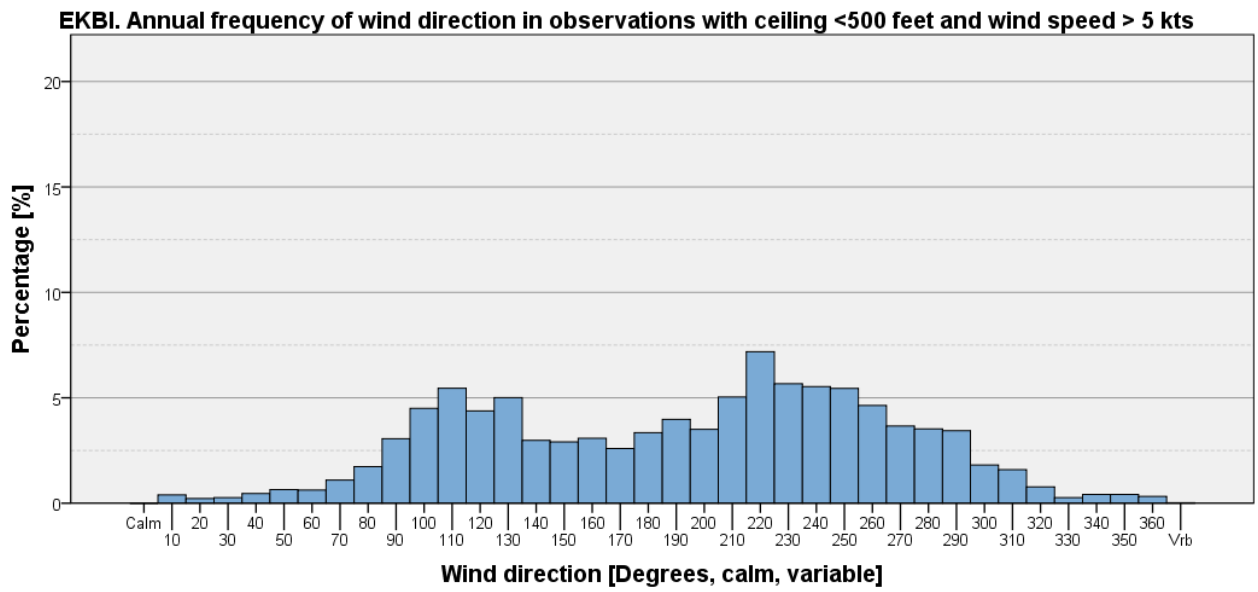


Figure 101

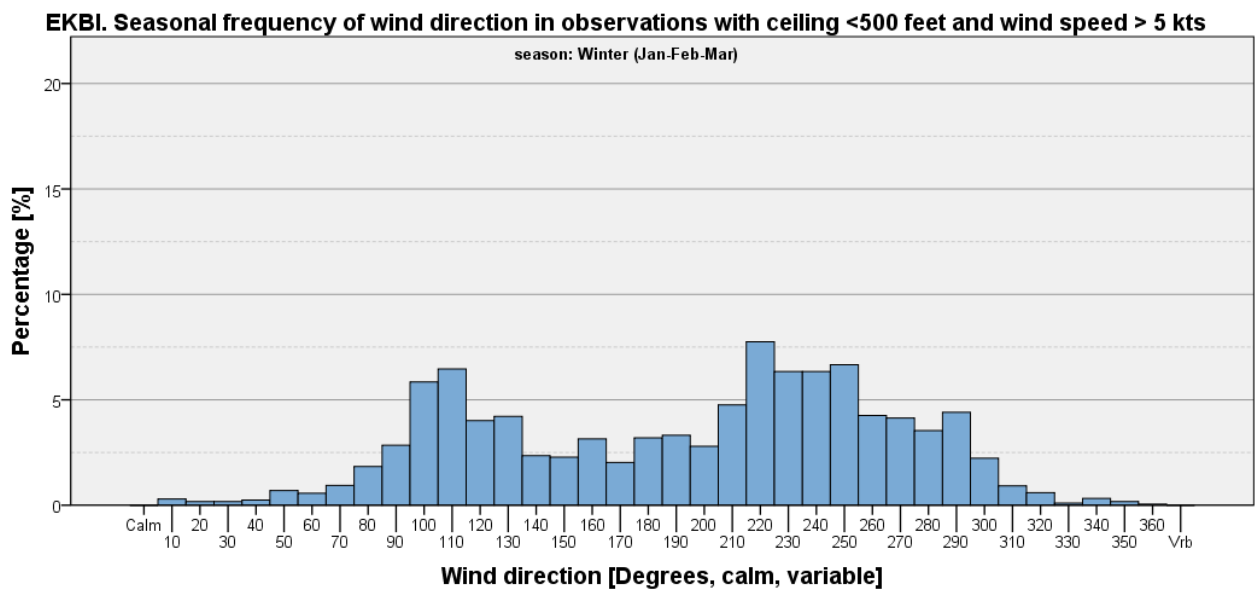


Figure 102

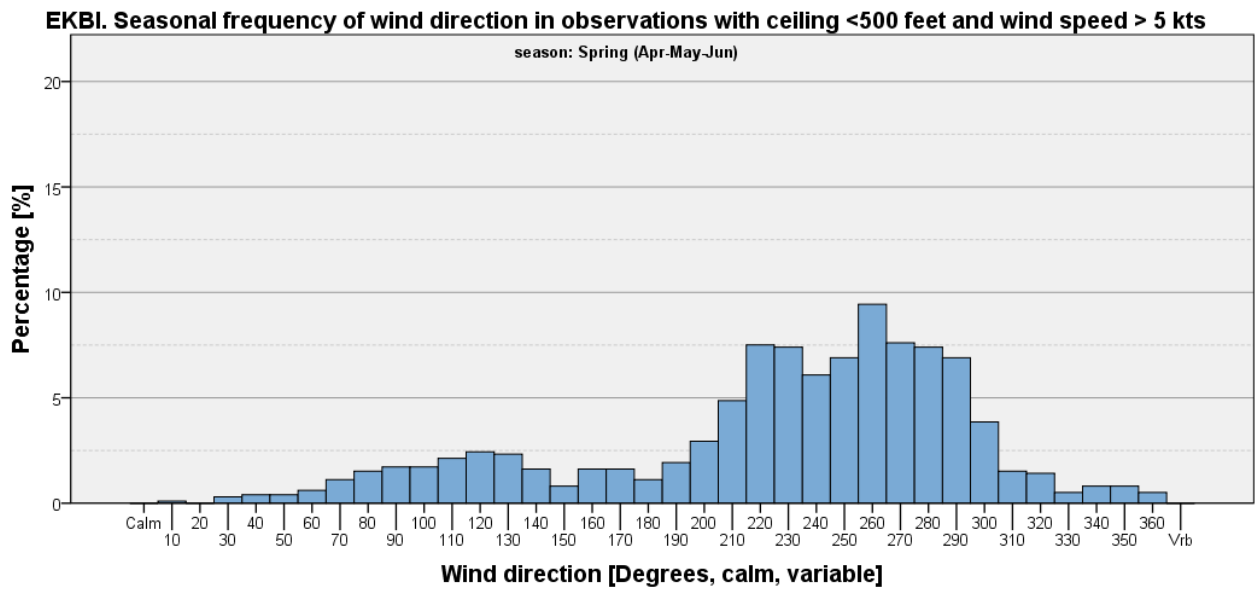


Figure 103

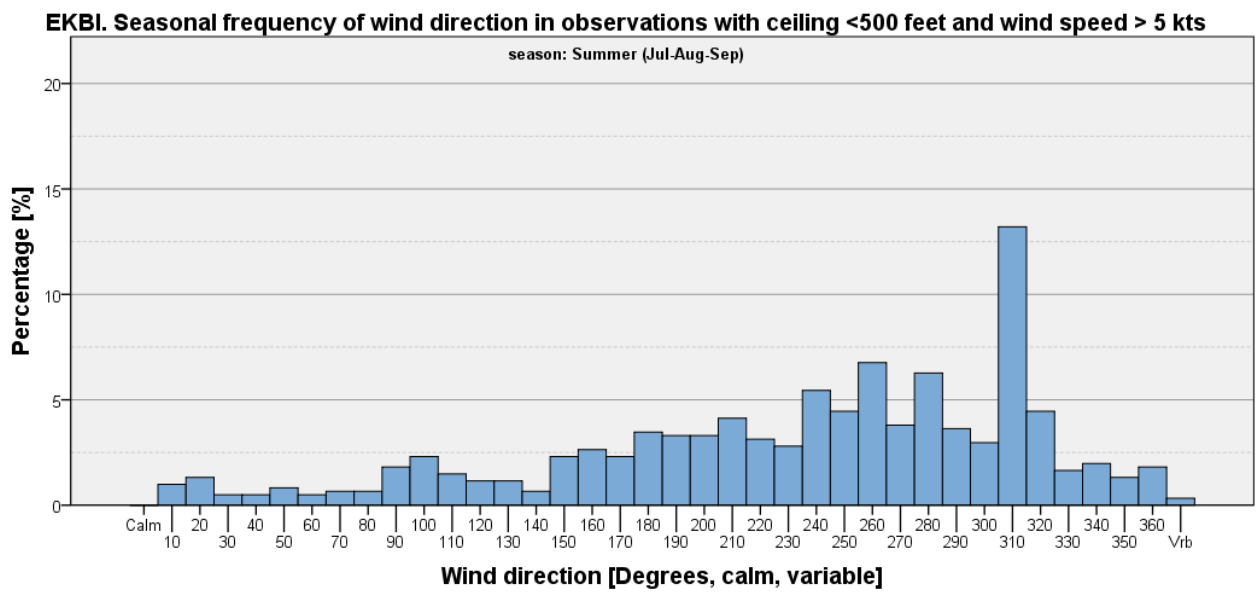


Figure 104

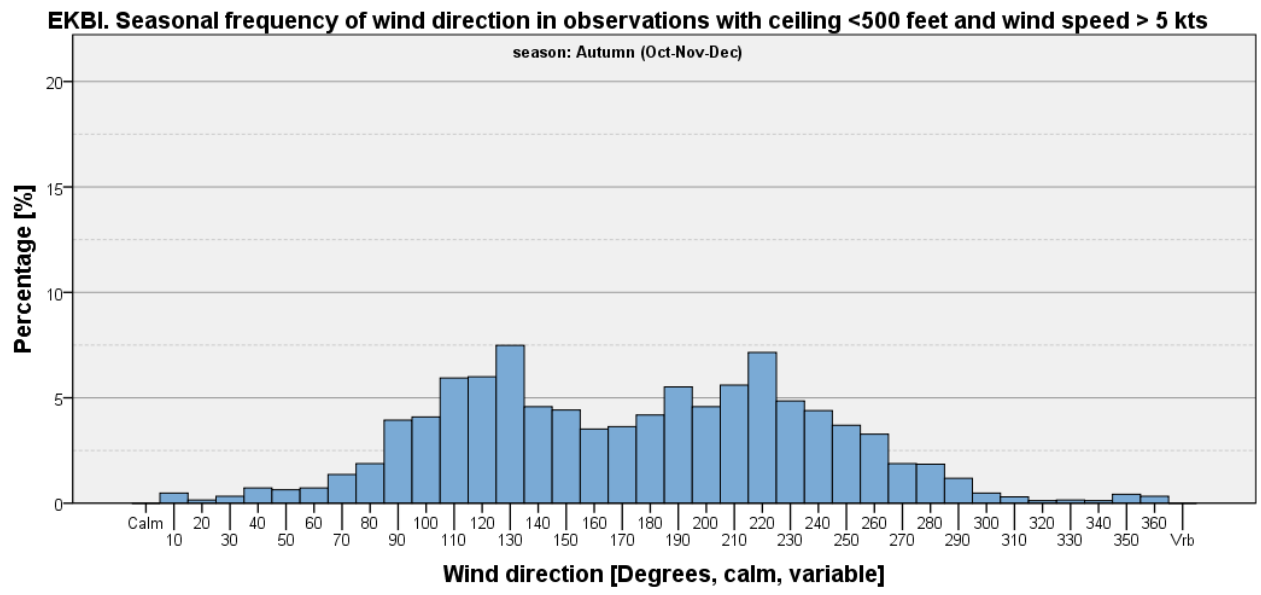
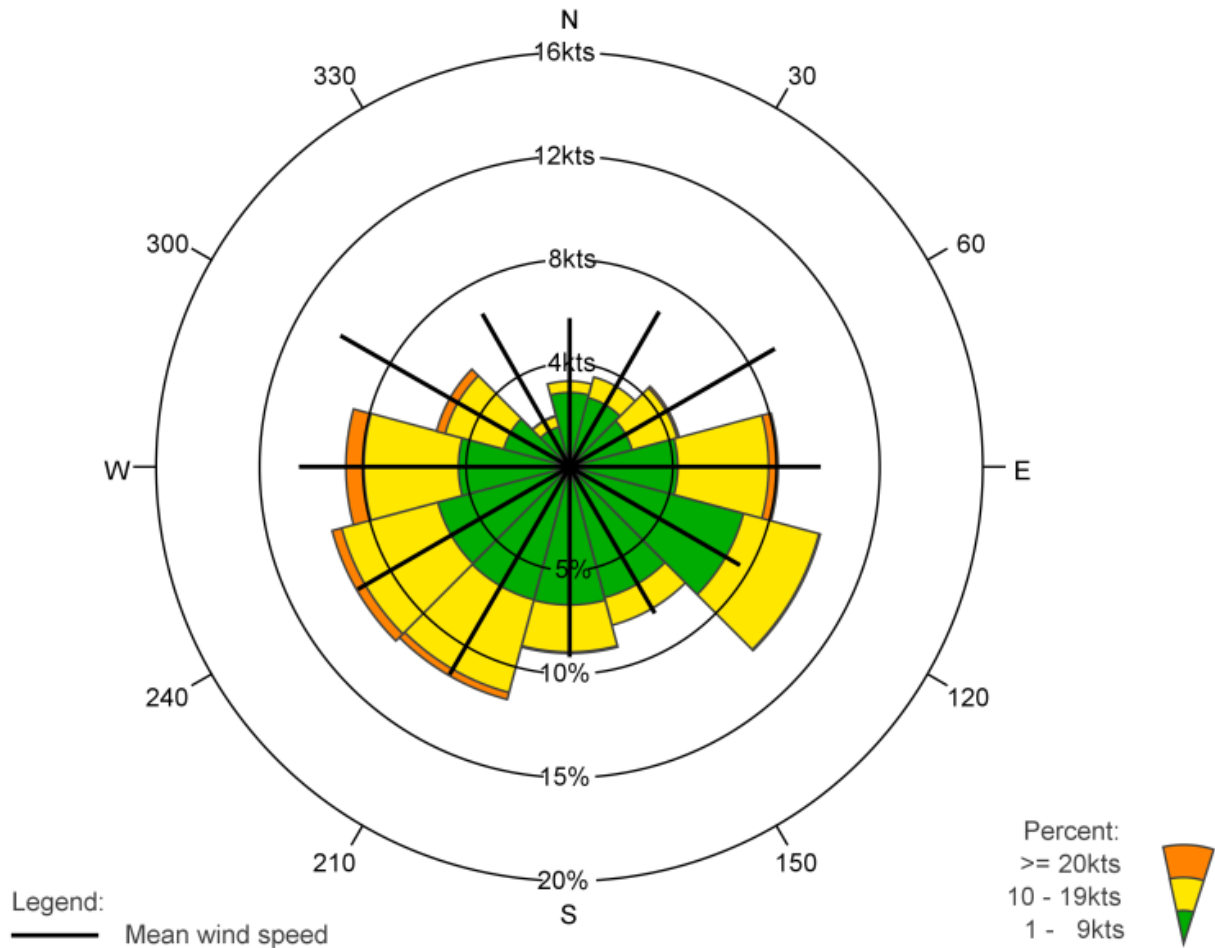


Figure 105

Wind Roses

EKBI: BILLUND LUFTHAVN, AUTUMN & WINTER

01-01-2009 - 31-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	4.1	4.5	5.5	10.1	12.6	7.9	9.0	11.6	11.9	10.8	6.7	2.6	97.3
% 1 - 9kts	3.6	3.5	3.1	5.2	8.7	6.5	6.7	6.6	6.6	5.4	3.3	2.0	61.3
% 10 - 19kts	0.5	1.0	2.3	4.4	3.8	1.4	2.3	4.6	4.8	4.6	2.9	0.5	33.1
% >= 20kts	0.0	0.0	0.1	0.5	0.1	0.0	0.1	0.4	0.5	0.9	0.5	0.0	2.9
Mean wind speed	5.7	6.9	9.2	9.7	7.6	6.6	7.3	9.2	9.5	10.5	10.2	6.8	8.6
Max wind speed	23.0	20.0	30.0	27.0	28.0	20.0	25.0	31.0	40.0	51.0	42.0	28.0	51.0

Number of observations = 85272

Source: DMI

Calm defined as wind speed = 0kts

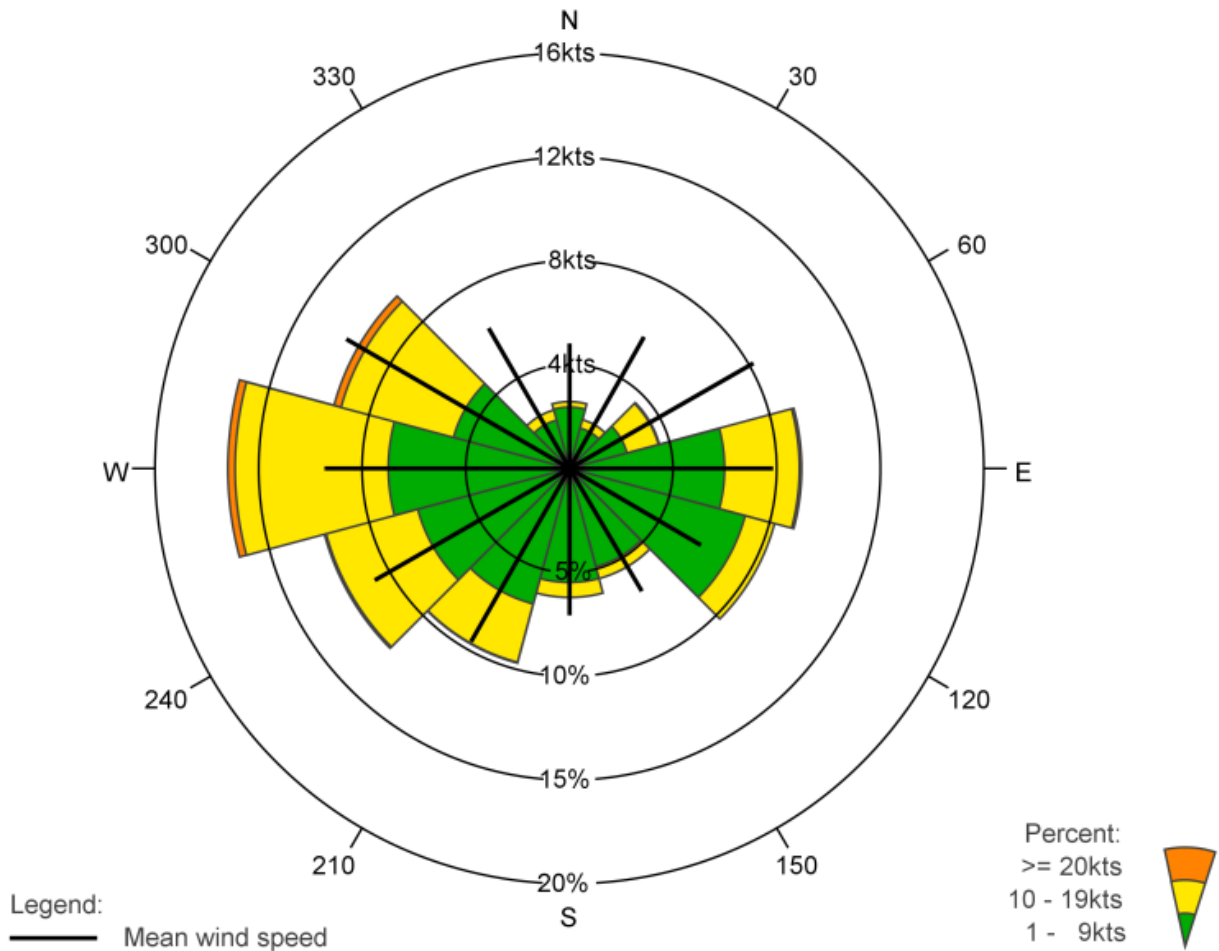
Number of observations with calm/varying wind direction: 2344=2.7%

Observations with calm/varying wind direction are not used in the statistics

Figure 106

EKBI: BILLUND LUFTHAVN, SPRING & SUMMER

01-01-2009 - 31-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.2	2.4	4.5	11.2	10.2	5.5	6.2	9.7	12.2	16.5	11.8	2.9	96.4
% 1 - 9kts	3.0	2.0	2.9	7.5	8.8	4.9	5.5	6.8	7.6	8.7	5.8	2.4	65.8
% 10 - 19kts	0.2	0.4	1.6	3.6	1.5	0.6	0.7	2.9	4.6	7.4	5.6	0.5	29.6
% >= 20kts	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.4	0.4	0.0	1.0
Mean wind speed	4.8	5.8	8.2	7.9	5.9	5.5	5.6	7.7	8.6	9.5	9.9	6.3	7.8
Max wind speed	18.0	19.0	27.0	26.0	23.0	20.0	19.0	25.0	27.0	29.0	30.0	25.0	30.0

Number of observations = 85569

Source: DMI

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 3101=3.6%

Observations with calm/varying wind direction are not used in the statistics

Figure 107

Availability

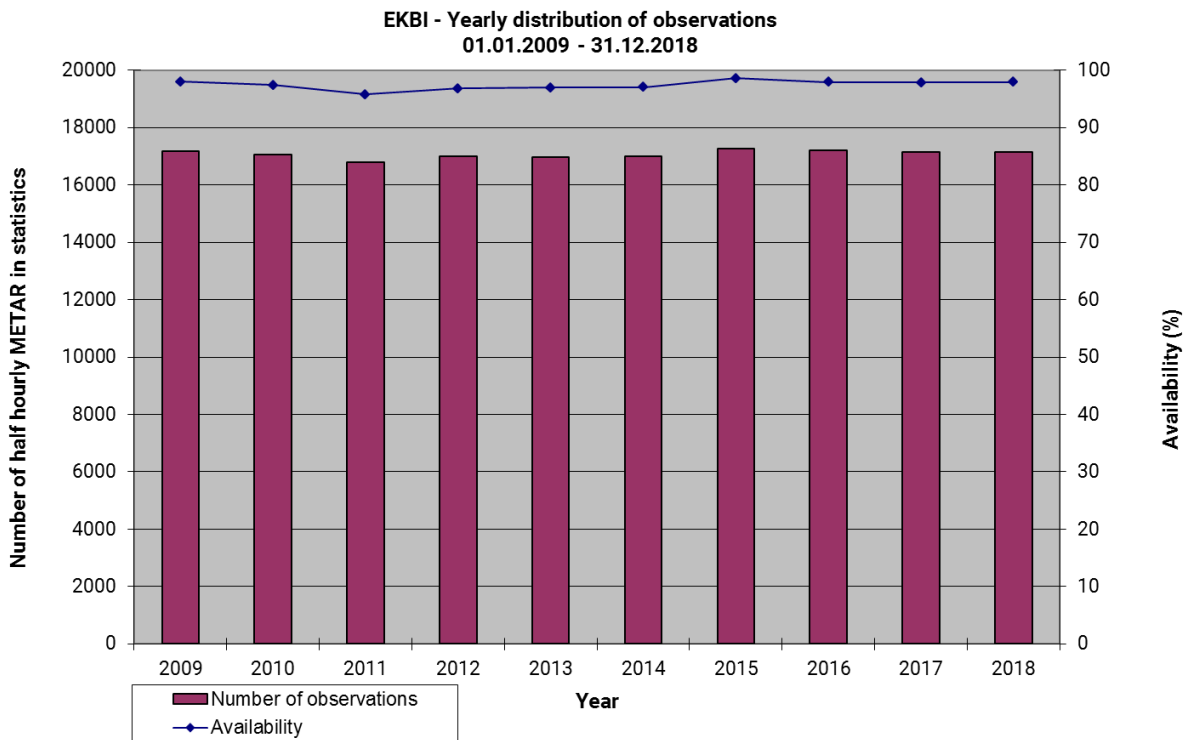


Figure 108

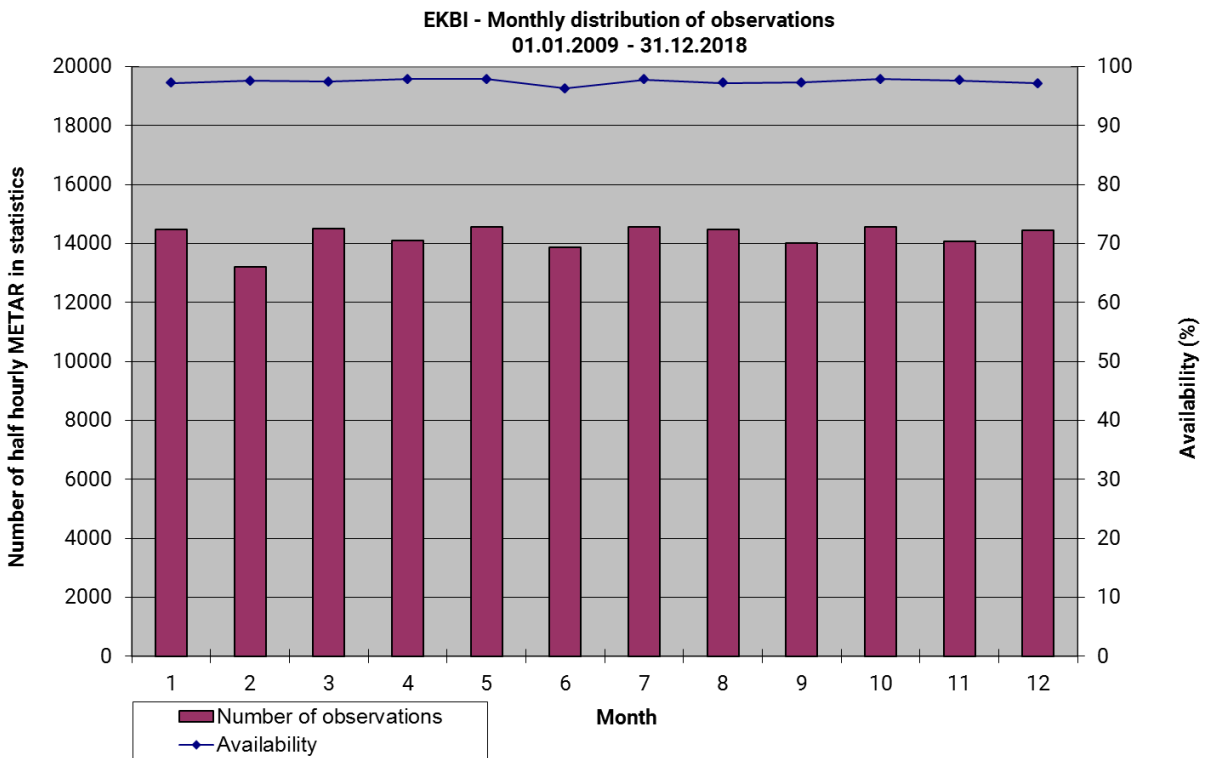


Figure 109

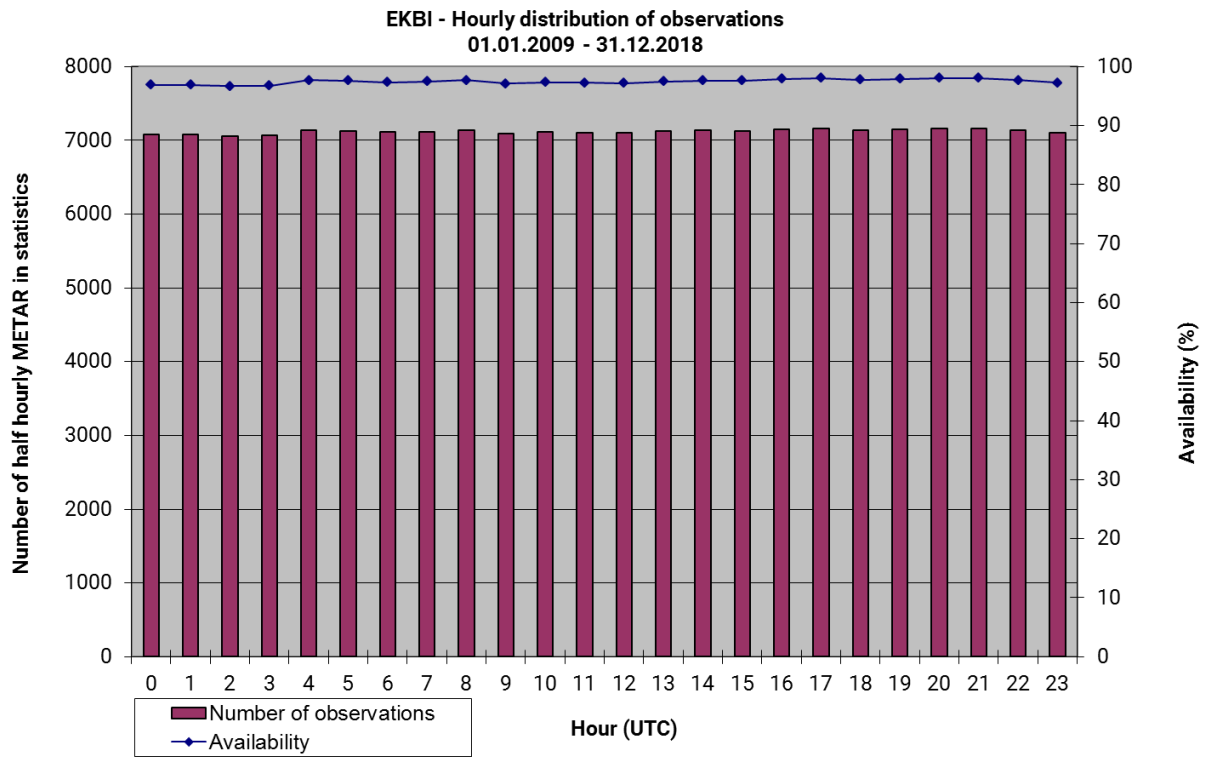


Figure 110

Table 32: EKBI. Average number of half hourly observations in statistics, 01.01.2009 – 31.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0
1	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0
2	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0
3	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0
4	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
5	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	1.9	1.9
6	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9	1.9	2.0
7	2.0	1.9	1.9	2.0	1.9	2.0	2.0	2.0	1.9	2.0
8	2.0	2.0	1.9	1.9	2.0	1.9	2.0	2.0	2.0	1.9
9	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9
10	2.0	2.0	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0
11	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0
12	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0
13	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0
14	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0
15	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
16	2.0	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0
17	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
18	1.9	2.0	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0
19	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0
20	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
21	2.0	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0
22	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0
23	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0

EKCH Københavns Lufthavn, Kastrup

Airport location: 55,617°N 12,650°E Elevation: 5 m above MSL.

EKCH observations in statistics: 172,818 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 98.6 %. For more information, please go to the 'Availability' section.

The EKCH METAR are all manual.

Cross Tables Visibility – Ceiling

Table 33: EKCH Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 172,818	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.07	0.10	0.10	0.11	0.11	0.011	0.12
<350m	0	0.19	0.59	0.59	0.59	0.60	0.08	0.67
<600m	0	0.21	0.83	0.84	0.85	0.85	0.11	0.96
<800 m	0	0.21	1.00	1.02	1.02	1.03	0.14	1.17
<1.5 km	0	0.22	1.52	1.64	1.68	1.70	0.31	2.01
<3.0 km	0.00058	0.23	2.51	3.22	3.44	3.55	0.99	4.54
< 5.0 km	0.00058	0.23	3.23	5.25	5.98	6.29	2.52	8.81
< 8.0 km	0.00058	0.23	3.58	7.17	8.94	9.64	5.37	15.02
>= 8.0 km or CAVOK	0.0012	0.0012	0.12	2.48	7.03	10.89	74.09	84.98
Total	0.0017	0.23	3.70	9.65	15.97	20.54	79.46	100

Table 34: EKCH - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,756	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.11	0.13	0.13	0.14	0.14	0.0047	0.14
<350m	0	0.44	1.18	1.18	1.18	1.18	0.07	1.25
<600m	0	0.46	1.74	1.75	1.75	1.75	0.11	1.86
<800 m	0	0.47	2.11	2.14	2.15	2.15	0.13	2.28
<1.5 km	0	0.49	3.22	3.48	3.59	3.63	0.33	3.96
<3.0 km	0.0023	0.51	5.31	6.79	7.25	7.51	1.57	9.09
< 5.0 km	0.0023	0.51	6.69	10.39	11.83	12.52	4.26	16.77
< 8.0 km	0.0023	0.51	7.39	13.79	16.76	18.01	8.86	26.87
>= 8.0 km or CAVOK	0.0023	0.0023	0.21	4.31	11.22	16.77	56.36	73.13
Total	0.0047	0.51	7.60	18.09	27.98	34.78	65.22	100

Table 35: EKCH - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,814	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.040	0.056	0.056	0.056	0.056	0.014	0.070
<350m	0	0.082	0.32	0.32	0.32	0.32	0.061	0.38
<600m	0	0.10	0.47	0.47	0.47	0.47	0.10	0.57
<800 m	0	0.11	0.56	0.56	0.56	0.57	0.12	0.69
<1.5 km	0	0.12	0.85	0.88	0.90	0.91	0.23	1.14
<3.0 km	0	0.12	1.18	1.33	1.40	1.42	0.63	2.05
< 5.0 km	0	0.13	1.45	1.91	2.15	2.26	1.66	3.93
< 8.0 km	0	0.13	1.56	2.44	3.10	3.36	3.69	7.05
>= 8.0 km or CAVOK	0.0023	0.0023	0.0327	0.79	2.85	4.76	88.19	92.95
Total	0.0023	0.13	1.60	3.23	5.96	8.12	91.88	100

Table 36: EKCH - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,629	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.025	0.050	0.050	0.050	0.053	0.0069	0.060
<350m	0	0.044	0.14	0.14	0.14	0.15	0.060	0.21
<600m	0	0.050	0.18	0.18	0.18	0.18	0.10	0.28
<800 m	0	0.050	0.19	0.19	0.19	0.19	0.13	0.33
<1.5 km	0	0.060	0.30	0.33	0.33	0.34	0.28	0.62
<3.0 km	0	0.064	0.43	0.58	0.63	0.66	0.58	1.24
< 5.0 km	0	0.064	0.52	0.95	1.16	1.25	1.29	2.54
< 8.0 km	0	0.064	0.59	1.37	1.89	2.15	3.18	5.32
>= 8.0 km or CAVOK	0	0	0.071	0.90	2.35	3.87	90.80	94.68
Total	0	0.064	0.66	2.27	4.24	6.02	93.98	100

Table 37: EKCH - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,619	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.11	0.18	0.18	0.18	0.18	0.018	0.20
<350m	0	0.21	0.72	0.73	0.73	0.74	0.11	0.85
<600m	0	0.22	0.95	0.99	1.00	1.00	0.15	1.15
<800 m	0	0.22	1.13	1.20	1.21	1.23	0.19	1.42
<1.5 km	0	0.23	1.71	1.88	1.93	1.95	0.41	2.37
<3.0 km	0	0.24	3.16	4.23	4.52	4.64	1.19	5.83
< 5.0 km	0	0.24	4.27	7.81	8.81	9.16	2.90	12.06
< 8.0 km	0	0.24	4.82	11.13	14.06	15.11	5.80	20.92
>= 8.0 km or CAVOK	0	0	0.15	3.93	11.69	18.17	60.92	79.08
Total	0	0.24	4.97	15.06	25.75	33.28	66.72	100

Wind Direction Histograms

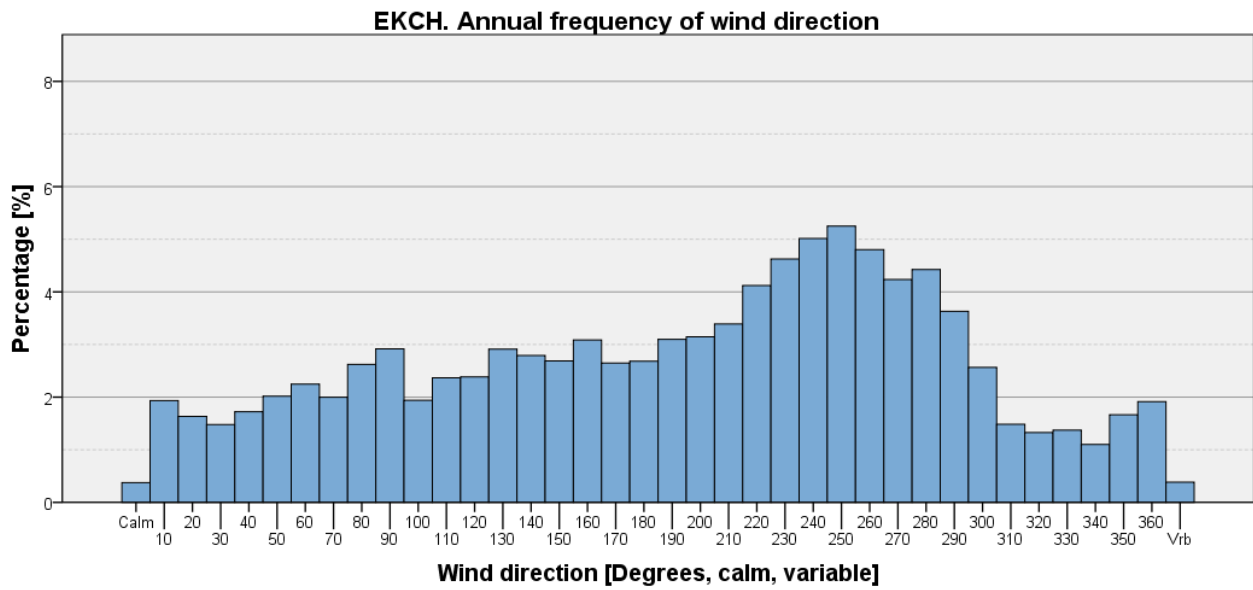


Figure 111

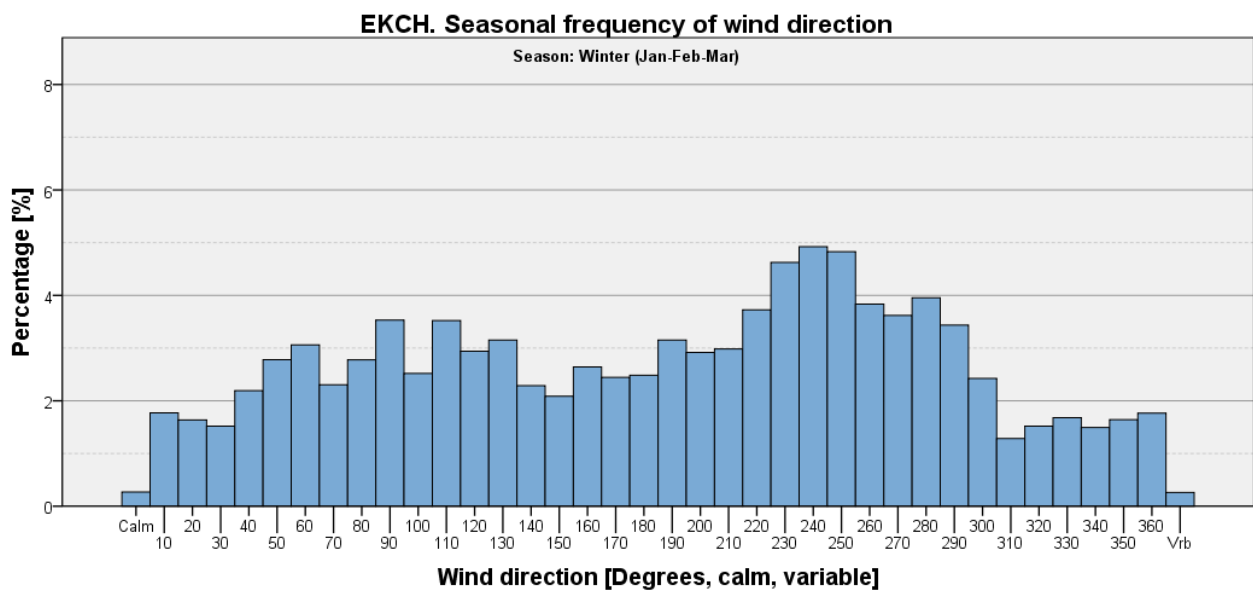


Figure 112

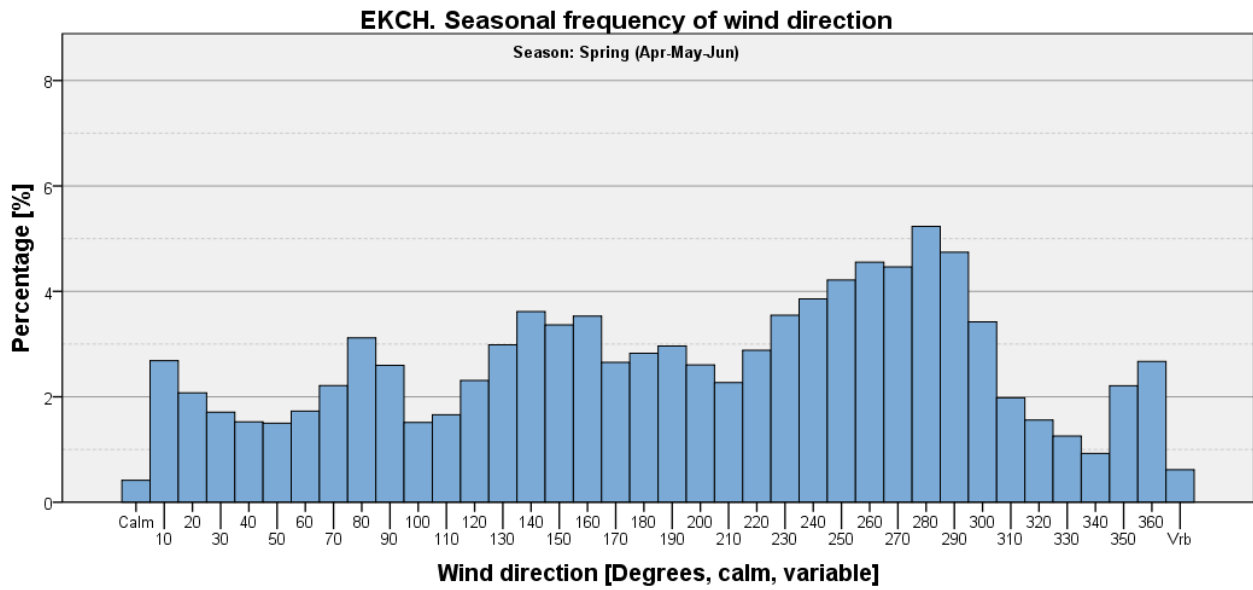


Figure 113

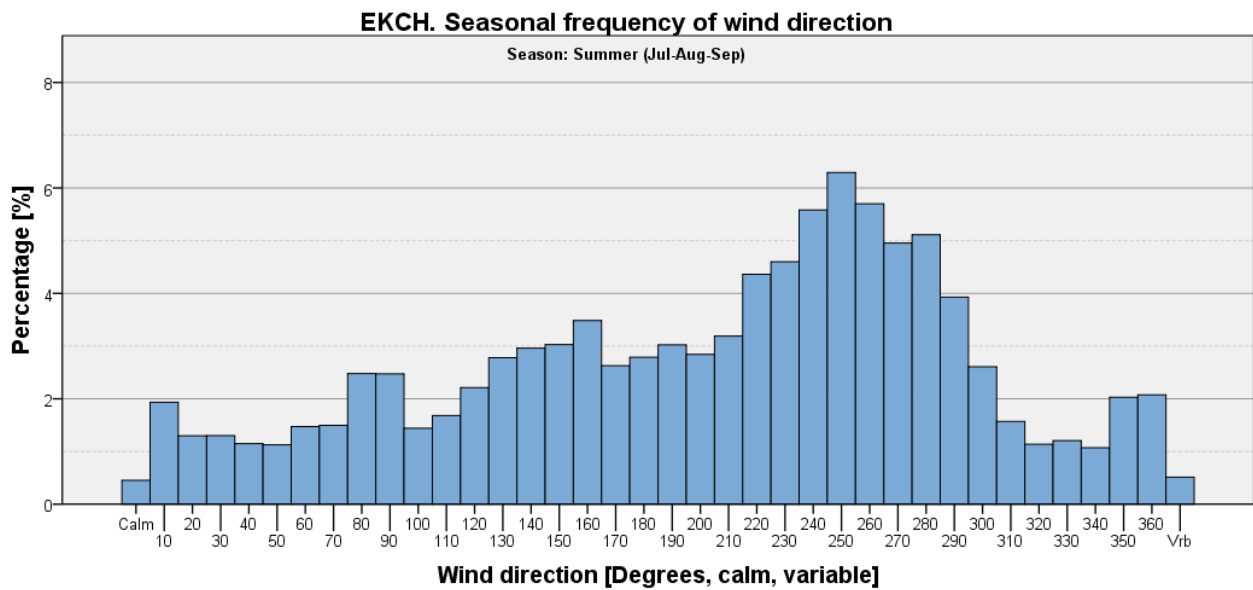


Figure 114

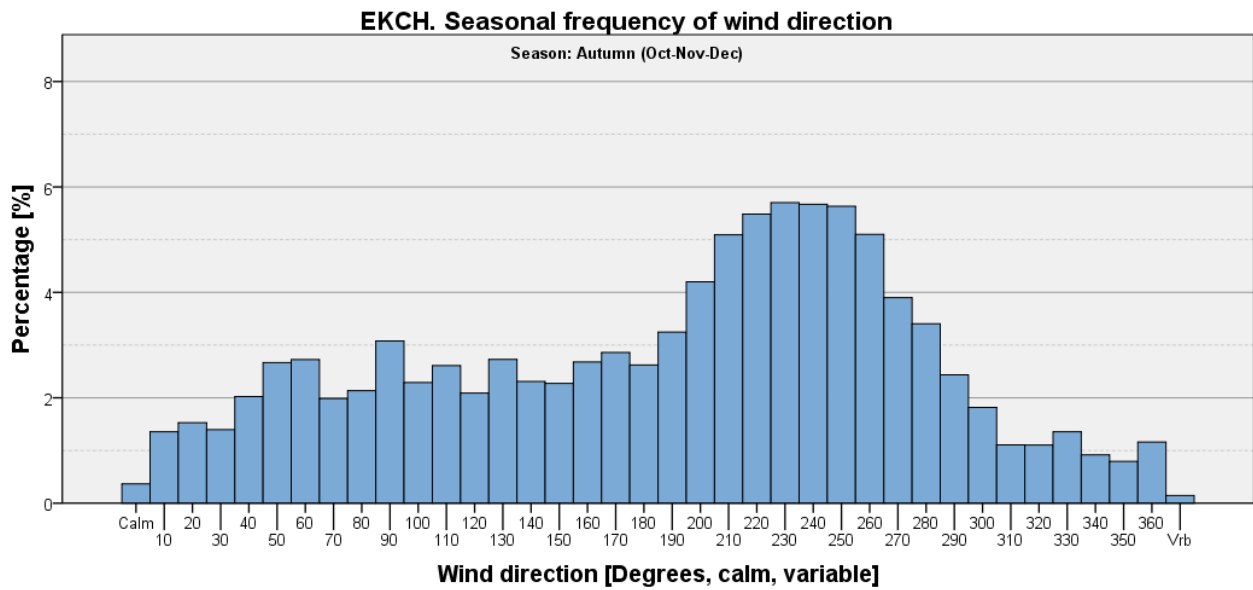


Figure 115

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 38: EKCH - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	2.28	0.69	0.33	1.42	1.17
All other observations	97.72	99.31	99.67	98.58	98.83
Total	100	100	100	100	100

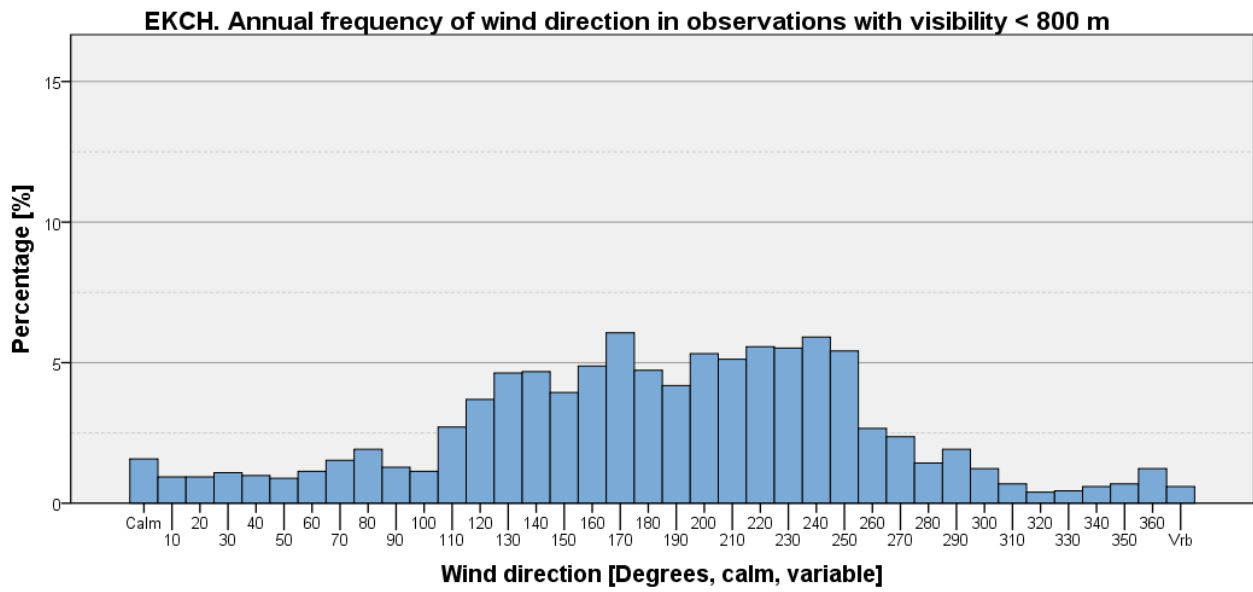


Figure 116

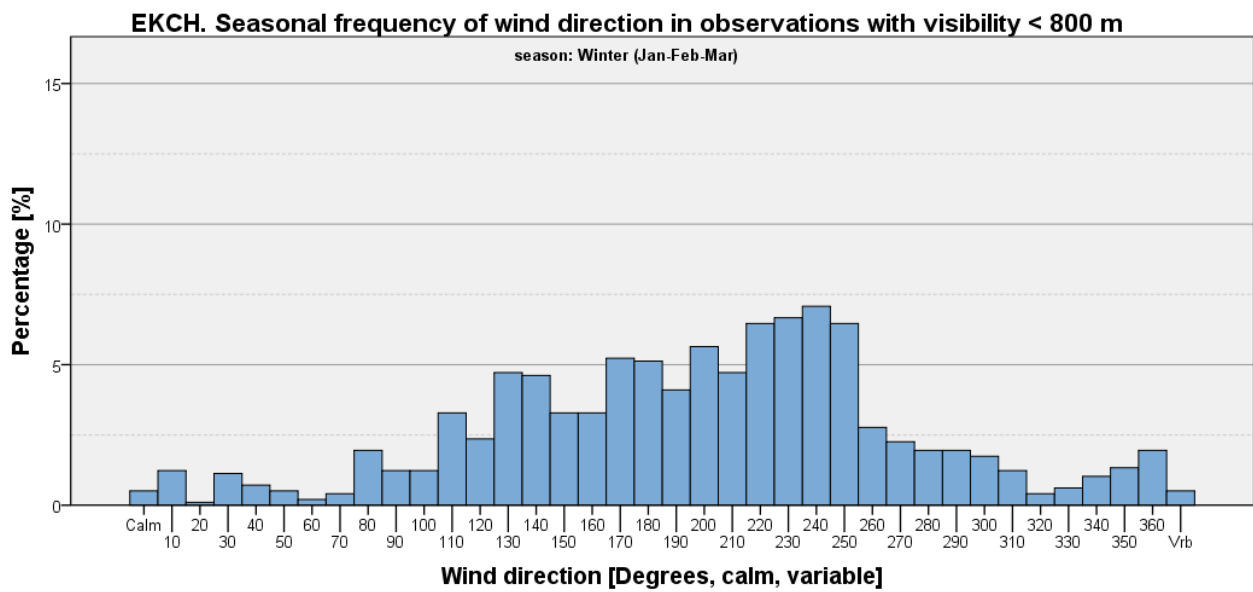


Figure 117

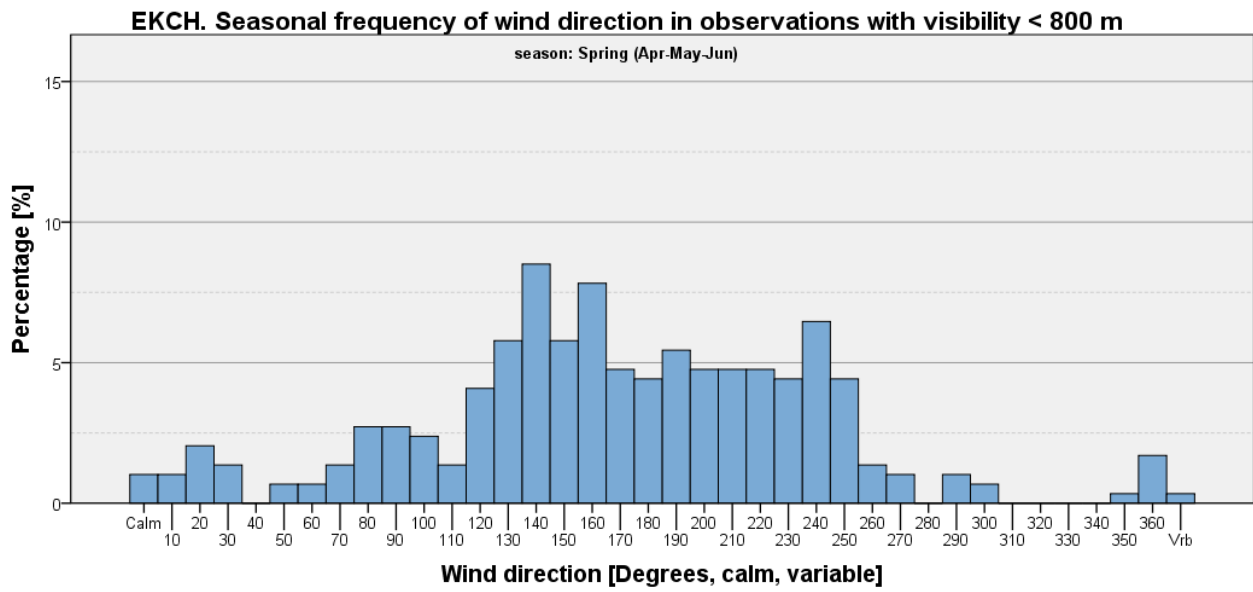


Figure 118

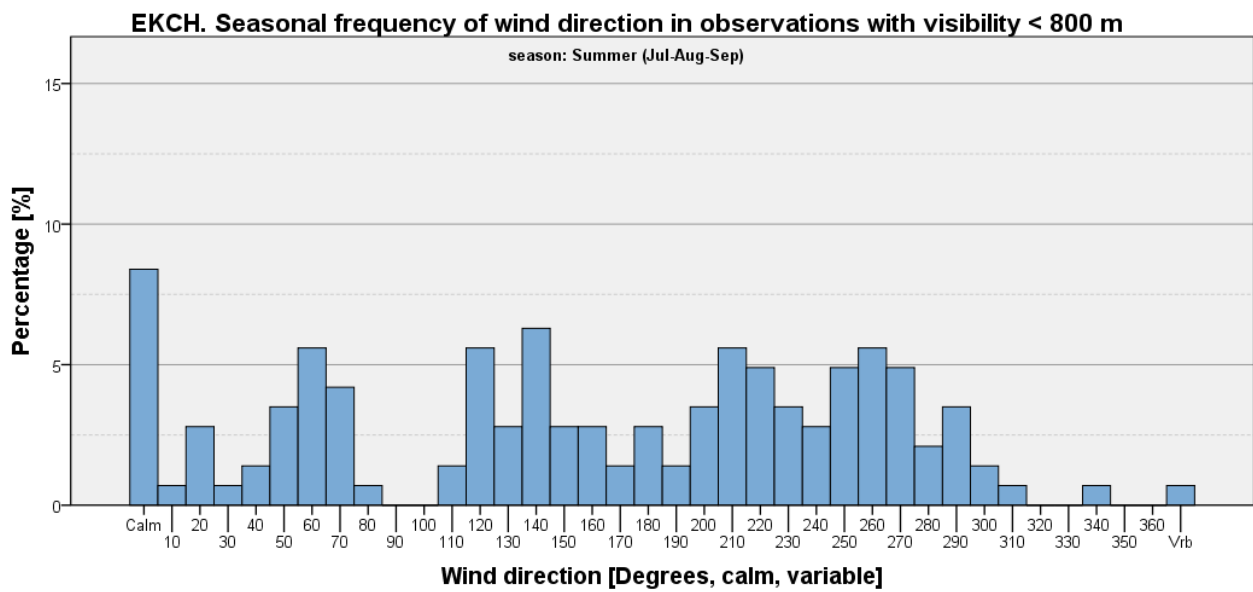


Figure 119

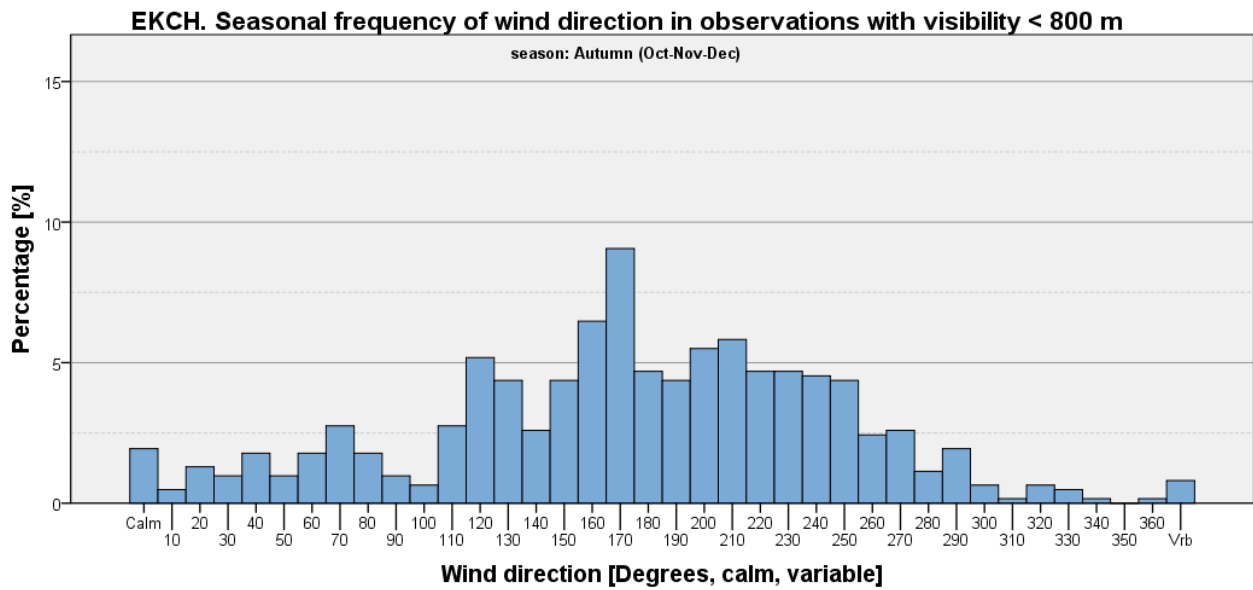


Figure 120

Visibility < 800 m and Wind Speed <= 5 kts

Table 39: EKCH - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	1.00	0.35	0.28	0.79	0.60
All other observations	99.00	99.65	99.72	99.21	99.40
Total	100	100	100	100	100

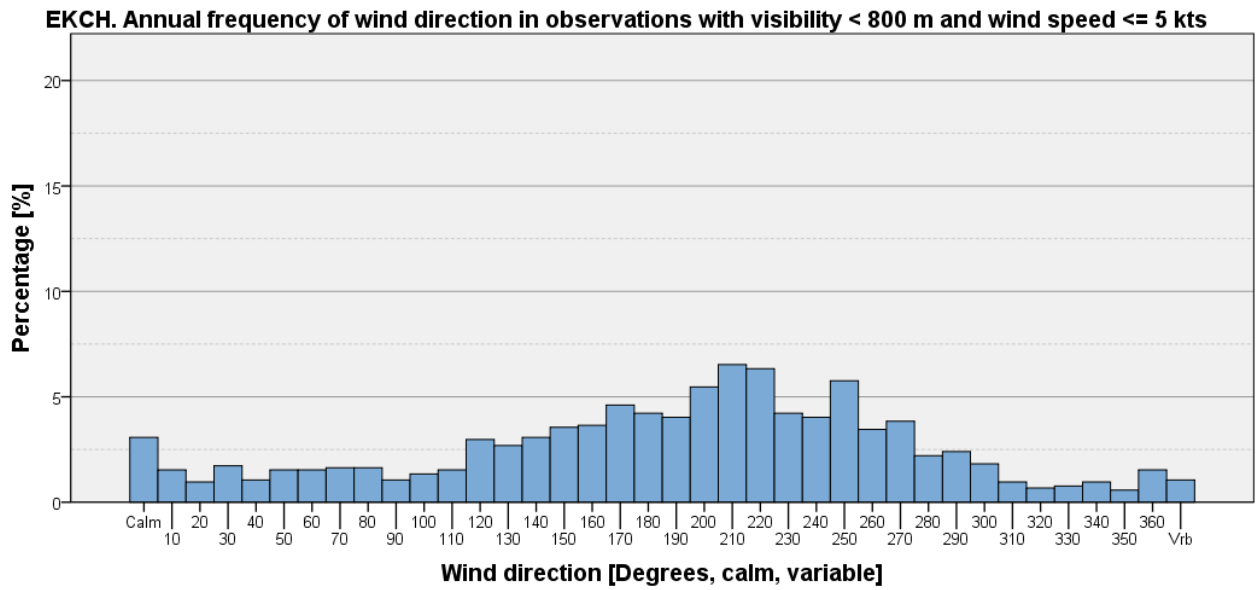


Figure 121

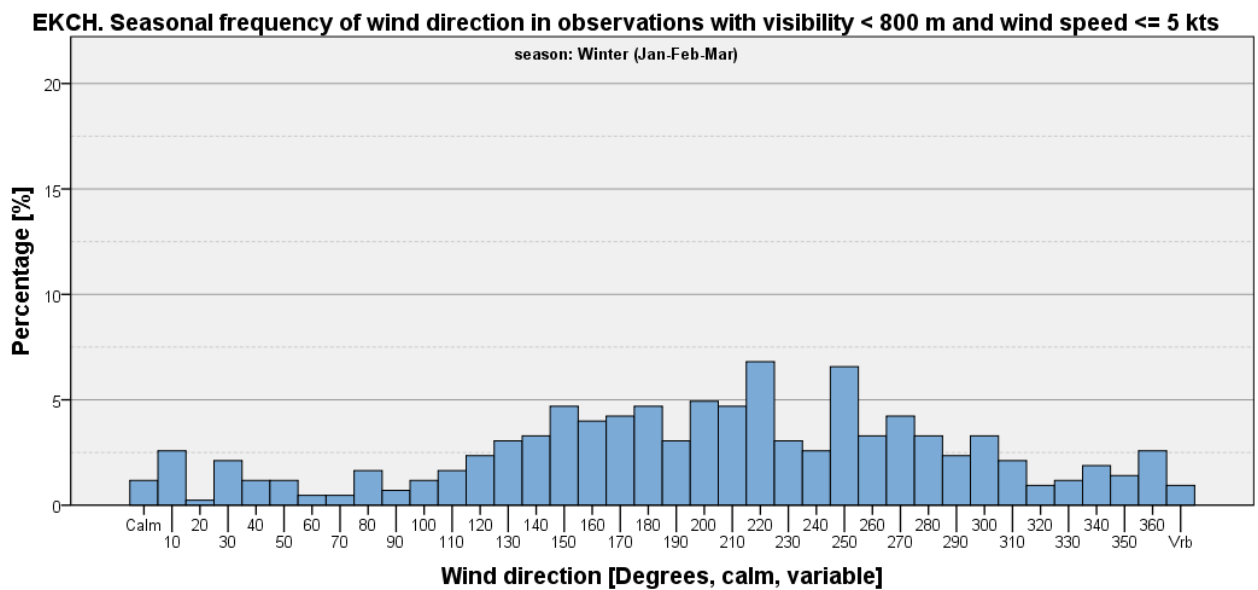


Figure 122

EKCH. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

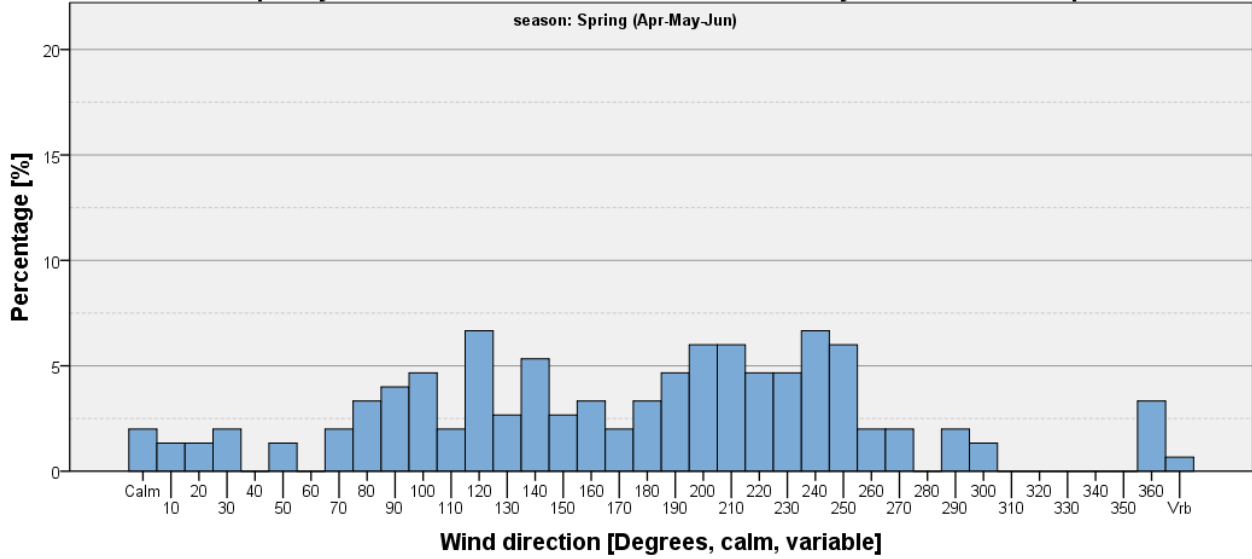


Figure 123

EKCH. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

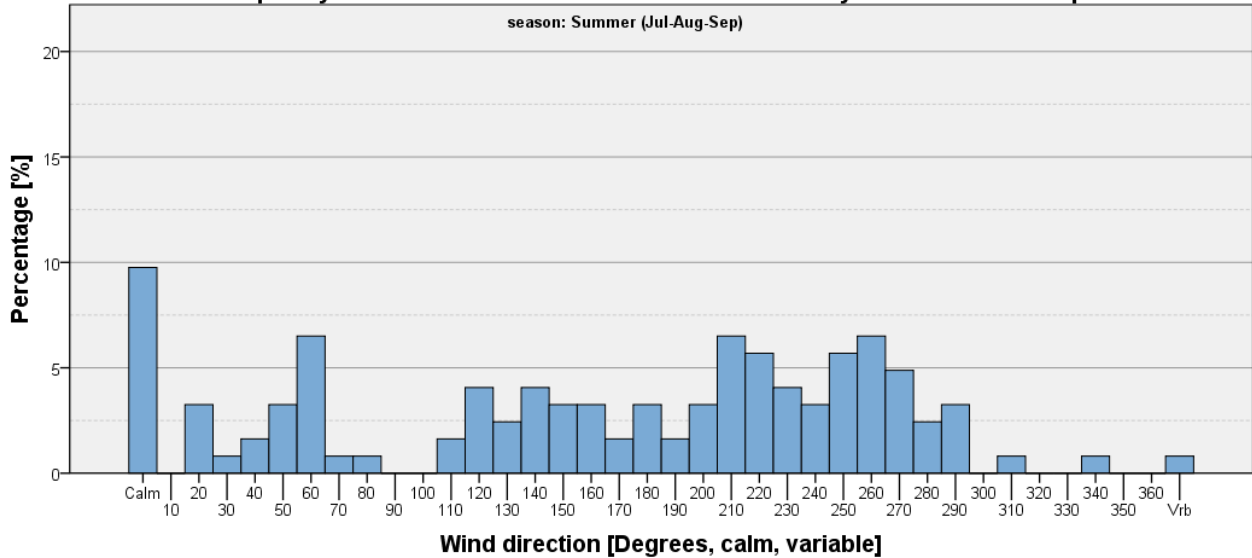


Figure 124

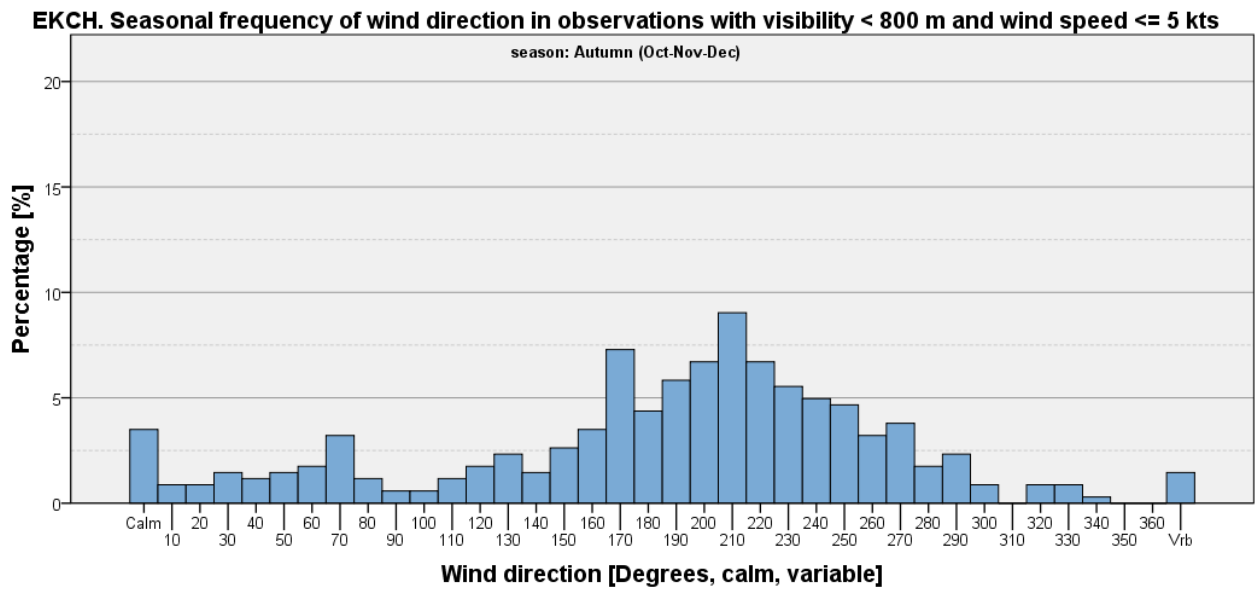


Figure 125

Visibility < 800 m and Wind Speed > 5 kts

Table 40: EKCH - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	1.28	0.34	0.046	0.63	0.57
All other observations	98.72	99.66	99.95	99.37	99.43
Total	100	100	100	100	100

EKCH. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

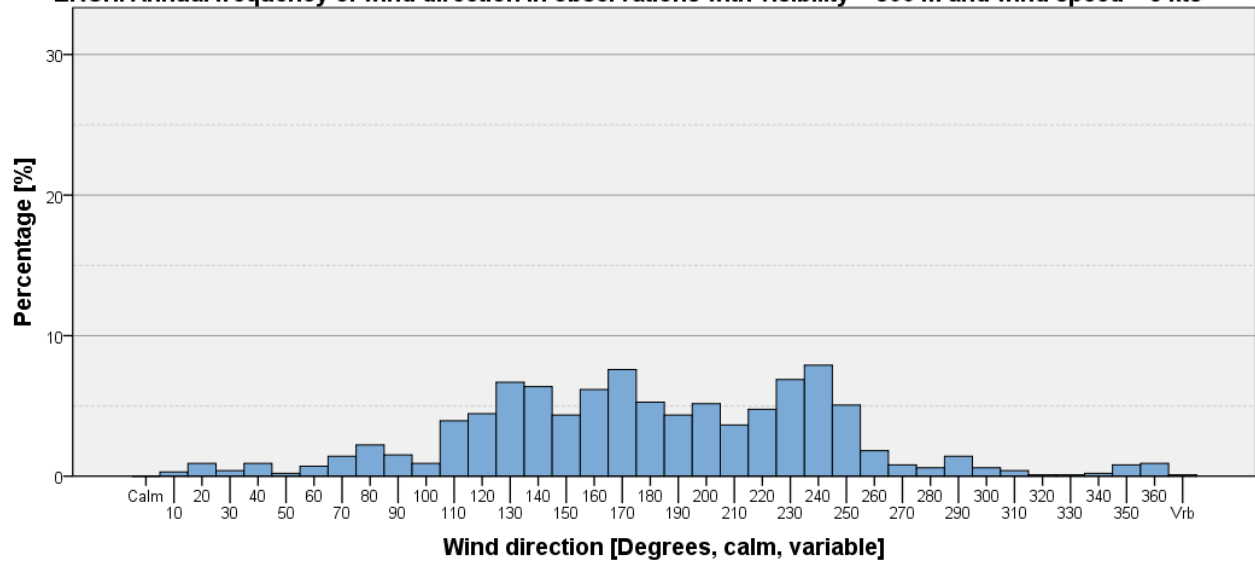


Figure 126

EKCH. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

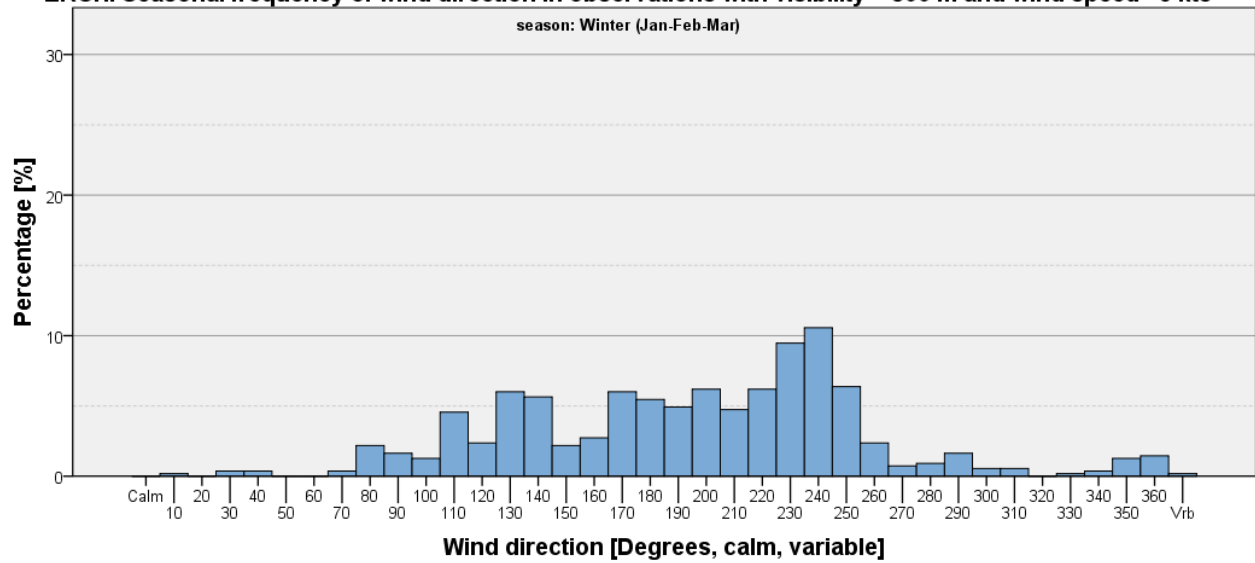


Figure 127

EKCH. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

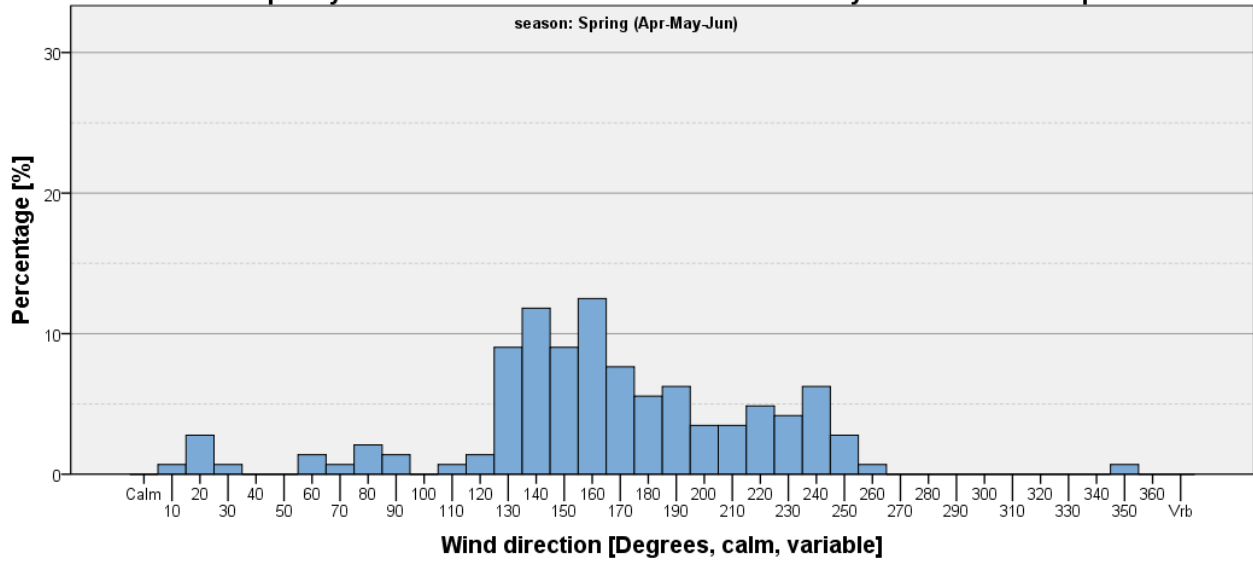


Figure 128

EKCH. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

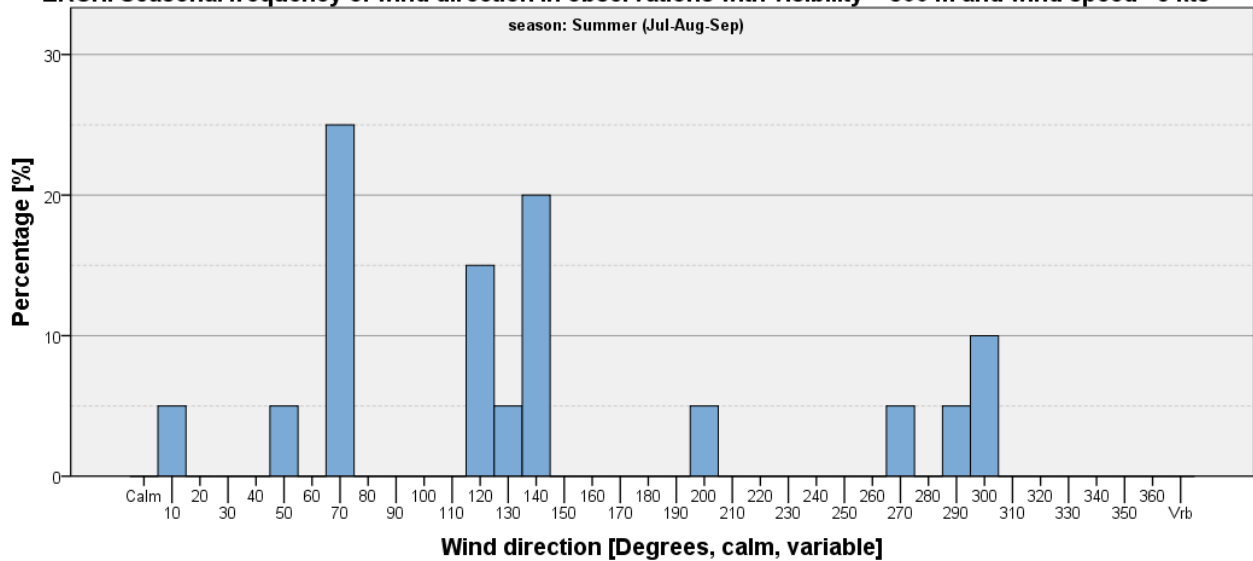


Figure 129

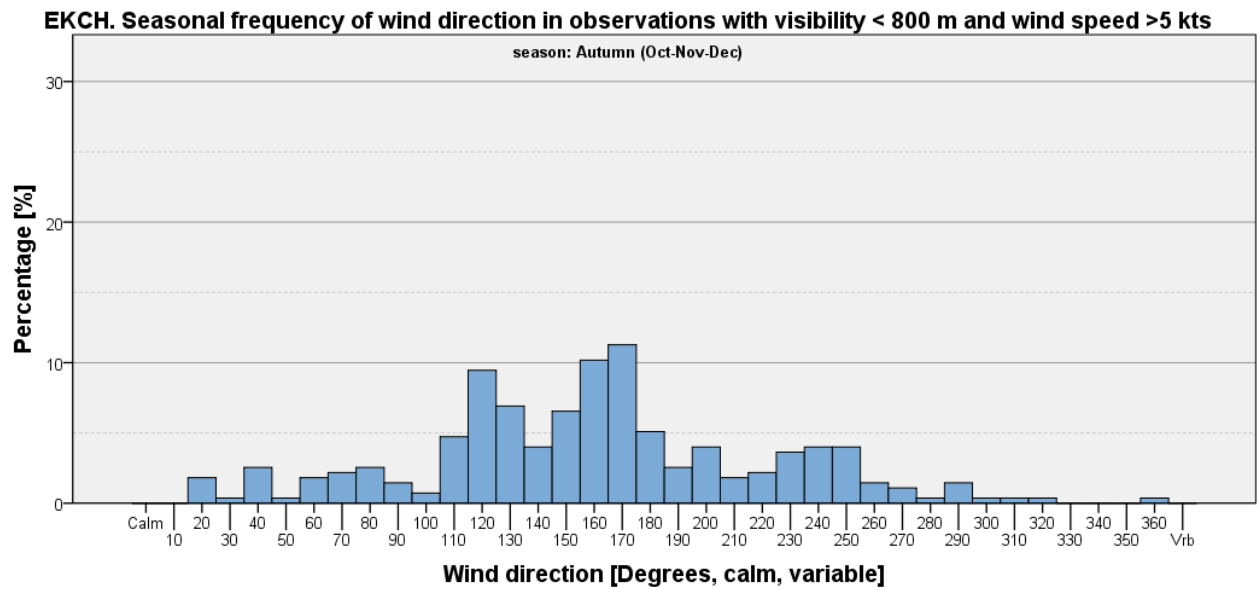


Figure 130

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 41: EKCH - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	18.09	3.23	2.27	15.06	9.65
All other observations	81.91	96.77	97.73	84.94	90.35
Total	100	100	100	100	100

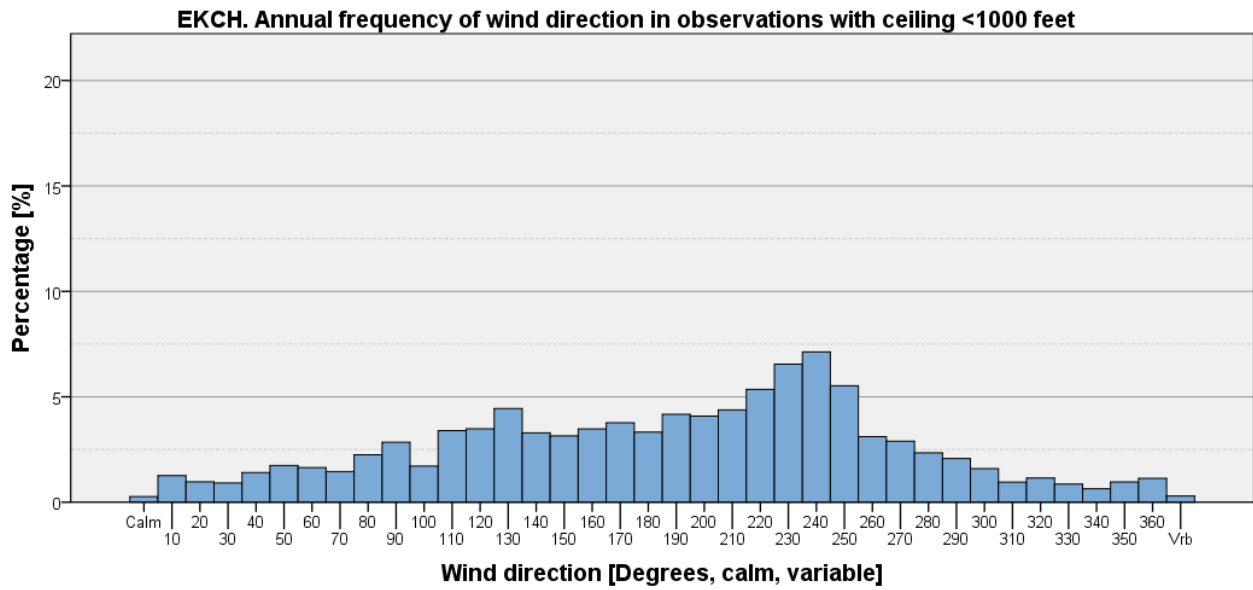


Figure 131

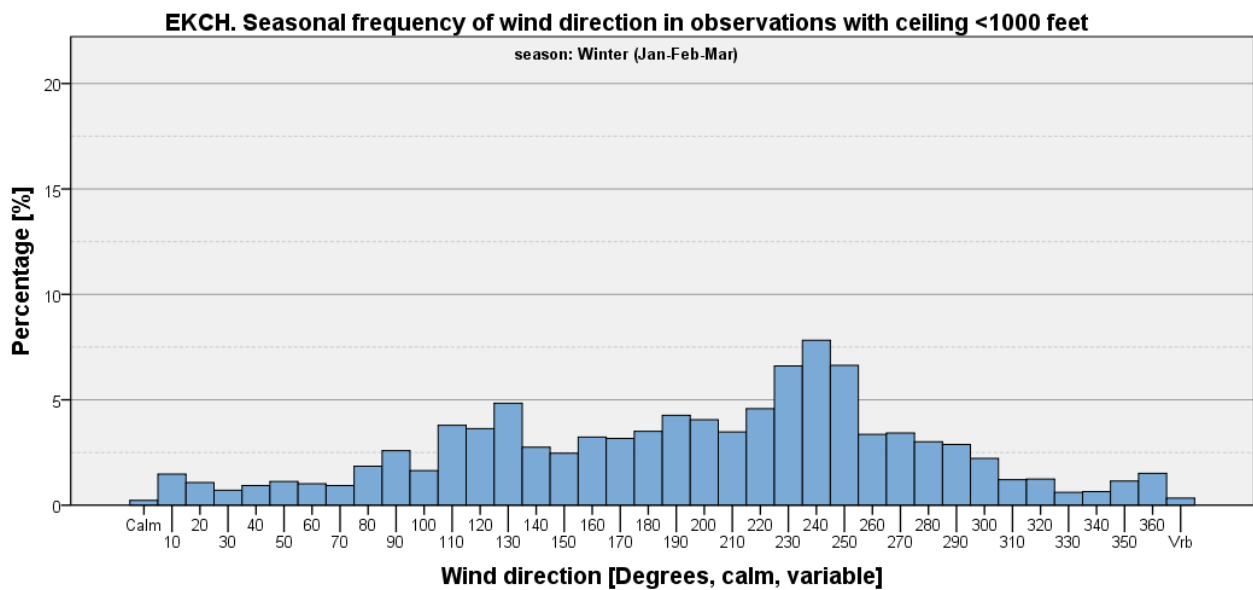


Figure 132

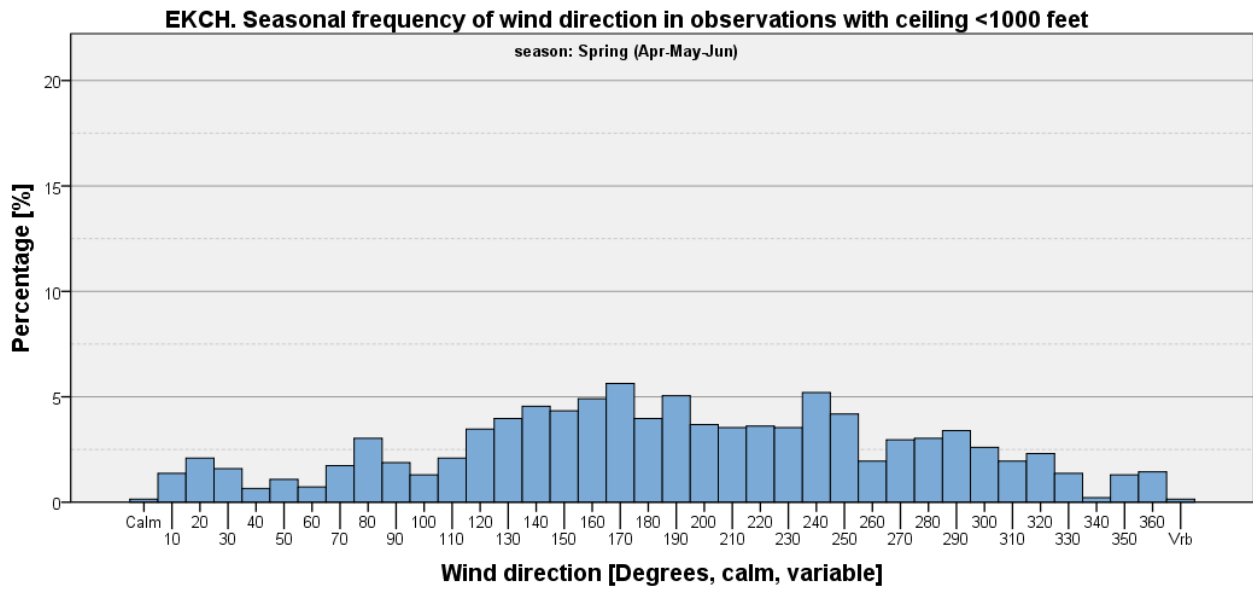


Figure 133

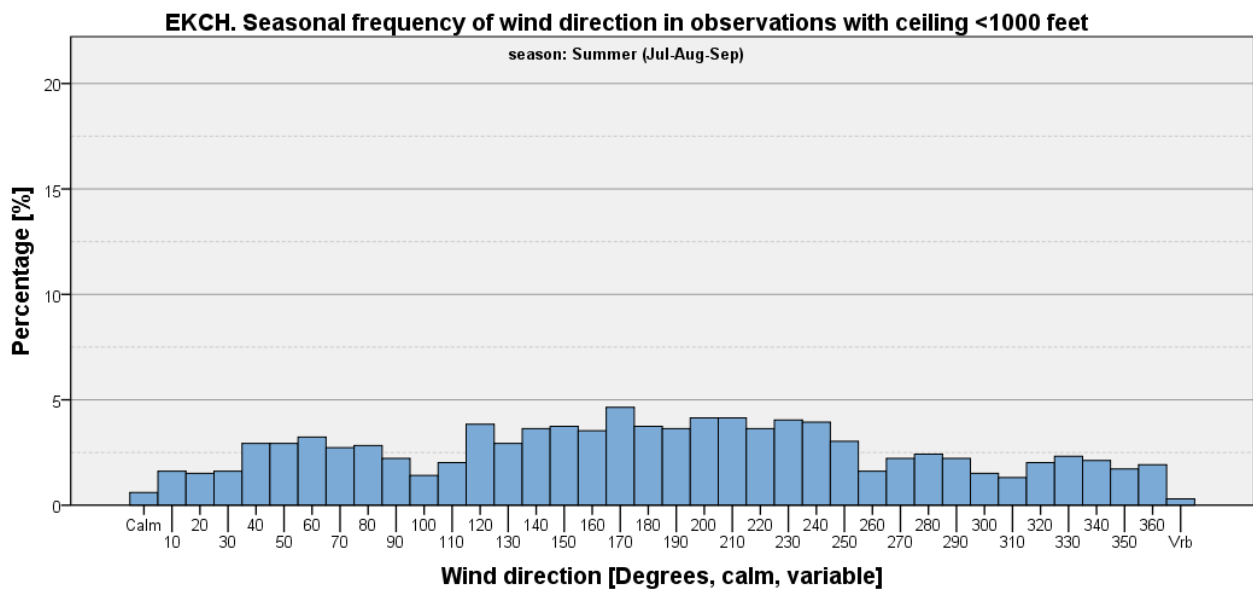


Figure 134

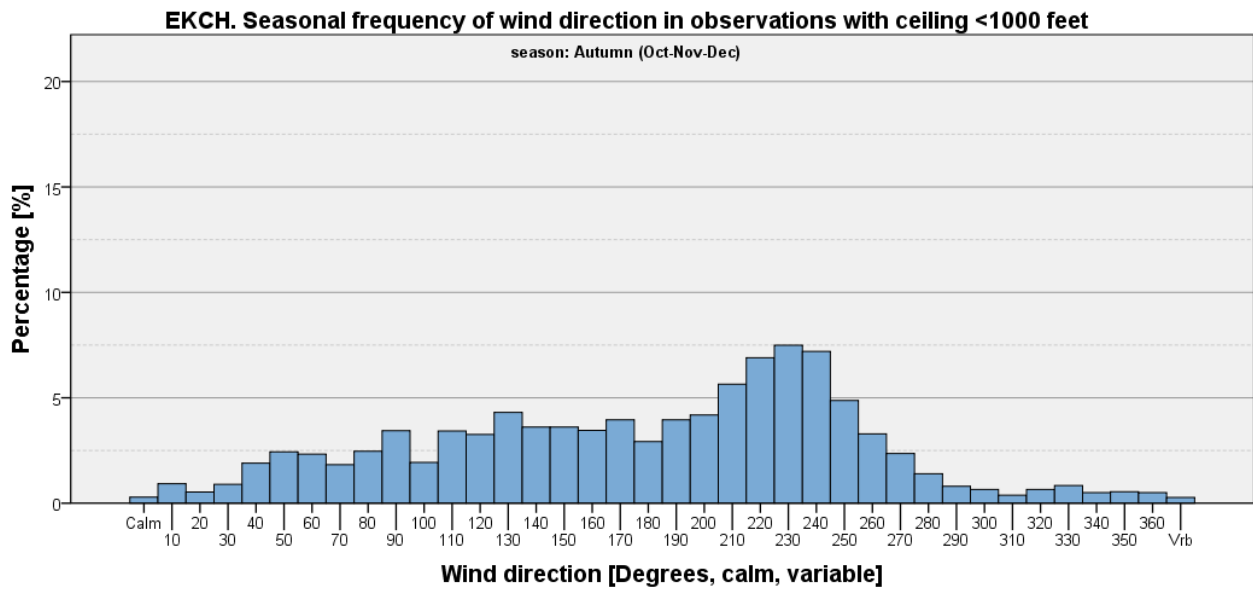


Figure 135

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 42: EKCH - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	3.70	0.71	0.65	2.39	1.86
All other observations	96.30	99.29	99.35	97.61	98.14
Total	100	100	100	100	100

EKCH. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

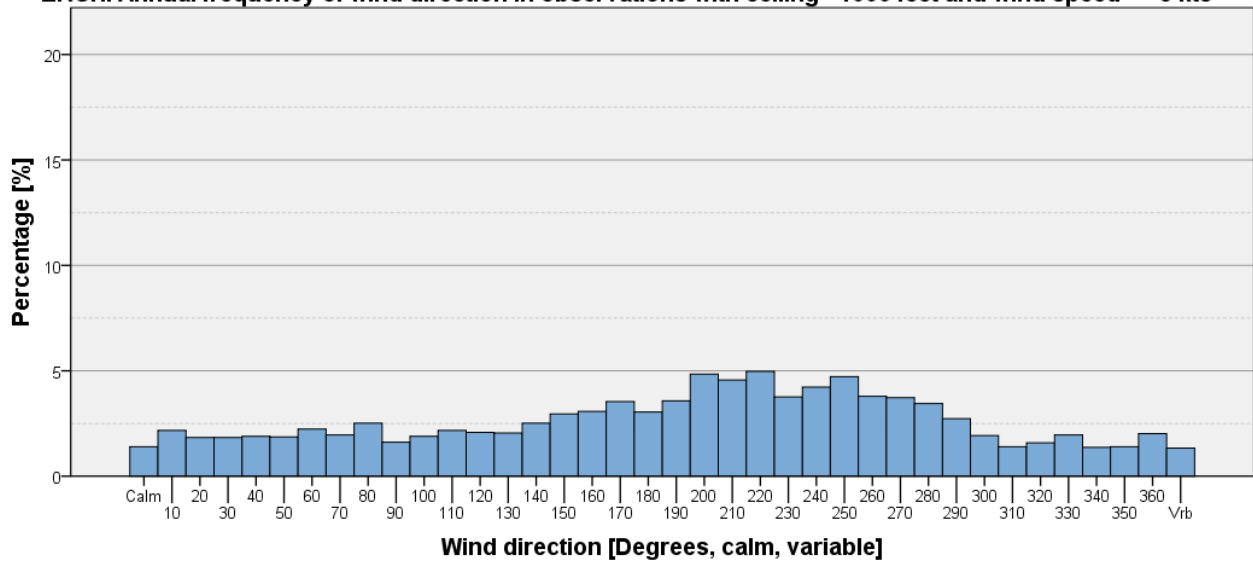


Figure 136

EKCH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

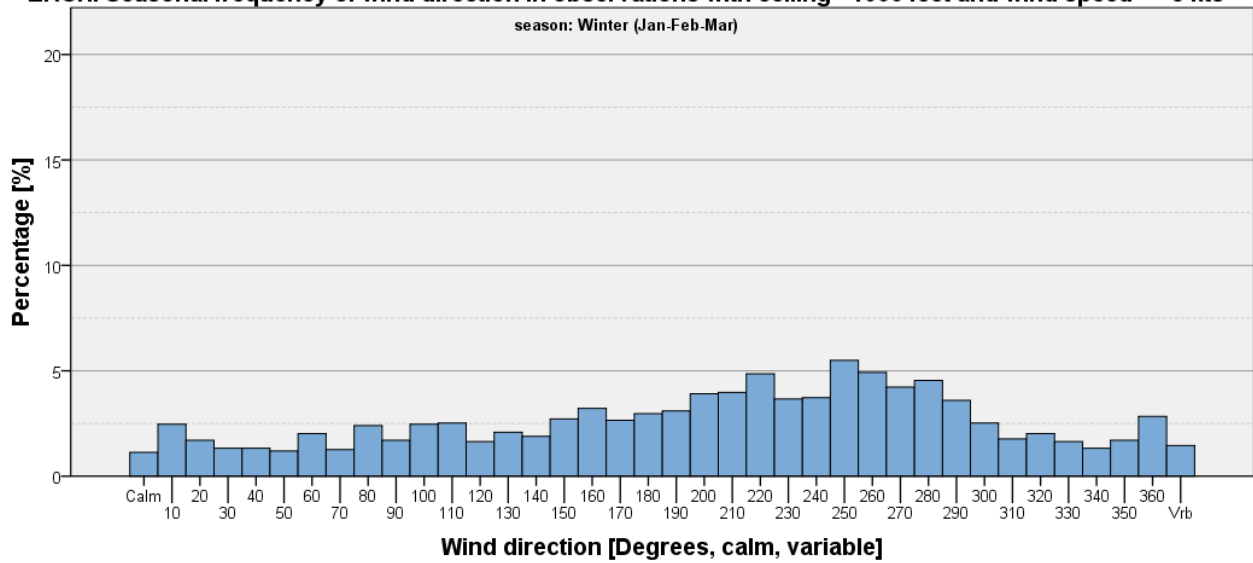


Figure 137

EKCH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

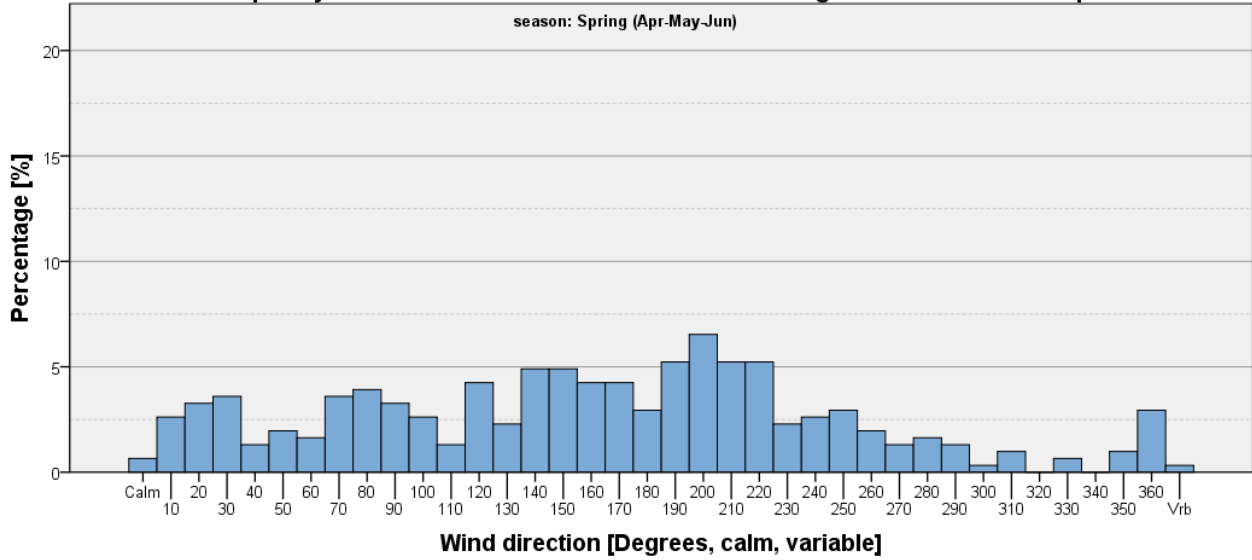


Figure 138

EKCH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

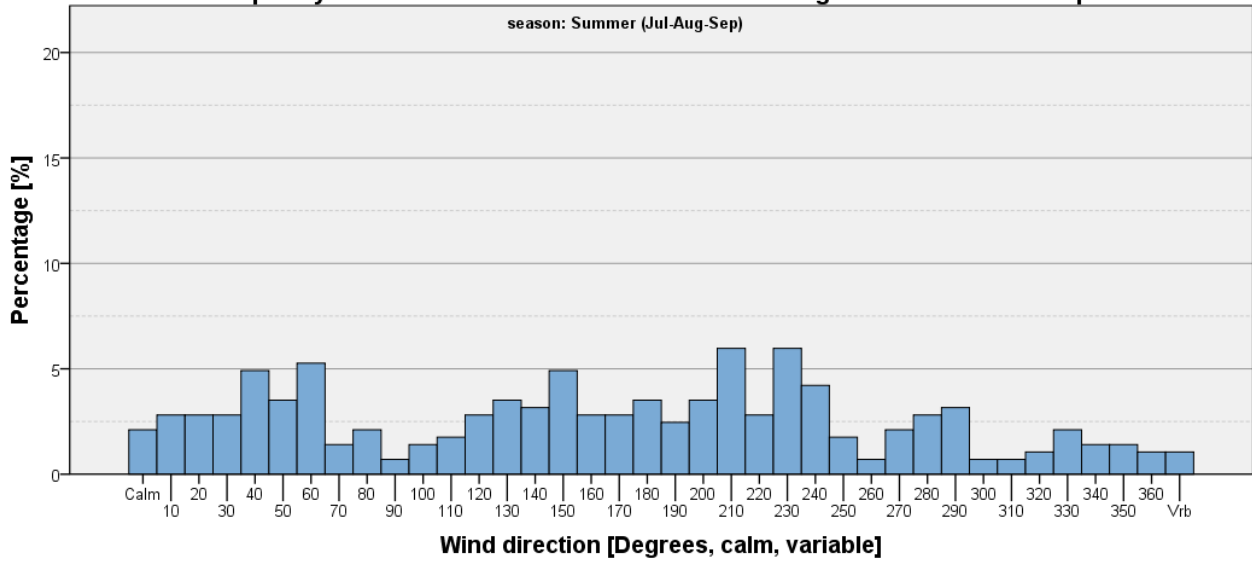


Figure 139

EKCH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

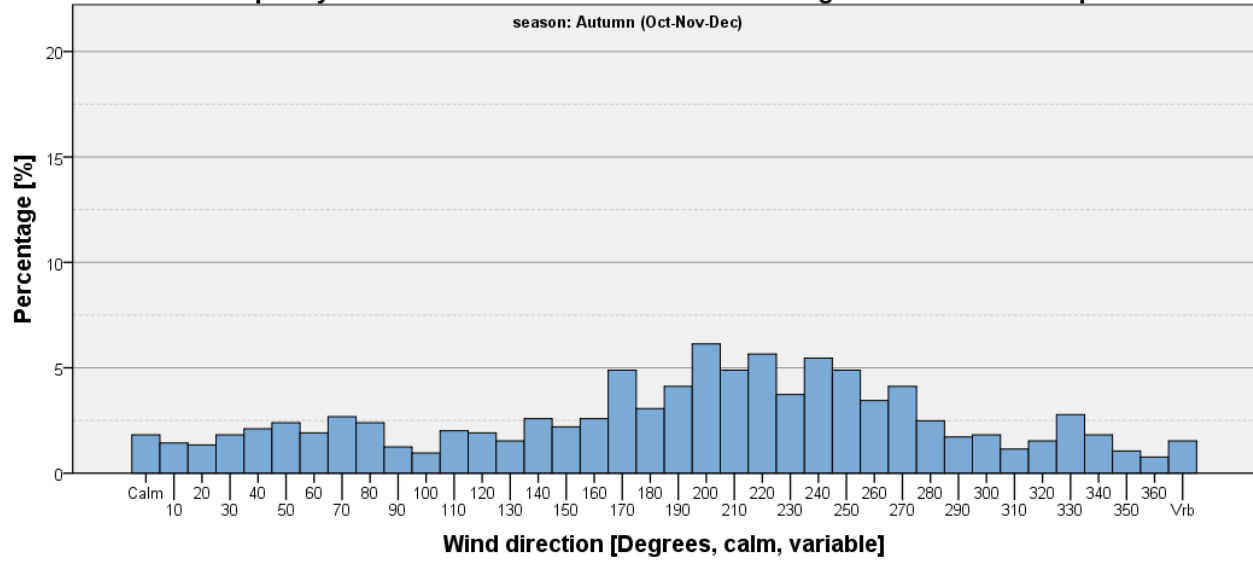


Figure 140

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 43: EKCH - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	14.39	2.52	1.62	12.66	7.79
All other observations	85.61	97.48	98.38	87.34	92.21
Total	100	100	100	100	100

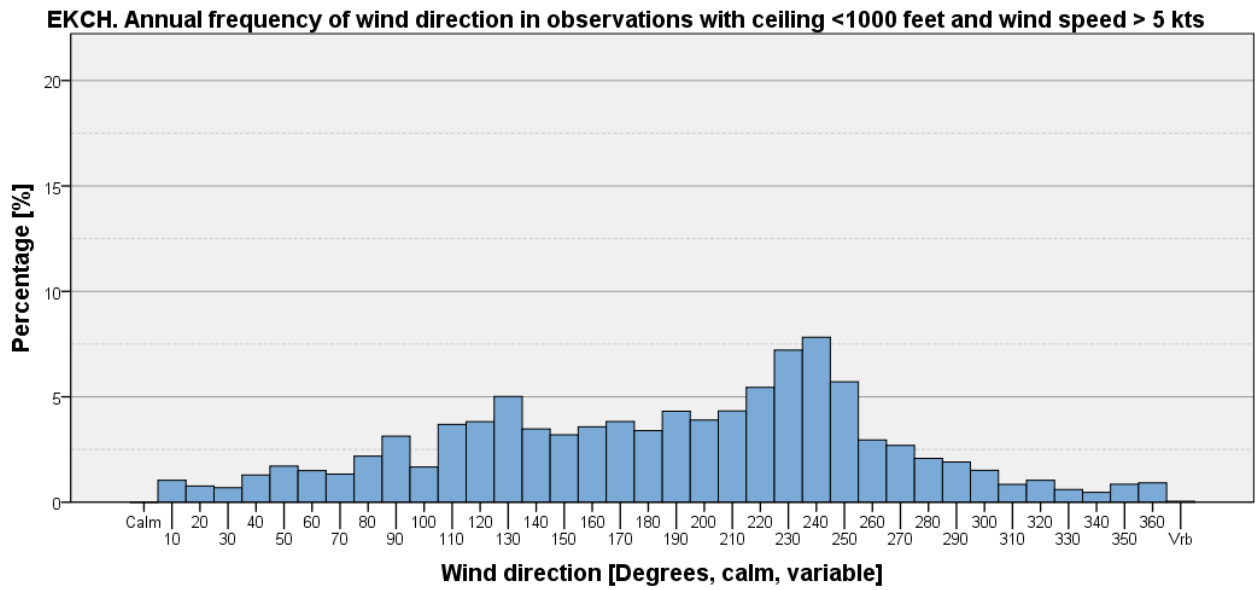


Figure 141

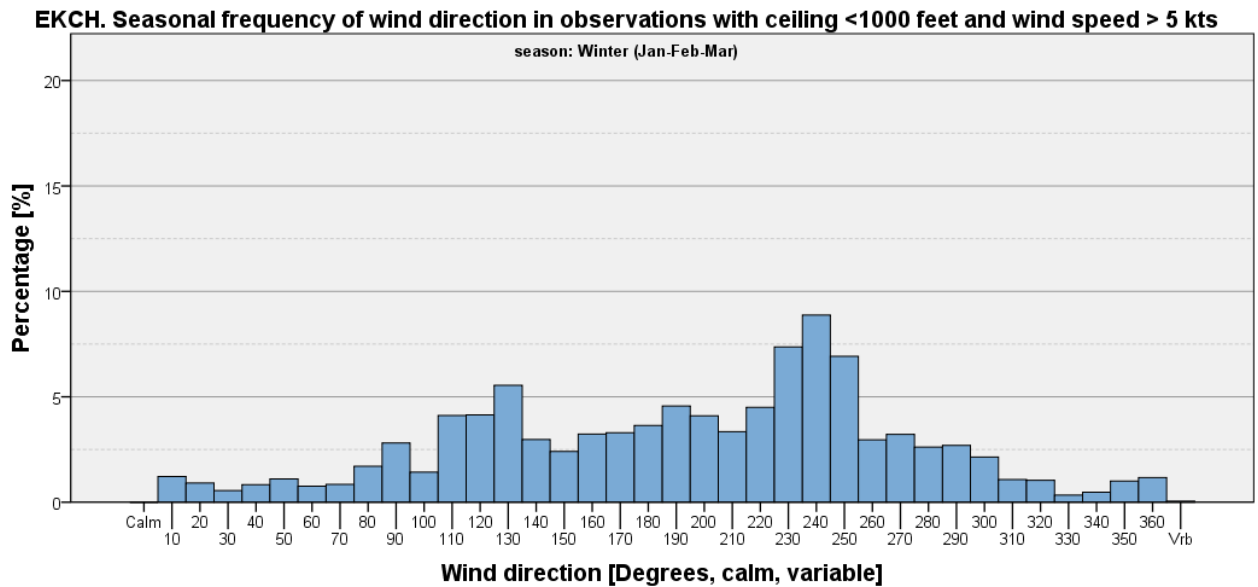


Figure 142

EKCH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

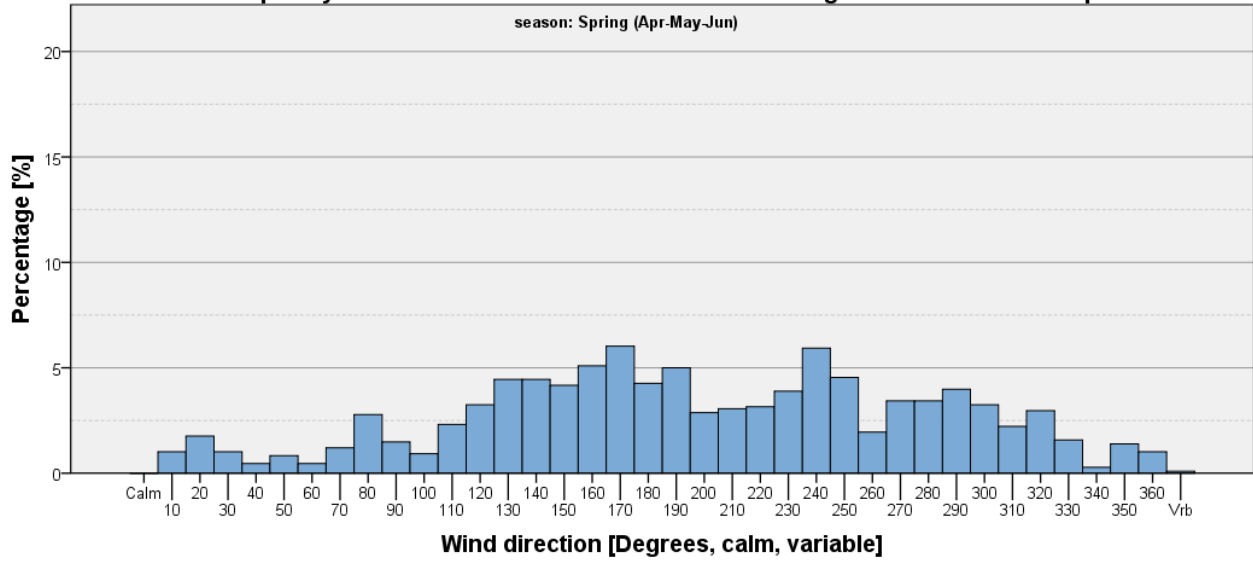


Figure 143

EKCH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

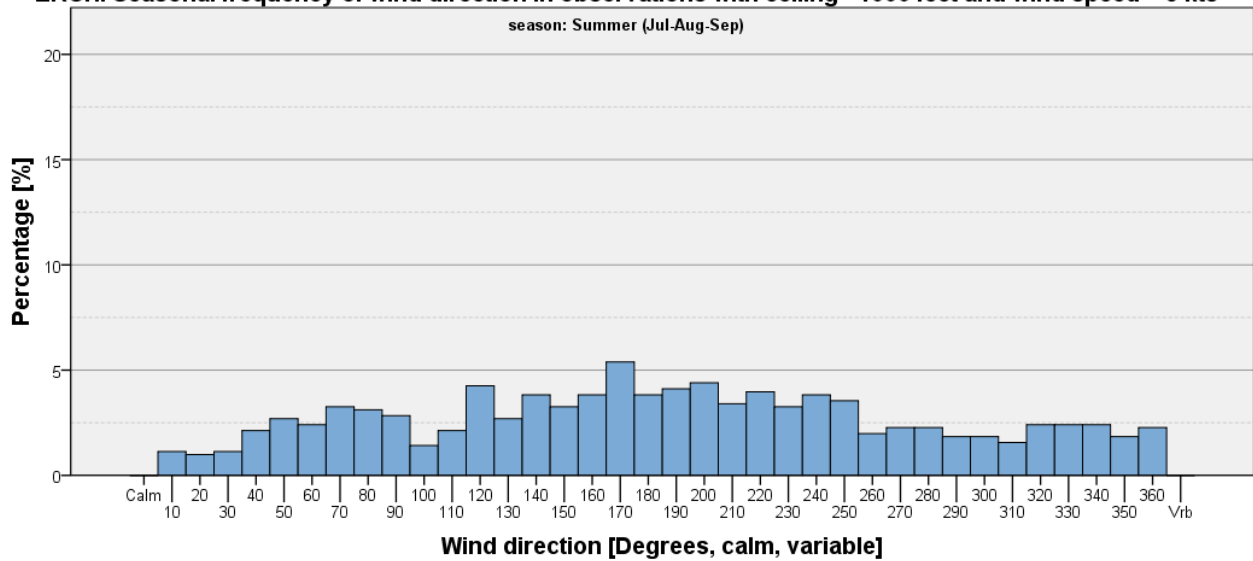


Figure 144

EKCH. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

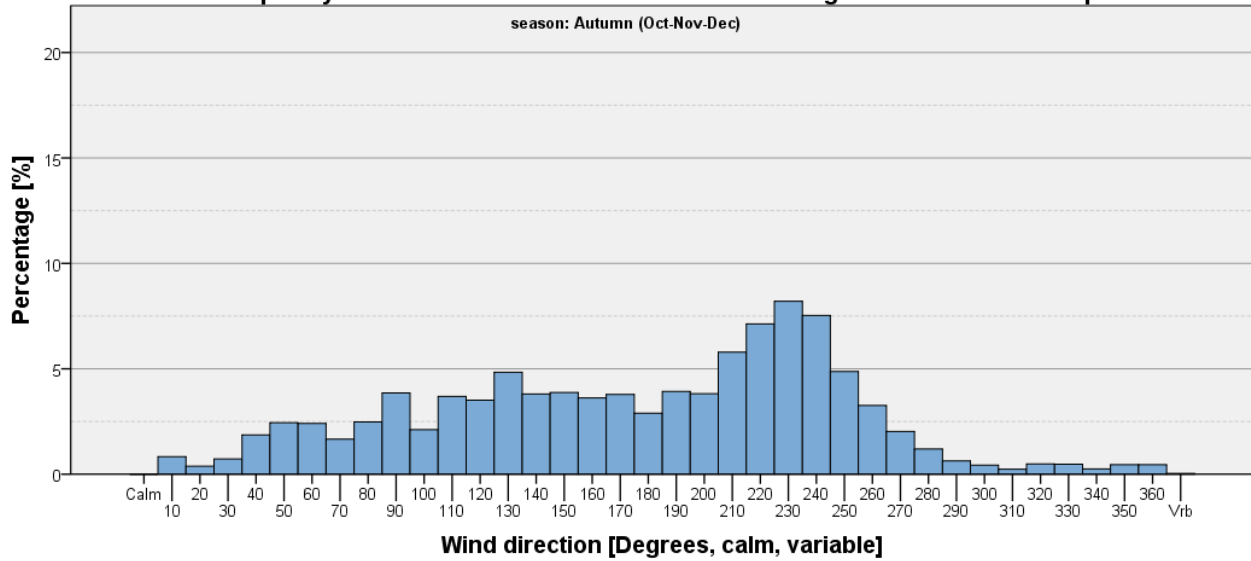


Figure 145

Ceiling < 500 feet

Table 44: EKCH - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	7.60	1.60	0.66	4.97	3.70
All other observations	92.40	98.40	99.34	95.03	96.30
Total	100	100	100	100	100

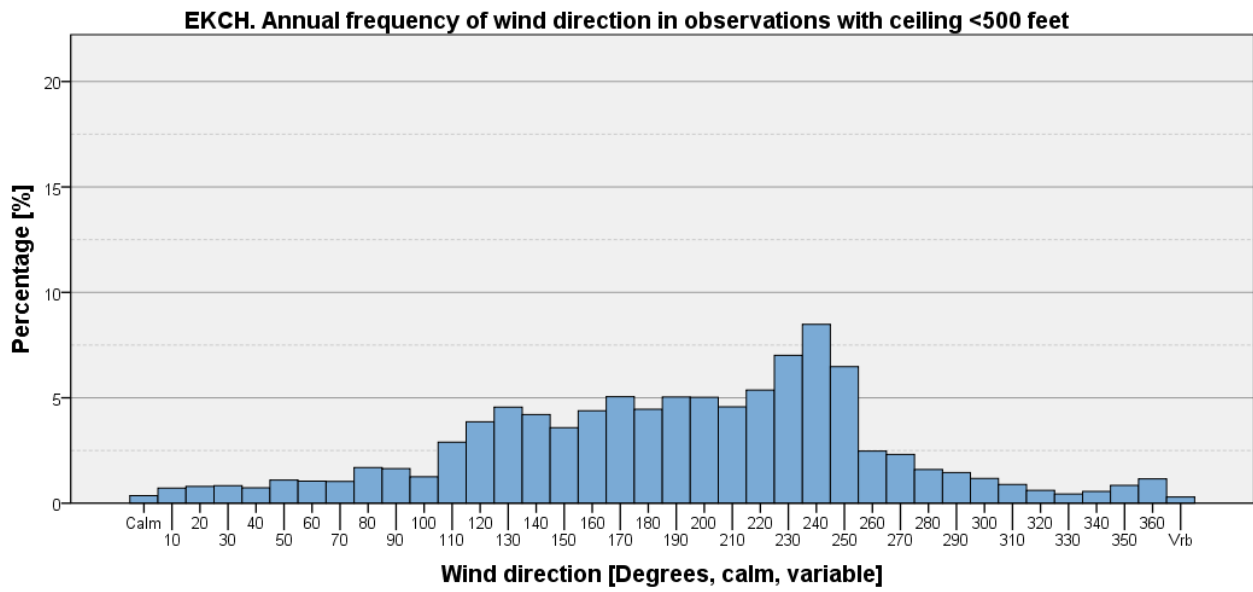


Figure 146

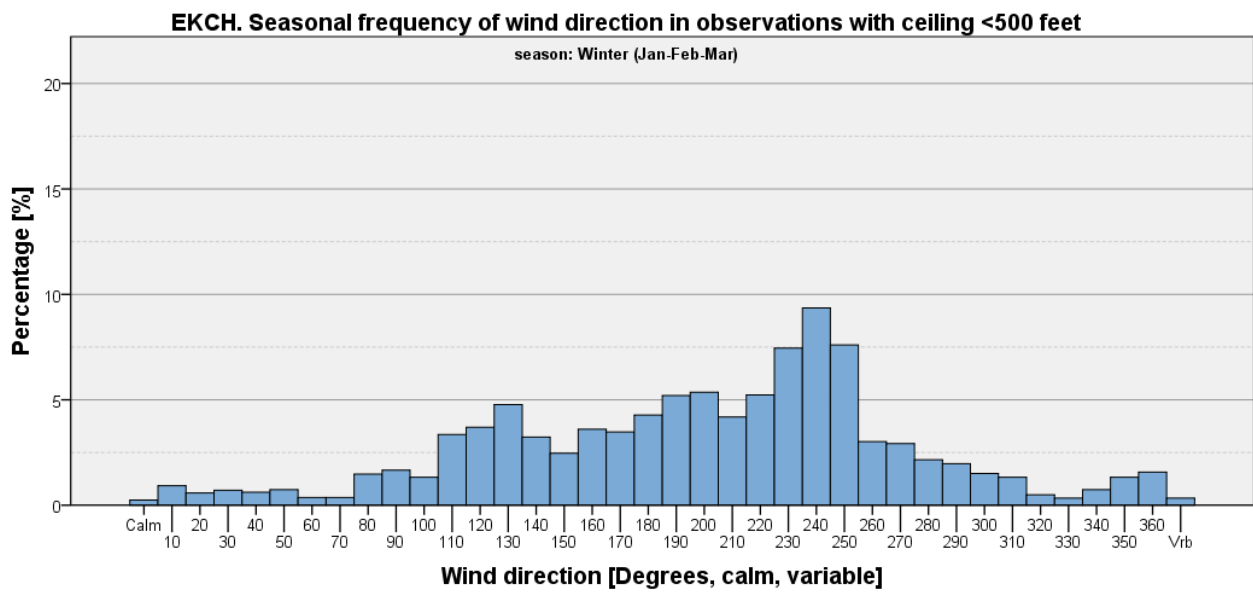


Figure 147

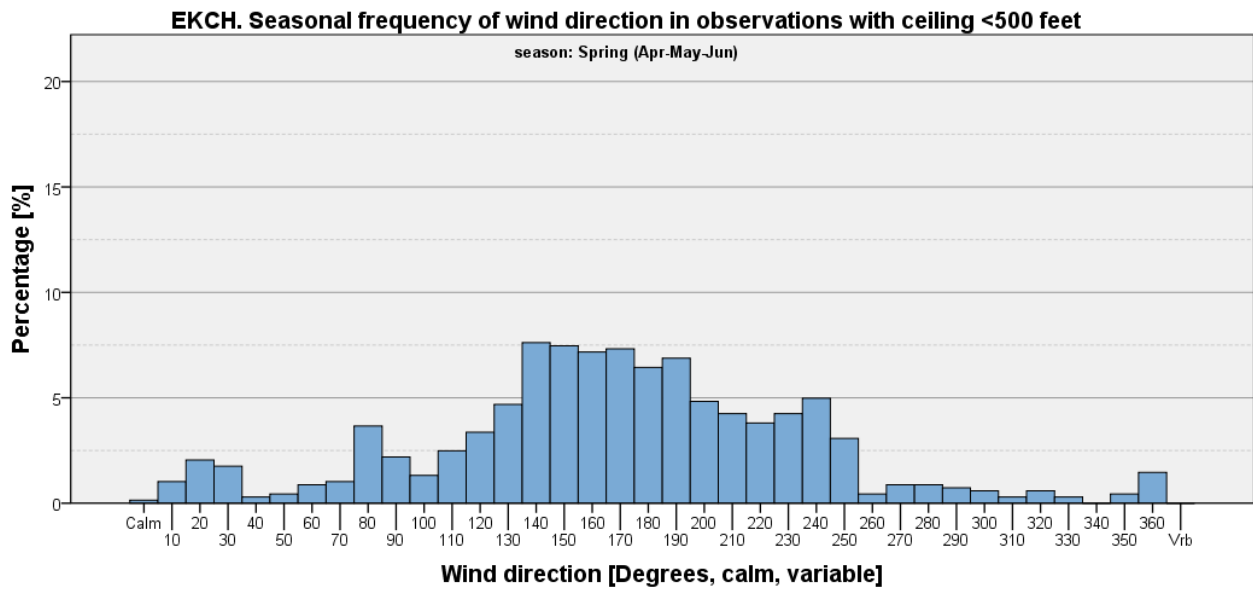


Figure 148

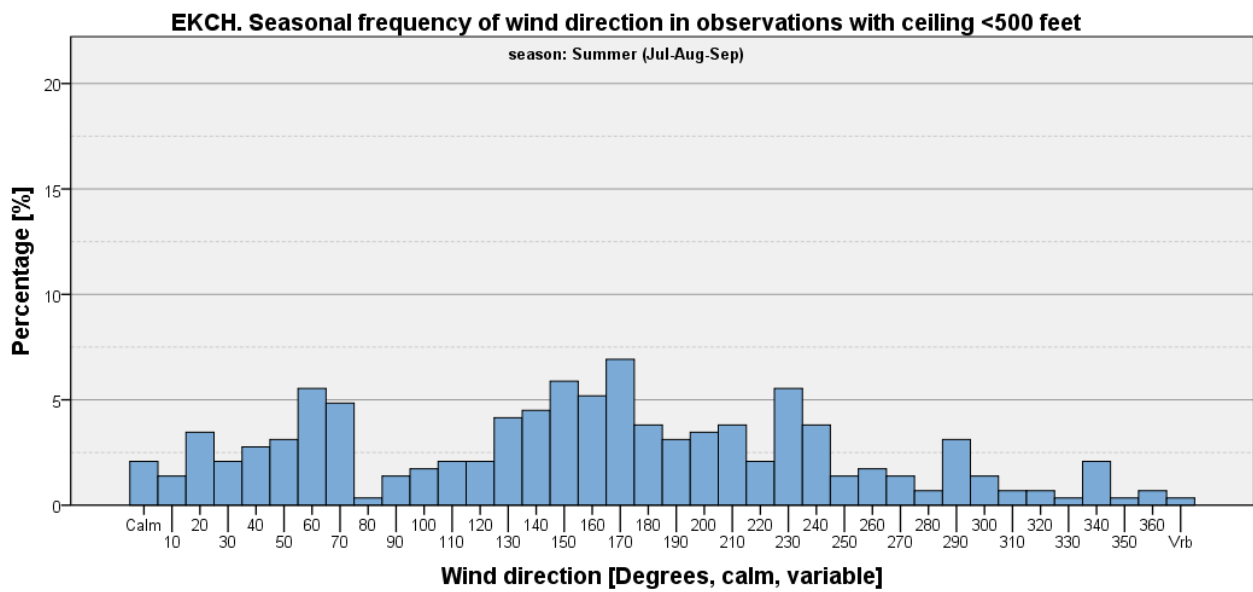


Figure 149

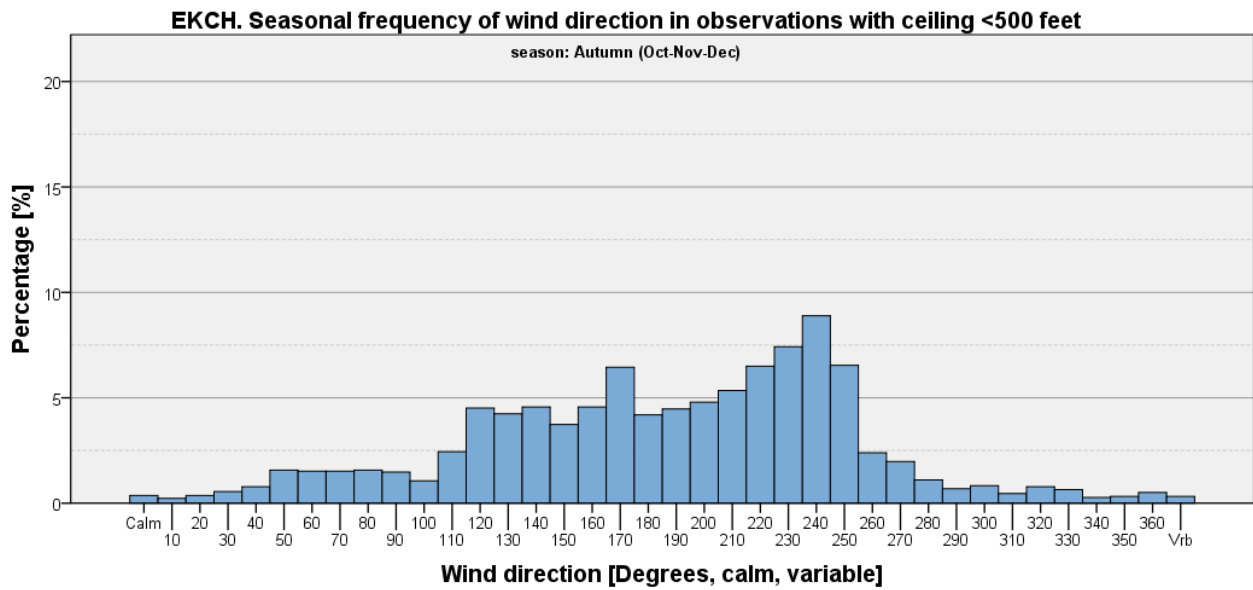


Figure 150

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 45: EKCH - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	2.00	0.48	0.35	1.22	1.01
All other Observations	98.00	99.52	99.65	98.78	98.99
Total	100	100	100	100	100

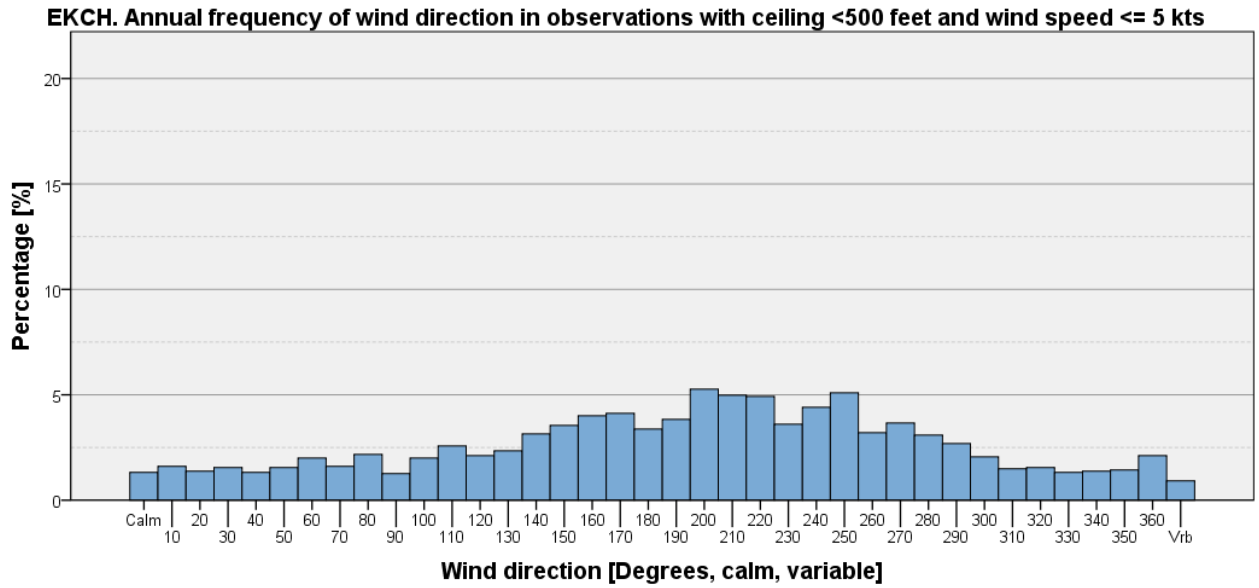


Figure 151

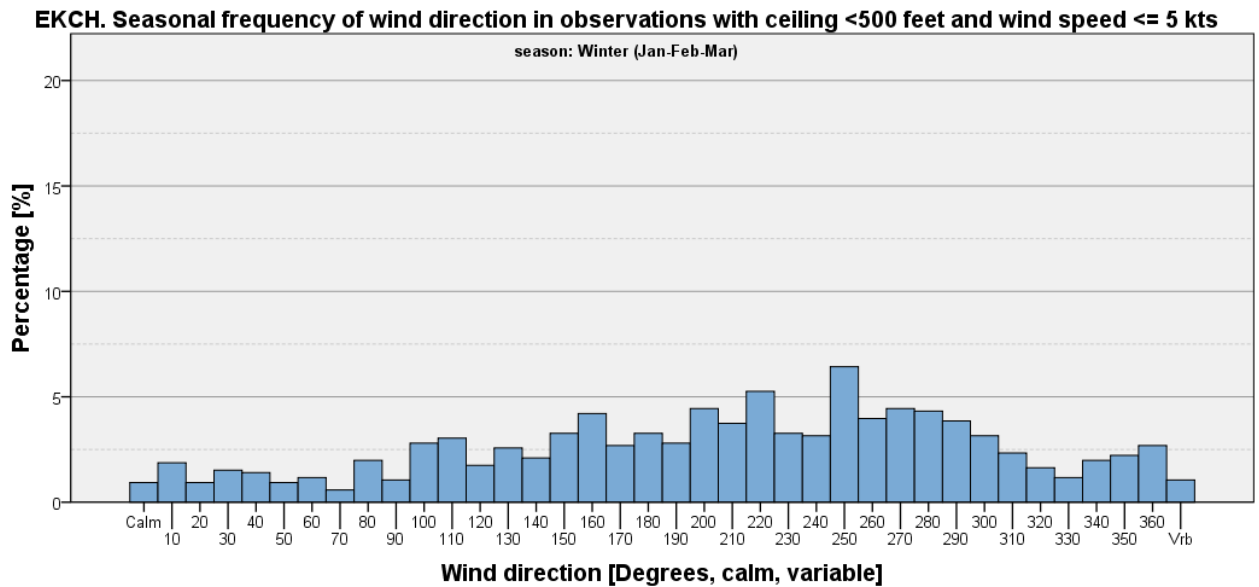


Figure 152

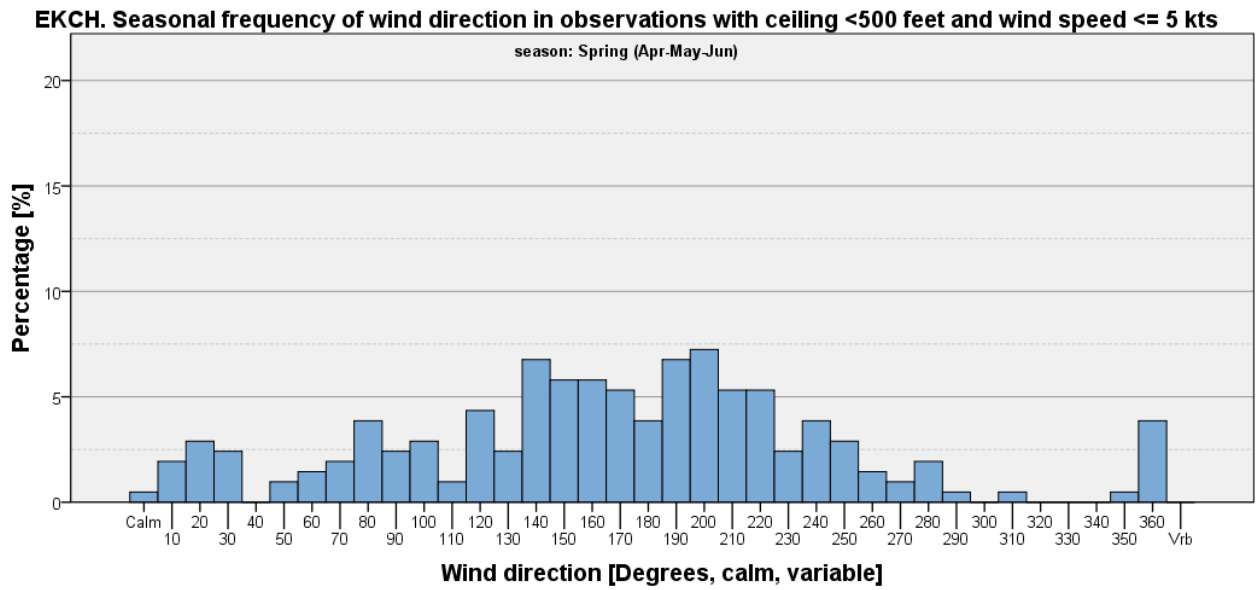


Figure 153

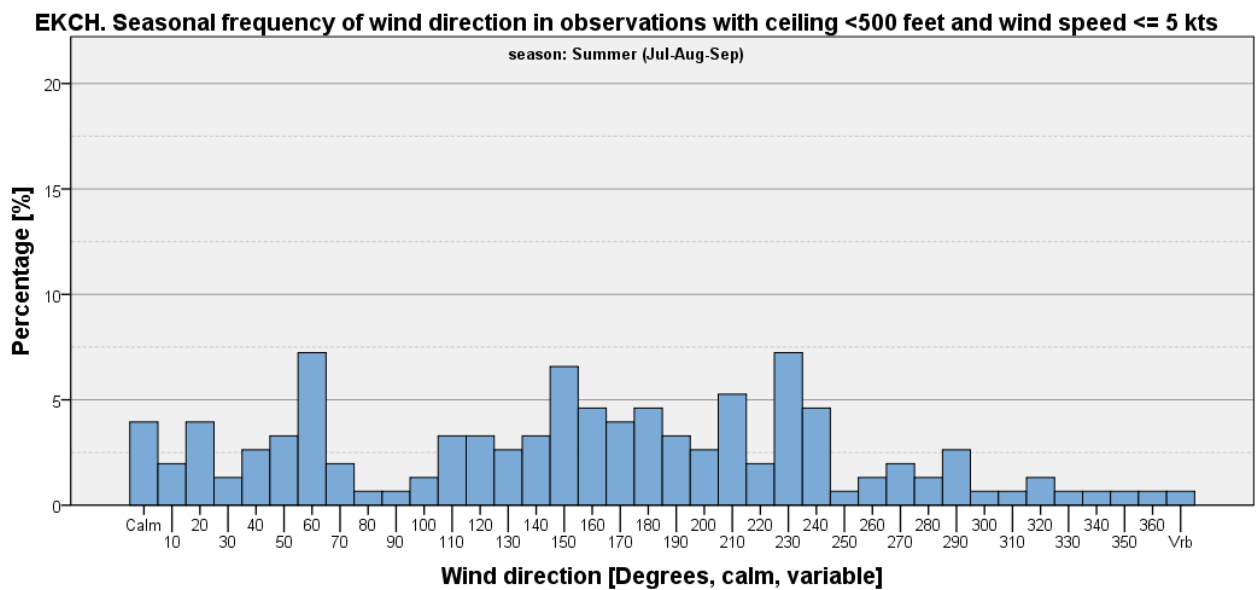


Figure 154

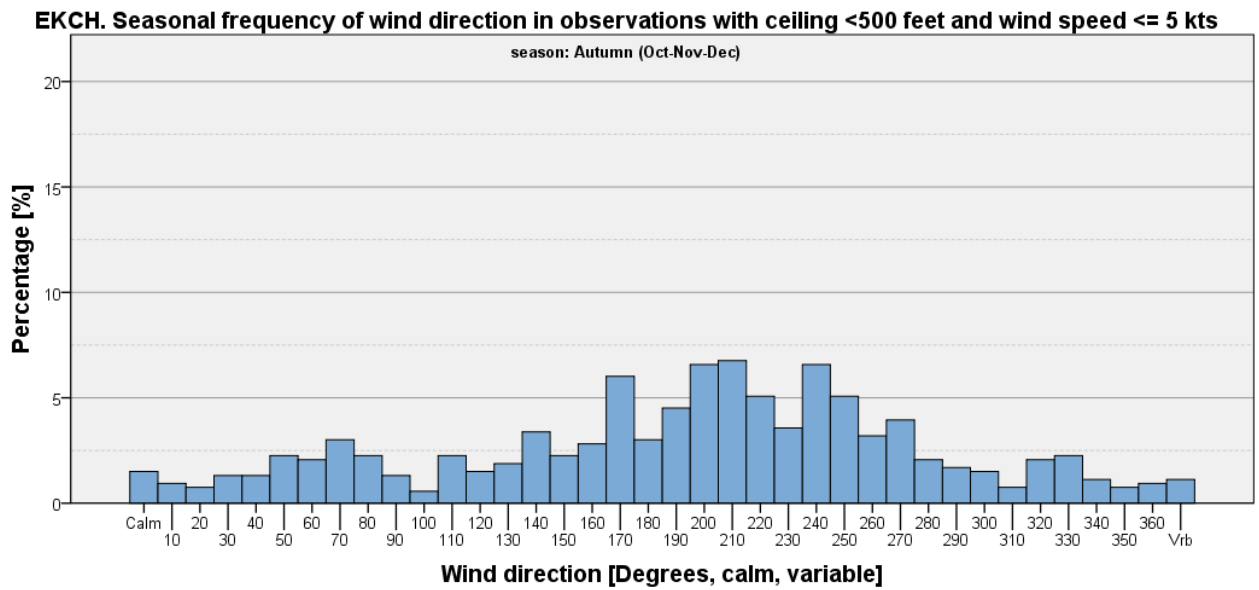


Figure 155

Ceiling < 500 feet and Wind Speed > 5 kts

Table 46: EKCH - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	5.59	1.11	0.31	3.76	2.69
All other observations	94.41	98.89	99.69	96.24	97.31
Total	100	100	100	100	100

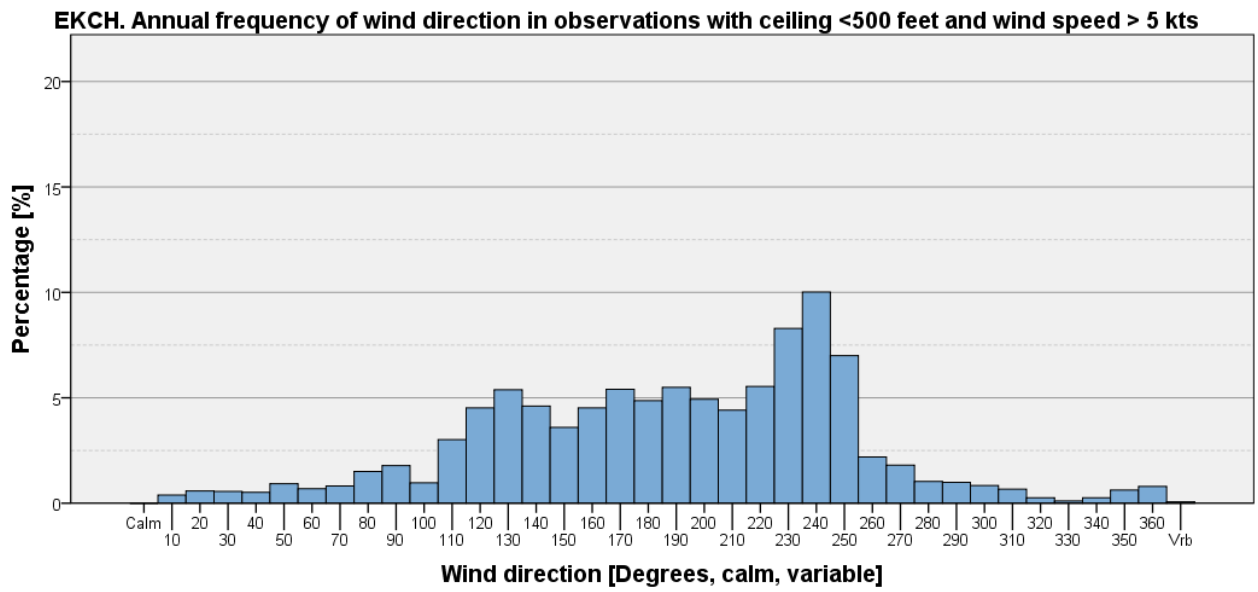


Figure 156

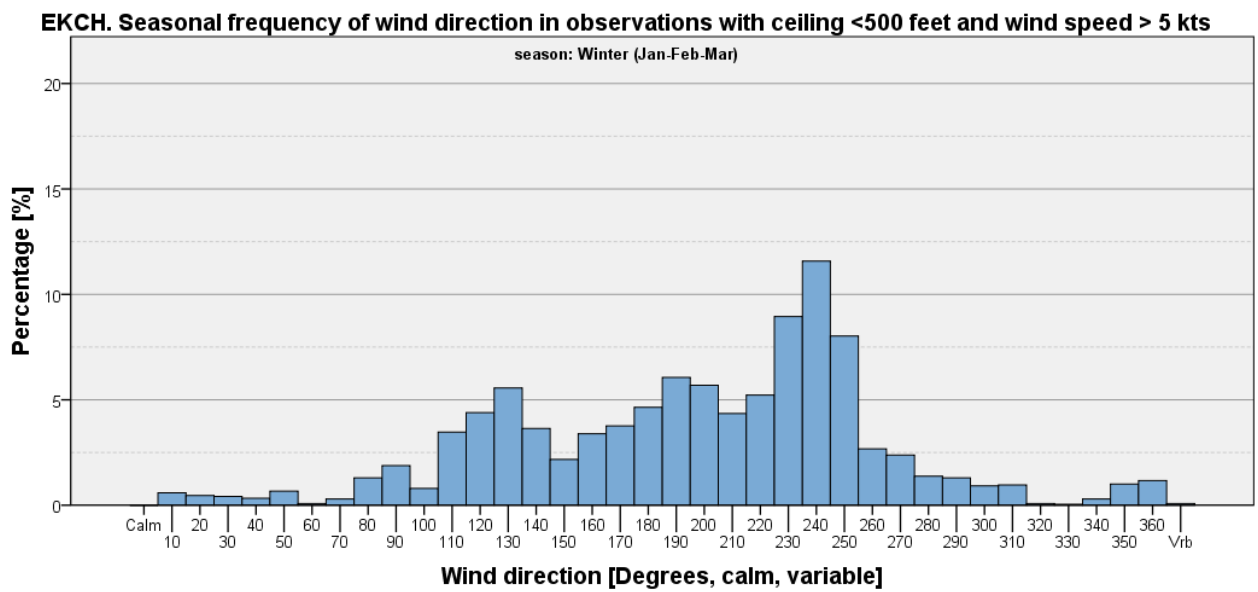


Figure 157

EKCH. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

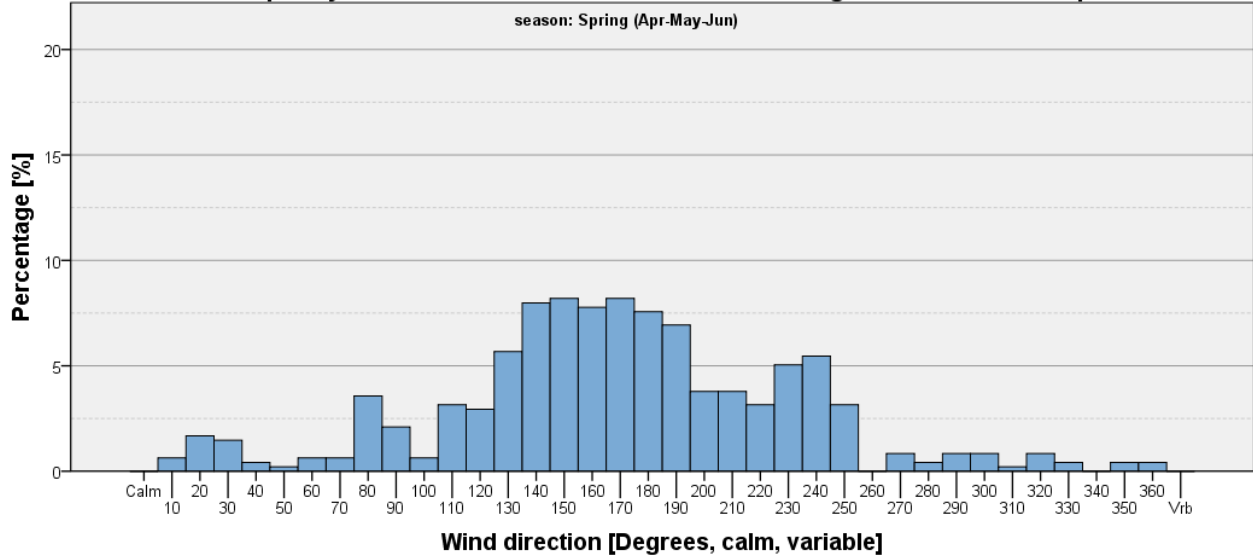


Figure 158

EKCH. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

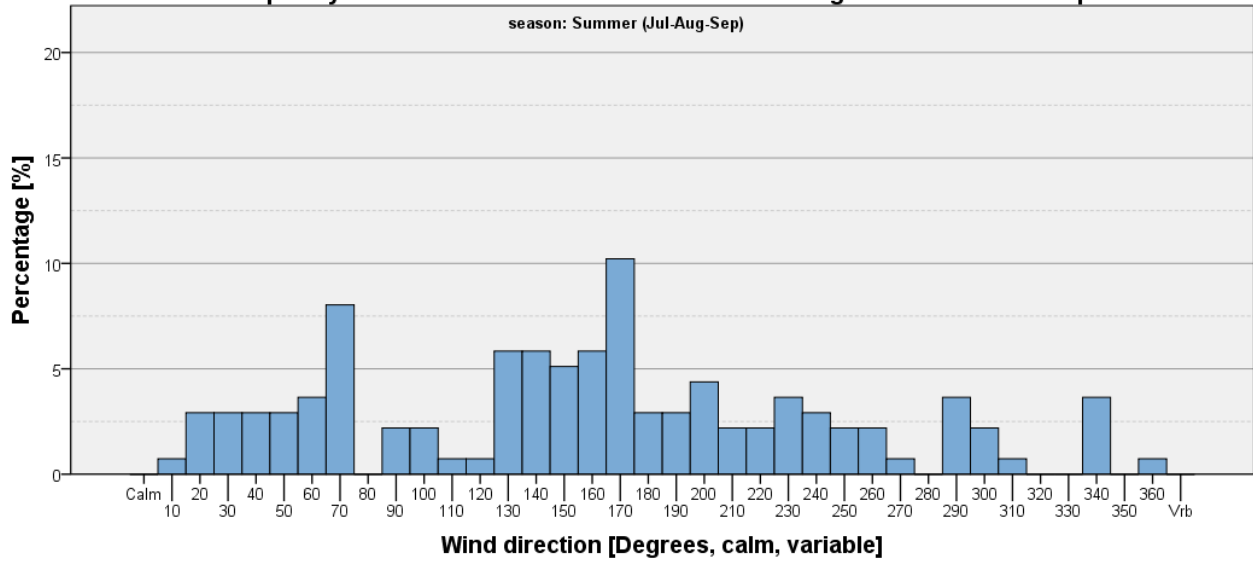


Figure 159

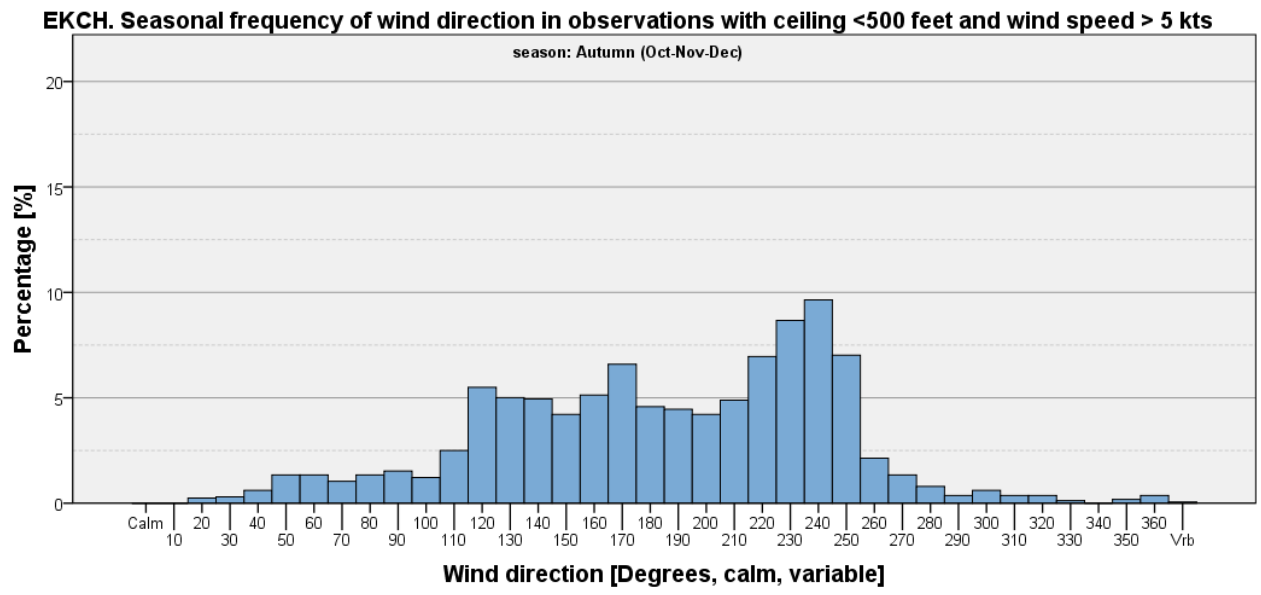
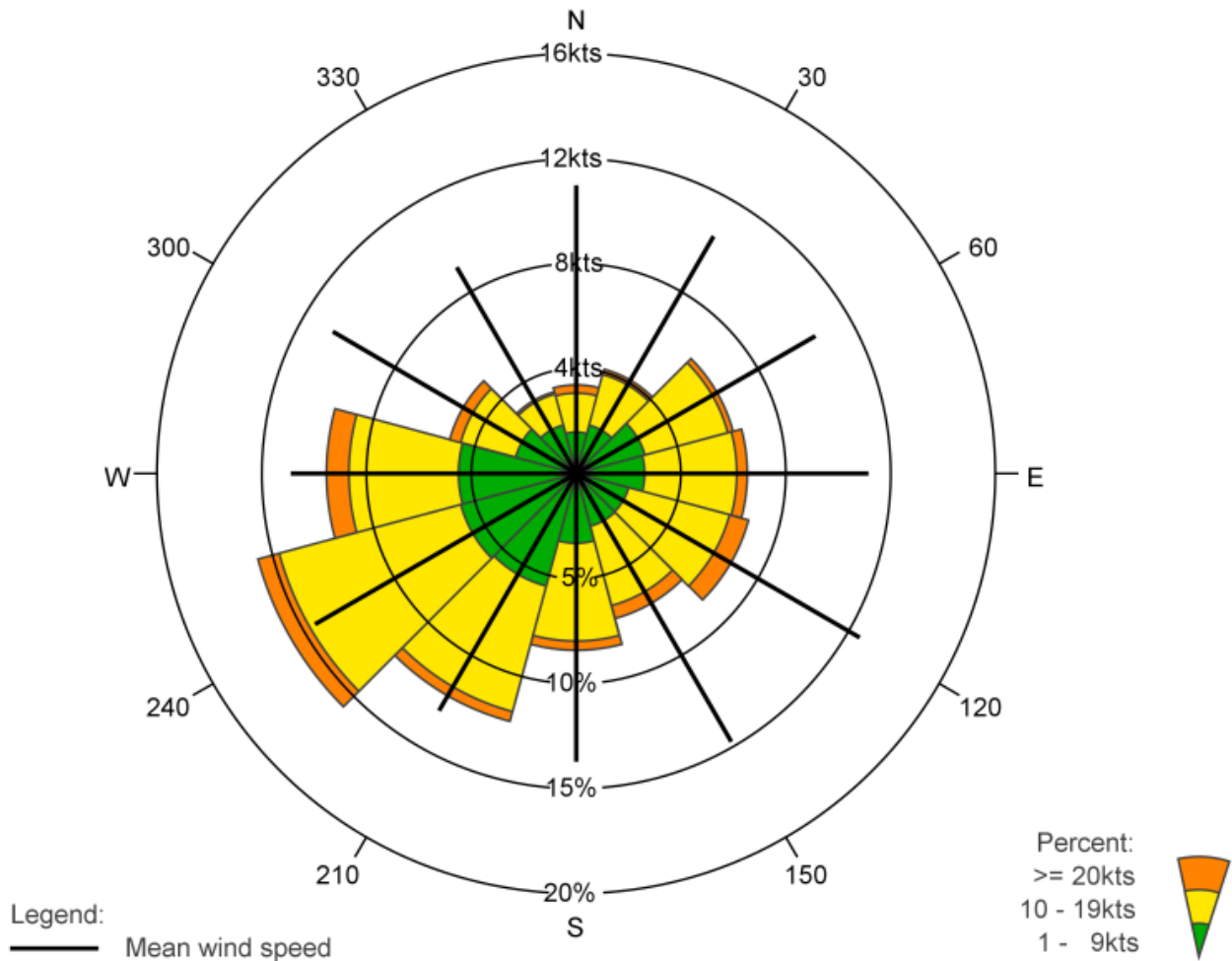


Figure 160

Wind Roses

EKCH: KBH. LUFTHAVN, KASTRUP, AUTUMN & WINTER

01-01-2009 - 31-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	4.2	5.1	7.8	8.2	8.5	7.1	8.4	12.2	15.7	11.9	6.2	4.0	99.5
% 1 - 9kts	2.0	2.4	3.4	3.3	2.6	2.6	3.3	5.6	5.7	5.6	3.0	2.4	41.8
% 10 - 19kts	1.9	2.5	4.1	4.4	5.0	3.9	4.7	6.2	9.0	5.2	2.7	1.5	51.0
% >= 20kts	0.4	0.3	0.3	0.5	0.9	0.6	0.4	0.5	1.1	1.1	0.5	0.1	6.7
Mean wind speed	11.0	10.5	10.5	11.2	12.4	11.8	11.0	10.5	11.6	10.9	10.7	9.1	11.0
Max wind speed	33.0	27.0	24.0	28.0	28.0	32.0	31.0	43.0	43.0	42.0	38.0	28.0	43.0

Number of observations = 86375

Source: DMI

Calm defined as wind speed = 0kts

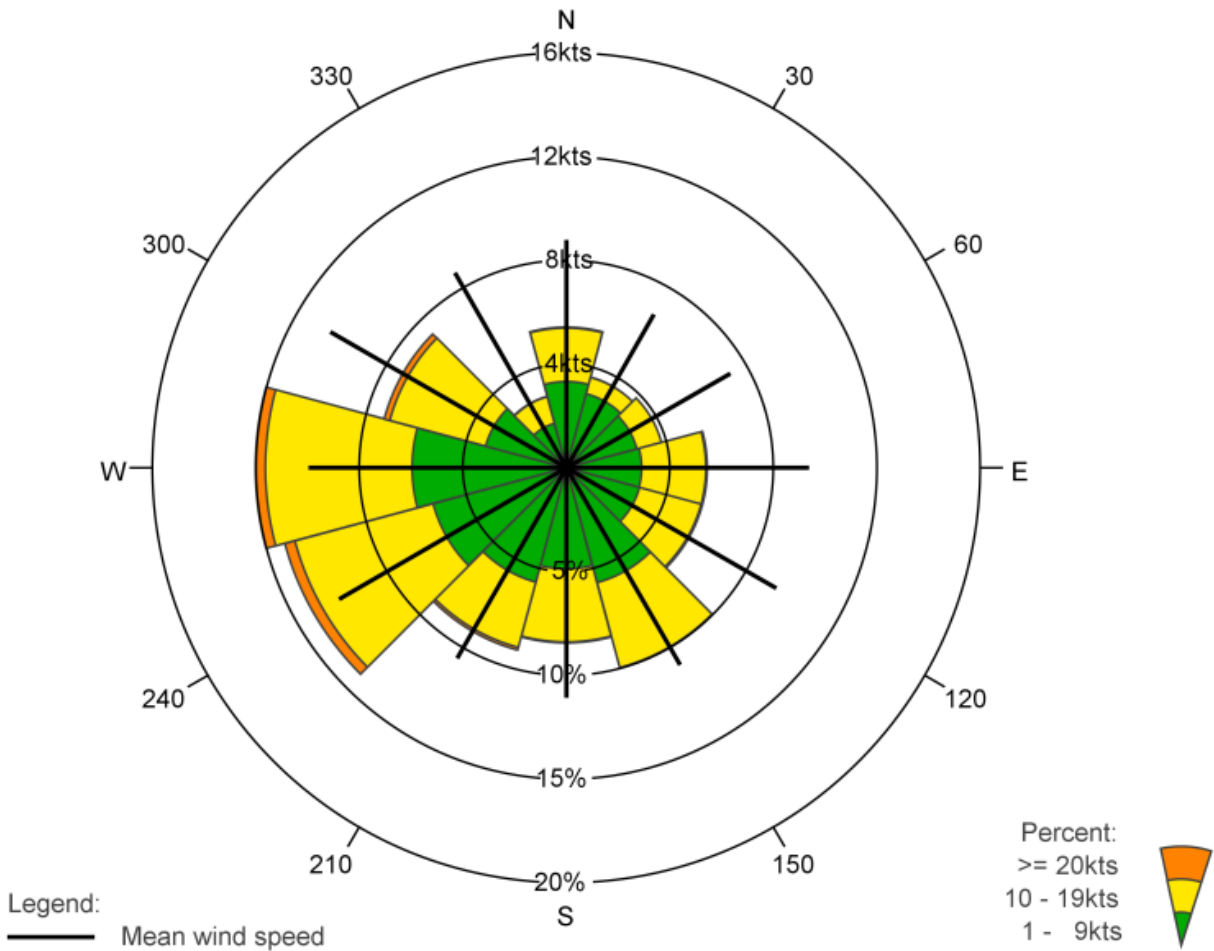
Number of observations with calm/varying wind direction: 452=0.5%

Observations with calm/varying wind direction are not used in the statistics

Figure 161

EKCH: KBH. LUFTHAVN, KASTRUP, SPRING & SUMMER

01-01-2009 - 31-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	6.8	4.5	4.8	6.8	6.8	10.0	8.4	9.1	14.1	15.0	9.1	3.6	99.0
% 1 - 9kts	4.2	3.7	3.5	3.6	3.7	5.7	4.9	5.7	6.7	7.4	4.0	2.2	55.4
% 10 - 19kts	2.6	0.8	1.2	3.1	3.1	4.2	3.5	3.3	6.9	7.1	4.8	1.3	41.9
% >= 20kts	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.5	0.5	0.3	0.0	1.7
Mean wind speed	8.8	6.8	7.3	9.4	9.4	8.8	8.9	8.5	10.1	10.0	10.5	8.6	9.2
Max wind speed	26.0	22.0	20.0	25.0	24.0	23.0	23.0	27.0	28.0	30.0	37.0	25.0	37.0

Number of observations = 86443

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 864=1.0%

Observations with calm/varying wind direction are not used in the statistics

Source: DMI

Figure 162

Availability

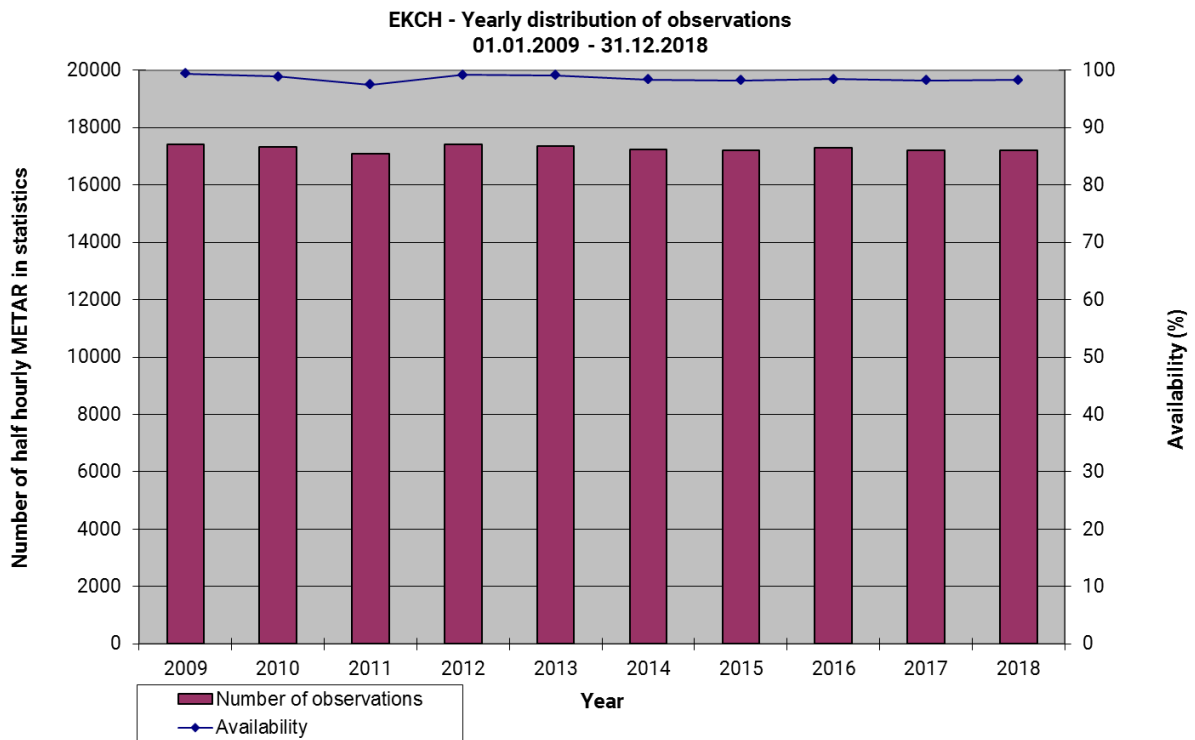


Figure 163

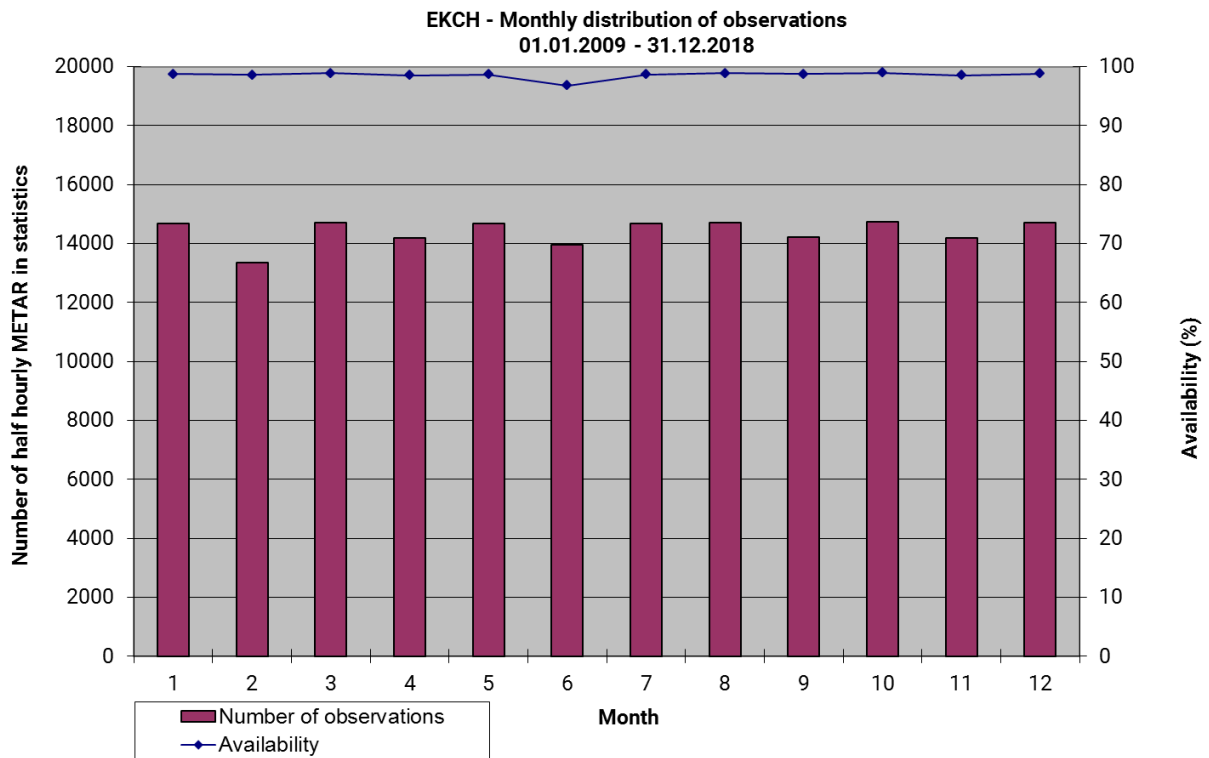


Figure 164

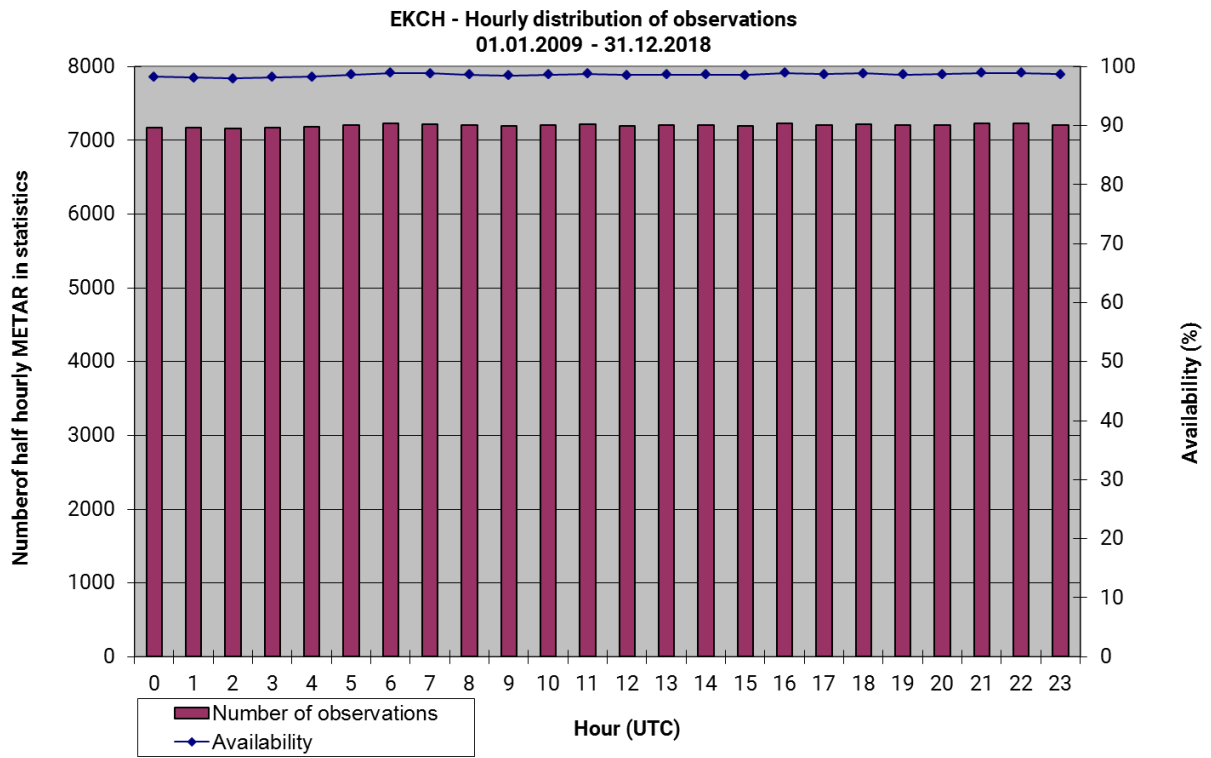


Figure 165

Table 47: EKCH. Average number of half hourly observations in statistics, 01.01.2009 – 31.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.9
1	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9
2	2.0	2.0	1.9	2.0	2.0	1.9	2.0	2.0	1.9	1.9
3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0
4	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.0
5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
6	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
7	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
10	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
11	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
12	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
13	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
14	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
15	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
16	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
17	2.0	2.0	1.9	2.0	2.0	2.0	1.9	2.0	2.0	2.0
18	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
19	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0
20	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
21	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
22	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
23	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0

EKEB Esbjerg Lufthavn

Airport location: 55,533°N 8,567°E Elevation: 30 m above MSL.

EKEB observations in statistics: 172,058 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 98.2 %. For more information, please go to the 'Availability' section.

EKEB METAR are both AUTO METAR and manual METAR.

Cross Tables Visibility – Ceiling

Table 48: EKEB Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 172,058	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.15	0.29	0.30	0.30	0.30	0.091	0.39
<350m	0	0.28	1.17	1.21	1.22	1.23	0.42	1.64
<600m	0	0.31	1.81	1.85	1.88	1.89	0.65	2.53
<800 m	0	0.32	2.12	2.18	2.21	2.22	0.77	3.00
<1.5 km	0	0.34	3.01	3.12	3.18	3.21	1.02	4.23
<3.0 km	0	0.36	5.31	5.90	6.08	6.18	1.96	8.14
< 5.0 km	0	0.36	7.07	9.26	9.81	10.07	3.62	13.70
< 8.0 km	0	0.37	8.07	12.75	14.27	15.00	7.30	22.30
>= 8.0 km or CAVOK	0	0	0.55	4.80	9.89	14.42	63.29	77.70
Total	0	0.37	8.62	17.54	24.16	29.42	70.58	100

Table 49: EKEB - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,543	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.18	0.39	0.40	0.40	0.40	0.063	0.47
<350m	0	0.34	2.16	2.21	2.24	2.24	0.39	2.64
<600m	0	0.39	3.54	3.61	3.66	3.66	0.64	4.31
<800 m	0	0.41	4.27	4.37	4.43	4.44	0.78	5.23
<1.5 km	0	0.42	6.16	6.41	6.53	6.58	1.04	7.62
<3.0 km	0	0.43	10.13	11.33	11.72	11.94	2.07	14.01
< 5.0 km	0	0.44	12.96	16.48	17.52	17.96	3.88	21.84
< 8.0 km	0	0.45	14.51	21.55	24.20	25.30	8.54	33.84
>= 8.0 km or CAVOK	0	0	0.87	5.97	12.43	17.22	48.94	66.16
Total	0	0.45	15.38	27.52	36.63	42.52	57.48	100

Table 50: EKEB - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,851	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.11	0.23	0.23	0.23	0.23	0.11	0.34
<350m	0	0.17	0.62	0.63	0.63	0.63	0.41	1.04
<600m	0	0.19	0.83	0.85	0.86	0.86	0.58	1.44
<800 m	0	0.20	0.95	0.98	0.98	0.98	0.69	1.67
<1.5 km	0	0.20	1.25	1.29	1.29	1.30	0.90	2.20
<3.0 km	0	0.21	2.20	2.42	2.45	2.47	1.54	4.02
< 5.0 km	0	0.22	3.16	4.09	4.24	4.31	2.81	7.12
< 8.0 km	0	0.22	3.82	6.10	6.62	6.86	5.62	12.48
>= 8.0 km or CAVOK	0	0	0.49	4.91	9.96	14.87	72.65	87.52
Total	0	0.22	4.31	11.01	16.58	21.73	78.27	100

Table 51: EKEB - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,336	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.17	0.22	0.24	0.24	0.24	0.15	0.38
<350m	0	0.26	0.52	0.55	0.55	0.56	0.58	1.13
<600m	0	0.28	0.62	0.65	0.66	0.66	0.87	1.54
<800 m	0	0.29	0.64	0.68	0.69	0.70	1.03	1.73
<1.5 km	0	0.30	0.74	0.79	0.81	0.82	1.33	2.15
<3.0 km	0	0.31	1.24	1.48	1.53	1.57	2.19	3.76
< 5.0 km	0	0.33	1.89	2.84	3.01	3.14	3.63	6.76
< 8.0 km	0	0.33	2.24	4.30	4.83	5.25	6.39	11.64
>= 8.0 km or CAVOK	0	0	0.31	3.17	7.16	11.06	77.30	88.36
Total	0	0.33	2.55	7.47	11.99	16.31	83.69	100

Table 52: EKEB - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,328	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.16	0.31	0.33	0.34	0.34	0.042	0.39
<350m	0	0.34	1.41	1.45	1.48	1.49	0.29	1.77
<600m	0	0.38	2.25	2.31	2.36	2.38	0.49	2.88
<800 m	0	0.39	2.64	2.72	2.78	2.80	0.59	3.39
<1.5 km	0	0.44	3.92	4.03	4.12	4.18	0.81	4.98
<3.0 km	0	0.47	7.71	8.44	8.66	8.81	2.03	10.85
< 5.0 km	0	0.47	10.33	13.73	14.54	14.98	4.16	19.14
< 8.0 km	0	0.47	11.78	19.13	21.53	22.69	8.65	31.34
>= 8.0 km or CAVOK	0	0	0.52	5.15	10.06	14.57	54.09	68.66
Total	0	0.47	12.31	24.29	31.59	37.26	62.74	100

Wind Direction Histograms

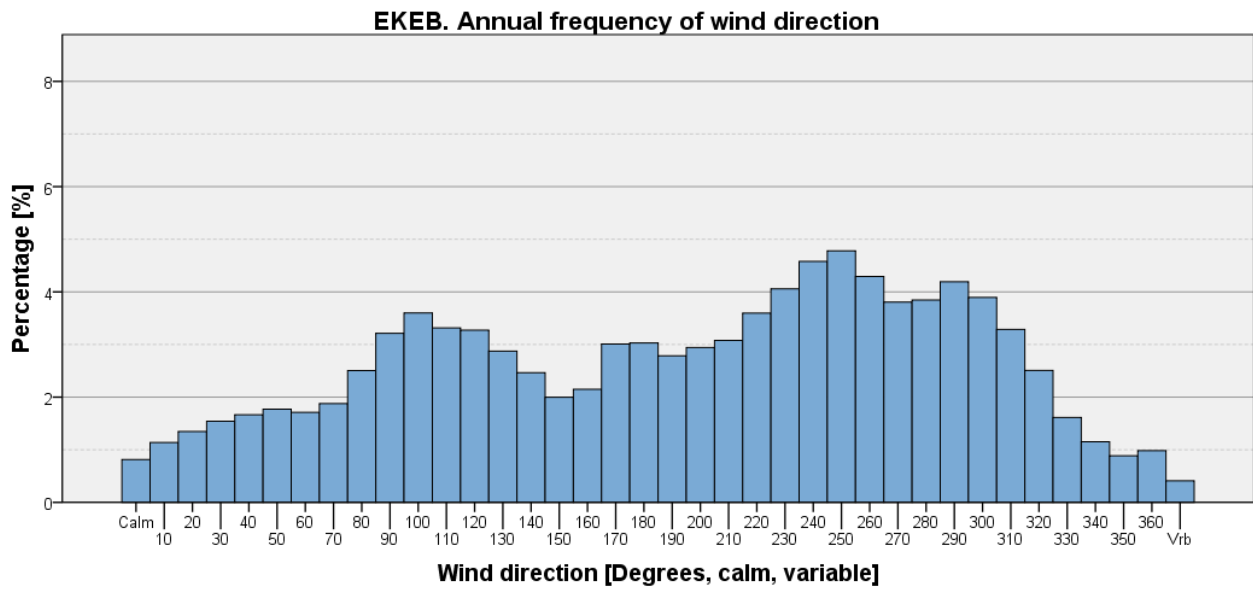


Figure 166

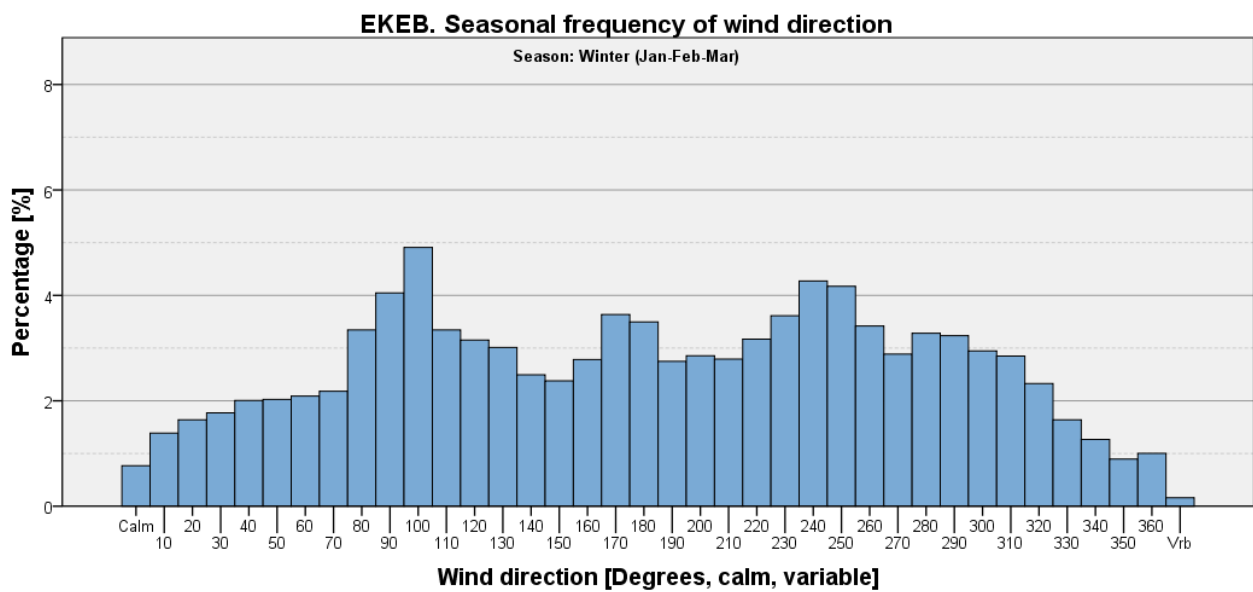


Figure 167

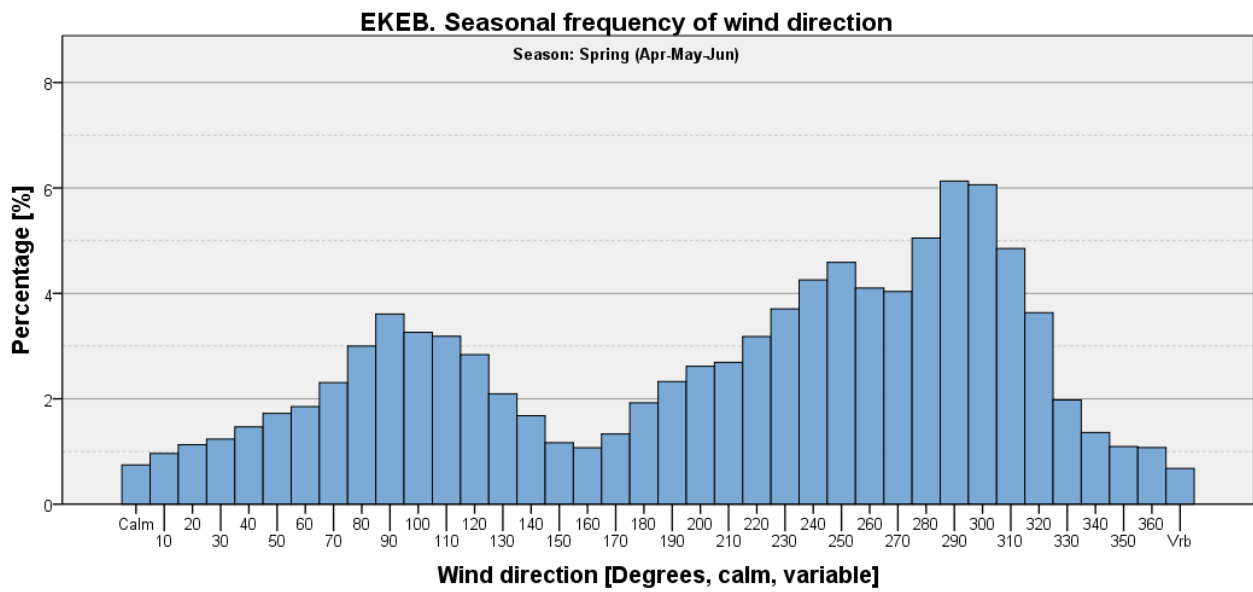


Figure 168

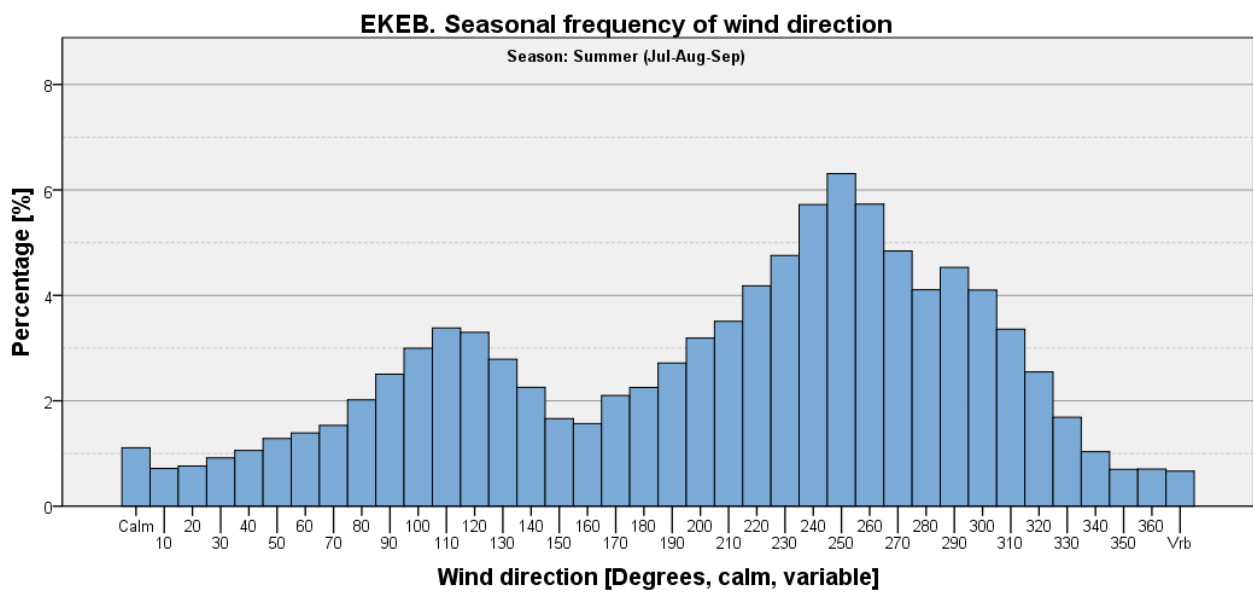


Figure 169

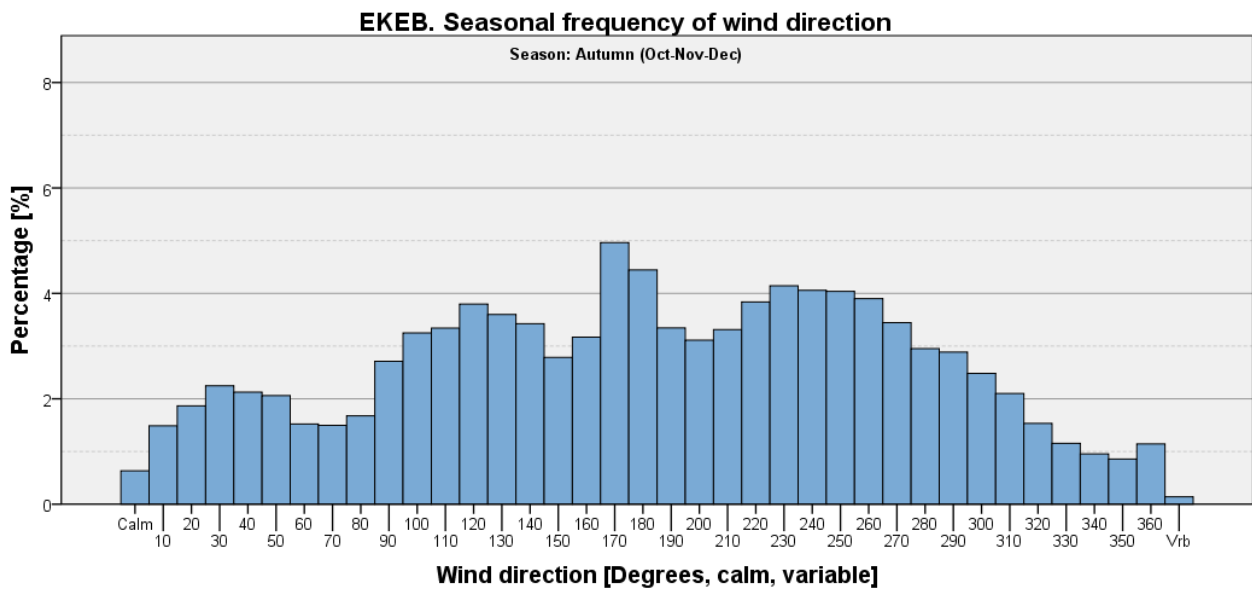


Figure 170

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 53: EKEB - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	5.23	1.67	1.73	3.39	3.00
All other observations	94.77	98.33	98.27	96.61	97.00
Total	100	100	100	100	100

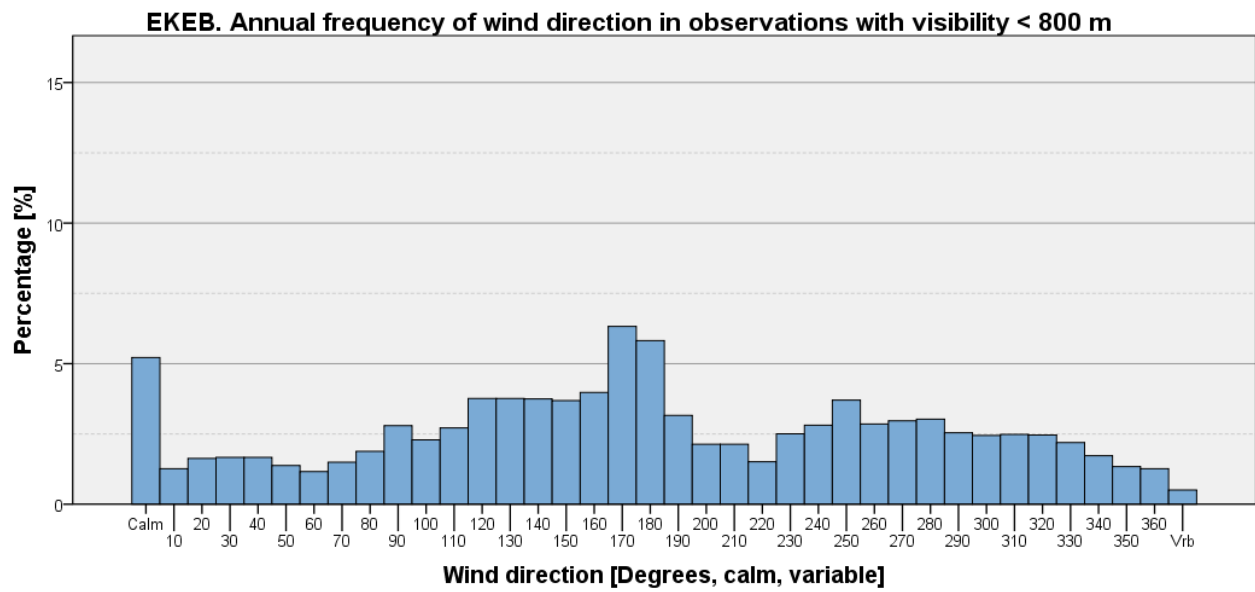


Figure 171

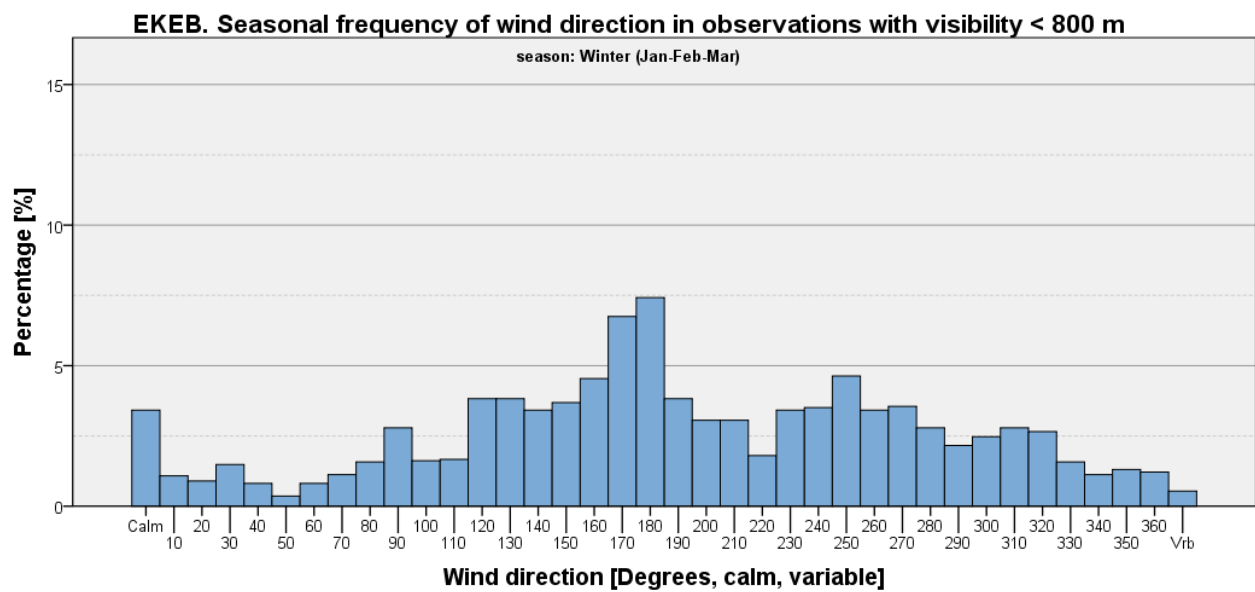


Figure 172

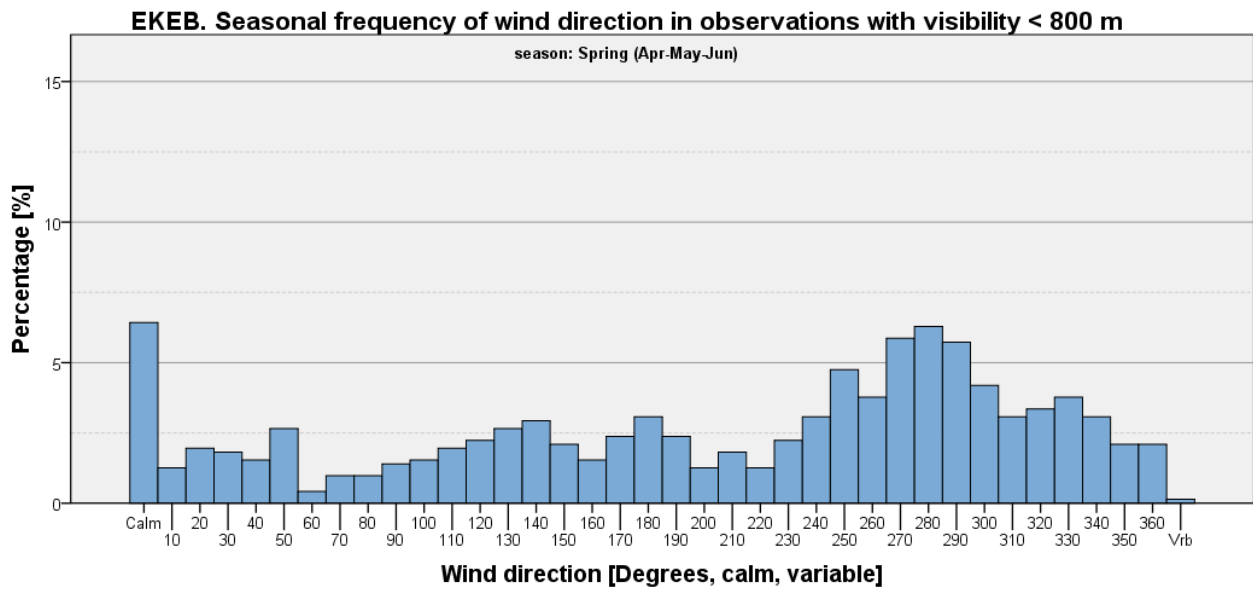


Figure 173

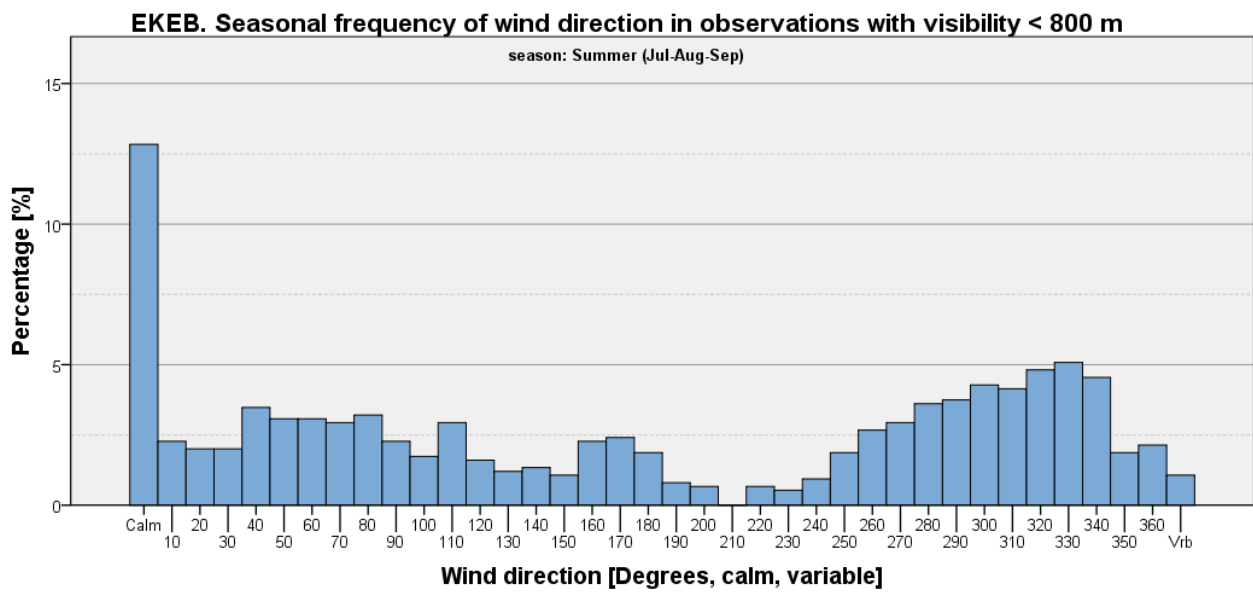


Figure 174

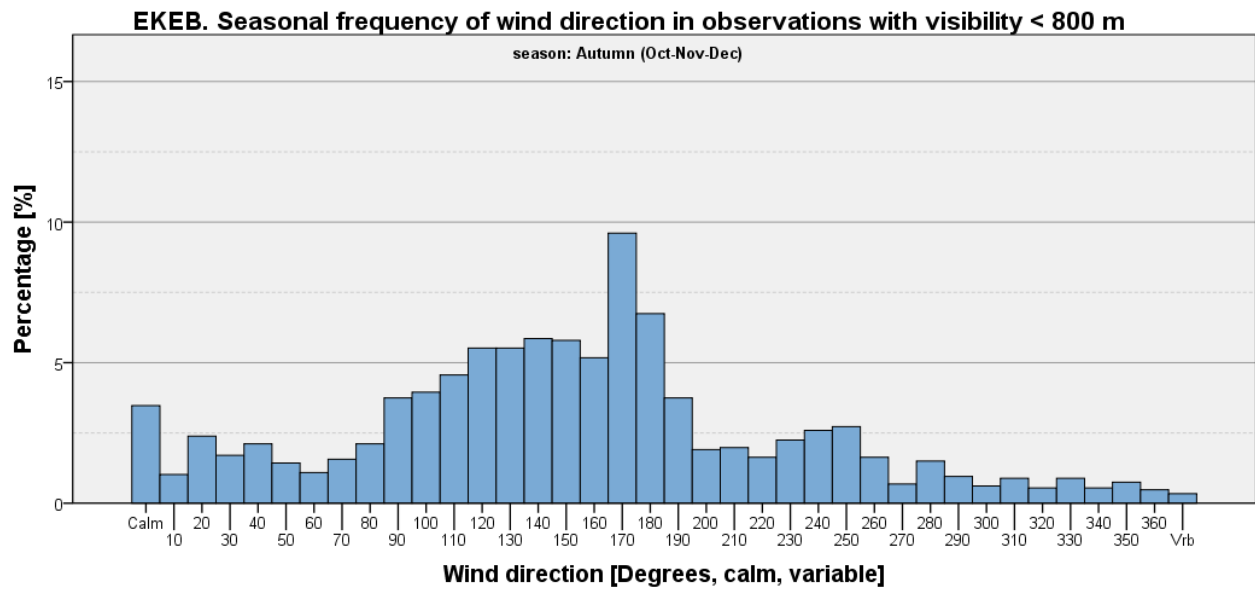


Figure 175

Visibility < 800 m and Wind Speed <= 5 kts

Table 54: EKEB - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	3.00	1.40	1.67	2.02	2.02
All other observations	97.00	98.60	98.33	97.98	97.98
Total	100	100	100	100	100

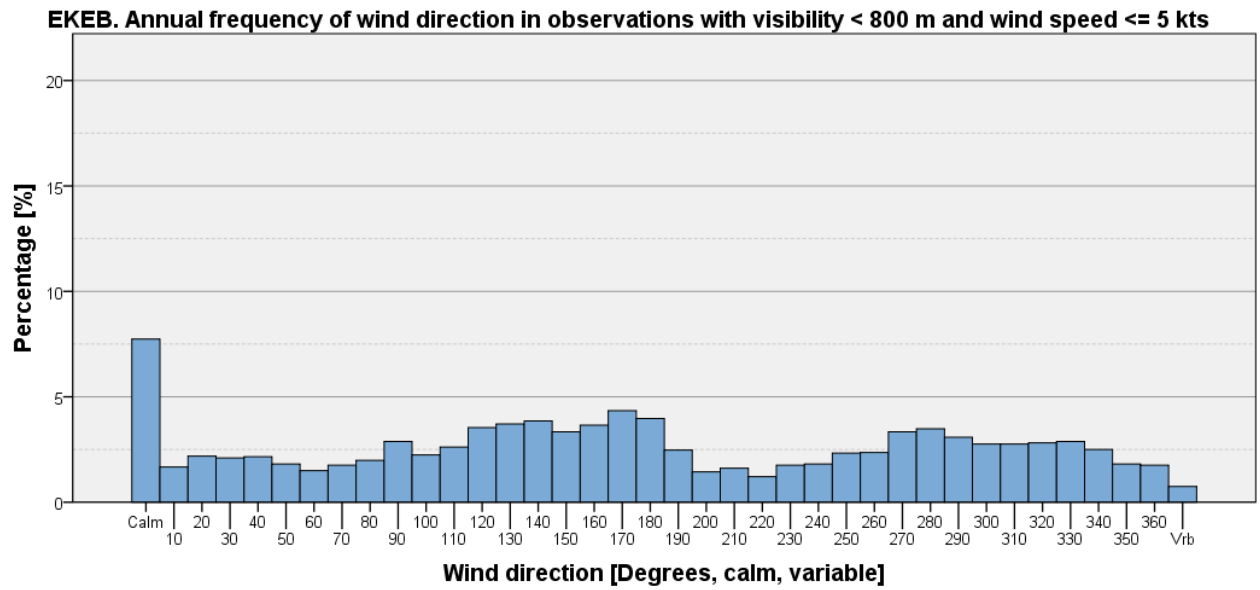


Figure 176

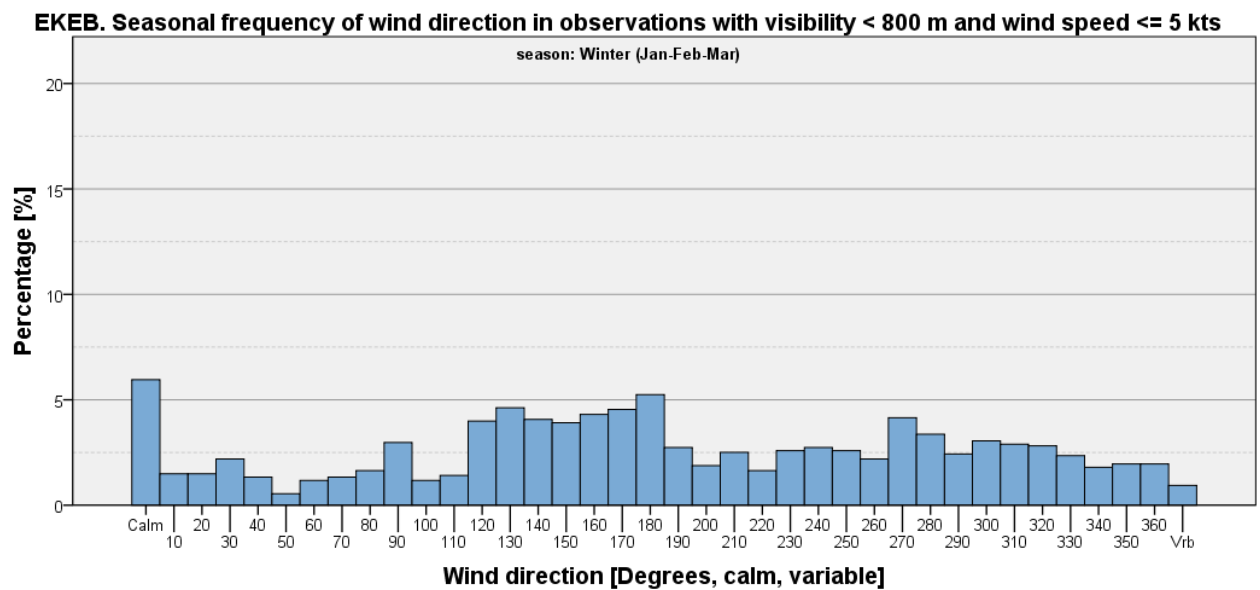


Figure 177

EKEB. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

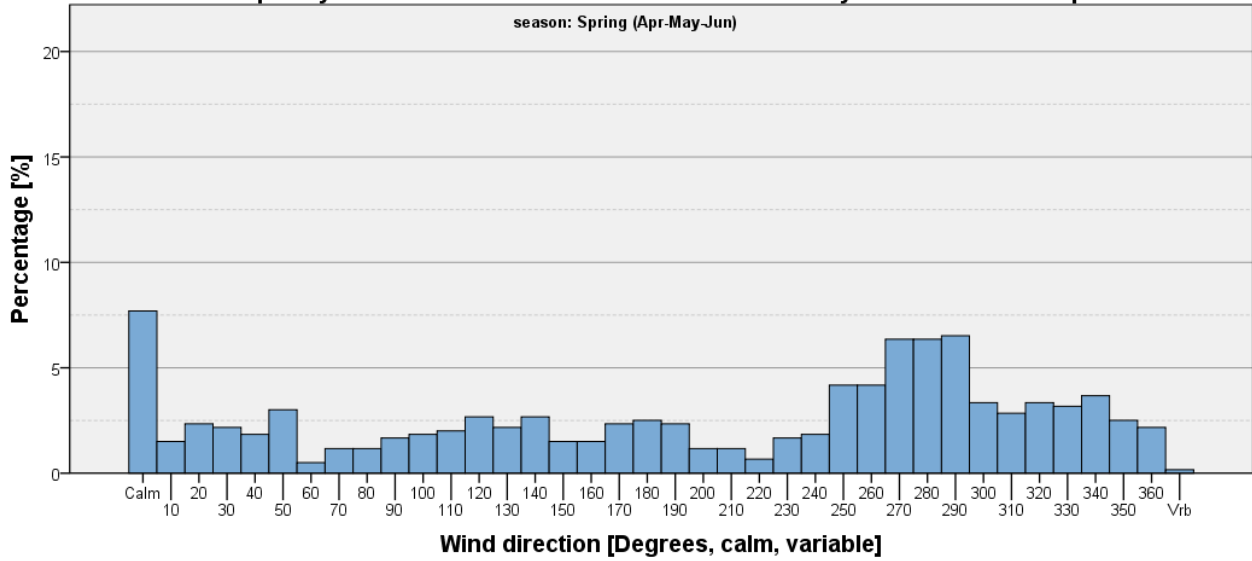


Figure 178

EKEB. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

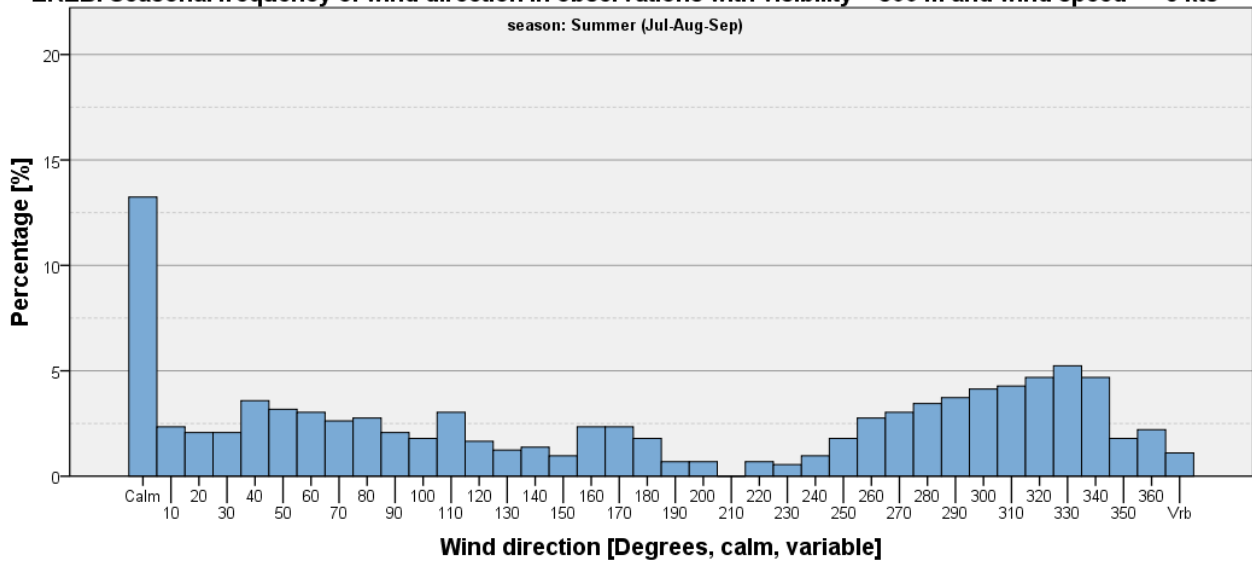


Figure 179

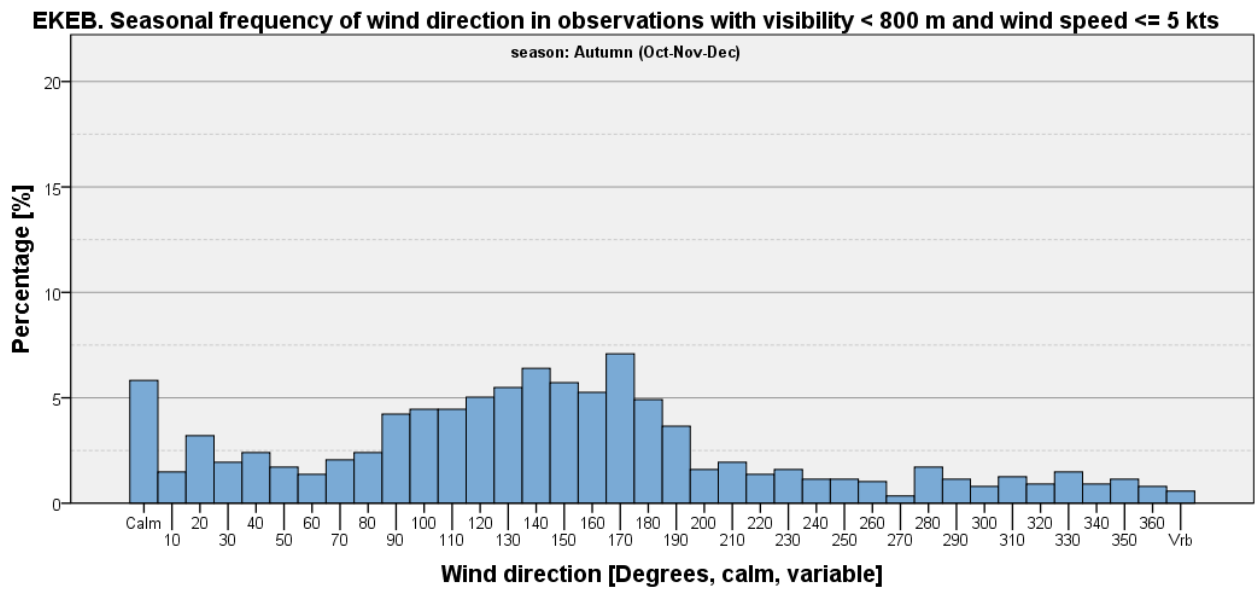


Figure 180

Visibility < 800 m and Wind Speed > 5 kts

Table 55: EKEB - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	2.22	0.28	0.053	1.37	0.98
All other observations	97.78	99.72	99.95	98.63	99.02
Total	100	100	100	100	100

EKEB. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

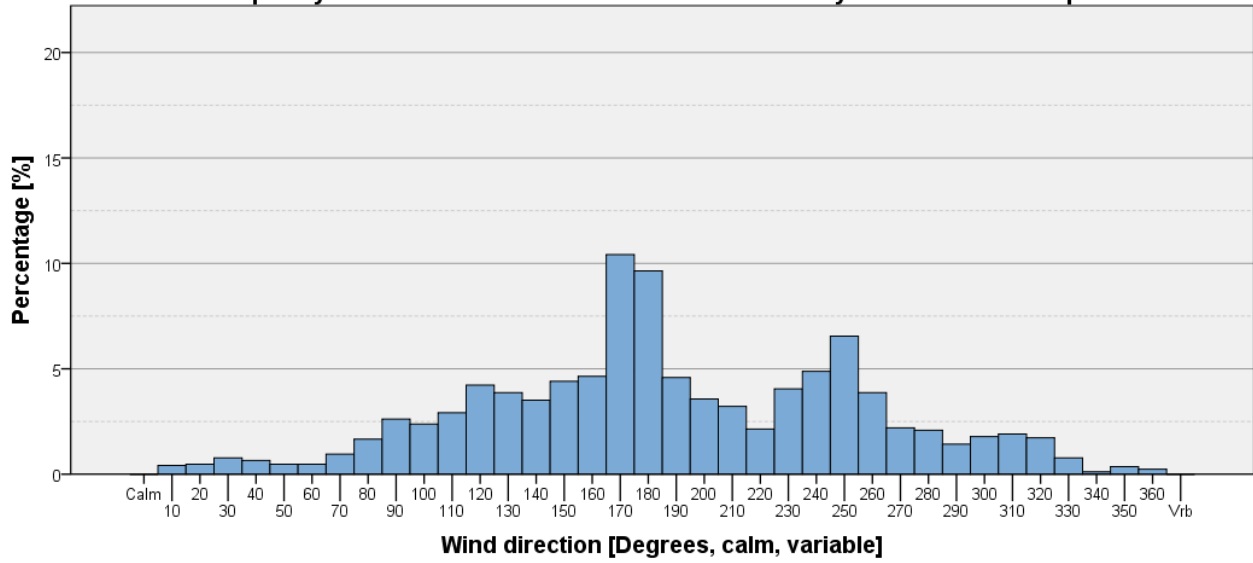


Figure 181

EKEB. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

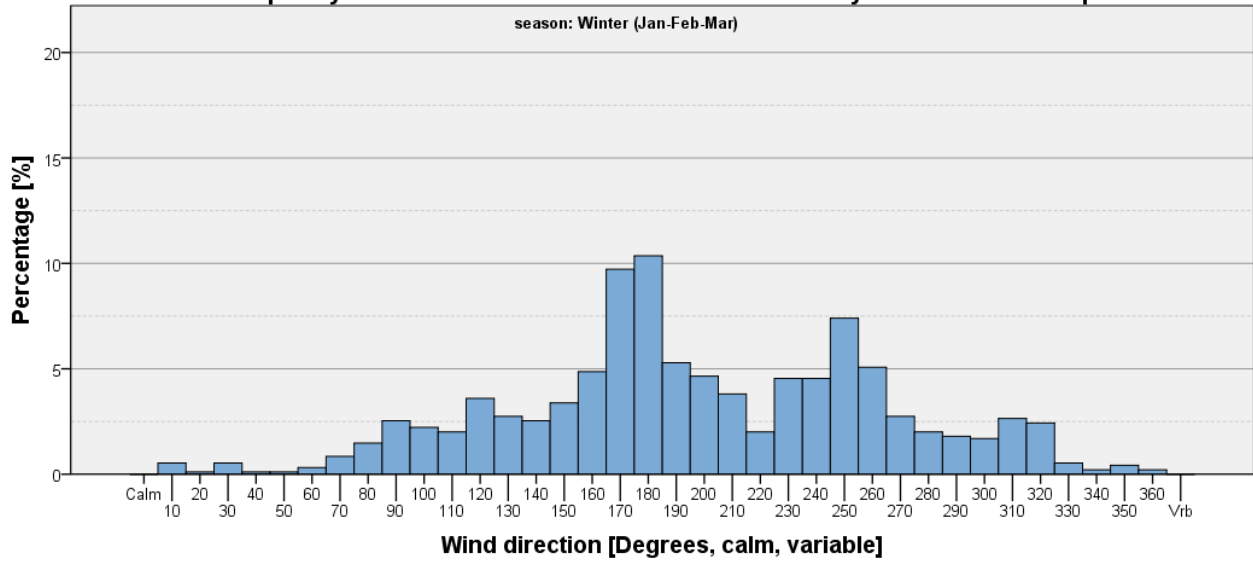


Figure 182

EKEB. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

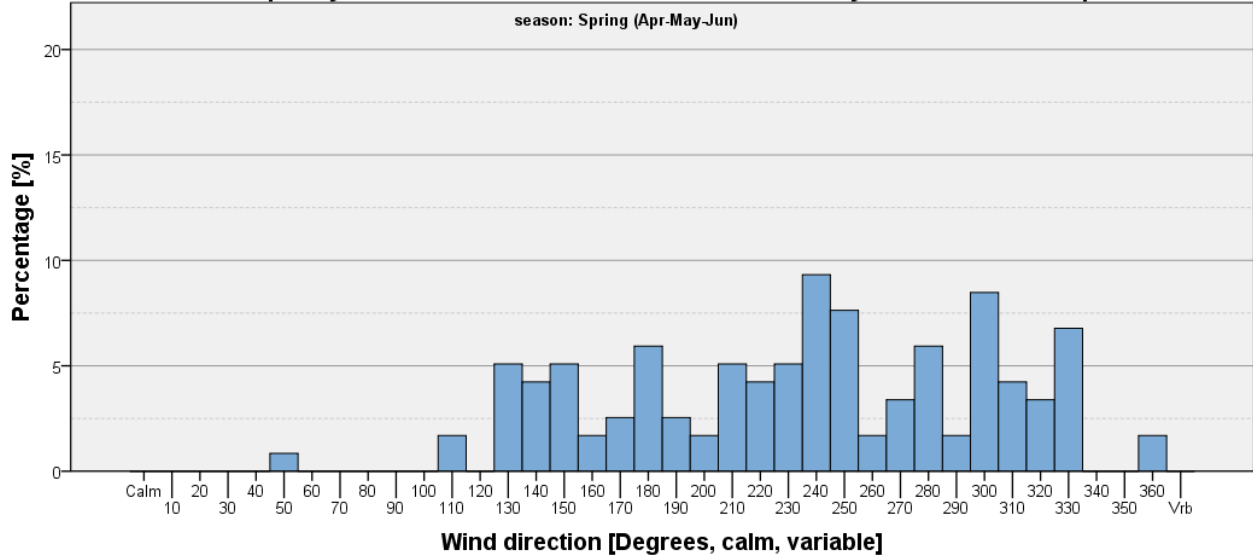


Figure 183

EKEB. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

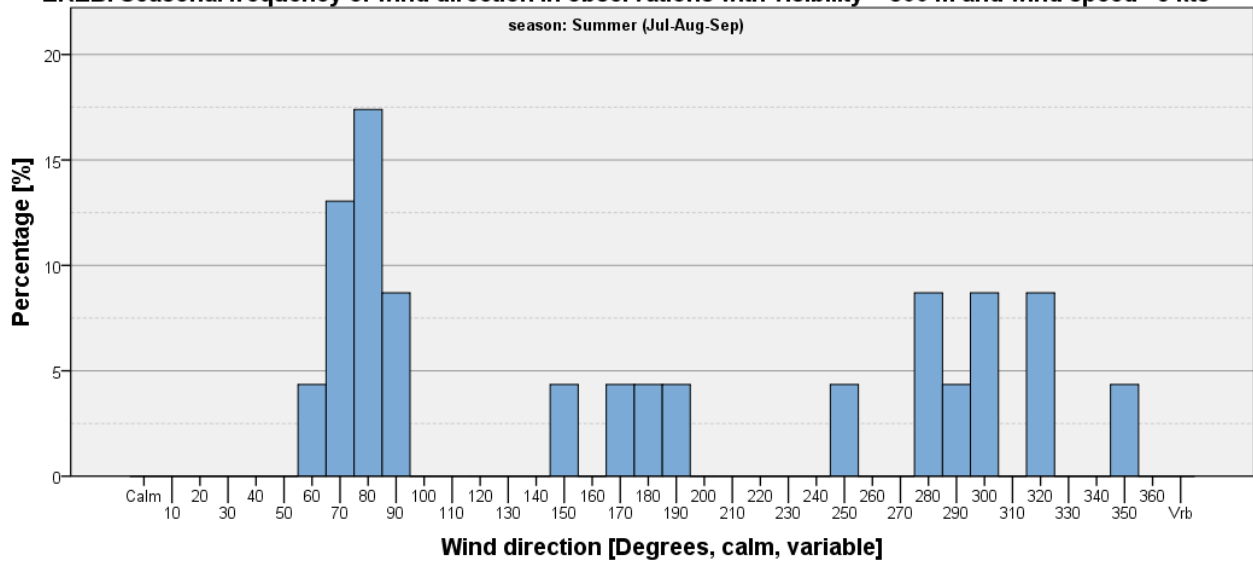


Figure 184

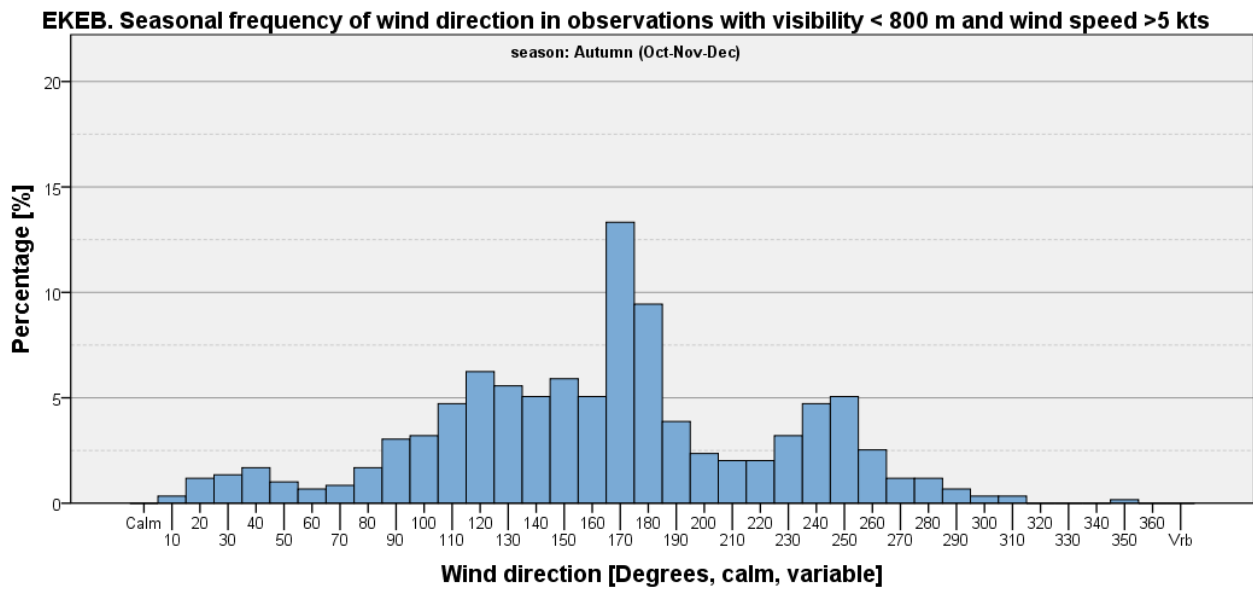


Figure 185

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 56: EKEB - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	27.52	11.01	7.47	24.29	17.54
All other observations	72.48	88.99	92.53	75.71	82.46
Total	100	100	100	100	100

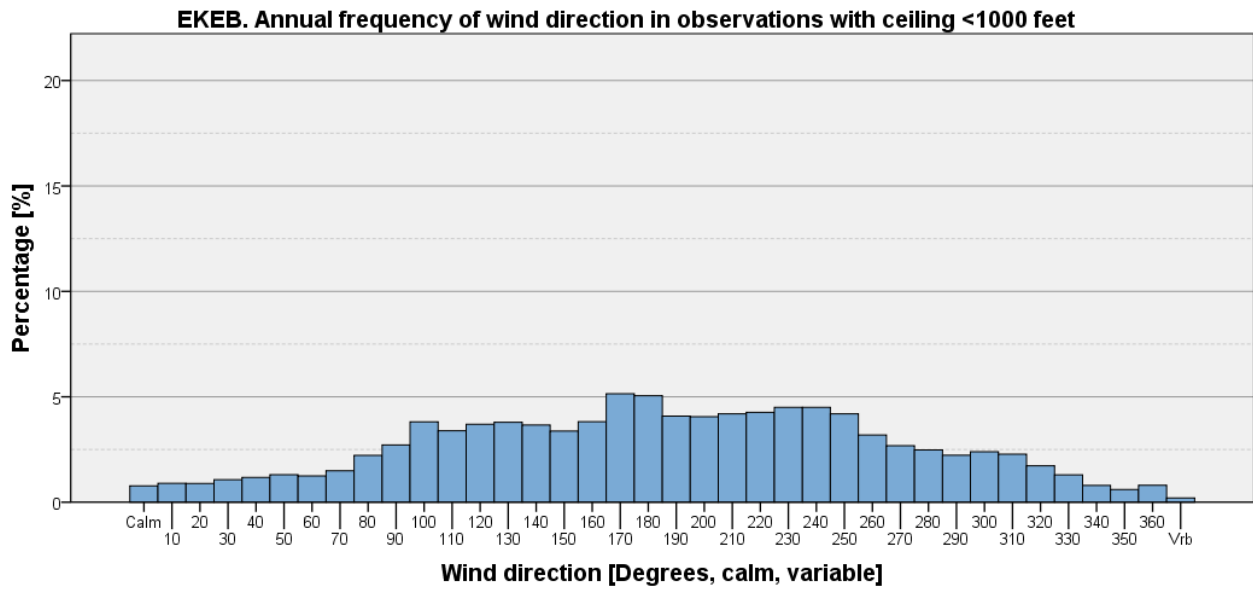


Figure 186

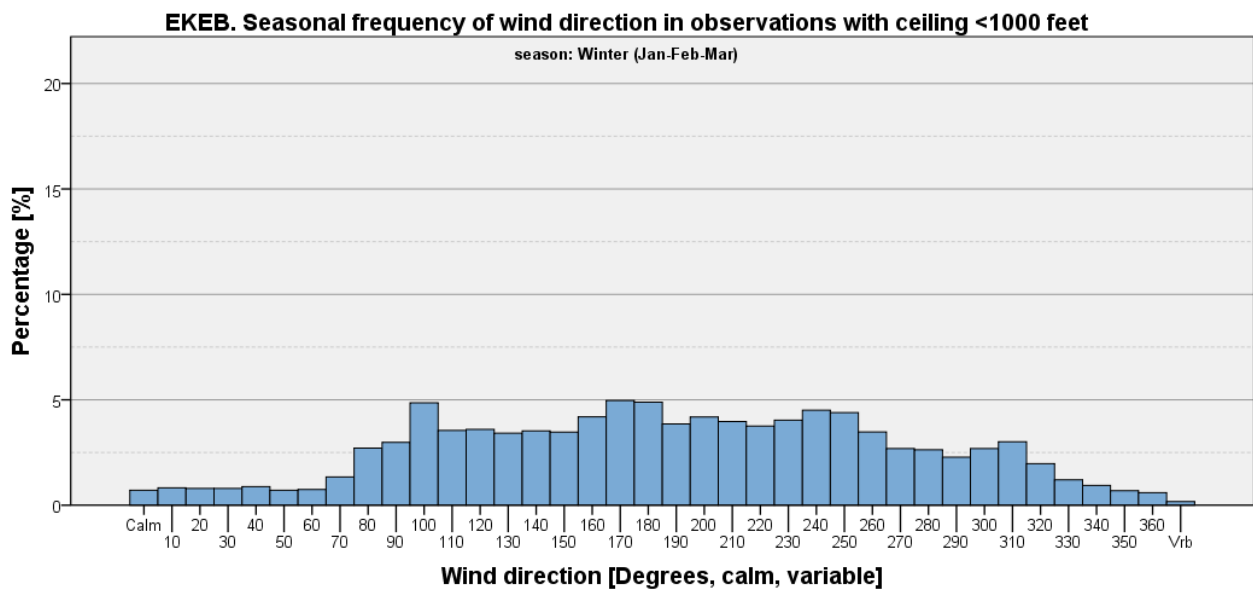


Figure 187

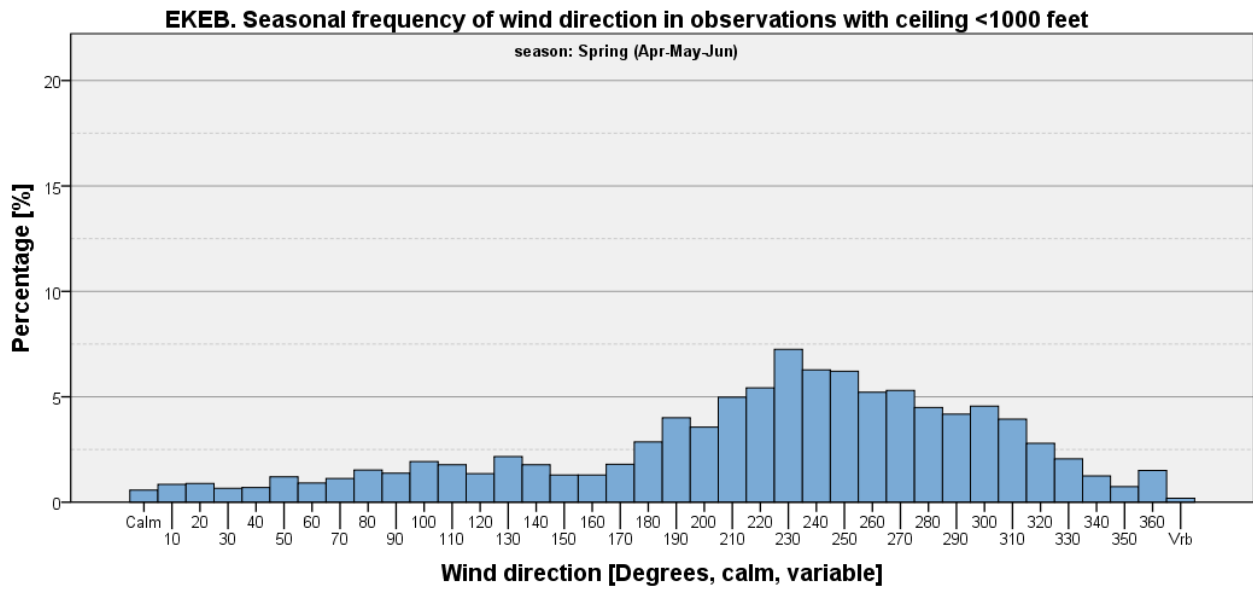


Figure 188

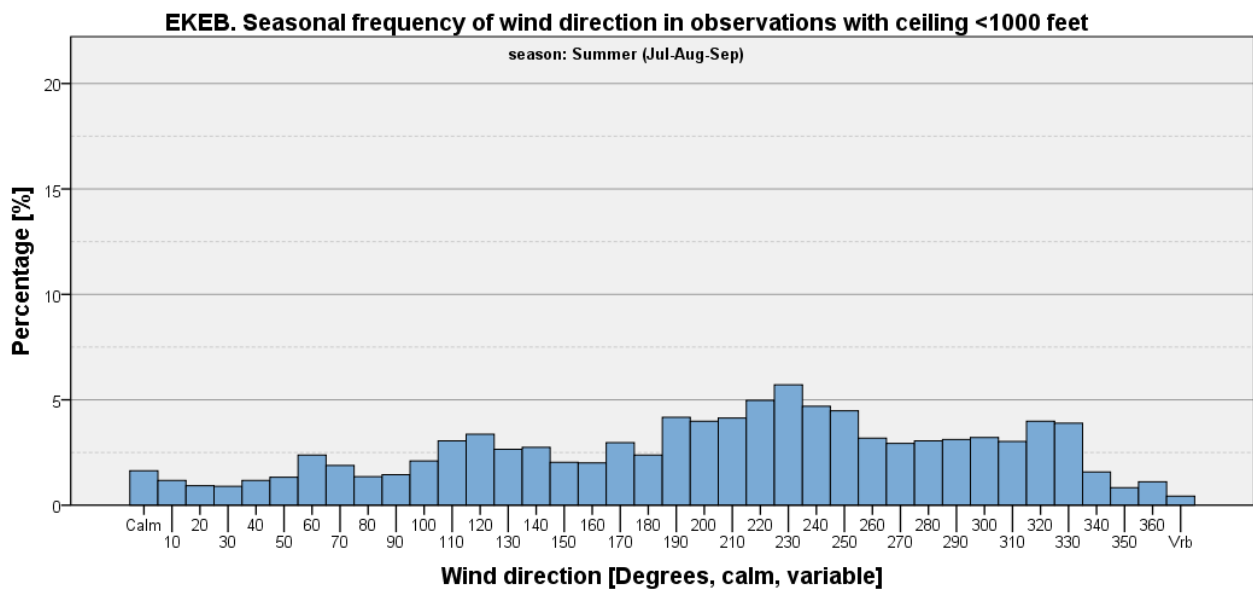


Figure 189

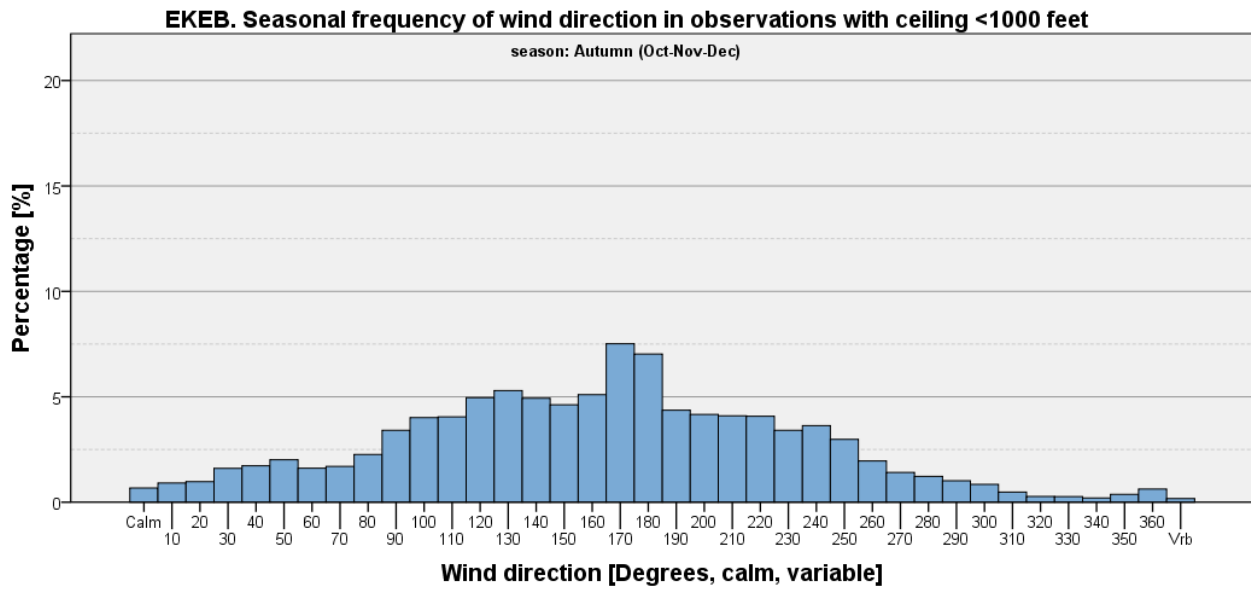


Figure 190

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 57: EKEB - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	6.04	2.64	2.02	4.38	3.76
All other observations	93.96	97.36	97.98	95.62	96.24
Total	100	100	100	100	100

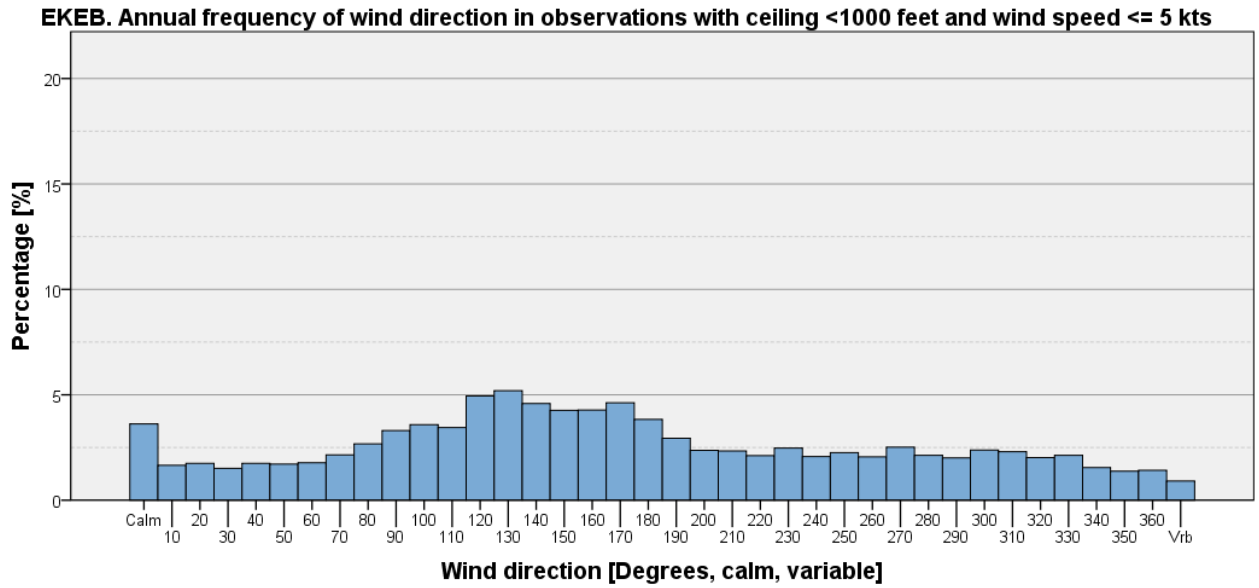


Figure 191

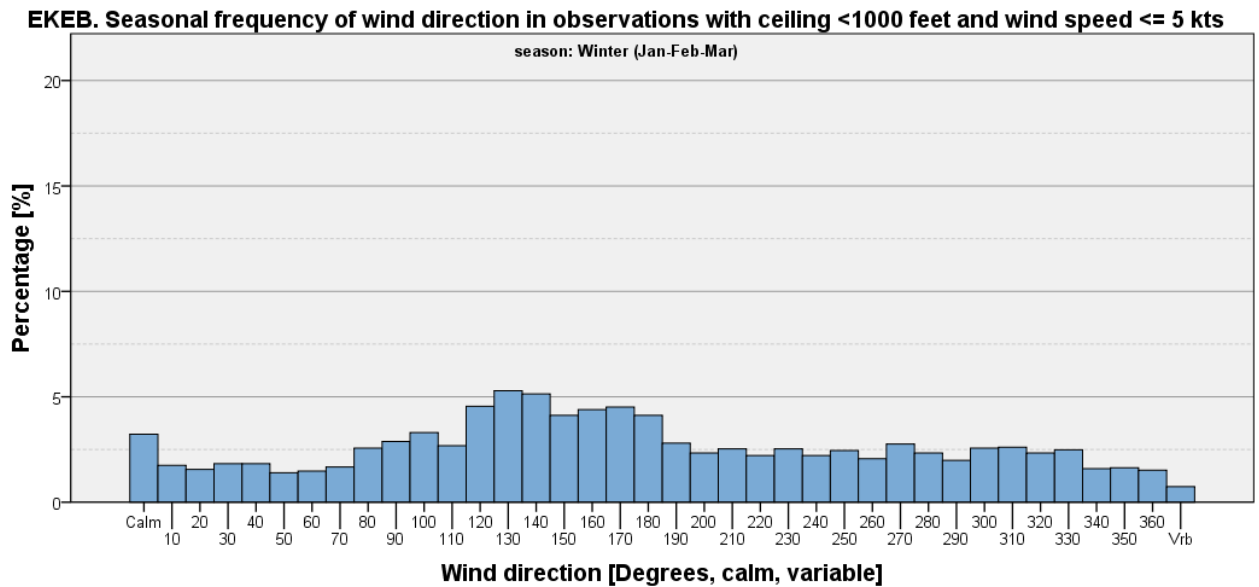


Figure 192

EKEB. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

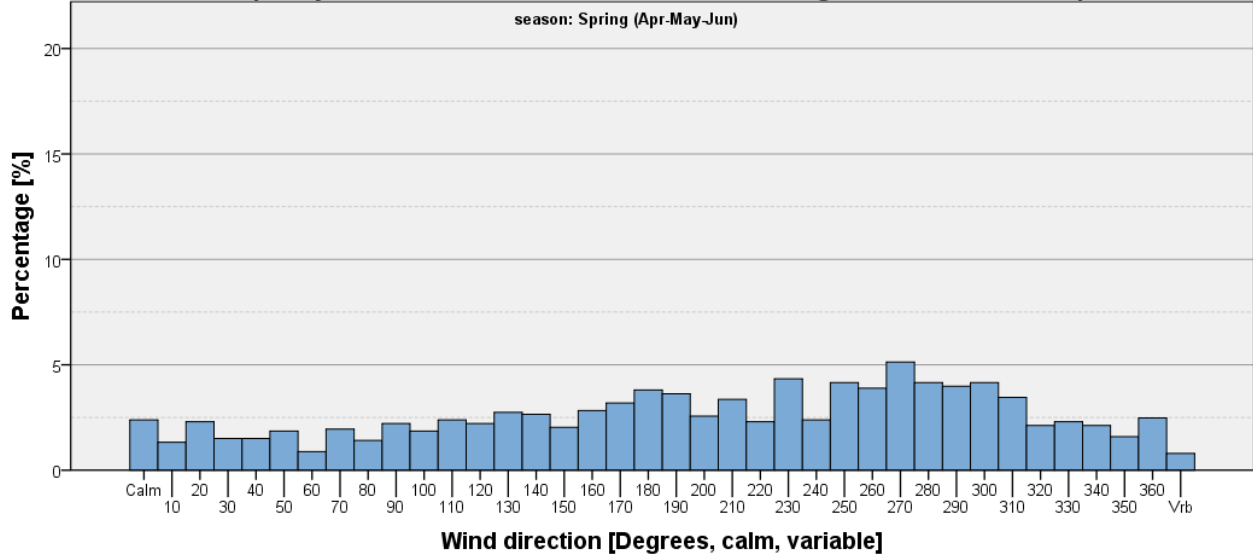


Figure 193

EKEB. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

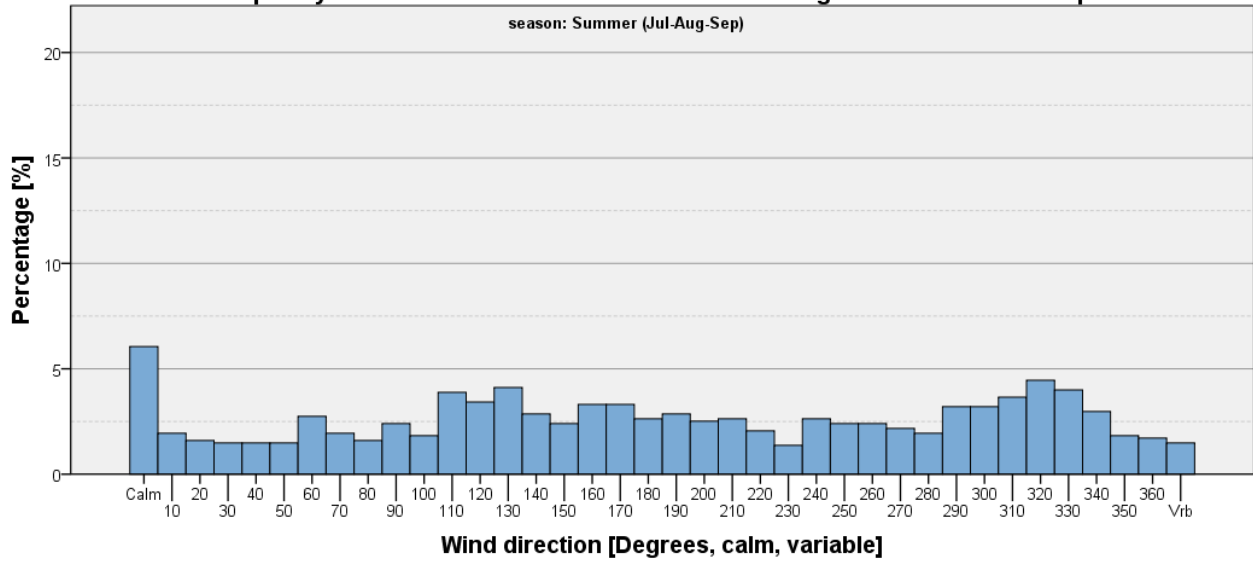


Figure 194

EKEB. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

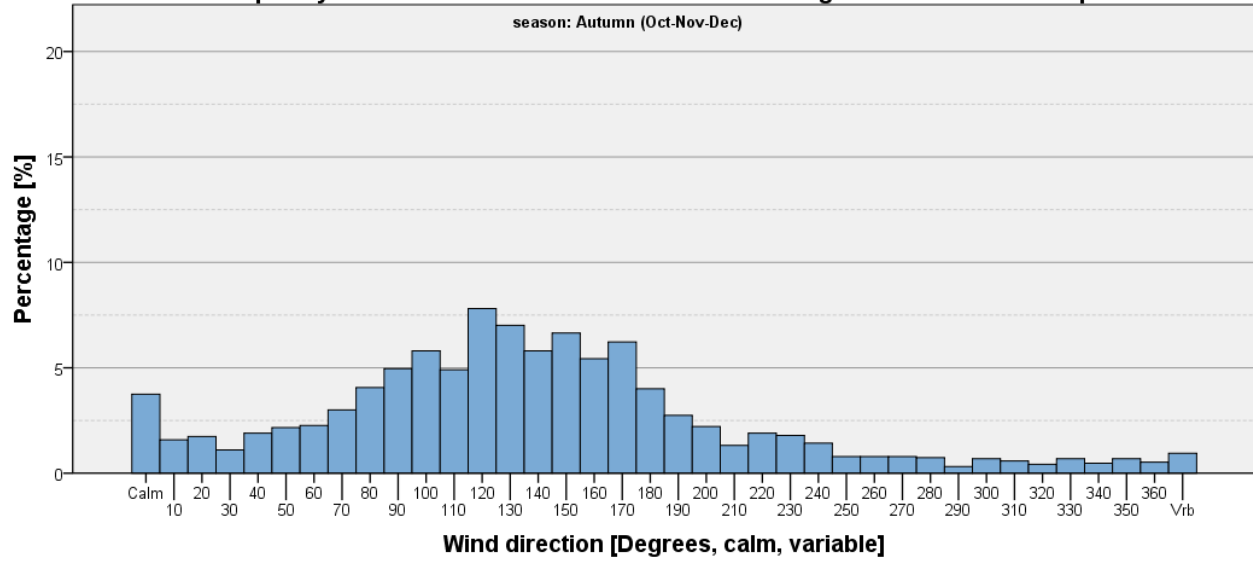


Figure 195

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 58: EKEB - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	21.47	8.37	5.46	19.91	13.78
All other observations	78.53	91.63	94.54	80.09	86.22
Total	100	100	100	100	100

EKEB. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

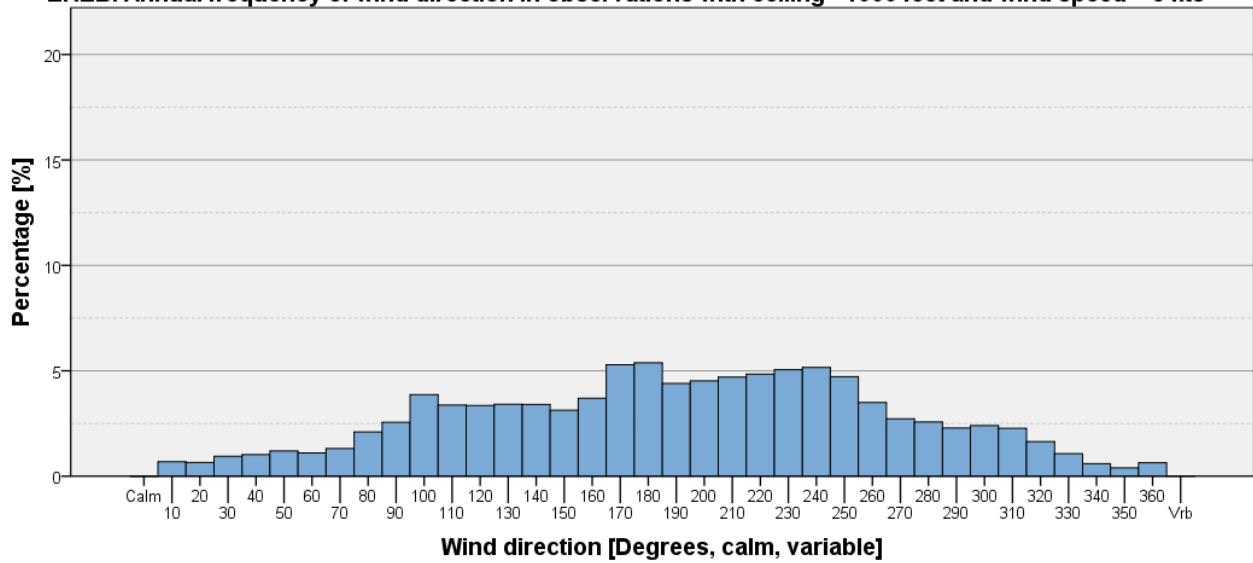


Figure 196

EKEB. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

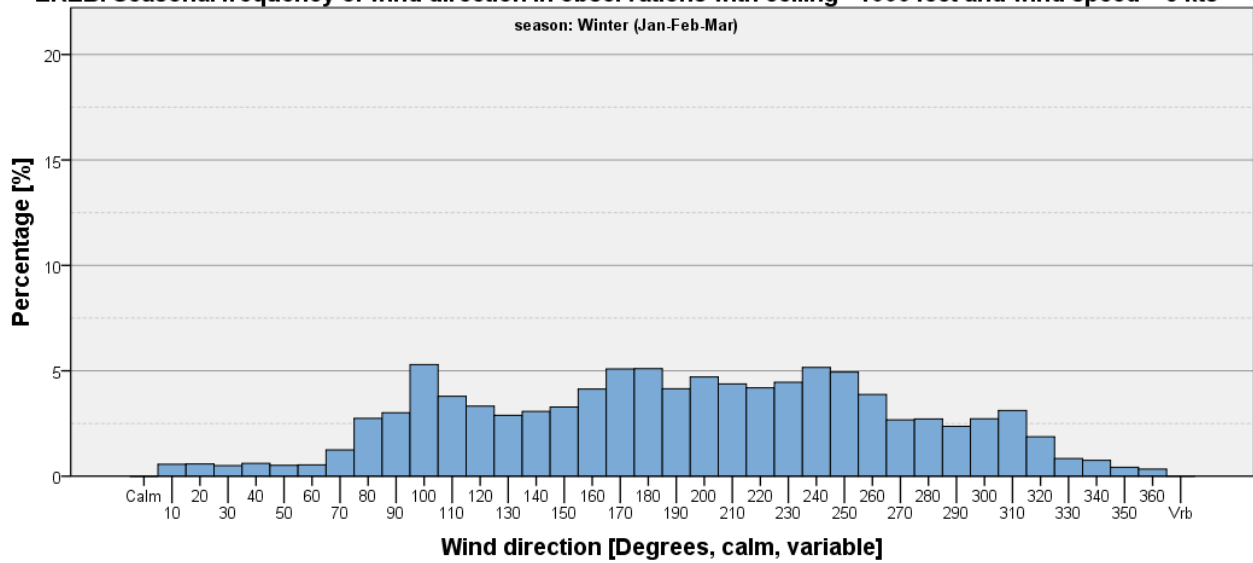


Figure 197

EKEB. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

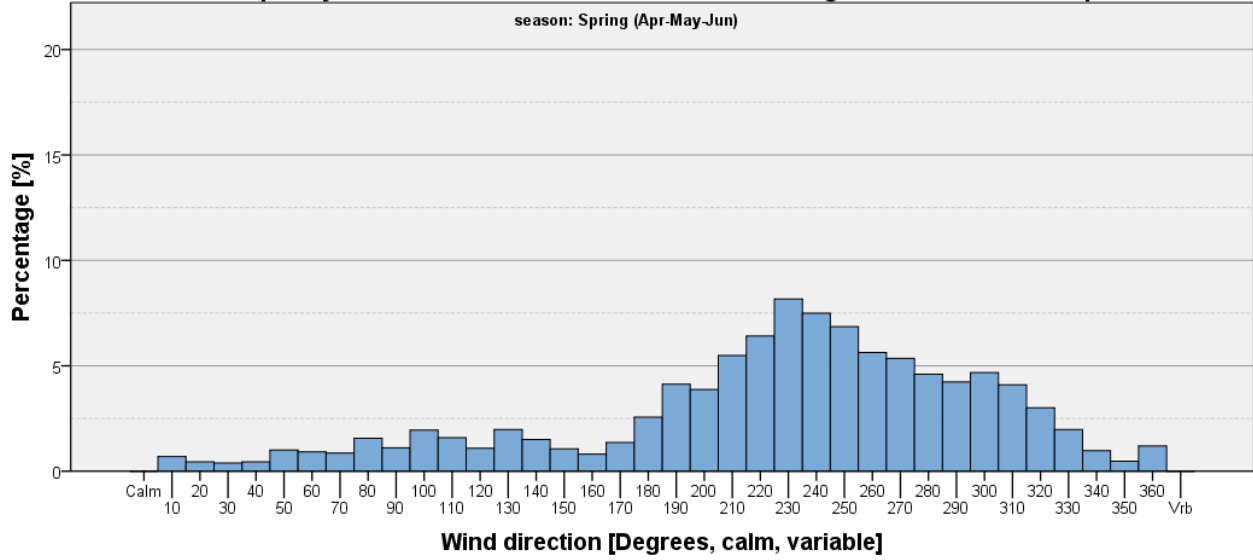


Figure 198

EKEB. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

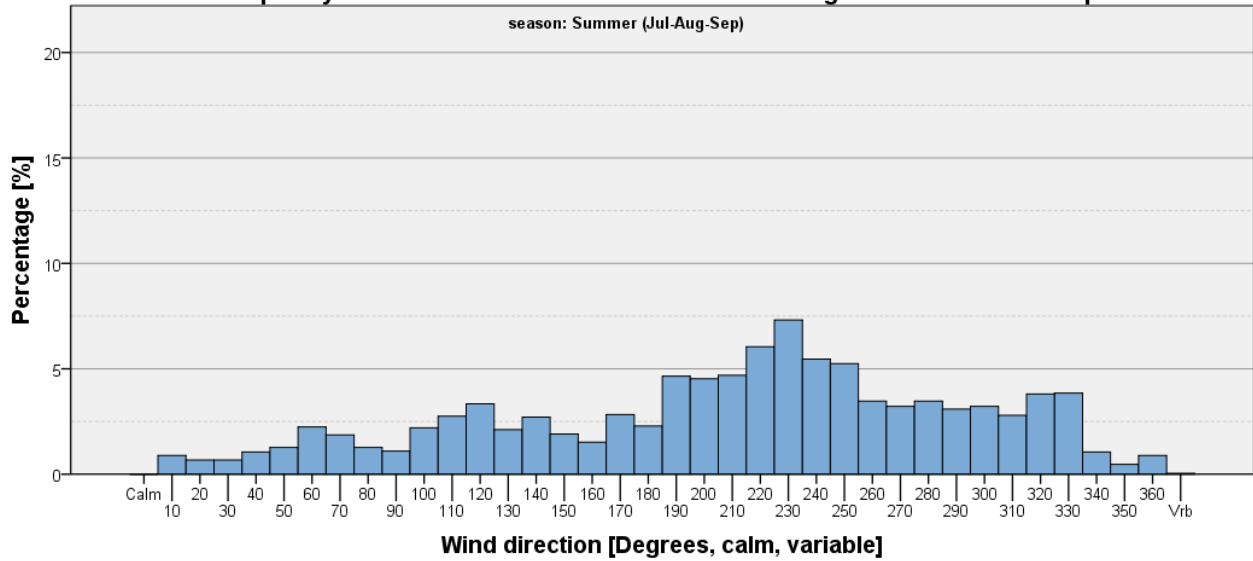


Figure 199

EKEB. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

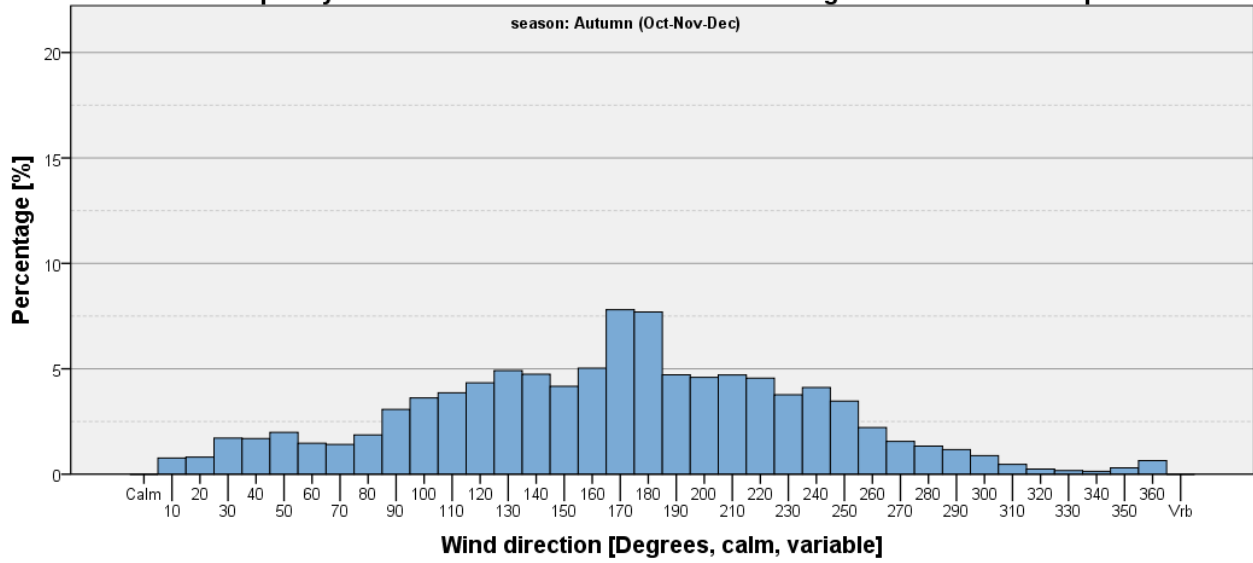


Figure 200

Ceiling < 500 feet

Table 59: EKEB - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	15.38	4.31	2.55	12.31	8.62
All other observations	84.62	95.69	97.45	87.69	91.38
Total	100	100	100	100	100

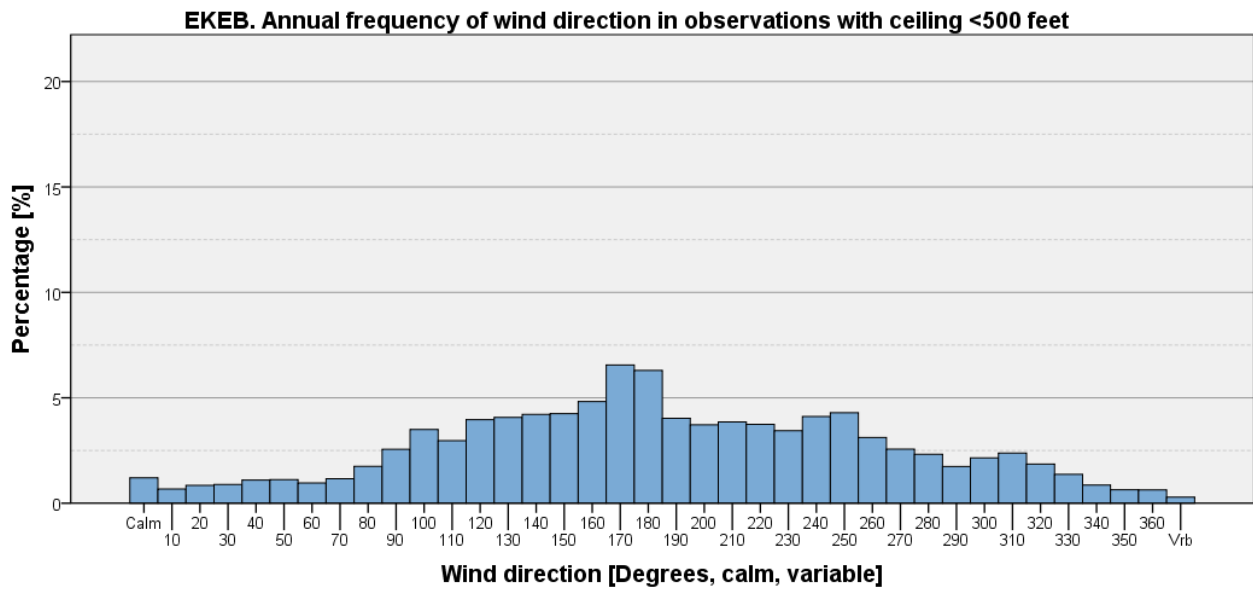


Figure 201

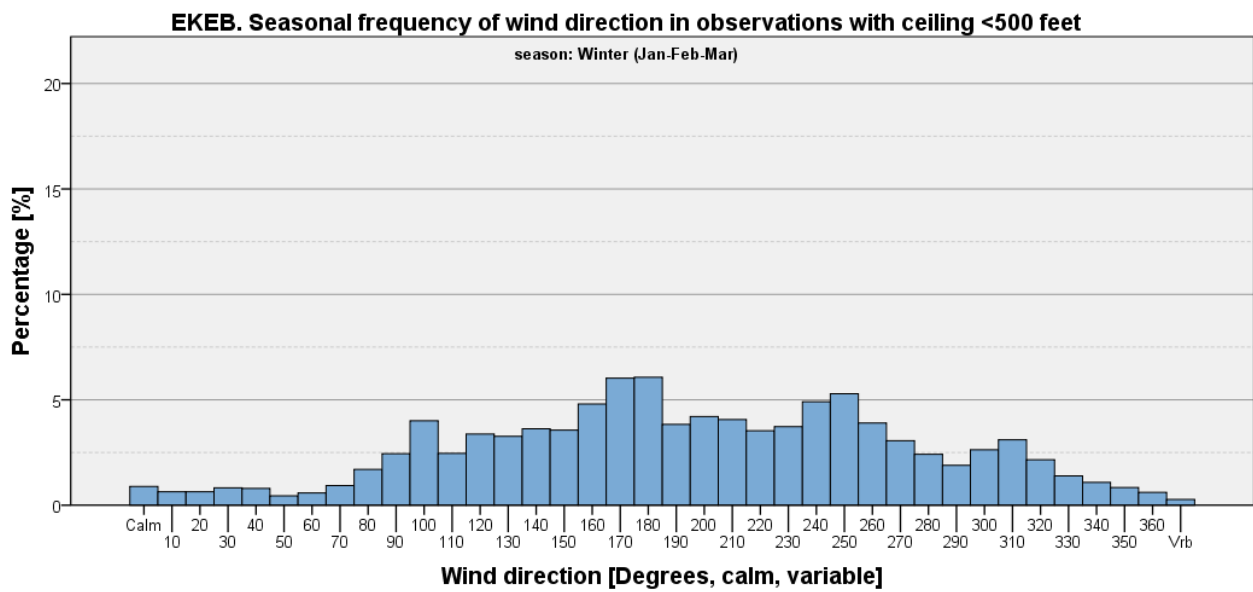


Figure 202

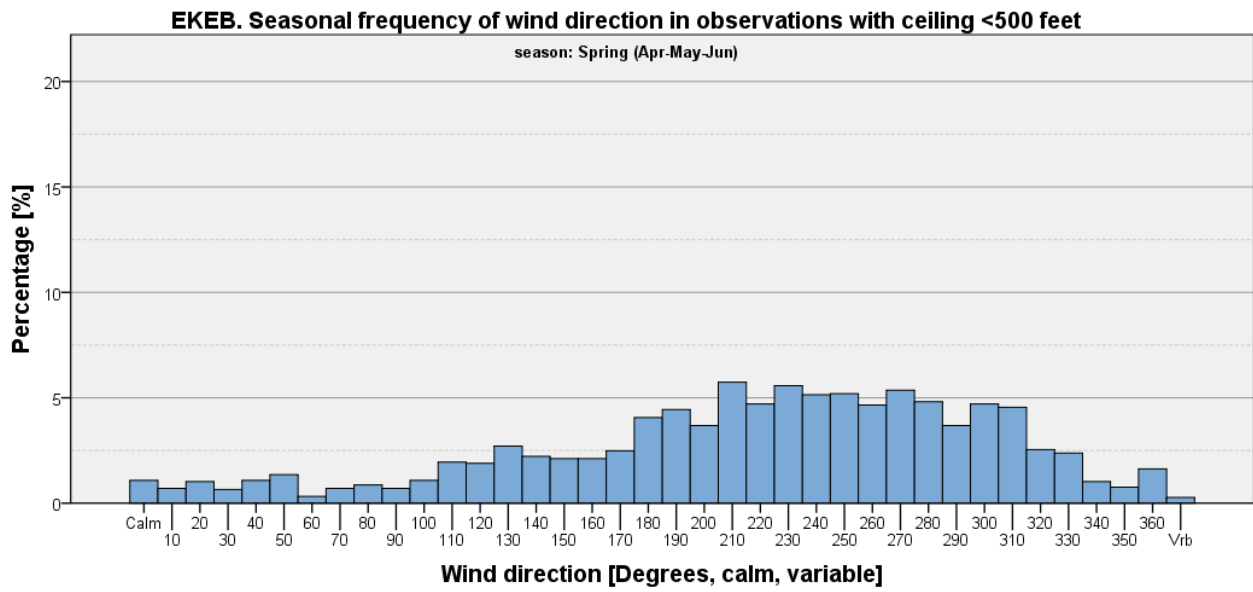


Figure 203

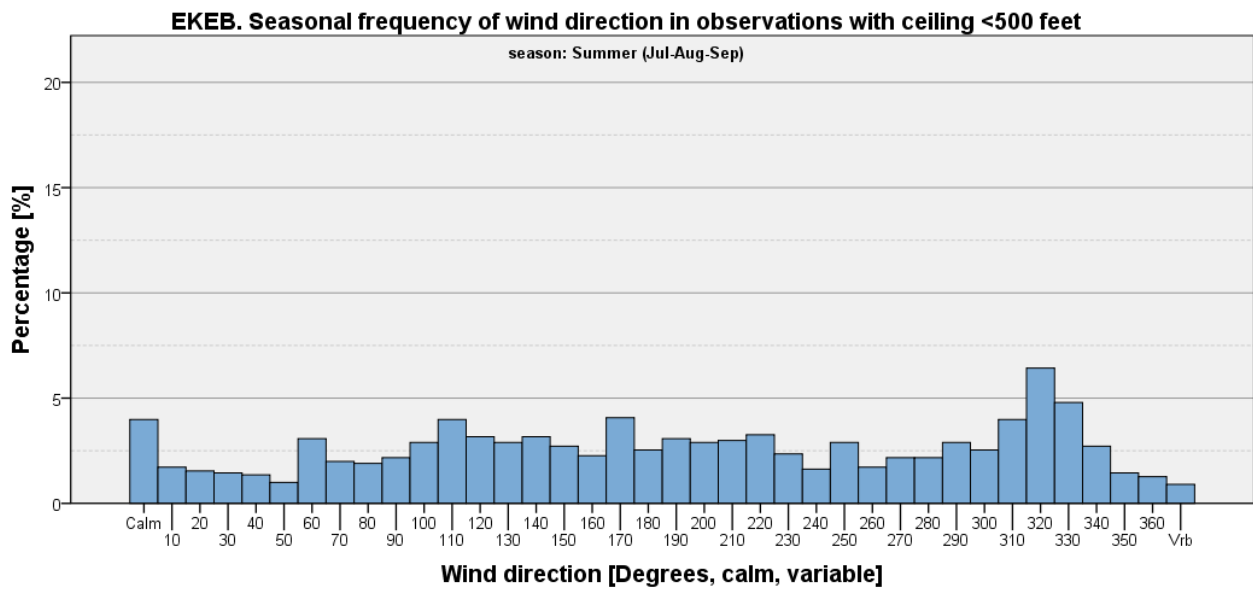


Figure 204

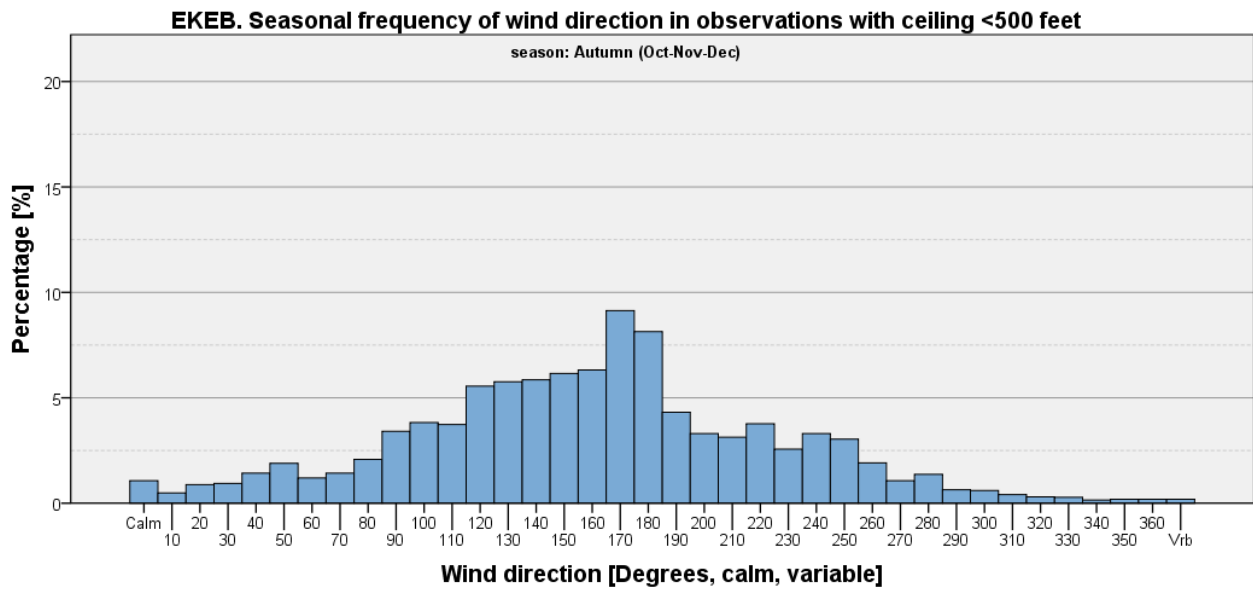


Figure 205

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 60: EKEB - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	4.32	1.56	1.20	3.19	2.56
All other Observations	95.68	98.44	98.80	96.81	97.44
Total	100	100	100	100	100

EKEB. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

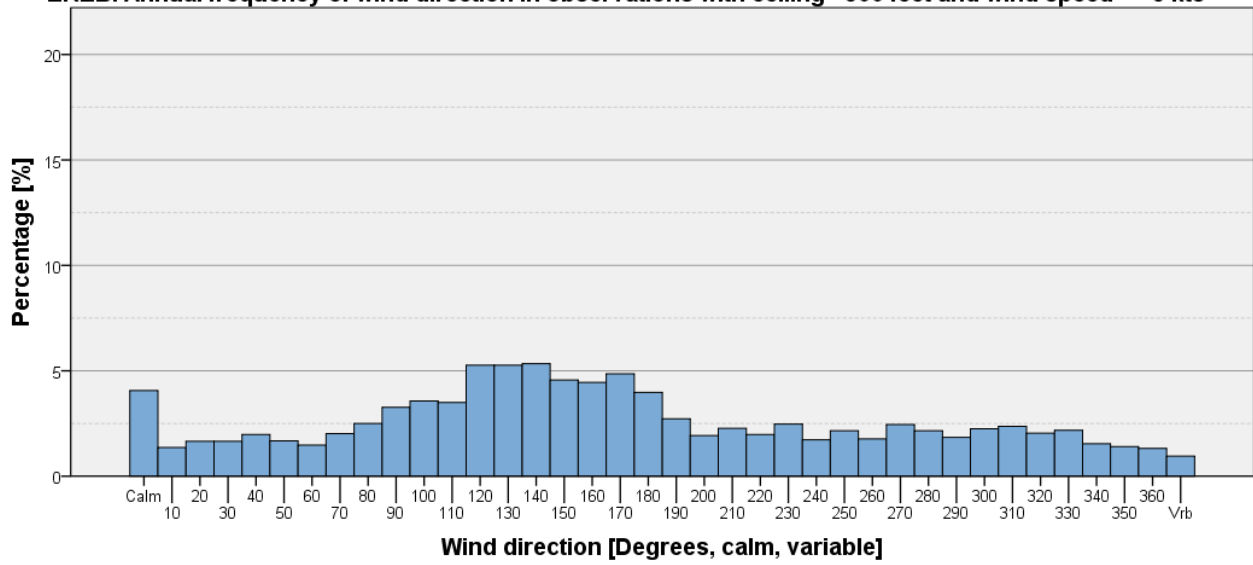


Figure 206

EKEB. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

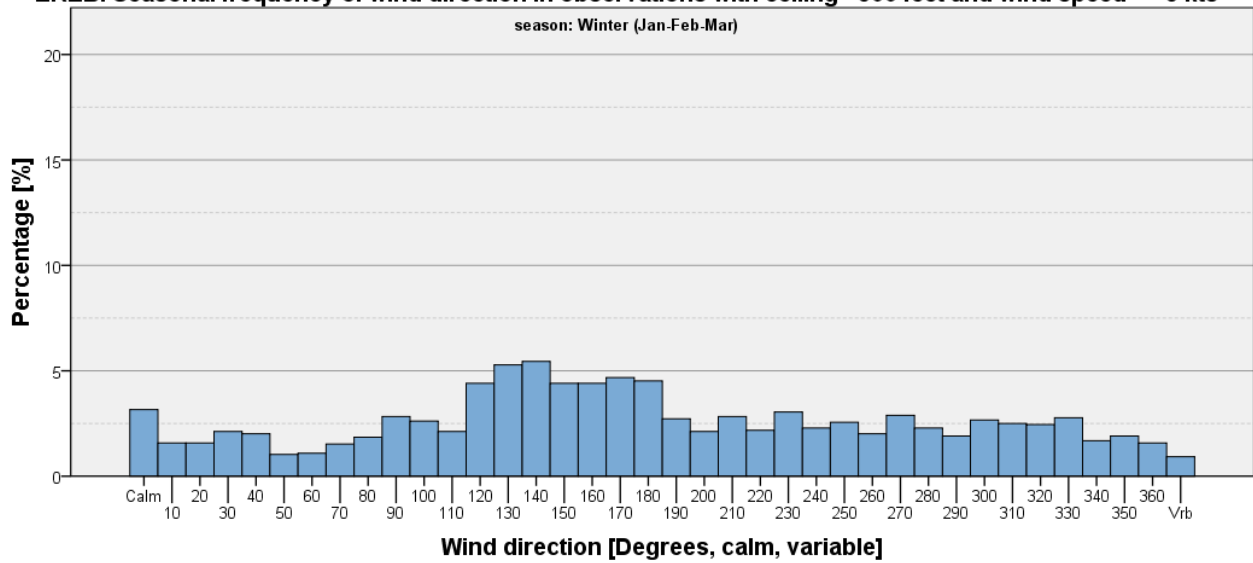


Figure 207

EKEB. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

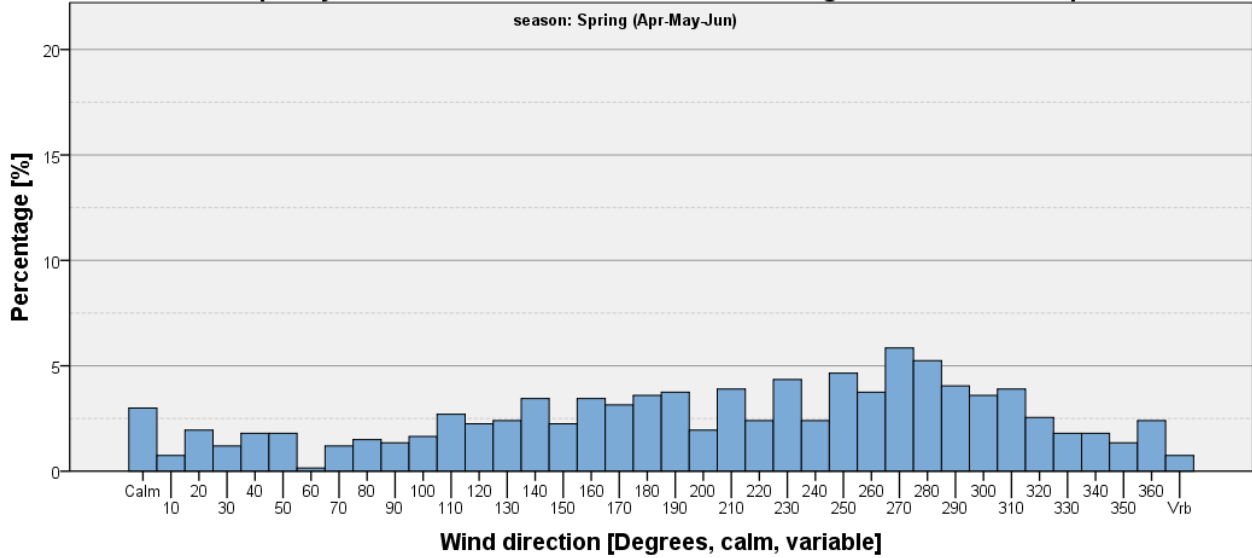


Figure 208

EKEB. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

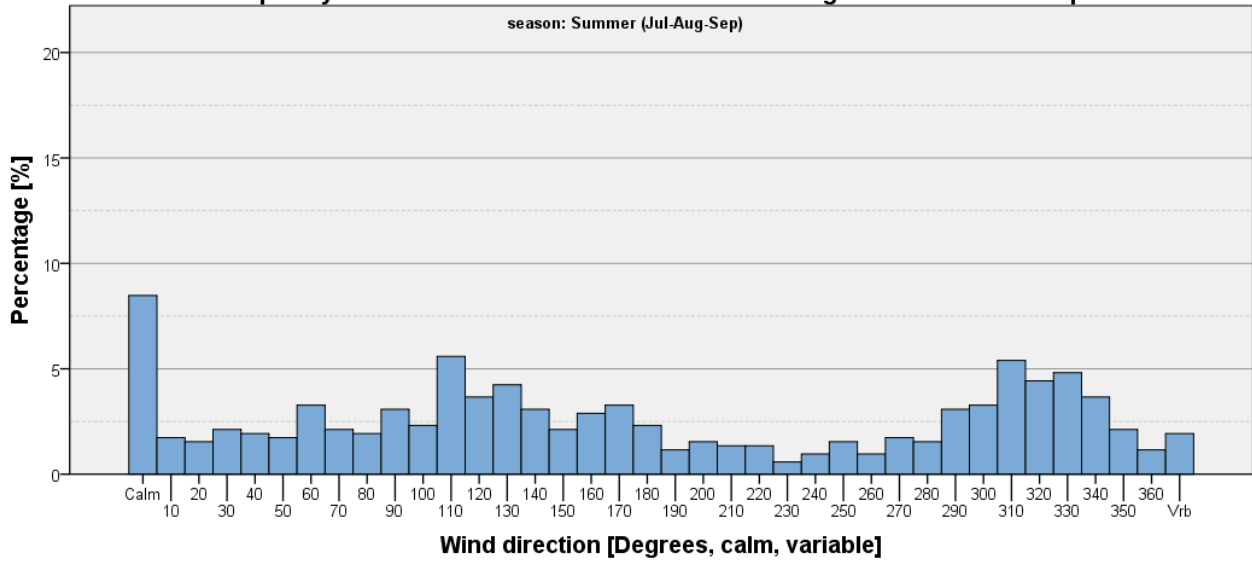


Figure 209

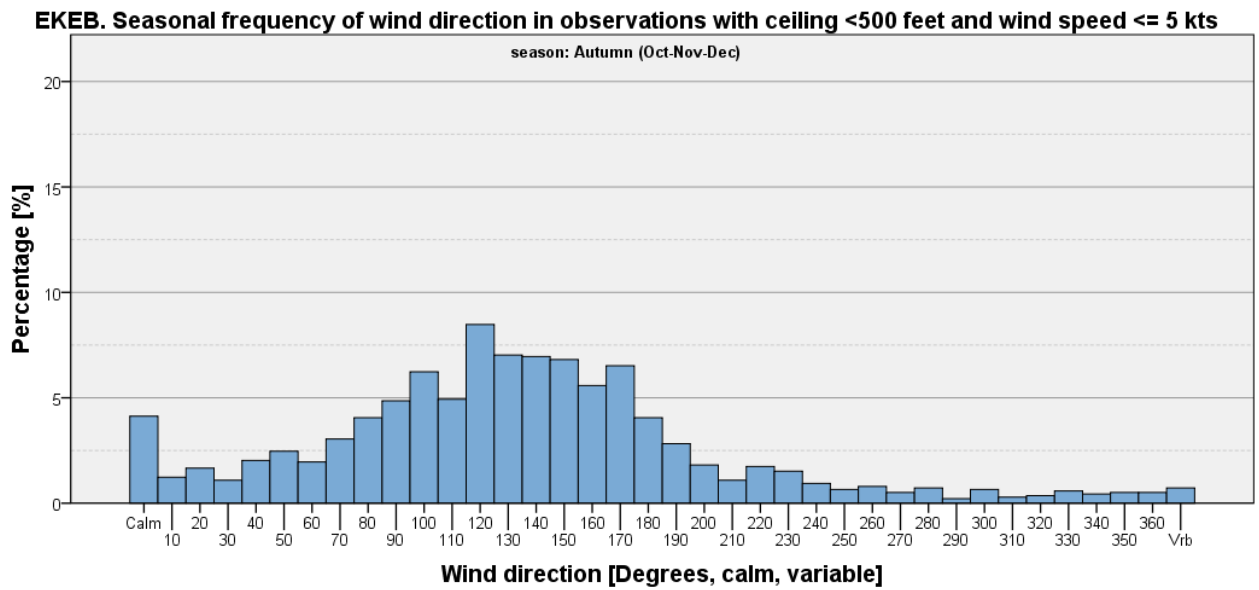


Figure 210

Ceiling < 500 feet and Wind Speed > 5 kts

Table 61: EKEB - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	11.06	2.75	1.35	9.12	6.06
All other observations	88.94	97.25	98.65	90.88	93.94
Total	100	100	100	100	100

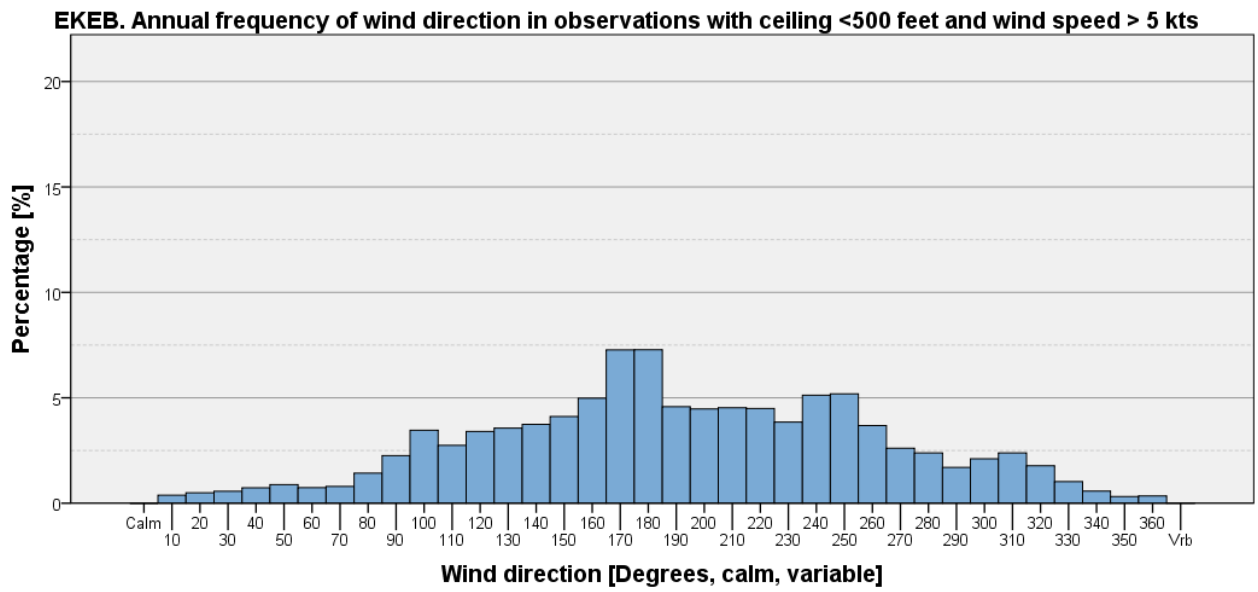


Figure 211

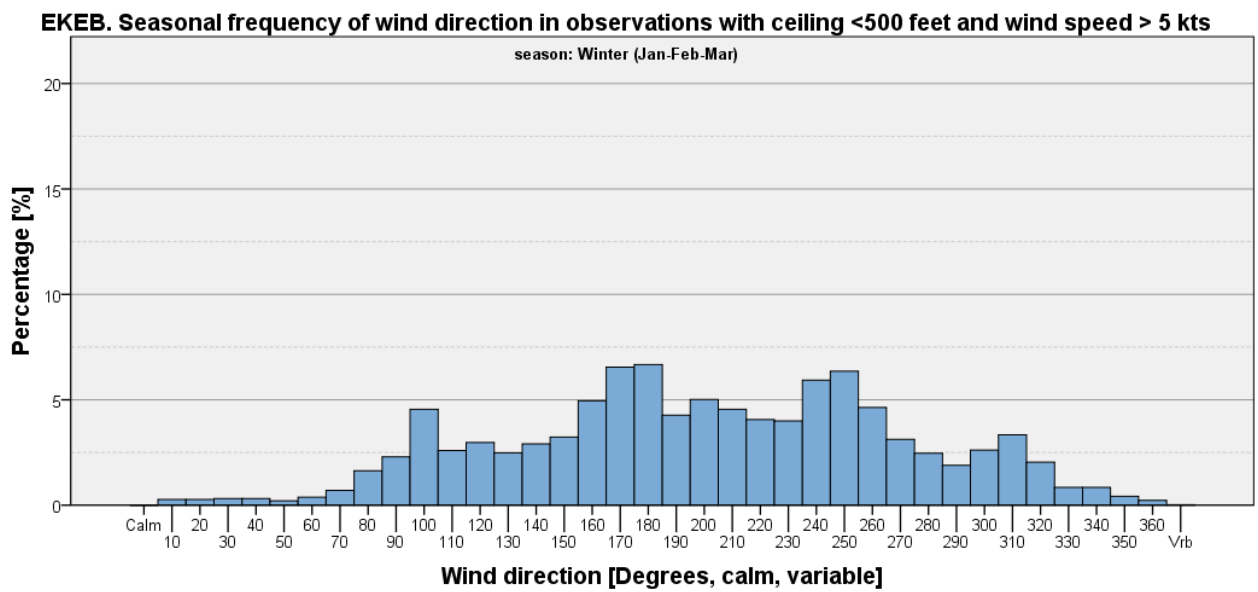


Figure 212

EKEB. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

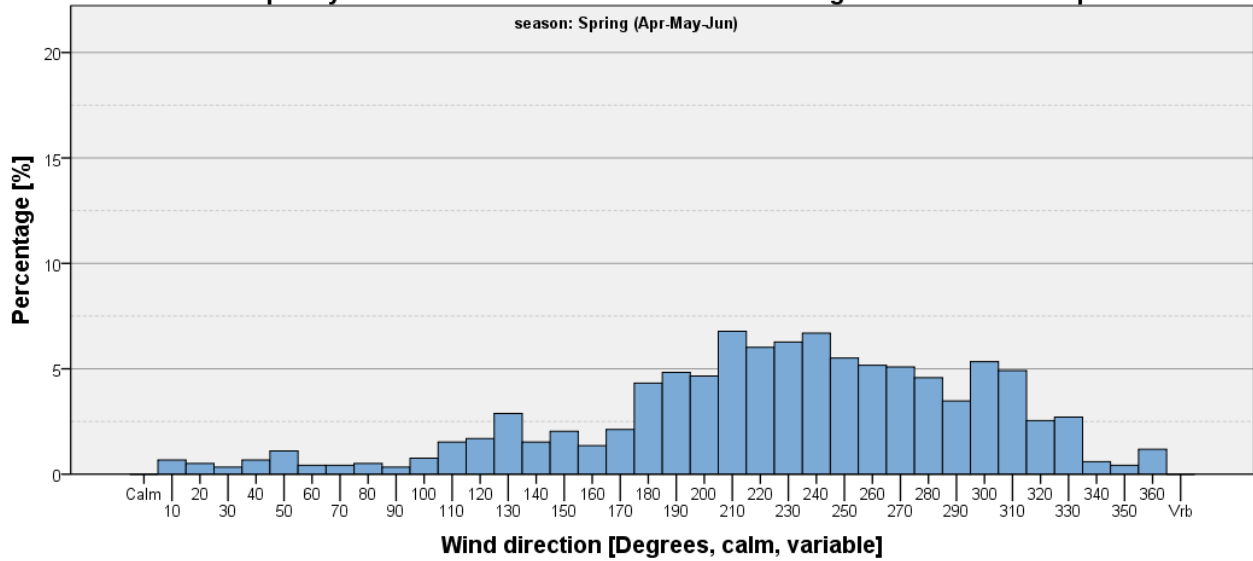


Figure 213

EKEB. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

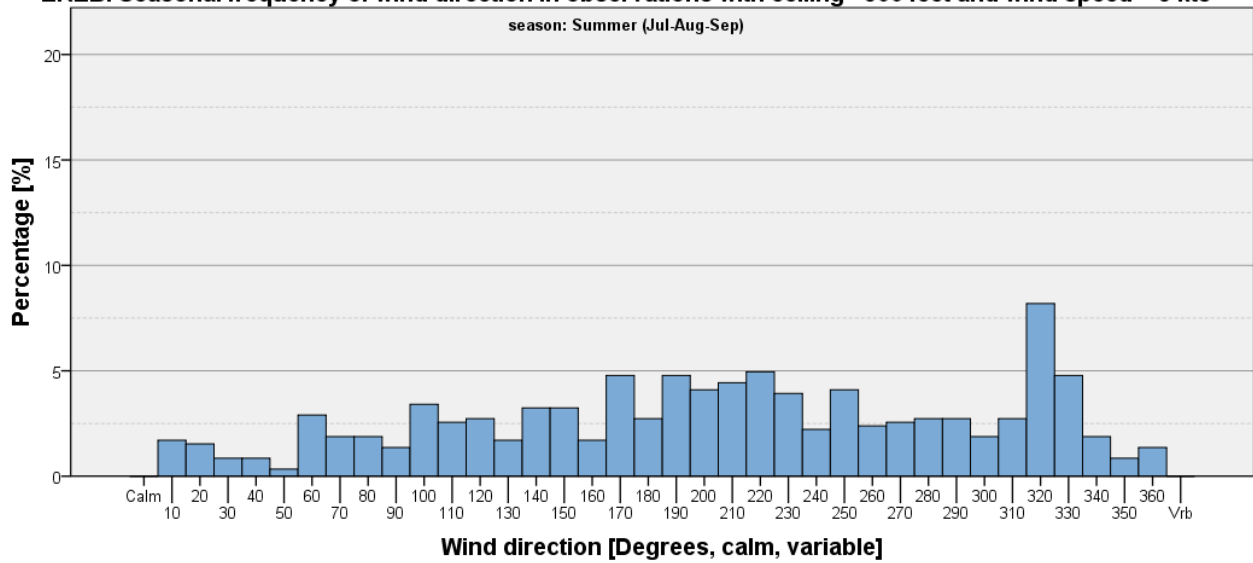


Figure 214

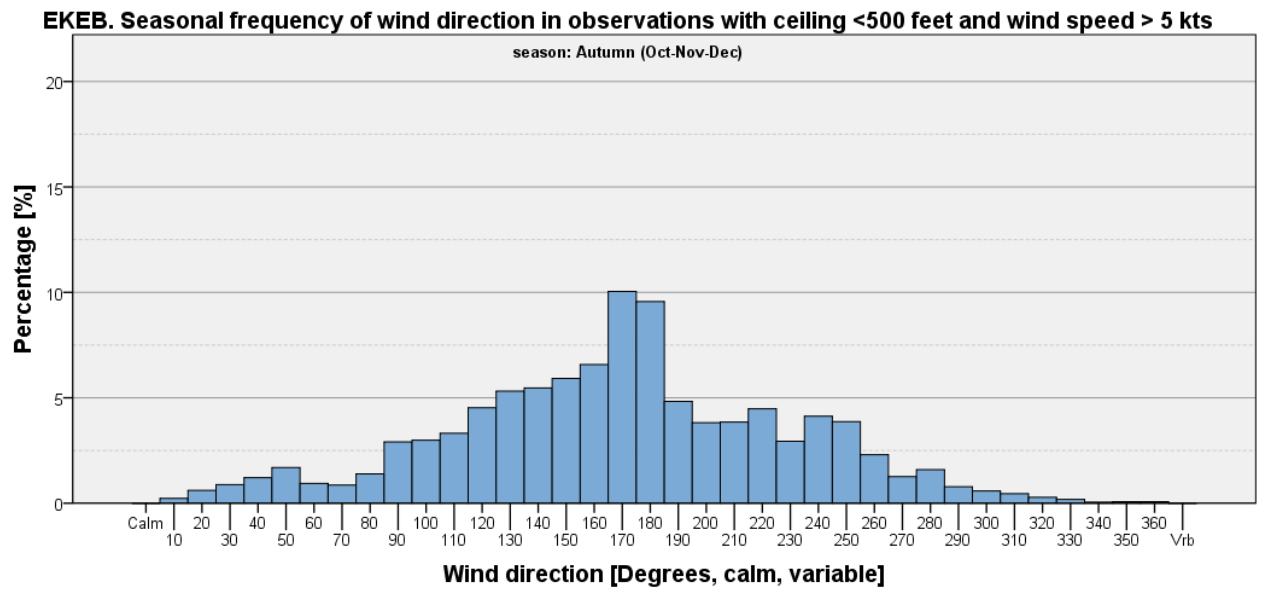
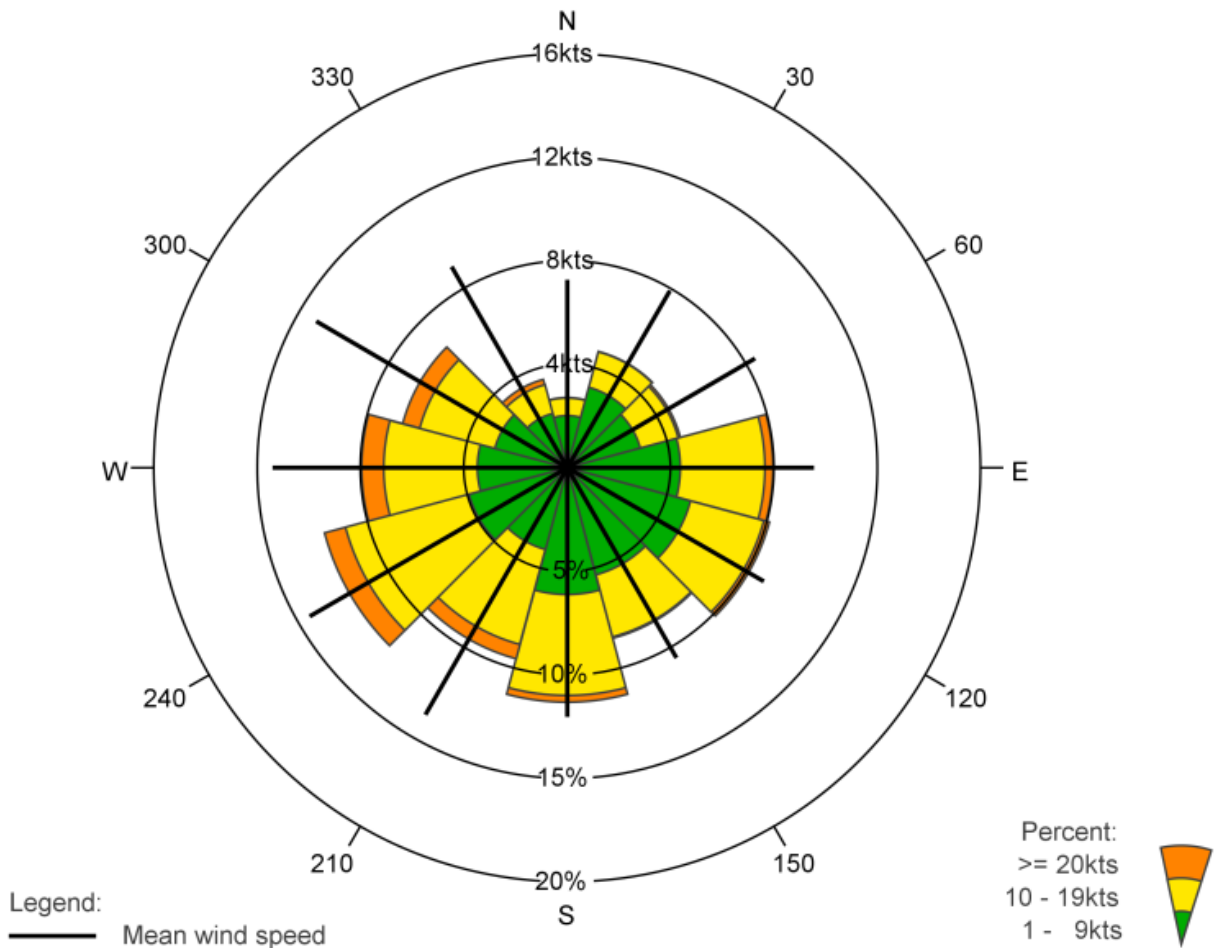


Figure 215

Wind Roses

EKEB: ESBJERG LUFTHAVN, AUTUMN & WINTER

01-01-2009 - 31-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.4	5.8	5.7	9.9	10.1	8.5	11.3	9.5	12.2	9.9	8.2	4.4	99.1
% 1 - 9kts	2.5	4.0	3.7	5.5	6.2	5.3	6.1	4.1	4.9	4.3	3.6	2.7	53.0
% 10 - 19kts	0.8	1.8	1.9	4.1	3.7	3.1	4.9	4.8	6.2	4.5	3.8	1.4	40.9
% >= 20kts	0.0	0.0	0.1	0.4	0.3	0.1	0.3	0.7	1.1	1.1	0.9	0.3	5.2
Mean wind speed	7.3	7.9	8.4	9.5	8.7	8.5	9.6	11.0	11.5	11.4	11.2	8.9	9.8
Max wind speed	34.0	22.0	29.0	33.0	28.0	26.0	34.0	32.0	37.0	43.0	40.0	38.0	43.0

Number of observations = 85871

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 730=0.9%

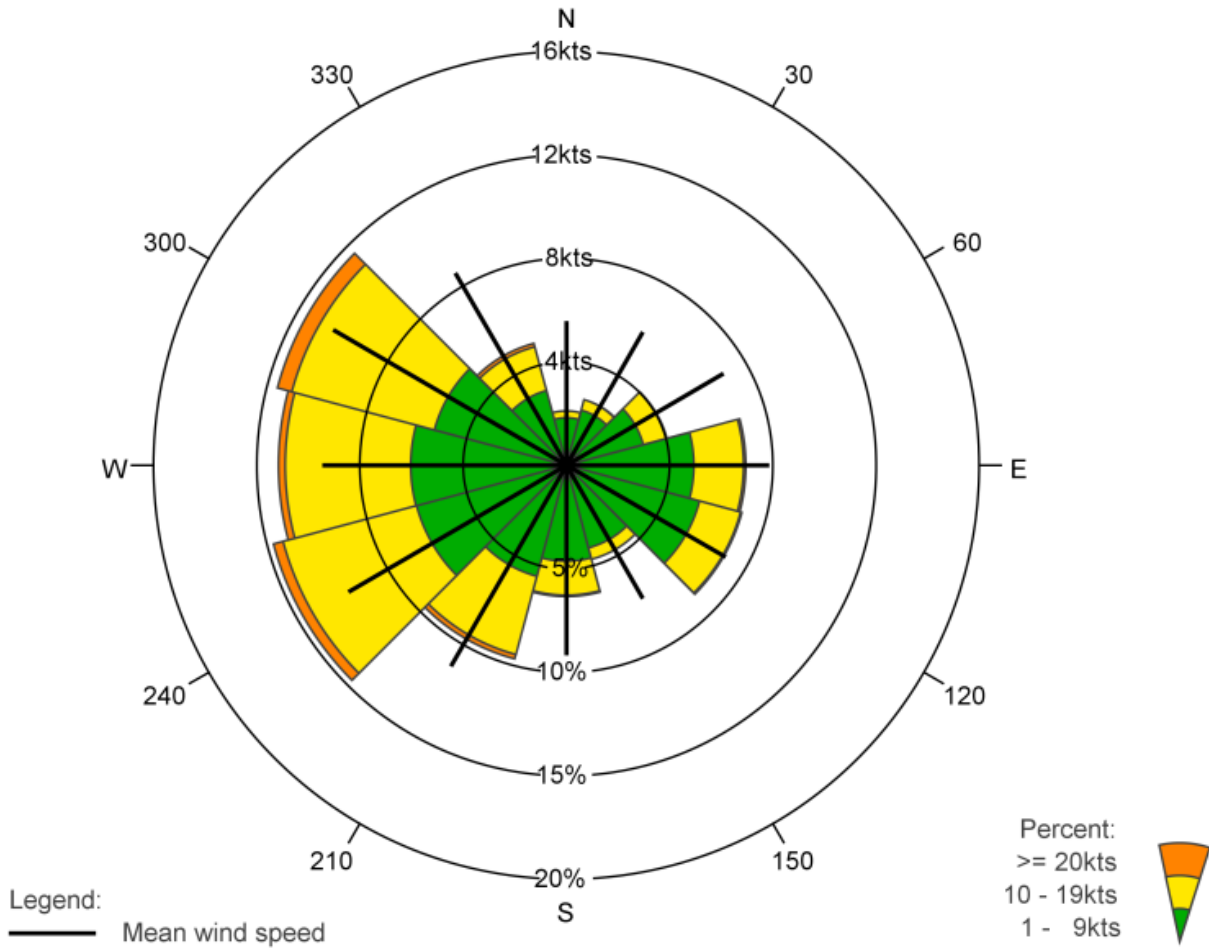
Observations with calm/varying wind direction are not used in the statistics

Source: DMI

Figure 216

EKEB: ESBJERG LUFTHAVN, SPRING & SUMMER

01-01-2009 - 31-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	2.6	3.3	5.0	8.7	8.8	4.7	6.3	9.7	14.7	13.9	14.5	6.1	98.4
% 1 - 9kts	2.3	2.8	3.9	6.2	6.7	4.1	4.6	5.6	7.5	7.5	6.6	3.7	61.5
% 10 - 19kts	0.3	0.5	1.1	2.4	2.0	0.6	1.6	3.9	6.7	6.1	7.1	2.2	34.6
% >= 20kts	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.5	0.3	0.7	0.2	2.2
Mean wind speed	5.6	6.0	7.0	7.8	7.2	6.0	7.4	9.0	9.8	9.5	10.4	8.6	8.5
Max wind speed	20.0	20.0	25.0	27.0	27.0	20.0	30.0	27.0	30.0	28.0	32.0	31.0	32.0

Number of observations = 86187

Source: DMI

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 1379=1.6%

Observations with calm/varying wind direction are not used in the statistics

Figure 217

Availability

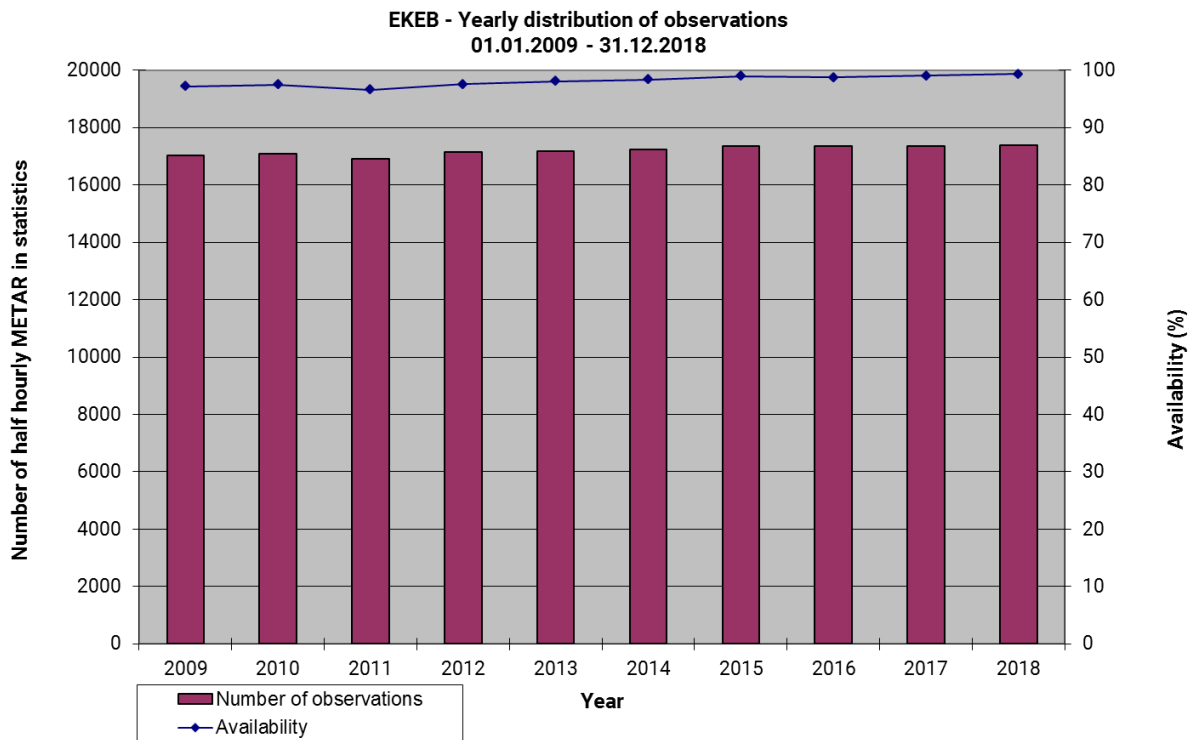


Figure 218

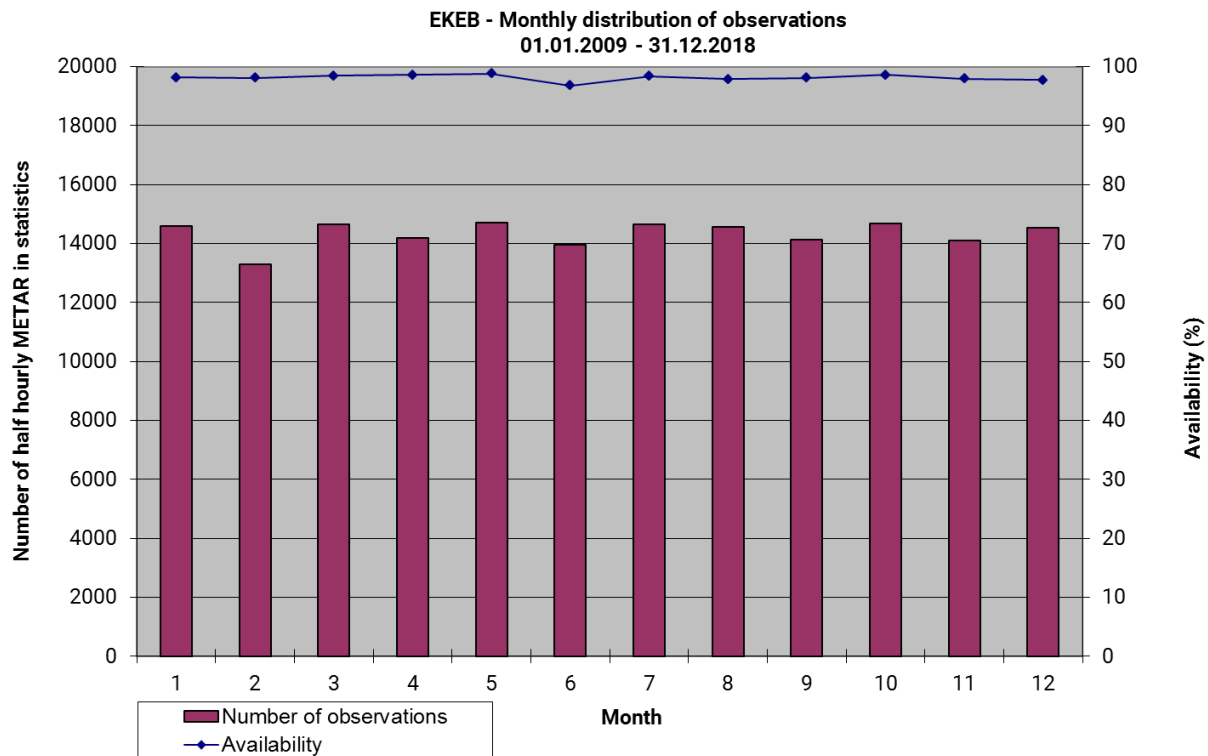


Figure 219

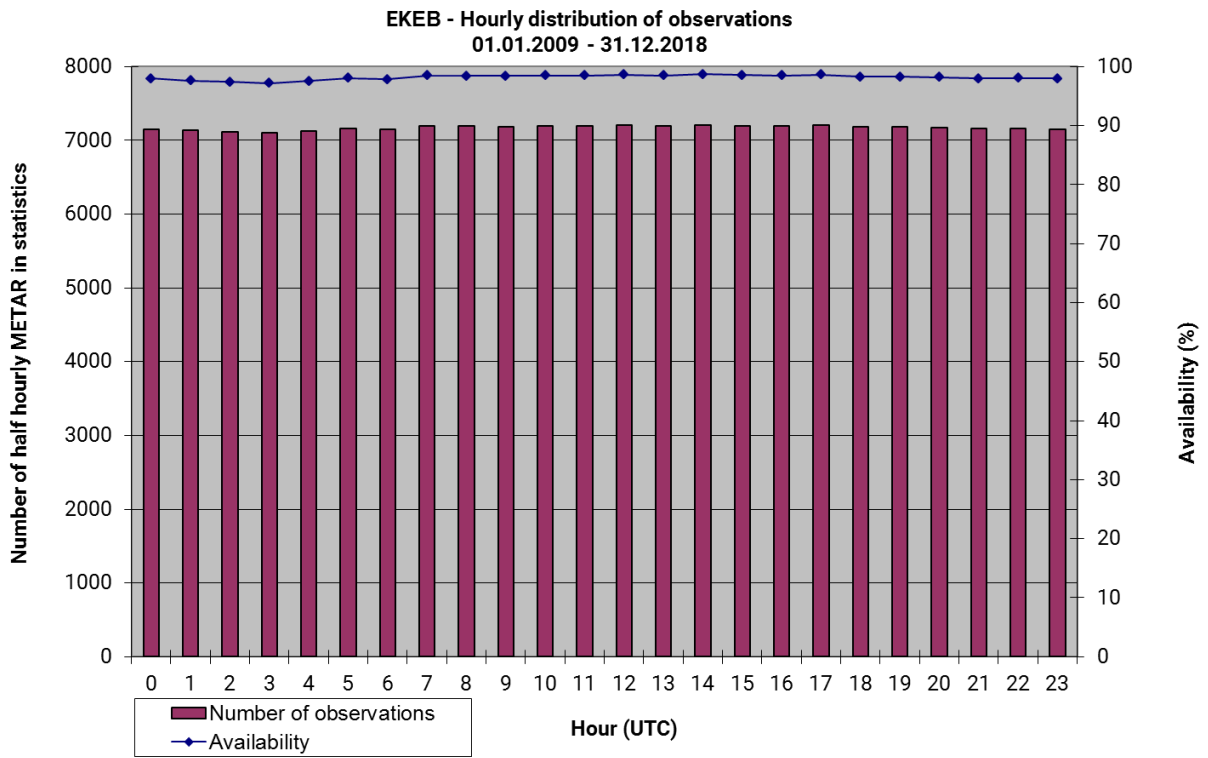


Figure 220

Table 62: EKEB. Average number of half hourly observations in statistics, 01.01.2009 – 31.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
1	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
2	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0
3	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0
4	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
5	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
6	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
7	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0
9	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0
10	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0
11	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0
12	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
13	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
14	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
15	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
16	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
17	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
18	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
19	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
20	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
21	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
22	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
23	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0

EKGF Thyra East

Airport location: 55,717°N 4,800°E Elevation: 67 m above MSL.

EKGF observations in statistics: 98,028 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 55.9 %. For more information, please go to the 'Availability' section.

All EKGF METAR are manual.

Cross Tables Visibility – Ceiling

<i>Table 63: EKGF Annual – Frequencies (%) Visibility – Ceiling.</i>								
Number of observations = 98,028	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.019	1.04	1.18	1.18	1.18	1.18	0.028	1.21
<350m	0.019	1.43	1.89	1.89	1.89	1.90	0.08	1.98
<600m	0.019	1.56	2.20	2.23	2.23	2.24	0.12	2.35
<800 m	0.019	1.58	2.26	2.30	2.30	2.30	0.13	2.43
<1.5 km	0.019	1.63	2.57	2.67	2.70	2.70	0.16	2.86
<3.0 km	0.019	1.66	2.99	3.31	3.41	3.44	0.35	3.79
< 5.0 km	0.019	1.68	3.50	4.54	4.88	5.00	1.03	6.02
< 8.0 km	0.019	1.68	3.93	6.18	7.11	7.50	2.85	10.35
>= 8.0 km or CAVOK	0	0.004	0.42	3.91	8.48	12.60	77.05	89.65
Total	0.019	1.68	4.35	10.09	15.59	20.11	79.89	100

Table 64: EKGf - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 24,533	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	1.23	1.28	1.28	1.28	1.29	0.012	1.30
<350m	0	1.84	2.35	2.36	2.36	2.37	0.08	2.45
<600m	0	2.02	2.79	2.84	2.86	2.87	0.12	3.00
<800 m	0	2.05	2.88	2.94	2.96	2.98	0.14	3.12
<1.5 km	0	2.14	3.39	3.55	3.61	3.63	0.16	3.79
<3.0 km	0	2.18	3.98	4.47	4.63	4.69	0.37	5.06
< 5.0 km	0	2.20	4.65	6.33	6.84	7.01	1.12	8.13
< 8.0 km	0	2.20	5.12	8.89	10.26	10.78	3.13	13.91
>= 8.0 km or CAVOK	0	0.0082	0.45	5.31	12.00	17.38	68.71	86.09
Total	0	2.21	5.56	14.21	22.26	28.16	71.84	100

Table 65: EKGf - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 24,622	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.073	2.27	2.61	2.61	2.61	2.61	0.085	2.70
<350m	0.073	2.87	3.73	3.73	3.73	3.73	0.19	3.92
<600m	0.073	3.12	4.24	4.26	4.26	4.26	0.26	4.52
<800 m	0.073	3.14	4.35	4.39	4.39	4.39	0.27	4.65
<1.5 km	0.073	3.21	4.67	4.78	4.79	4.79	0.34	5.13
<3.0 km	0.073	3.24	5.17	5.47	5.52	5.54	0.69	6.23
< 5.0 km	0.073	3.26	5.68	6.41	6.61	6.69	1.49	8.18
< 8.0 km	0.073	3.27	6.19	7.66	8.12	8.33	3.29	11.62
>= 8.0 km or CAVOK	0	0.0041	0.52	3.96	7.24	9.71	78.67	88.38
Total	0.073	3.27	6.71	11.62	15.36	18.04	81.96	100

Table 66: EKGf - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 24,235	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.42	0.50	0.50	0.50	0.50	0.012	0.51
<350m	0	0.57	0.77	0.78	0.78	0.78	0.058	0.83
<600m	0	0.62	0.93	0.94	0.94	0.94	0.091	1.03
<800 m	0	0.62	0.95	0.96	0.96	0.96	0.10	1.06
<1.5 km	0	0.65	1.12	1.17	1.18	1.18	0.13	1.31
<3.0 km	0	0.69	1.47	1.72	1.81	1.83	0.25	2.08
< 5.0 km	0	0.74	1.94	2.47	2.79	2.88	0.95	3.83
< 8.0 km	0	0.74	2.27	3.37	3.99	4.32	2.90	7.22
>= 8.0 km or CAVOK	0	0.0041	0.44	3.05	5.86	8.52	84.27	92.78
Total	0	0.74	2.71	6.42	9.86	12.84	87.16	100

Table 67: EKGf - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 24,638	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.0041	0.25	0.32	0.32	0.32	0.32	0	0.32
<350m	0.0041	0.43	0.69	0.69	0.69	0.69	0	0.69
<600m	0.0041	0.48	0.84	0.85	0.85	0.85	0	0.85
<800 m	0.0041	0.48	0.86	0.88	0.88	0.88	0	0.88
<1.5 km	0.0041	0.50	1.10	1.17	1.18	1.18	0.0081	1.19
<3.0 km	0.0041	0.50	1.32	1.58	1.64	1.67	0.085	1.76
< 5.0 km	0.0041	0.51	1.72	2.91	3.26	3.40	0.54	3.94
< 8.0 km	0.0041	0.51	2.14	4.76	6.01	6.55	2.07	8.62
>= 8.0 km or CAVOK	0	0	0.27	3.32	8.81	14.76	76.61	91.38
Total	0.0041	0.51	2.41	8.08	14.81	21.31	78.69	100

Wind Direction Histograms

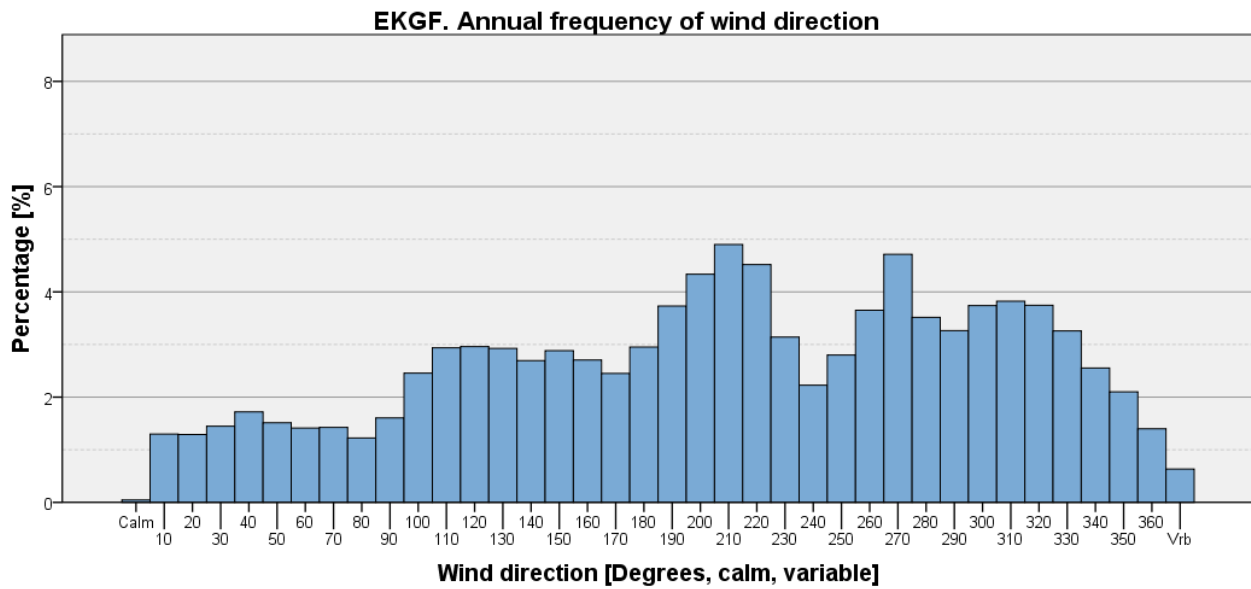


Figure 221

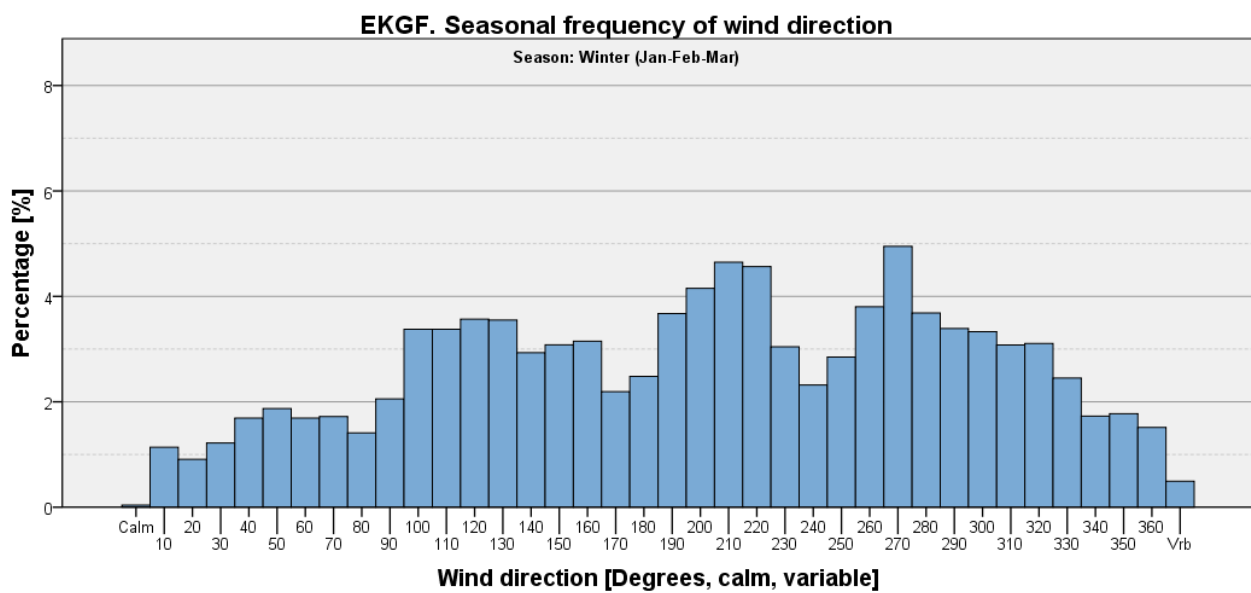


Figure 222

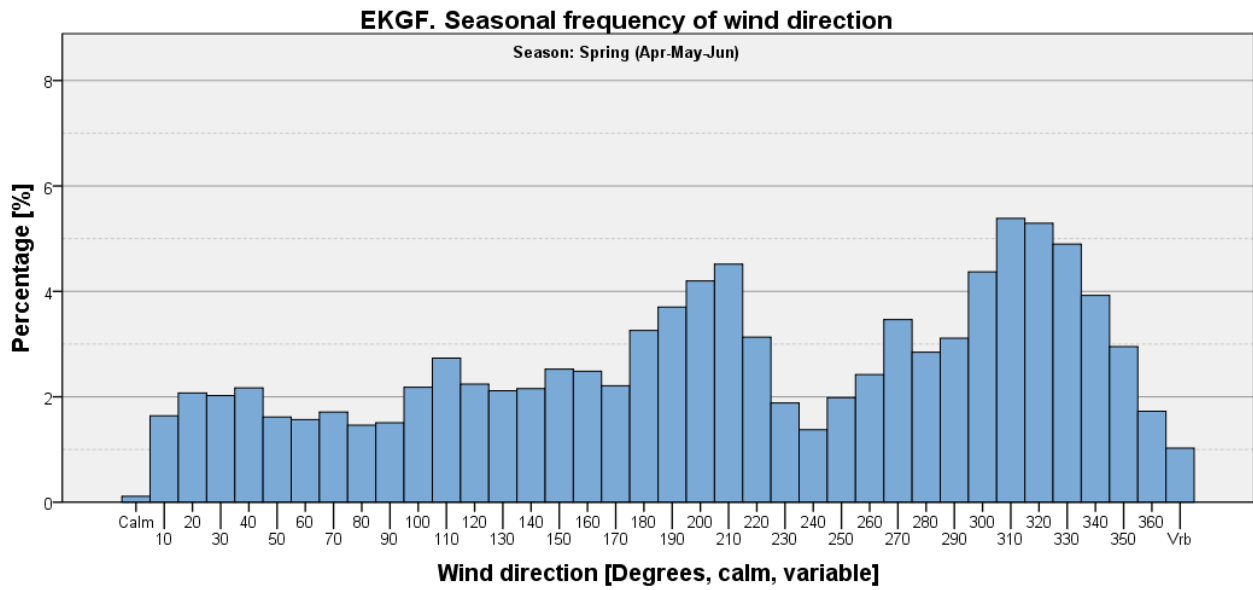


Figure 223

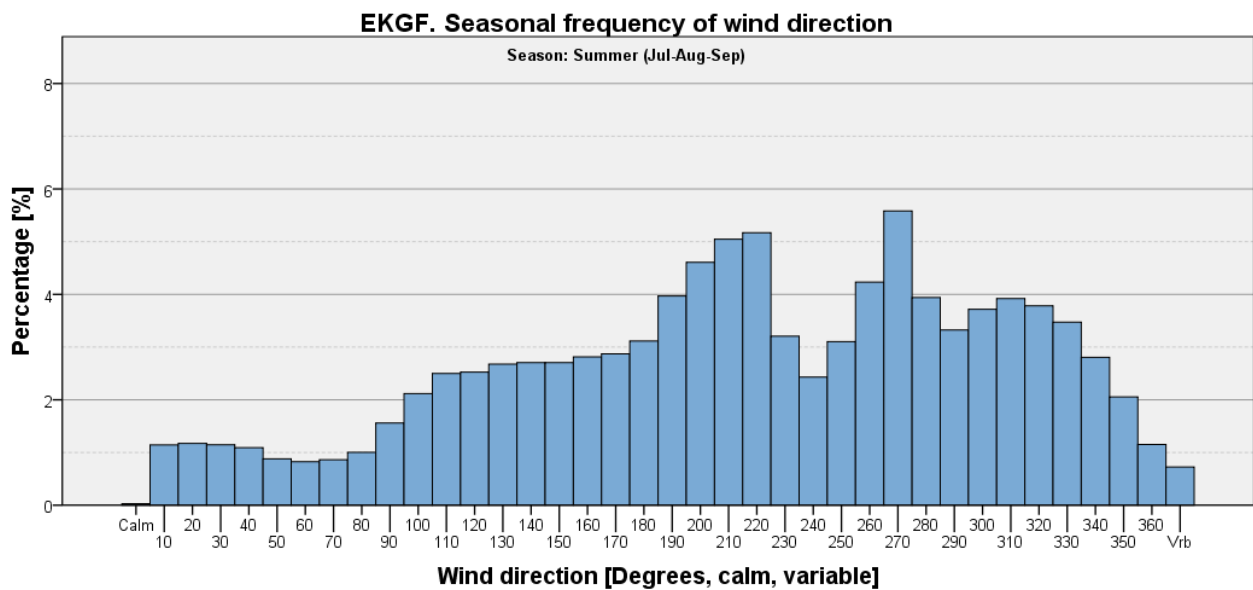


Figure 224

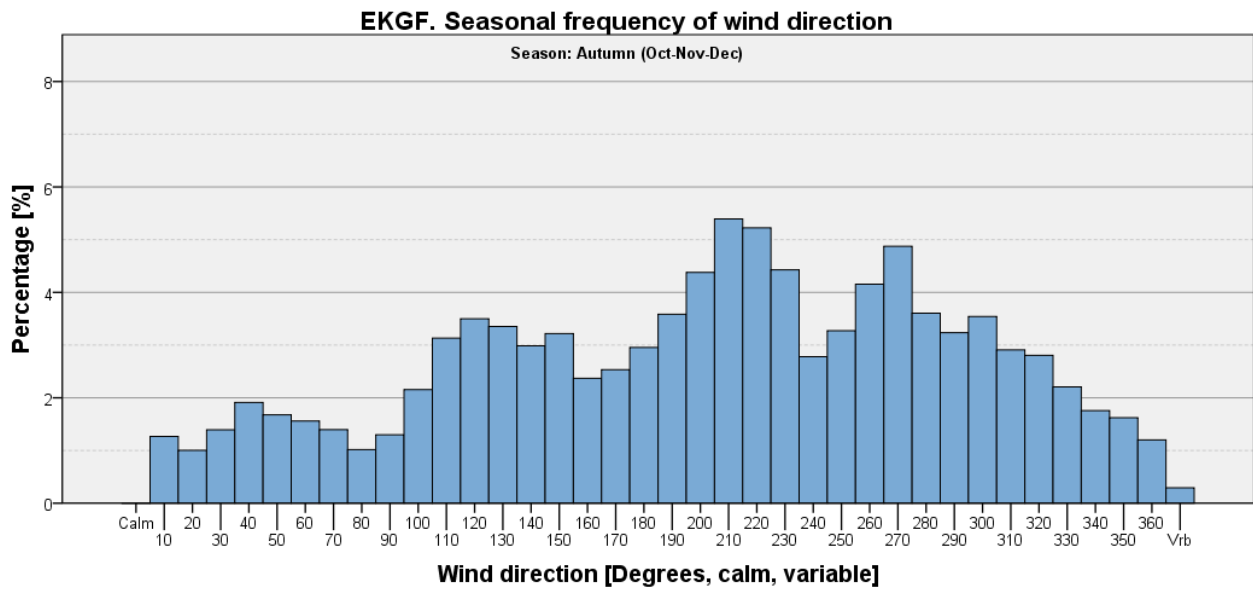


Figure 225

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 68: EKGF - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	3.12	4.65	1.06	0.88	2.43
All other observations	96.88	95.35	98.94	99.12	97.57
Total	100	100	100	100	100

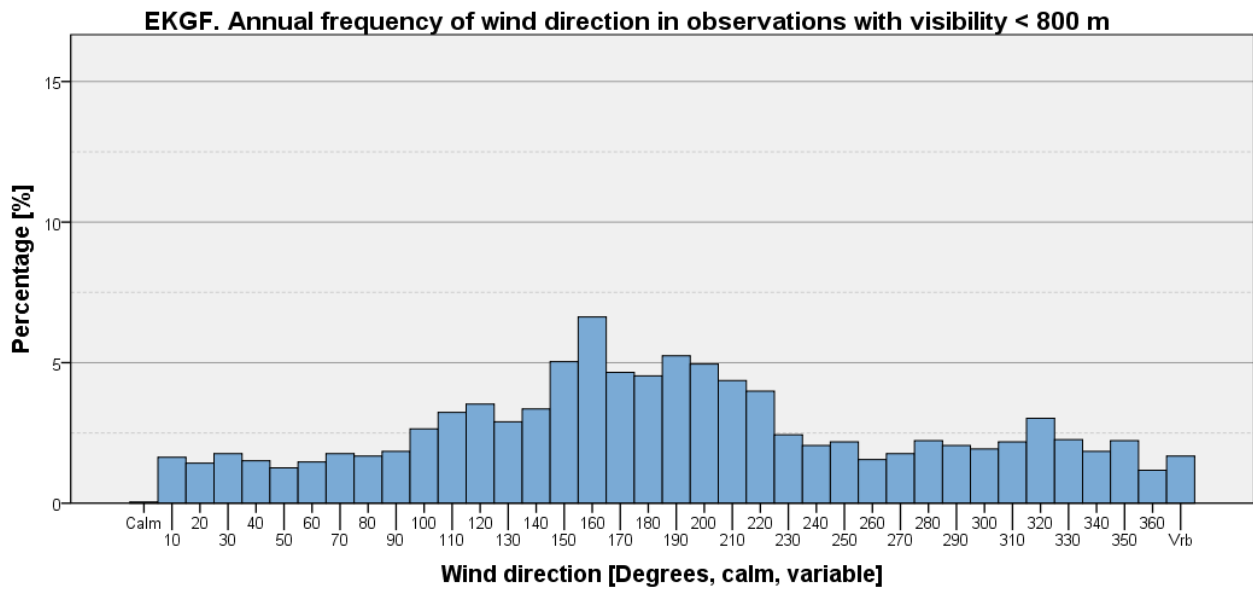


Figure 226

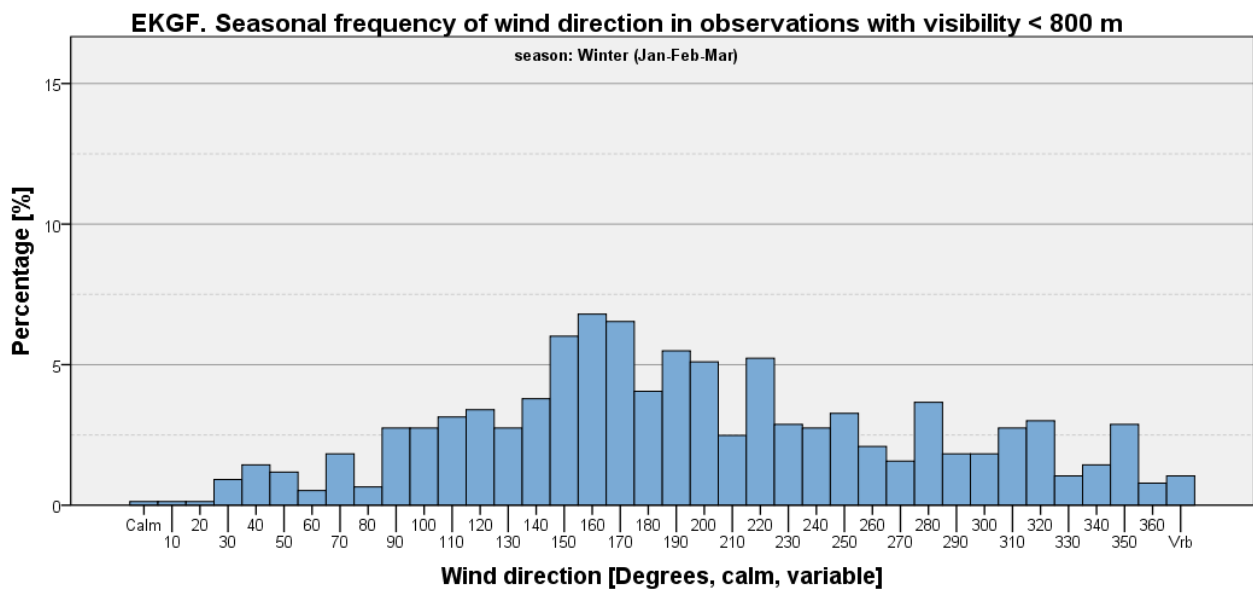


Figure 227

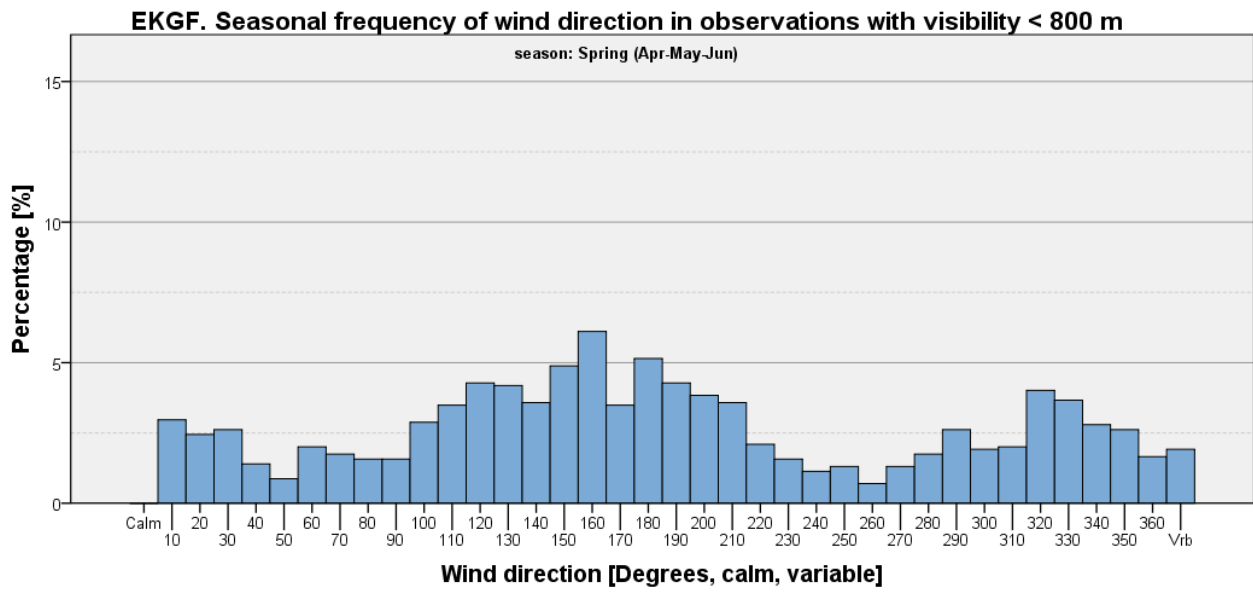


Figure 228

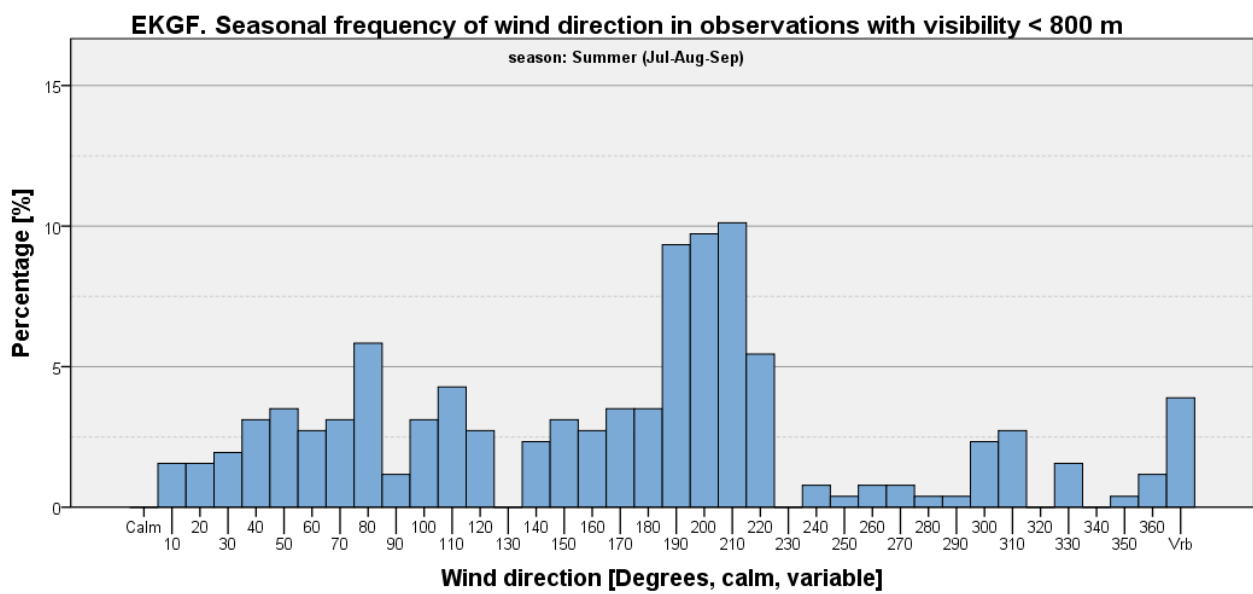


Figure 229

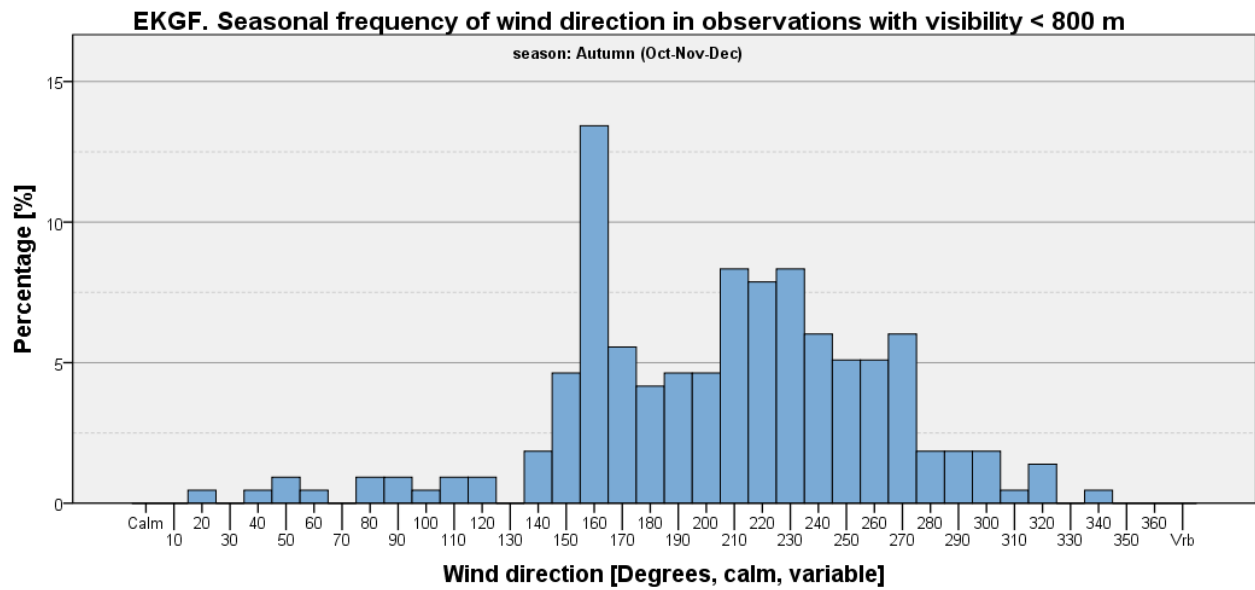


Figure 230

Visibility < 800 m and Wind Speed <= 5 kts

Table 69: EKGF - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	0.42	0.41	0.14	0.012	0.24
All other observations	99.58	99.59	99.86	99.99	99.76
Total	100	100	100	100	100

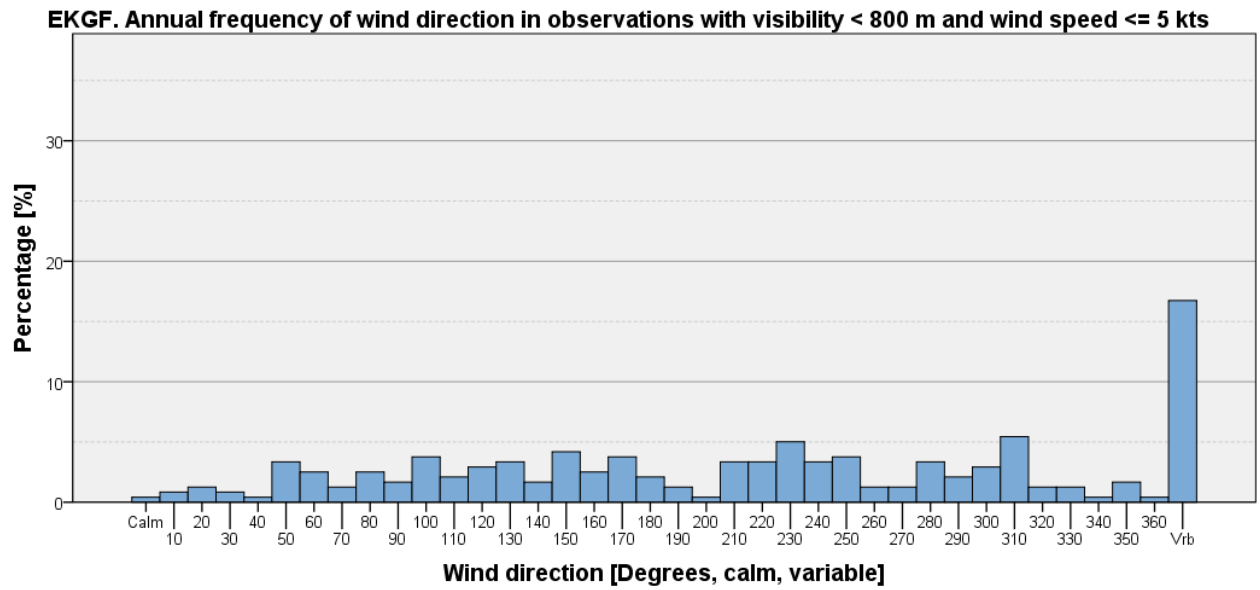


Figure 231

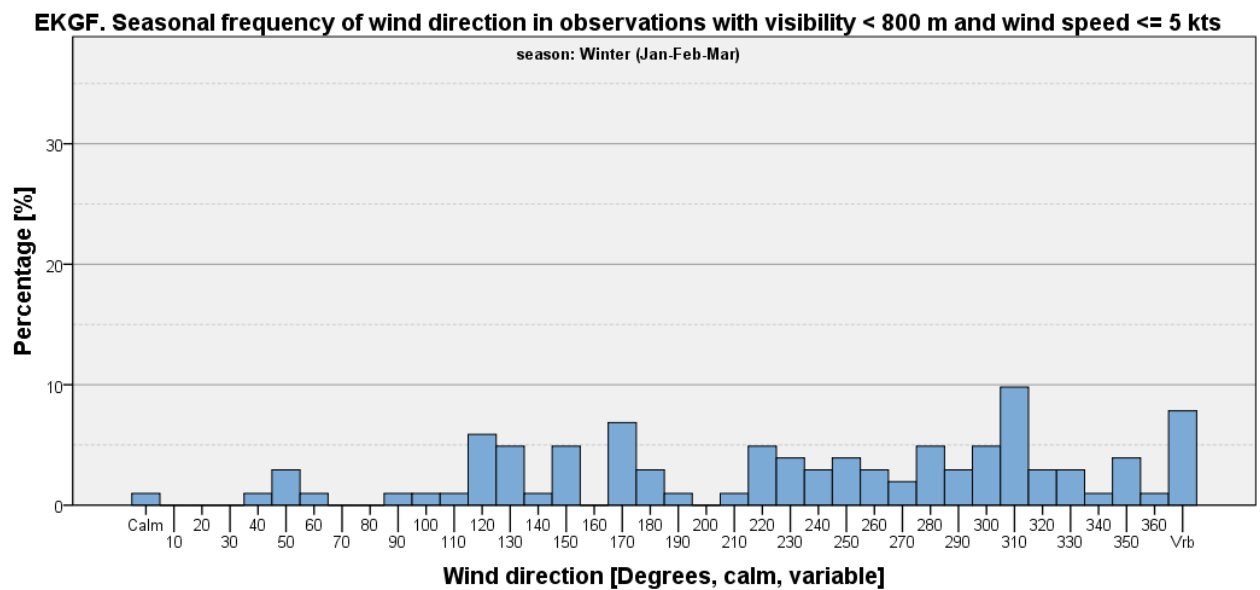


Figure 232

EKGF. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

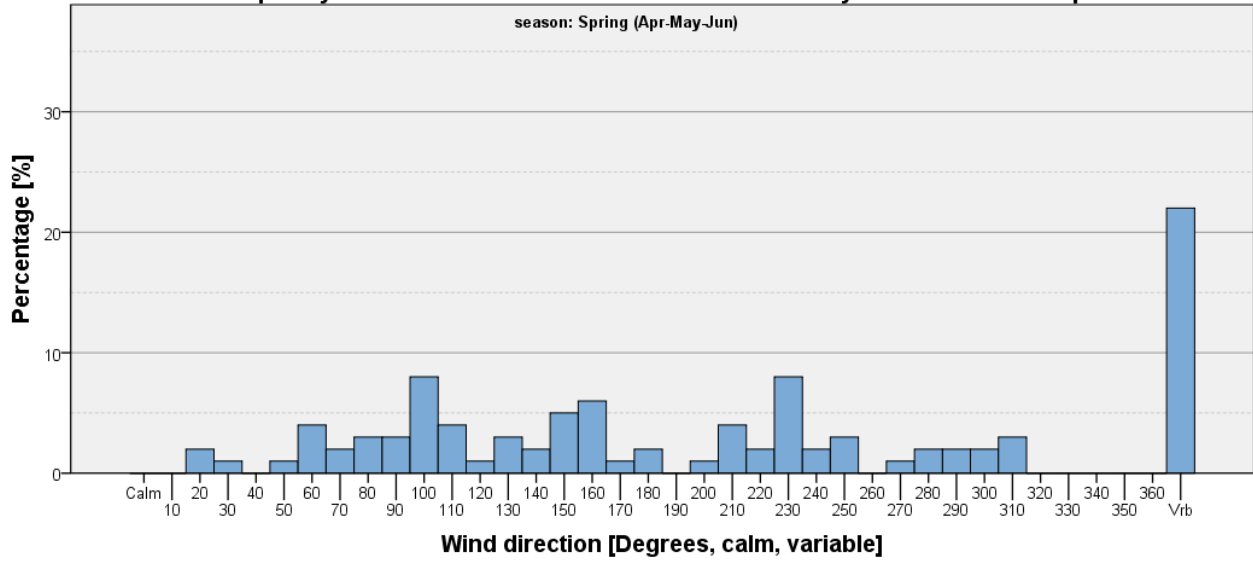


Figure 233

EKGF. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

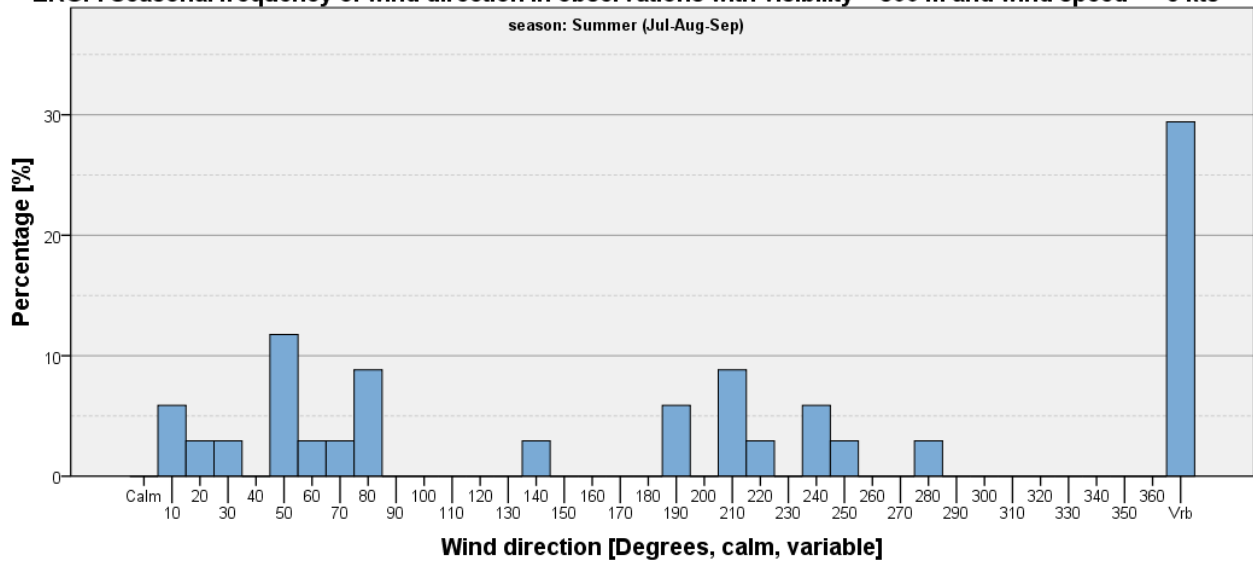


Figure 234

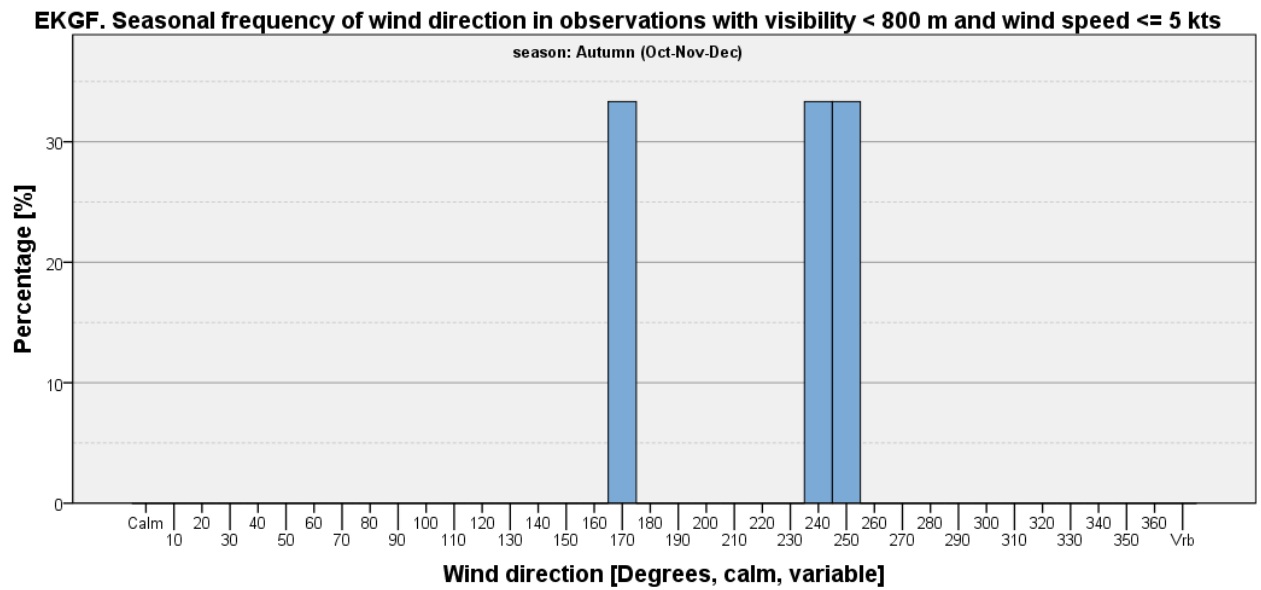


Figure 235

Visibility < 800 m and Wind Speed > 5 kts

Table 70: EKGF - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	2.70	4.25	0.92	0.86	2.19
All other observations	97.30	95.75	99.08	99.14	97.81
Total	100	100	100	100	100

EKGF. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

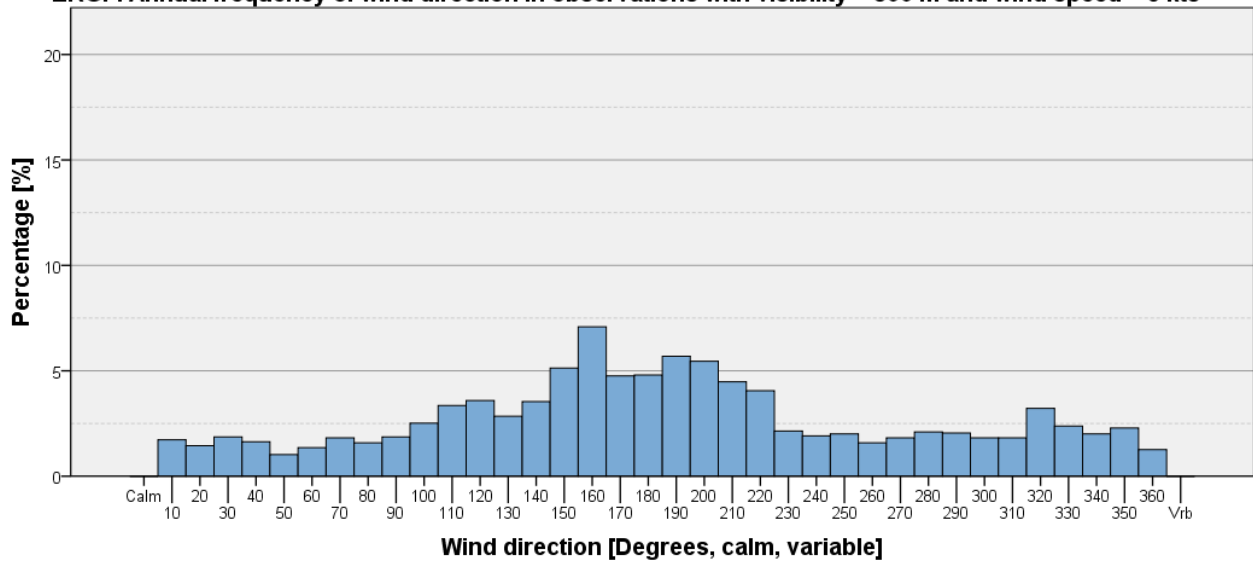


Figure 236

EKGF. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

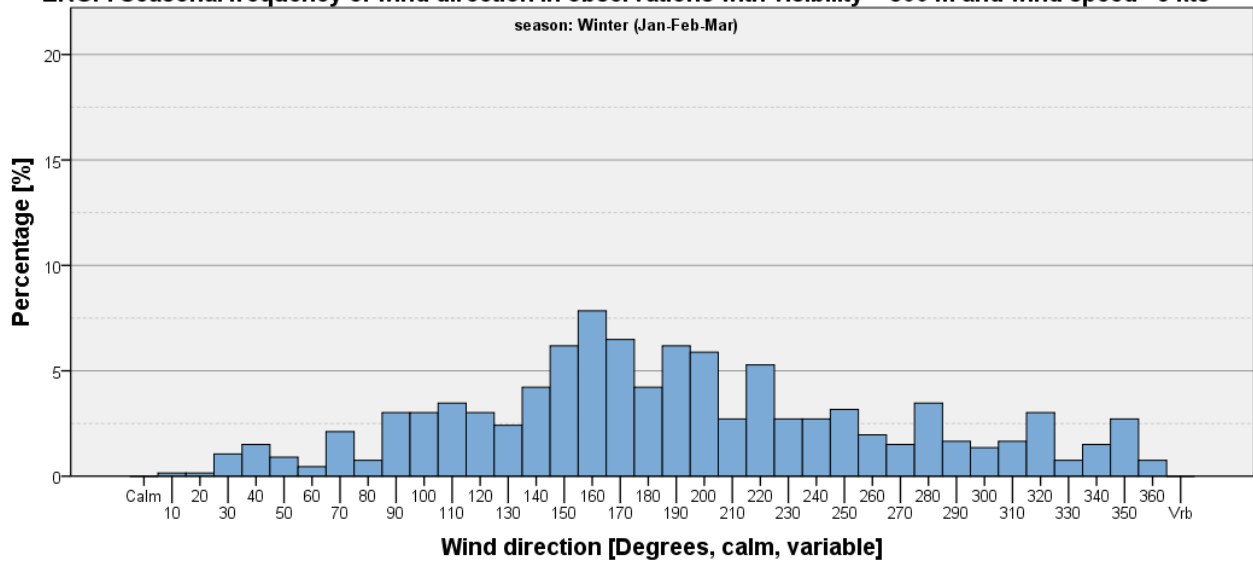


Figure 237

EKGF. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

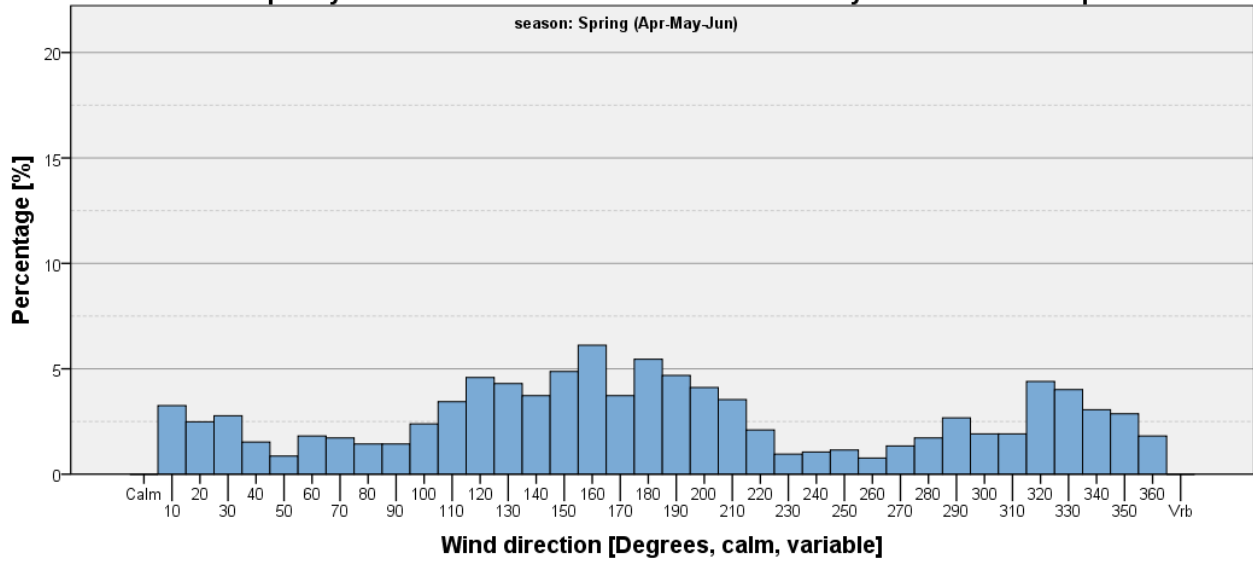


Figure 238

EKGF. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

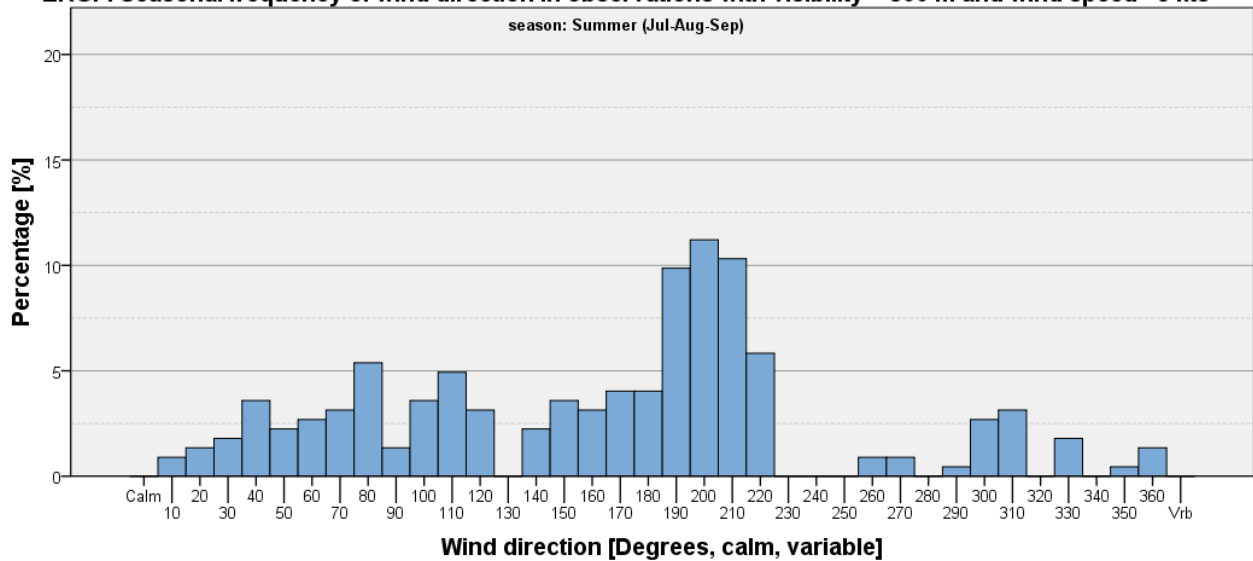


Figure 239

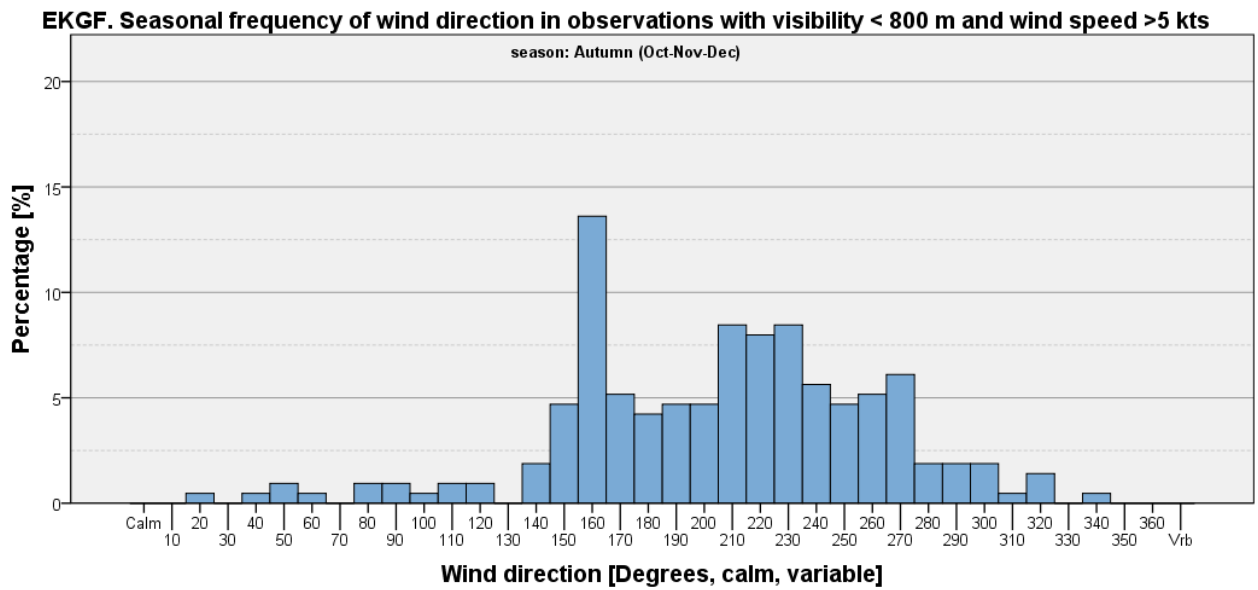


Figure 240

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 71: EKGF - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	14.21	11.62	6.42	8.08	10.09
All other observations	85.79	88.38	93.58	91.92	89.91
Total	100	100	100	100	100

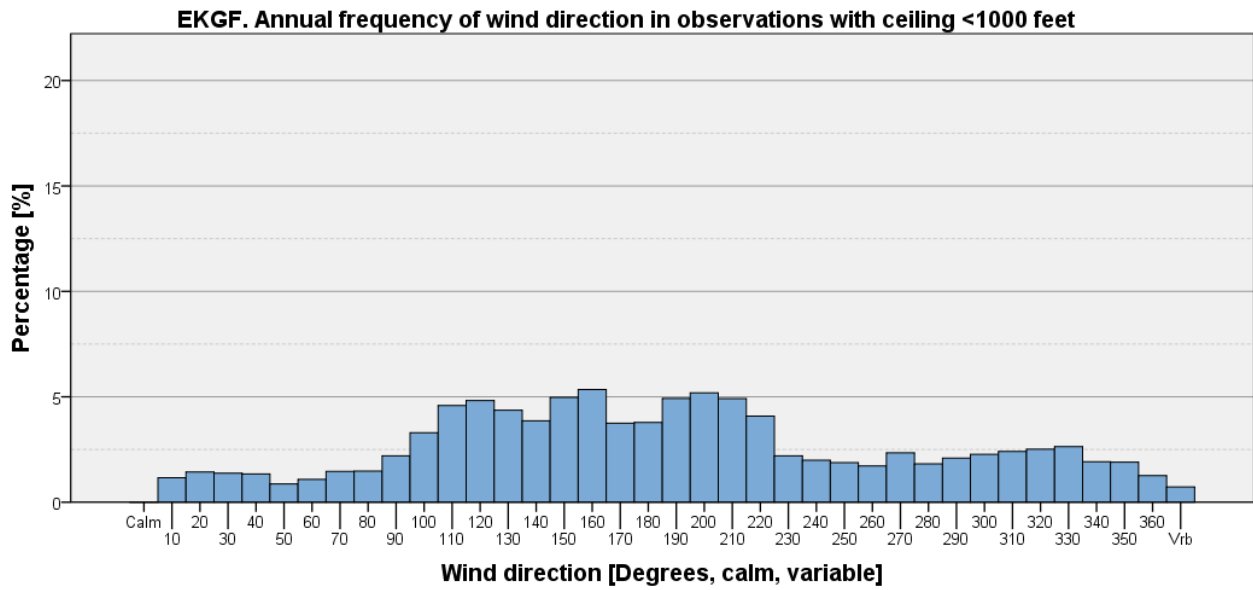


Figure 241

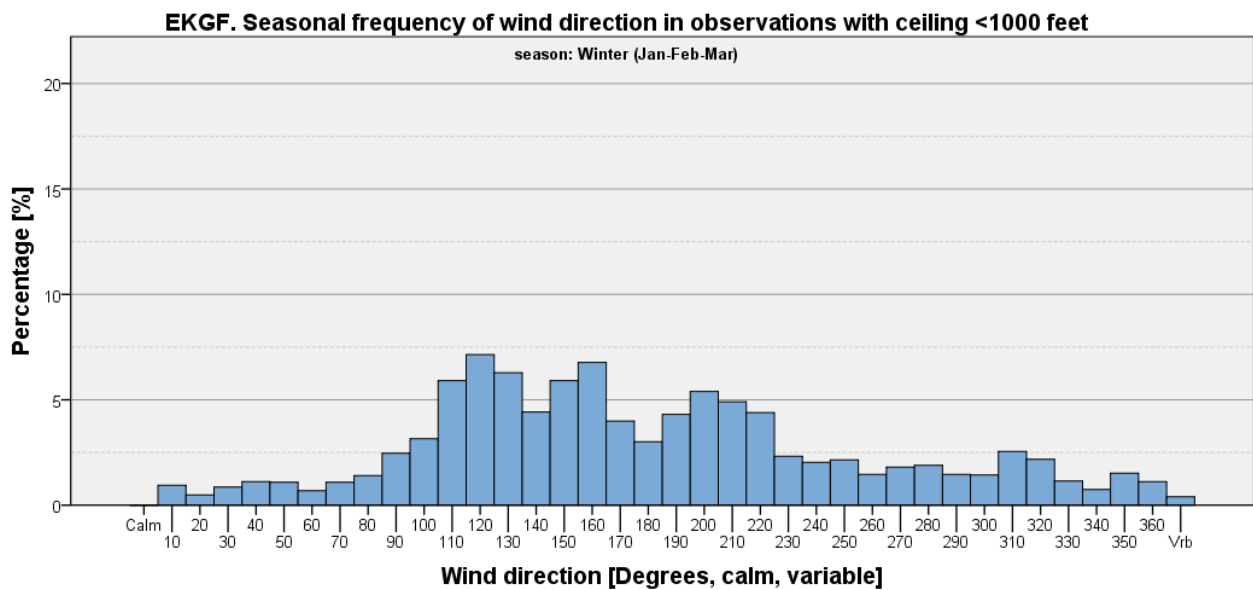


Figure 242

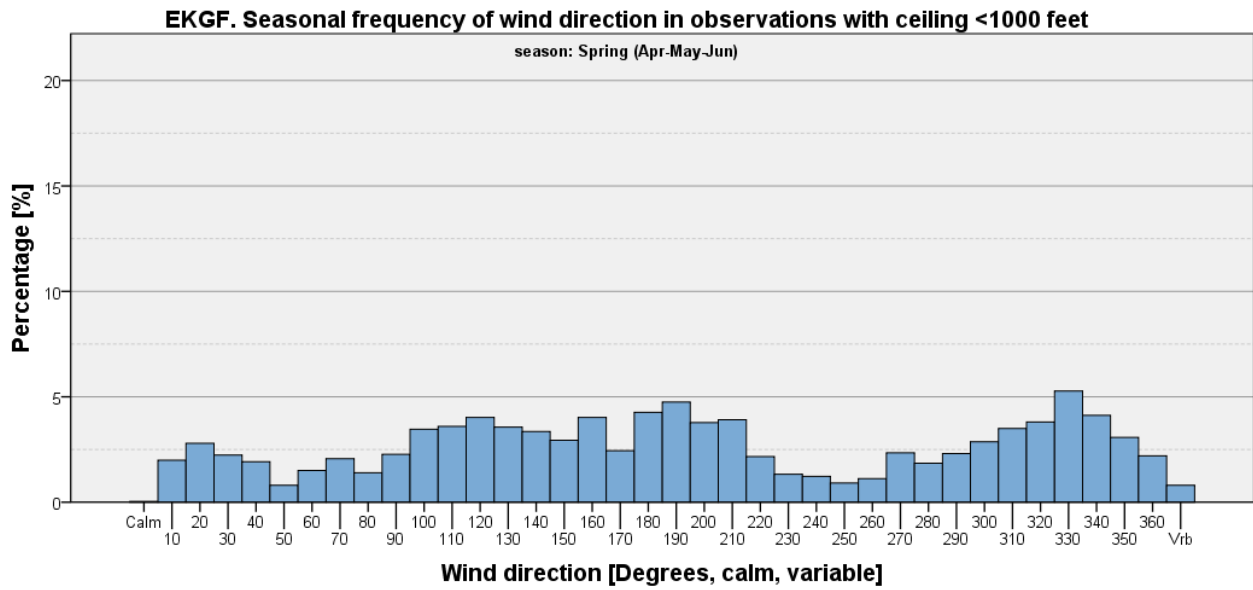


Figure 243

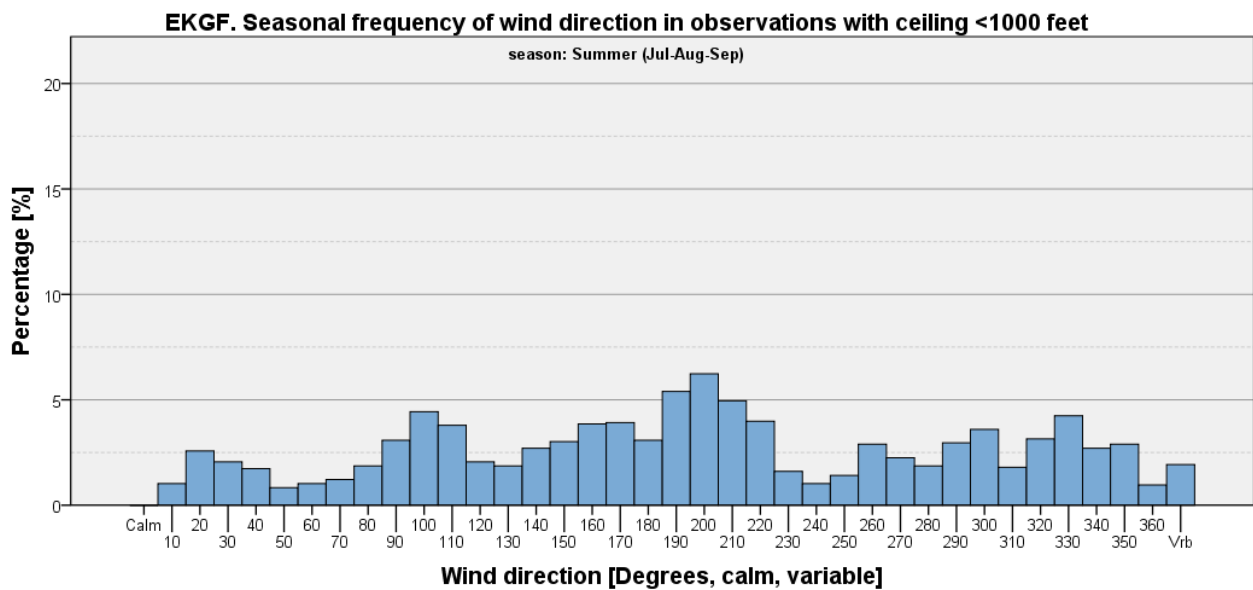


Figure 244

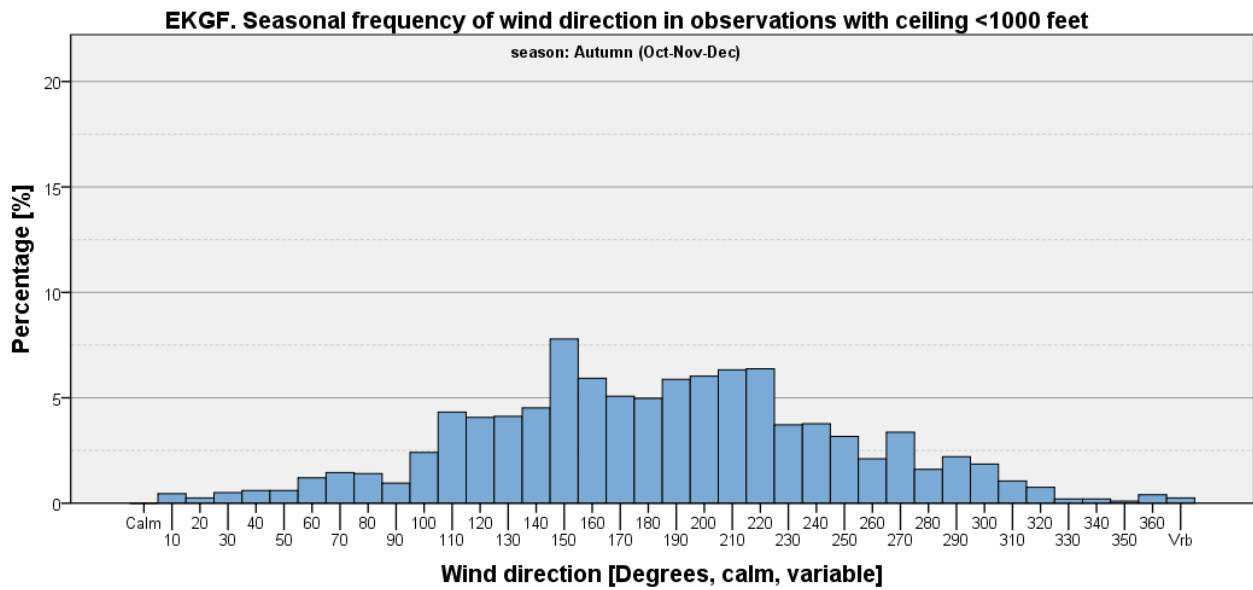


Figure 245

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 72: EKGF - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	0.56	0.68	0.45	0.11	0.45
All other observations	99.44	99.32	99.55	99.89	99.55
Total	100	100	100	100	100

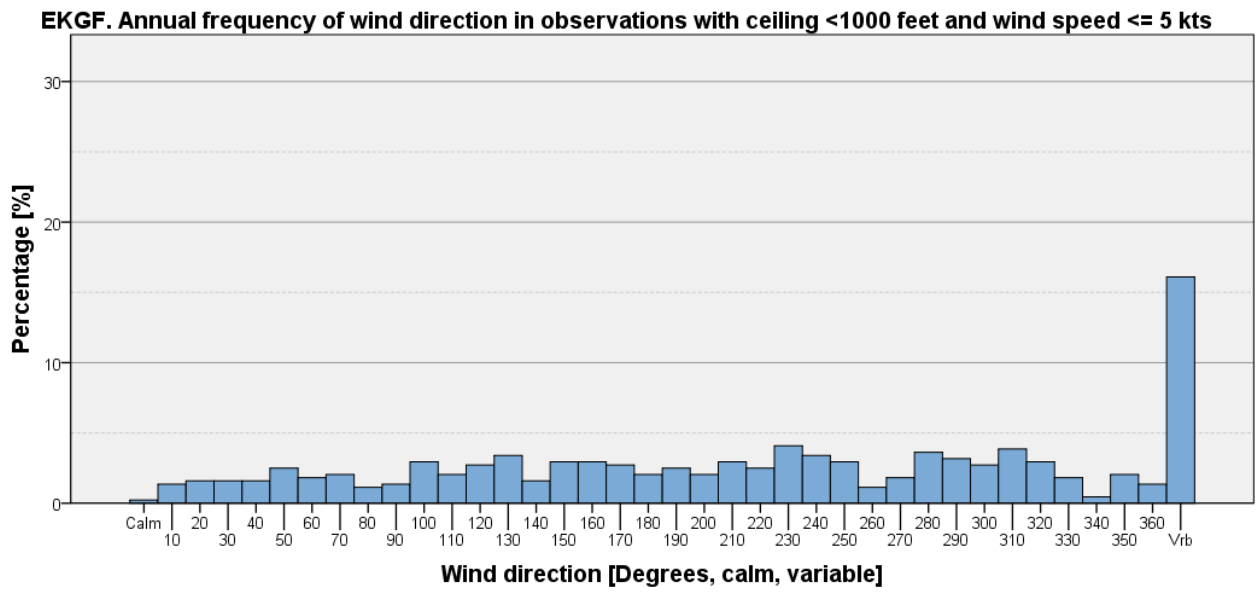


Figure 246

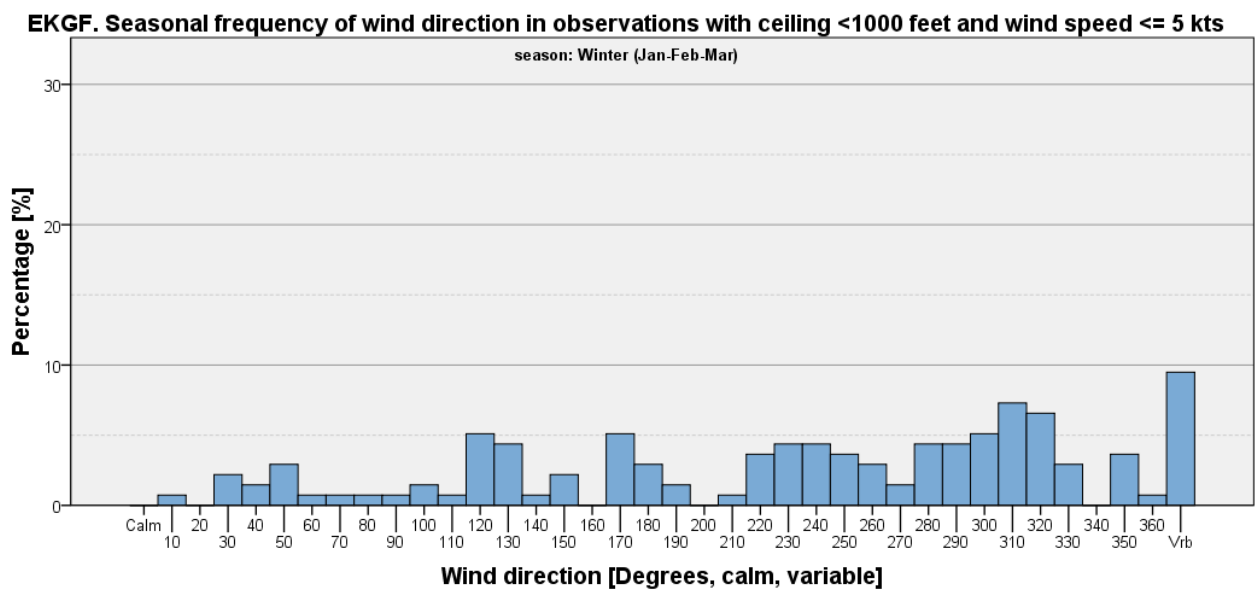


Figure 247

EKGF. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

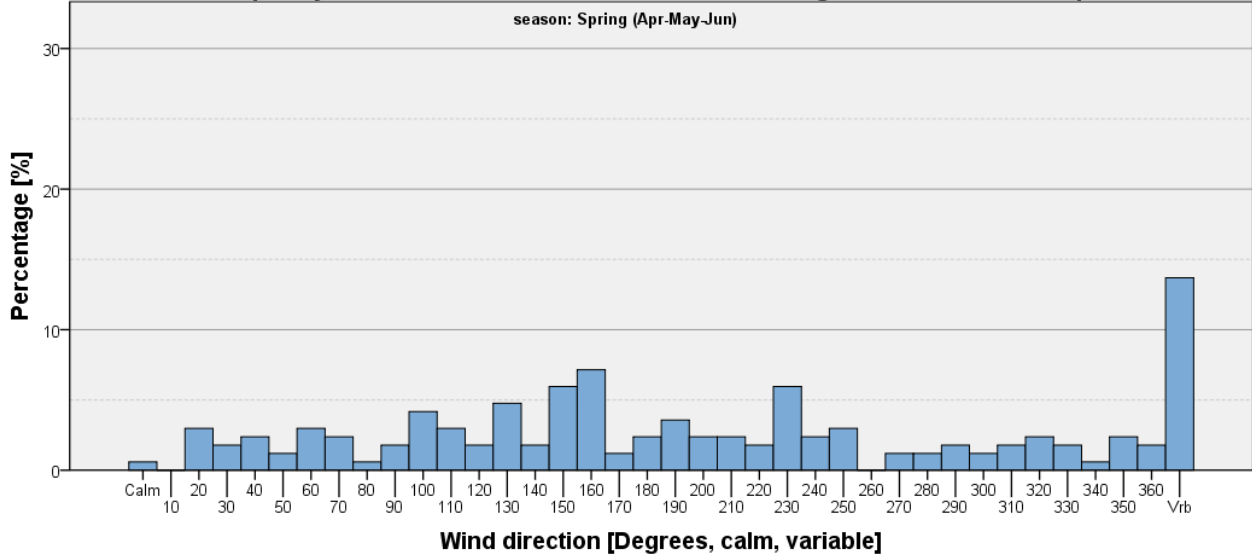


Figure 248

EKGF. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

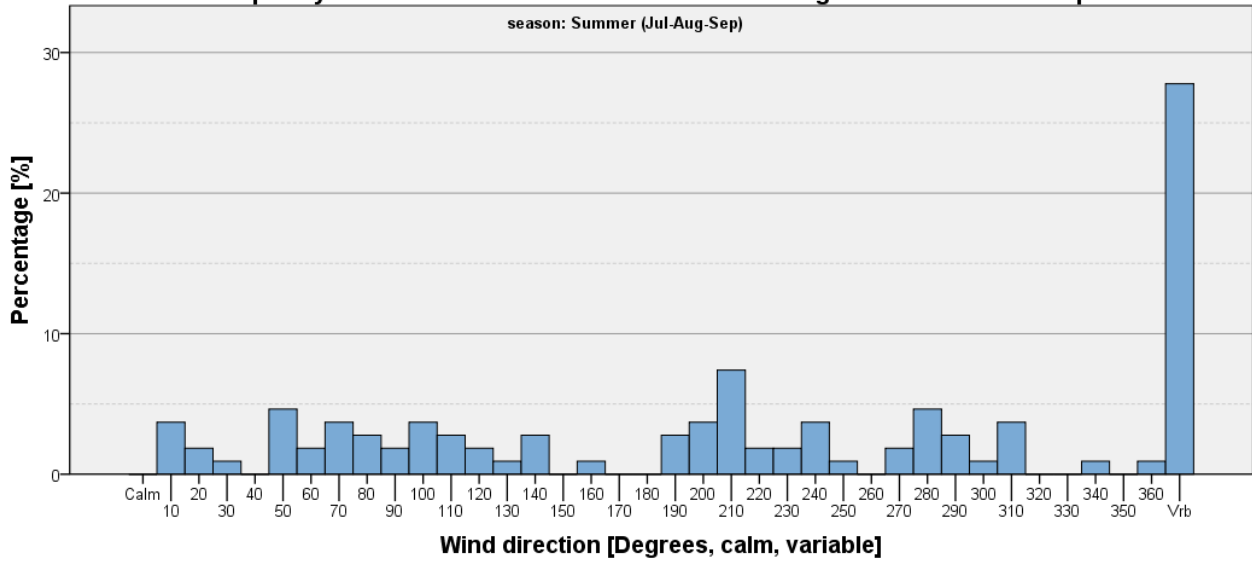


Figure 249

EKGF. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

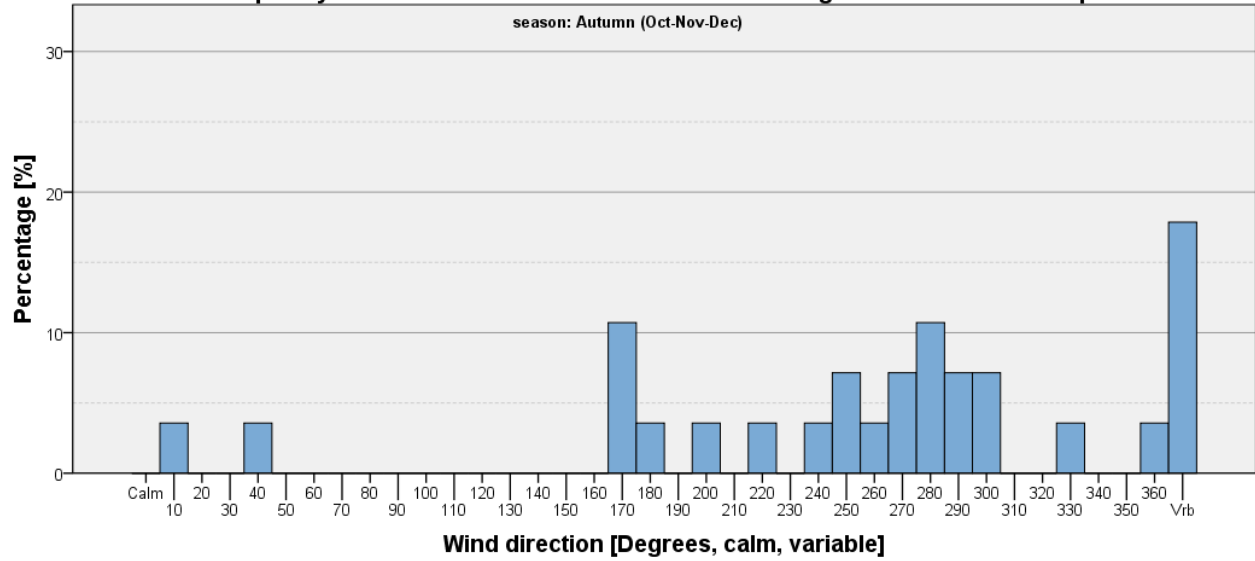


Figure 250

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 73: EKGF - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	13.65	10.94	5.97	7.97	9.64
All other observations	86.35	89.06	94.03	92.03	90.36
Total	100	100	100	100	100

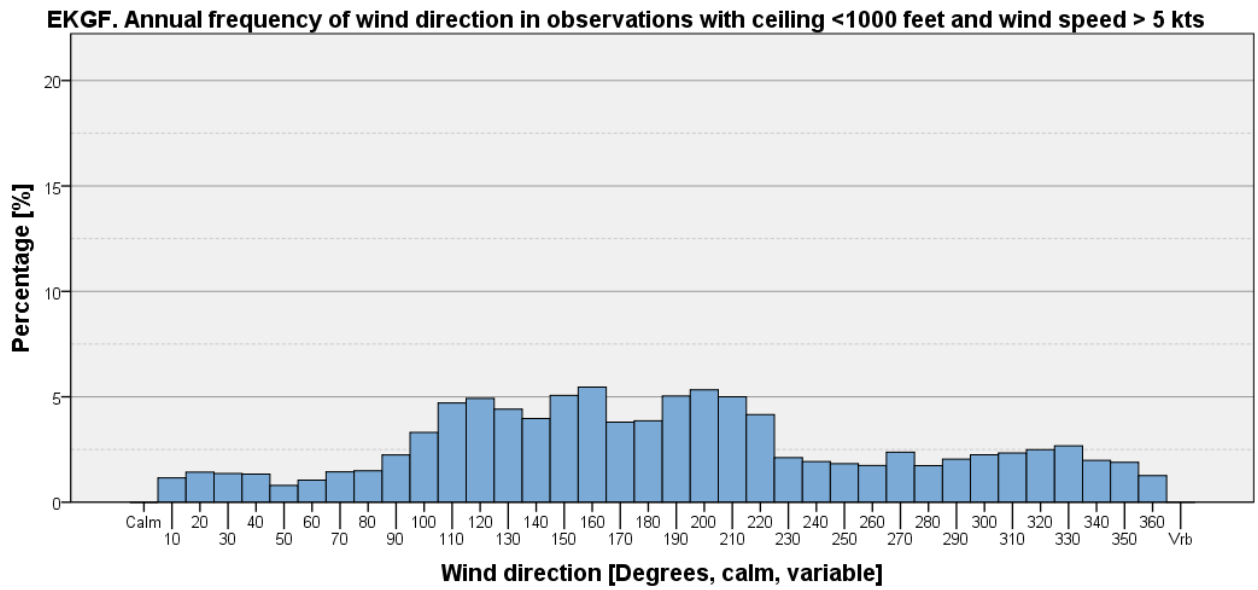


Figure 251

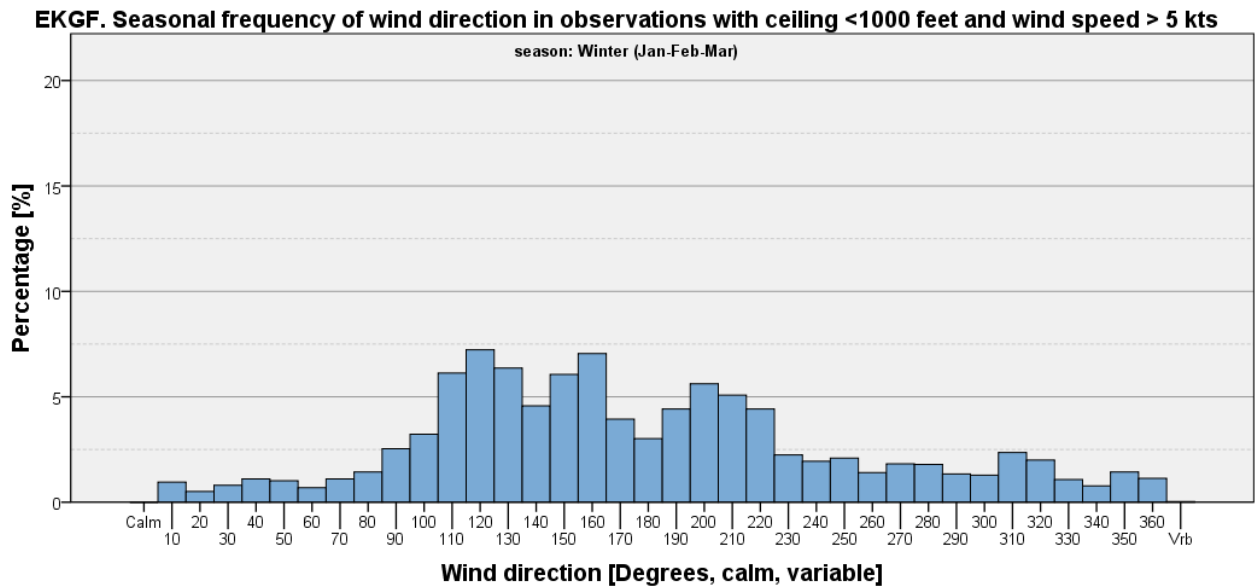


Figure 252

EKGF. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

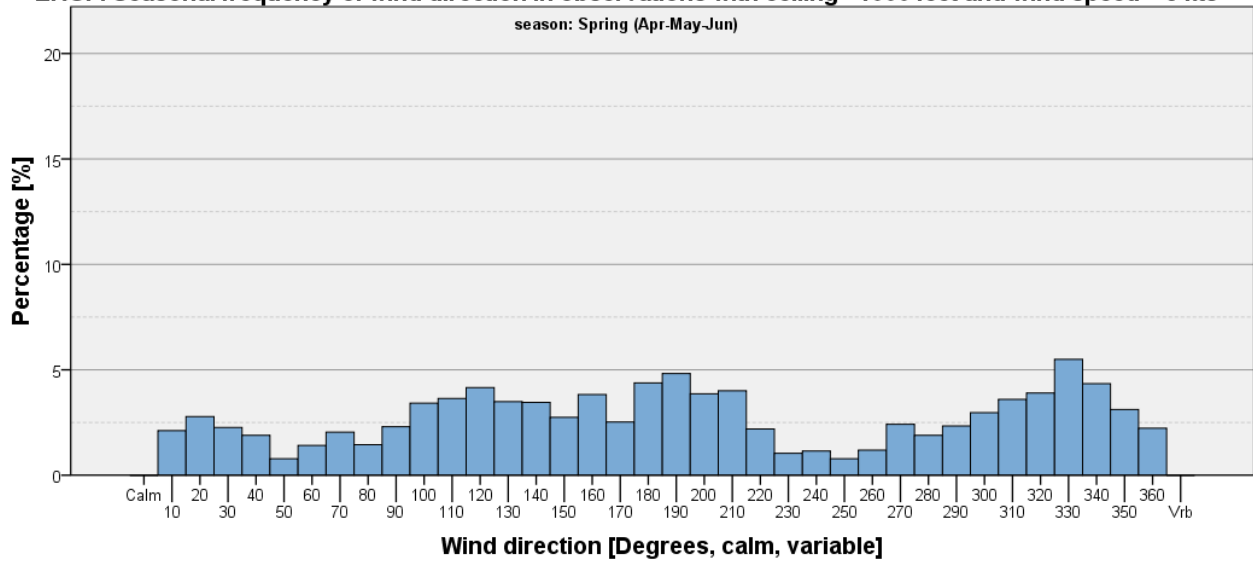


Figure 253

EKGF. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

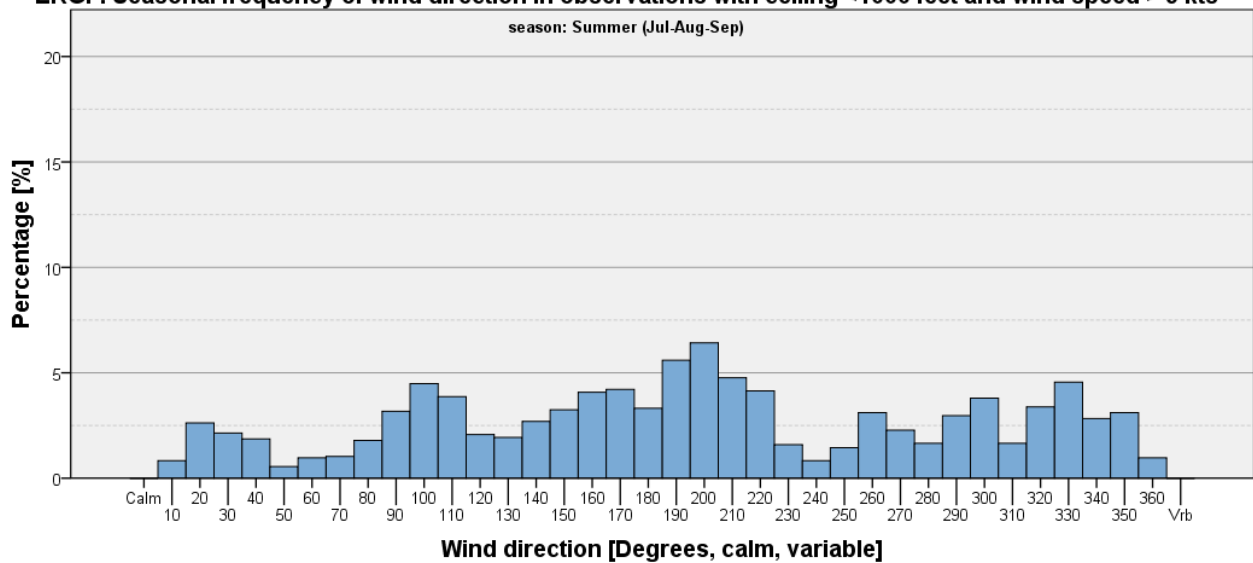


Figure 254

EKGF. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

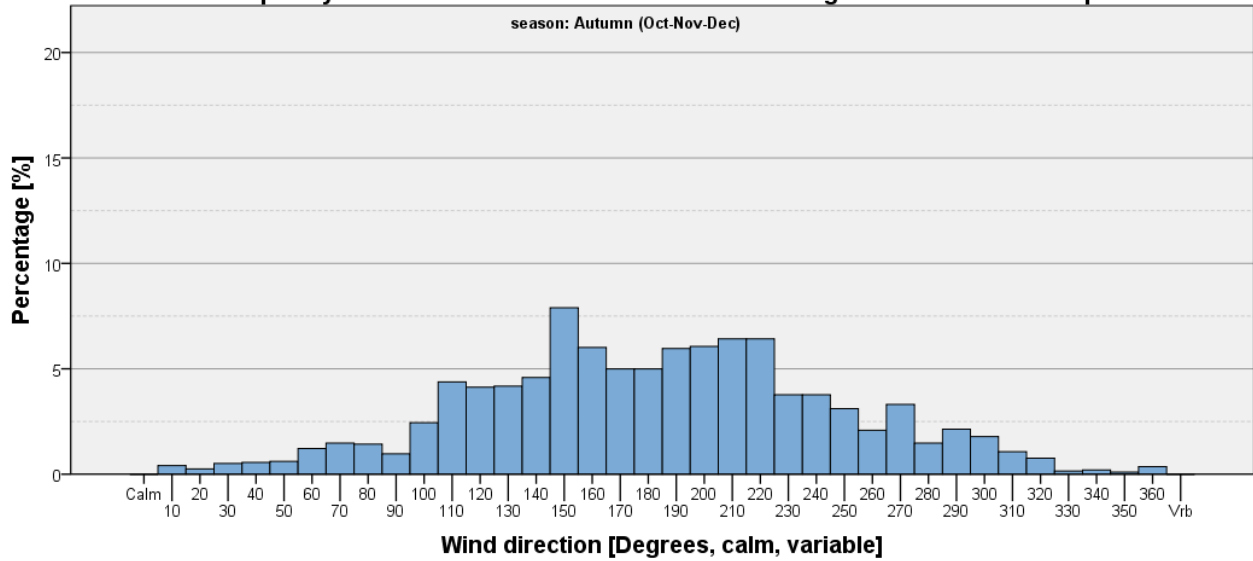


Figure 255

Ceiling < 500 feet

Table 74: EKGF - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	5.56	6.71	2.71	2.41	4.35
All other observations	94.44	93.29	97.29	97.59	95.65
Total	100	100	100	100	100

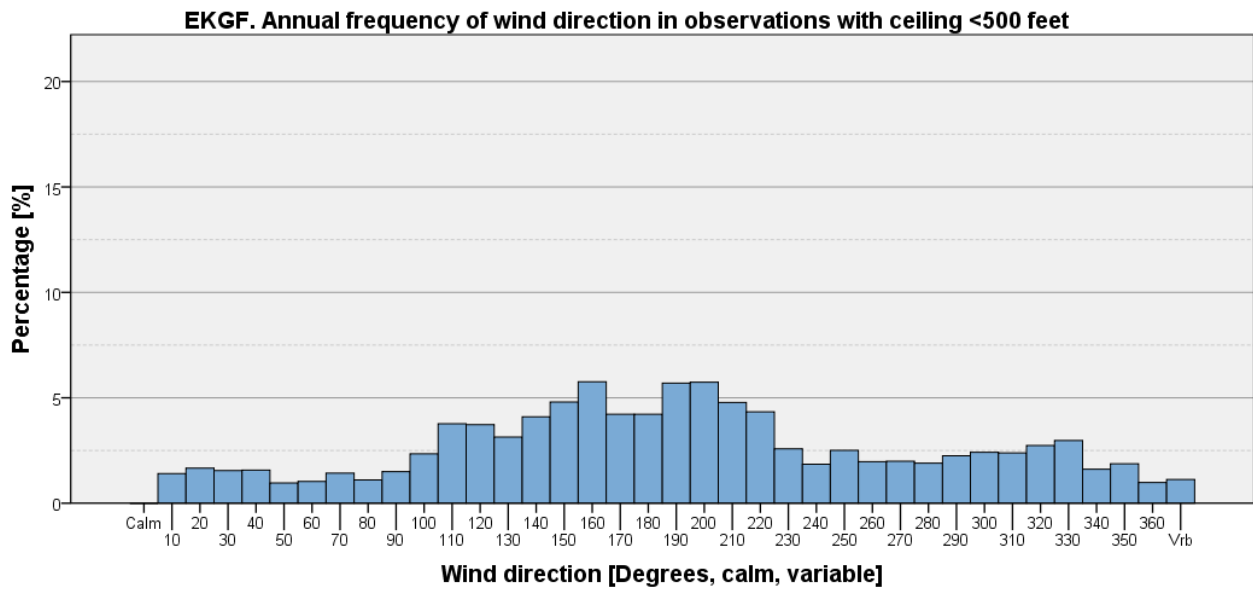


Figure 256

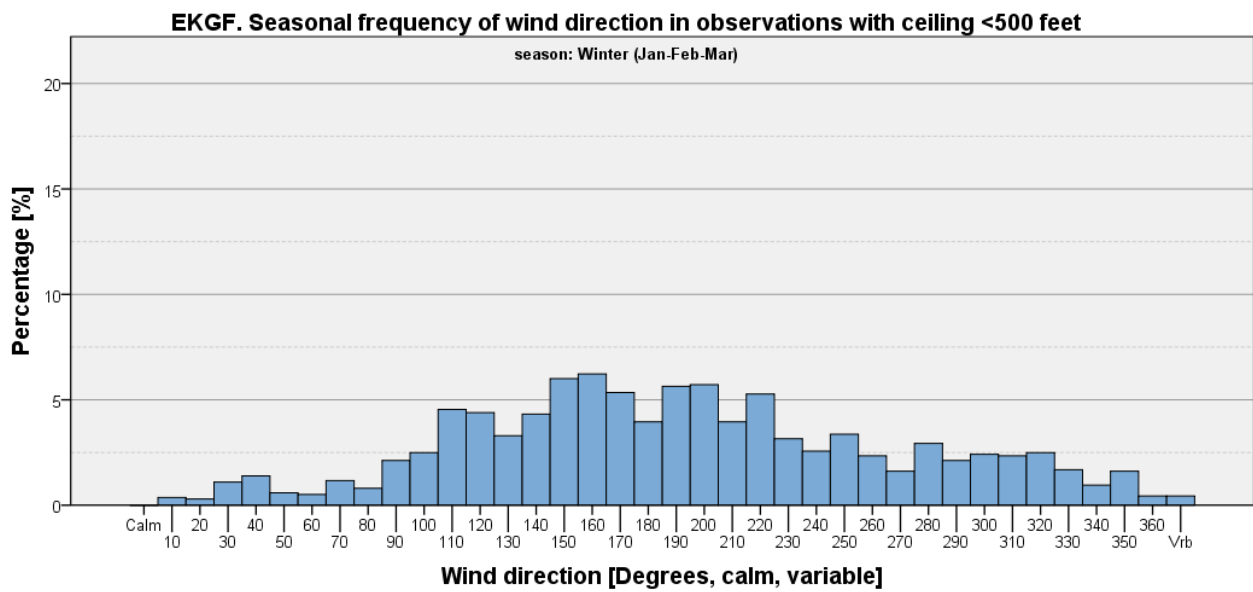


Figure 257

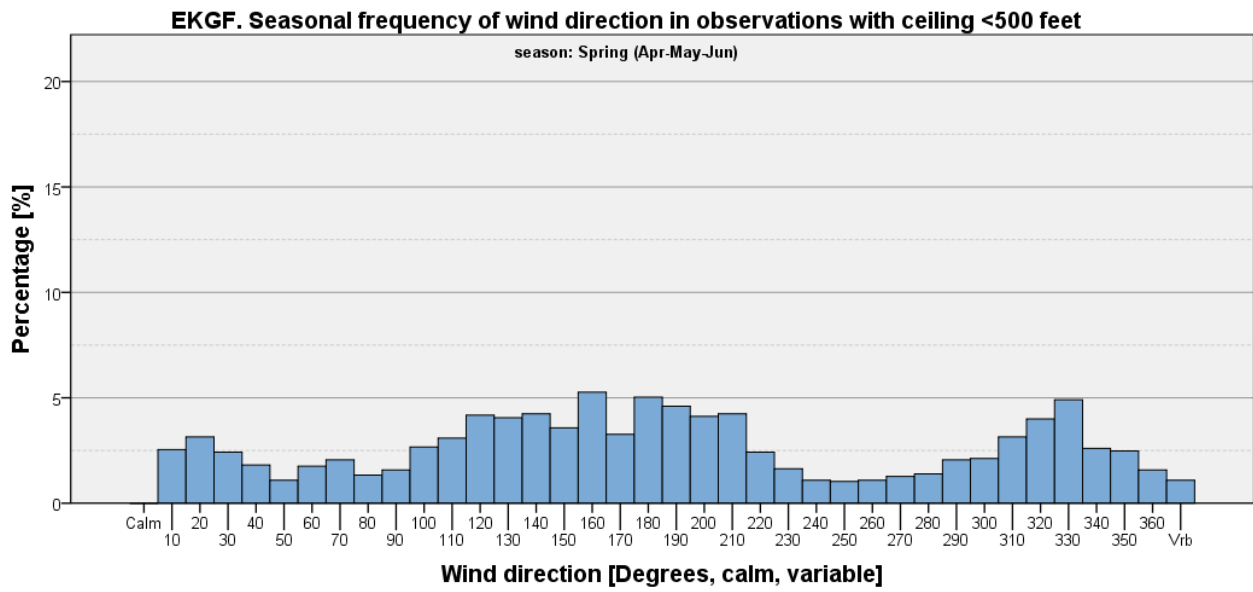


Figure 258

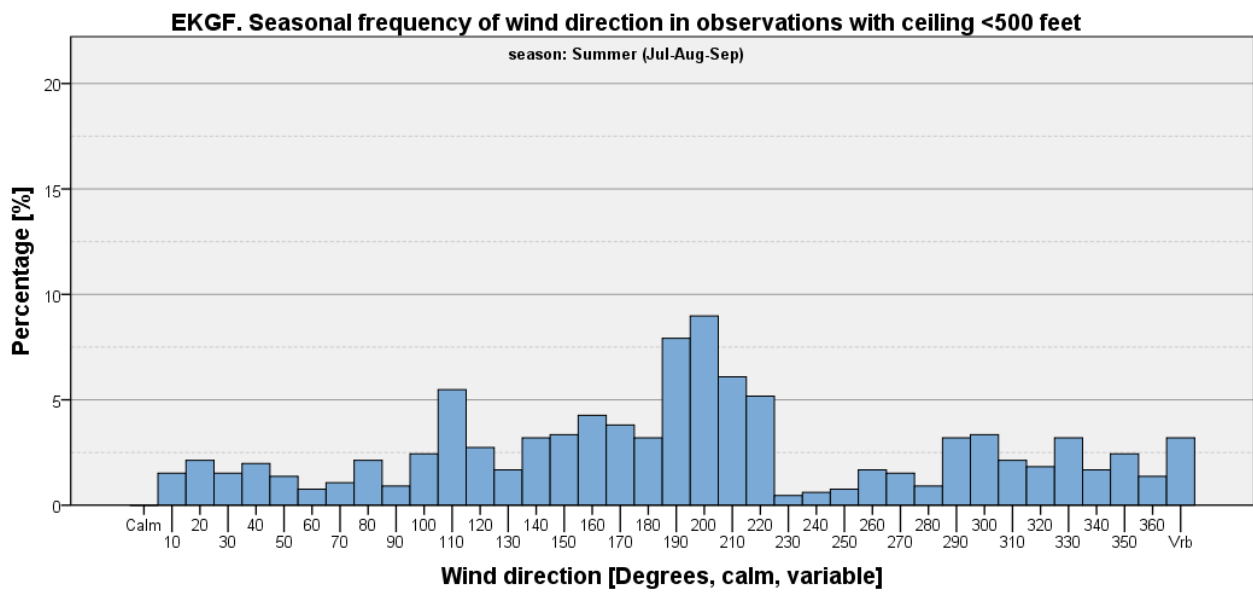


Figure 259

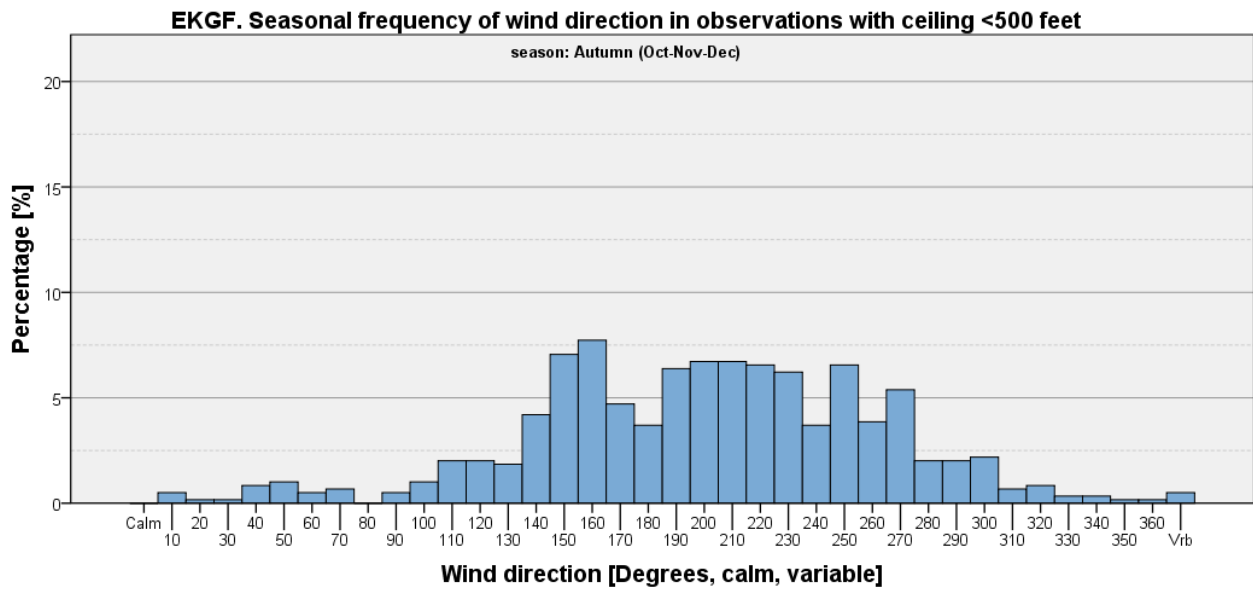


Figure 260

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 75: EKGF - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	0.45	0.46	0.28	0.041	0.31
All other Observations	99.55	99.54	99.72	99.96	99.69
Total	100	100	100	100	100

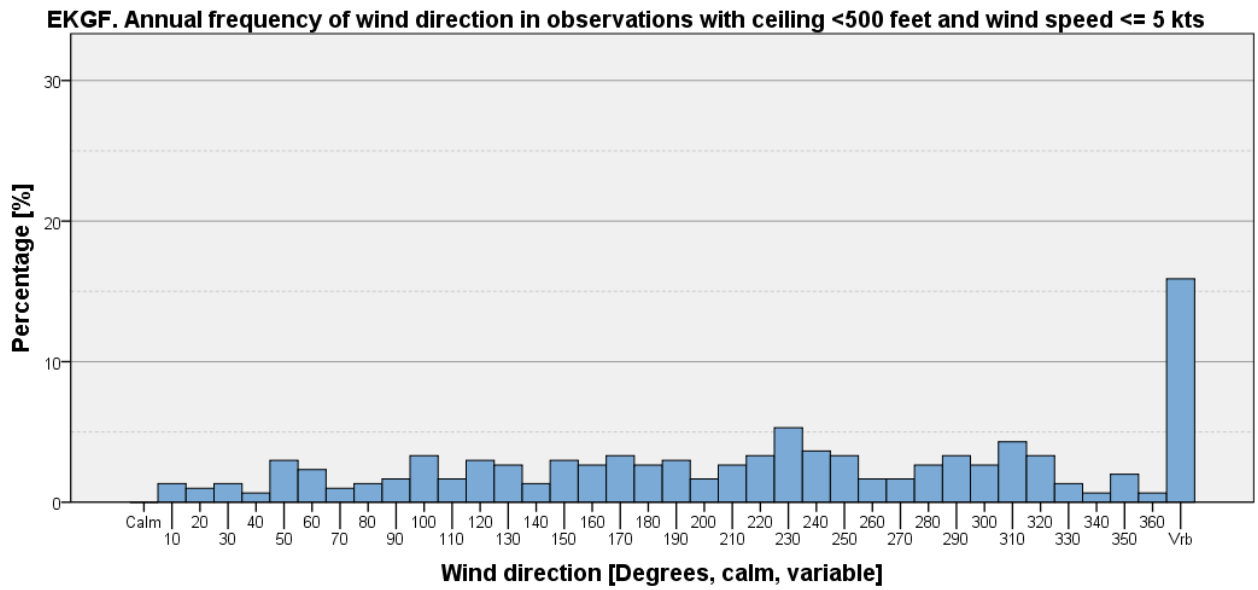


Figure 261

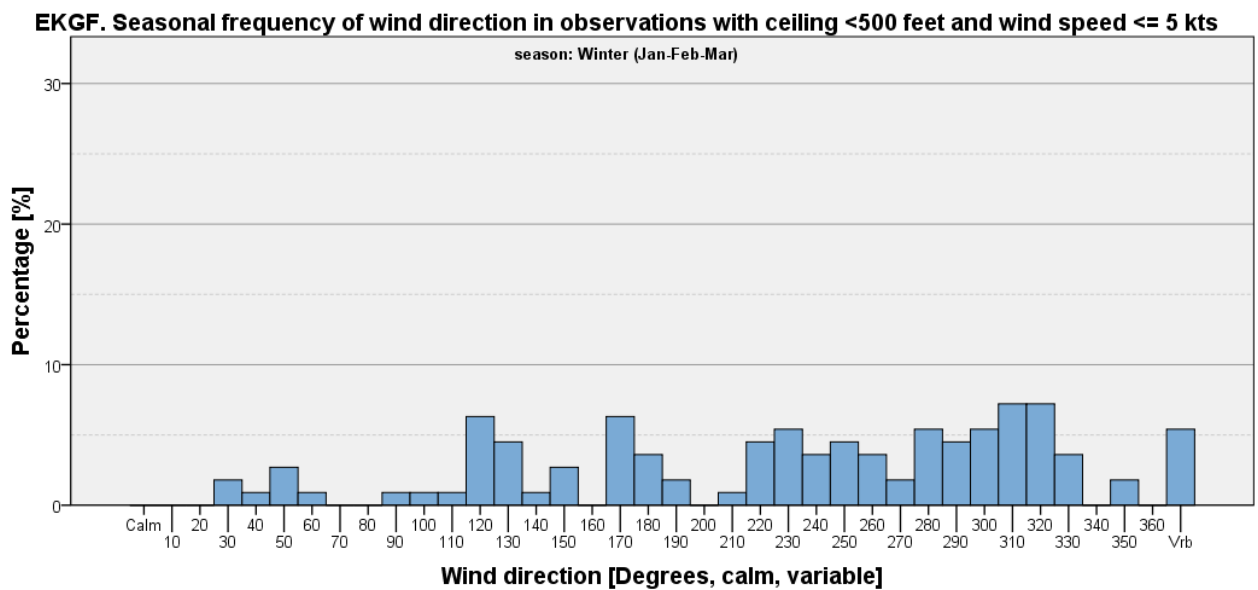


Figure 262

EKGF. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

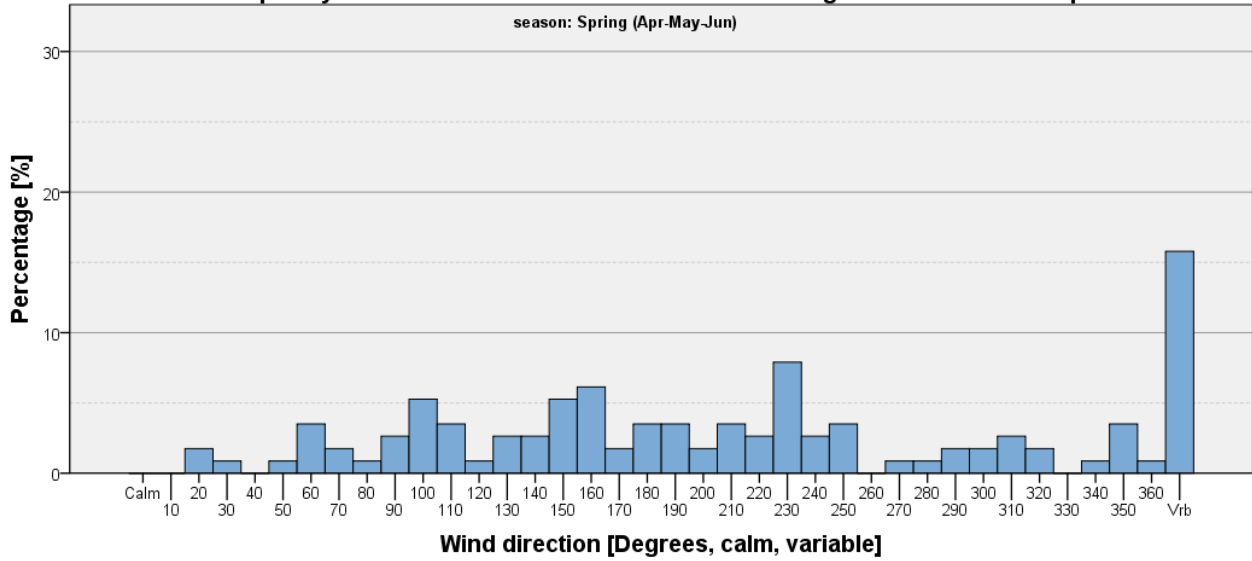


Figure 263

EKGF. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

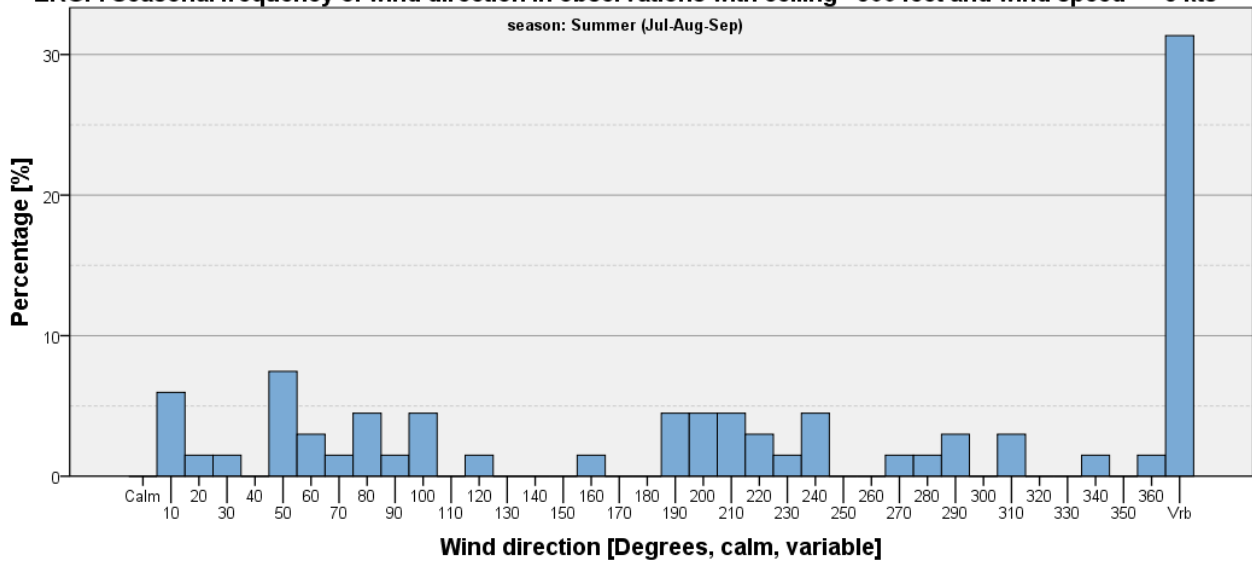


Figure 264

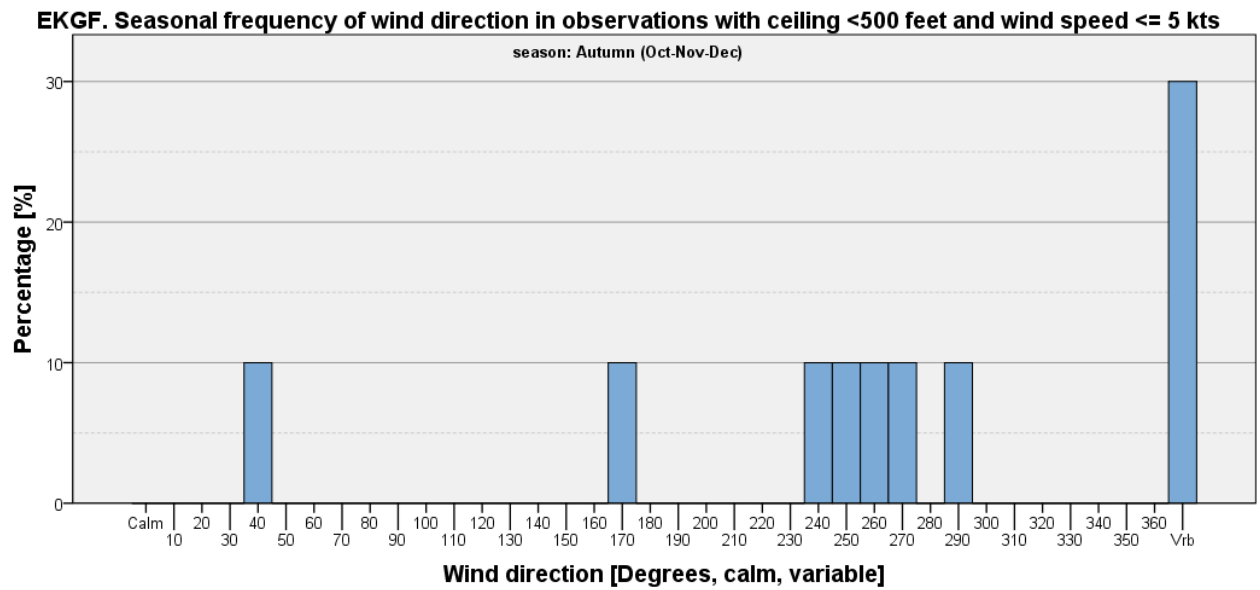


Figure 265

Ceiling < 500 feet and Wind Speed > 5 kts

Table 76: EKGF - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	5.11	6.24	2.43	2.37	4.05
All other observations	94.89	93.76	97.57	97.63	95.95
Total	100	100	100	100	100

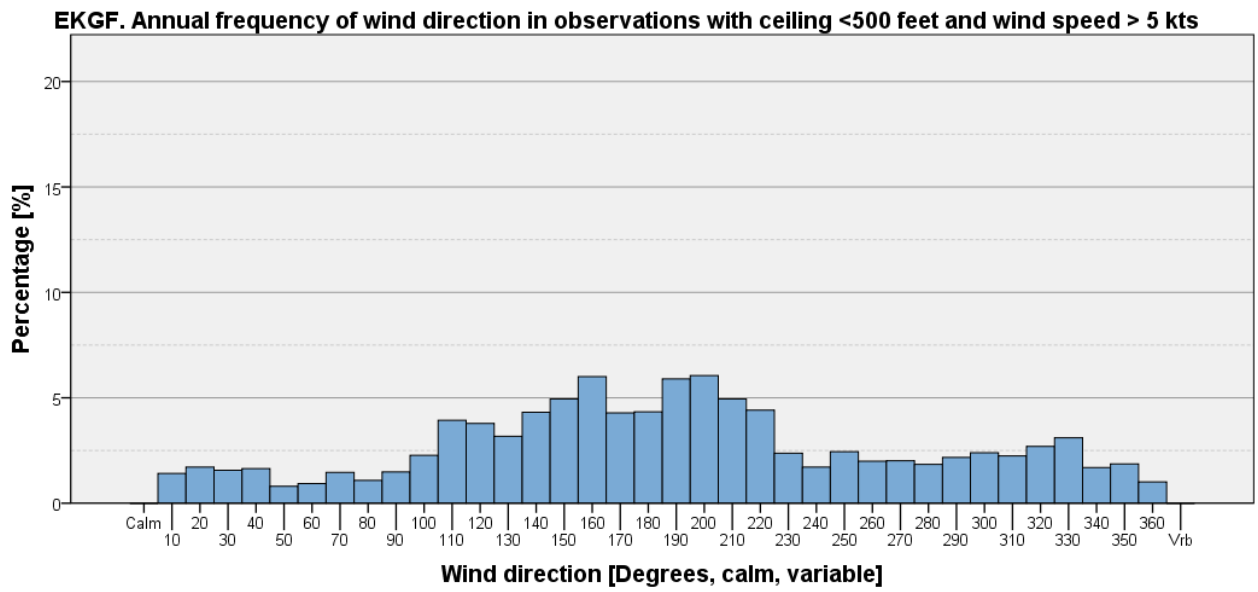


Figure 266

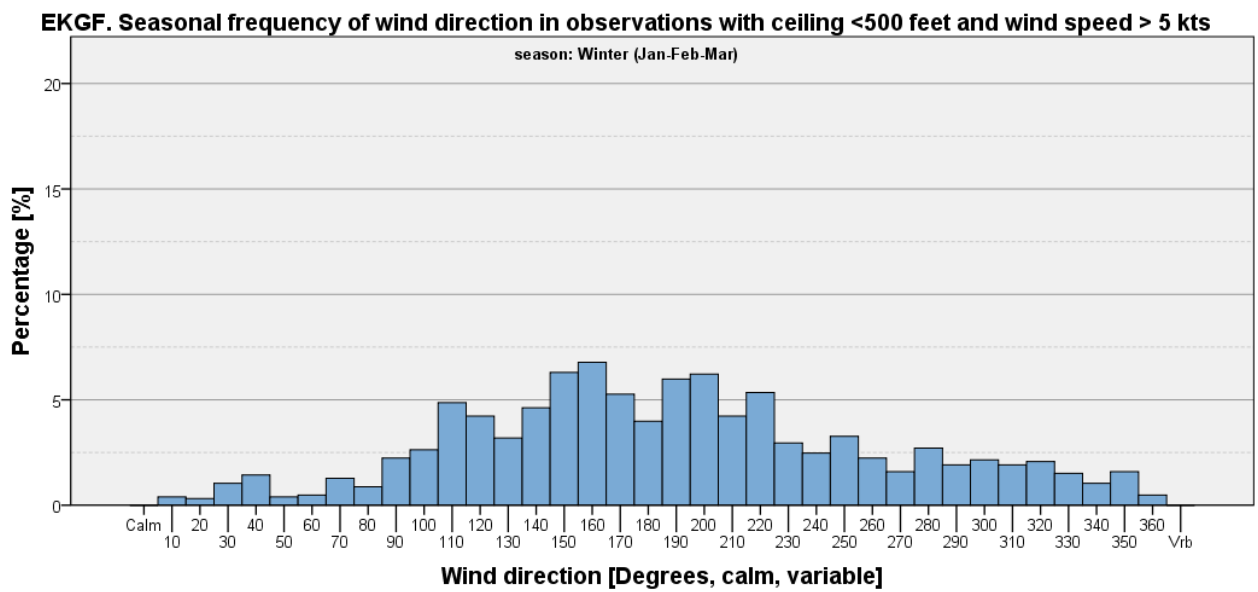


Figure 267

EKGF. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

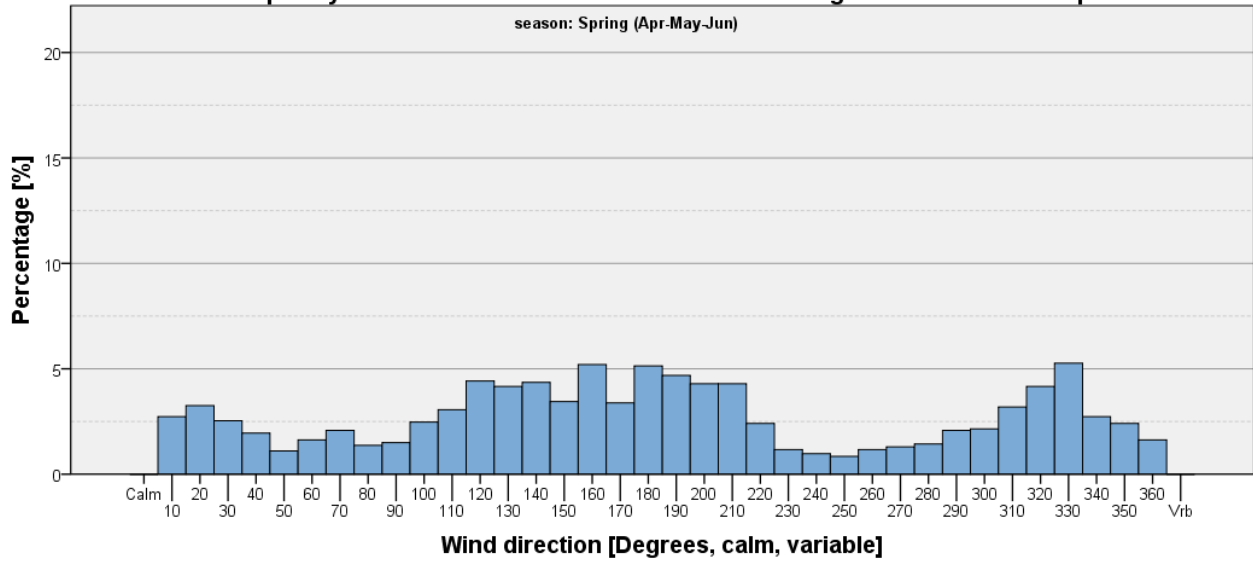


Figure 268

EKGF. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

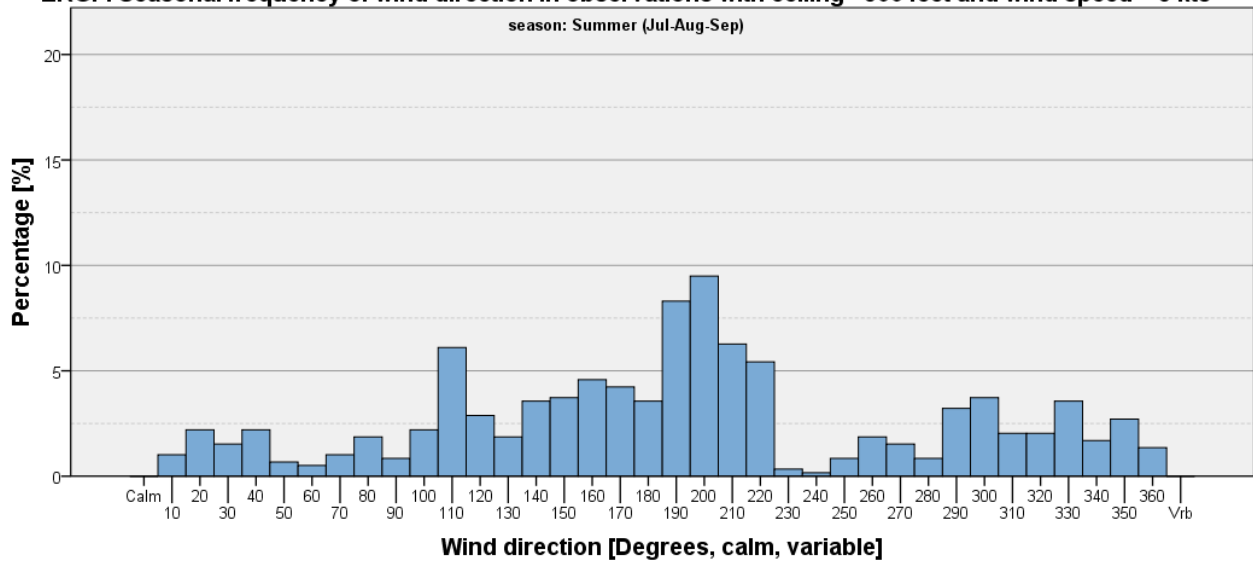


Figure 269

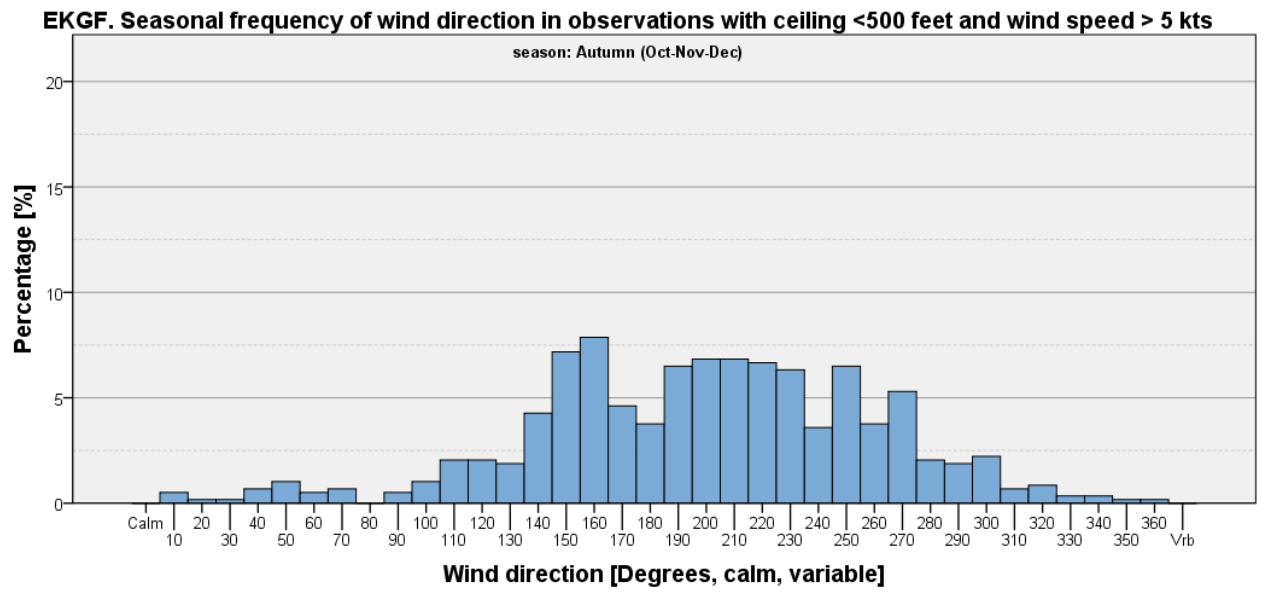
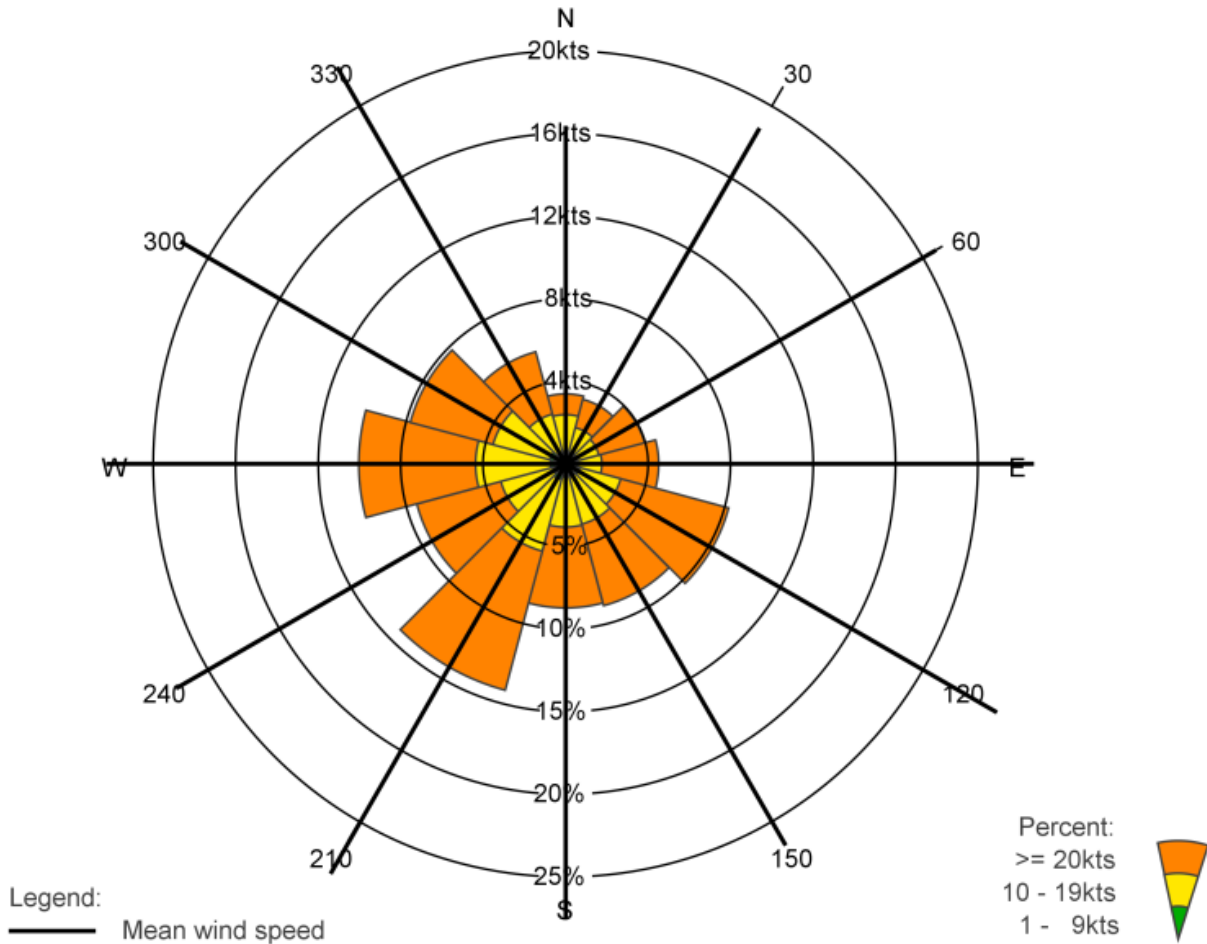


Figure 270

Wind Roses

EKGF: THYRA EAST, AUTUMN & WINTER

01-01-2009 - 31-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	4.3	4.1	5.0	5.7	10.2	8.9	8.7	14.2	9.3	12.5	9.7	7.0	99.6
% 1 - 9kts	0.7	0.6	0.5	0.4	0.9	0.8	0.8	1.0	0.8	0.9	1.0	0.7	9.1
% 10 - 19kts	2.3	1.6	1.6	1.8	2.6	3.0	3.0	4.5	3.3	4.5	3.5	2.4	34.1
% >= 20kts	1.3	1.8	2.9	3.5	6.8	5.1	4.9	8.7	5.3	7.1	5.2	3.9	56.4
Mean wind speed	16.4	18.8	20.8	22.7	24.2	21.4	22.1	22.9	21.8	22.3	21.5	22.2	21.9
Max wind speed	48.0	51.0	54.0	50.0	54.0	53.0	59.0	53.0	58.0	86.0	57.0	58.0	86.0

Number of observations = 49171

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 204=0.4%

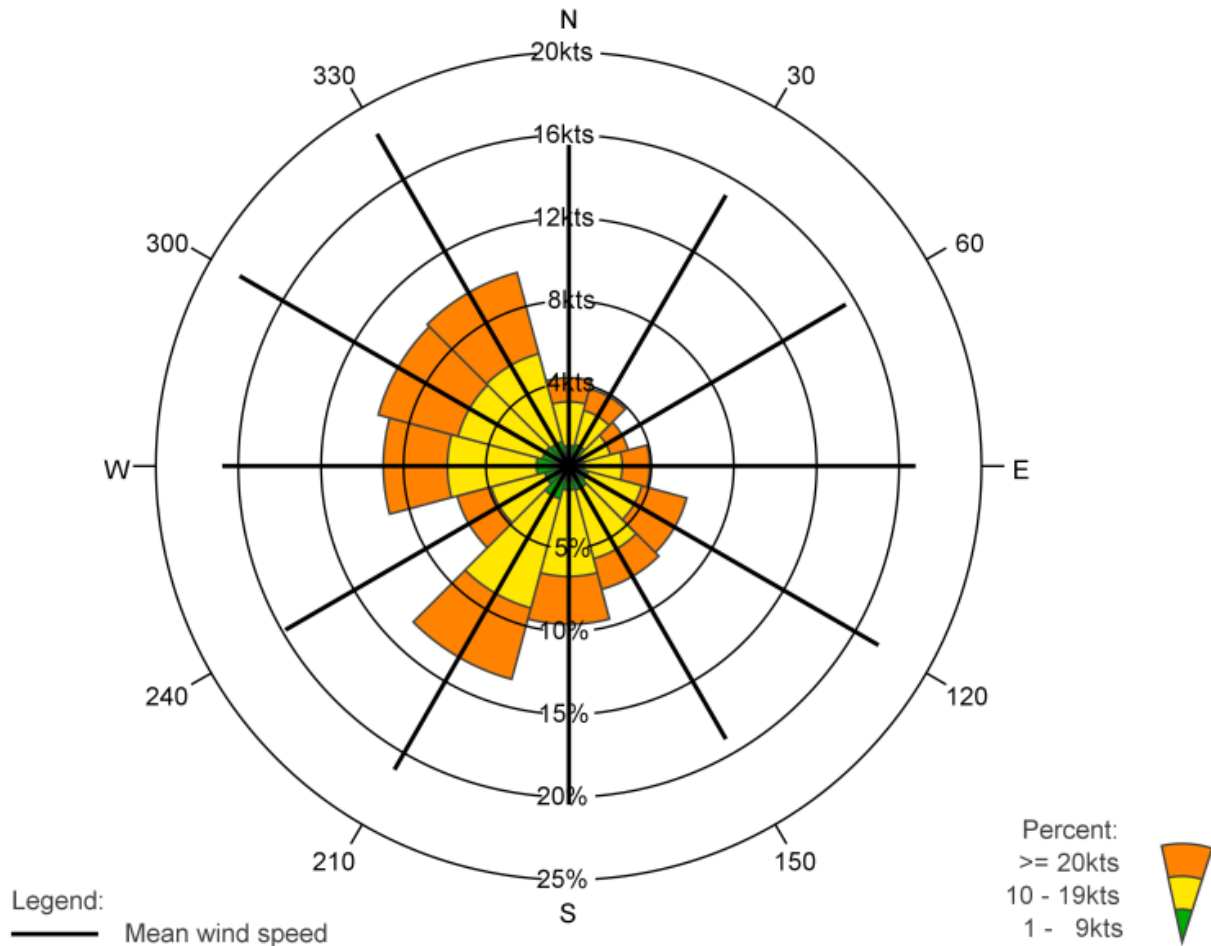
Observations with calm/varying wind direction are not used in the statistics

Source: DMI

Figure 271

EKGF: THYRA EAST, SPRING & SUMMER

01-01-2009 - 31-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	5.3	4.8	3.7	4.9	7.4	7.7	9.6	13.3	7.0	11.2	11.9	12.1	99.1
% 1 - 9kts	1.2	1.4	0.9	0.9	1.2	1.5	1.5	2.0	1.5	1.9	1.6	1.5	17.2
% 10 - 19kts	2.7	2.1	1.7	2.3	3.4	4.3	5.2	6.8	3.4	5.4	5.3	5.5	48.1
% >= 20kts	1.5	1.4	1.1	1.7	2.8	1.9	2.9	4.4	2.1	3.9	5.0	5.1	33.8
Mean wind speed	15.5	15.1	15.5	16.8	17.3	15.3	16.4	16.9	15.9	16.8	18.4	18.5	16.8
Max wind speed	40.0	41.0	53.0	53.0	44.0	39.0	51.0	49.0	56.0	50.0	51.0	46.0	56.0

Number of observations = 48857

Source: DMI

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 464=0.9%

Observations with calm/varying wind direction are not used in the statistics

Figure 272

Availability

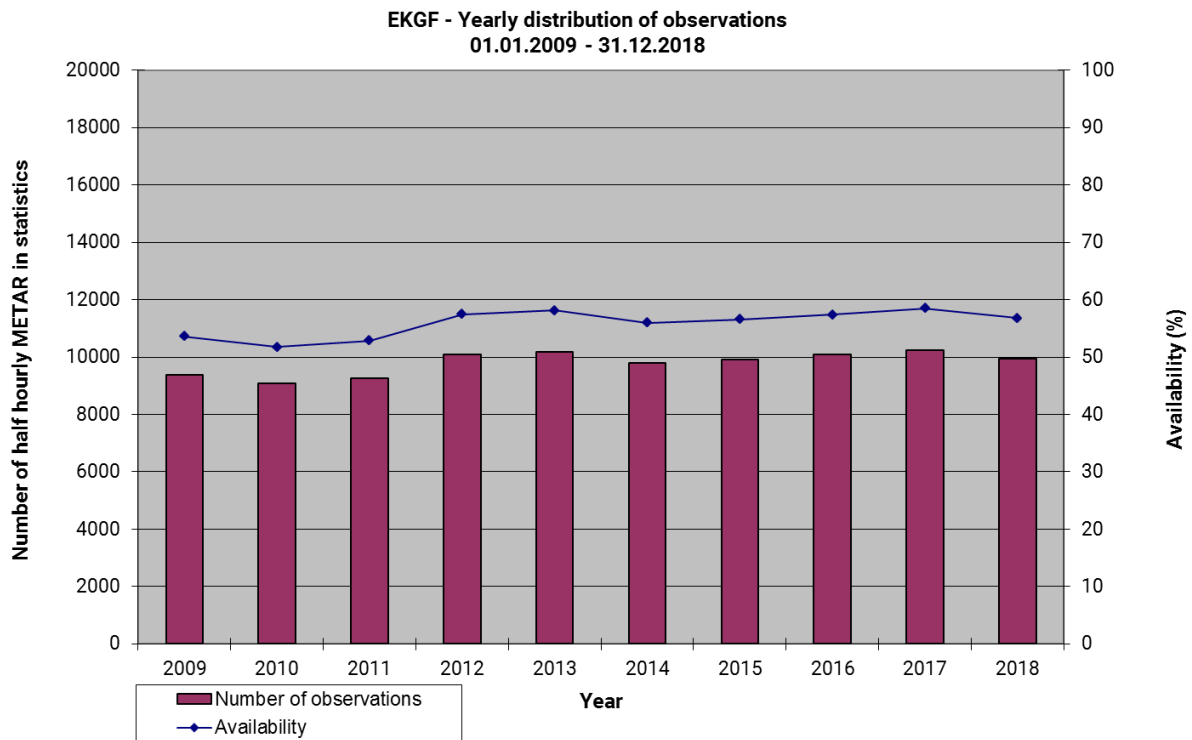


Figure 273

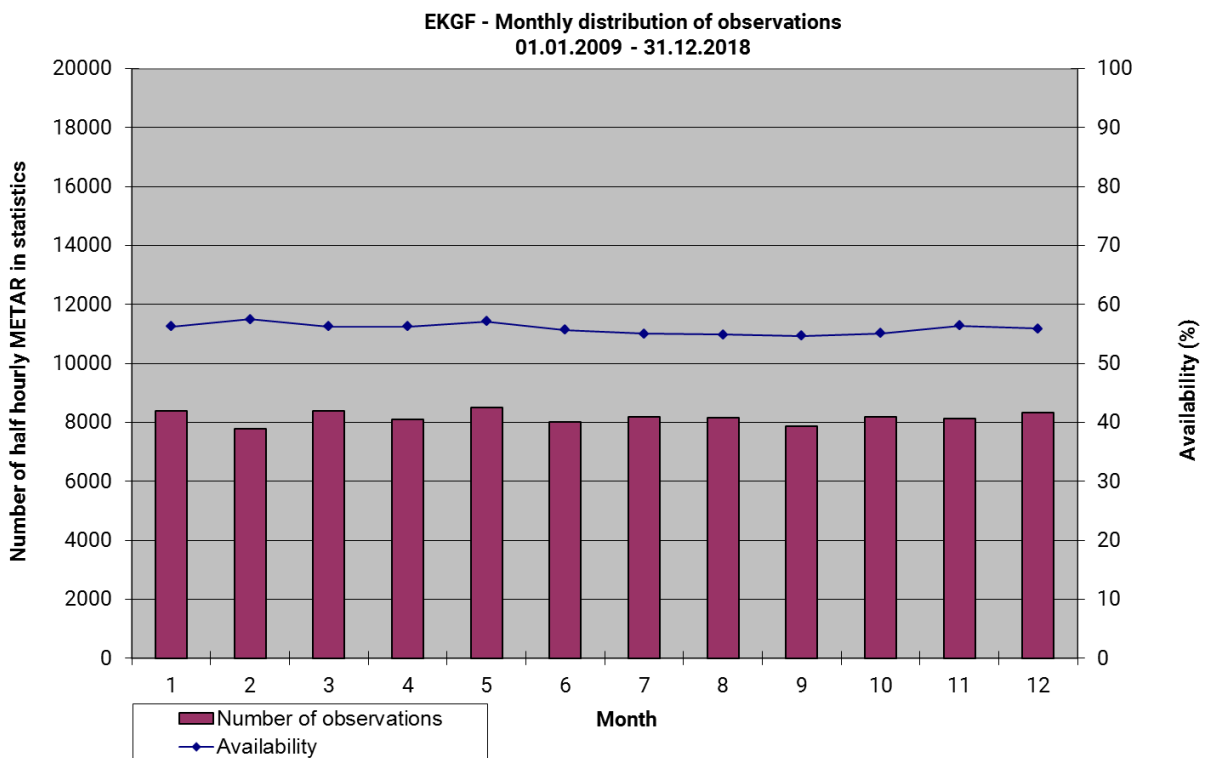


Figure 274

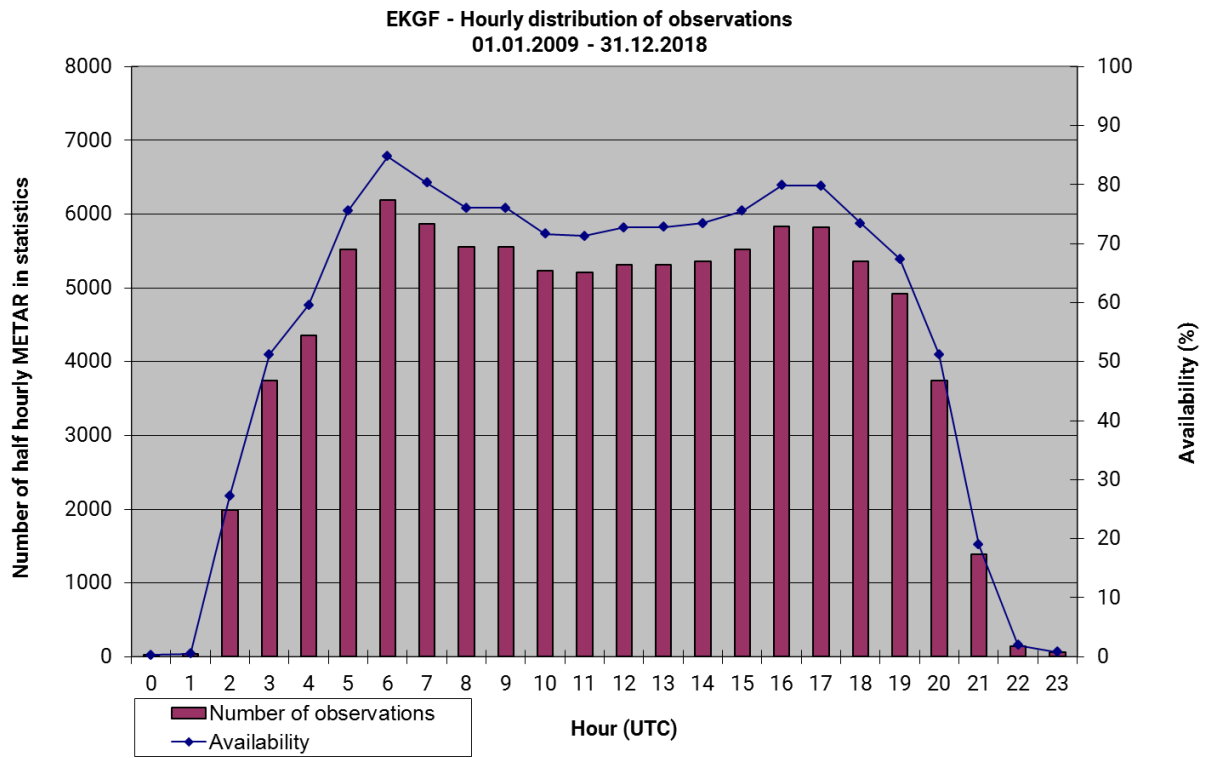


Figure 275

Table 77: EKGf. Average number of half hourly observations in statistics, 01.01.2009 – 31.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
3	1.0	1.0	1.0	1.1	1.0	1.1	1.1	1.0	1.0	1.0
4	1.1	1.1	1.1	1.2	1.3	1.2	1.3	1.2	1.3	1.1
5	1.5	1.4	1.4	1.5	1.6	1.5	1.6	1.5	1.6	1.5
6	1.7	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8
7	1.6	1.5	1.5	1.6	1.7	1.6	1.6	1.6	1.7	1.6
8	1.5	1.4	1.4	1.6	1.6	1.5	1.6	1.6	1.5	1.6
9	1.5	1.4	1.4	1.6	1.6	1.5	1.5	1.5	1.6	1.5
10	1.4	1.4	1.4	1.4	1.6	1.4	1.4	1.5	1.4	1.4
11	1.4	1.3	1.4	1.5	1.5	1.4	1.4	1.4	1.5	1.4
12	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5
13	1.4	1.4	1.4	1.5	1.6	1.5	1.5	1.5	1.5	1.4
14	1.4	1.3	1.4	1.5	1.6	1.5	1.5	1.5	1.5	1.5
15	1.5	1.3	1.4	1.6	1.6	1.5	1.5	1.6	1.6	1.5
16	1.5	1.4	1.5	1.7	1.6	1.6	1.7	1.7	1.6	1.6
17	1.5	1.4	1.5	1.6	1.7	1.7	1.6	1.7	1.7	1.6
18	1.3	1.3	1.4	1.5	1.5	1.4	1.5	1.6	1.6	1.6
19	1.2	1.2	1.2	1.4	1.4	1.3	1.3	1.5	1.6	1.5
20	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1
21	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
22	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

EKKA Midtjyllands Lufthavn / Flyvestation Karup

Airport location: 56,300°N 9,117°E Elevation: 52 m above MSL.

EKKA observations in statistics: 172,859 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 98.6 %. For more information, please go to the 'Availability' section.

EKKA METAR are both AUTO METAR and manual METAR.

Cross Tables Visibility – Ceiling

Table 78: EKKA Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 172,859	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.0012	0.28	0.34	0.35	0.35	0.35	0.065	0.41
<350m	0.0023	0.71	1.19	1.22	1.23	1.23	0.47	1.70
<600m	0.0023	0.85	1.71	1.75	1.76	1.76	0.79	2.55
<800 m	0.0023	0.92	2.02	2.08	2.10	2.11	0.95	3.06
<1.5 km	0.0023	1.00	2.78	2.94	3.00	3.01	1.37	4.39
<3.0 km	0.0029	1.03	4.66	6.03	6.35	6.51	2.45	8.96
< 5.0 km	0.0035	1.03	5.98	10.30	11.61	12.18	4.88	17.06
< 8.0 km	0.0058	1.03	6.43	13.16	15.91	17.11	9.14	26.26
>= 8.0 km or CAVOK	0.0029	0.0029	0.27	2.96	7.20	10.78	62.96	73.74
Total	0.0087	1.04	6.70	16.12	23.11	27.89	72.11	100

Table 79: EKKA - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,648	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.0047	0.38	0.41	0.42	0.42	0.42	0.075	0.49
<350m	0.0094	1.20	2.02	2.05	2.06	2.07	0.38	2.45
<600m	0.0094	1.51	3.17	3.24	3.25	3.26	0.68	3.94
<800 m	0.0094	1.64	3.85	3.95	3.98	4.00	0.81	4.81
<1.5 km	0.0094	1.79	5.46	5.80	5.92	5.96	1.06	7.02
<3.0 km	0.0094	1.85	8.55	11.11	11.65	11.89	2.37	14.26
< 5.0 km	0.0094	1.85	10.71	17.77	19.66	20.46	5.45	25.91
< 8.0 km	0.014	1.86	11.35	22.50	26.77	28.48	10.59	39.07
>= 8.0 km or CAVOK	0	0	0.35	3.87	9.57	14.02	46.91	60.93
Total	0.014	1.86	11.70	26.37	36.34	42.51	57.49	100

Table 80: EKKA - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,013	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.22	0.25	0.26	0.26	0.26	0.035	0.29
<350m	0	0.42	0.68	0.69	0.69	0.69	0.29	0.98
<600m	0	0.47	0.83	0.85	0.85	0.85	0.49	1.34
<800 m	0	0.50	0.98	1.01	1.01	1.01	0.58	1.59
<1.5 km	0	0.52	1.28	1.35	1.36	1.36	0.92	2.28
<3.0 km	0	0.52	2.32	2.92	3.01	3.07	1.64	4.71
< 5.0 km	0	0.52	2.93	4.84	5.42	5.62	3.14	8.76
< 8.0 km	0.0023	0.53	3.25	6.52	7.70	8.23	6.07	14.30
>= 8.0 km or CAVOK	0.0046	0.0046	0.21	2.67	6.18	9.65	76.06	85.70
Total	0.0070	0.53	3.46	9.19	13.88	17.87	82.13	100

Table 81: EKKA - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,541	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.23	0.33	0.34	0.34	0.34	0.062	0.40
<350m	0	0.44	0.83	0.86	0.86	0.86	0.62	1.48
<600m	0	0.51	0.97	1.01	1.01	1.02	1.07	2.08
<800 m	0	0.55	1.07	1.12	1.12	1.13	1.28	2.41
<1.5 km	0	0.60	1.27	1.34	1.35	1.36	1.83	3.19
<3.0 km	0	0.62	1.70	2.25	2.40	2.53	2.91	5.44
< 5.0 km	0	0.62	2.20	3.93	4.57	4.94	4.98	9.92
< 8.0 km	0.0023	0.63	2.34	4.93	6.17	6.81	8.56	15.36
>= 8.0 km or CAVOK	0.0023	0.0023	0.15	1.69	4.47	6.80	77.84	84.64
Total	0.0046	0.63	2.49	6.62	10.64	13.61	86.39	100

Table 82: EKKA - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,657	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.29	0.36	0.38	0.38	0.38	0.089	0.47
<350m	0	0.77	1.25	1.29	1.30	1.30	0.60	1.90
<600m	0	0.94	1.87	1.91	1.94	1.94	0.91	2.85
<800 m	0	1.01	2.21	2.29	2.31	2.31	1.13	3.44
<1.5 km	0	1.08	3.14	3.32	3.40	3.42	1.67	5.08
<3.0 km	0.0023	1.13	6.09	7.92	8.41	8.60	2.89	11.49
< 5.0 km	0.0046	1.13	8.15	14.73	16.86	17.77	5.94	23.71
< 8.0 km	0.0046	1.13	8.84	18.80	23.12	25.03	11.35	36.38
>= 8.0 km or CAVOK	0.0046	0.0046	0.35	3.61	8.61	12.70	50.92	63.62
Total	0.0092	1.14	9.19	22.41	31.73	37.73	62.27	100

Wind Direction Histograms

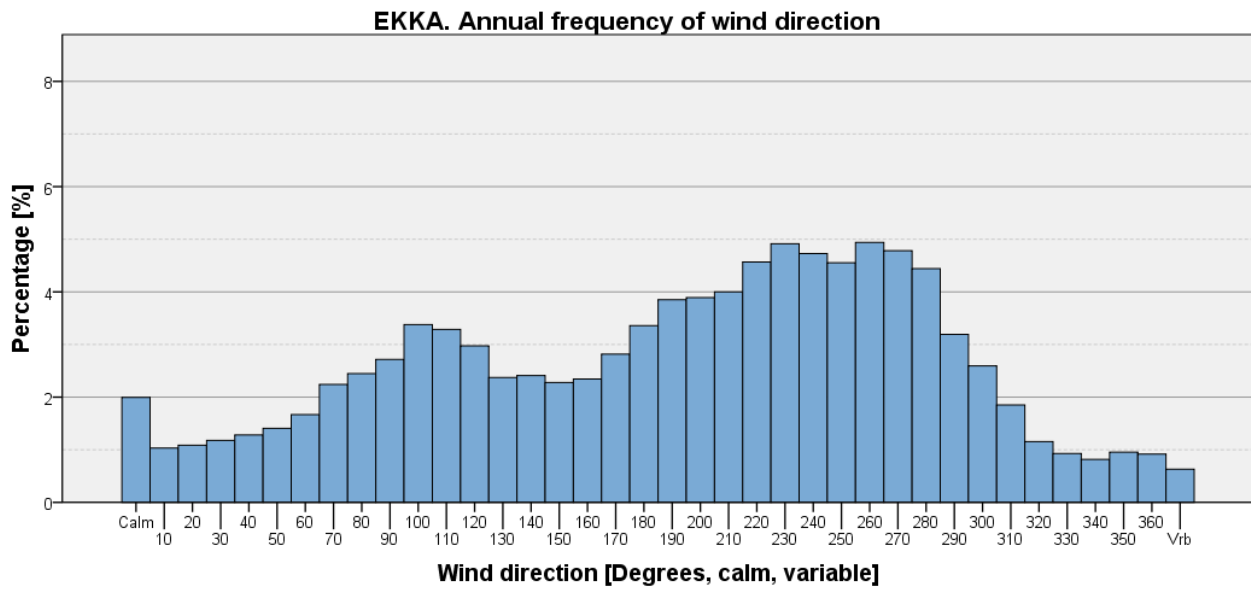


Figure 276

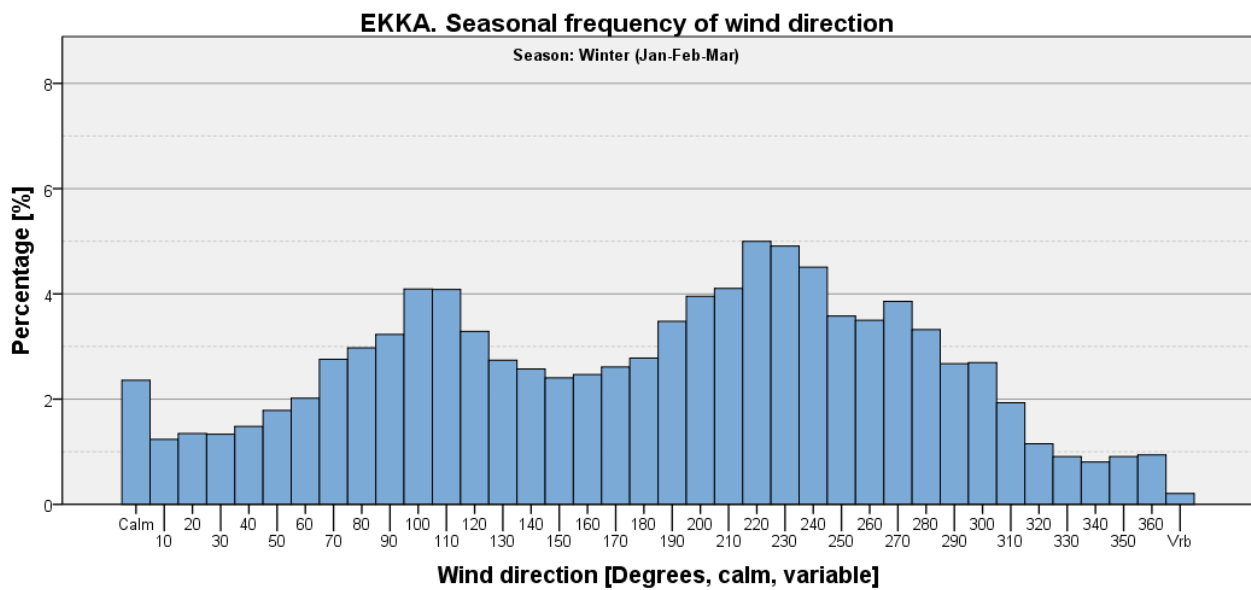


Figure 277

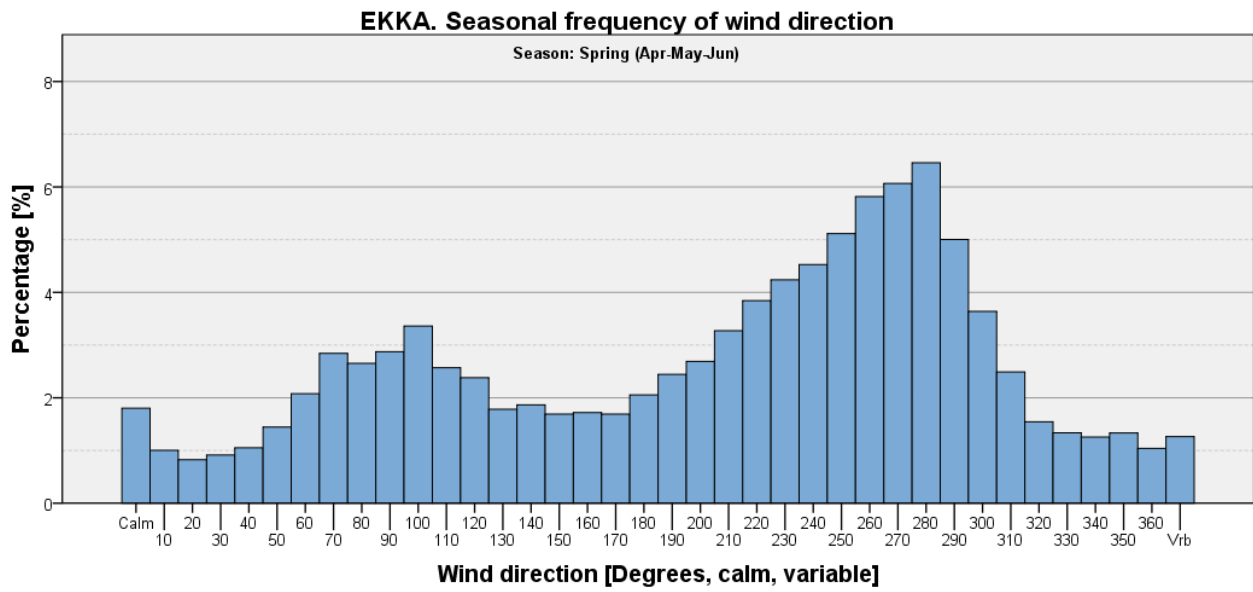


Figure 278

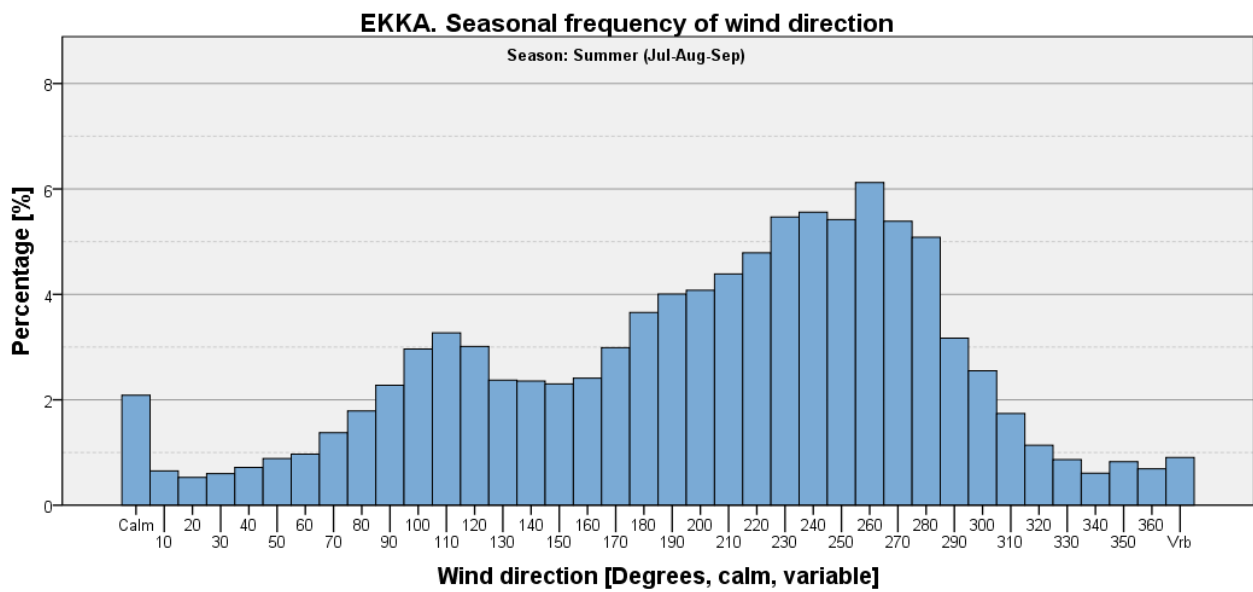


Figure 279

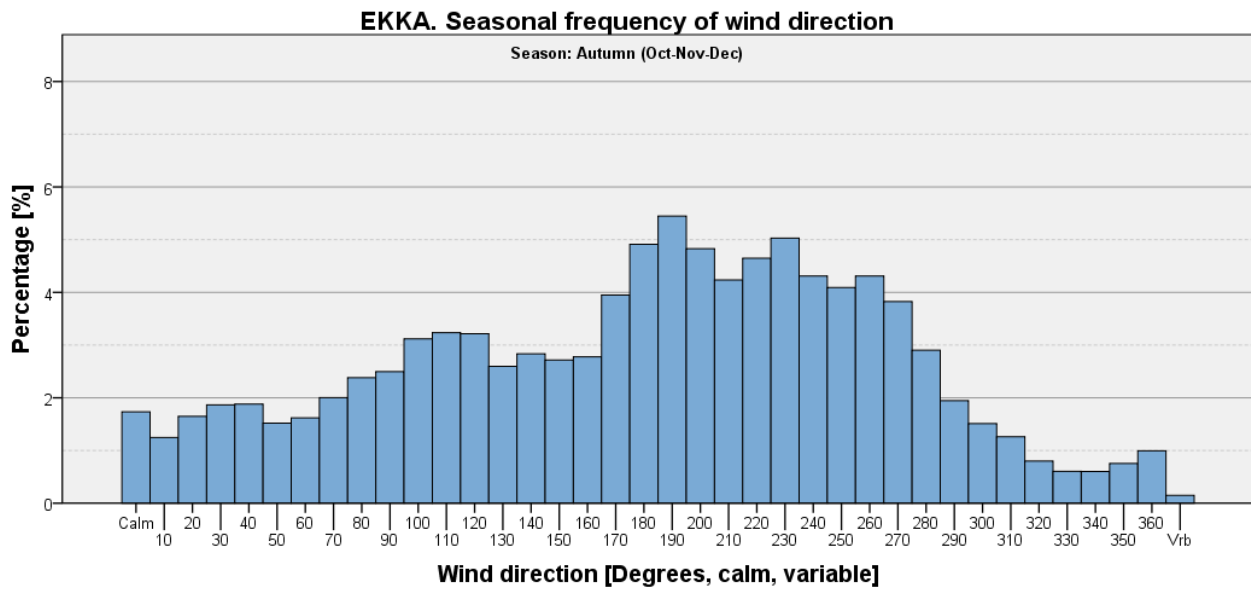


Figure 280

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 83: EKKA - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	4.81	1.59	2.41	3.44	3.06
All other observations	95.19	98.41	97.59	96.56	96.94
Total	100	100	100	100	100

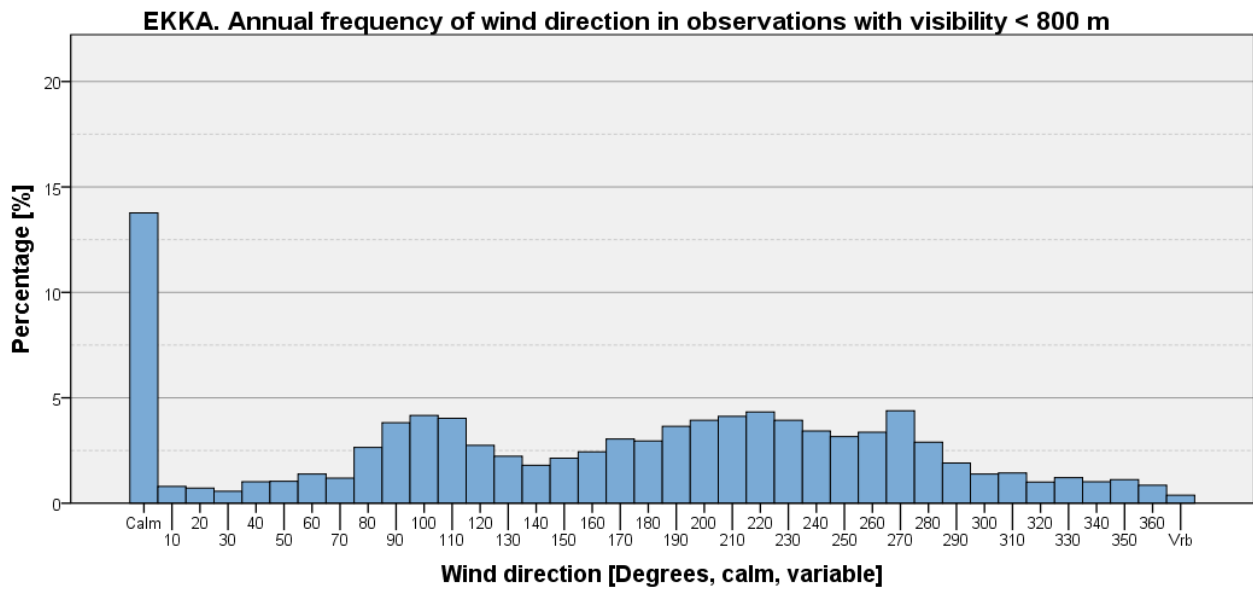


Figure 281

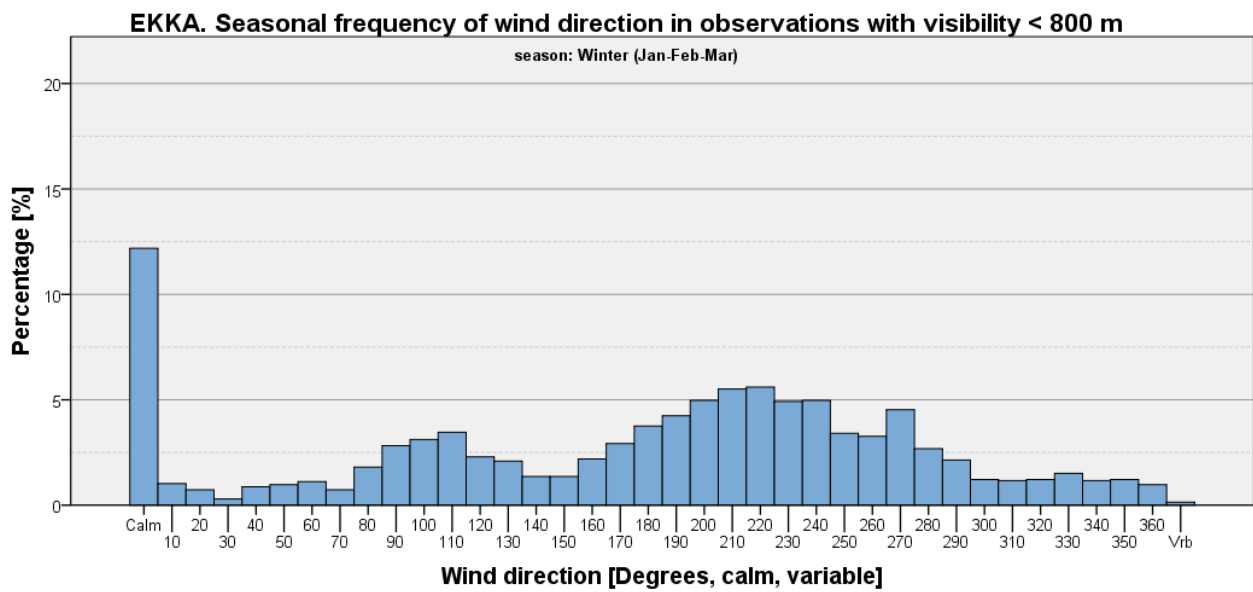


Figure 282

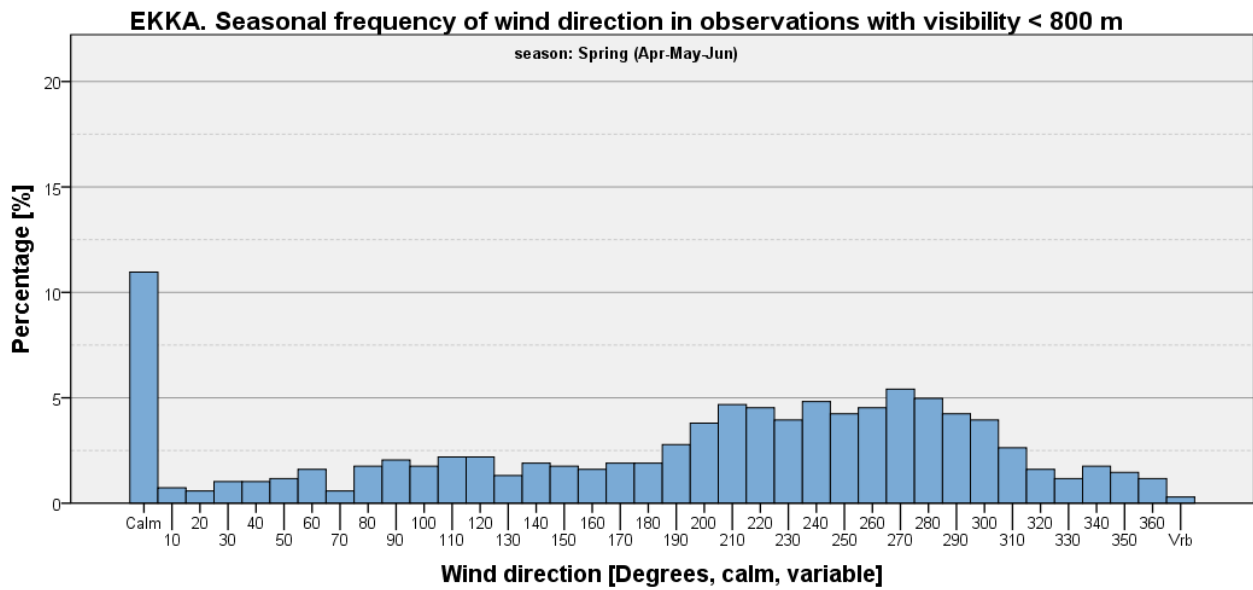


Figure 283

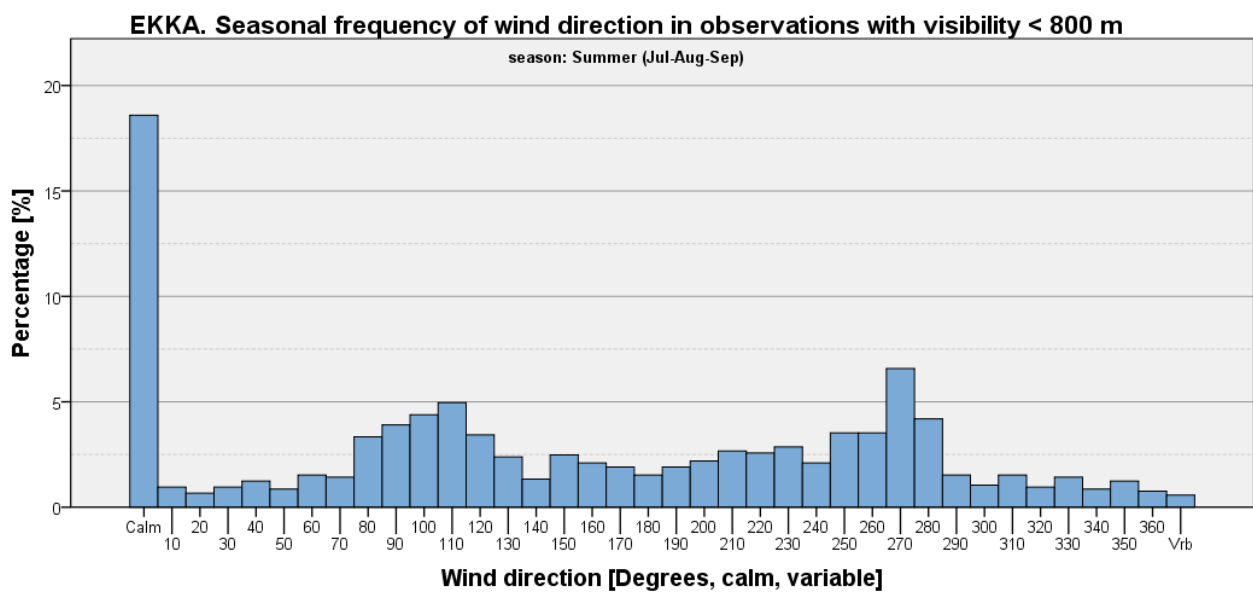


Figure 284

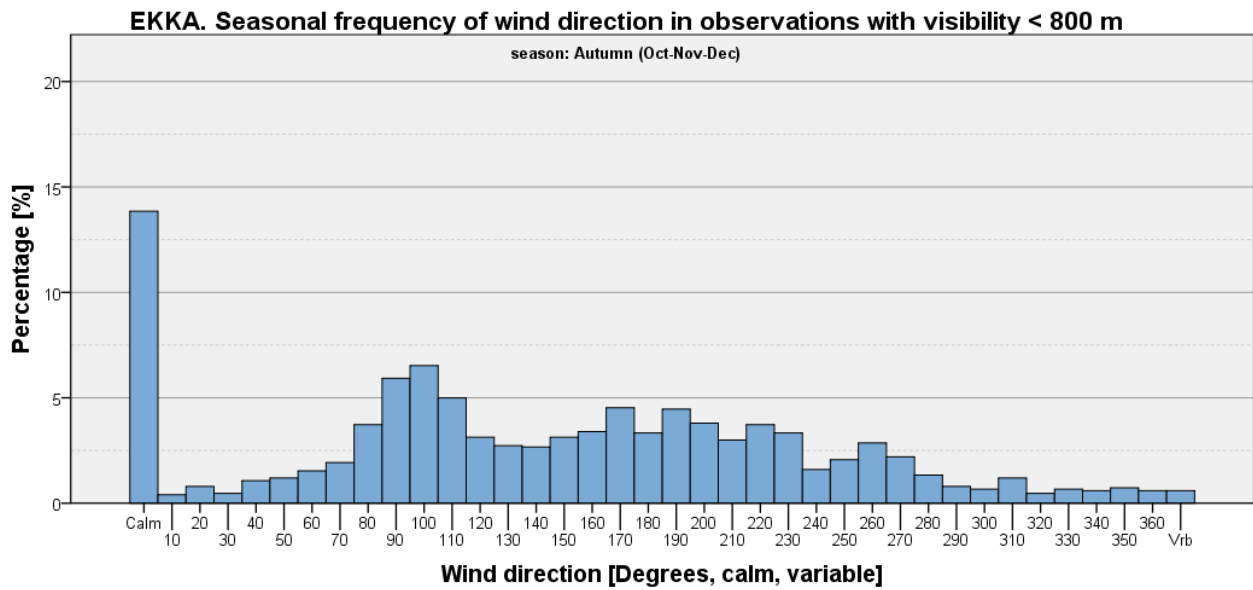


Figure 285

Visibility < 800 m and Wind Speed <= 5 kts

Table 84: EKKA - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	3.39	1.44	2.30	2.86	2.50
All other observations	96.61	98.56	97.70	97.14	97.50
Total	100	100	100	100	100

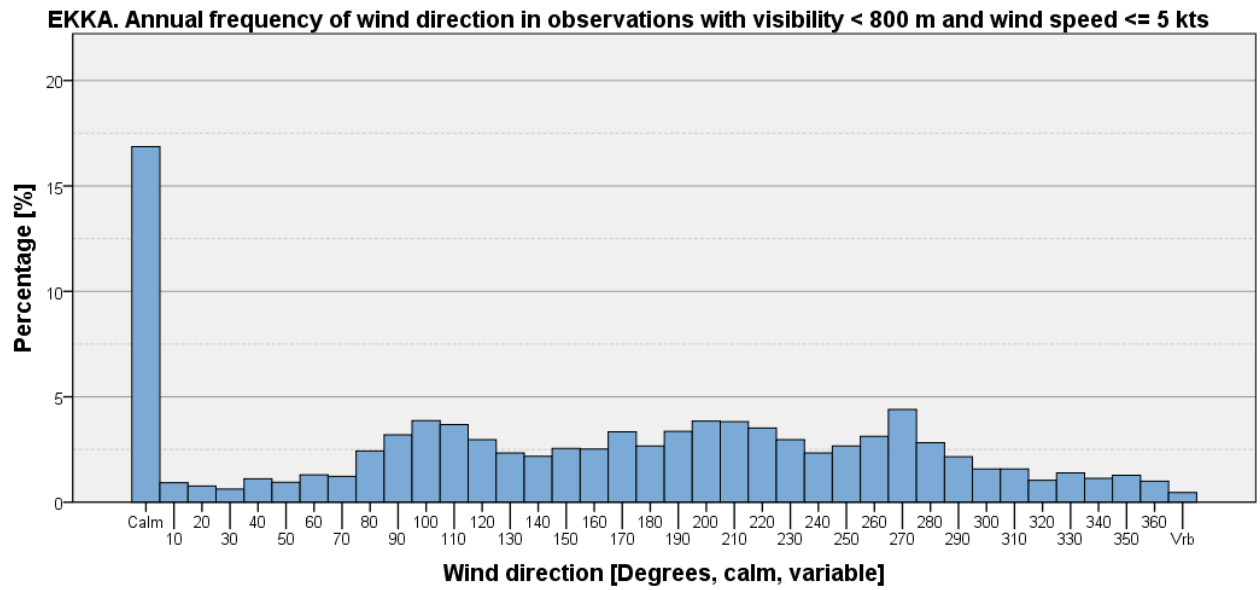


Figure 286

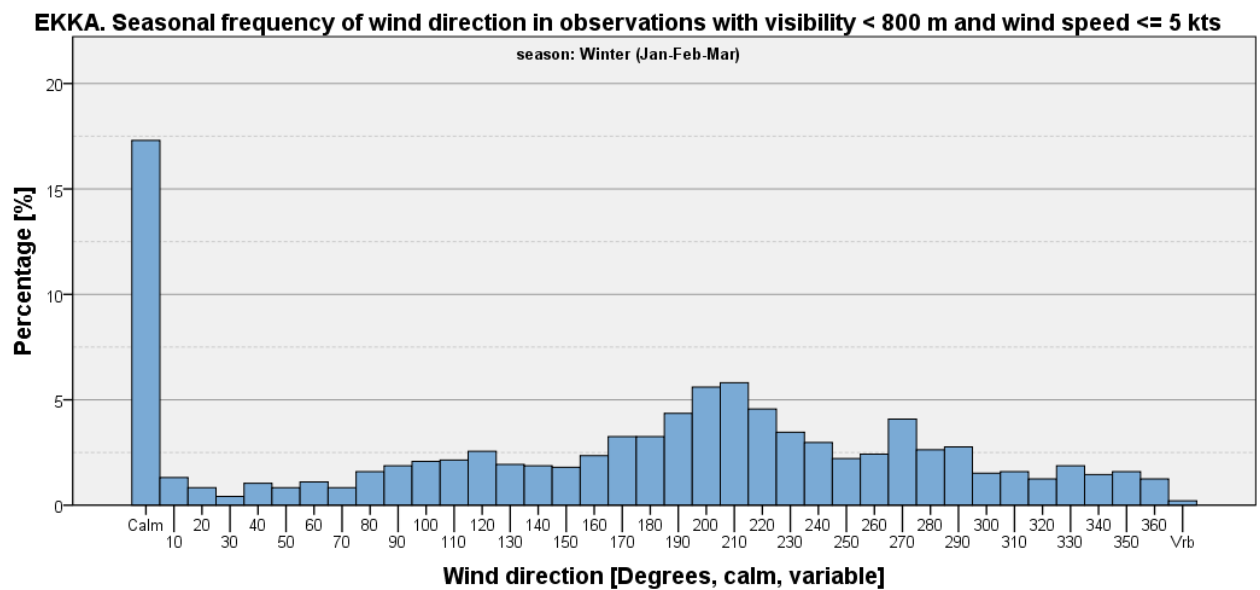


Figure 287

EKKA. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

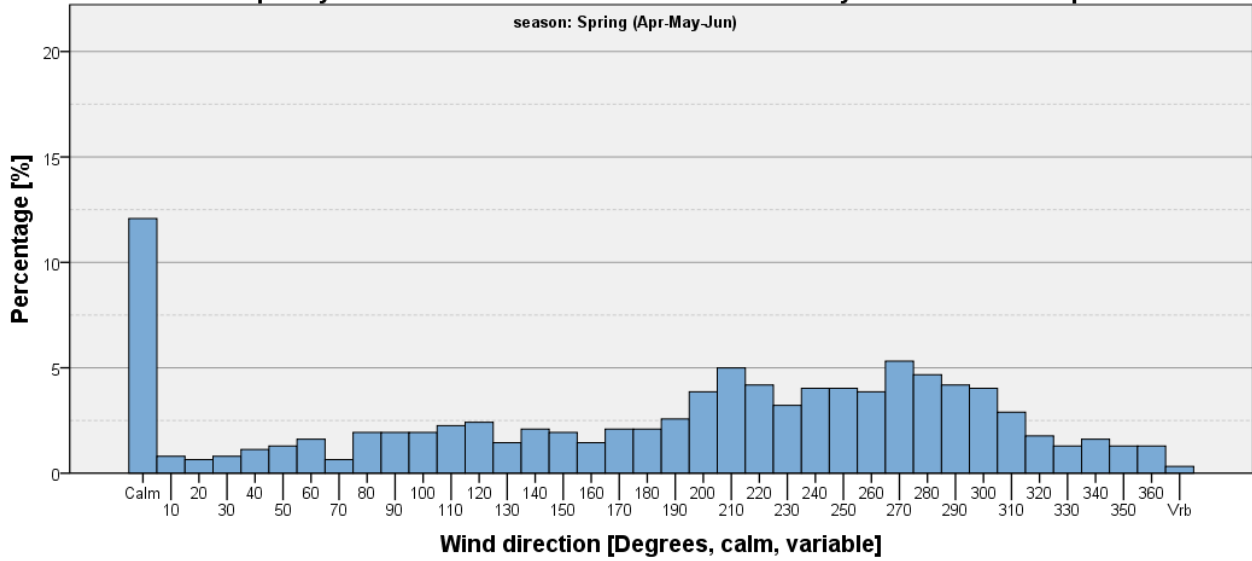


Figure 288

EKKA. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

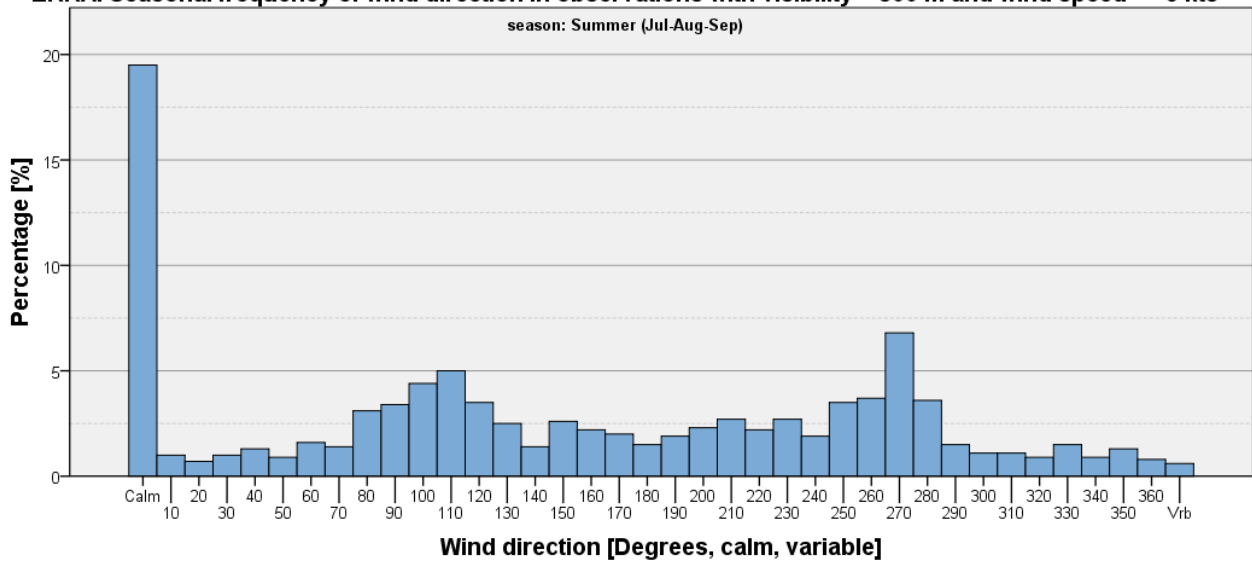


Figure 289

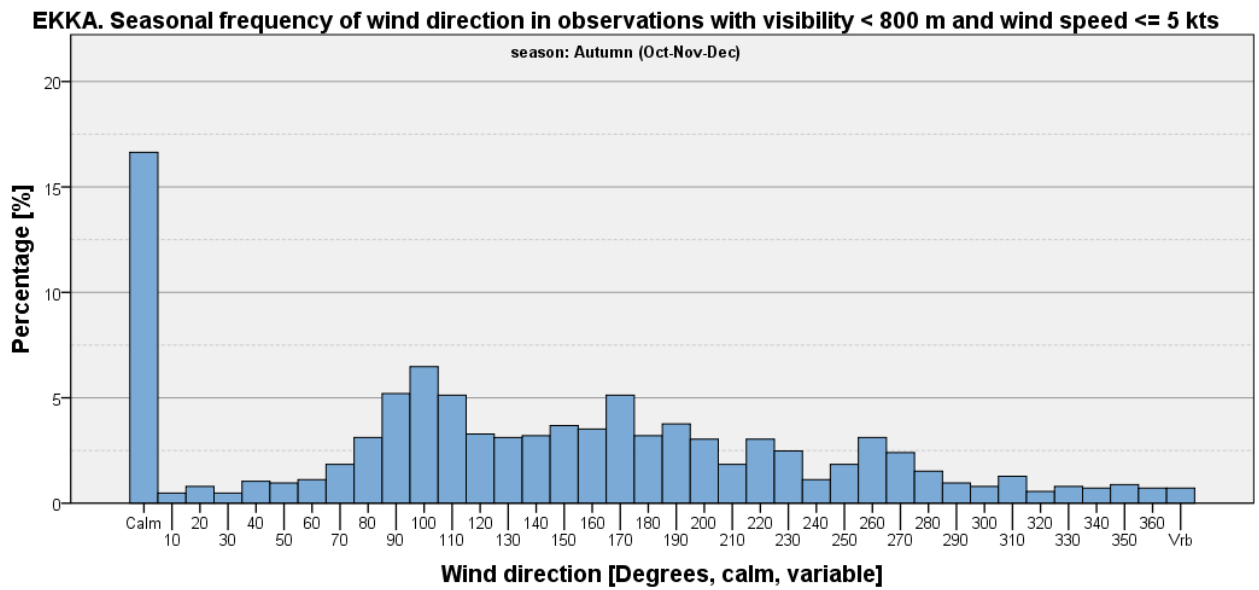


Figure 290

Visibility < 800 m and Wind Speed > 5 kts

Table 85: EKKA - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	1.42	0.15	0.11	0.58	0.56
All other observations	98.58	99.85	99.89	99.42	99.44
Total	100	100	100	100	100

EKKA. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

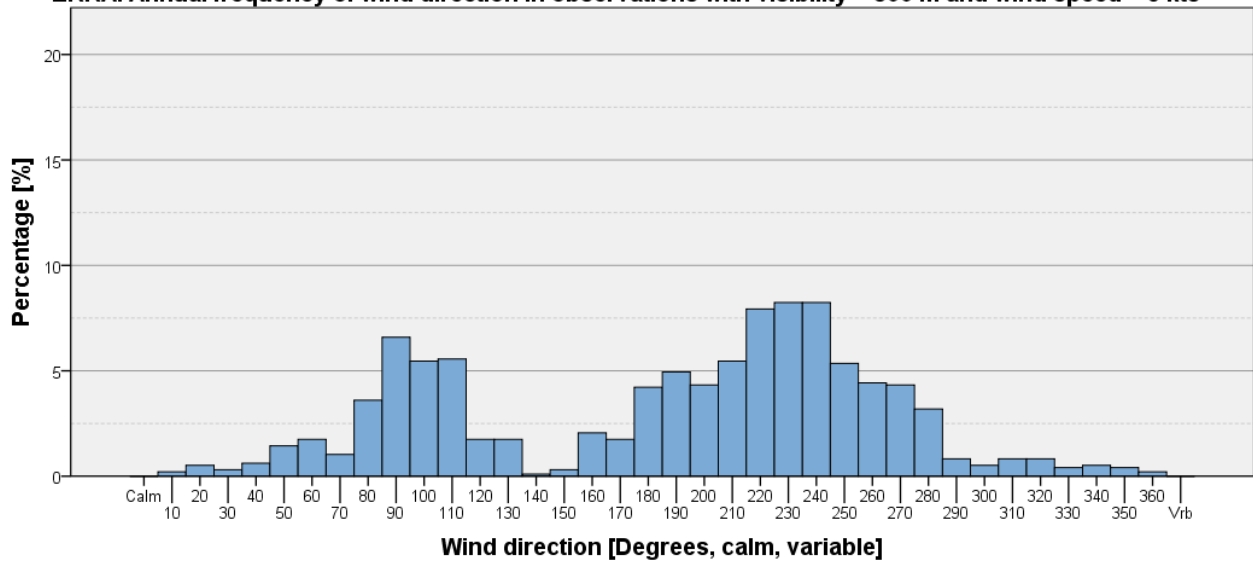


Figure 291

EKKA. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

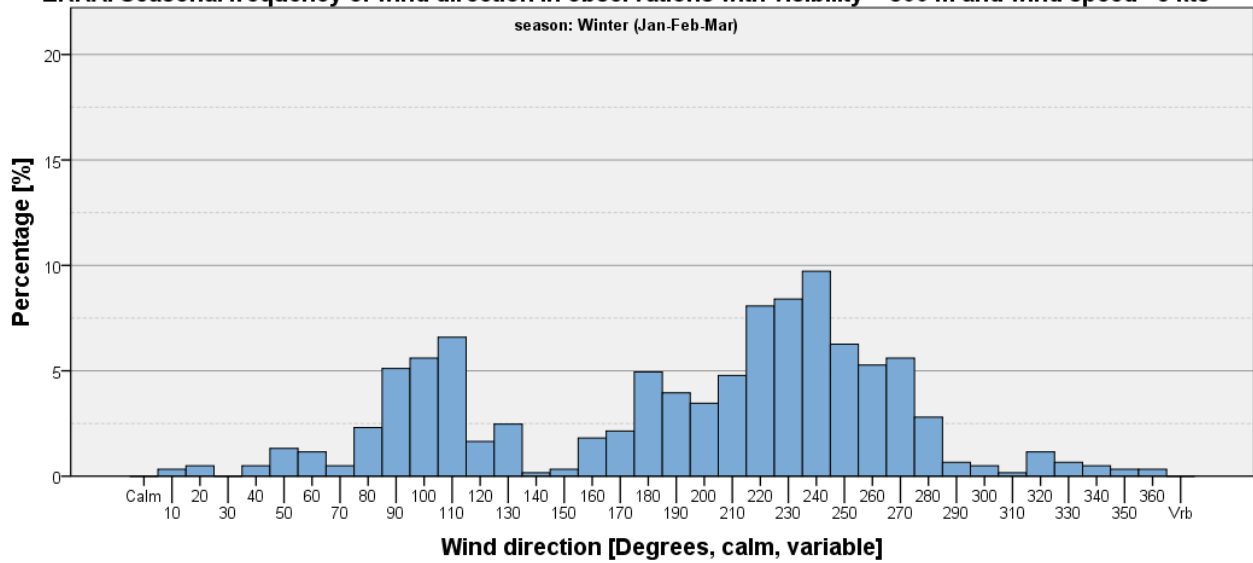


Figure 292

EKKA. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

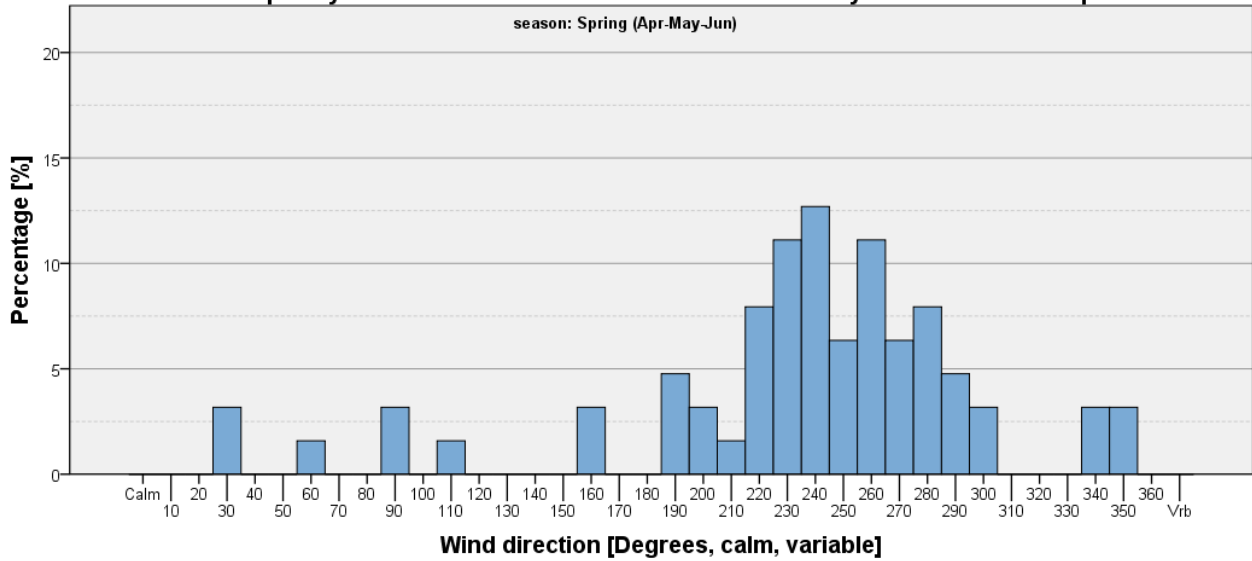


Figure 293

EKKA. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

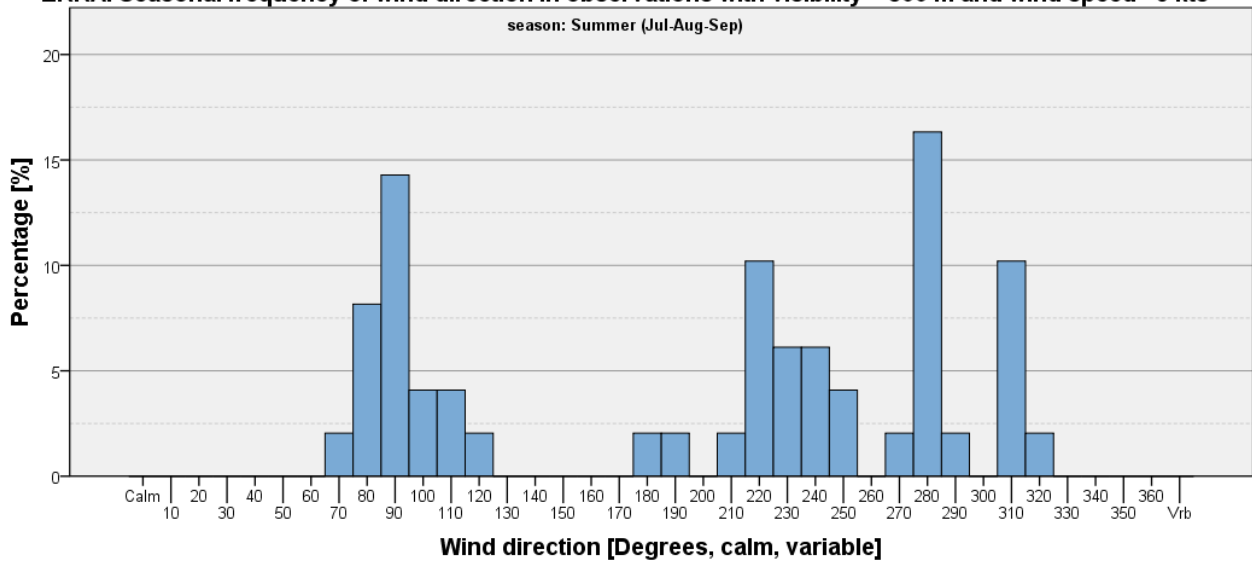


Figure 294

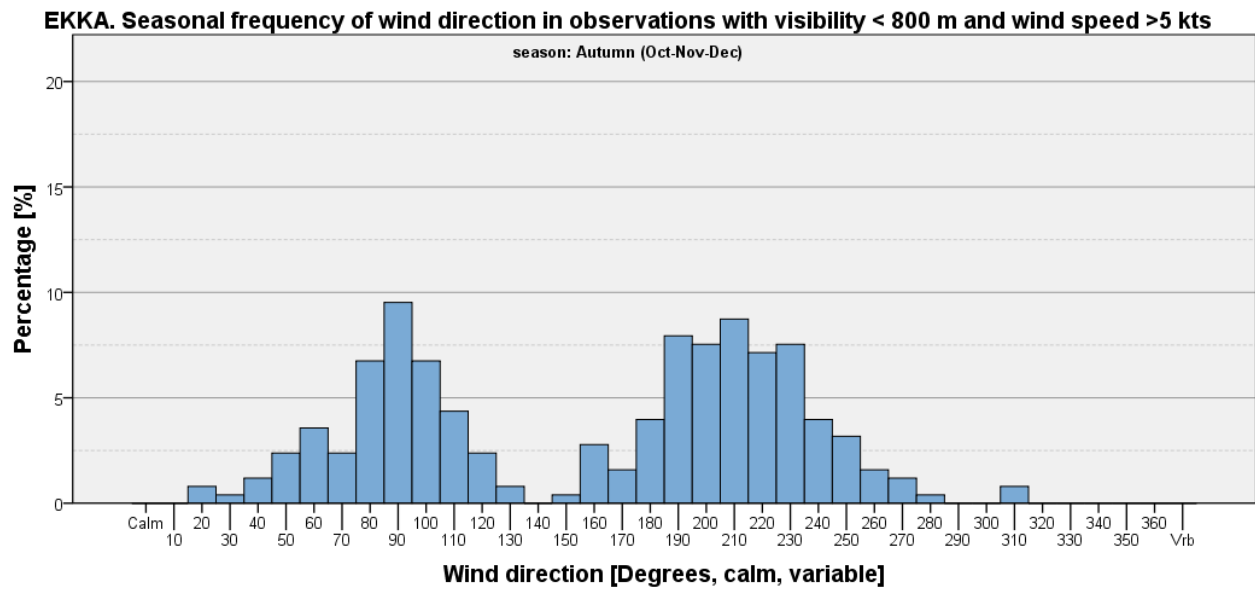


Figure 295

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 86: EKKA - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	26.37	9.19	6.62	22.41	16.12
All other observations	73.63	90.81	93.38	77.59	83.88
Total	100	100	100	100	100

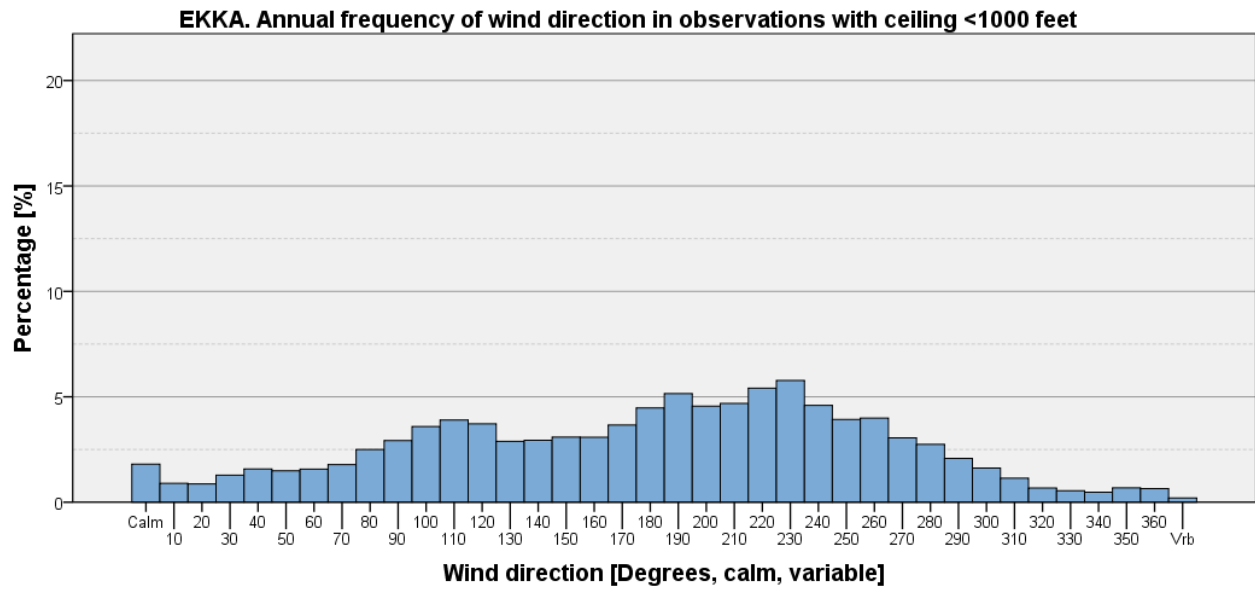


Figure 296

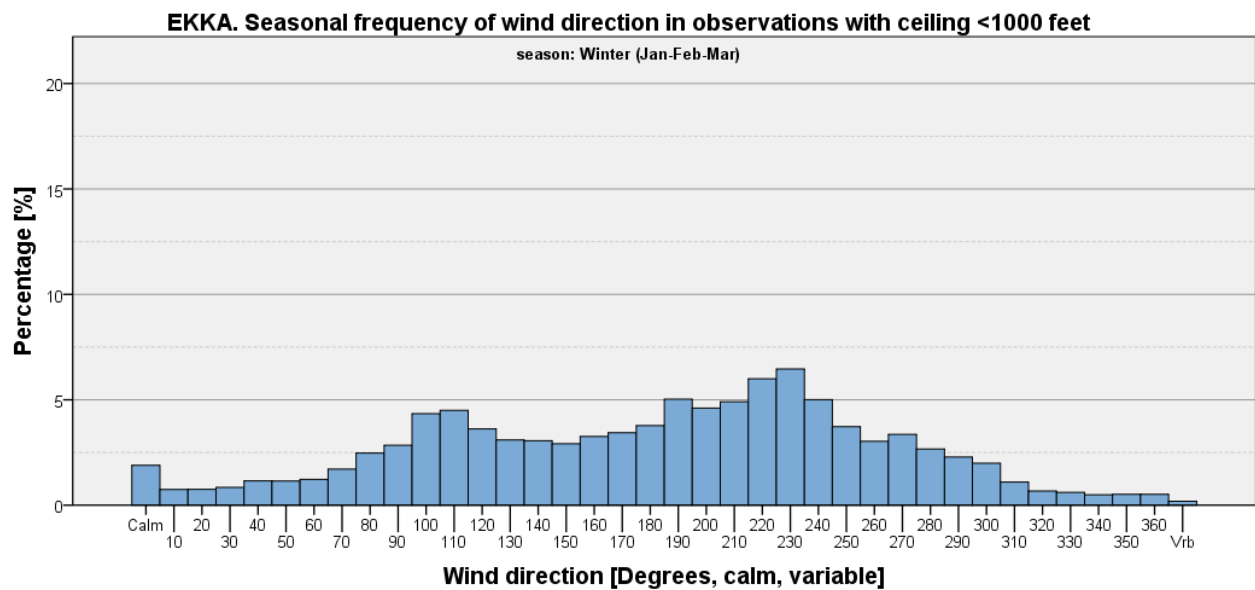


Figure 297

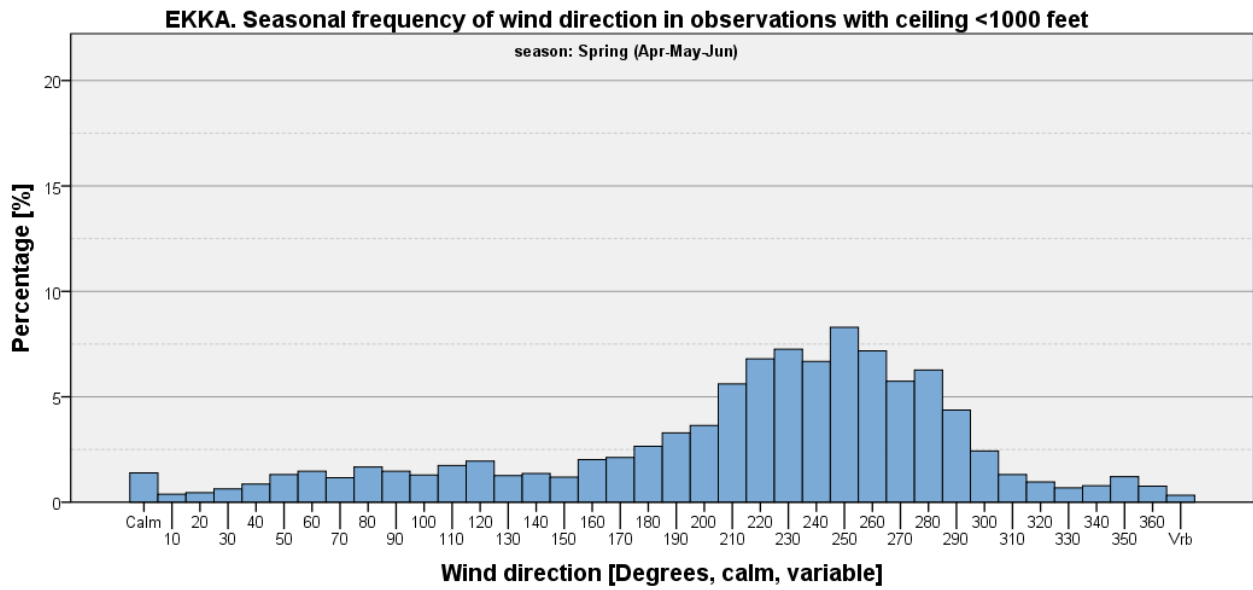


Figure 298

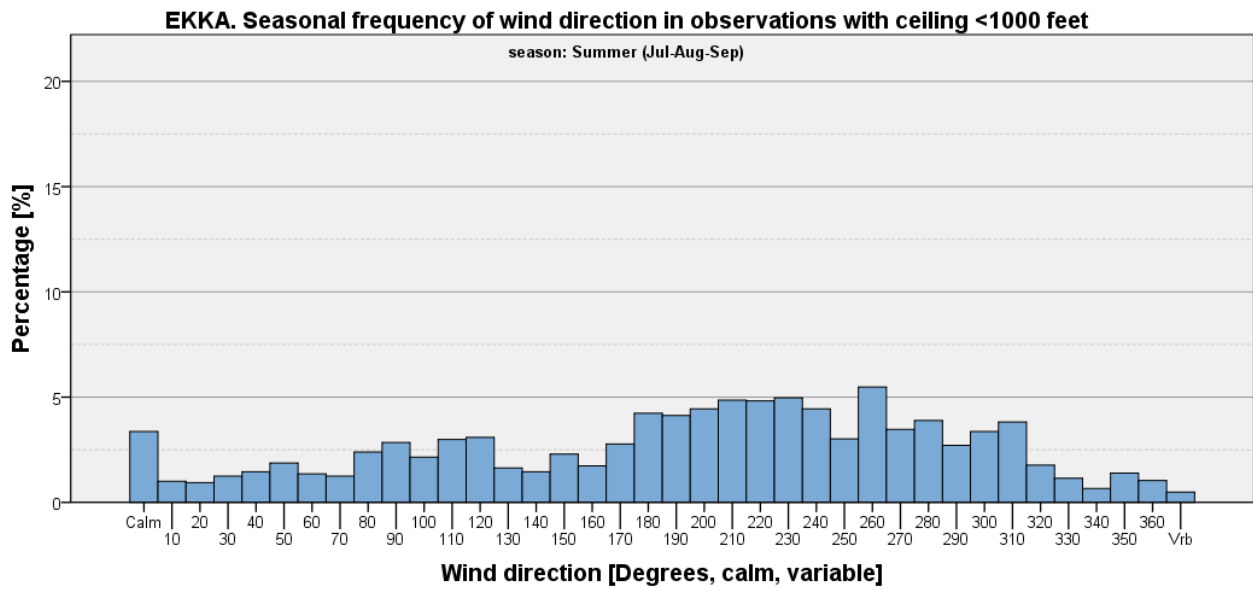


Figure 299

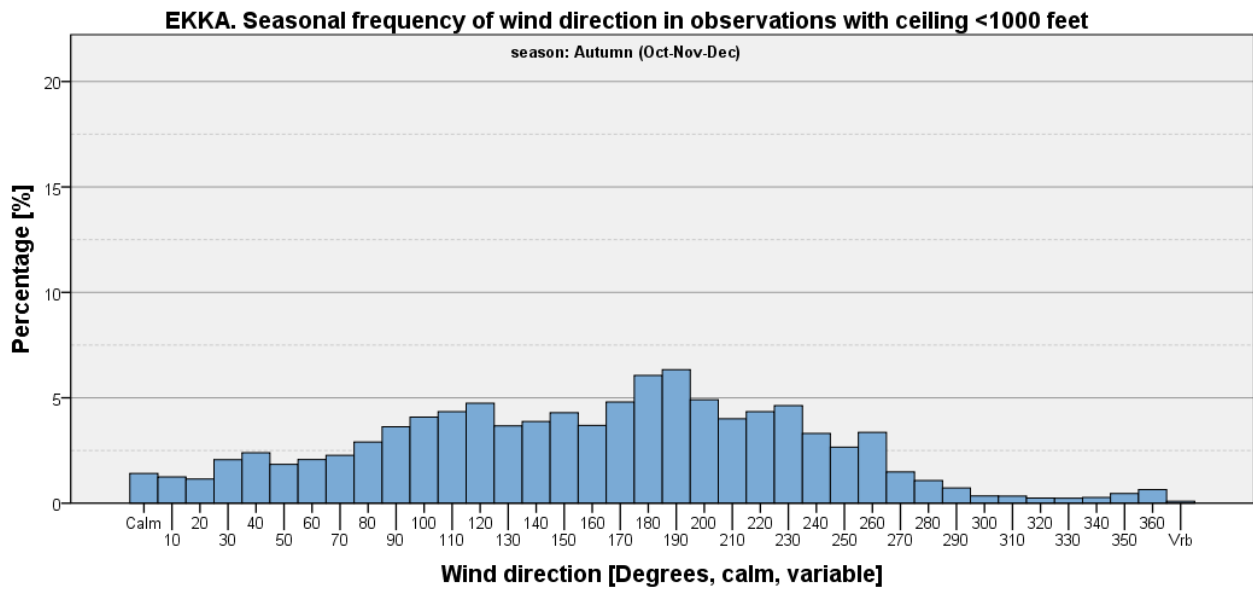


Figure 300

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 87: EKKA - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	7.92	2.94	2.56	5.80	4.79
All other observations	92.08	97.06	97.44	94.20	95.21
Total	100	100	100	100	100

EKKA. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

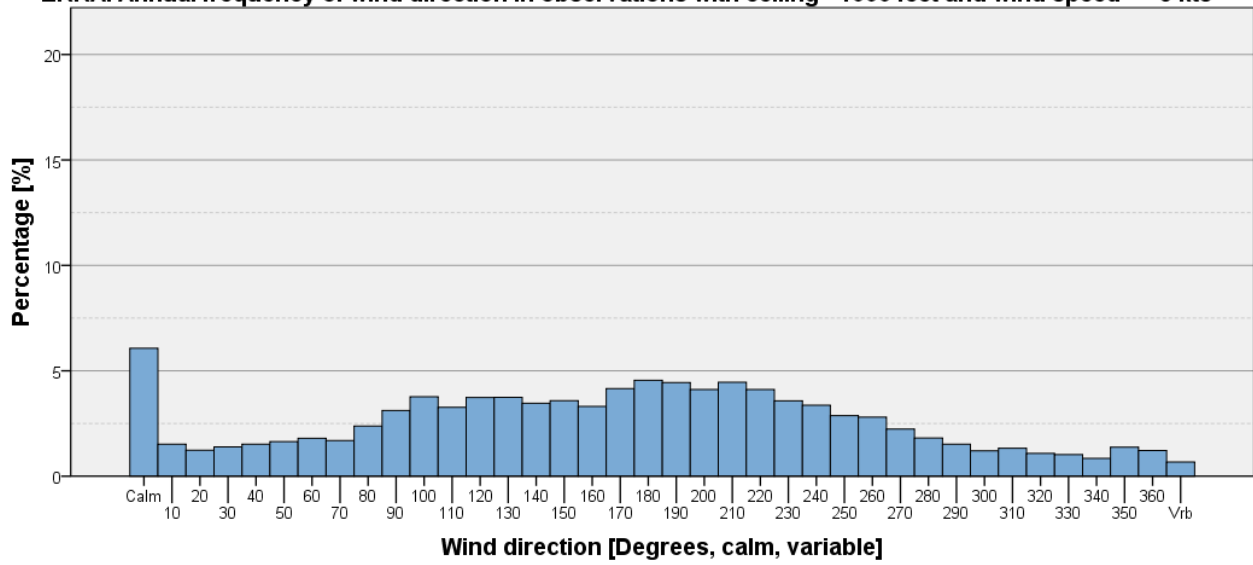


Figure 301

EKKA. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

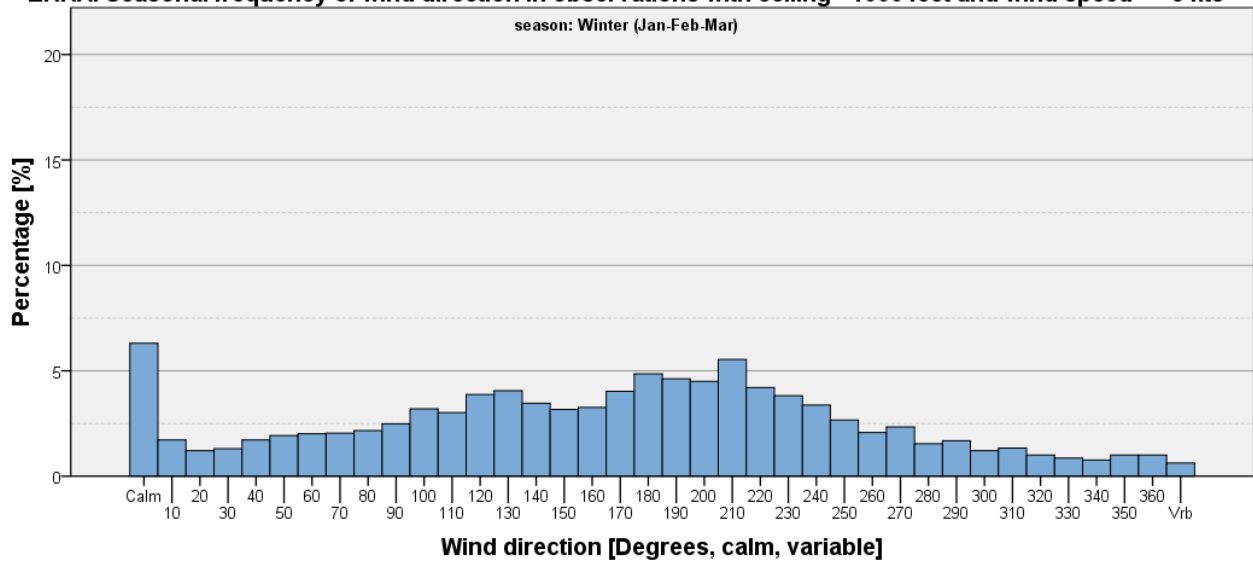


Figure 302

EKKA. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

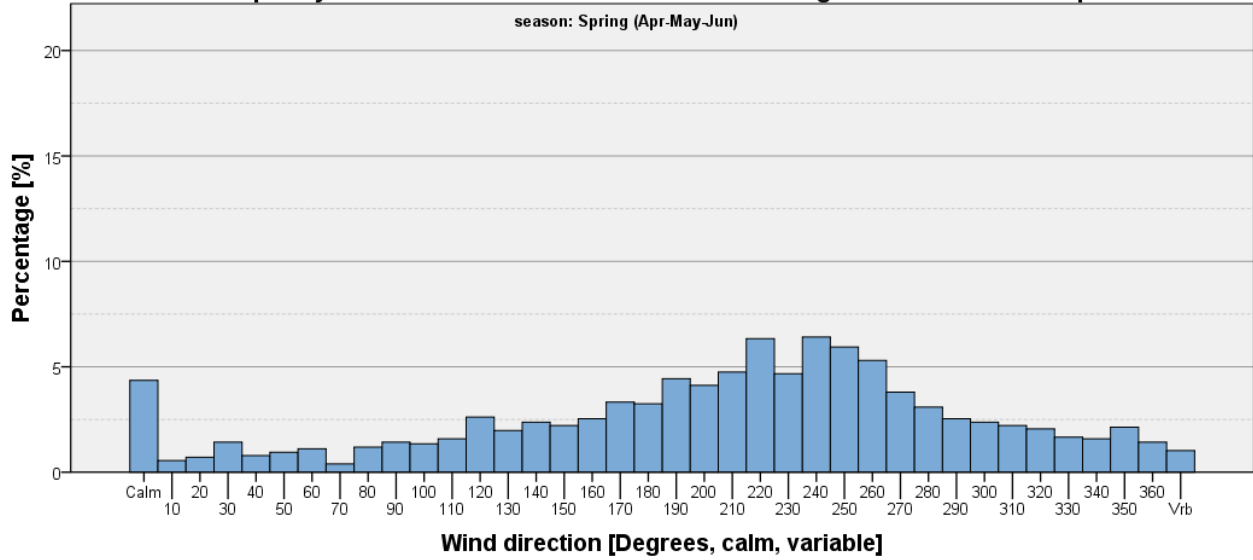


Figure 303

EKKA. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

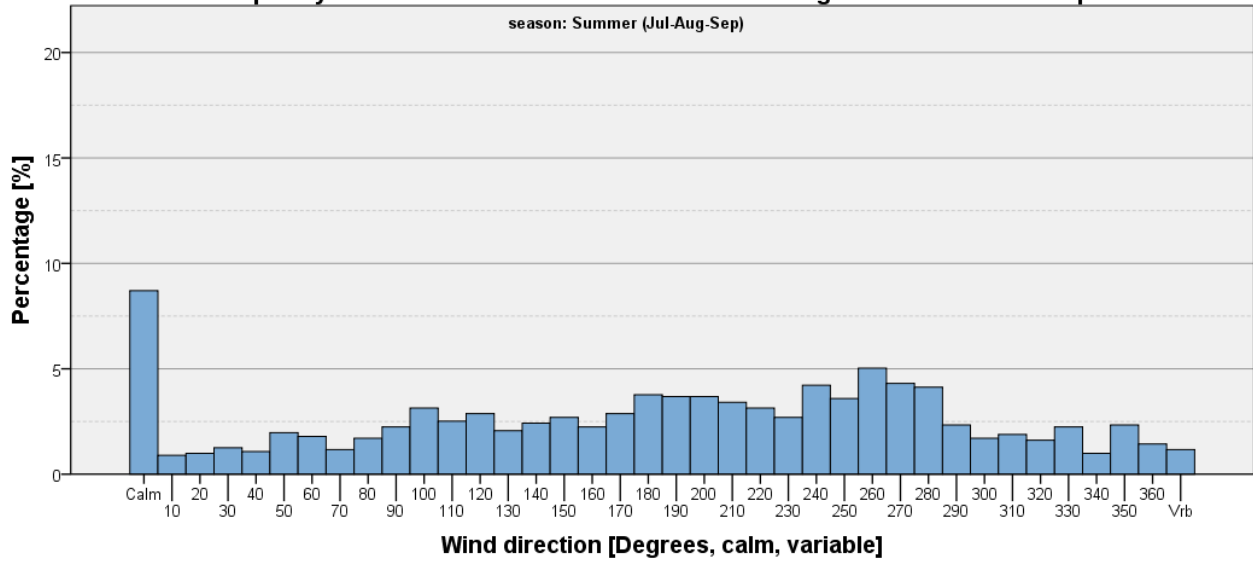


Figure 304

EKKA. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

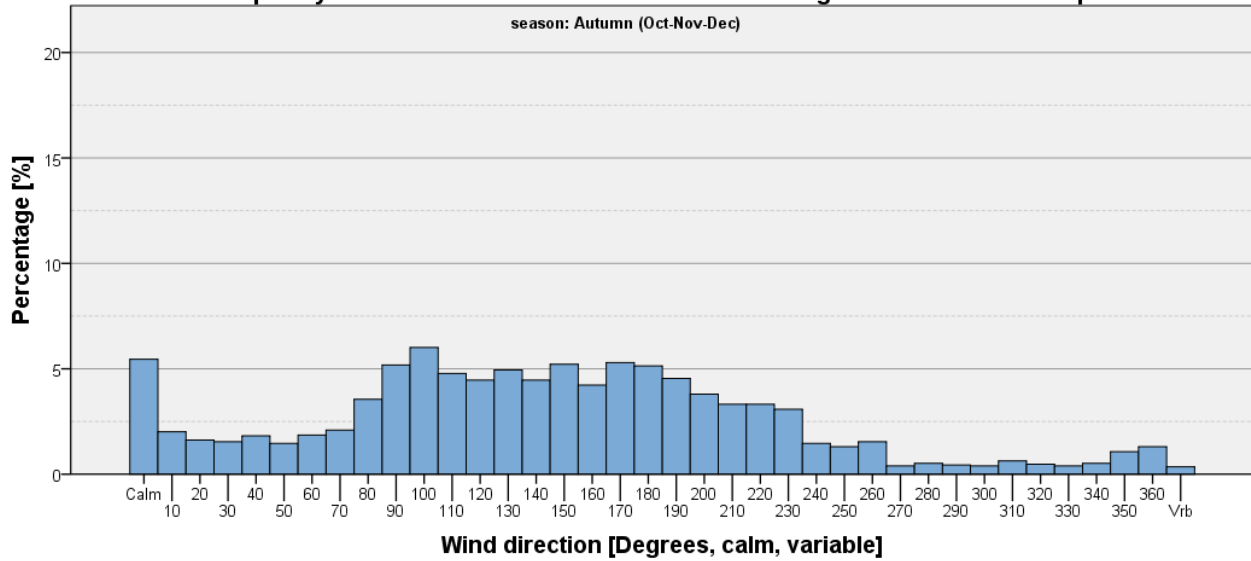


Figure 305

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 88: EKKA - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	18.45	6.26	4.06	16.62	11.33
All other observations	81.55	93.74	95.94	83.38	88.67
Total	100	100	100	100	100

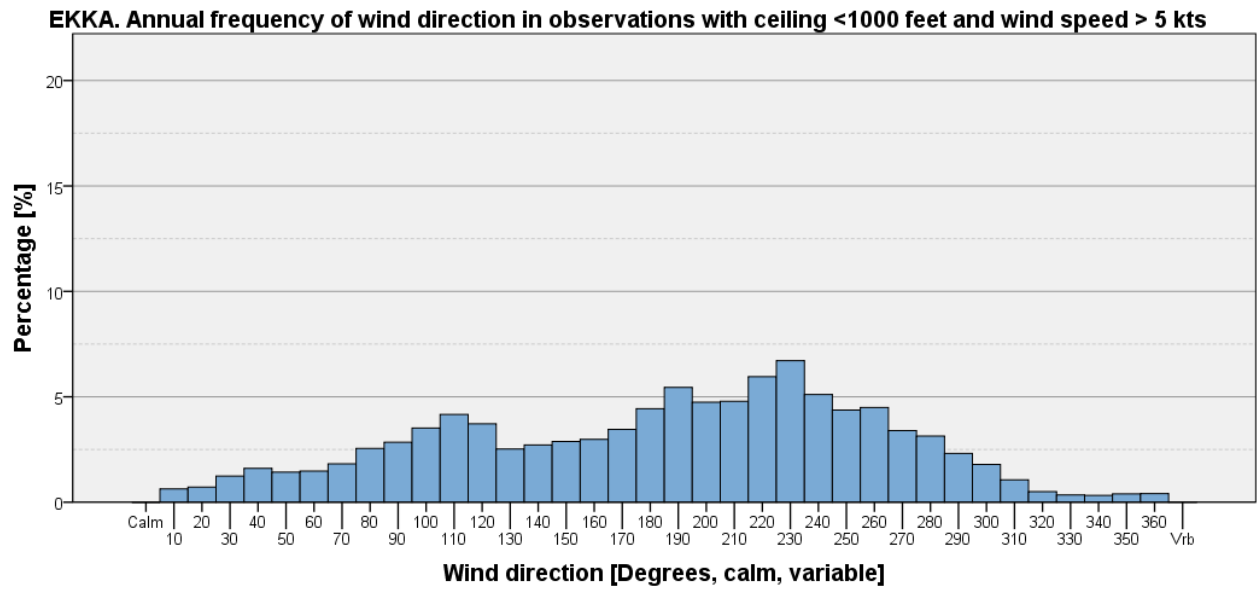


Figure 306

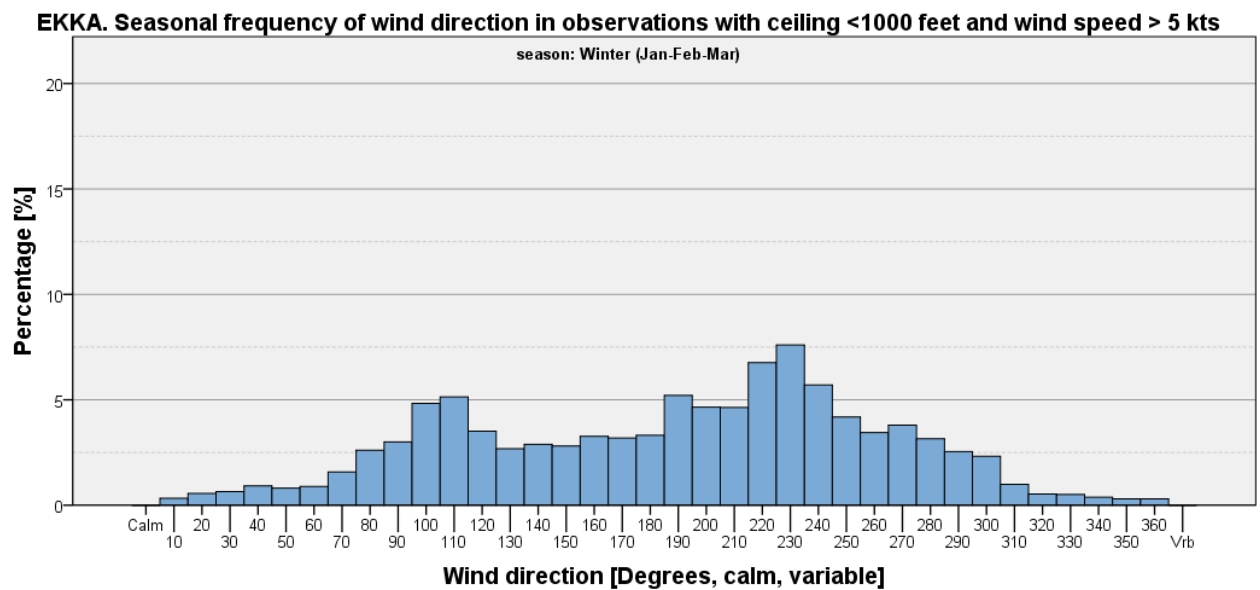


Figure 307

EKKA. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

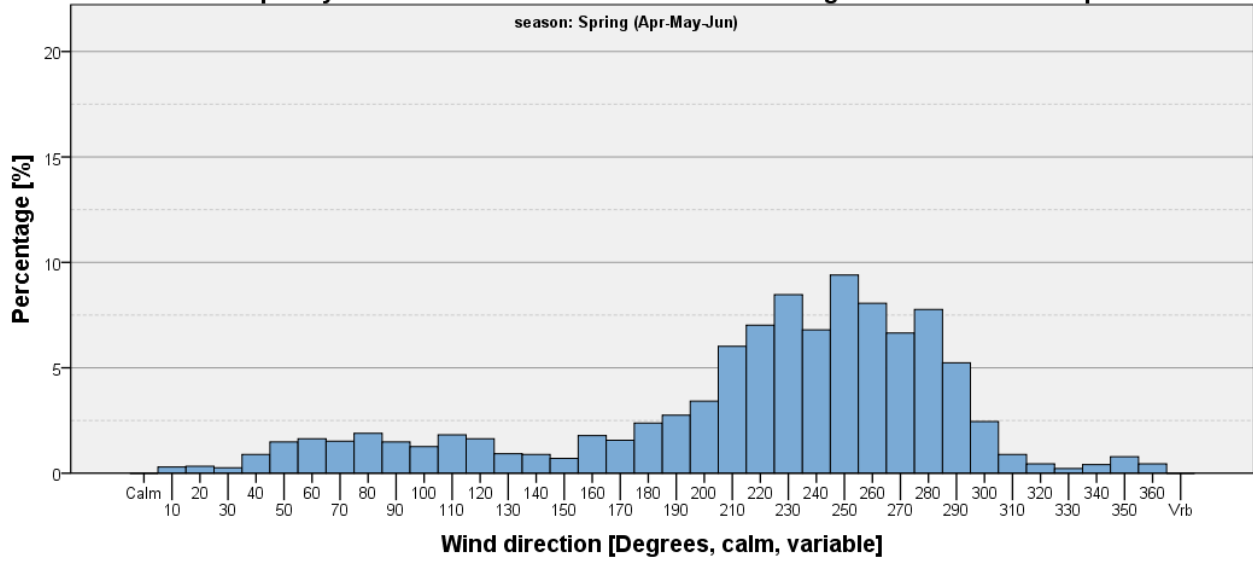


Figure 308

EKKA. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

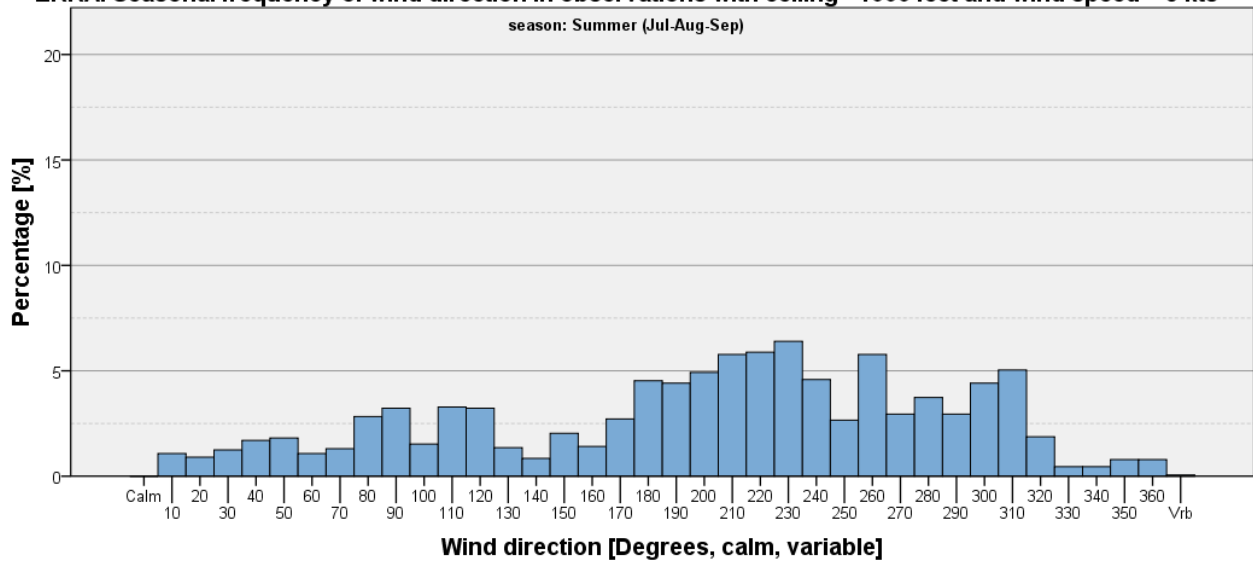


Figure 309

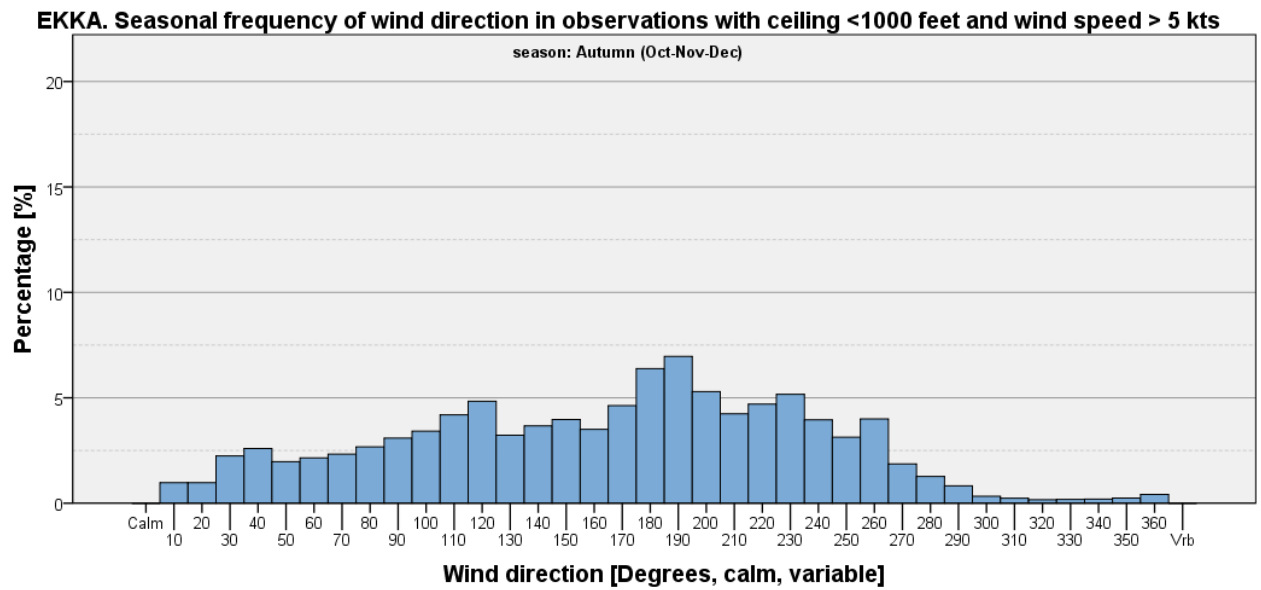


Figure 310

Ceiling < 500 feet

Table 89: EKKA - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	11.70	3.46	2.49	9.19	6.70
All other observations	88.30	96.54	97.51	90.81	93.30
Total	100	100	100	100	100

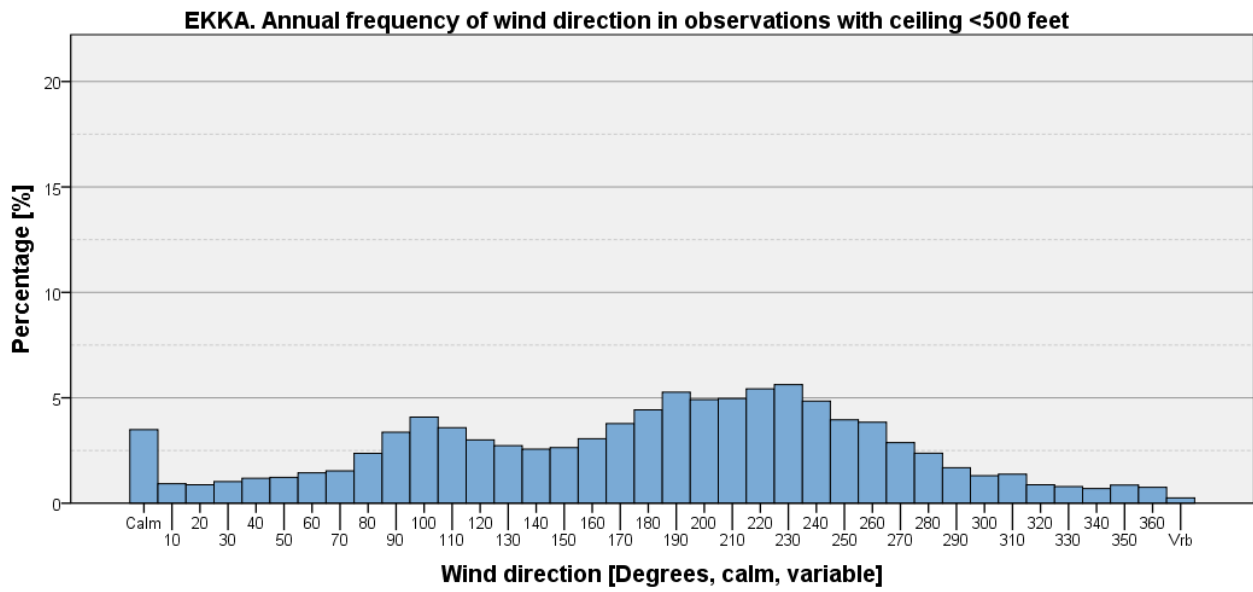


Figure 311

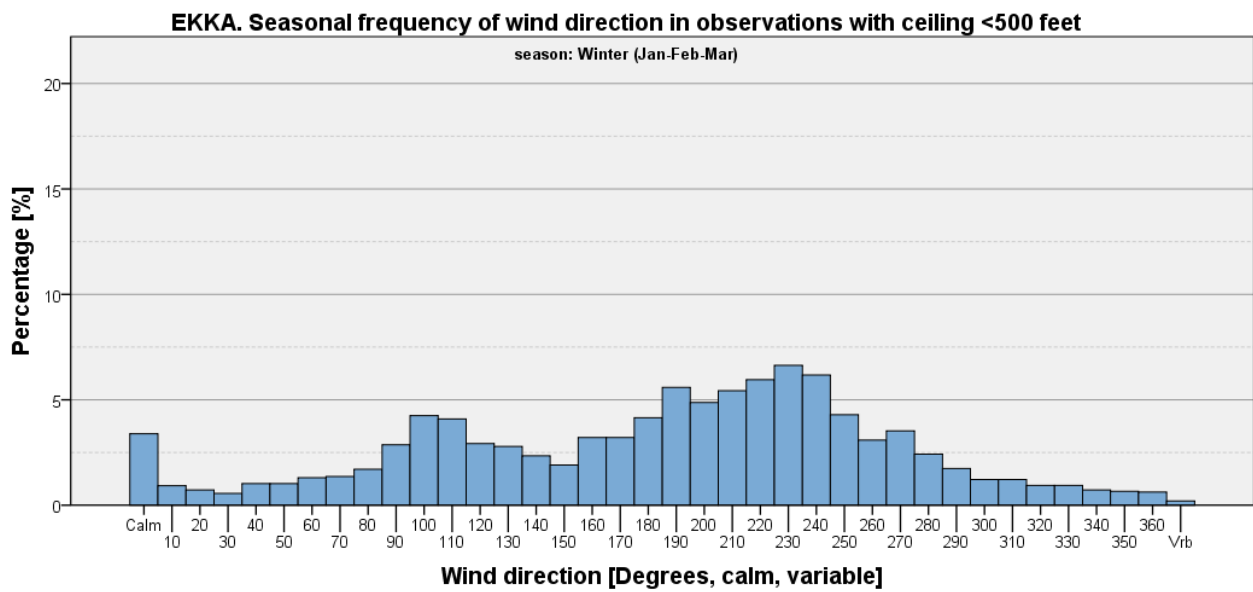


Figure 312

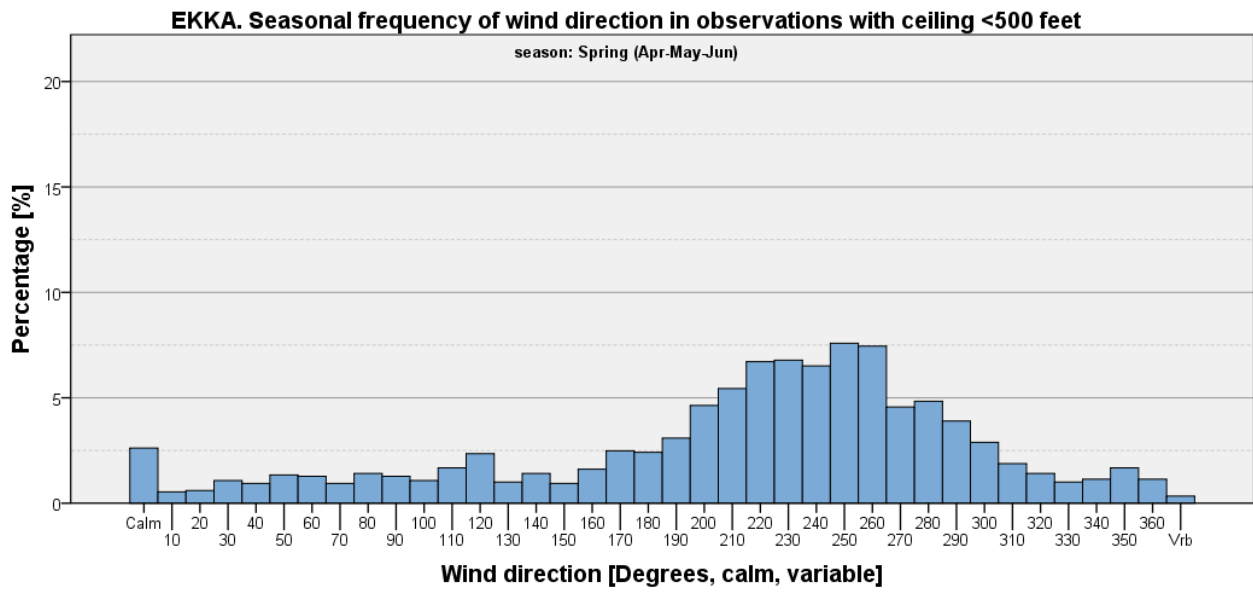


Figure 313

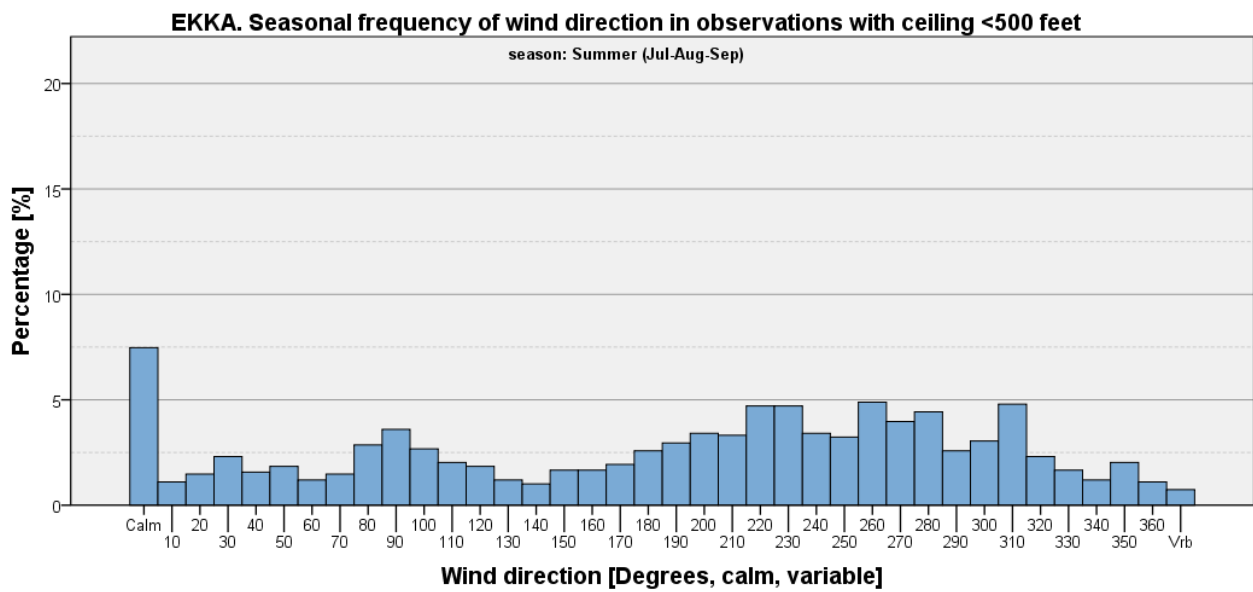


Figure 314

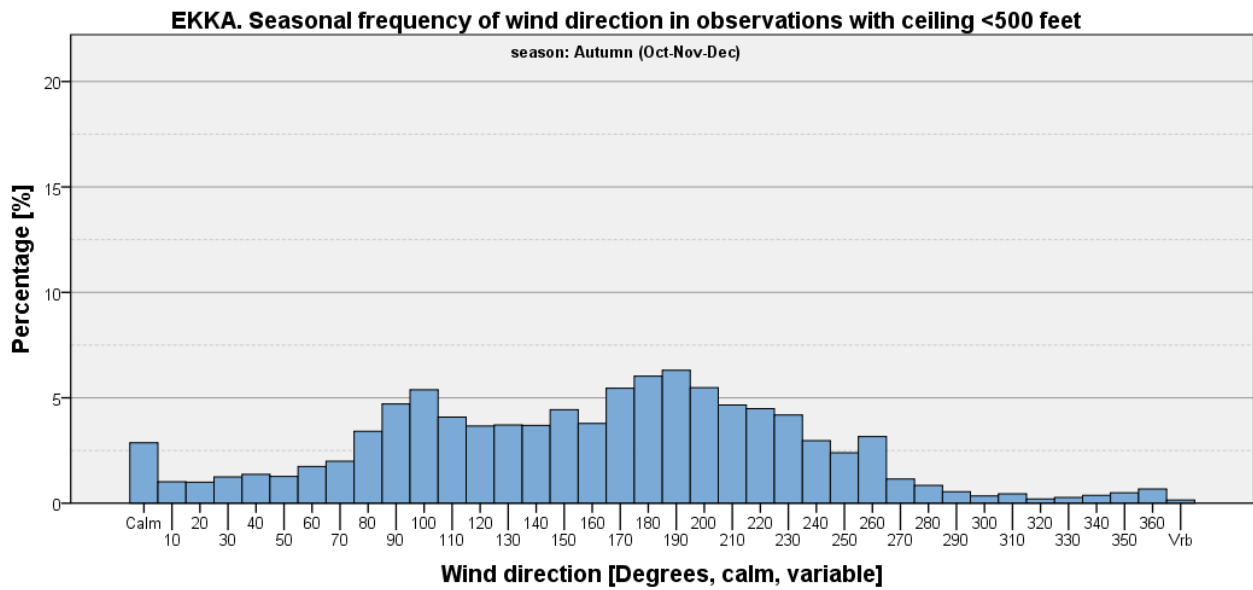


Figure 315

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 90: EKKA - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	5.03	1.79	1.55	3.92	3.07
All other Observations	94.97	98.21	98.45	96.08	96.93
Total	100	100	100	100	100

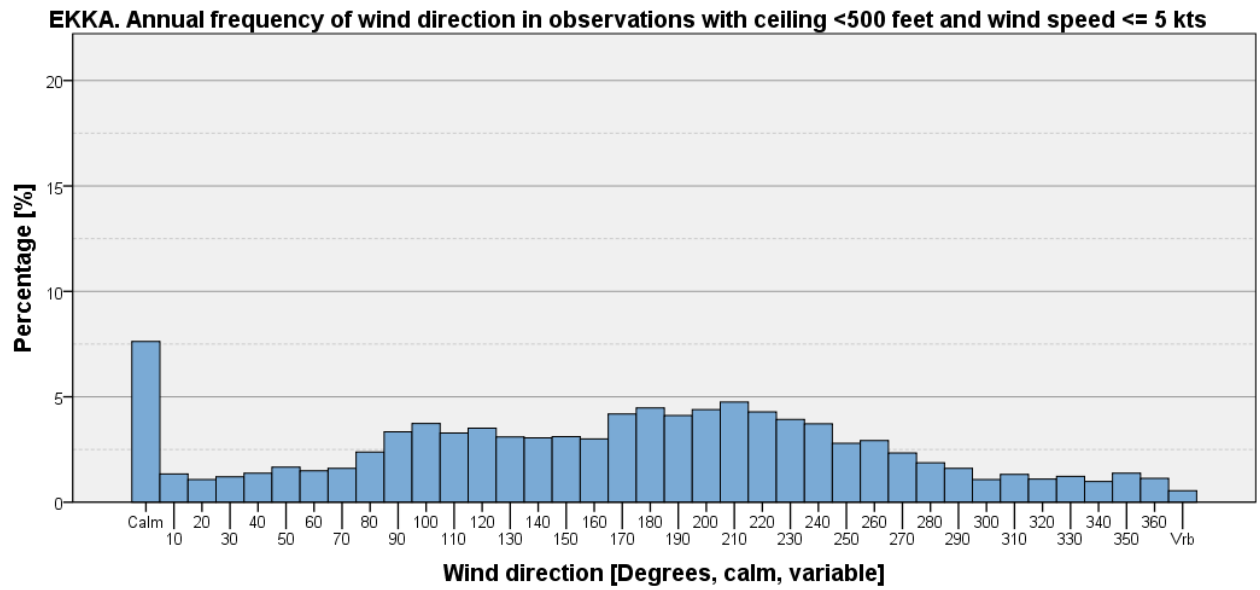


Figure 316

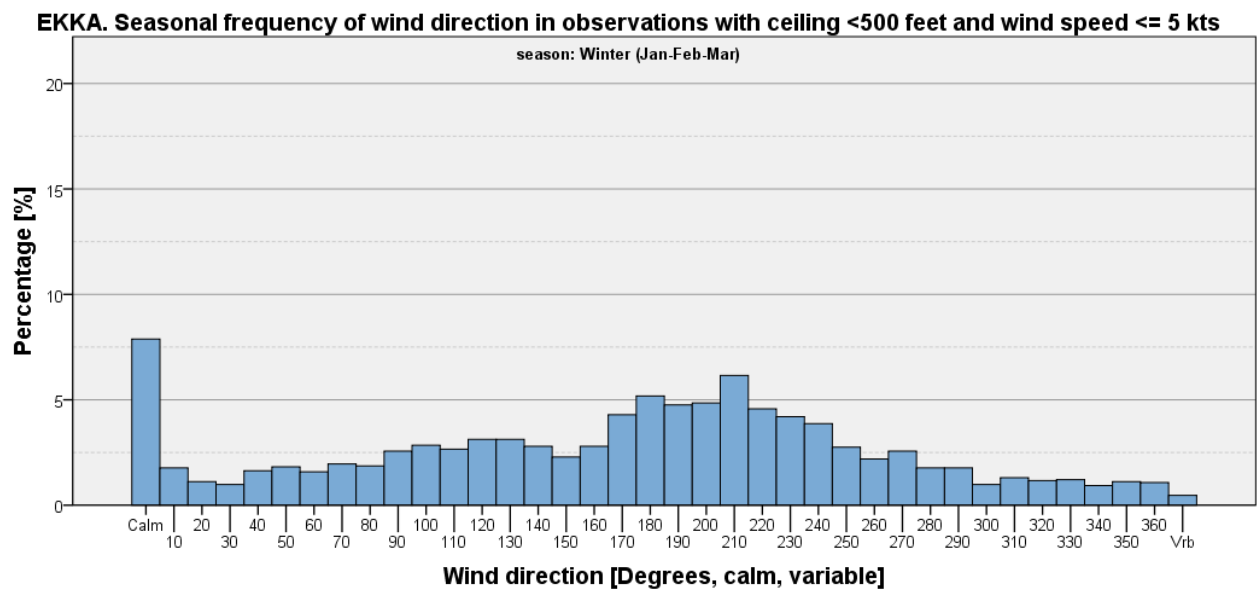


Figure 317

EKKA. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

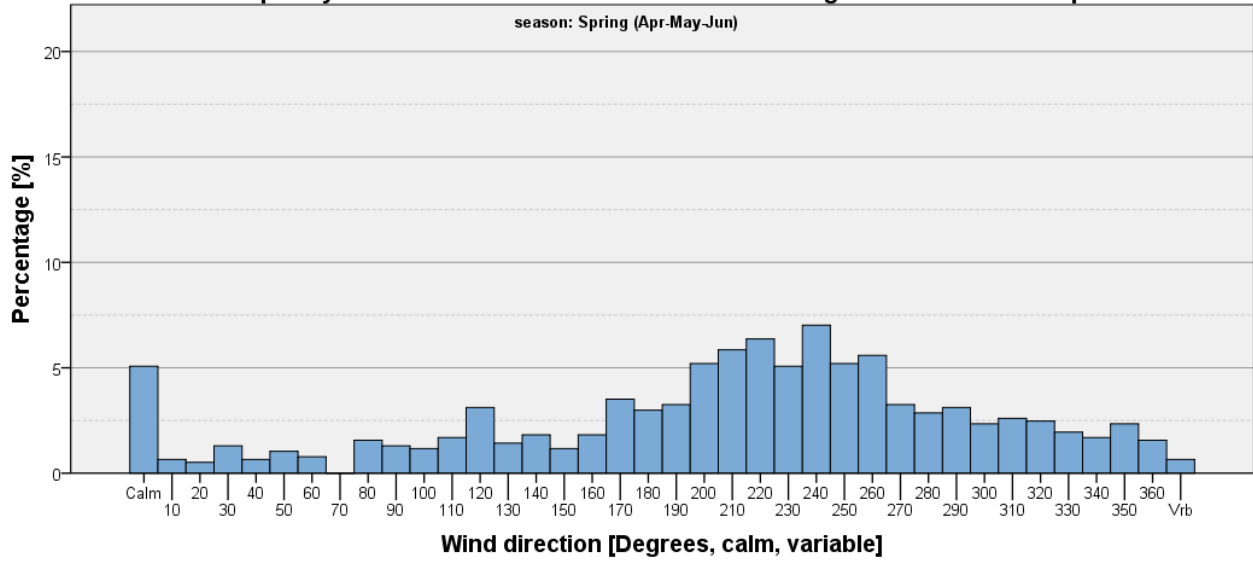


Figure 318

EKKA. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

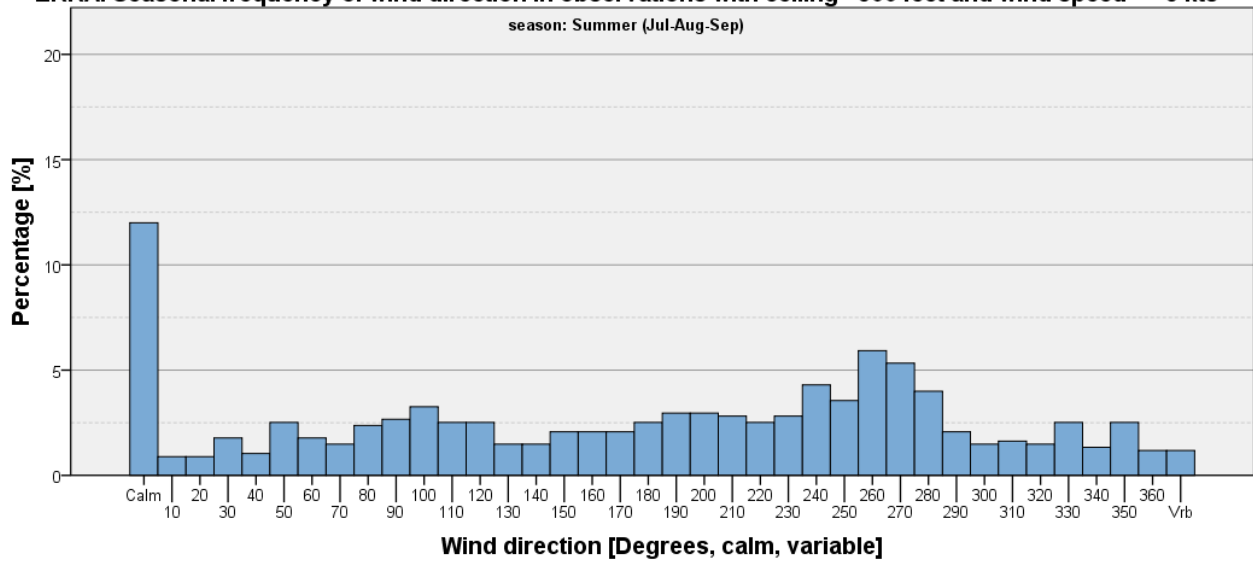


Figure 319

EKKA. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed ≤ 5 kts

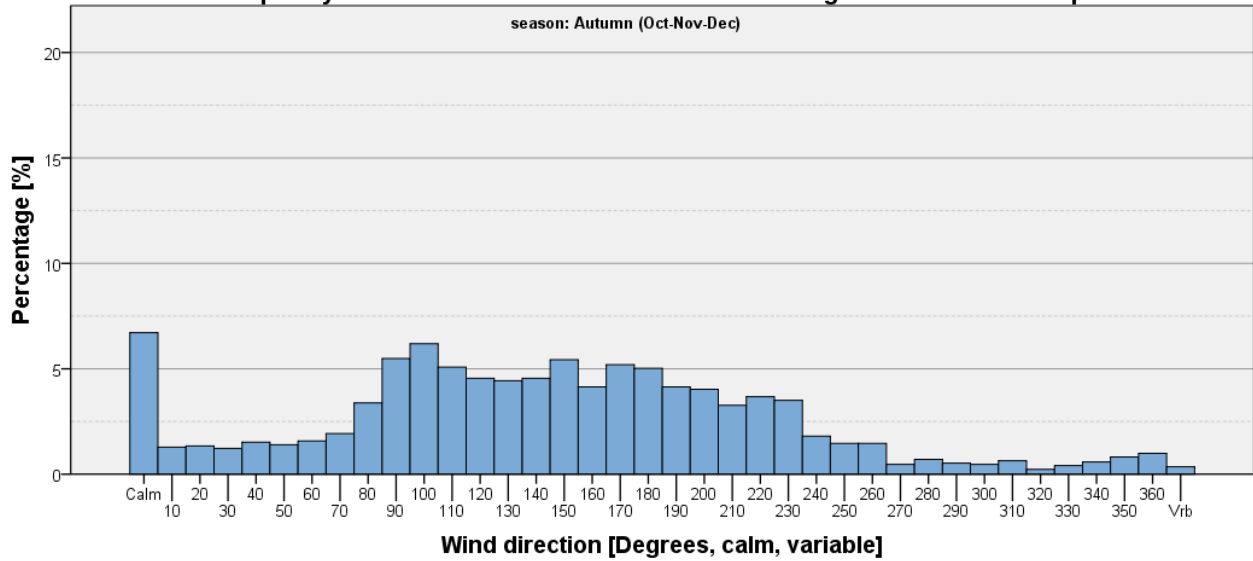


Figure 320

Ceiling < 500 feet and Wind Speed > 5 kts

Table 91: EKKA - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	6.67	1.67	0.94	5.27	3.63
All other observations	93.33	98.33	99.06	94.73	96.37
Total	100	100	100	100	100

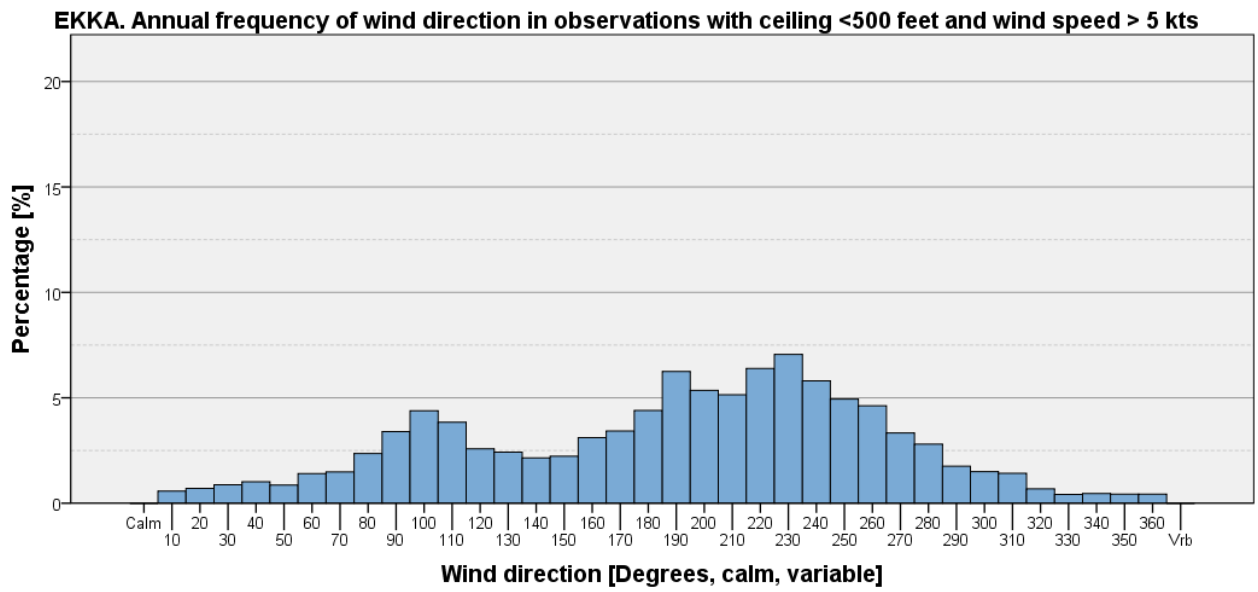


Figure 321

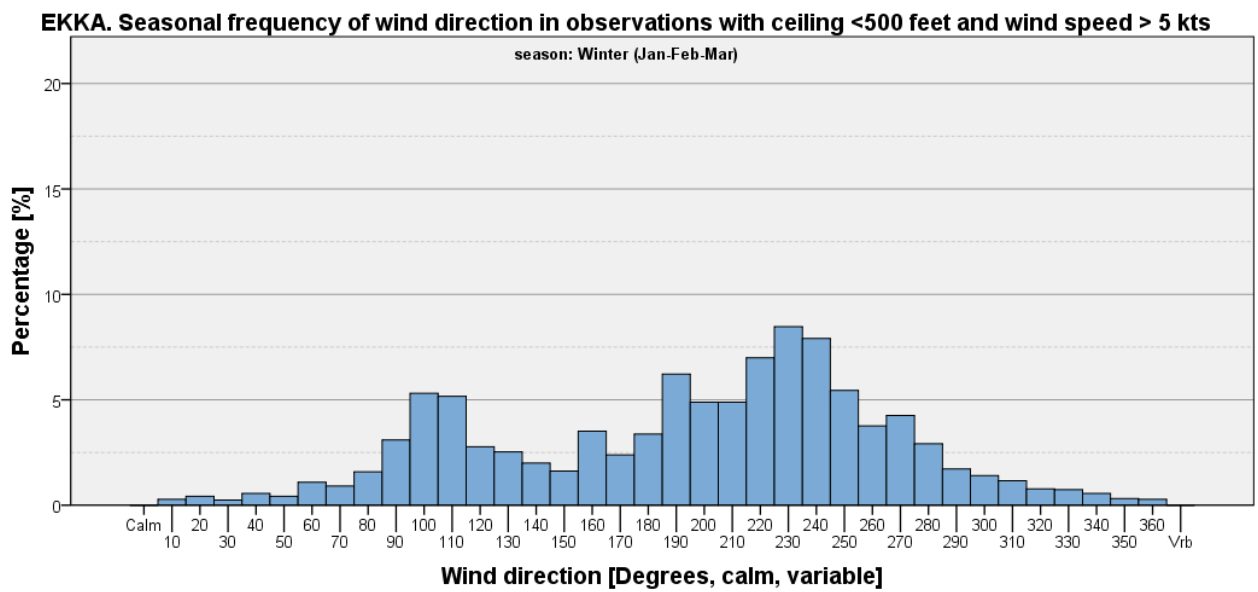


Figure 322

EKKA. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

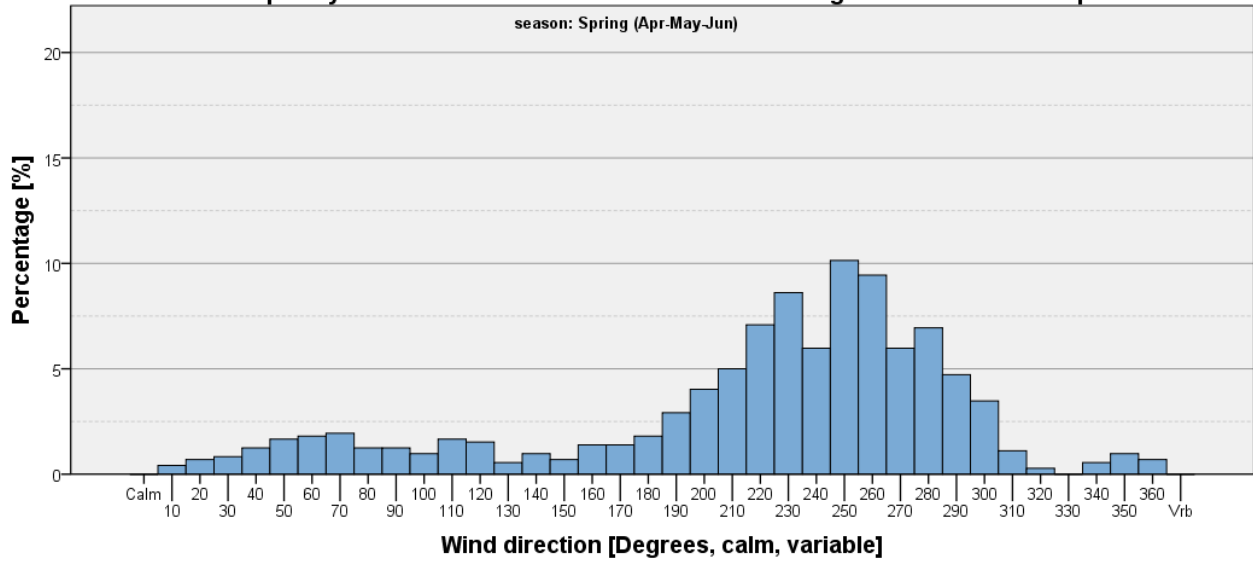


Figure 323

EKKA. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

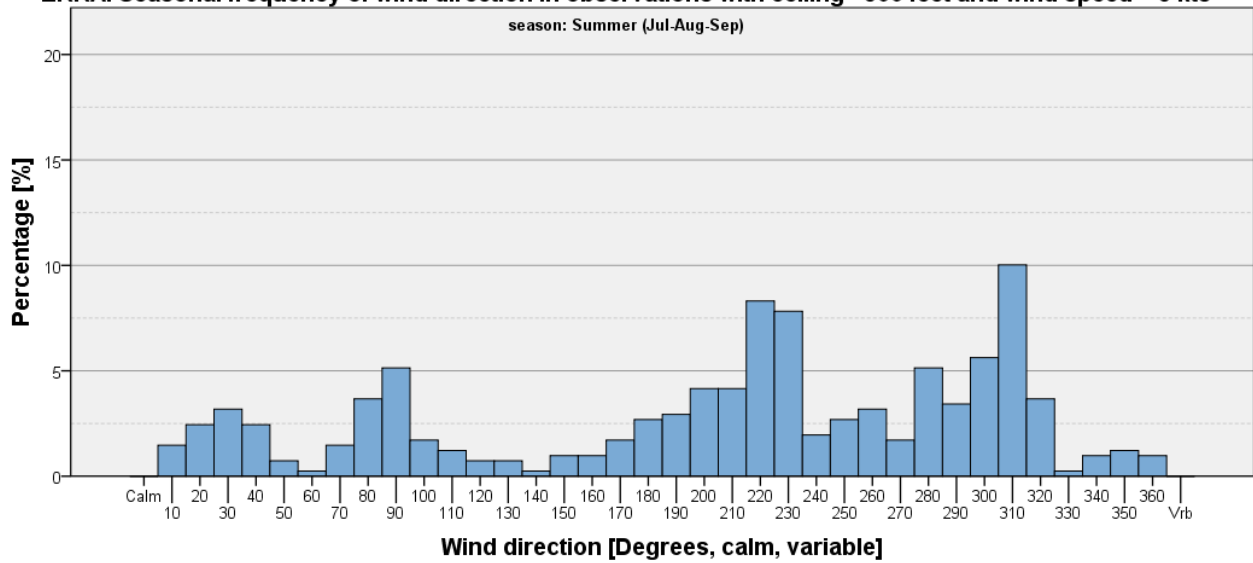


Figure 324

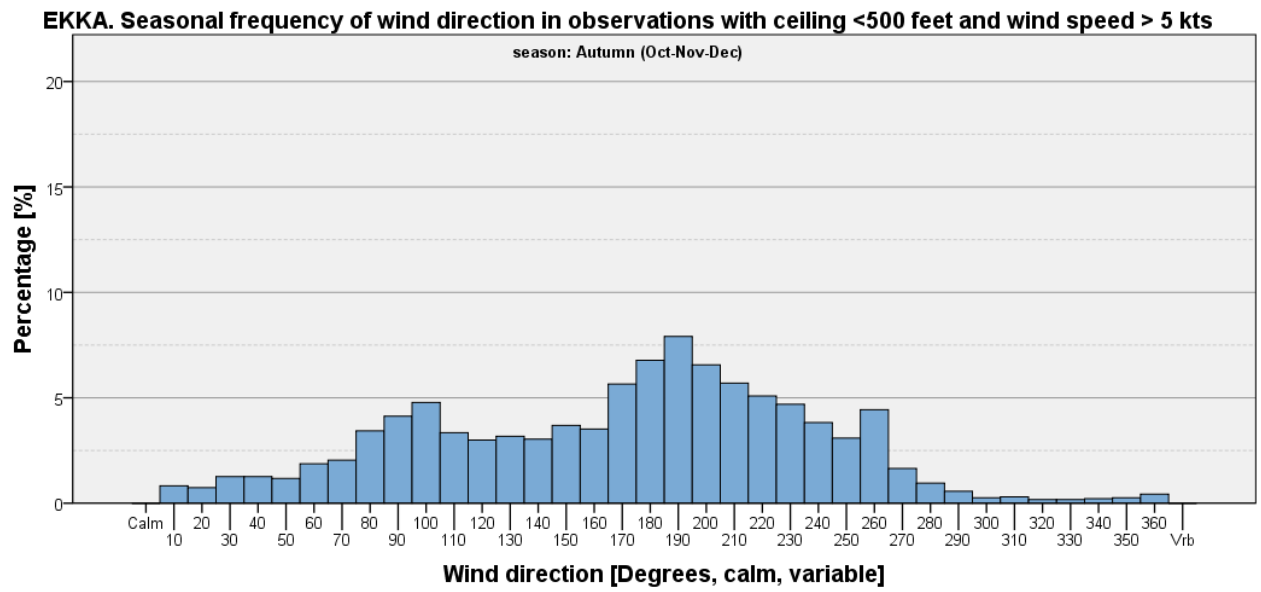
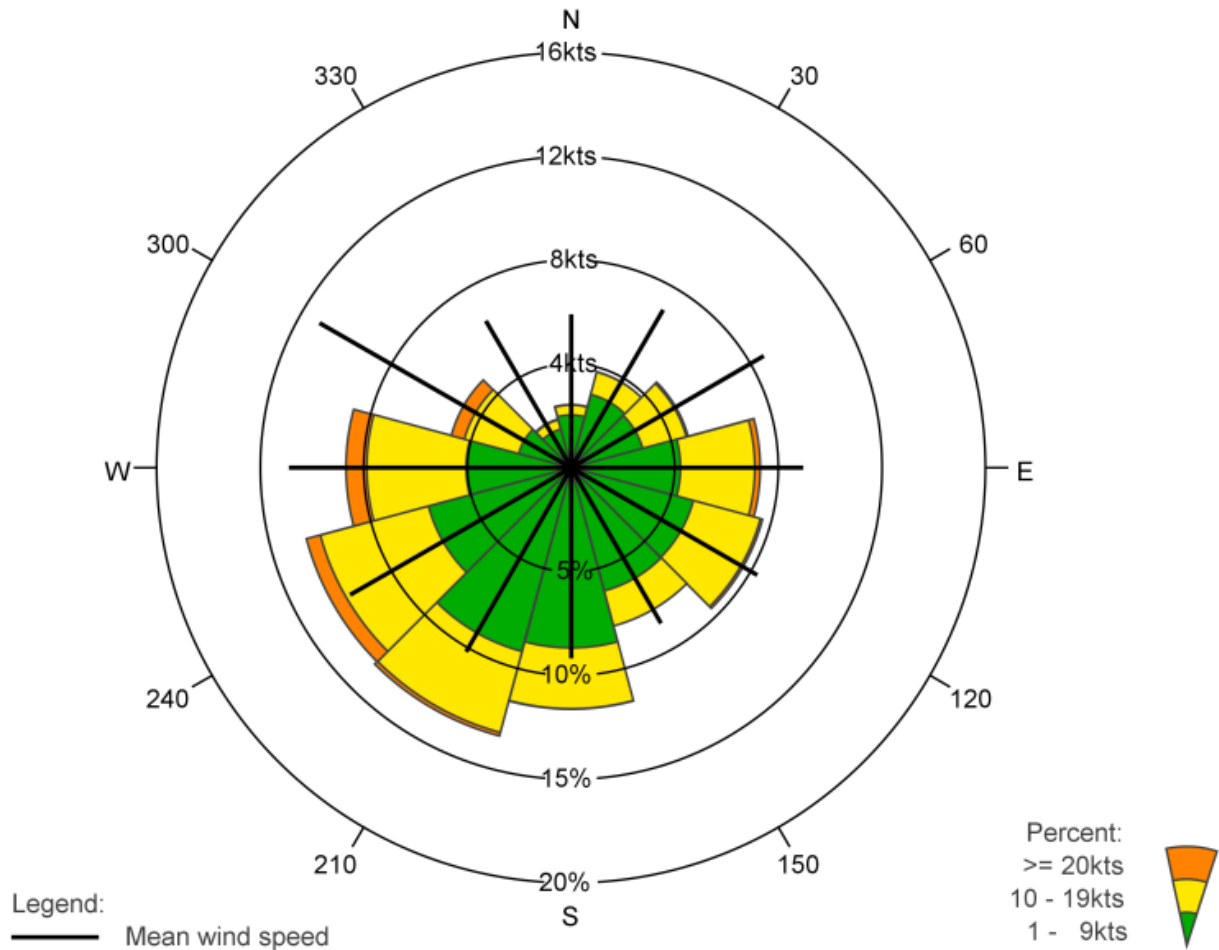


Figure 325

Wind Roses

EKKA: MIDTJYLLANDS LUFTHAVN, AUTUMN & WINTER

01-01-2009 - 31-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.0	4.8	5.8	9.1	9.6	7.9	11.6	13.4	13.2	10.9	6.0	2.4	97.8
% 1 - 9kts	2.5	3.7	3.6	5.3	6.1	6.1	8.7	9.2	7.1	5.1	2.6	1.9	61.9
% 10 - 19kts	0.5	1.1	2.2	3.6	3.3	1.7	2.9	4.0	5.4	4.8	2.7	0.5	32.7
% >= 20kts	0.0	0.0	0.1	0.3	0.1	0.0	0.0	0.2	0.7	1.0	0.7	0.0	3.1
Mean wind speed	5.9	7.1	8.6	9.0	8.3	6.9	7.4	8.2	9.8	10.9	11.2	6.6	8.6
Max wind speed	24.0	21.0	25.0	30.0	24.0	21.0	22.0	28.0	36.0	45.0	46.0	29.0	46.0

Number of observations = 86305

Source: DMI

Calm defined as wind speed = 0kts

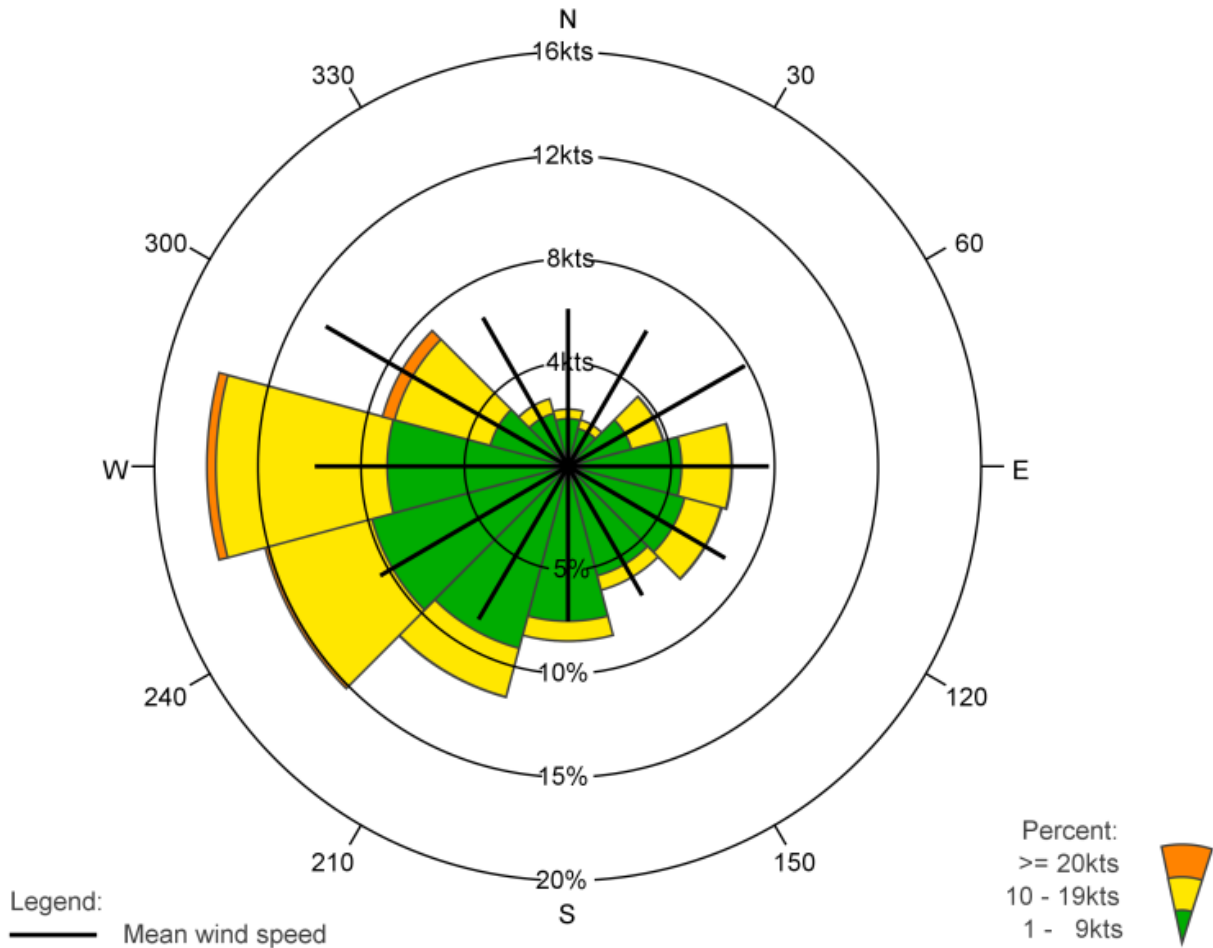
Number of observations with calm/varying wind direction: 1916=2.2%

Observations with calm/varying wind direction are not used in the statistics

Figure 326

EKKA: MIDTJYLLANDS LUFTHAVN, AUTUMN & WINTER

01-01-2009 - 31-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	2.8	2.3	4.8	8.0	7.7	6.2	8.4	11.5	15.2	17.5	9.3	3.4	97.0
% 1 - 9kts	2.3	1.9	3.2	5.5	5.9	5.5	7.5	9.1	9.8	8.7	3.9	2.6	65.8
% 10 - 19kts	0.5	0.4	1.6	2.4	1.8	0.7	1.0	2.4	5.2	8.3	4.8	0.7	29.8
% >= 20kts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.6	0.0	1.3
Mean wind speed	6.1	6.1	7.9	7.7	7.0	5.8	6.0	6.9	8.4	9.8	10.9	6.6	8.0
Max wind speed	19.0	20.0	25.0	25.0	24.0	18.0	21.0	22.0	29.0	30.0	33.0	22.0	33.0

Number of observations = 86554

Source: DMI

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 2622=3.0%

Observations with calm/varying wind direction are not used in the statistics

Figure 327

Availability

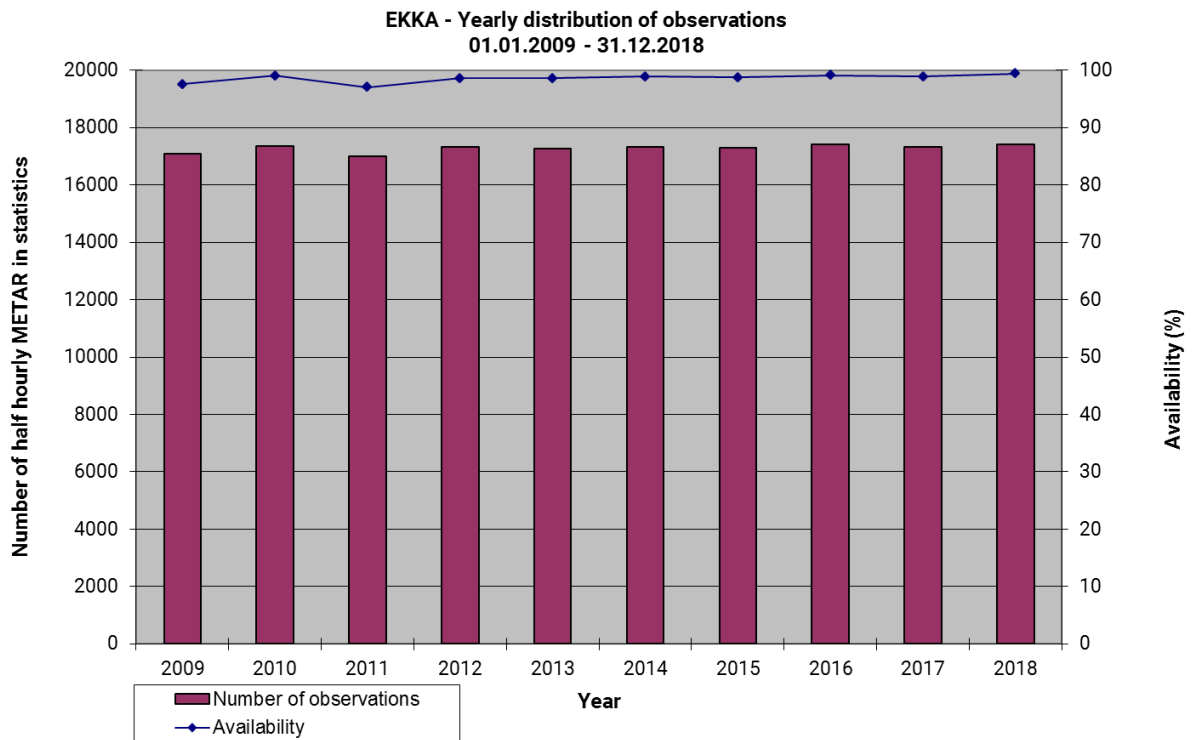


Figure 328

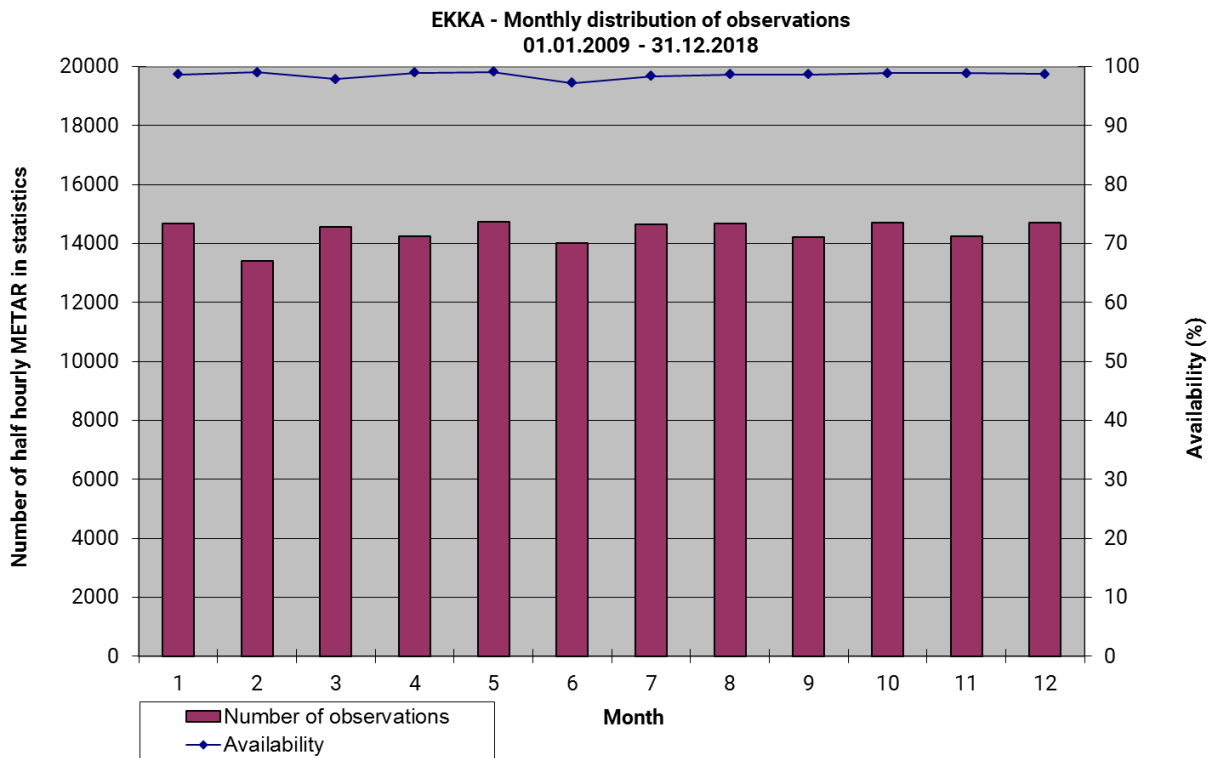


Figure 329

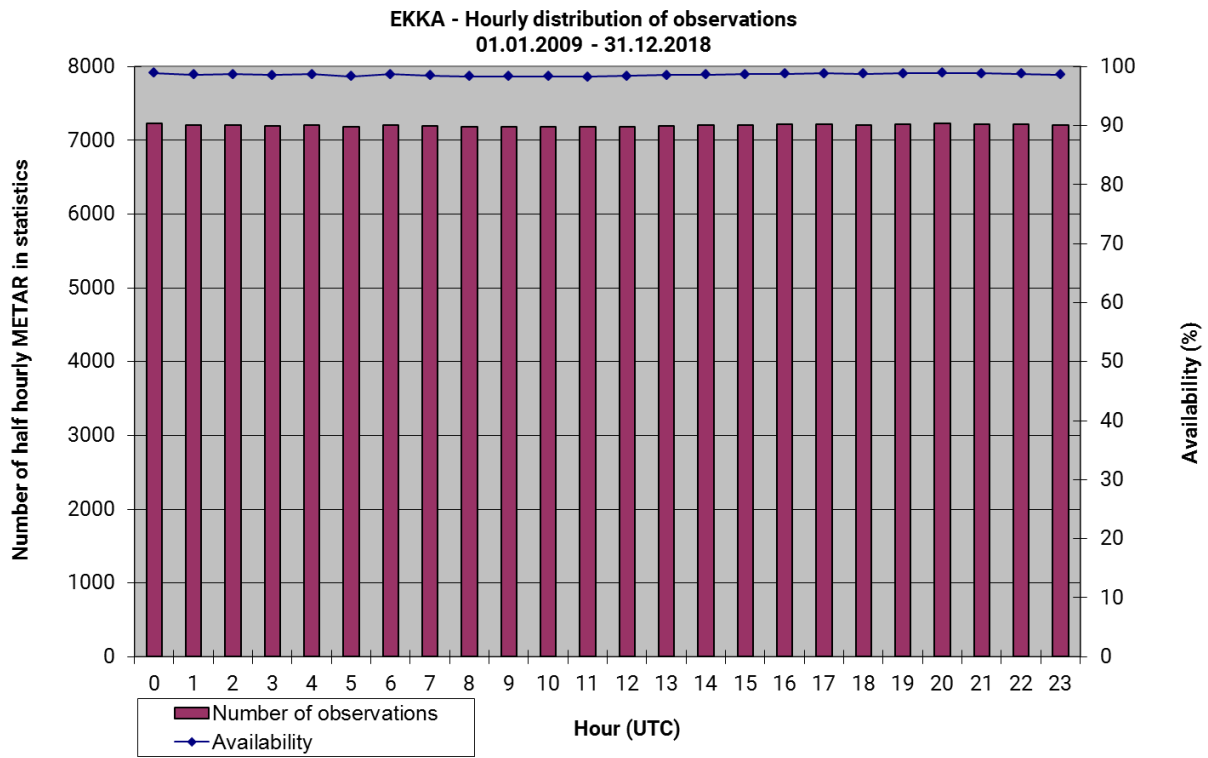


Figure 330

Table 92: EKKA. Average number of half hourly observations in statistics, 01.01.2009 – 31.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
1	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
2	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
3	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
4	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
5	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
6	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
7	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
10	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
11	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
12	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
13	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
14	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
15	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
16	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
17	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
18	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
19	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
20	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
21	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
22	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
23	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0

EKOD Hans Christian Andersen Airport

Odense

Airport location: 55,483°N 10,333°E Elevation: 17 m above MSL.

EKOD observations in statistics: 50,241 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 28.7 %. For more information, please go to the 'Availability' section.

All EKOD METAR are manual.

Cross Tables Visibility – Ceiling

Table 93: EKOD Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 50,241	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.0040	0.16	0.18	0.18	0.18	0.18	0.058	0.23
<350m	0.010	0.40	0.61	0.62	0.62	0.62	0.19	0.81
<600m	0.010	0.46	0.88	0.91	0.91	0.92	0.26	1.17
<800 m	0.010	0.49	1.03	1.08	1.09	1.10	0.29	1.38
<1.5 km	0.010	0.56	1.55	1.82	1.88	1.90	0.43	2.33
<3.0 km	0.010	0.63	2.83	4.16	4.54	4.66	1.02	5.67
< 5.0 km	0.012	0.66	3.74	7.46	8.87	9.35	2.86	12.21
< 8.0 km	0.012	0.67	4.10	10.36	13.42	14.60	5.89	20.49
>= 8.0 km or CAVOK	0.0020	0.0020	0.11	2.68	7.32	10.80	68.71	79.51
Total	0.014	0.67	4.20	13.04	20.74	25.40	74.60	100

Table 94: EKOD - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 11,849	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.017	0.37	0.38	0.38	0.38	0.38	0.017	0.40
<350m	0.017	0.93	1.20	1.22	1.22	1.22	0.034	1.25
<600m	0.017	1.07	1.86	1.93	1.96	1.96	0.093	2.05
<800 m	0.017	1.11	2.18	2.30	2.35	2.35	0.11	2.46
<1.5 km	0.017	1.29	3.44	3.92	4.13	4.14	0.26	4.41
<3.0 km	0.017	1.48	6.20	8.75	9.74	10.04	1.16	11.21
< 5.0 km	0.017	1.51	7.80	14.09	16.96	18.04	3.88	21.93
< 8.0 km	0.017	1.54	8.48	18.92	24.26	26.47	7.49	33.97
>= 8.0 km or CAVOK	0	0	0.21	4.73	11.18	15.84	50.19	66.03
Total	0.017	1.54	8.69	23.65	35.45	42.32	57.68	100

Table 95: EKOD - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 12,665	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.047	0.063	0.063	0.063	0.063	0.016	0.079
<350m	0.024	0.17	0.28	0.28	0.28	0.28	0.032	0.32
<600m	0.024	0.19	0.36	0.36	0.36	0.36	0.032	0.39
<800 m	0.024	0.21	0.39	0.39	0.39	0.39	0.039	0.43
<1.5 km	0.024	0.26	0.54	0.56	0.58	0.58	0.055	0.64
<3.0 km	0.024	0.28	0.97	1.30	1.37	1.39	0.31	1.70
< 5.0 km	0.024	0.32	1.40	2.78	3.20	3.33	1.36	4.69
< 8.0 km	0.024	0.34	1.64	4.75	6.11	6.58	3.60	10.18
>= 8.0 km or CAVOK	0	0	0.032	1.42	4.69	7.11	82.71	89.82
Total	0.024	0.34	1.67	6.17	10.80	13.69	86.31	100

Table 96: EKOD - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 13,785	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.036	0.051	0.051	0.051	0.051	0.044	0.094
<350m	0	0.058	0.20	0.20	0.20	0.20	0.18	0.38
<600m	0	0.058	0.25	0.25	0.25	0.25	0.23	0.49
<800 m	0	0.058	0.28	0.28	0.28	0.28	0.29	0.57
<1.5 km	0	0.058	0.30	0.32	0.33	0.33	0.40	0.73
<3.0 km	0	0.058	0.40	0.72	0.83	0.86	0.70	1.56
< 5.0 km	0	0.058	0.56	1.80	2.26	2.42	1.97	4.40
< 8.0 km	0	0.058	0.67	2.94	4.24	4.82	4.25	9.08
>= 8.0 km or CAVOK	0	0	0.065	1.52	4.51	6.88	84.04	90.92
Total	0	0.058	0.74	4.46	8.75	11.71	88.29	100

Table 97: EKOD - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 11,942	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.20	0.23	0.24	0.24	0.24	0.16	0.40
<350m	0	0.53	0.85	0.87	0.87	0.88	0.51	1.39
<600m	0	0.62	1.20	1.23	1.23	1.24	0.69	1.93
<800 m	0	0.64	1.42	1.51	1.52	1.54	0.72	2.26
<1.5 km	0	0.75	2.17	2.78	2.84	2.90	1.04	3.94
<3.0 km	0	0.84	4.27	6.62	7.01	7.16	1.98	9.14
< 5.0 km	0.0084	0.86	5.89	12.39	14.47	15.09	4.45	19.54
< 8.0 km	0.0084	0.86	6.30	16.37	21.01	22.59	8.63	31.23
>= 8.0 km or CAVOK	0.0084	0.0084	0.13	3.32	9.54	14.24	54.53	68.77
Total	0.017	0.87	6.42	19.69	30.55	36.84	63.16	100

Wind Direction Histograms

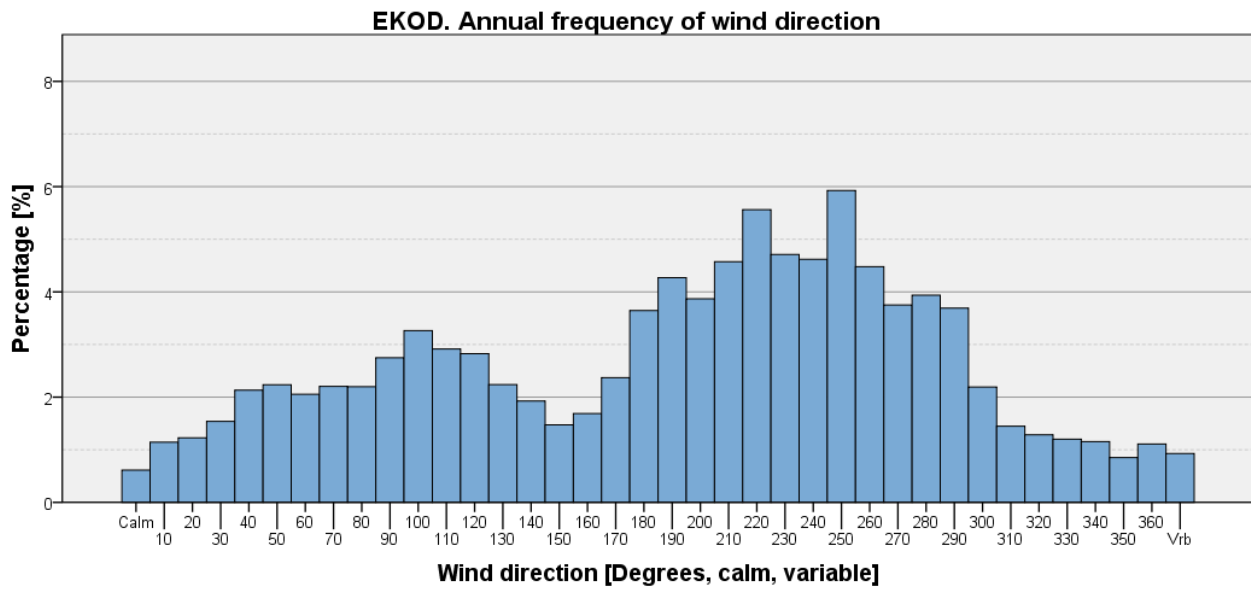


Figure 331

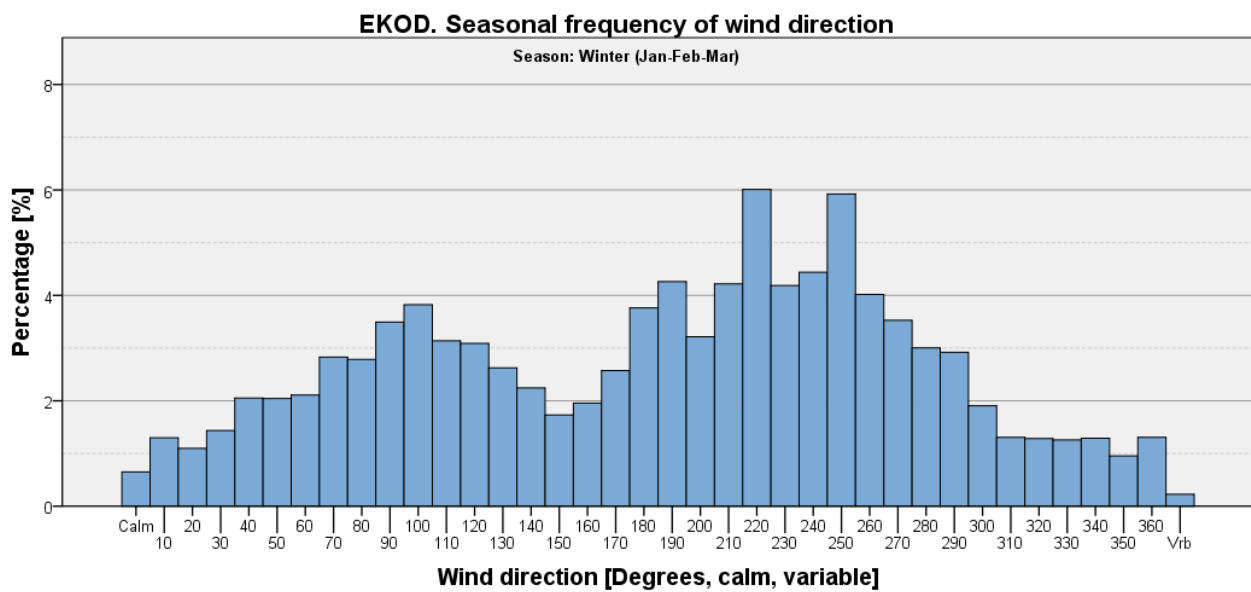


Figure 332

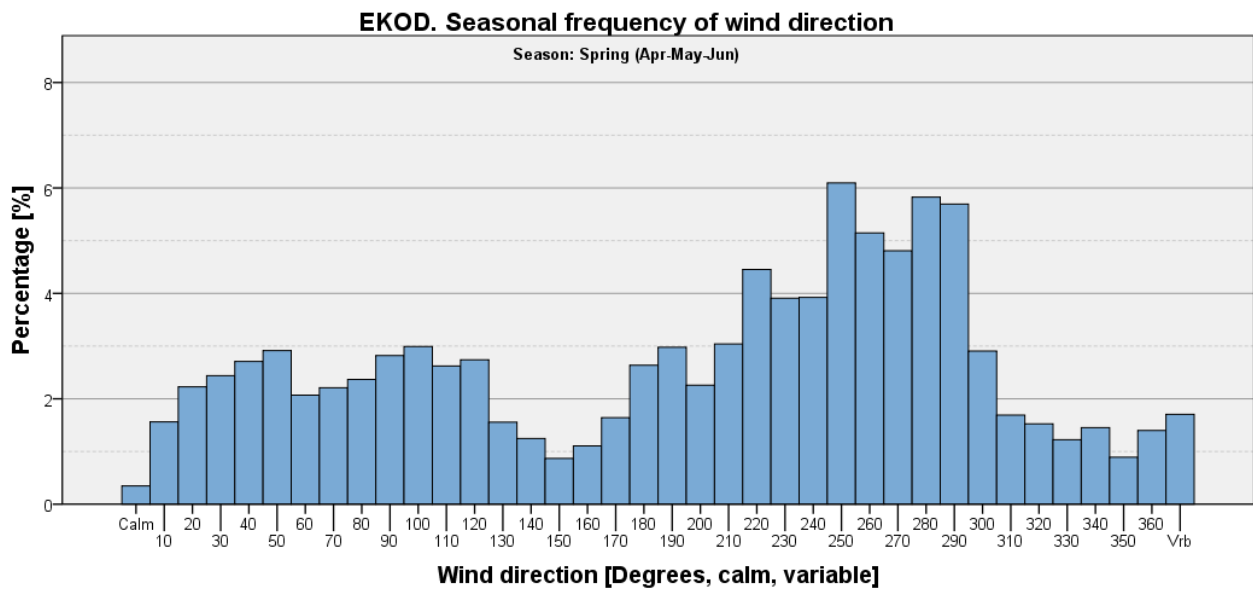


Figure 333

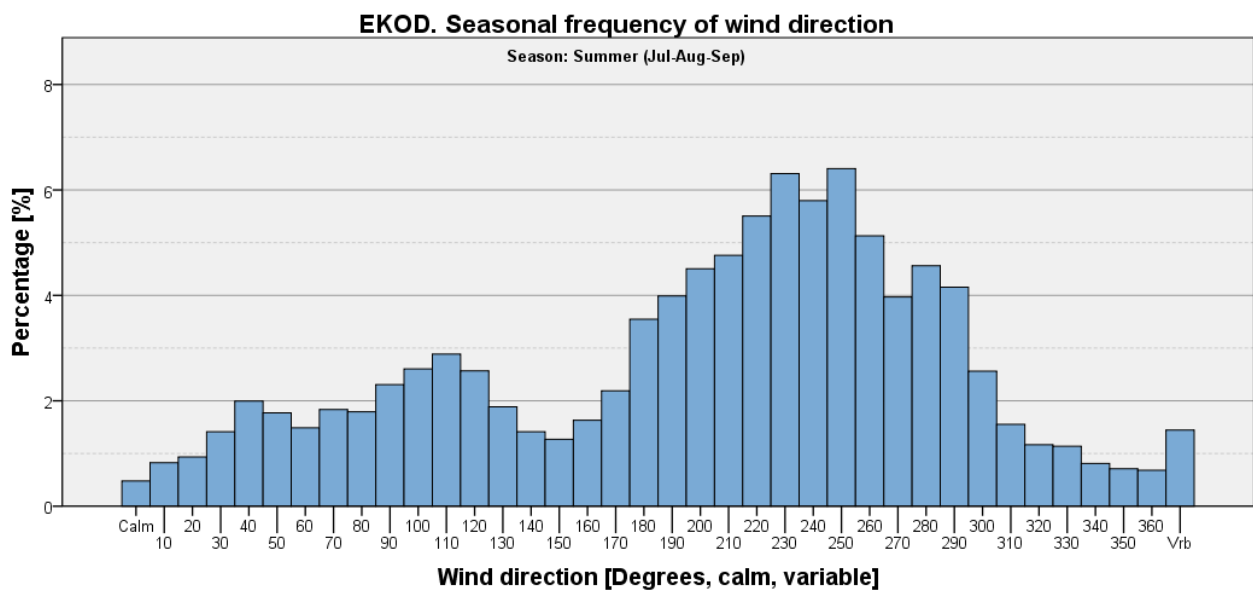


Figure 334

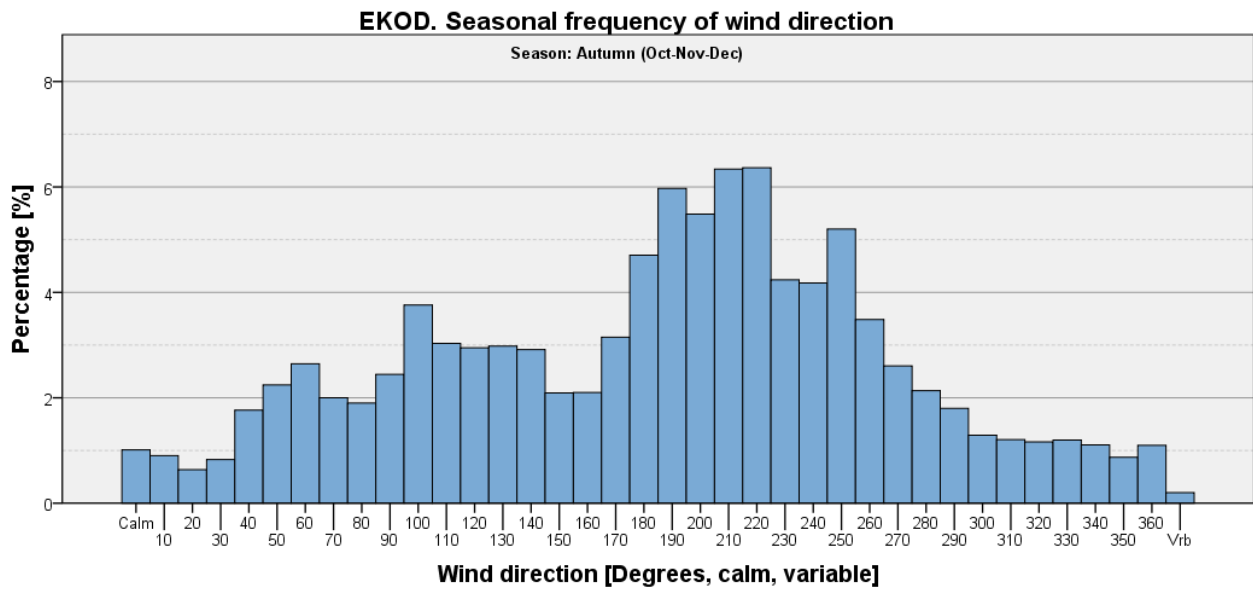


Figure 335

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 98: EKOD - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	2.46	0.43	0.57	2.26	1.38
All other observations	97.54	99.57	99.43	97.74	98.62
Total	100	100	100	100	100

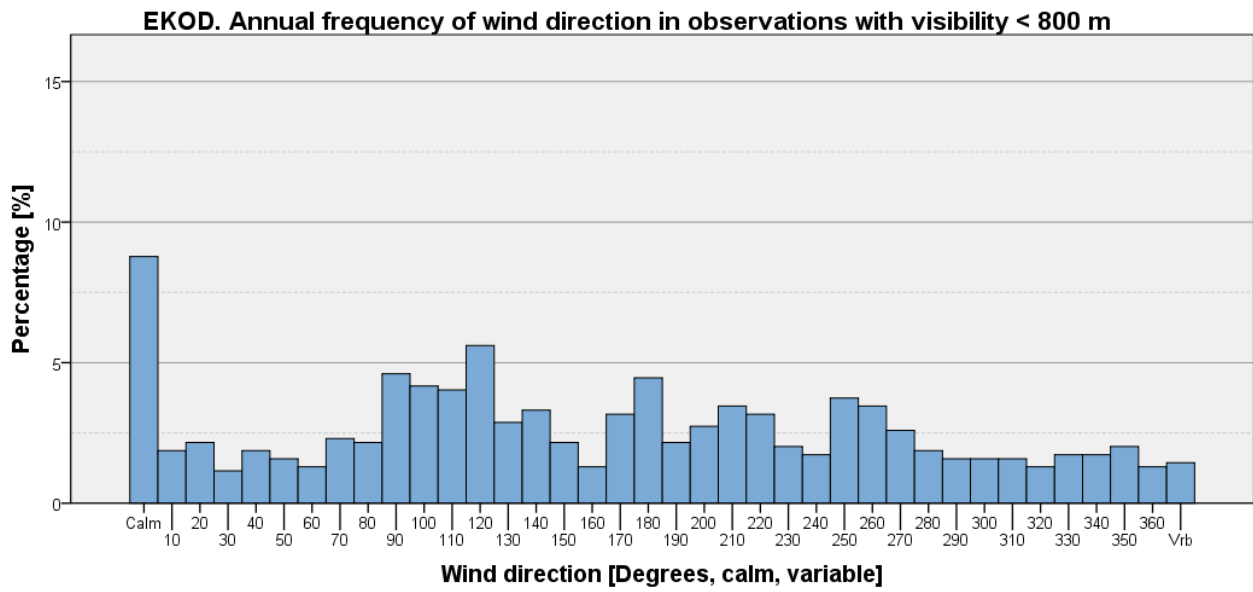


Figure 336

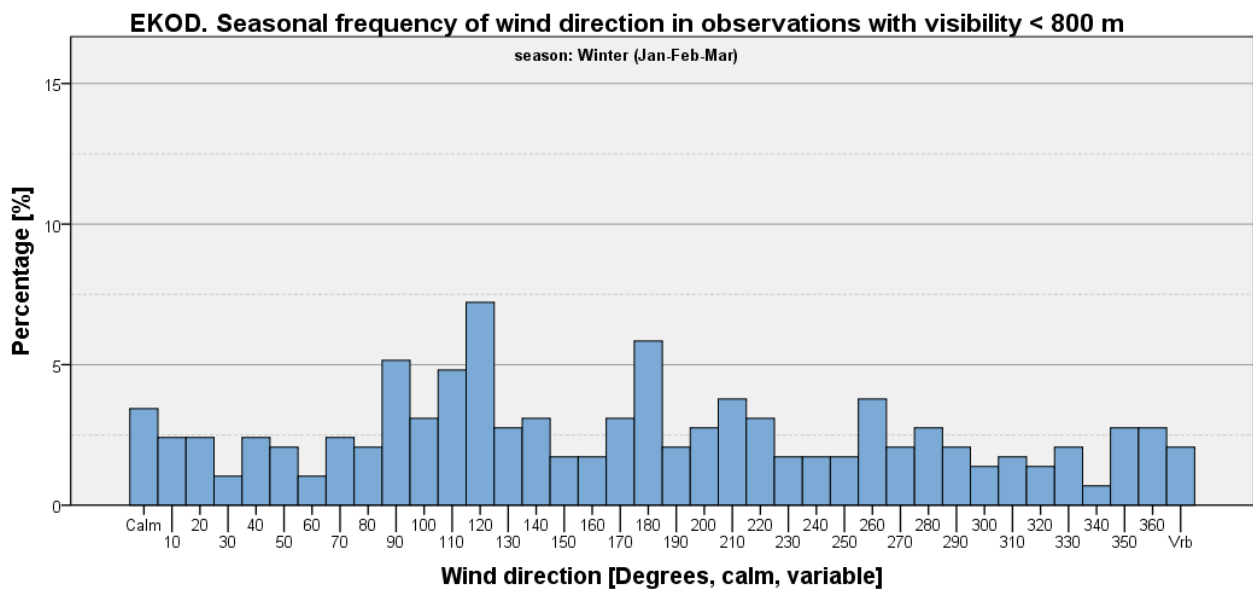


Figure 337

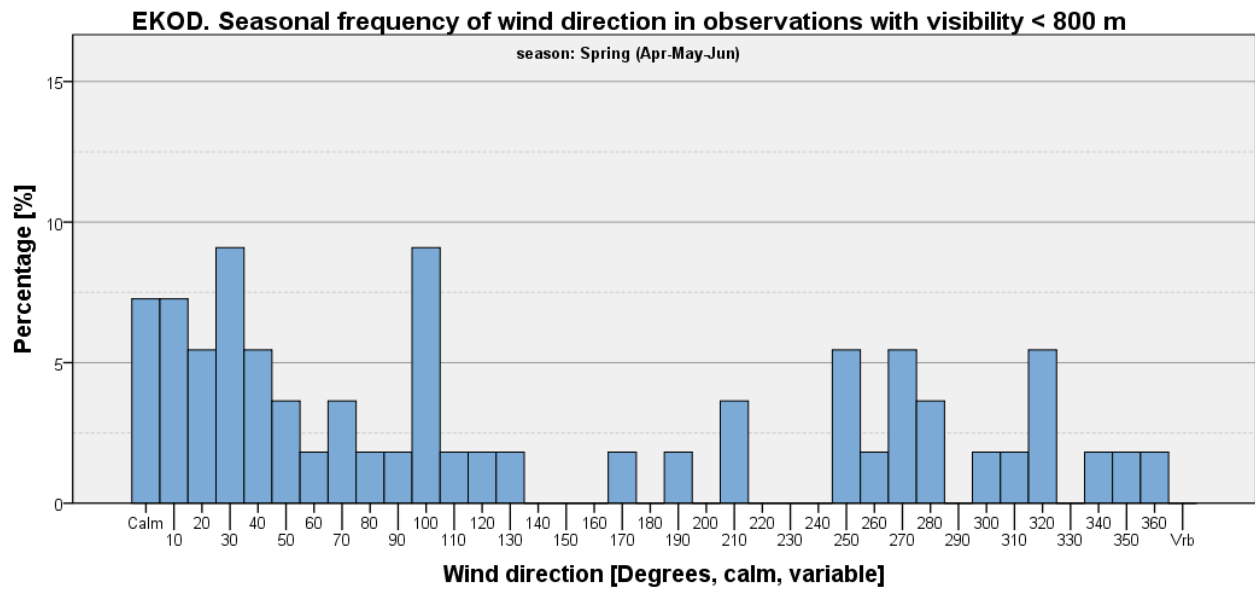


Figure 338

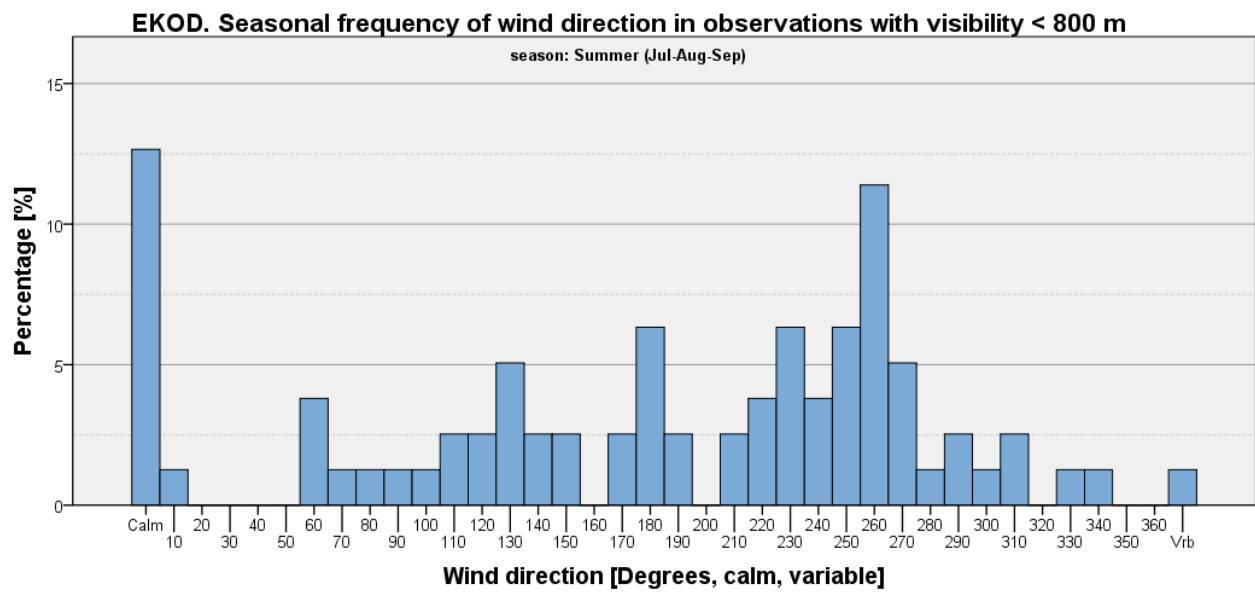


Figure 339

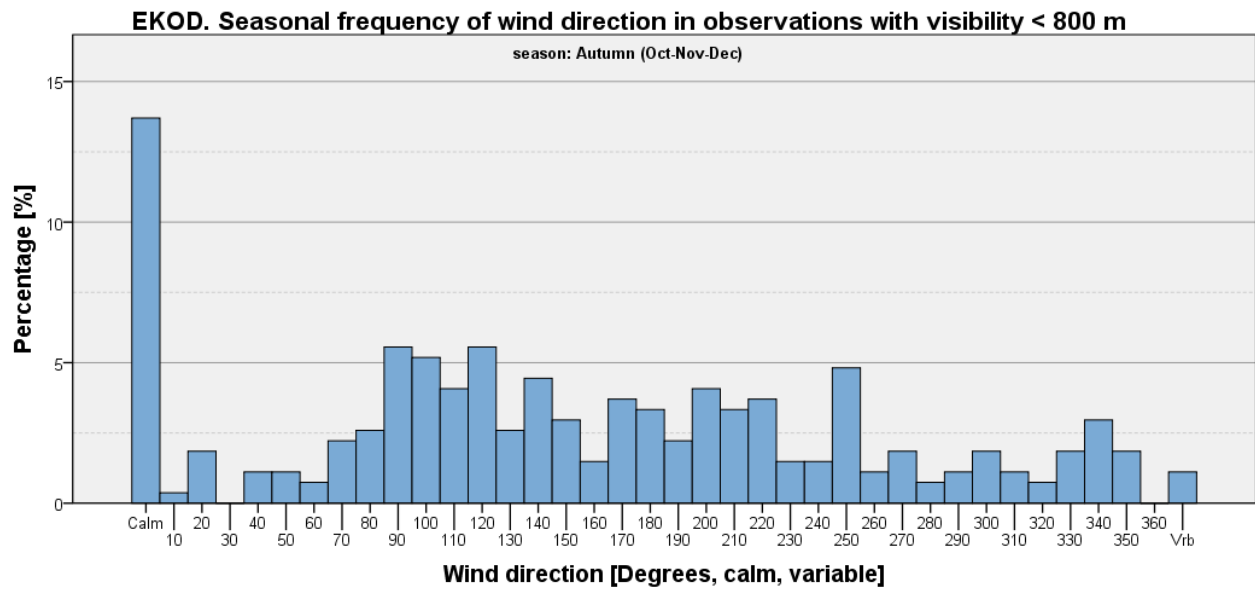


Figure 340

Visibility < 800 m and Wind Speed <= 5 kts

Table 99: EKOD - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	1.67	0.38	0.57	1.86	1.09
All other observations	98.33	99.62	99.43	98.14	98.91
Total	100	100	100	100	100

EKOD. Annual frequency of wind direction in observations with visibility < 800 m and wind speed ≤ 5 kts

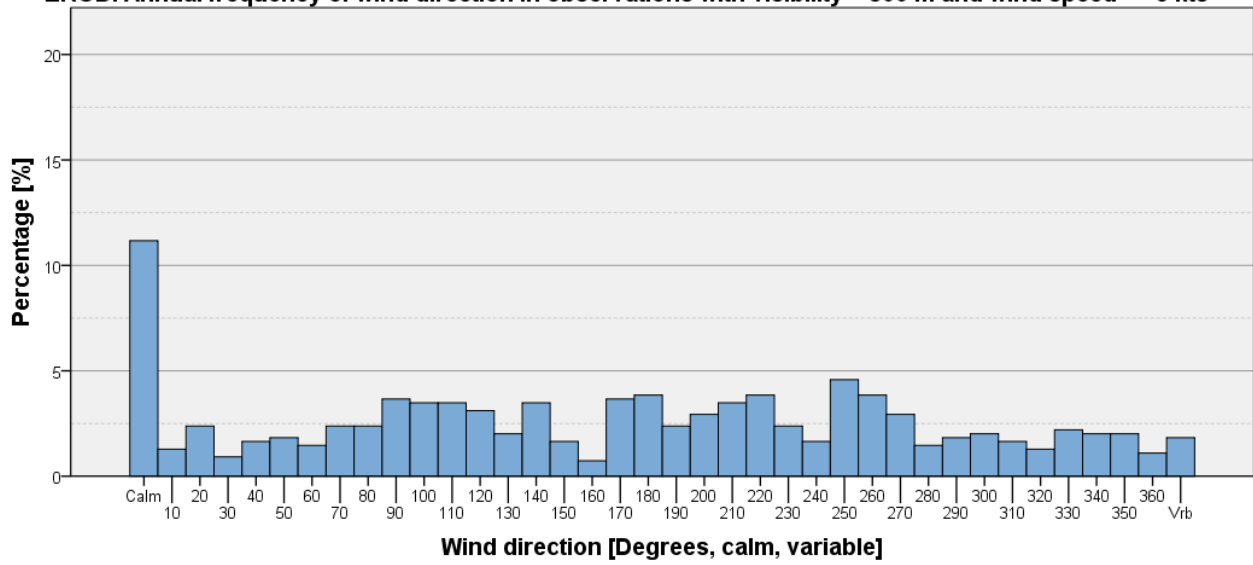


Figure 341

EKOD. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed ≤ 5 kts

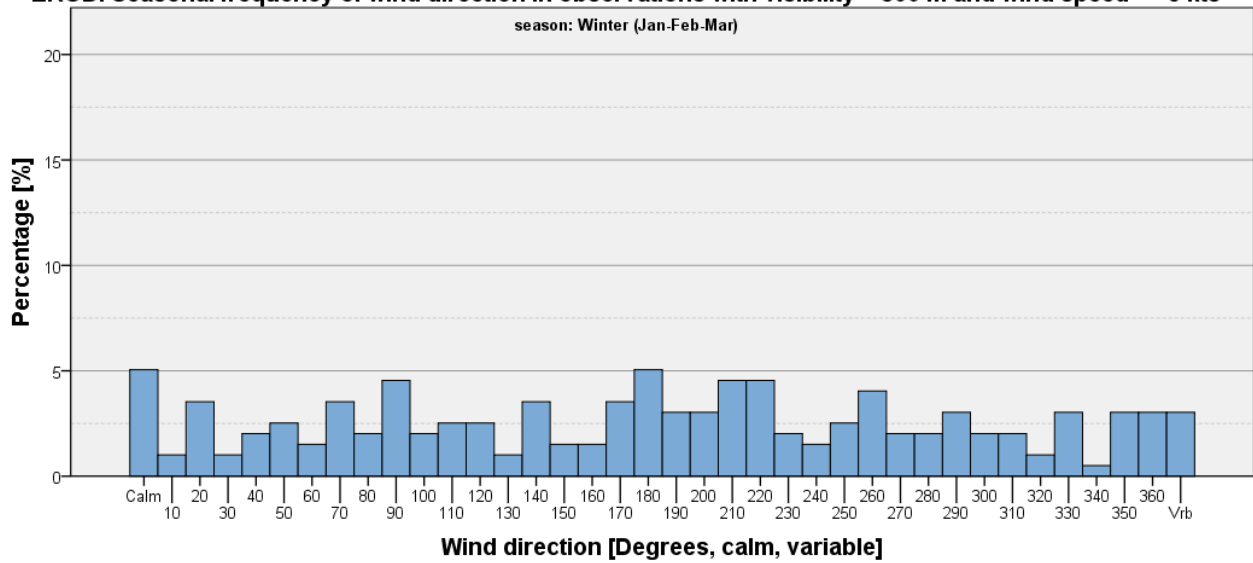


Figure 342

EKOD. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

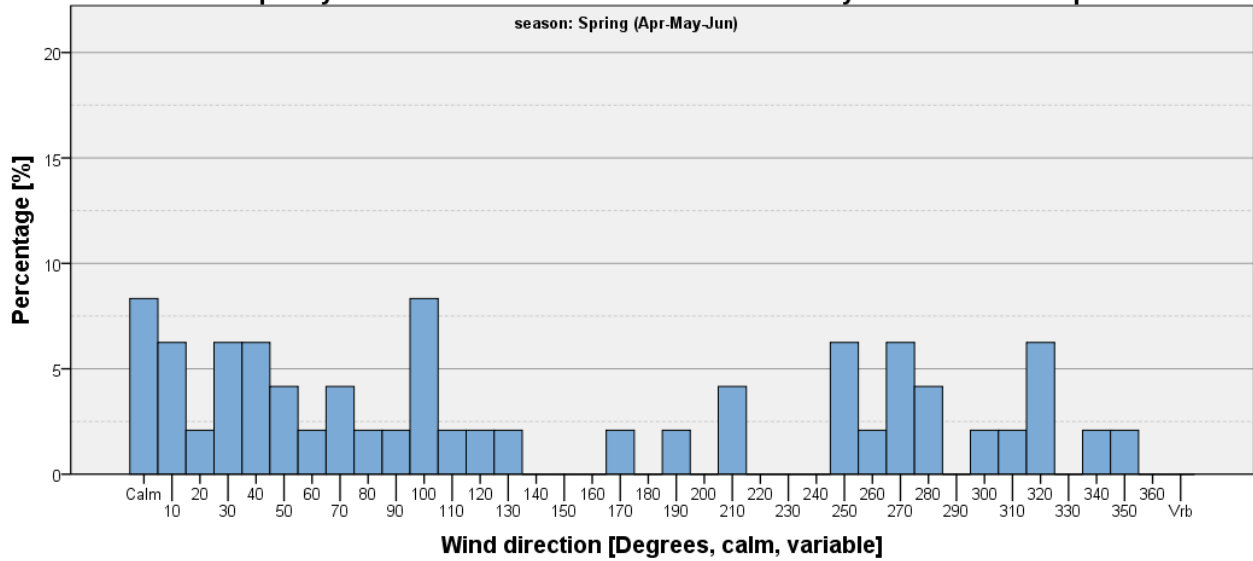


Figure 343

EKOD. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

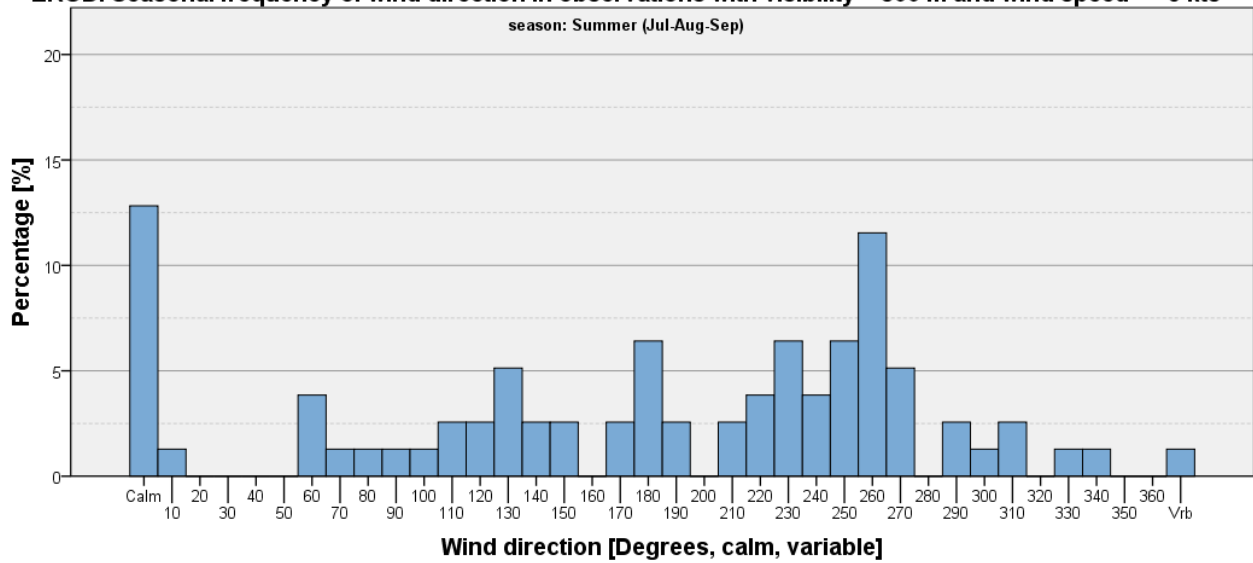


Figure 344

EKOD. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed ≤ 5 kts

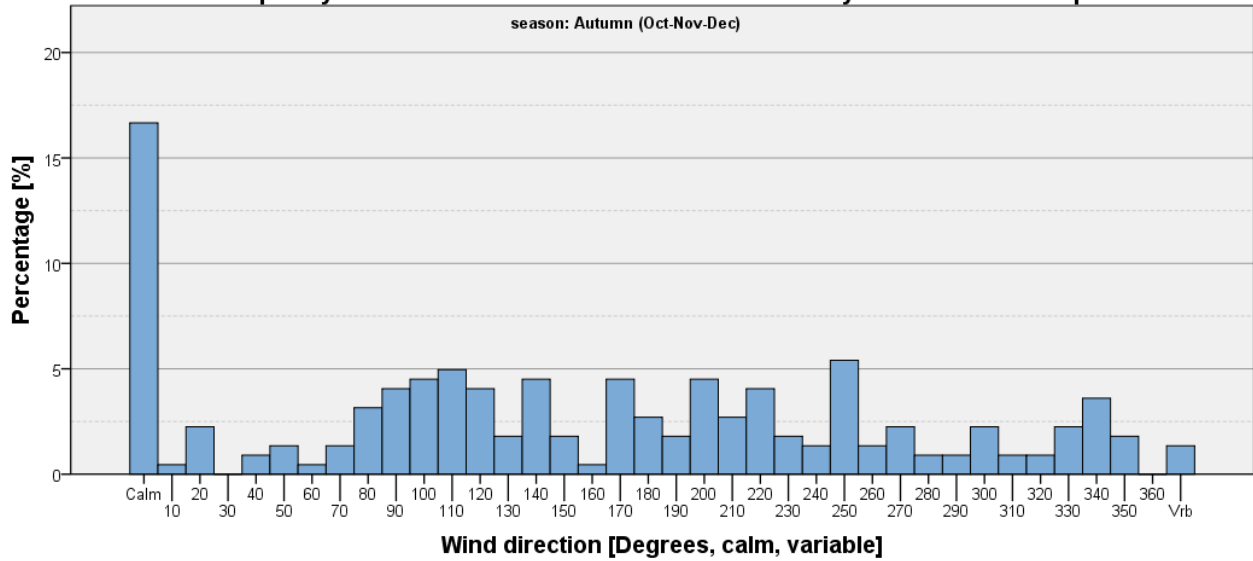


Figure 345

Visibility < 800 m and Wind Speed > 5 kts

Table 100: EKOD - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	0.78	0.055	0.0073	0.40	0.30
All other observations	99.22	99.94	99.99	99.60	99.70
Total	100	100	100	100	100

EKOD. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

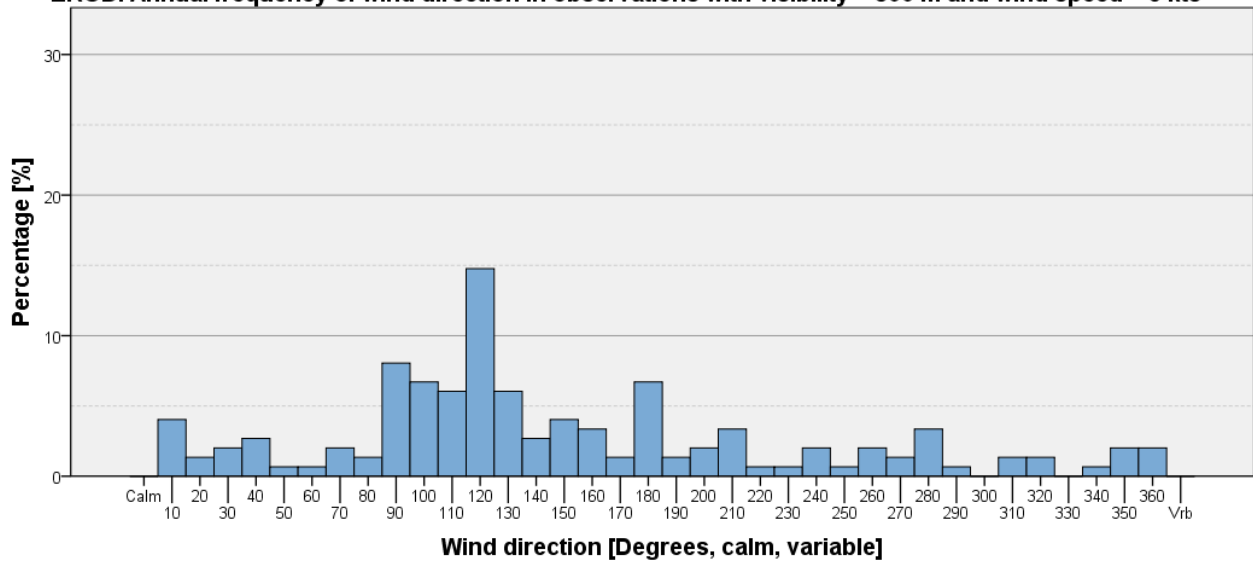


Figure 346

EKOD. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

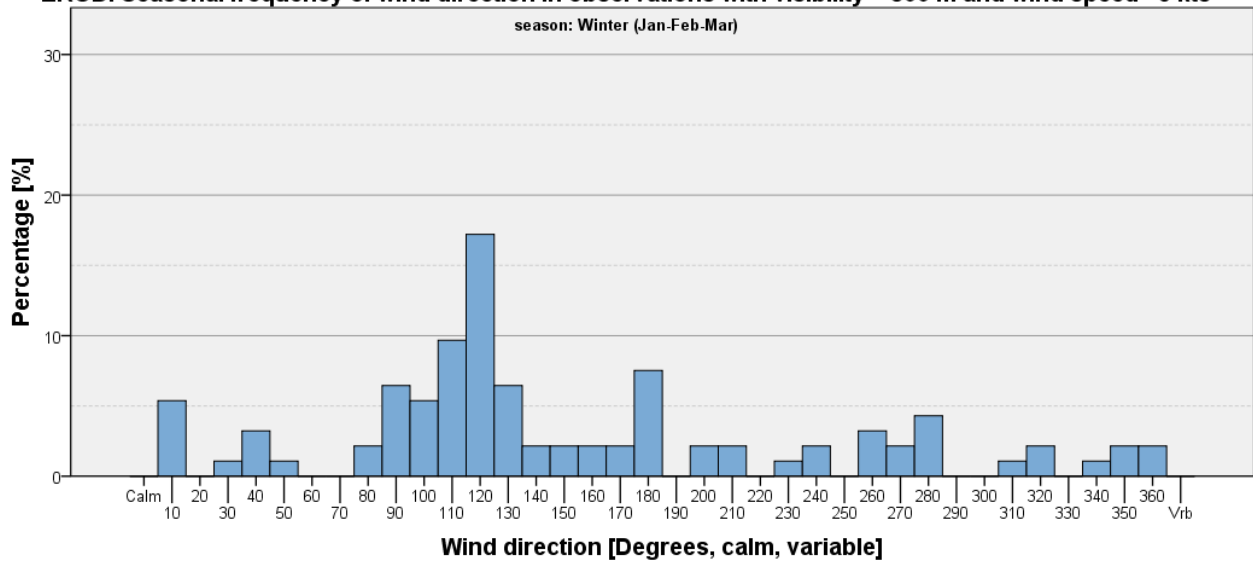


Figure 347

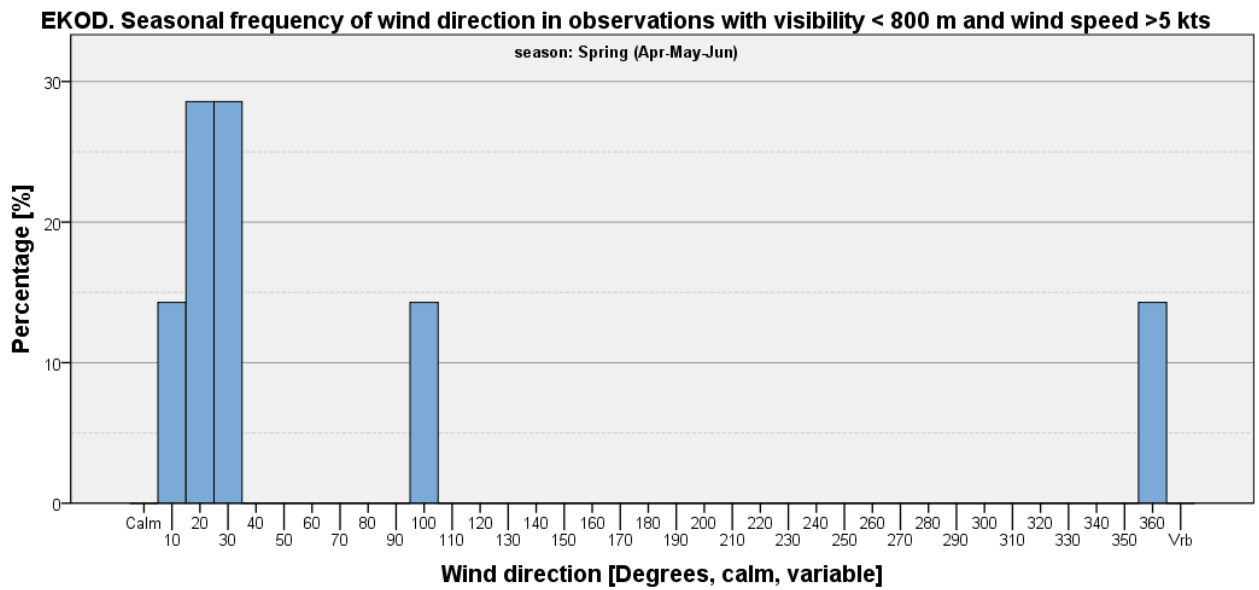


Figure 348

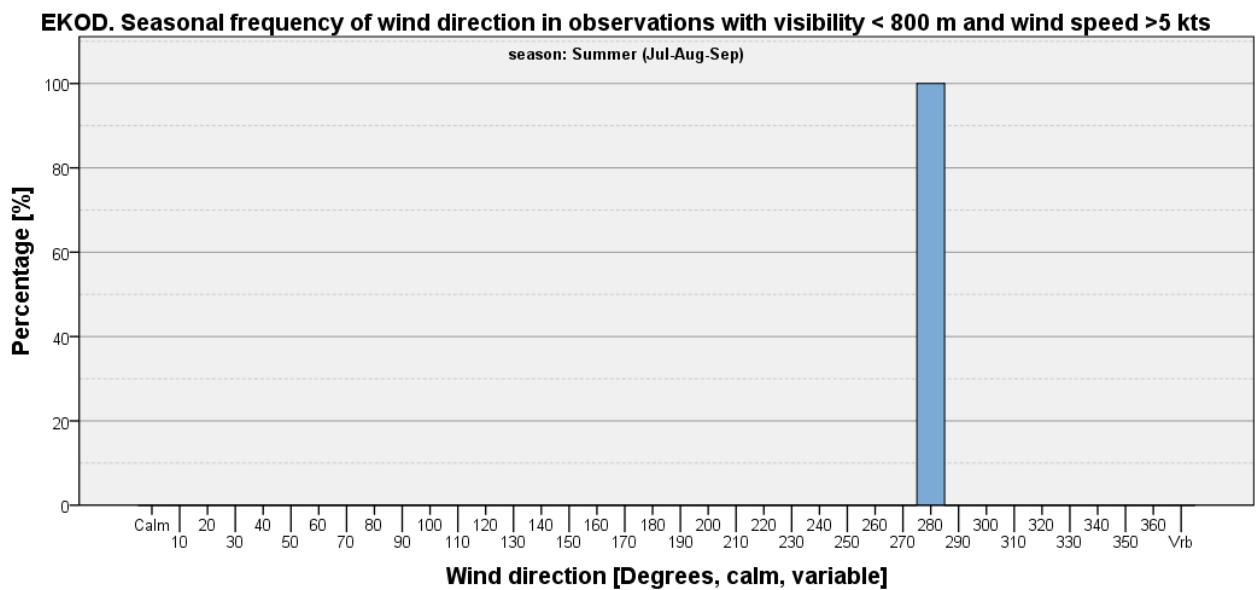


Figure 349: Please notice the changed y-axis. The change in y-axis is caused by a low number of observations within the limits of visibility > 800 m and wind speed < 5 kts.

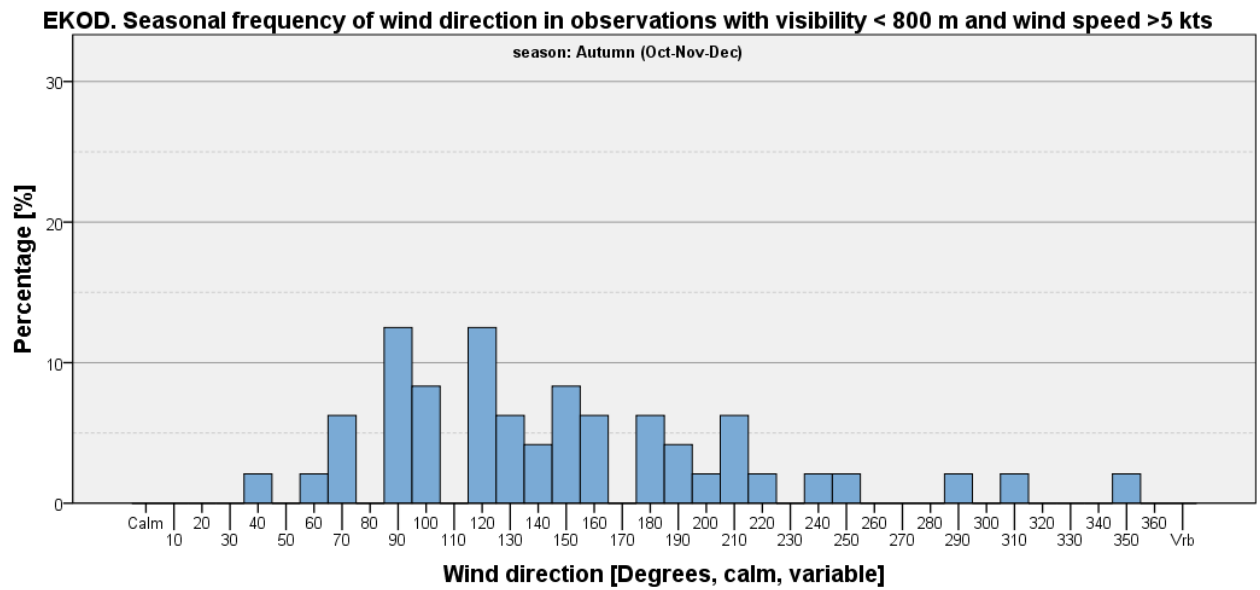


Figure 350

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 101: EKOD - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	23.65	6.17	4.46	19.69	13.04
All other observations	76.35	93.83	95.54	80.31	86.96
Total	100	100	100	100	100

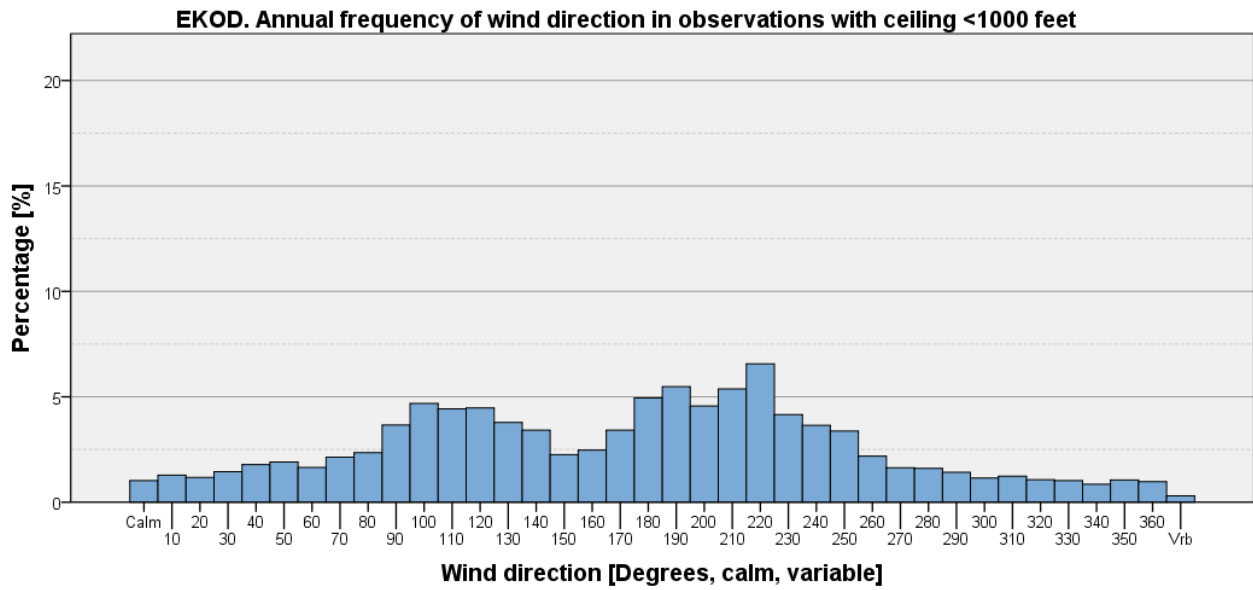


Figure 351

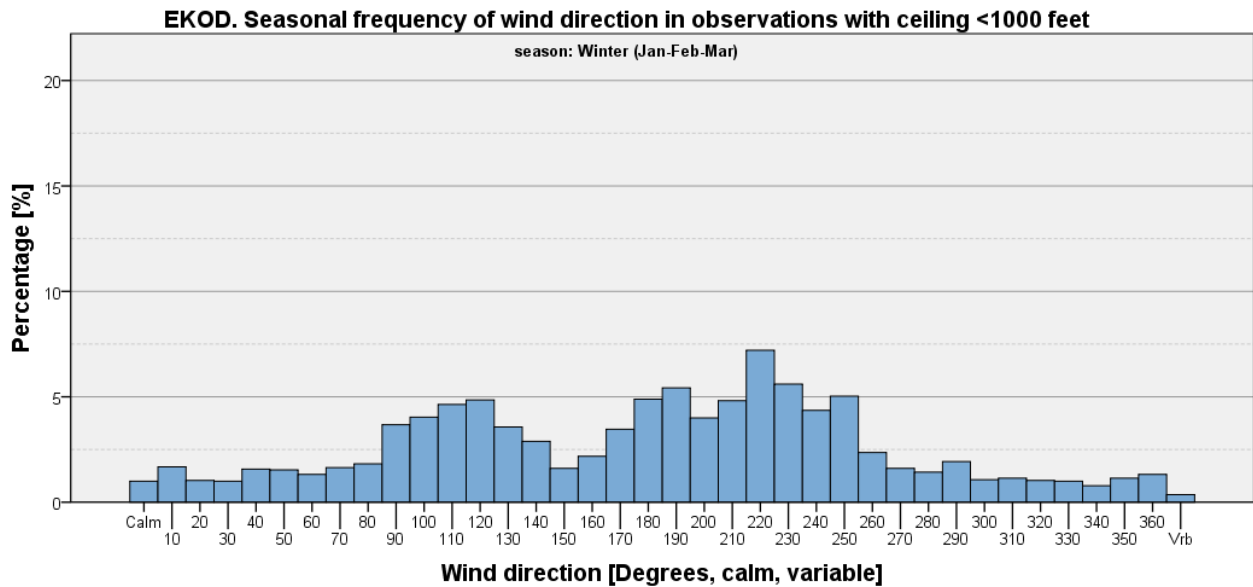


Figure 352

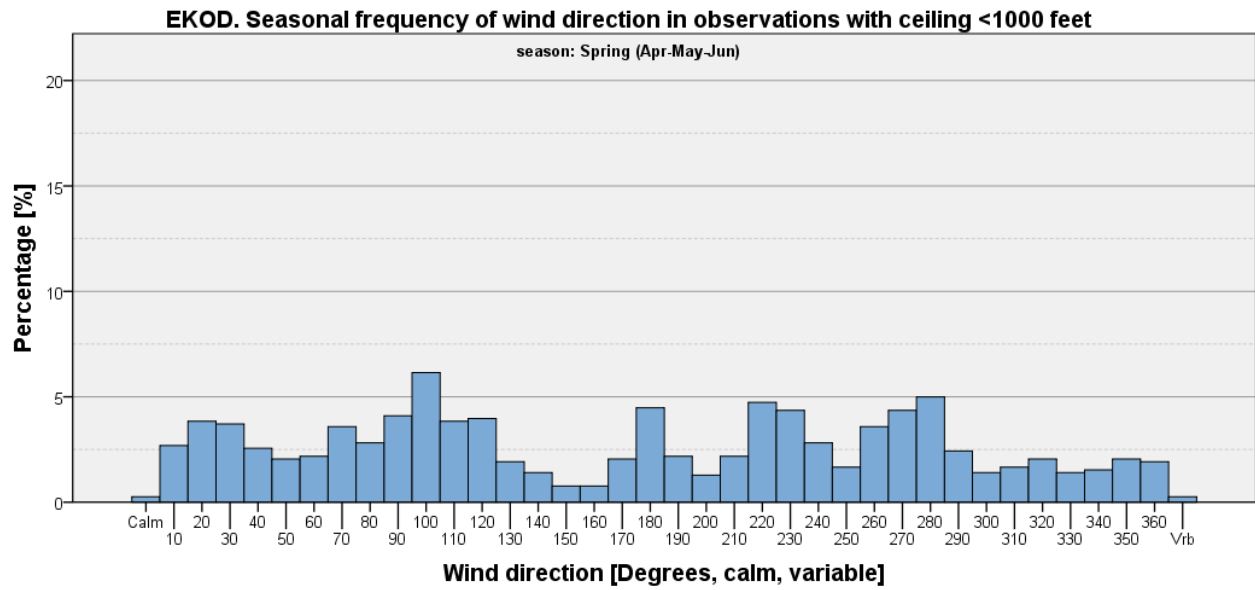


Figure 353

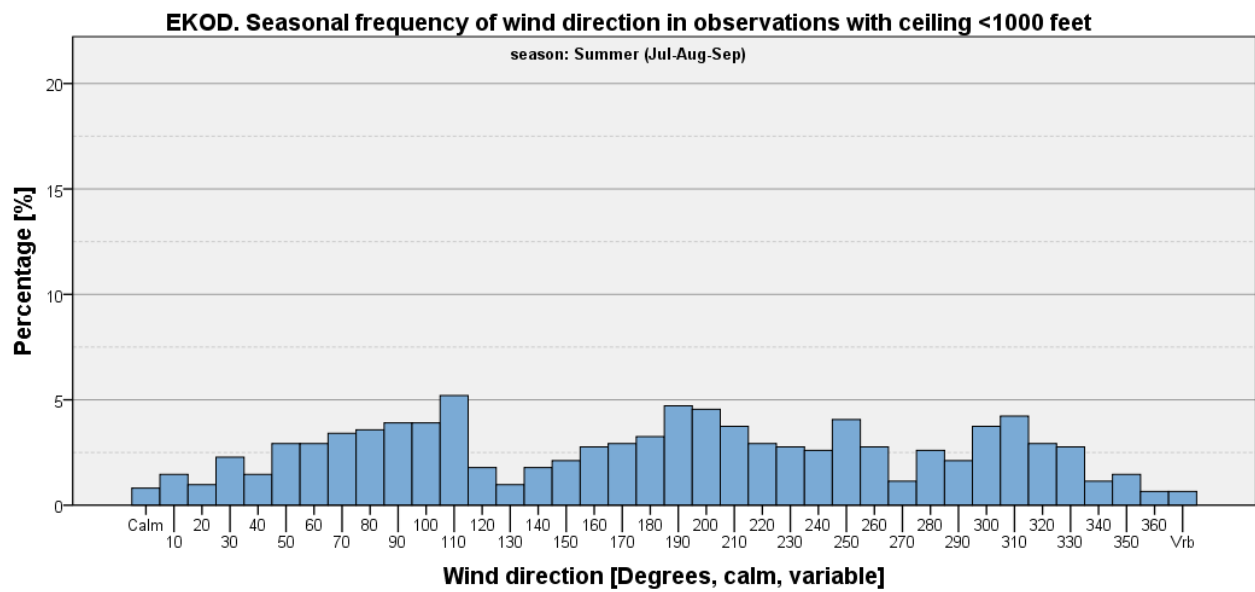


Figure 354

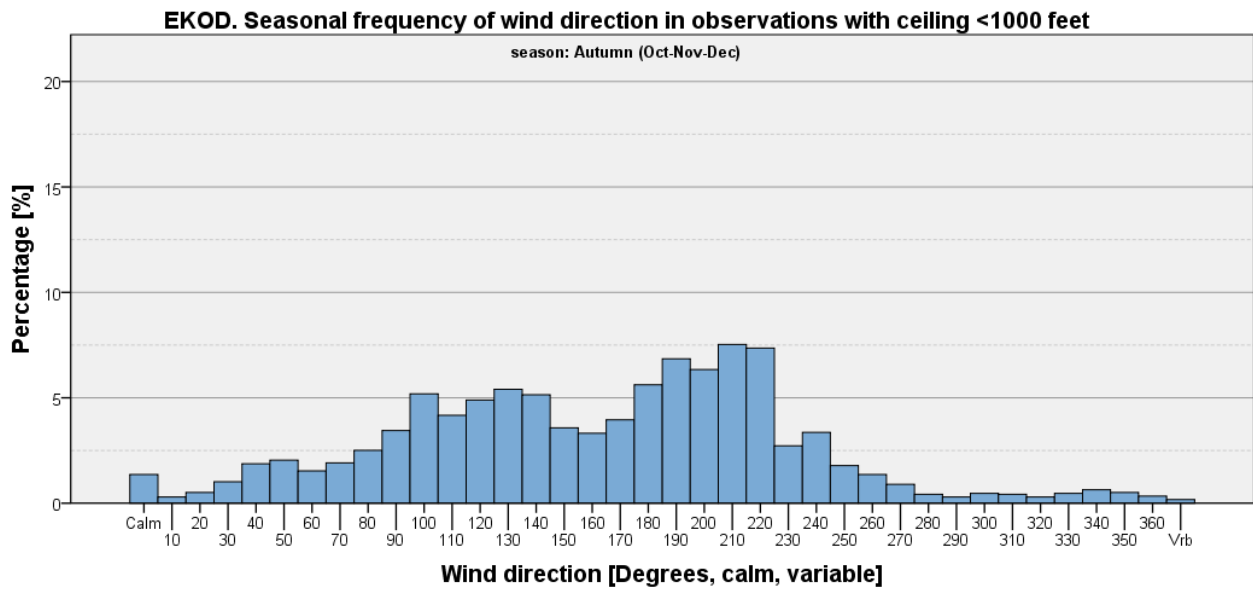


Figure 355

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 102: EKOD - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	6.14	1.58	1.05	4.66	3.24
All other observations	93.86	98.42	98.95	95.34	96.76
Total	100	100	100	100	100

EKOD. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

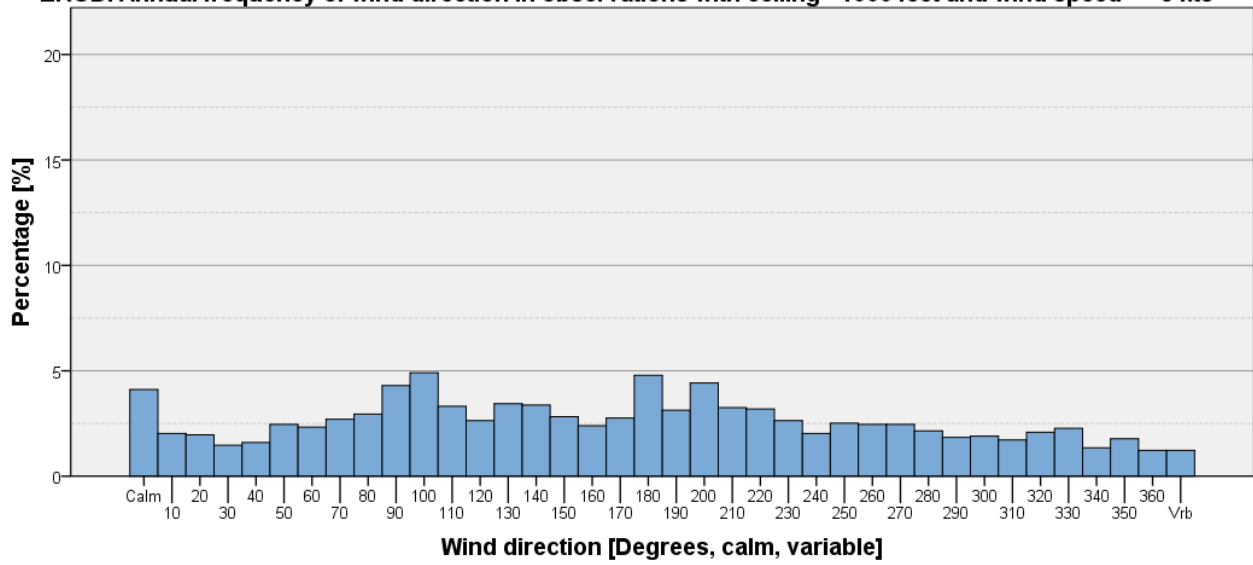


Figure 356

EKOD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

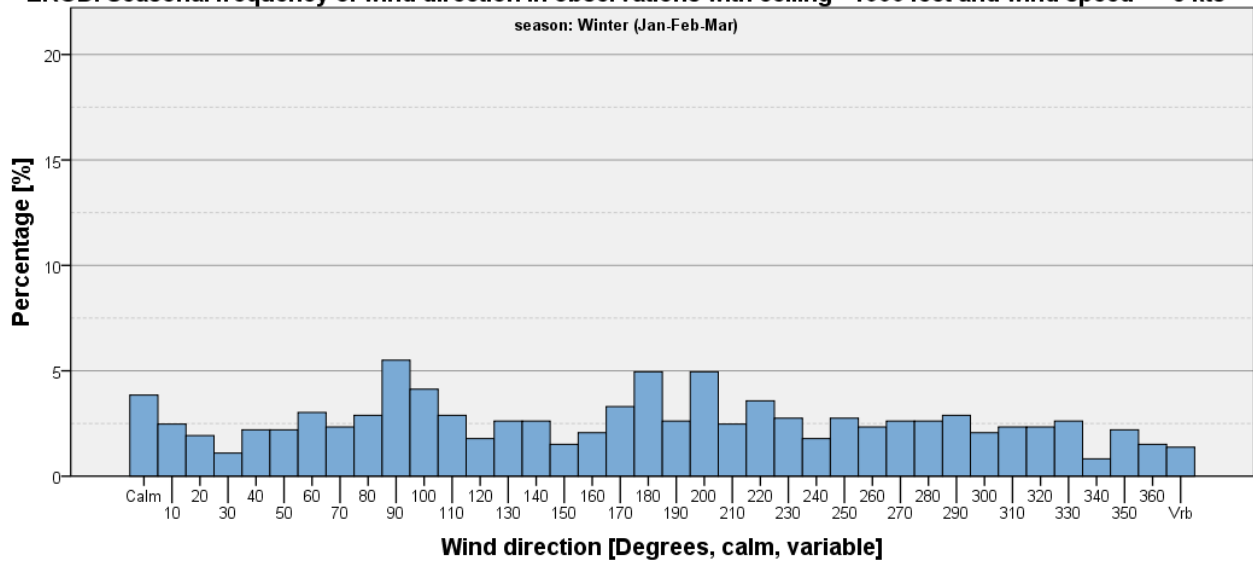


Figure 357

EKOD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

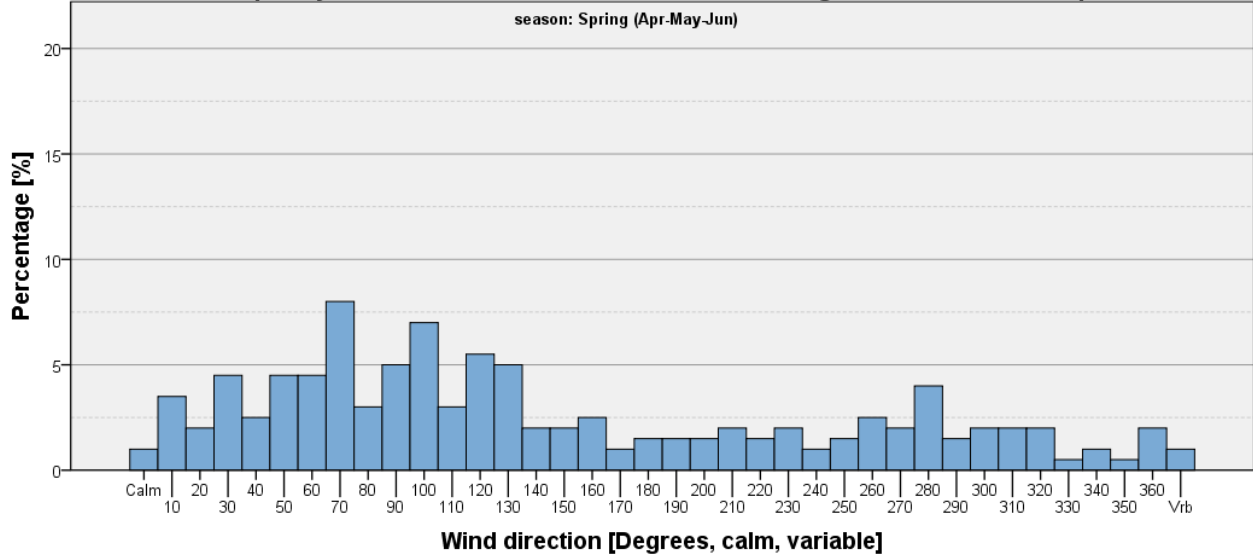


Figure 358

EKOD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

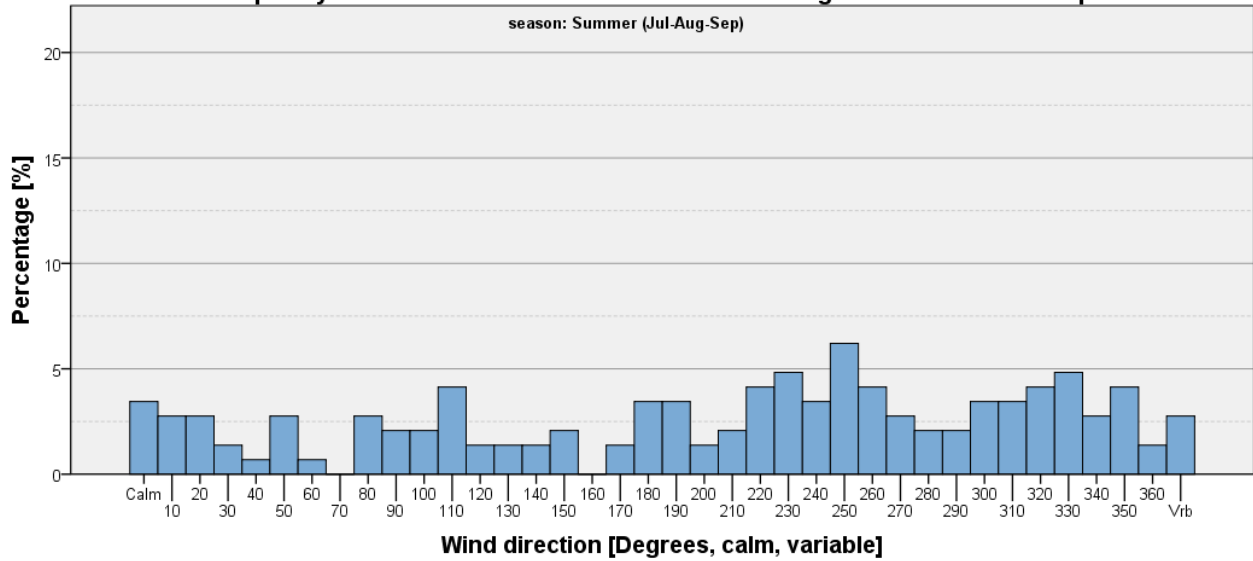


Figure 359

EKOD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

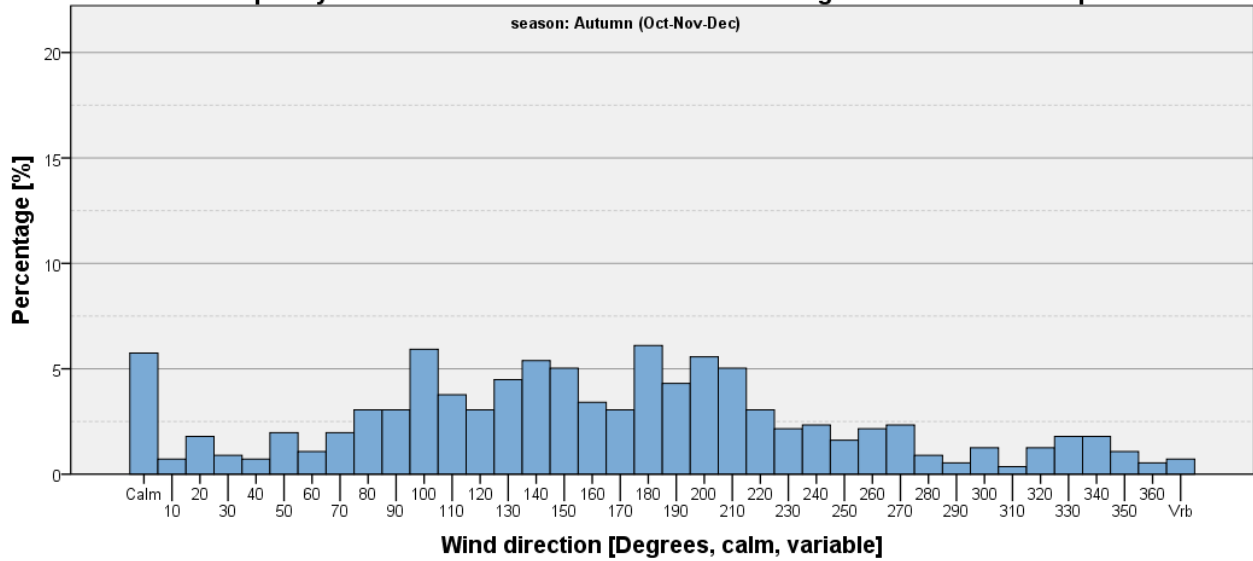


Figure 360

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 103: EKOD - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	17.51	4.59	3.41	15.02	9.79
All other observations	82.49	95.41	96.59	84.98	90.21
Total	100	100	100	100	100

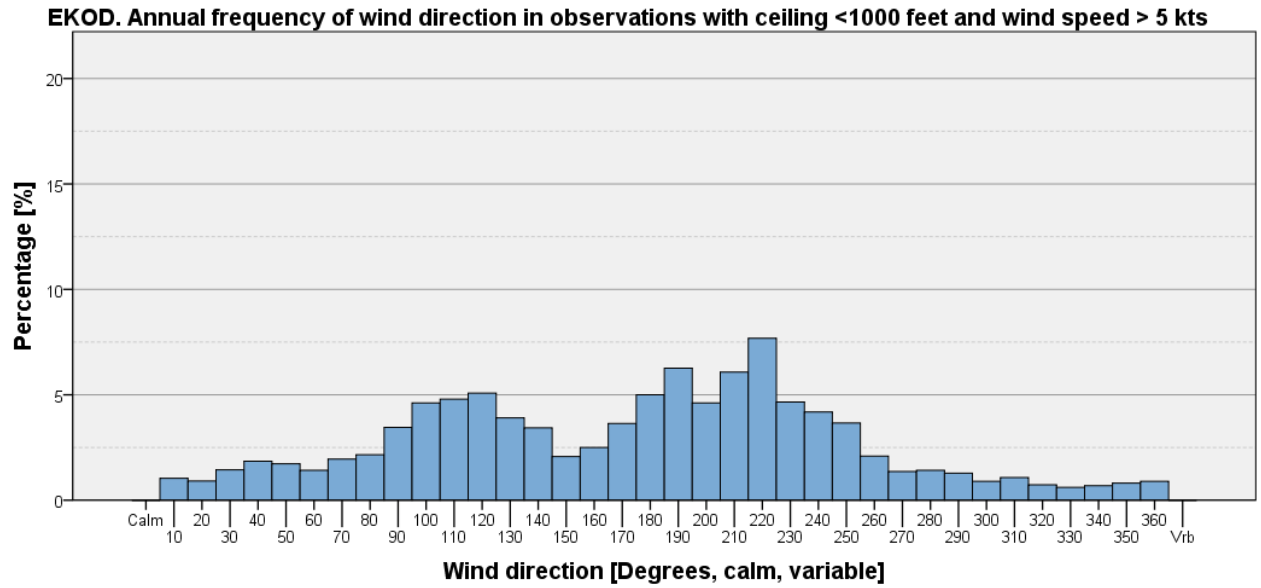


Figure 361

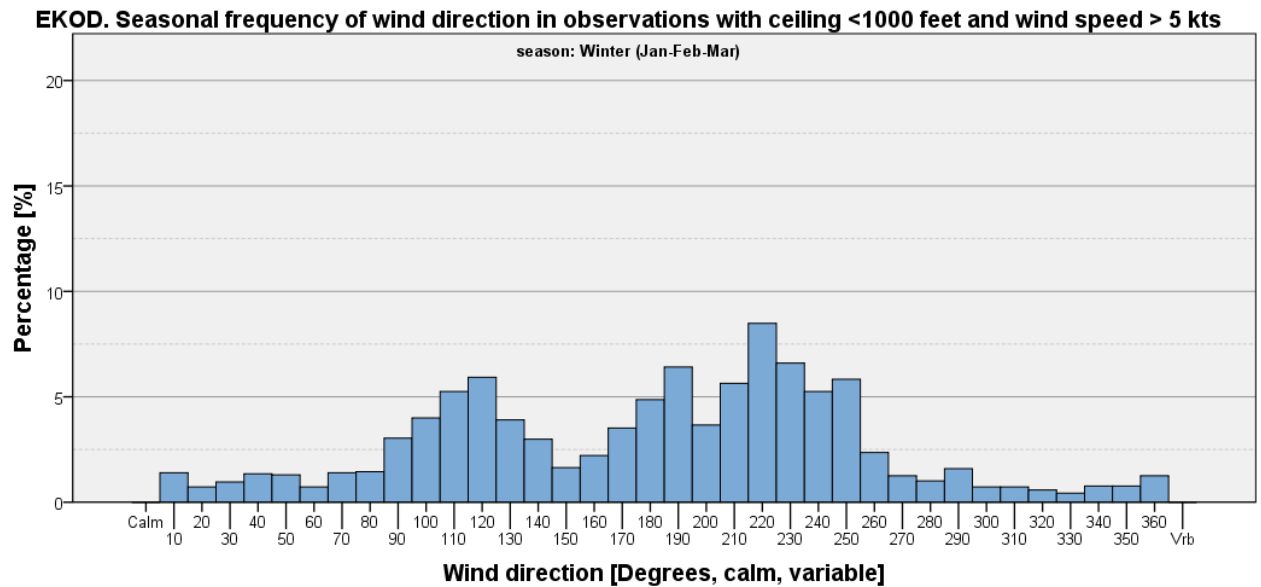


Figure 362

EKOD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

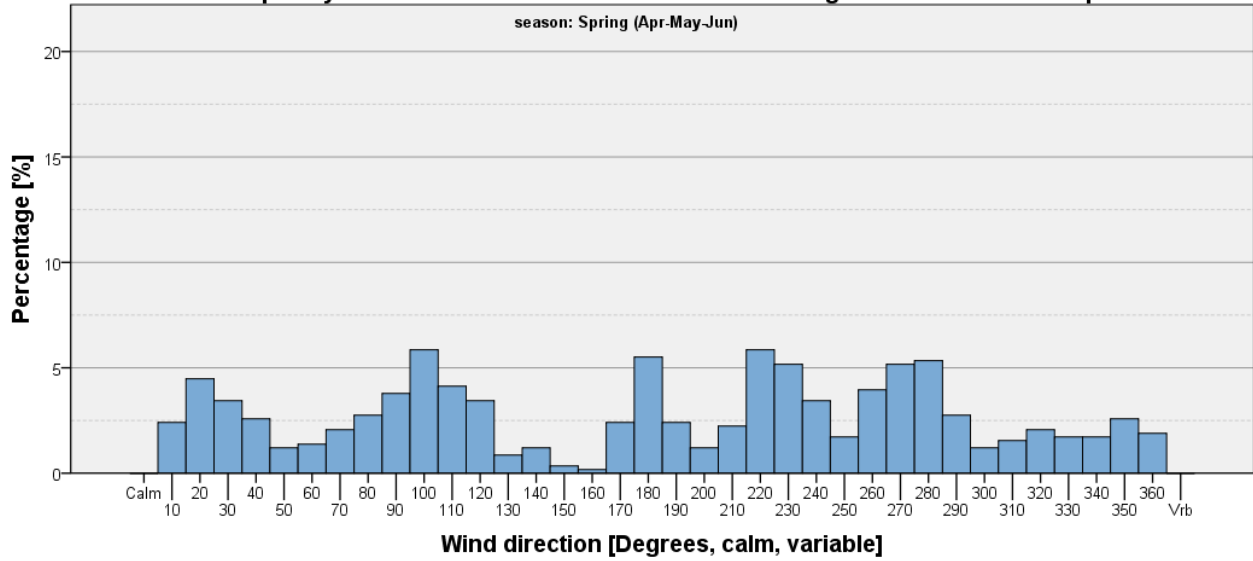


Figure 363

EKOD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

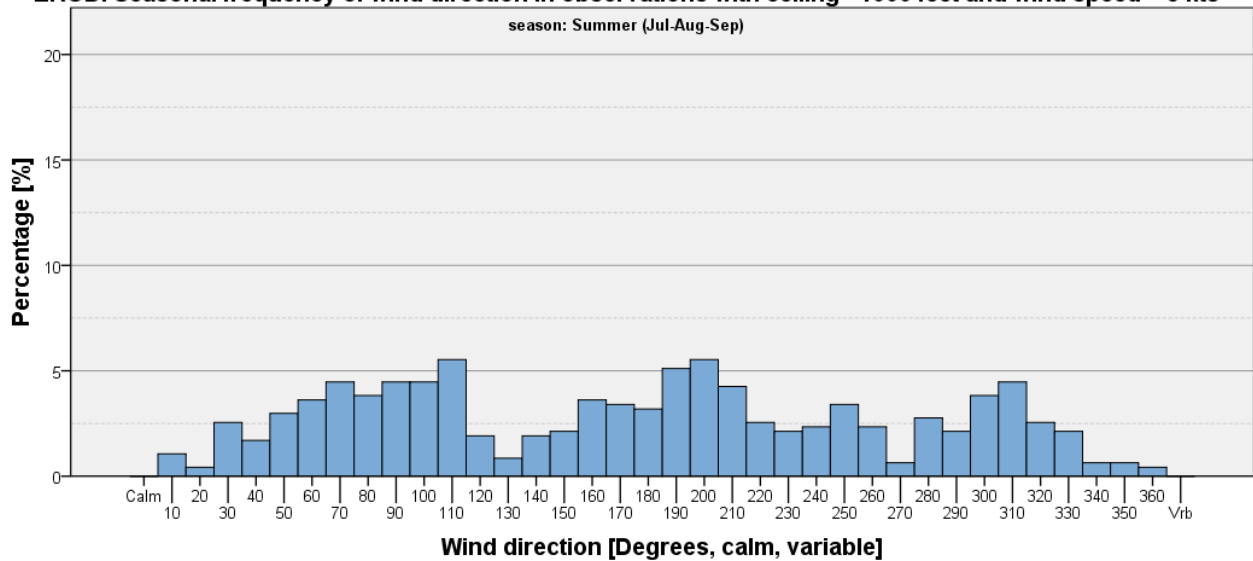


Figure 364

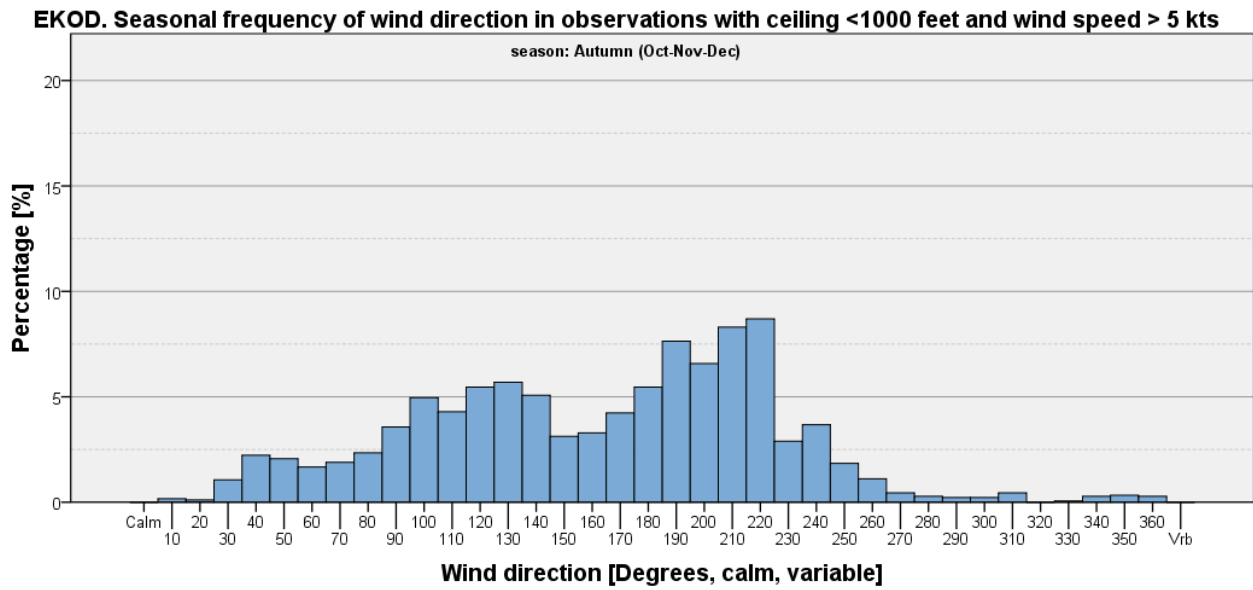


Figure 365

Ceiling < 500 feet

Table 104: EKOD - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	8.69	1.67	0.74	6.42	4.20
All other observations	91.31	98.33	99.26	93.58	95.80
Total	100	100	100	100	100

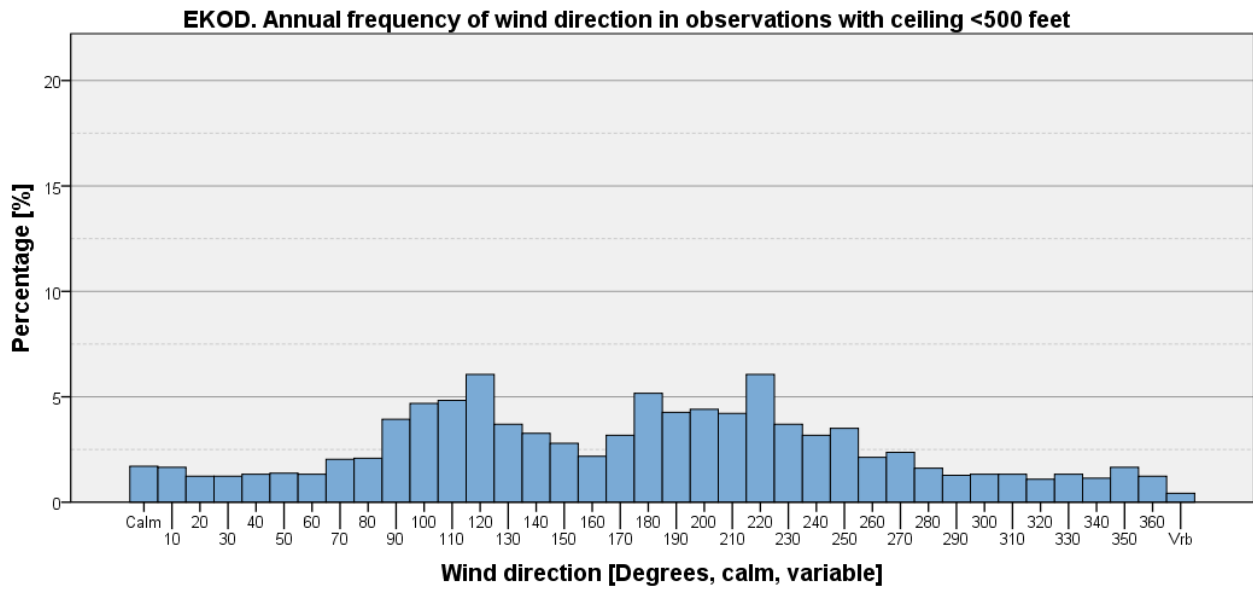


Figure 366

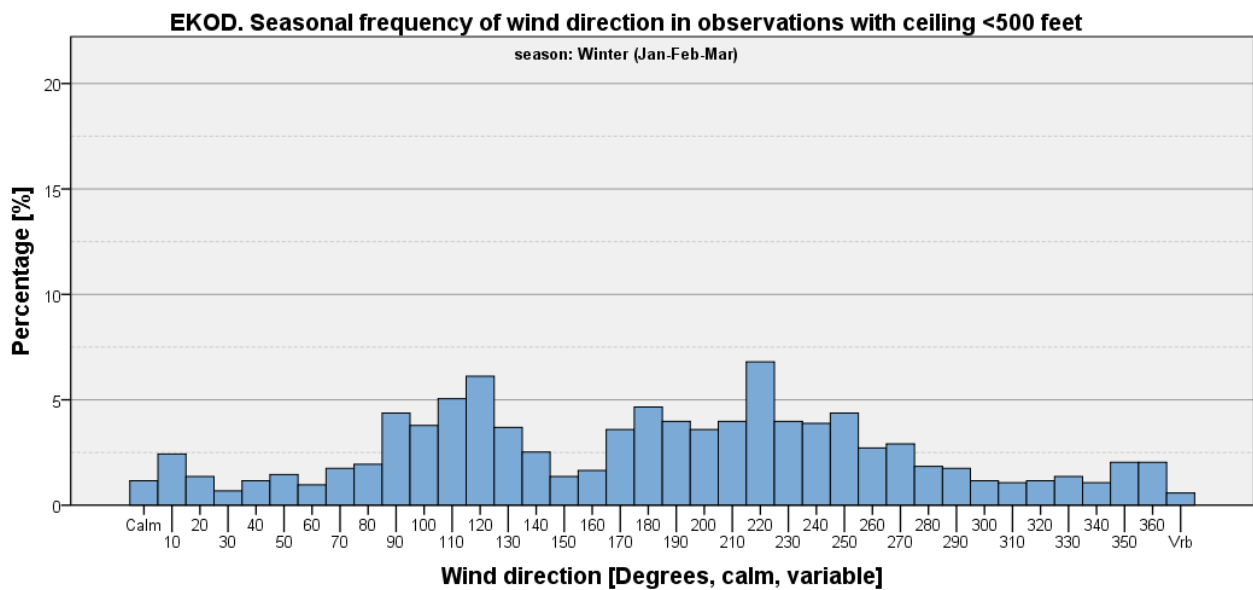


Figure 367

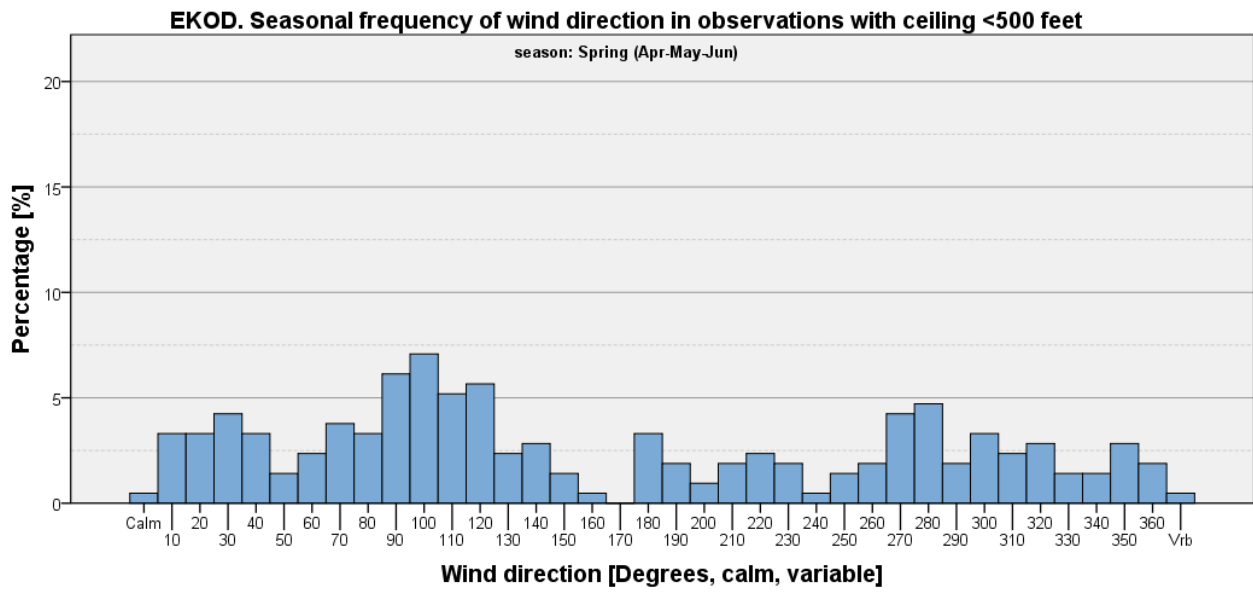


Figure 368

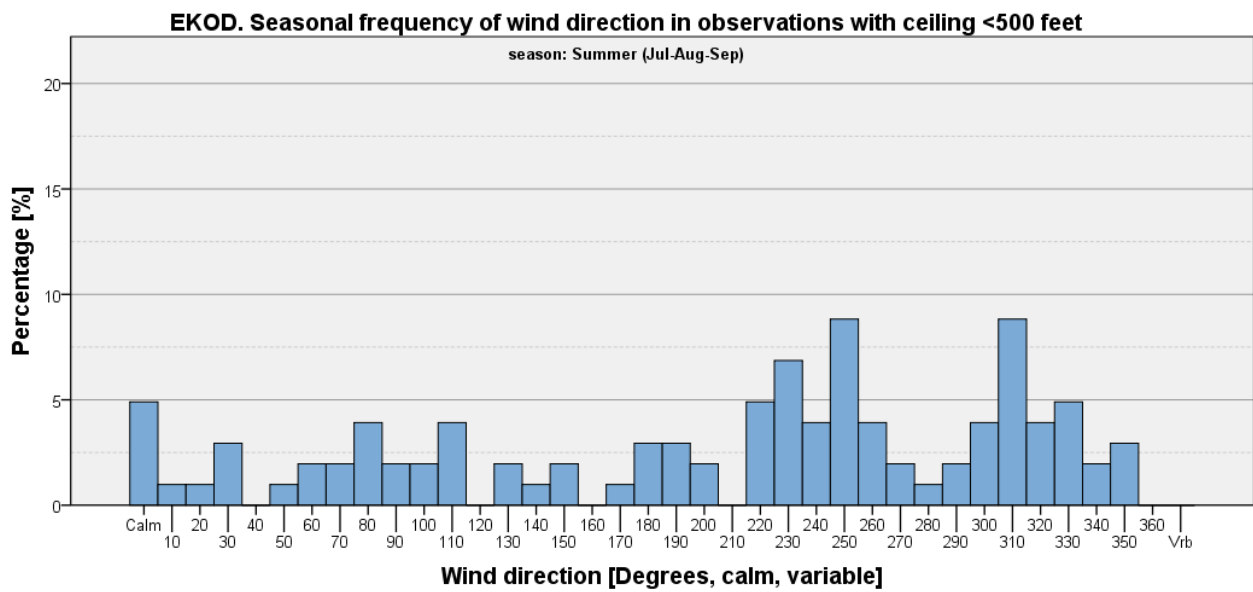


Figure 369

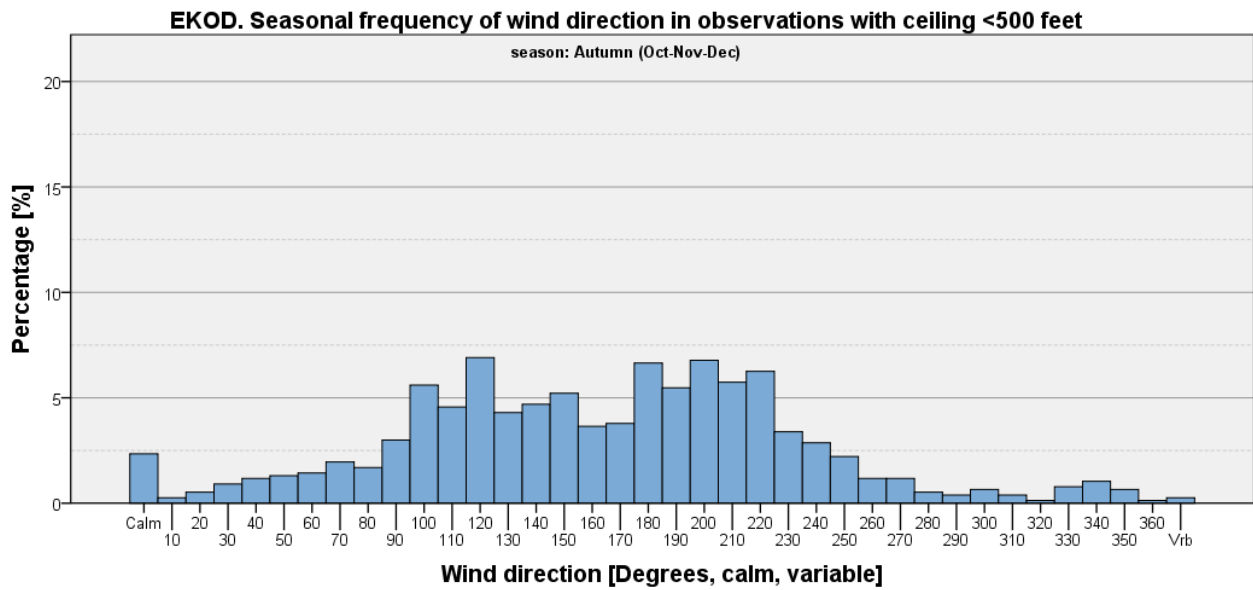


Figure 370

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 105: EKOD - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	3.38	0.77	0.46	2.50	1.71
All other Observations	96.62	99.23	99.54	97.50	98.29
Total	100	100	100	100	100

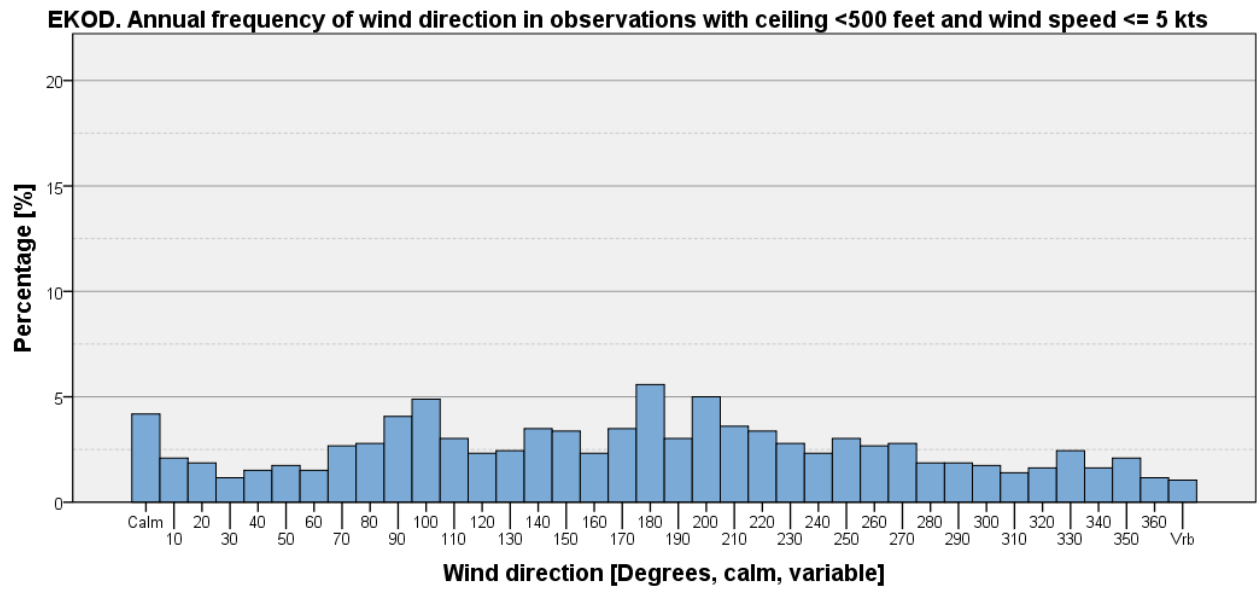


Figure 371

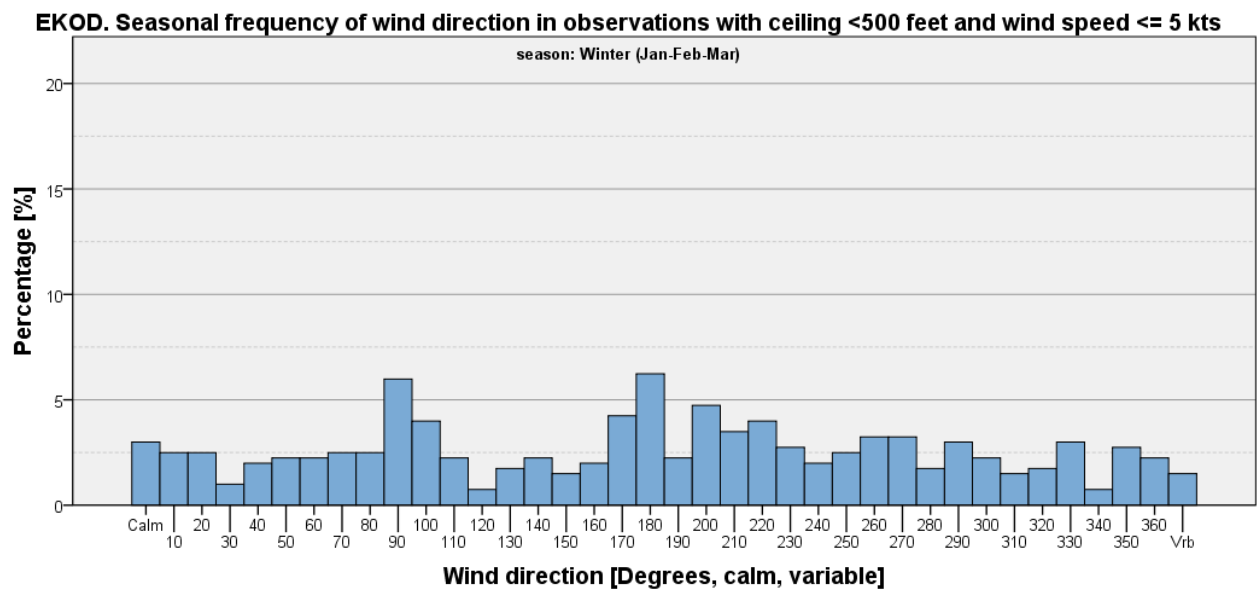


Figure 372

EKOD. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

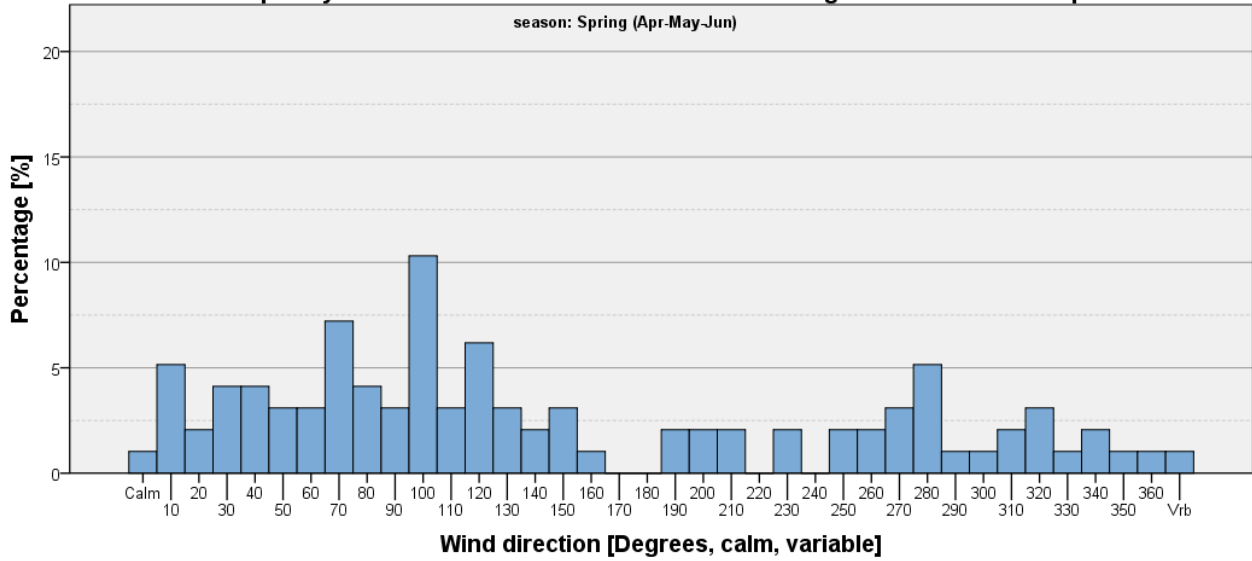


Figure 373

EKOD. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

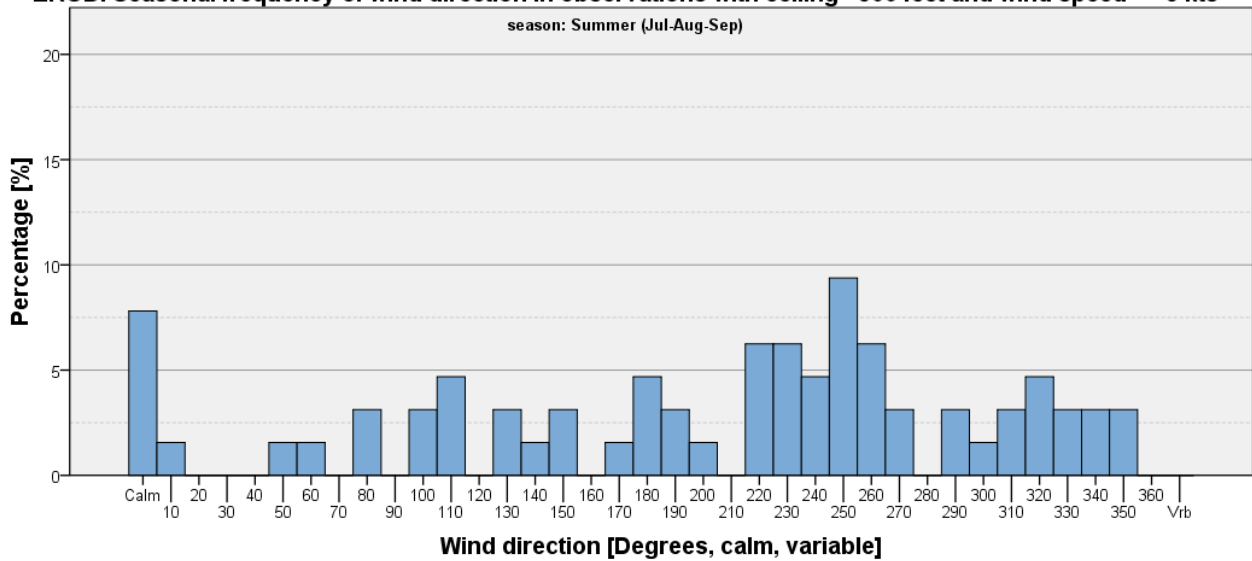


Figure 374

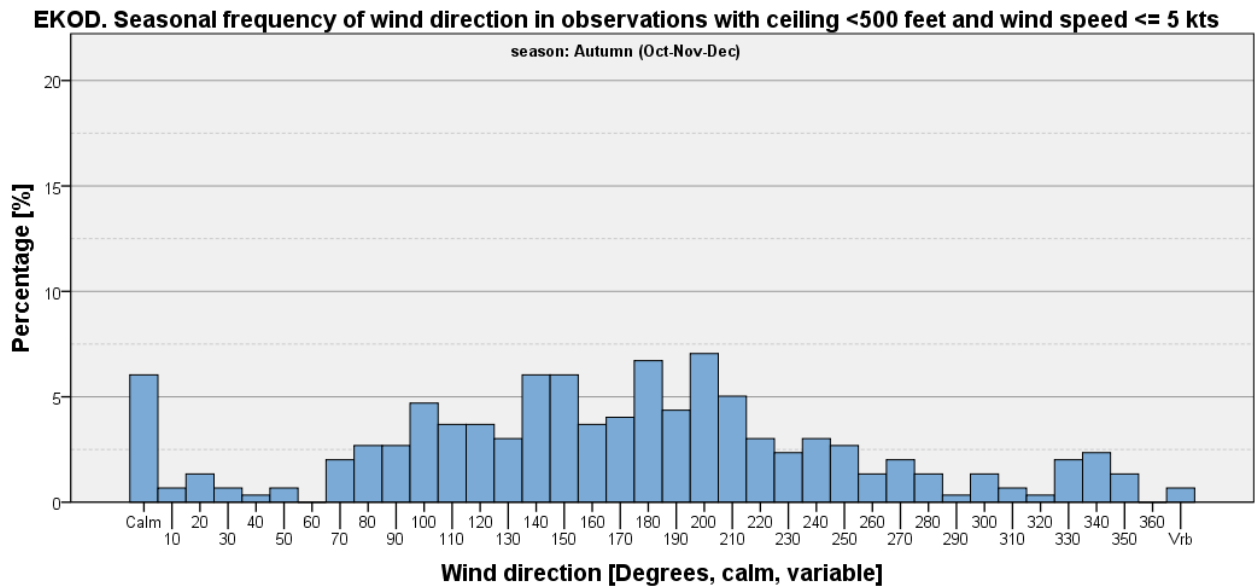


Figure 375

Ceiling < 500 feet and Wind Speed > 5 kts

Table 106: EKOD - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	5.31	0.91	0.28	3.93	2.49
All other observations	94.69	99.09	99.72	96.07	97.51
Total	100	100	100	100	100

EKOD. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

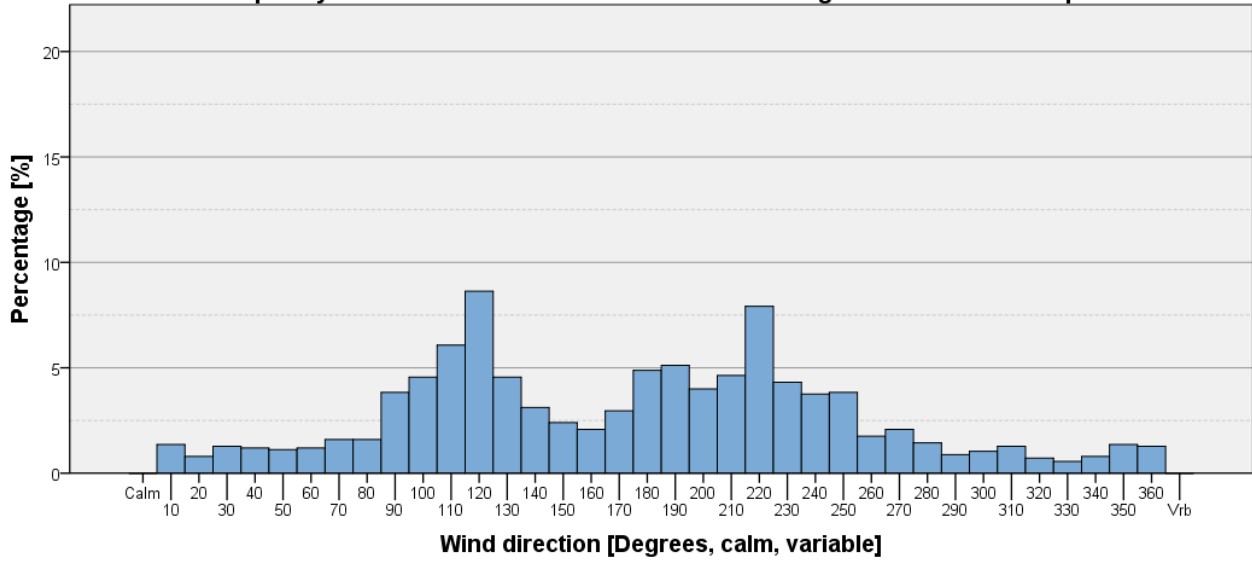


Figure 376

EKOD. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

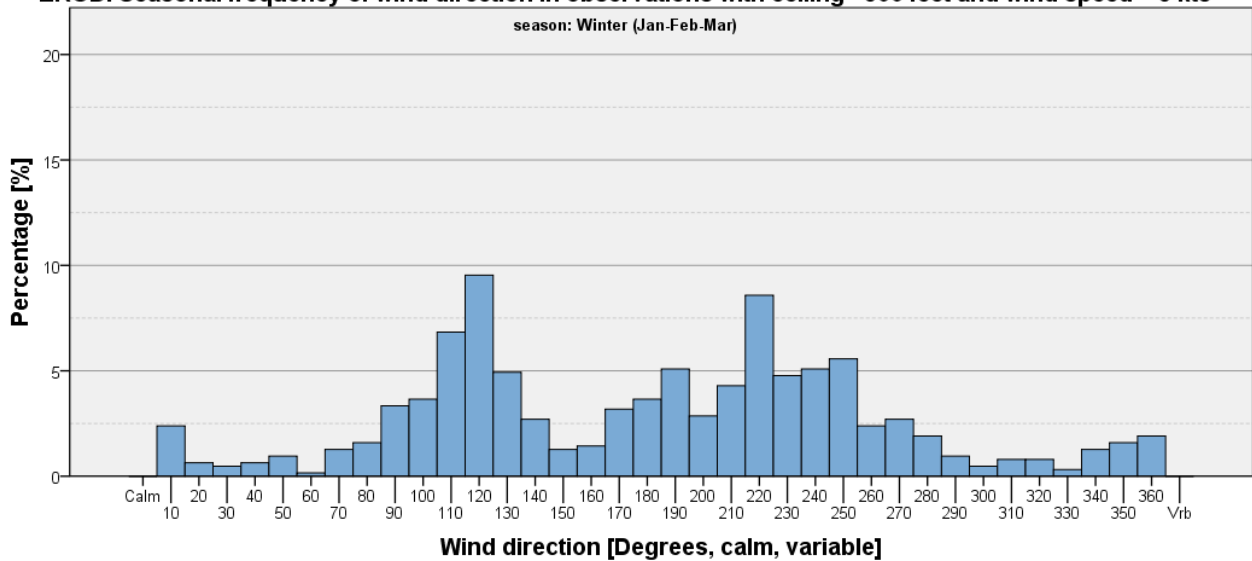


Figure 377

EKOD. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

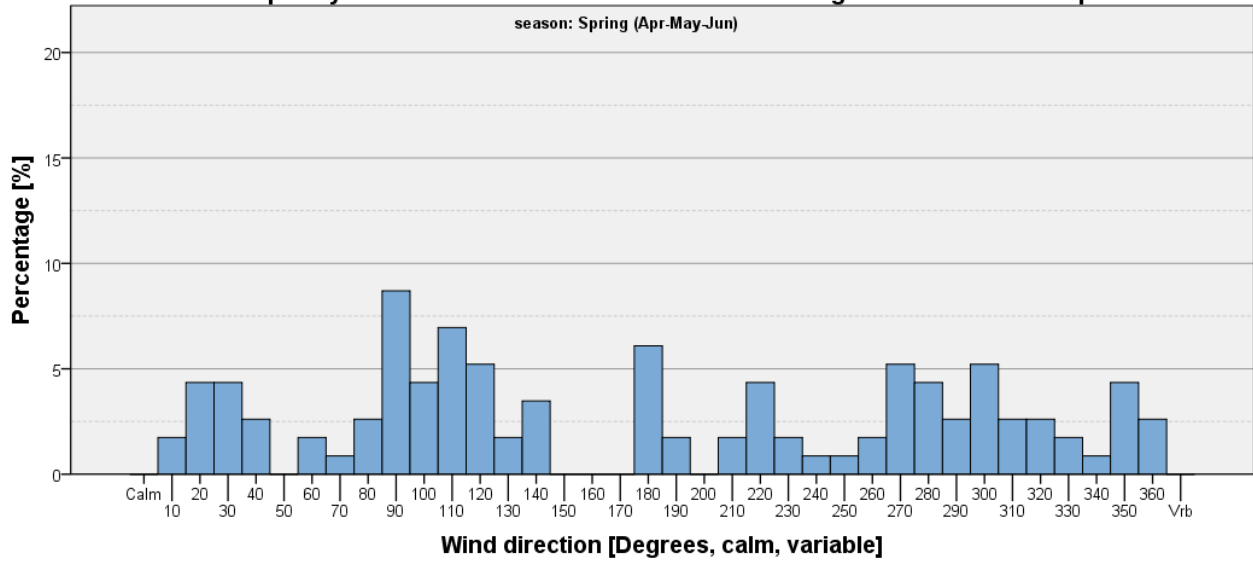


Figure 378

EKOD. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

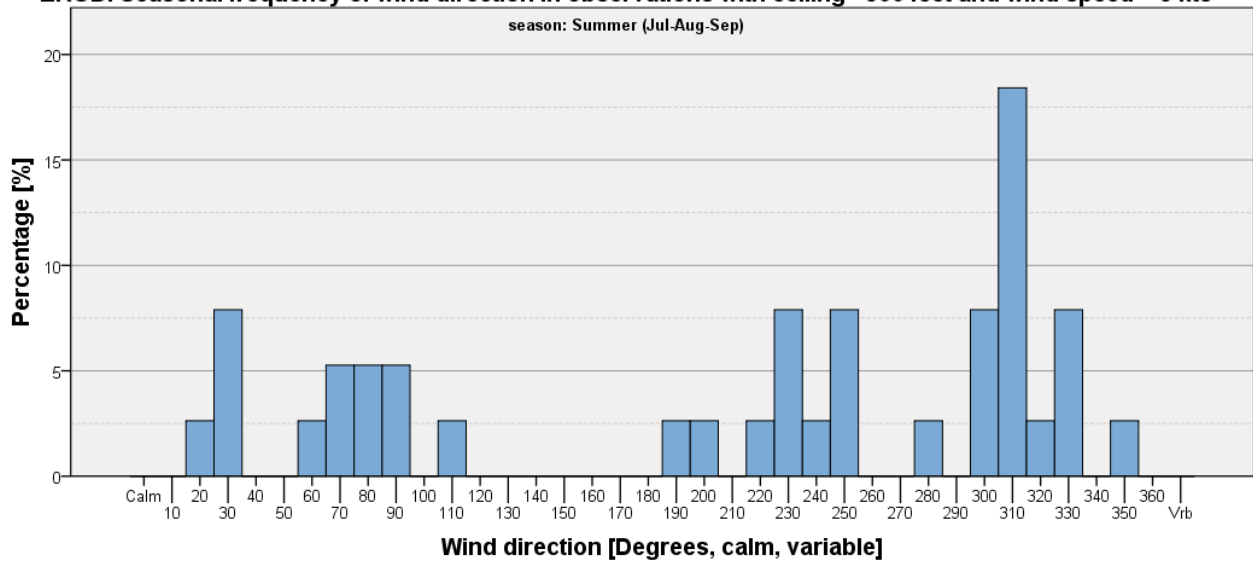


Figure 379

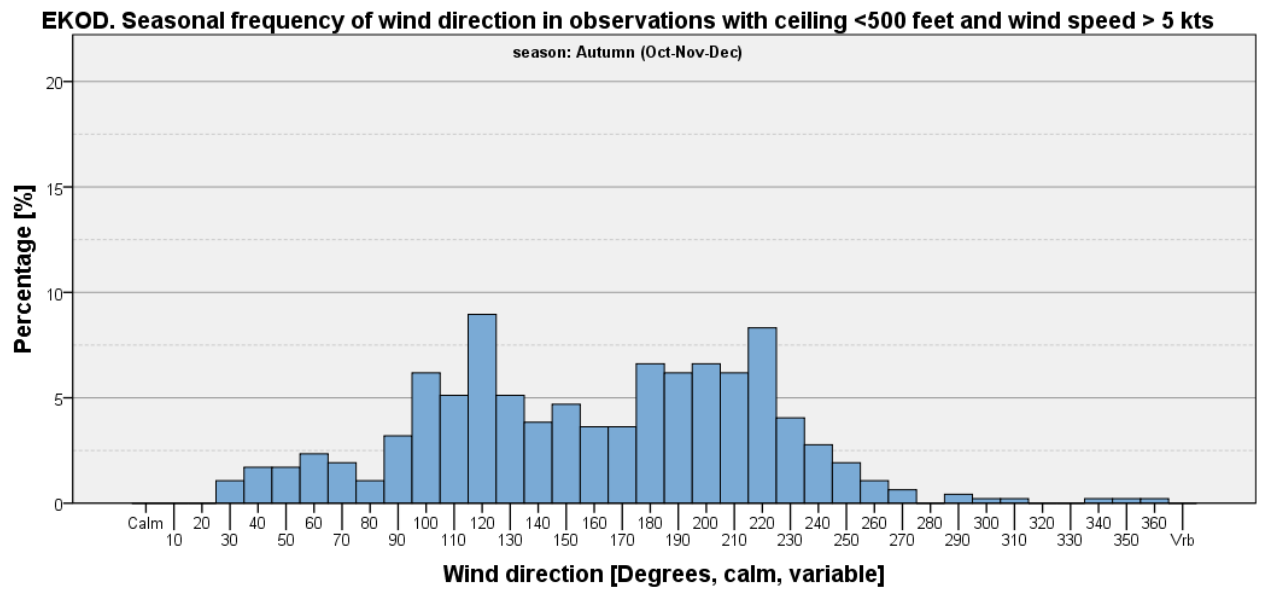
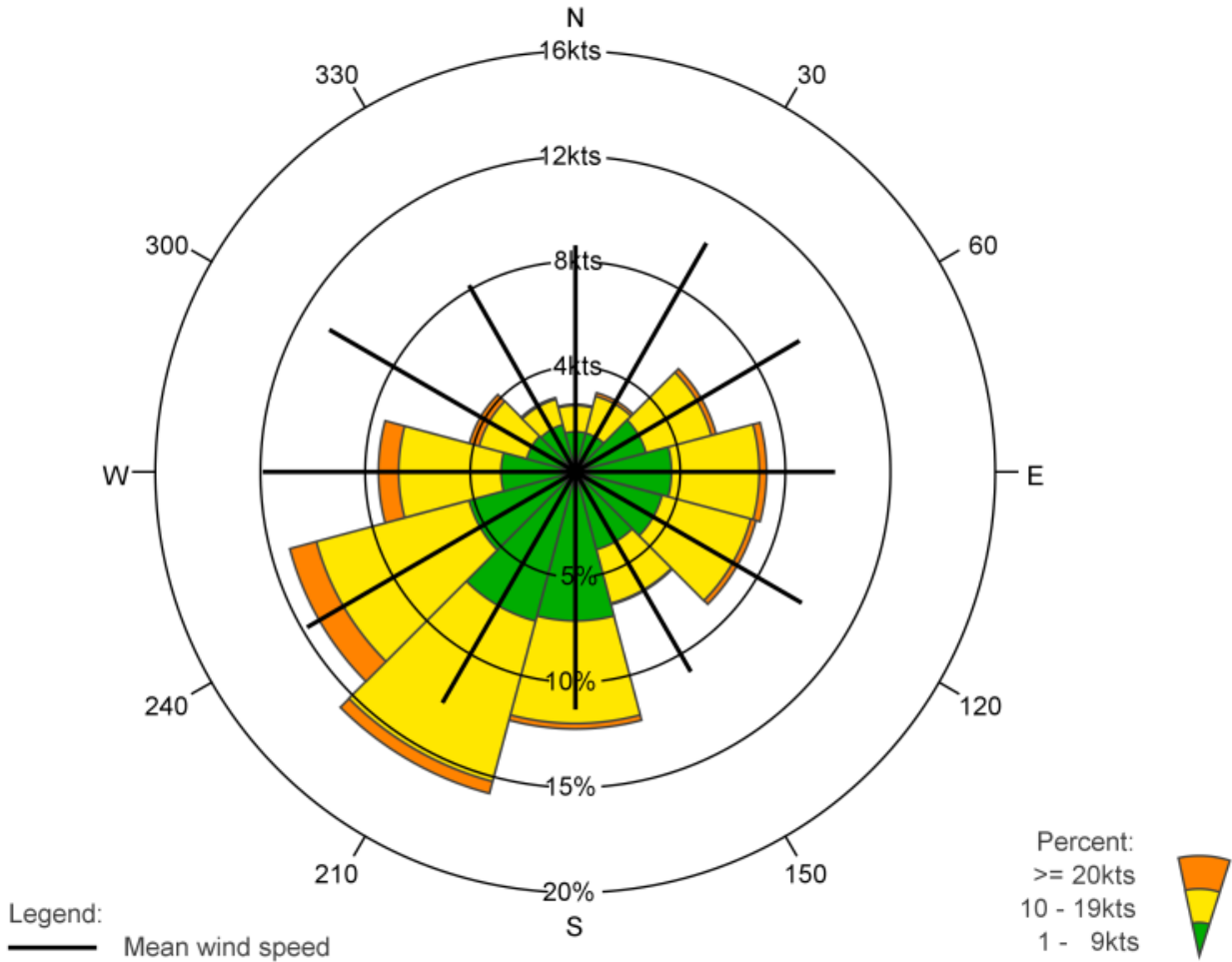


Figure 380

Wind Roses

EKOD: HANS CHR. ANDERSEN AIRPORT, AUTUMN & WINTER

02-01-2009 - 27-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.2	3.9	6.9	9.1	8.9	6.5	12.2	15.8	14.1	9.4	5.2	3.6	99.0
% 1 - 9kts	1.9	1.9	3.5	4.6	4.3	3.8	7.1	7.3	5.2	3.5	2.4	2.3	47.9
% 10 - 19kts	1.2	1.8	3.2	4.2	4.4	2.6	4.9	7.9	7.5	4.9	2.3	1.3	46.2
% >= 20kts	0.1	0.2	0.2	0.3	0.3	0.1	0.3	0.6	1.3	1.0	0.5	0.1	4.8
Mean wind speed	8.6	10.0	9.9	9.9	9.9	8.8	9.1	10.2	11.8	11.9	10.8	8.2	10.2
Max wind speed	28.0	26.0	26.0	27.0	25.0	23.0	26.0	45.0	43.0	38.0	32.0	26.0	45.0

Number of observations = 23791

Source: DMI

Calm defined as wind speed = 0kts

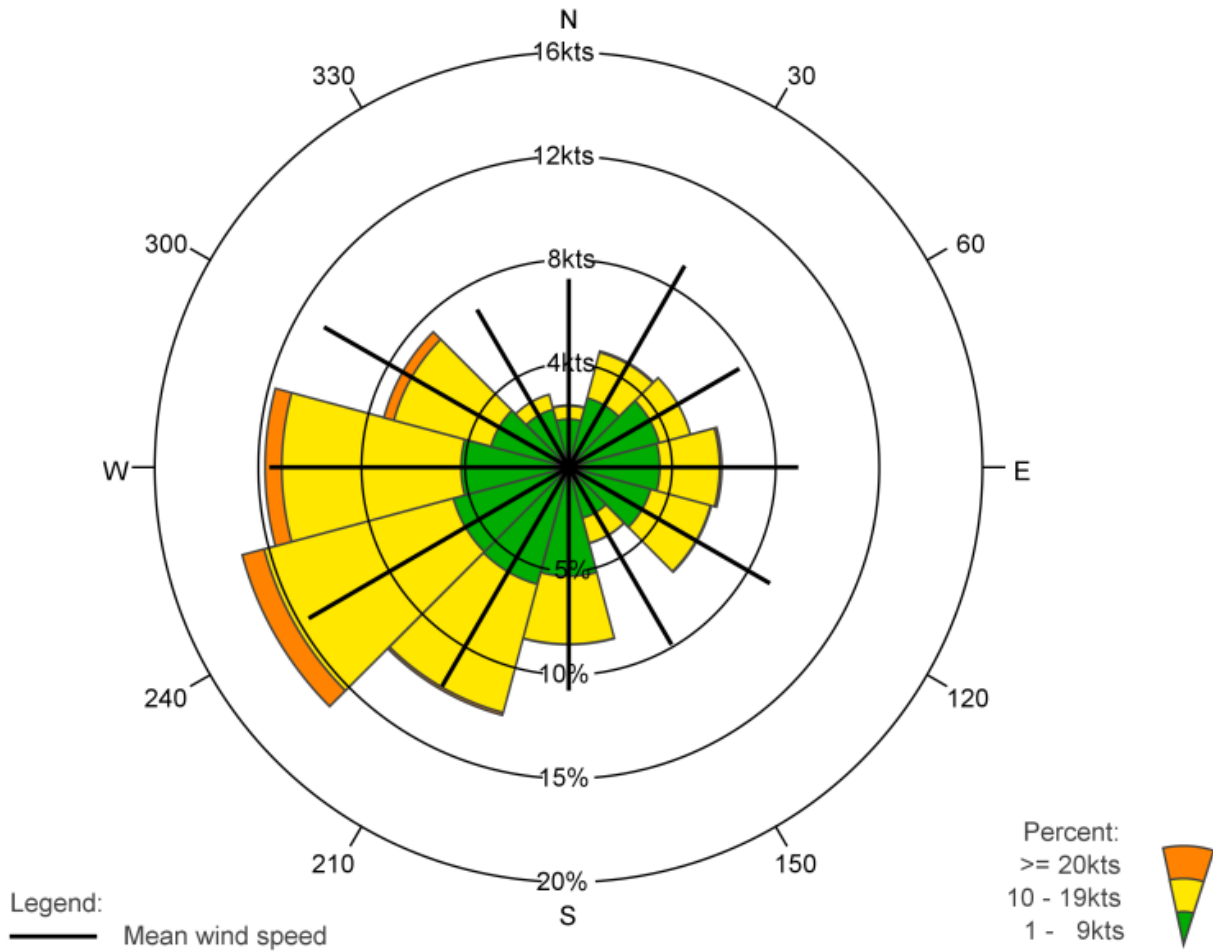
Number of observations with calm/varying wind direction: 249=1.0%

Observations with calm/varying wind direction are not used in the statistics

Figure 381

EKOD: HANS CHR. ANDERSEN AIRPORT, AUTUMN & WINTER

02-01-2009 - 27-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.0	5.8	6.1	7.4	7.1	3.8	8.5	12.4	16.3	14.7	9.2	3.6	98.0
% 1 - 9kts	2.3	3.5	4.5	4.4	4.1	2.5	5.2	5.8	5.8	5.2	3.9	2.9	50.2
% 10 - 19kts	0.6	2.3	1.6	2.9	3.0	1.2	3.3	6.4	9.5	8.7	4.8	0.7	45.0
% >= 20kts	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	1.1	0.8	0.5	0.0	2.8
Mean wind speed	7.3	9.0	7.6	8.9	9.0	7.9	8.6	9.8	11.6	11.6	10.9	7.0	9.8
Max wind speed	24.0	23.0	21.0	23.0	23.0	21.0	22.0	26.0	33.0	32.0	34.0	23.0	34.0

Number of observations = 26450

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 525=2.0%

Observations with calm/varying wind direction are not used in the statistics

Source: DMI

Figure 382

Availability

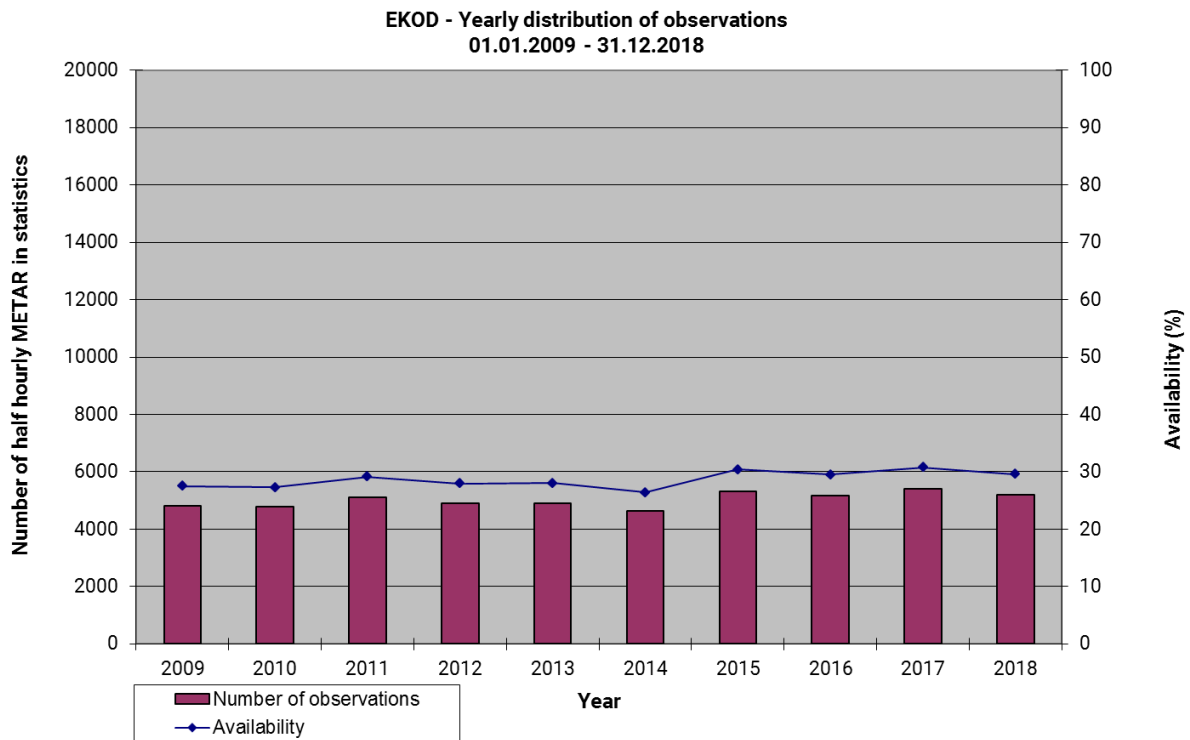


Figure 383

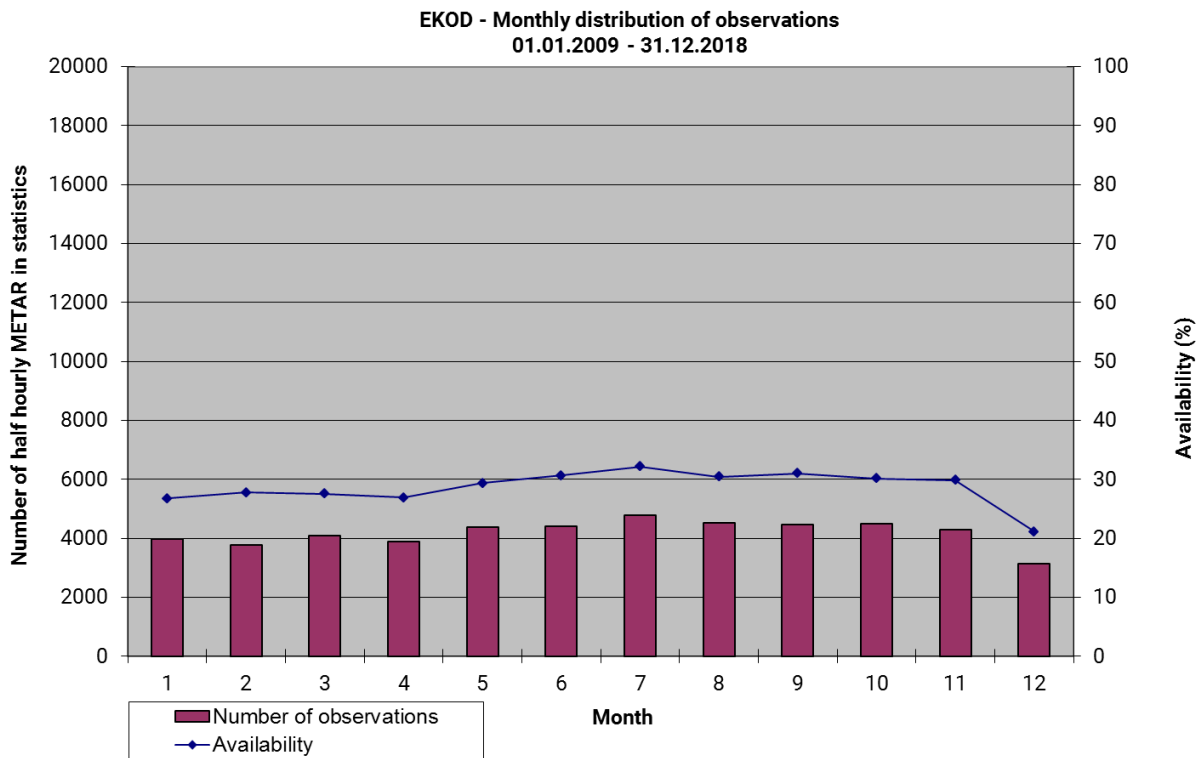


Figure 384

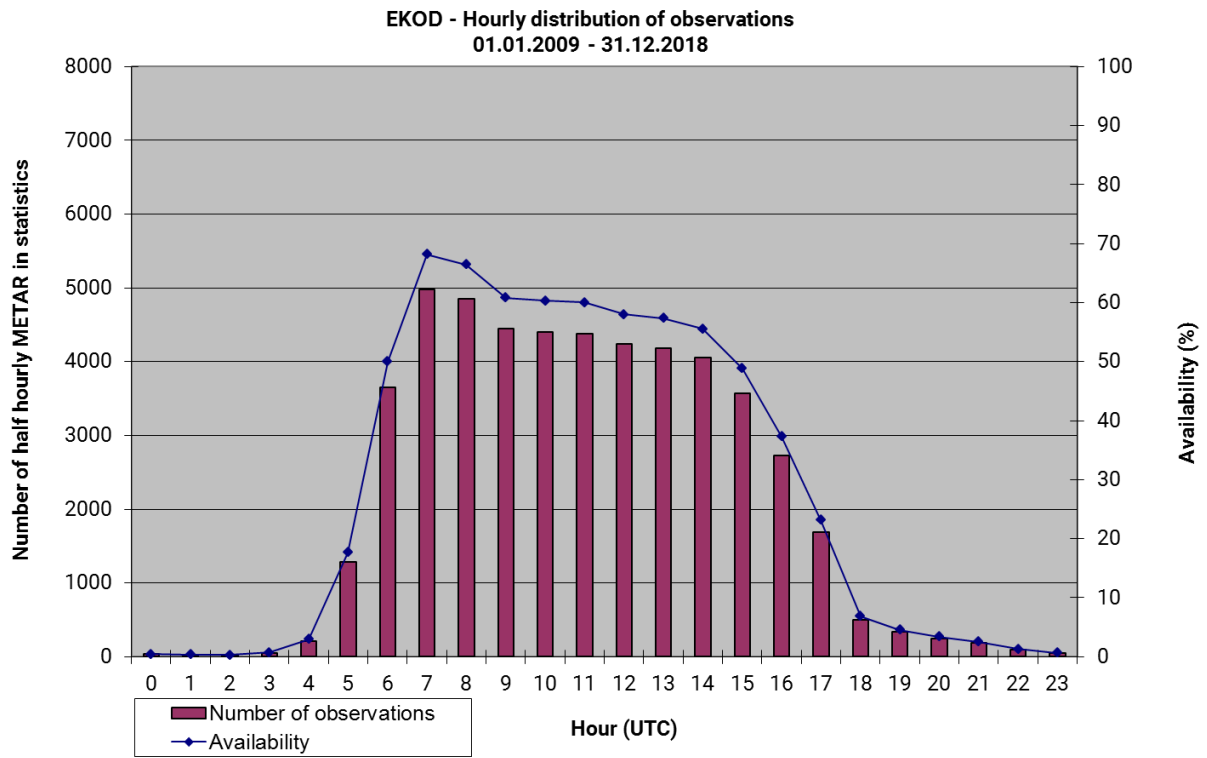


Figure 385

Table 107: EKOD. Average number of half hourly observations in statistics, 02.01.2009 – 27.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
5	0.4	0.3	0.4	0.4	0.3	0.4	0.5	0.3	0.3	0.3
6	0.9	1.0	1.0	1.0	1.0	0.9	1.1	1.0	1.0	1.0
7	1.2	1.4	1.4	1.3	1.3	1.2	1.4	1.4	1.5	1.5
8	1.3	1.4	1.3	1.2	1.3	1.1	1.4	1.4	1.4	1.4
9	1.1	1.2	1.2	1.1	1.2	1.1	1.3	1.3	1.3	1.3
10	1.1	1.2	1.2	1.2	1.2	1.1	1.2	1.2	1.3	1.3
11	1.1	1.2	1.2	1.2	1.2	1.0	1.3	1.2	1.3	1.2
12	1.1	1.2	1.2	1.1	1.1	1.0	1.2	1.2	1.3	1.2
13	1.1	1.2	1.2	1.1	1.1	1.0	1.2	1.2	1.2	1.2
14	1.1	1.1	1.1	1.1	1.1	1.0	1.1	1.1	1.2	1.2
15	0.9	0.9	1.0	0.9	0.9	0.9	1.0	1.0	1.1	1.0
16	0.8	0.6	0.8	0.7	0.8	0.7	0.8	0.8	0.8	0.7
17	0.6	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.4
18	0.3	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
19	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
21	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

EKRK Københavns Lufthavn, Roskilde

Airport location: 55,583°N 12,133°E Elevation: 45 m above MSL.

EKRK observations in statistics: 170,790 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 97.4 %. For more information, please go to the 'Availability' section.

EKRK METAR are both AUTO METAR and manual METAR.

Cross Tables Visibility – Ceiling

Table 108: EKRK Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 170,790	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.0023	0.33	0.36	0.36	0.36	0.36	0.11	0.48
<350m	0.0023	0.99	1.23	1.24	1.25	1.25	0.44	1.70
<600m	0.0023	1.15	1.64	1.67	1.68	1.69	0.63	2.32
<800 m	0.0023	1.24	1.87	1.91	1.92	1.93	0.73	2.66
<1.5 km	0.0023	1.56	2.47	2.62	2.66	2.68	1.04	3.72
<3.0 km	0.0023	1.89	3.79	4.66	4.96	5.10	2.26	7.35
< 5.0 km	0.0023	1.96	4.71	6.99	7.93	8.30	4.45	12.76
< 8.0 km	0.0023	1.98	5.18	8.93	10.90	11.70	8.18	19.88
>= 8.0 km or CAVOK	0	0.0041	0.26	2.61	6.50	9.89	70.23	80.12
Total	0.0023	1.98	5.44	11.55	17.40	21.58	78.42	100

Table 109: EKRK - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,048	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.53	0.55	0.55	0.55	0.55	0.10	0.65
<350m	0	1.86	2.34	2.37	2.38	2.38	0.39	2.77
<600m	0	2.17	3.22	3.27	3.28	3.29	0.52	3.81
<800 m	0	2.39	3.76	3.83	3.85	3.86	0.60	4.46
<1.5 km	0	3.04	5.02	5.30	5.39	5.44	1.00	6.44
<3.0 km	0	3.69	7.59	9.09	9.74	10.04	2.77	12.81
< 5.0 km	0	3.82	9.27	13.19	14.84	15.62	6.03	21.65
< 8.0 km	0	3.86	10.21	16.70	20.02	21.50	11.00	32.50
>= 8.0 km or CAVOK	0	0	0.46	4.38	9.83	14.64	52.86	67.50
Total	0	3.86	10.67	21.08	29.85	36.13	63.87	100

Table 110: EKRK - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,477	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.13	0.15	0.15	0.15	0.15	0.026	0.17
<350m	0	0.43	0.48	0.48	0.48	0.48	0.16	0.64
<600m	0	0.51	0.65	0.65	0.65	0.65	0.24	0.89
<800 m	0	0.53	0.71	0.72	0.72	0.72	0.28	1.00
<1.5 km	0	0.68	0.93	0.96	0.96	0.96	0.44	1.40
<3.0 km	0	0.80	1.31	1.51	1.58	1.60	1.19	2.79
< 5.0 km	0	0.83	1.67	2.31	2.64	2.75	2.57	5.31
< 8.0 km	0	0.83	1.83	2.97	3.68	3.88	5.53	9.42
>= 8.0 km or CAVOK	0	0.0024	0.094	1.13	3.15	5.30	85.28	90.58
Total	0	0.84	1.93	4.10	6.82	9.18	90.82	100

Table 111: EKRK - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43311	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.0023	0.21	0.22	0.22	0.23	0.23	0.11	0.33
<350m	0.0023	0.40	0.44	0.45	0.45	0.45	0.43	0.88
<600m	0.0023	0.43	0.50	0.50	0.51	0.51	0.66	1.17
<800 m	0.0023	0.44	0.52	0.53	0.53	0.54	0.76	1.30
<1.5 km	0.0023	0.46	0.58	0.59	0.60	0.61	0.96	1.57
<3.0 km	0.0023	0.50	0.67	0.84	0.92	0.97	1.76	2.74
< 5.0 km	0.0023	0.53	0.86	1.32	1.59	1.73	3.17	4.91
< 8.0 km	0.0023	0.54	1.01	1.86	2.45	2.78	5.86	8.63
>= 8.0 km or CAVOK	0	0.0046	0.15	1.11	2.79	4.28	87.08	91.37
Total	0.0023	0.54	1.15	2.97	5.24	7.06	92.94	100

Table 112: EKRK - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,954	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.0070	0.46	0.52	0.53	0.53	0.53	0.22	0.75
<350m	0.0070	1.31	1.66	1.71	1.72	1.72	0.79	2.51
<600m	0.0070	1.50	2.23	2.30	2.32	2.32	1.10	3.42
<800 m	0.0070	1.59	2.52	2.60	2.62	2.62	1.28	3.91
<1.5 km	0.0070	2.10	3.41	3.70	3.76	3.79	1.75	5.53
<3.0 km	0.0070	2.60	5.66	7.27	7.71	7.87	3.31	11.17
< 5.0 km	0.0070	2.70	7.15	11.26	12.78	13.26	6.06	19.32
< 8.0 km	0.0070	2.71	7.79	14.37	17.64	18.83	10.40	29.22
>= 8.0 km or CAVOK	0	0.0093	0.32	3.87	10.29	15.42	55.35	70.78
Total	0.0070	2.72	8.12	18.24	27.93	34.25	65.75	100

Wind Direction Histograms

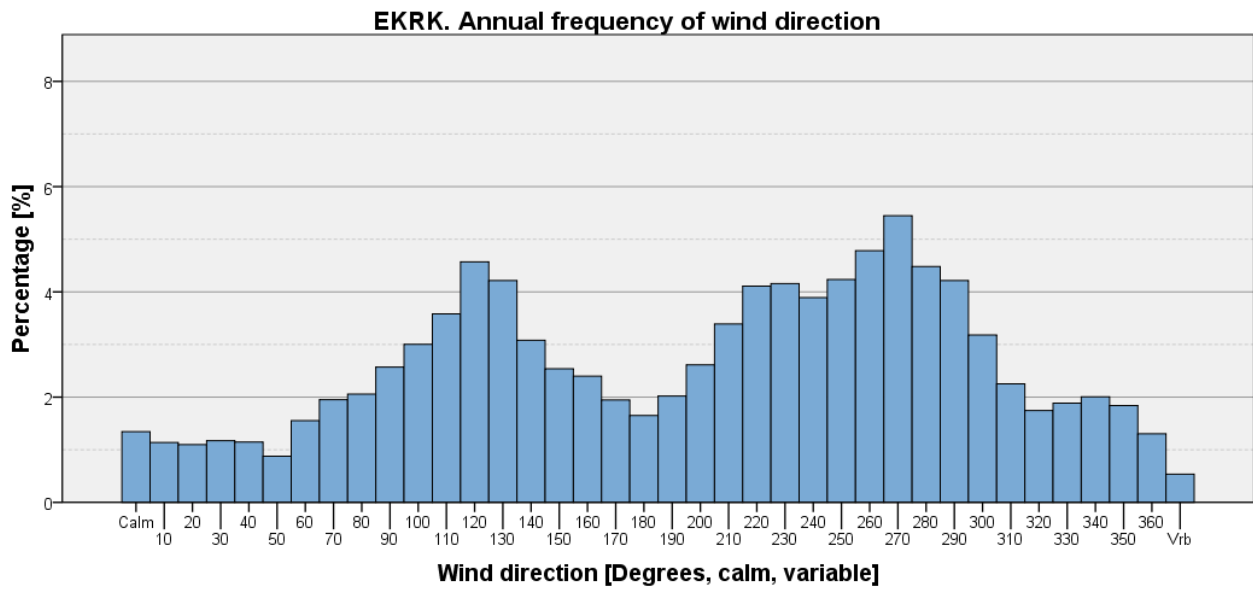


Figure 386

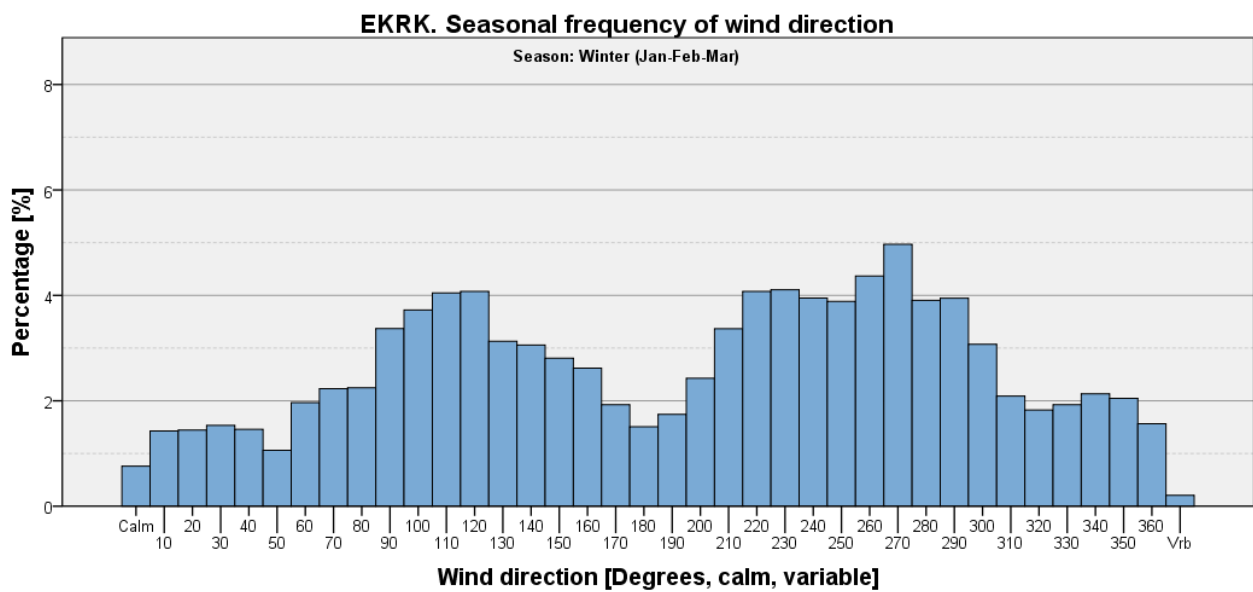


Figure 387

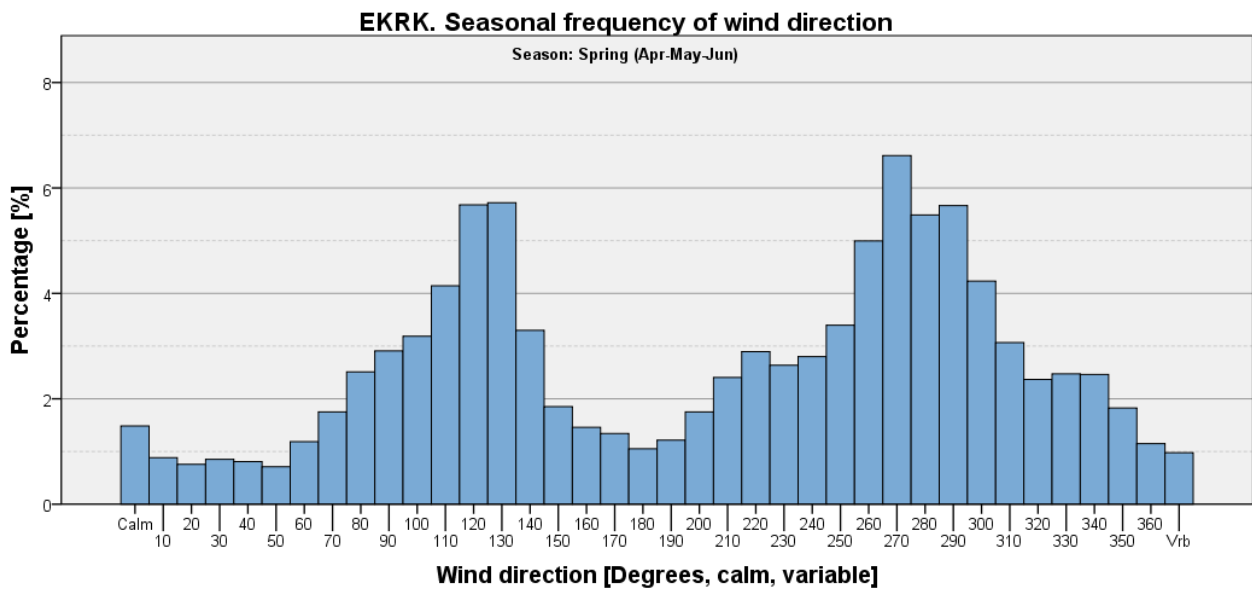


Figure 388

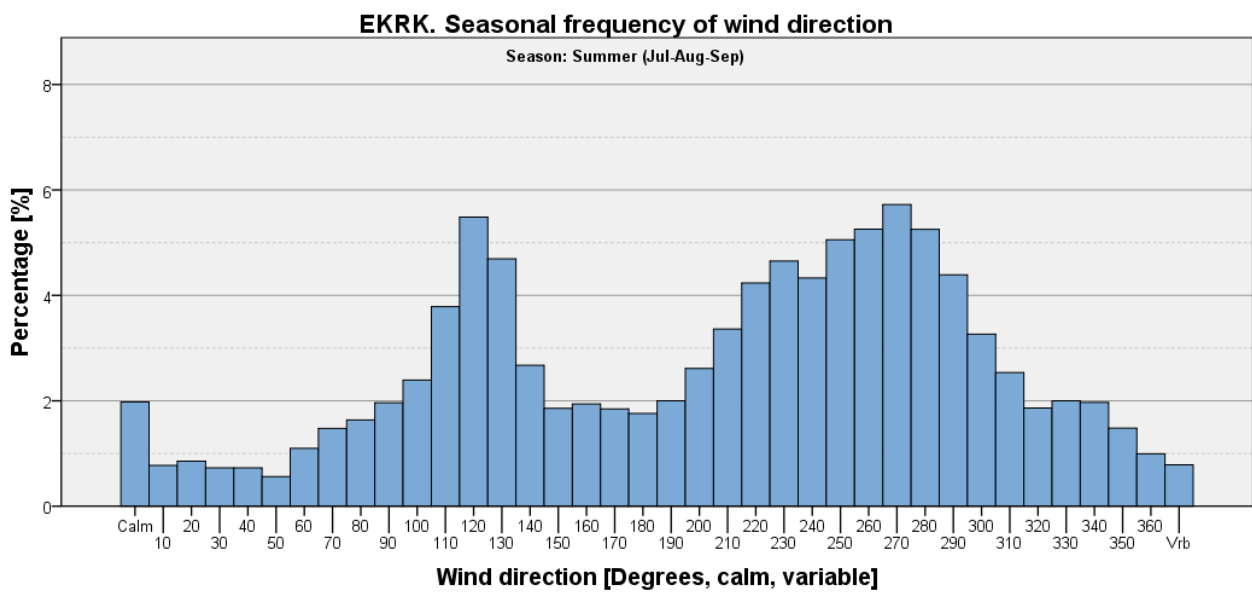


Figure 389

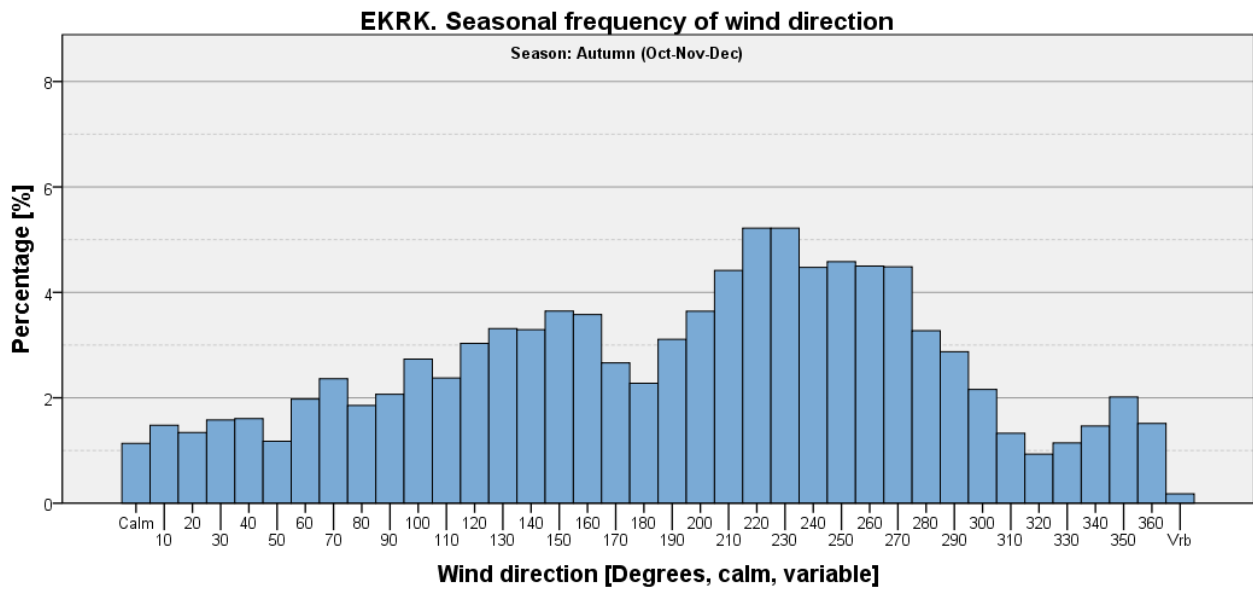


Figure 390

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 113: EKRR - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	4.46	1.00	1.30	3.91	2.66
All other observations	95.54	99.00	98.70	96.09	97.34
Total	100	100	100	100	100

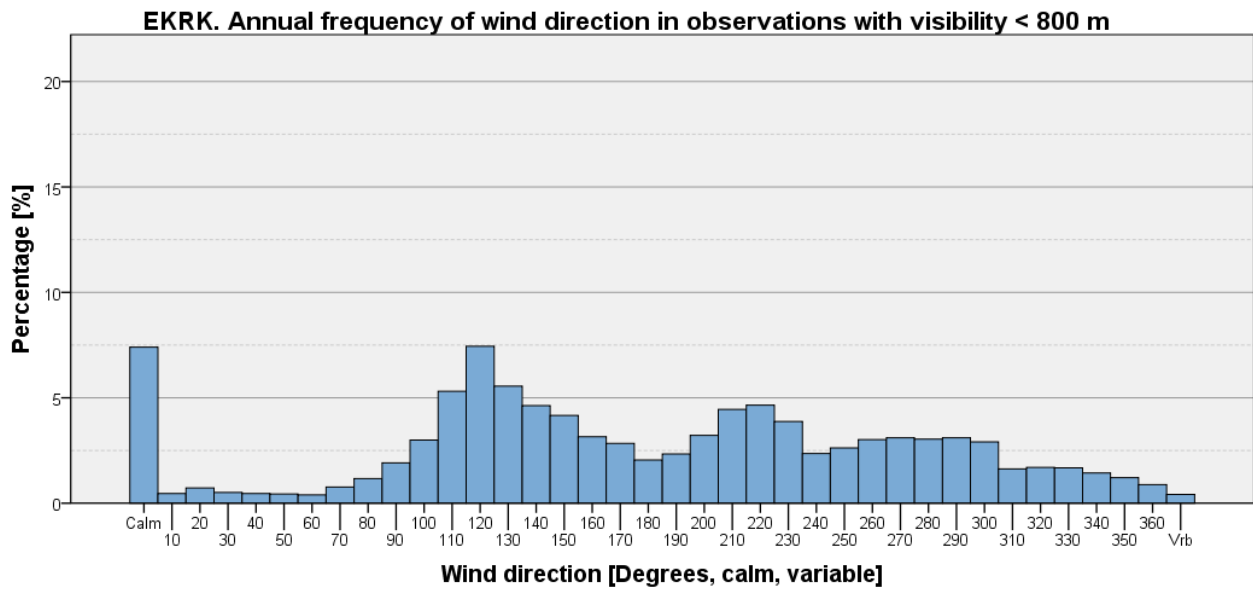


Figure 391

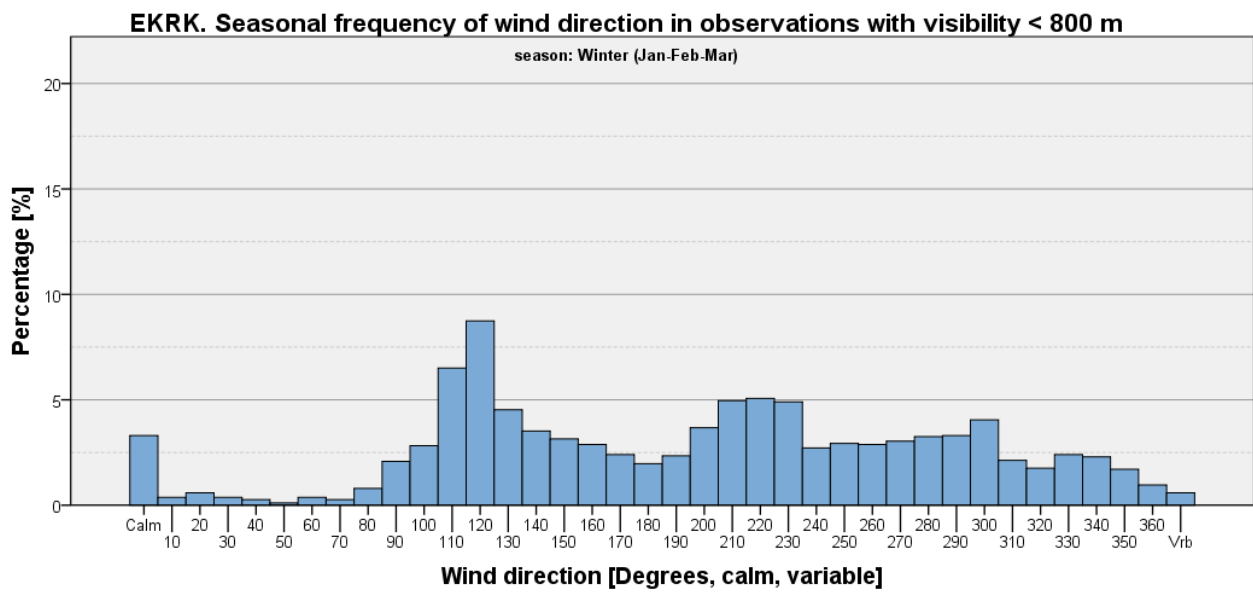


Figure 392

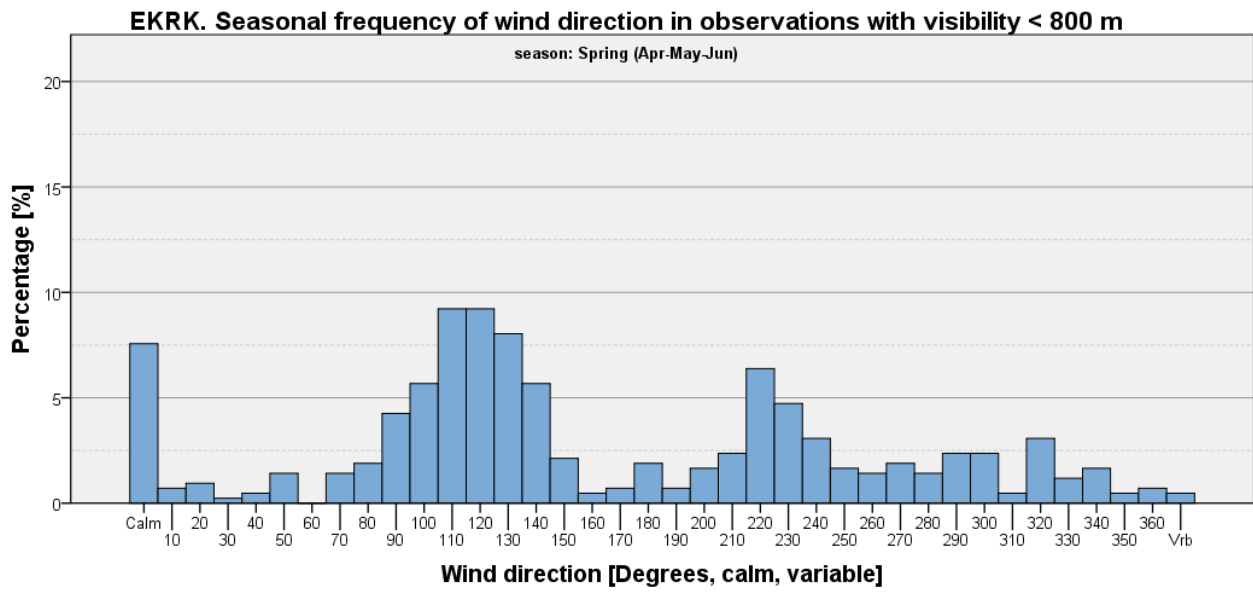


Figure 393

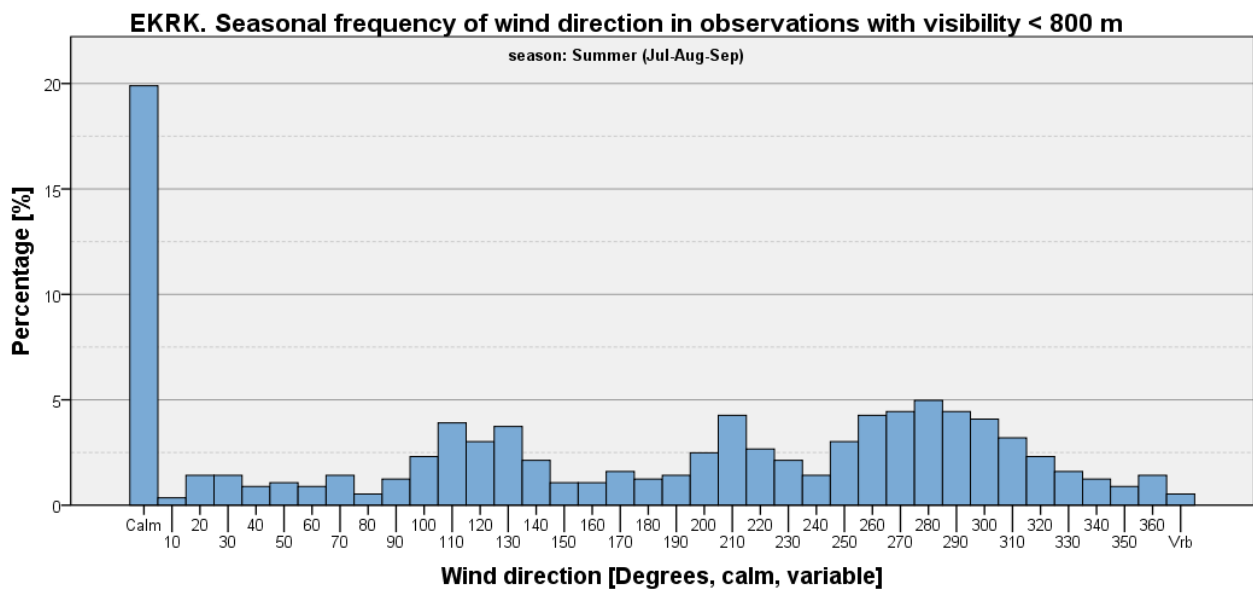


Figure 394

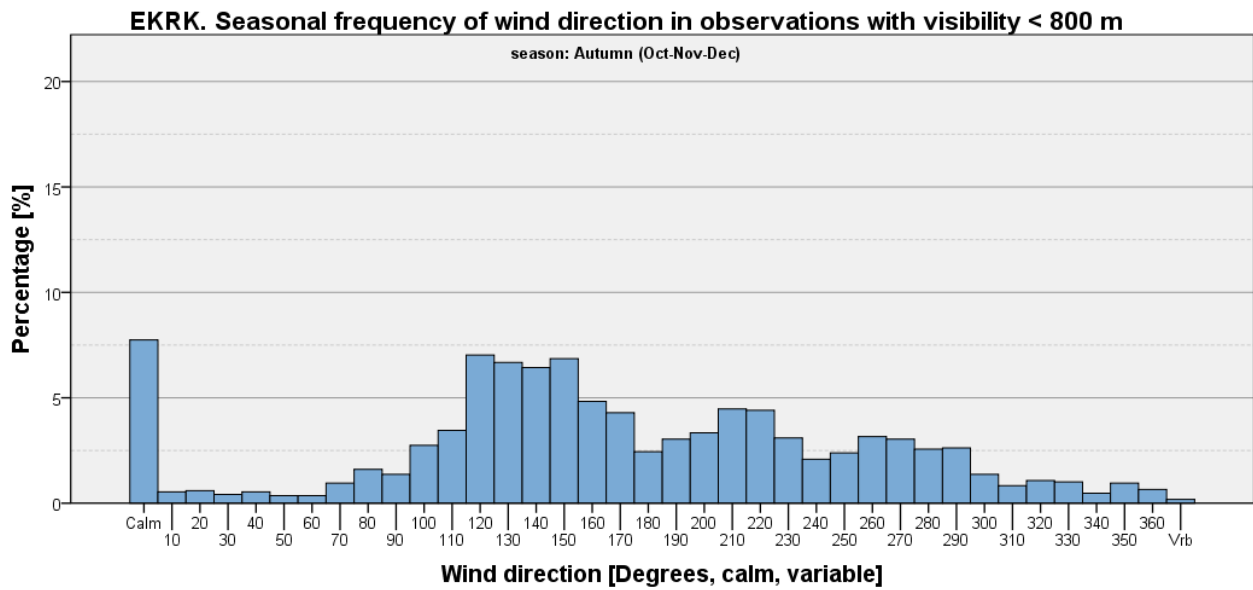


Figure 395

Visibility < 800 m and Wind Speed <= 5 kts

Table 114: EKRK - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	2.39	0.67	1.24	2.75	1.76
All other observations	97.61	99.33	98.76	97.25	98.24
Total	100	100	100	100	100

EKRK. Annual frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

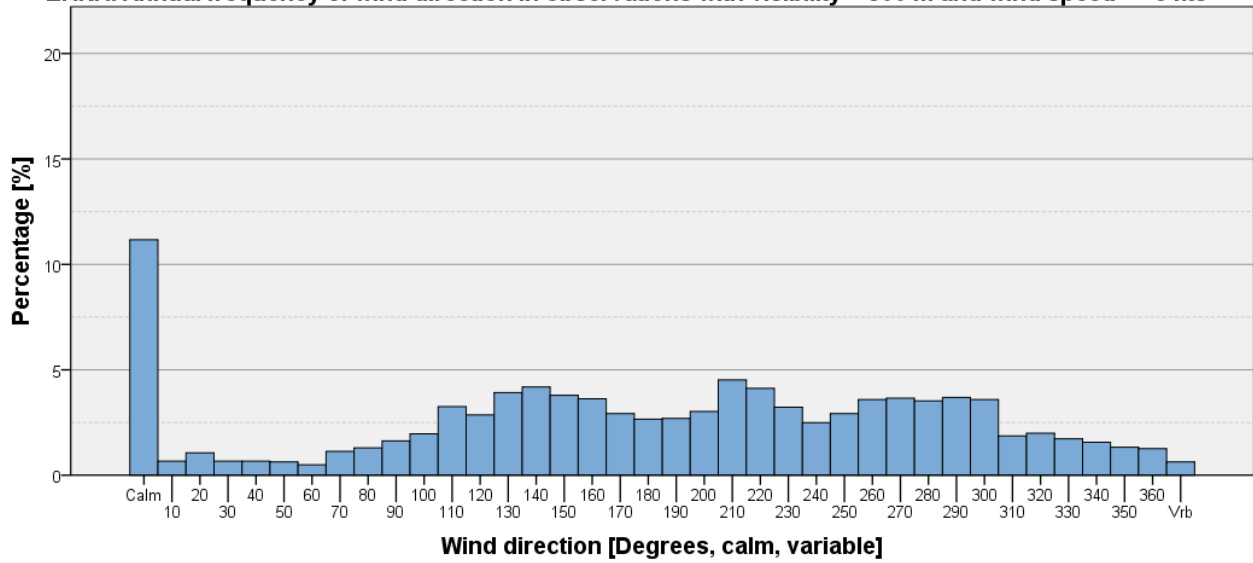


Figure 396

EKRK. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

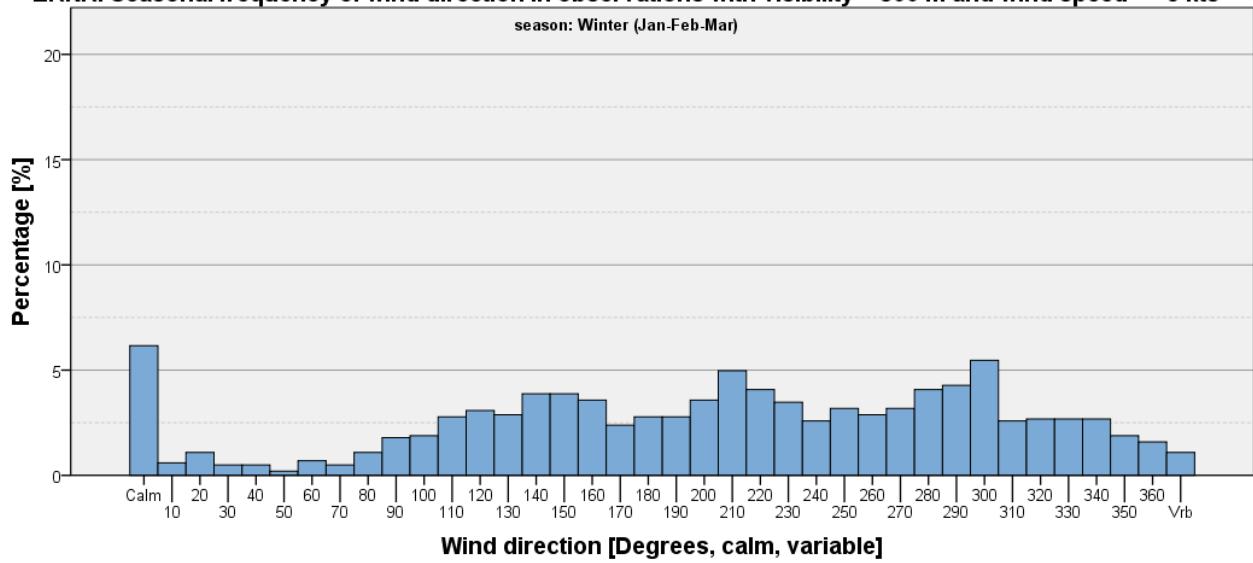


Figure 397

EKRK. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

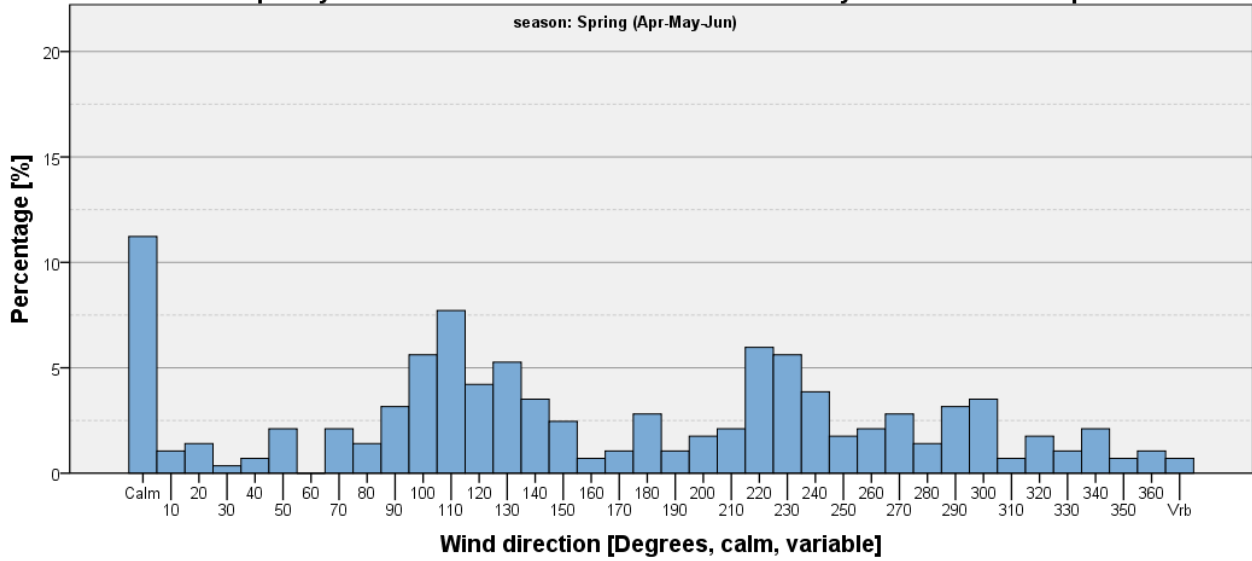


Figure 398

EKRK. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

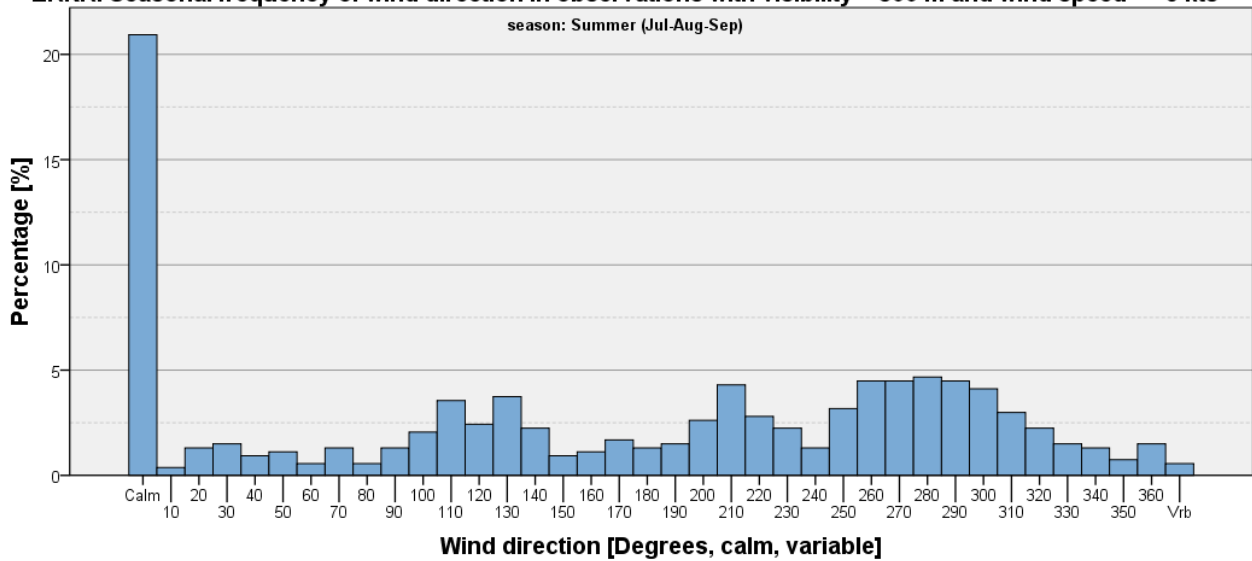


Figure 399

EKRK. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

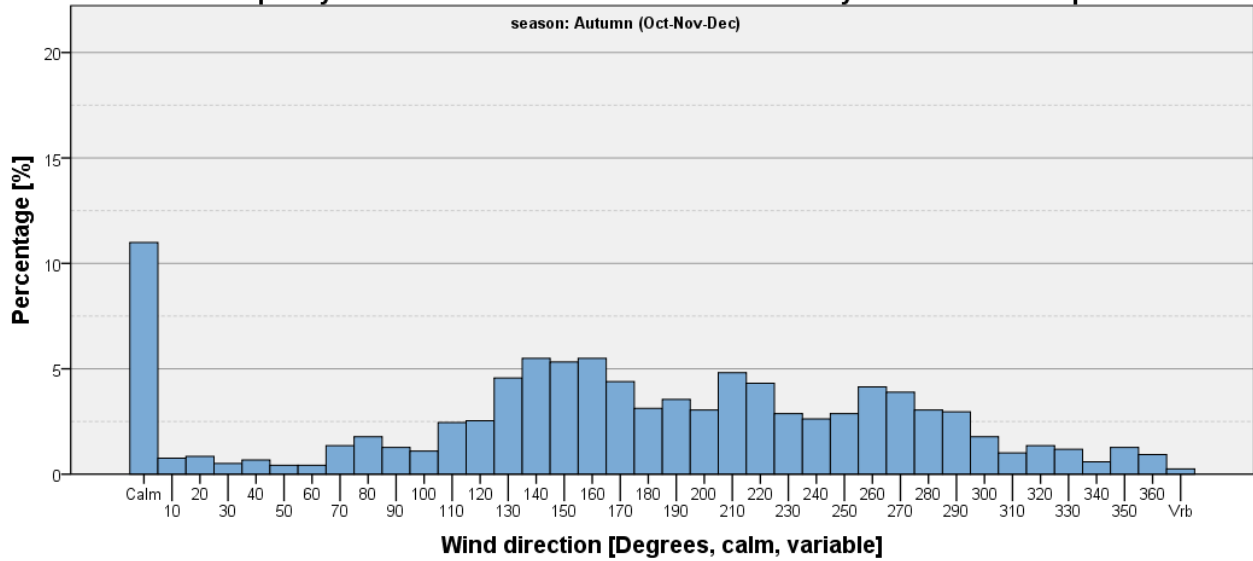


Figure 400

Visibility < 800 m and Wind Speed > 5 kts

Table 115: EKRK - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	2.07	0.32	0.065	1.15	0.90
All other observations	97.93	99.68	99.94	98.85	99.10
Total	100	100	100	100	100

EKRK. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

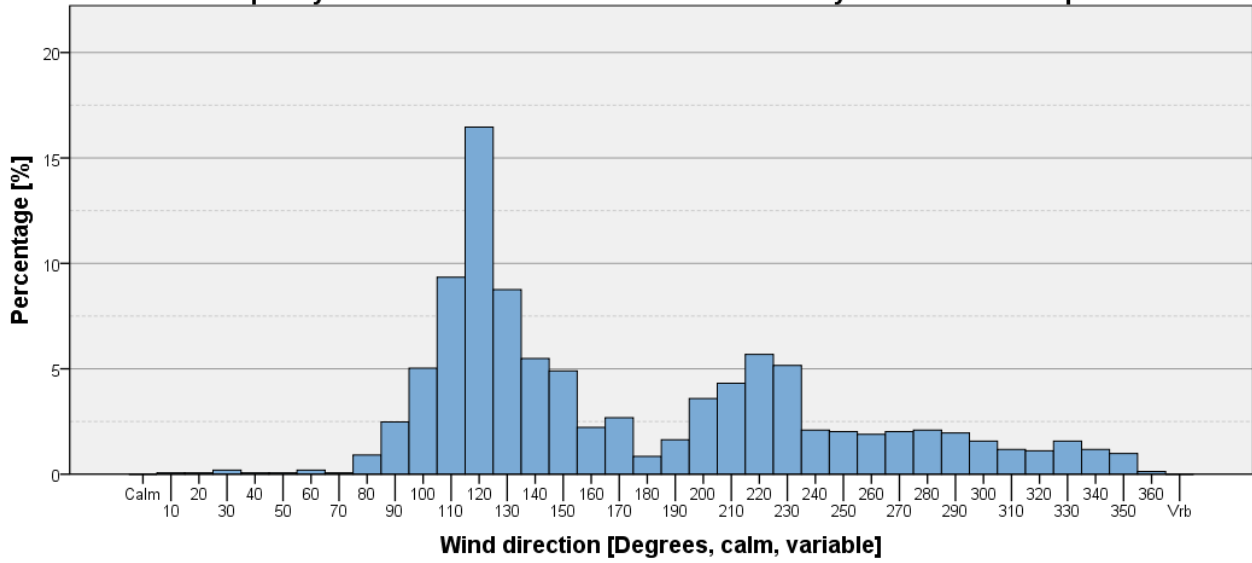


Figure 401

EKRK. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

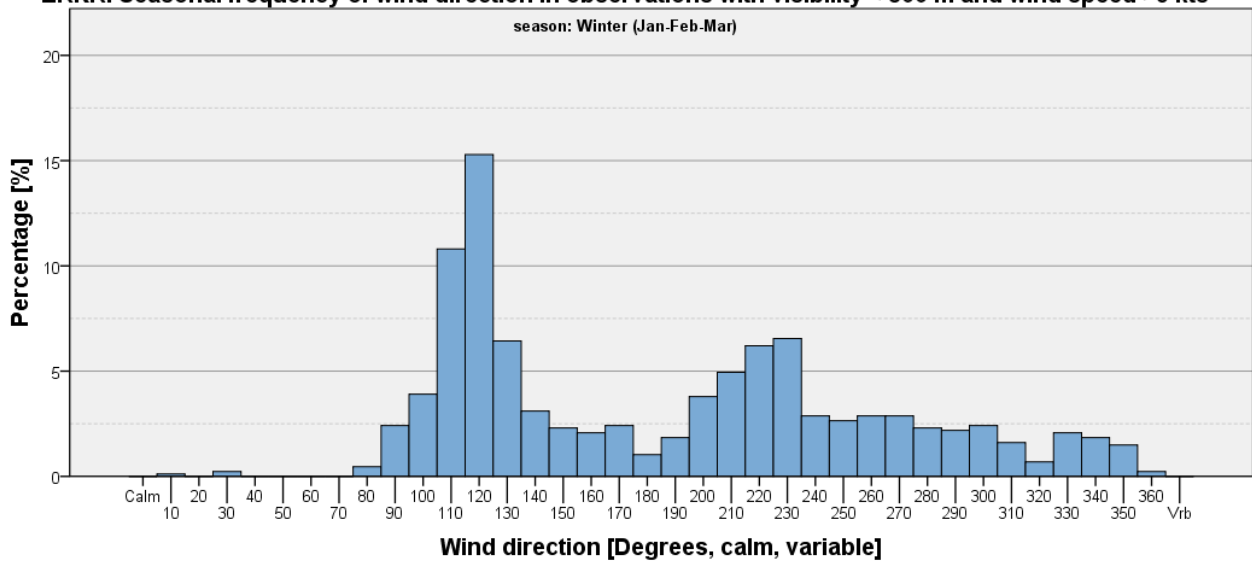


Figure 402

EKRK. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

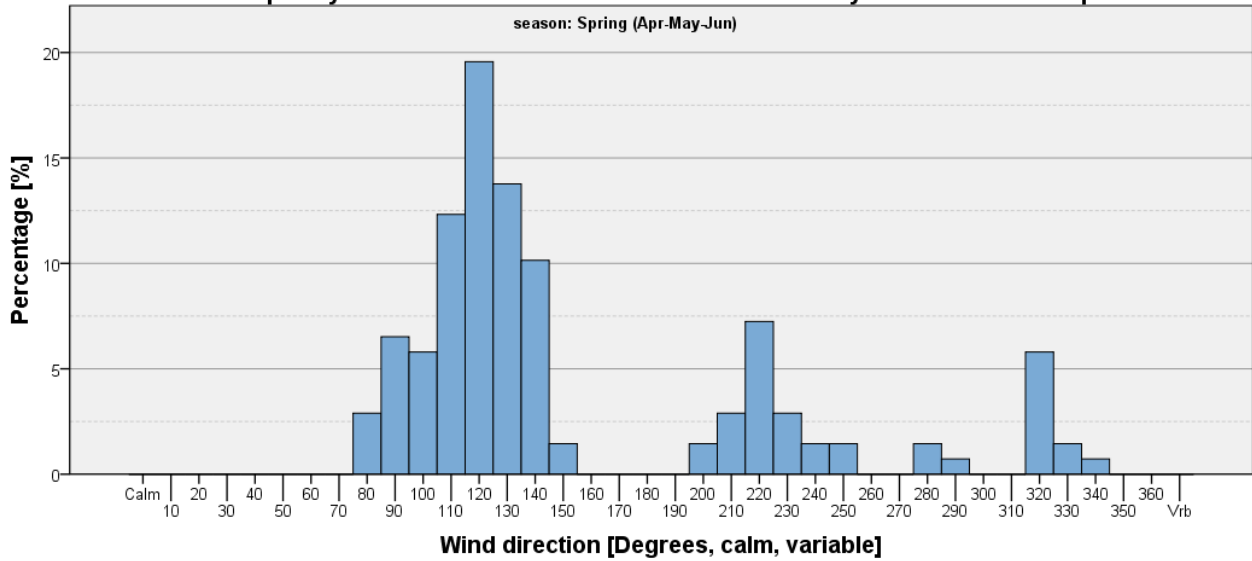


Figure 403

EKRK. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

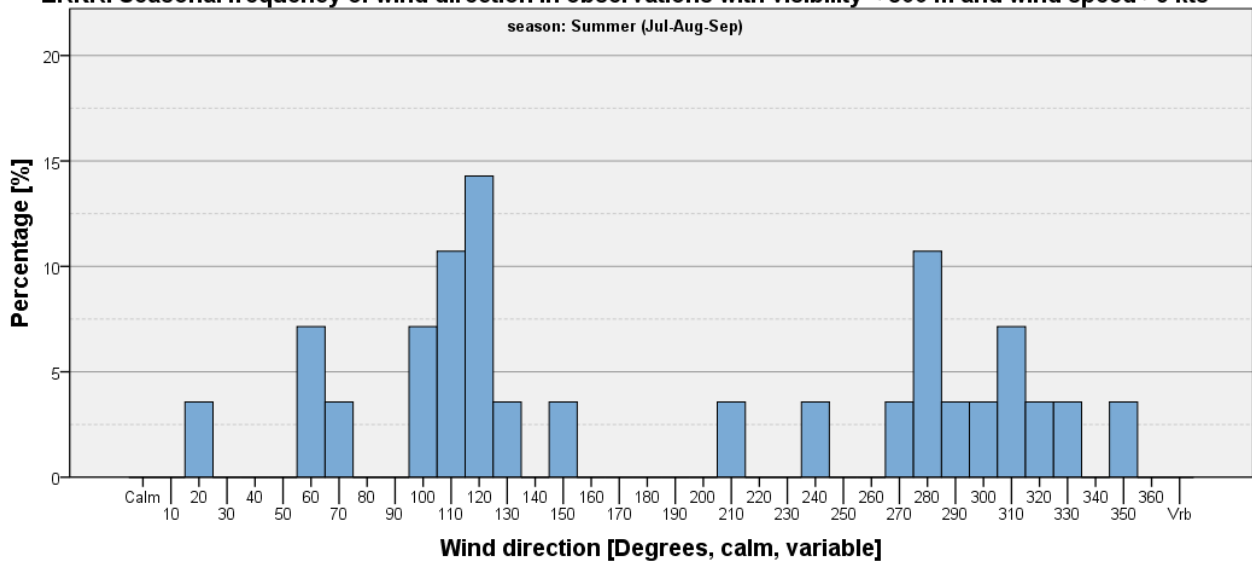


Figure 404

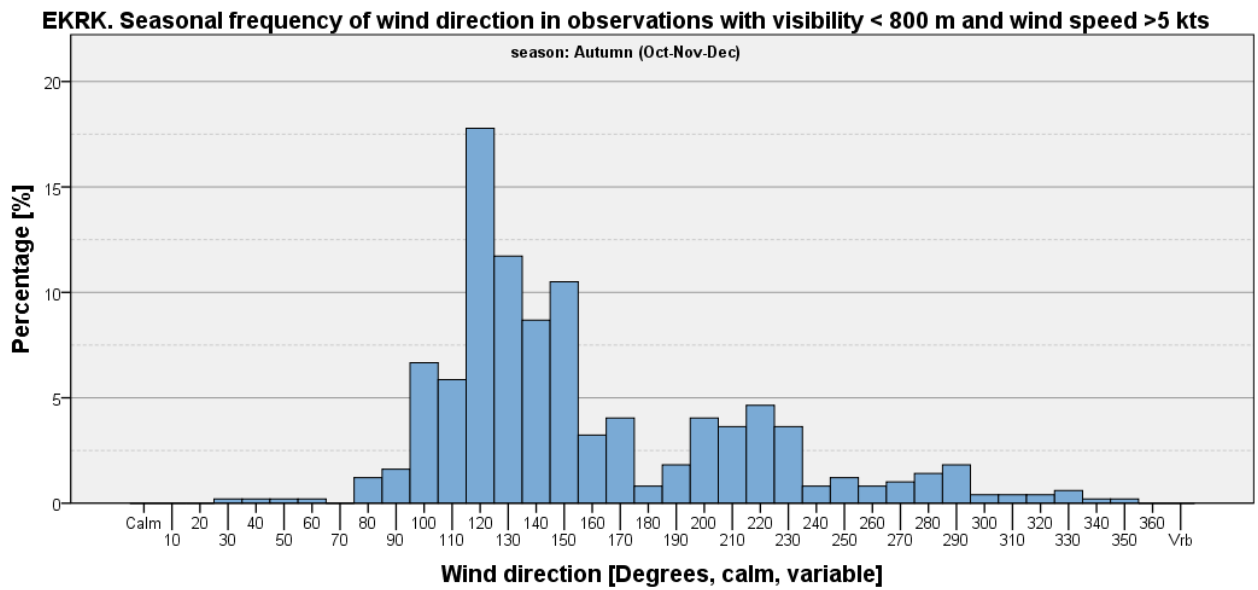


Figure 405

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 116: EKRK - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	21.08	4.10	2.97	18.24	11.55
All other observations	78.92	95.90	97.03	81.76	88.45
Total	100	100	100	100	100

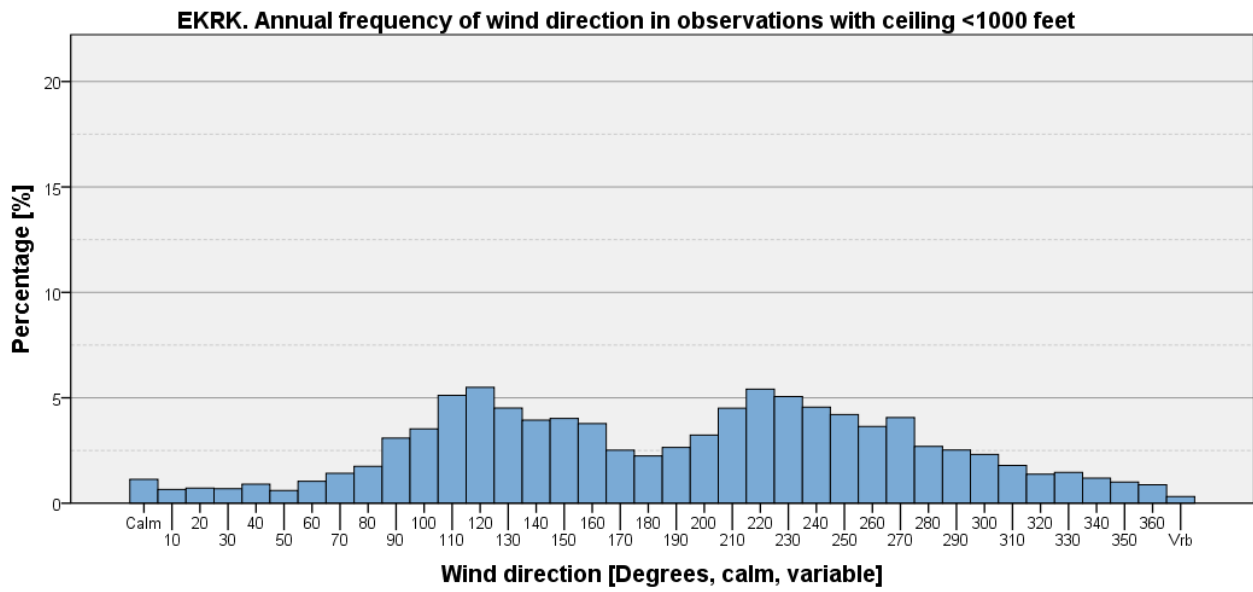


Figure 406

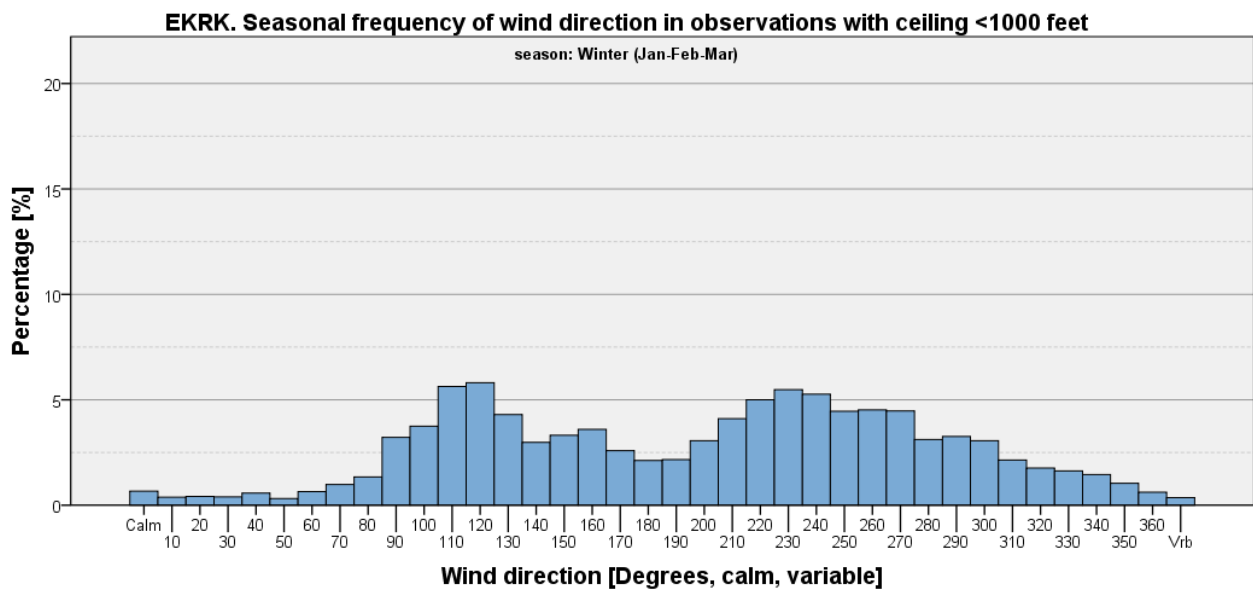


Figure 407

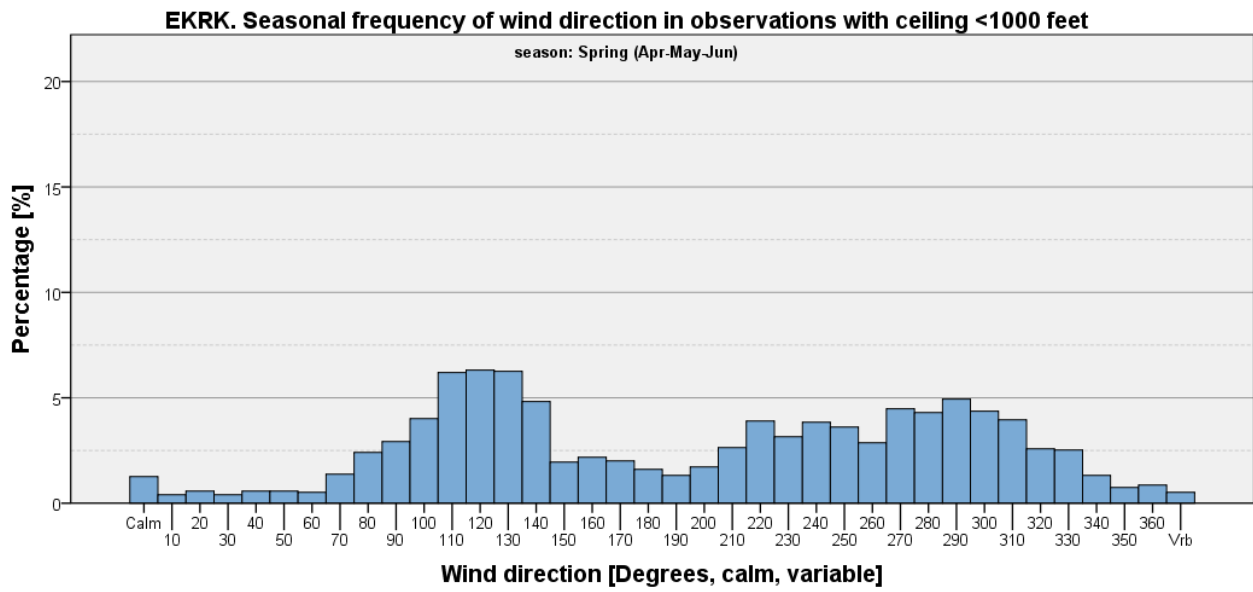


Figure 408

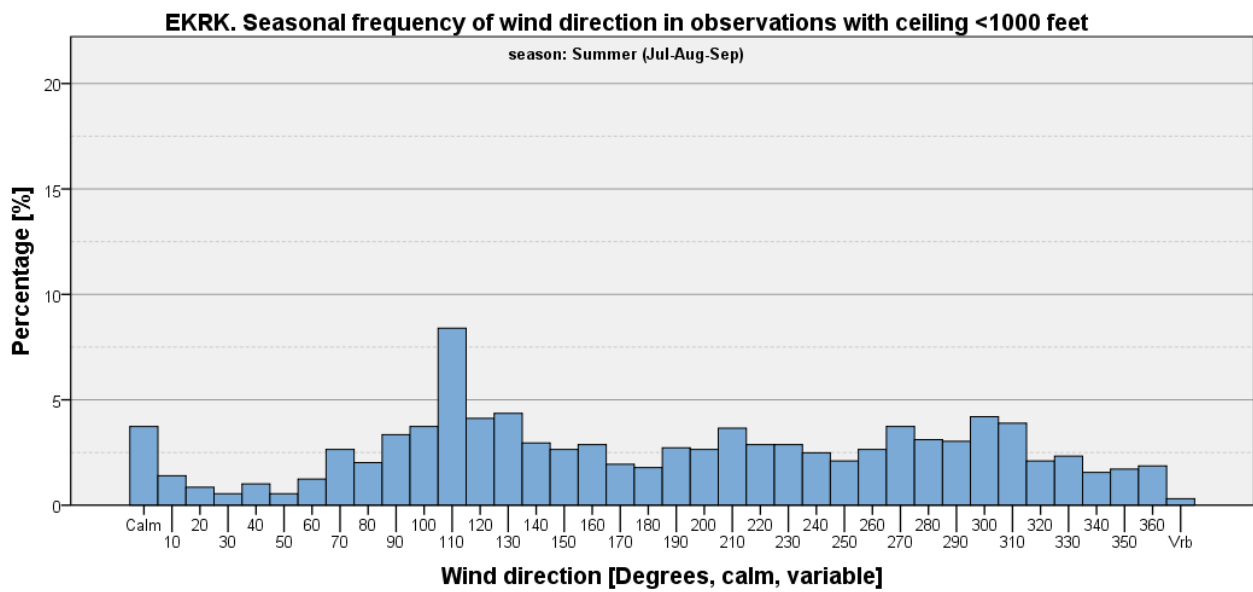


Figure 409

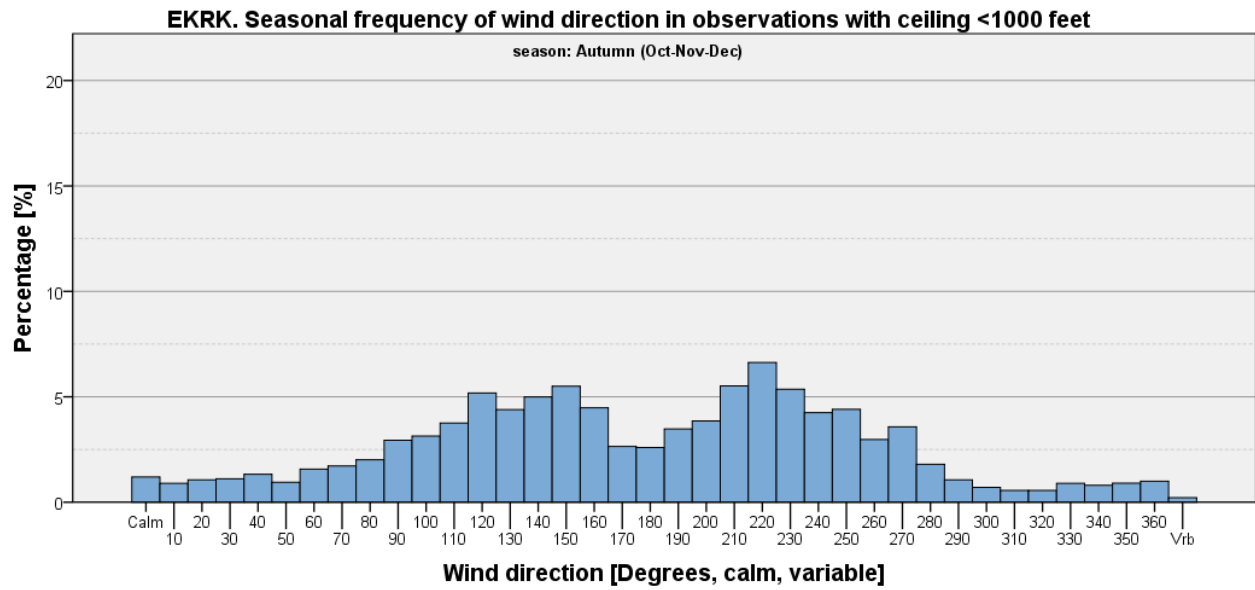


Figure 410

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 117: EKRK - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	5.13	1.21	1.13	4.39	2.96
All other observations	94.87	98.79	98.87	95.61	97.04
Total	100	100	100	100	100

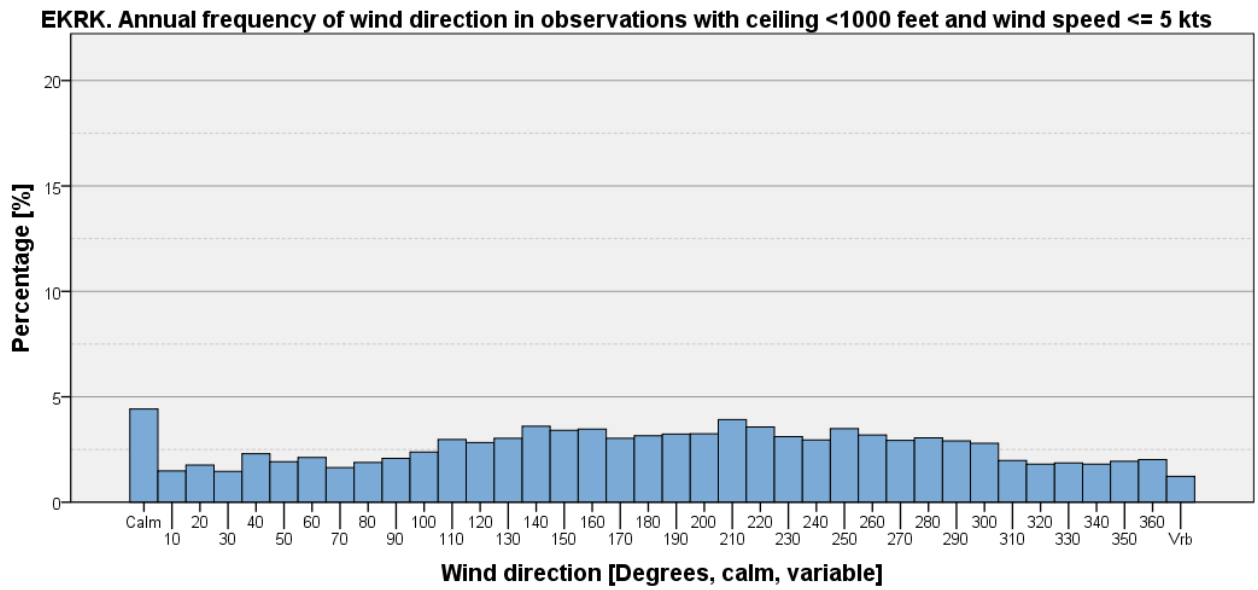


Figure 411

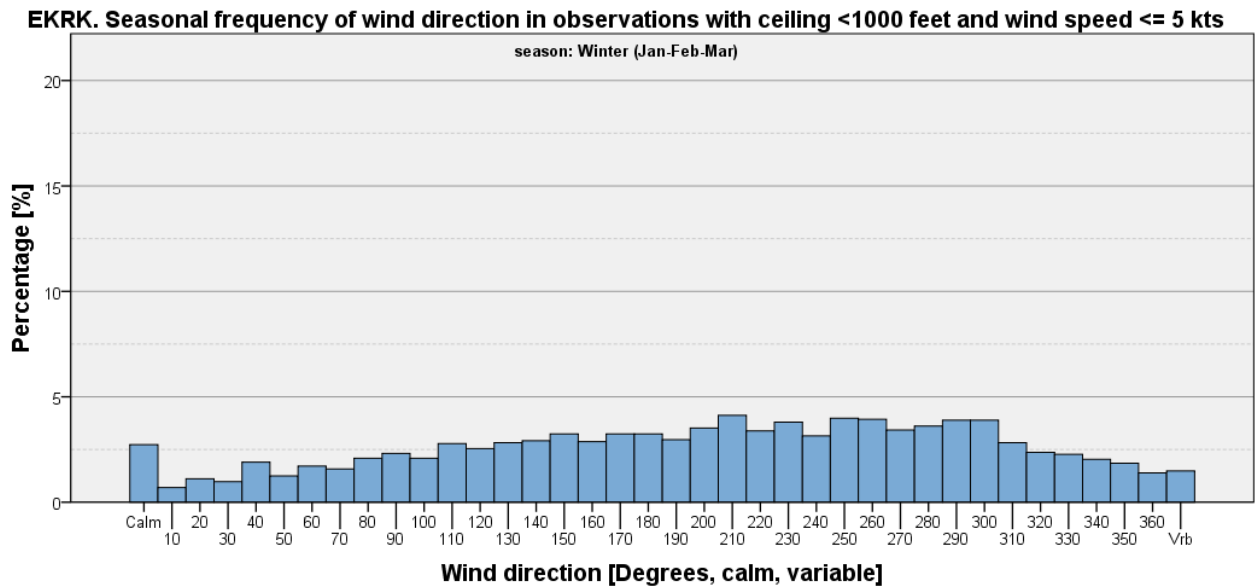


Figure 412

EKRK. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

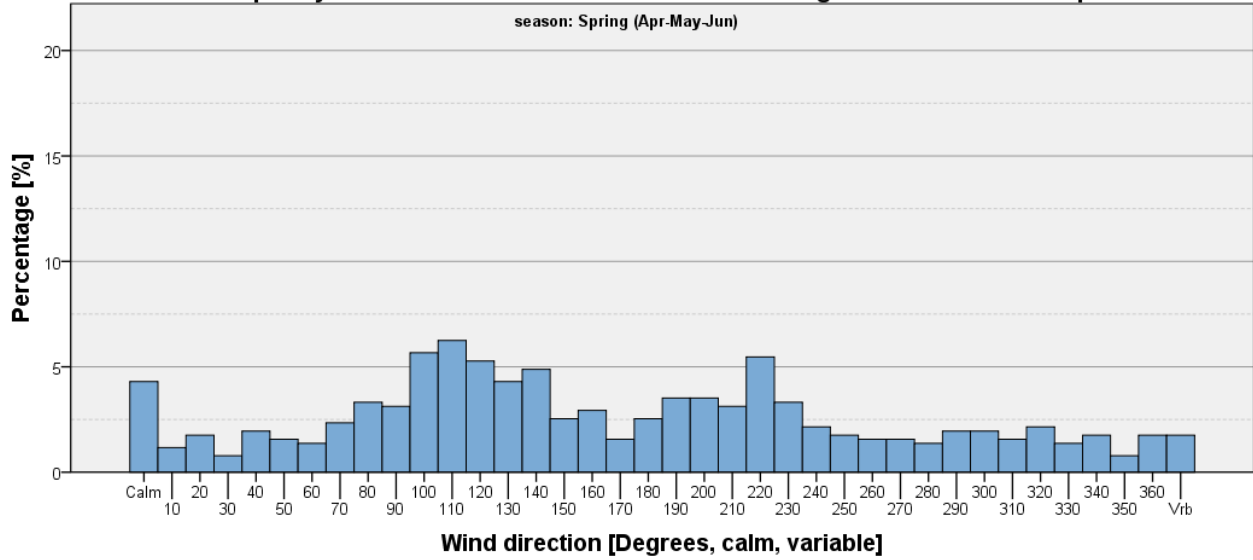


Figure 413

EKRK. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

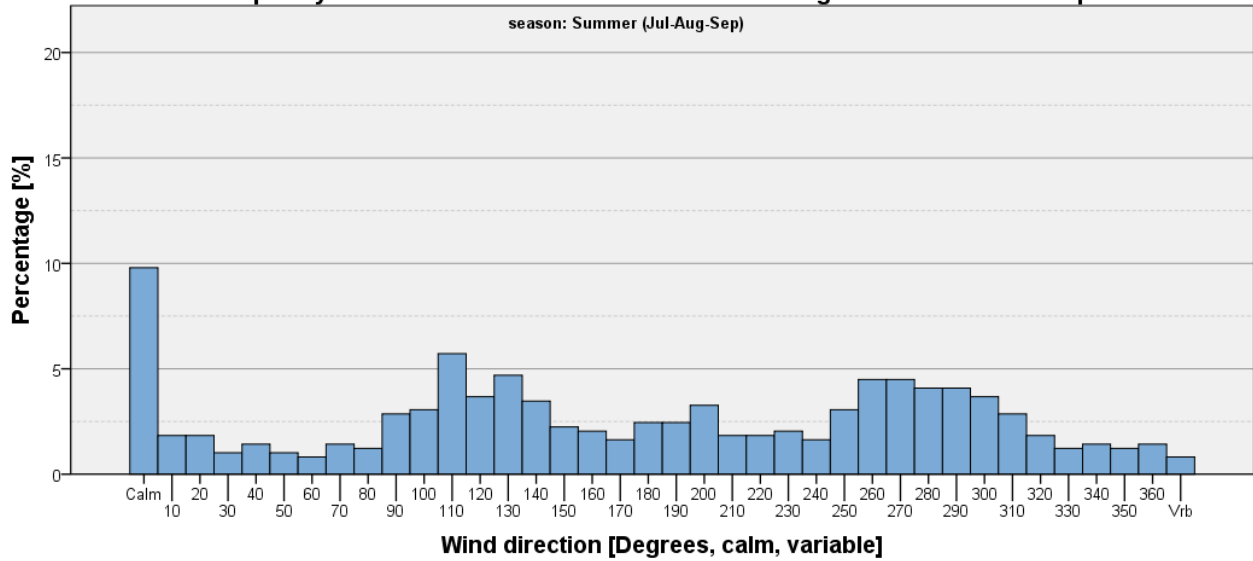


Figure 414

EKRK. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

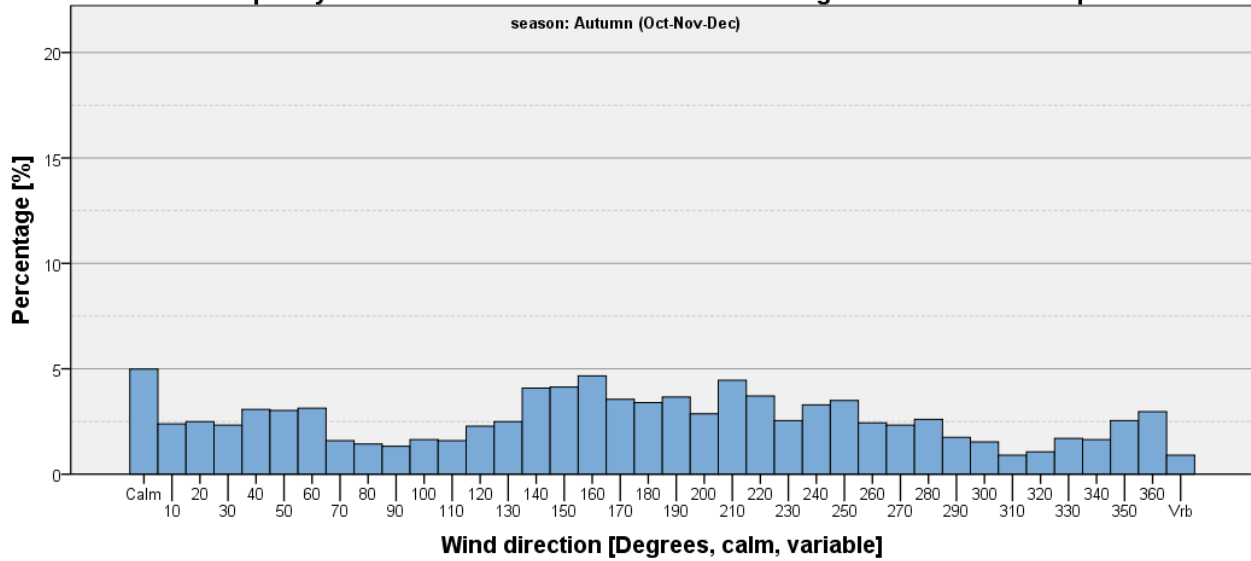


Figure 415

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 118: EKRK - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	15.94	2.90	1.84	13.85	8.59
All other observations	84.06	97.10	98.16	86.15	91.41
Total	100	100	100	100	100

EKRK. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

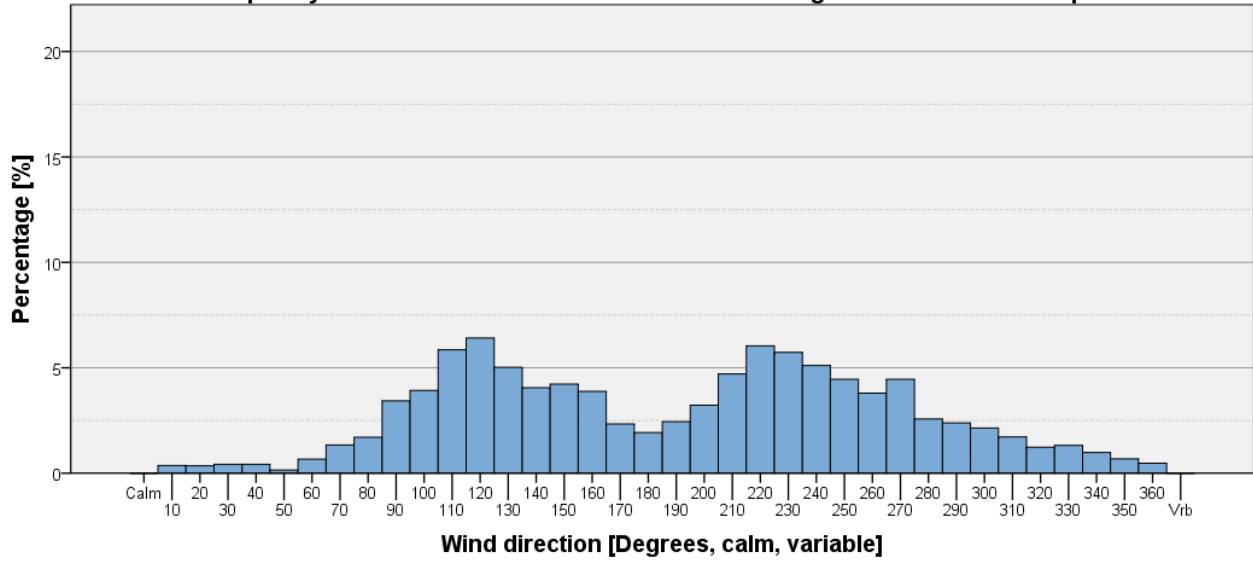


Figure 416

EKRK. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

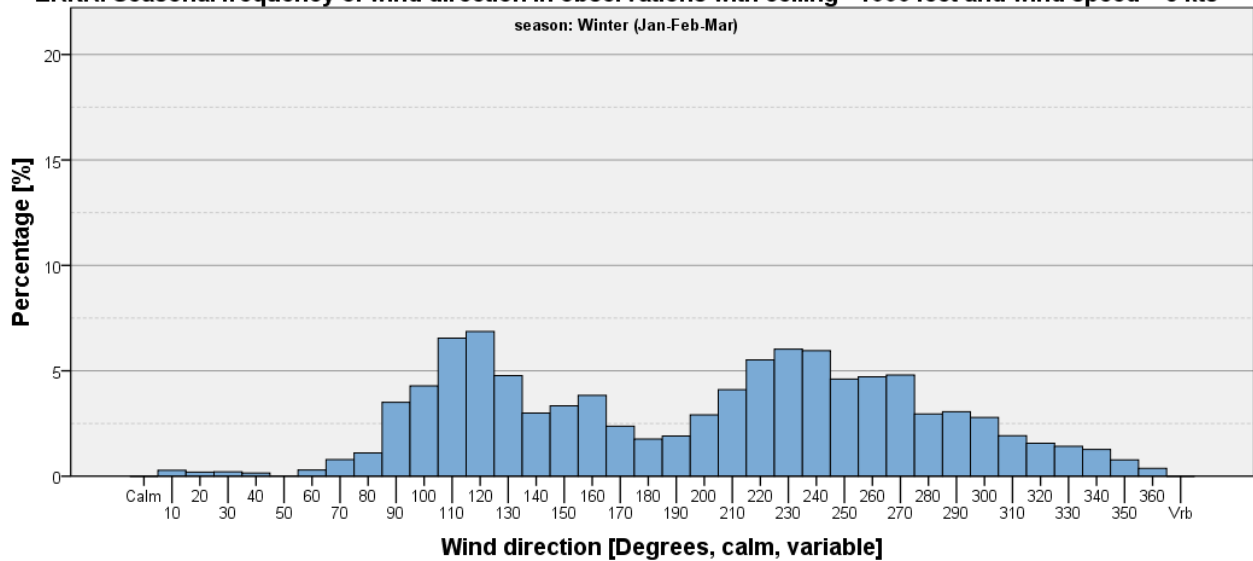


Figure 417

EKRK. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

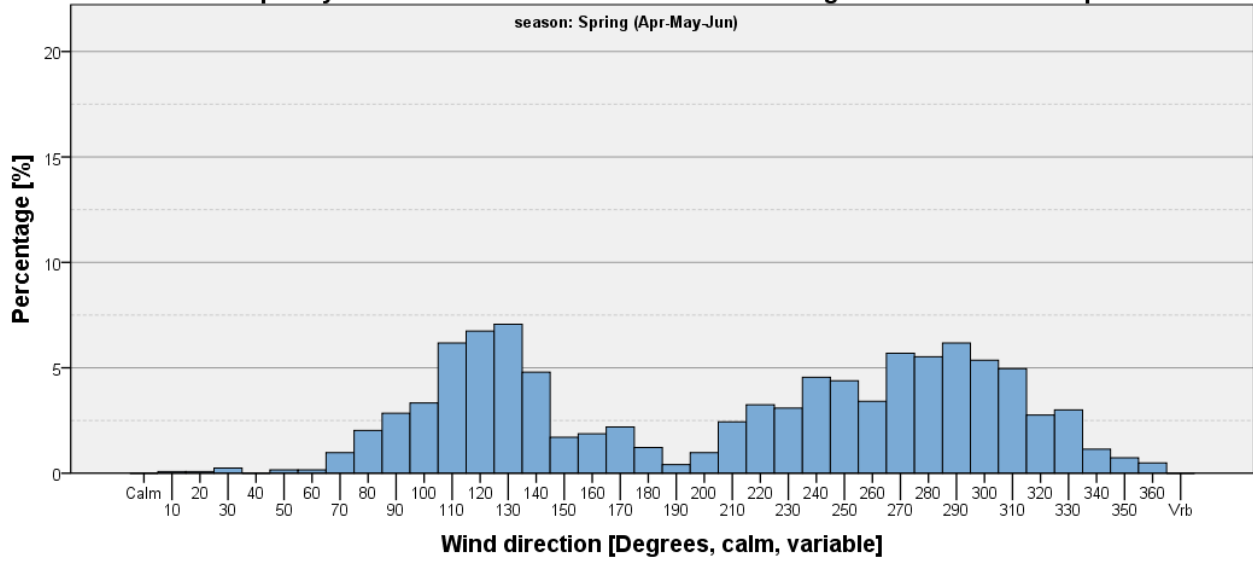


Figure 418

EKRK. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

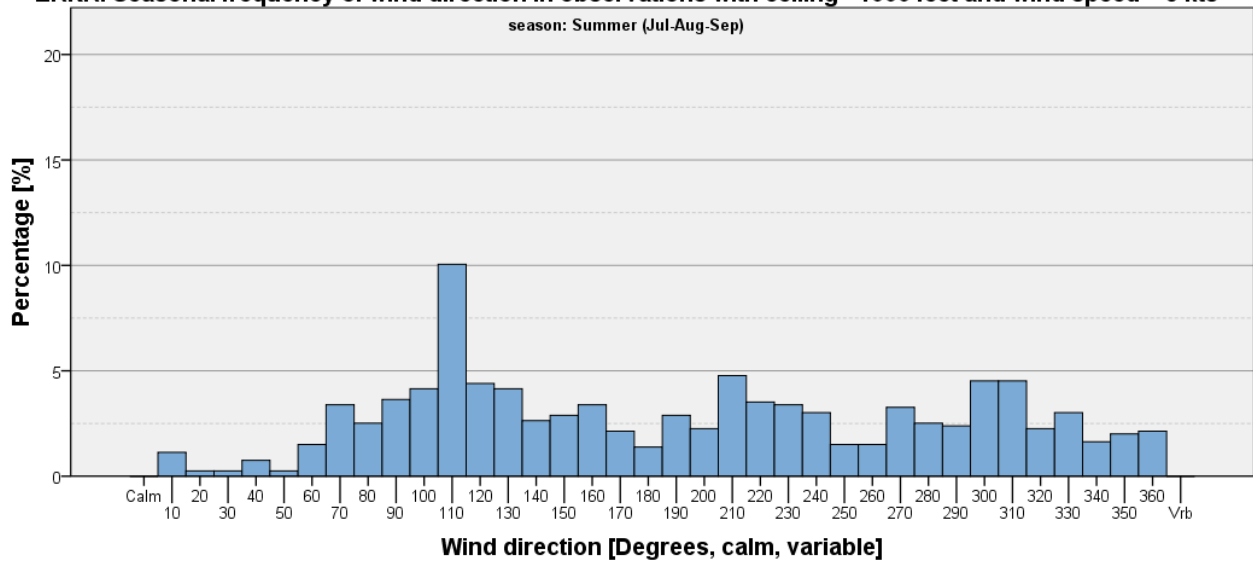


Figure 419

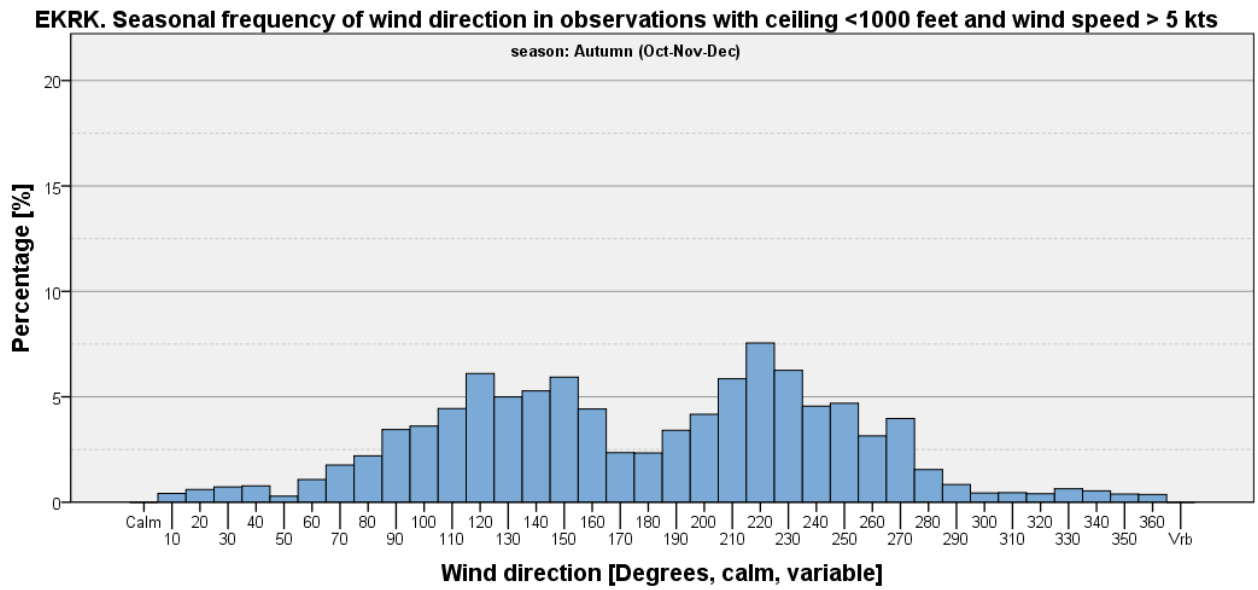


Figure 420

Ceiling < 500 feet

Table 119: EKRK - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	10.67	1.93	1.15	8.12	5.44
All other observations	89.33	98.07	98.85	91.88	94.56
Total	100	100	100	100	100

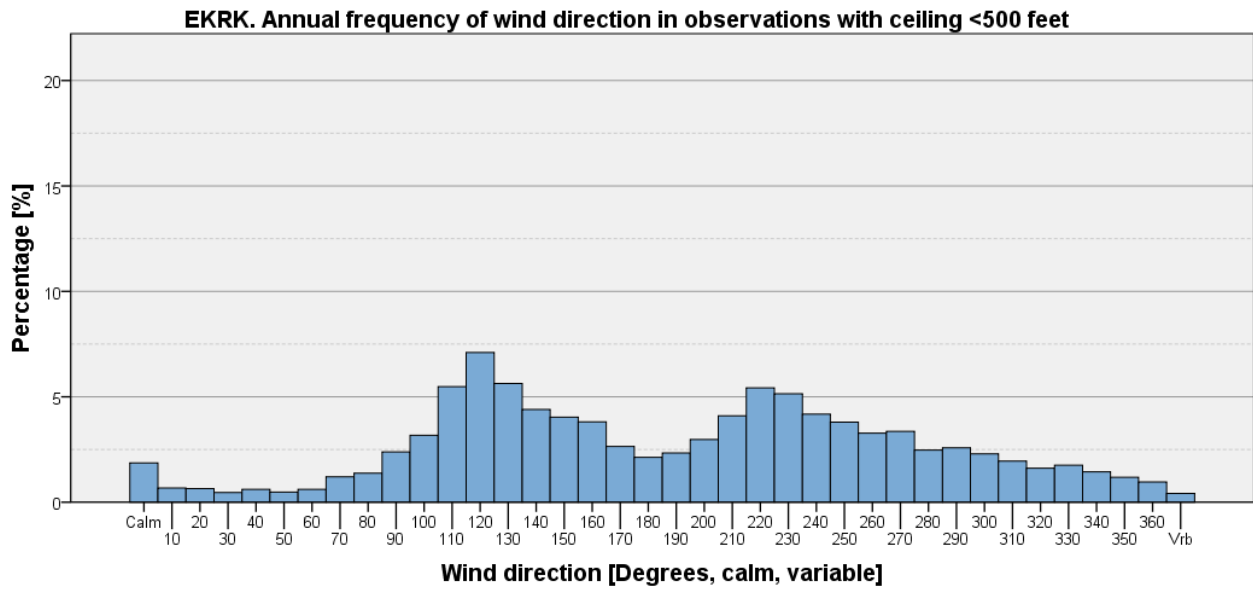


Figure 421

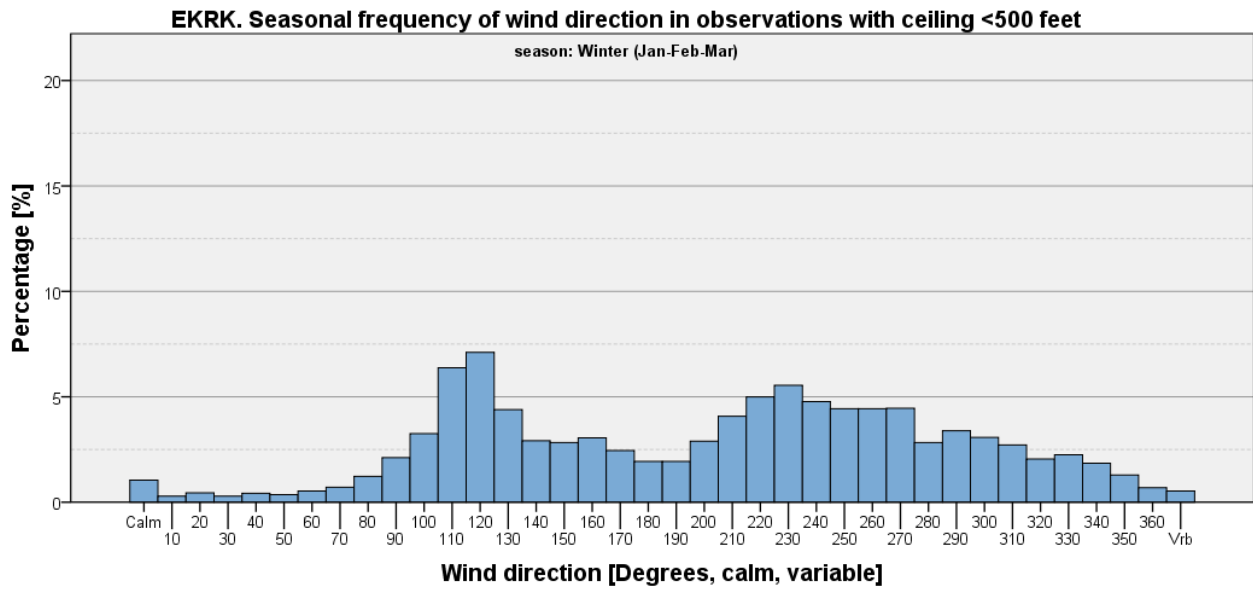


Figure 422

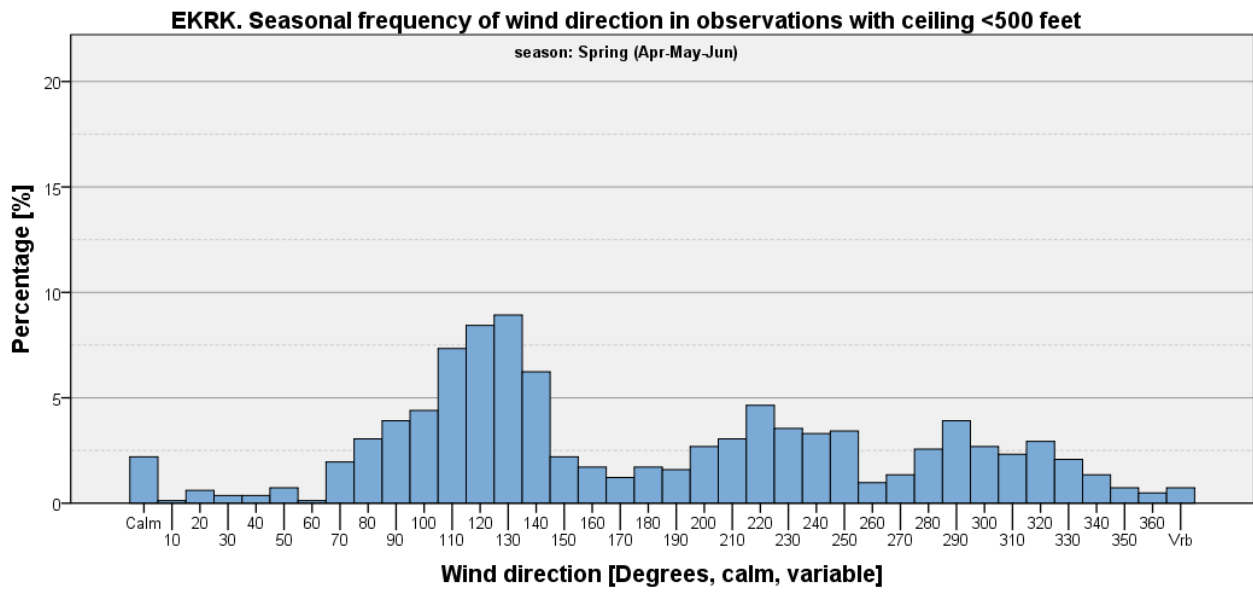


Figure 423

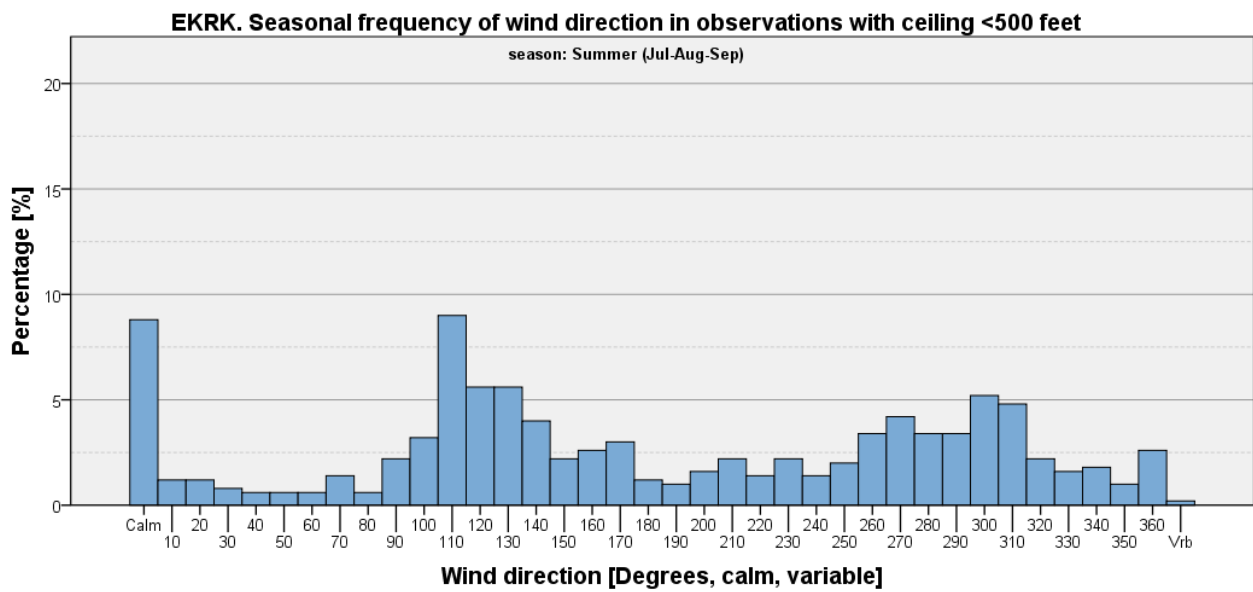


Figure 424

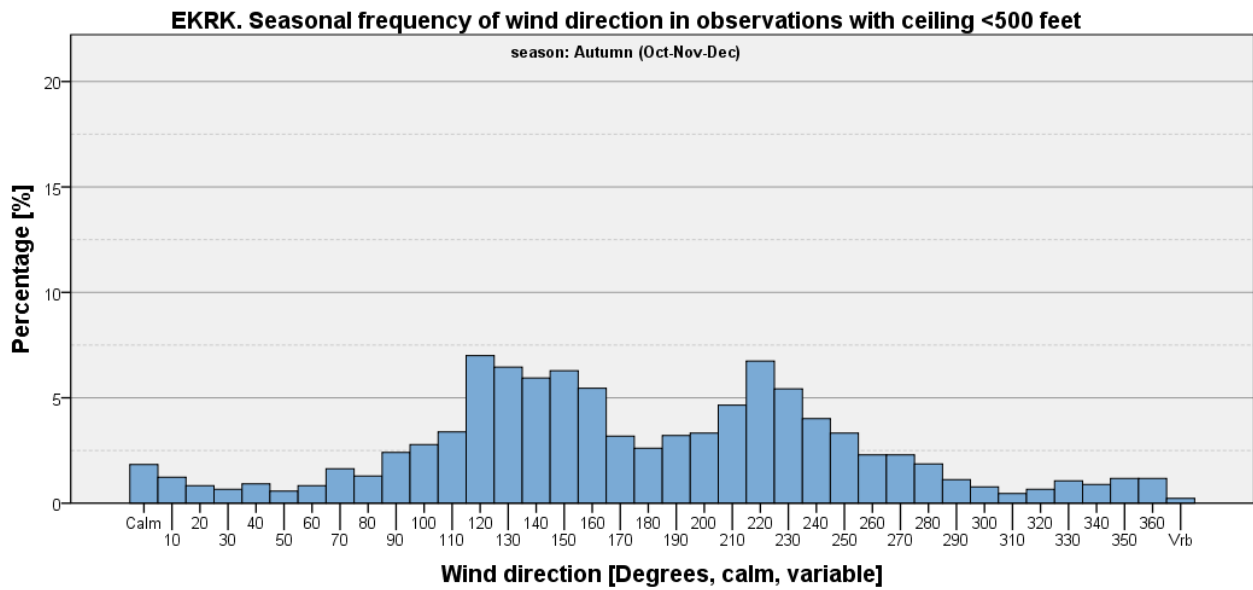


Figure 425

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 120: EKRK - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	3.35	0.76	0.73	2.75	1.89
All other Observations	96.65	99.24	99.27	97.25	98.11
Total	100	100	100	100	100

EKRK. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

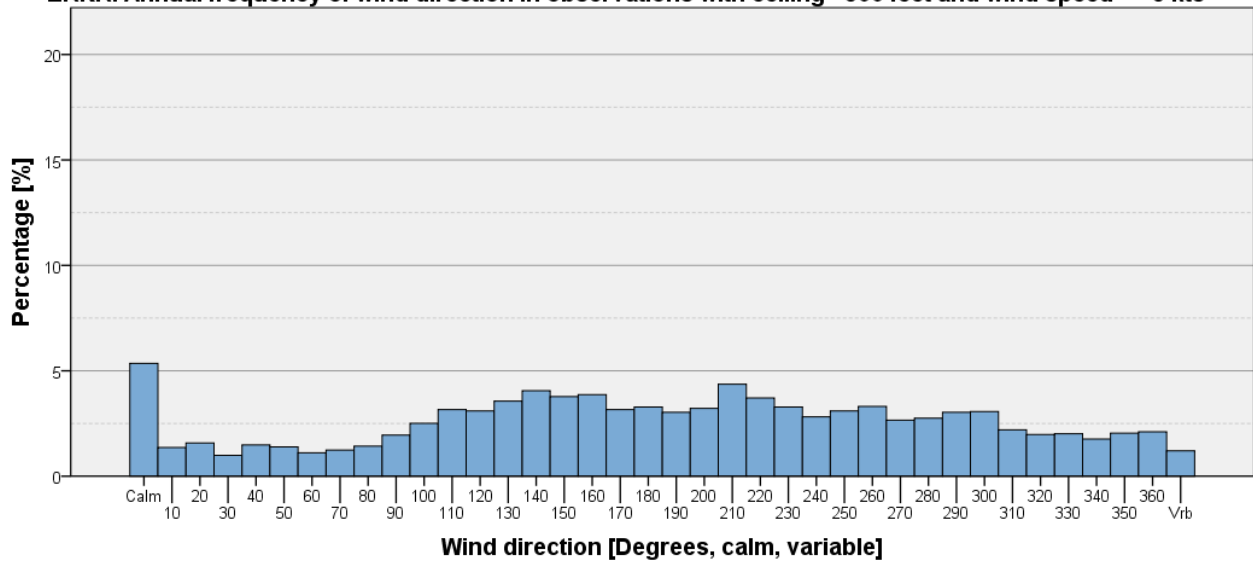


Figure 426

EKRK. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

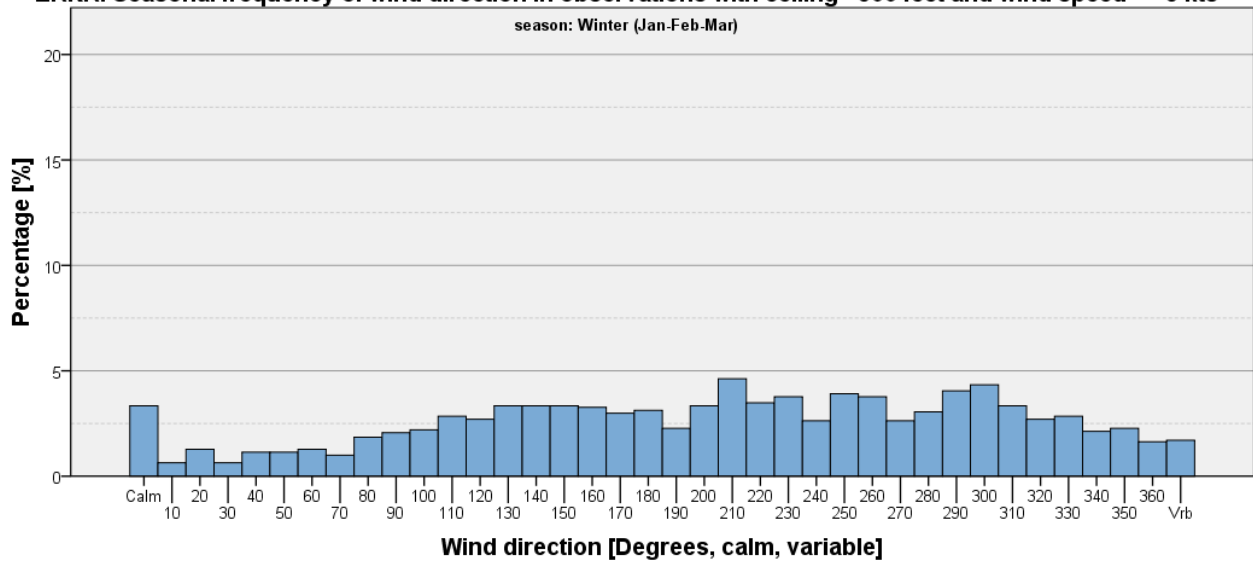


Figure 427

EKRK. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

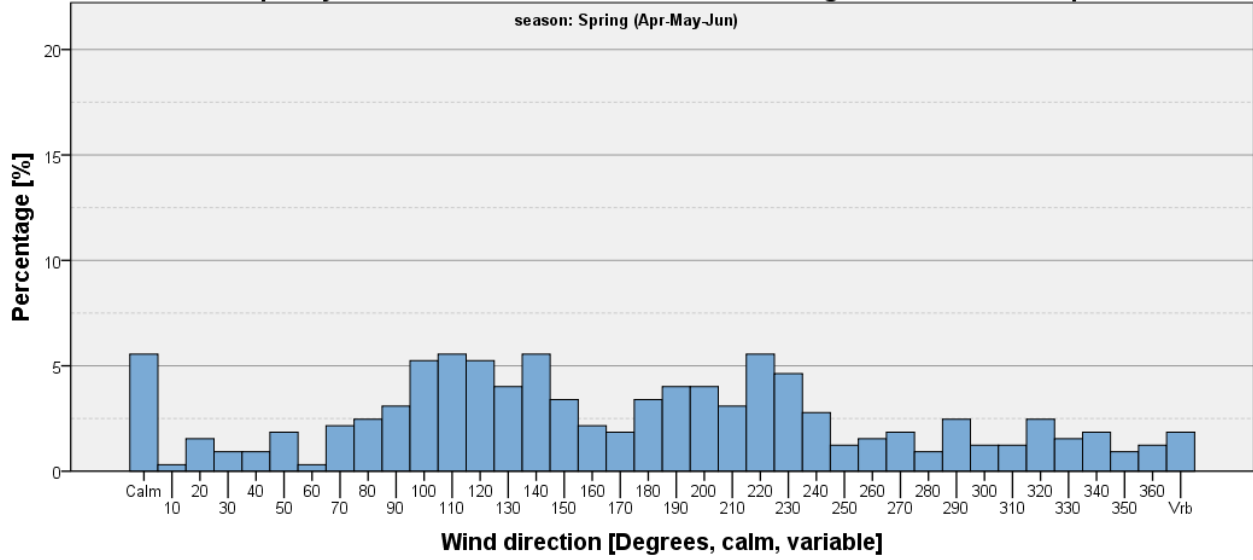


Figure 428

EKRK. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

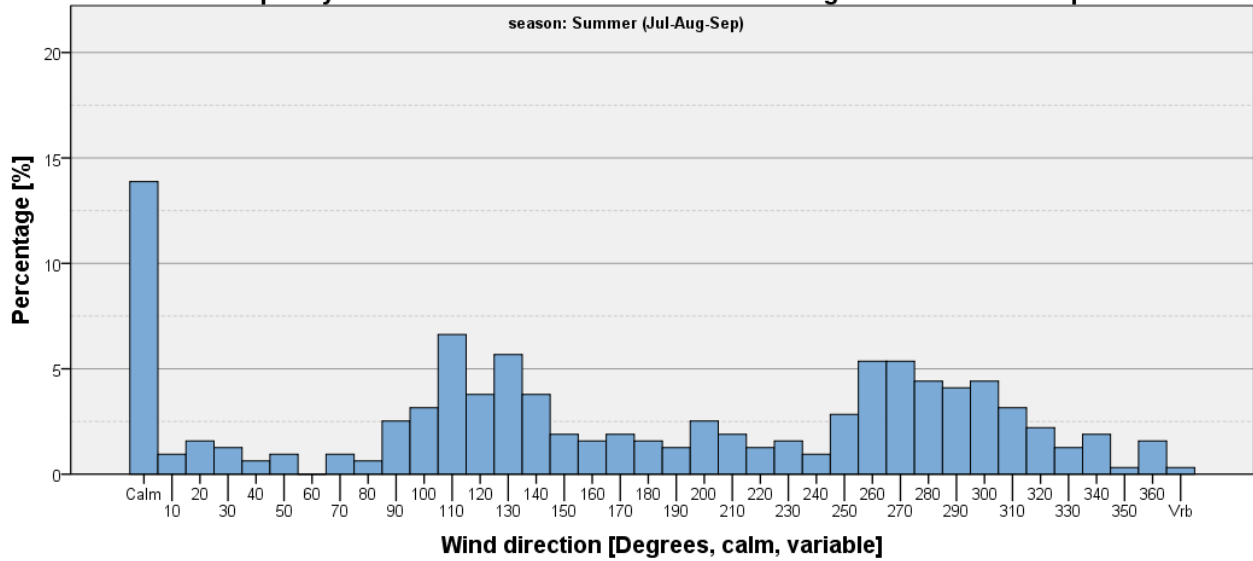


Figure 429

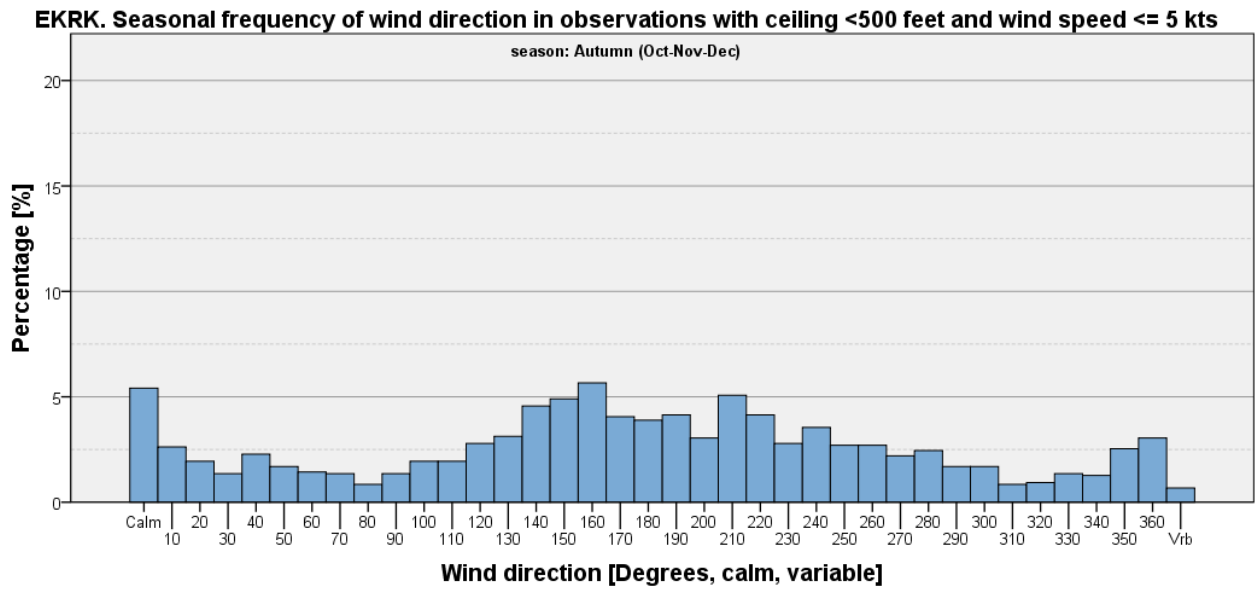


Figure 430

Ceiling < 500 feet and Wind Speed > 5 kts

Table 121: EKRK - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	7.32	1.16	0.42	5.36	3.55
All other observations	92.68	98.84	99.58	94.64	96.45
Total	100	100	100	100	100

EKRK. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

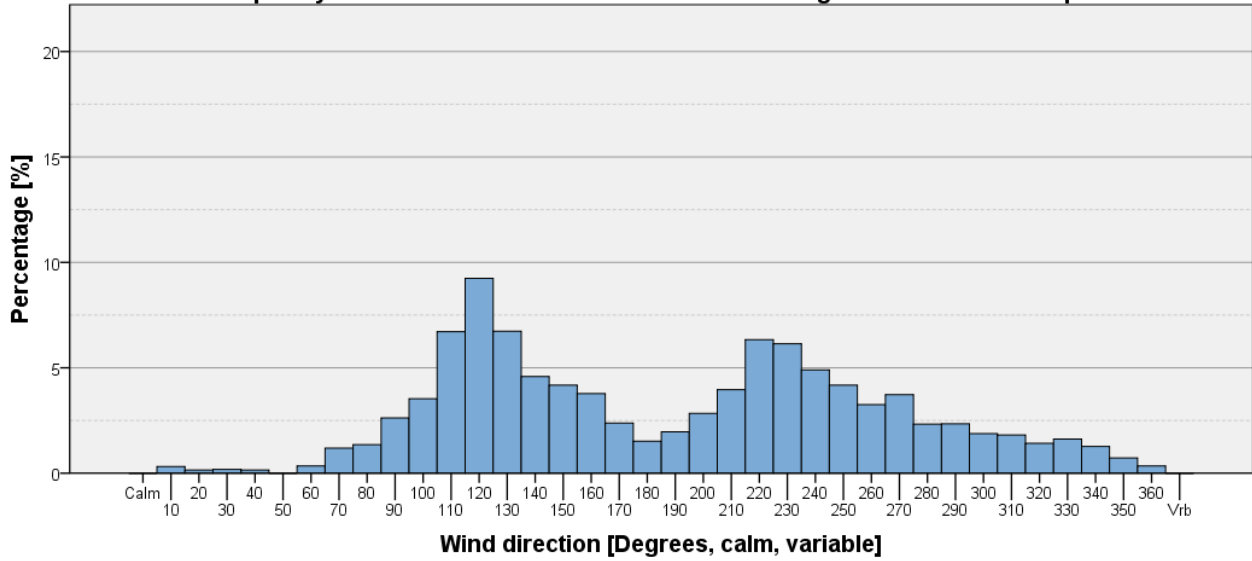


Figure 431

EKRK. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

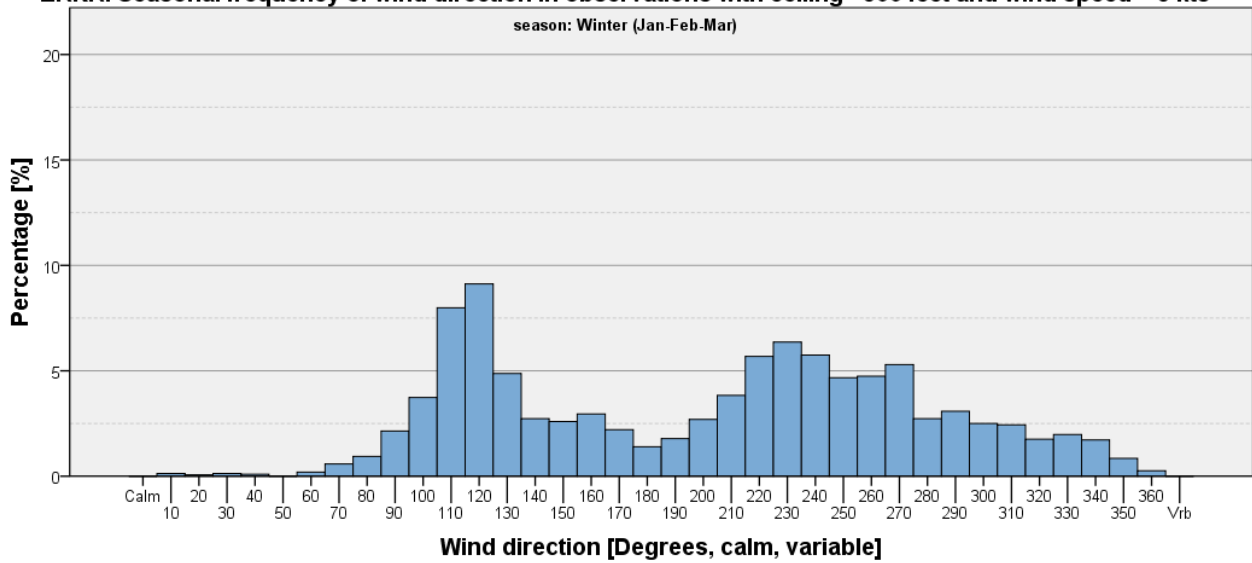


Figure 432

EKRK. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

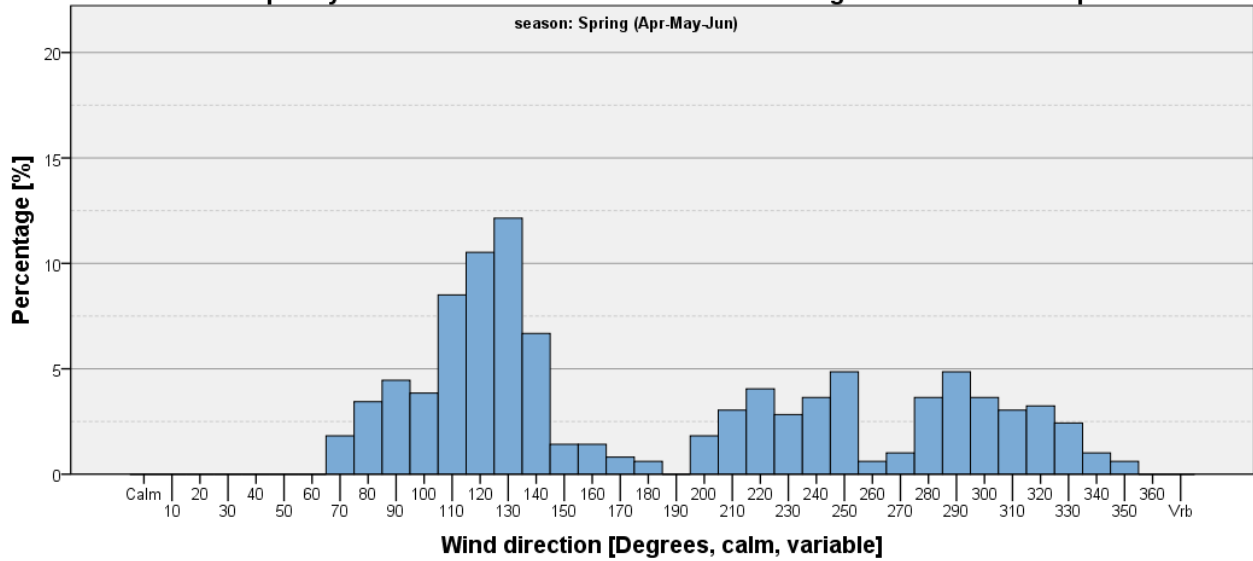


Figure 433

EKRK. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

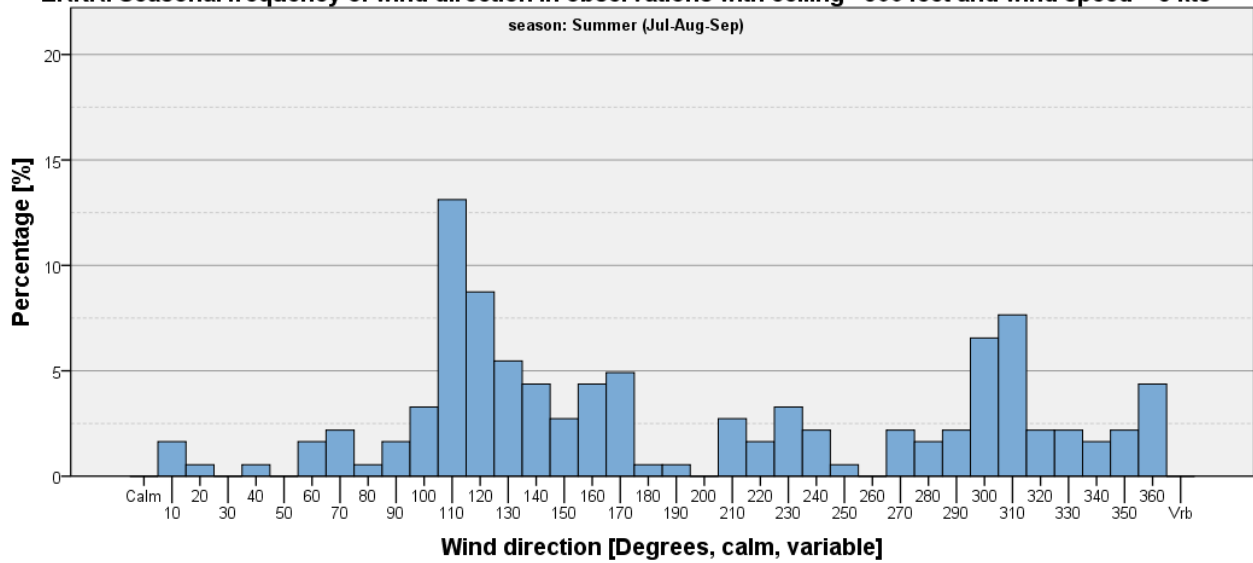


Figure 434

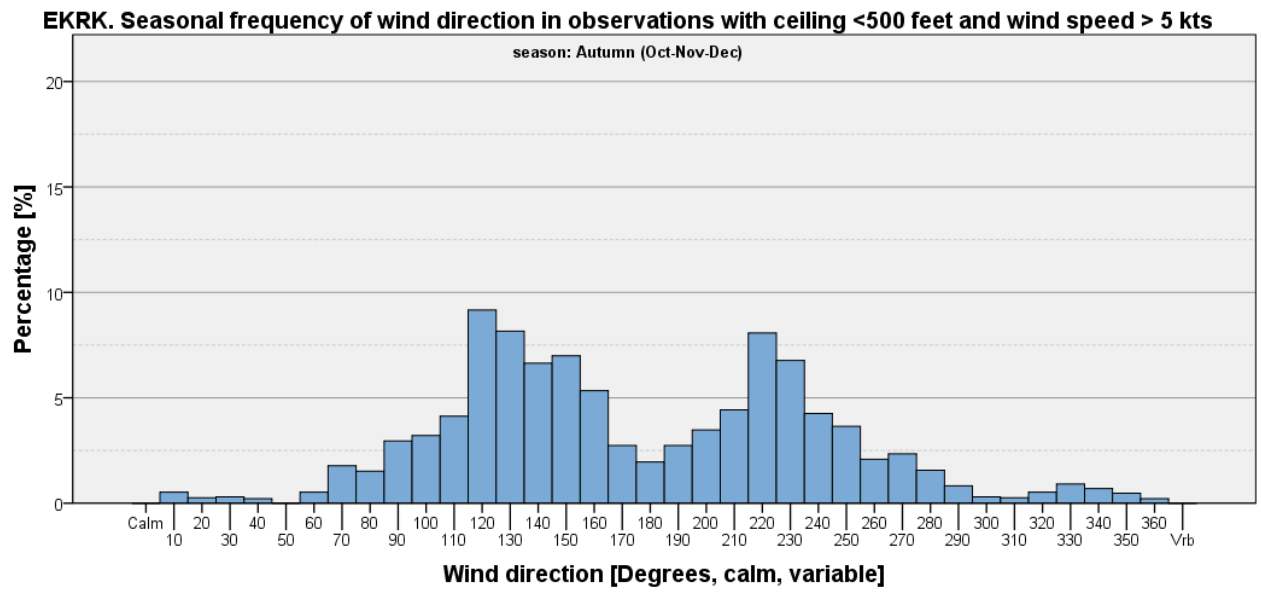
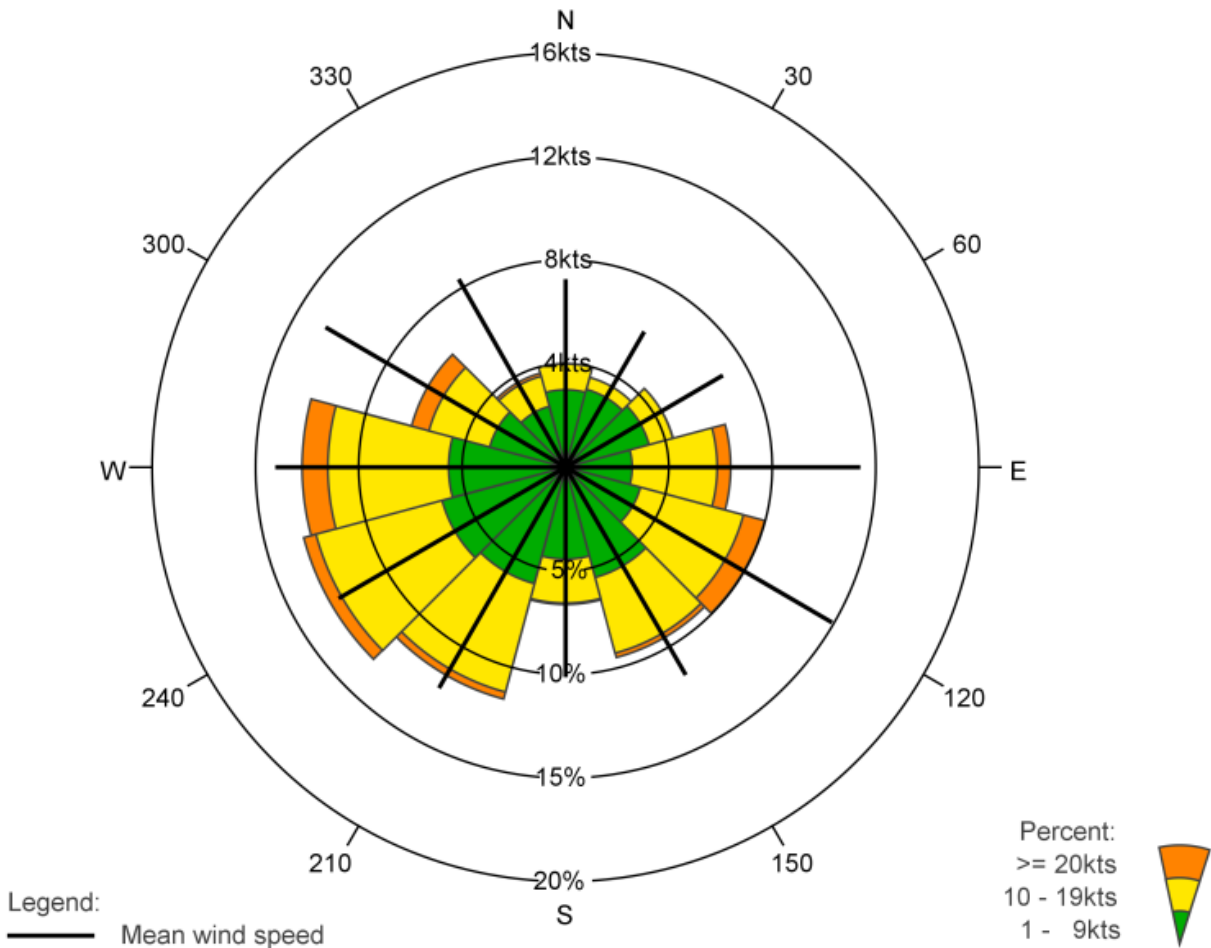


Figure 435

Wind Roses

EKRK: KBH. LUFTHAVN, ROSKILDE, AUTUMN & WINTER

01-01-2009 - 31-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	5.0	4.5	5.4	8.0	10.0	9.5	6.6	11.6	13.1	12.7	7.7	4.7	98.9
% 1 - 9kts	3.8	3.9	4.2	3.2	3.8	5.5	4.4	5.8	6.2	5.6	3.8	3.0	53.2
% 10 - 19kts	1.2	0.6	1.2	4.1	5.2	3.8	2.1	5.4	6.3	5.8	3.0	1.5	40.3
% >= 20kts	0.0	0.0	0.0	0.7	1.1	0.2	0.1	0.4	0.6	1.3	0.9	0.1	5.3
Mean wind speed	7.2	6.0	7.0	11.4	11.9	9.2	8.1	9.8	10.2	11.2	10.7	8.4	9.8
Max wind speed	32.0	20.0	21.0	32.0	29.0	26.0	25.0	45.0	39.0	46.0	36.0	27.0	46.0

Number of observations = 85002

Source: DMI

Calm defined as wind speed = 0kts

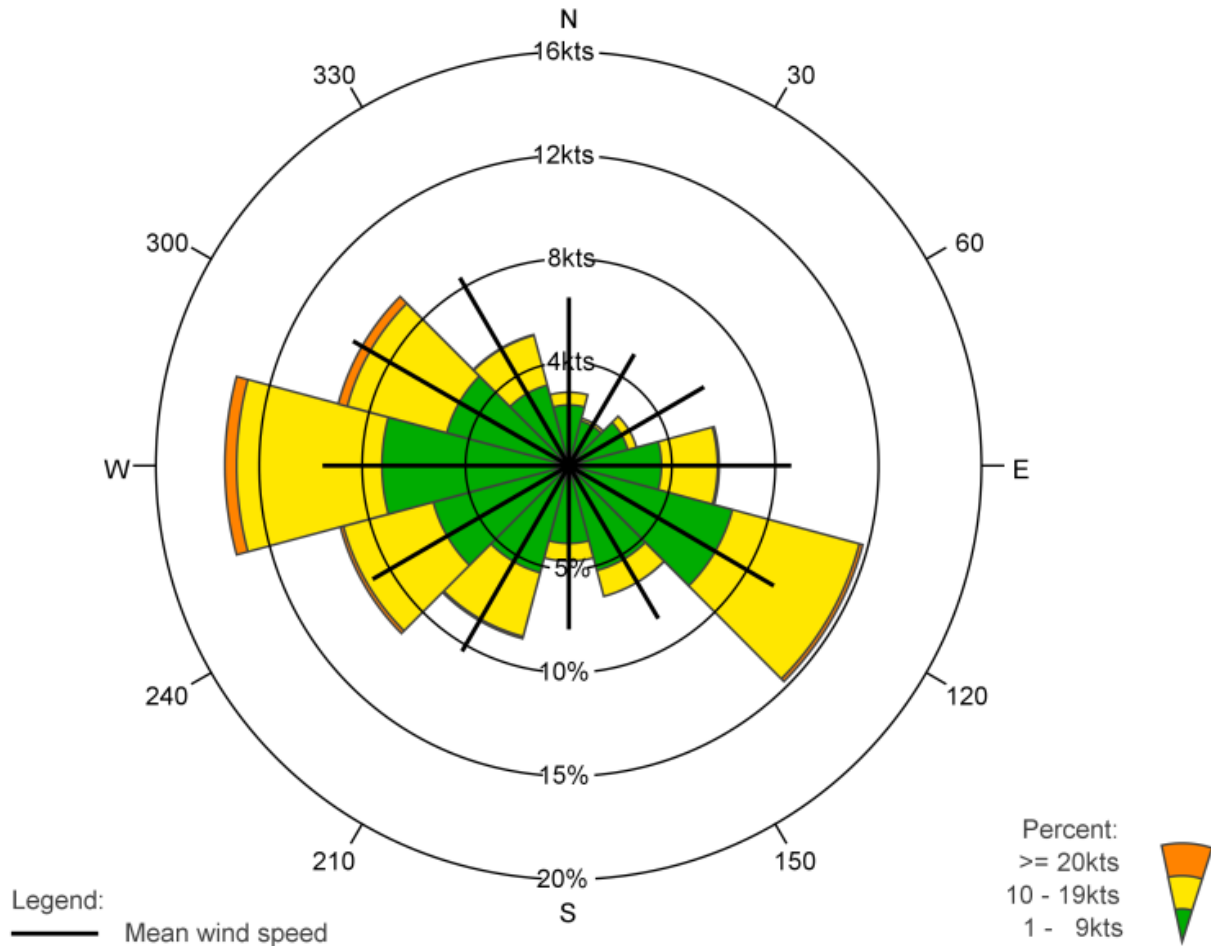
Number of observations with calm/varying wind direction: 971=1.1%

Observations with calm/varying wind direction are not used in the statistics

Figure 436

EKRK: KBH. LUFTHAVN, ROSKILDE, AUTUMN & WINTER

01-01-2009 - 31-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.6	2.4	3.4	7.3	14.7	6.5	4.6	8.6	11.5	16.7	11.6	6.6	97.4
% 1 - 9kts	2.9	2.2	3.0	4.5	8.2	5.2	3.8	5.4	6.8	9.0	6.1	4.0	61.2
% 10 - 19kts	0.6	0.1	0.4	2.7	6.4	1.3	0.9	3.2	4.5	7.0	5.0	2.5	34.6
% >= 20kts	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.2	0.6	0.5	0.0	1.6
Mean wind speed	6.5	5.0	6.1	8.6	9.2	6.9	6.3	8.3	8.8	9.5	9.6	8.4	8.5
Max wind speed	21.0	16.0	17.0	27.0	24.0	22.0	21.0	27.0	30.0	30.0	43.0	25.0	43.0

Number of observations = 85788

Source: DMI

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 2243=2.6%

Observations with calm/varying wind direction are not used in the statistics

Figure 437

Availability

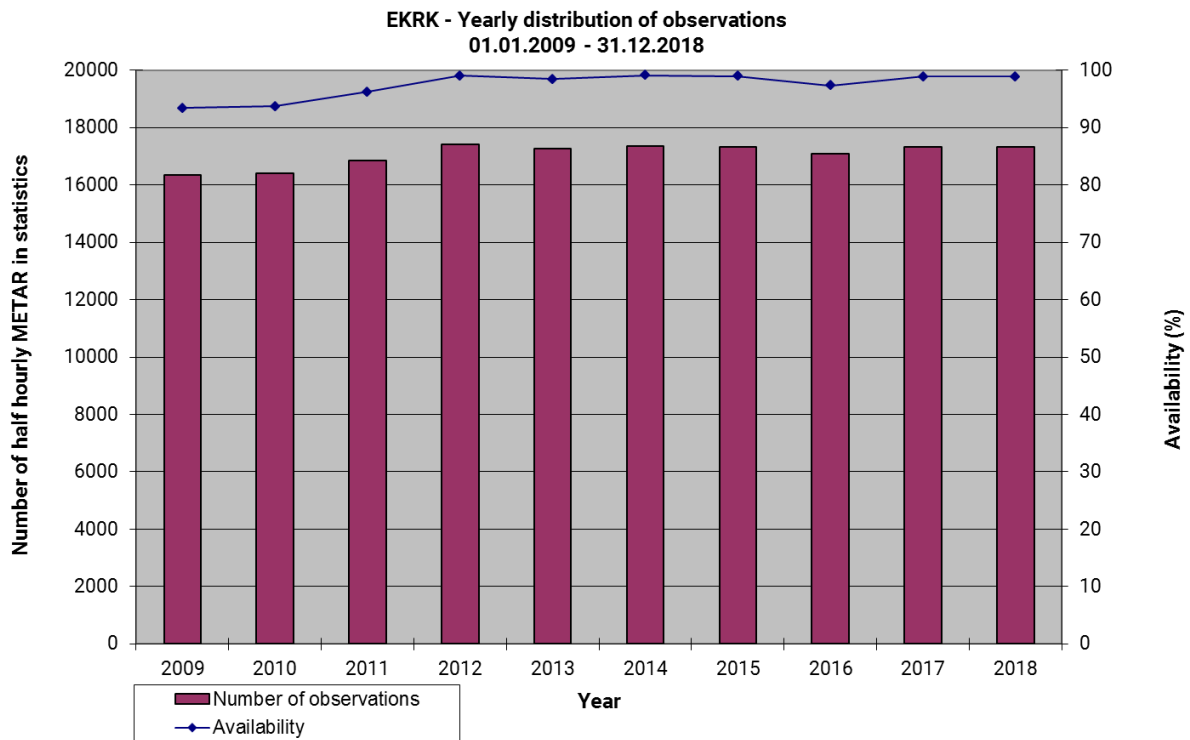


Figure 438

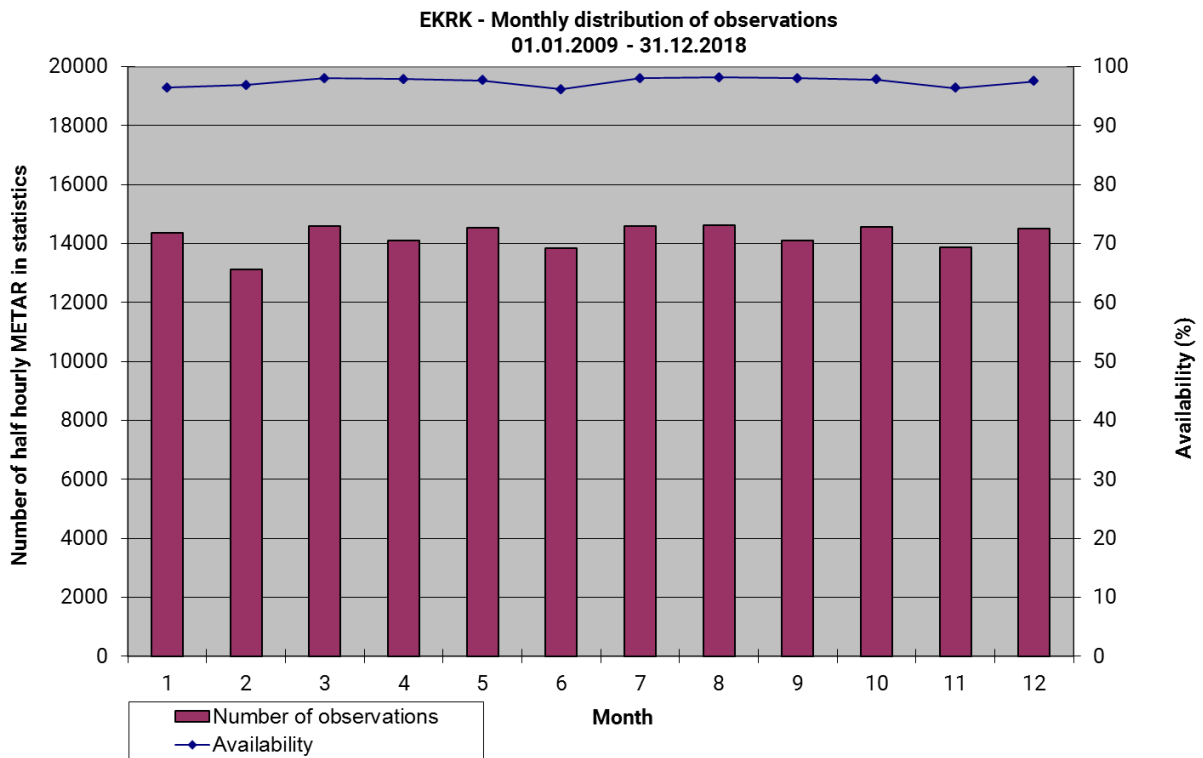


Figure 439

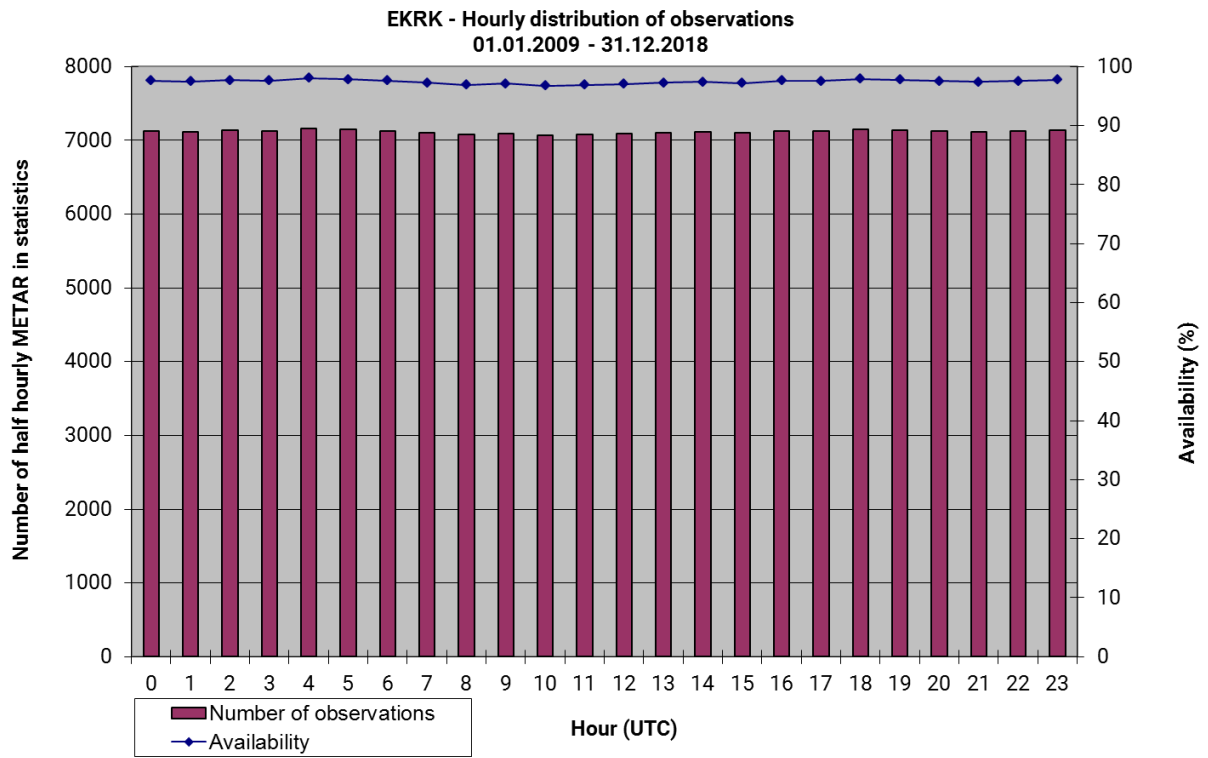


Figure 440

Table 122

Table 123: EKRK. Average number of half hourly observations in statistics, 01.01.2009 – 31.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
1	1.8	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
2	1.8	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
3	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
4	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
5	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
6	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
7	1.8	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
8	1.9	1.8	1.9	2.0	1.9	2.0	2.0	1.9	2.0	2.0
9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
10	1.9	1.8	1.9	2.0	1.9	2.0	2.0	1.9	2.0	2.0
11	1.9	1.8	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
12	1.8	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
13	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
14	1.8	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
15	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
16	1.8	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
17	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
18	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
19	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
20	1.9	1.8	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
21	1.9	1.8	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
22	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
23	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0

EKRN Bornholms Lufthavn (Rønne)

Airport location: 55,067°N 14,883°E Elevation: 102 m above MSL.

EKRN observations in statistics: 171,534 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 97.9%. For more information, please go to the 'Availability' section.

EKRN METAR are both AUTO METAR and manual METAR.

Cross Tables Visibility – Ceiling

Table 124: EKRN Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 171,534	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.058	0.14	0.14	0.14	0.14	0.0047	0.15
<350m	0	0.17	0.83	0.84	0.85	0.85	0.050	0.90
<600m	0	0.19	1.21	1.25	1.27	1.28	0.11	1.39
<800 m	0	0.20	1.39	1.46	1.49	1.51	0.15	1.66
<1.5 km	0	0.23	1.92	2.13	2.22	2.26	0.33	2.59
<3.0 km	0	0.27	3.31	4.05	4.36	4.51	1.22	5.73
< 5.0 km	0	0.29	4.29	6.35	7.09	7.44	2.97	10.41
< 8.0 km	0	0.30	4.91	8.85	10.69	11.46	6.55	18.02
>= 8.0 km or CAVOK	0	0.0047	0.48	3.91	9.27	13.58	68.40	81.98
Total	0	0.30	5.39	12.76	19.96	25.05	74.95	100

Table 125: EKRN - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,428	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.090	0.19	0.20	0.20	0.20	0	0.20
<350m	0	0.33	1.76	1.78	1.79	1.80	0.012	1.81
<600m	0	0.36	2.63	2.73	2.77	2.79	0.059	2.85
<800 m	0	0.37	3.05	3.22	3.29	3.31	0.087	3.40
<1.5 km	0	0.40	4.18	4.61	4.84	4.91	0.33	5.23
<3.0 km	0	0.44	6.81	8.28	8.98	9.32	1.80	11.12
< 5.0 km	0	0.46	8.32	11.95	13.56	14.31	4.75	19.06
< 8.0 km	0	0.47	9.29	15.98	19.32	20.88	10.90	31.79
>= 8.0 km or CAVOK	0	0.0024	0.57	5.93	13.31	18.97	49.24	68.21
Total	0	0.47	9.86	21.90	32.63	39.85	60.15	100

Table 126: EKRN - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,659	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.082	0.24	0.24	0.24	0.24	0.01	0.25
<350m	0	0.26	0.89	0.90	0.90	0.91	0.10	1.01
<600m	0	0.32	1.22	1.23	1.23	1.24	0.19	1.42
<800 m	0	0.33	1.35	1.36	1.37	1.37	0.24	1.61
<1.5 km	0	0.39	1.73	1.79	1.81	1.81	0.42	2.24
<3.0 km	0	0.49	2.46	2.66	2.76	2.80	1.26	4.06
< 5.0 km	0	0.54	3.00	3.48	3.72	3.84	2.75	6.58
< 8.0 km	0	0.55	3.44	4.34	4.85	5.13	5.96	11.09
>= 8.0 km or CAVOK	0	0.012	0.49	2.14	3.66	5.19	83.72	88.91
Total	0	0.56	3.93	6.48	8.50	10.32	89.68	100

Table 127: EKRN - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,244	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.0046	0.012	0.012	0.014	0.016	0.007	0.023
<350m	0	0.0092	0.079	0.081	0.083	0.092	0.051	0.14
<600m	0	0.0092	0.11	0.11	0.12	0.13	0.11	0.24
<800 m	0	0.0092	0.12	0.12	0.13	0.14	0.15	0.30
<1.5 km	0	0.016	0.18	0.20	0.21	0.23	0.26	0.48
<3.0 km	0	0.039	0.50	0.60	0.65	0.68	0.69	1.38
< 5.0 km	0	0.044	0.90	1.26	1.39	1.47	1.52	2.99
< 8.0 km	0	0.046	1.14	1.98	2.25	2.49	3.35	5.84
>= 8.0 km or CAVOK	0	0.0023	0.24	2.11	4.61	6.96	87.20	94.16
Total	0	0.049	1.37	4.09	6.86	9.45	90.55	100

Table 128: EKRN - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,203	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.056	0.11	0.11	0.11	0.12	0.0023	0.12
<350m	0	0.079	0.59	0.62	0.62	0.63	0.035	0.67
<600m	0	0.086	0.90	0.95	0.98	0.99	0.083	1.07
<800 m	0	0.088	1.09	1.18	1.22	1.24	0.13	1.37
<1.5 km	0	0.10	1.65	1.97	2.08	2.15	0.30	2.45
<3.0 km	0	0.11	3.50	4.70	5.11	5.31	1.14	6.46
< 5.0 km	0	0.12	5.00	8.77	9.79	10.21	2.90	13.11
< 8.0 km	0	0.12	5.84	13.17	16.43	17.45	6.08	23.53
>= 8.0 km or CAVOK	0	0.0023	0.62	5.48	15.49	23.21	53.25	76.47
Total	0	0.13	6.47	18.65	31.92	40.67	59.33	100

Wind Direction Histograms

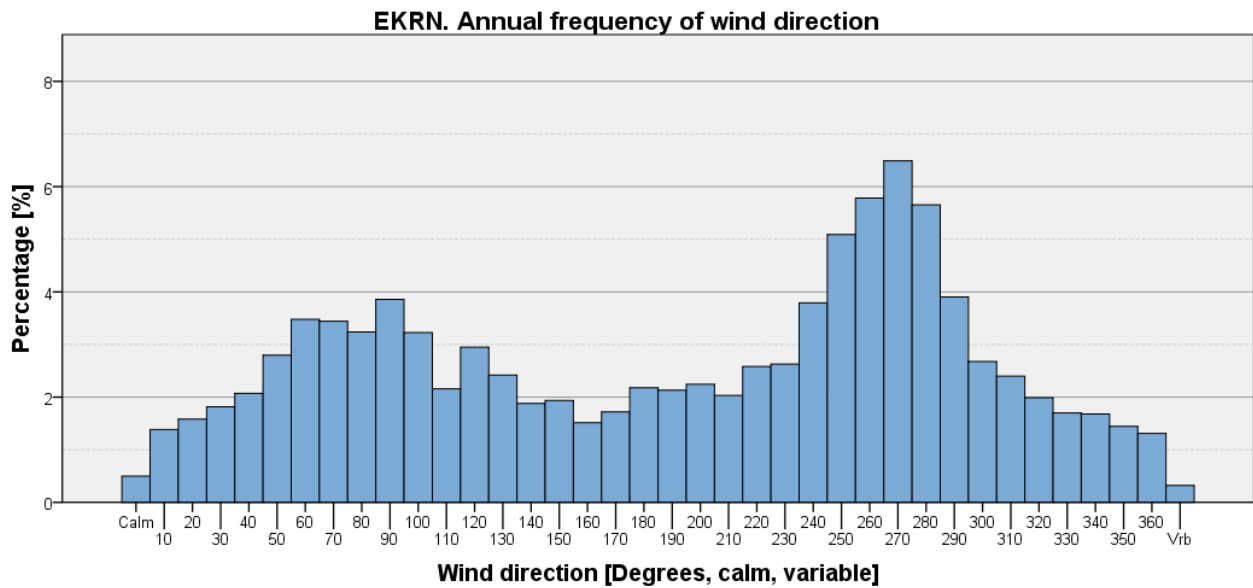


Figure 441

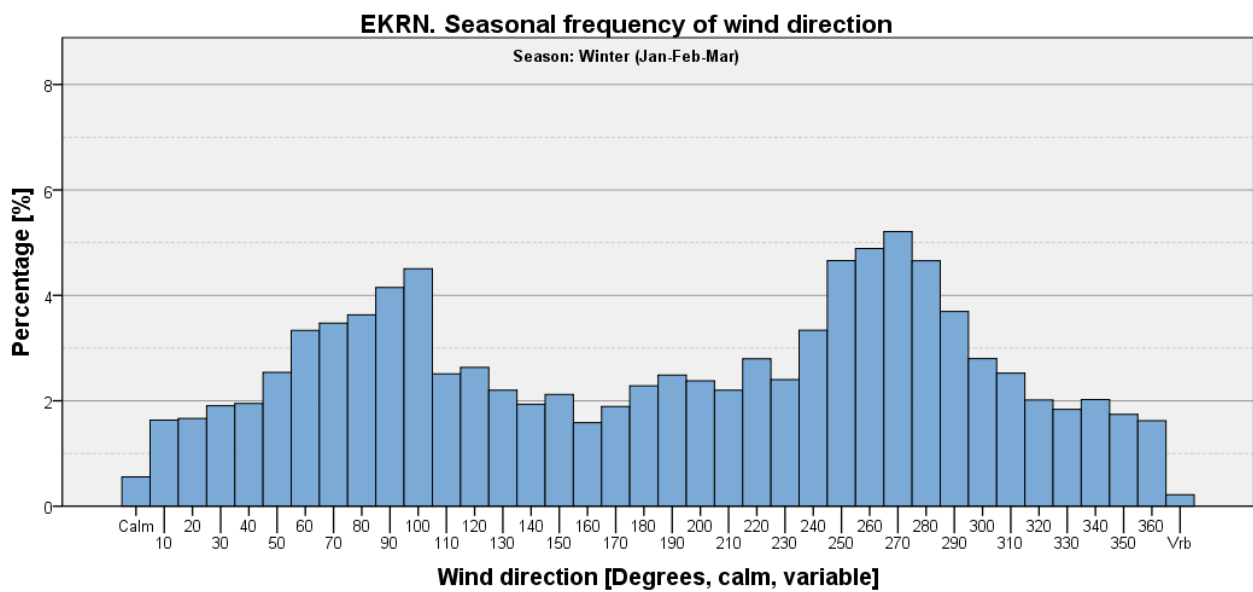


Figure 442

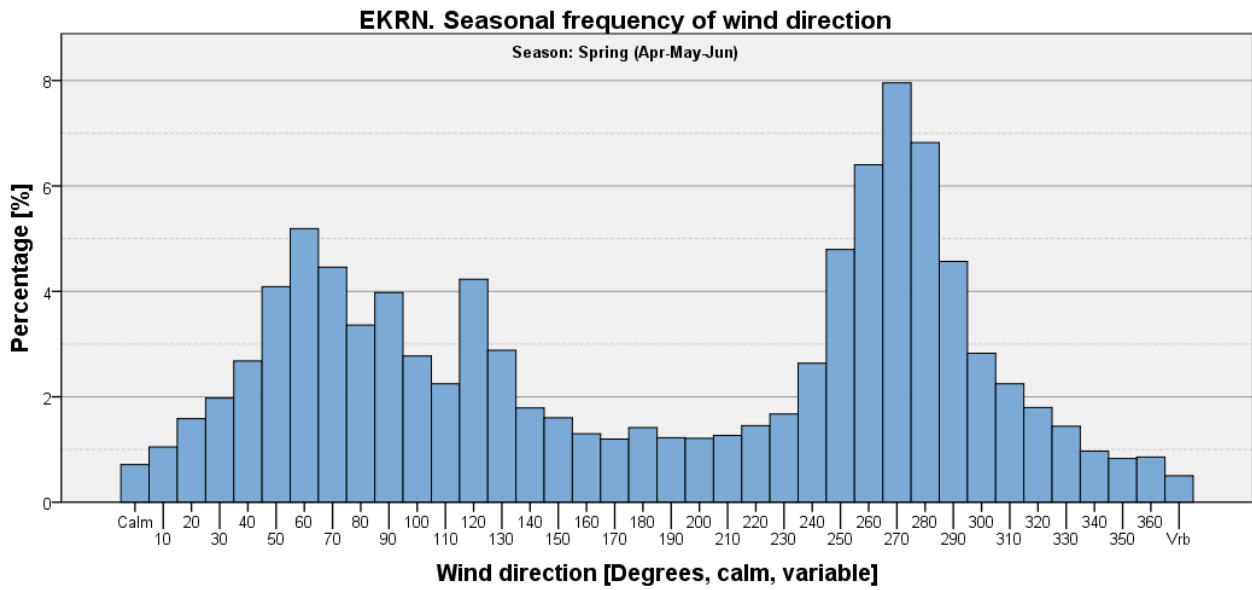


Figure 443

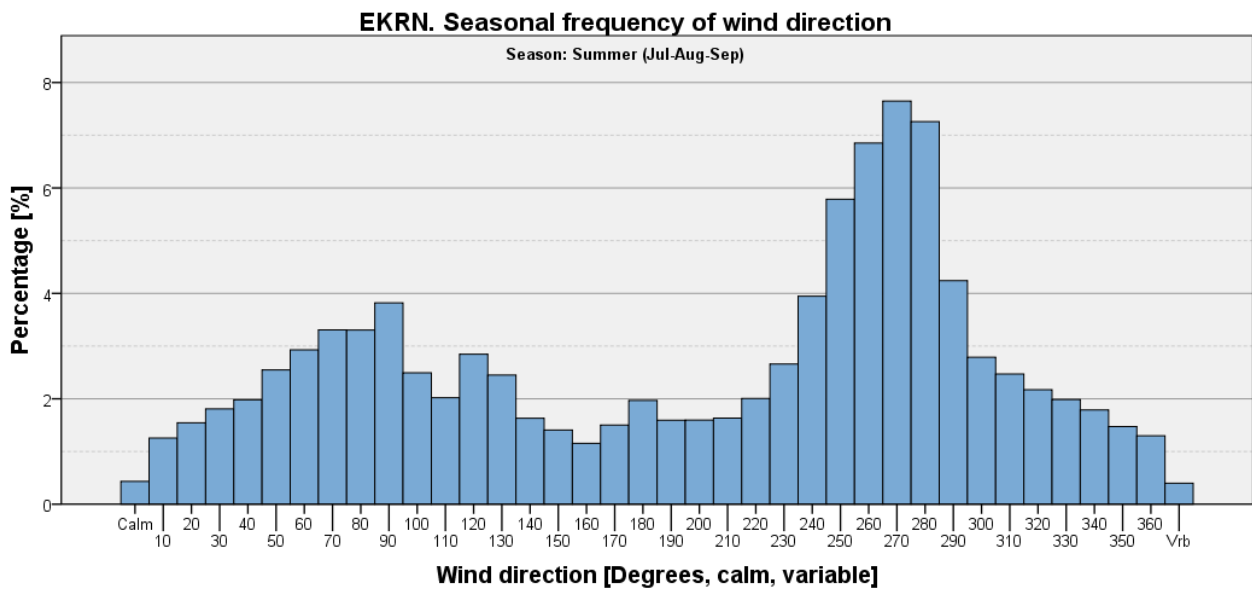


Figure 444

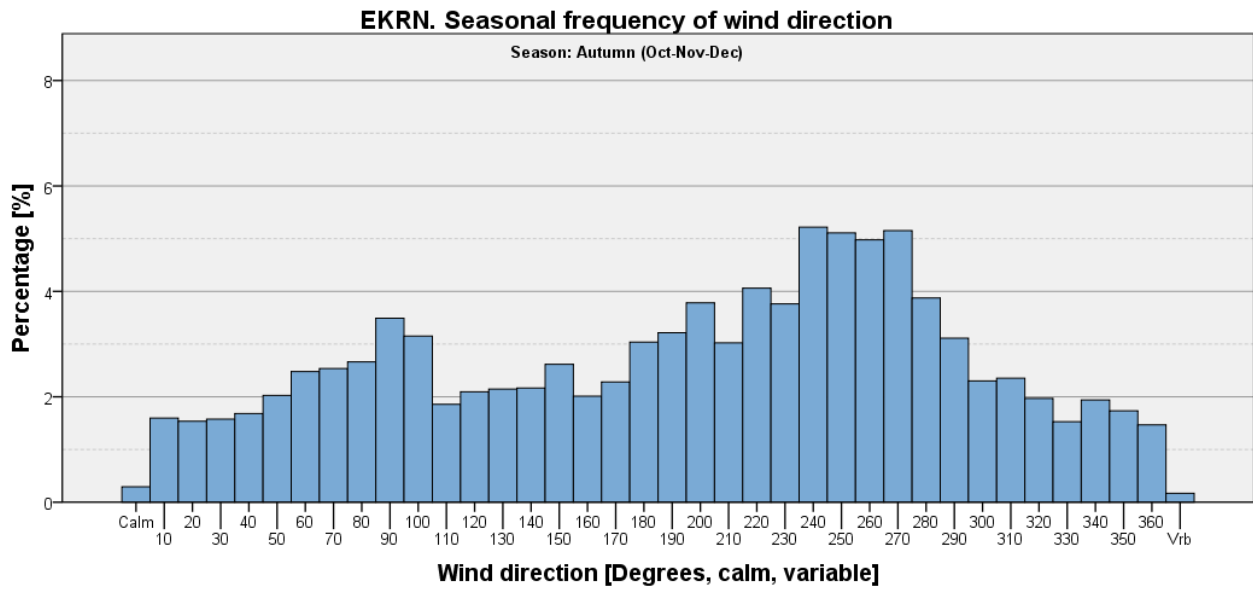


Figure 445

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 129: EKRN - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	3.40	1.61	0.30	1.37	1.66
All other observations	96.60	98.39	99.70	98.63	98.34
Total	100	100	100	100	100

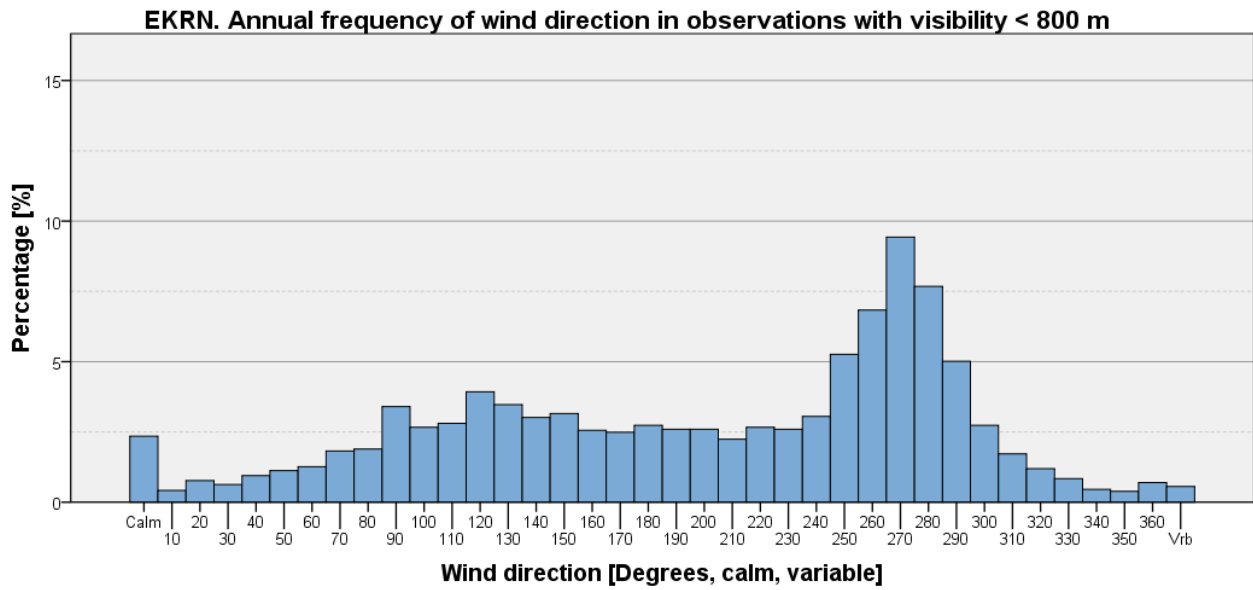


Figure 446

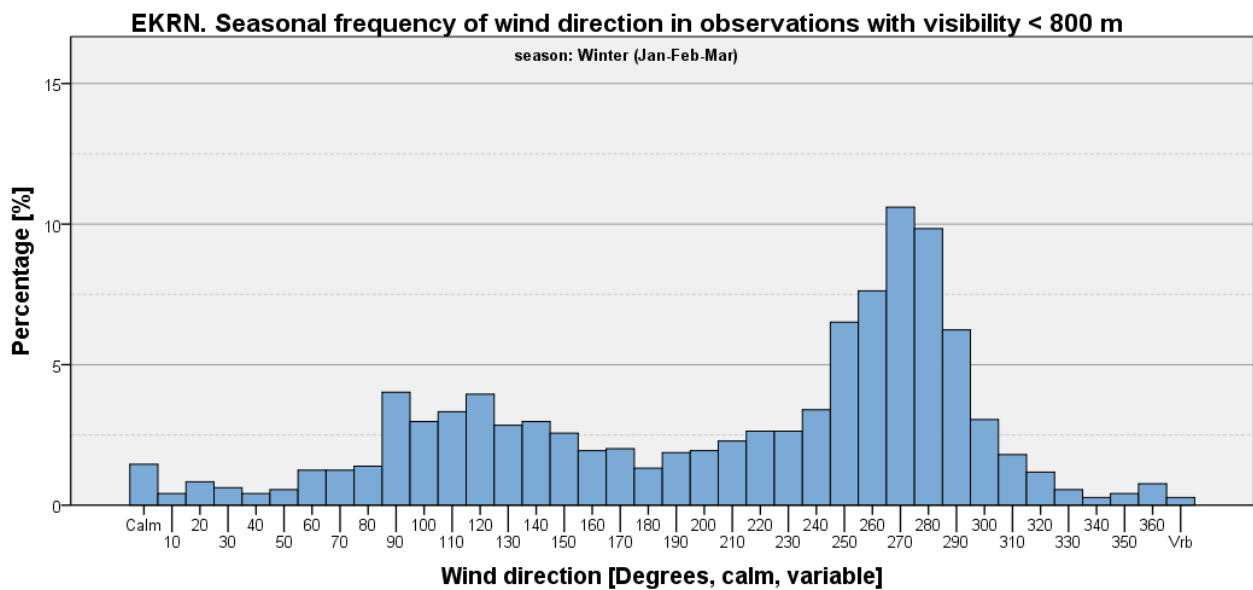


Figure 447

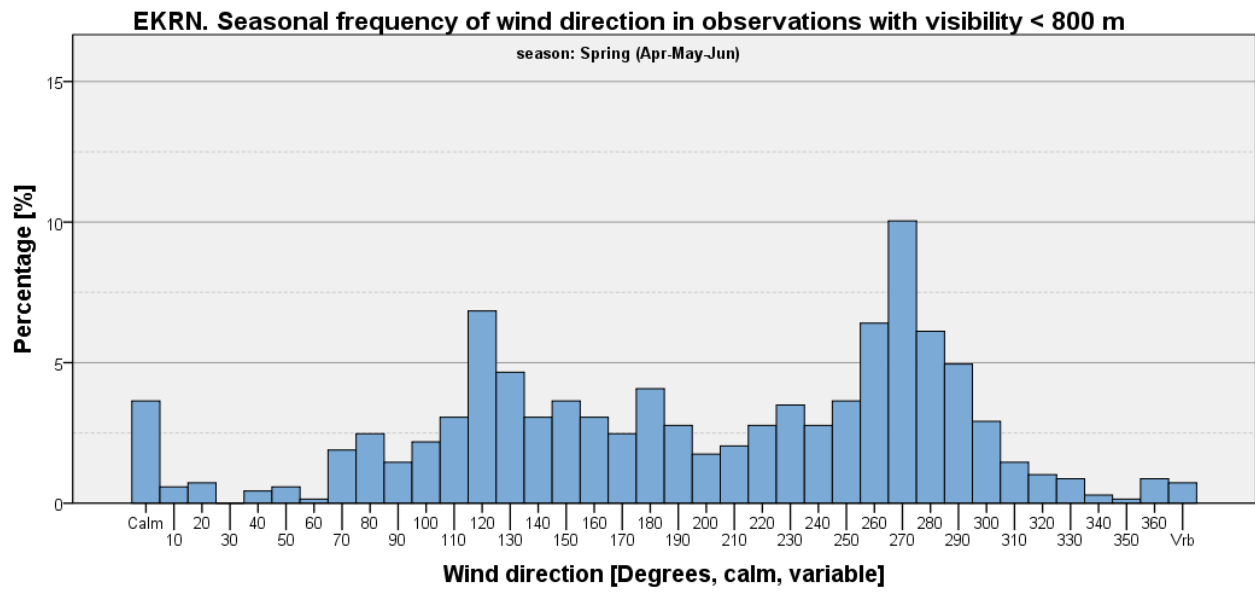


Figure 448

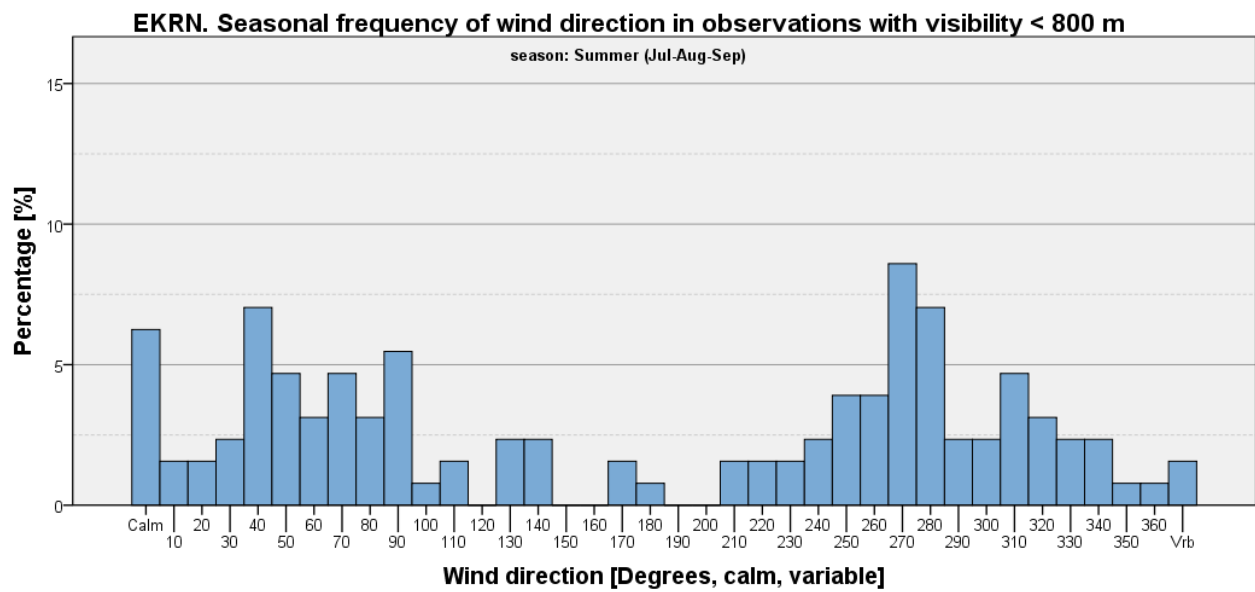


Figure 449

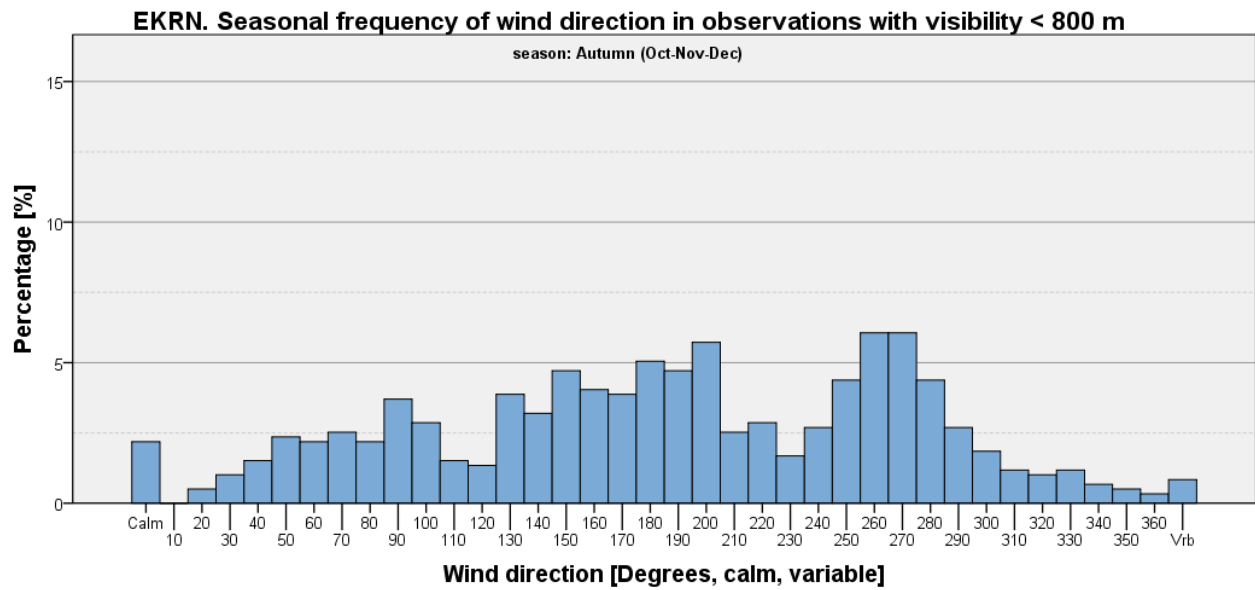


Figure 450

Visibility < 800 m and Wind Speed <= 5 kts

Table 130: EKRN - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	1.16	1.08	0.26	0.73	0.80
All other observations	98.84	98.92	99.74	99.27	99.20
Total	100	100	100	100	100

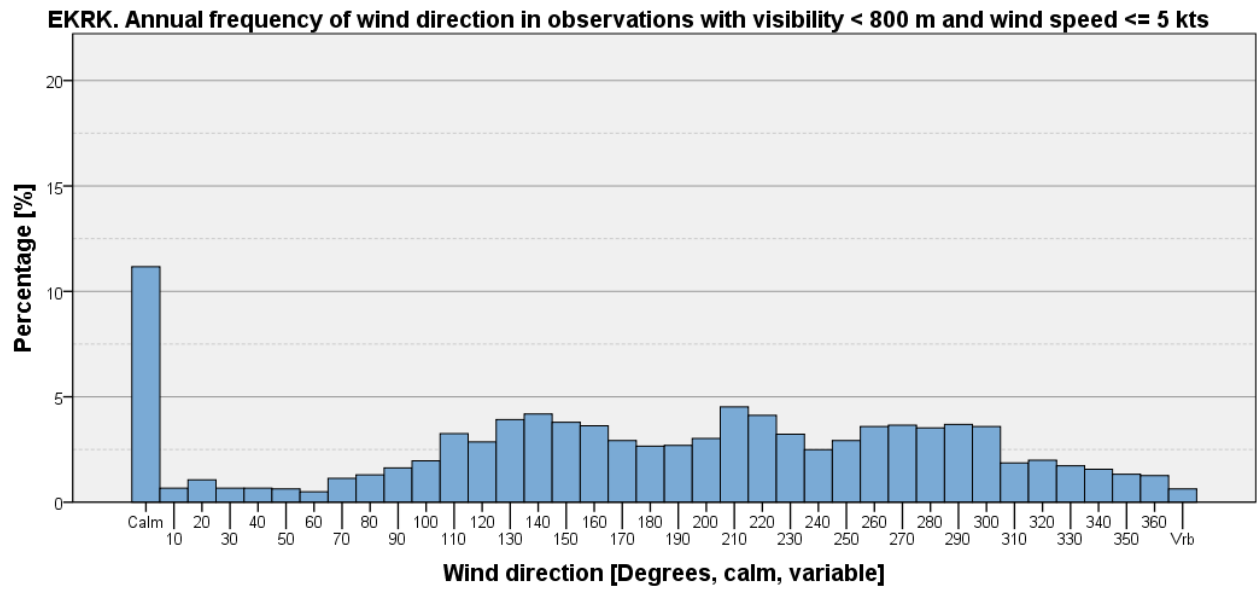


Figure 451

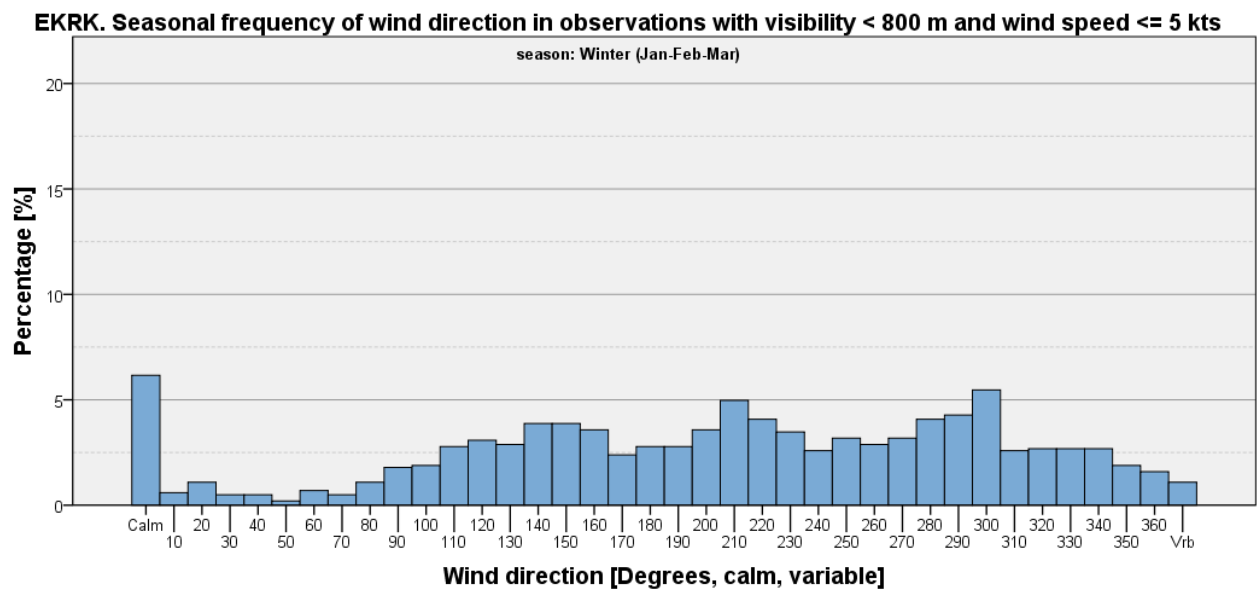


Figure 452

EKRK. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

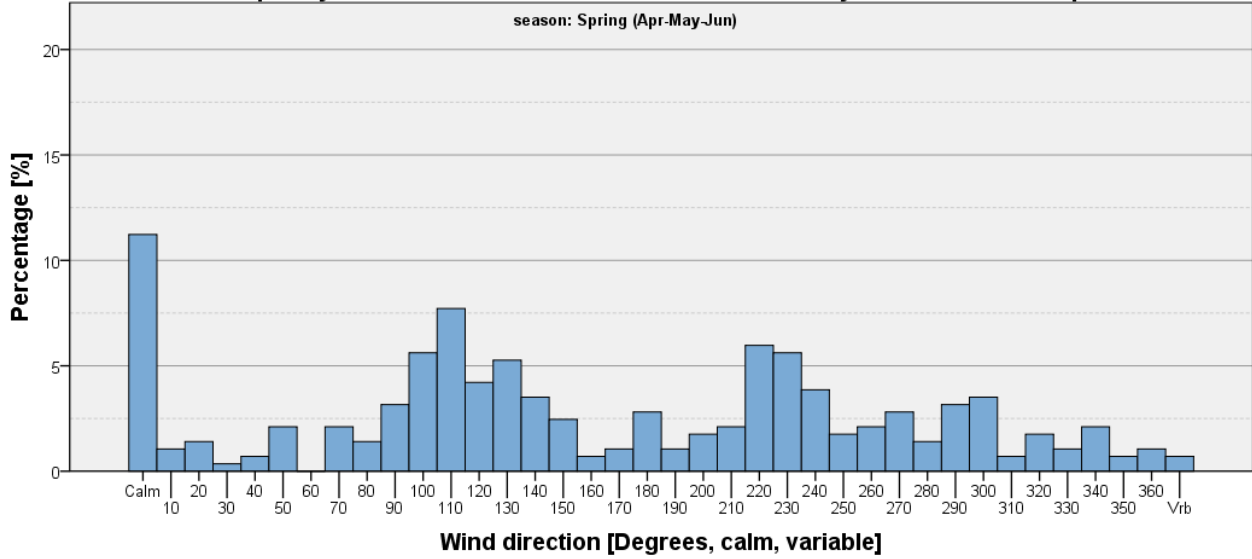


Figure 453

EKRK. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

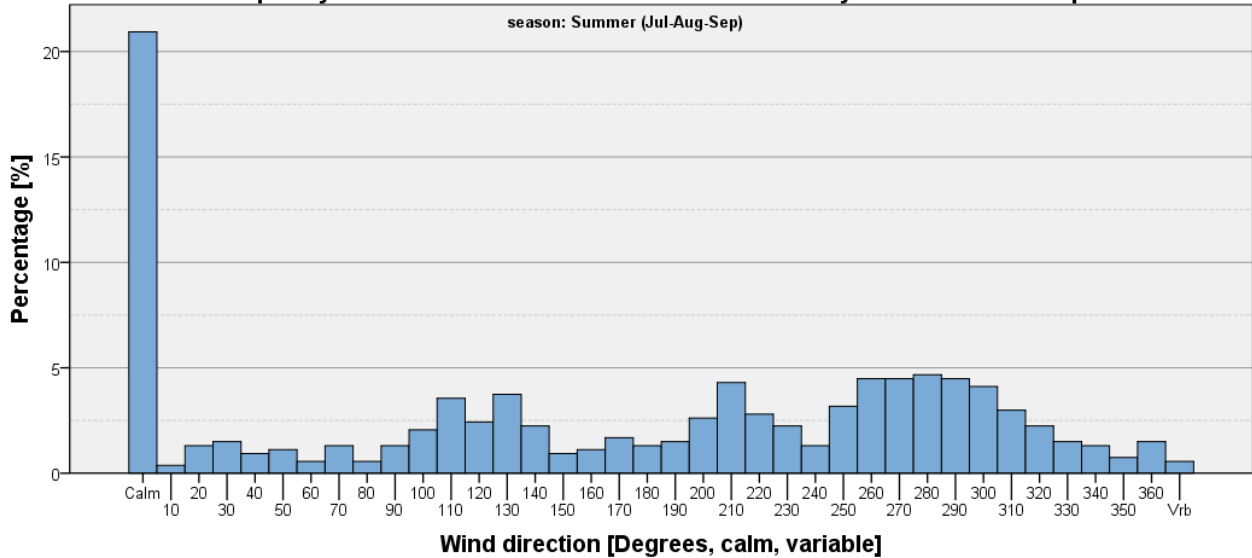


Figure 454

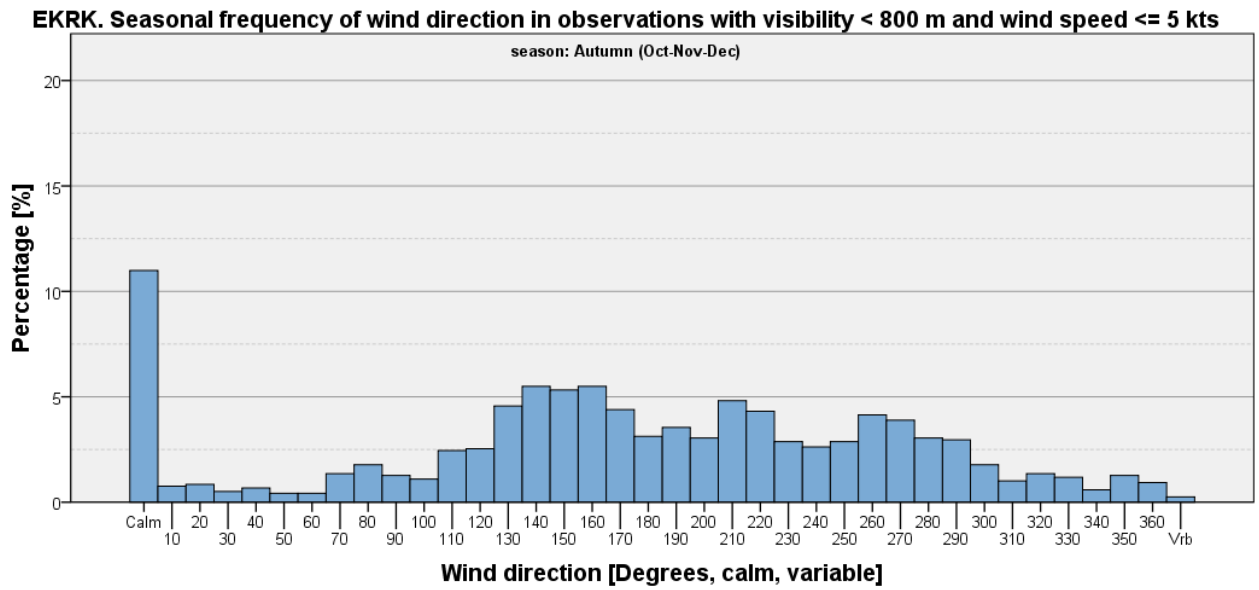


Figure 455

Visibility < 800 m and Wind Speed > 5 kts

Table 131: EKRK - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	2.24	0.53	0.039	0.64	0.86
All other observations	97.76	99.47	99.96	99.36	99.14
Total	100	100	100	100	100

EKRK. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

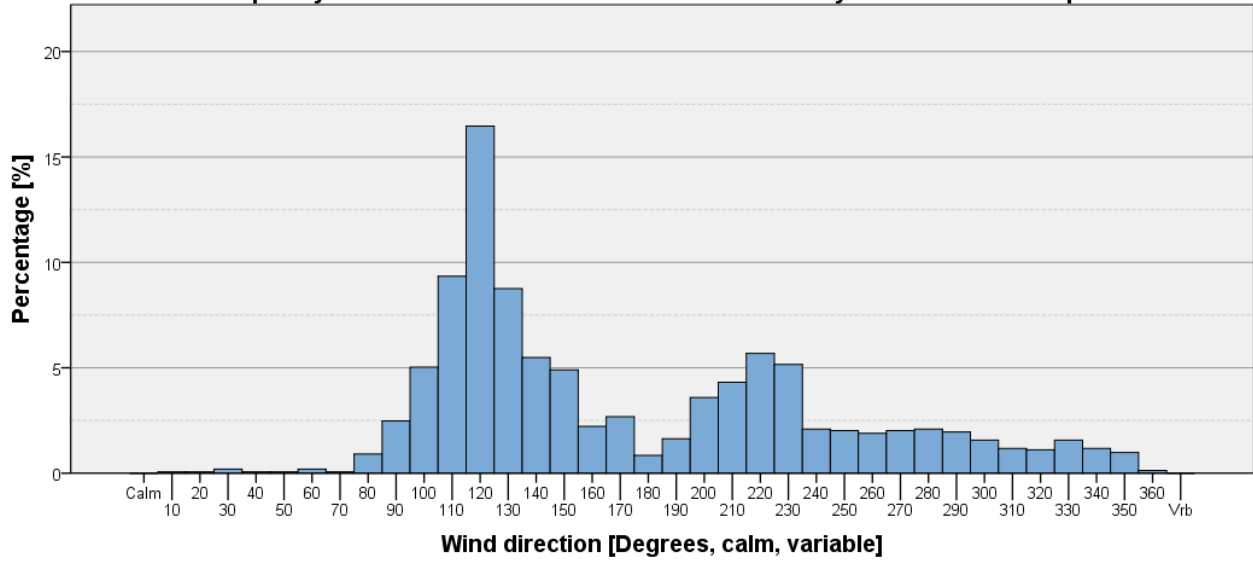


Figure 456

EKRK. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

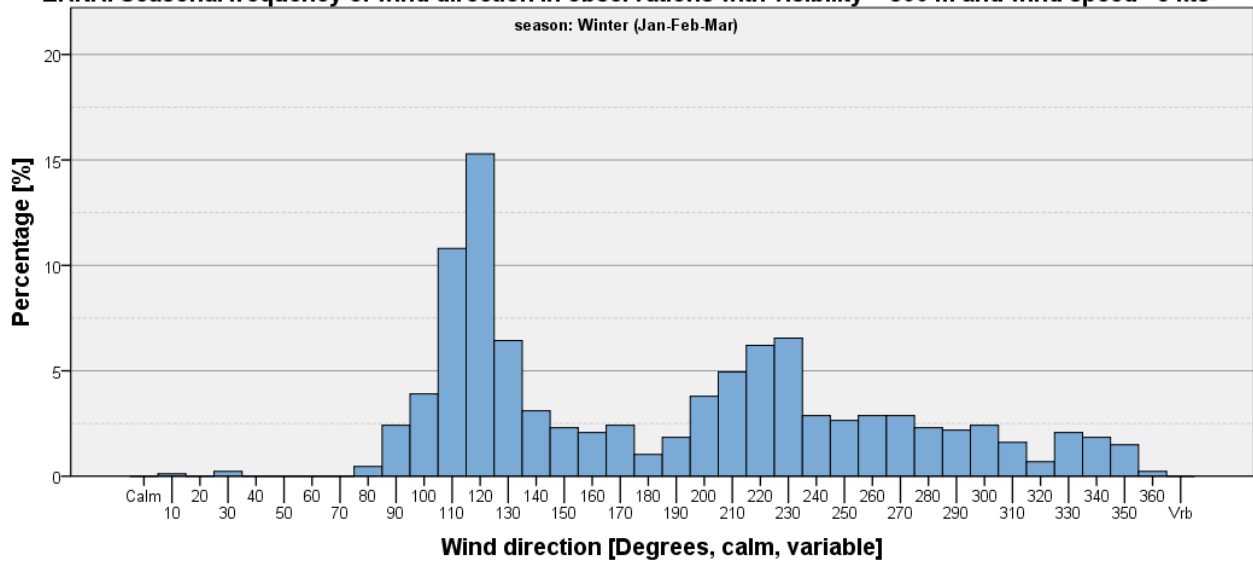


Figure 457

EKRK. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

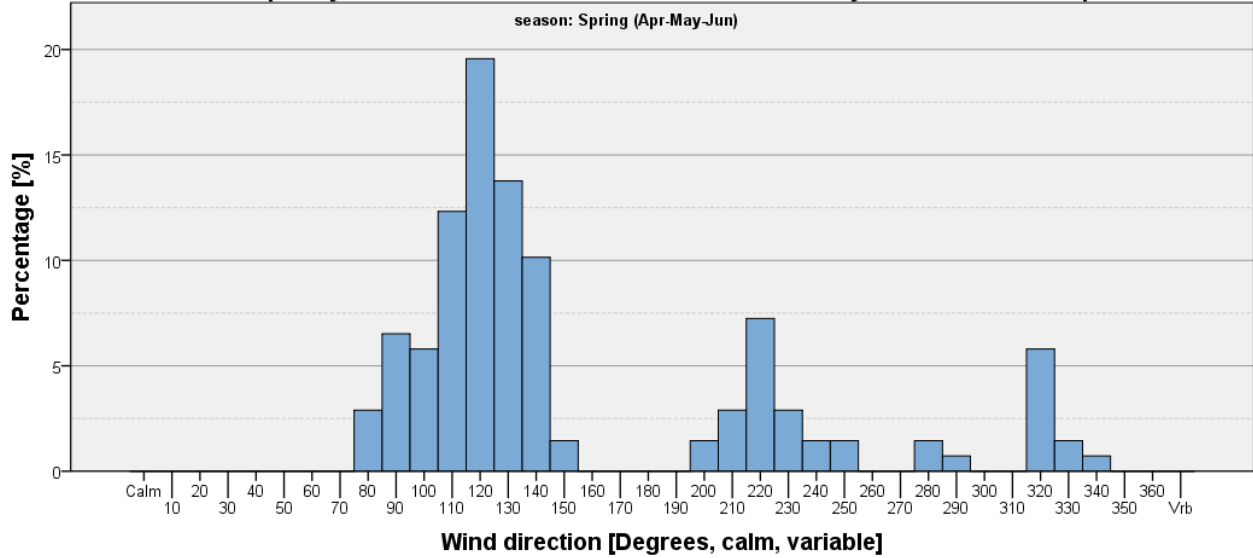


Figure 458

EKRK. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

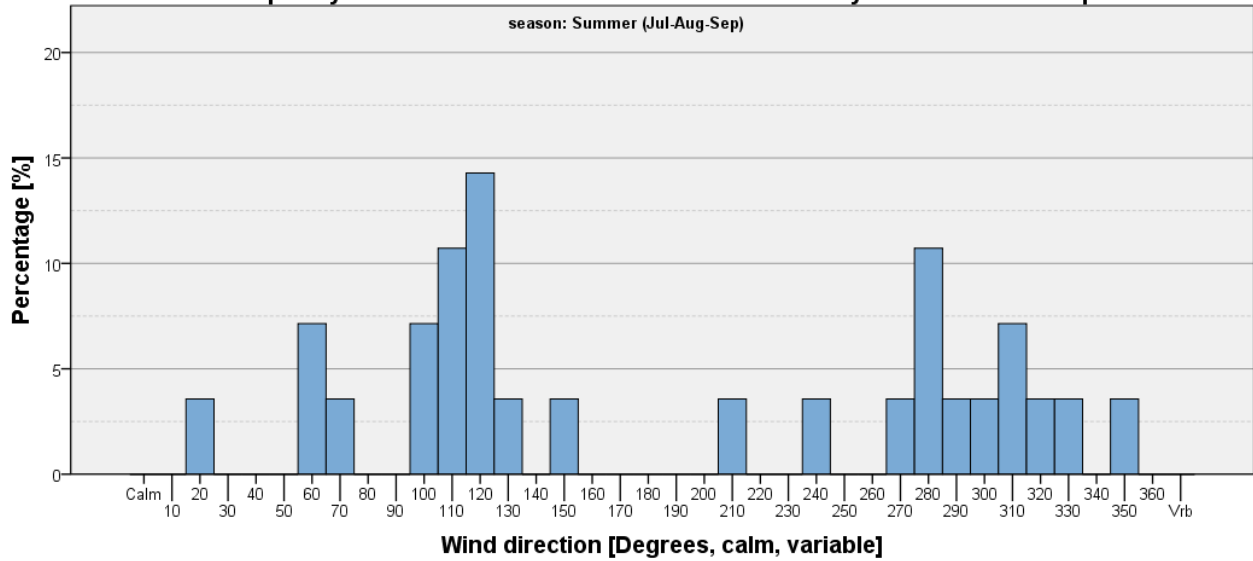


Figure 459

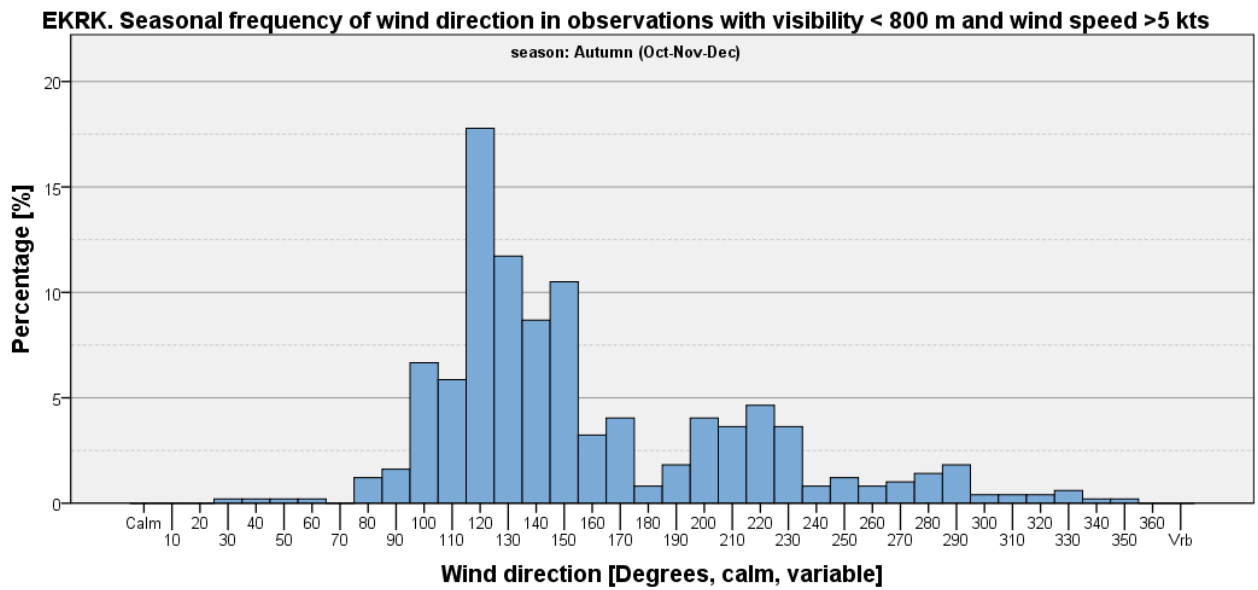


Figure 460

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 132: EKRK - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	21.90	6.48	4.09	18.65	12.76
All other observations	78.10	93.52	95.91	81.35	87.24
Total	100	100	100	100	100

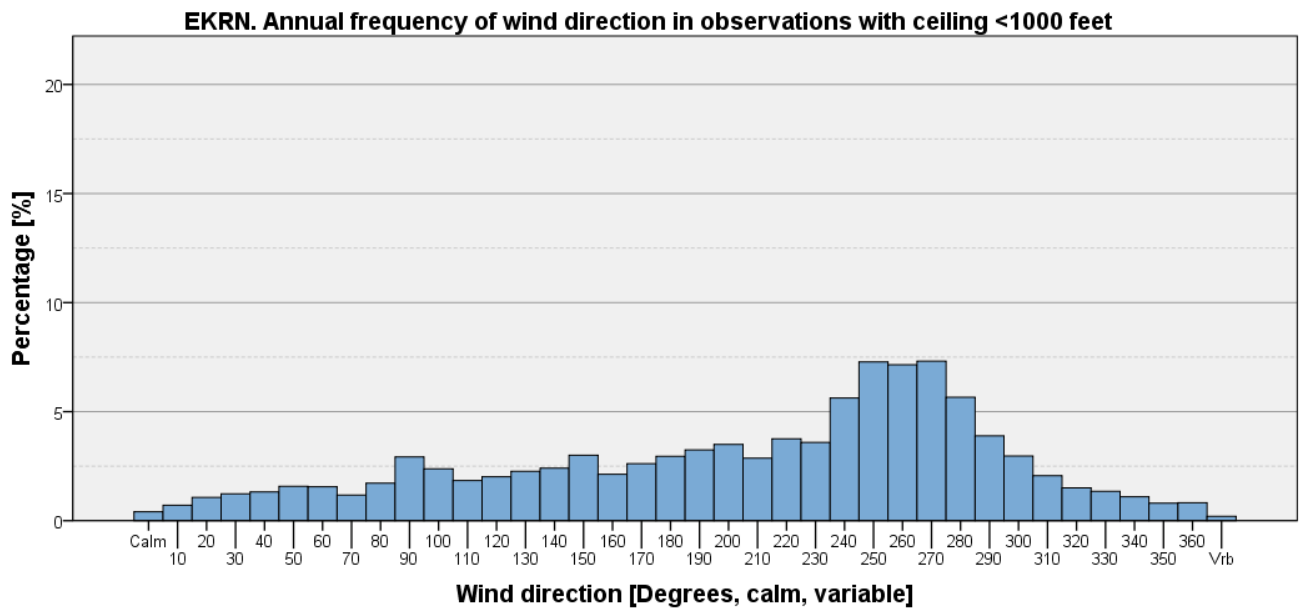


Figure 461

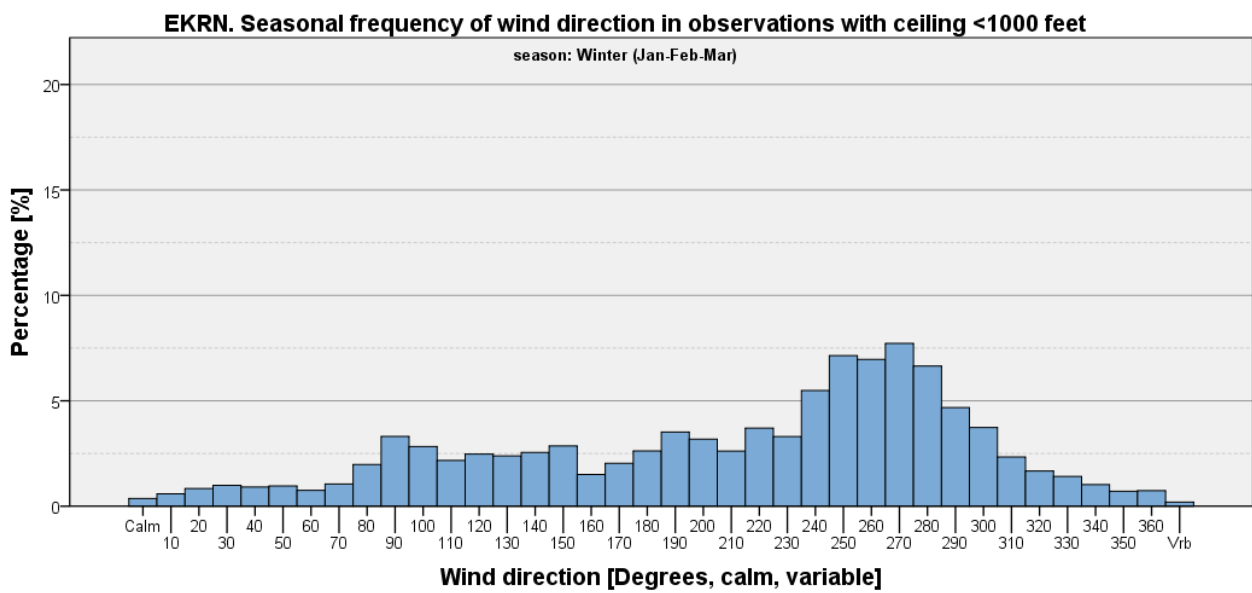


Figure 462

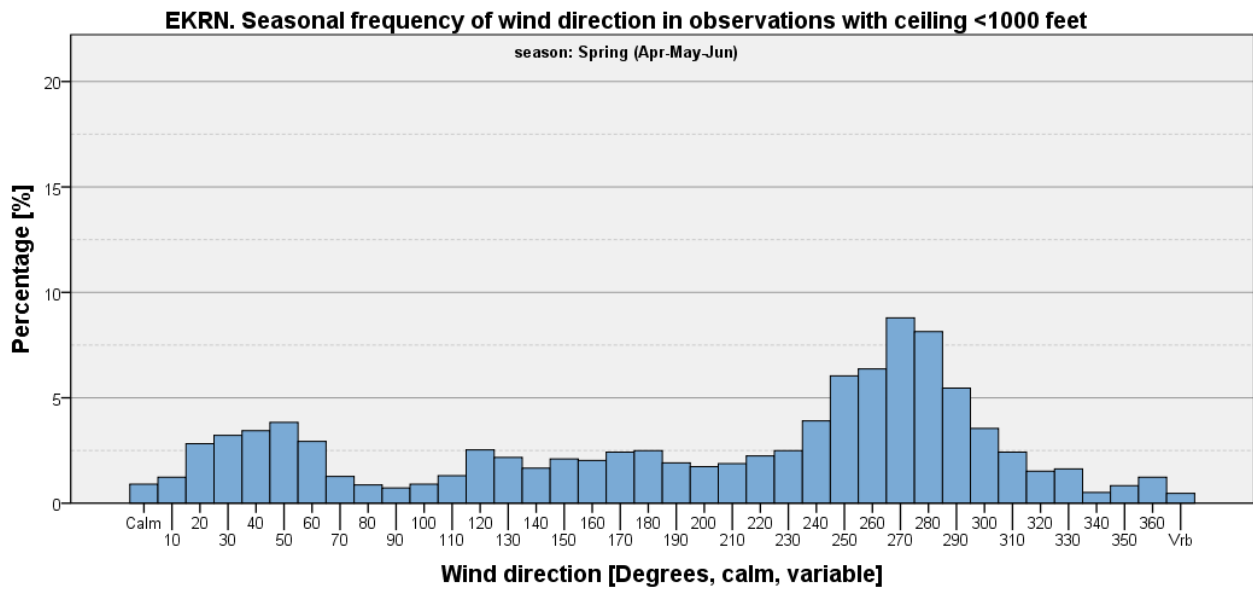


Figure 463

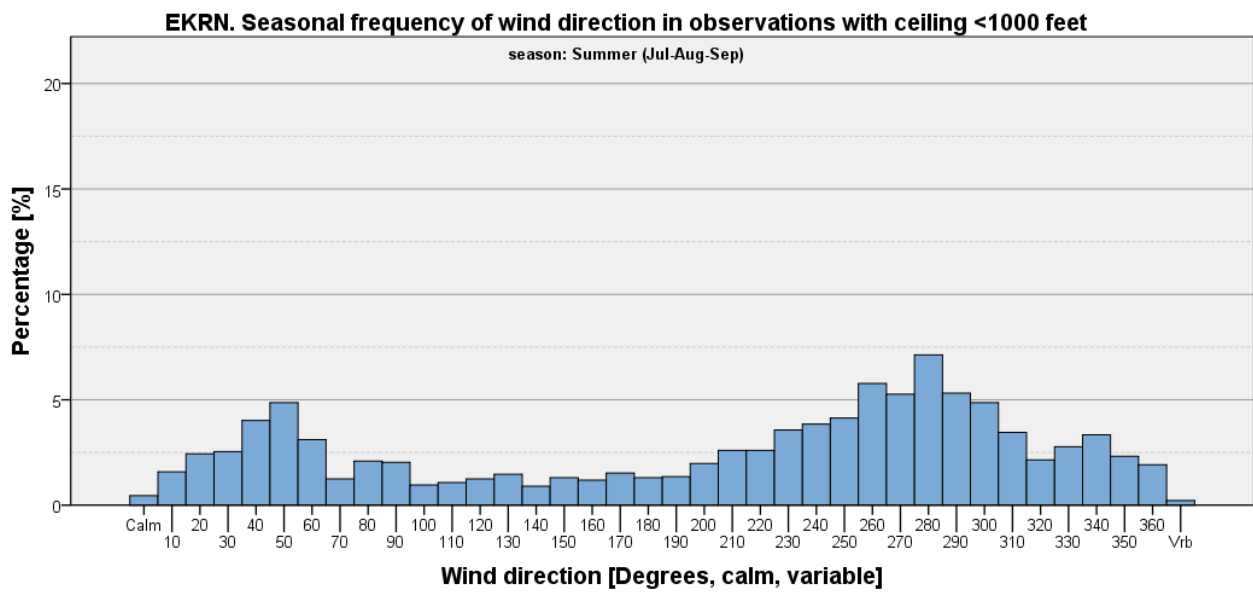


Figure 464

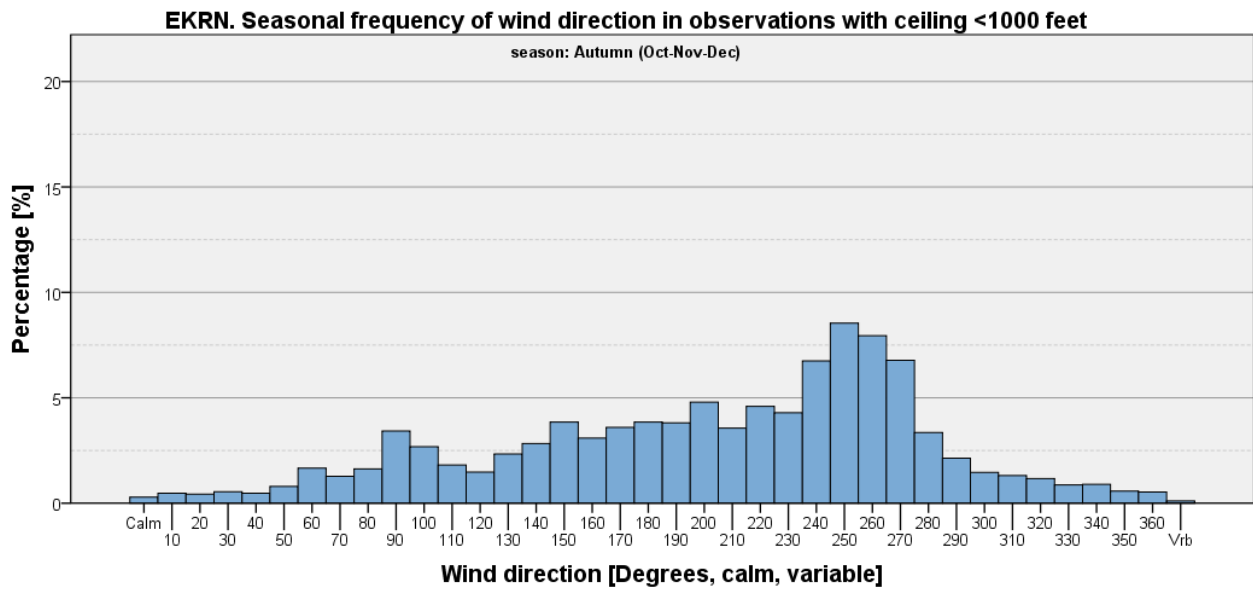


Figure 465

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 133: EKRN - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	3.43	1.95	0.89	2.30	2.14
All other observations	96.57	98.05	99.11	97.70	97.86
Total	100	100	100	100	100

EKRN. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

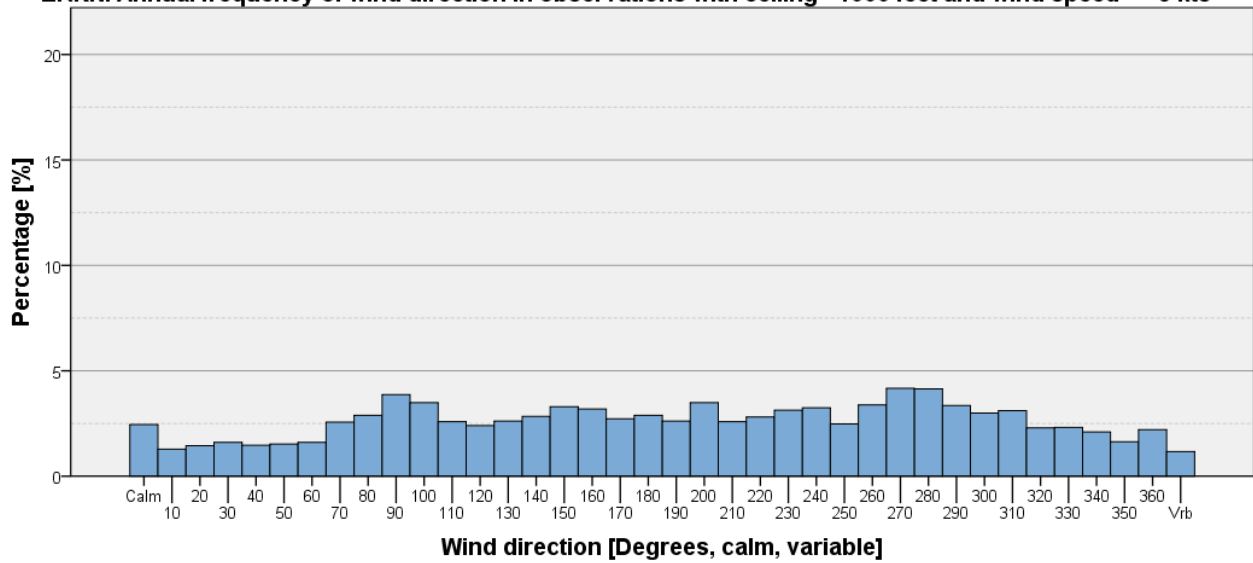


Figure 466

EKRN. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

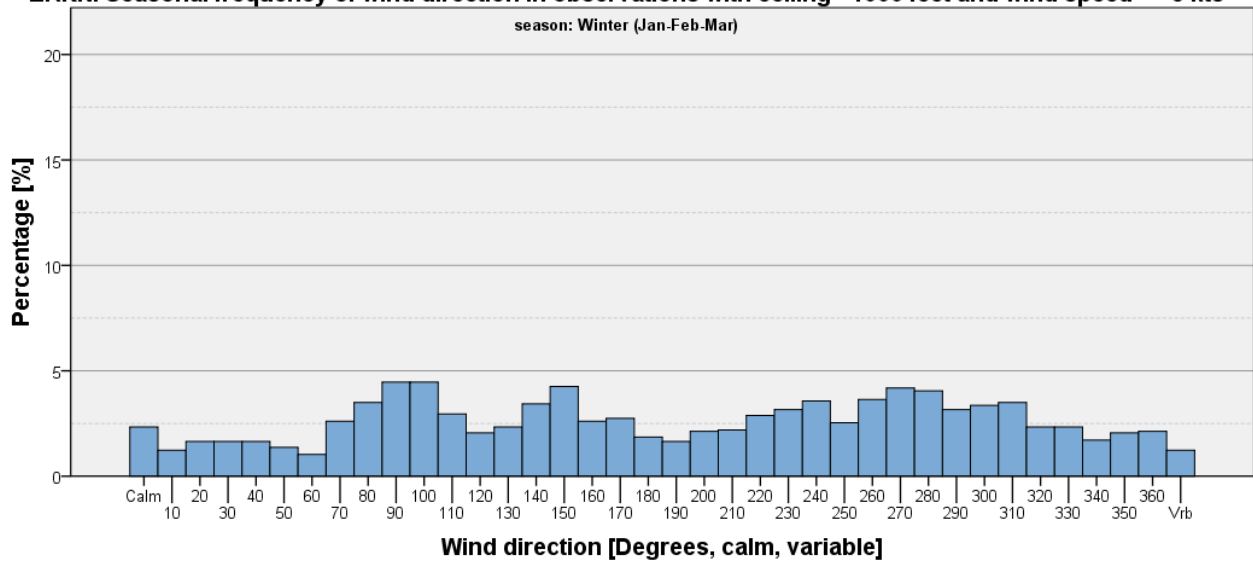


Figure 467

EKRN. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

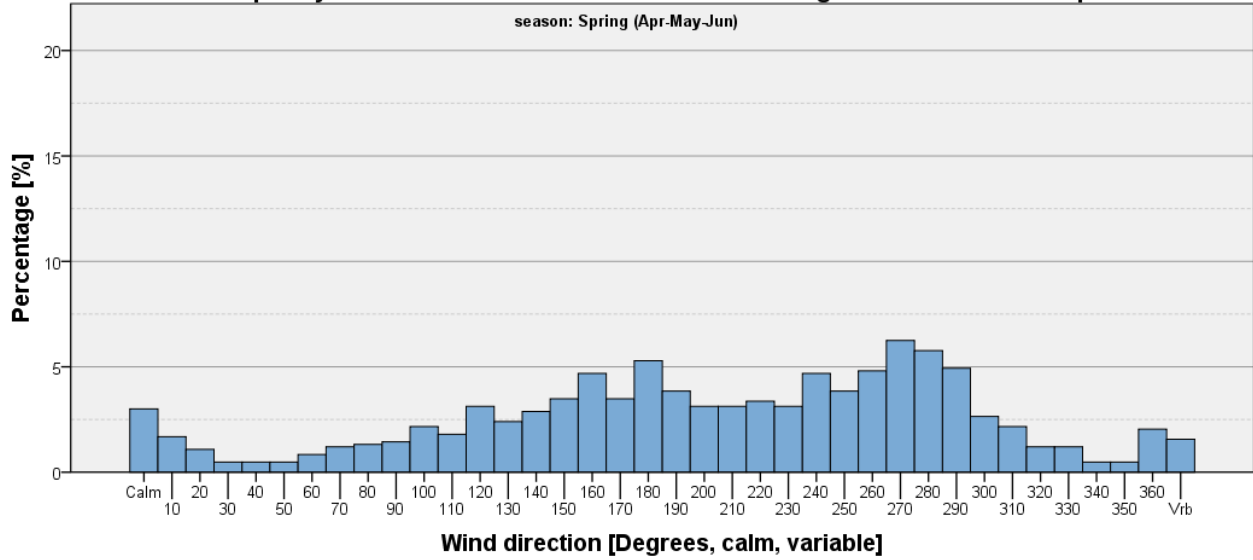


Figure 468

EKRN. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

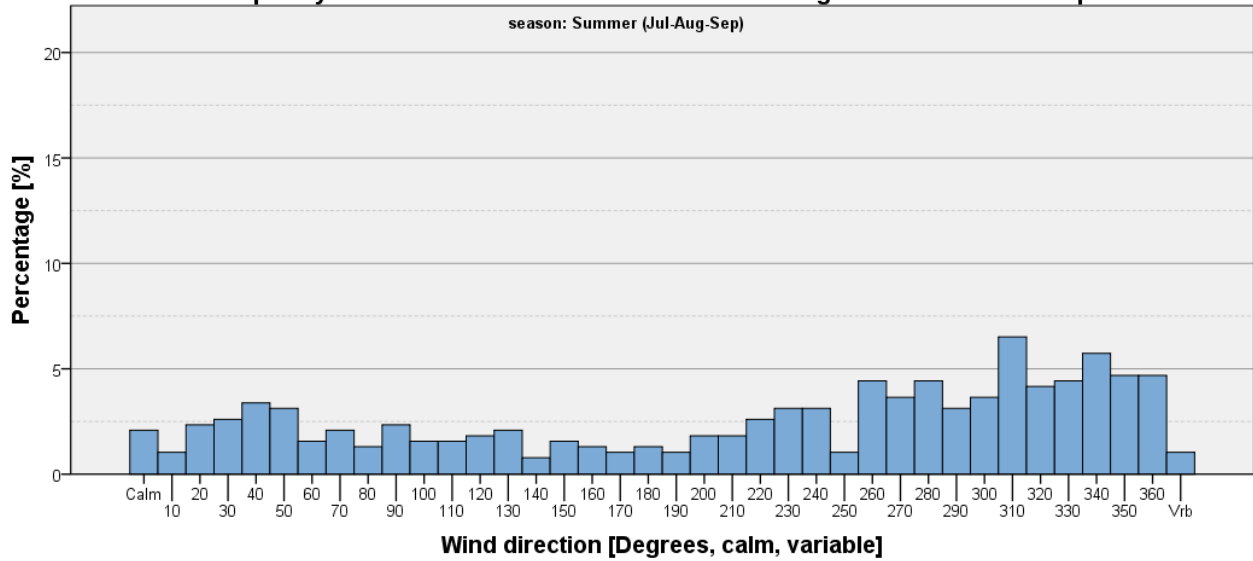


Figure 469

EKRN. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

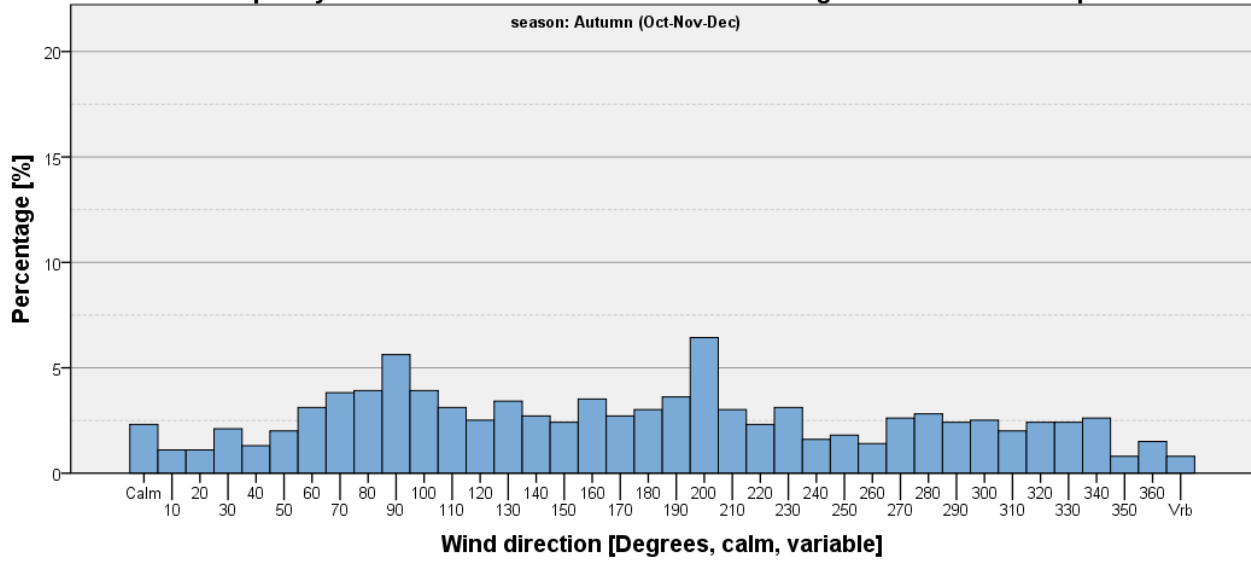


Figure 470

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 134: EKRN - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	18.47	4.53	3.20	16.34	10.62
All other observations	81.53	95.47	96.80	83.66	89.38
Total	100	100	100	100	100

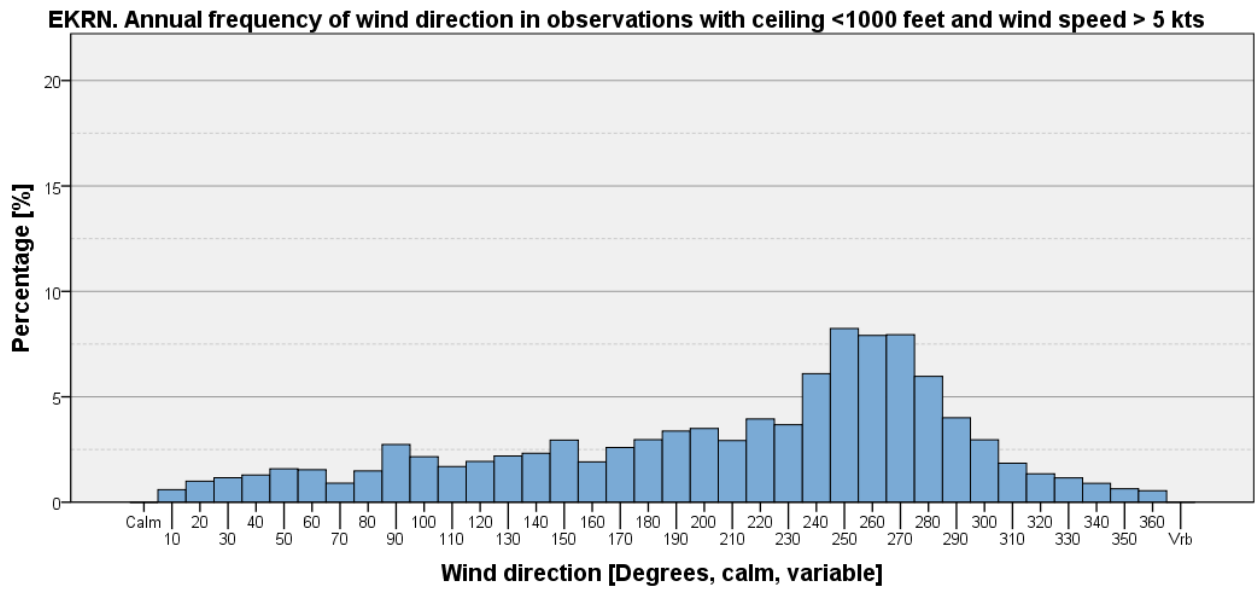


Figure 471

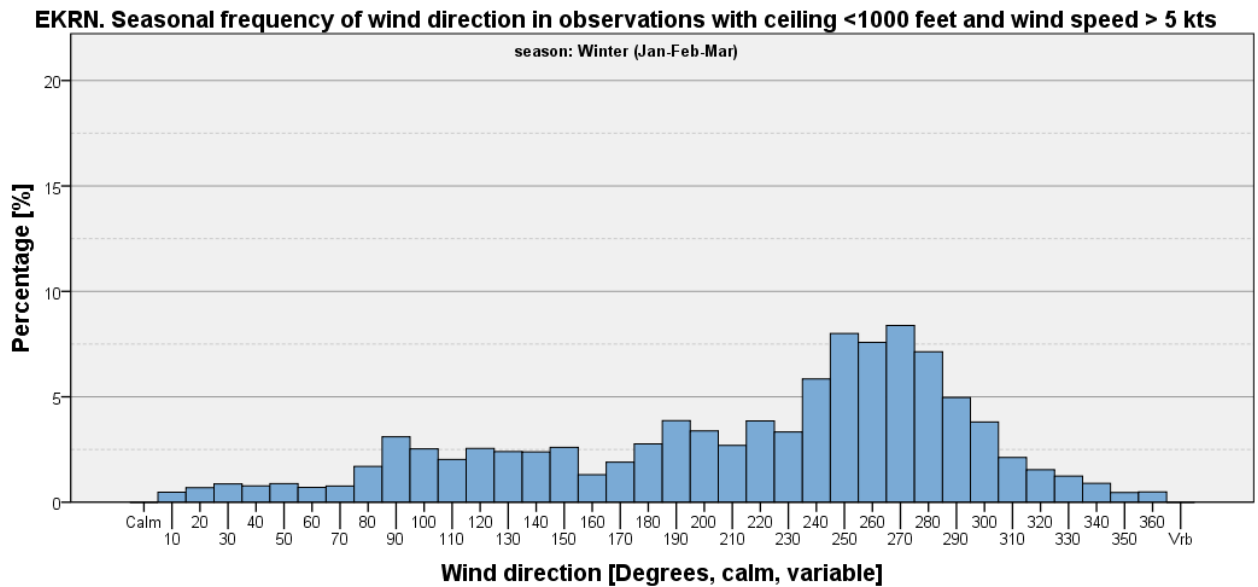


Figure 472

EKRN. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

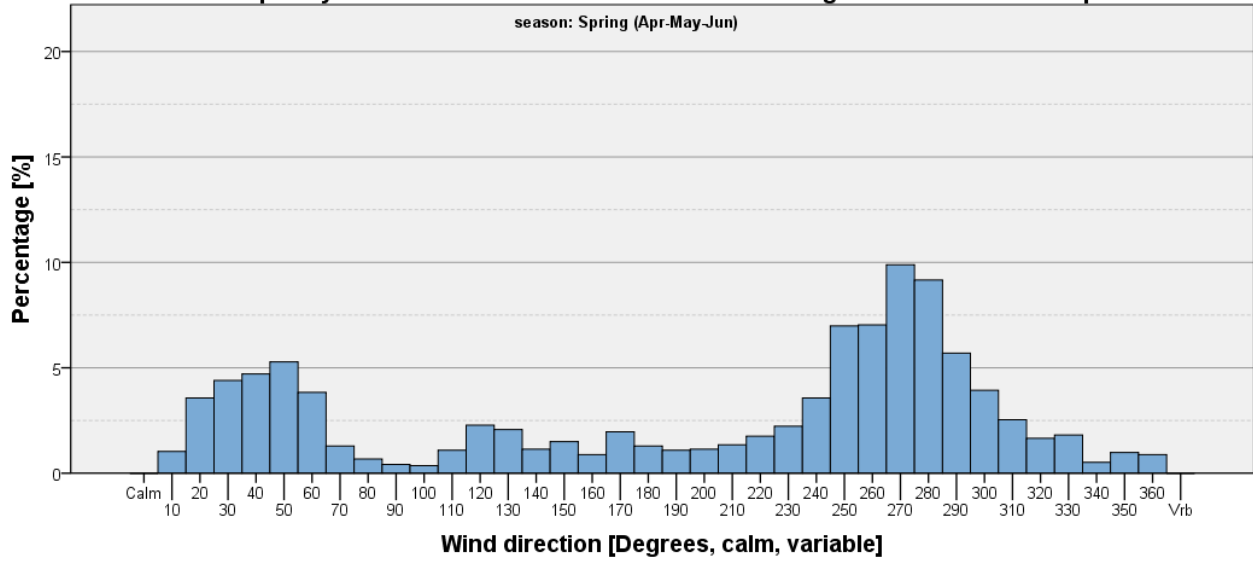


Figure 473

EKRN. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

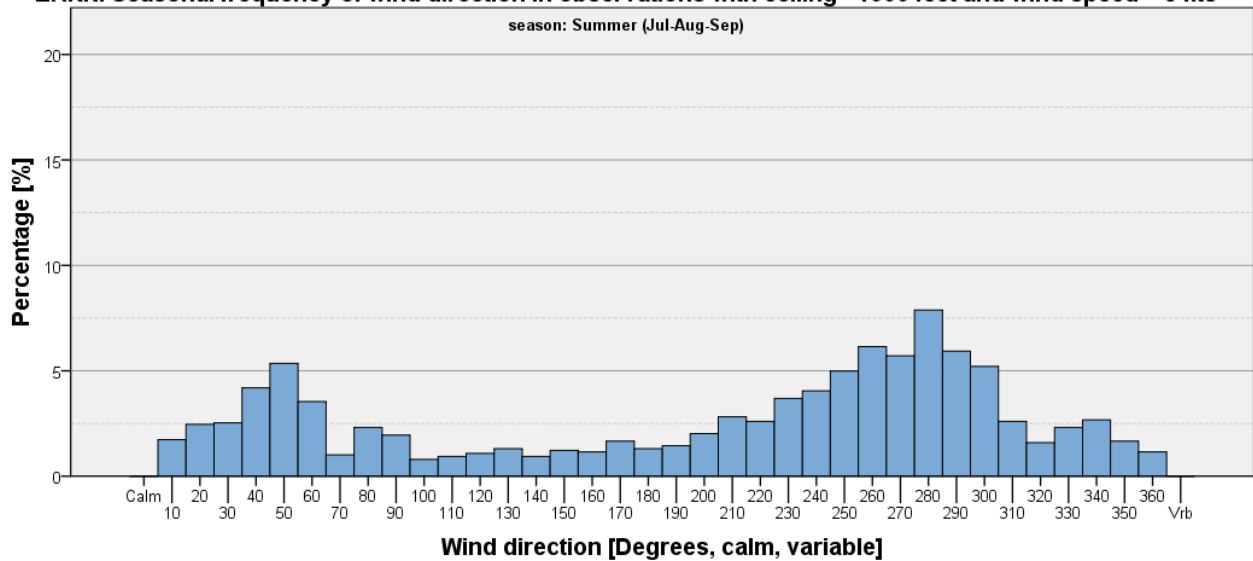


Figure 474

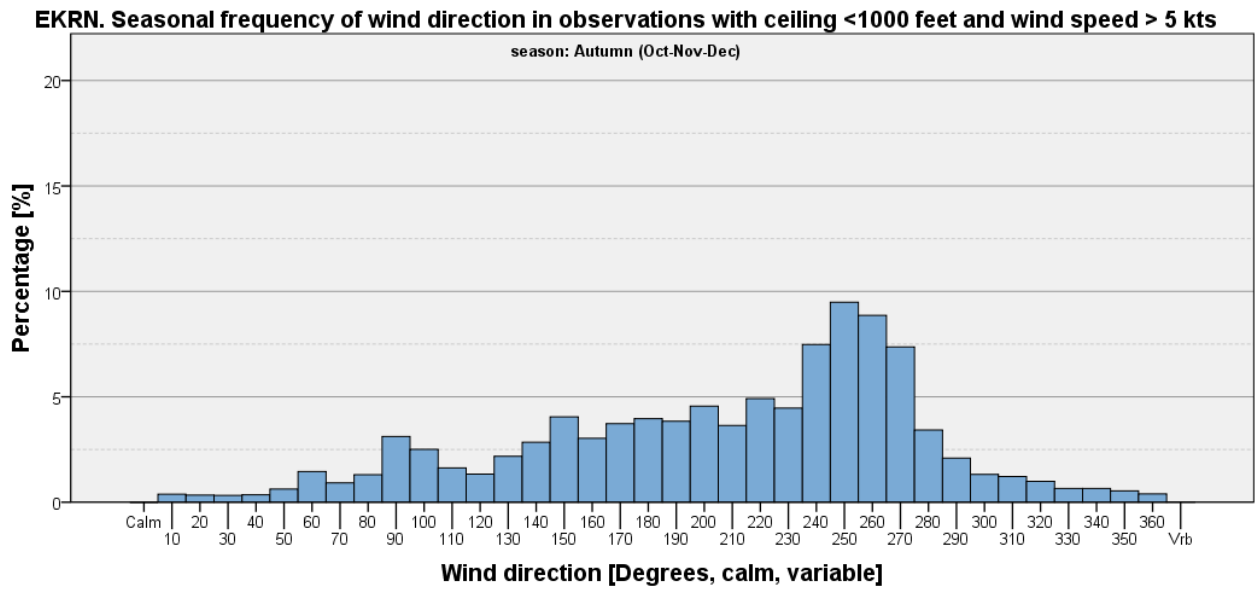


Figure 475

Ceiling < 500 feet

Table 135: EKRN - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	9.86	3.93	1.37	6.47	5.39
All other observations	90.14	96.07	98.63	93.53	94.61
Total	100	100	100	100	100

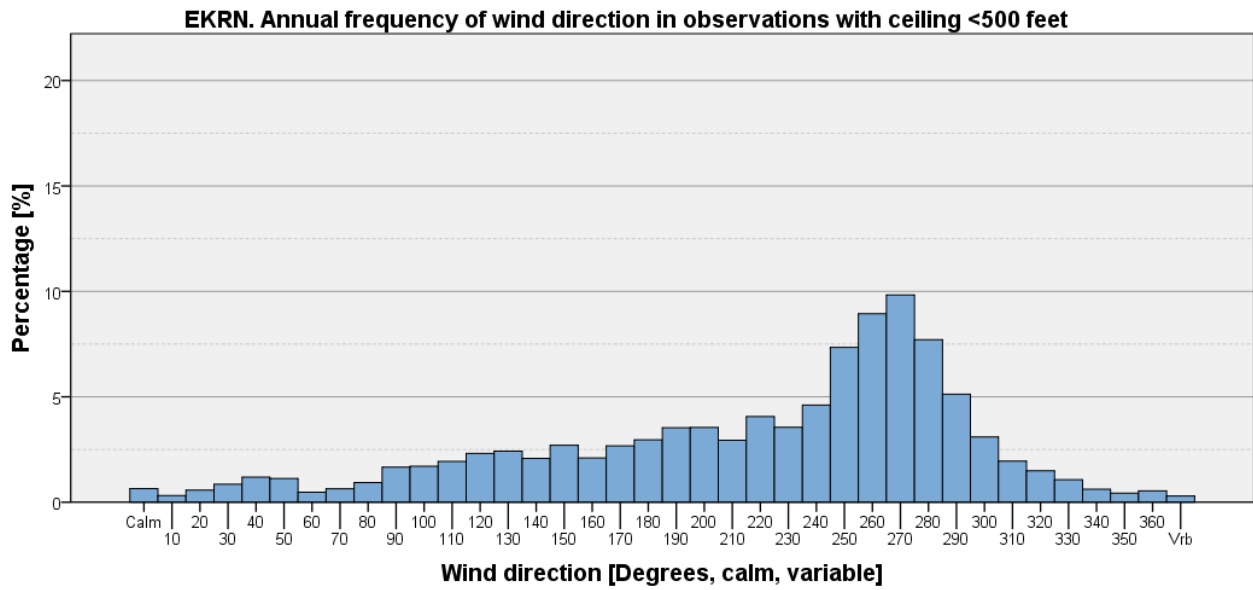


Figure 476

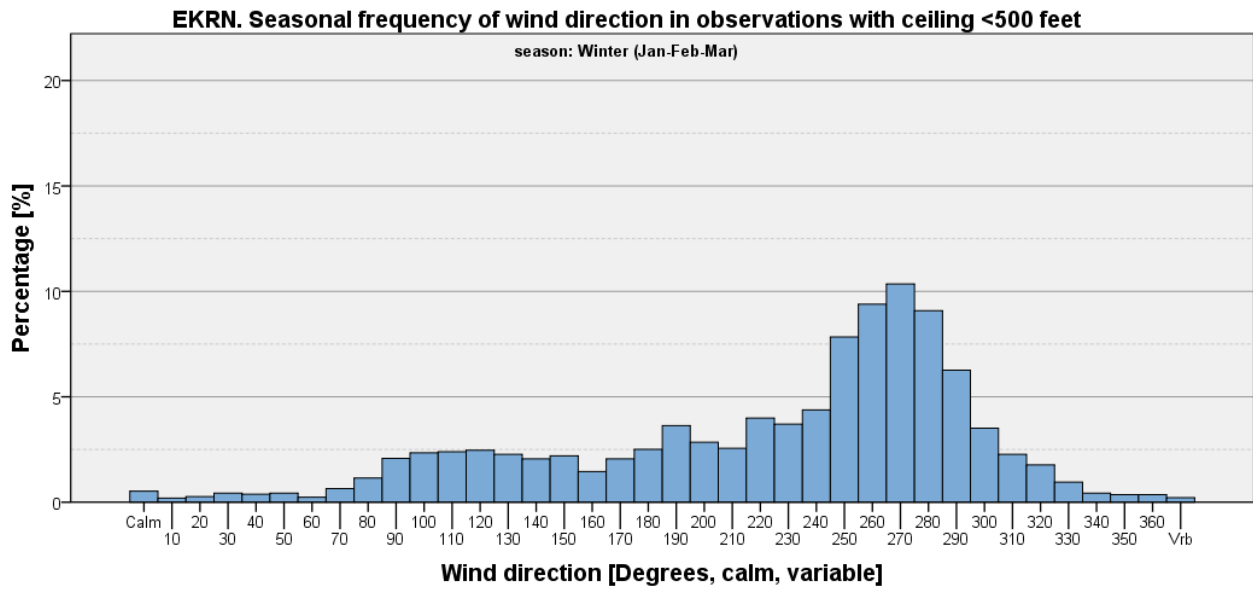


Figure 477

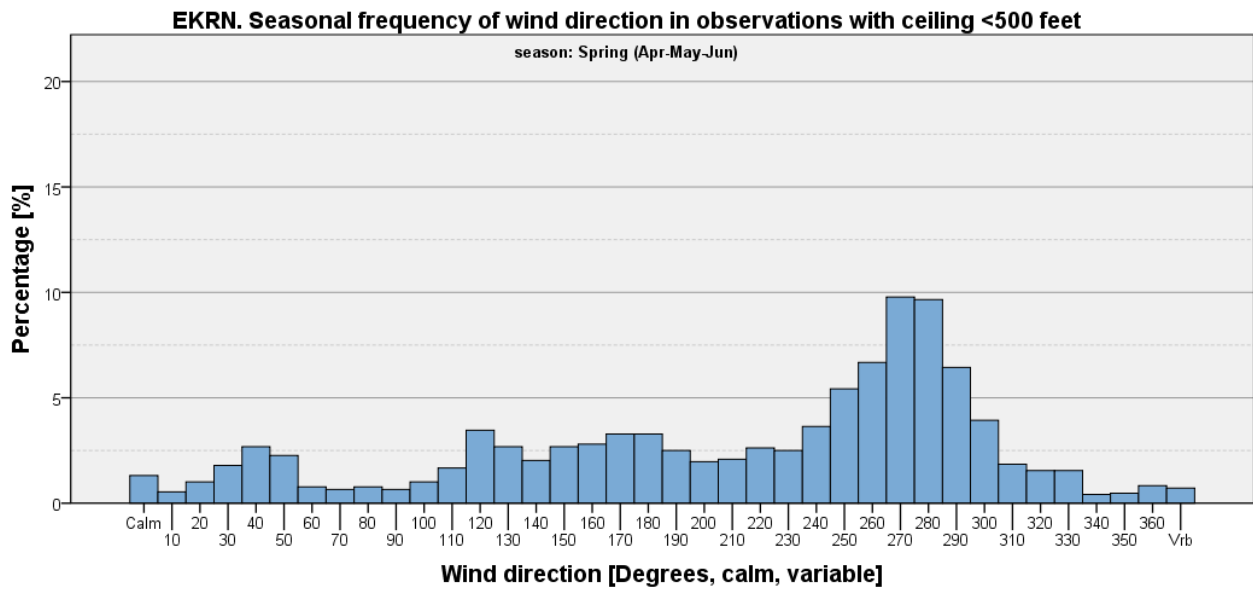


Figure 478

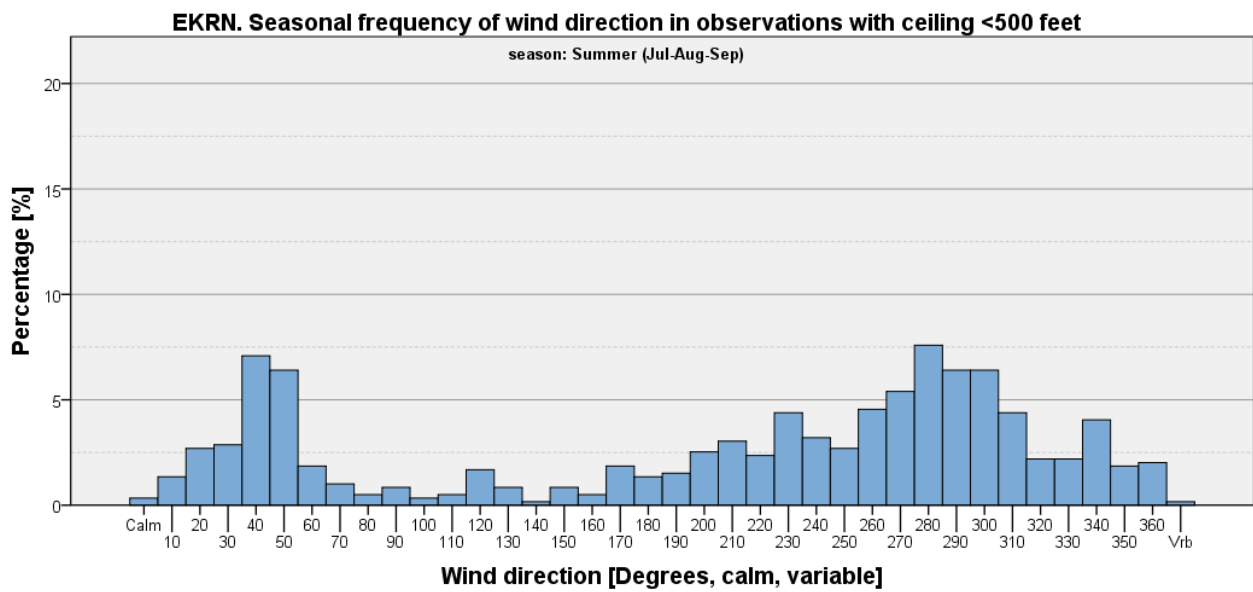


Figure 479

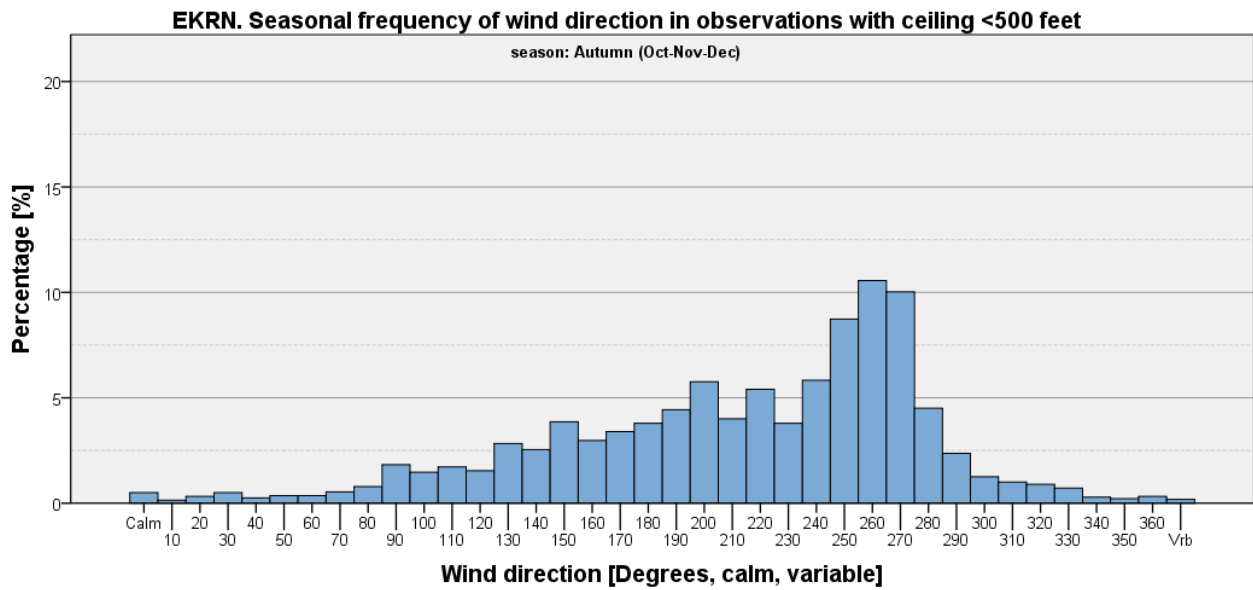


Figure 480

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 136: EKRN - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	1.91	1.56	0.44	1.19	1.27
All other Observations	98.09	98.44	99.56	98.81	98.73
Total	100	100	100	100	100

EKRN. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

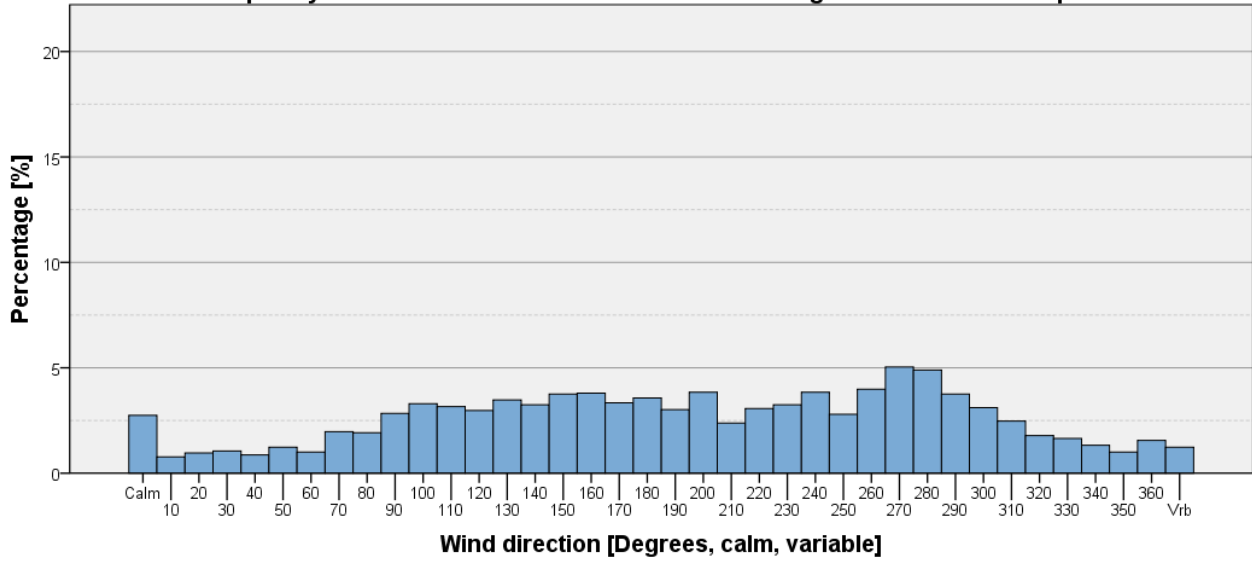


Figure 481

EKRN. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

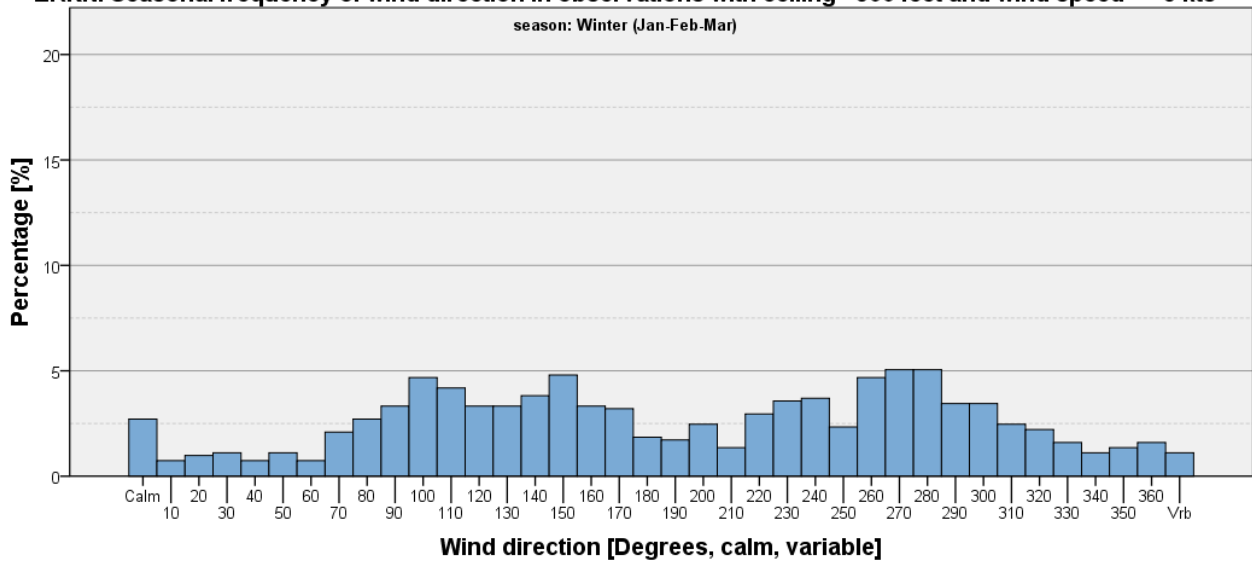


Figure 482

EKRN. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

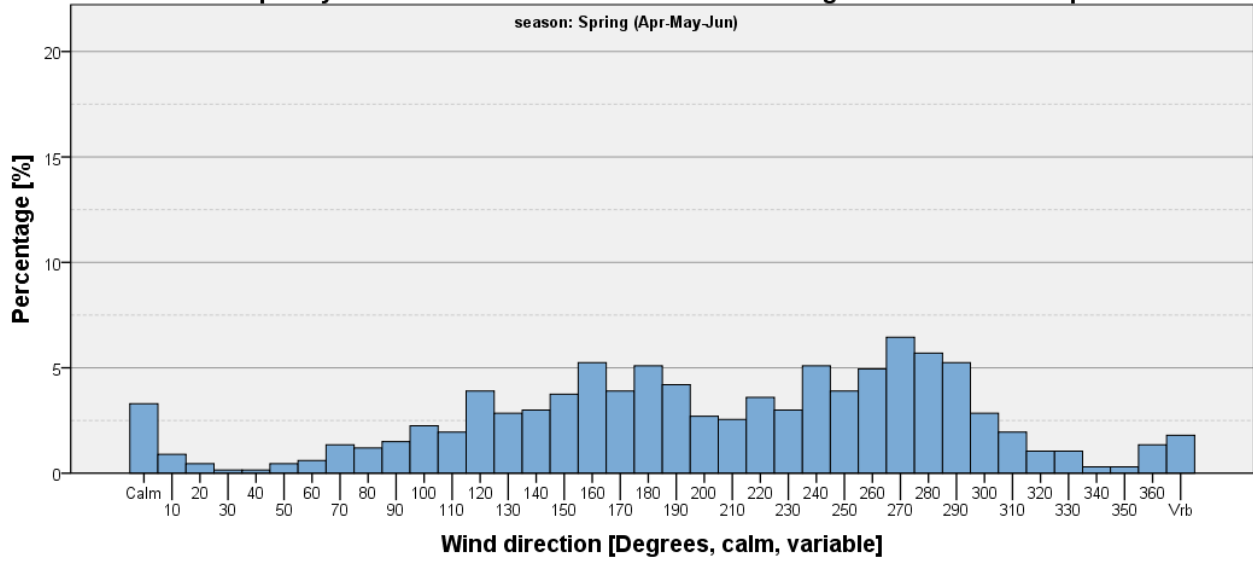


Figure 483

EKRN. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

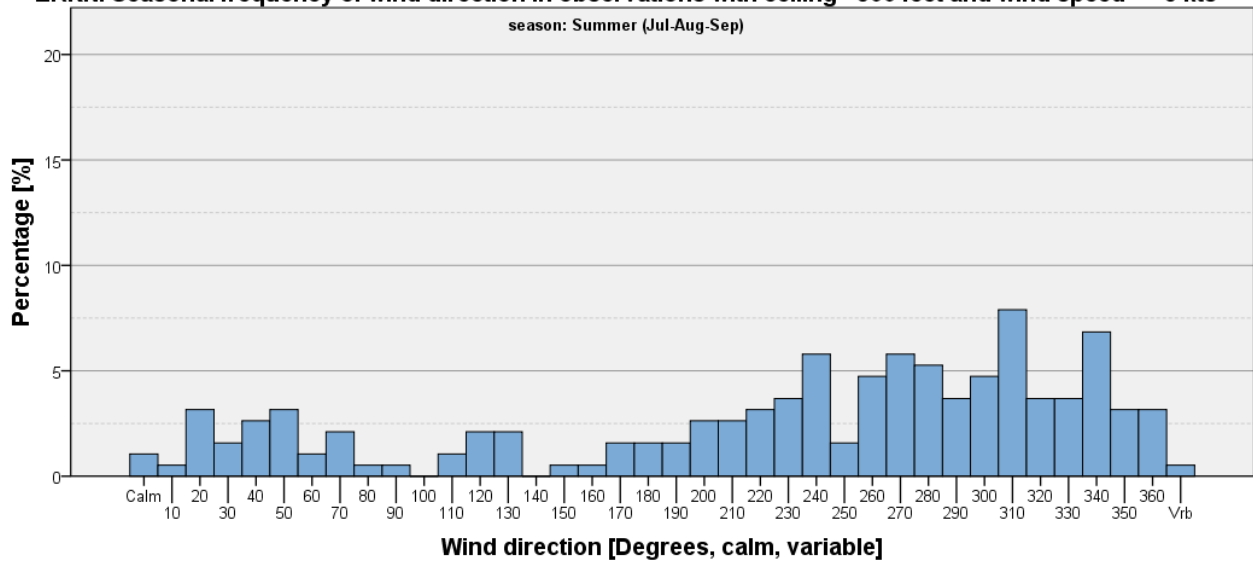


Figure 484

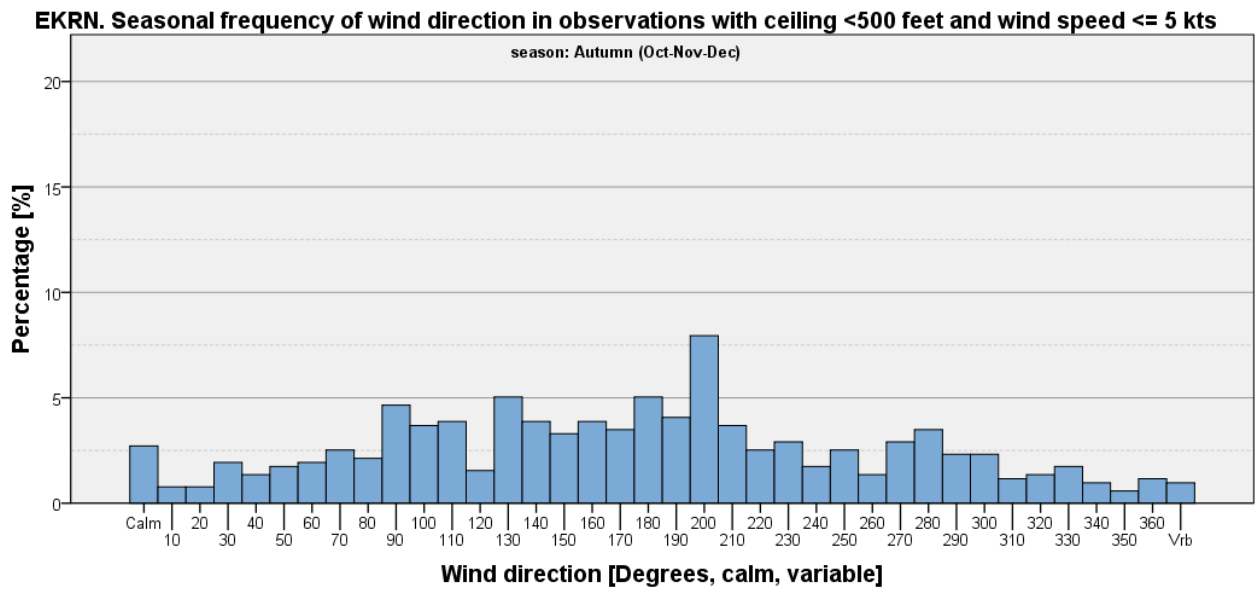


Figure 485

Ceiling < 500 feet and Wind Speed > 5 kts

Table 137: EKRN - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	7.95	2.37	0.93	5.27	4.12
All other observations	92.05	97.63	99.07	94.73	95.88
Total	100	100	100	100	100

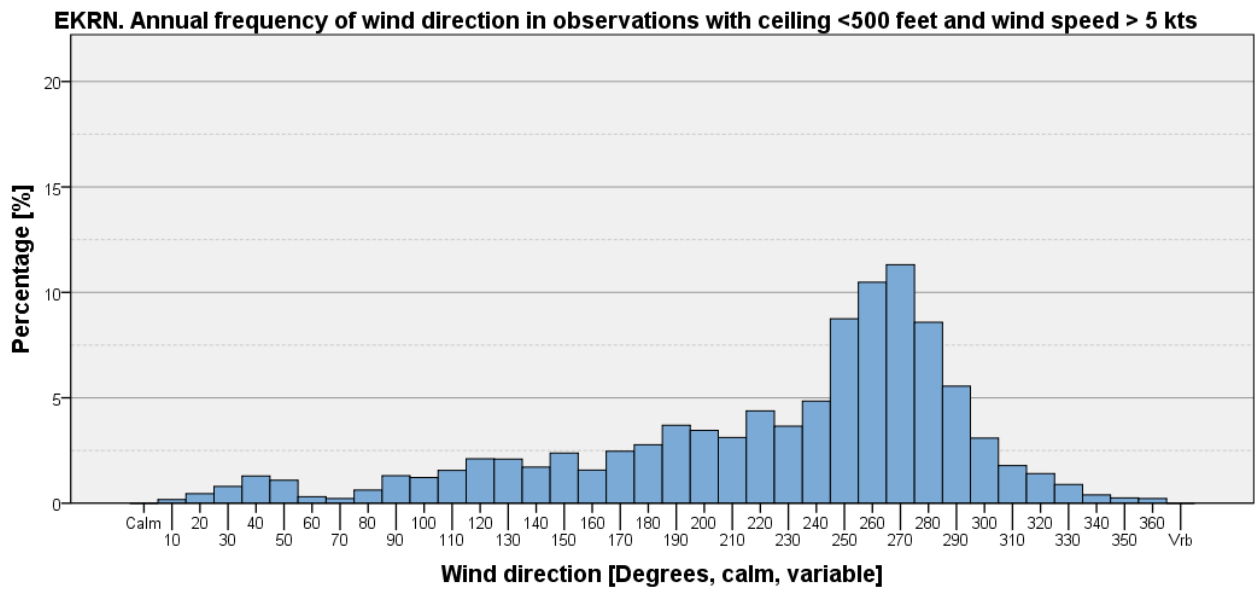


Figure 486

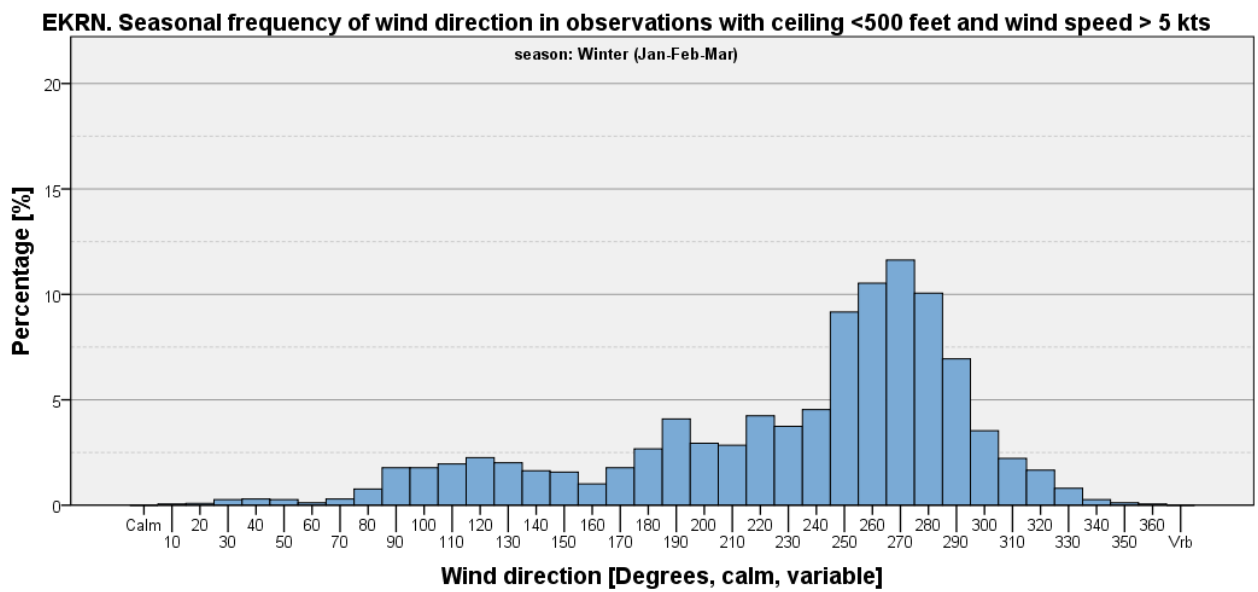


Figure 487

EKRN. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

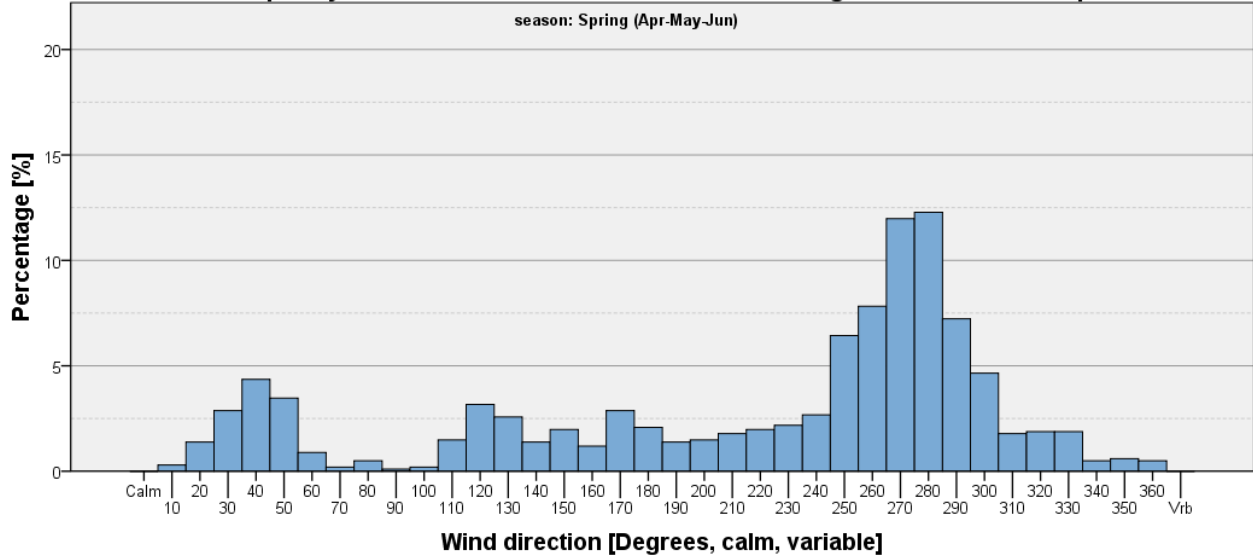


Figure 488

EKRN. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

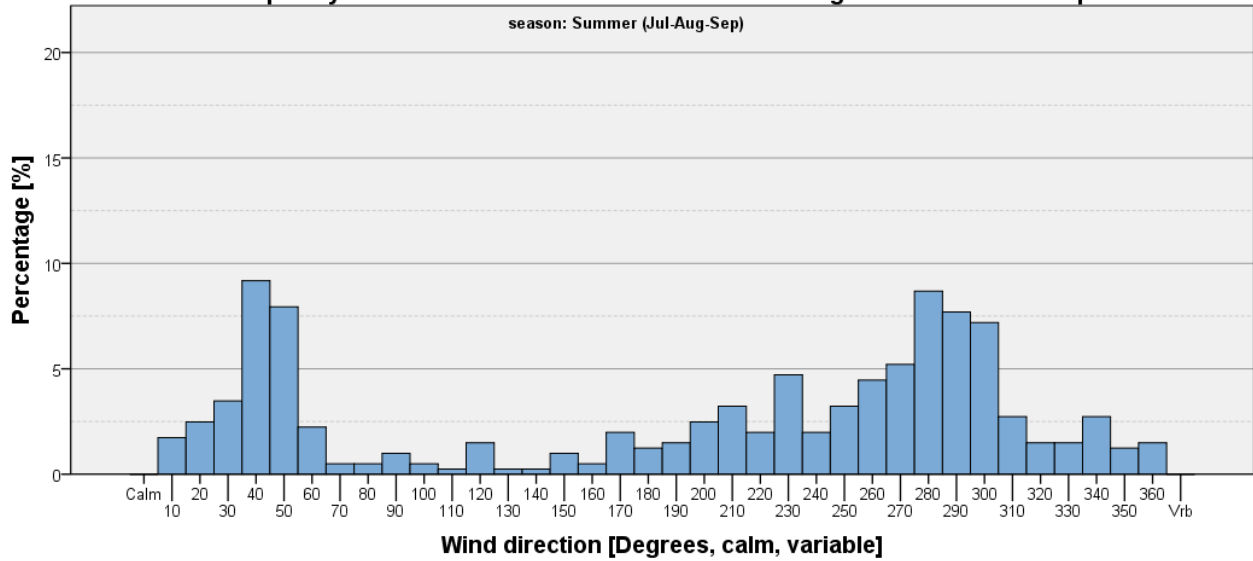


Figure 489

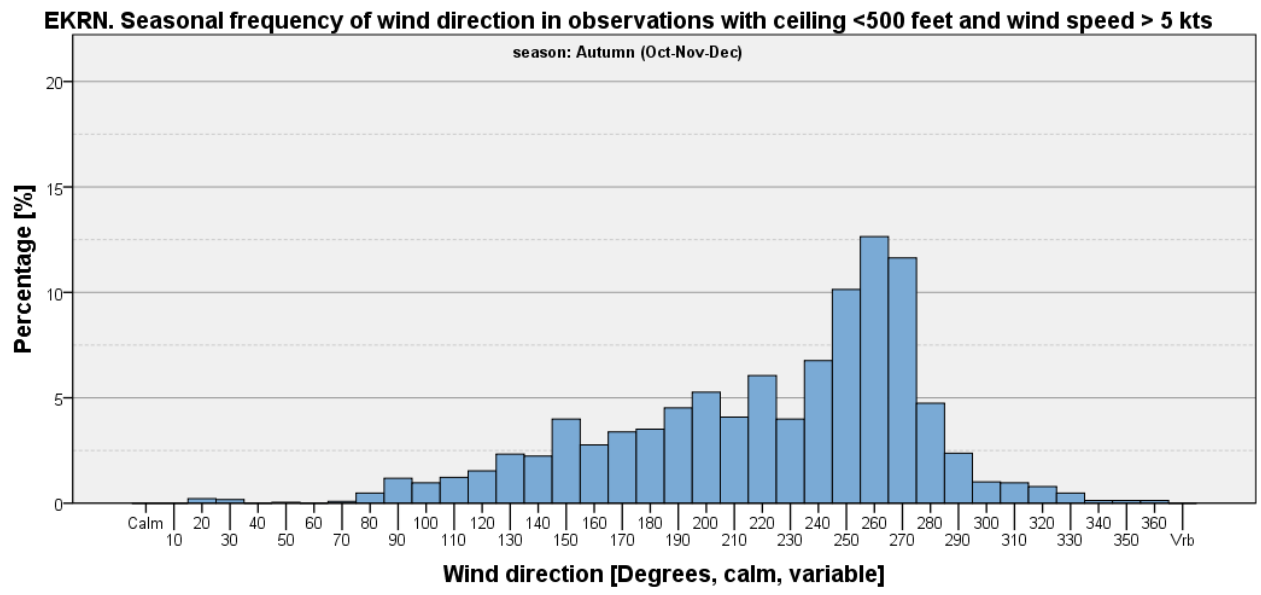
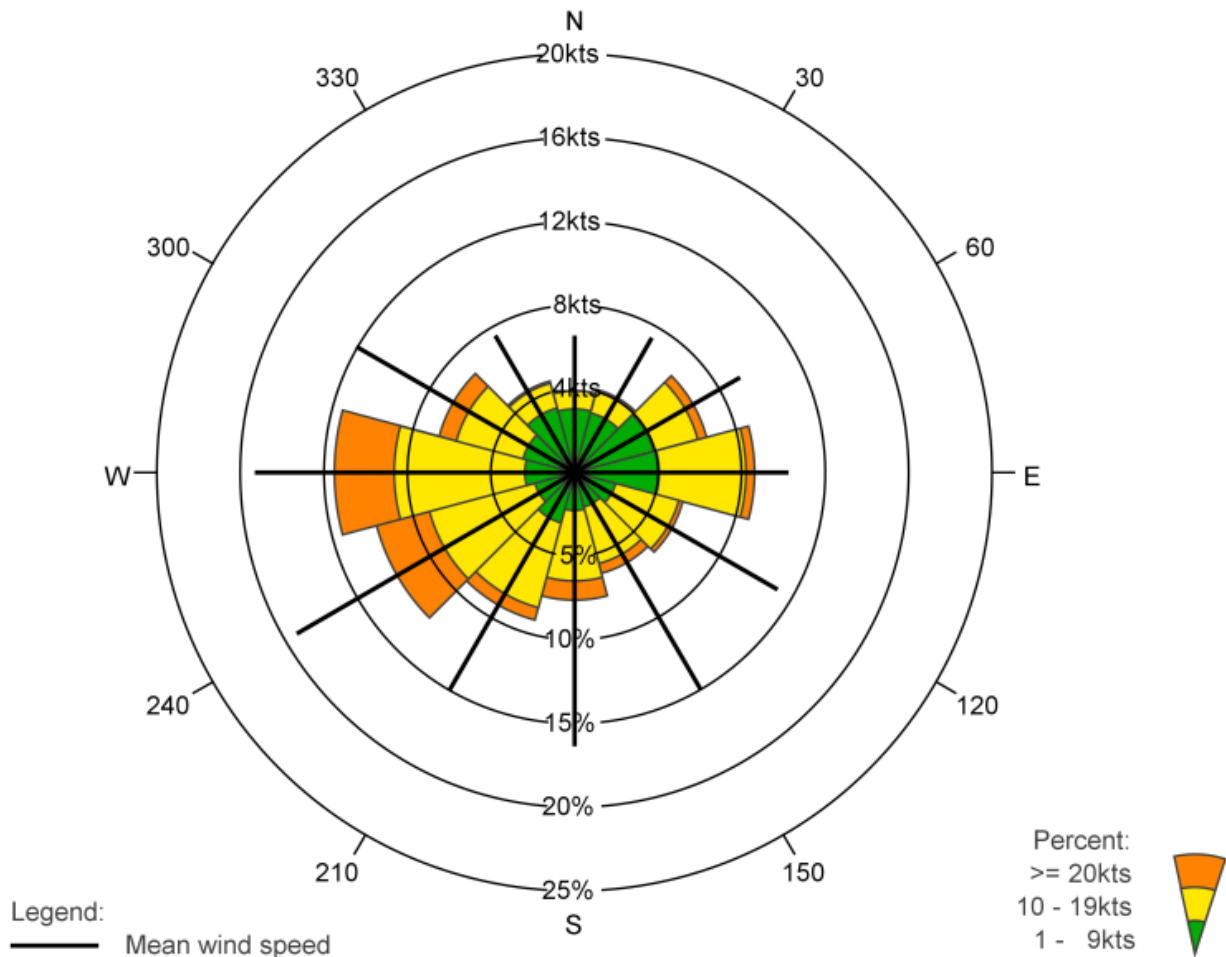


Figure 490

Wind Roses

EKRN: BORNHOLMS LUFTHAVN (RØNNE), AUTUMN & WINTER

01-01-2009 - 31-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	4.9	5.2	8.2	10.8	6.7	6.2	7.6	9.1	12.3	14.4	8.4	5.7	99.4
% 1 - 9kts	3.8	3.7	4.9	5.1	2.5	2.1	2.3	3.1	2.5	3.0	3.2	4.0	40.1
% 10 - 19kts	1.1	1.3	2.7	5.2	3.9	3.5	4.2	5.3	6.5	7.8	4.1	1.5	47.2
% >= 20kts	0.0	0.1	0.6	0.5	0.3	0.6	1.1	0.8	3.3	3.6	1.1	0.1	12.1
Mean wind speed	6.5	7.5	9.1	10.3	11.2	11.9	13.1	12.1	15.4	15.3	12.1	7.6	11.7
Max wind speed	24.0	30.0	31.0	30.0	26.0	30.0	35.0	38.0	42.0	43.0	42.0	28.0	43.0

Number of observations = 85631

Source: DMI

Calm defined as wind speed = 0kts

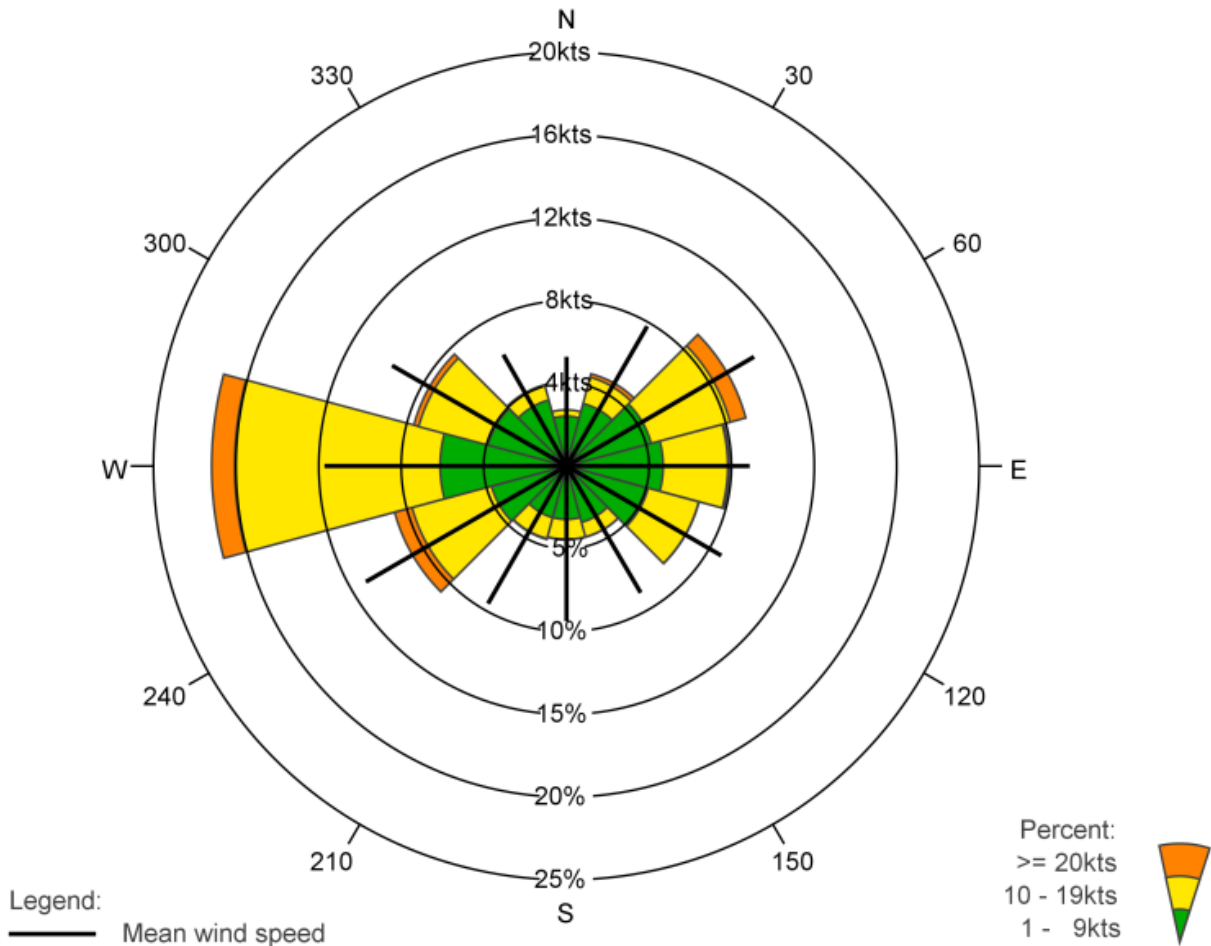
Number of observations with calm/varying wind direction: 528=0.6%

Observations with calm/varying wind direction are not used in the statistics

Figure 491

EKRN: BORNHOLMS LUFTHAVN (RØNNE), SPRING & SUMMER

01-01-2009 - 31-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.4	5.8	11.2	9.9	8.3	4.4	4.5	4.6	10.8	21.5	9.6	5.1	99.0
% 1 - 9kts	3.0	3.9	5.3	5.9	5.1	3.5	3.2	3.2	4.7	7.6	4.9	4.1	54.5
% 10 - 19kts	0.4	1.6	5.0	3.9	3.2	0.9	1.2	1.3	5.0	12.4	4.3	0.9	40.2
% >= 20kts	0.0	0.2	1.0	0.1	0.0	0.0	0.0	0.1	1.1	1.4	0.3	0.0	4.3
Mean wind speed	5.3	7.8	10.5	8.9	8.6	7.1	7.5	7.6	11.2	11.7	9.8	6.2	9.5
Max wind speed	18.0	30.0	33.0	24.0	22.0	22.0	27.0	25.0	34.0	33.0	31.0	21.0	34.0

Number of observations = 85903

Source: DMI

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 878=1.0%

Observations with calm/varying wind direction are not used in the statistics

Figure 492

Availability

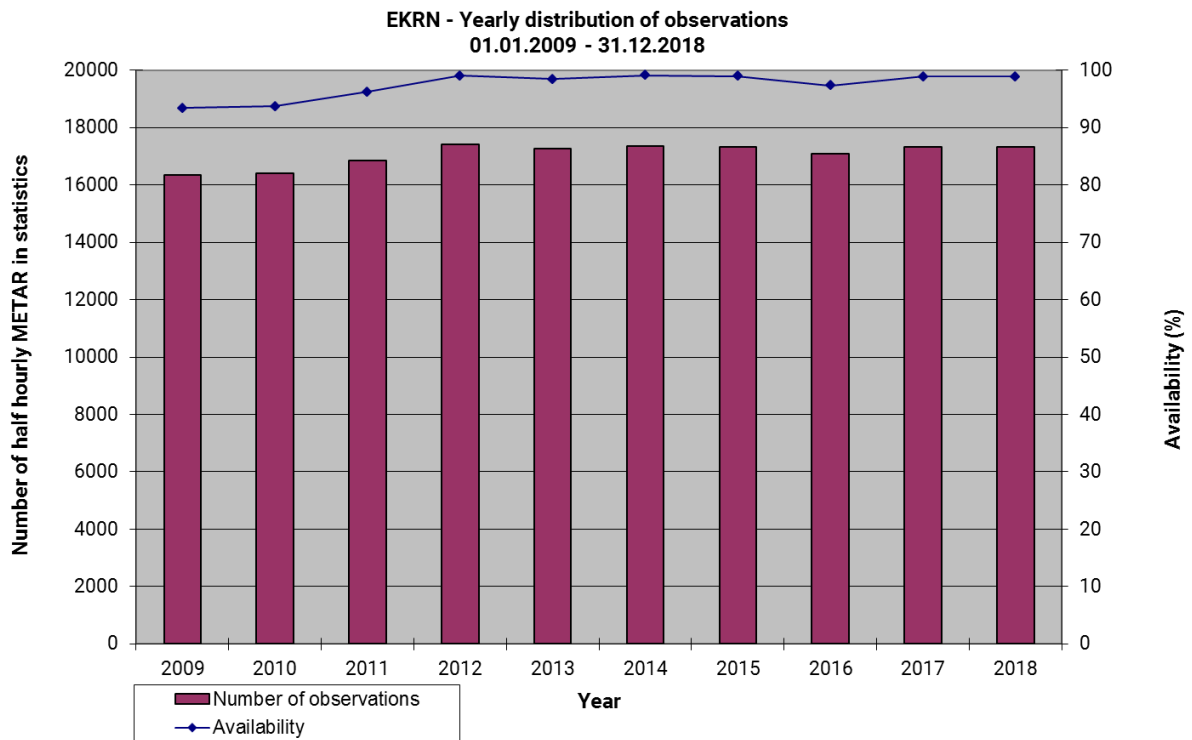


Figure 493

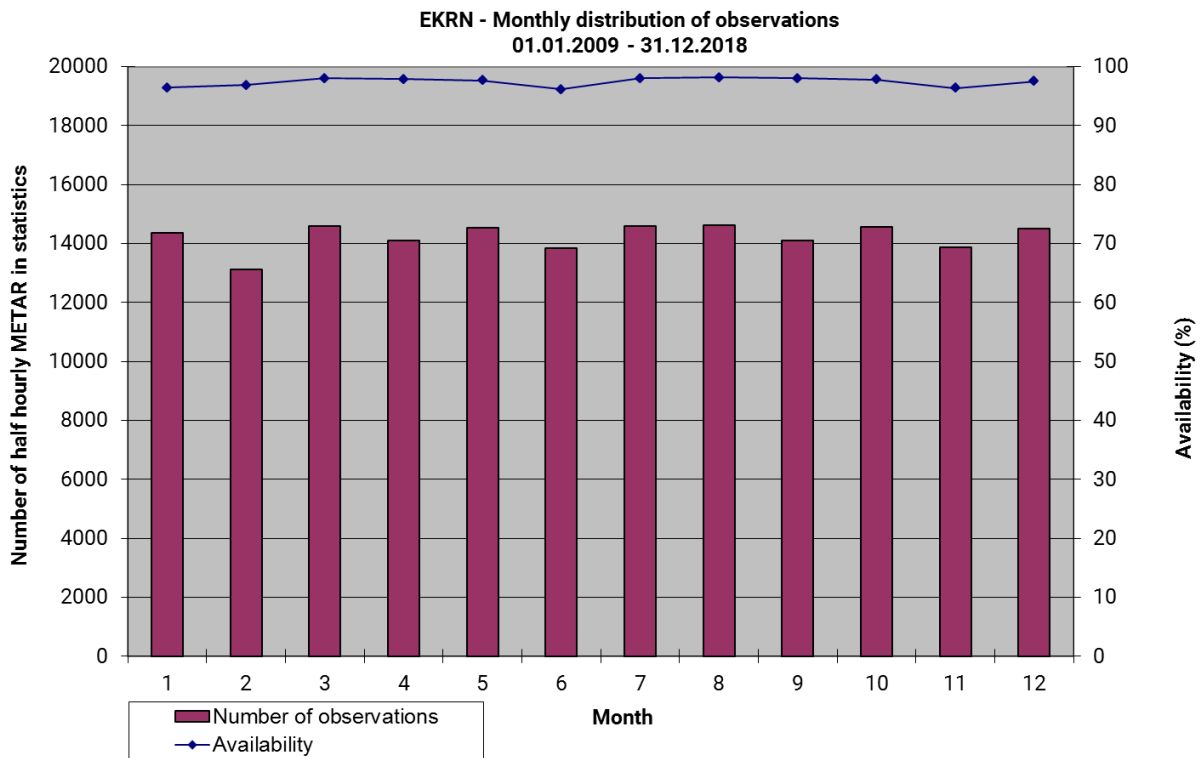


Figure 494

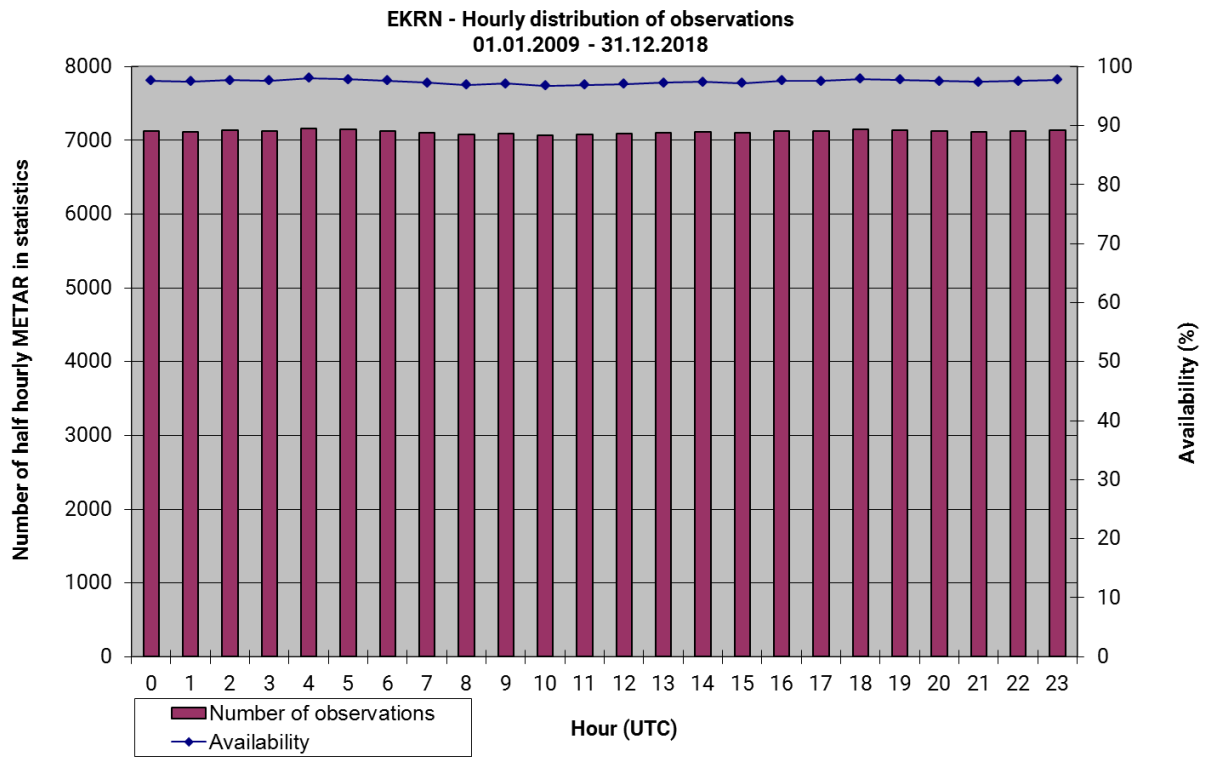


Figure 495

Table 138: EKRN. Average number of half hourly observations in statistics, 01.01.2009 – 31.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
1	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
2	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
3	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
4	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
5	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
6	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
7	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
8	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	2.0	2.0
9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	2.0	2.0
10	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
11	1.9	1.9	1.9	2.0	2.0	2.0	1.9	2.0	2.0	2.0
12	1.9	2.0	1.9	1.9	2.0	2.0	1.9	2.0	2.0	2.0
13	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
14	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
15	1.9	1.9	1.9	2.0	2.0	1.9	2.0	2.0	1.9	2.0
16	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
17	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
18	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
19	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
20	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
21	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
22	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
23	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0

EKSB Sønderborg Lufthavn

Airport location: 54,967°N 9,783°E Elevation: 7 m above MSL.

EKSB observations in statistics: 95,557 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 54.5 %. For more information, please go to the 'Availability' section.

EKSB METAR are both AUTO METAR and manual METAR.

Cross Tables Visibility – Ceiling

Table 139: EKSB Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 95,557	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.21	0.23	0.24	0.24	0.24	0.040	0.28
<350m	0	0.45	0.79	0.80	0.80	0.81	0.11	0.91
<600m	0	0.52	1.25	1.28	1.28	1.28	0.16	1.44
<800 m	0	0.55	1.51	1.55	1.56	1.56	0.19	1.75
<1.5 km	0	0.64	2.21	2.38	2.40	2.42	0.29	2.71
<3.0 km	0	0.75	4.25	5.35	5.55	5.66	0.92	6.59
< 5.0 km	0.0021	0.76	5.77	9.67	10.53	10.92	2.72	13.64
< 8.0 km	0.0031	0.76	6.37	13.52	16.28	17.34	6.97	24.31
>= 8.0 km or CAVOK	0.0010	0.0010	0.22	3.05	7.58	11.27	64.42	75.69
Total	0.0042	0.76	6.59	16.57	23.86	28.61	71.39	100

Table 140: EKSB - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 24,233	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.43	0.46	0.46	0.46	0.46	0.008	0.47
<350m	0	0.92	1.66	1.69	1.69	1.69	0.062	1.75
<600m	0	1.07	2.83	2.93	2.95	2.95	0.083	3.03
<800 m	0	1.12	3.55	3.69	3.71	3.72	0.11	3.83
<1.5 km	0	1.28	5.18	5.71	5.77	5.82	0.24	6.07
<3.0 km	0	1.53	9.02	11.30	11.84	12.14	1.29	13.44
< 5.0 km	0	1.54	11.63	18.17	19.84	20.62	3.92	24.55
< 8.0 km	0.0041	1.55	12.61	23.95	28.28	29.99	9.37	39.36
>= 8.0 km or CAVOK	0.0041	0.0041	0.38	3.87	10.06	15.16	45.48	60.64
Total	0.0083	1.55	12.98	27.82	38.34	45.15	54.85	100

Table 141: EKSB - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 22,377	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.12	0.14	0.14	0.14	0.14	0.045	0.19
<350m	0	0.22	0.32	0.32	0.32	0.32	0.085	0.41
<600m	0	0.24	0.39	0.39	0.40	0.40	0.13	0.52
<800 m	0	0.25	0.42	0.43	0.43	0.43	0.15	0.58
<1.5 km	0	0.31	0.62	0.64	0.65	0.65	0.23	0.88
<3.0 km	0	0.34	1.35	1.62	1.65	1.69	0.67	2.36
< 5.0 km	0	0.35	1.99	3.45	3.79	4.00	1.99	5.99
< 8.0 km	0	0.35	2.34	5.43	6.65	7.23	5.76	12.99
>= 8.0 km or CAVOK	0	0	0.089	2.40	5.29	7.78	79.23	87.01
Total	0	0.35	2.43	7.84	11.94	15.01	84.99	100

Table 142: EKSB - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 22,732	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.035	0.048	0.048	0.048	0.048	0.048	0.10
<350m	0	0.11	0.16	0.16	0.16	0.16	0.12	0.29
<600m	0	0.14	0.20	0.20	0.20	0.20	0.19	0.40
<800 m	0	0.14	0.22	0.23	0.23	0.23	0.24	0.47
<1.5 km	0	0.14	0.26	0.27	0.27	0.27	0.30	0.57
<3.0 km	0	0.15	0.51	0.80	0.82	0.84	0.85	1.69
< 5.0 km	0	0.15	0.84	2.11	2.39	2.49	1.98	4.47
< 8.0 km	0	0.15	1.09	3.78	5.01	5.51	5.05	10.55
>= 8.0 km or CAVOK	0	0	0.092	1.68	3.88	5.97	83.48	89.45
Total	0	0.15	1.18	5.46	8.89	11.47	88.53	100

Table 143: EKSB - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 26,215	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.24	0.26	0.27	0.28	0.28	0.057	0.34
<350m	0	0.51	0.93	0.95	0.95	0.96	0.16	1.11
<600m	0	0.60	1.41	1.43	1.43	1.44	0.22	1.66
<800 m	0	0.63	1.66	1.67	1.68	1.68	0.27	1.96
<1.5 km	0	0.75	2.50	2.61	2.64	2.65	0.37	3.02
<3.0 km	0	0.90	5.57	6.98	7.15	7.25	0.86	8.11
< 5.0 km	0.0076	0.92	7.85	13.68	14.74	15.18	2.86	18.04
< 8.0 km	0.0076	0.92	8.62	19.23	23.20	24.55	7.45	32.00
>= 8.0 km or CAVOK	0	0	0.31	4.05	10.44	15.25	52.75	68.00
Total	0.0076	0.92	8.93	23.27	33.64	39.79	60.21	100

Wind Direction Histograms

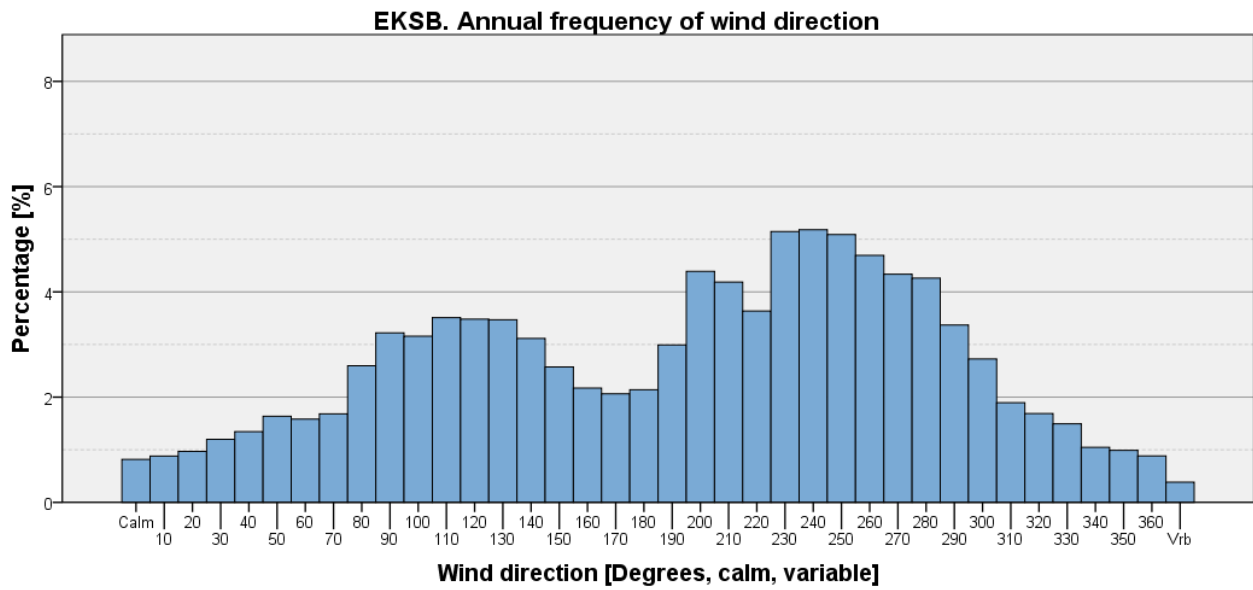


Figure 496

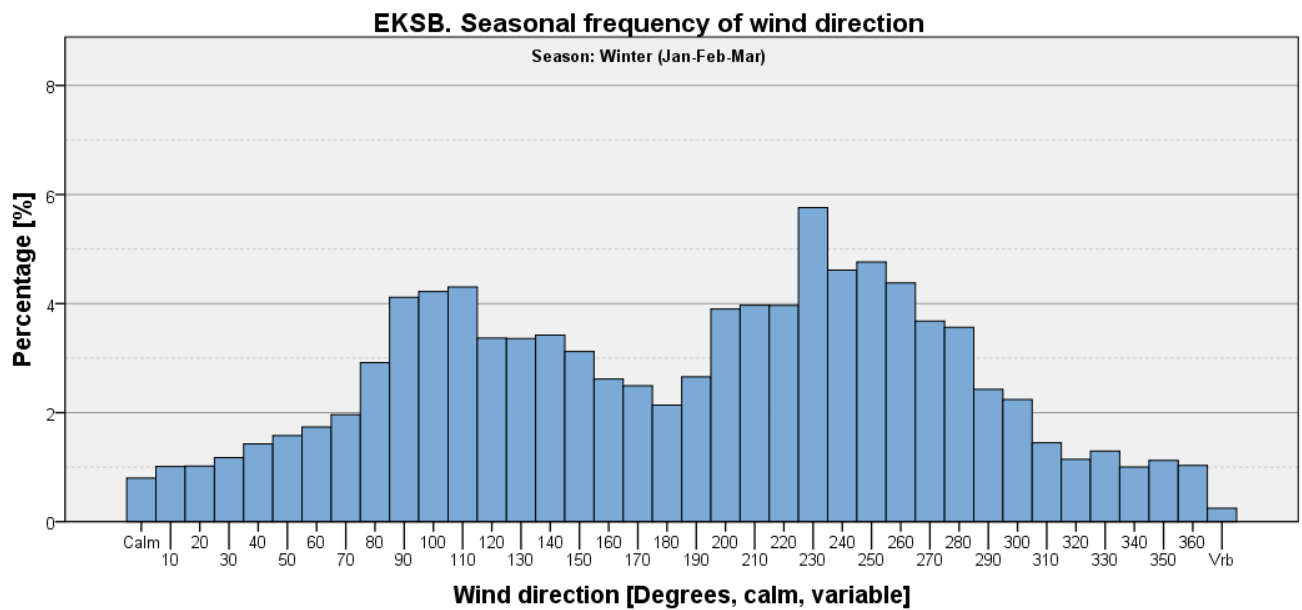


Figure 497

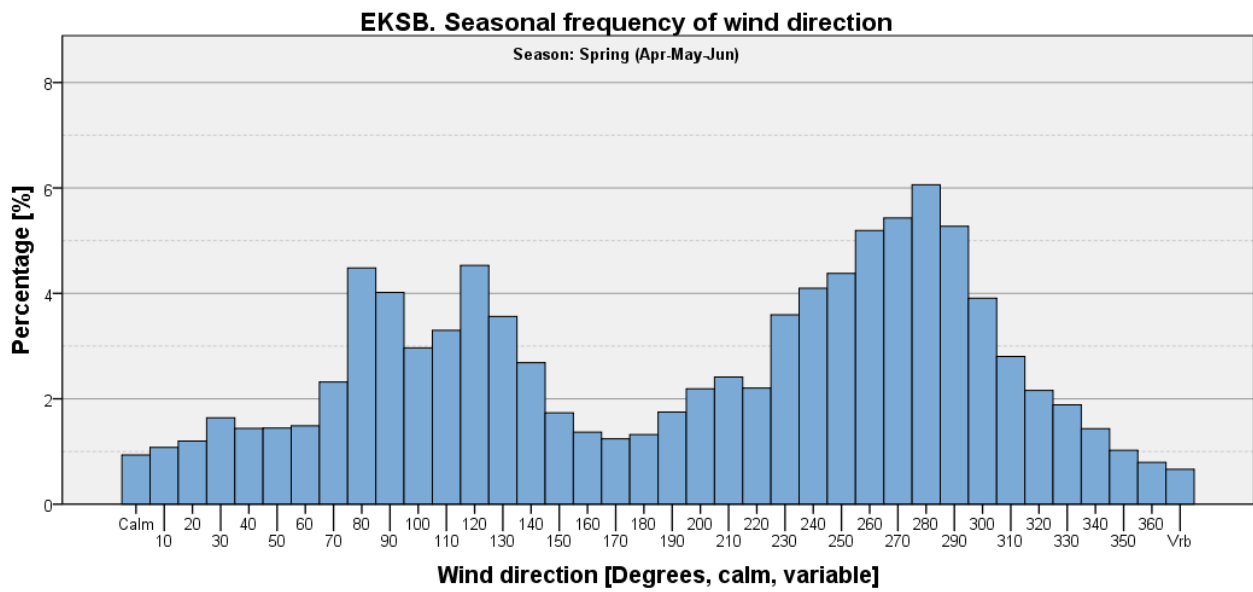


Figure 498

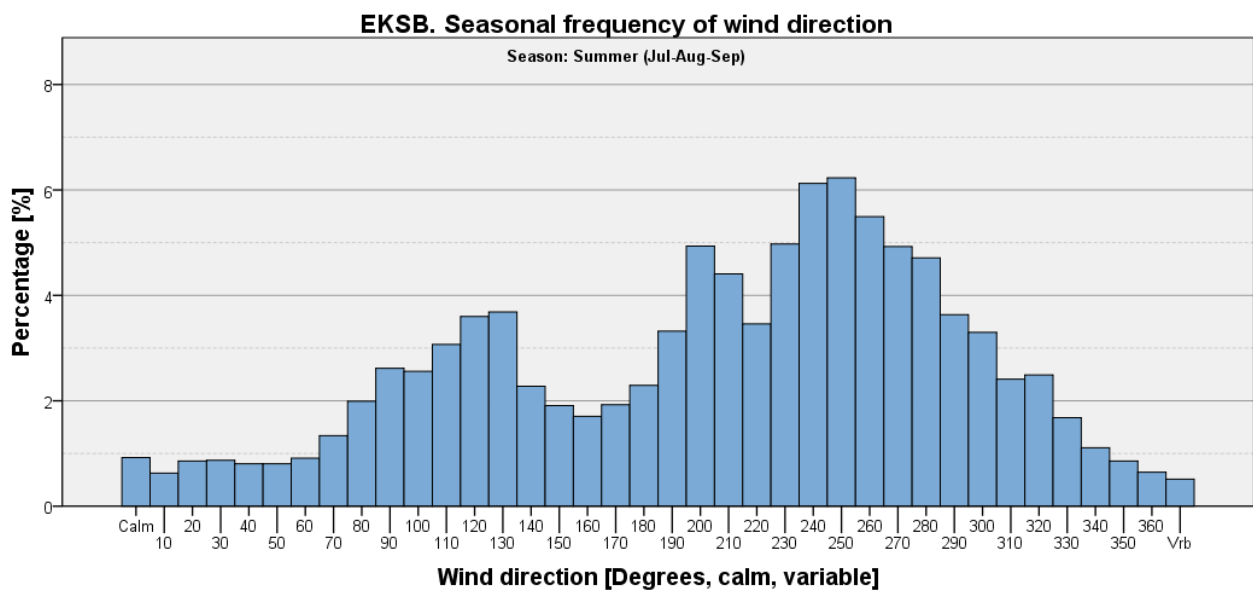


Figure 499

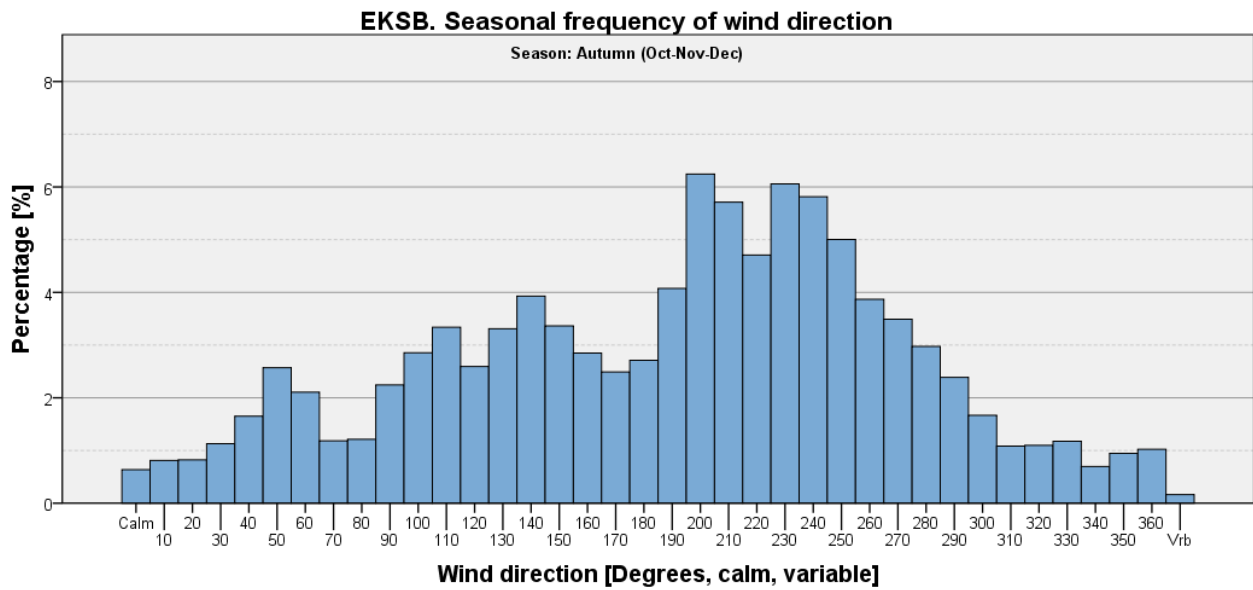


Figure 500

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 144: EKSB - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	3.83	0.58	0.47	1.96	1.75
All other observations	96.17	99.42	99.53	98.04	98.25
Total	100	100	100	100	100

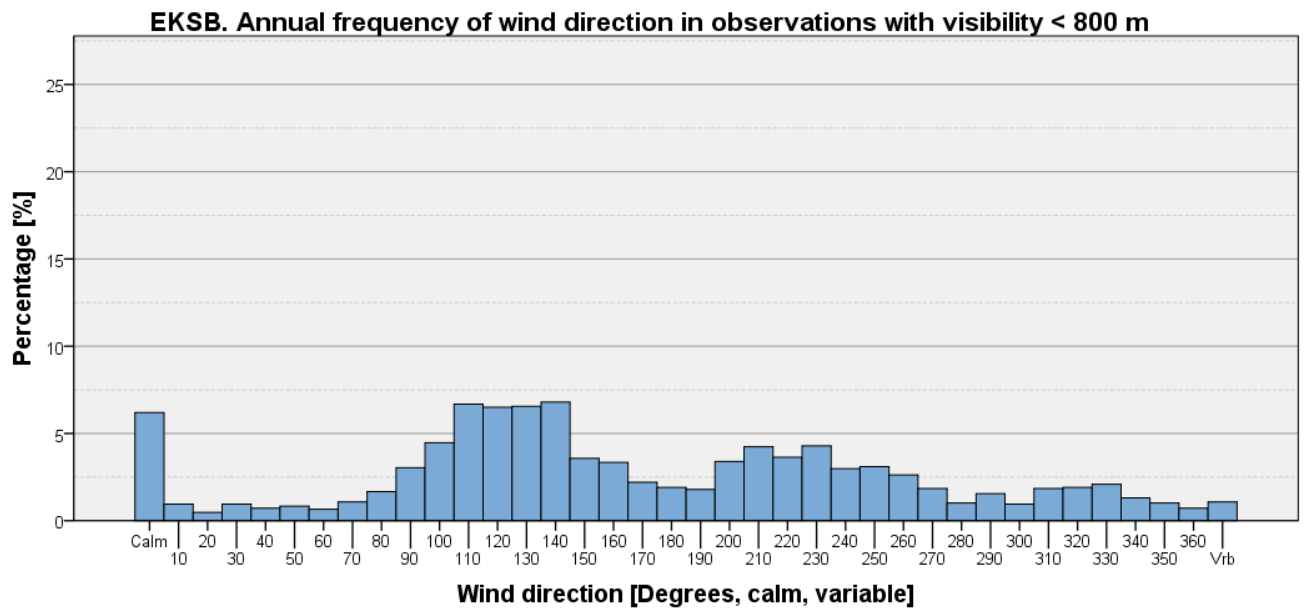


Figure 501

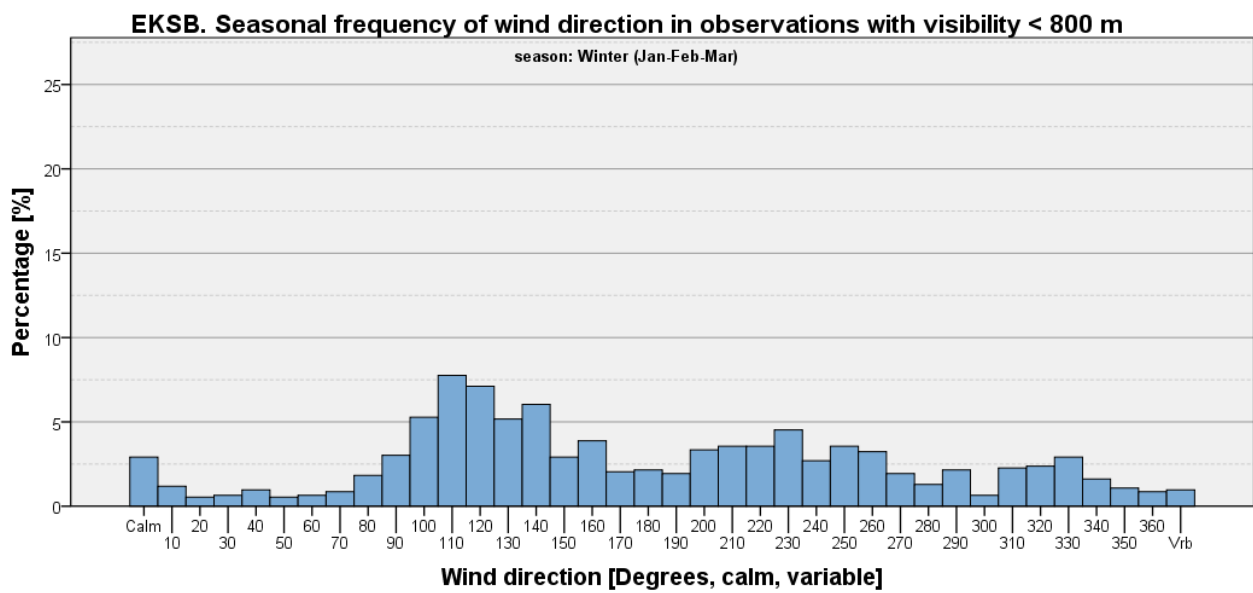


Figure 502

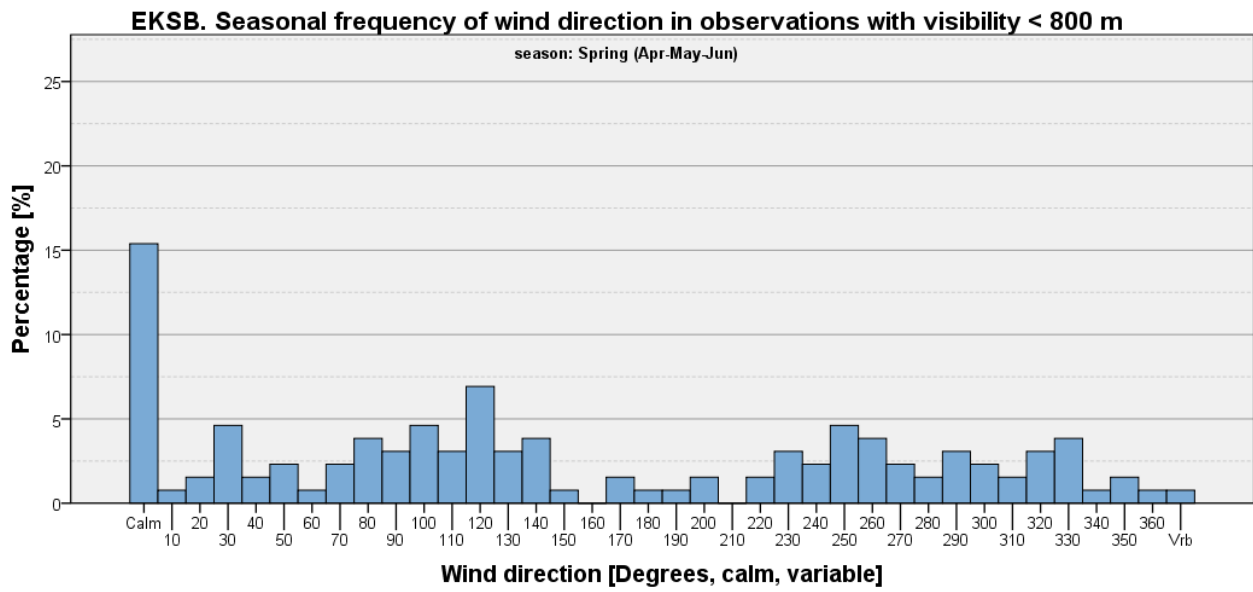


Figure 503

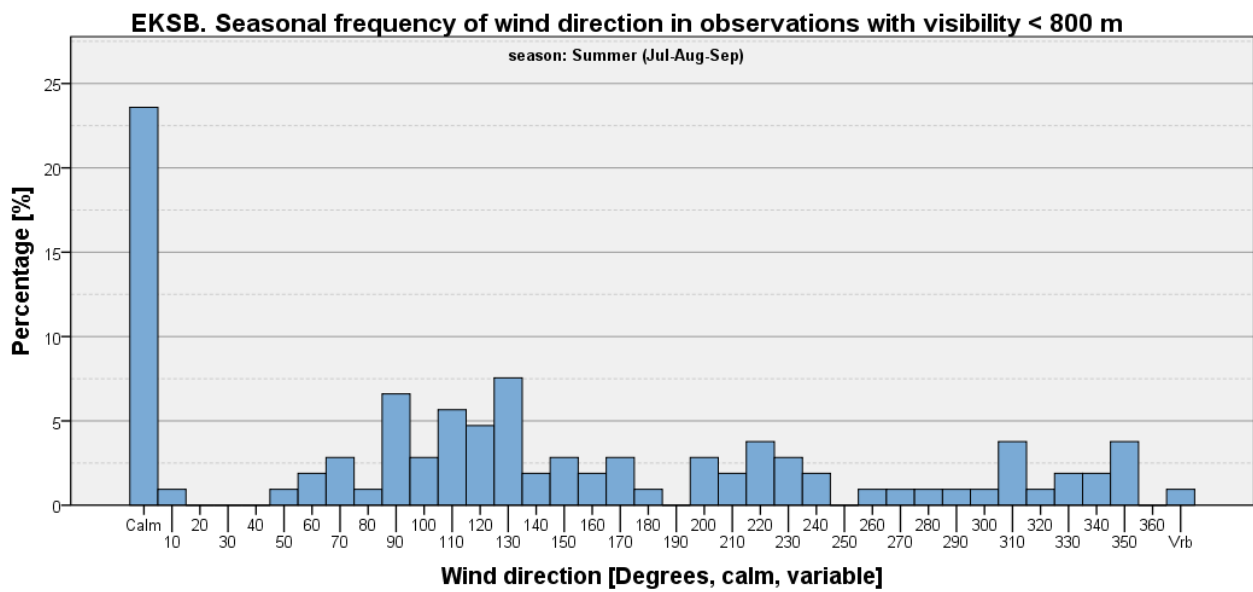


Figure 504

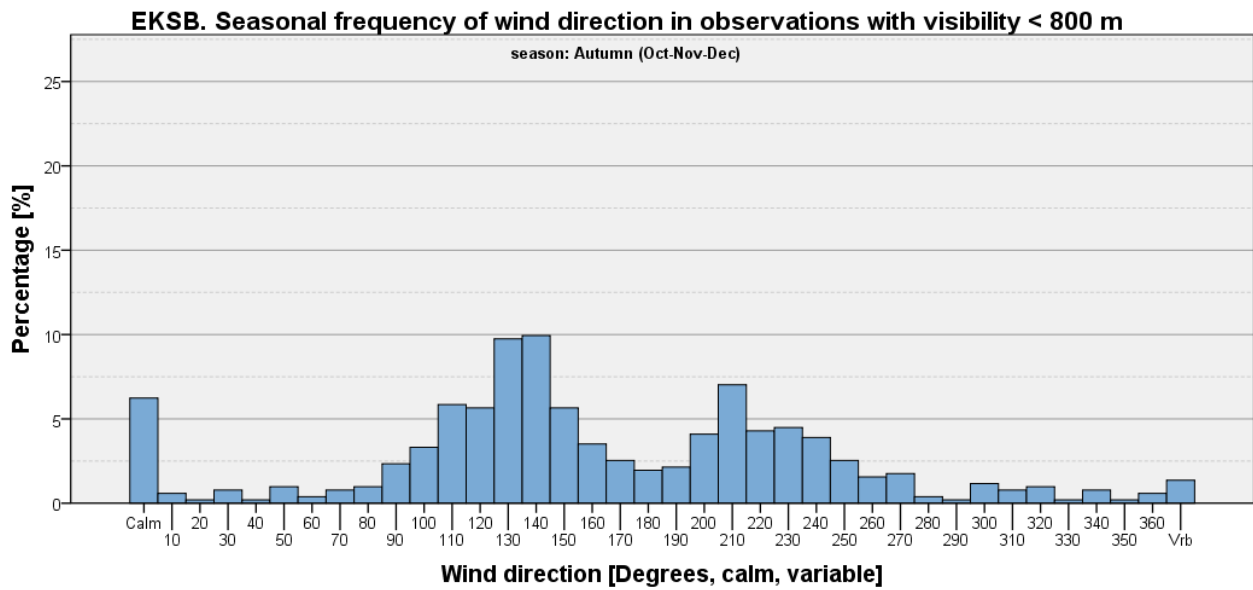


Figure 505

Visibility < 800 m and Wind Speed <= 5 kts

Table 145: EKSB - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	2.26	0.51	0.45	1.37	1.18
All other observations	97.74	99.49	99.55	98.63	98.82
Total	100	100	100	100	100

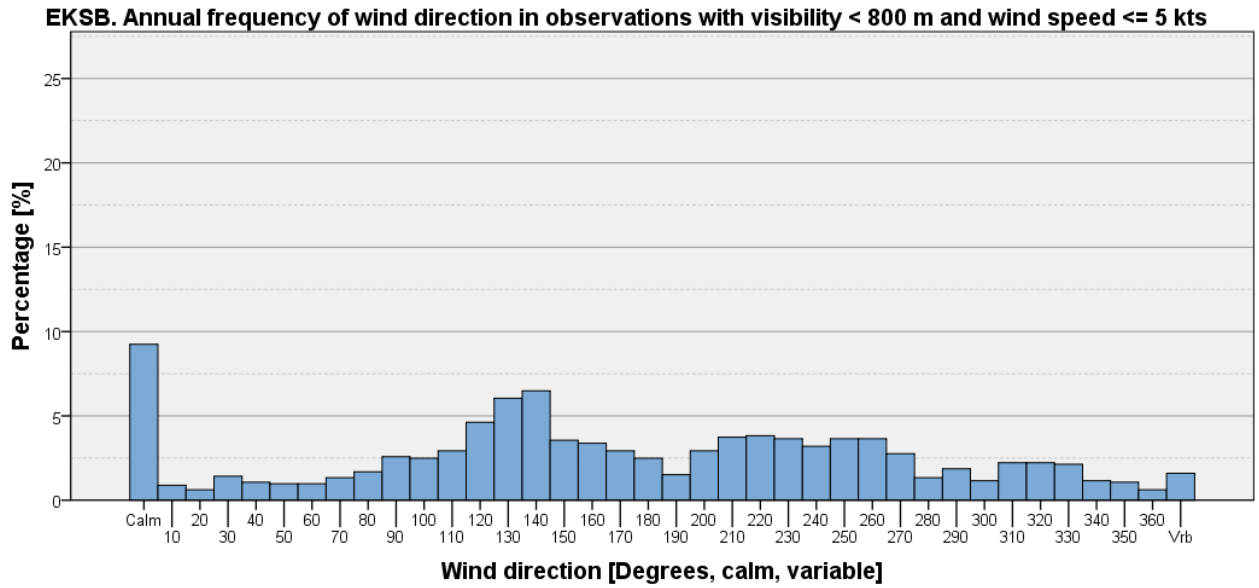


Figure 506

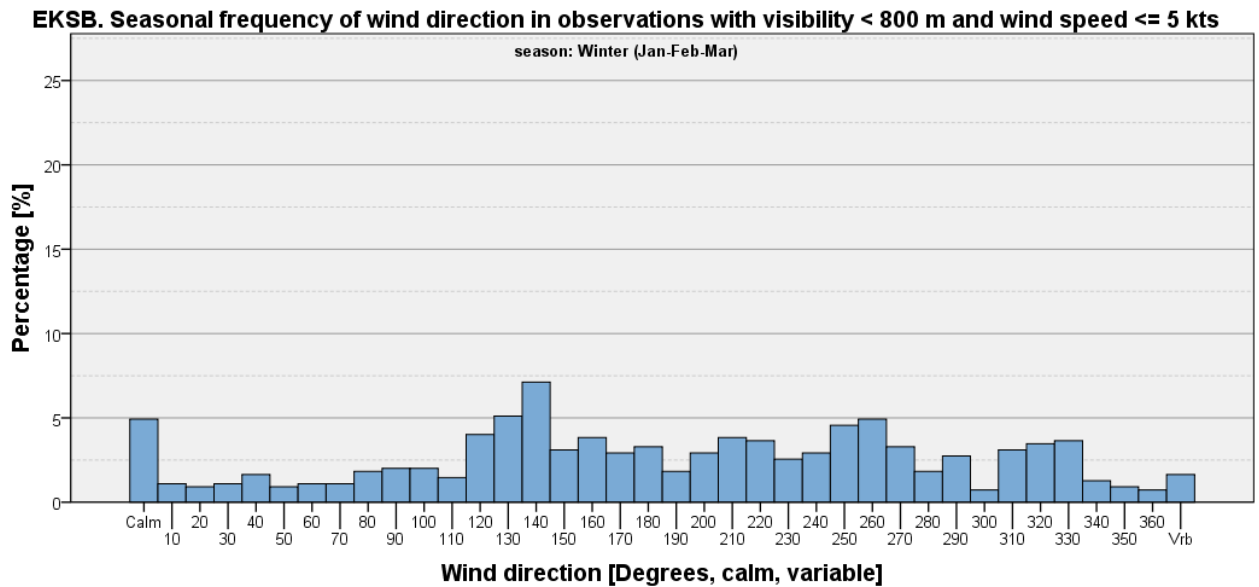


Figure 507

EKSB. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

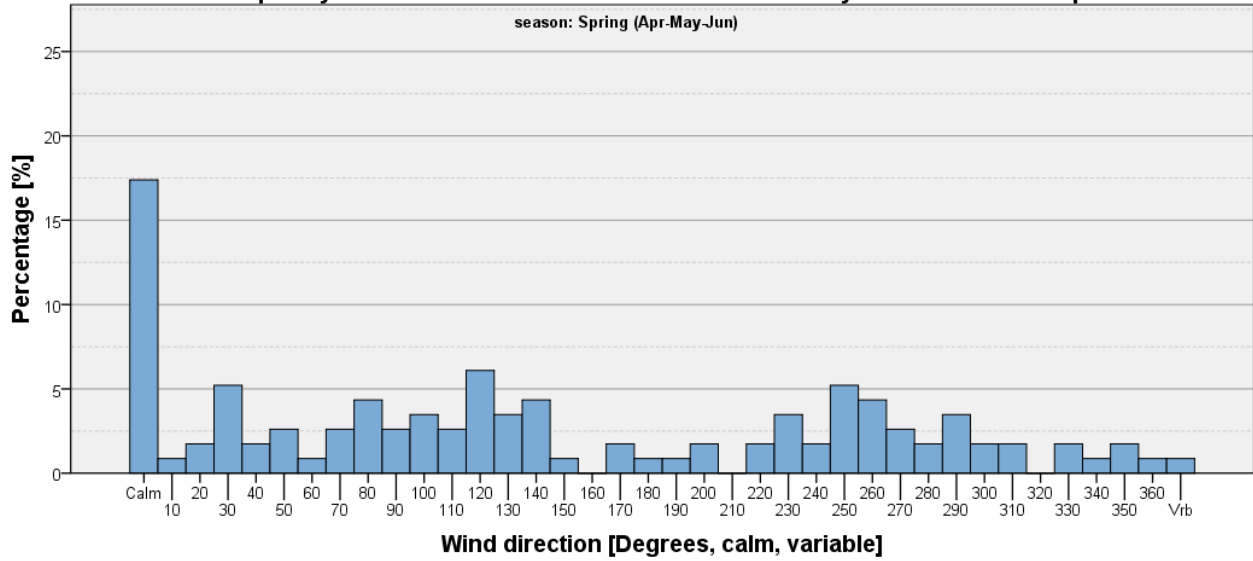


Figure 508

EKSB. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

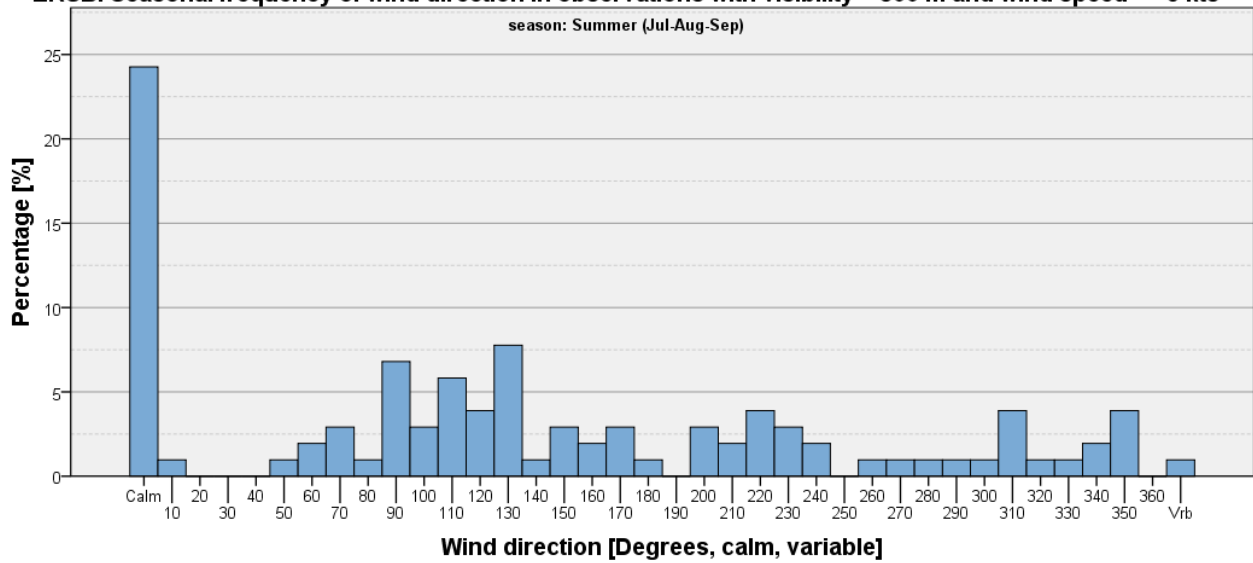


Figure 509

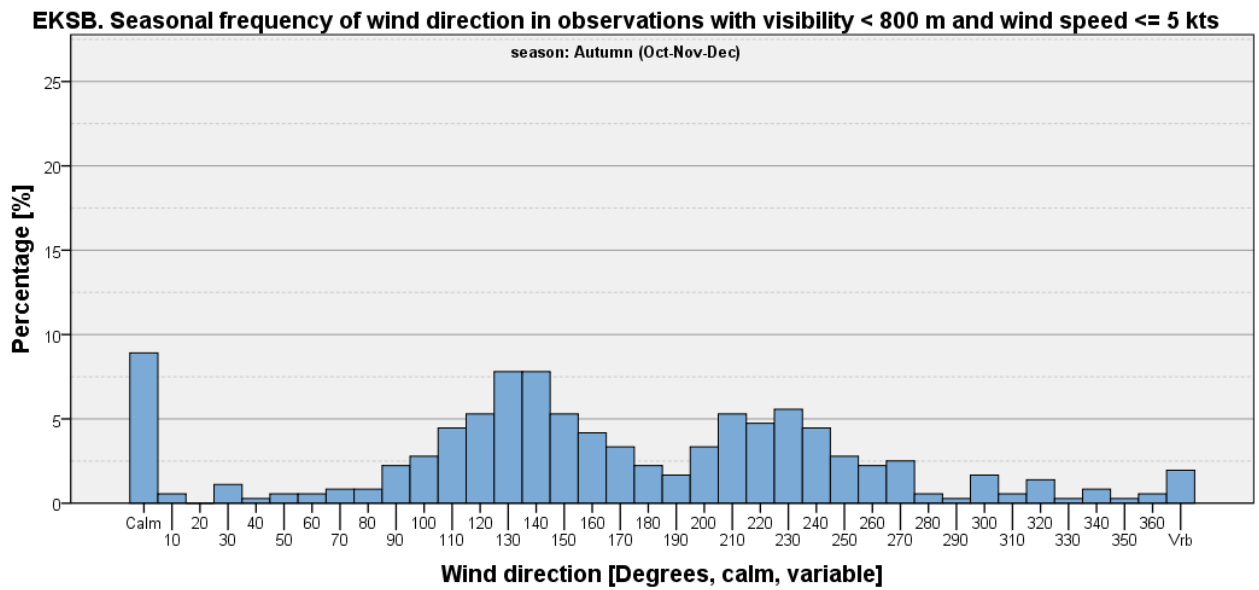


Figure 510

Visibility < 800 m and Wind Speed > 5 kts

Table 146: EKSB - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	1.57	0.067	0.013	0.59	0.58
All other observations	98.43	99.93	99.99	99.41	99.42
Total	100	100	100	100	100

EKSB. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

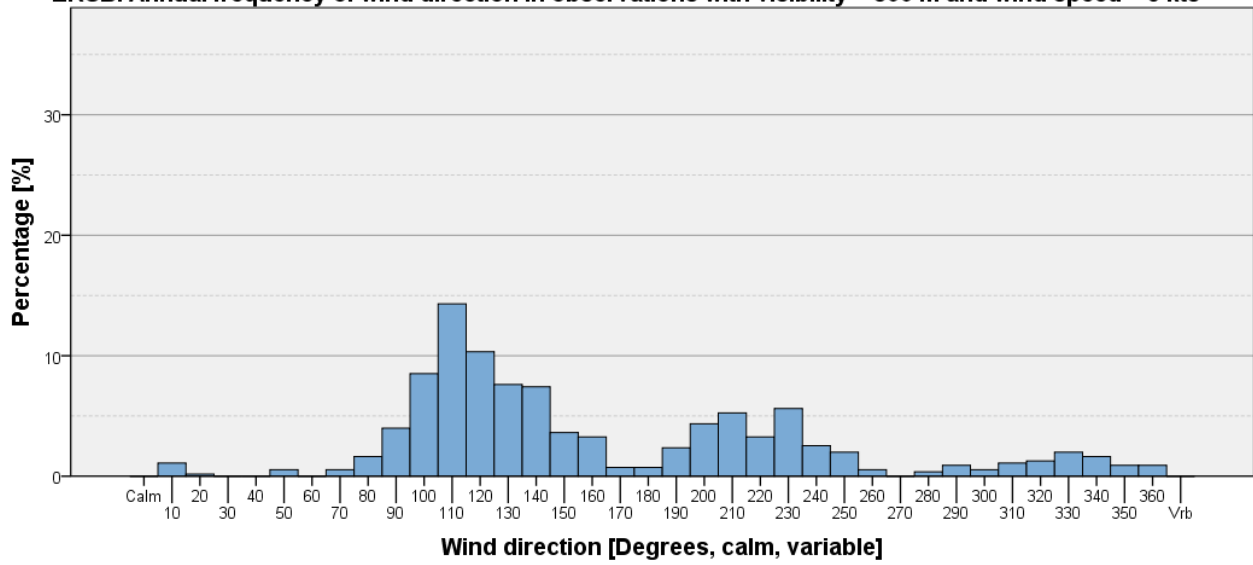


Figure 511

EKSB. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

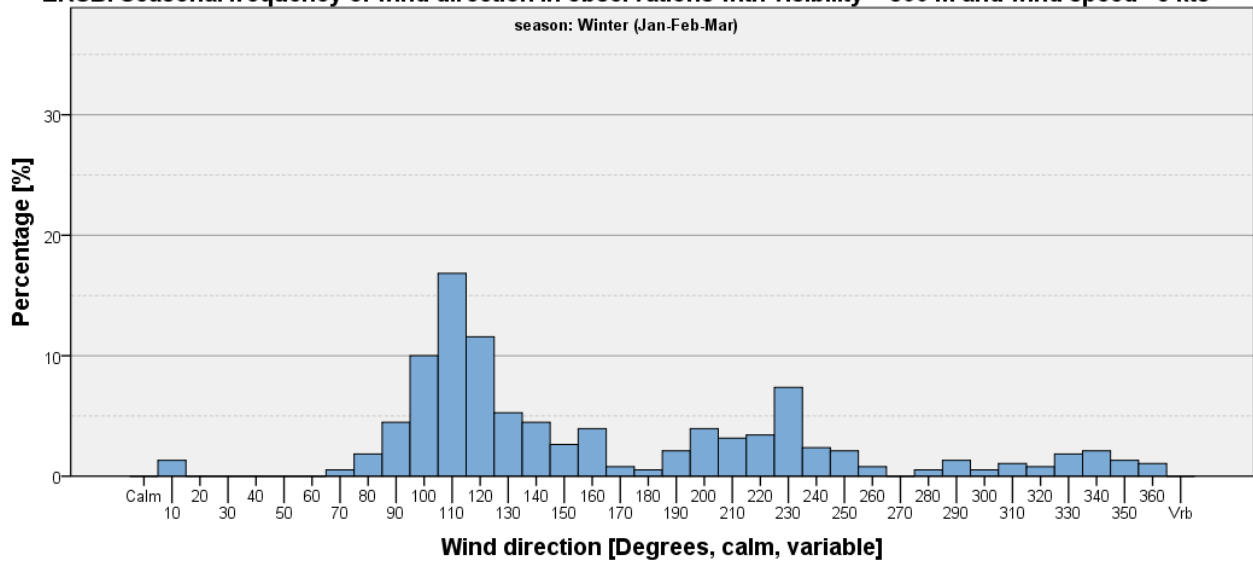


Figure 512

EKSB. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

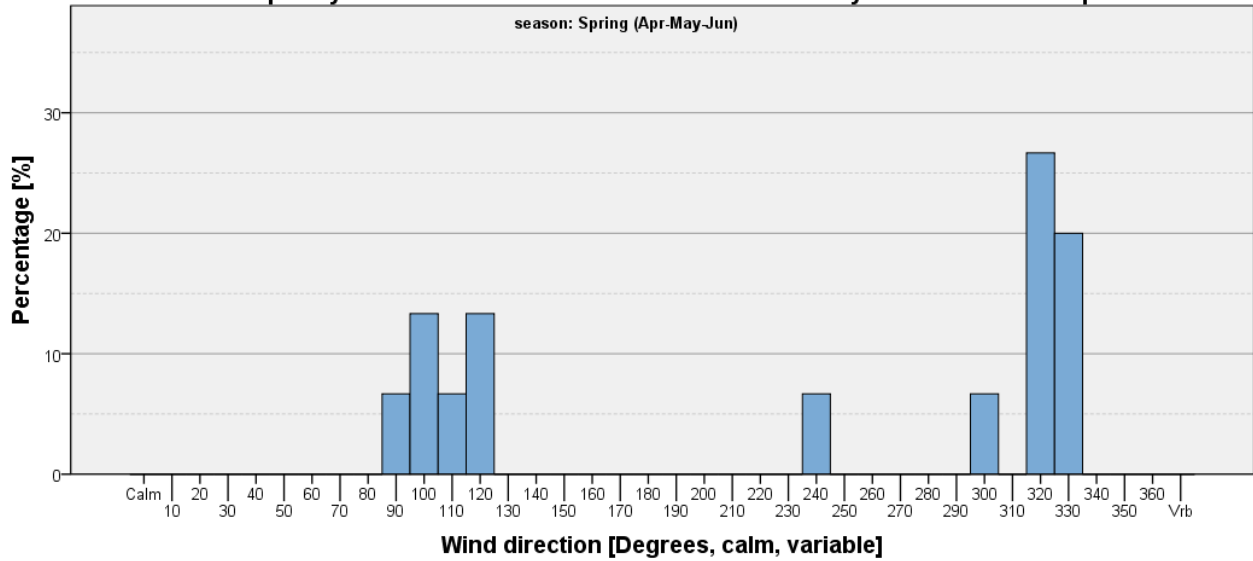


Figure 513

EKSB. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

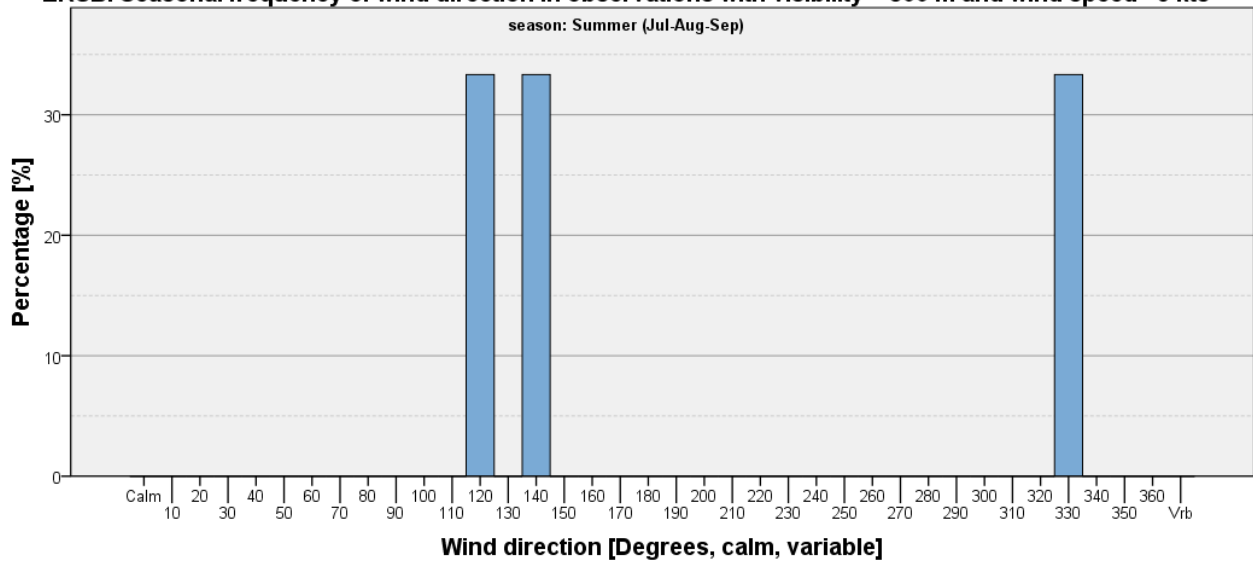


Figure 514

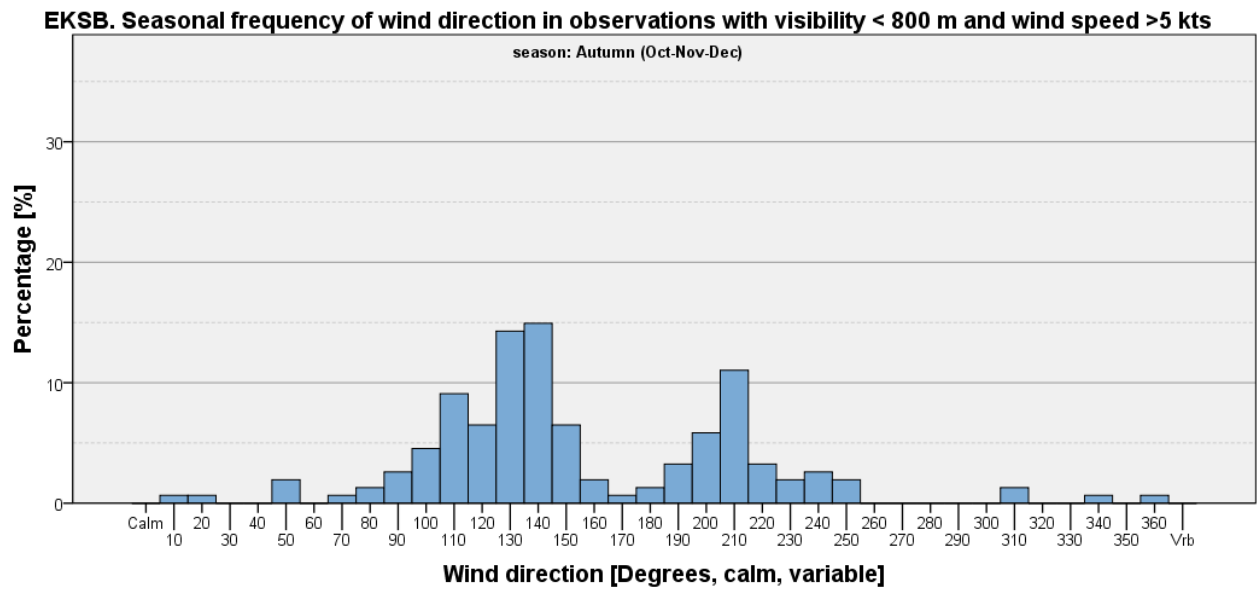


Figure 515

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 147: EKSB - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	27.82	7.84	5.46	23.27	16.57
All other observations	72.18	92.16	94.54	76.73	83.43
Total	100	100	100	100	100

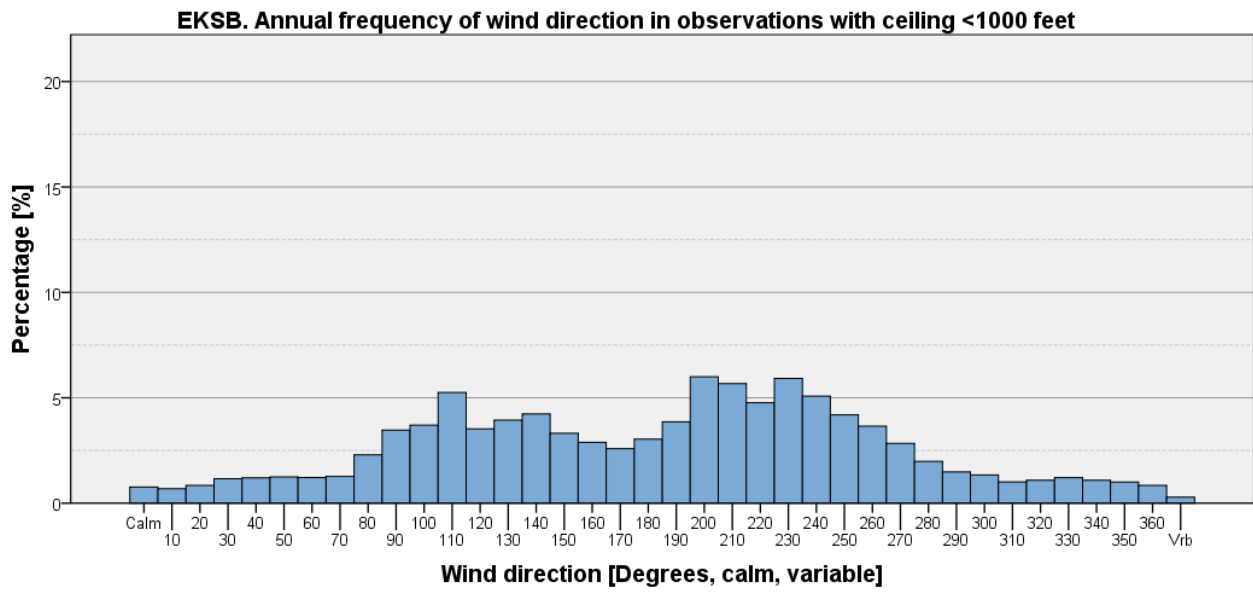


Figure 516

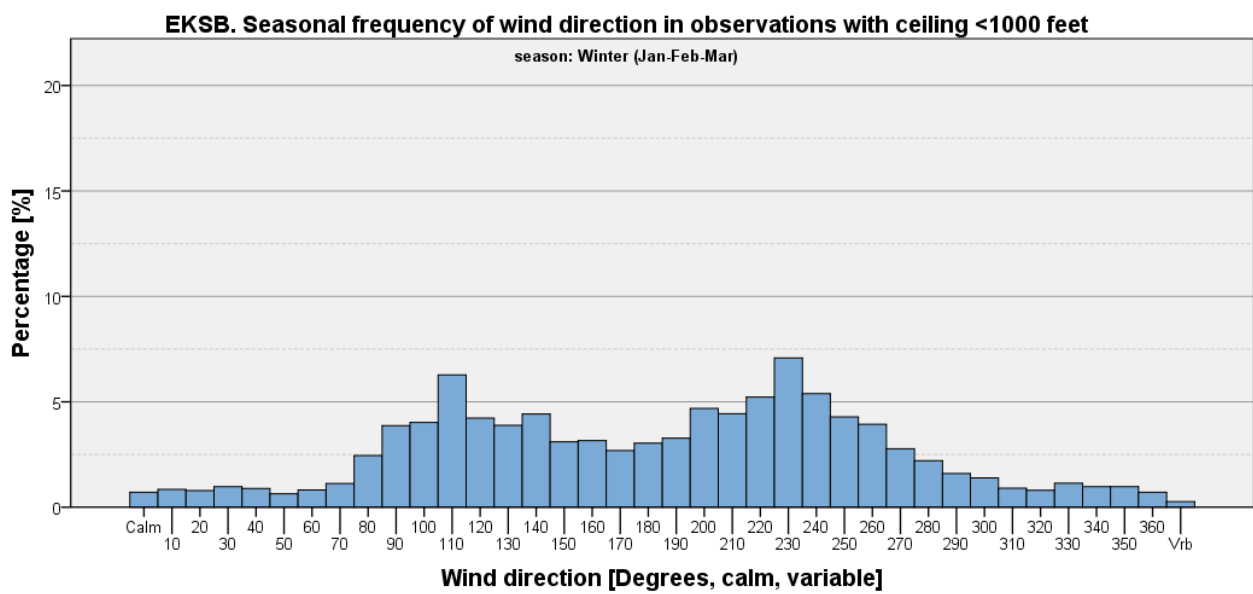


Figure 517

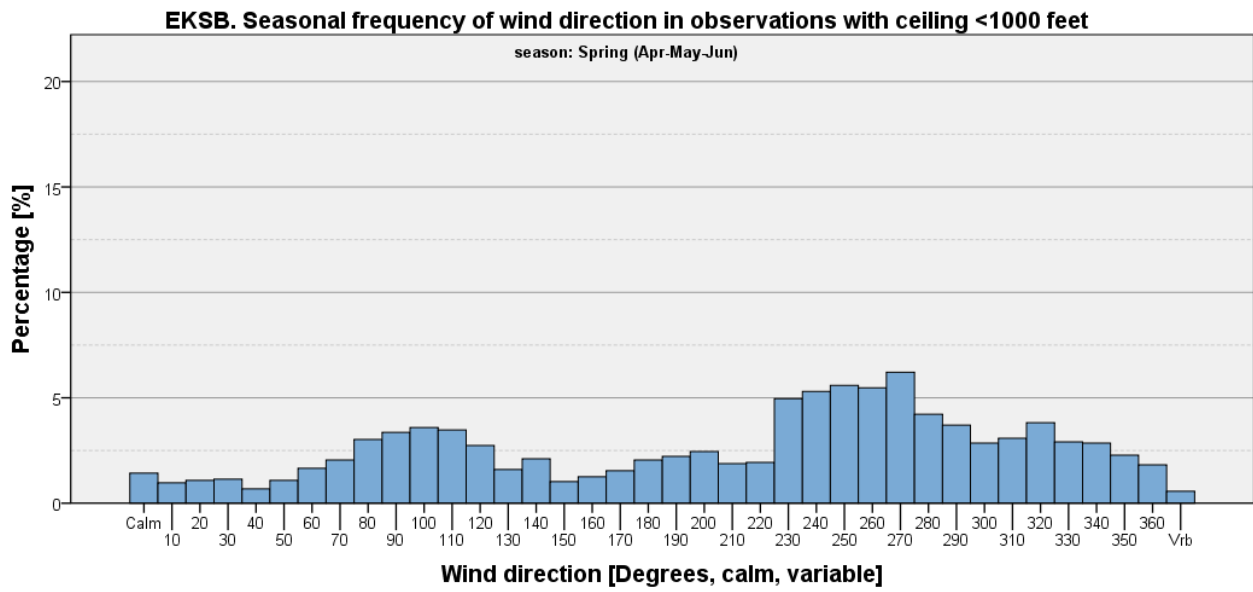


Figure 518

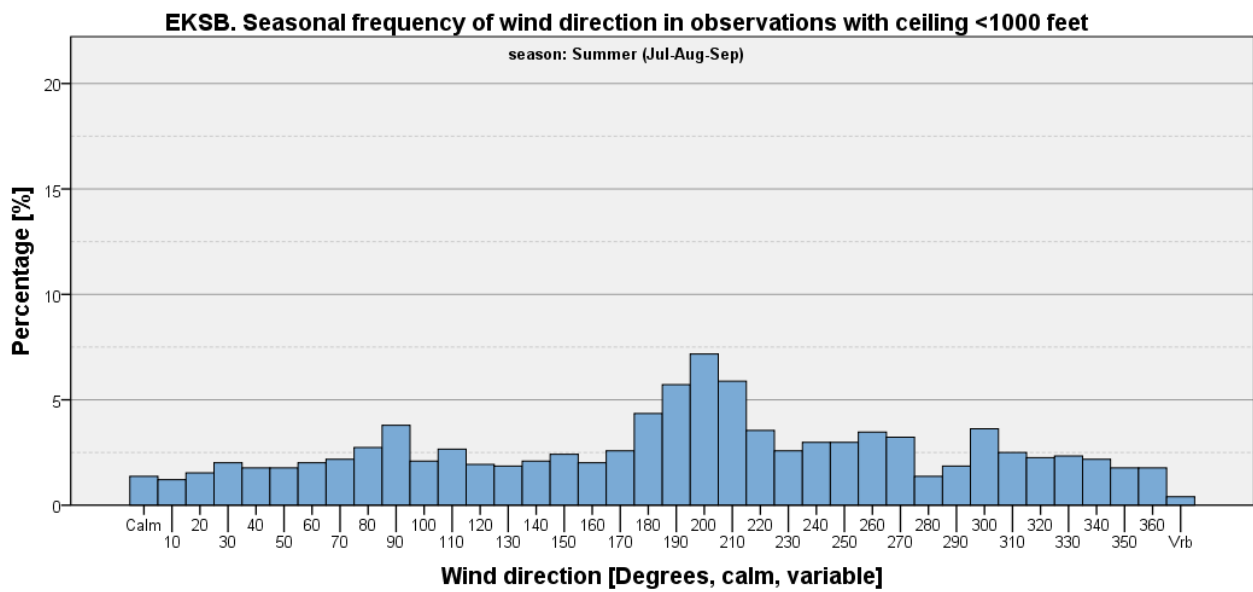


Figure 519

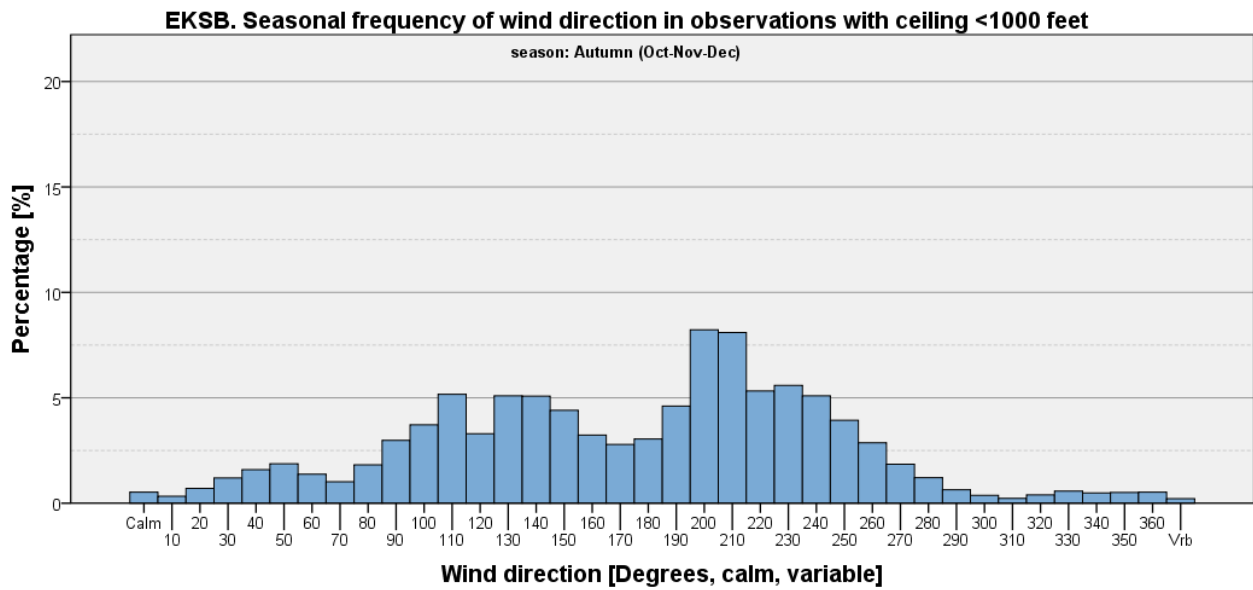


Figure 520

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 148: EKSB - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	7.58	2.64	1.57	5.04	4.30
All other observations	92.42	97.36	98.43	94.96	95.70
Total	100	100	100	100	100

EKSB. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

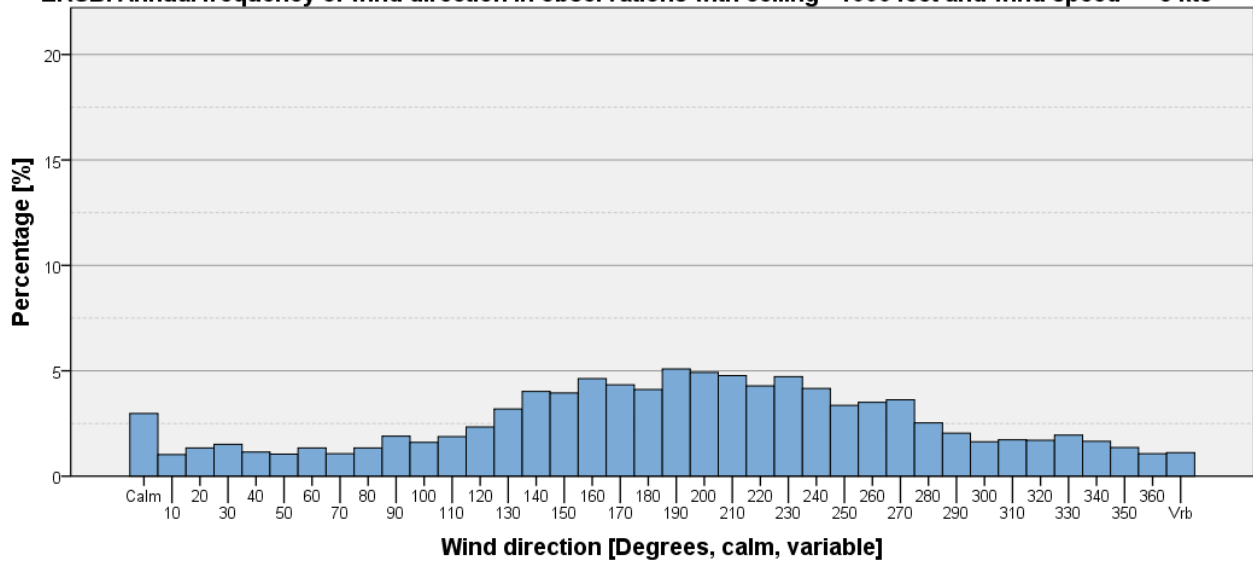


Figure 521

EKSB. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

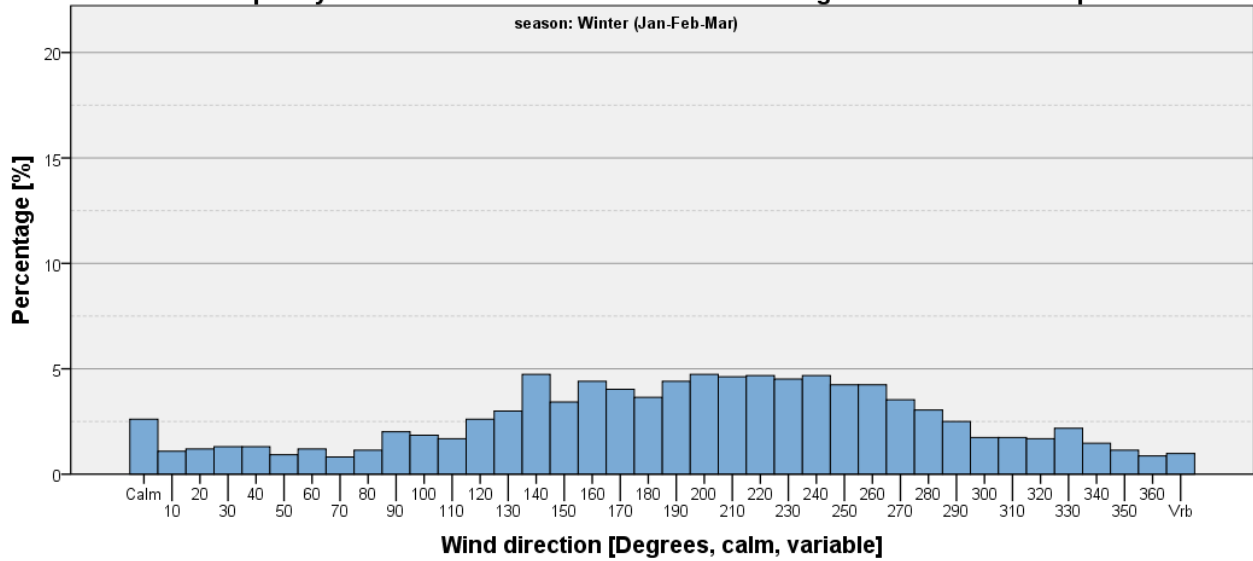


Figure 522

EKSB. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

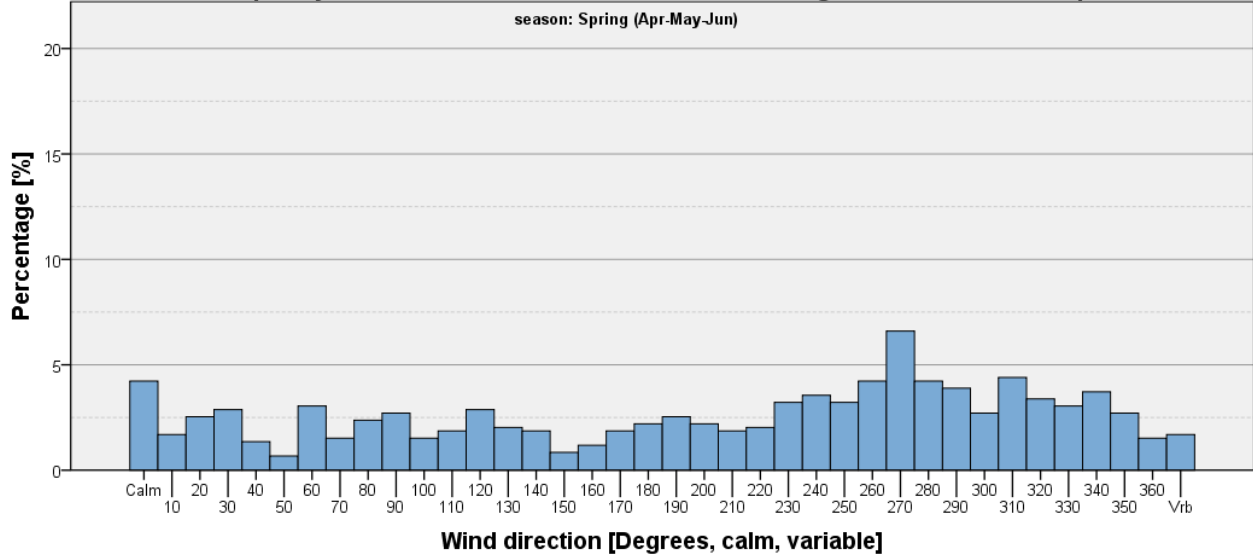


Figure 523

EKSB. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

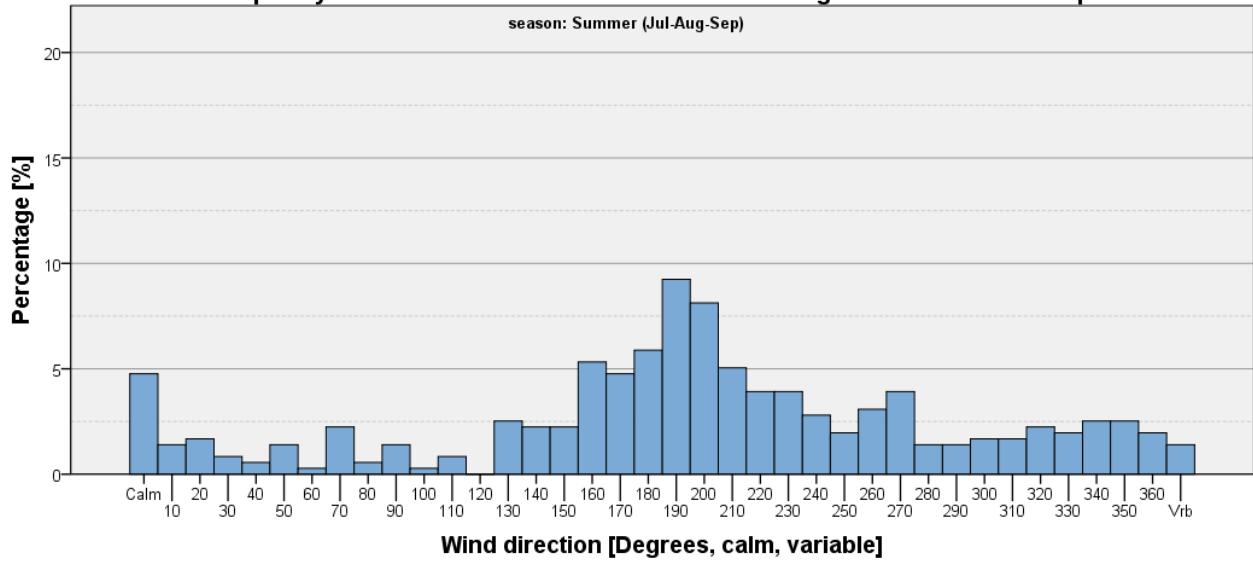


Figure 524

EKSB. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

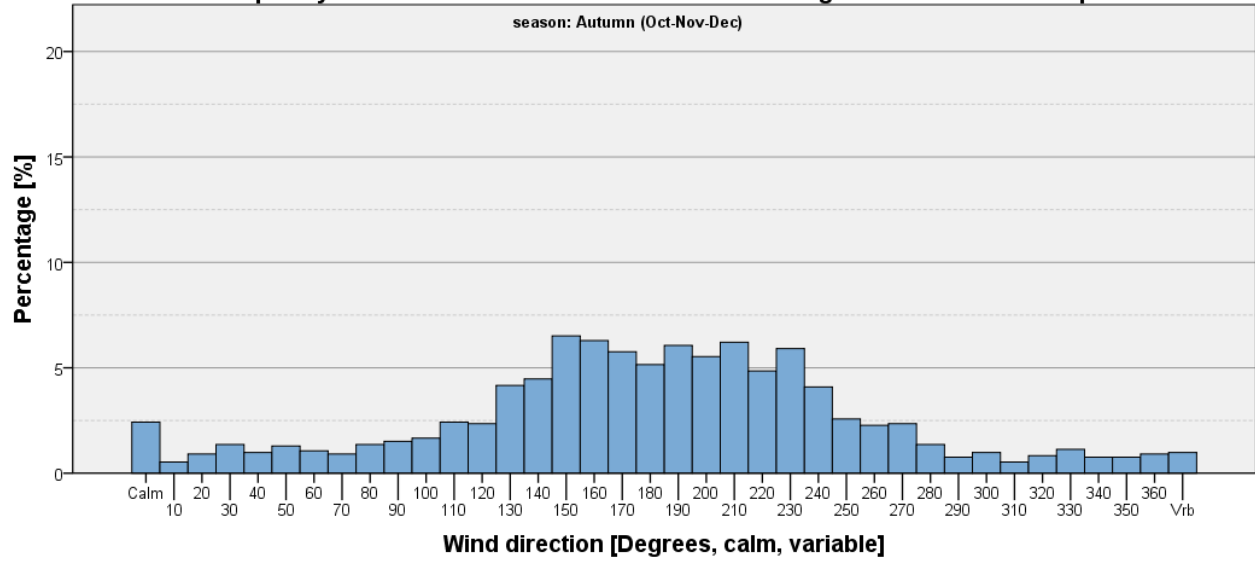


Figure 525

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 149: EKSB - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	20.23	5.20	3.89	18.24	12.28
All other observations	79.77	94.80	96.11	81.76	87.72
Total	100	100	100	100	100

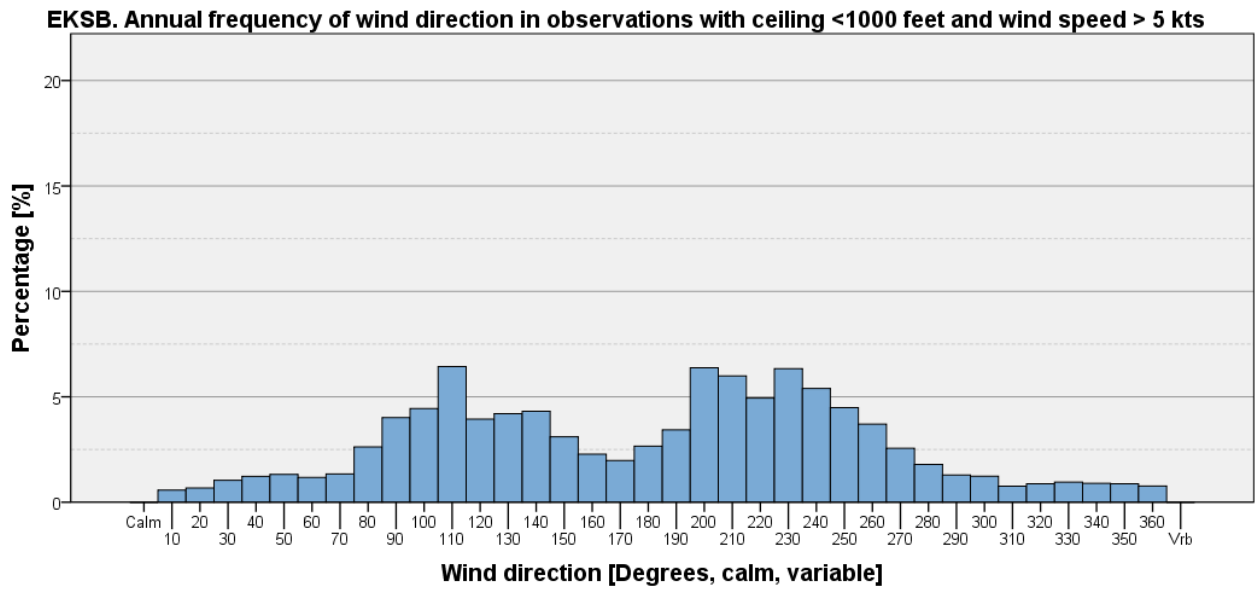


Figure 526

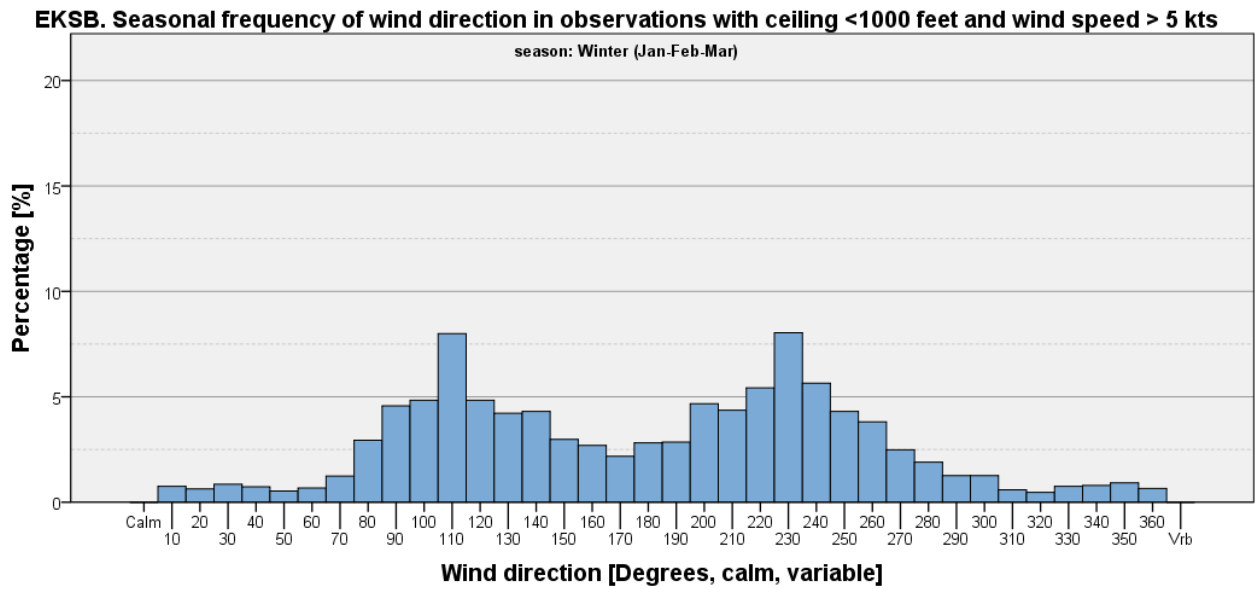


Figure 527

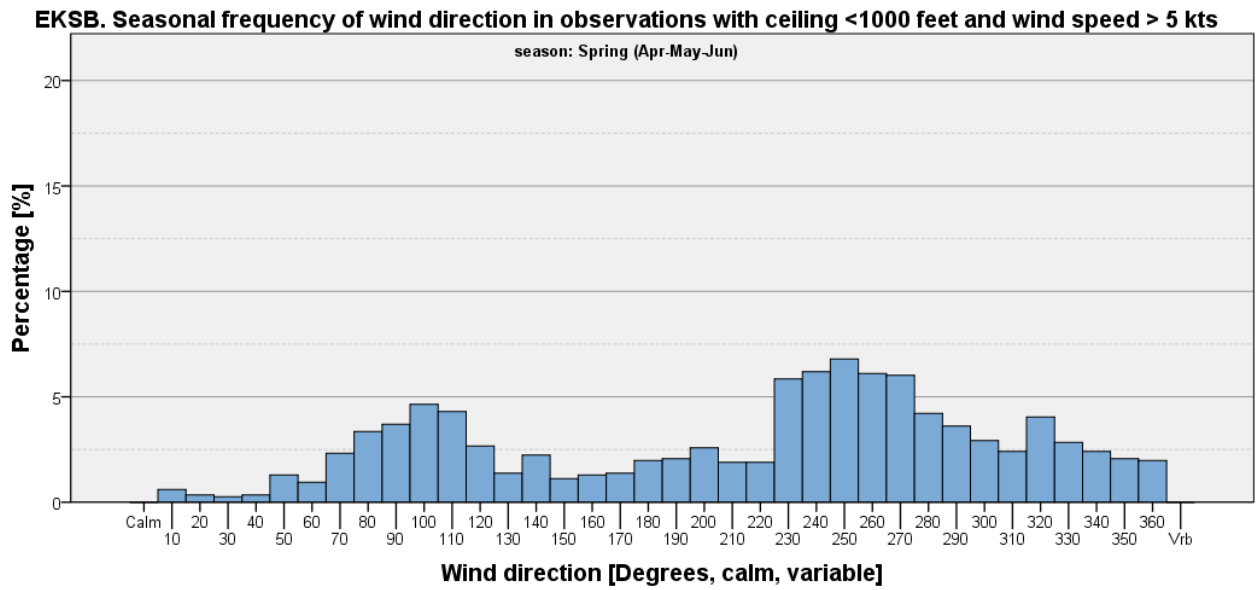


Figure 528

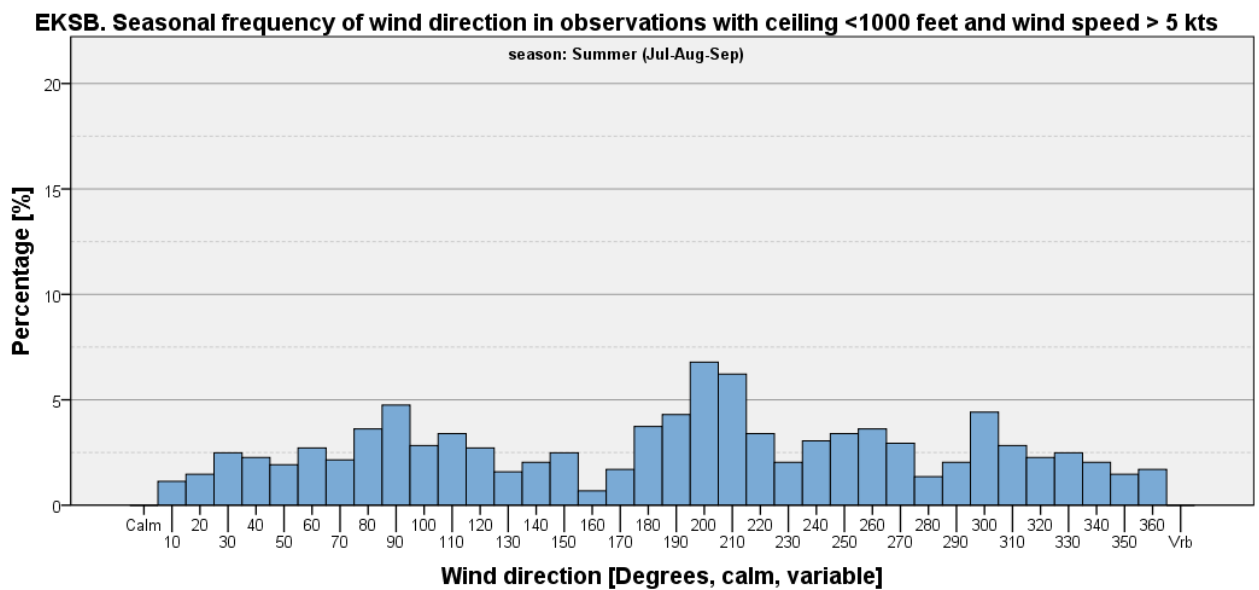


Figure 529

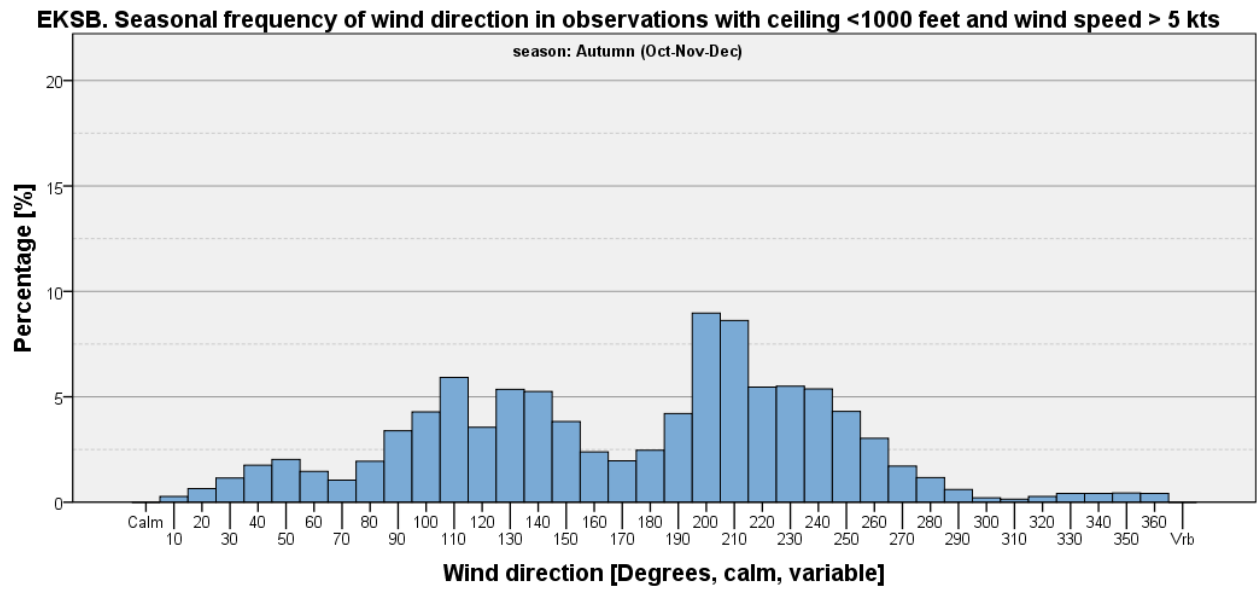


Figure 530

Ceiling < 500 feet

Table 150: EKSB - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	12.98	2.43	1.18	8.93	6.59
All other observations	87.02	97.57	98.82	91.07	93.41
Total	100	100	100	100	100

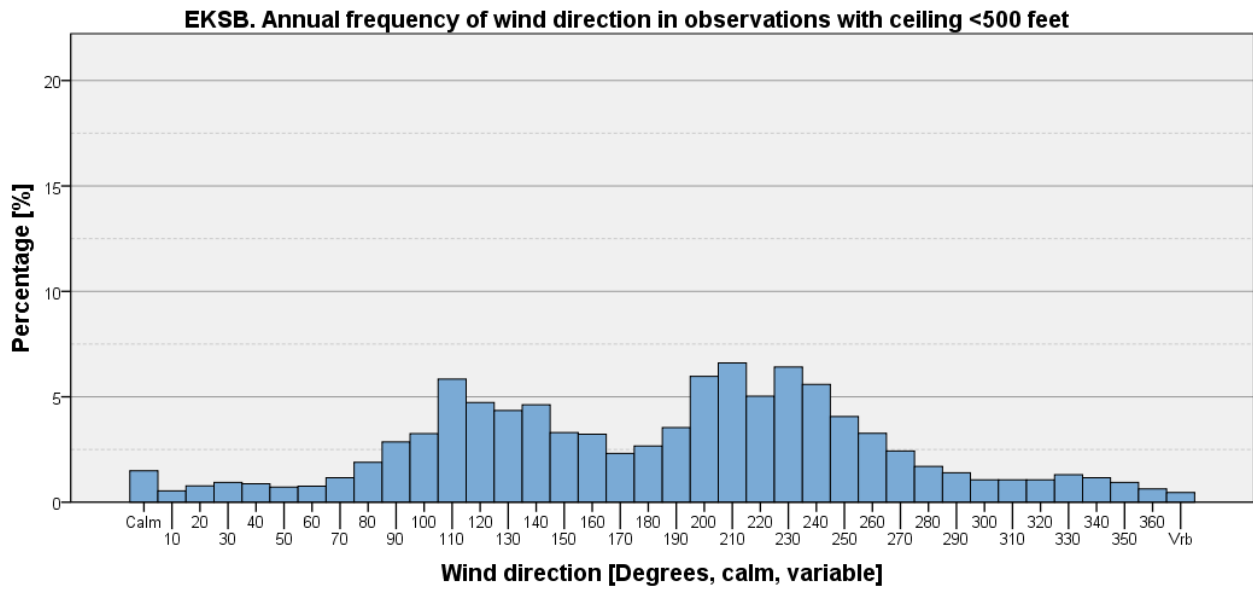


Figure 531

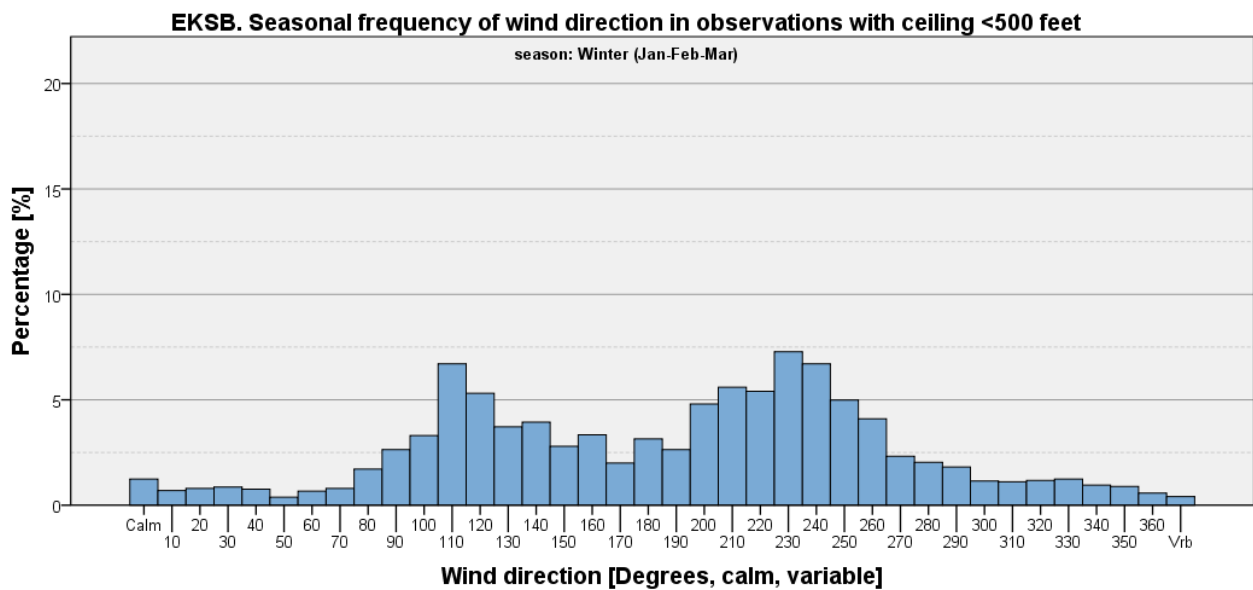


Figure 532

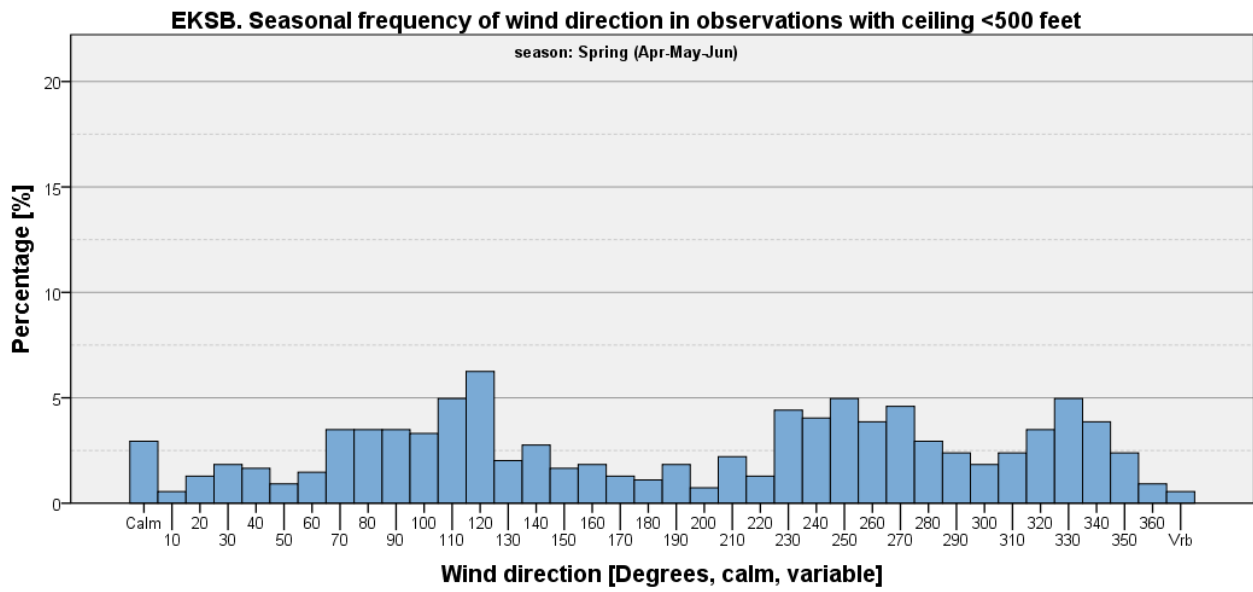


Figure 533

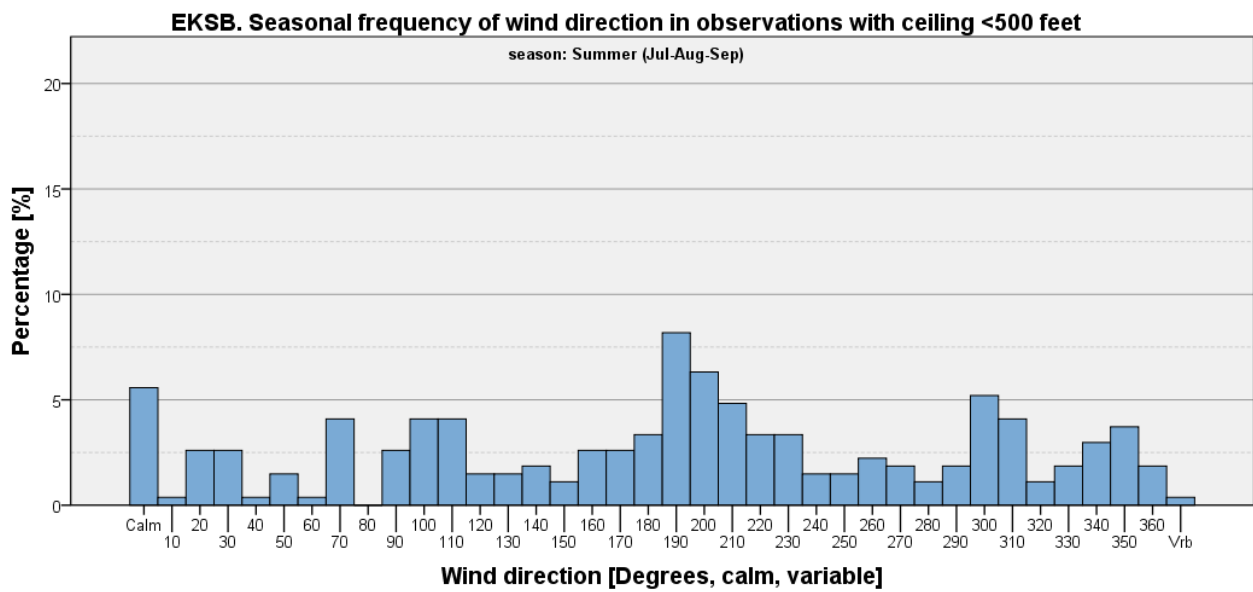


Figure 534

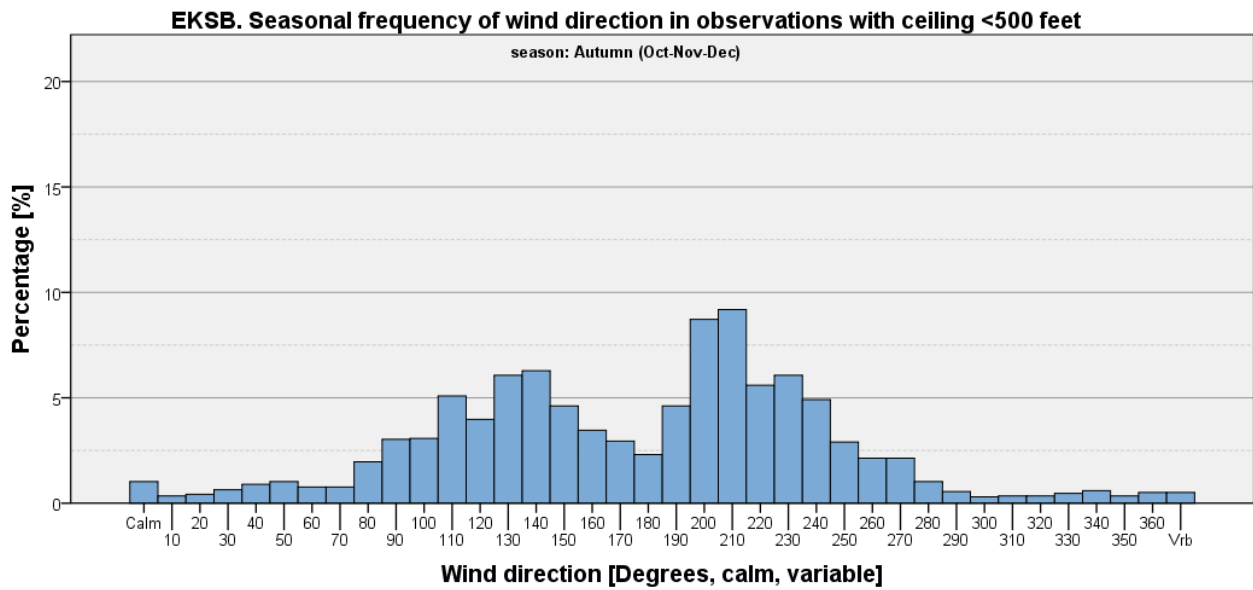


Figure 535

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 151: EKSB - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	4.87	1.21	0.66	2.94	2.48
All other Observations	95.13	98.79	99.34	97.06	97.52
Total	100	100	100	100	100

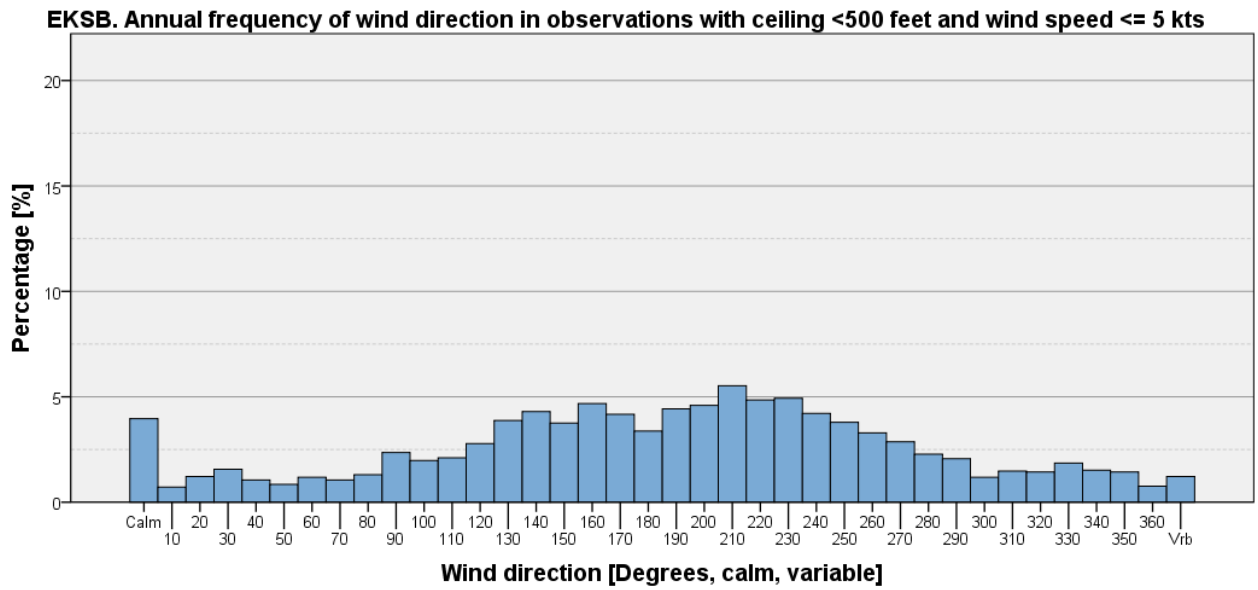


Figure 536

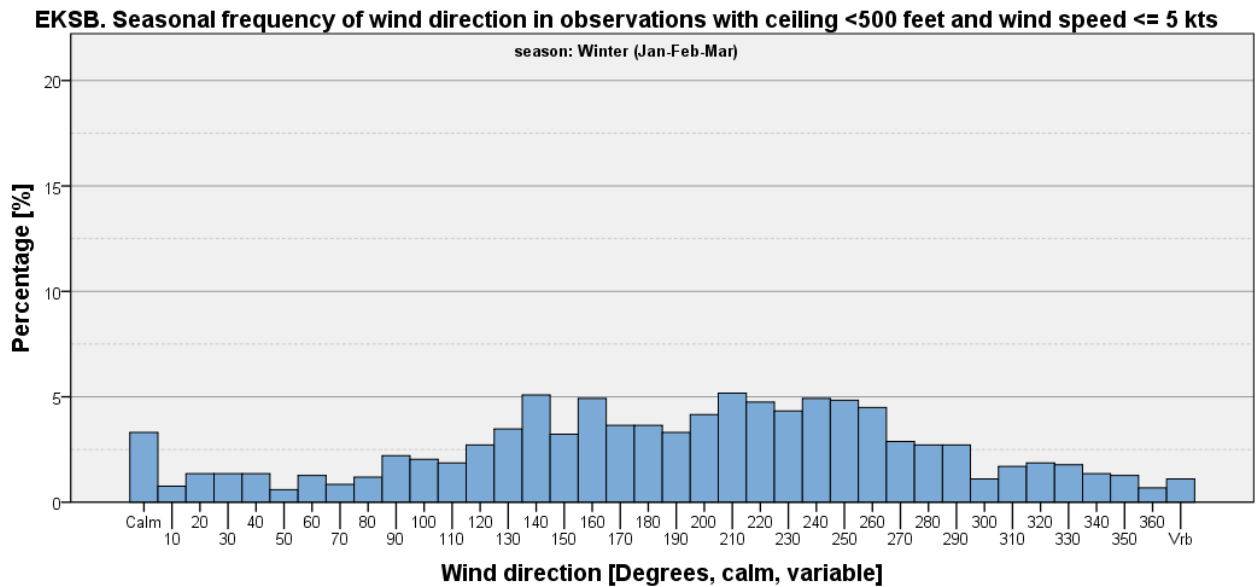


Figure 537

EKSB. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

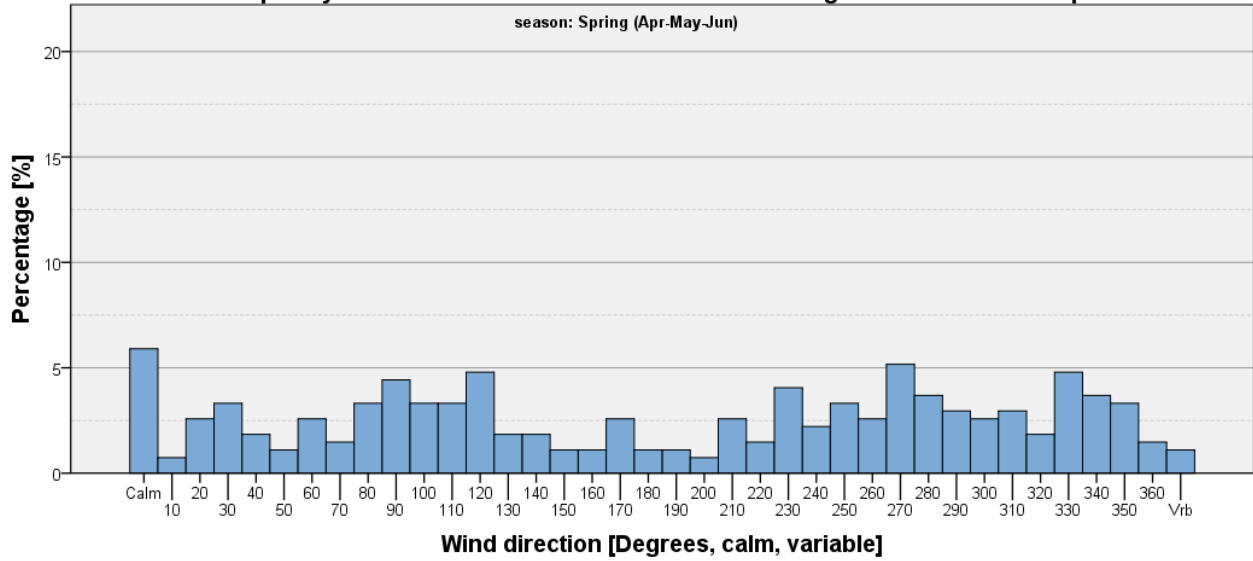


Figure 538

EKSB. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

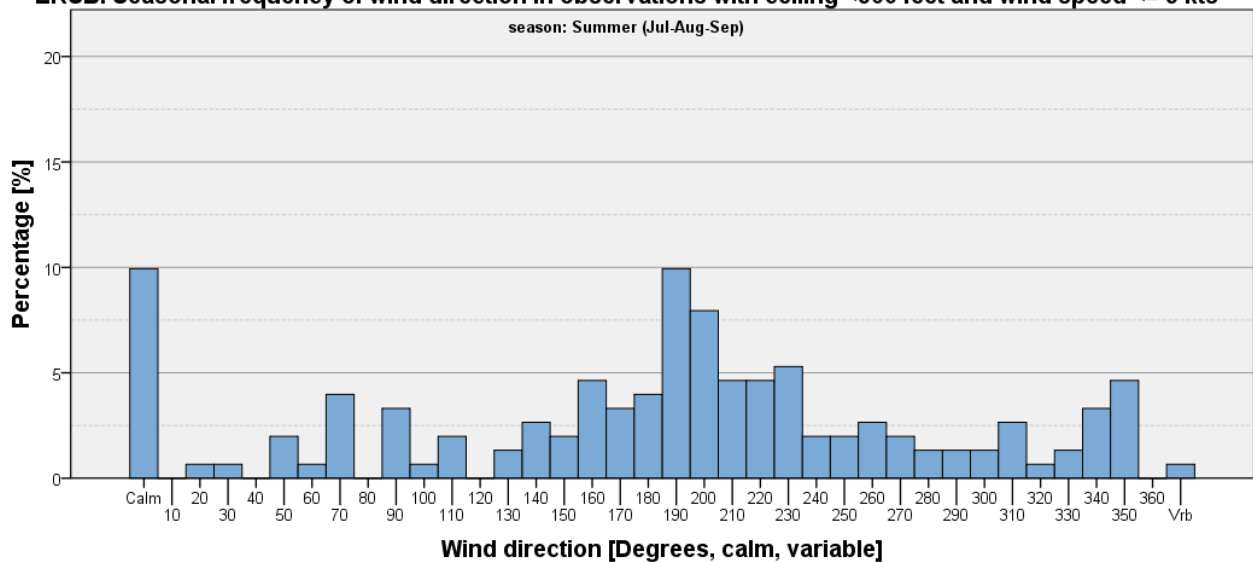


Figure 539

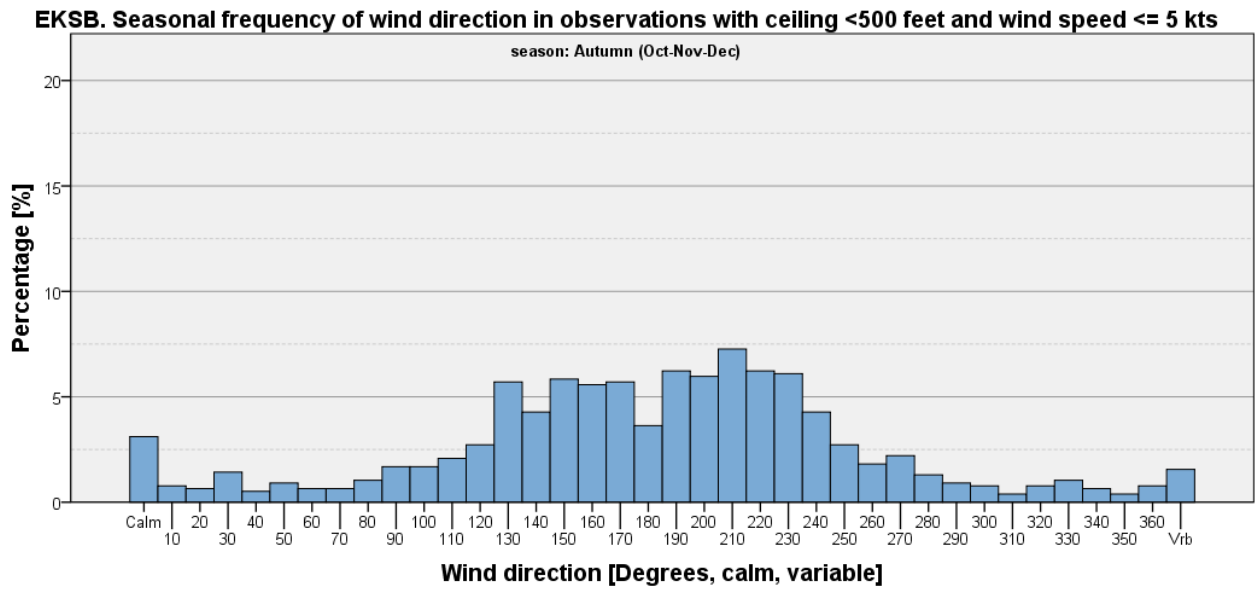


Figure 540

Ceiling < 500 feet and Wind Speed > 5 kts

Table 152: EKSB - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	8.12	1.22	0.52	5.99	4.11
All other observations	91.88	98.78	99.48	94.01	95.89
Total	100	100	100	100	100

EKSB. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

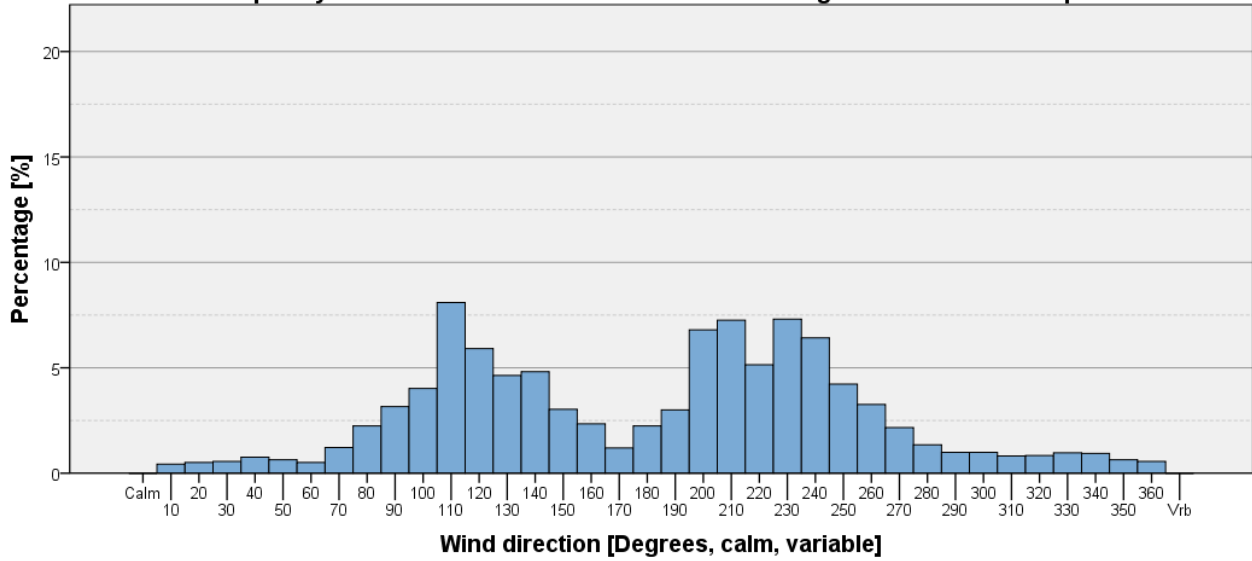


Figure 541

EKSB. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

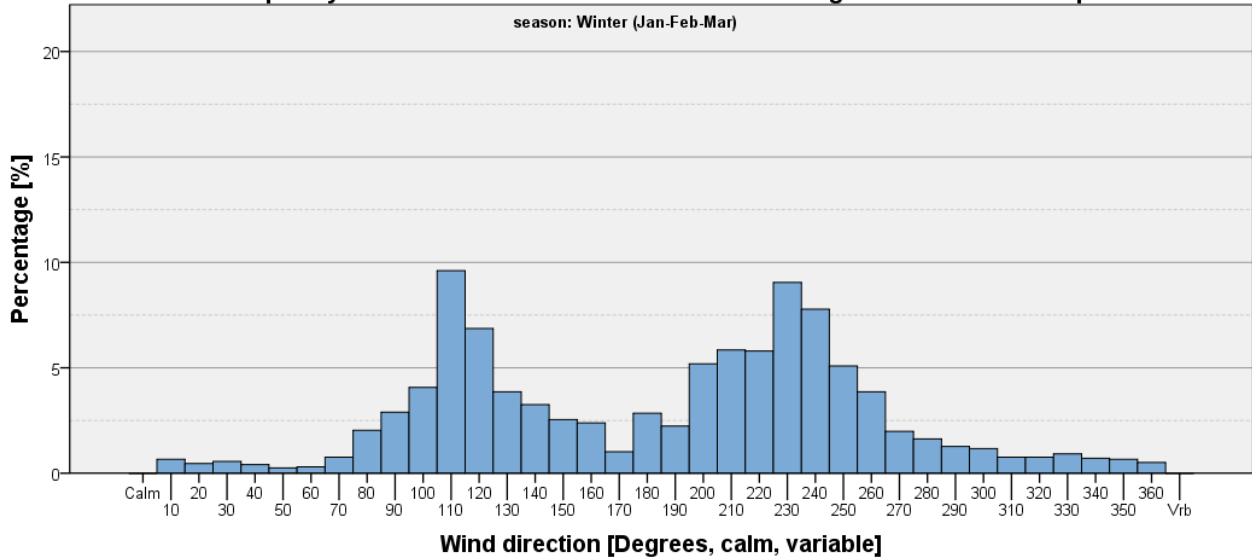


Figure 542

EKSB. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

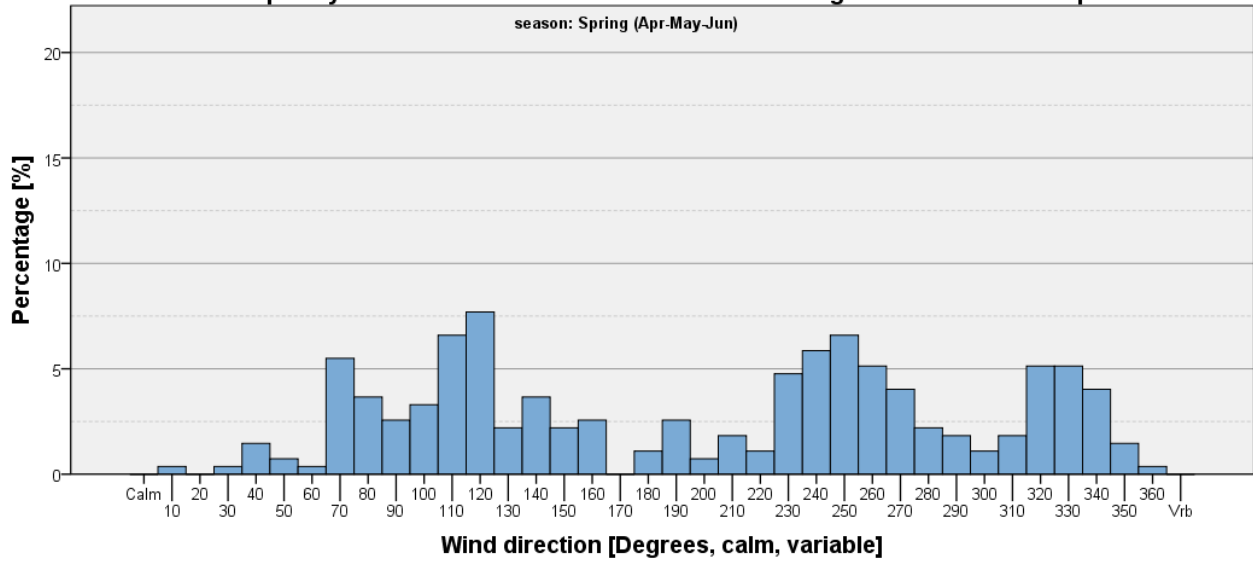


Figure 543

EKSB. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

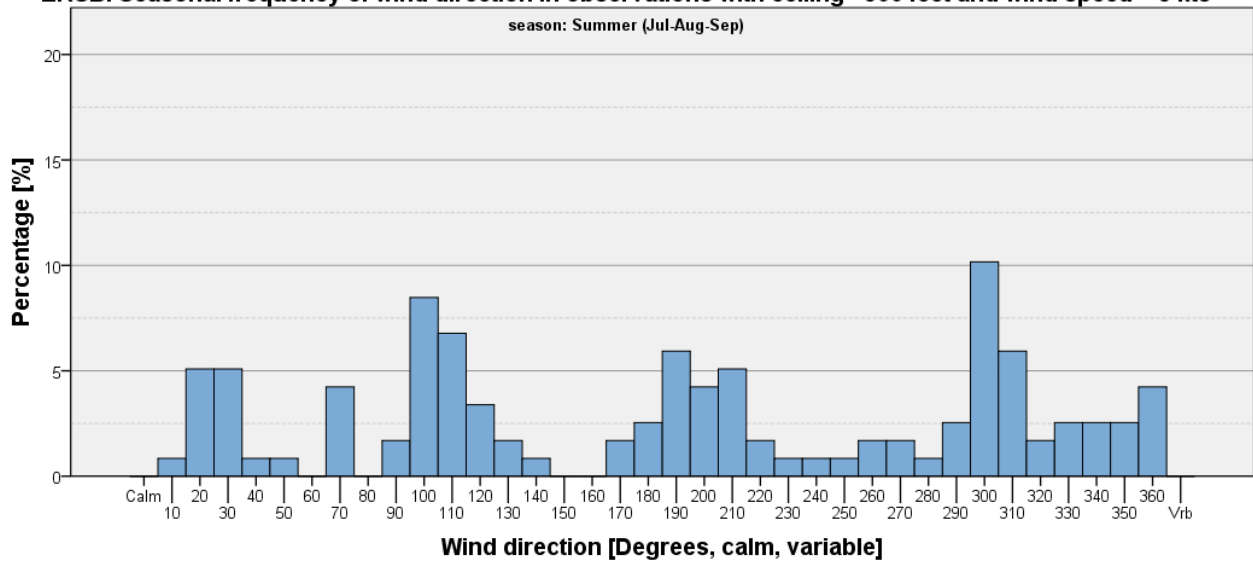


Figure 544

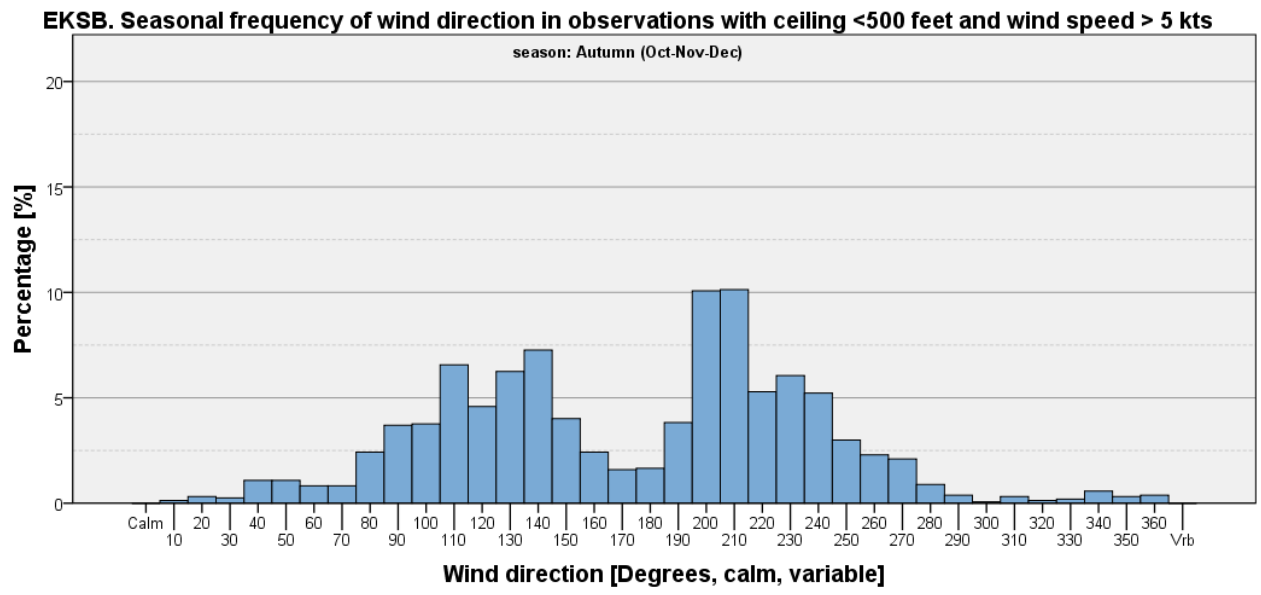
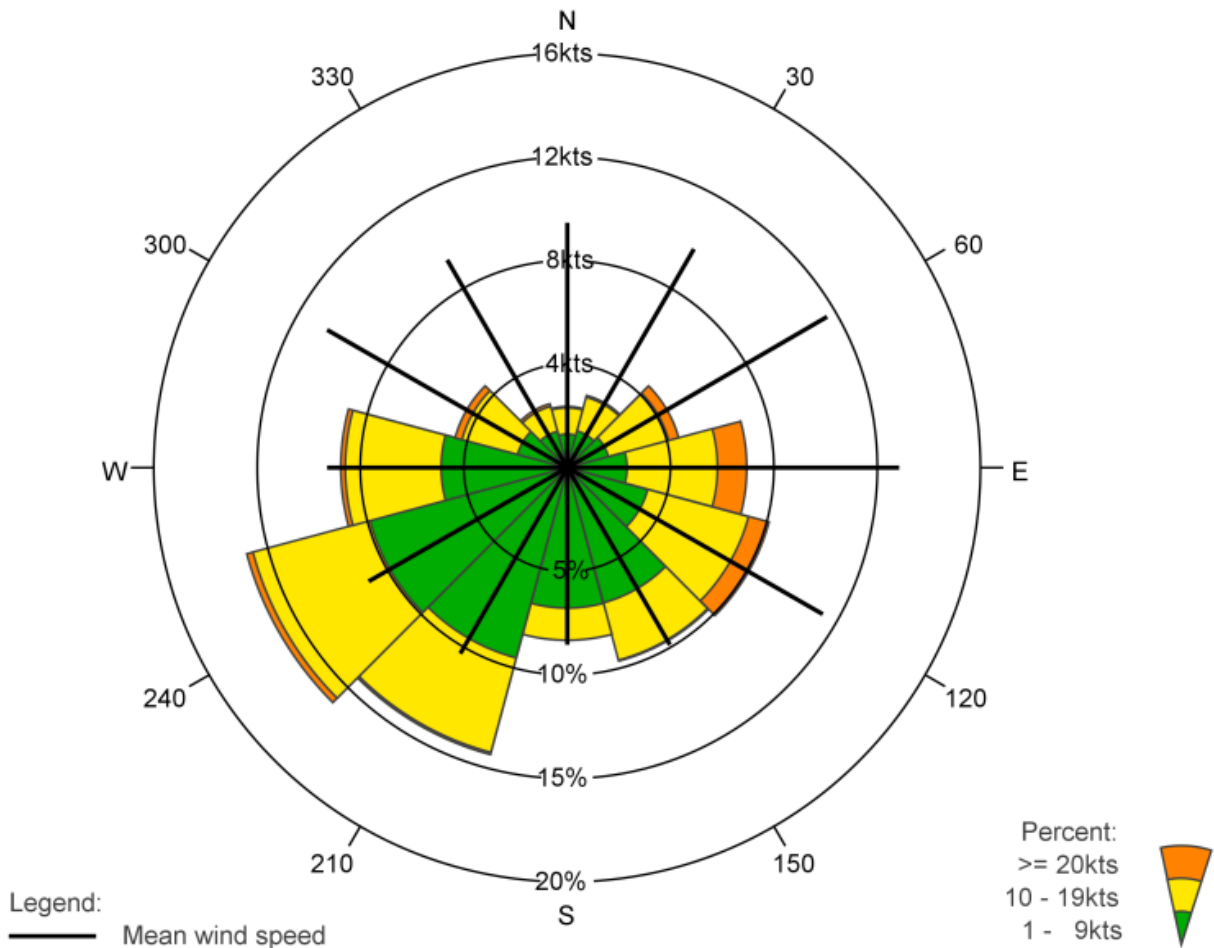


Figure 545

Wind Roses

EKSB: SØNDERBORG LUFTHAVN, AUTUMN & WINTER

02-01-2009 - 31-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.0	3.6	5.6	8.7	10.1	9.7	8.3	14.3	16.0	11.0	5.6	3.2	99.1
% 1 - 9kts	1.6	1.8	2.1	2.9	4.0	6.7	6.8	9.5	9.9	6.1	2.5	1.8	55.8
% 10 - 19kts	1.3	1.7	3.0	4.4	5.1	2.9	1.6	4.7	5.9	4.6	2.8	1.2	39.1
% >= 20kts	0.1	0.1	0.5	1.4	1.0	0.1	0.0	0.1	0.3	0.2	0.3	0.1	4.3
Mean wind speed	9.5	9.8	11.6	12.8	11.4	7.9	6.9	8.3	8.8	9.3	10.7	9.3	9.5
Max wind speed	32.0	27.0	31.0	34.0	30.0	23.0	20.0	43.0	42.0	30.0	36.0	38.0	43.0

Number of observations = 50448

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 464=0.9%

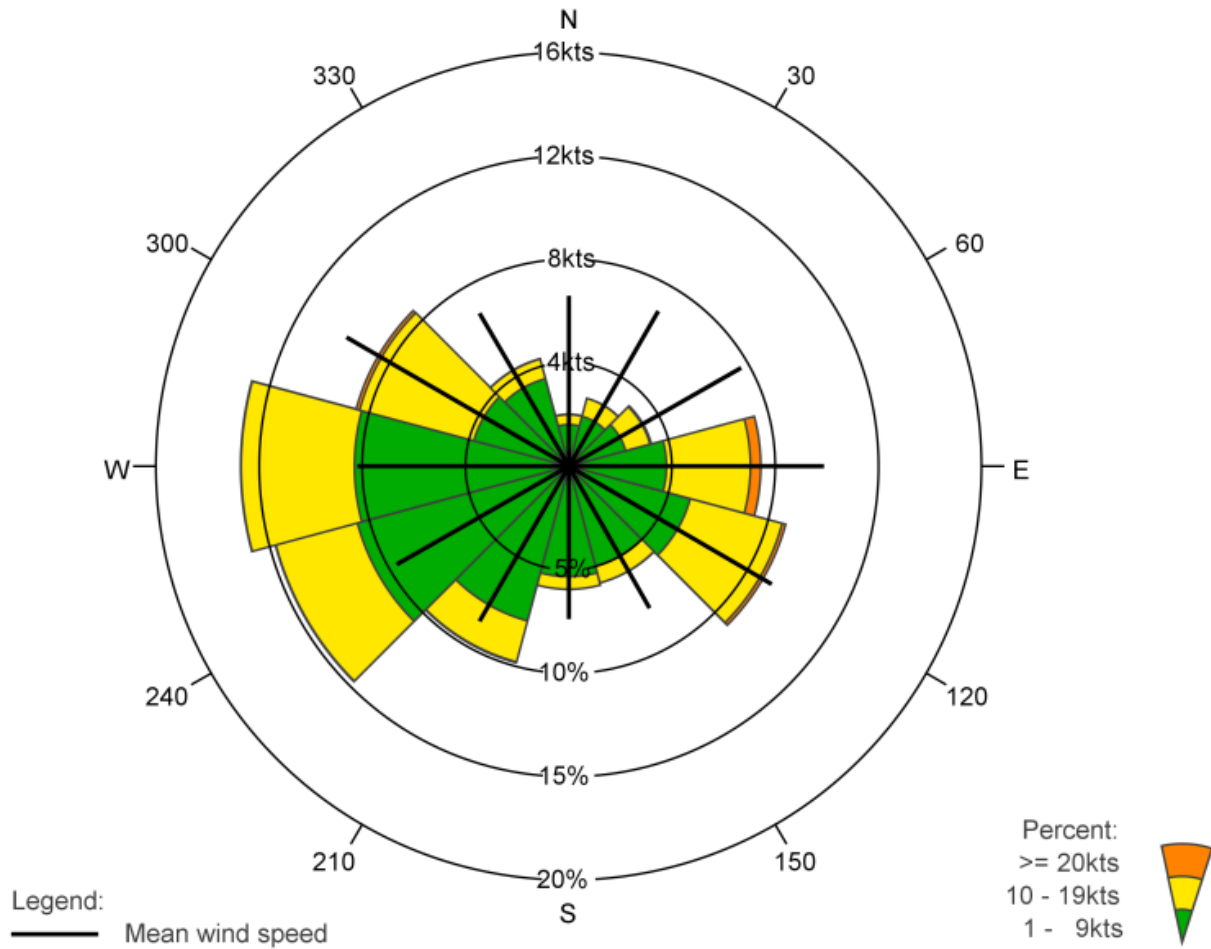
Observations with calm/varying wind direction are not used in the statistics

Source: DMI

Figure 546

EKSB: SØNDERBORG LUFTHAVN, SPRING & SUMMER

02-01-2009 - 31-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	2.5	3.4	4.1	9.3	10.9	5.8	5.9	9.8	14.7	15.9	10.7	5.4	98.5
% 1 - 9kts	2.0	2.5	2.8	4.7	6.1	5.0	5.3	7.7	10.6	10.4	4.7	4.4	66.3
% 10 - 19kts	0.5	0.9	1.2	4.1	4.6	0.9	0.6	2.0	4.1	5.5	5.7	1.0	31.1
% >= 20kts	0.0	0.0	0.1	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.1
Mean wind speed	6.6	6.9	7.7	9.9	9.1	6.3	5.9	6.9	7.7	8.2	9.9	6.9	8.0
Max wind speed	21.0	22.0	28.0	28.0	24.0	20.0	18.0	25.0	26.0	22.0	27.0	24.0	28.0

Number of observations = 45109

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 684=1.5%

Observations with calm/varying wind direction are not used in the statistics

Source: DMI

Figure 547

Availability

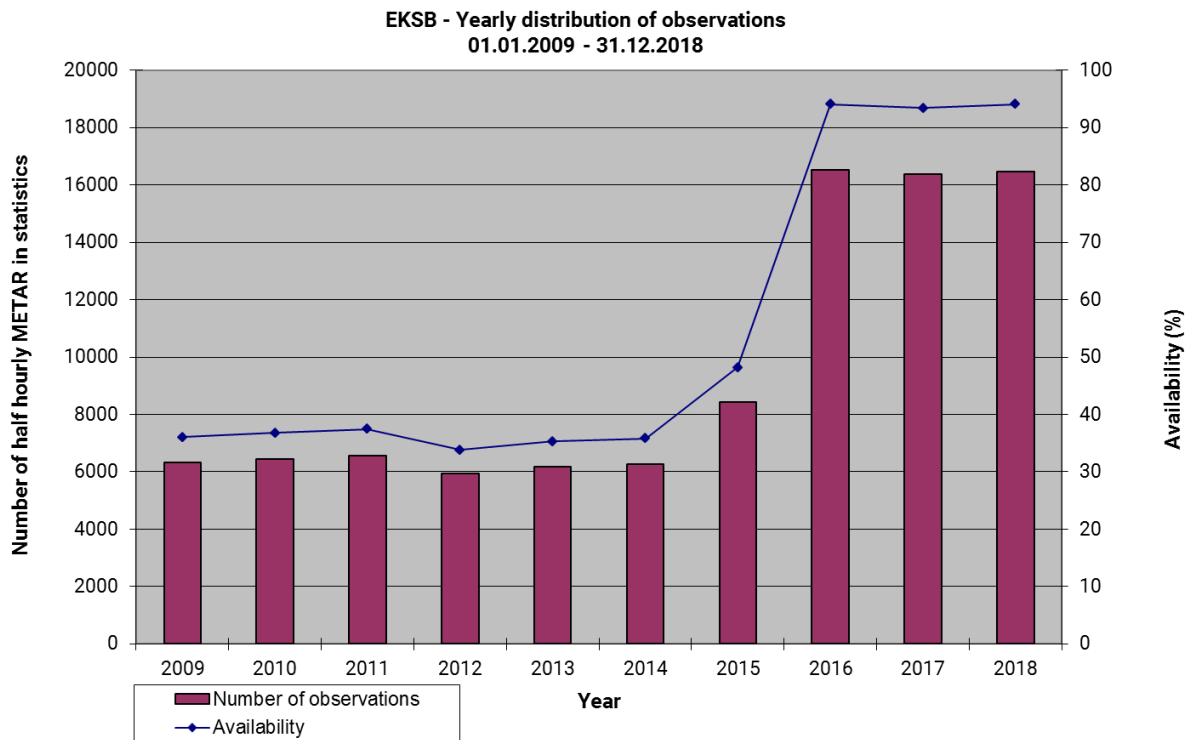


Figure 548

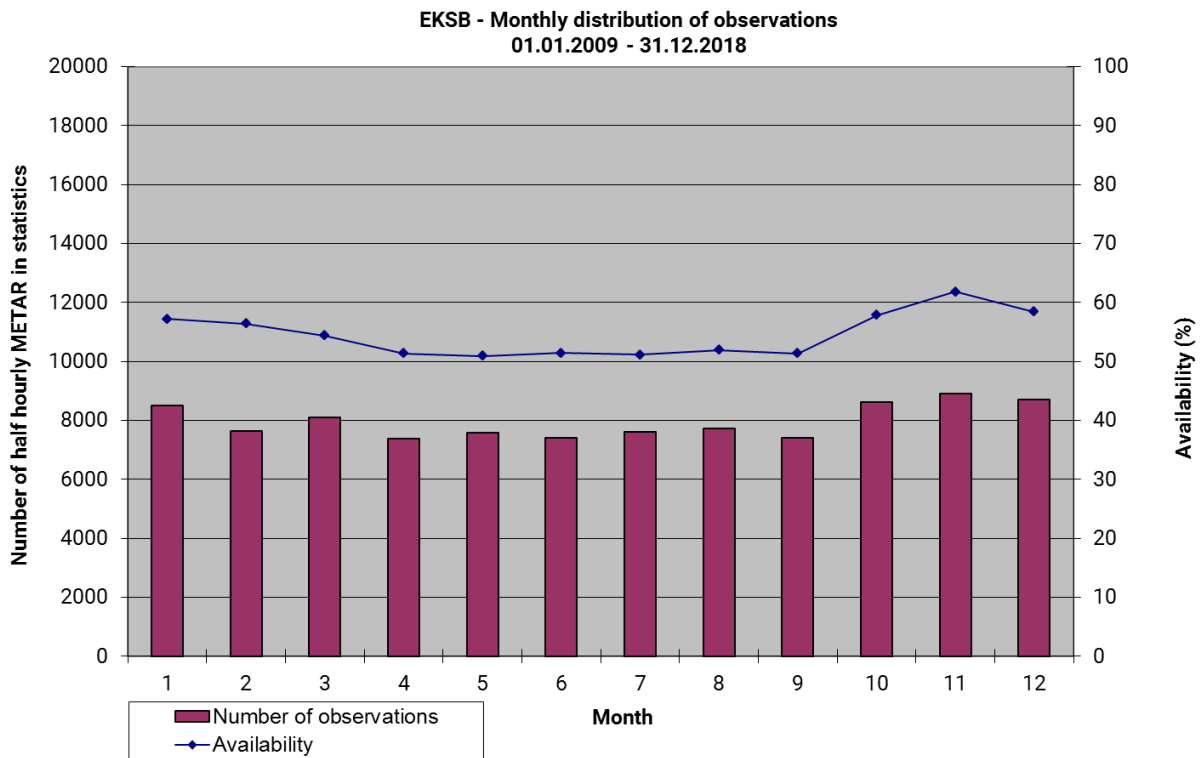


Figure 549

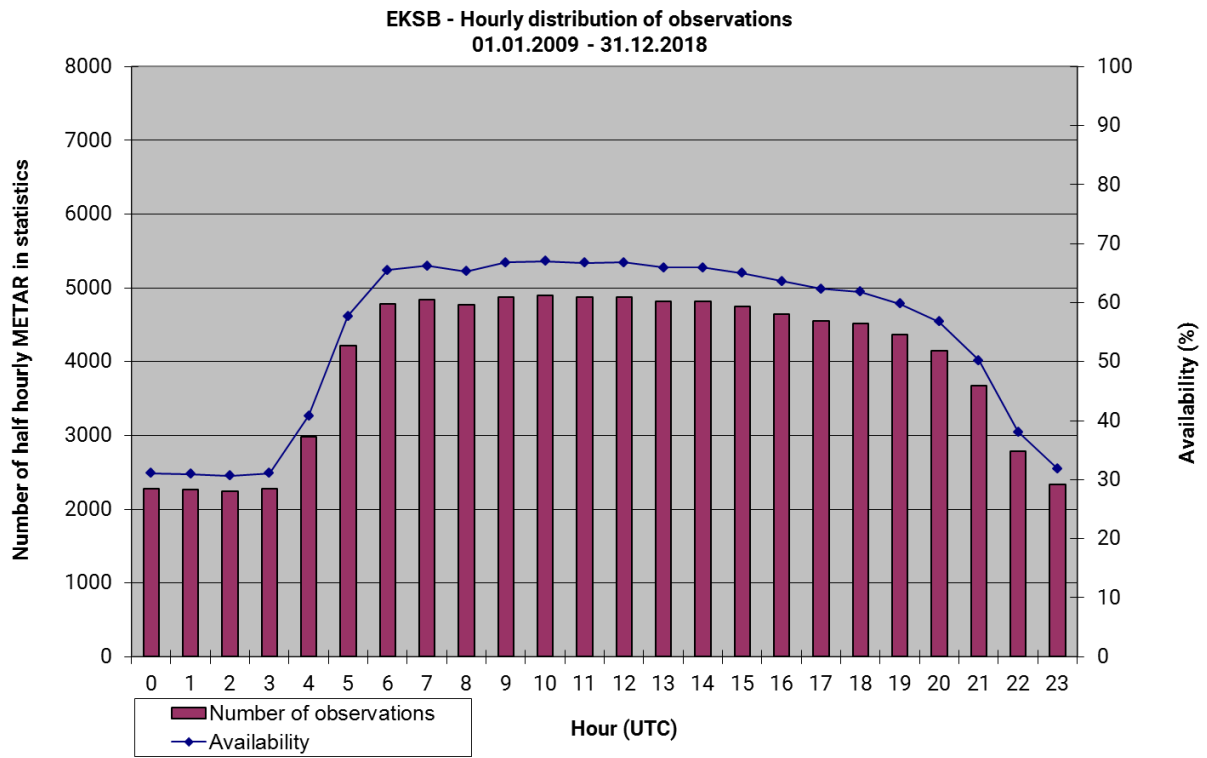


Figure 550

Table 153: EKSB. Average number of half hourly observations in statistics, 01.01.2009 – 31.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.9	1.9	1.9
1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.9	1.9	1.9
2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.9	1.9	1.8
3	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.9	1.9	1.8
4	0.1	0.2	0.2	0.3	0.4	0.4	0.8	1.9	1.9	1.9
5	0.6	0.7	0.8	0.8	0.8	0.9	1.1	1.9	1.9	1.9
6	1.0	1.0	1.1	1.0	1.0	1.1	1.2	1.9	1.9	2.0
7	1.0	1.0	1.1	1.0	1.1	1.1	1.3	1.8	1.9	1.9
8	1.0	1.0	1.0	1.0	1.1	1.2	1.3	1.9	1.8	1.9
9	1.1	1.1	1.1	1.0	1.1	1.2	1.3	1.8	1.8	1.9
10	1.2	1.1	1.1	1.0	1.1	1.1	1.3	1.8	1.9	1.8
11	1.1	1.1	1.2	1.1	1.0	1.1	1.2	1.8	1.9	1.9
12	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.8	1.9	1.8
13	1.1	1.1	1.1	1.0	1.1	1.1	1.2	1.8	1.8	1.9
14	1.1	1.1	1.1	0.9	1.0	1.1	1.3	1.8	1.9	1.9
15	1.1	1.1	1.1	0.9	1.0	1.0	1.2	1.8	1.8	1.9
16	1.0	1.0	1.0	0.9	1.0	1.0	1.2	1.9	1.8	1.9
17	0.9	1.0	1.0	0.9	0.9	1.0	1.1	1.9	1.9	1.9
18	1.0	1.0	1.0	0.9	0.9	0.9	1.1	1.9	1.9	1.9
19	0.9	1.0	1.0	0.8	0.8	0.8	1.0	1.9	1.9	1.9
20	0.8	0.9	0.9	0.7	0.8	0.7	0.9	1.9	1.9	1.9
21	0.6	0.8	0.8	0.6	0.5	0.4	0.6	1.9	1.9	1.9
22	0.2	0.3	0.4	0.3	0.2	0.0	0.5	1.9	1.9	1.9
23	0.0	0.1	0.0	0.0	0.0	0.0	0.4	1.9	1.9	1.9

EKSN Sindal Lufthavn

Airport location: 57.504°N 10.229°E Elevation: 28 m above MSL.

EKSN observations in statistics: 16,116 half-hourly METAR covering the 8 years period 17.05.2011 to 16.05.2019, resulting in an overall availability of 11.5%. For more information, please go to the 'Availability' section.

All EKSN METAR are manual.

Cross Tables Visibility – Ceiling

Table 154: EKSN Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 16,116	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.025	0.025	0.025	0.025	0.025	0	0.025
<350m	0	0.32	0.40	0.40	0.40	0.42	0.012	0.43
<600m	0	0.48	0.78	0.78	0.78	0.79	0.025	0.82
<800 m	0	0.60	1.07	1.07	1.07	1.08	0.037	1.12
<1.5 km	0	0.66	1.63	1.68	1.69	1.70	0.043	1.74
<3.0 km	0	0.66	2.67	3.54	3.76	3.88	0.12	4.01
< 5.0 km	0	0.66	3.72	7.07	8.72	9.23	1.41	10.65
< 8.0 km	0	0.66	3.91	9.06	13.15	14.56	3.75	18.32
>= 8.0 km or CAVOK	0	0	0.031	1.67	6.04	10.49	71.19	81.68
Total	0	0.66	3.94	10.73	19.20	25.06	74.94	100

Table 155: EKSJ - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 3,997	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.050	0.050	0.050	0.050	0.050	0	0.050
<350m	0	0.58	0.78	0.78	0.78	0.78	0	0.78
<600m	0	0.95	1.68	1.68	1.68	1.68	0.025	1.70
<800 m	0	1.35	2.40	2.40	2.40	2.40	0.050	2.45
<1.5 km	0	1.45	3.53	3.68	3.70	3.70	0.050	3.75
<3.0 km	0	1.45	5.35	6.91	7.36	7.76	0.18	7.93
< 5.0 km	0	1.45	6.63	11.96	14.29	15.26	1.53	16.79
< 8.0 km	0	1.45	6.98	14.84	21.52	23.82	3.90	27.72
>= 8.0 km or CAVOK	0	0	0.075	2.53	8.46	13.21	59.07	72.28
Total	0	1.45	7.06	17.36	29.97	37.03	62.97	100

Table 156: EKSJ - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 3,872	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0	0	0	0	0	0	0
<350m	0	0	0.026	0.026	0.026	0.026	0	0.026
<600m	0	0.052	0.077	0.077	0.077	0.077	0	0.077
<800 m	0	0.052	0.15	0.15	0.15	0.15	0	0.15
<1.5 km	0	0.077	0.36	0.41	0.41	0.41	0	0.41
<3.0 km	0	0.077	0.88	1.65	1.76	1.76	0.077	1.83
< 5.0 km	0	0.077	1.76	4.13	4.80	4.83	0.72	5.55
< 8.0 km	0	0.077	2.04	5.99	7.93	8.37	2.79	11.16
>= 8.0 km or CAVOK	0	0	0.052	1.99	5.89	9.27	79.57	88.84
Total	0	0.077	2.09	7.98	13.82	17.64	82.36	100

Table 157: EKSJ - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 4,310	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0	0	0	0	0	0	0
<350m	0	0.093	0.12	0.12	0.12	0.12	0	0.12
<600m	0	0.12	0.19	0.19	0.19	0.19	0	0.19
<800 m	0	0.12	0.23	0.23	0.23	0.23	0.023	0.26
<1.5 km	0	0.12	0.23	0.23	0.23	0.23	0.023	0.26
<3.0 km	0	0.12	0.30	0.65	0.70	0.70	0.023	0.72
< 5.0 km	0	0.12	0.58	1.93	2.44	2.60	0.67	3.27
< 8.0 km	0	0.12	0.67	2.58	4.04	4.71	2.46	7.17
>= 8.0 km or CAVOK	0	0	0	0.86	3.60	6.91	85.92	92.83
Total	0	0.12	0.67	3.43	7.63	11.62	88.38	100

Table 158: EKSJ - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 3,937	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.051	0.051	0.051	0.051	0.051	0	0.051
<350m	0	0.64	0.71	0.71	0.71	0.76	0.051	0.81
<600m	0	0.84	1.22	1.22	1.22	1.27	0.076	1.35
<800 m	0	0.91	1.52	1.52	1.52	1.57	0.076	1.65
<1.5 km	0	1.02	2.49	2.49	2.49	2.54	0.10	2.64
<3.0 km	0	1.02	4.29	5.13	5.44	5.54	0.23	5.77
< 5.0 km	0	1.02	6.15	10.64	13.82	14.71	2.79	17.50
< 8.0 km	0	1.02	6.17	13.31	19.79	22.05	5.97	28.02
>= 8.0 km or CAVOK	0	0	0	1.37	6.43	12.85	59.13	71.98
Total	0	0.077	2.09	7.98	13.82	17.64	82.36	100

Wind Direction Histograms

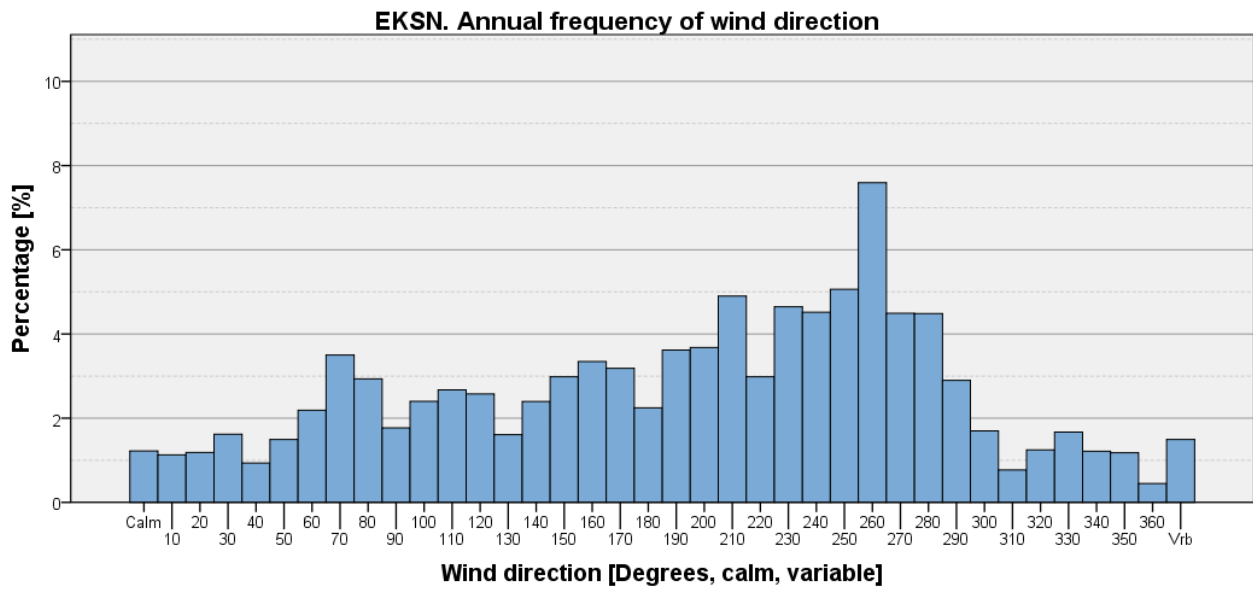


Figure 551

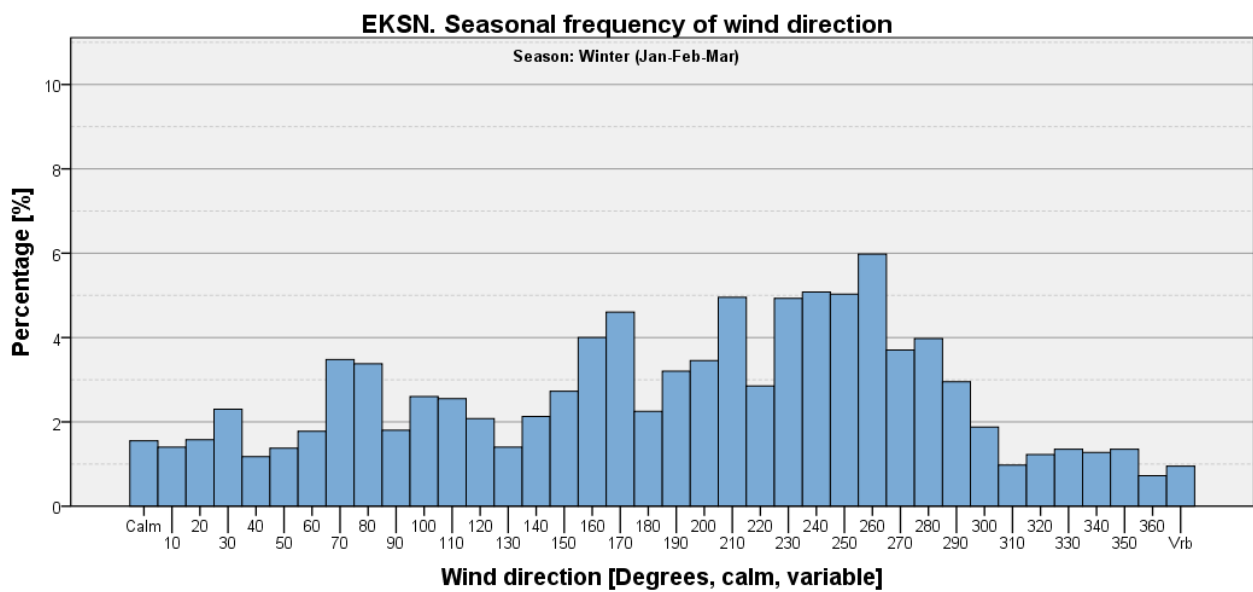


Figure 552

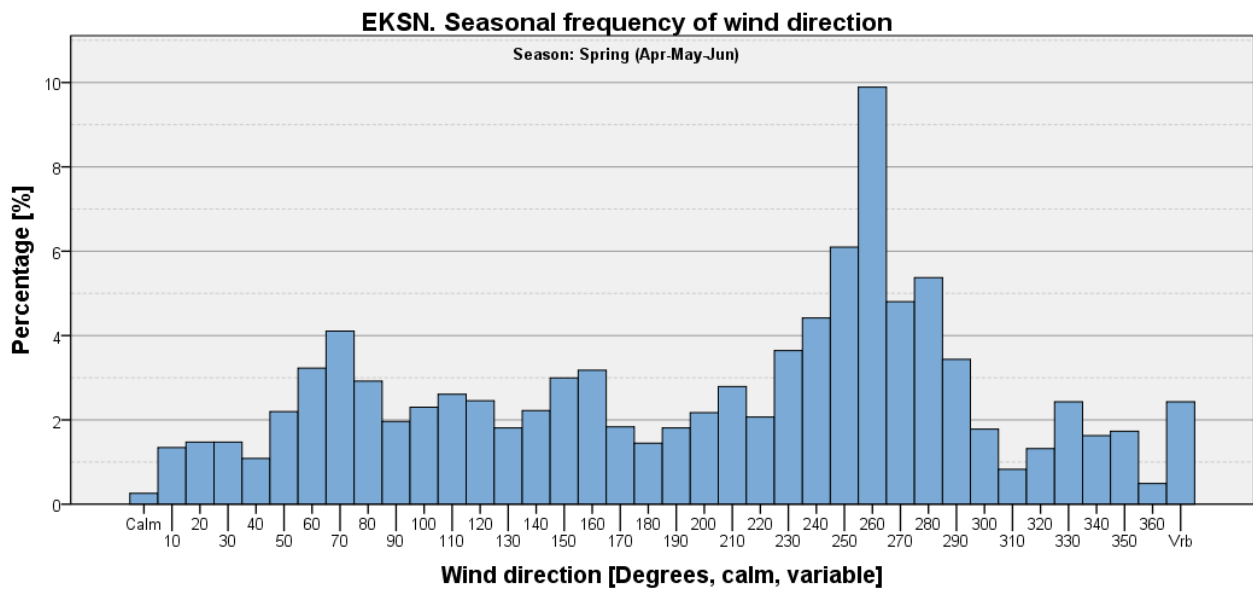


Figure 553

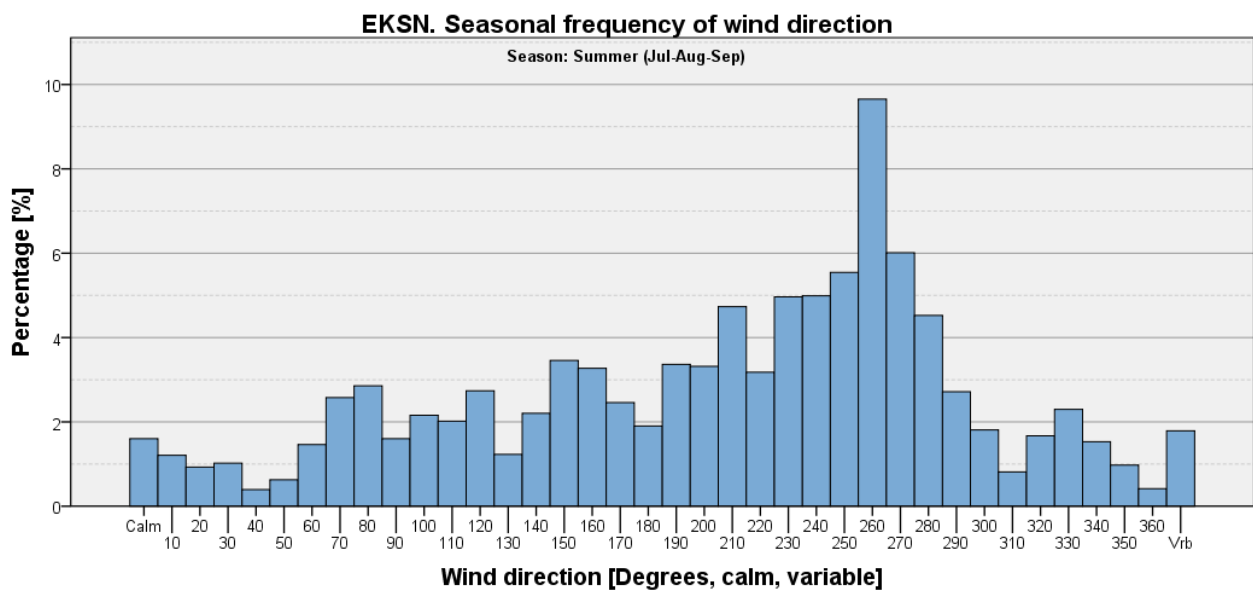


Figure 554

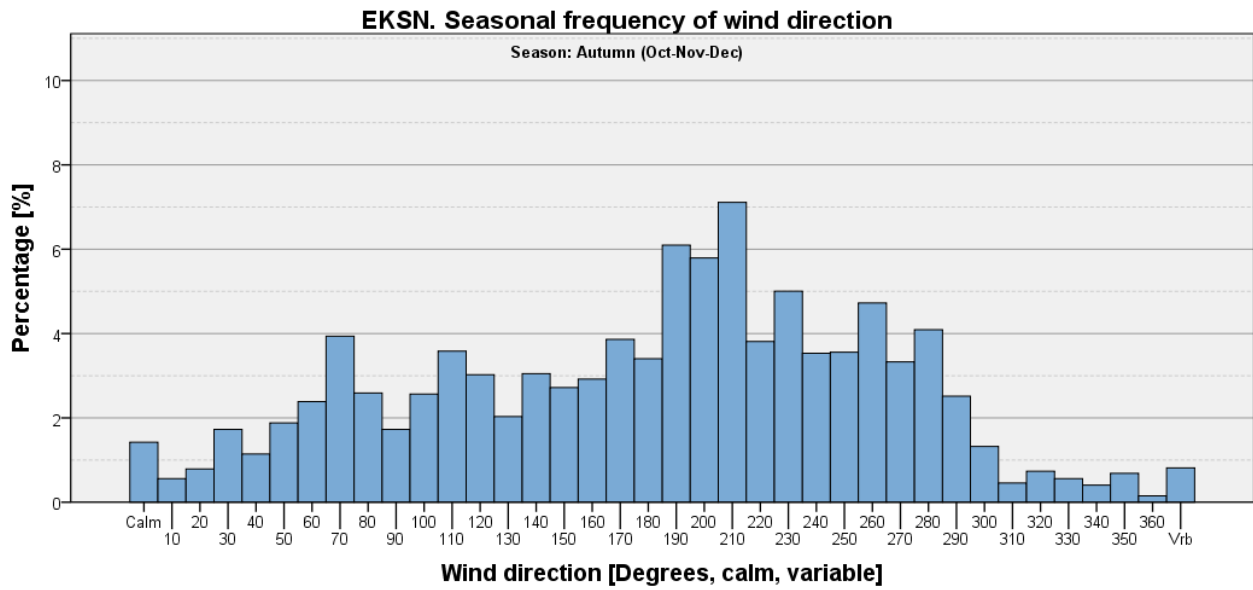


Figure 555

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 159: EKSN - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	2.45	0.15	0.26	1.65	1.12
All other observations	97.55	99.85	99.74	98.35	98.88
Total	100	100	100	100	100

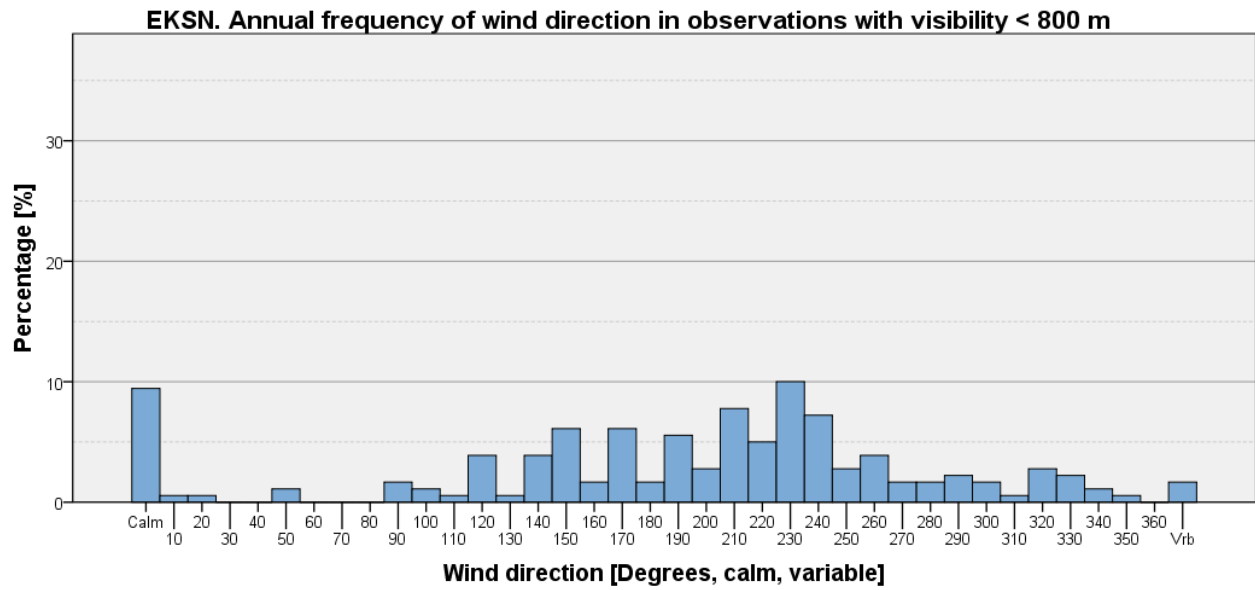


Figure 556

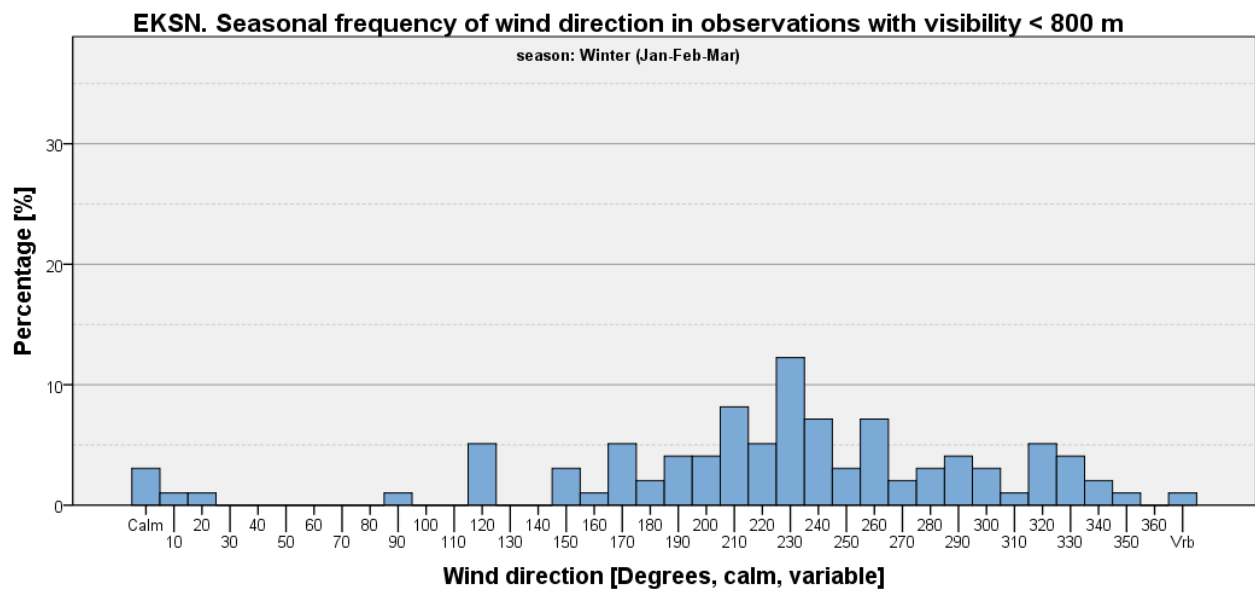


Figure 557

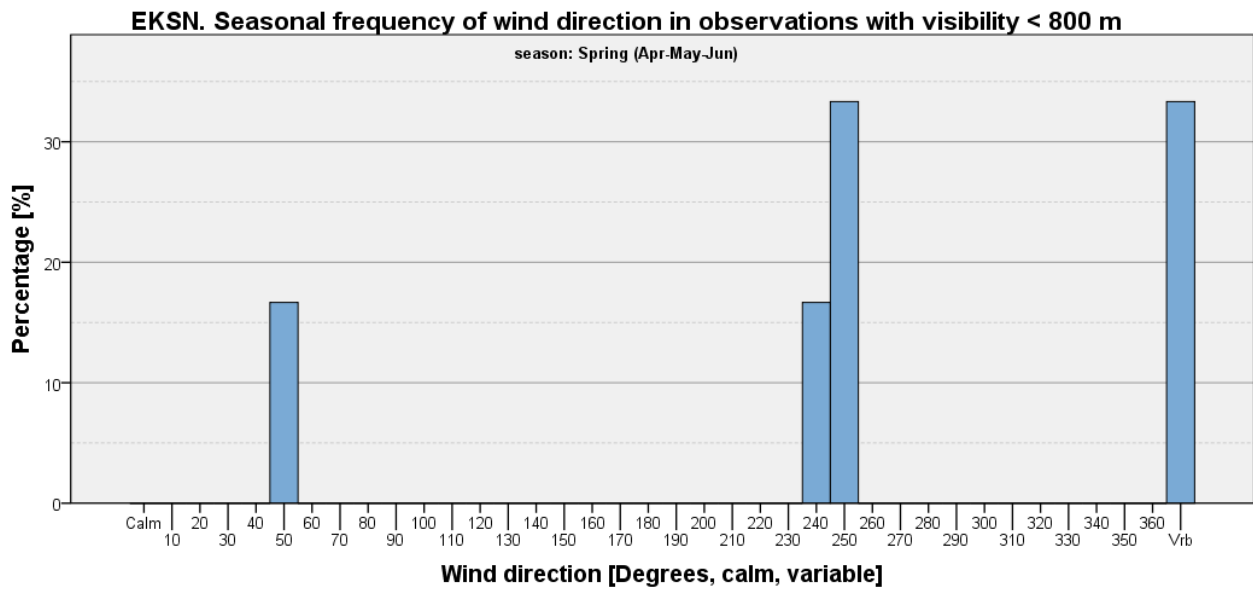


Figure 558

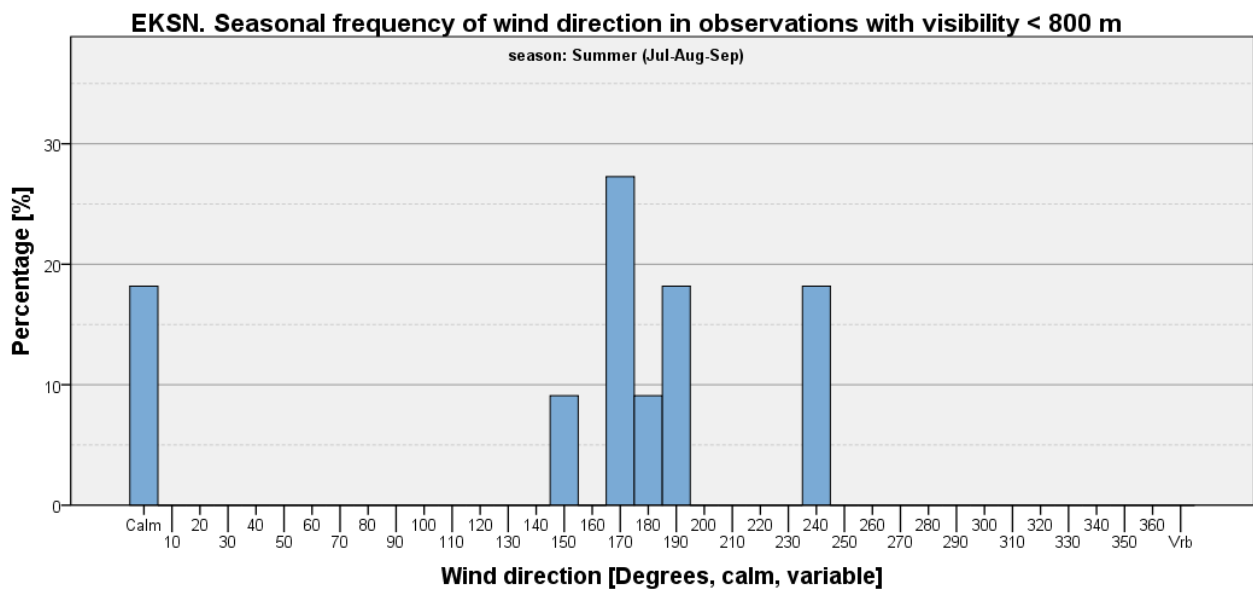


Figure 559

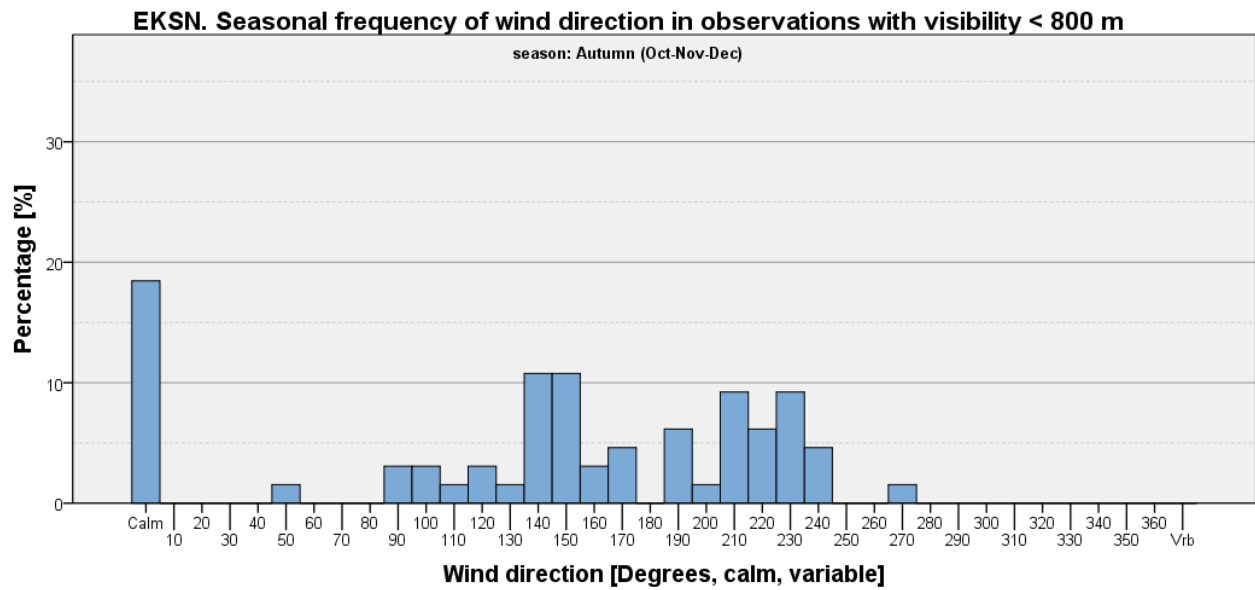


Figure 560

Visibility < 800 m and Wind Speed <= 5 kts

Table 160: EKSN - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	1.50	0.077	0.21	0.94	0.68
All other observations	98.50	99.92	99.79	99.06	99.32
Total	100	100	100	100	100

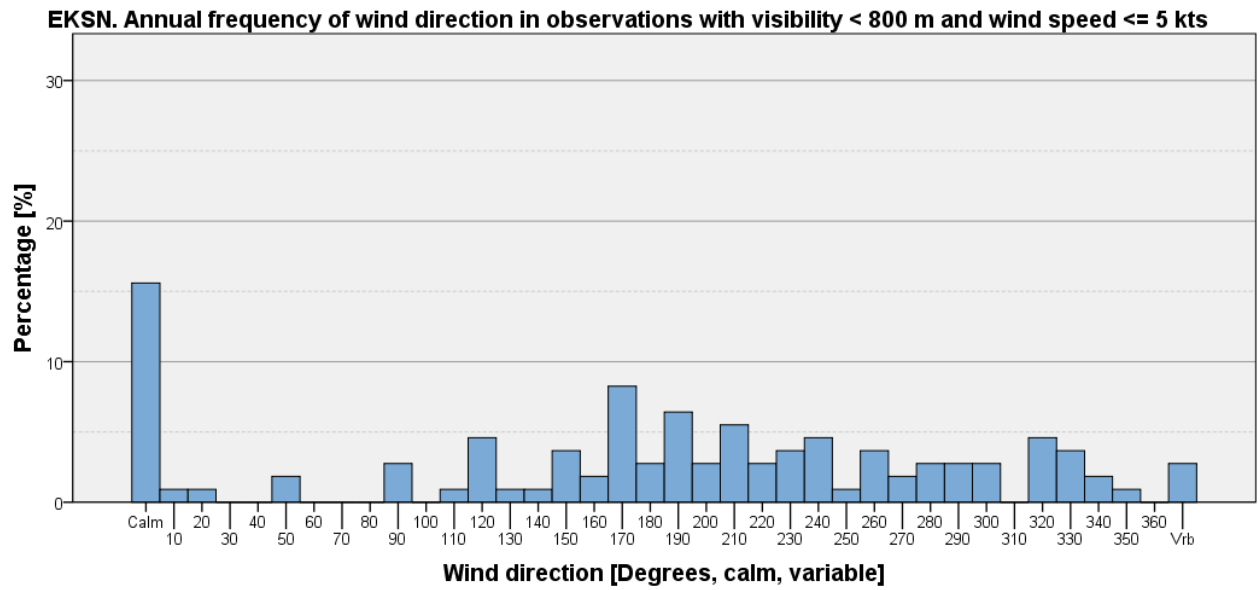


Figure 561

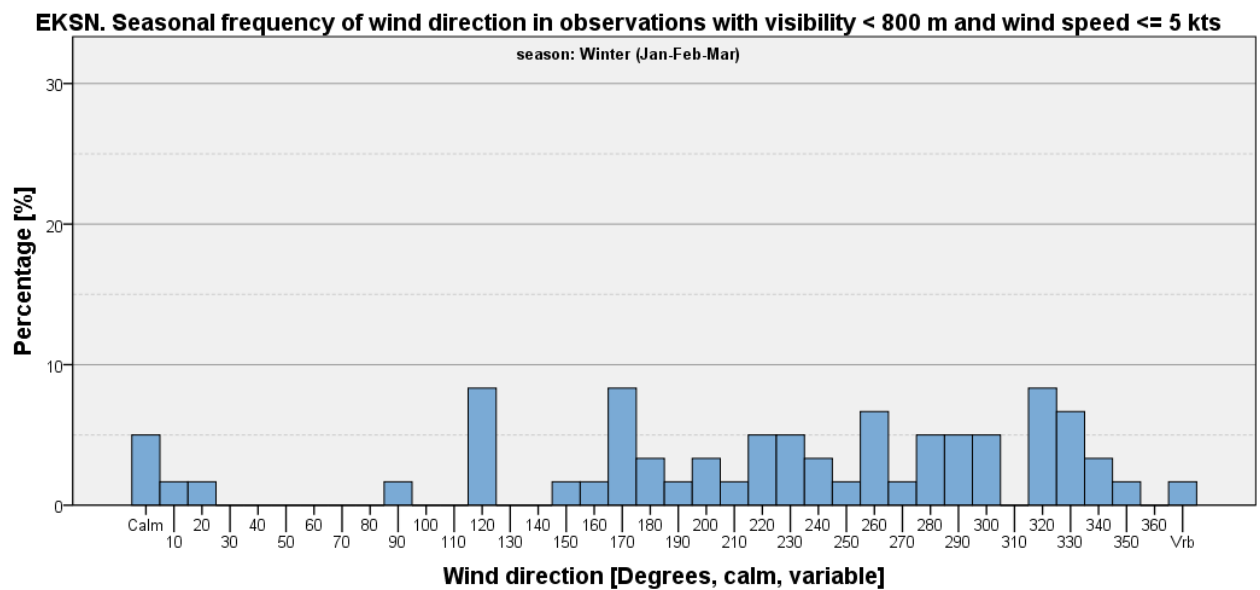


Figure 562

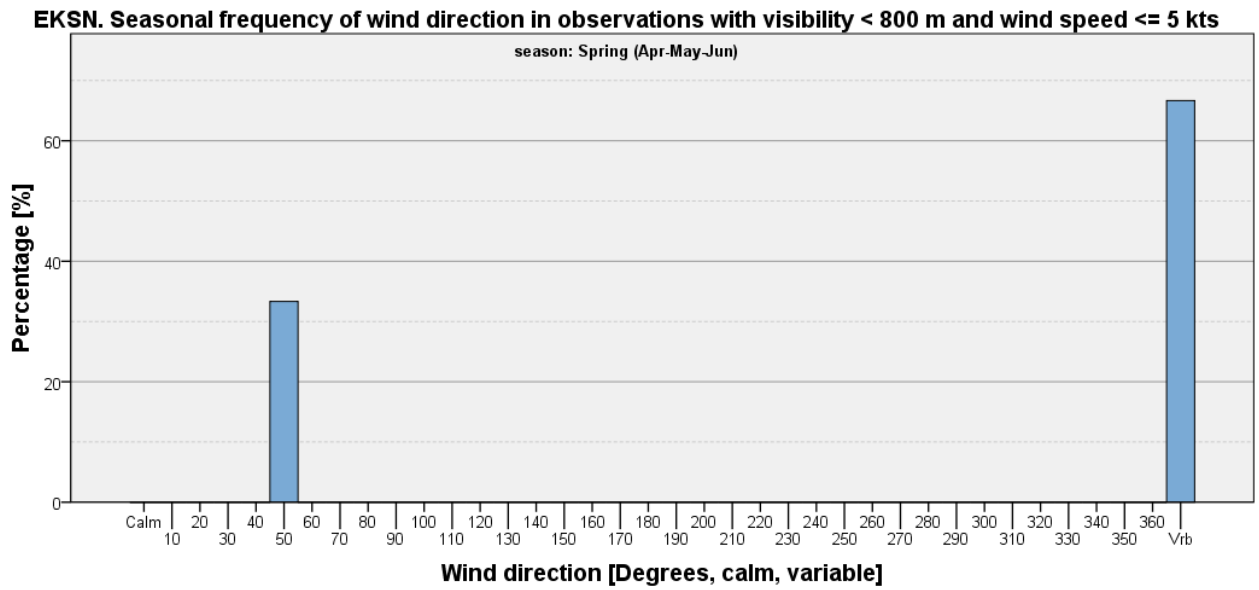


Figure 563: Please notice the changed y-axis. The change in y-axis is caused by a low number of observations within the limits of visibility < 800 m and wind speed <= 5 kts.

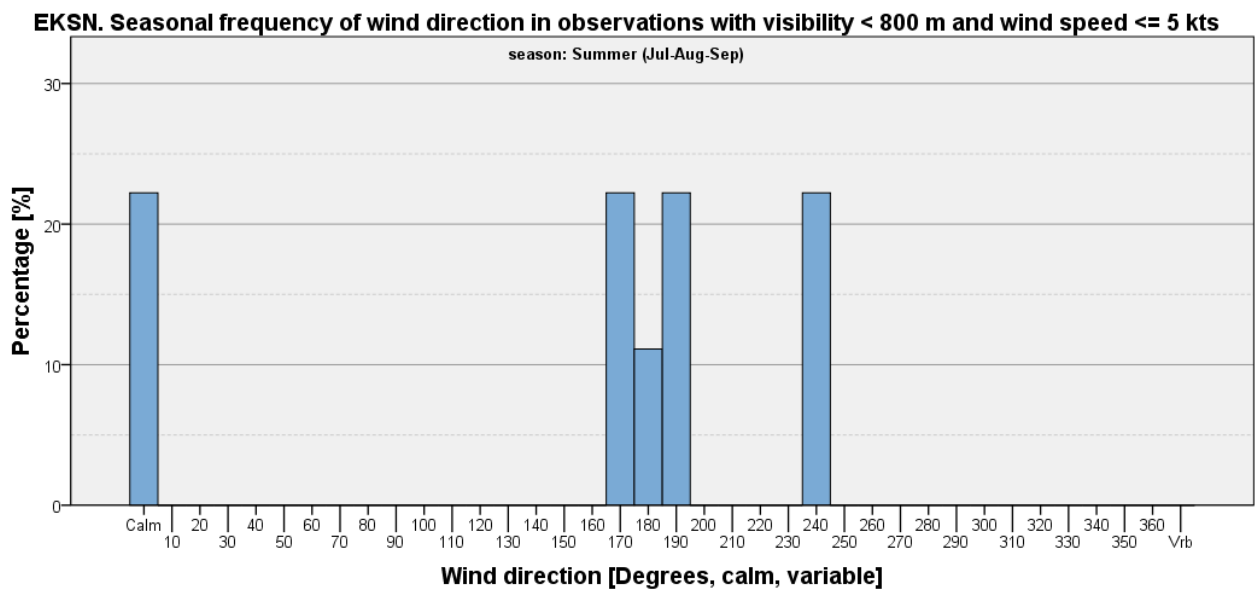


Figure 564

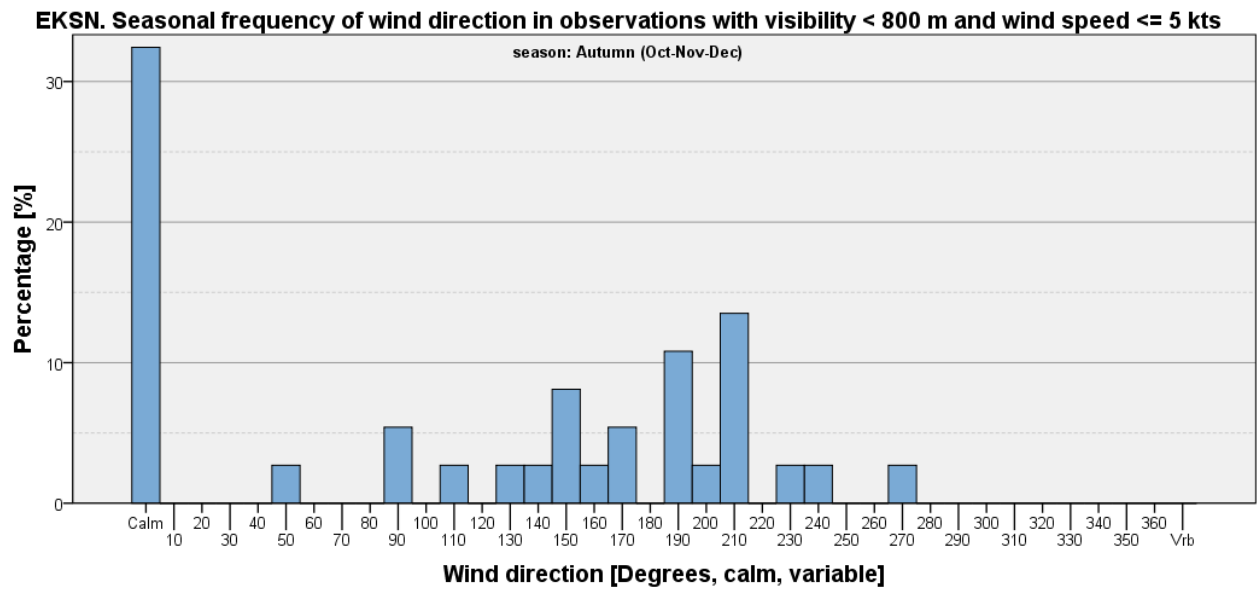


Figure 565

Visibility < 800 m and Wind Speed > 5 kts

Table 161: EKSN - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	0.95	0.077	0.046	0.71	0.44
All other observations	99.05	99.92	99.95	99.29	99.56
Total	100	100	100	100	100

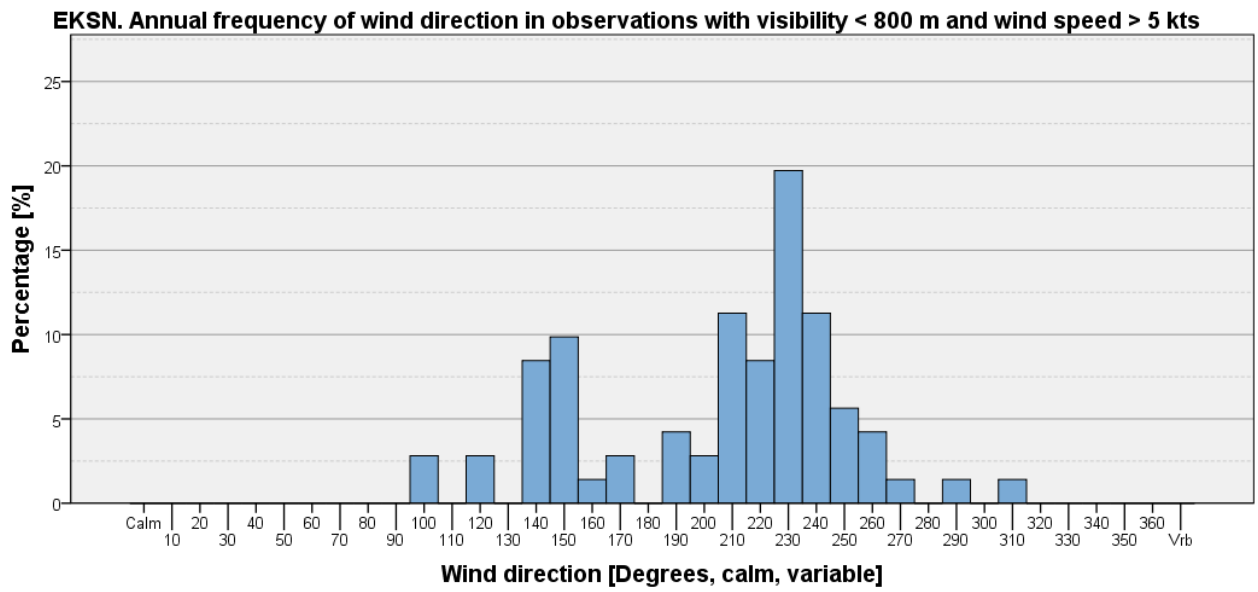


Figure 566

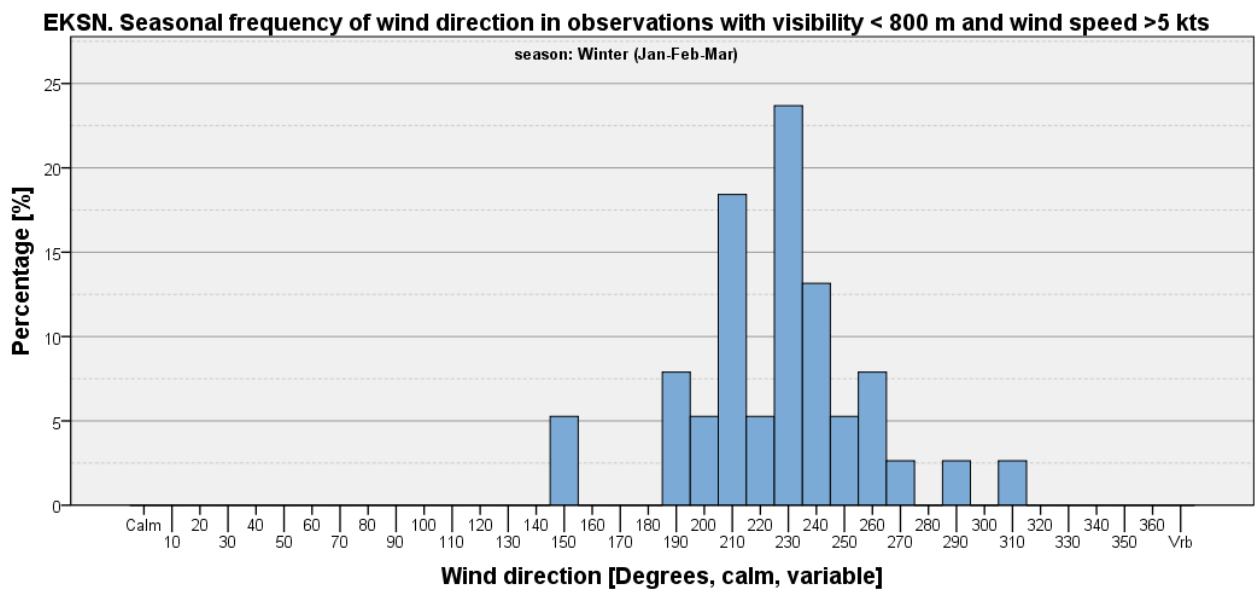


Figure 567

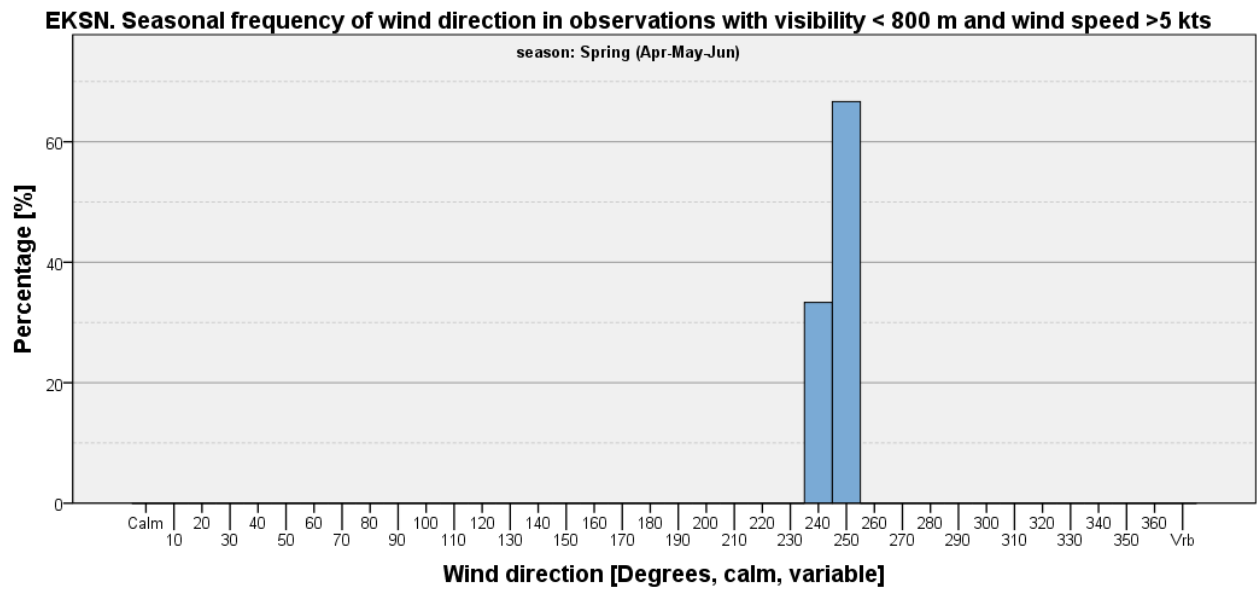


Figure 568: Please notice the changed y-axis. The change in y-axis is caused by a low number of observations within the limits of visibility > 800 m and wind speed < 5 kts.

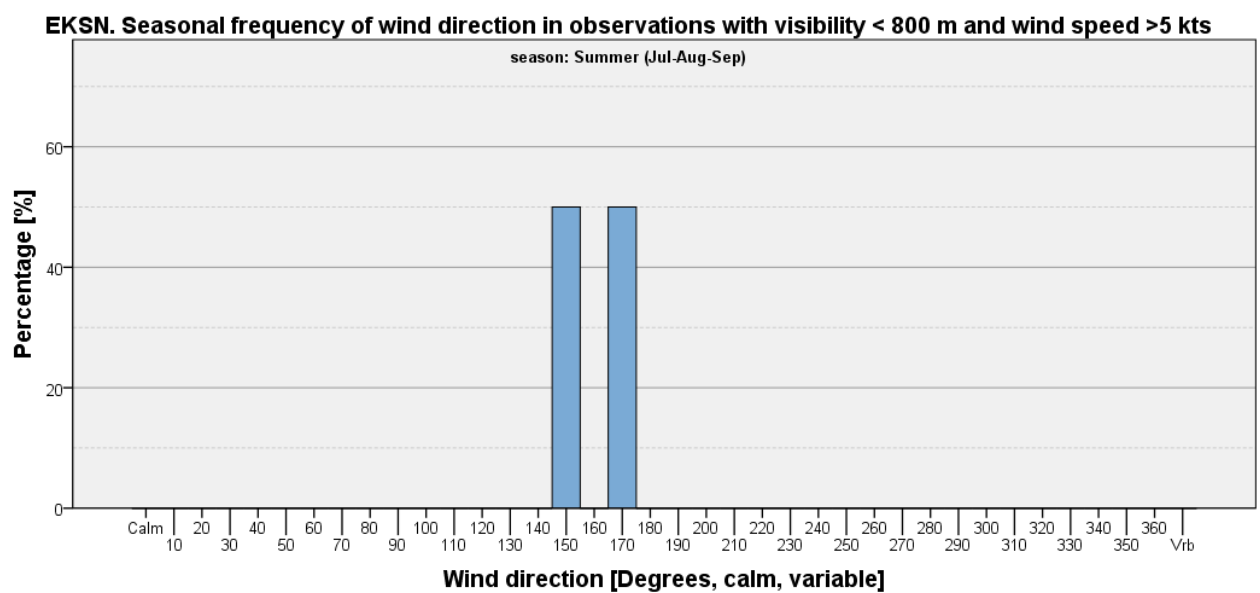


Figure 569: Please notice the changed y-axis. The change in y-axis is caused by a low number of observations within the limits of visibility < 800 m and wind speed > 5 kts.

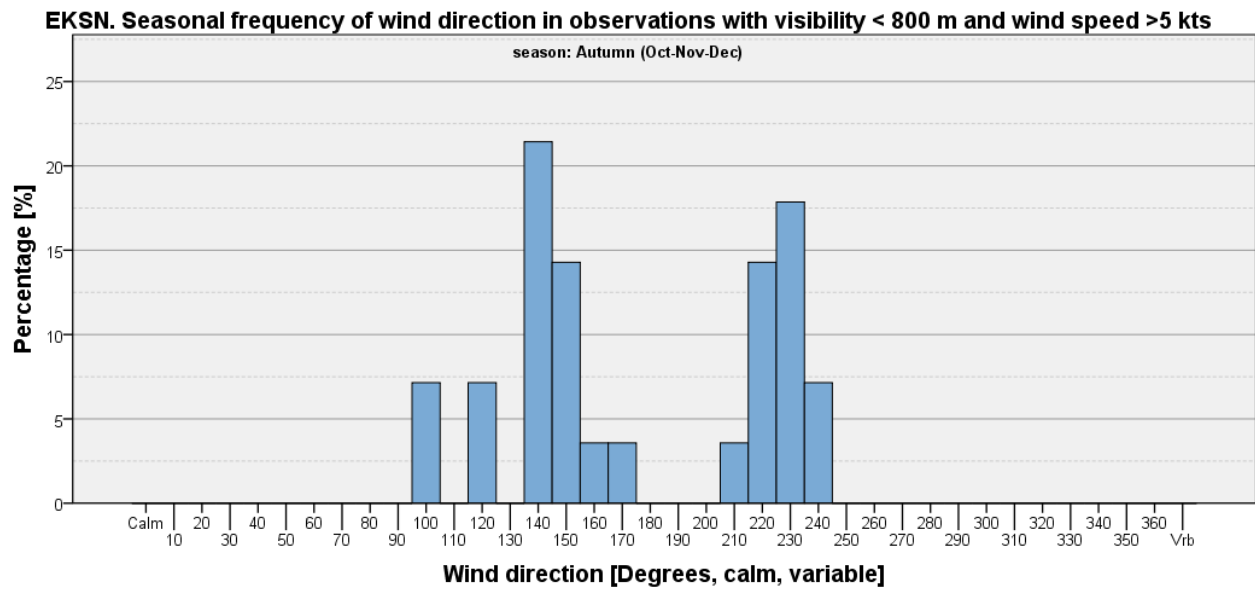


Figure 570

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 162: EKSN - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	17.36	7.98	3.43	14.68	10.73
All other observations	82.64	92.02	96.57	85.32	89.27
Total	100	100	100	100	100

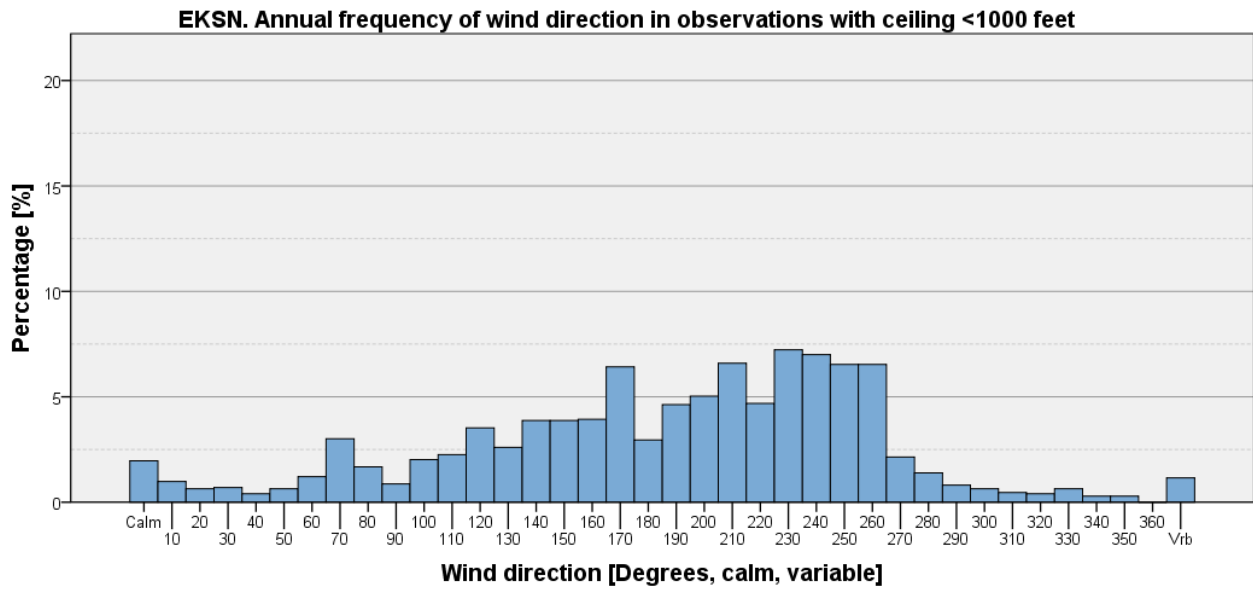


Figure 571

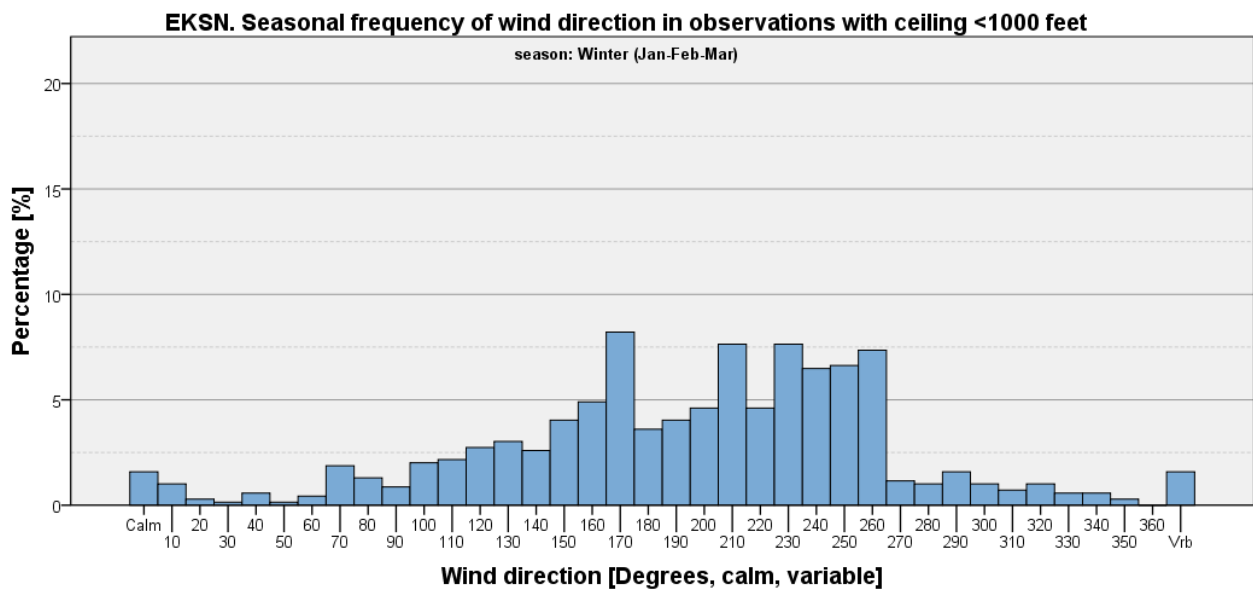


Figure 572

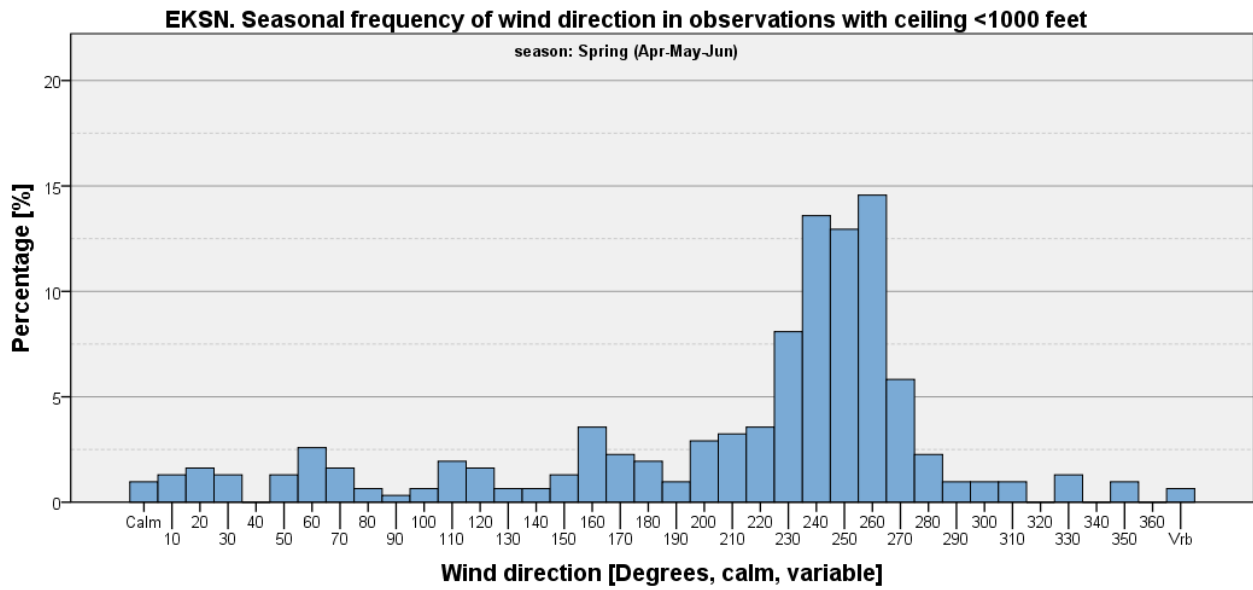


Figure 573

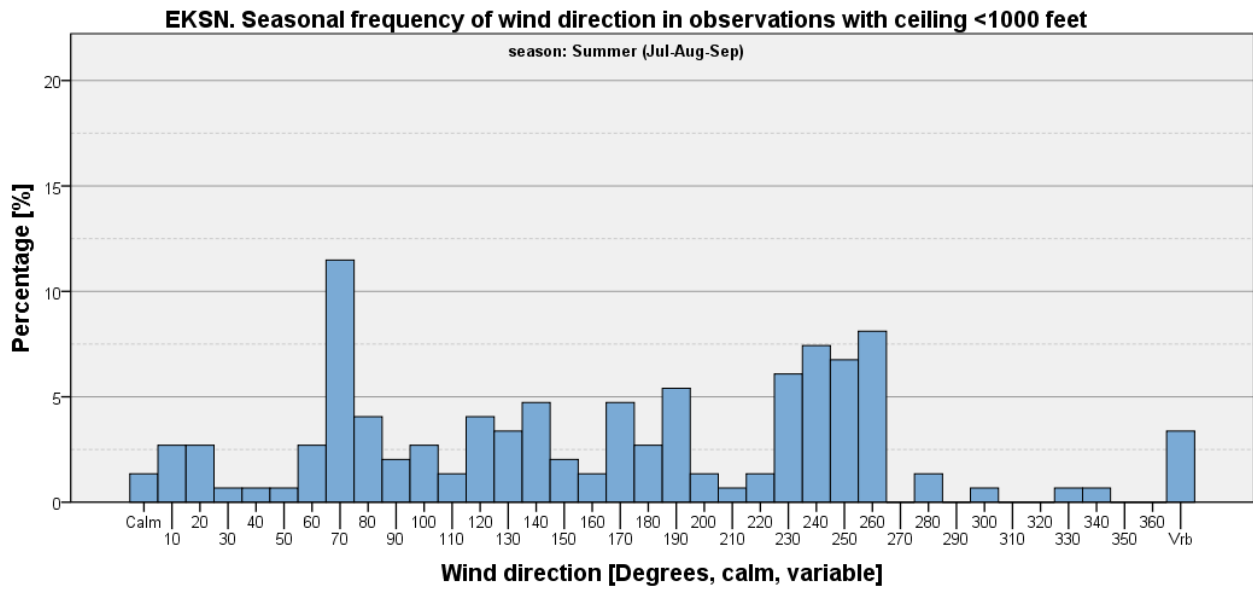


Figure 574

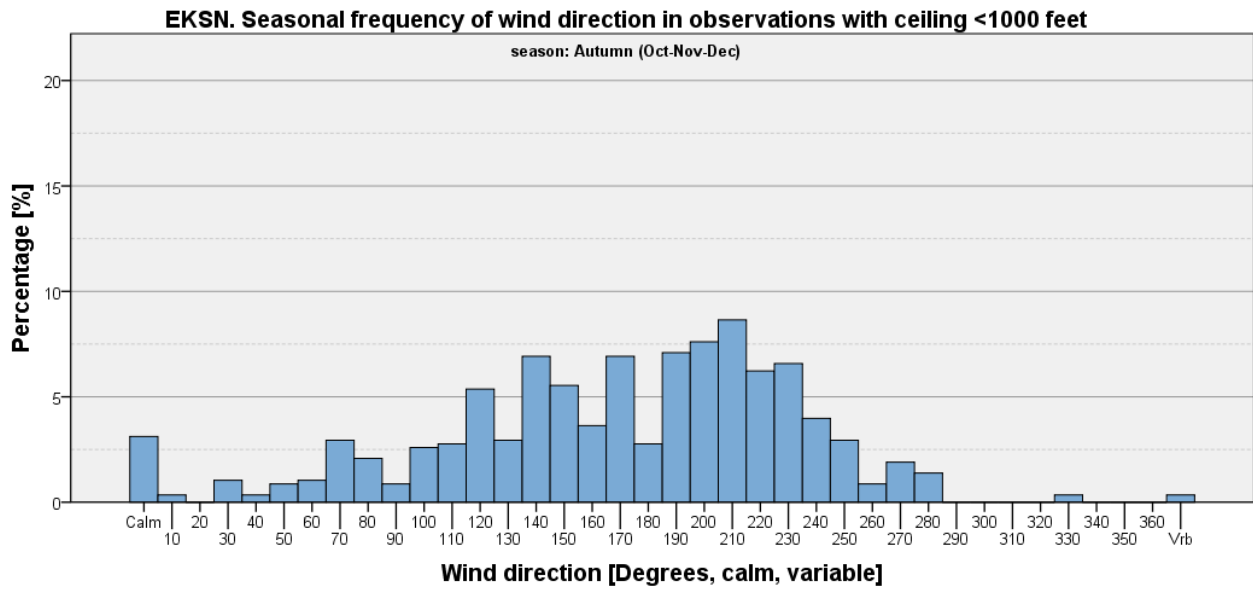


Figure 575

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 163: EKSN - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	4.30	1.65	0.77	2.67	2.32
All other observations	95.70	98.35	99.23	97.33	97.68
Total	100	100	100	100	100

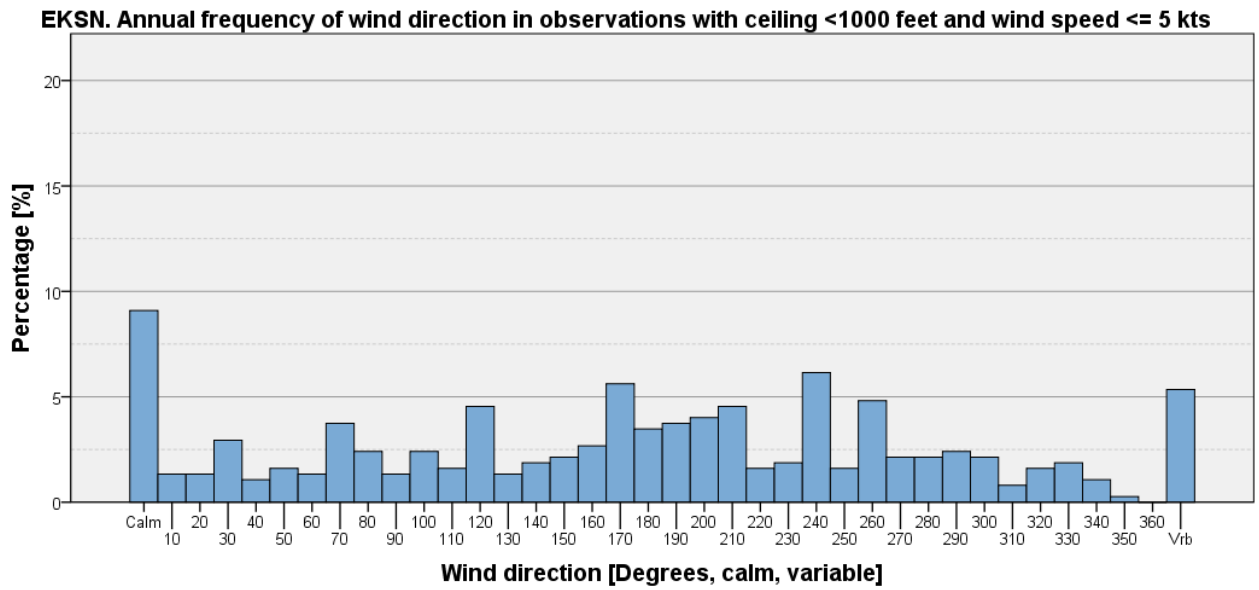


Figure 576

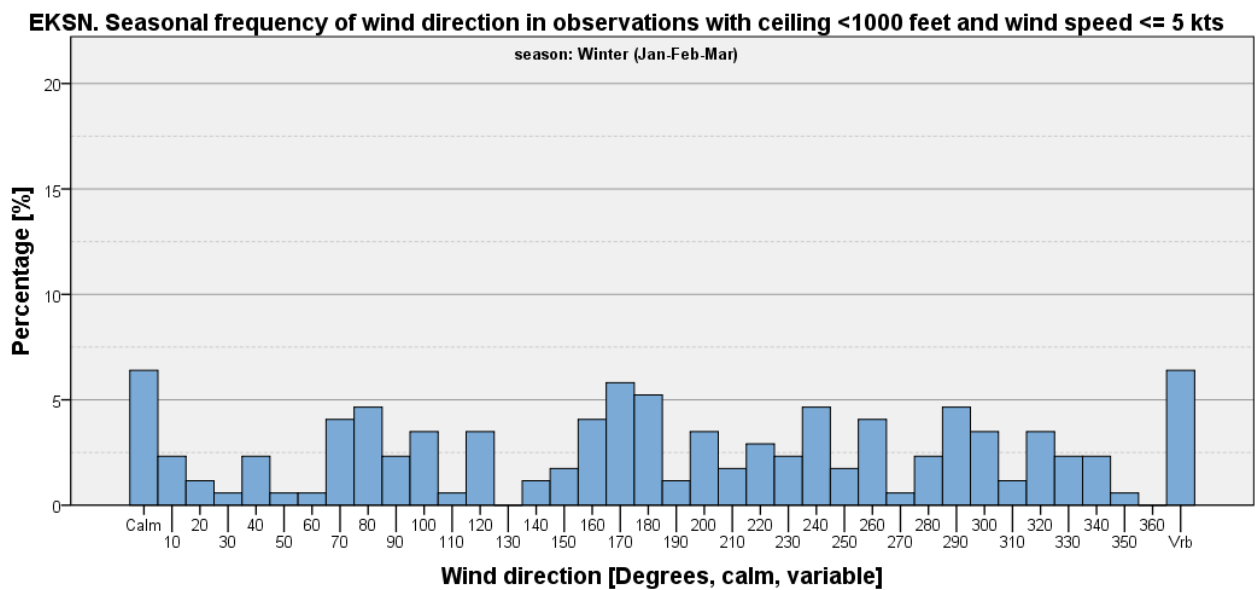


Figure 577

EKSN. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

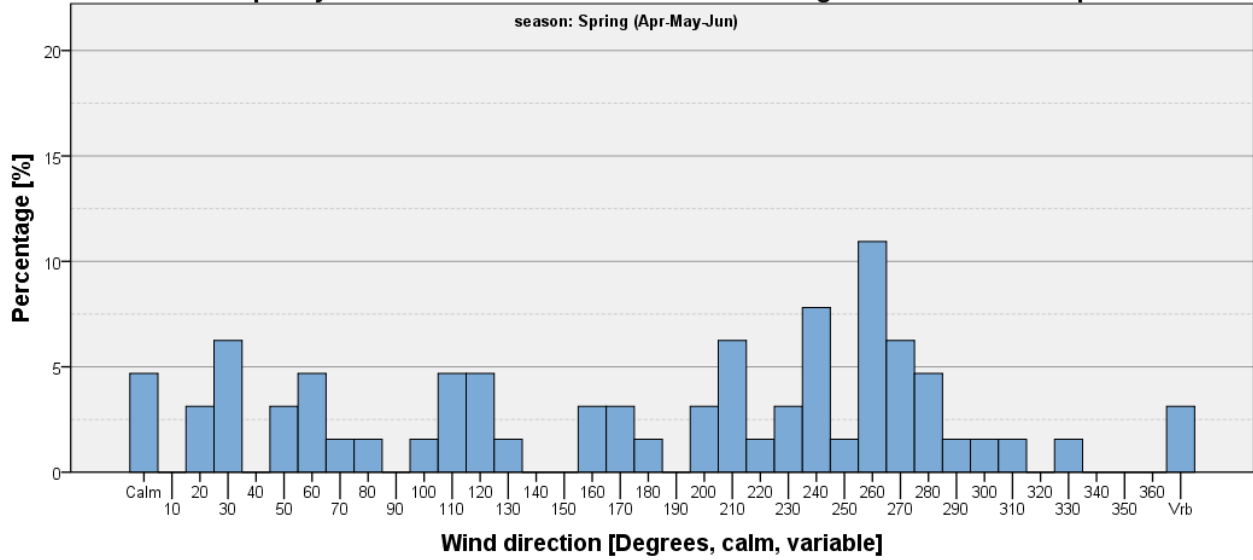


Figure 578

EKSN. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

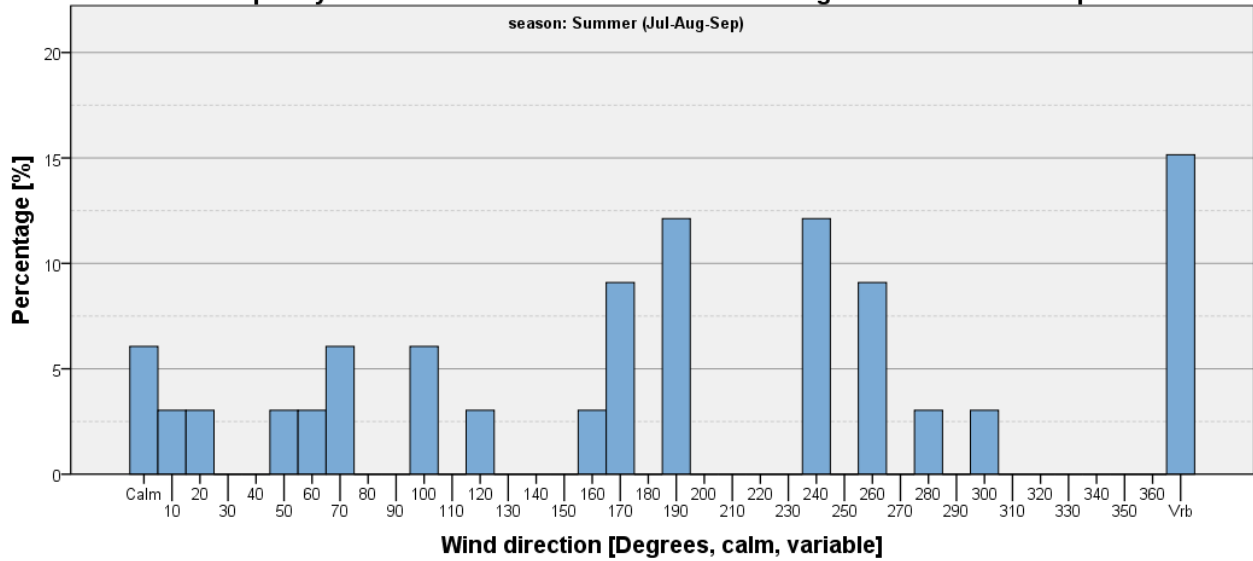


Figure 579

EKSN. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

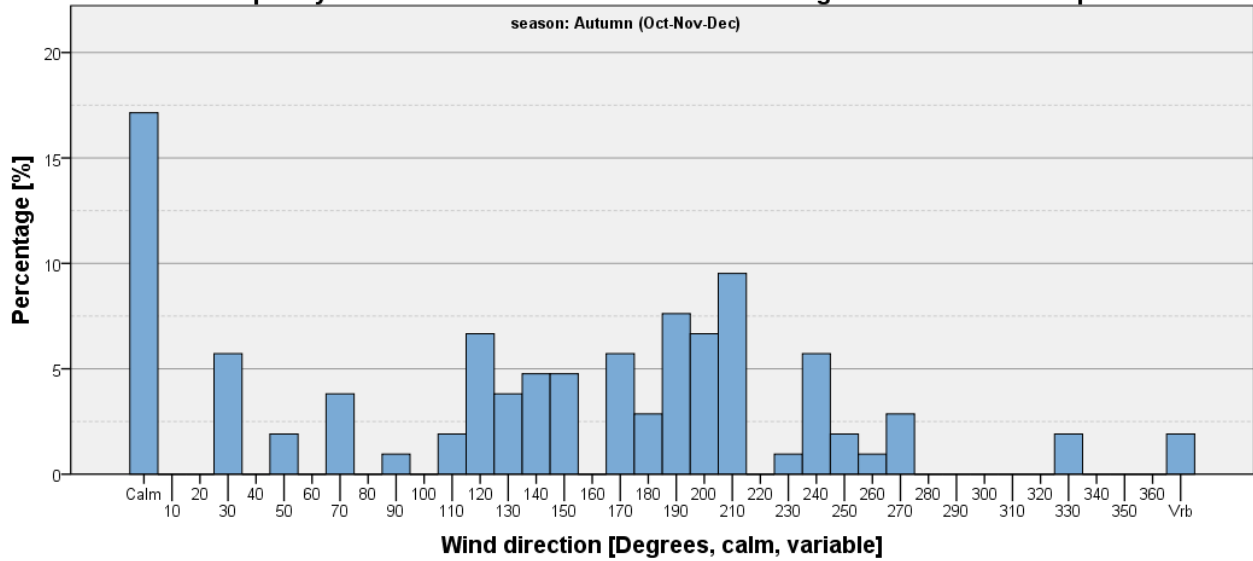


Figure 580

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 164: EKSN - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	13.06	6.33	2.67	12.01	8.41
All other observations	86.94	93.67	97.33	87.99	91.59
Total	100	100	100	100	100

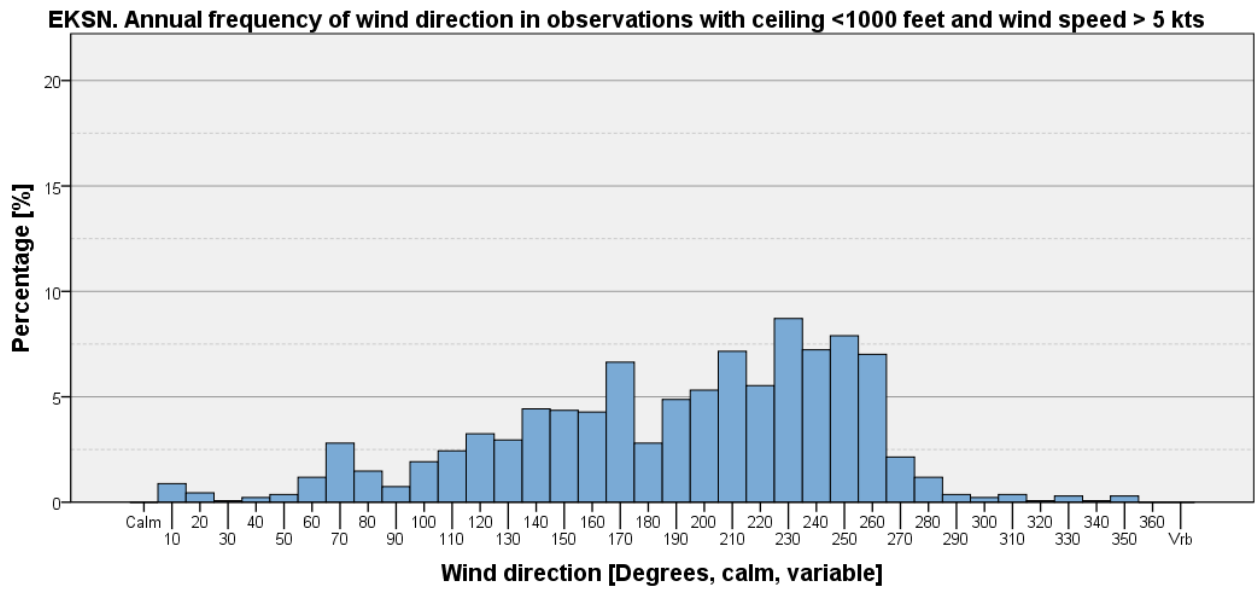


Figure 581

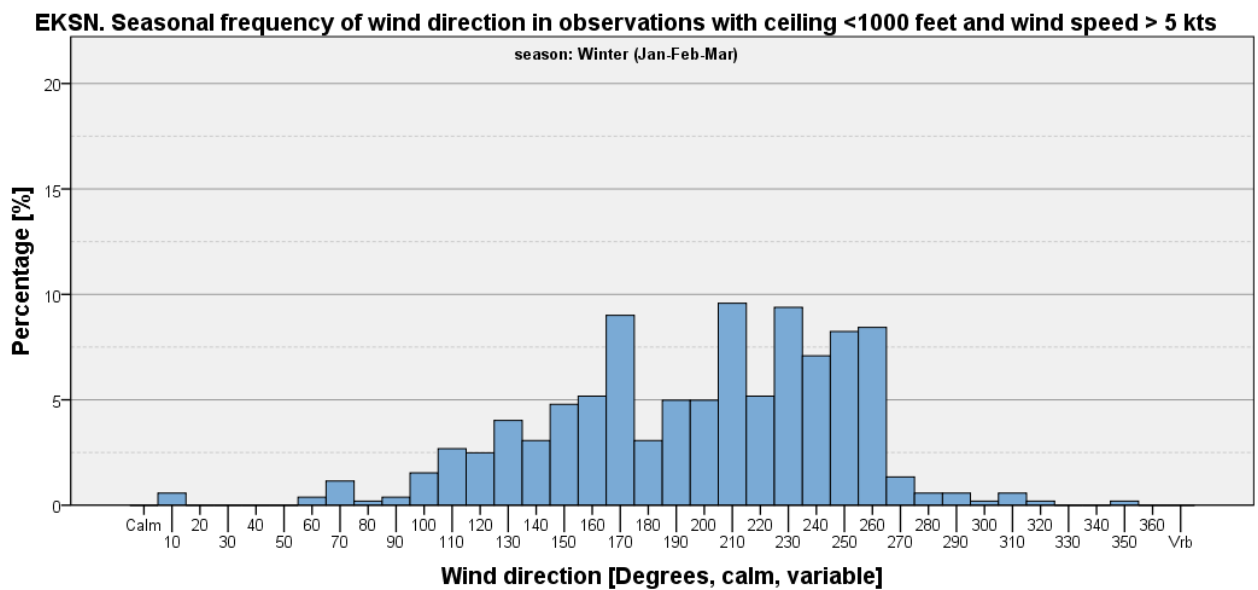


Figure 582

EKSN. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

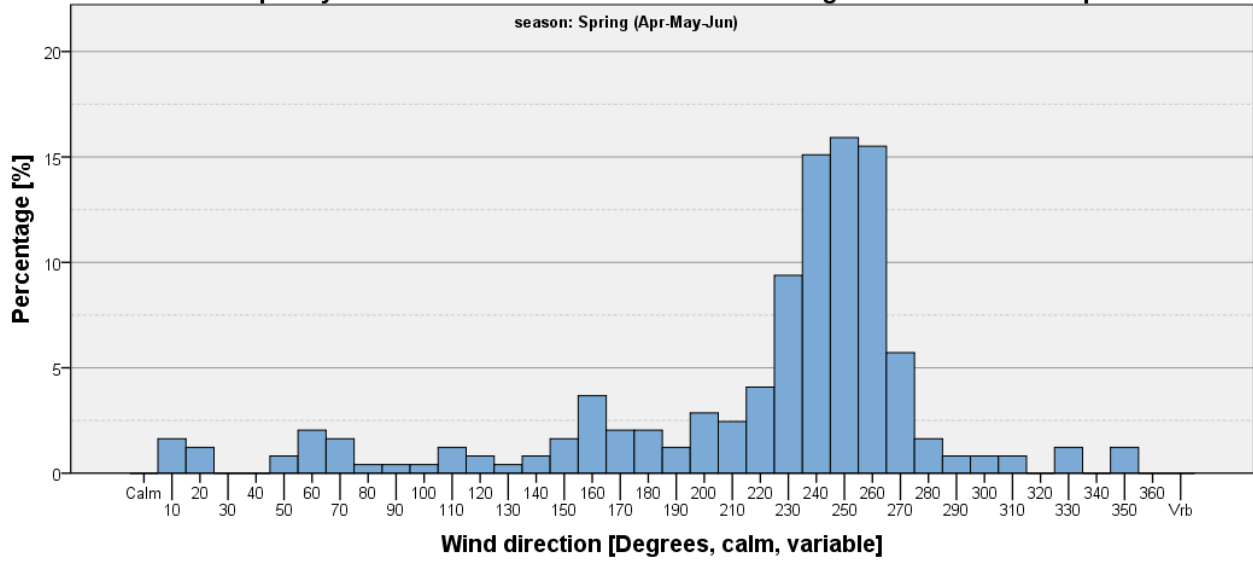


Figure 583

EKSN. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

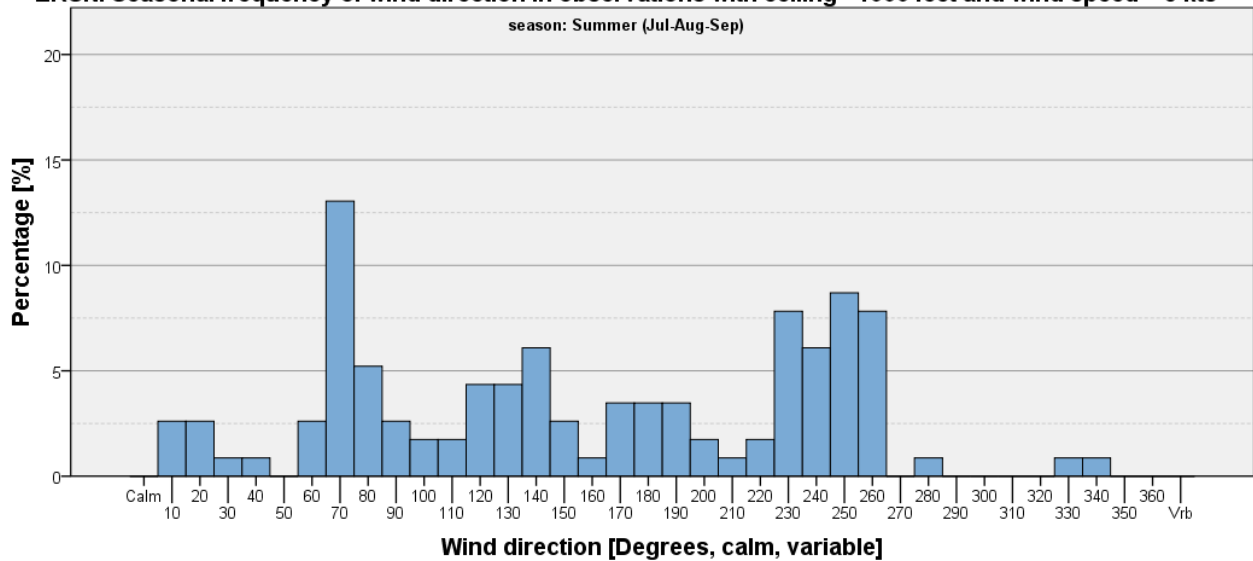


Figure 584

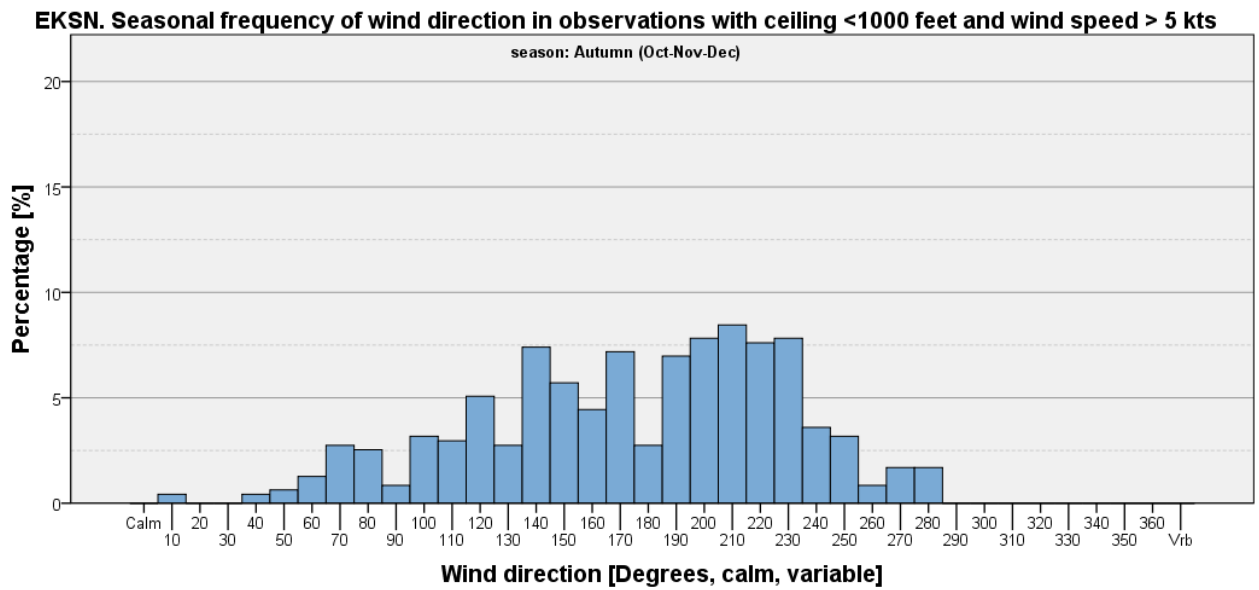


Figure 585

Ceiling < 500 feet

Table 165: EKSN - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	7.06	2.09	0.67	6.17	3.94
All other observations	92.94	97.91	99.33	93.83	96.06
Total	100	100	100	100	100

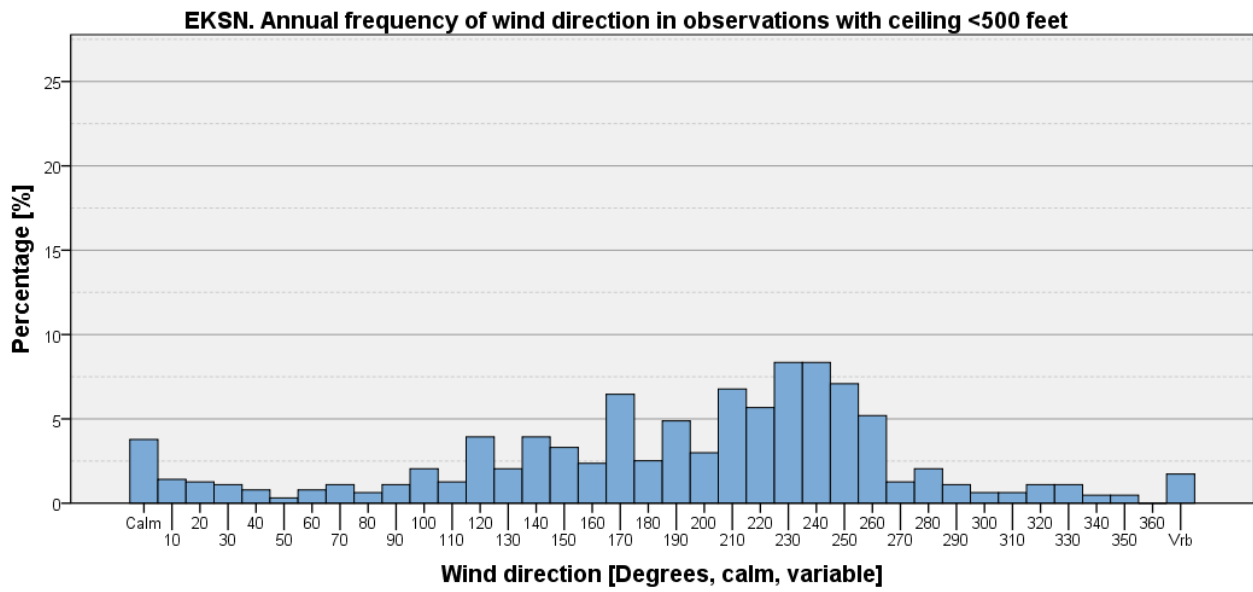


Figure 586

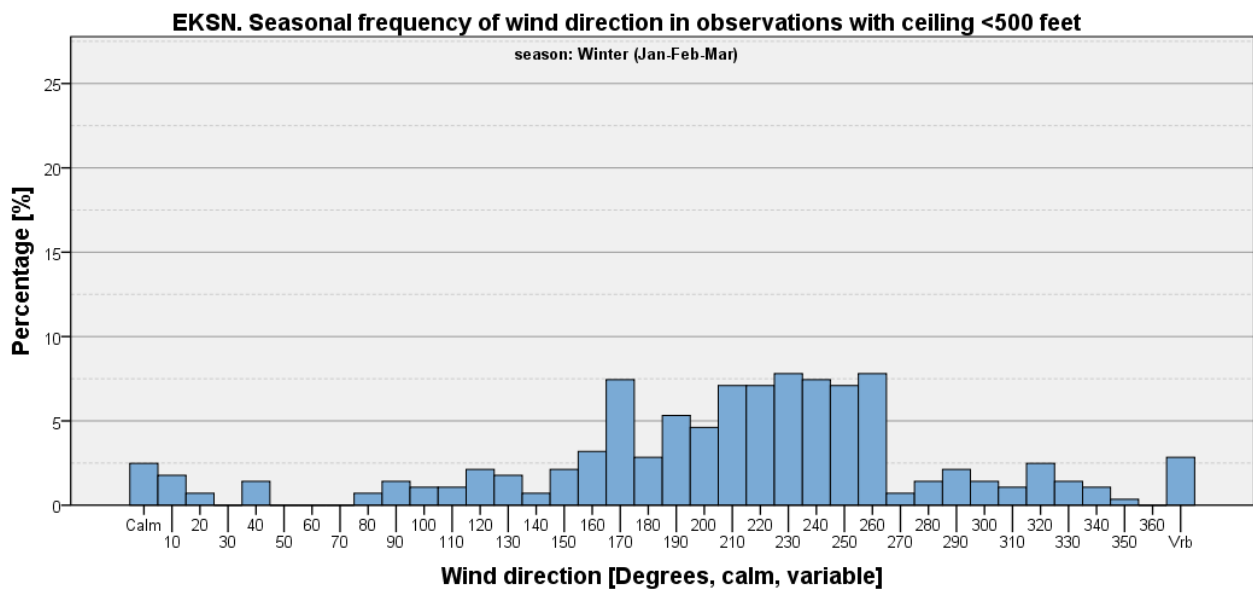


Figure 587

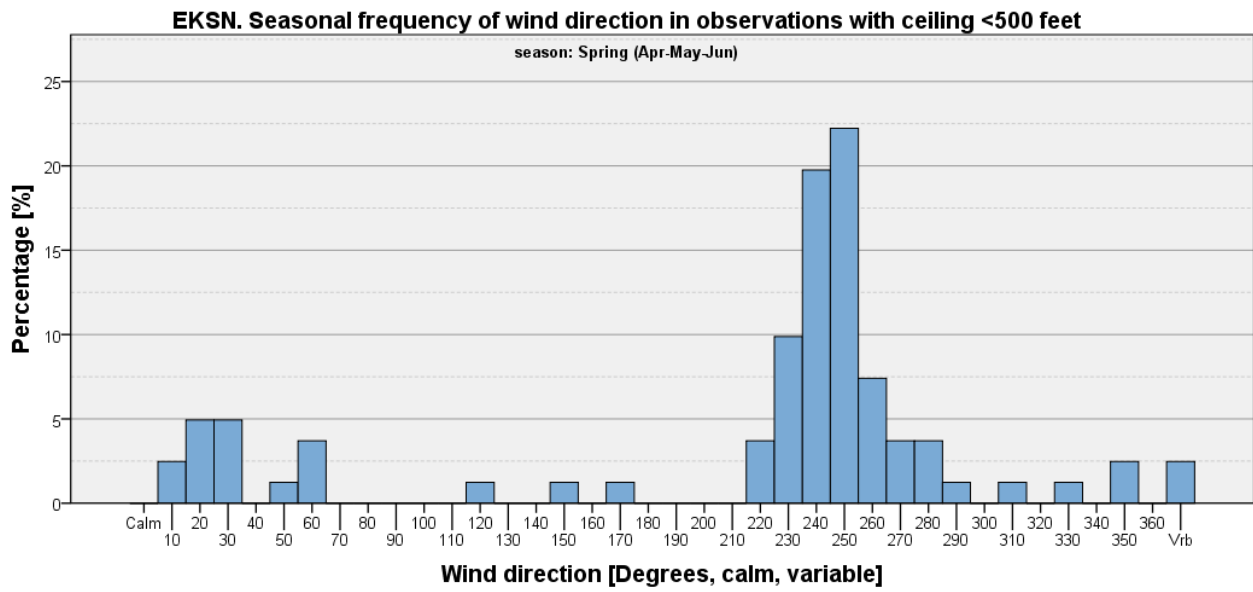


Figure 588

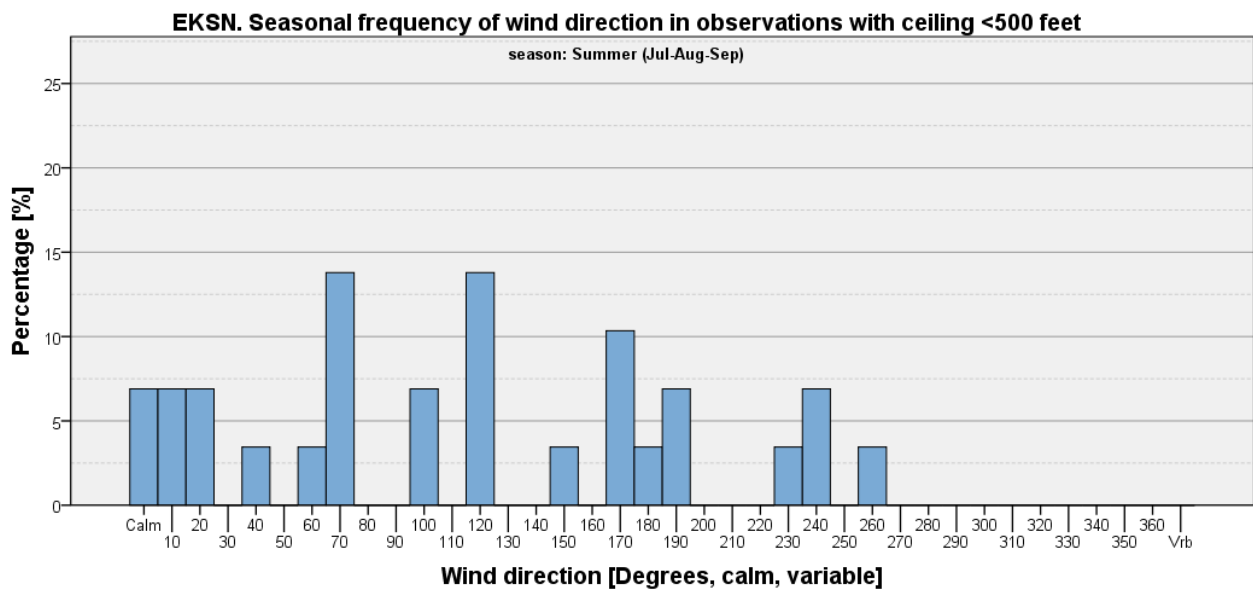


Figure 589

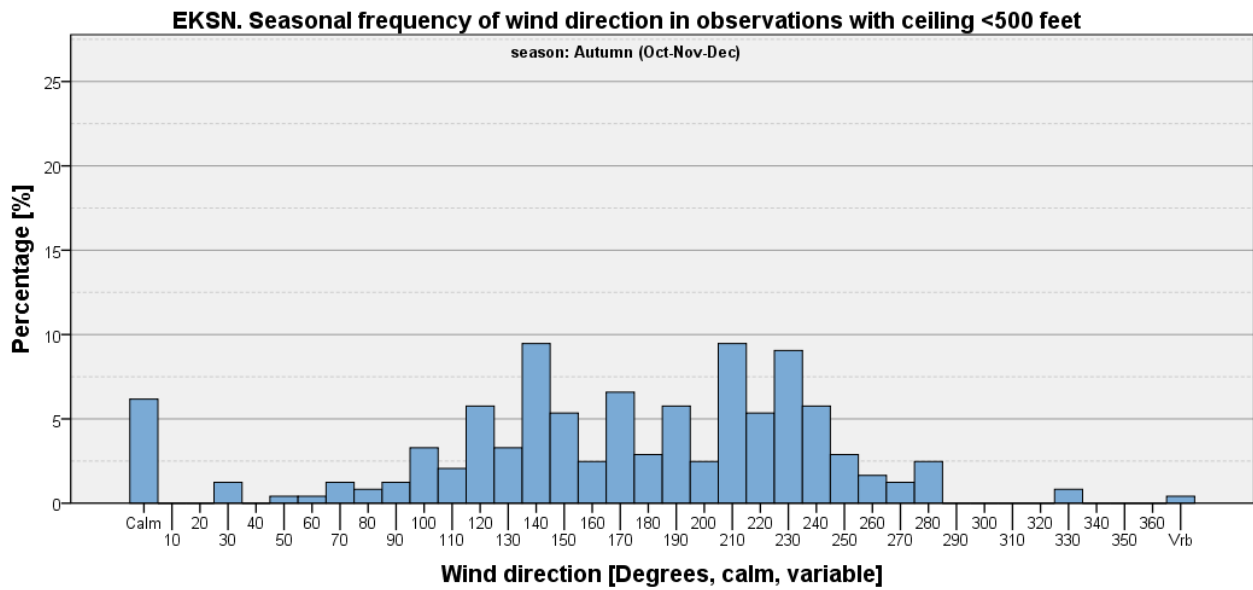


Figure 590

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 166: EKSN - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	2.95	0.62	0.30	1.80	1.40
All other Observations	97.05	99.38	99.70	98.20	98.60
Total	100	100	100	100	100

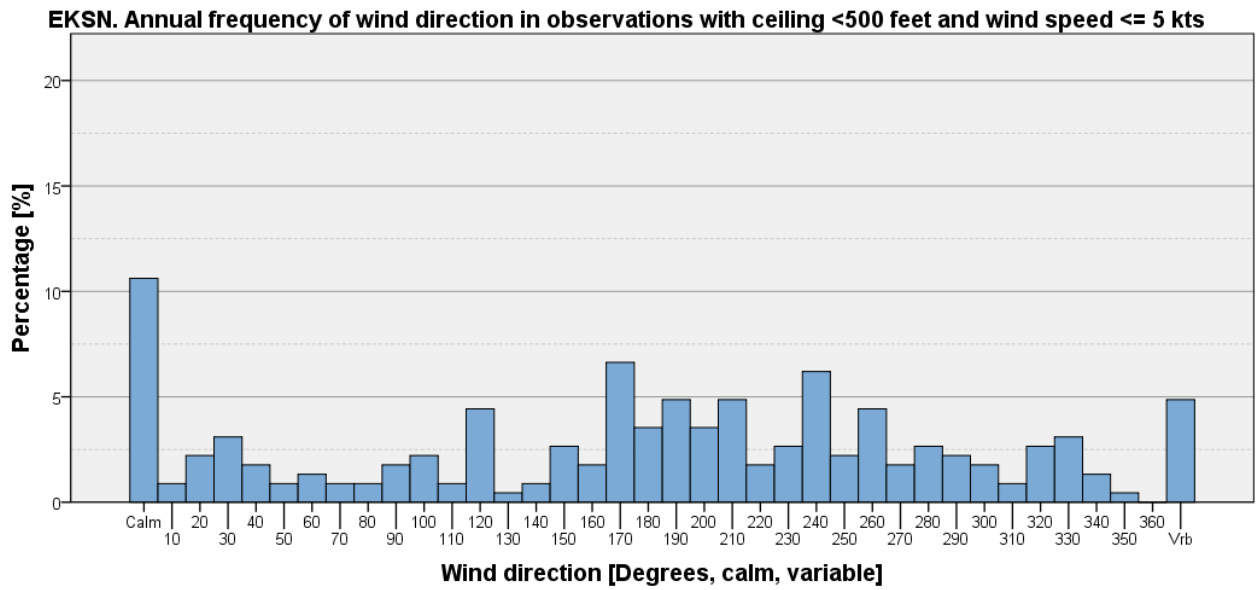


Figure 591

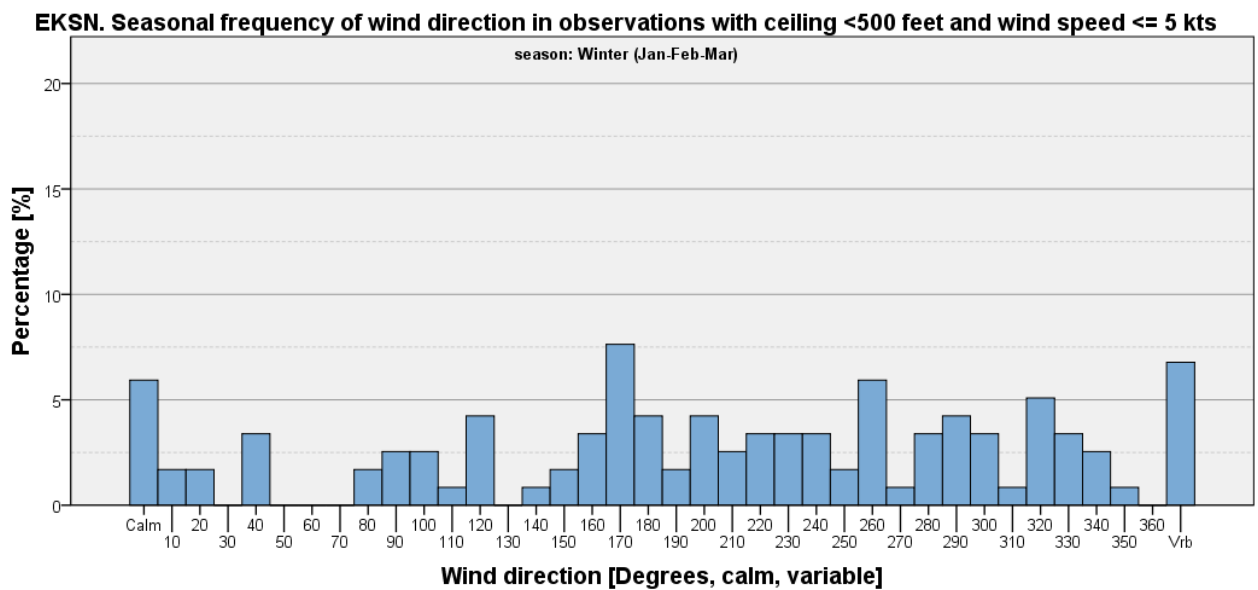


Figure 592

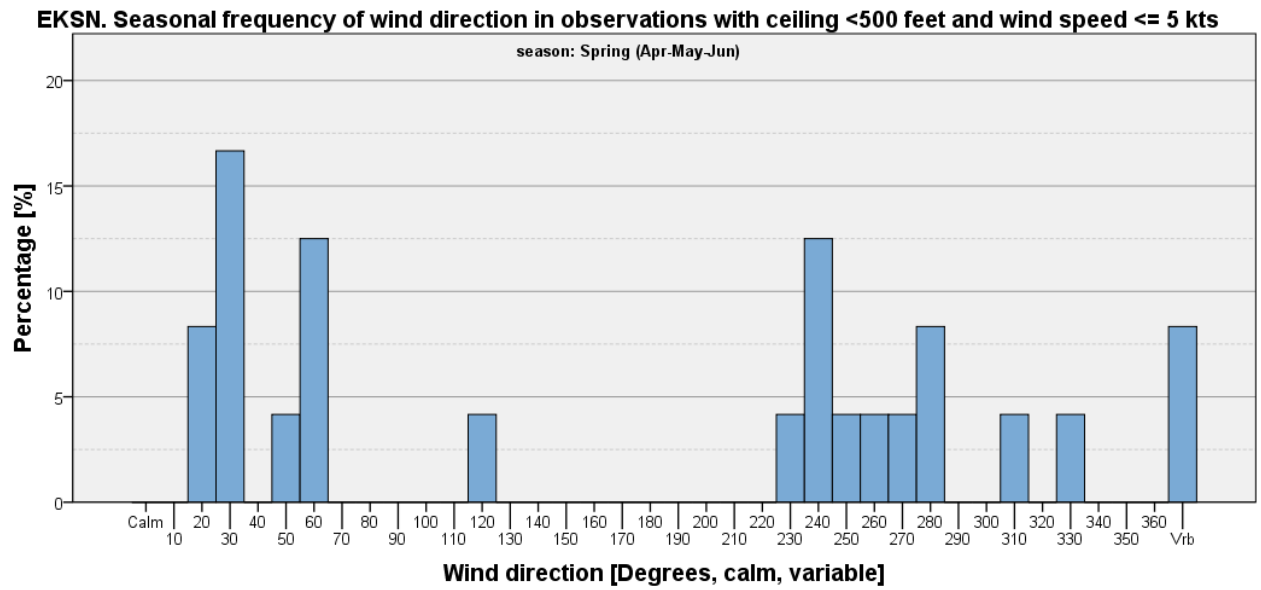


Figure 593

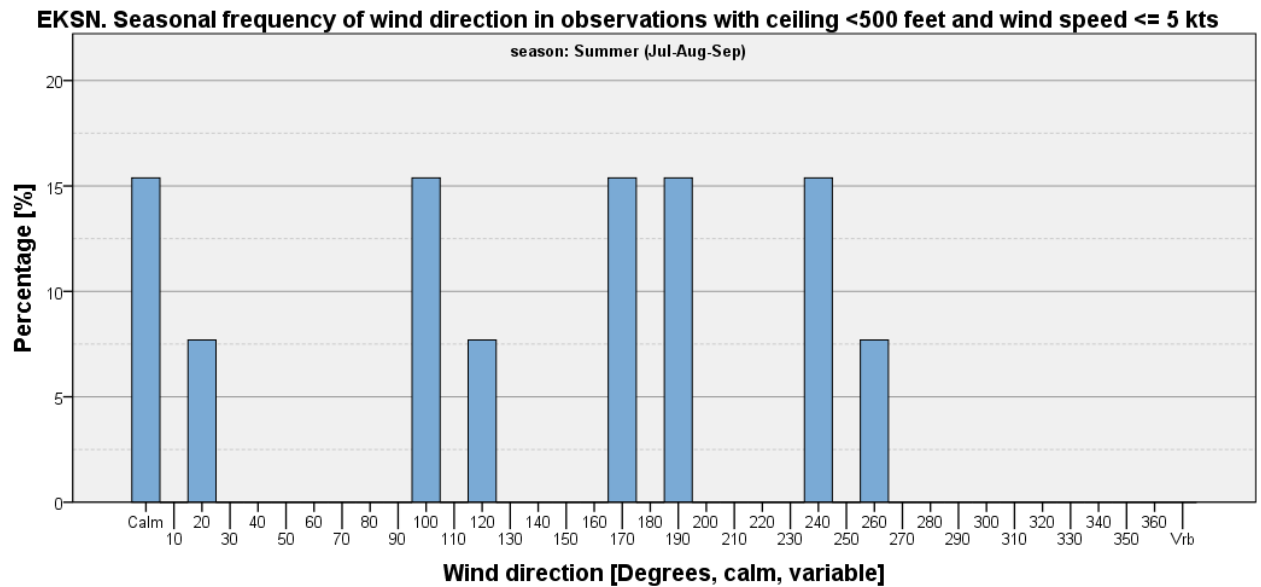


Figure 594

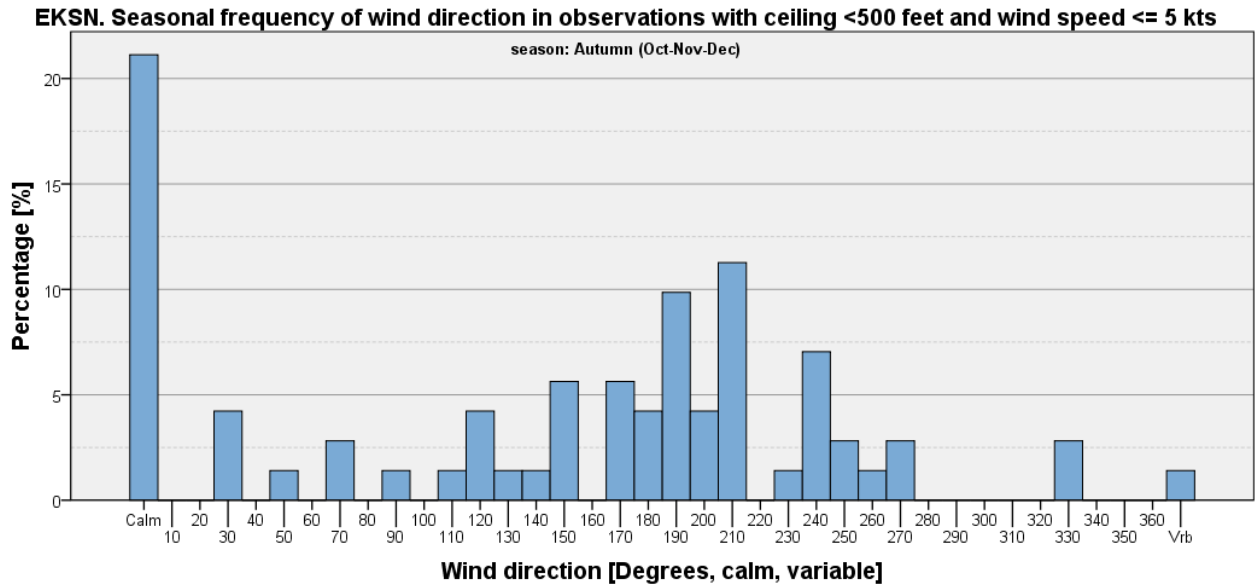


Figure 595

Ceiling < 500 feet and Wind Speed > 5 kts

Table 167: EKSN - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	4.10	1.47	0.37	4.37	2.54
All other observations	95.90	98.53	99.63	95.63	97.46
Total	100	100	100	100	100

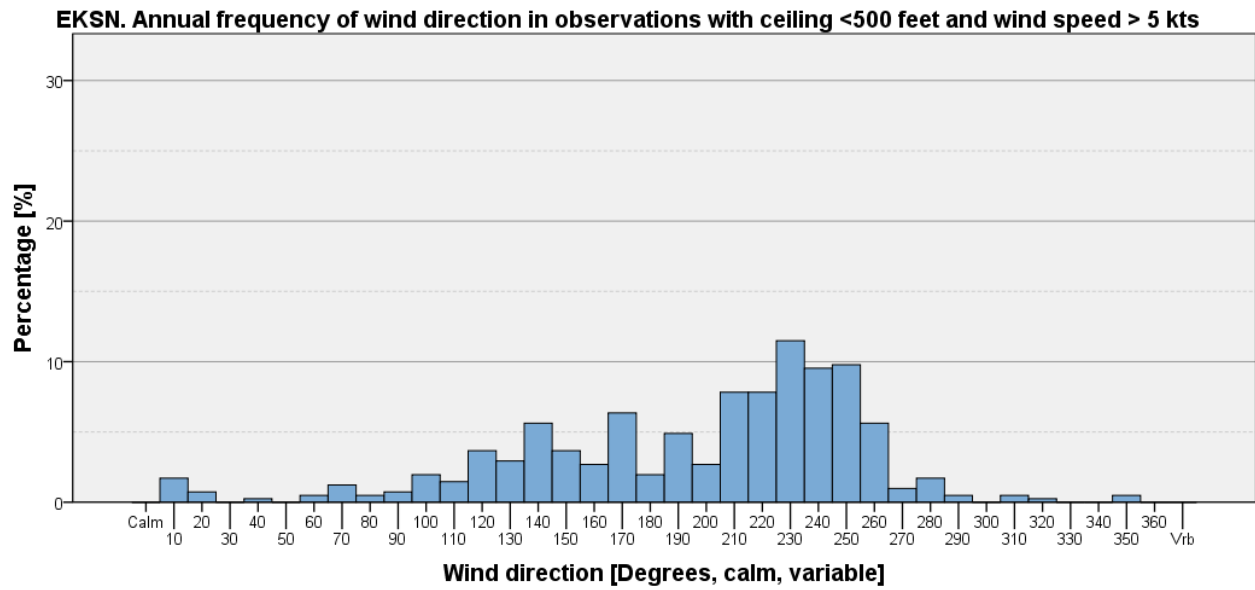


Figure 596

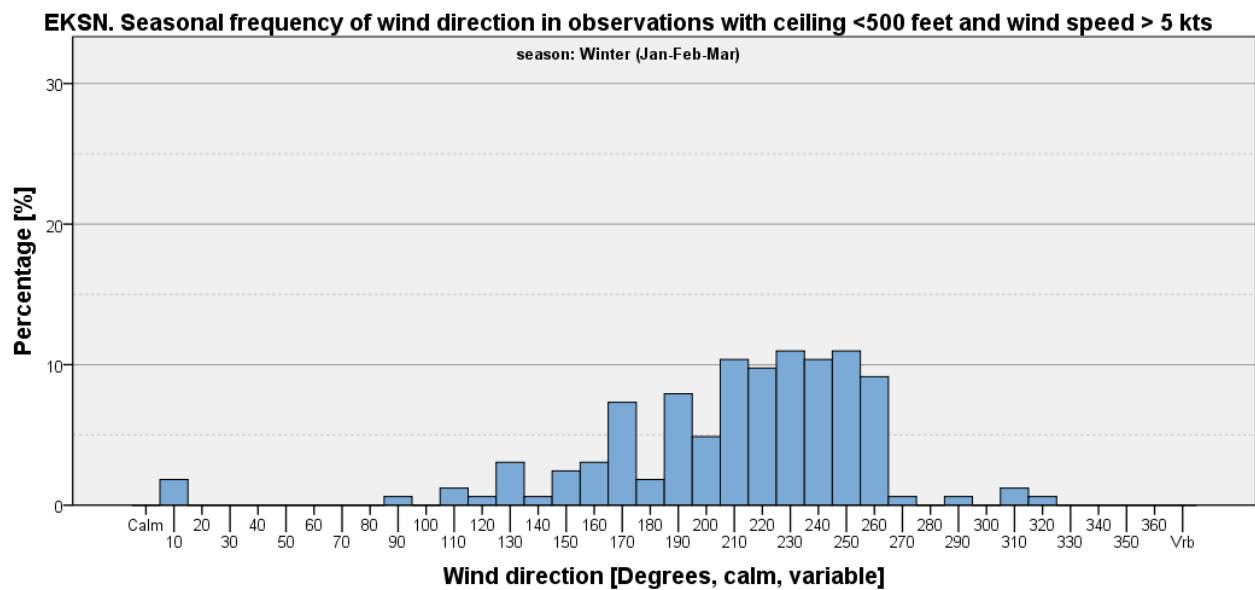


Figure 597

EKSN. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

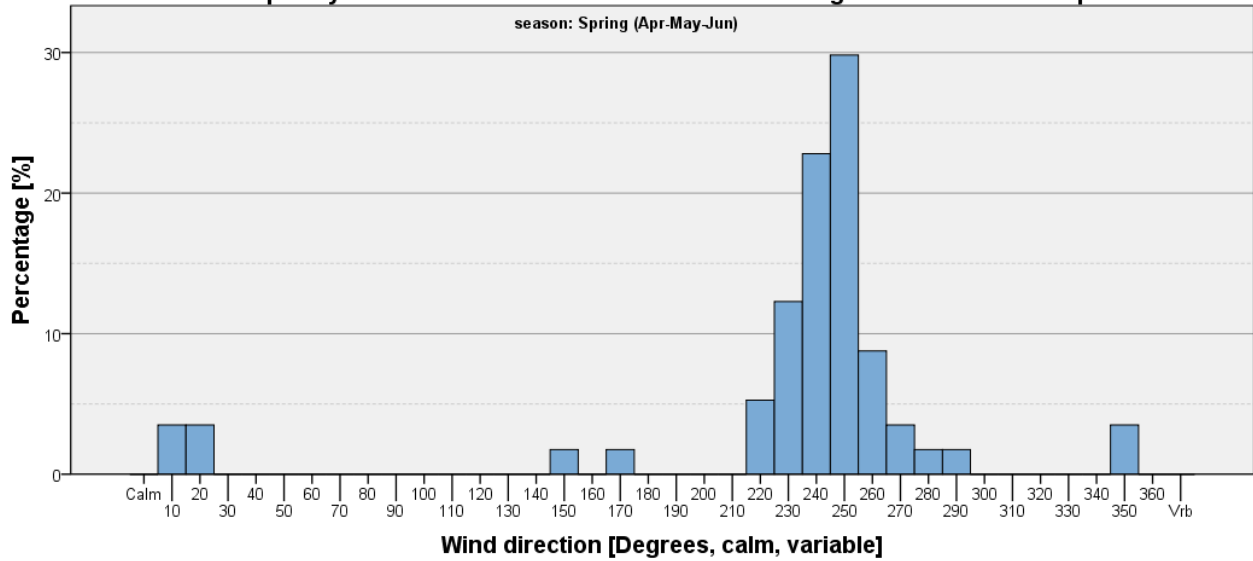


Figure 598

EKSN. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

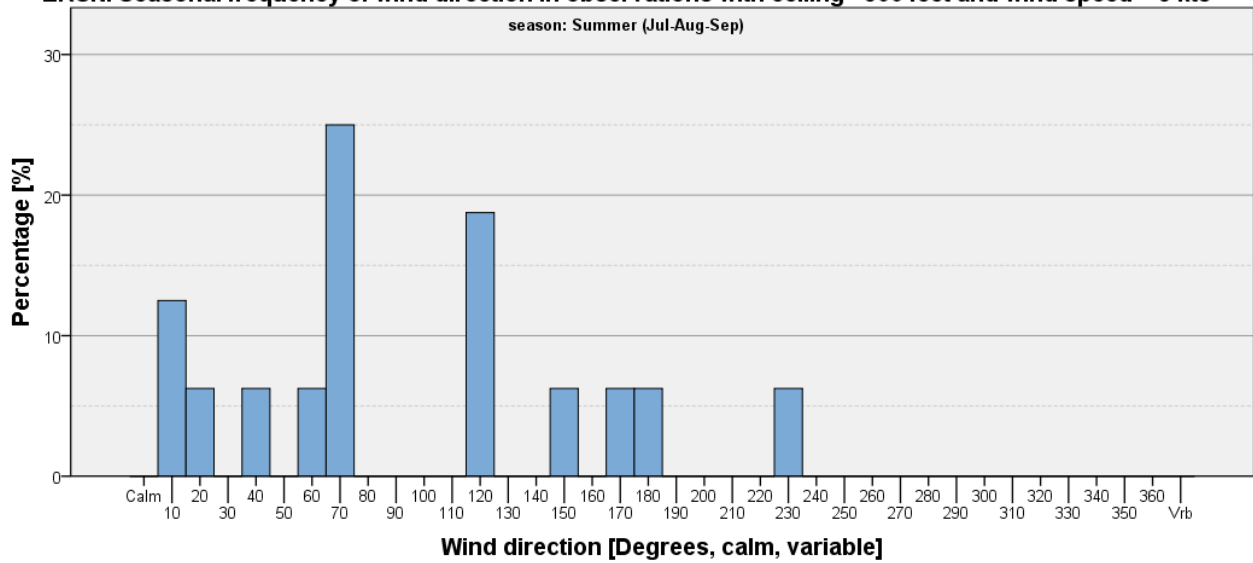


Figure 599

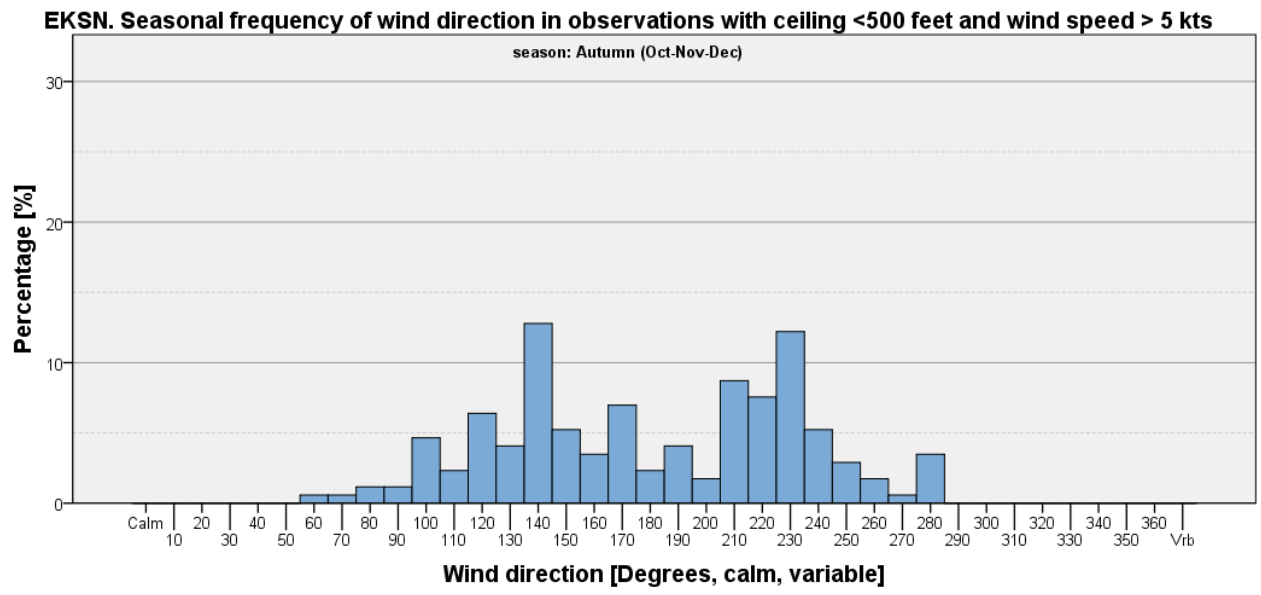
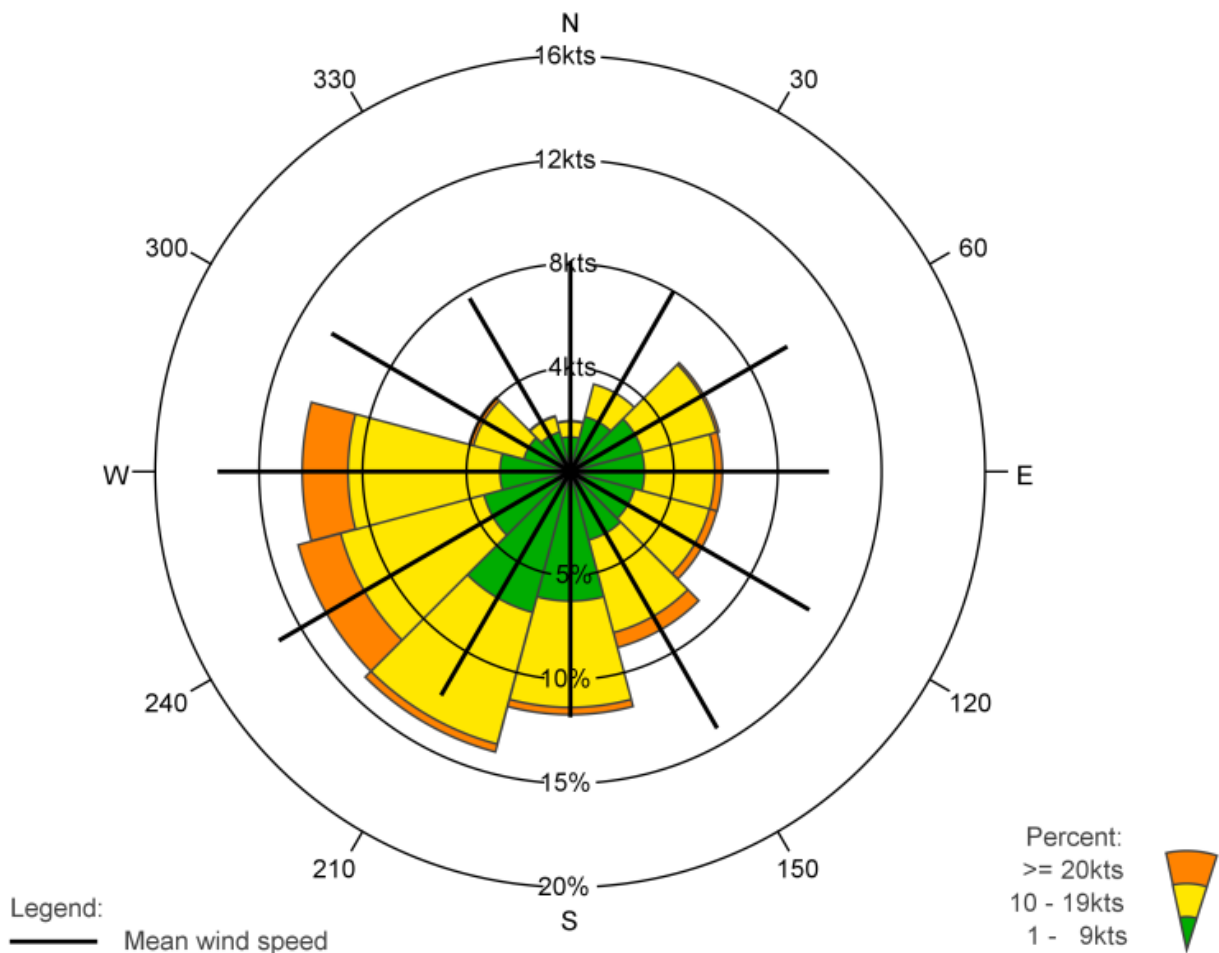


Figure 600

Wind Roses

EKSN: SINDAL LUFTHAVN, AUTUMN & WINTER

17-05-2011 - 16-05-2019 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	2.4	4.4	7.4	7.3	7.3	8.8	11.7	14.0	13.6	12.9	5.1	2.8	97.6
% 1 - 9kts	1.7	2.7	3.6	3.6	3.2	3.4	6.2	7.0	4.3	3.4	2.3	2.0	43.4
% 10 - 19kts	0.8	1.6	3.7	3.4	3.7	4.6	5.1	6.6	7.1	7.3	2.5	0.8	47.2
% >= 20kts	0.0	0.0	0.1	0.4	0.4	0.8	0.4	0.4	2.1	2.2	0.2	0.0	7.0
Mean wind speed	8.1	8.0	9.7	9.9	10.6	11.4	9.5	10.0	12.9	13.6	10.6	7.8	10.8
Max wind speed	21.0	18.0	24.0	24.0	24.0	28.0	26.0	28.0	42.0	39.0	26.0	22.0	42.0

Number of observations = 7934

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 188=2.4%

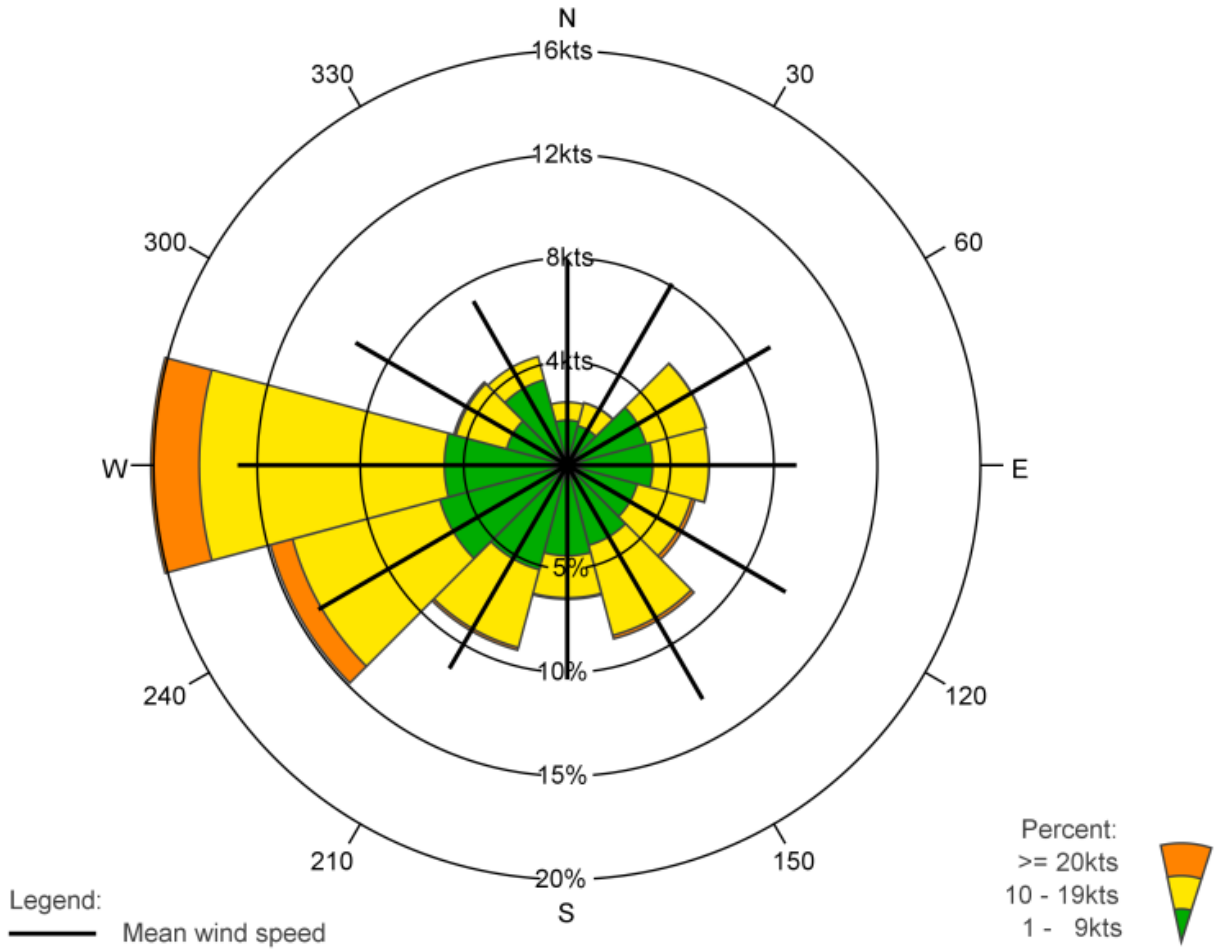
Observations with calm/varying wind direction are not used in the statistics

Source: DMI

Figure 601

EKSN: SINDAL LUFTHAVN, SPRING & SUMMER

17-05-2011 - 16-05-2019 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.1	3.1	7.0	6.9	6.4	8.7	6.5	9.2	14.9	20.1	5.7	5.4	96.9
% 1 - 9kts	2.2	2.0	3.9	4.1	3.5	4.0	4.4	5.2	6.4	5.9	3.0	4.3	48.9
% 10 - 19kts	0.9	1.1	3.0	2.7	2.7	4.5	2.0	3.9	7.4	11.9	2.5	1.2	43.8
% >= 20kts	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1	1.1	2.3	0.1	0.0	4.3
Mean wind speed	8.0	8.1	9.1	8.9	9.8	10.4	8.3	9.1	11.2	12.7	9.5	7.3	10.1
Max wind speed	20.0	21.0	22.0	22.0	24.0	23.0	22.0	30.0	28.0	29.0	23.0	19.0	30.0

Number of observations = 8182

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 250=3.1%

Observations with calm/varying wind direction are not used in the statistics

Source: DMI

Figure 602

Availability

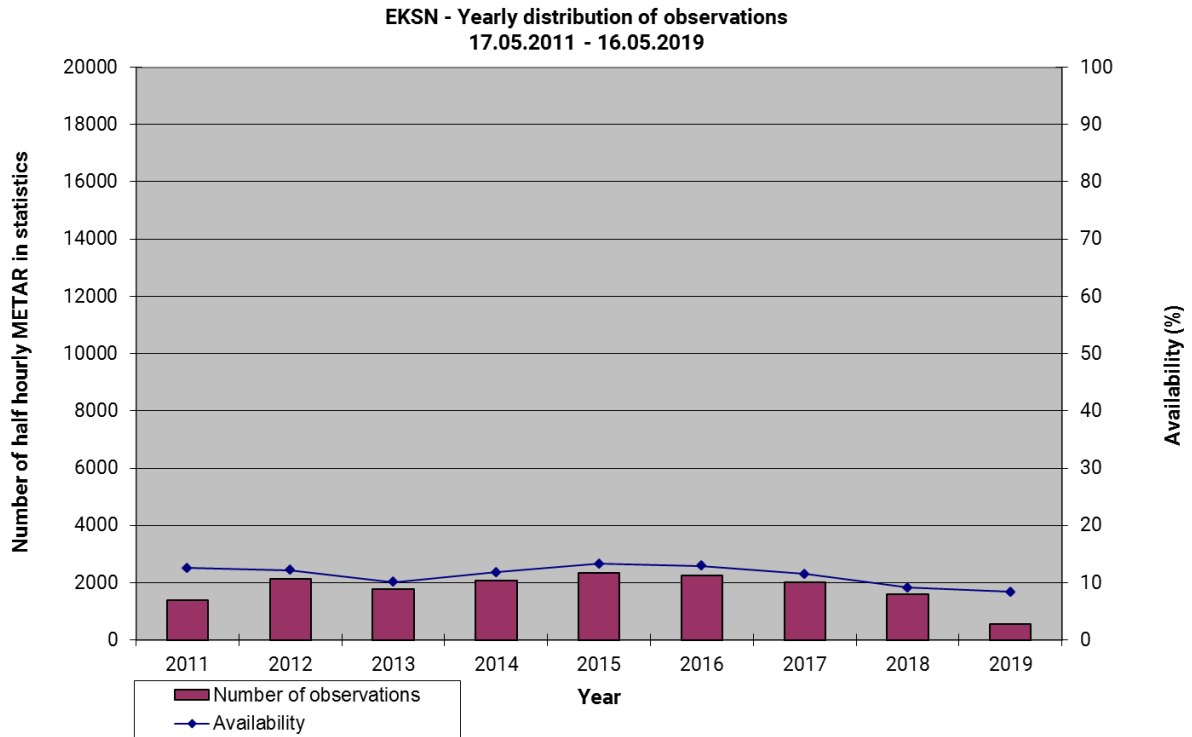


Figure 603

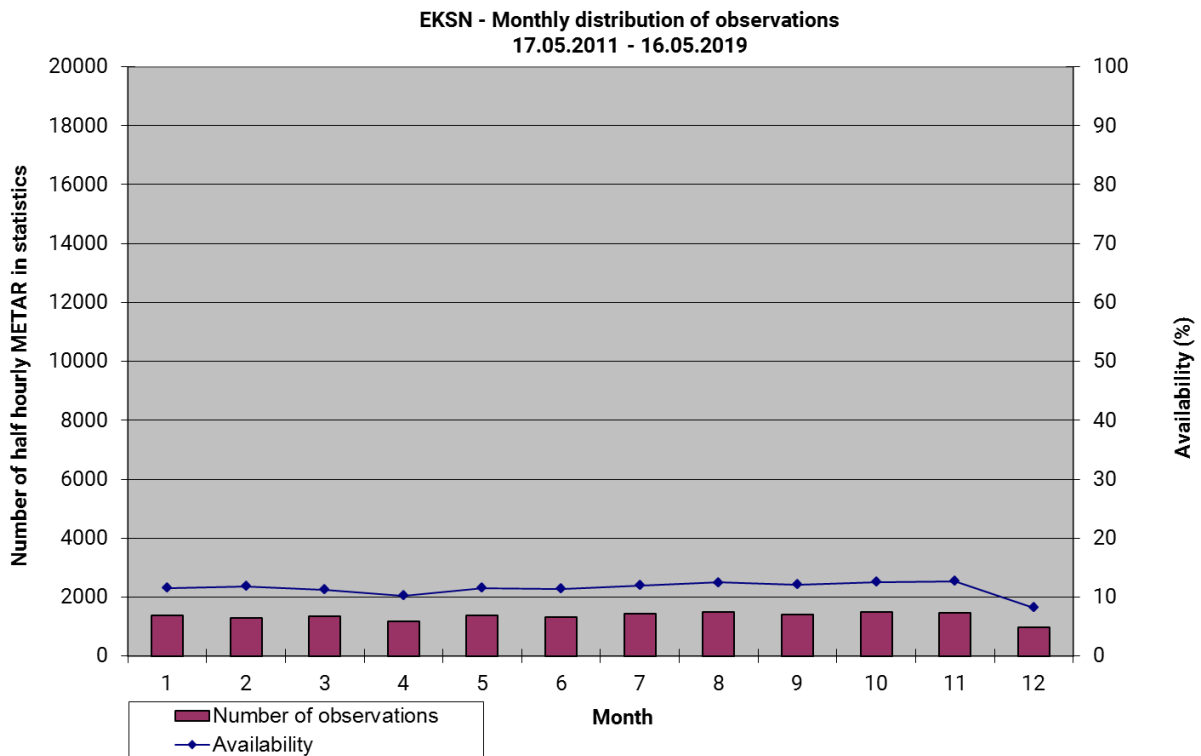


Figure 604

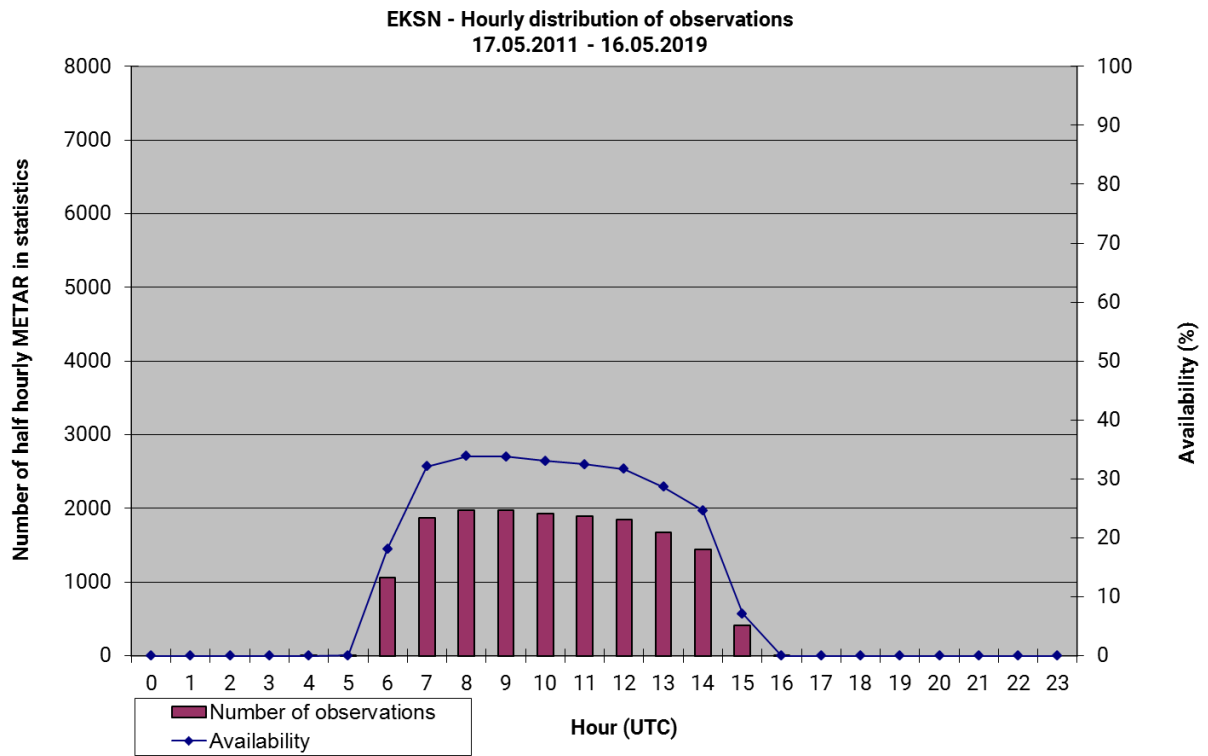


Figure 605

Table 168: EKS. Average number of half hourly observations in statistics, 17.05.2011 – 16.05.2019

Hour	Year								
	2011	2012	2013	2014	2015	2016	2017	2018	2019
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.2
7	0.6	0.7	0.6	0.6	0.7	0.7	0.6	0.6	0.5
8	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.6
9	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.6
10	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.6	0.6
11	0.7	0.7	0.5	0.7	0.7	0.7	0.7	0.6	0.6
12	0.7	0.7	0.5	0.6	0.7	0.7	0.7	0.6	0.6
13	0.7	0.6	0.5	0.6	0.7	0.7	0.7	0.2	0.3
14	0.7	0.6	0.5	0.6	0.7	0.7	0.4	0.0	0.1
15	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

EKSP Vojens Lufthavn / Flyvestation Skrydstrup

Airport location: 55,225°N 9,263°E Elevation: 43 m above MSL.

EKSP observations in statistics: 172,288 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 98.3%. For more information, please go to the 'Availability' section.

All EKSP METAR are manual.

Cross Tables Visibility – Ceiling

Table 169: EKSP Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 172,288	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.010	0.71	0.75	0.76	0.76	0.76	0.14	0.90
<350m	0.013	1.55	1.83	1.84	1.85	1.85	0.61	2.46
<600m	0.013	1.84	2.32	2.35	2.36	2.37	0.93	3.30
<800 m	0.013	1.94	2.60	2.63	2.65	2.66	1.07	3.73
<1.5 km	0.013	2.10	3.54	3.75	3.80	3.83	1.50	5.33
<3.0 km	0.013	2.15	5.72	7.23	7.55	7.72	2.51	10.23
< 5.0 km	0.015	2.16	6.92	11.03	12.02	12.46	4.39	16.84
< 8.0 km	0.016	2.16	7.25	14.03	16.52	17.50	8.31	25.80
>= 8.0 km or CAVOK	0.007	0.0081	0.13	2.41	6.11	8.90	65.30	74.20
Total	0.023	2.17	7.38	16.44	22.62	26.39	73.61	100

Table 170: EKSP - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,795	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.021	1.25	1.31	1.31	1.31	1.31	0.084	1.40
<350m	0.030	3.06	3.63	3.64	3.66	3.67	0.41	4.08
<600m	0.030	3.77	4.78	4.82	4.85	4.86	0.67	5.53
<800 m	0.030	3.99	5.37	5.43	5.47	5.49	0.77	6.25
<1.5 km	0.030	4.34	7.37	7.83	7.97	8.04	1.21	9.24
<3.0 km	0.030	4.47	11.25	13.83	14.44	14.75	2.49	17.24
< 5.0 km	0.030	4.48	13.21	19.62	21.26	22.03	4.78	26.81
< 8.0 km	0.030	4.48	13.73	23.99	28.12	29.68	9.63	39.32
>= 8.0 km or CAVOK	0.014	0.014	0.18	3.44	8.52	12.49	48.19	60.68
Total	0.044	4.50	13.91	27.44	36.64	42.18	57.82	100

Table 171: EKSP - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,804	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.0047	0.40	0.41	0.41	0.41	0.41	0.084	0.50
<350m	0.0047	0.68	0.77	0.77	0.77	0.78	0.33	1.11
<600m	0.0047	0.77	0.93	0.93	0.93	0.94	0.50	1.44
<800 m	0.0047	0.80	1.00	1.00	1.00	1.01	0.57	1.58
<1.5 km	0.0047	0.86	1.33	1.35	1.36	1.37	0.76	2.13
<3.0 km	0.0047	0.88	2.14	2.63	2.72	2.76	1.33	4.09
< 5.0 km	0.0047	0.88	2.74	4.42	4.79	4.91	2.53	7.43
< 8.0 km	0.0047	0.88	3.00	6.26	7.34	7.71	5.25	12.96
>= 8.0 km or CAVOK	0.0047	0.0047	0.12	2.03	5.08	7.22	79.82	87.04
Total	0.0093	0.89	3.12	8.30	12.42	14.93	85.07	100

Table 172: EKSP - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,223	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.23	0.25	0.25	0.25	0.25	0.21	0.46
<350m	0	0.49	0.55	0.56	0.57	0.57	0.91	1.48
<600m	0	0.54	0.64	0.66	0.66	0.66	1.37	2.03
<800 m	0	0.56	0.69	0.71	0.71	0.71	1.55	2.26
<1.5 km	0	0.62	0.84	0.90	0.90	0.91	2.03	2.94
<3.0 km	0	0.63	1.27	1.86	1.97	2.04	2.90	4.94
< 5.0 km	0.0046	0.64	1.71	3.36	3.83	4.10	4.60	8.70
< 8.0 km	0.0046	0.64	1.87	4.59	5.70	6.26	7.81	14.07
>= 8.0 km or CAVOK	0.0023	0.0023	0.083	1.35	3.34	5.09	80.84	85.93
Total	0.0069	0.65	1.96	5.94	9.04	11.36	88.64	100

Table 173: EKSP - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,466	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.016	0.97	1.05	1.06	1.06	1.06	0.18	1.25
<350m	0.016	1.99	2.36	2.39	2.39	2.39	0.76	3.15
<600m	0.016	2.27	2.94	3.00	3.02	3.02	1.17	4.19
<800 m	0.016	2.41	3.33	3.41	3.42	3.43	1.38	4.81
<1.5 km	0.016	2.60	4.63	4.93	4.99	5.02	1.99	7.01
<3.0 km	0.016	2.63	8.22	10.61	11.08	11.32	3.31	14.63
< 5.0 km	0.018	2.64	10.01	16.72	18.18	18.78	5.62	24.40
< 8.0 km	0.023	2.64	10.41	21.27	24.90	26.31	10.51	36.82
>= 8.0 km or CAVOK	0.0069	0.012	0.12	2.80	7.50	10.79	52.39	63.18
Total	0.030	2.65	10.53	24.07	32.39	37.10	62.90	100

Wind Direction Histograms

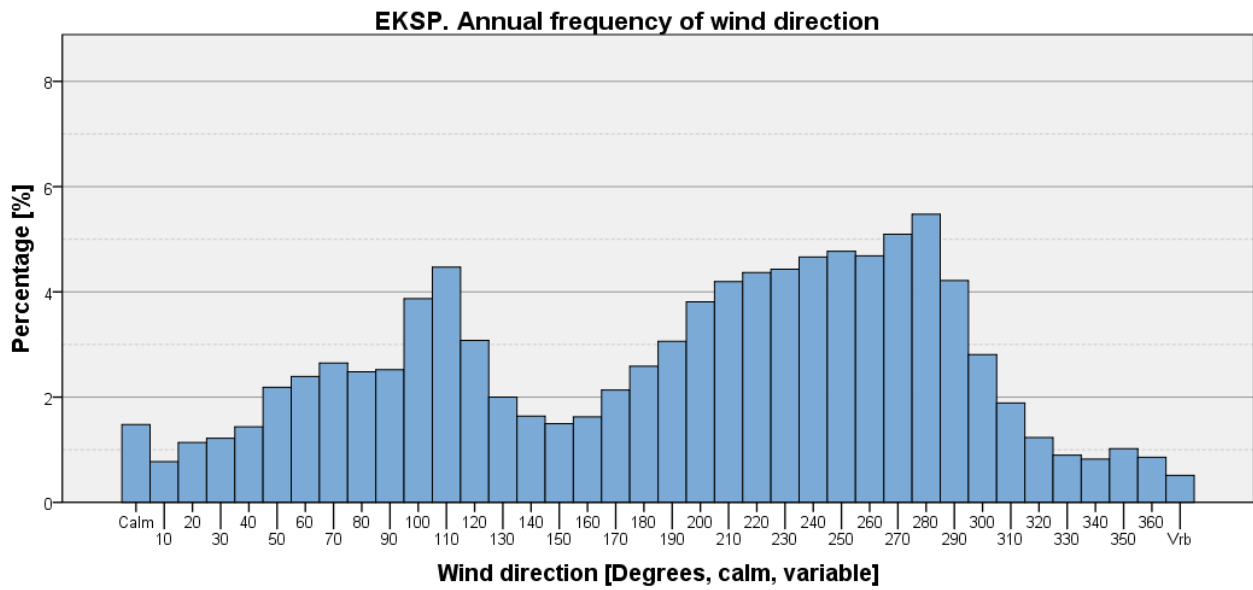


Figure 606

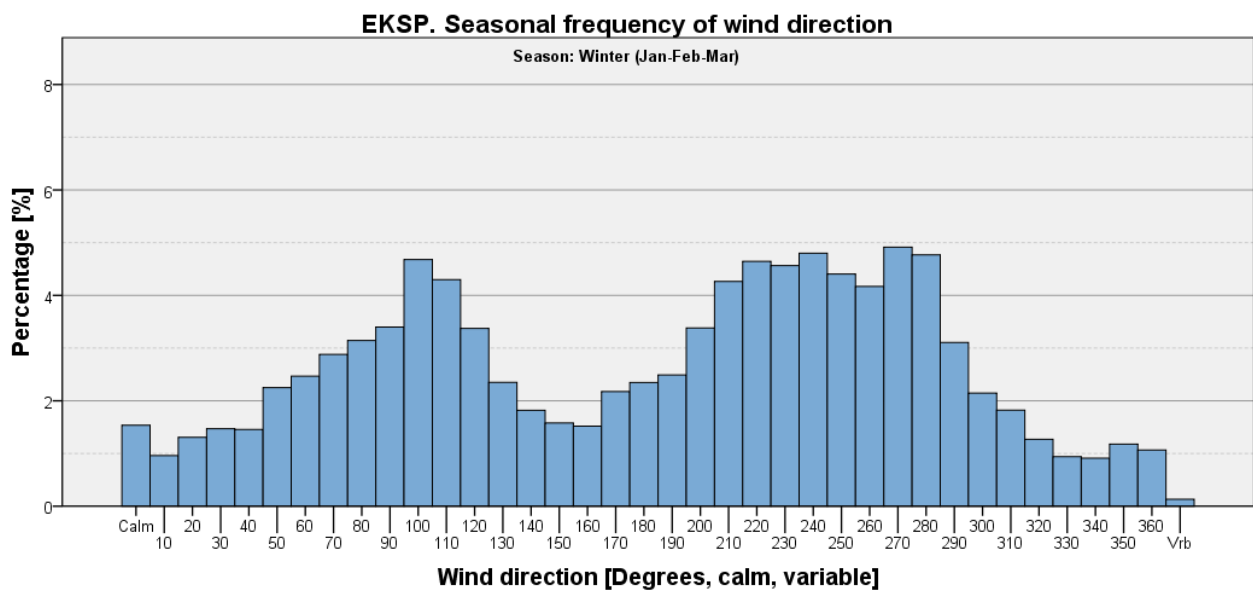


Figure 607

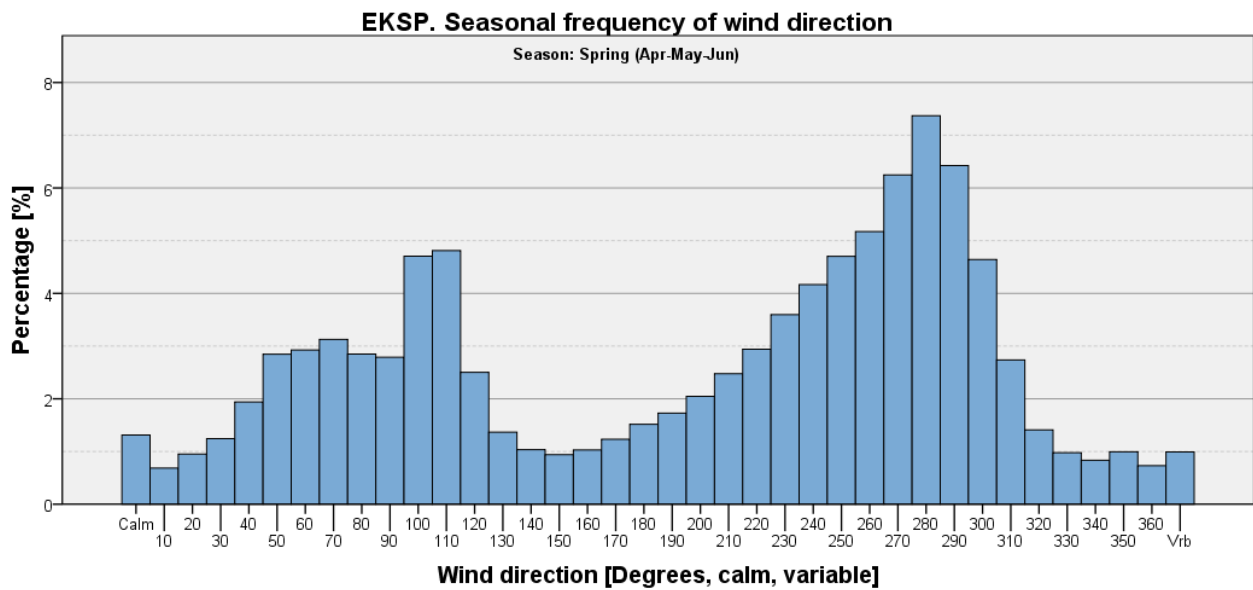


Figure 608

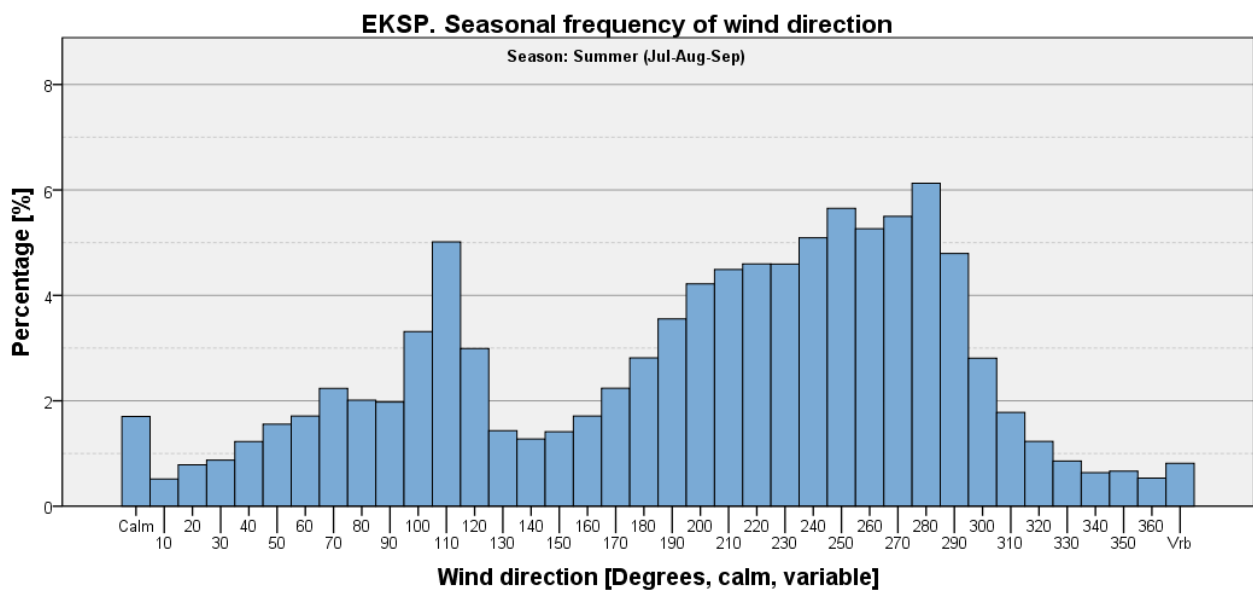


Figure 609

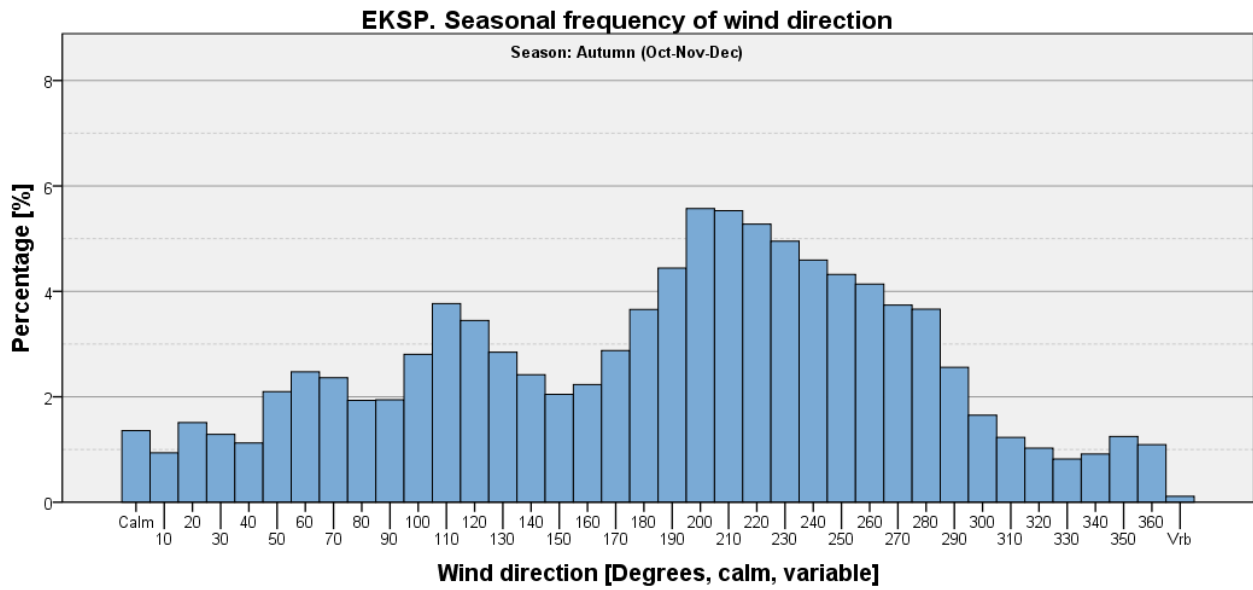


Figure 610

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 174: EKSP - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	6.25	1.58	2.26	4.81	3.73
All other observations	93.75	98.42	97.74	95.19	96.27
Total	100	100	100	100	100

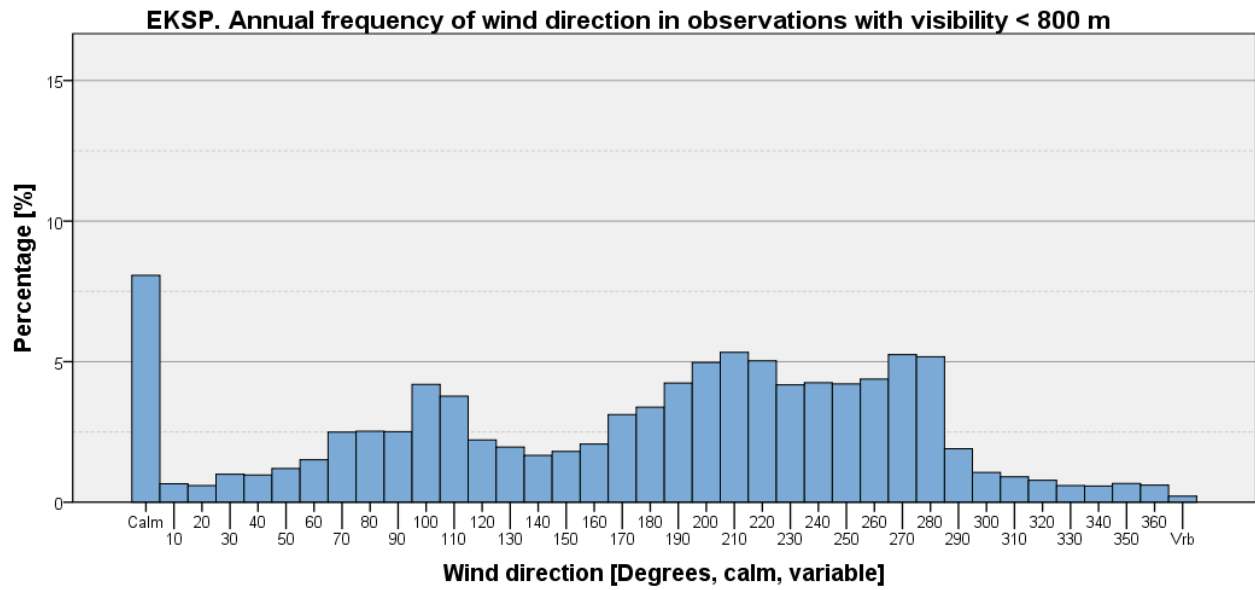


Figure 611

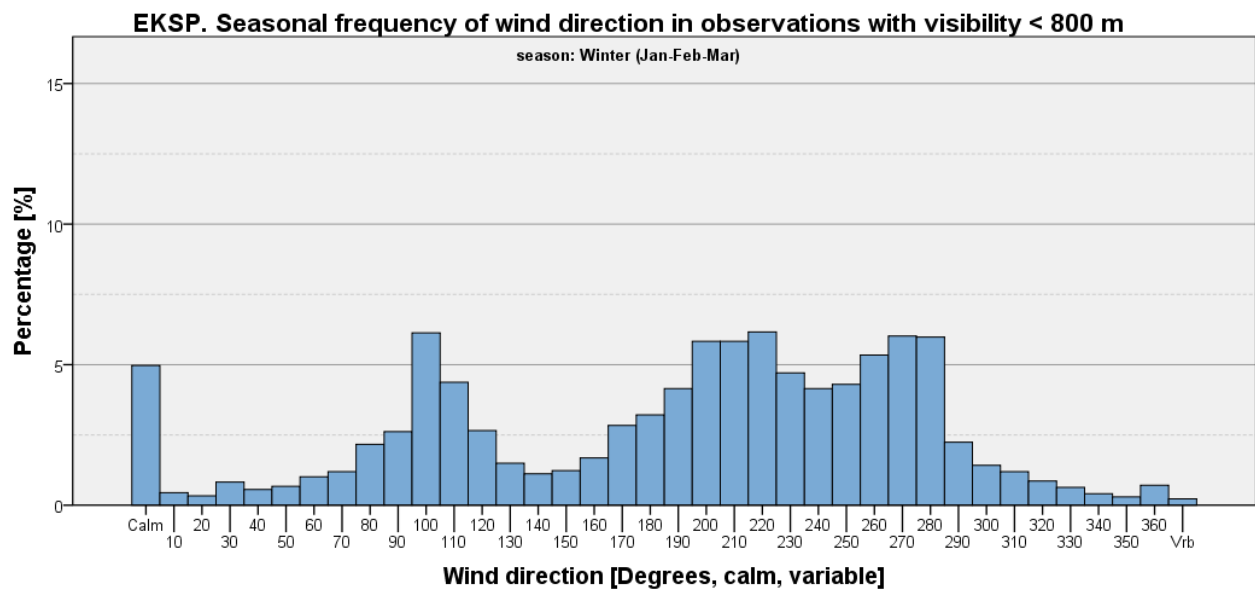


Figure 612

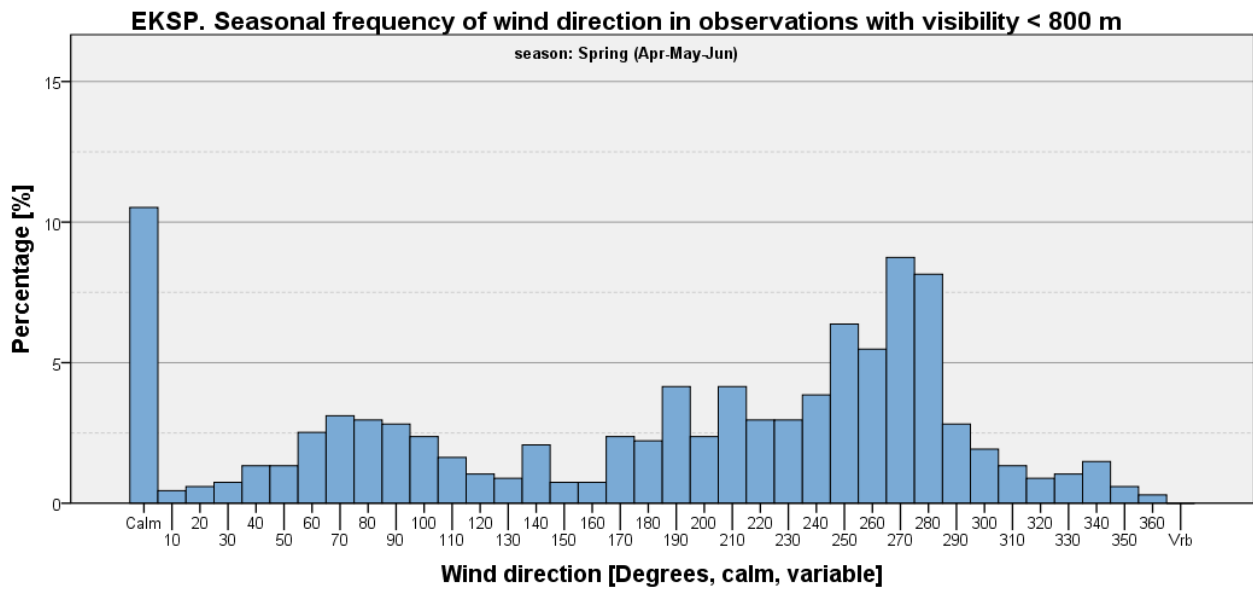


Figure 613

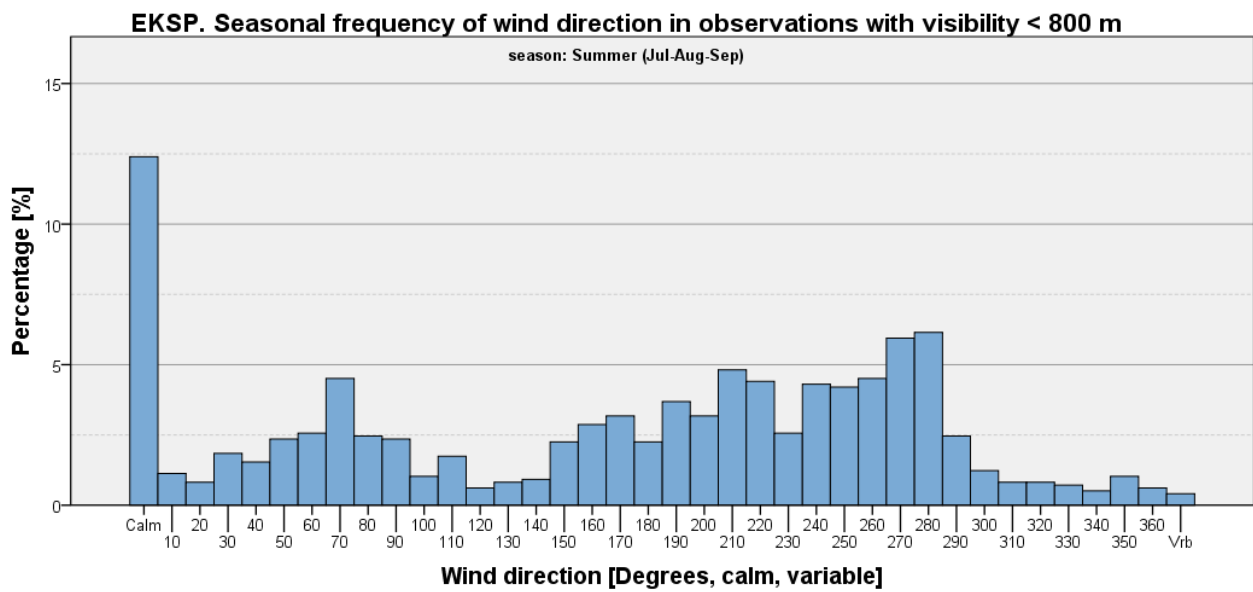


Figure 614

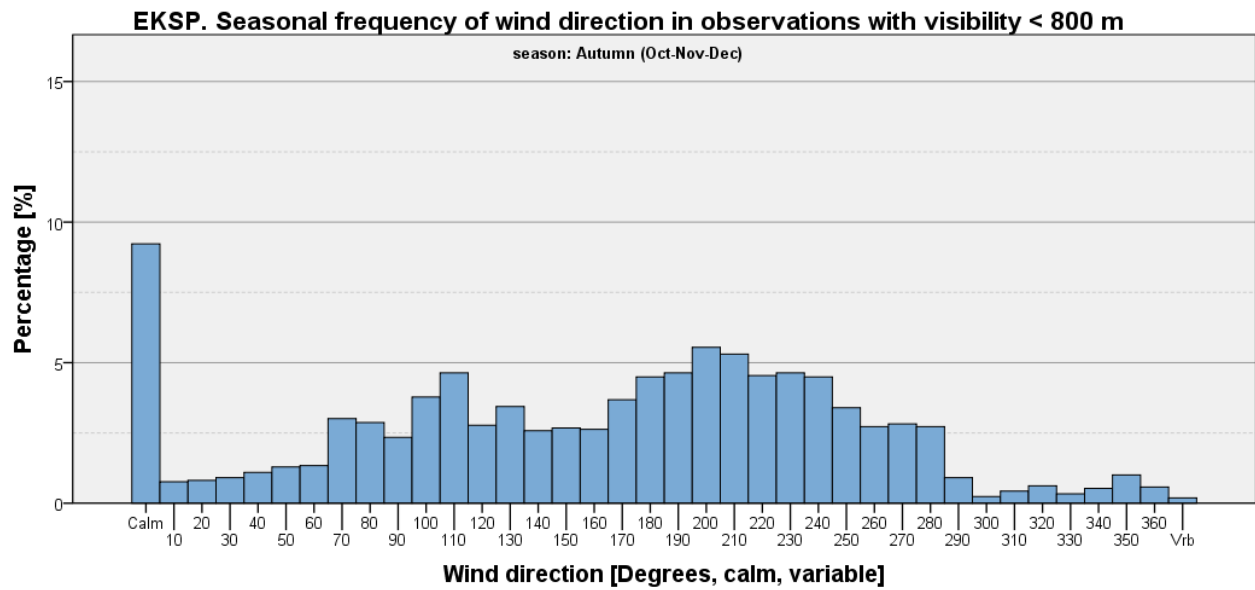


Figure 615

Visibility < 800 m and Wind Speed <= 5 kts

Table 175: EKSP - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	3.62	1.31	2.19	3.48	2.65
All other observations	96.38	98.69	97.81	96.52	97.35
Total	100	100	100	100	100

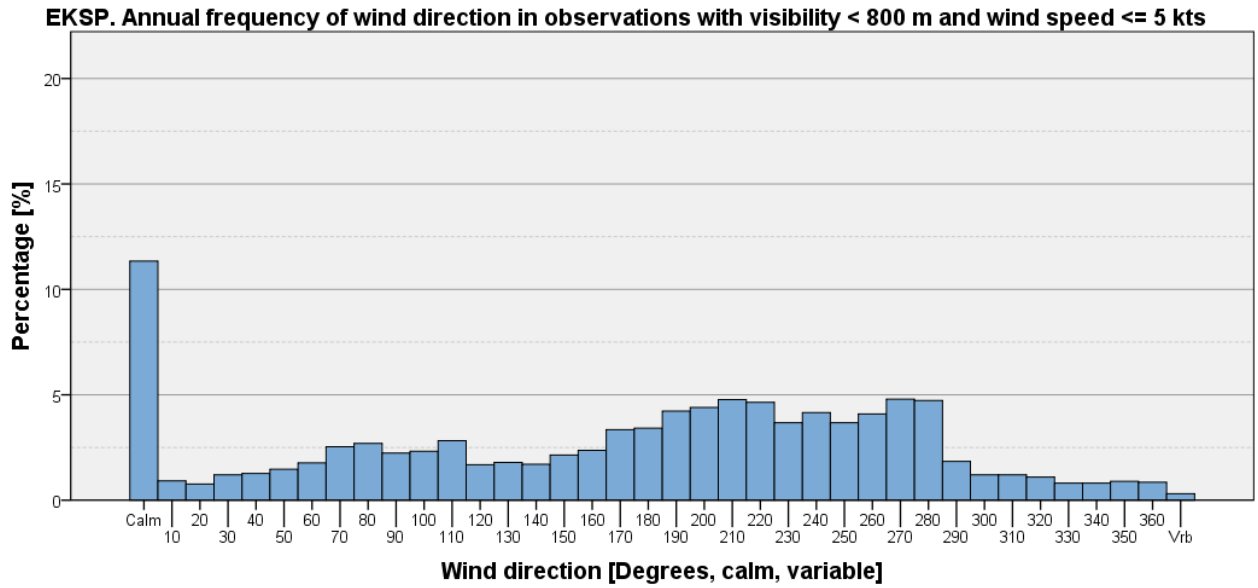


Figure 616

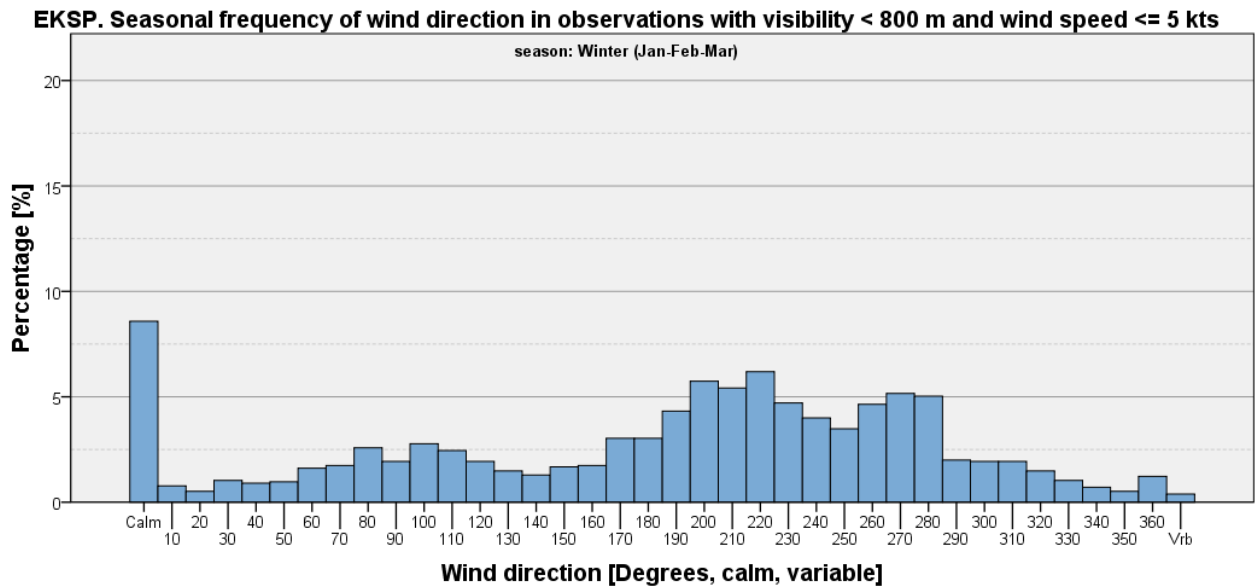


Figure 617

EKSP. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

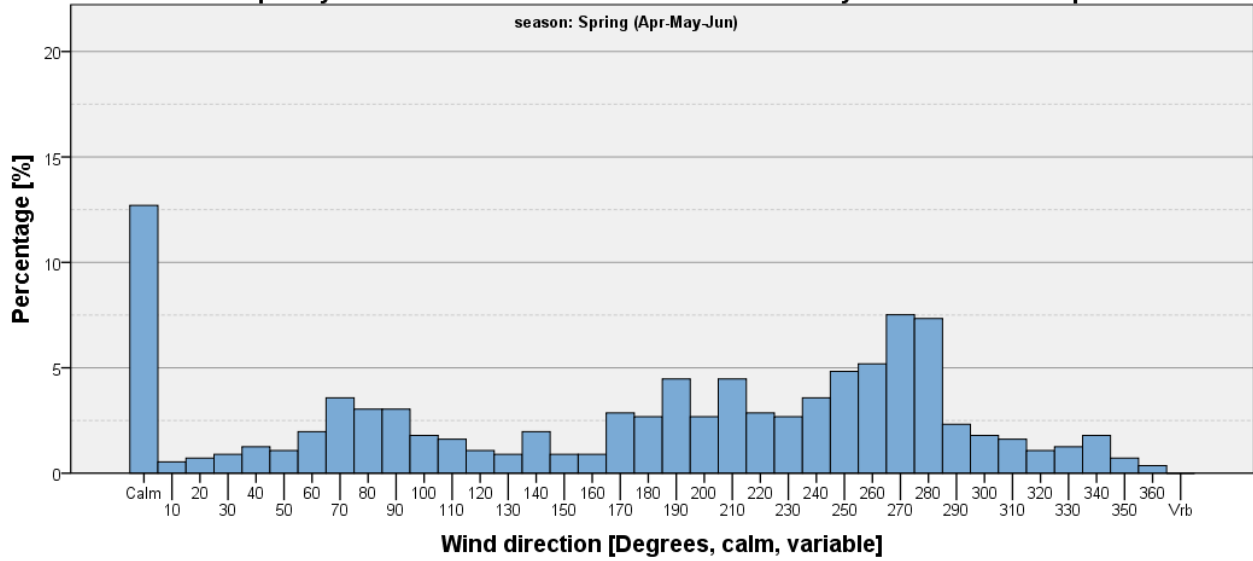


Figure 618

EKSP. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

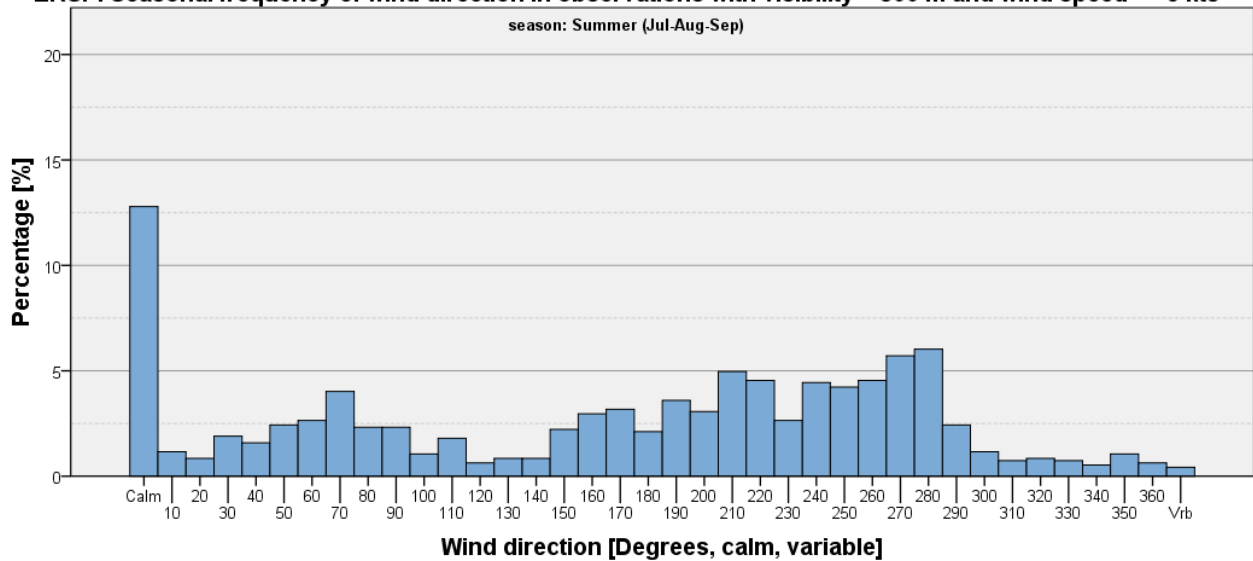


Figure 619

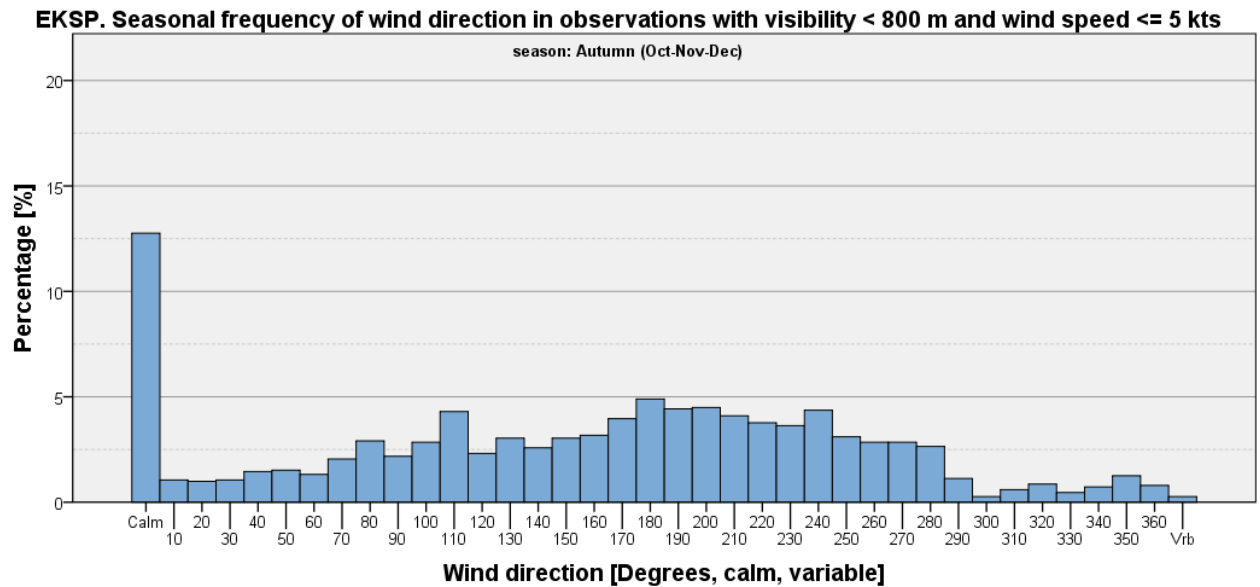


Figure 620

Visibility < 800 m and Wind Speed > 5 kts

Table 176: EKSP - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	2.63	0.27	0.069	1.33	1.07
All other observations	97.37	99.73	99.93	98.67	98.93
Total	100	100	100	100	100

EKSP. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

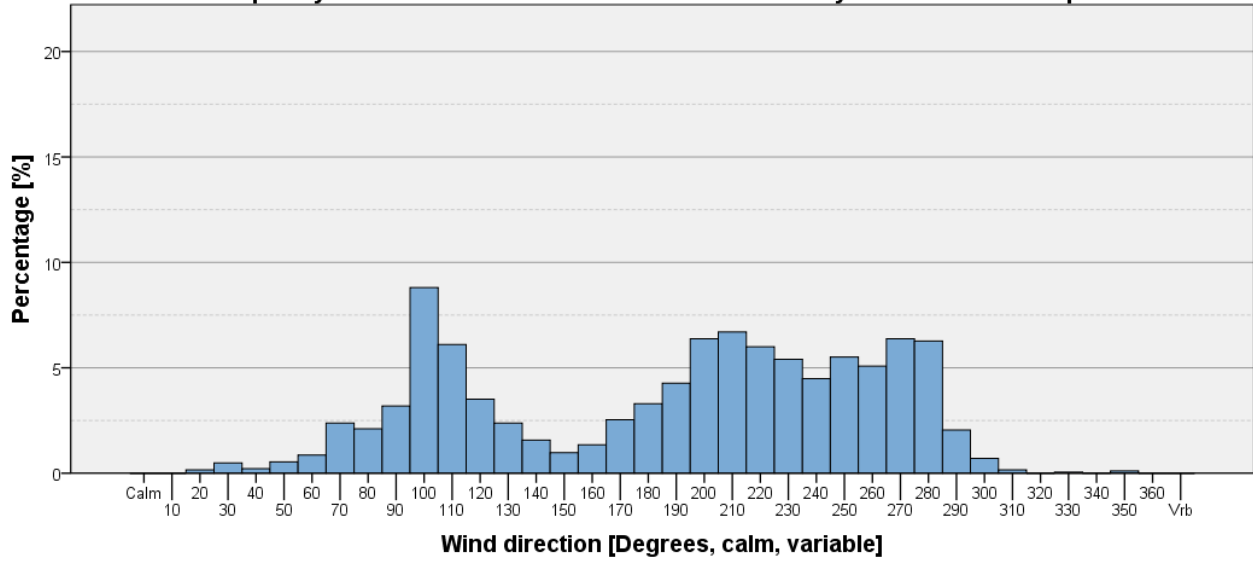


Figure 621

EKSP. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

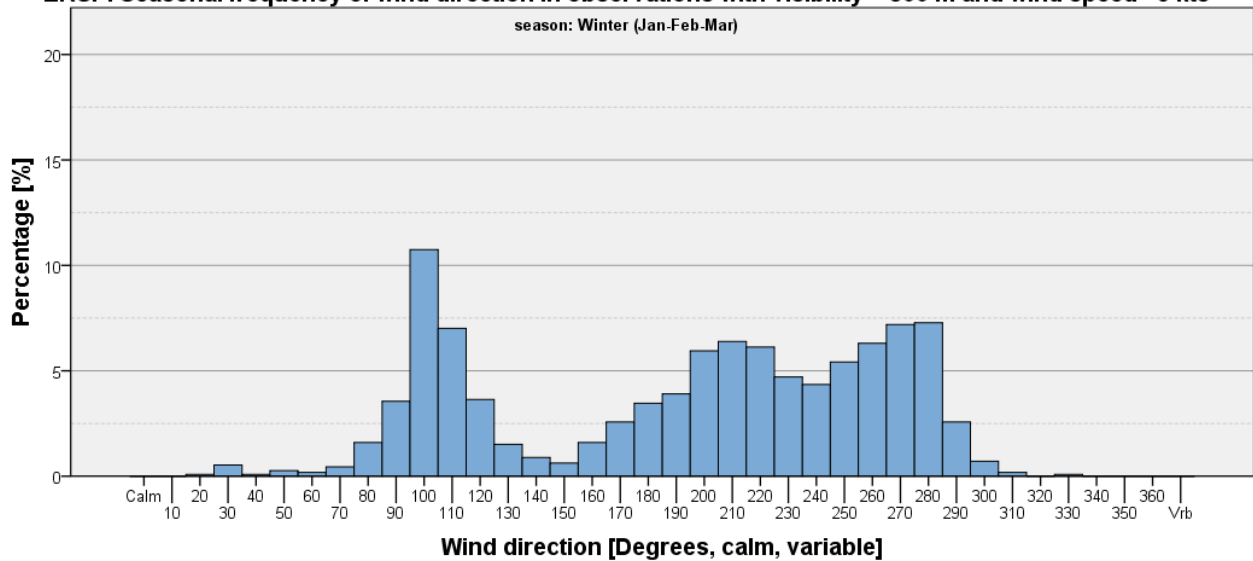


Figure 622

EKSP. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

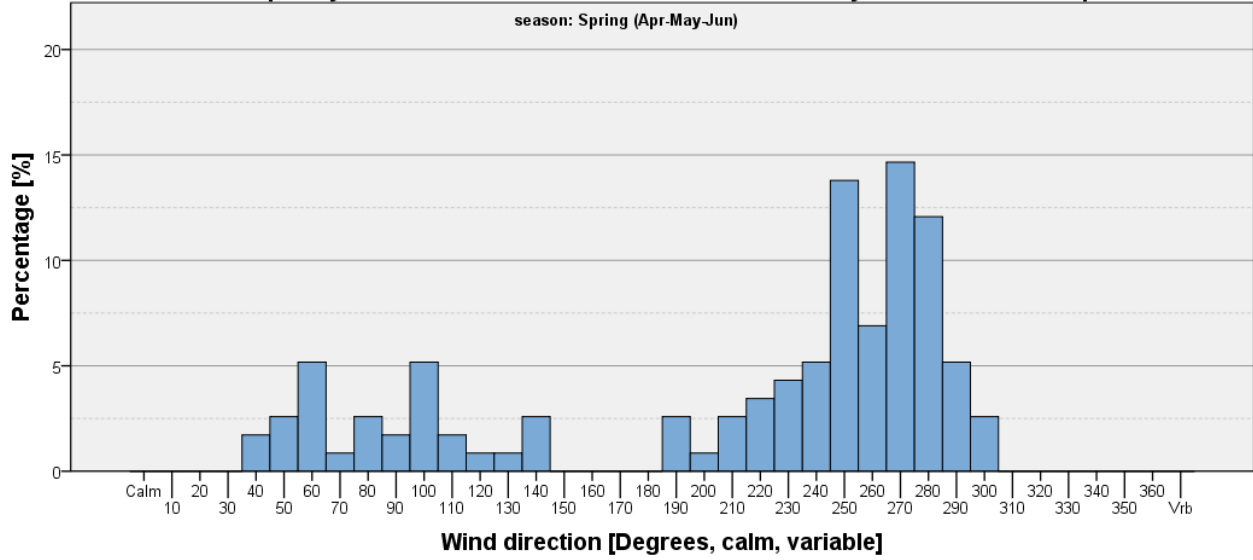


Figure 623

EKSP. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

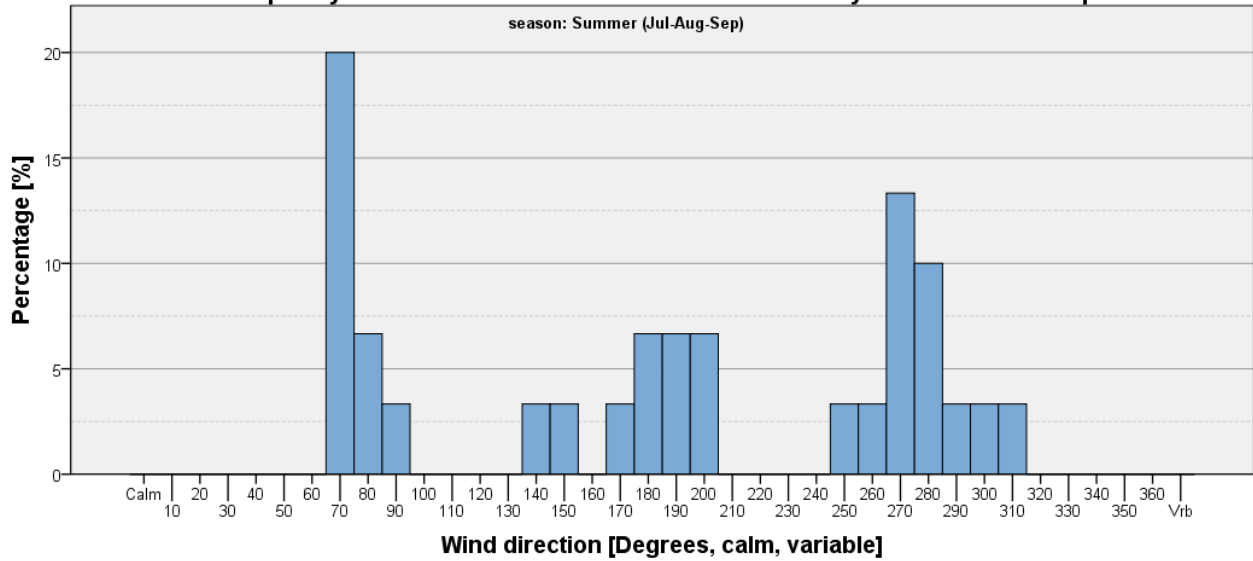


Figure 624

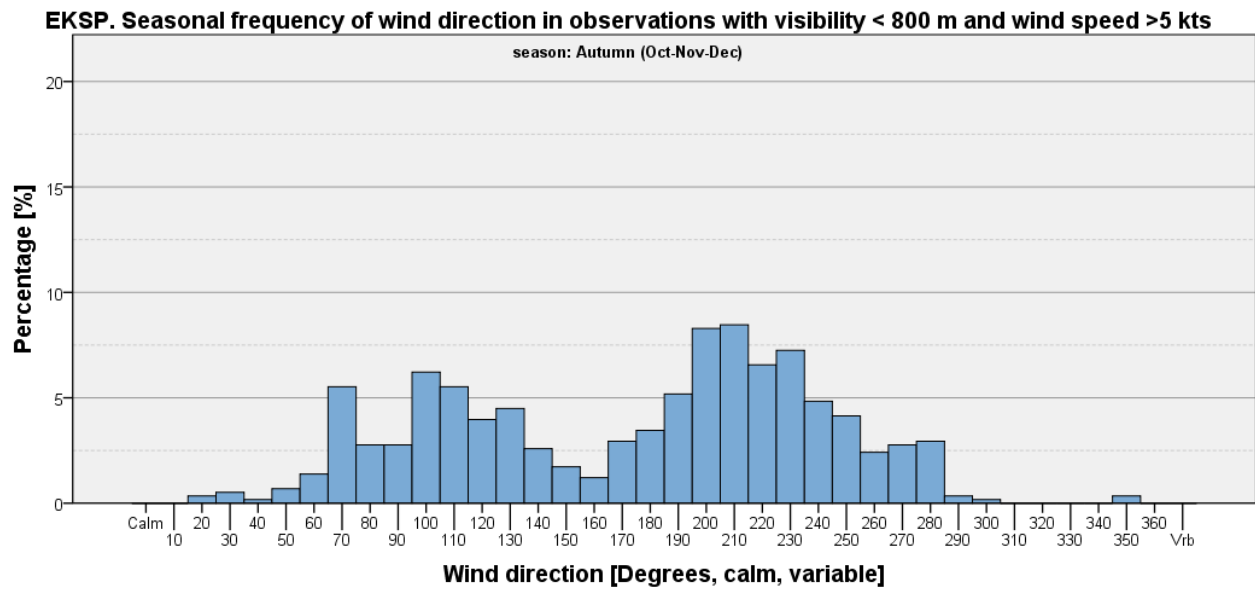


Figure 625

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 177: EKSP - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	27.44	8.30	5.94	24.07	16.44
All other observations	72.56	91.70	94.06	75.93	83.56
Total	100	100	100	100	100

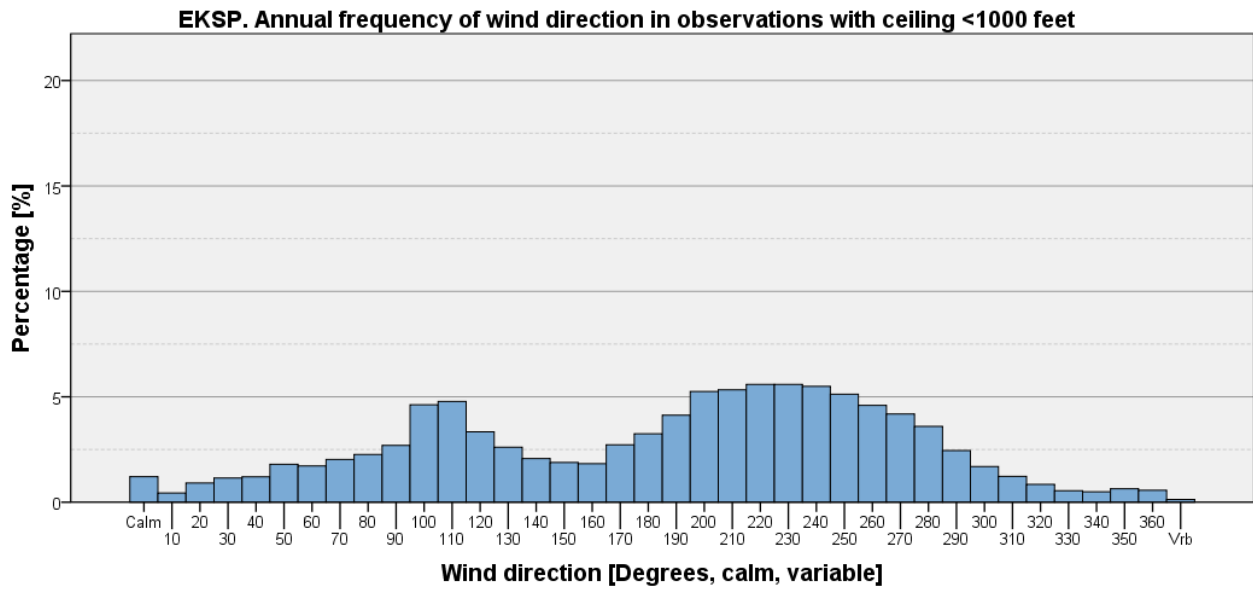


Figure 626

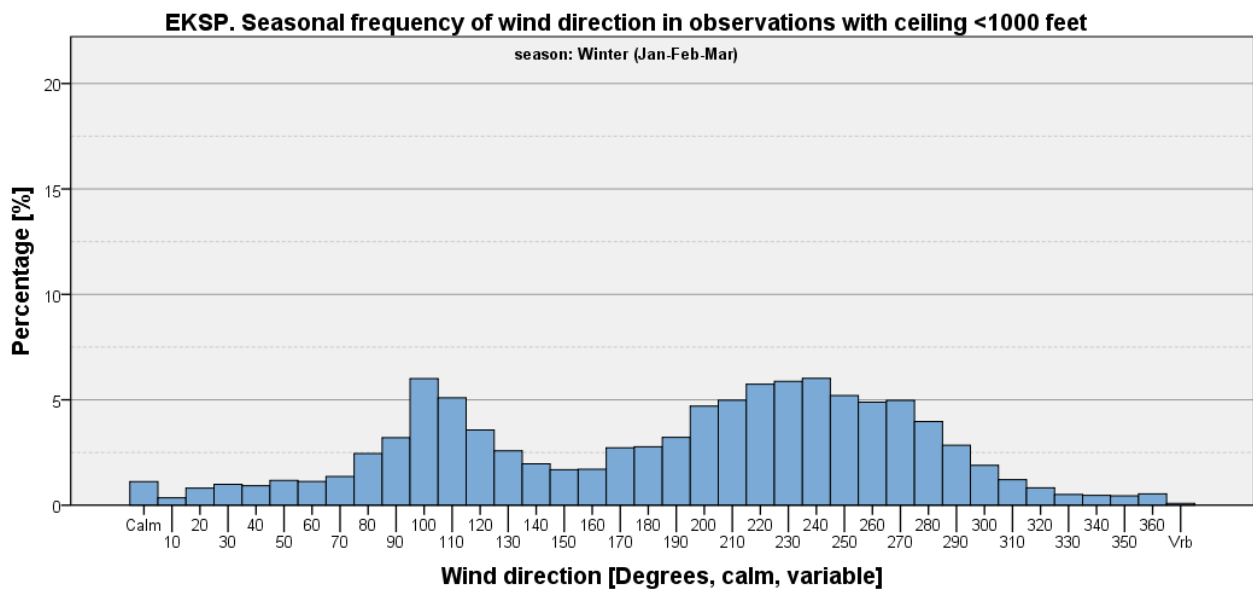


Figure 627

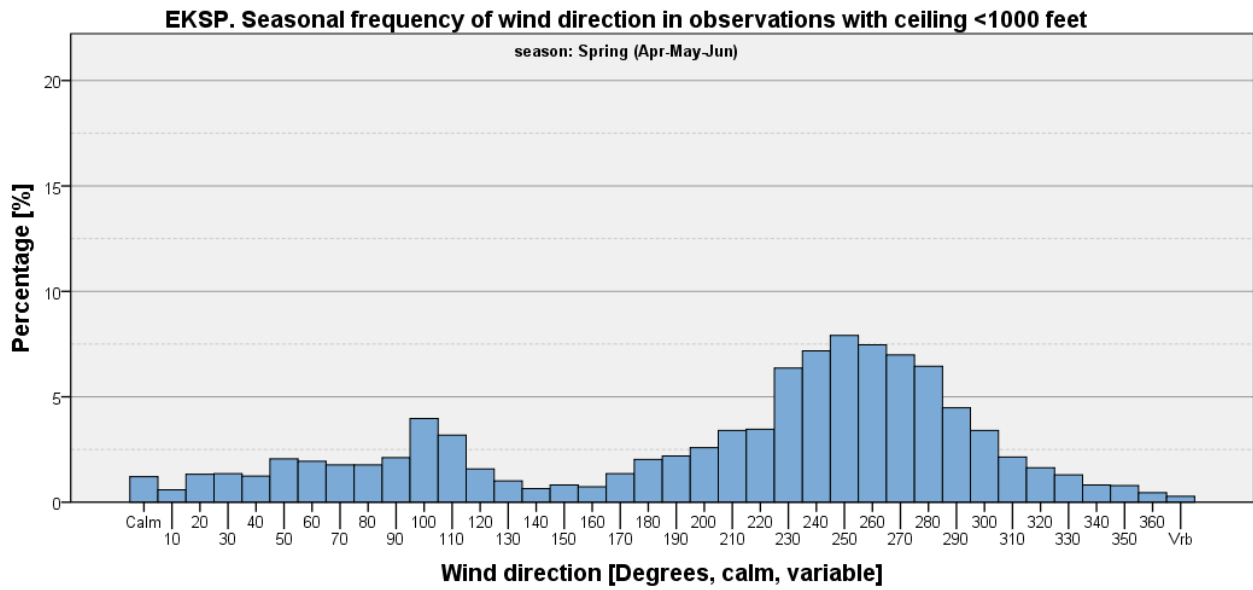


Figure 628

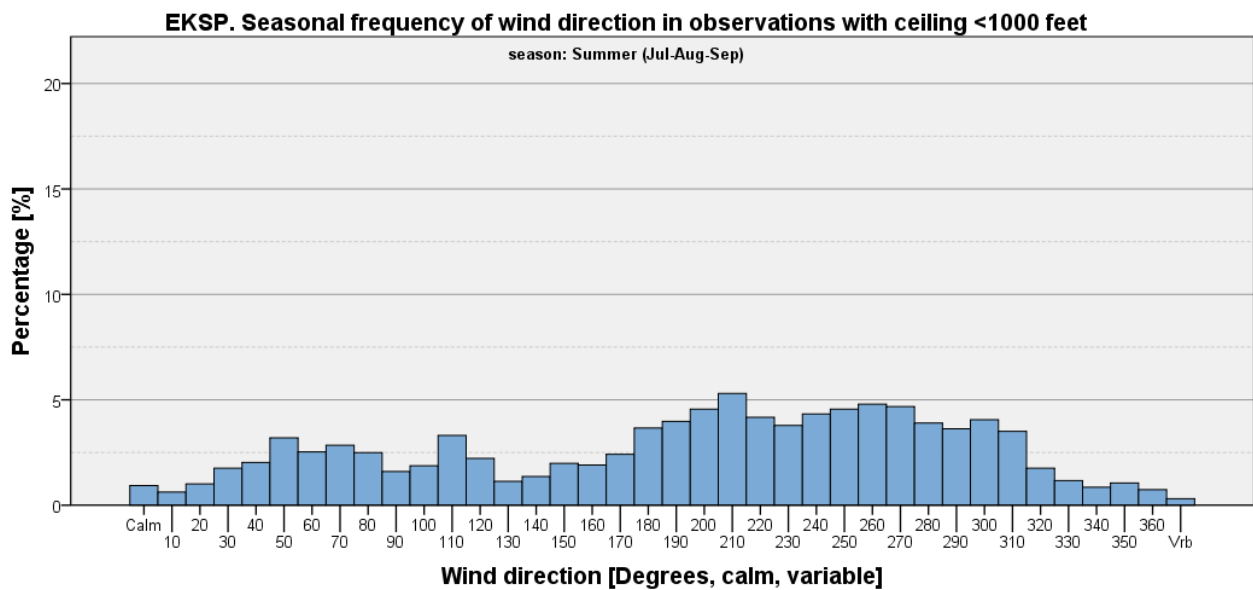


Figure 629

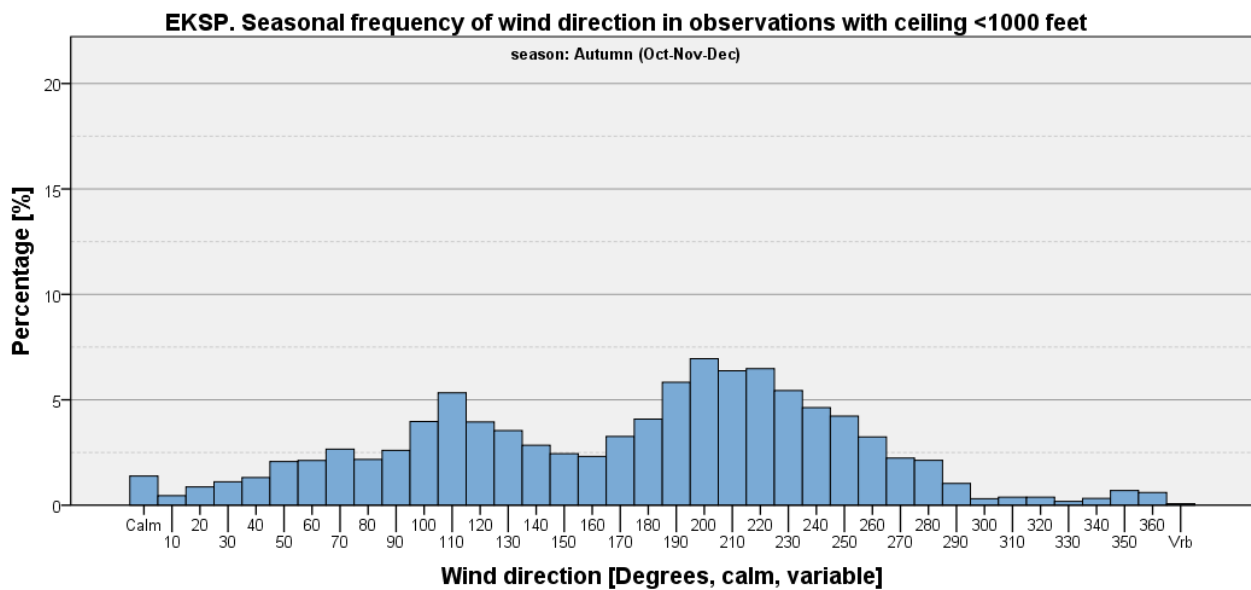


Figure 630

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 178: EKSP - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	6.56	2.35	1.91	5.77	4.15
All other observations	93.44	97.65	98.09	94.23	95.85
Total	100	100	100	100	100

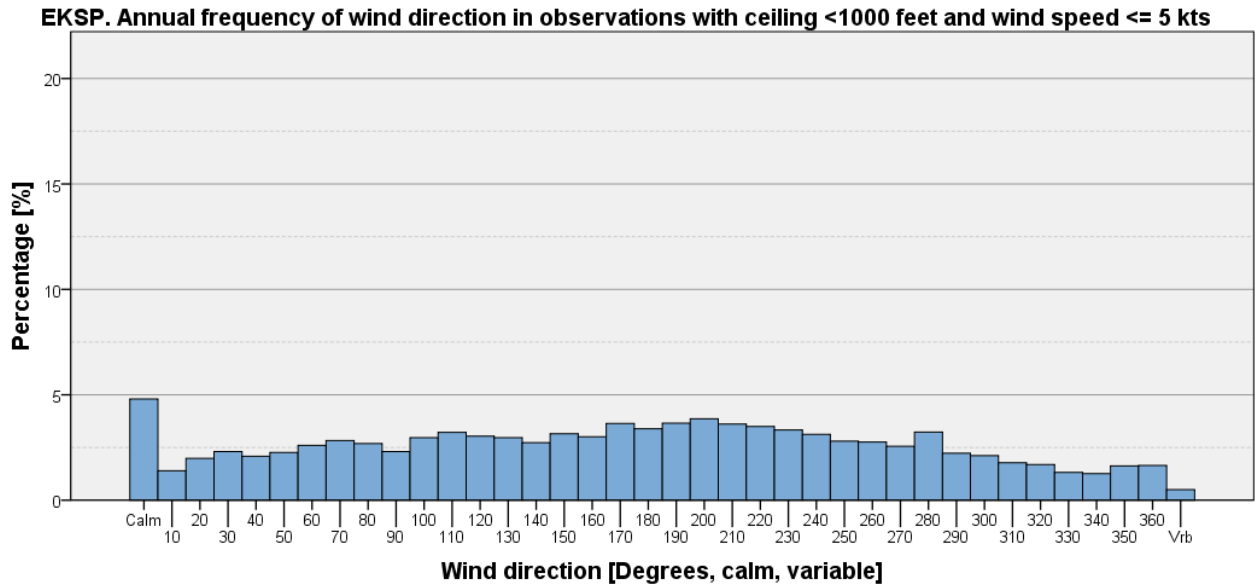


Figure 631

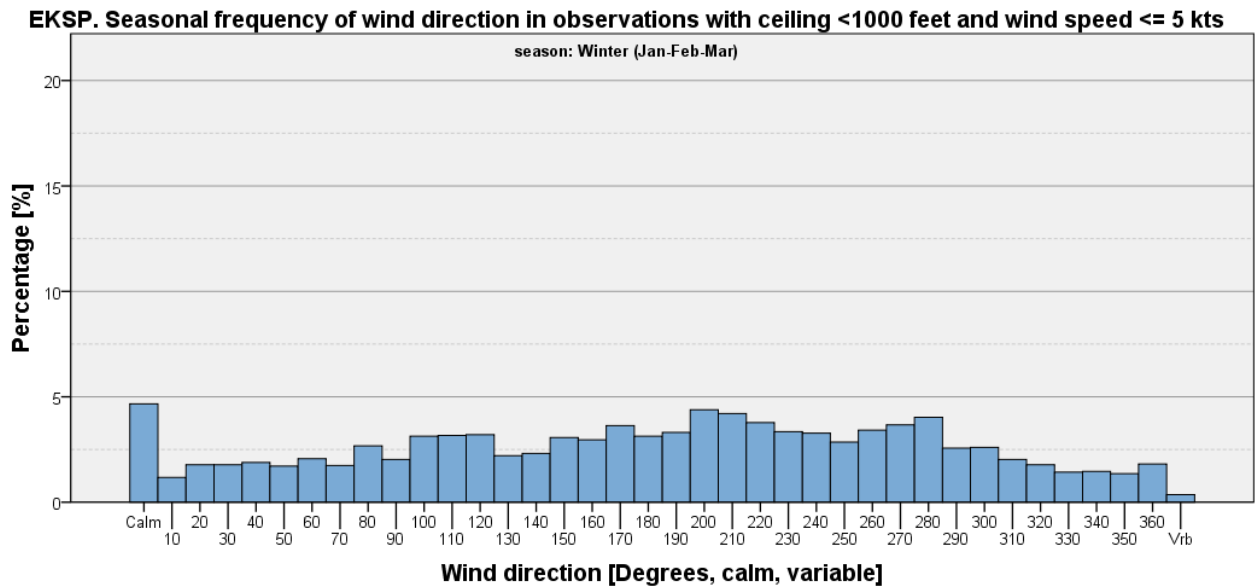


Figure 632

EKSP. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

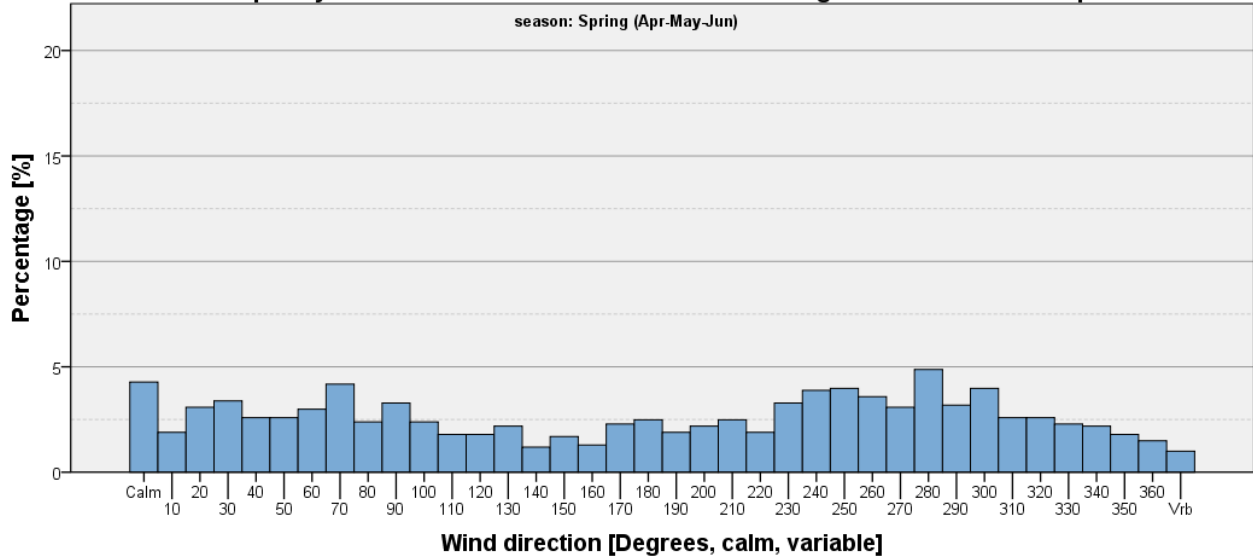


Figure 633

EKSP. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

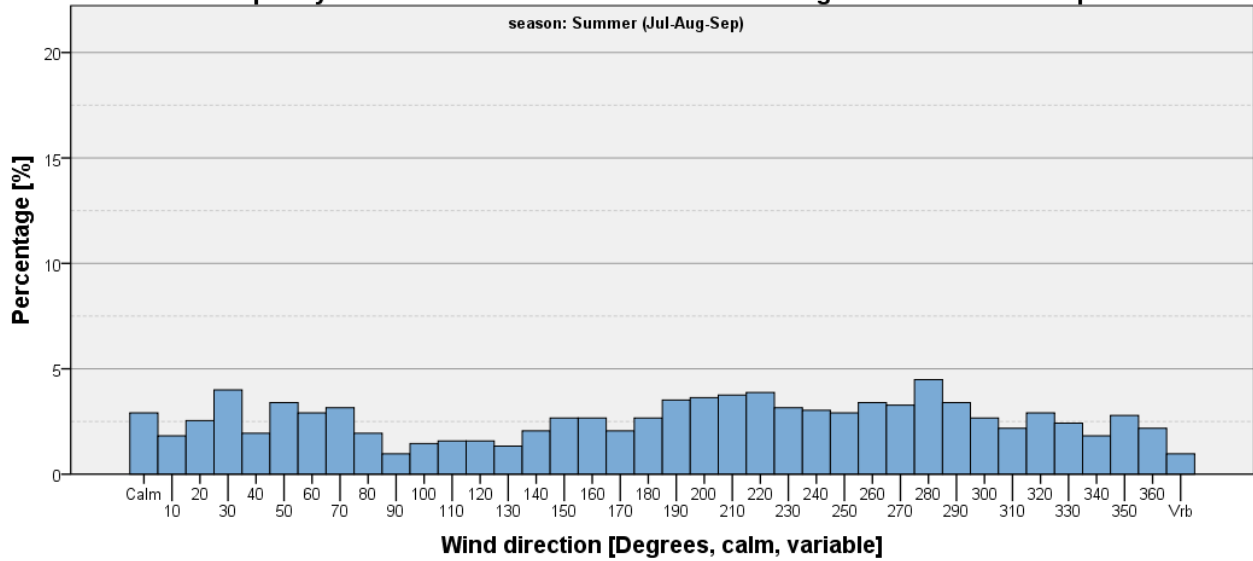


Figure 634

EKSP. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

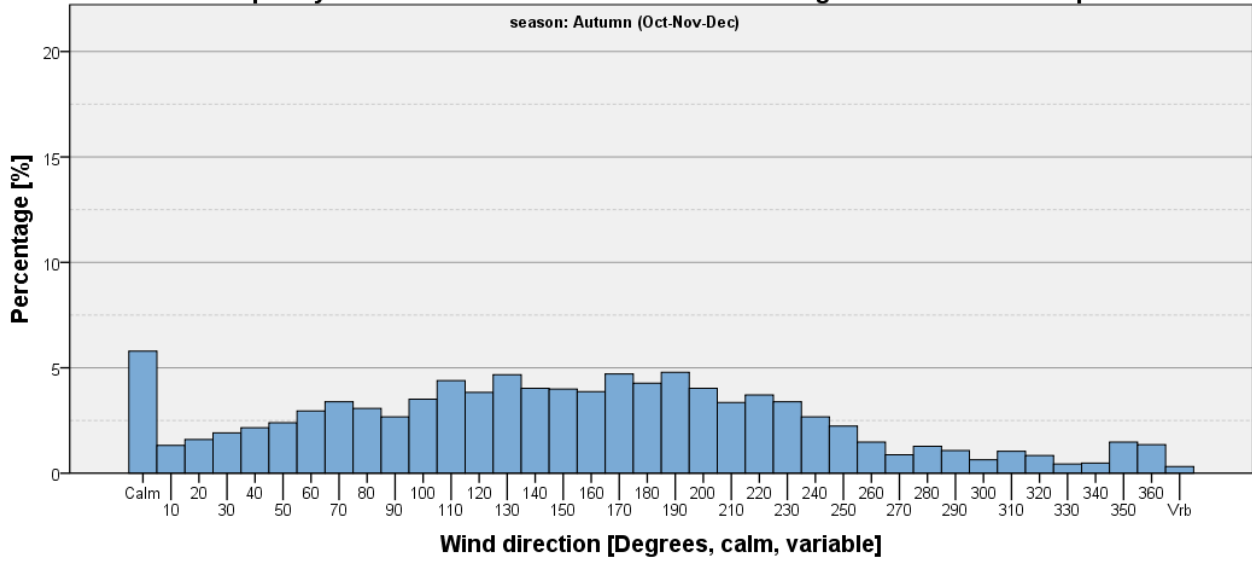


Figure 635

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 179: EKSP - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	20.88	5.95	4.03	18.30	12.29
All other observations	79.12	94.05	95.97	81.70	87.71
Total	100	100	100	100	100

EKSP. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

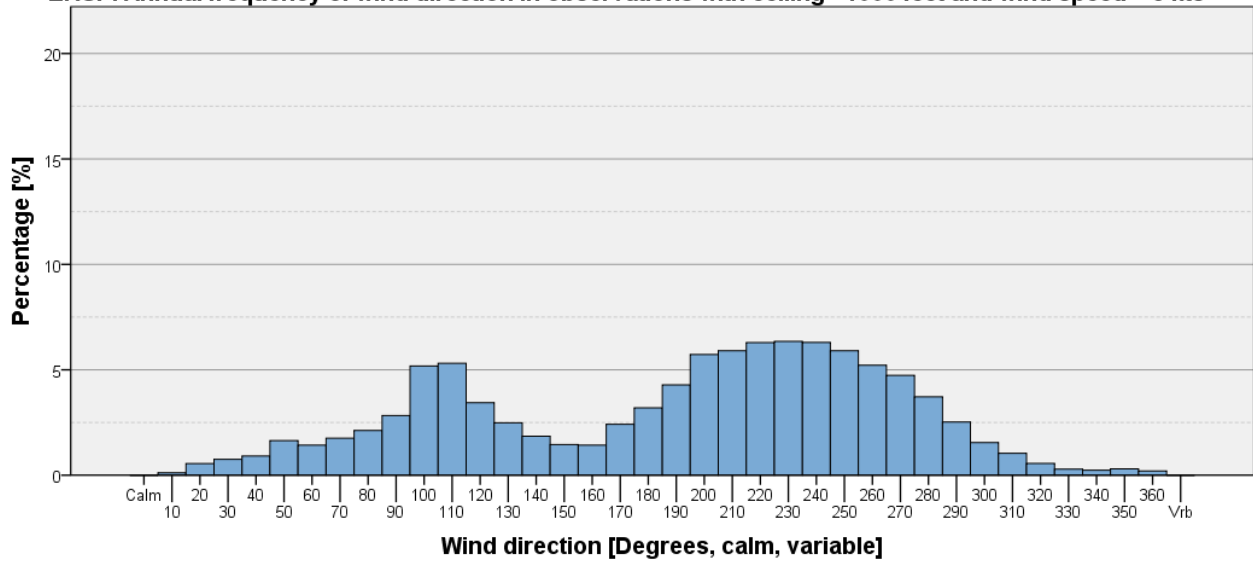


Figure 636

EKSP. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

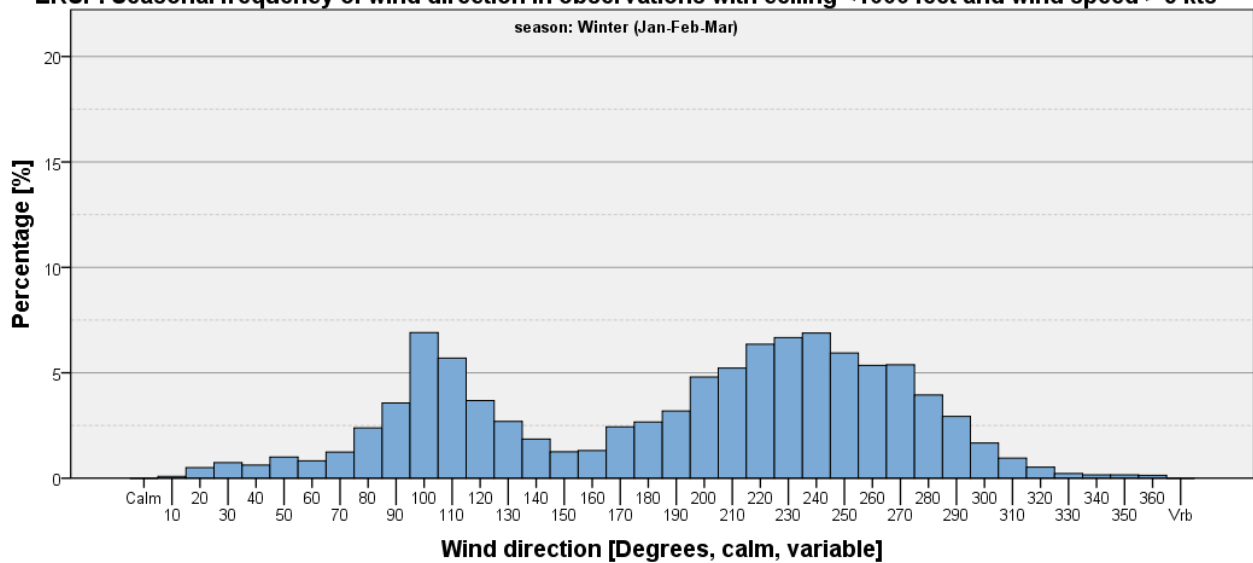


Figure 637

EKSP. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

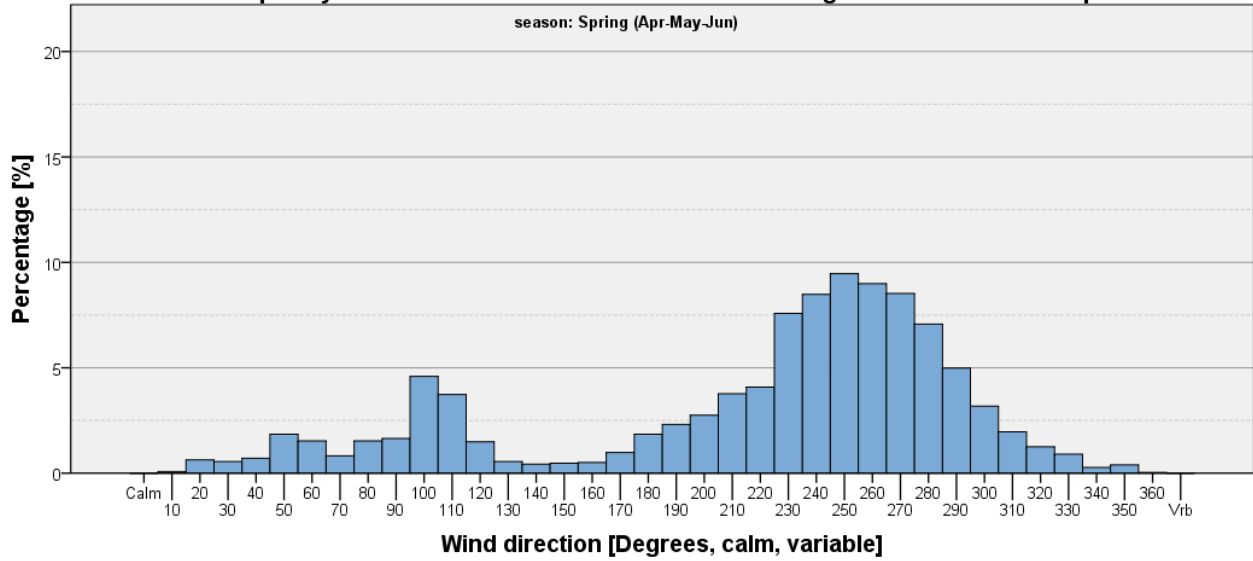


Figure 638

EKSP. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

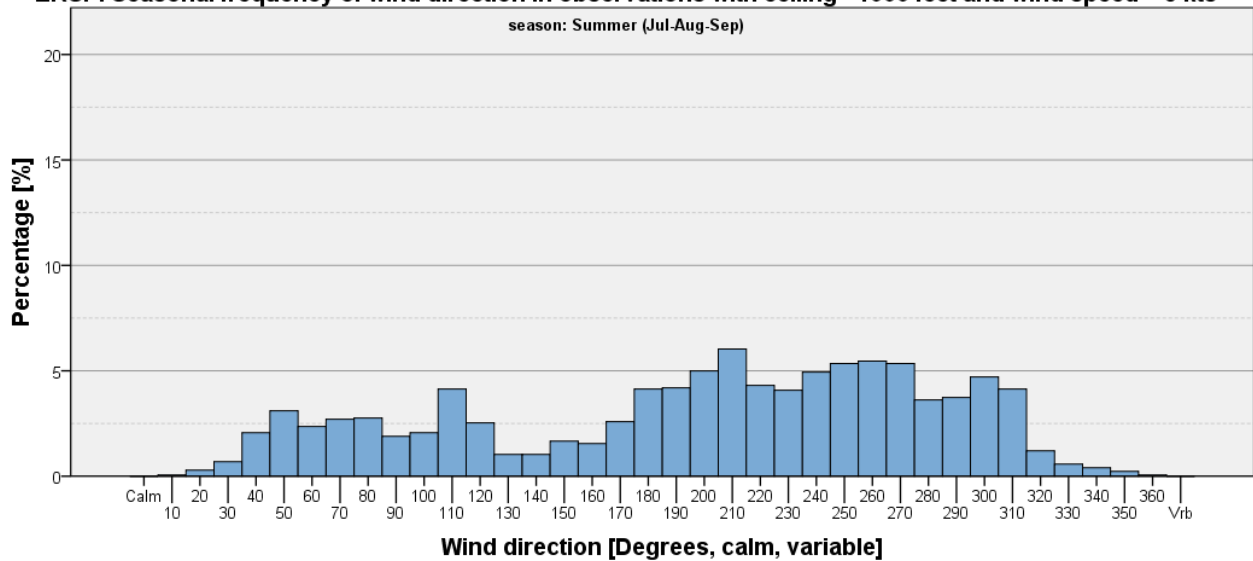


Figure 639

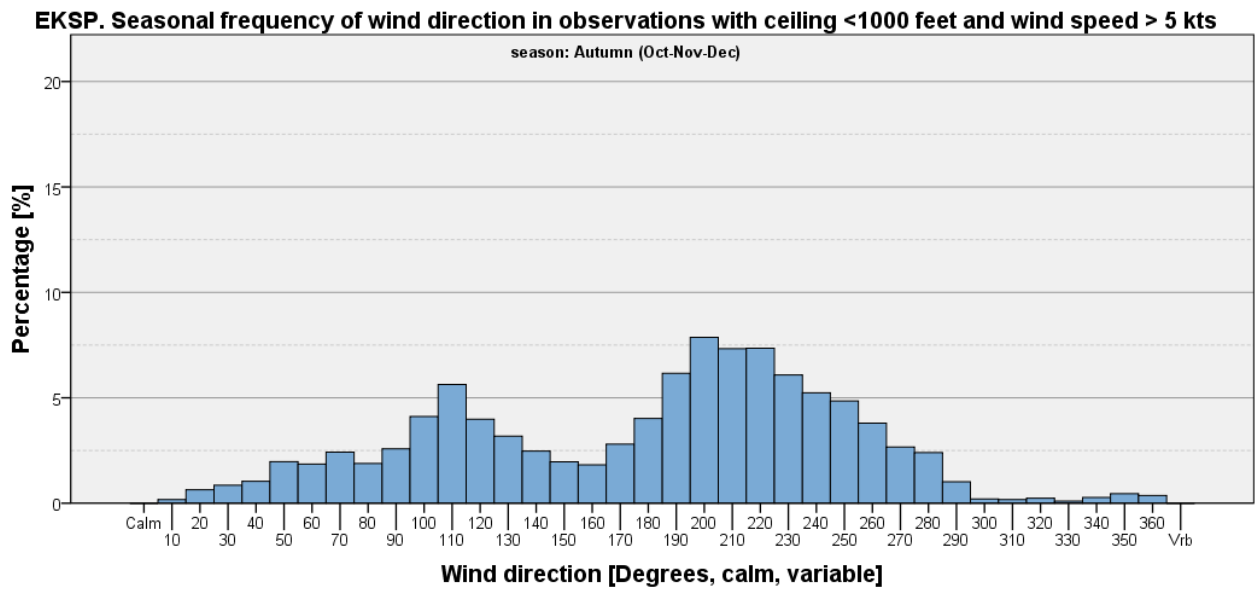


Figure 640

Ceiling < 500 feet

Table 180: EKSP - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	13.91	3.12	1.96	10.53	7.38
All other observations	86.09	96.88	98.04	89.47	92.62
Total	100	100	100	100	100

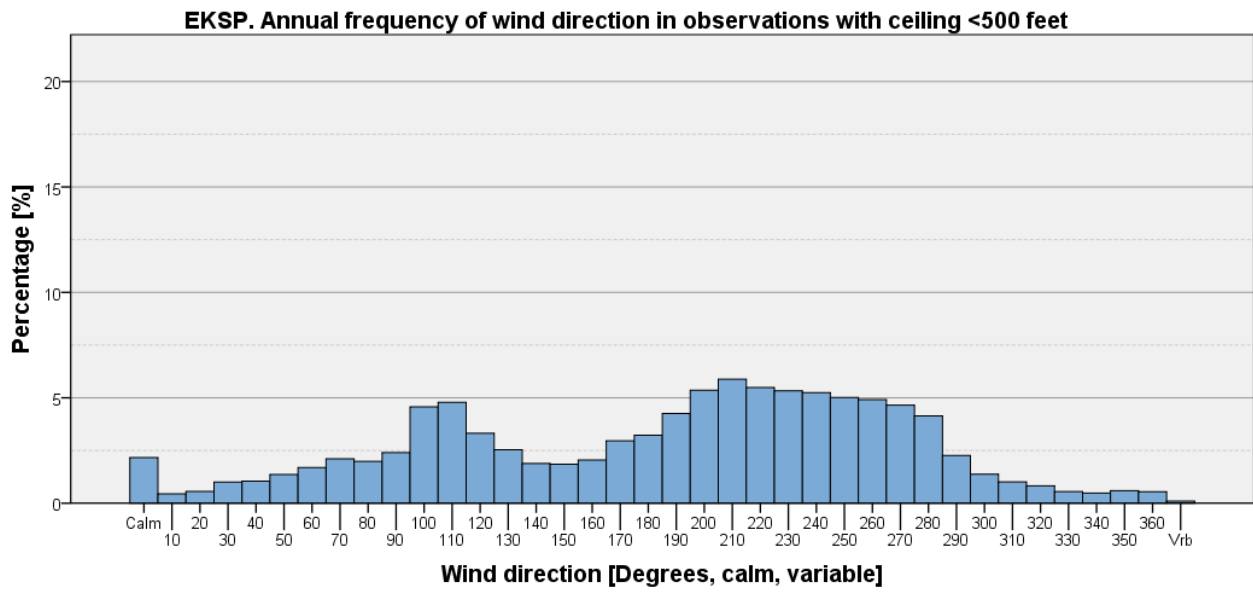


Figure 641

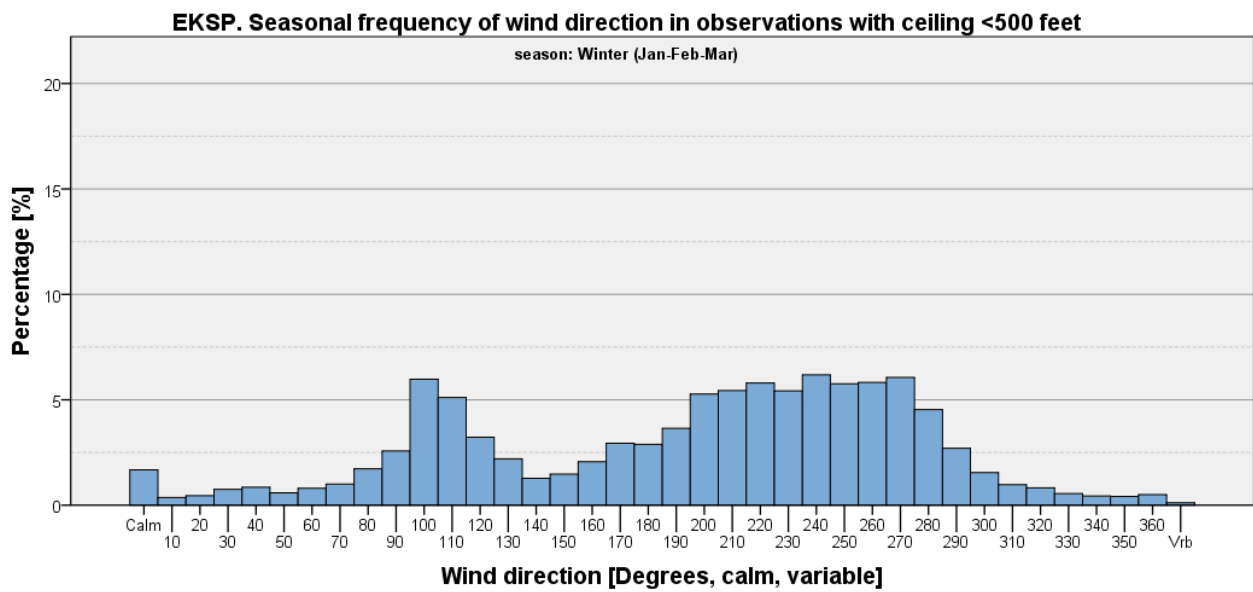


Figure 642

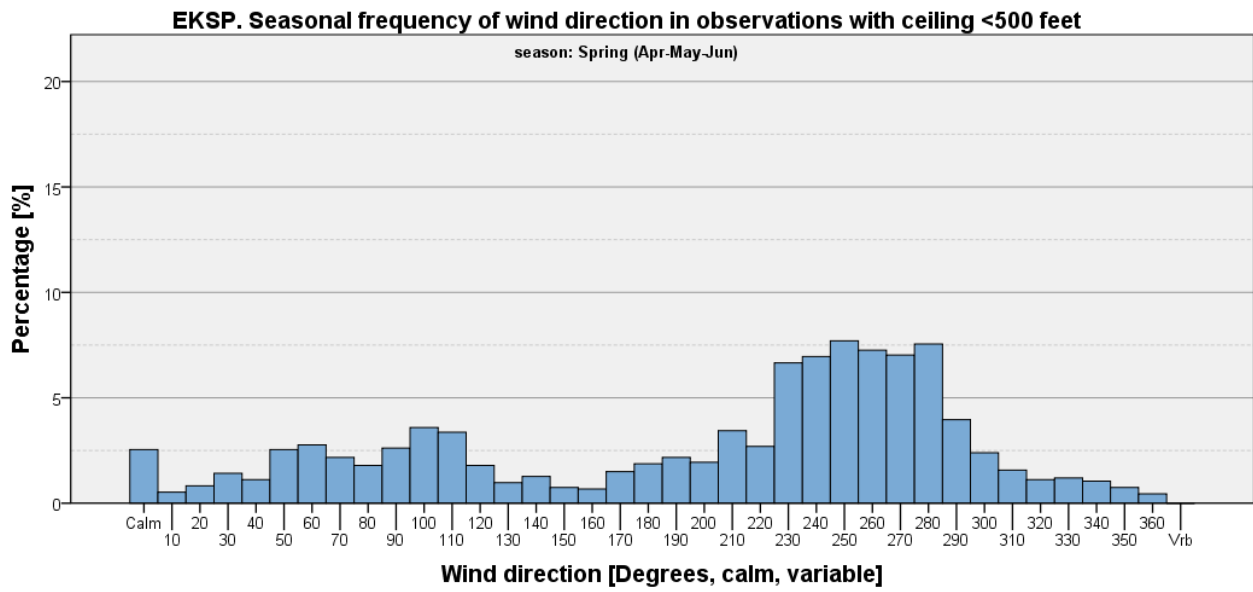


Figure 643

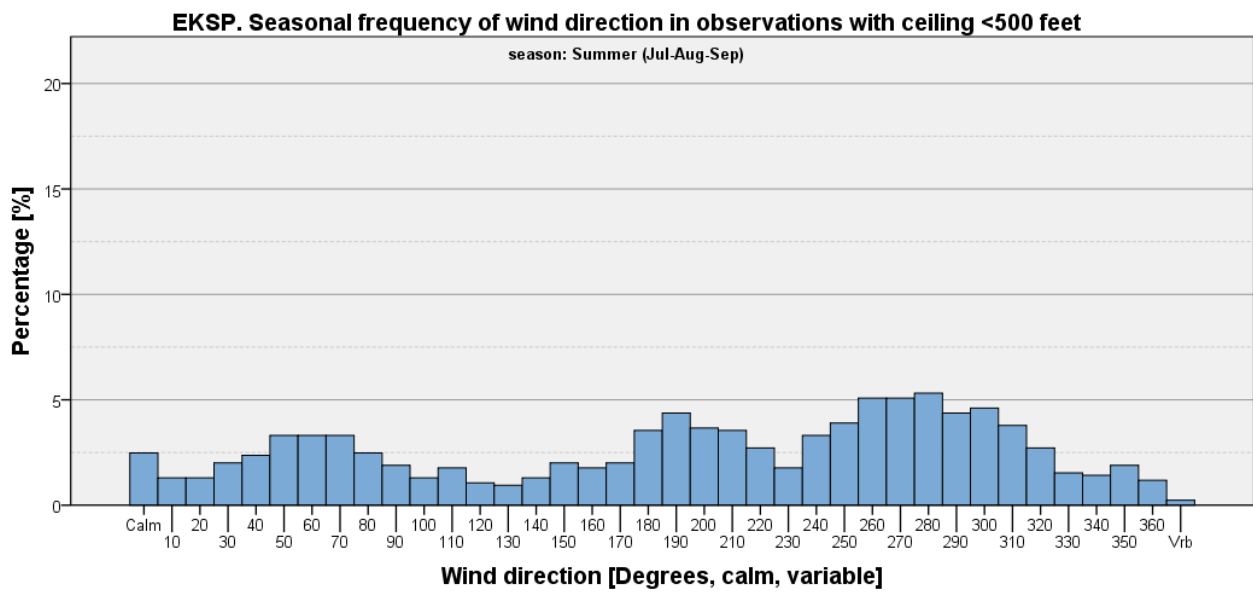


Figure 644

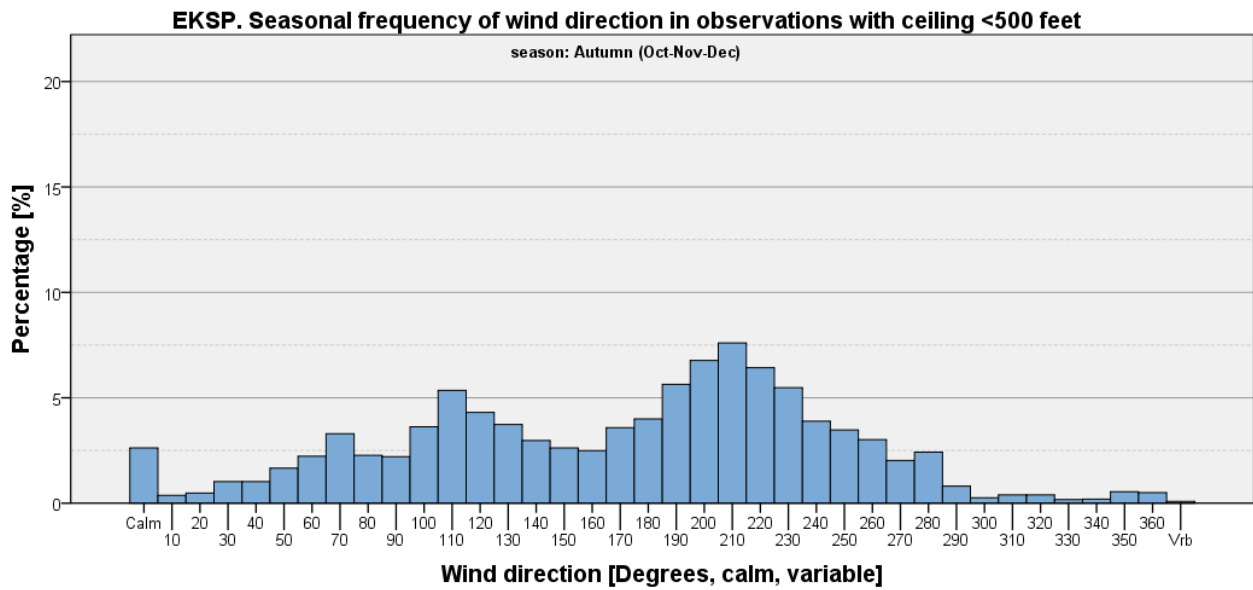


Figure 645

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 181: EKSP - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	4.79	1.34	1.20	3.87	2.80
All other Observations	95.21	98.66	98.80	96.13	97.20
Total	100	100	100	100	100

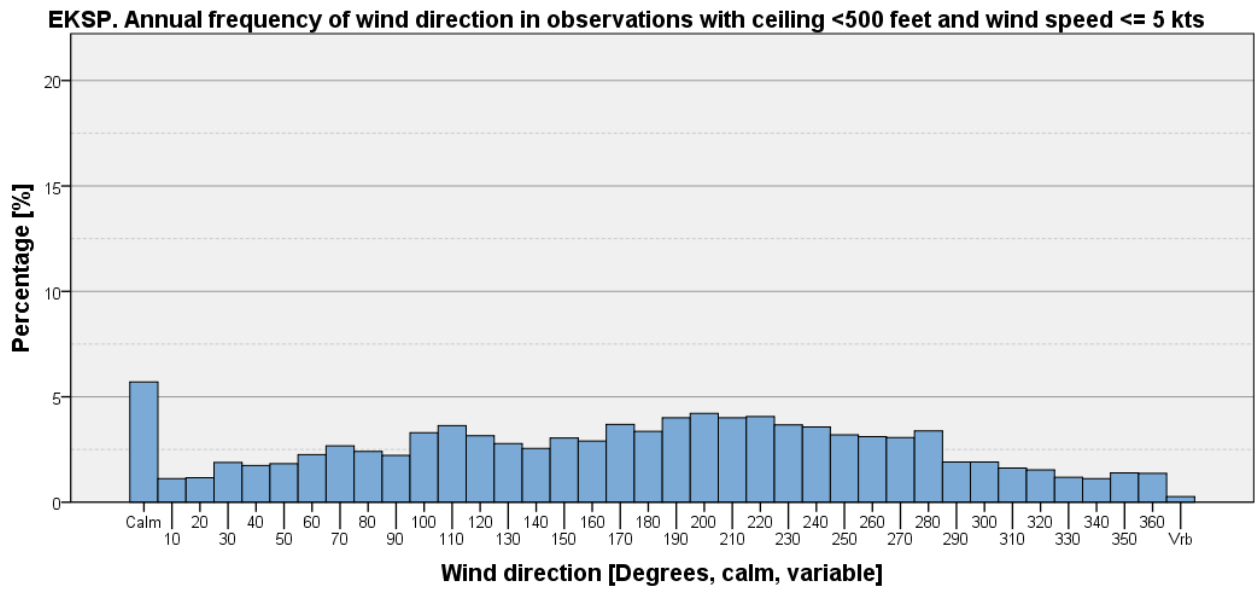


Figure 646

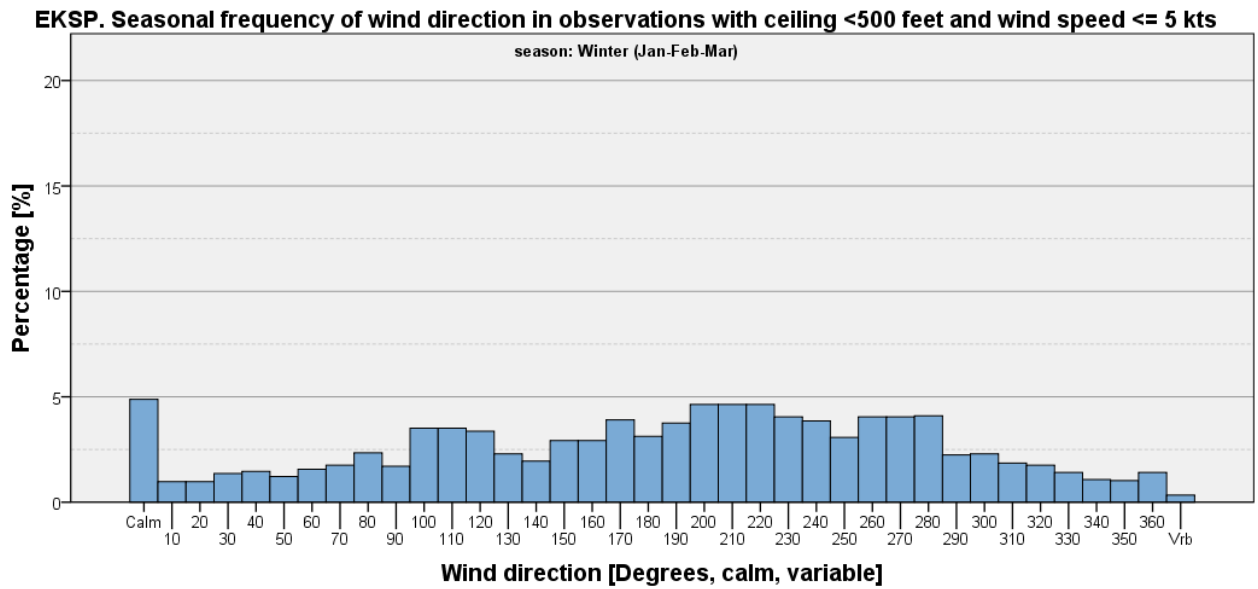


Figure 647

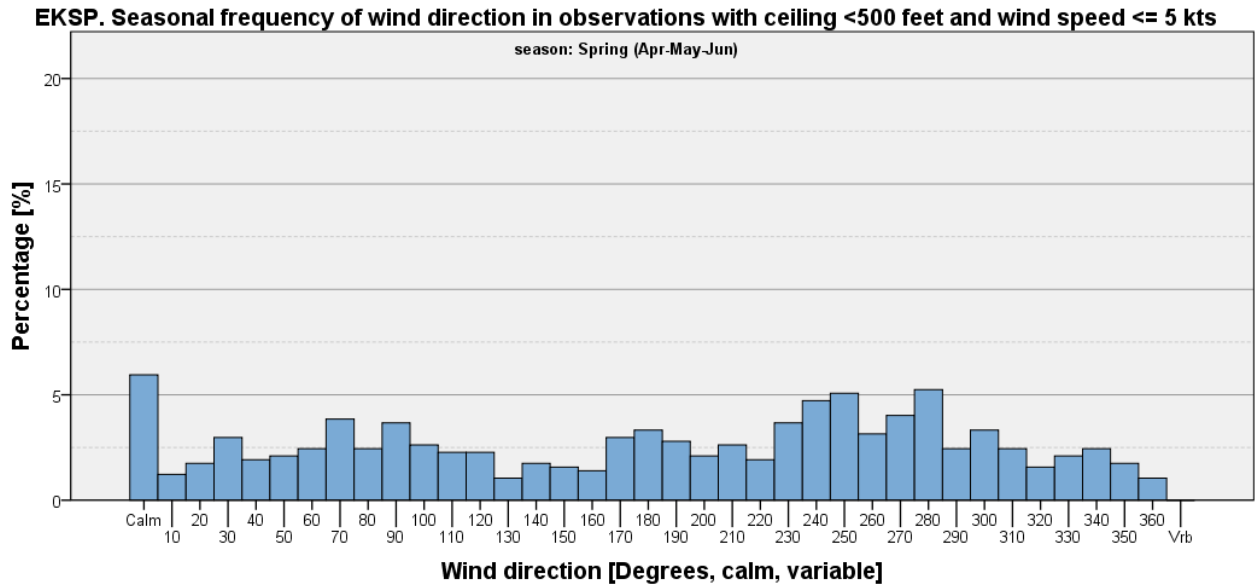


Figure 648

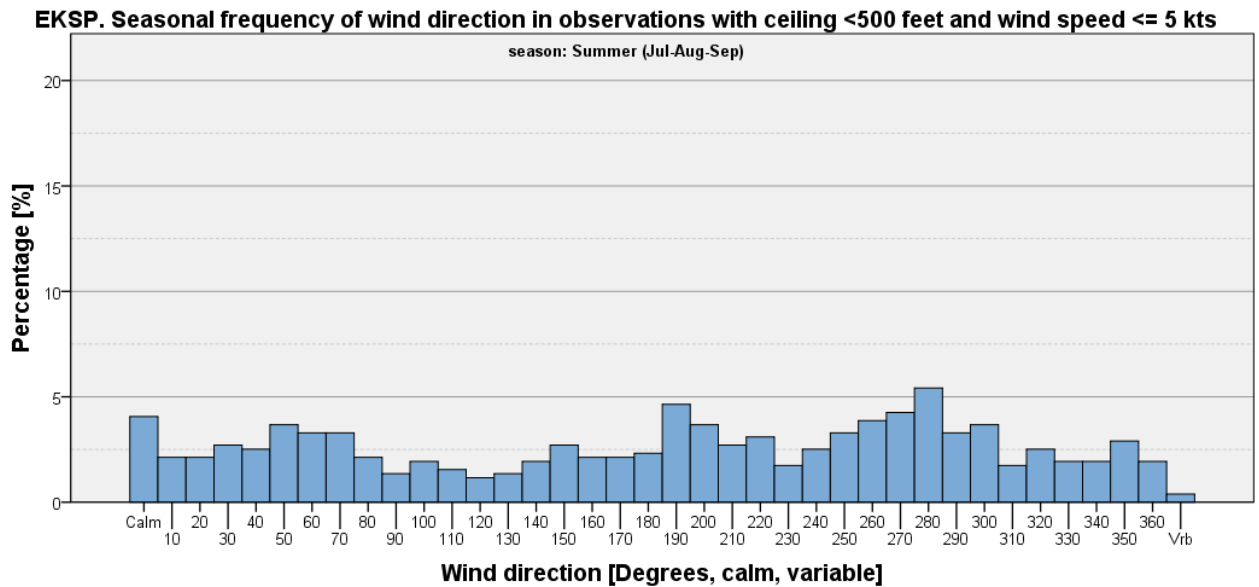


Figure 649

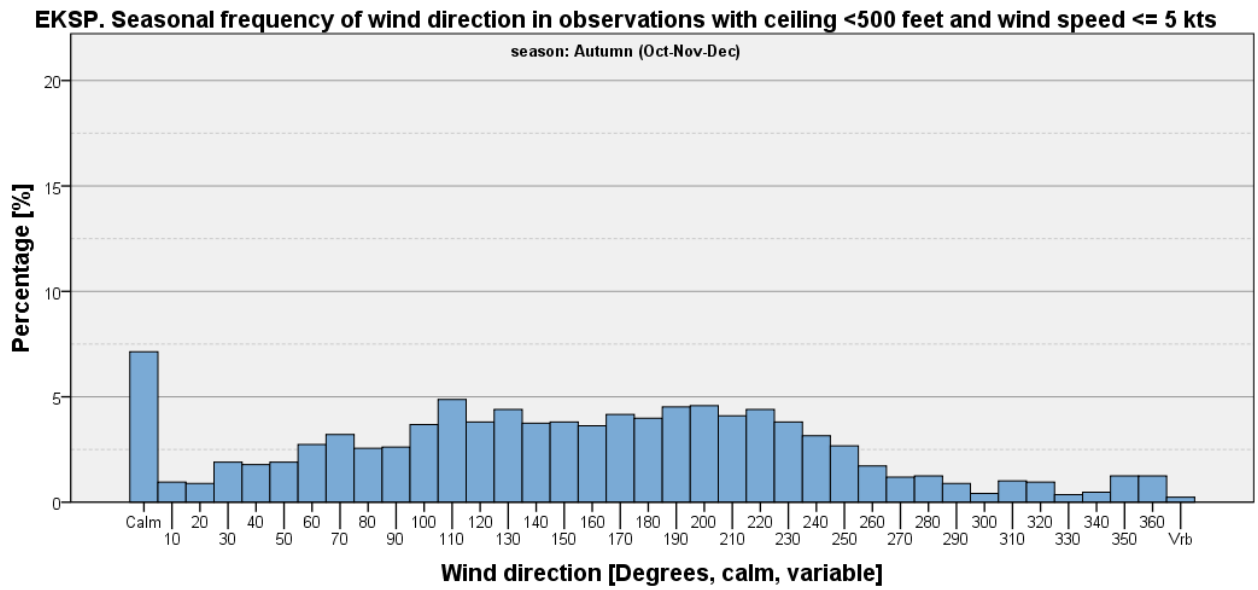


Figure 650

Ceiling < 500 feet and Wind Speed > 5 kts

Table 182: EKSP - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	9.12	1.79	0.76	6.66	4.58
All other observations	90.88	98.21	99.24	93.34	95.42
Total	100	100	100	100	100

EKSP. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

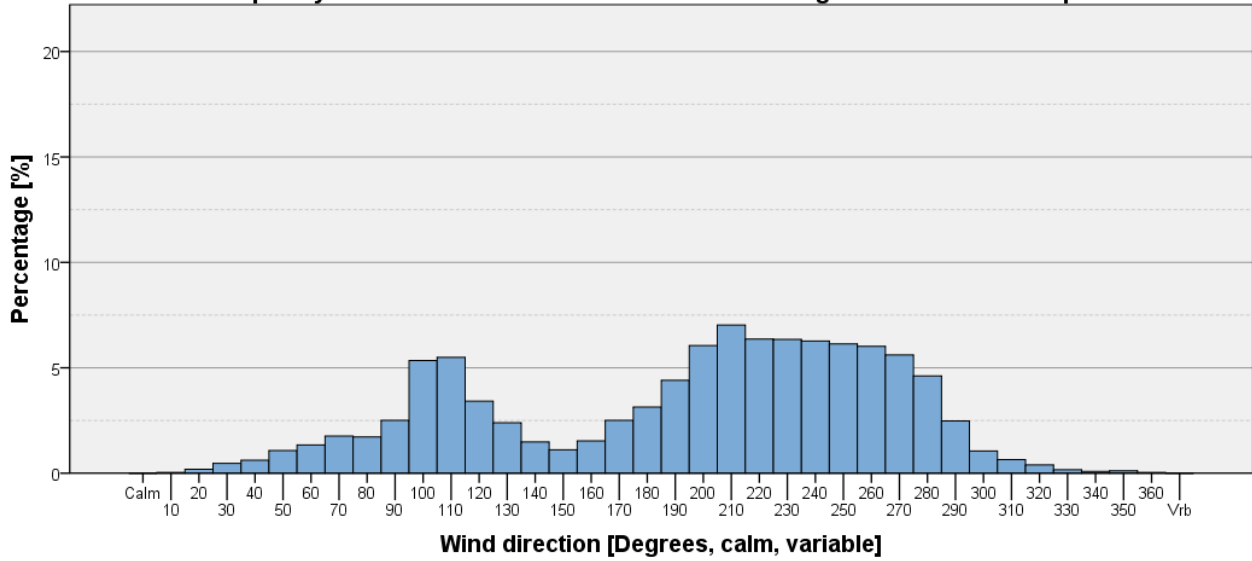


Figure 651

EKSP. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

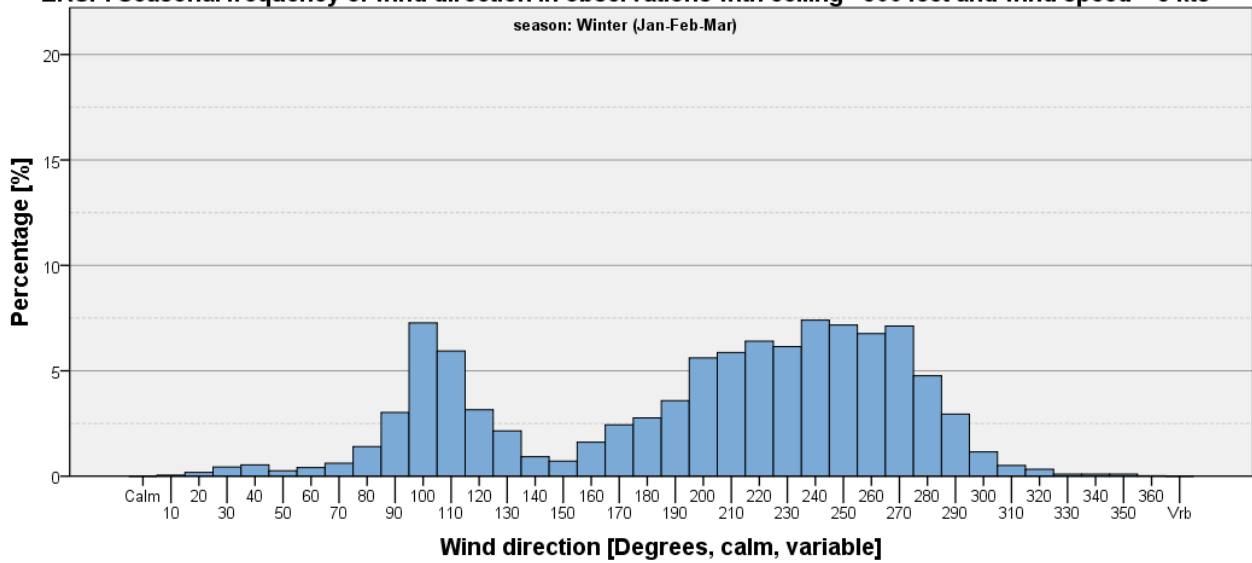


Figure 652

EKSP. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

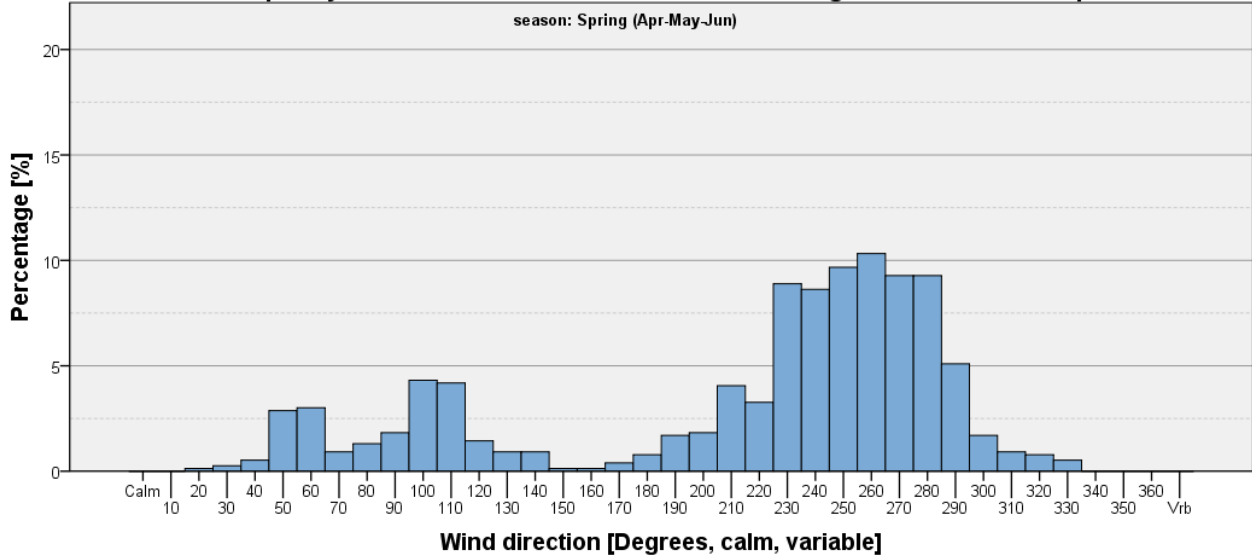


Figure 653

EKSP. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

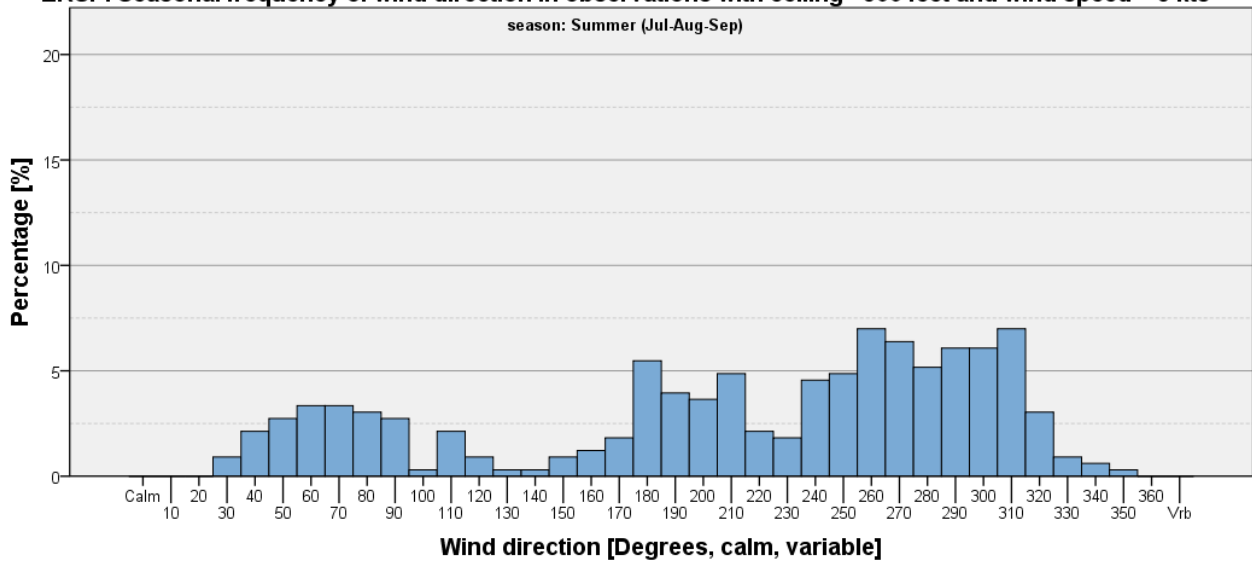


Figure 654

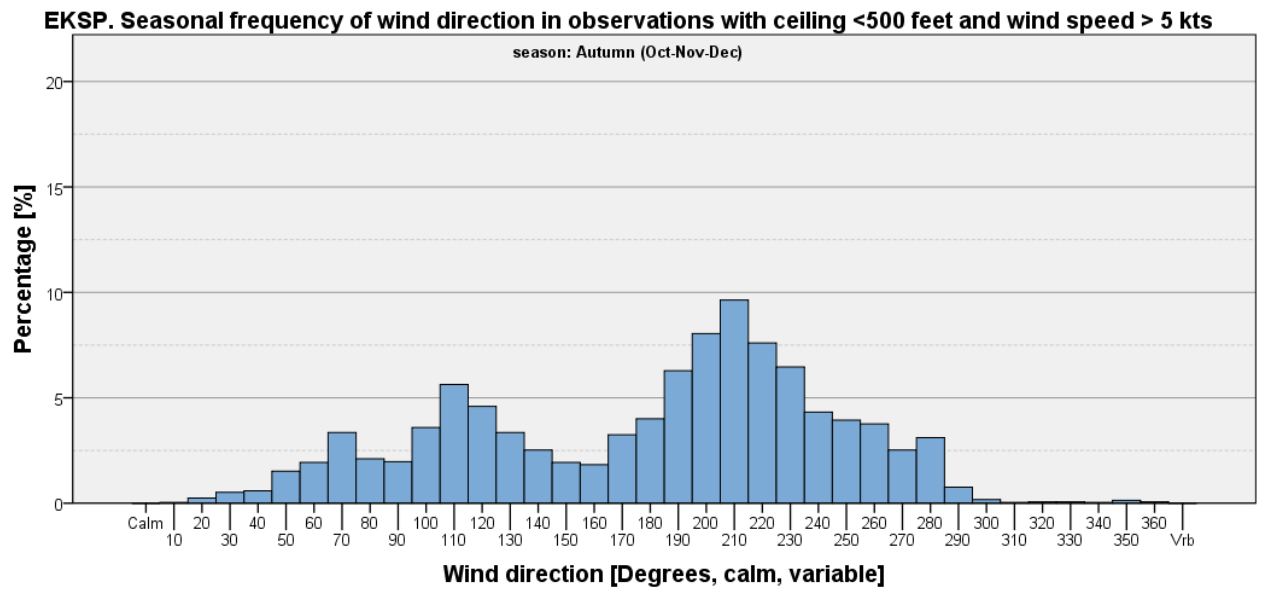
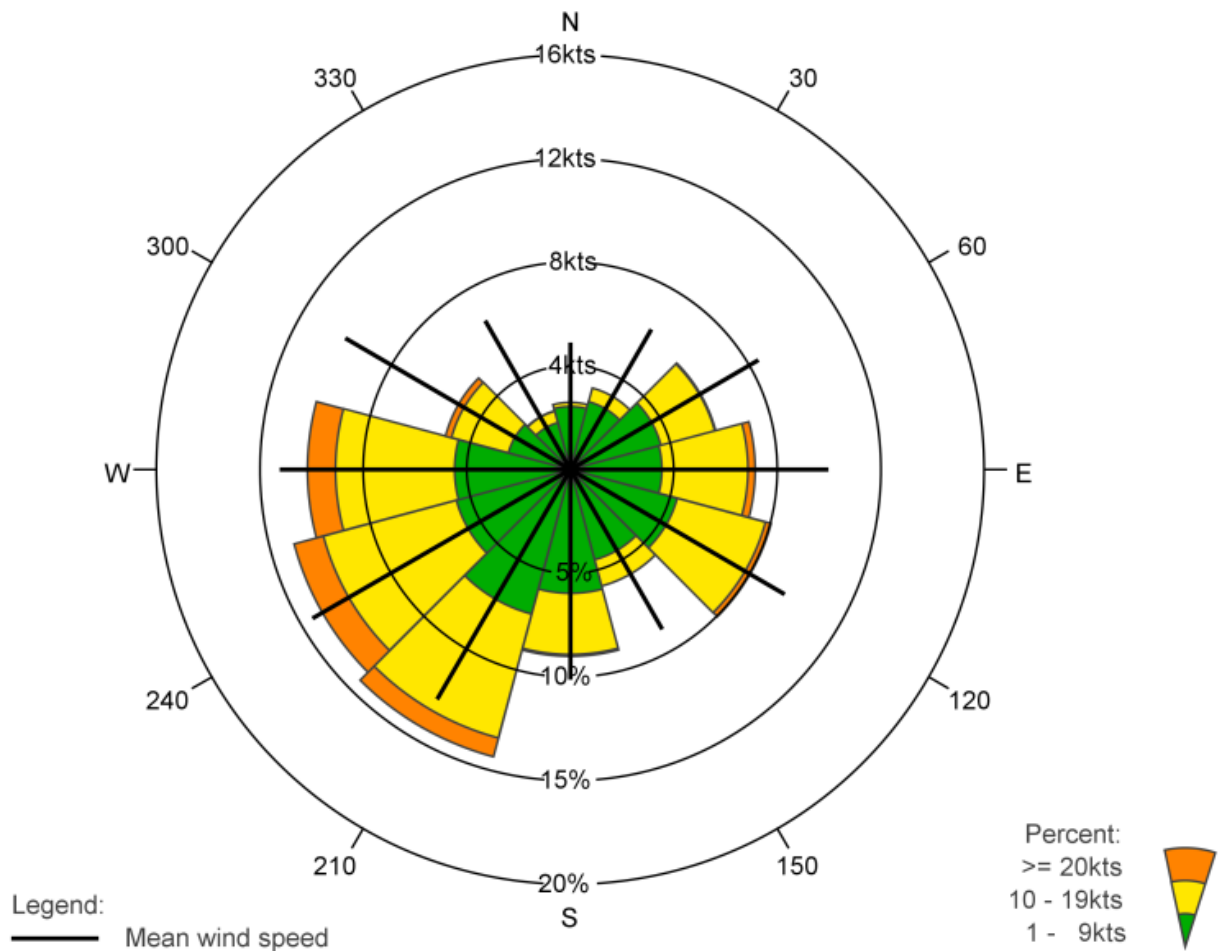


Figure 655

Wind Roses

EKSP: VOJENS LUFTHAVN, AUTUMN & WINTER

01-01-2009 - 31-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.2	4.1	7.3	8.9	10.0	5.8	9.0	14.4	13.8	12.7	6.3	2.9	98.4
% 1 - 9kts	3.0	3.4	4.5	4.4	5.3	4.5	6.0	7.2	5.7	5.6	3.1	2.3	55.1
% 10 - 19kts	0.2	0.7	2.7	4.2	4.4	1.3	3.0	6.2	6.6	5.8	2.9	0.6	38.4
% >= 20kts	0.0	0.0	0.0	0.4	0.3	0.0	0.1	0.9	1.5	1.4	0.3	0.0	4.9
Mean wind speed	4.9	6.3	8.4	10.0	9.6	7.1	8.1	10.2	11.5	11.3	10.1	6.6	9.5
Max wind speed	26.0	21.0	27.0	27.0	25.0	25.0	28.0	44.0	49.0	38.0	39.0	28.0	49.0

Number of observations = 86261

Source: DMI

Calm defined as wind speed = 0kts

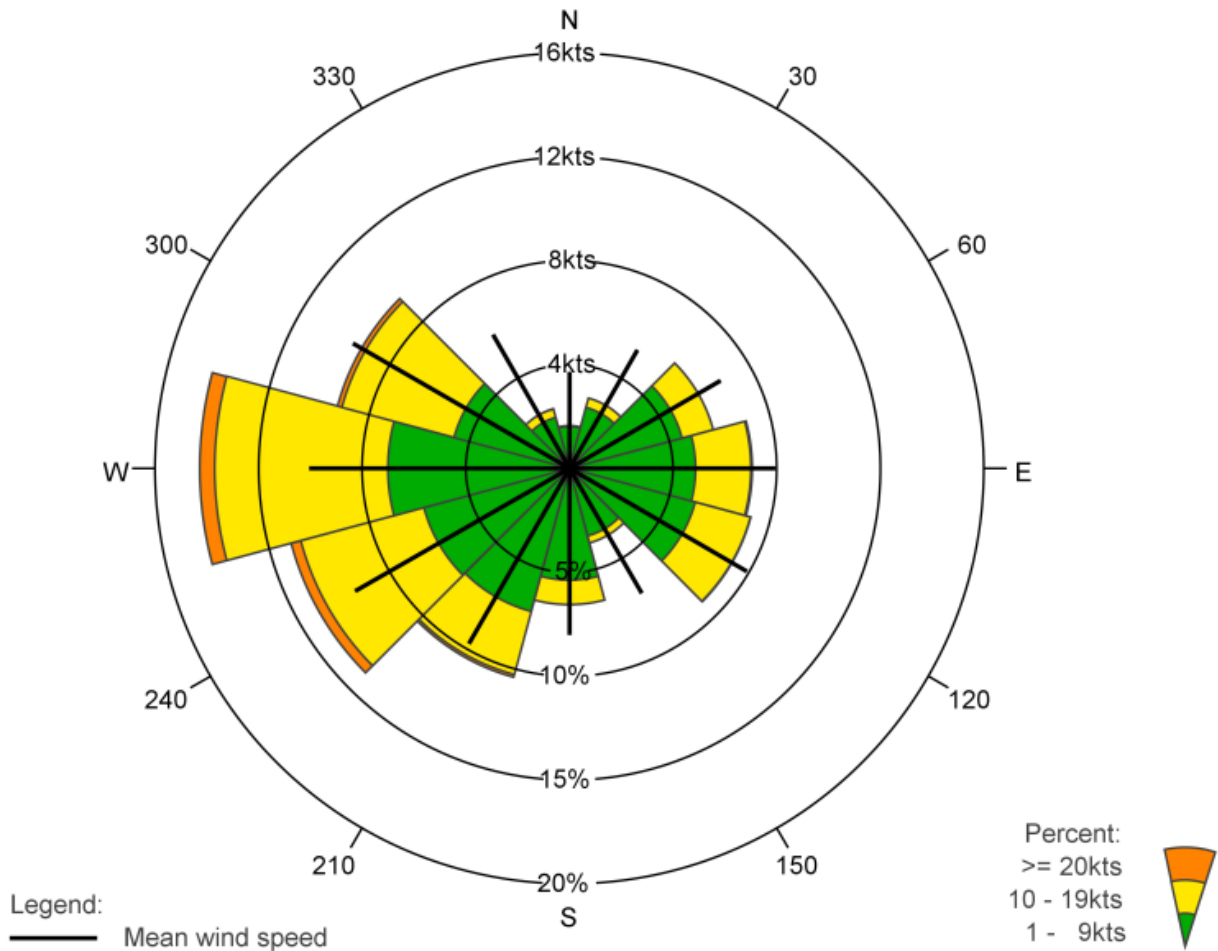
Number of observations with calm/varying wind direction: 1355=1.6%

Observations with calm/varying wind direction are not used in the statistics

Figure 656

EKSP: VOJENS LUFTHAVN, SPRING & SUMMER

01-01-2009 - 31-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	2.1	3.5	7.2	8.8	9.1	3.7	6.6	10.4	13.9	17.8	11.6	3.0	97.6
% 1 - 9kts	2.0	3.1	5.6	6.1	6.3	3.4	5.4	7.1	7.3	8.8	5.8	2.6	63.3
% 10 - 19kts	0.0	0.5	1.6	2.7	2.8	0.3	1.2	3.1	6.2	8.4	5.6	0.4	32.7
% >= 20kts	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.5	0.7	0.2	0.0	1.6
Mean wind speed	3.7	5.3	6.7	7.9	7.9	5.6	6.5	7.8	9.5	10.0	9.7	5.9	8.2
Max wind speed	15.0	20.0	21.0	23.0	22.0	17.0	21.0	28.0	33.0	28.0	27.0	25.0	33.0

Number of observations = 86027

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 2075=2.4%

Observations with calm/varying wind direction are not used in the statistics

Source: DMI

Figure 657

Availability

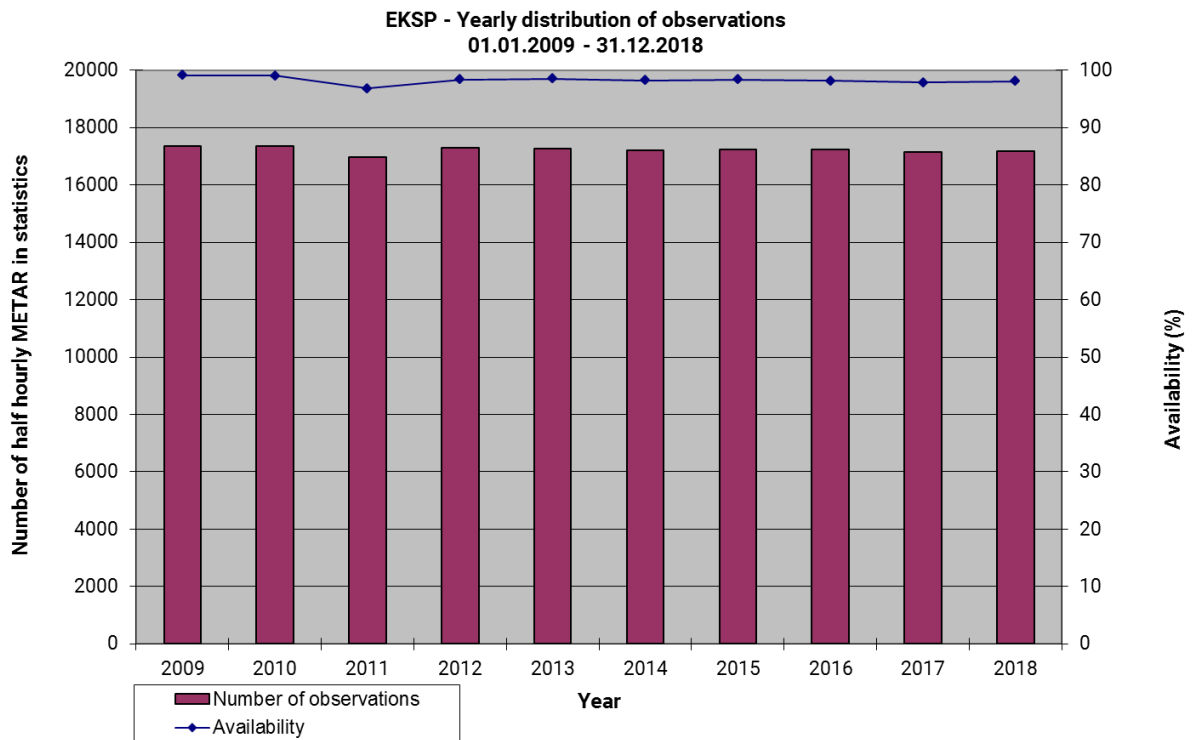


Figure 658

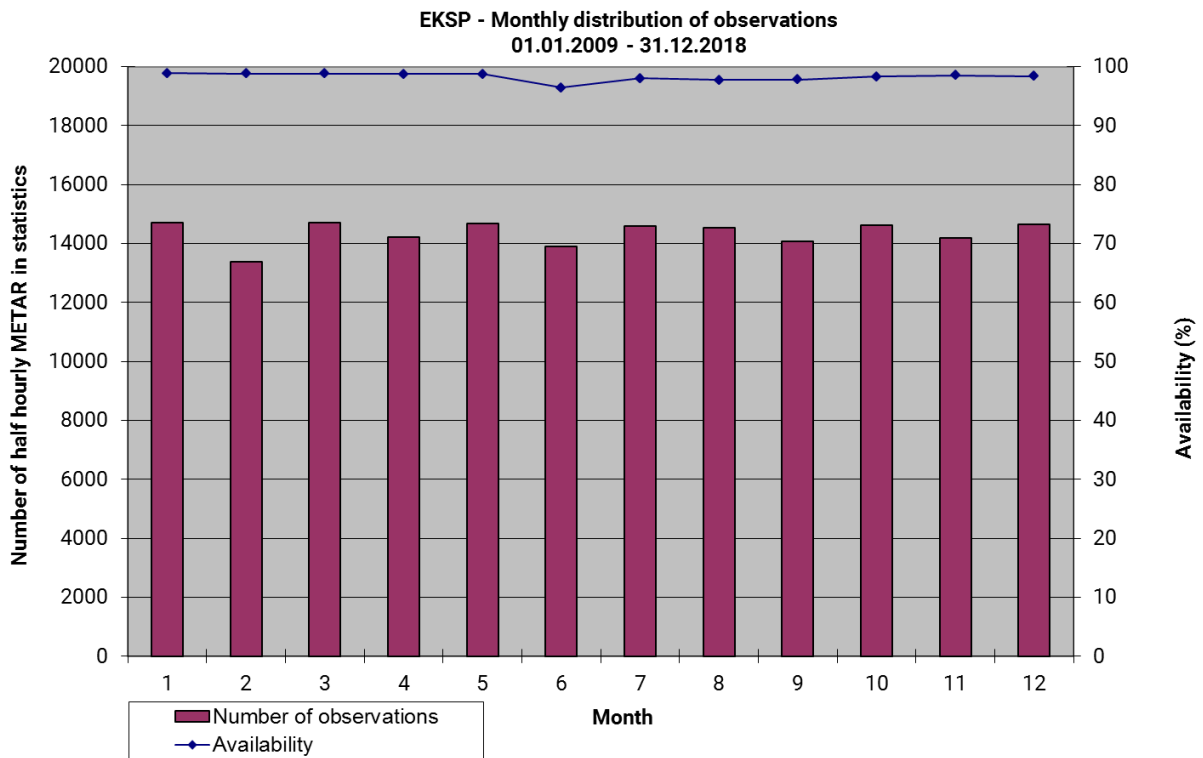


Figure 659

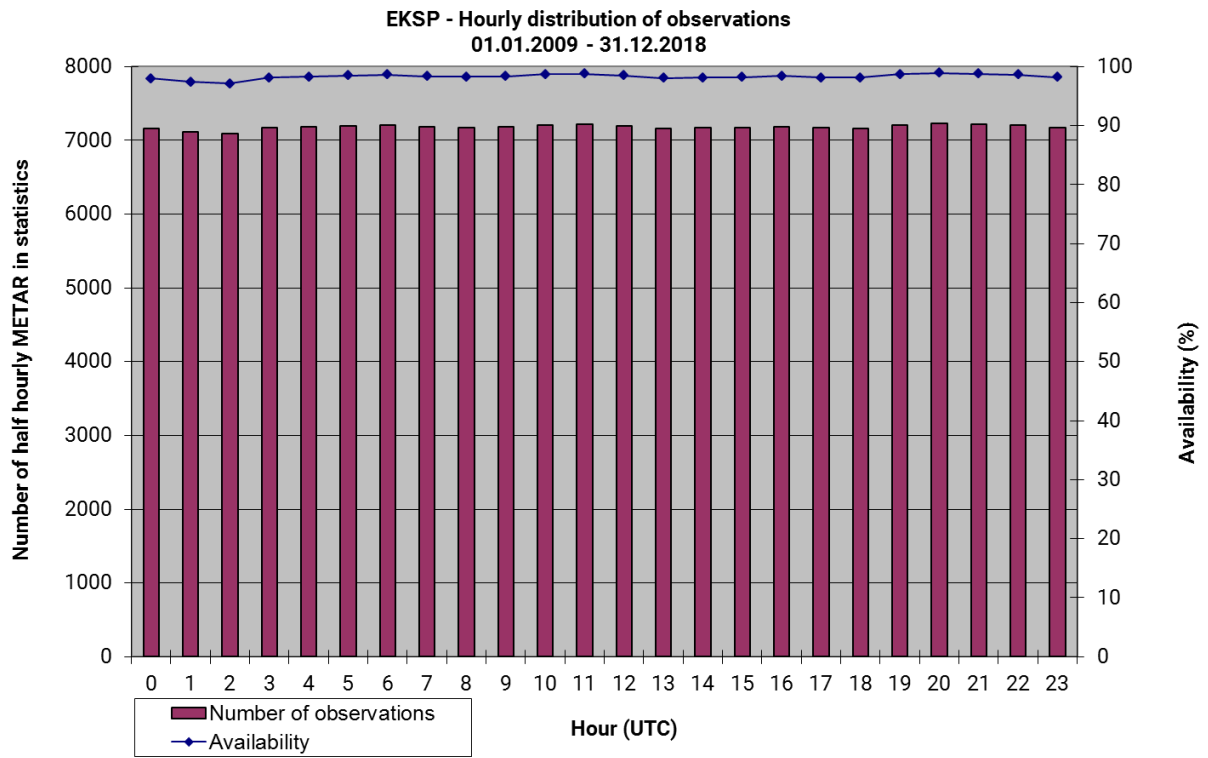


Figure 660

Table 183: EKSP. Average number of half hourly observations in statistics, 01.01.2009 – 31.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	2.0	2.0	1.9	2.0	2.0	2.0	1.9	2.0	1.9	1.9
1	2.0	2.0	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9
2	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9
3	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.9	2.0	1.9
4	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
5	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
6	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
7	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
8	2.0	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0
9	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
10	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
11	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
12	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.0
13	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
14	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
15	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0
16	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.0
17	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.0
18	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
19	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
20	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
21	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
22	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
23	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0

EKVD Kolding Lufthavn (Vamdrup)

Airport location: 55,433°N 9,333°E Elevation: 44 m above MSL.

EKVD observations in statistics: 36,019 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 20.5%. For more information, please go to the 'Availability' section.

EKVD METAR are both AUTO METAR and manual METAR.

Cross Tables Visibility – Ceiling

Table 184: EKVD Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 36,019	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.053	0.17	0.20	0.20	0.20	0.20	0.011	0.21
<350m	0.092	0.86	1.02	1.02	1.02	1.02	0.12	1.13
<600m	0.10	1.50	1.95	1.95	1.95	1.95	0.18	2.13
<800 m	0.10	1.65	2.37	2.37	2.37	2.37	0.19	2.57
<1.5 km	0.10	1.90	4.23	4.43	4.47	4.48	0.32	4.80
<3.0 km	0.10	2.03	7.40	9.90	10.27	10.38	0.84	11.22
< 5.0 km	0.10	2.04	8.37	14.30	15.63	15.99	2.29	18.28
< 8.0 km	0.10	2.05	8.61	17.69	20.76	21.62	4.85	26.47
>= 8.0 km or CAVOK	0	0.0028	0.072	3.74	9.86	14.11	59.41	73.53
Total	0.10	2.05	8.69	21.43	30.62	35.74	64.26	100

Table 185: EKVD - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 9,088	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.12	0.40	0.41	0.41	0.41	0.41	0	0.41
<350m	0.19	1.82	1.96	1.96	1.96	1.96	0.09	2.05
<600m	0.21	3.31	4.14	4.15	4.15	4.16	0.13	4.29
<800 m	0.21	3.76	5.19	5.20	5.20	5.22	0.13	5.35
<1.5 km	0.21	4.12	9.08	9.54	9.62	9.64	0.28	9.91
<3.0 km	0.21	4.30	14.46	18.60	19.39	19.62	1.17	20.79
< 5.0 km	0.21	4.34	15.85	24.64	27.07	27.57	2.95	30.52
< 8.0 km	0.21	4.35	16.41	28.98	34.18	35.42	6.47	41.89
>= 8.0 km or CAVOK	0	0	0.10	4.39	11.44	16.48	41.63	58.11
Total	0.21	4.35	16.51	33.37	45.62	51.90	48.10	100

Table 186: EKVD - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 9,177	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.054	0.087	0.087	0.087	0.087	0	0.087
<350m	0	0.27	0.33	0.33	0.33	0.33	0.054	0.38
<600m	0	0.34	0.48	0.48	0.48	0.48	0.087	0.57
<800 m	0	0.36	0.57	0.57	0.57	0.57	0.087	0.65
<1.5 km	0	0.44	1.00	1.05	1.05	1.05	0.12	1.17
<3.0 km	0	0.47	2.24	3.52	3.66	3.68	0.33	4.01
< 5.0 km	0	0.47	2.82	6.02	6.60	6.68	1.05	7.73
< 8.0 km	0	0.47	2.93	8.02	9.80	10.05	3.12	13.16
>= 8.0 km or CAVOK	0	0	0.011	2.92	8.89	13.04	73.79	86.84
Total	0	0.47	2.94	10.94	18.69	23.09	76.91	100

Table 187: EKVD - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 9,197	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.13	0.14	0.14	0.14	0.14	0.011	0.15
<350m	0.054	0.29	0.33	0.33	0.33	0.33	0.11	0.43
<600m	0.054	0.34	0.39	0.39	0.39	0.39	0.14	0.53
<800 m	0.054	0.35	0.41	0.41	0.41	0.41	0.14	0.55
<1.5 km	0.065	0.47	0.76	0.87	0.87	0.87	0.29	1.16
<3.0 km	0.065	0.55	1.49	2.56	2.69	2.70	0.61	3.31
< 5.0 km	0.065	0.57	1.97	4.89	5.49	5.64	1.83	7.47
< 8.0 km	0.065	0.57	2.09	7.08	8.38	8.82	3.83	12.65
>= 8.0 km or CAVOK	0	0	0.087	3.14	7.80	11.34	76.01	87.35
Total	0.065	0.57	2.17	10.22	16.18	20.16	79.84	100

Table 188: EKVD - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations =	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.093	0.12	0.16	0.16	0.16	0.16	0.035	0.20
<350m	0.13	1.09	1.50	1.50	1.50	1.50	0.22	1.72
<600m	0.14	2.06	2.87	2.87	2.87	2.87	0.36	3.24
<800 m	0.14	2.21	3.39	3.39	3.39	3.39	0.43	3.82
<1.5 km	0.14	2.64	6.28	6.47	6.53	6.57	0.62	7.19
<3.0 km	0.14	2.86	11.78	15.40	15.83	16.02	1.29	17.31
< 5.0 km	0.14	2.87	13.28	22.30	24.04	24.79	3.42	28.21
< 8.0 km	0.14	2.89	13.45	27.46	31.58	33.15	6.08	39.23
>= 8.0 km or CAVOK	0	0.012	0.093	4.58	11.43	15.73	45.04	60.77
Total	0.14	2.90	13.54	32.04	43.01	48.88	51.12	100

Wind Direction Histograms

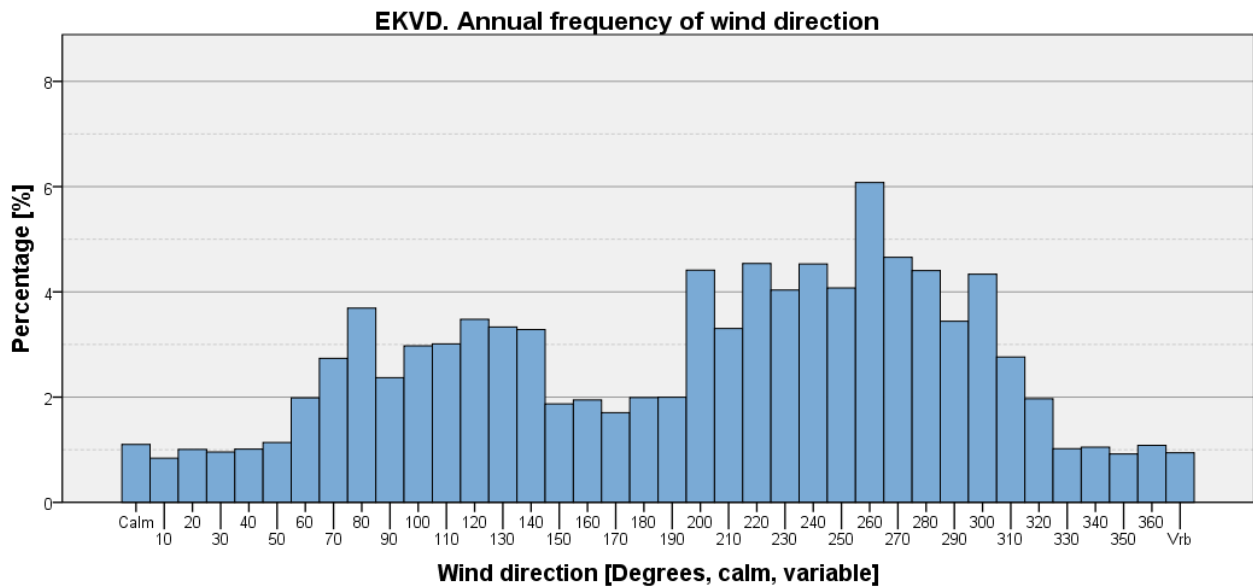


Figure 661

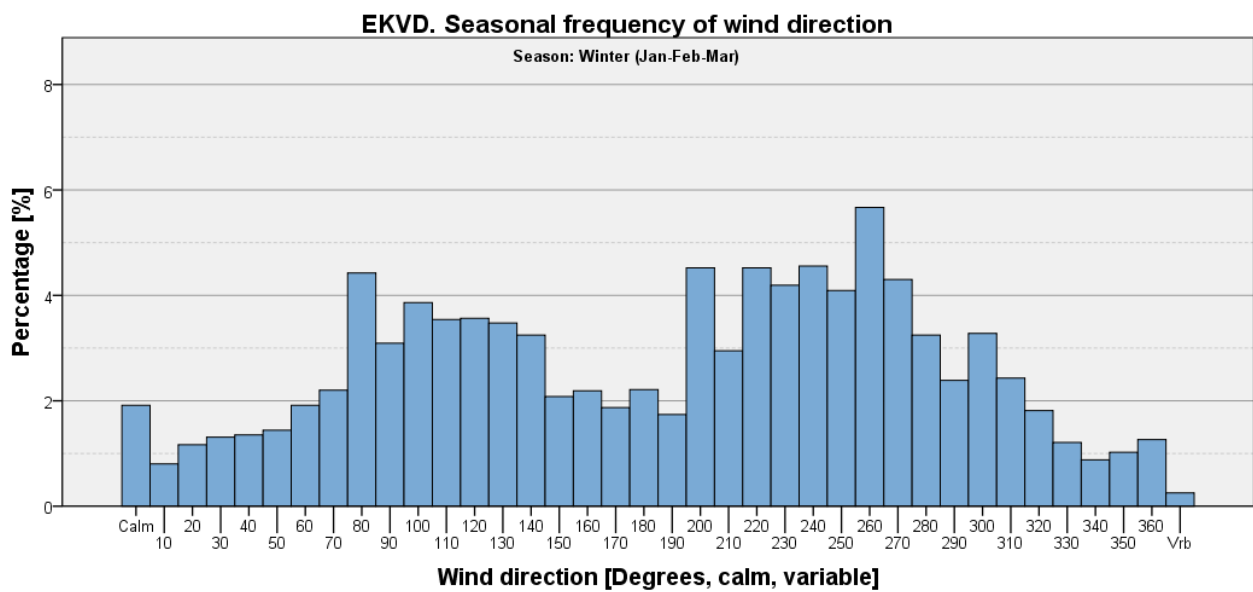


Figure 662

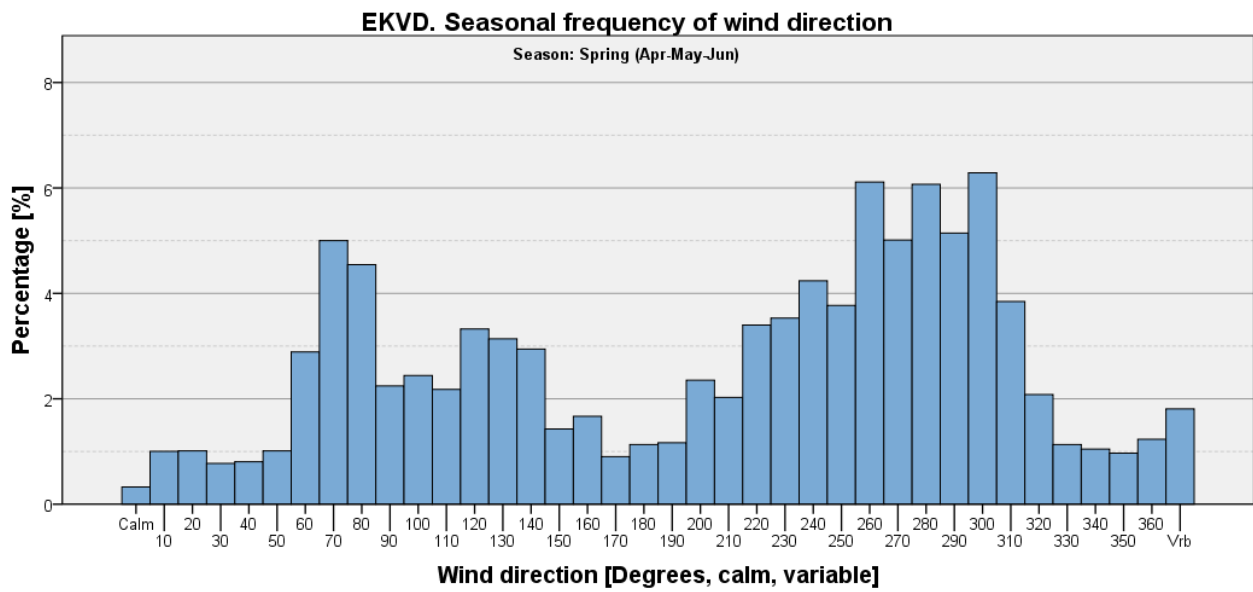


Figure 663

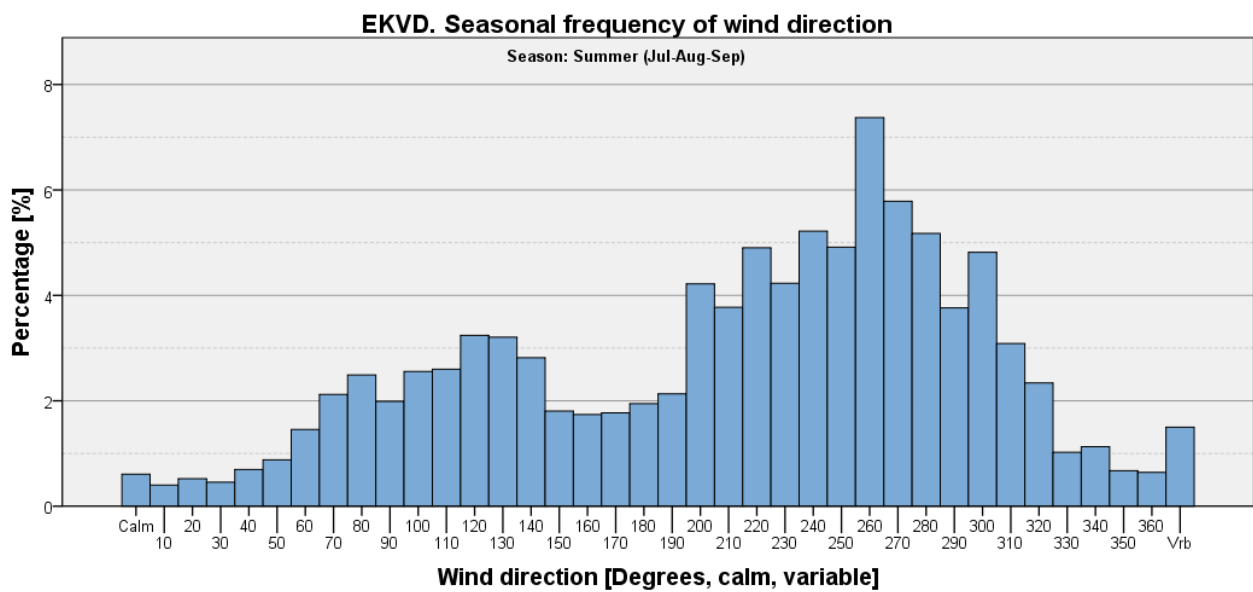


Figure 664

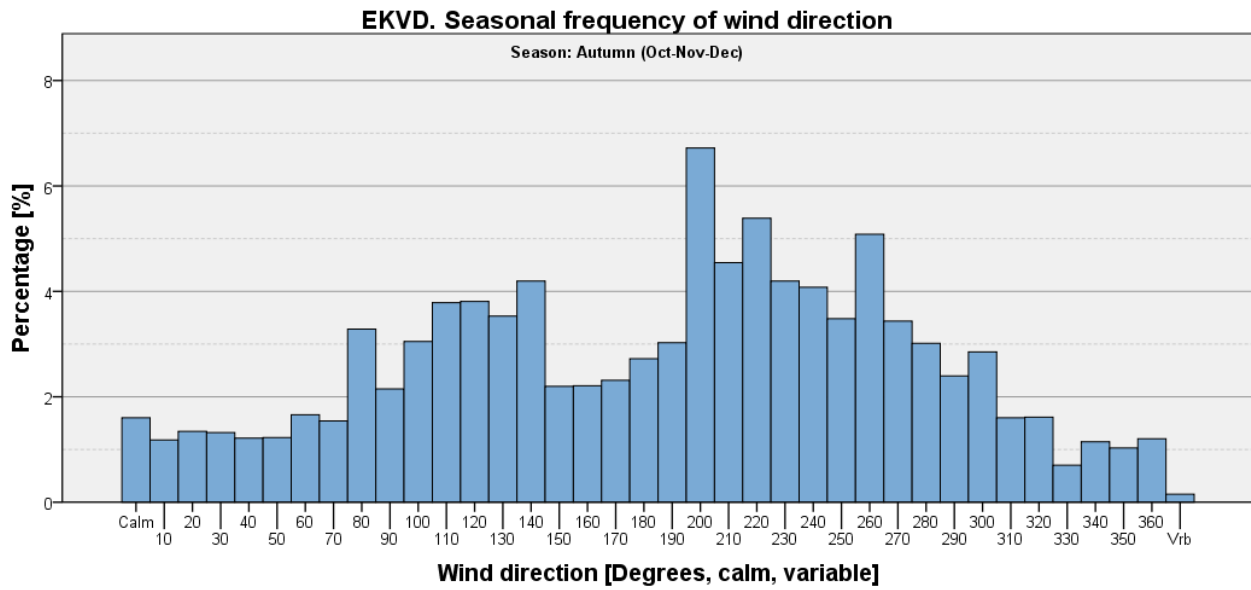


Figure 665

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 189: EKVD - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	5.35	0.65	0.55	3.82	2.57
All other observations	94.65	99.35	99.45	96.18	97.43
Total	100	100	100	100	100

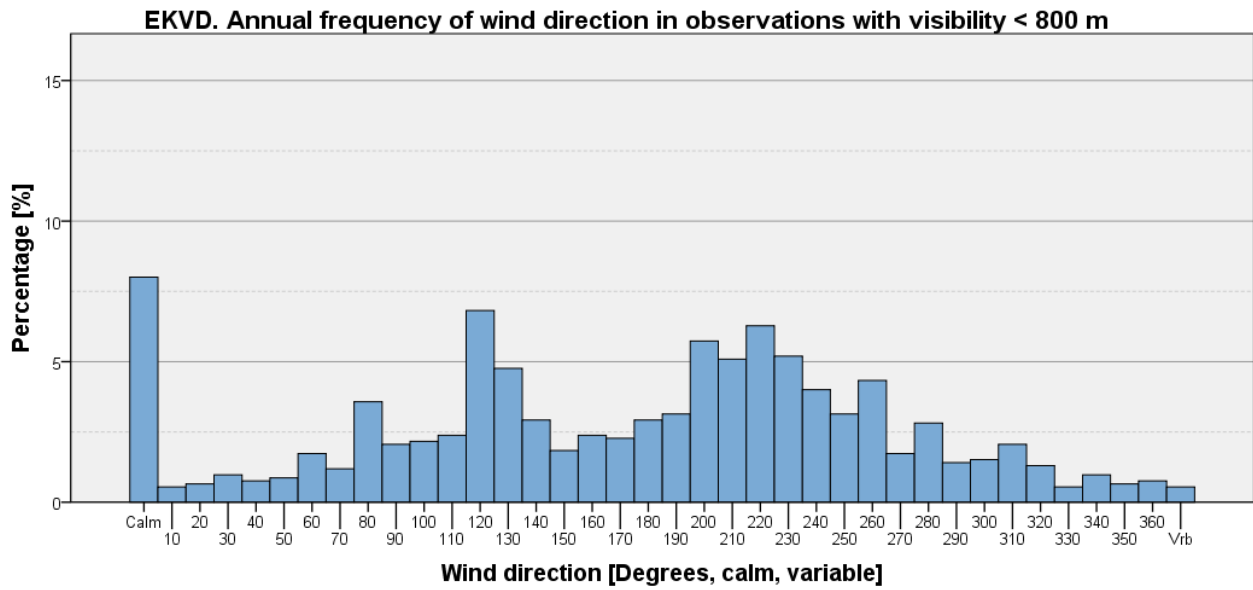


Figure 666

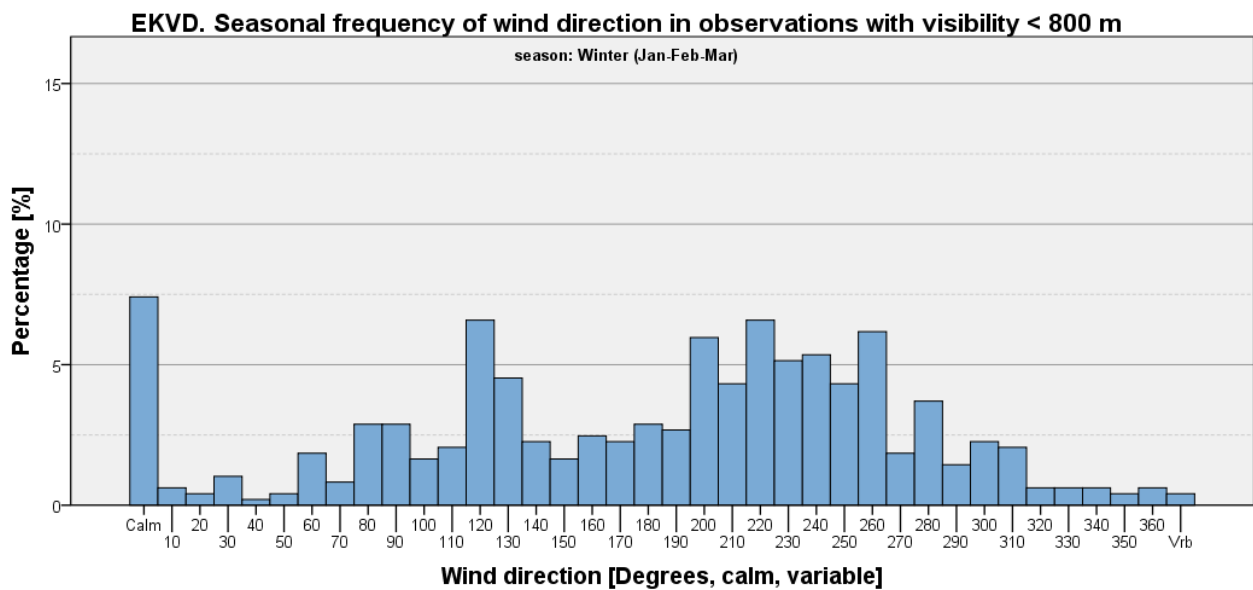


Figure 667

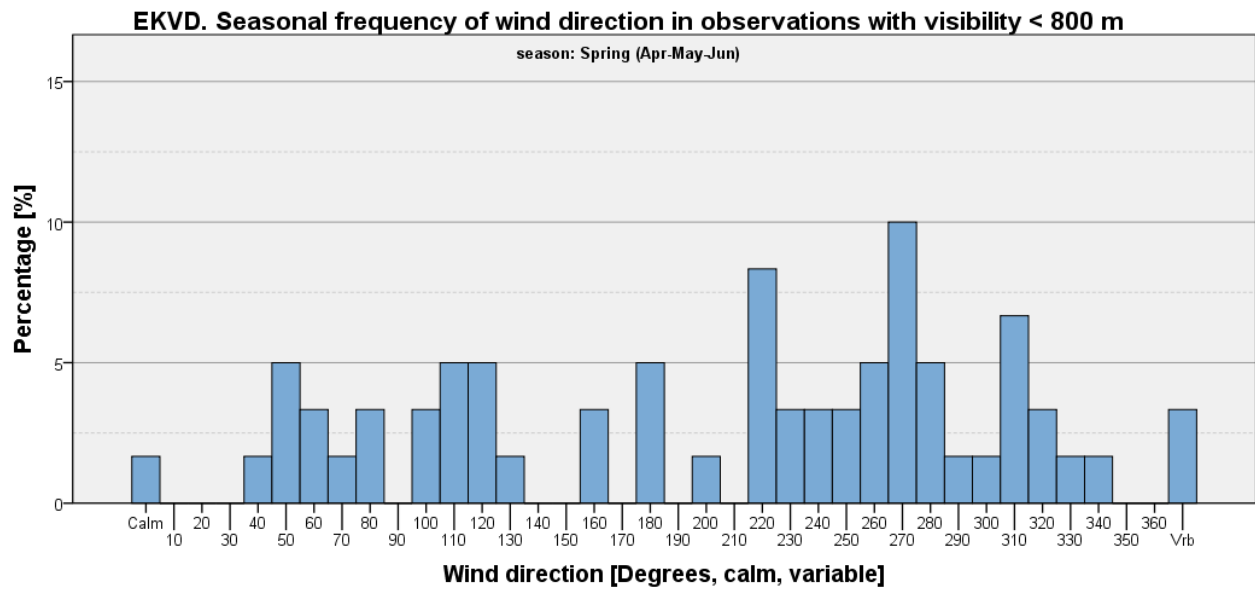


Figure 668

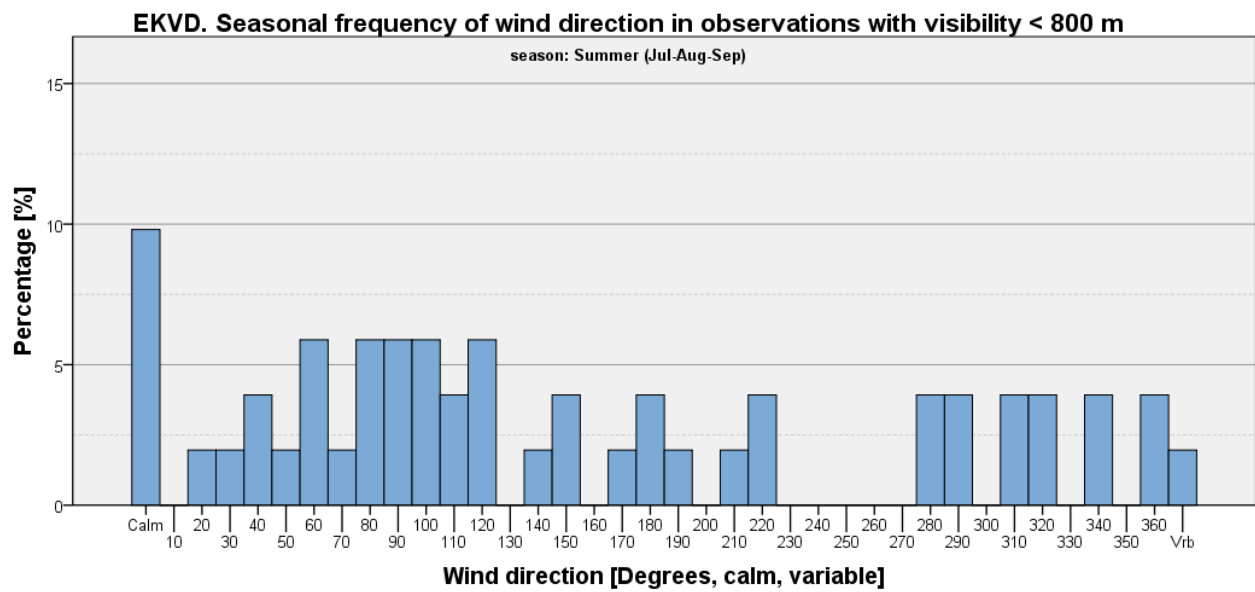


Figure 669

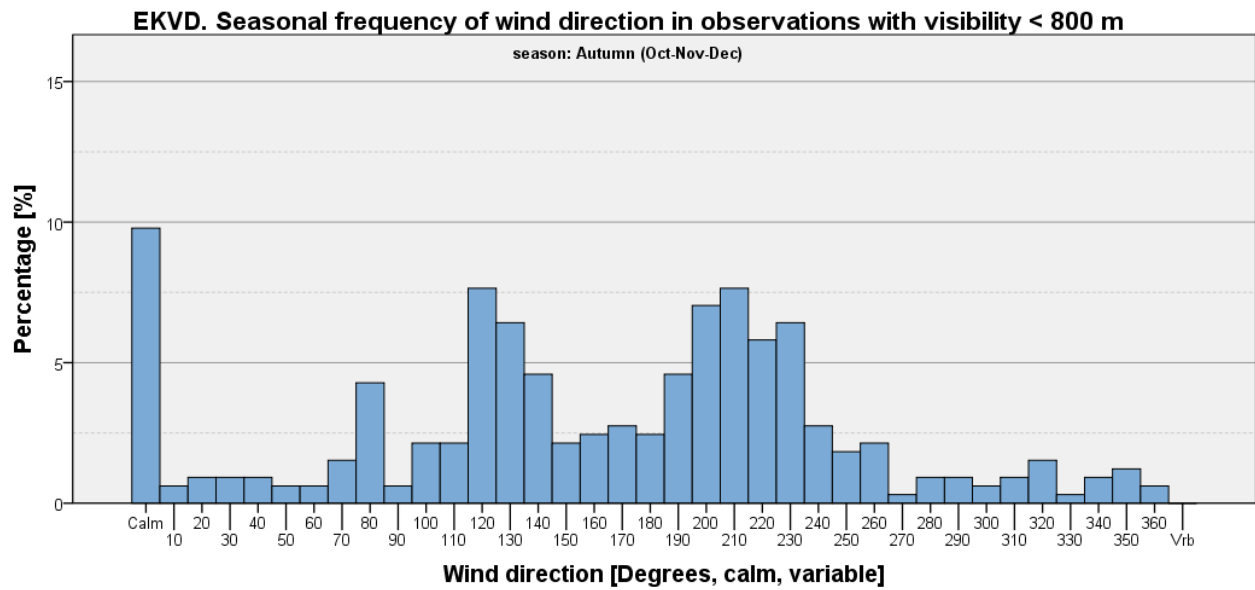


Figure 670

Visibility < 800 m and Wind Speed <= 5 kts

Table 190: EKVD - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	2.61	0.41	0.52	2.16	1.41
All other observations	97.39	99.59	99.48	97.84	98.59
Total	100	100	100	100	100

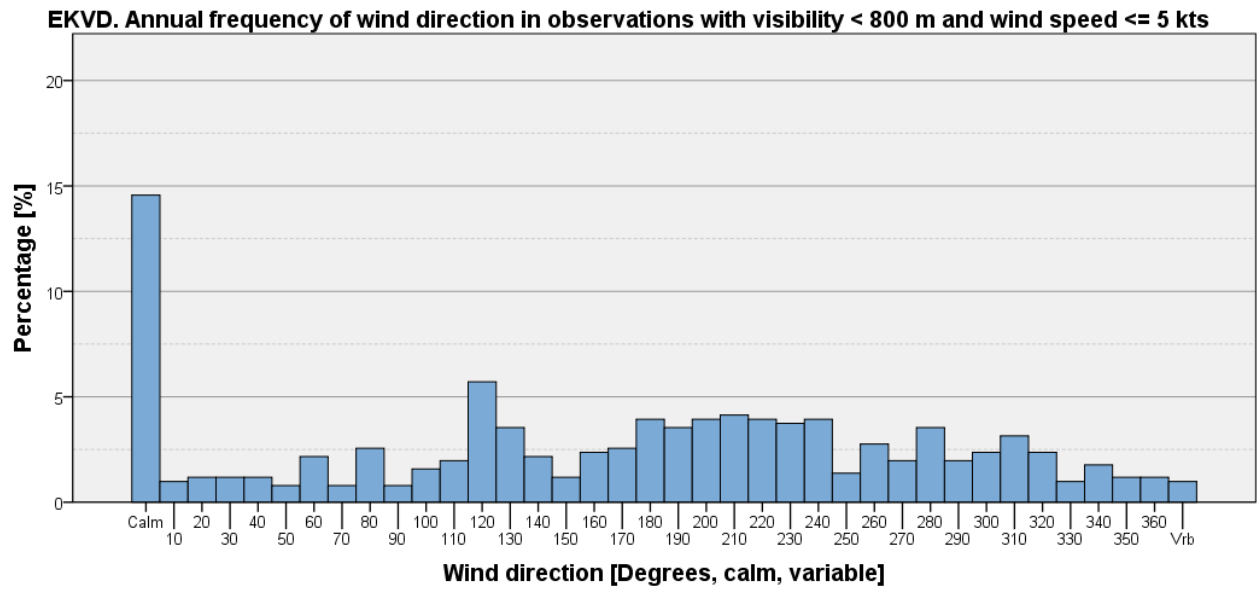


Figure 671

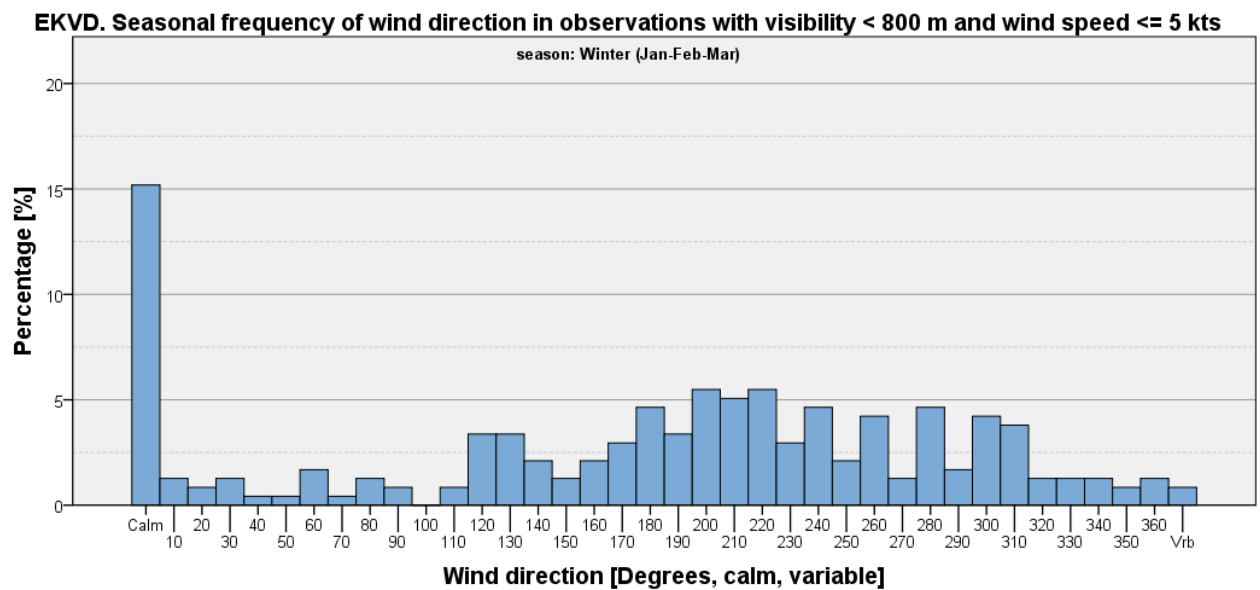


Figure 672

EKVD. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

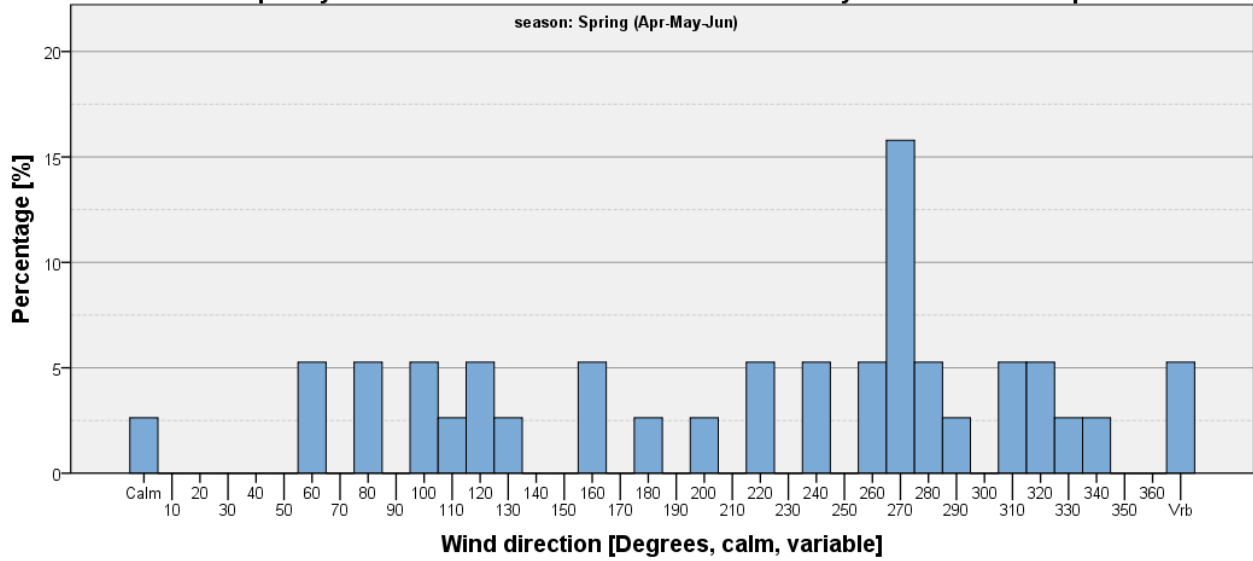


Figure 673

EKVD. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

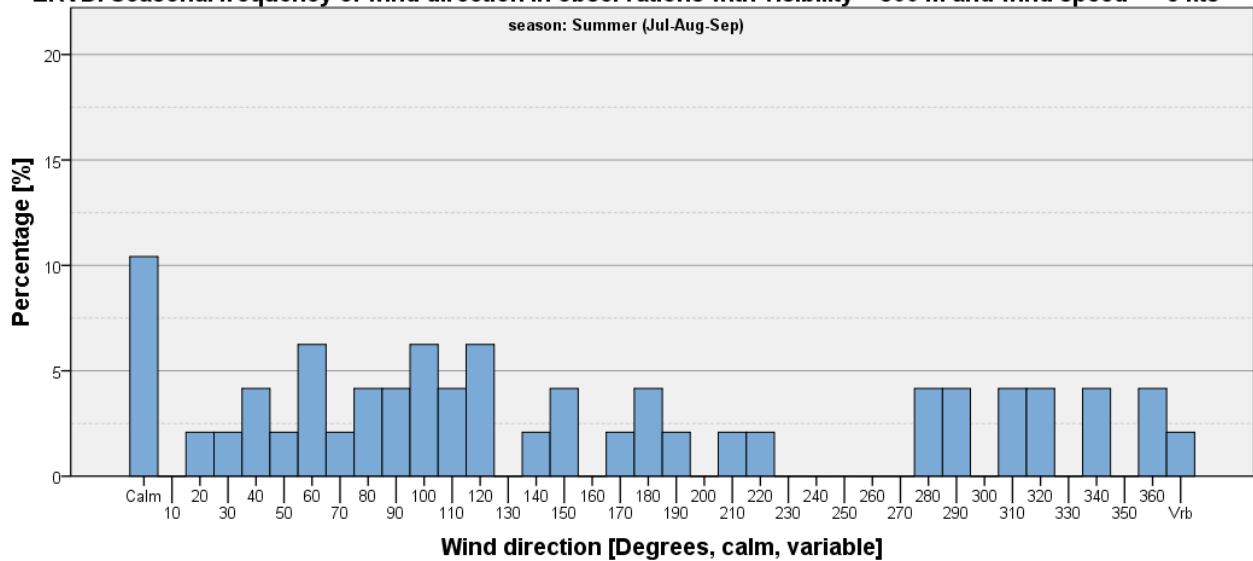


Figure 674

EKVD. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

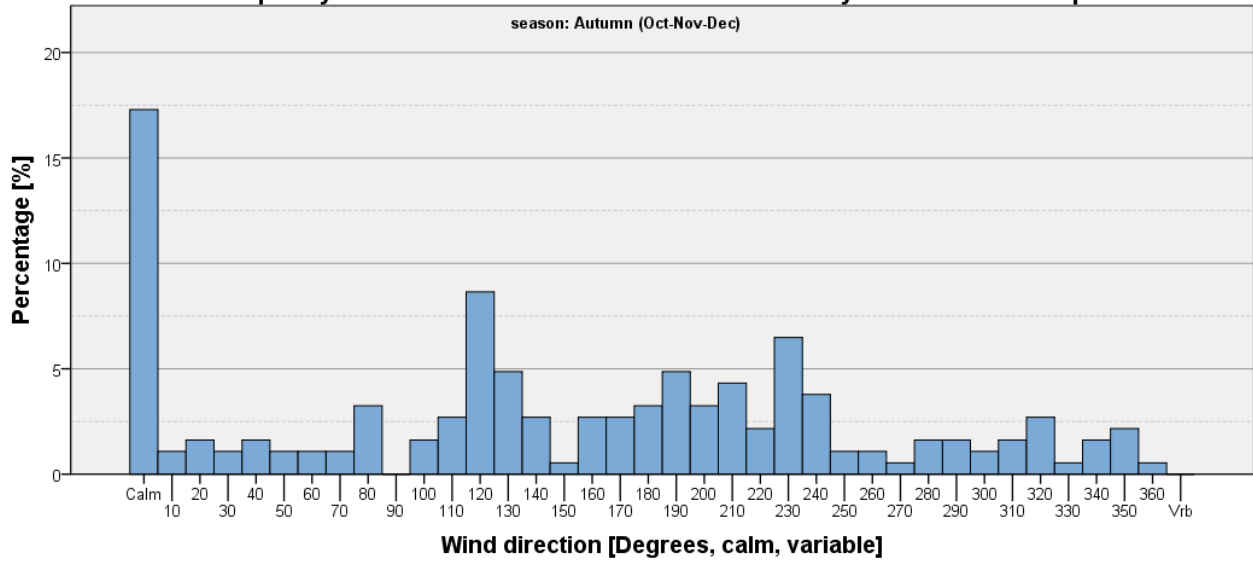


Figure 675

Visibility < 800 m and Wind Speed > 5 kts

Table 191: EKVD - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	2.74	0.24	0.033	1.66	1.15
All other observations	97.26	99.76	99.97	98.34	98.85
Total	100	100	100	100	100

EKVD. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

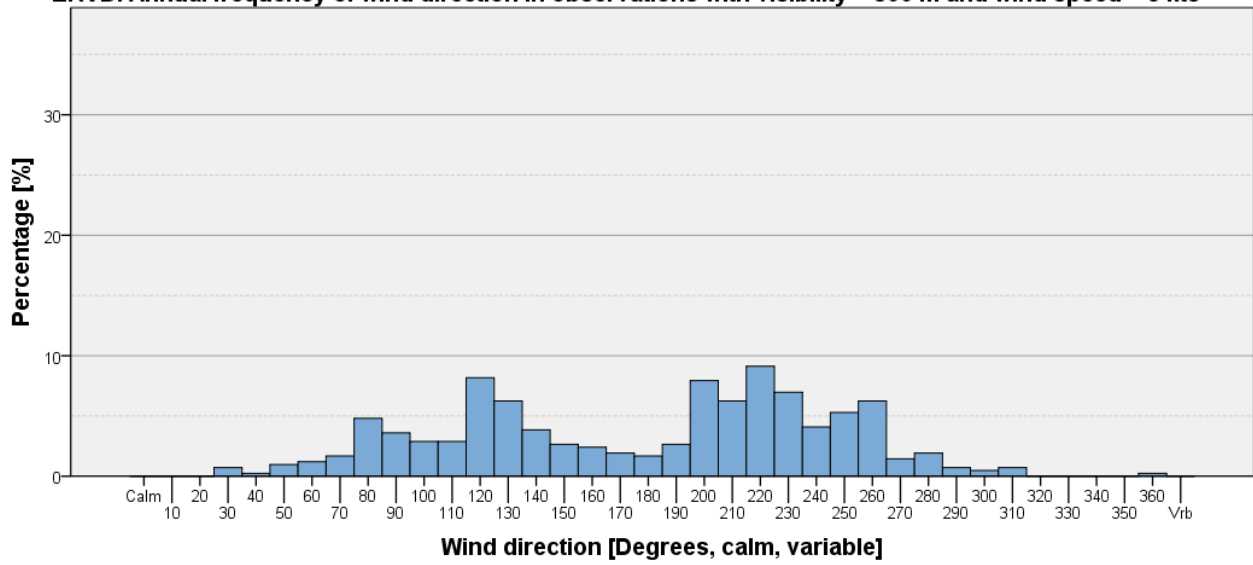


Figure 676

EKVD. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

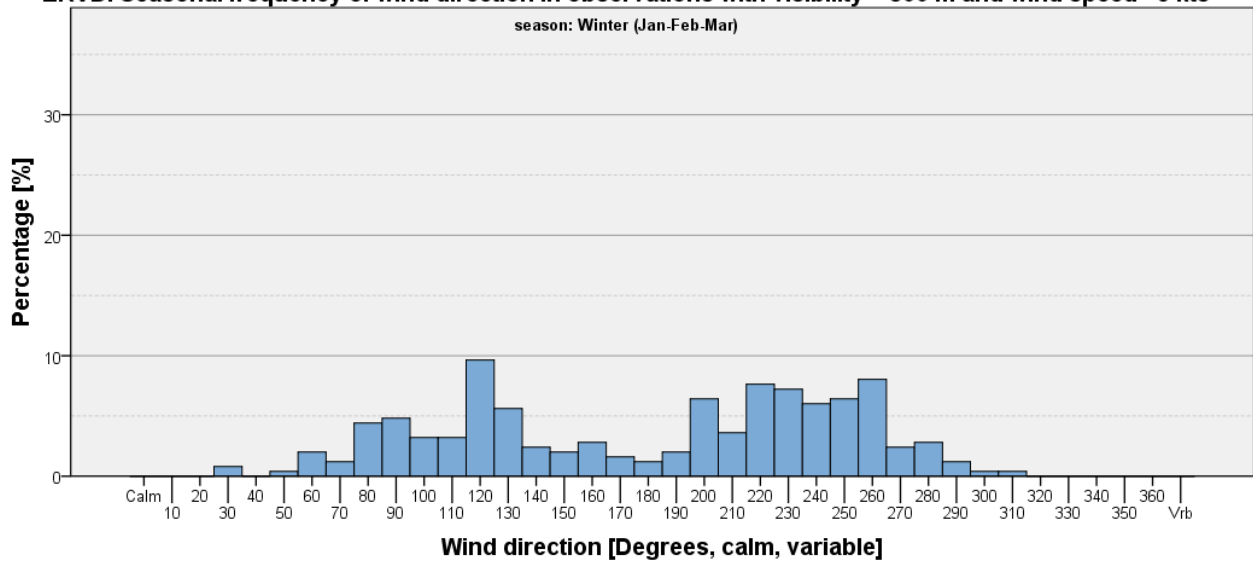


Figure 677

EKVD. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

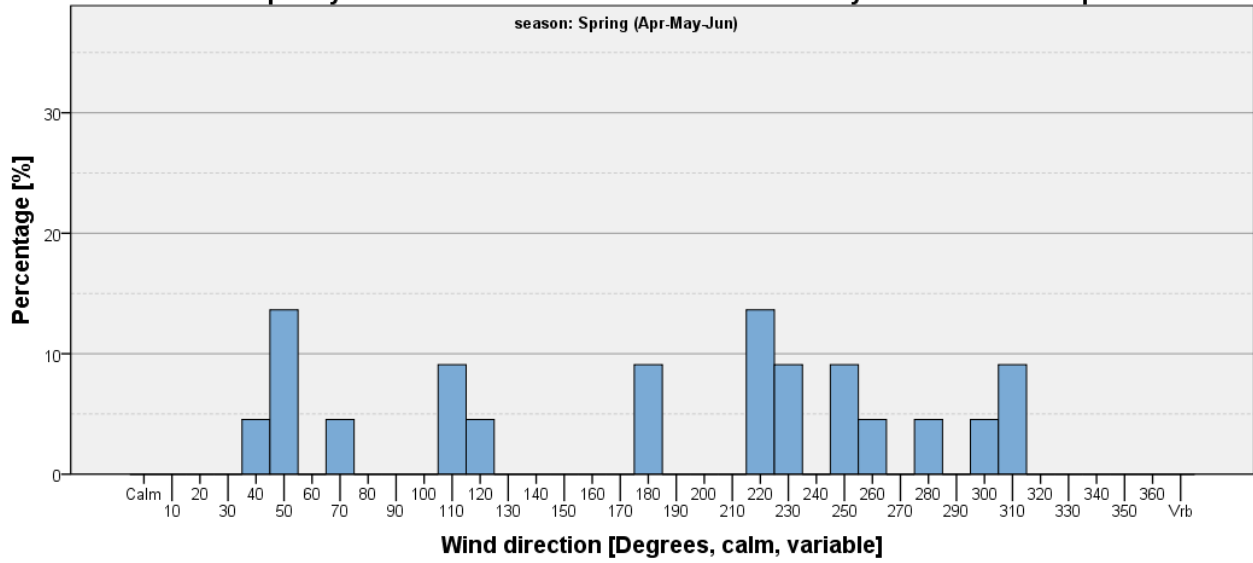


Figure 678

EKVD. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

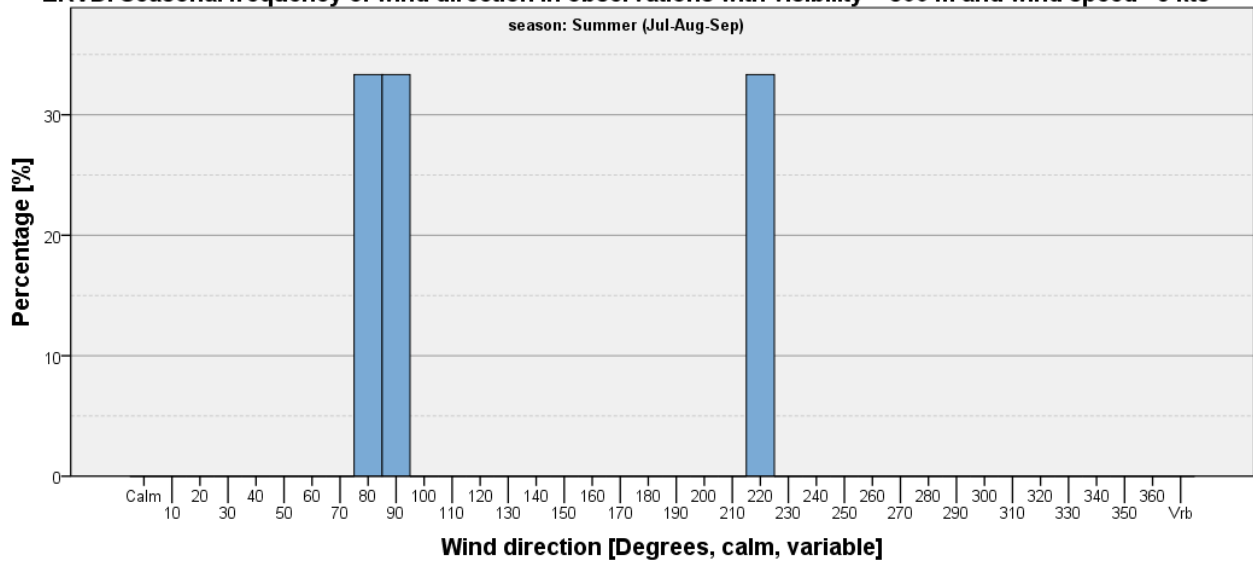


Figure 679

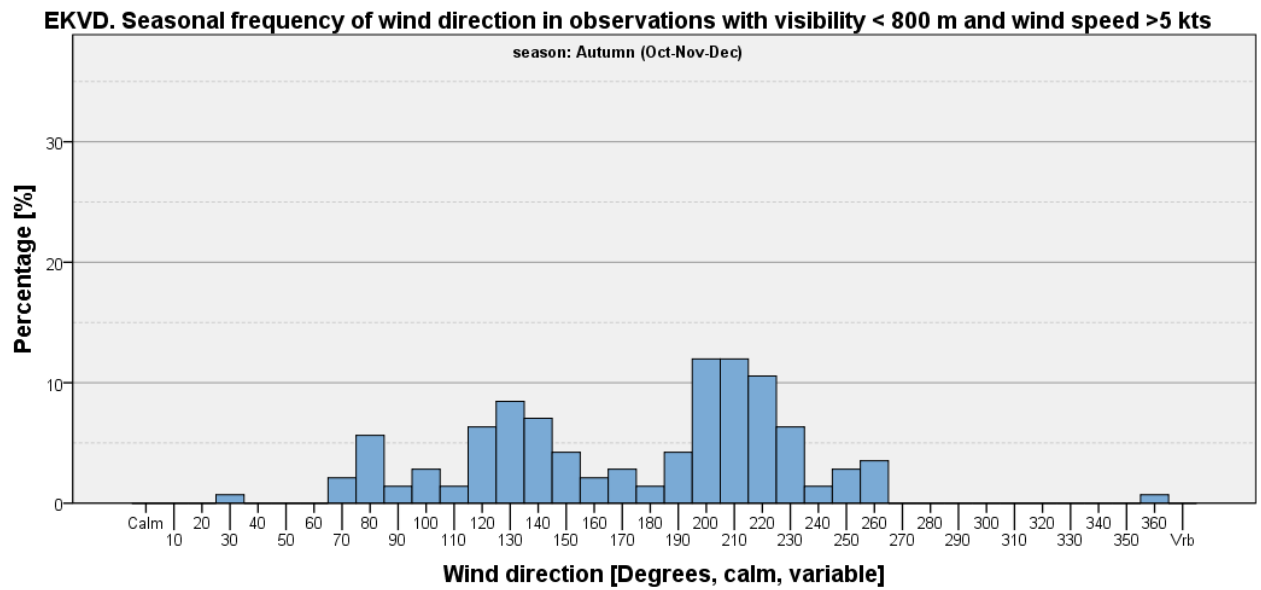


Figure 680

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 192: EKVD - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	33.37	10.94	10.22	32.04	21.43
All other observations	66.63	89.06	89.78	67.96	78.57
Total	100	100	100	100	100

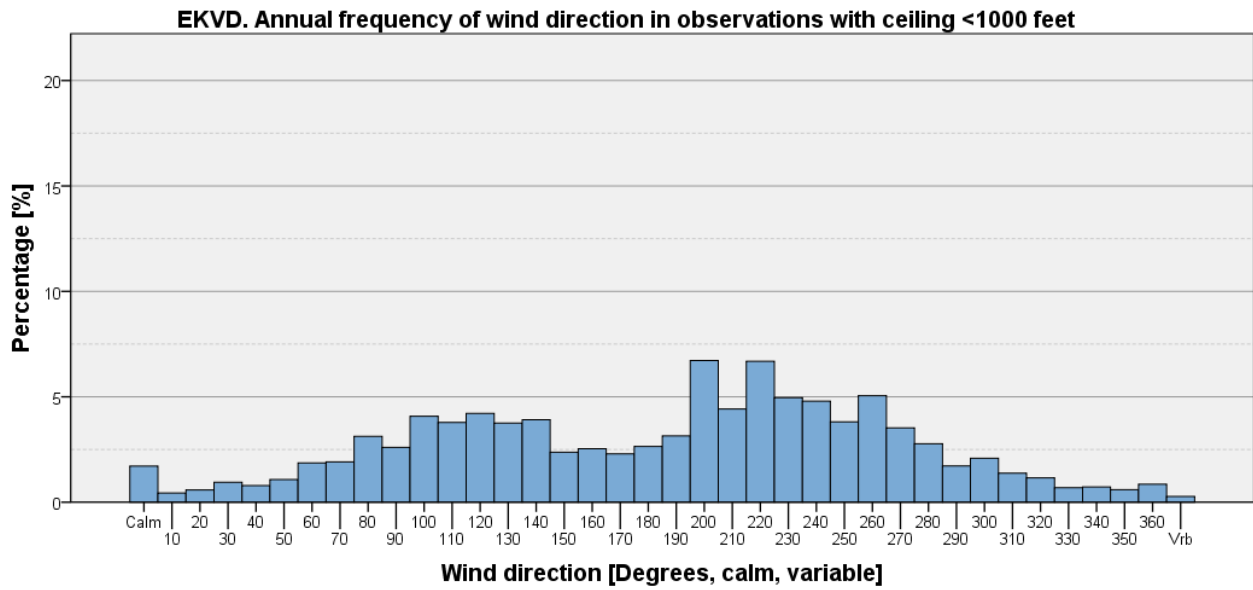


Figure 681

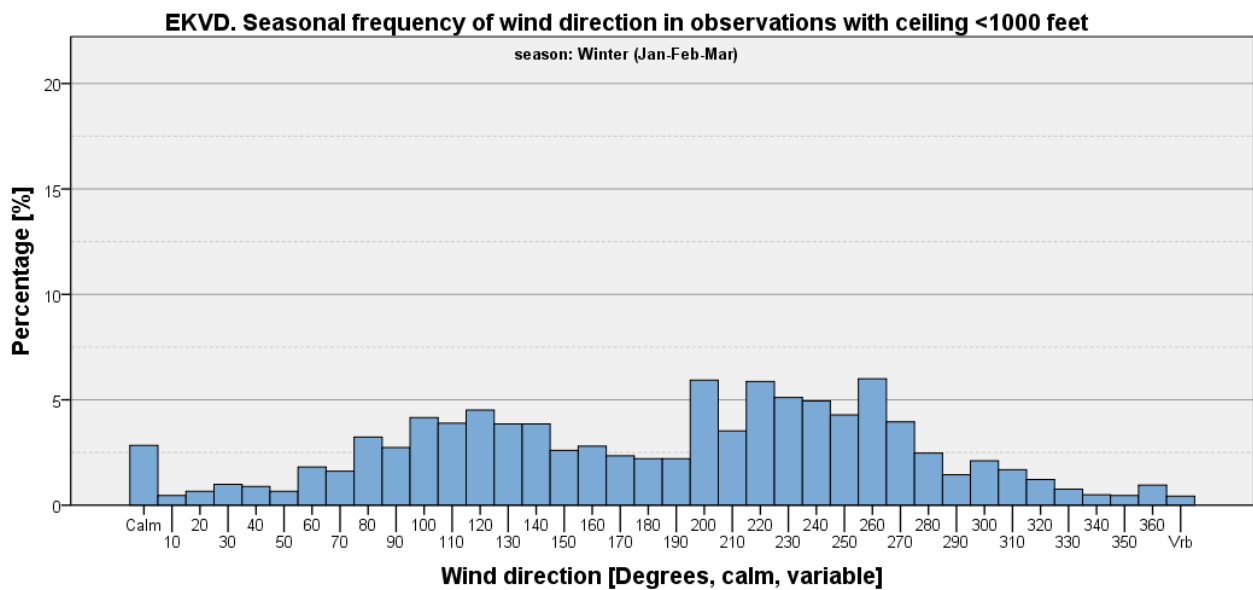


Figure 682

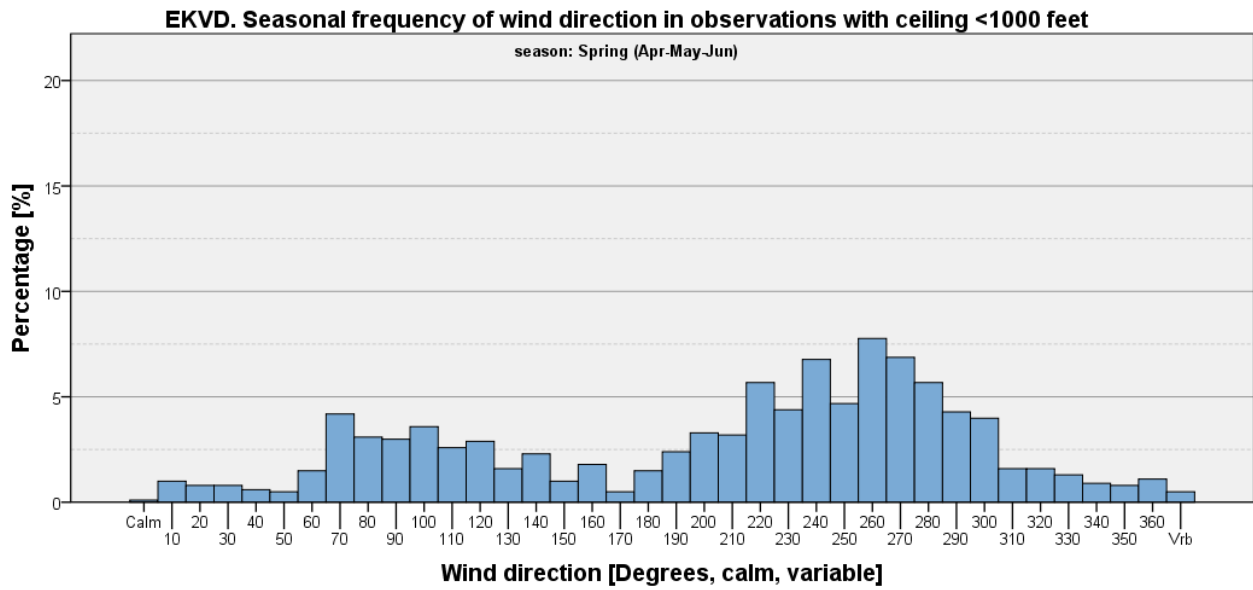


Figure 683

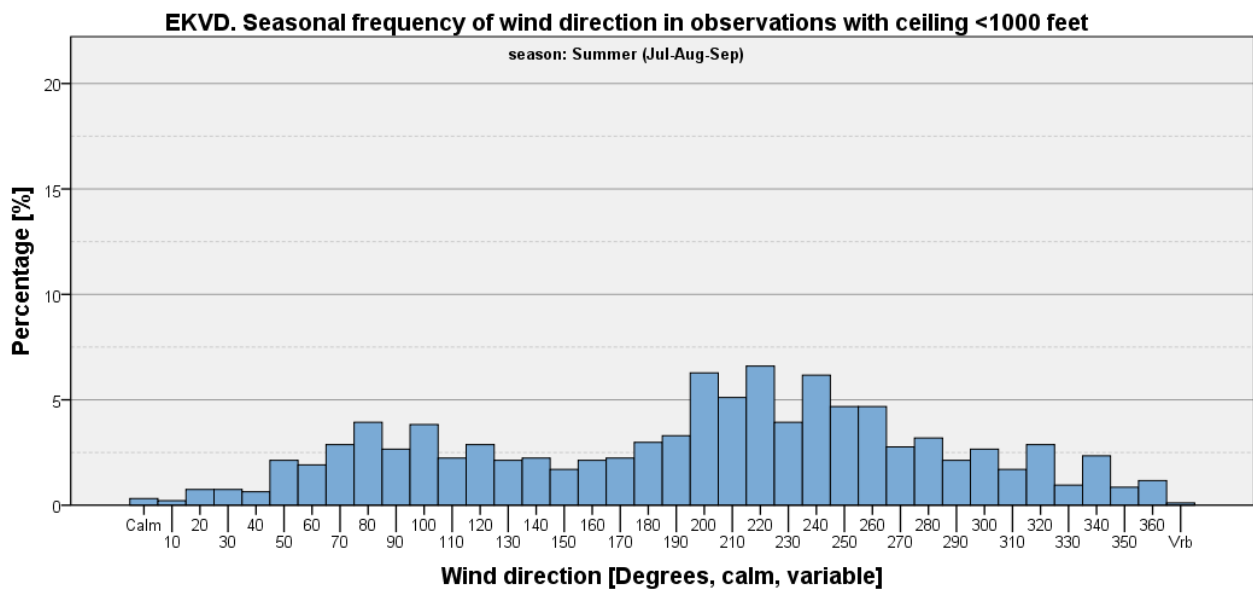


Figure 684

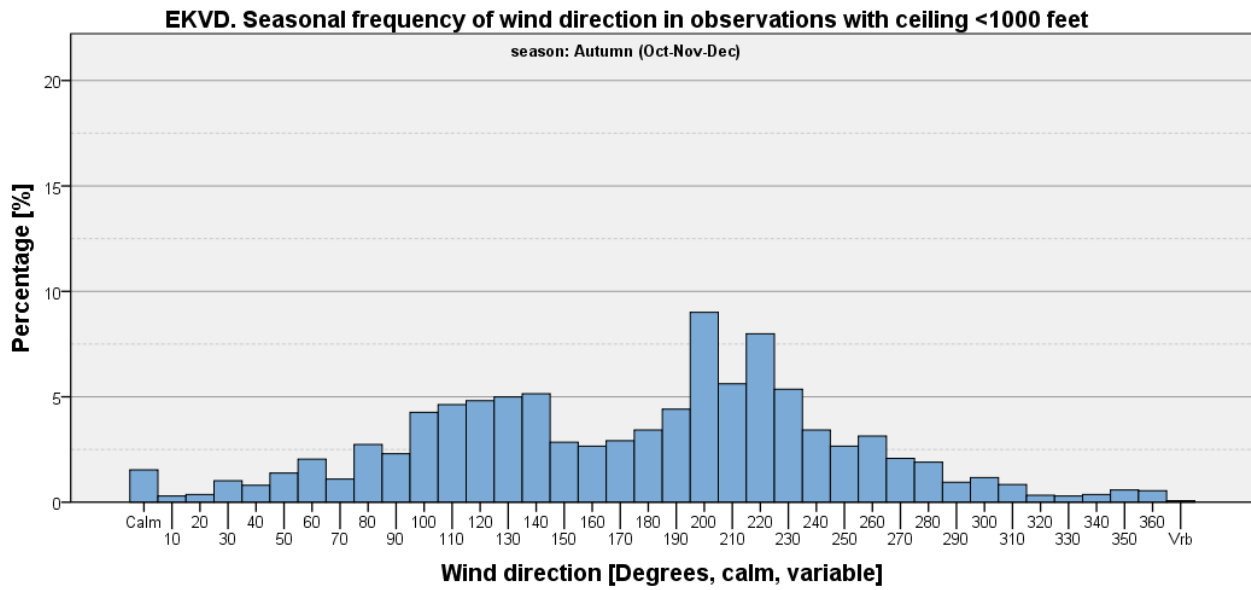


Figure 685

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 193: EKVD - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	7.35	2.08	2.02	6.28	4.39
All other observations	92.65	97.92	97.98	93.72	95.61
Total	100	100	100	100	100

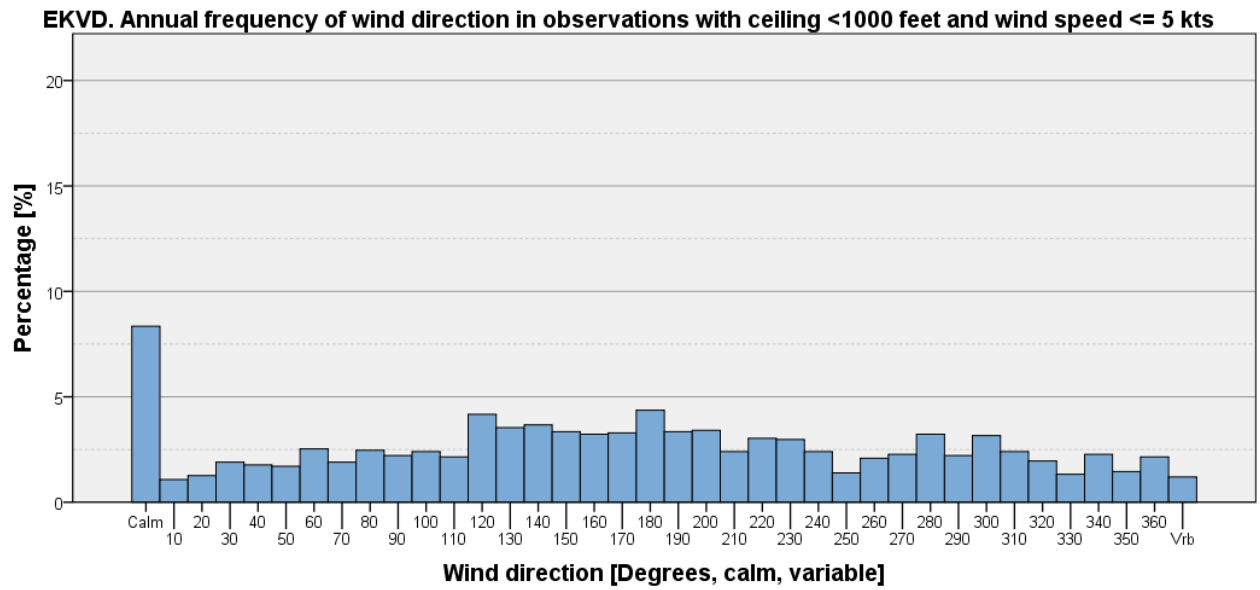


Figure 686

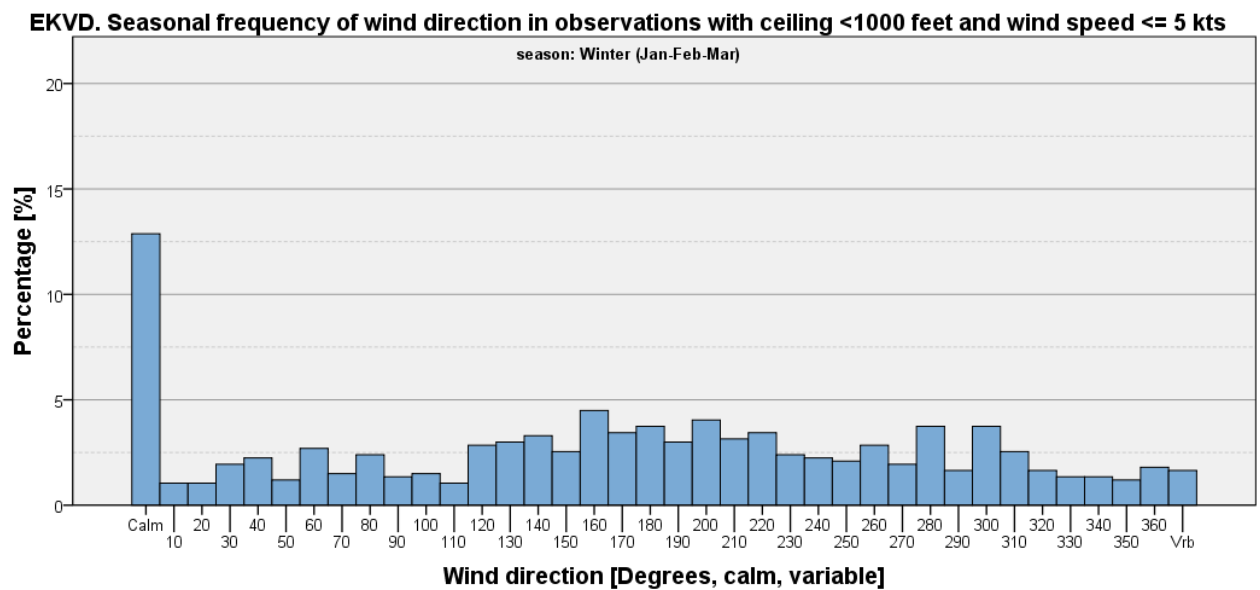


Figure 687

EKVD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

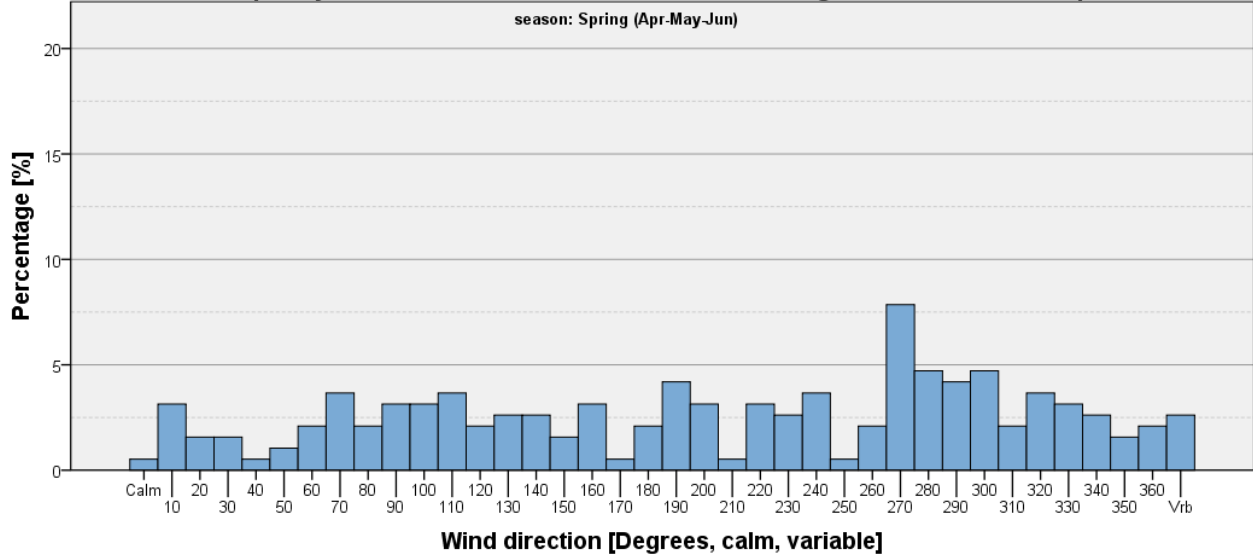


Figure 688

EKVD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

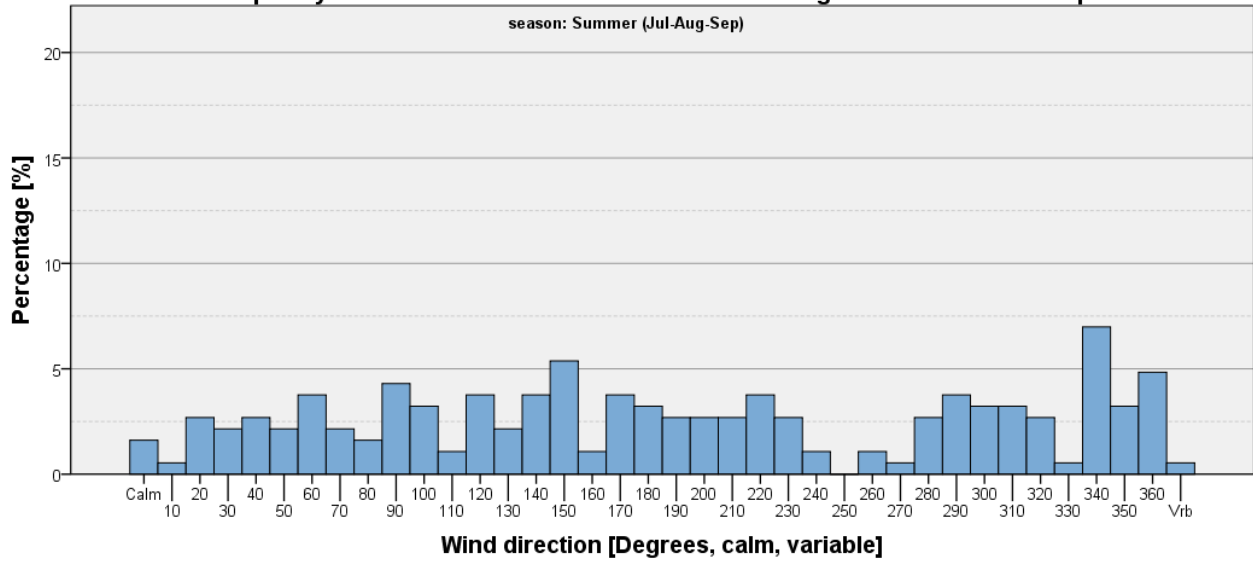


Figure 689

EKVD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed ≤ 5 kts

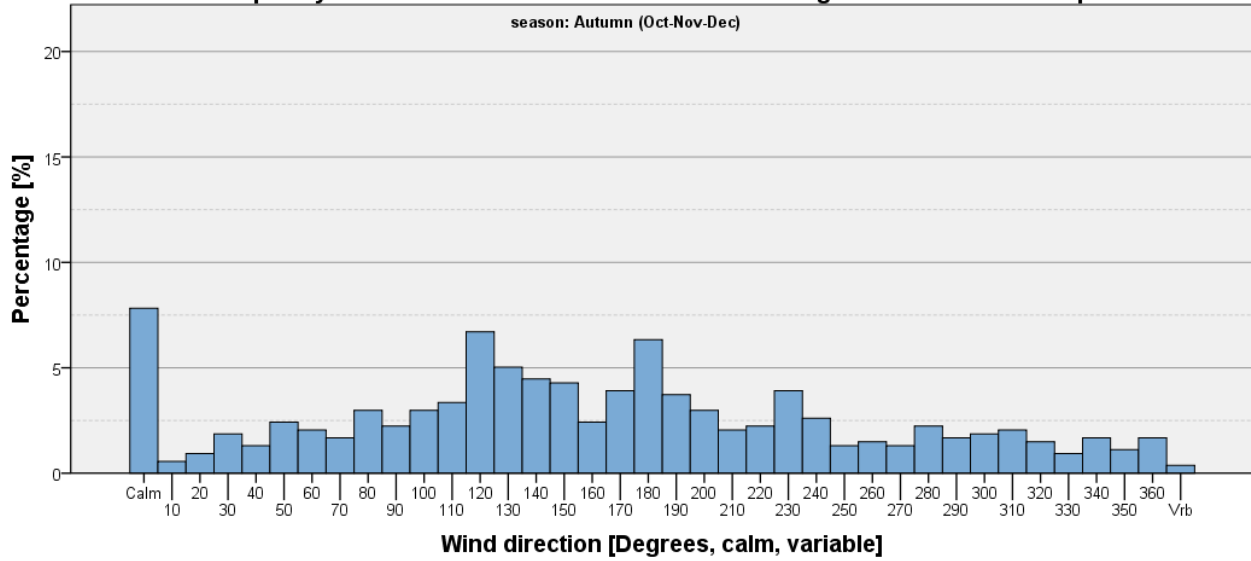


Figure 690

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 194: EKVD - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	26.02	8.86	8.20	25.77	17.04
All other observations	73.98	91.14	91.80	74.23	82.96
Total	100	100	100	100	100

EKVD. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

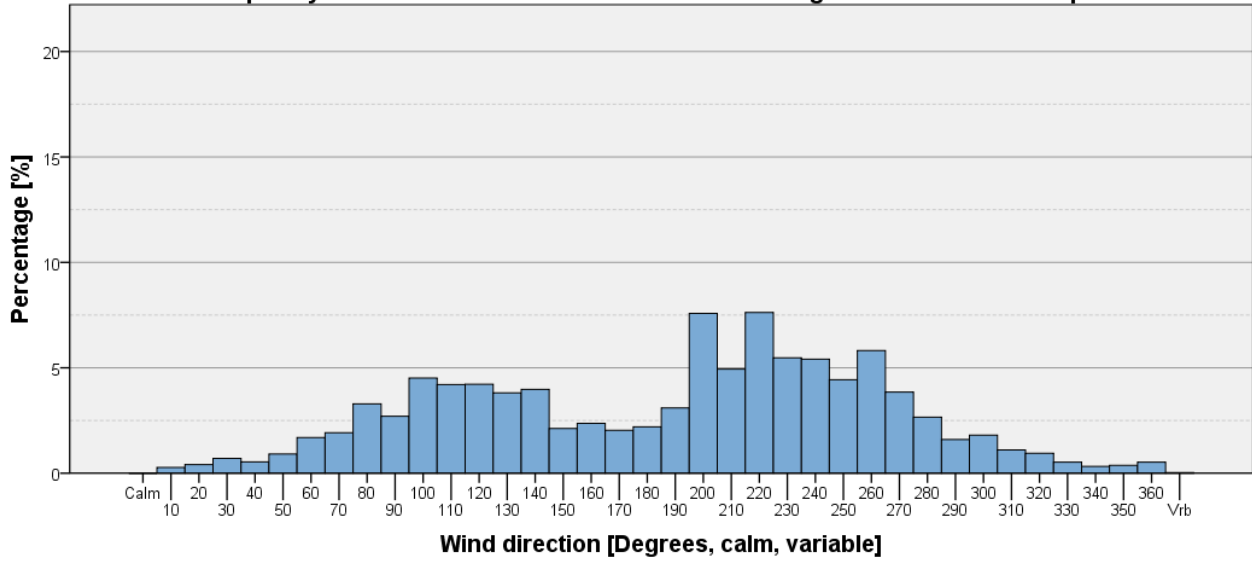


Figure 691

EKVD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

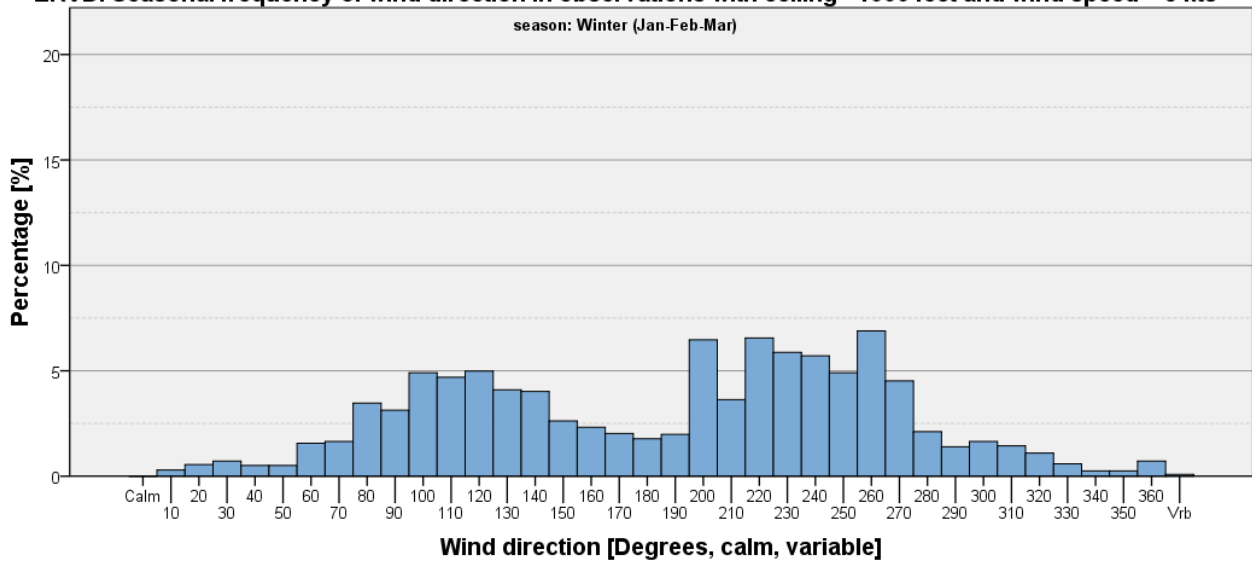


Figure 692

EKVD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

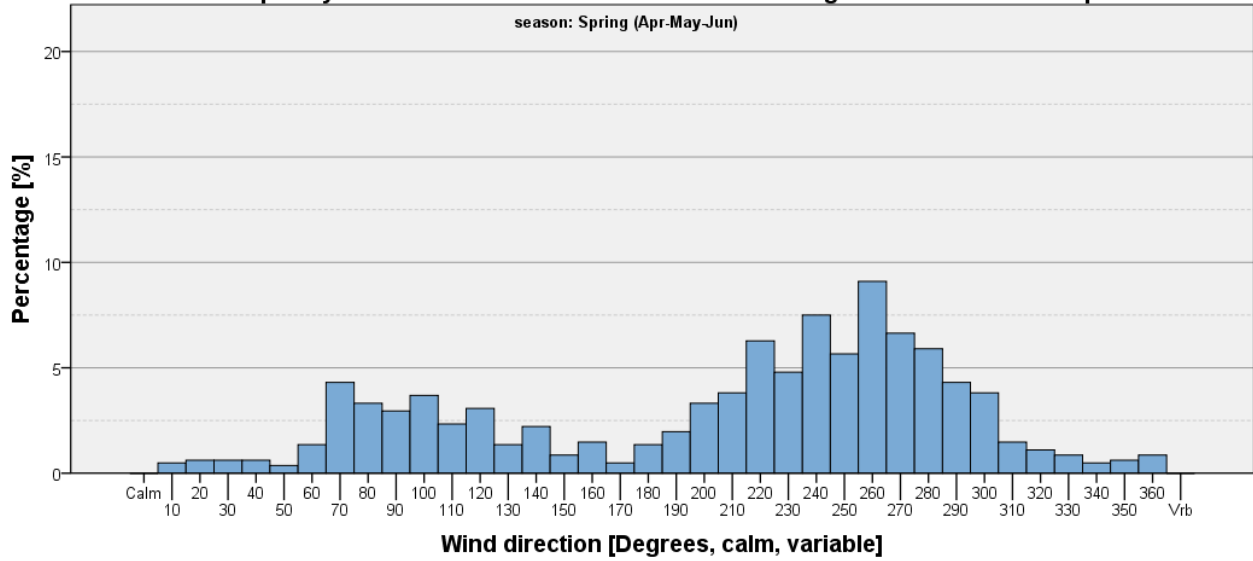


Figure 693

EKVD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

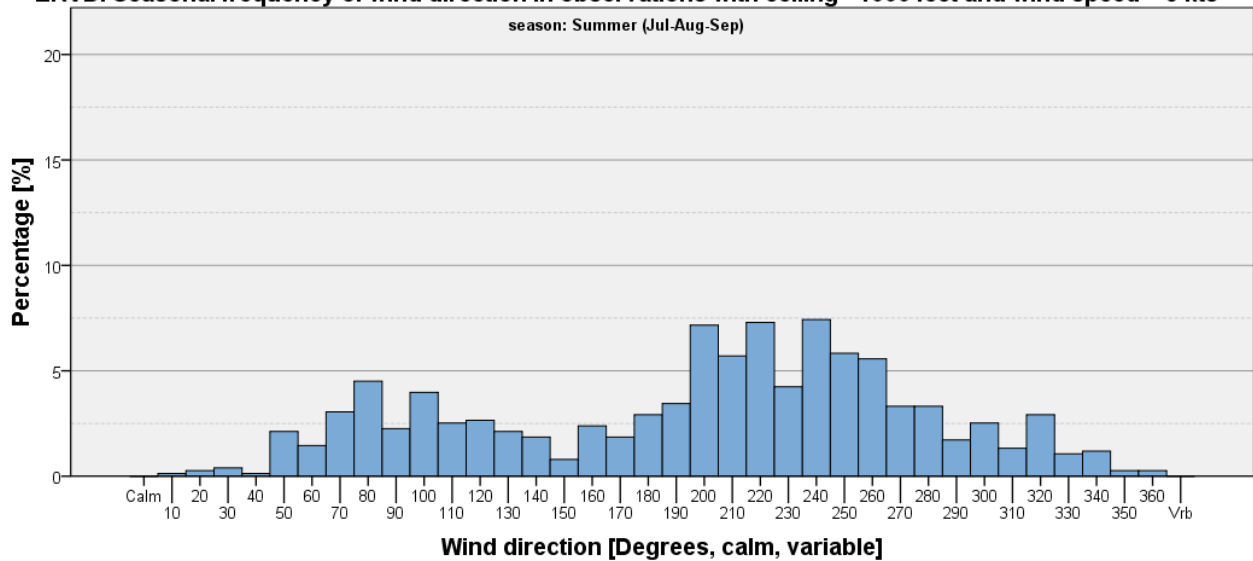


Figure 694

EKVD. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

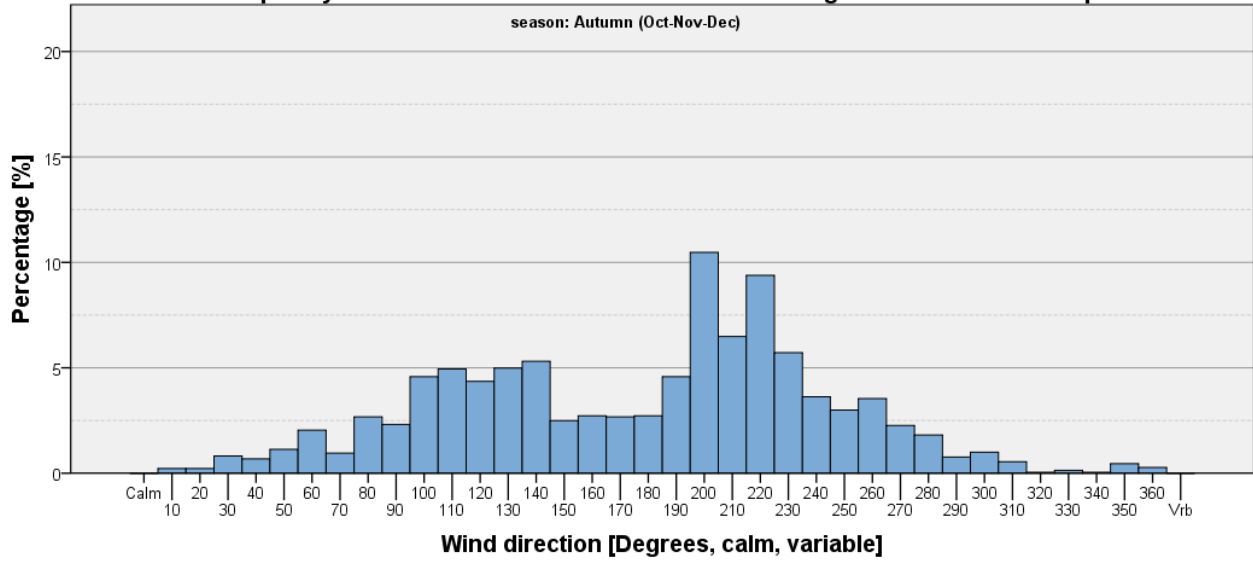


Figure 695

Ceiling < 500 feet

Table 195: EKVD - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	16.51	2.94	2.17	13.54	8.69
All other observations	83.49	97.06	97.83	86.46	91.31
Total	100	100	100	100	100

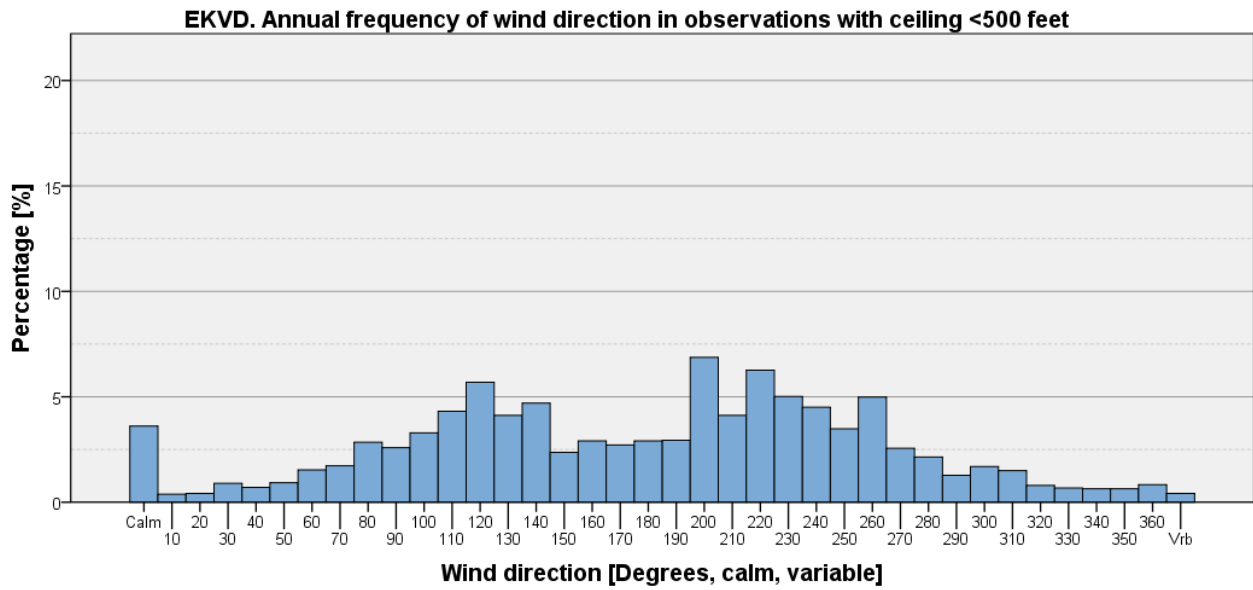


Figure 696

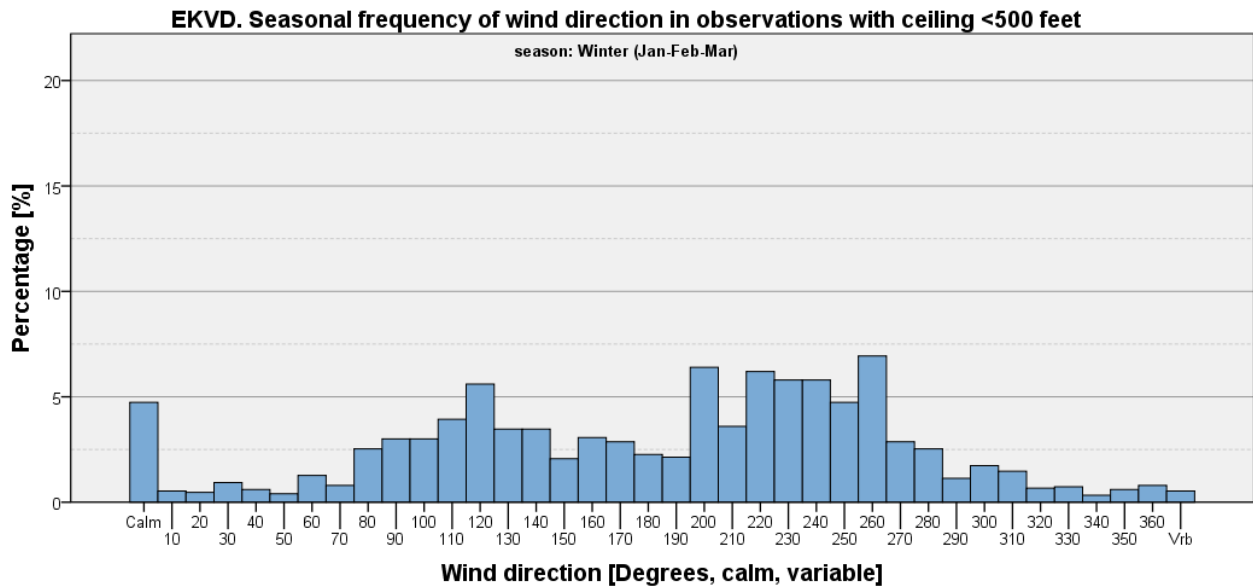


Figure 697

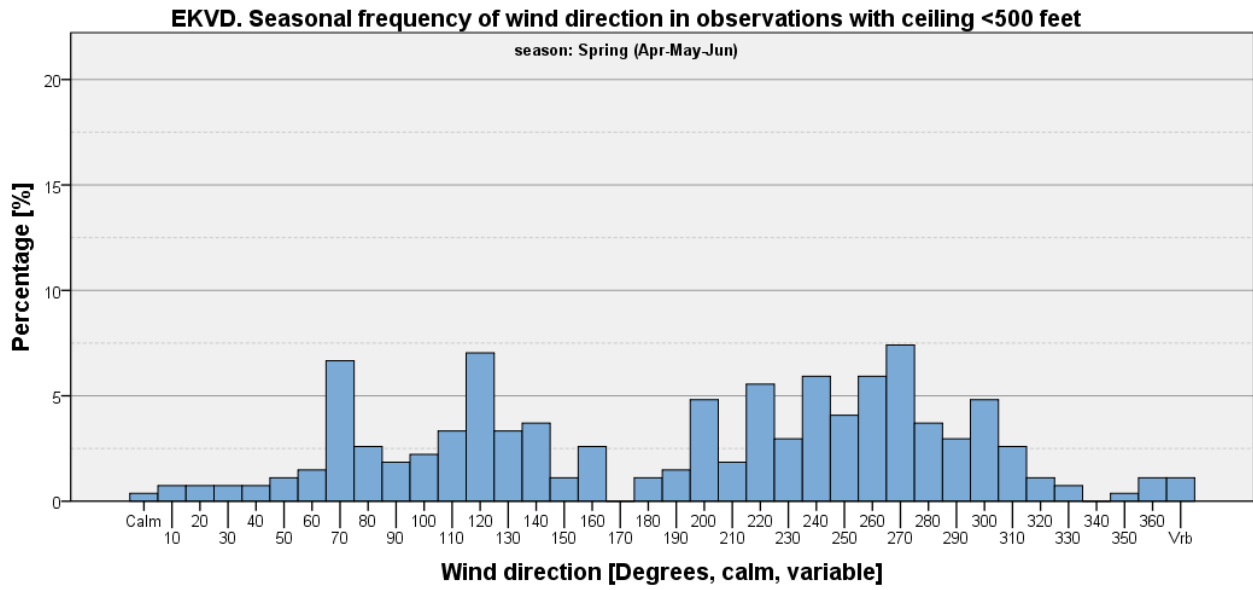


Figure 698

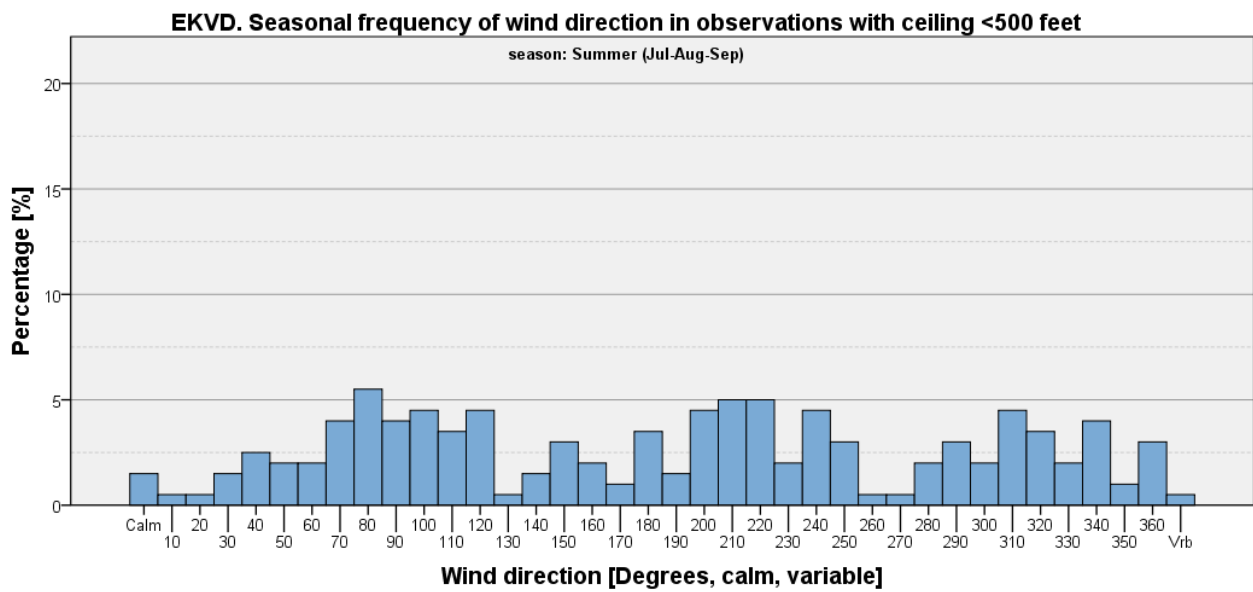


Figure 699

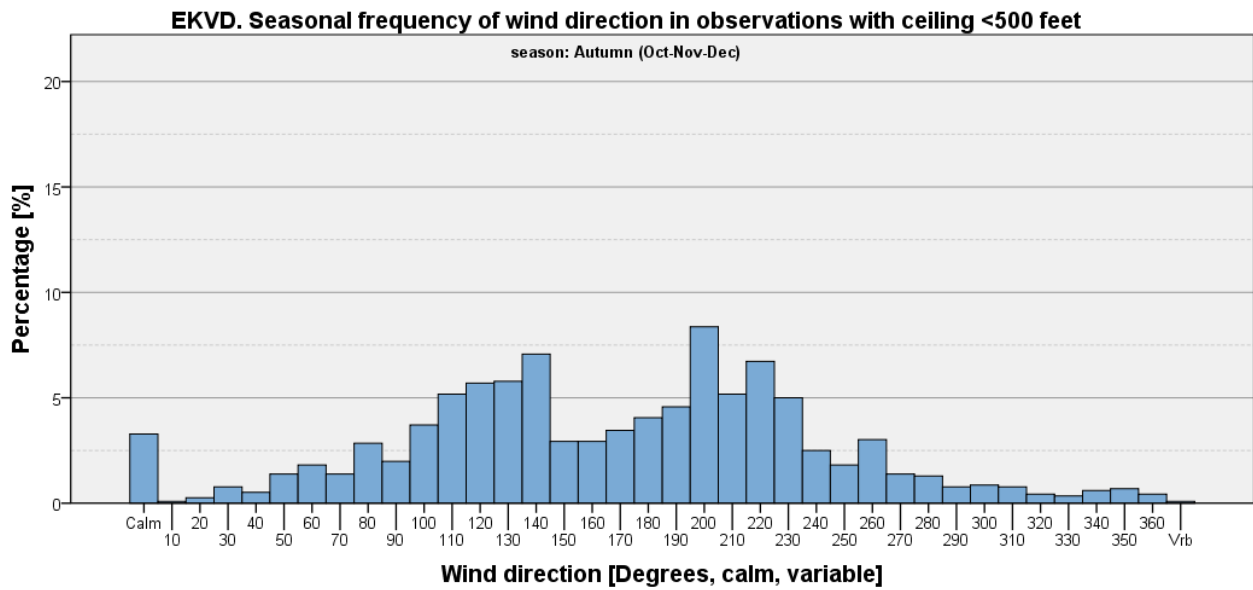


Figure 700

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 196: EKVD - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	5.34	0.94	1.03	4.20	2.85
All other Observations	94.66	99.06	98.97	95.80	97.15
Total	100	100	100	100	100

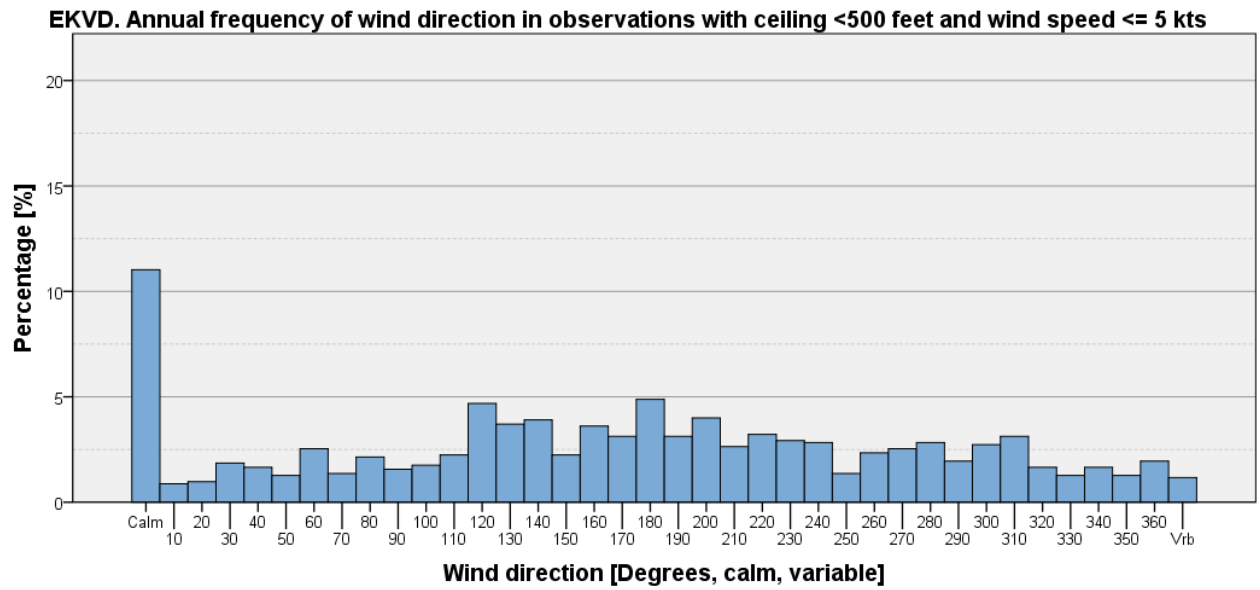


Figure 701

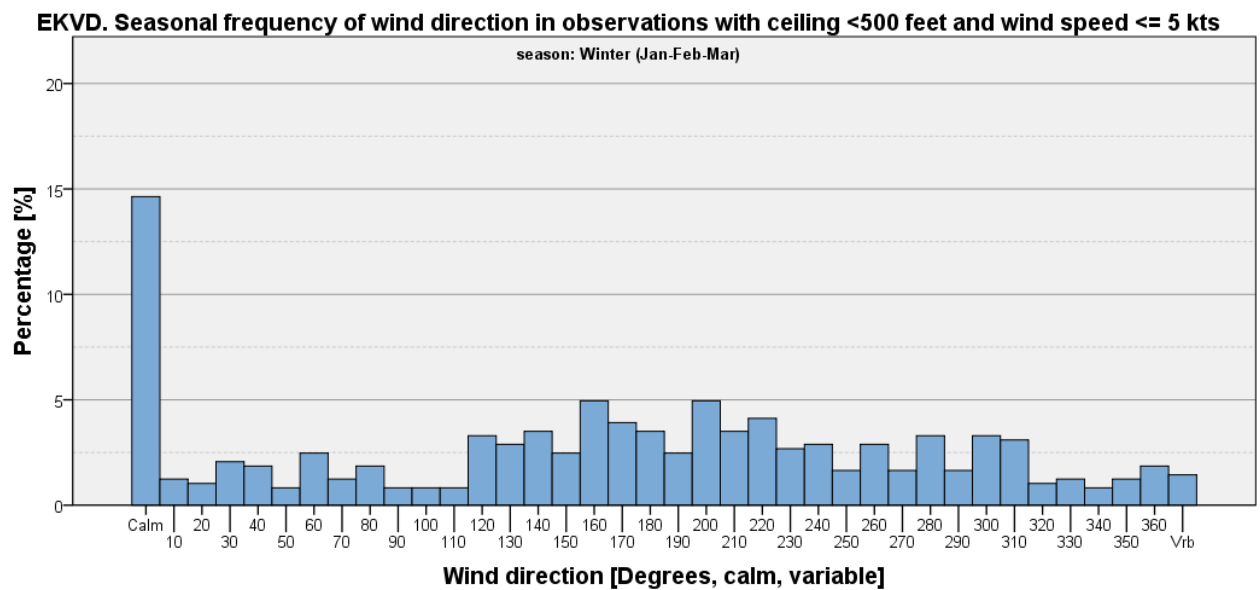


Figure 702

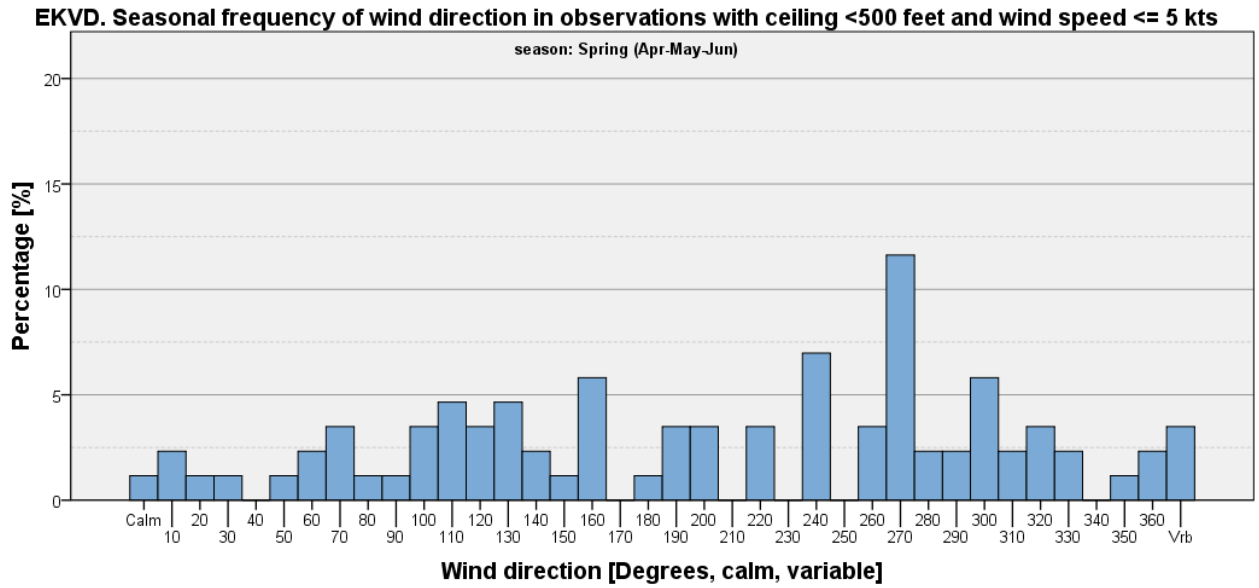


Figure 703

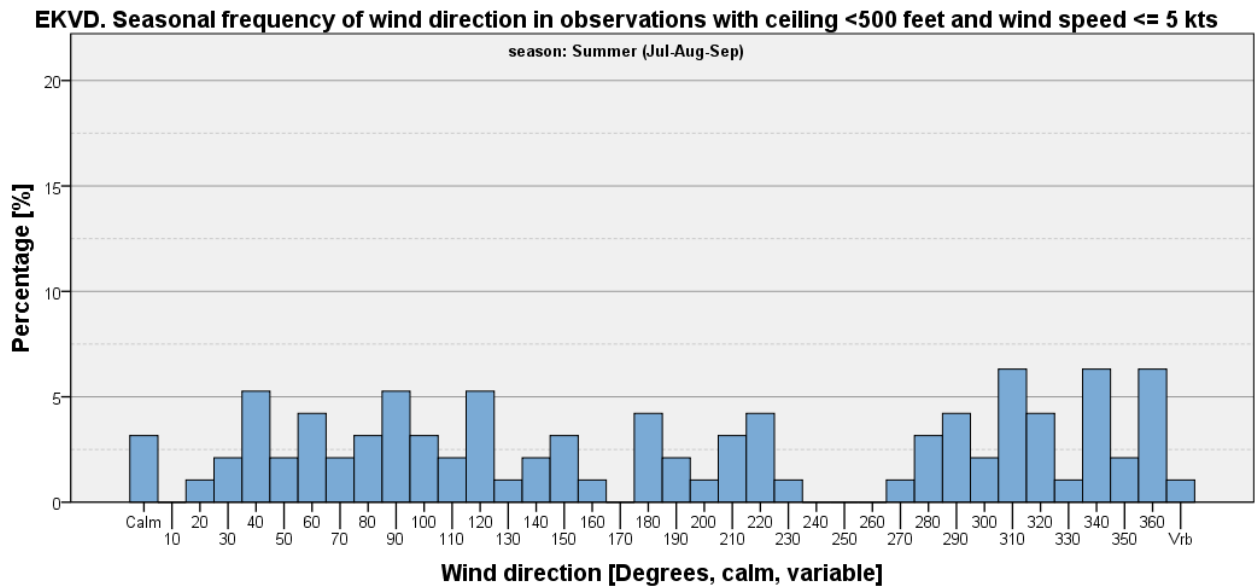


Figure 704

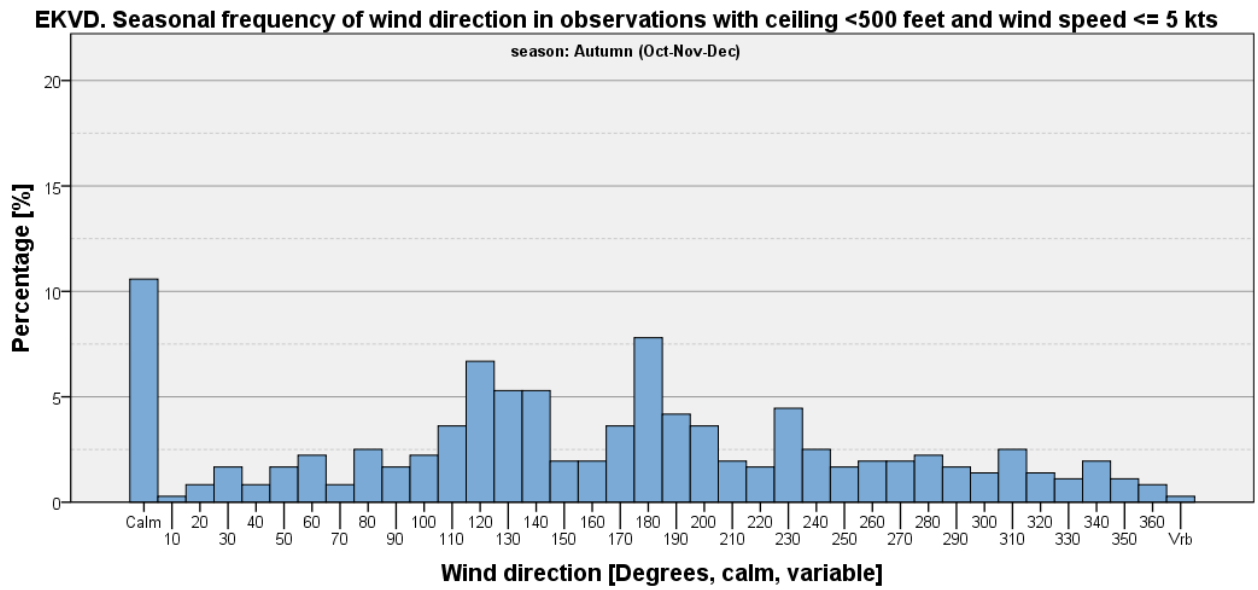


Figure 705

Ceiling < 500 feet and Wind Speed > 5 kts

Table 197: EKVD - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	11.17	2.01	1.14	9.35	5.84
All other observations	88.83	97.99	98.86	90.65	94.16
Total	100	100	100	100	100

EKVD. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

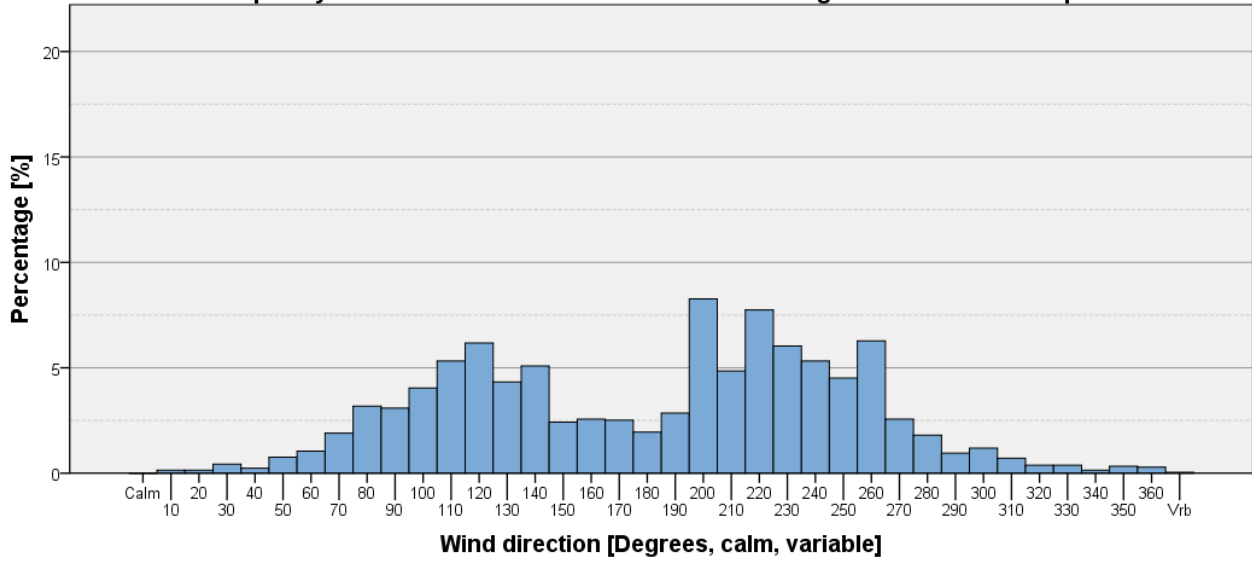


Figure 706

EKVD. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

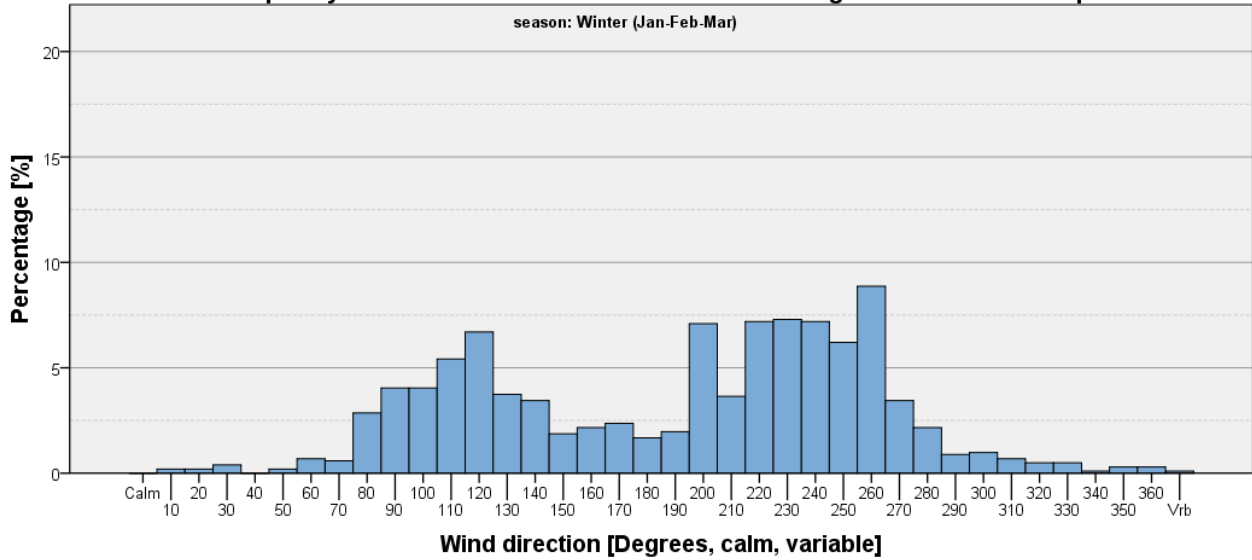


Figure 707

EKVD. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

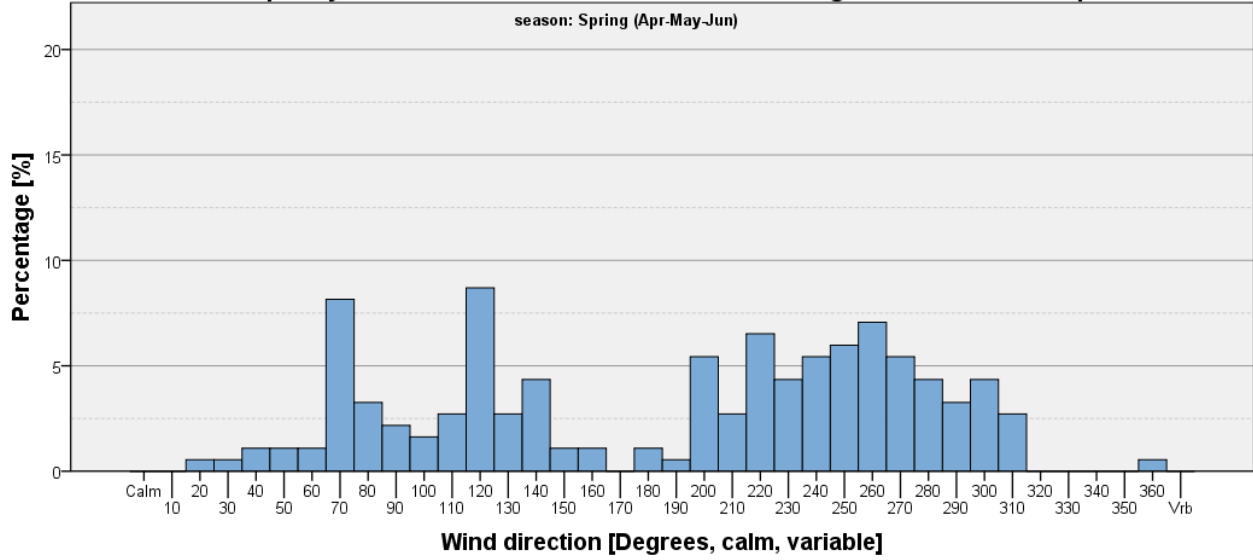


Figure 708

EKVD. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

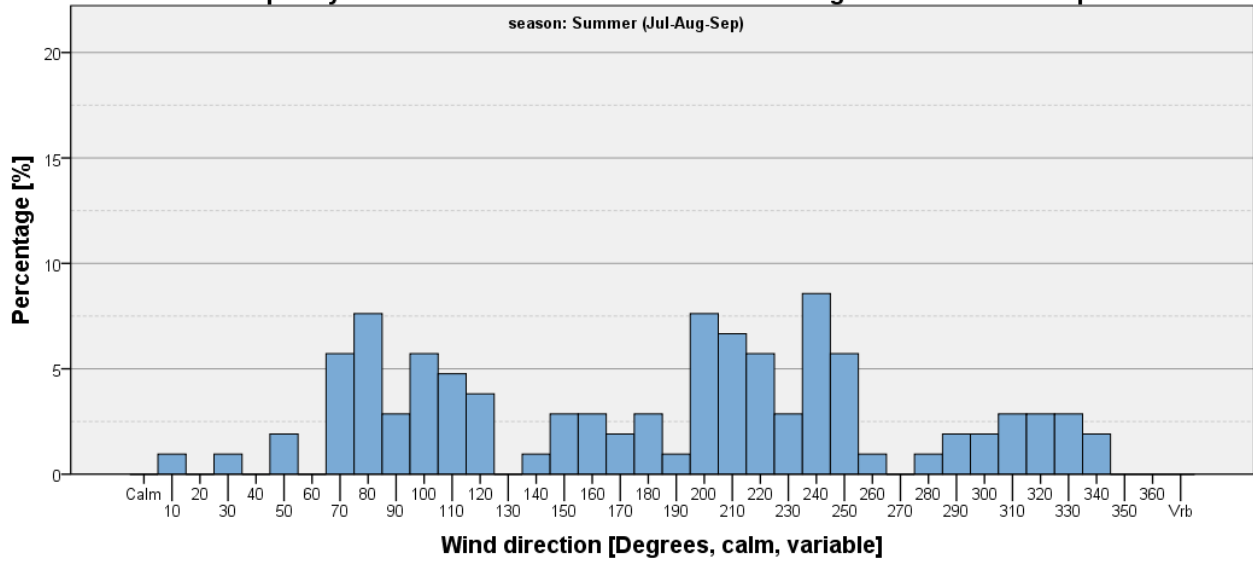


Figure 709

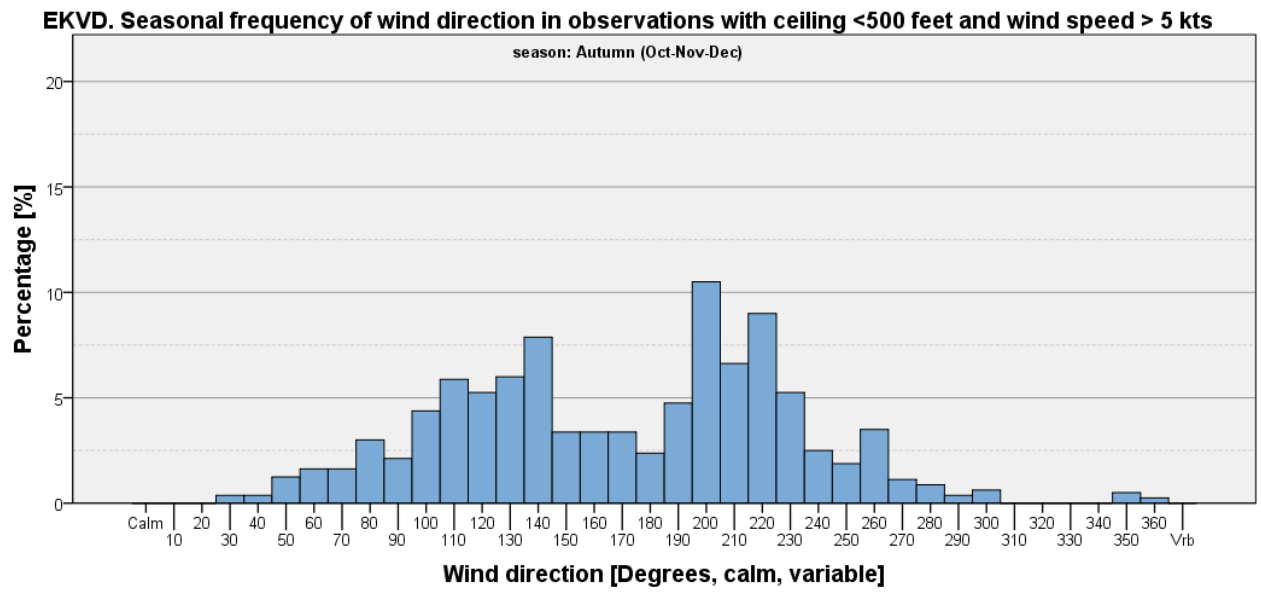
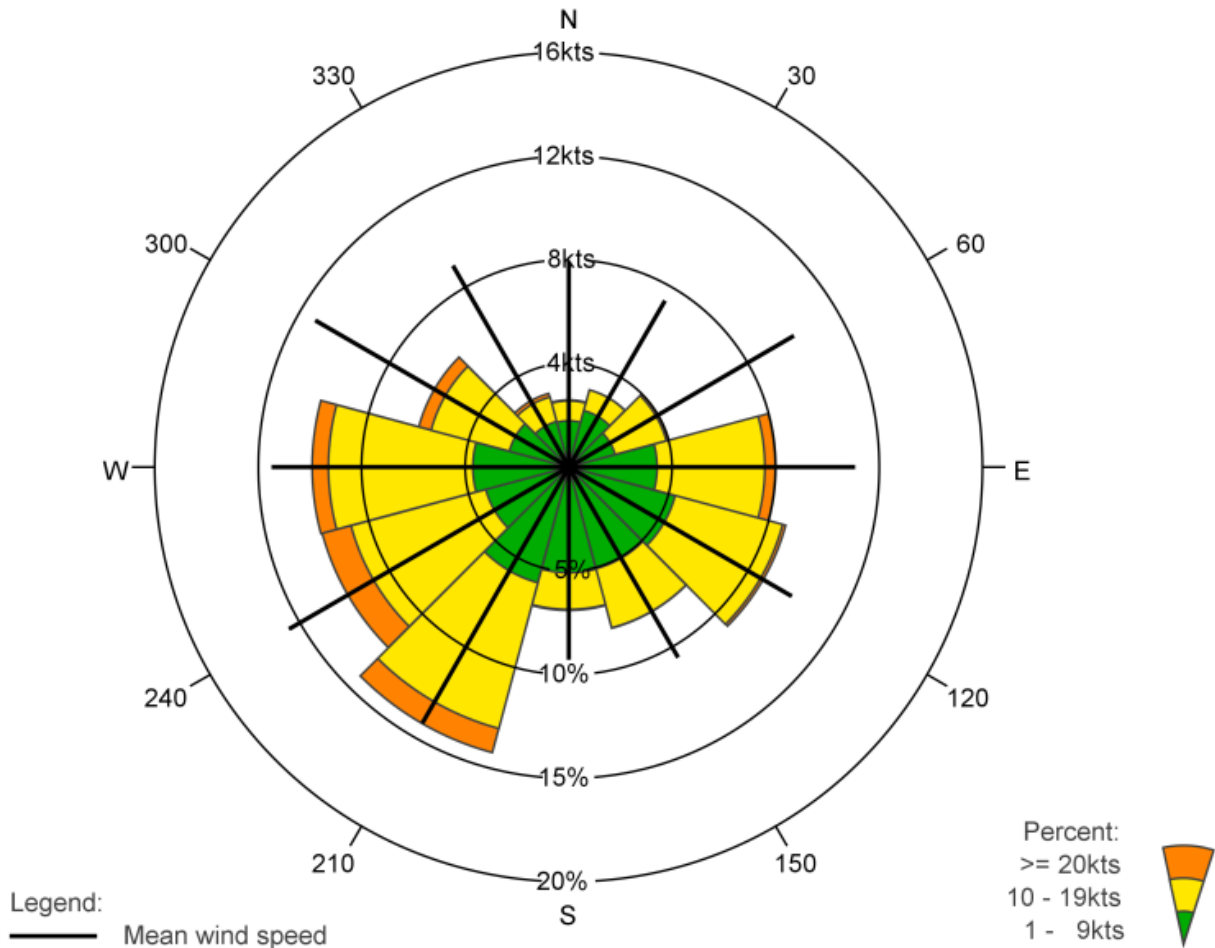


Figure 710

Wind Roses

EKVD: KOLDING LUFTHAVN (VAMDRUP), AUTUMN & WINTER

02-01-2009 - 23-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.2	3.9	5.0	10.0	10.8	8.0	6.9	14.3	12.3	12.4	7.5	3.7	98.0
% 1 - 9kts	2.2	2.8	2.3	4.3	5.3	5.1	5.1	5.8	4.1	4.6	3.0	2.3	46.9
% 10 - 19kts	1.0	1.0	2.6	5.2	5.4	3.0	1.8	7.3	6.7	7.0	3.9	1.2	46.0
% >= 20kts	0.1	0.0	0.1	0.5	0.1	0.0	0.0	1.2	1.4	0.8	0.6	0.2	5.1
Mean wind speed	7.9	7.4	10.1	11.0	10.0	8.5	7.4	11.4	12.5	11.5	11.3	9.0	10.4
Max wind speed	25.0	20.0	27.0	26.0	24.0	23.0	24.0	36.0	34.0	45.0	32.0	32.0	45.0

Number of observations = 17645

Source: DMI

Calm defined as wind speed = 0kts

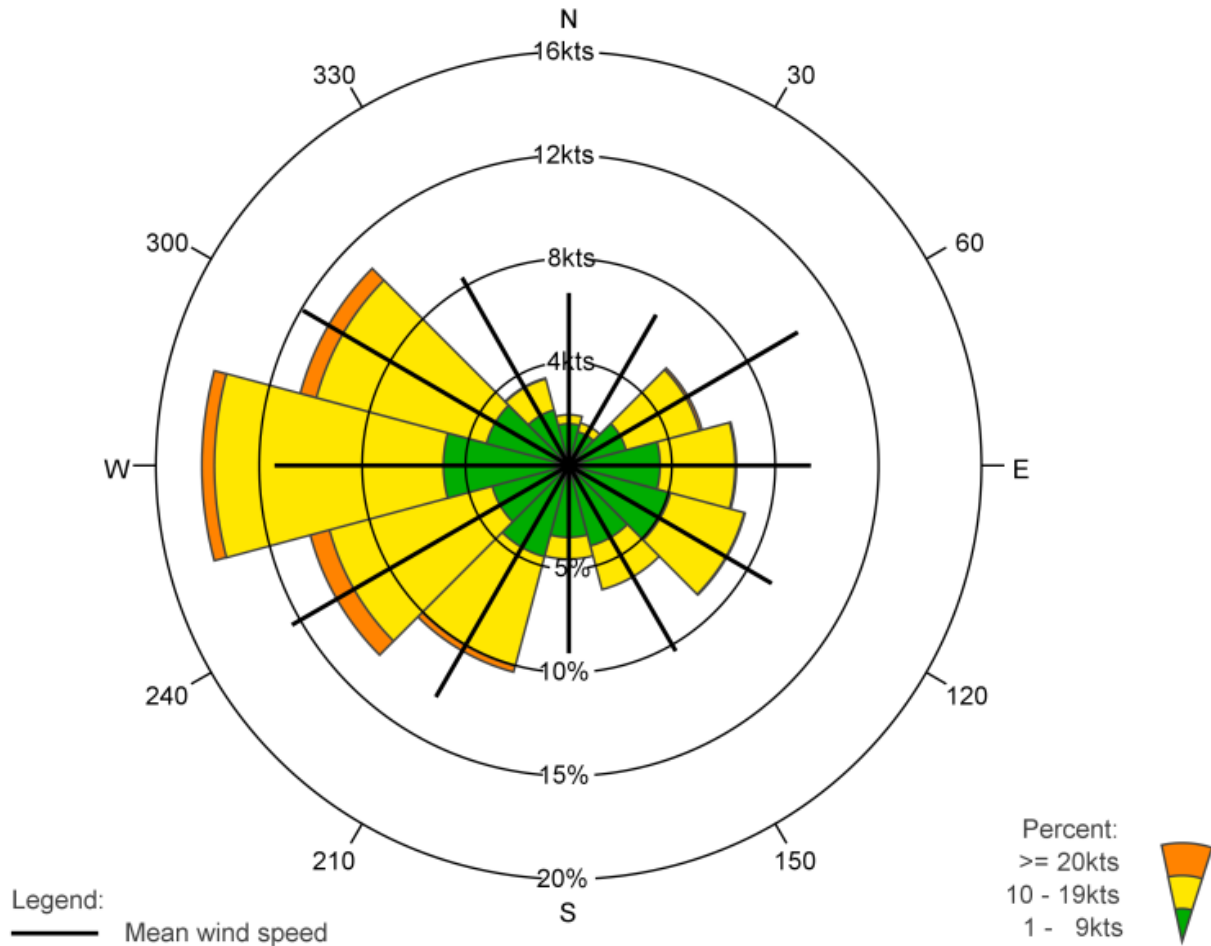
Number of observations with calm/varying wind direction: 347=2.0%

Observations with calm/varying wind direction are not used in the statistics

Figure 711

EKVD: KOLDING LUFTHAVN (VAMDRUP), SPRING & SUMMER

02-01-2009 - 23-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	2.5	2.1	6.7	8.1	8.8	6.2	4.5	10.3	13.0	17.8	13.5	4.4	97.9
% 1 - 9kts	2.0	1.7	2.9	4.4	5.1	4.0	3.5	4.6	3.8	6.1	4.1	2.8	45.0
% 10 - 19kts	0.4	0.4	3.7	3.6	3.7	2.2	1.1	5.5	8.1	11.1	8.5	1.5	49.9
% >= 20kts	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.3	1.0	0.6	0.8	0.0	3.0
Mean wind speed	6.7	6.8	10.2	9.3	9.1	8.3	7.3	10.4	12.4	11.4	12.0	8.4	10.3
Max wind speed	18.0	19.0	23.0	22.0	23.0	19.0	18.0	31.0	32.0	27.0	31.0	25.0	32.0

Number of observations = 18374

Source: DMI

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 390=2.1%

Observations with calm/varying wind direction are not used in the statistics

Figure 712

Availability

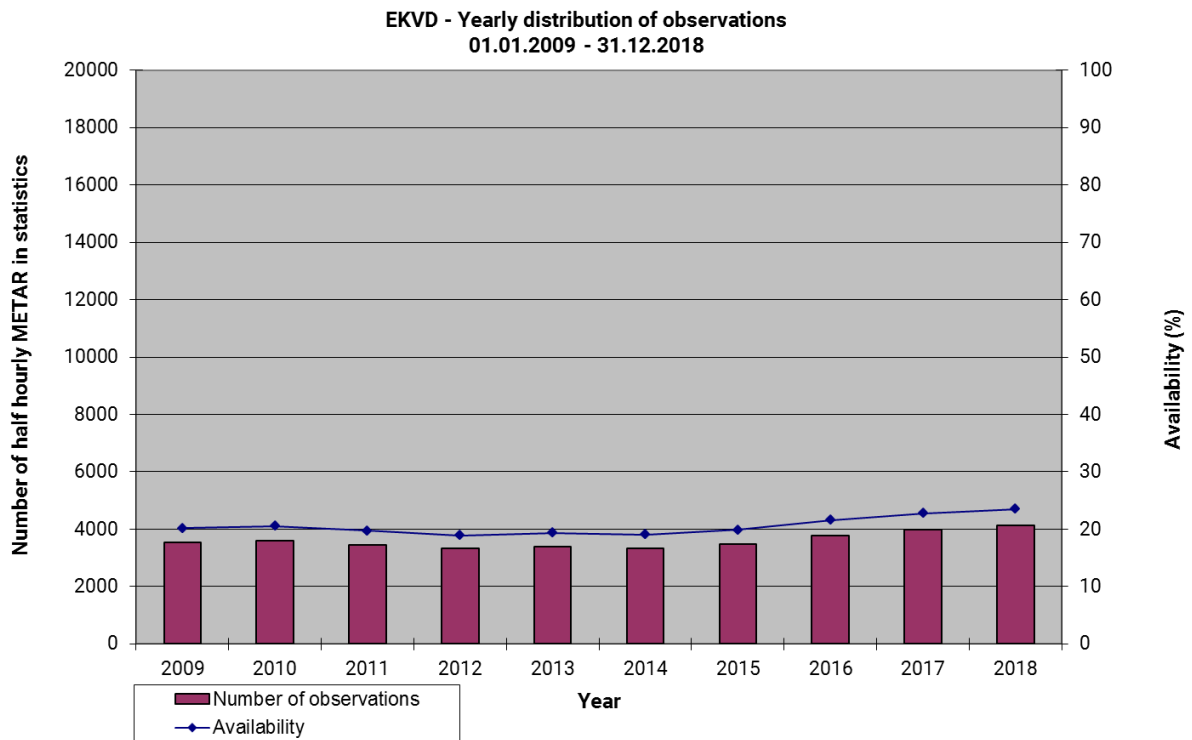


Figure 713

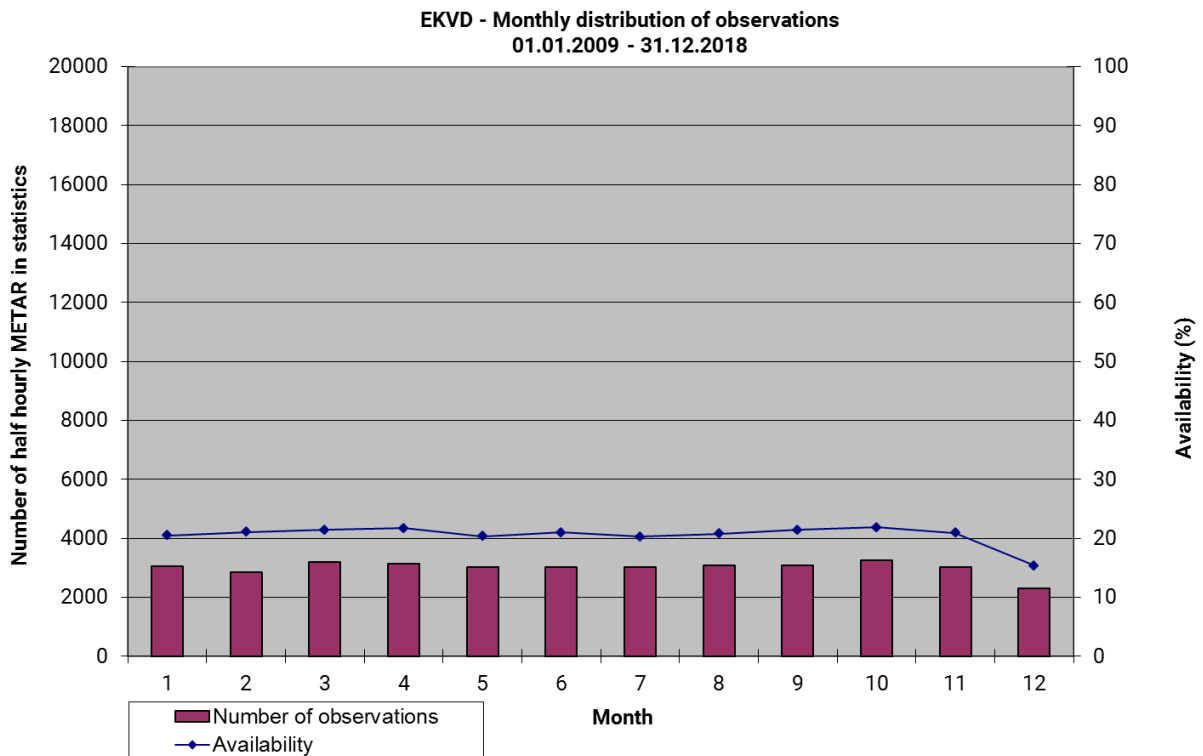


Figure 714

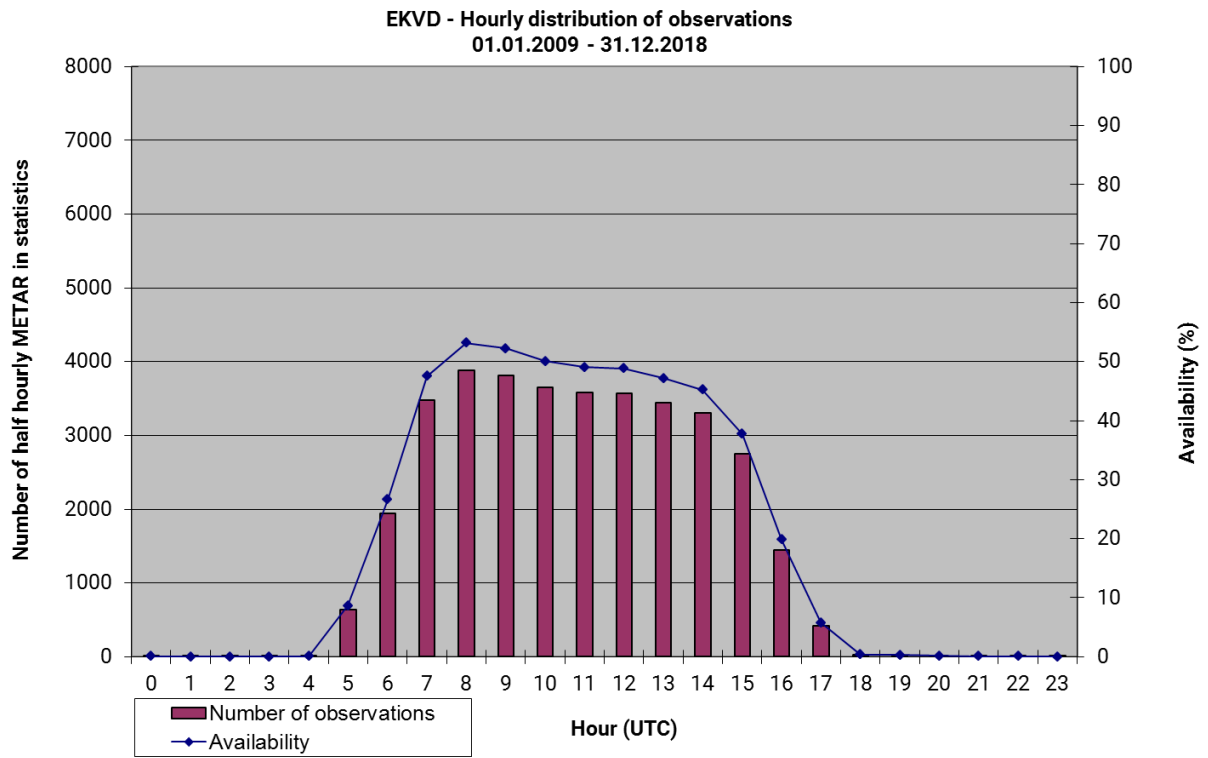


Figure 715

Table 198: EKVD. Average number of half hourly observations in statistics, 02.01.2009 – 23.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
6	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.6
7	0.9	0.7	0.9	0.8	0.8	0.9	1.0	1.0	1.1	1.2
8	1.0	1.0	1.0	0.9	0.9	1.0	1.1	1.2	1.3	1.3
9	1.0	1.0	0.9	0.9	0.9	0.9	1.0	1.1	1.3	1.3
10	0.9	1.0	0.9	0.9	0.9	0.9	1.0	1.1	1.2	1.2
11	0.9	1.0	0.9	0.9	0.9	0.9	1.0	1.1	1.1	1.2
12	0.9	1.0	0.9	0.9	0.9	0.9	1.0	1.1	1.1	1.2
13	0.9	0.9	0.9	0.8	0.9	0.9	0.9	1.0	1.1	1.2
14	0.8	0.9	0.9	0.8	0.9	0.8	0.8	0.9	1.0	1.1
15	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8
16	0.5	0.6	0.5	0.5	0.5	0.4	0.3	0.2	0.2	0.2
17	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

EKVJ Stauning Lufthavn

Airport location: 55.990°N 8.354°E Elevation: 5 m above MSL.

EKVJ observations in statistics: 17,797 half-hourly METAR covering the 8 years period 17.05.2011 to 16.05.2019, resulting in an overall availability of 12.7%. For more information, please go to the 'Availability' section.

All EKVJ METAR are manual.

Cross Tables Visibility – Ceiling

Table 199: EKVJ Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 17,797	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.062	0.062	0.062	0.062	0.062	0.017	0.079
<350m	0.0056	0.29	0.47	0.47	0.48	0.48	0.028	0.51
<600m	0.0056	0.40	0.96	0.96	0.97	0.97	0.045	1.01
<800 m	0.011	0.43	1.48	1.48	1.48	1.48	0.062	1.55
<1.5 km	0.017	0.47	2.49	2.52	2.52	2.53	0.14	2.67
<3.0 km	0.022	0.47	4.72	5.31	5.38	5.44	0.44	5.88
< 5.0 km	0.028	0.48	7.50	10.78	11.79	12.24	2.33	14.57
< 8.0 km	0.034	0.49	8.24	13.81	15.96	16.90	5.12	22.02
>= 8.0 km or CAVOK	0	0	0.32	3.28	7.78	12.13	65.85	77.98
Total	0.034	0.49	8.56	17.09	23.75	29.02	70.98	100

Table 200: EKVJ - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 4,776	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.17	0.17	0.17	0.17	0.17	0.063	0.23
<350m	0	0.59	1.13	1.13	1.15	1.15	0.084	1.24
<600m	0	0.59	2.09	2.09	2.11	2.11	0.084	2.20
<800 m	0	0.59	2.95	2.95	2.97	2.97	0.10	3.08
<1.5 km	0	0.61	4.71	4.79	4.82	4.82	0.23	5.05
<3.0 km	0	0.61	7.68	8.96	9.15	9.25	0.67	9.92
< 5.0 km	0	0.61	12.16	17.50	19.26	20.08	3.69	23.76
< 8.0 km	0	0.63	13.30	22.38	25.94	27.49	7.33	34.82
>= 8.0 km or CAVOK	0	0	0.46	3.83	8.84	12.79	52.39	65.18
Total	0	0.63	13.76	26.21	34.78	40.28	59.72	100

Table 201: EKVJ - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 4,287	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0	0	0	0	0	0	0
<350m	0	0	0	0	0	0	0	0
<600m	0	0.023	0.070	0.070	0.070	0.070	0	0.070
<800 m	0	0.023	0.12	0.12	0.12	0.12	0.047	0.16
<1.5 km	0	0.023	0.49	0.51	0.51	0.51	0.19	0.70
<3.0 km	0	0.023	1.54	1.73	1.73	1.73	0.35	2.08
< 5.0 km	0	0.023	3.36	4.92	5.39	5.44	1.14	6.58
< 8.0 km	0	0.023	4.06	7.18	8.21	8.49	2.66	11.15
>= 8.0 km or CAVOK	0	0	0.42	3.80	8.84	14.02	74.83	88.85
Total	0	0.023	4.48	10.99	17.05	22.51	77.49	100

Table 202: EKVJ - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 4,532	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.022	0.022	0.022	0.022	0.022	0	0.022
<350m	0	0.11	0.13	0.13	0.13	0.13	0	0.13
<600m	0	0.11	0.15	0.15	0.15	0.15	0.022	0.18
<800 m	0	0.11	0.22	0.22	0.22	0.22	0.022	0.24
<1.5 km	0	0.11	0.24	0.24	0.24	0.24	0.022	0.26
<3.0 km	0	0.11	0.44	0.57	0.57	0.62	0.13	0.75
< 5.0 km	0.022	0.13	1.21	2.41	2.67	2.87	0.97	3.84
< 8.0 km	0.044	0.15	1.46	3.71	4.59	5.08	3.18	8.25
>= 8.0 km or CAVOK	0	0	0.20	2.41	6.24	11.54	80.21	91.75
Total	0.044	0.15	1.65	6.11	10.83	16.62	83.38	100

Table 203: EKVJ - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 4,202	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.048	0.048	0.048	0.048	0.048	0	0.048
<350m	0.024	0.43	0.57	0.57	0.57	0.57	0.024	0.59
<600m	0.024	0.88	1.45	1.45	1.45	1.45	0.071	1.52
<800 m	0.048	1.02	2.55	2.55	2.55	2.55	0.071	2.62
<1.5 km	0.071	1.14	4.43	4.43	4.43	4.45	0.12	4.57
<3.0 km	0.10	1.17	9.21	9.92	10.02	10.09	0.59	10.69
< 5.0 km	0.10	1.17	13.21	18.16	19.68	20.37	3.47	23.85
< 8.0 km	0.10	1.17	14.06	21.73	24.80	26.18	7.23	33.41
>= 8.0 km or CAVOK	0	0	0.19	3.07	7.16	10.07	56.52	66.59
Total	0.10	1.17	14.26	24.80	31.96	36.24	63.76	100

Wind Direction Histograms

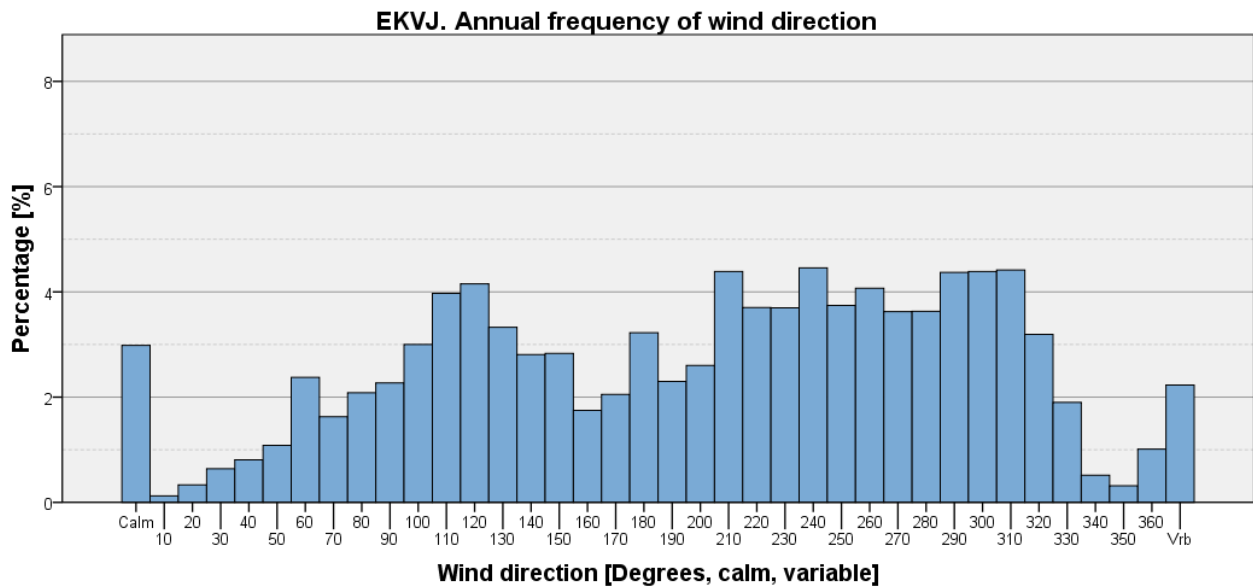


Figure 716

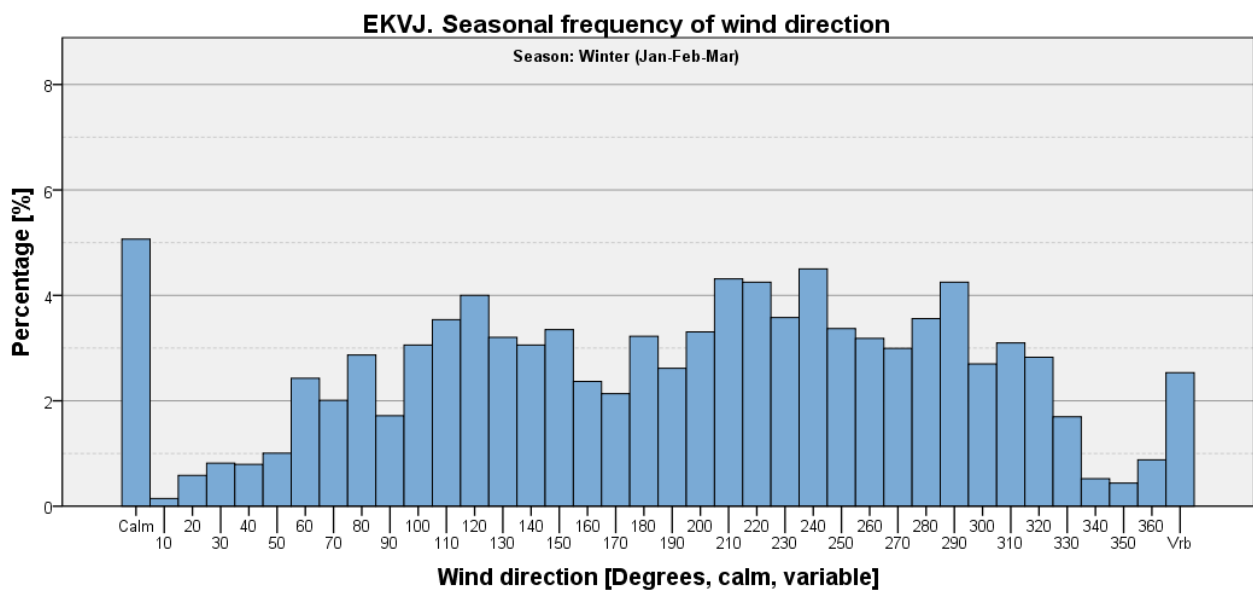


Figure 717

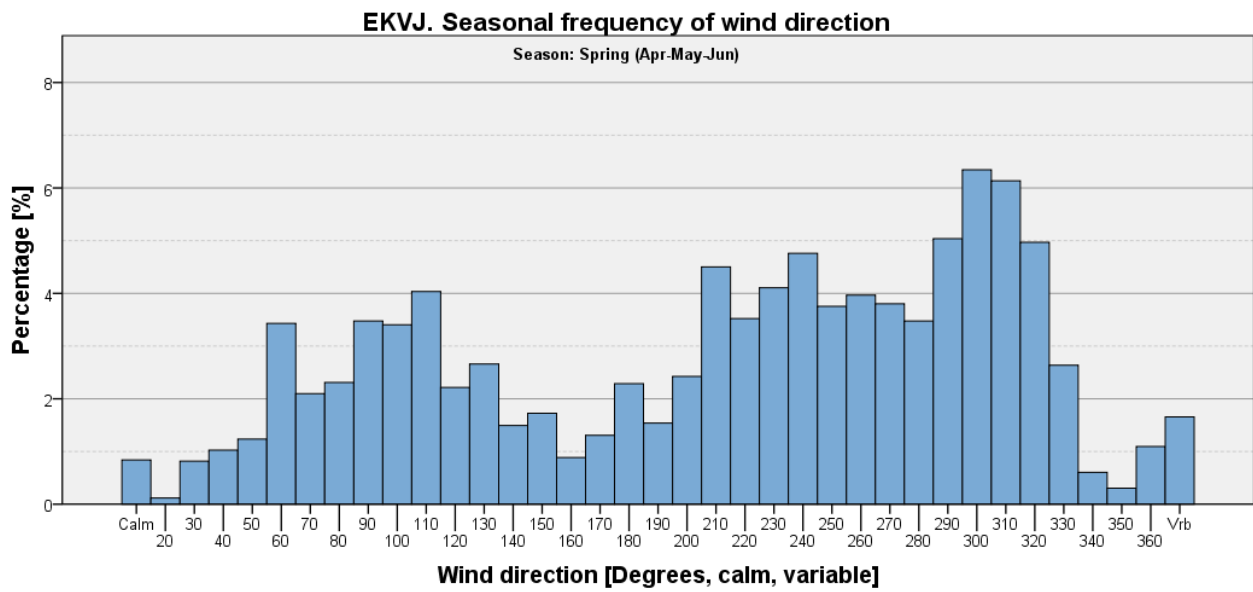


Figure 718

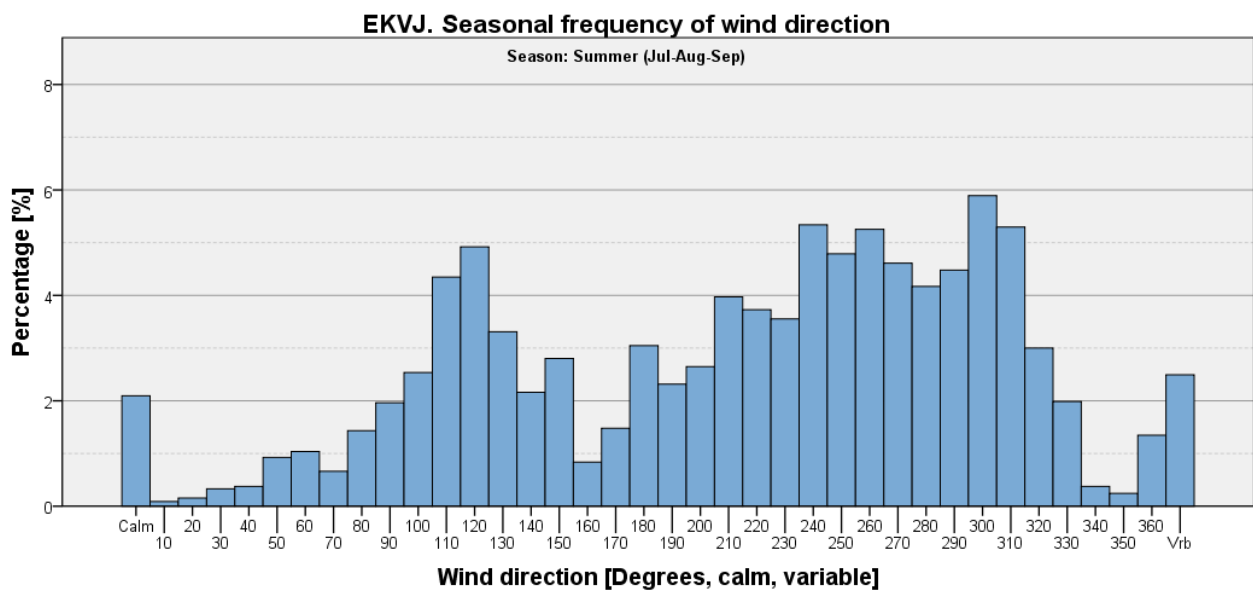


Figure 719

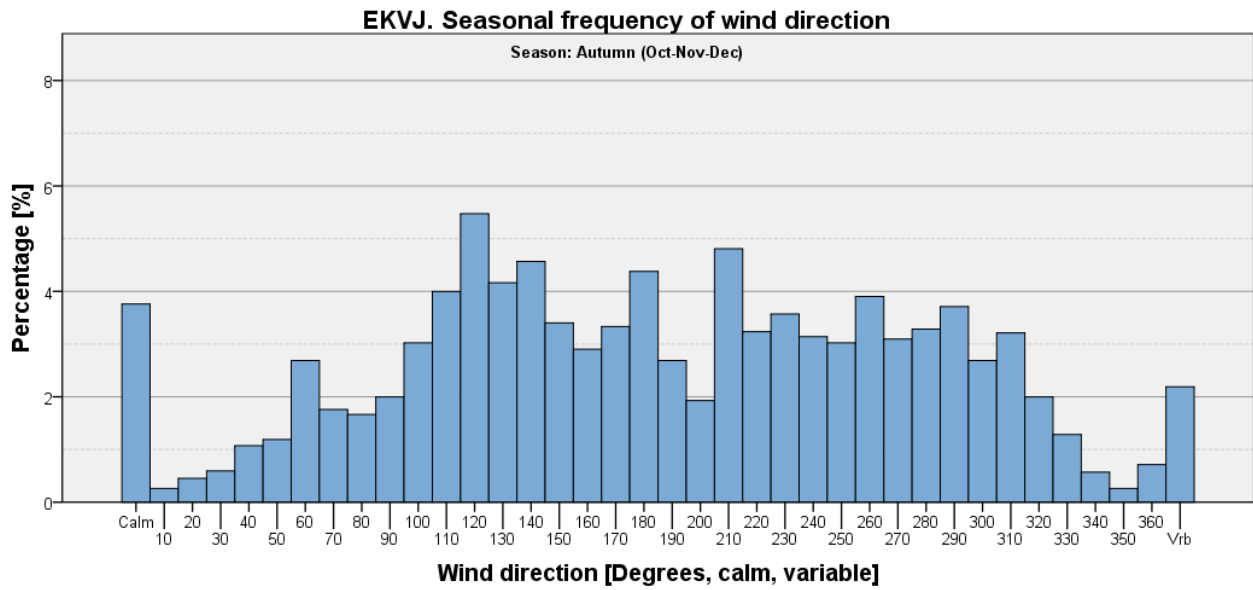


Figure 720

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 204: EKVJ - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	3.08	0.16	0.24	2.62	1.55
All other observations	96.92	99.84	99.76	97.38	98.45
Total	100	100	100	100	100

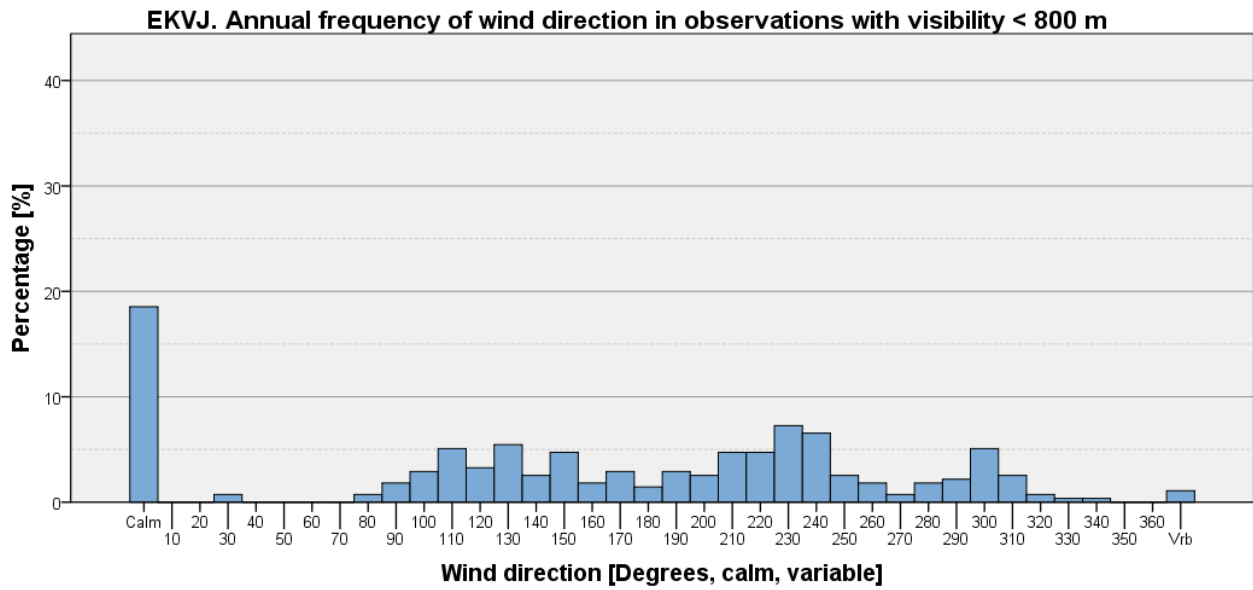


Figure 721

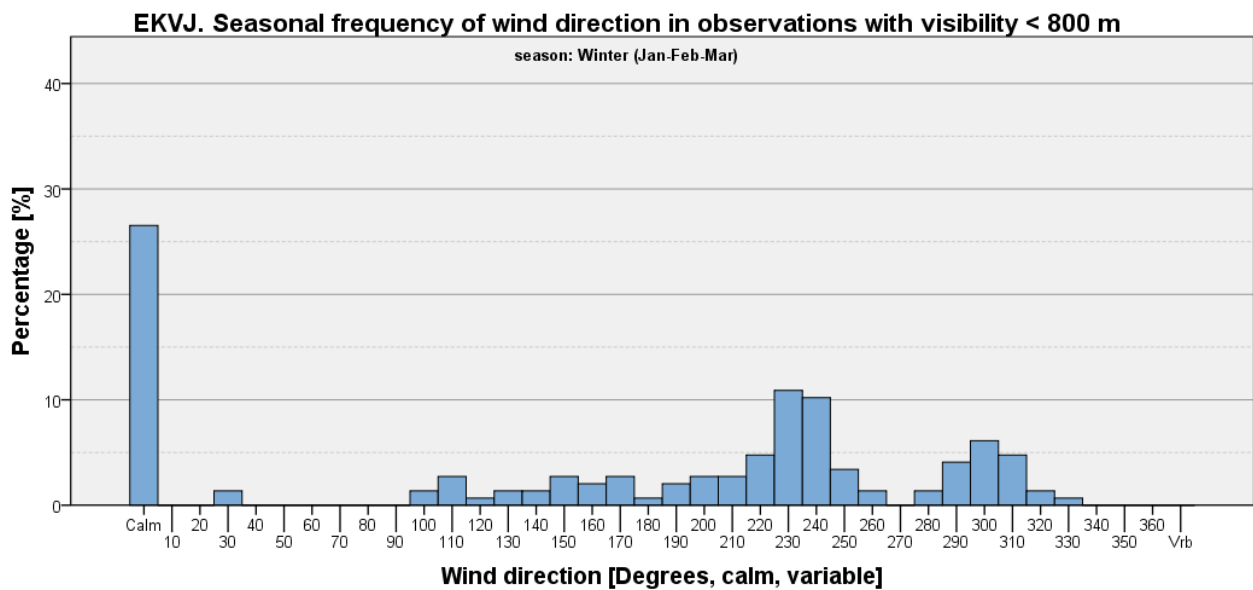


Figure 722

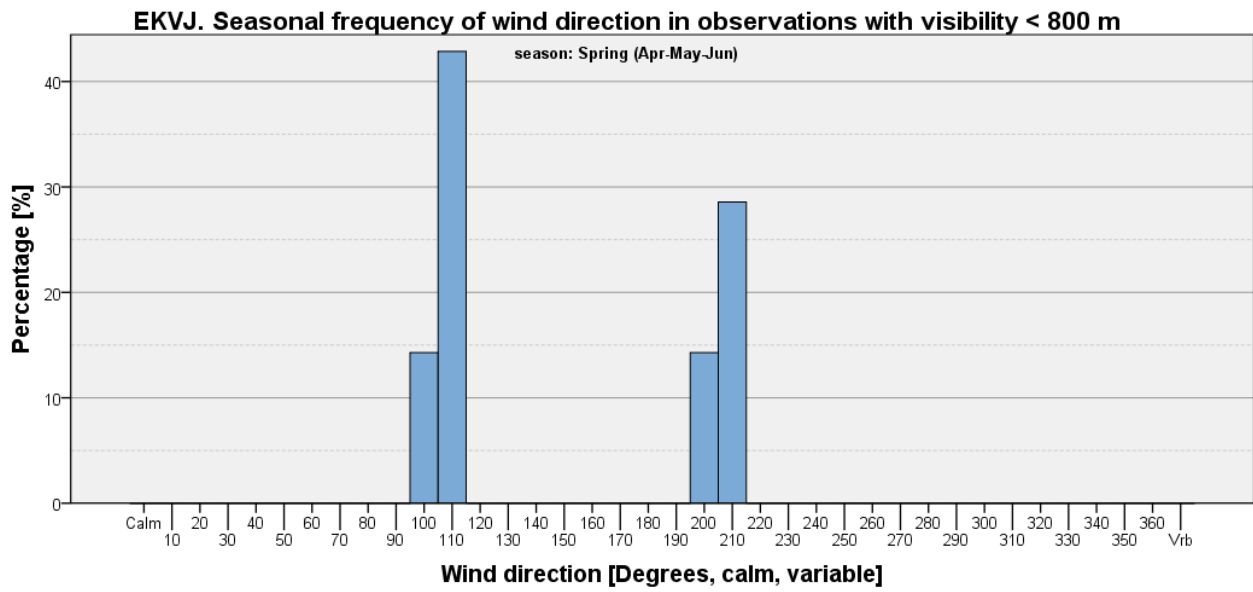


Figure 723

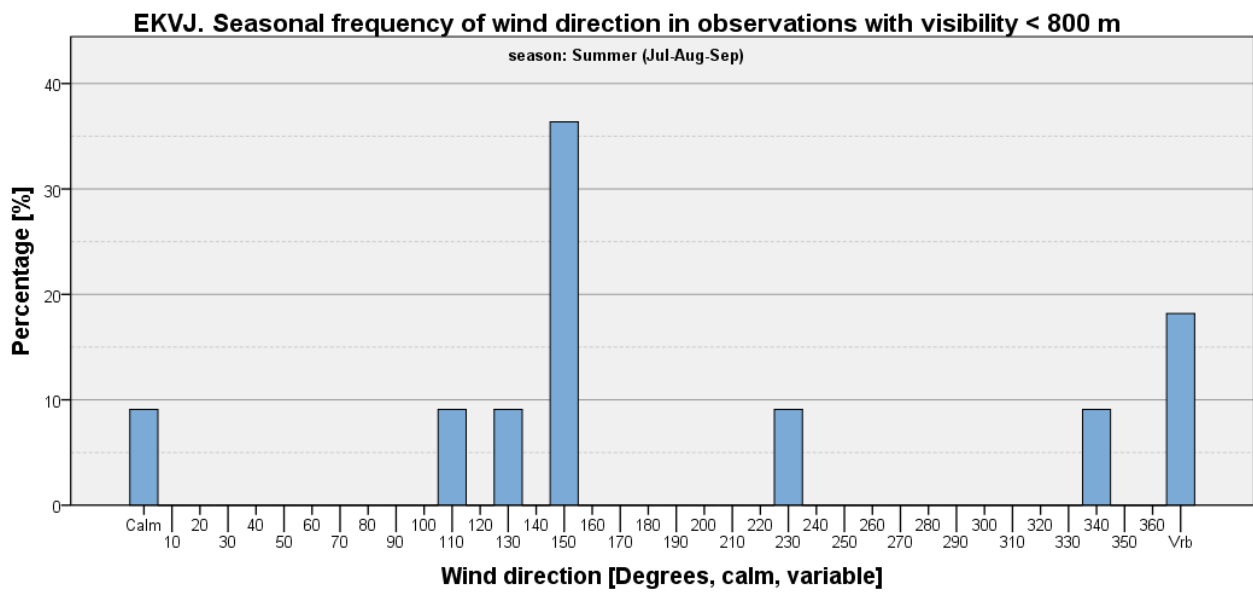


Figure 724

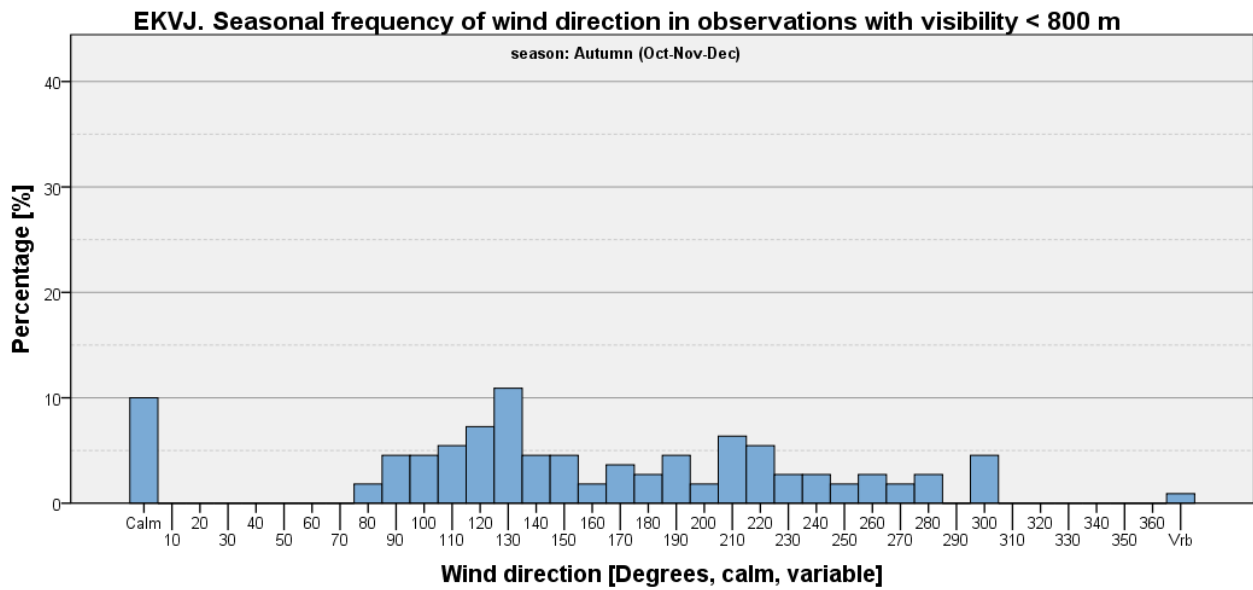


Figure 725

Visibility < 800 m and Wind Speed <= 5 kts

Table 205: EKVJ - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	1.74	0.023	0.13	1.38	0.83
All other observations	98.26	99.98	99.87	98.62	99.17
Total	100	100	100	100	100

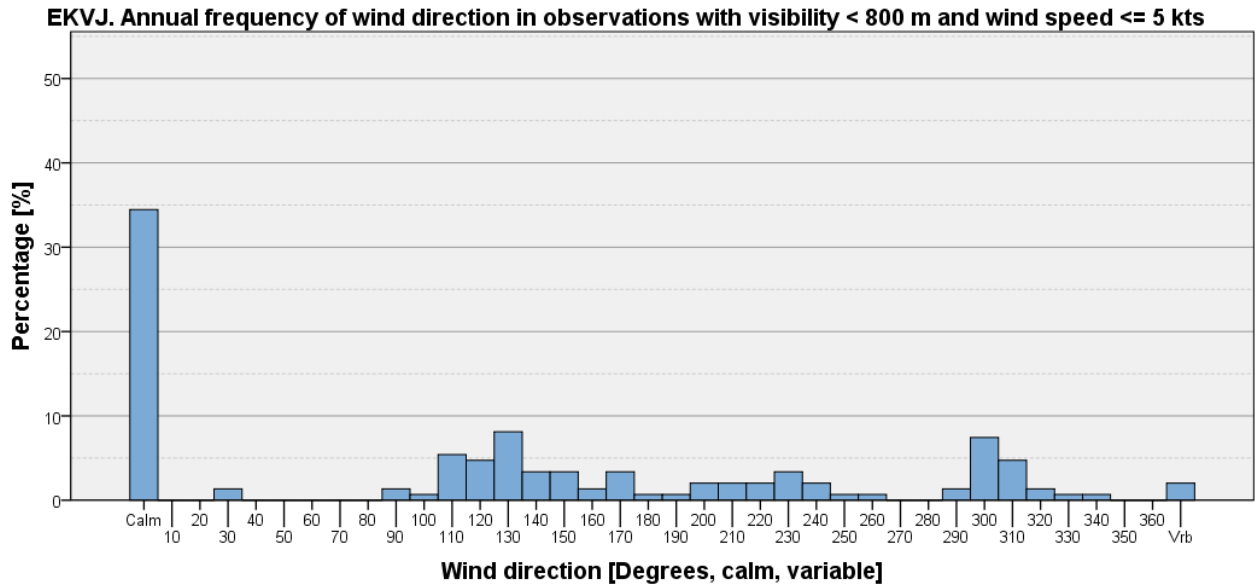


Figure 726

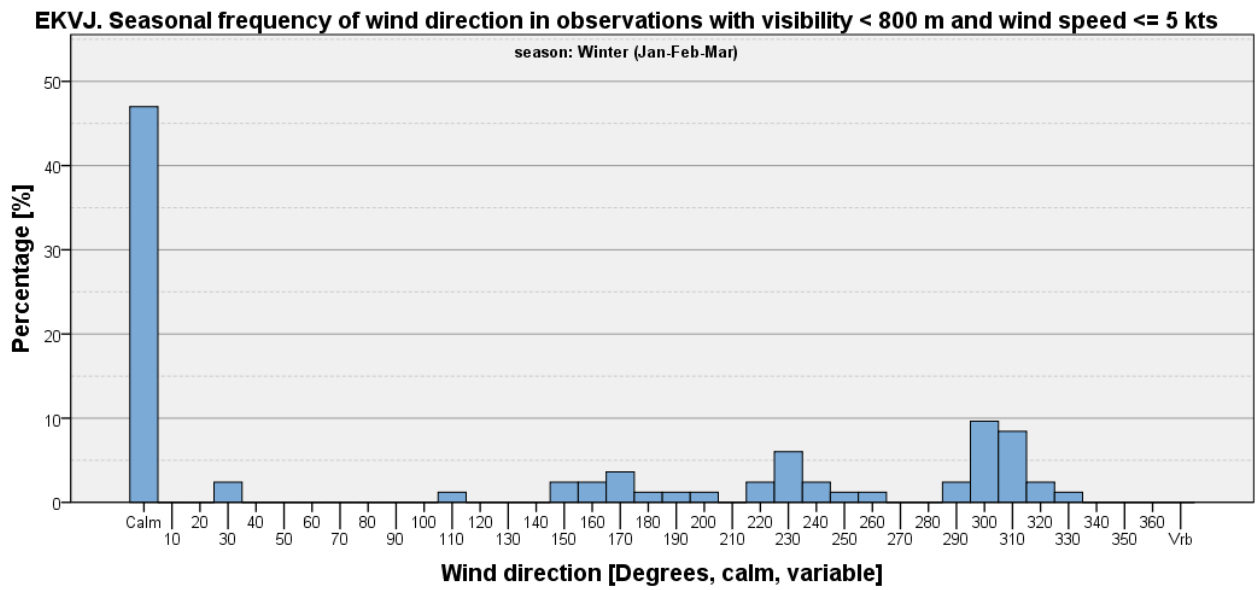


Figure 727

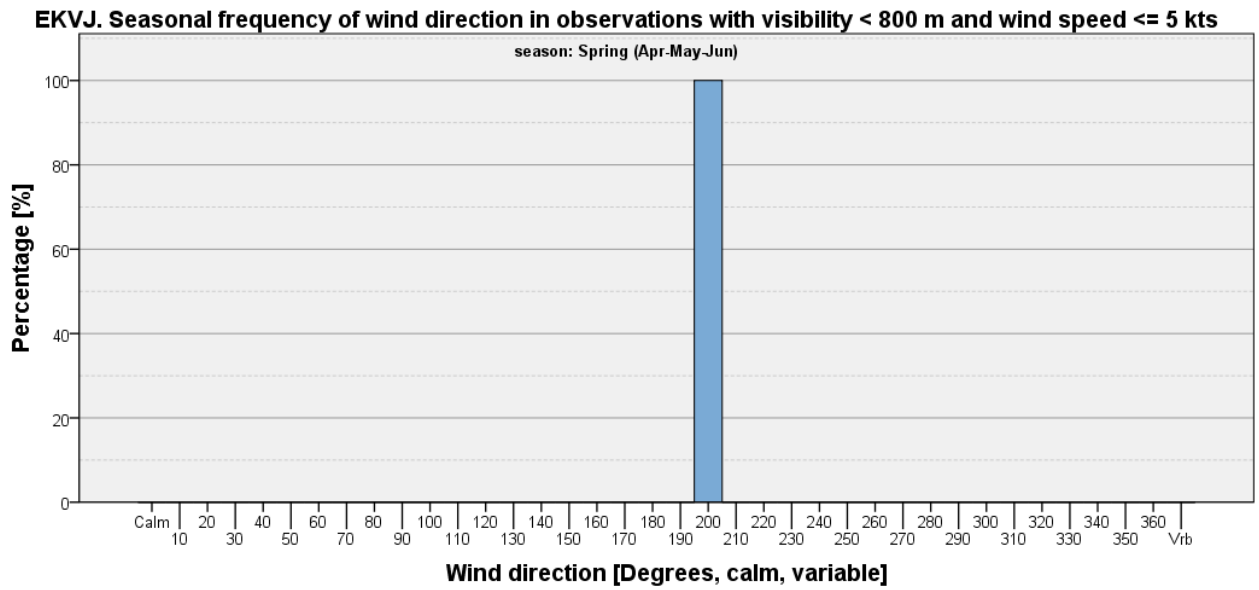


Figure 728 : Please notice the changed y-axis. The change in y-axis is caused by a low number of observations within the limits of visibility < 800 m and wind speed <= 5 kts.

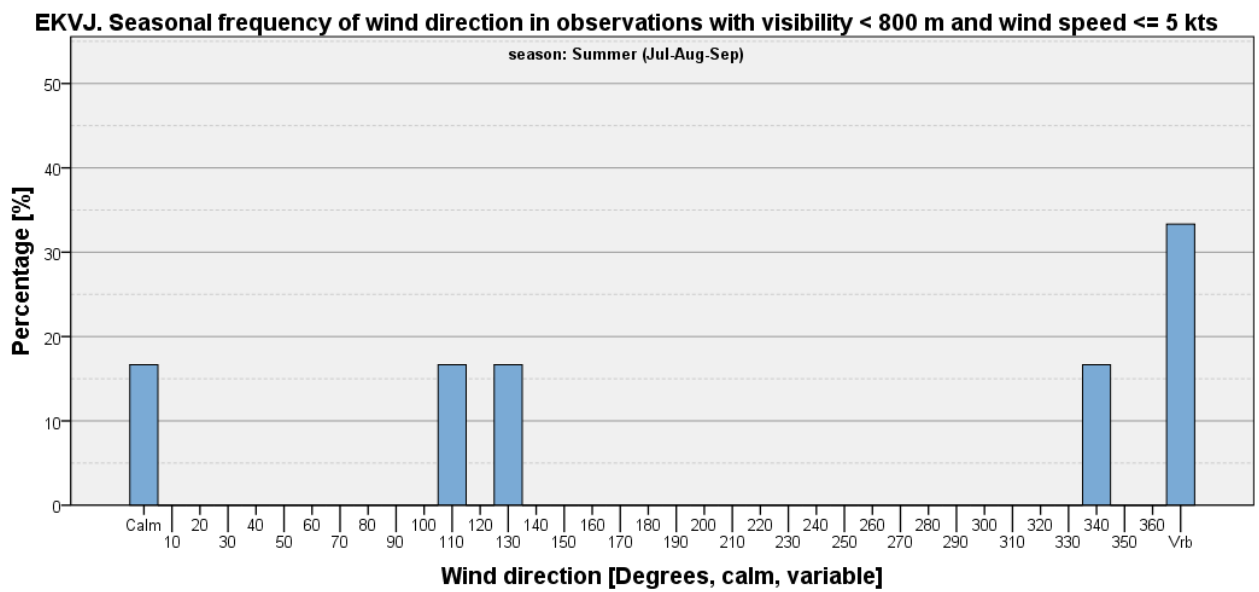


Figure 729

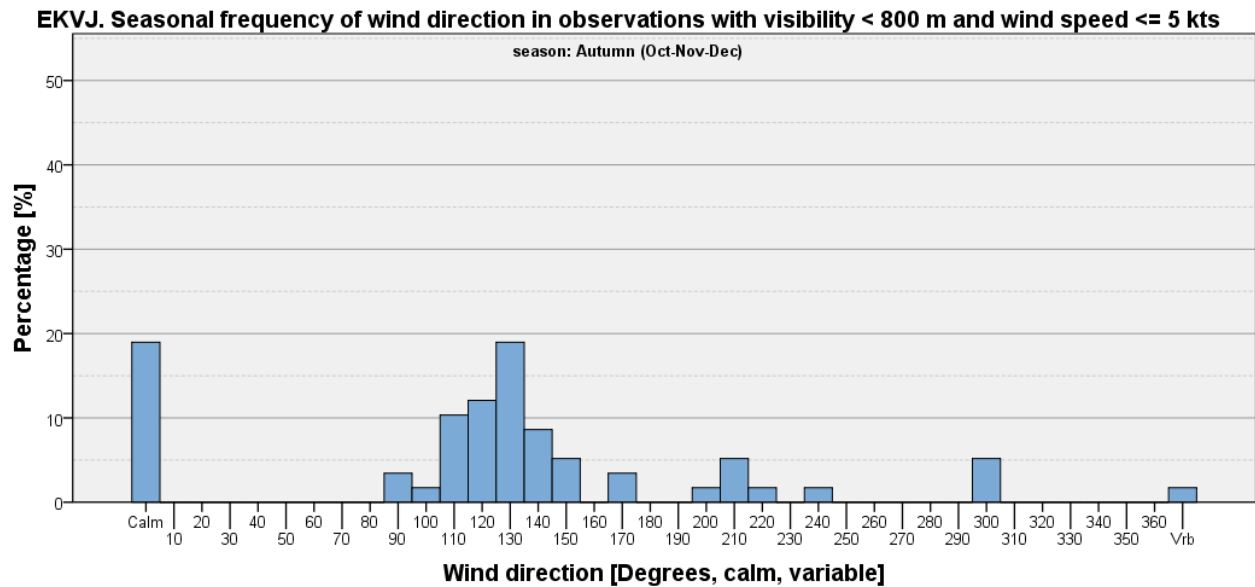


Figure 730

Visibility < 800 m and Wind Speed > 5 kts

Table 206: EKVJ - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	1.34	0.14	0.11	1.24	0.71
All other observations	98.66	99.86	99.89	98.76	99.29
Total	100	100	100	100	100

EKVJ. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

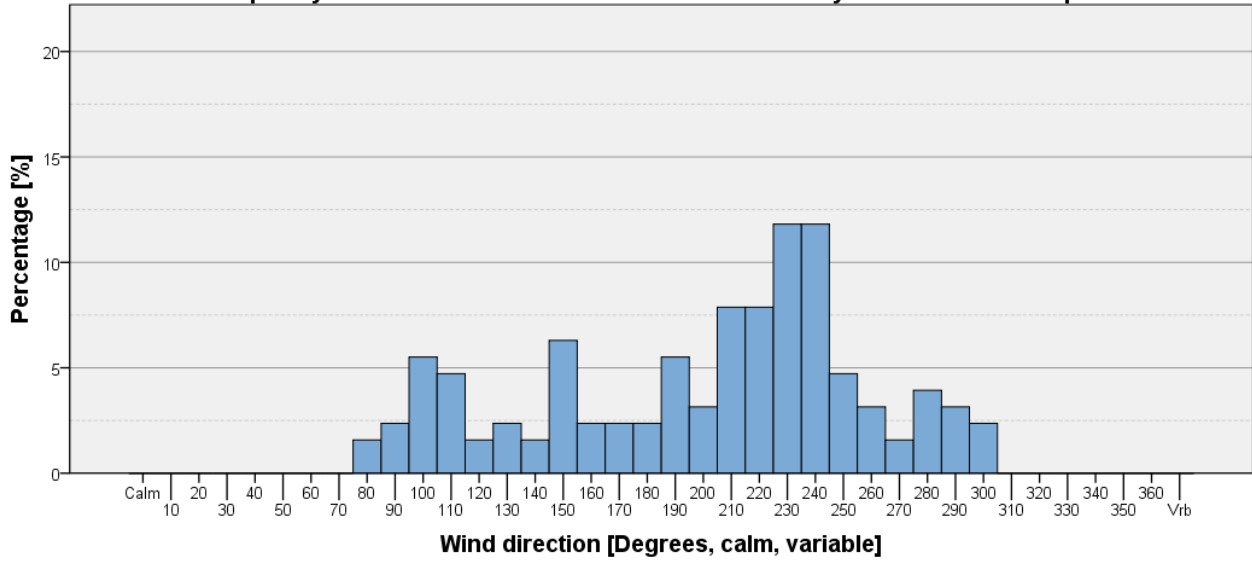


Figure 731

EKVJ. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

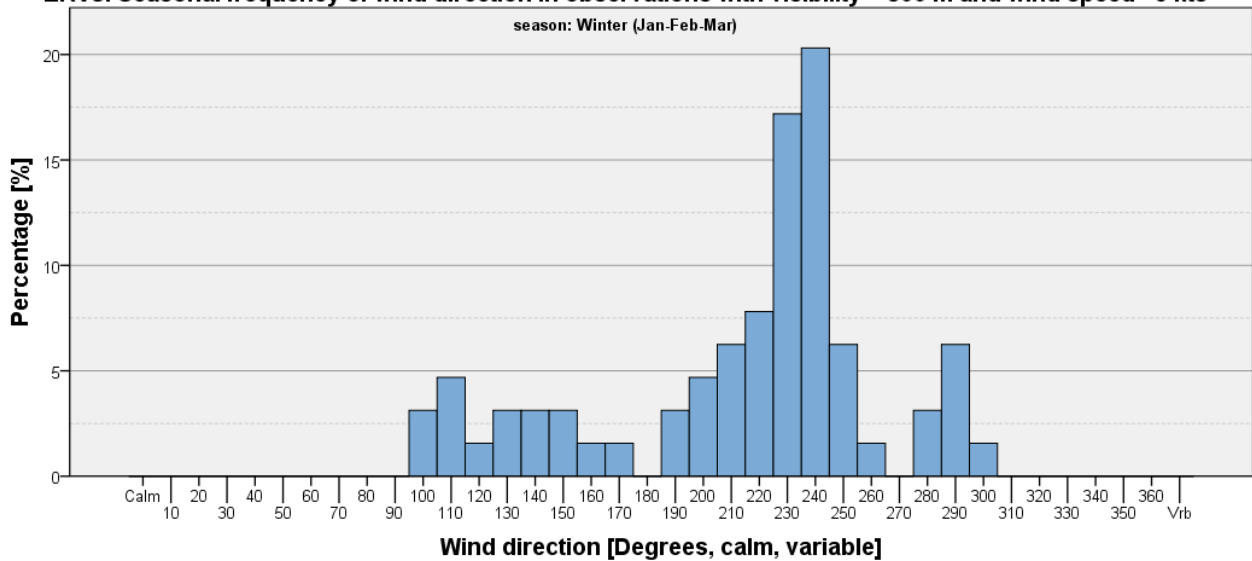


Figure 732

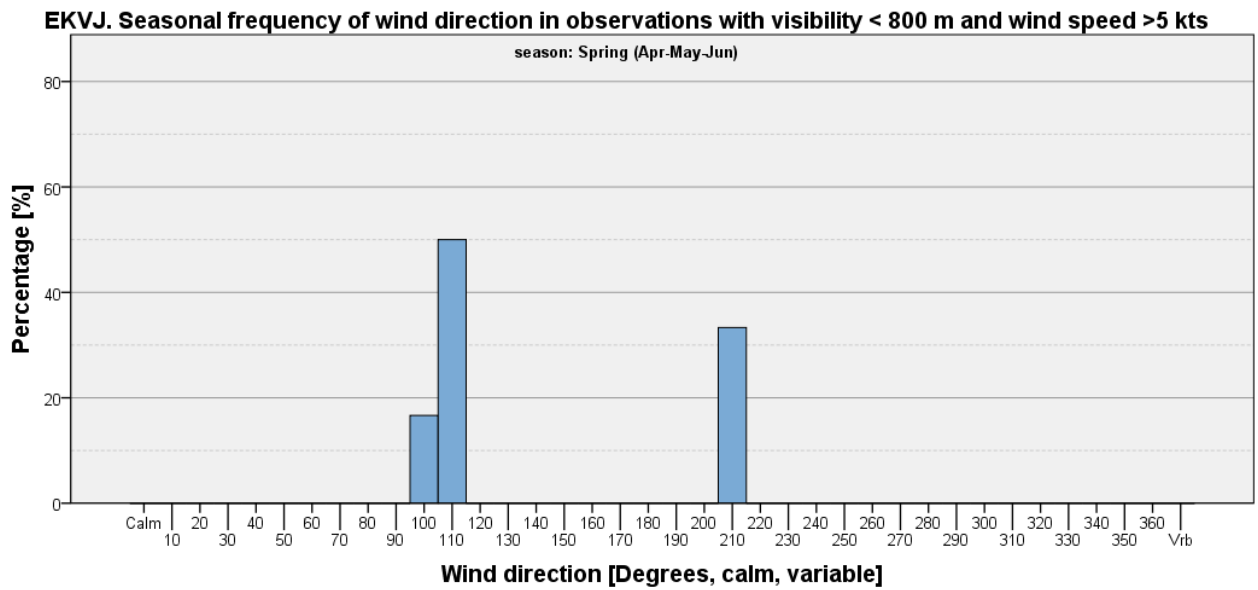


Figure 733: Please notice the changed y-axis. The change in y-axis is caused by a low number of observations within the limits of visibility > 800 m and wind speed < 5 kts.

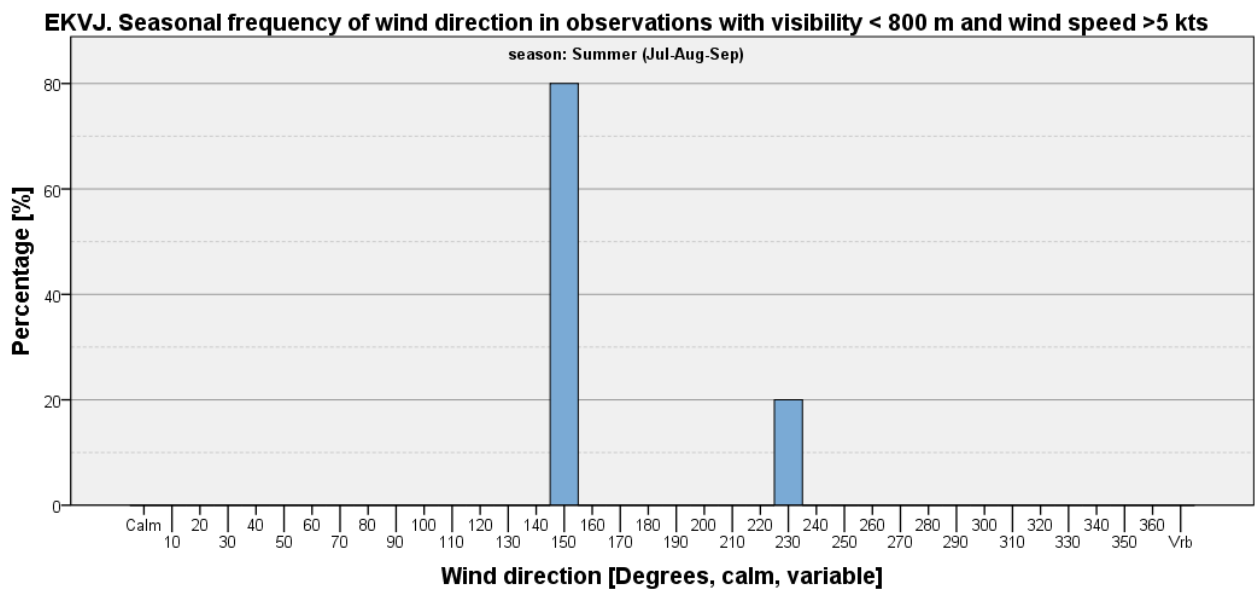


Figure 734: Please notice the changed y-axis. The change in y-axis is caused by a low number of observations within the limits of visibility > 800 m and wind speed < 5 kts.

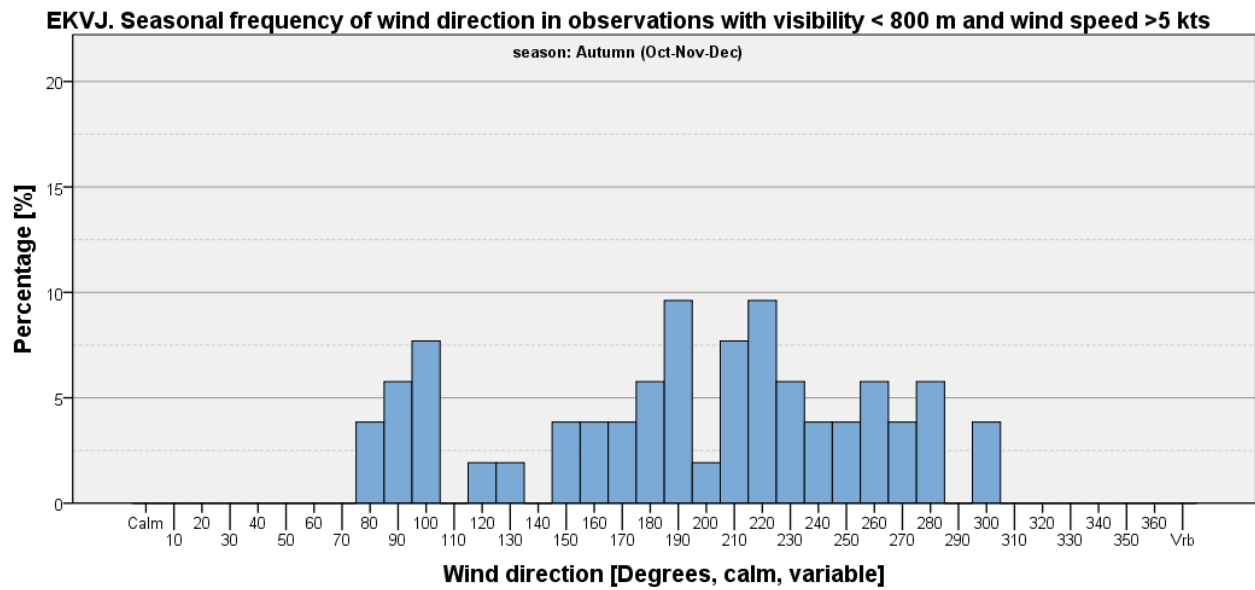


Figure 735

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 207: EKVJ - Seasonal and annual frequencies of ceiling < 1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling < 1,000 feet	26.21	10.99	6.11	24.80	17.09
All other observations	73.79	89.01	93.89	75.20	82.91
Total	100	100	100	100	100

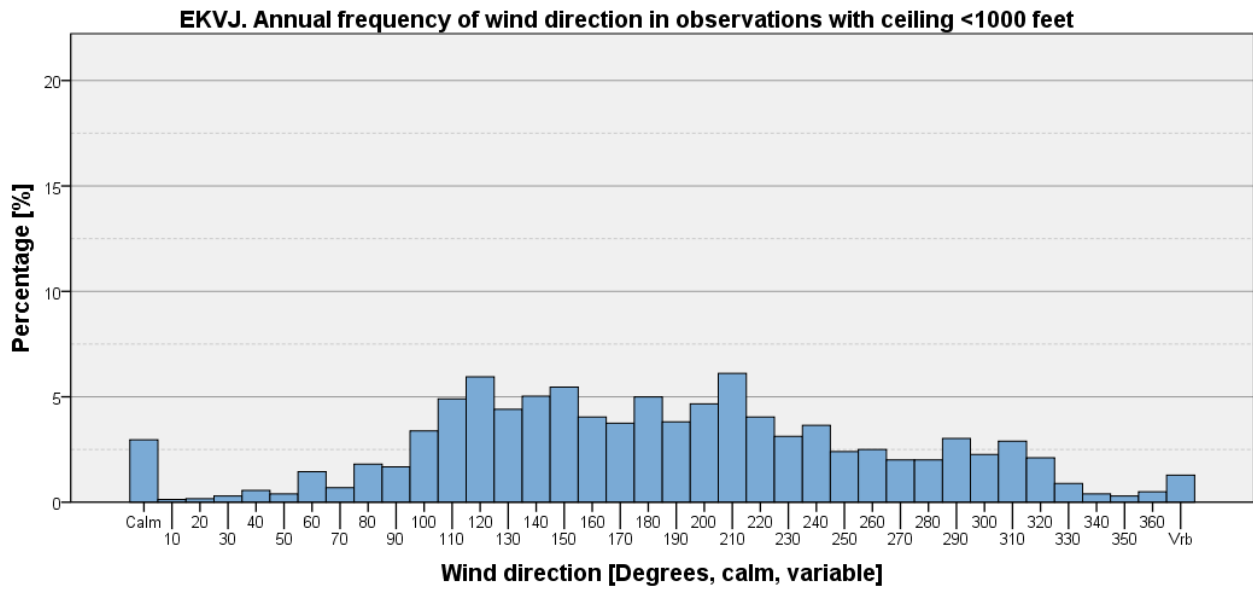


Figure 736

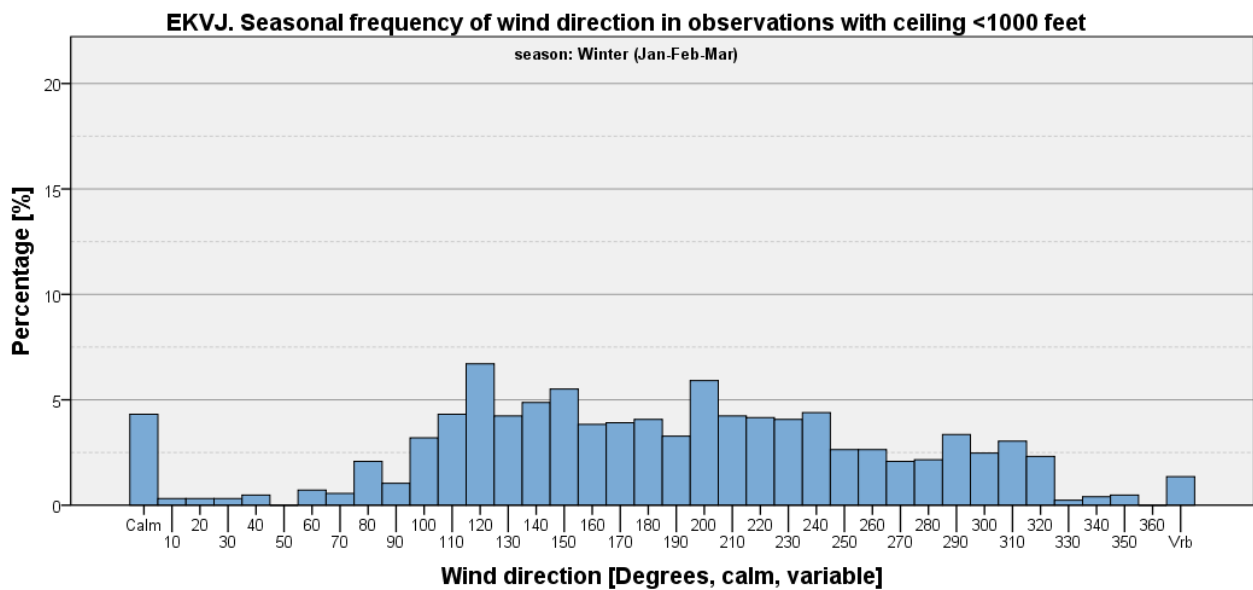


Figure 737

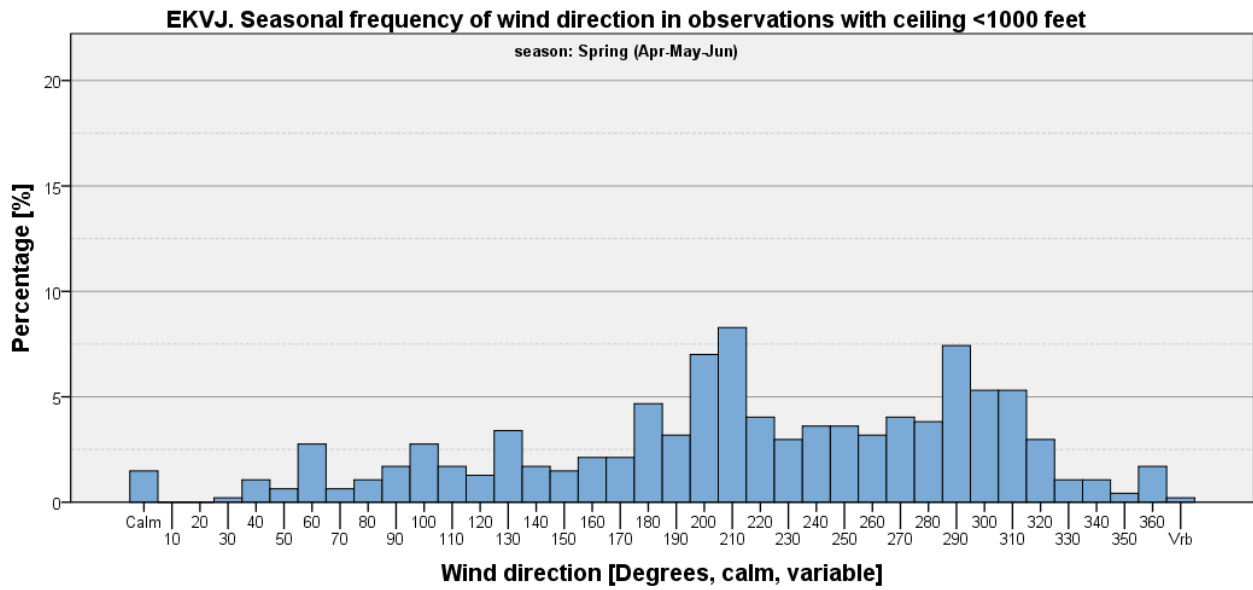


Figure 738

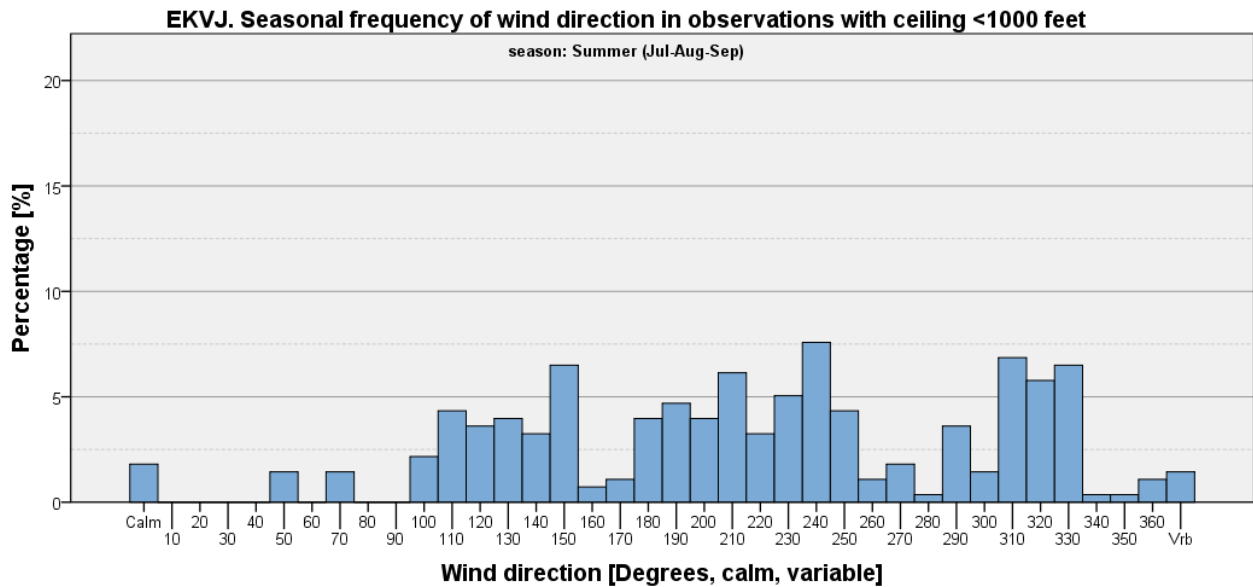


Figure 739

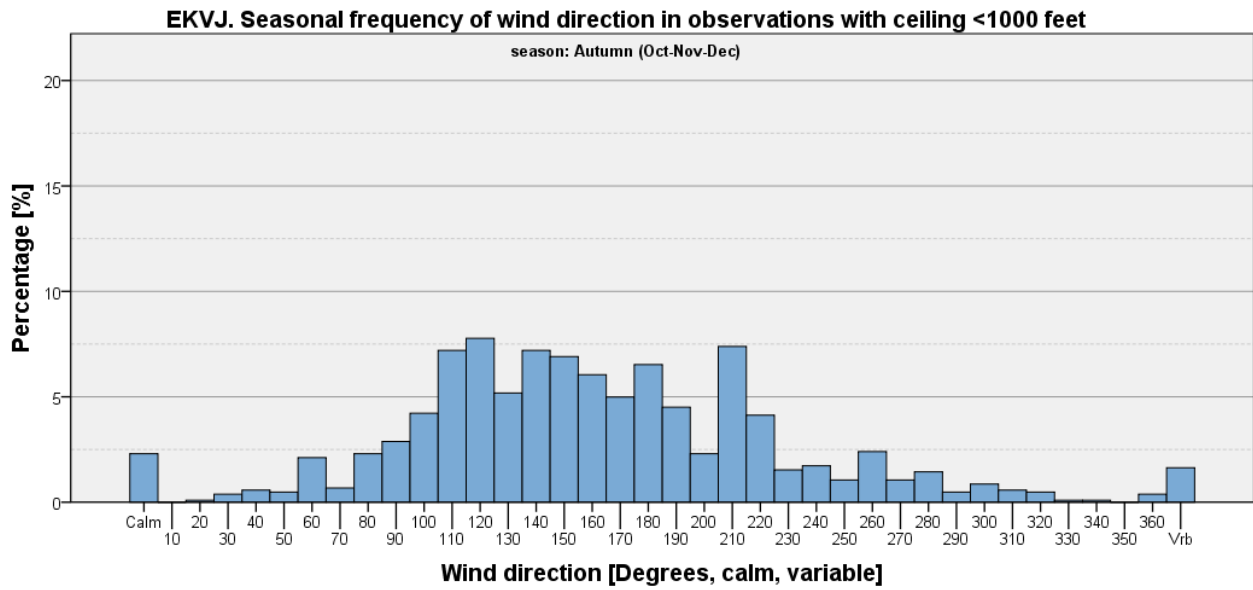


Figure 740

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 208: EKVJ - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	4.98	1.49	0.75	5.33	3.15
All other observations	95.02	98.51	99.25	94.67	96.85
Total	100	100	100	100	100

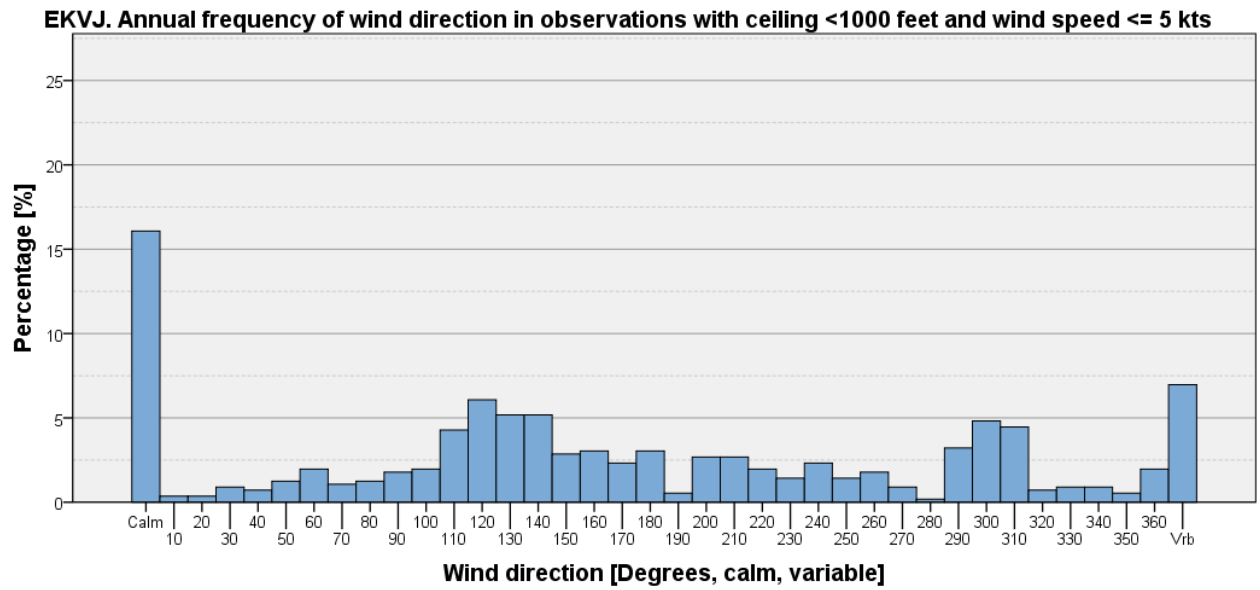


Figure 741

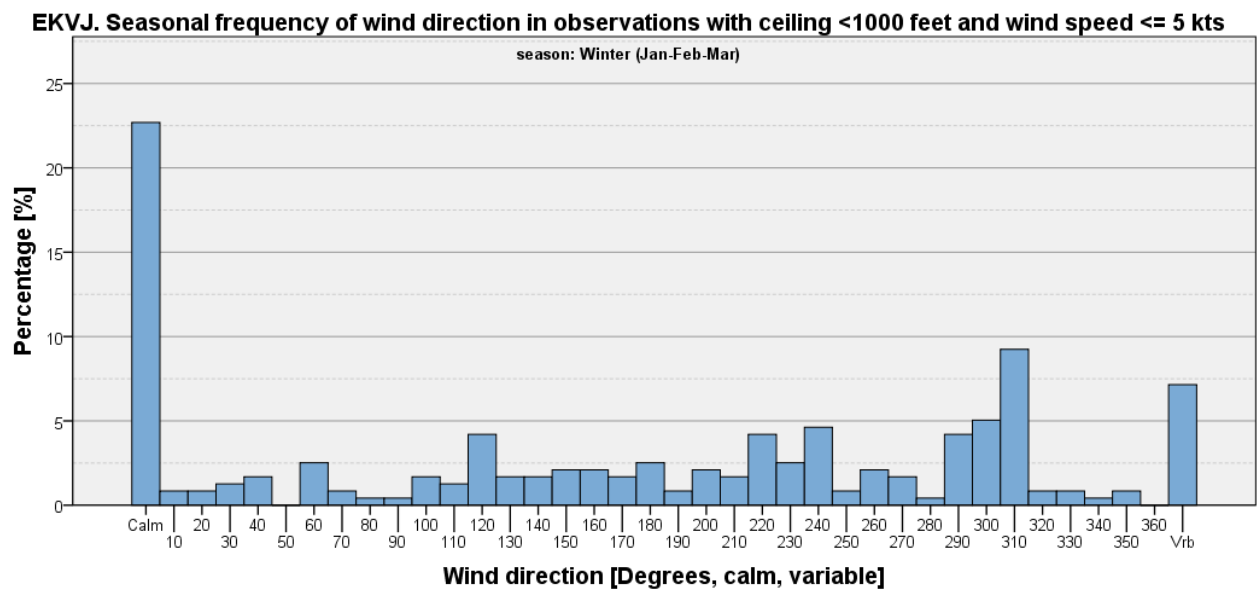


Figure 742

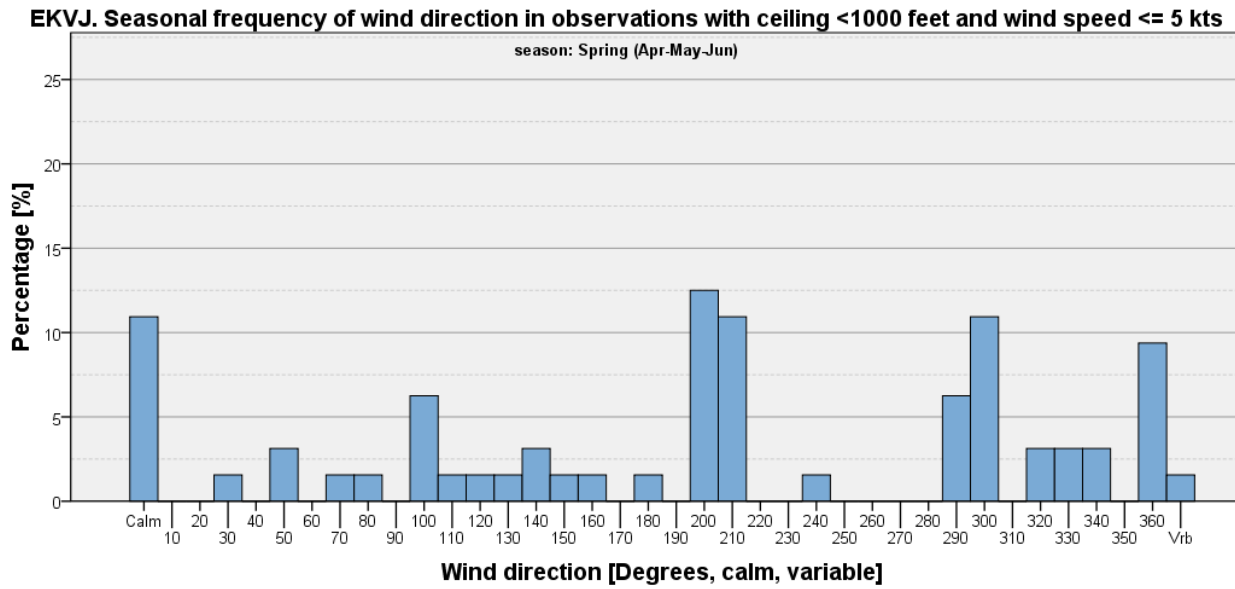


Figure 743

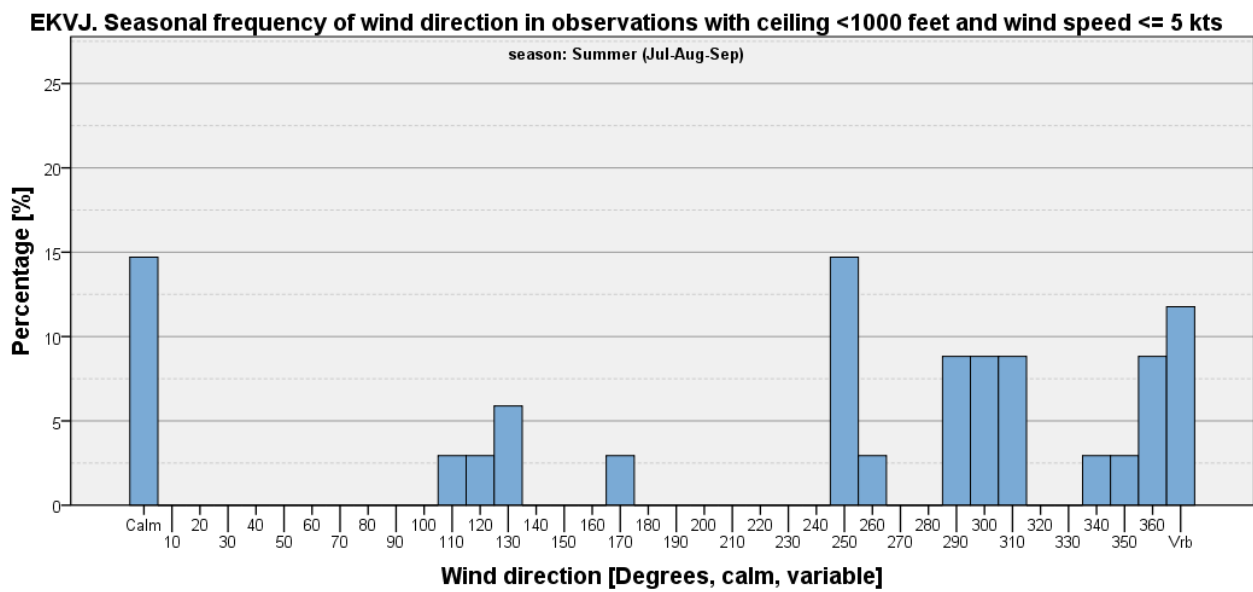


Figure 744

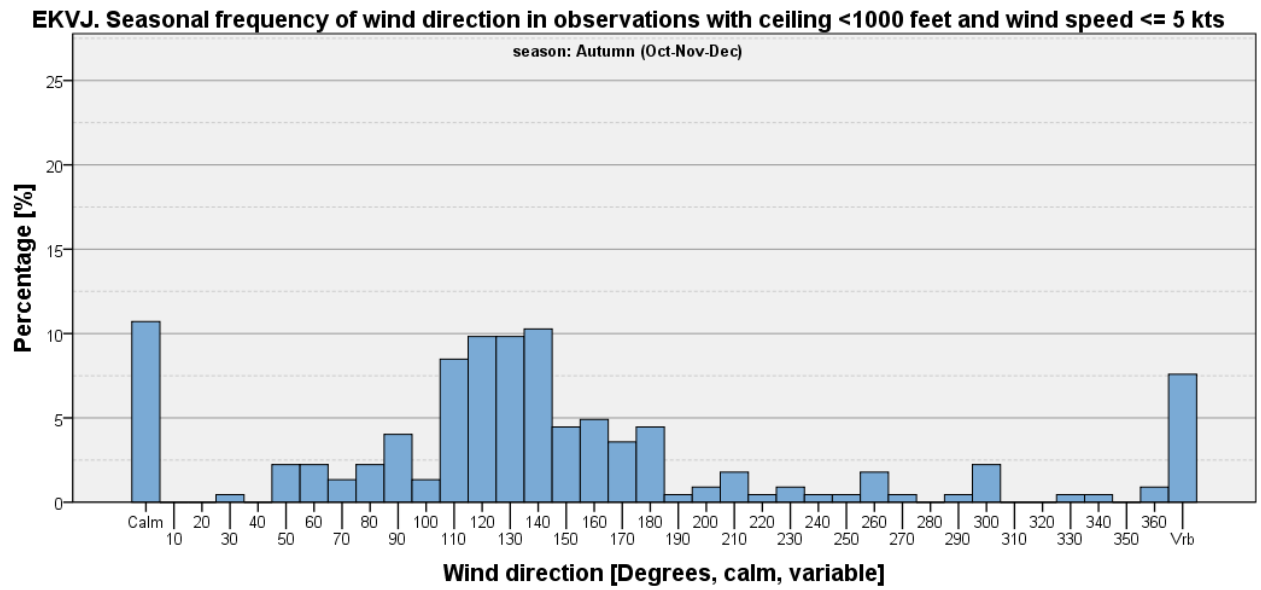


Figure 745

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 209: EKVJ - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	21.23	9.49	5.36	19.47	13.95
All other observations	78.77	90.51	94.64	80.53	86.05
Total	100	100	100	100	100

EKVJ. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

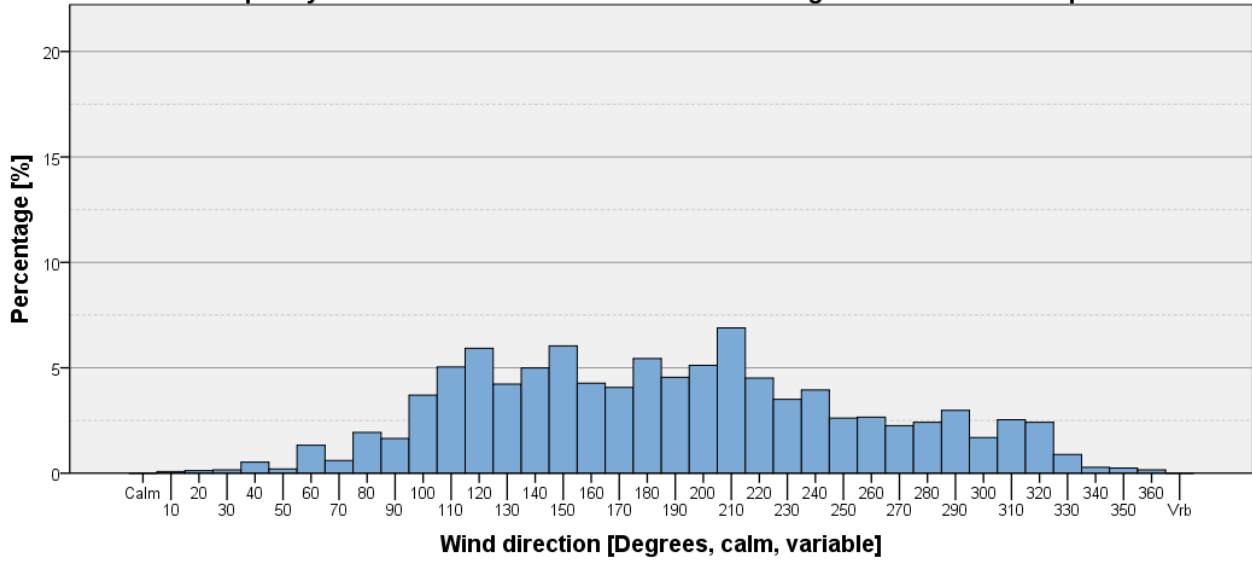


Figure 746

EKVJ. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

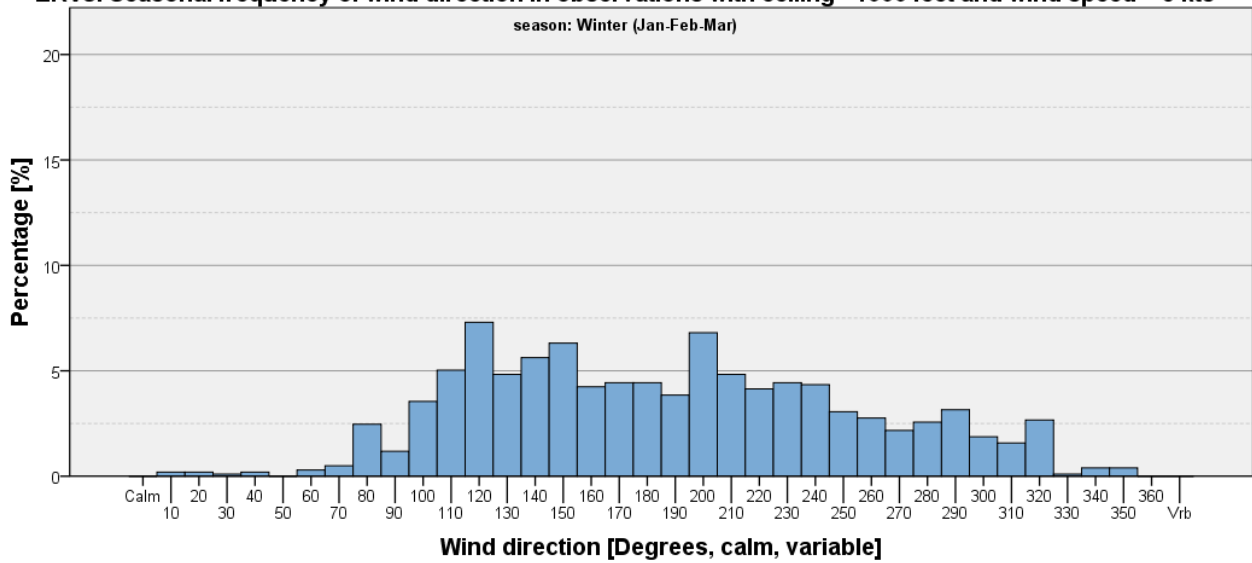


Figure 747

EKVJ. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

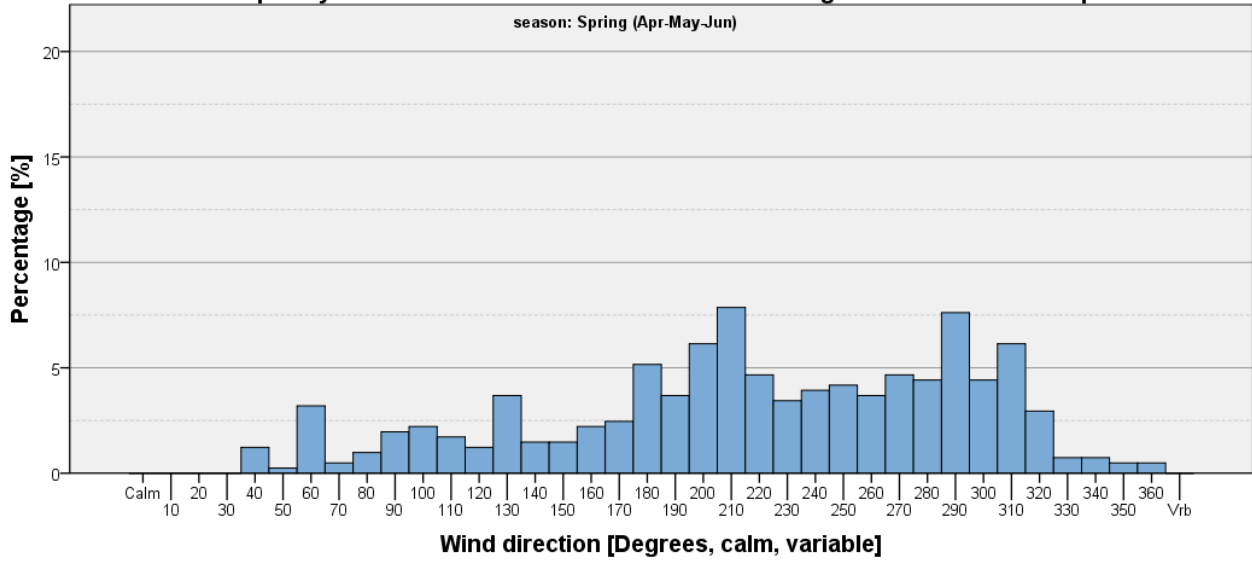


Figure 748

EKVJ. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

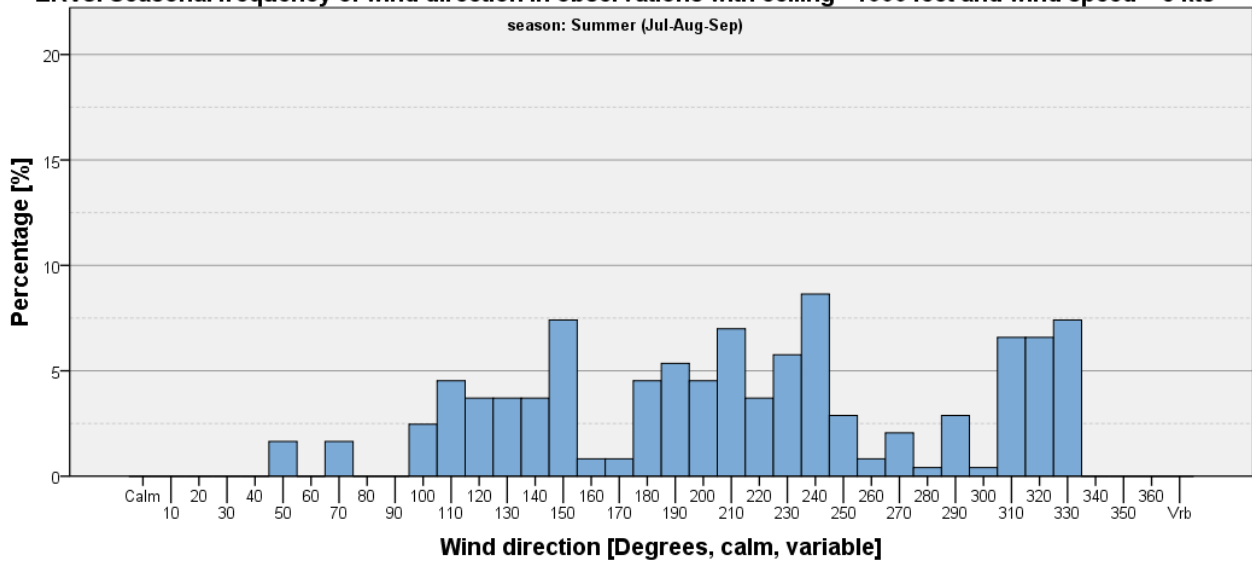


Figure 749

EKVJ. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

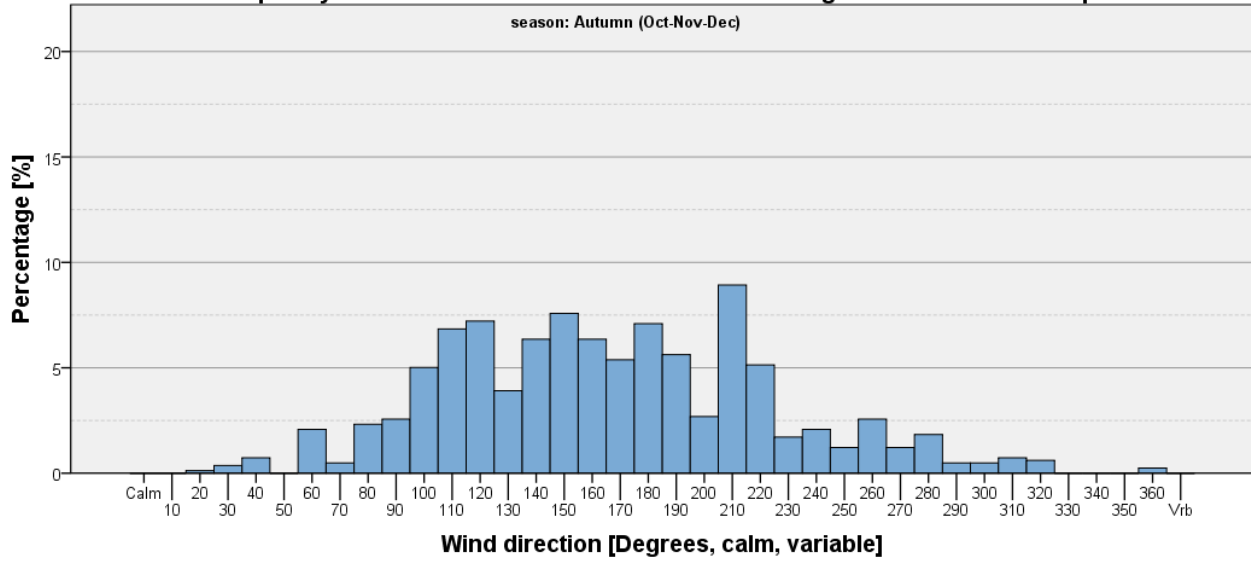


Figure 750

Ceiling < 500 feet

Table 210: EKVJ - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	13.76	4.48	1.65	14.26	8.56
All other observations	86.24	95.52	98.35	85.74	91.44
Total	100	100	100	100	100

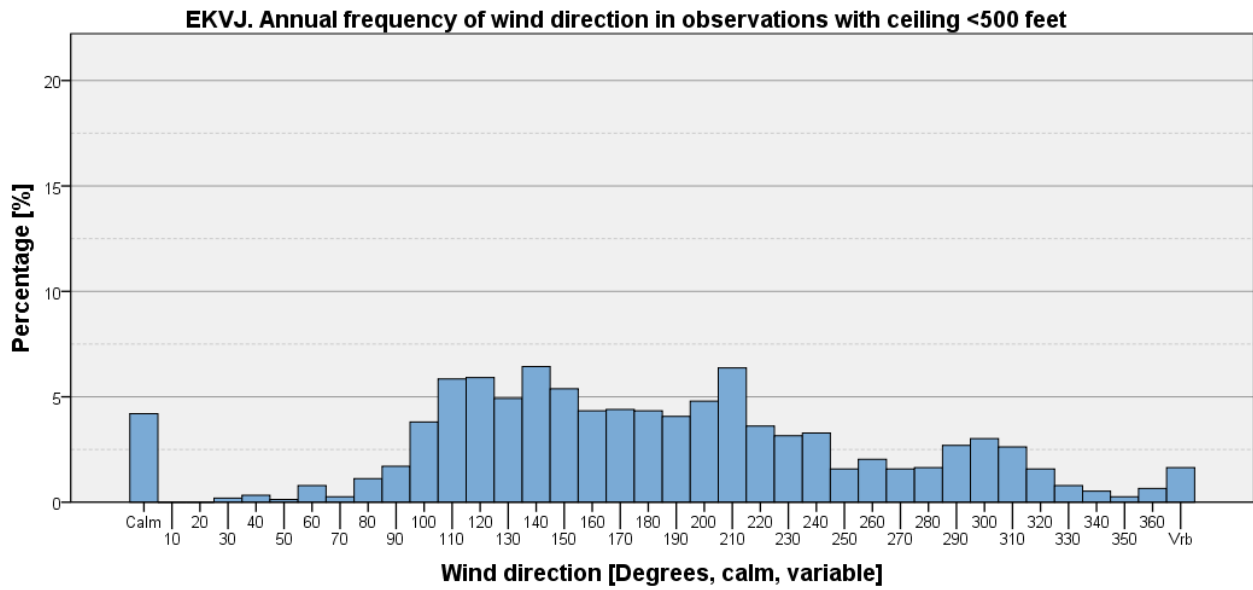


Figure 751

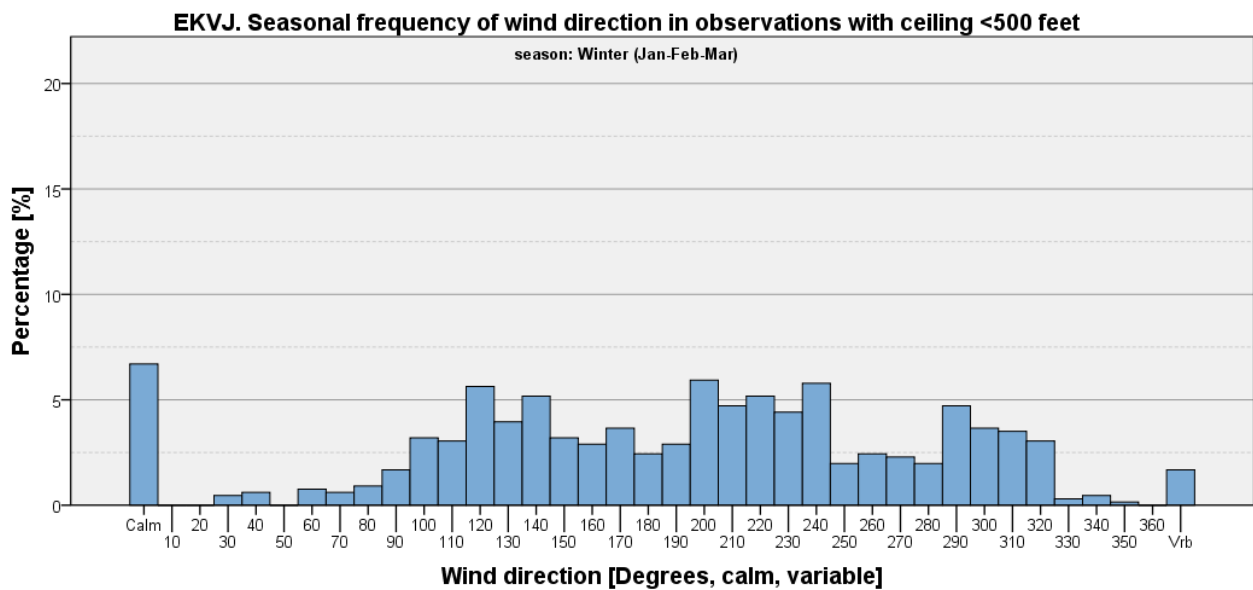


Figure 752

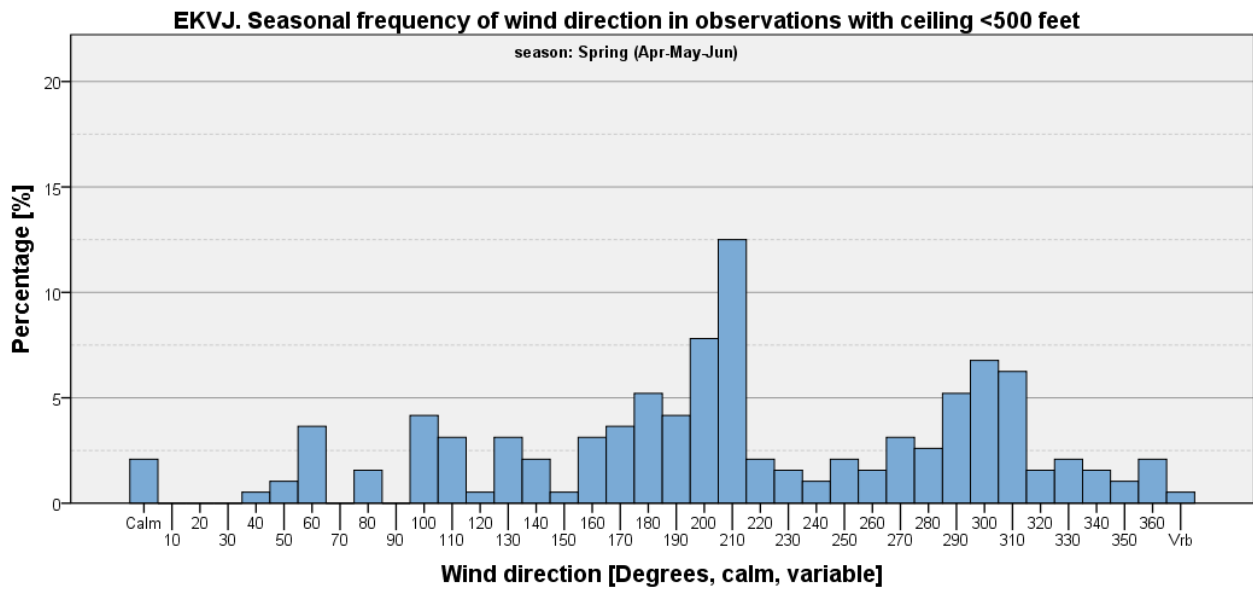


Figure 753

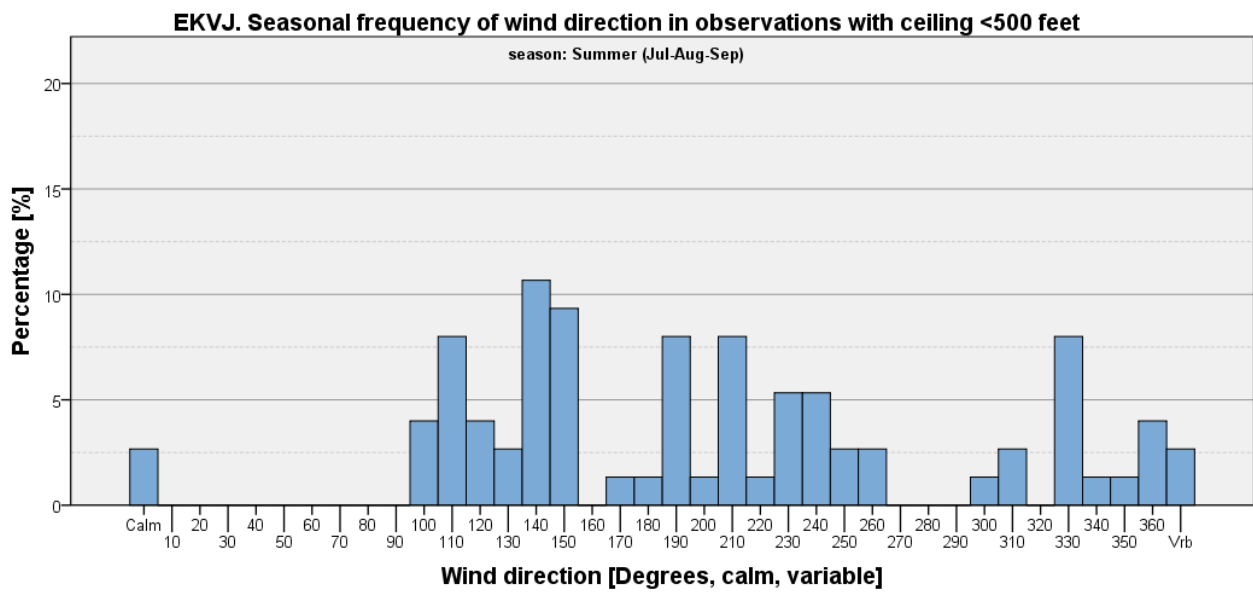


Figure 754

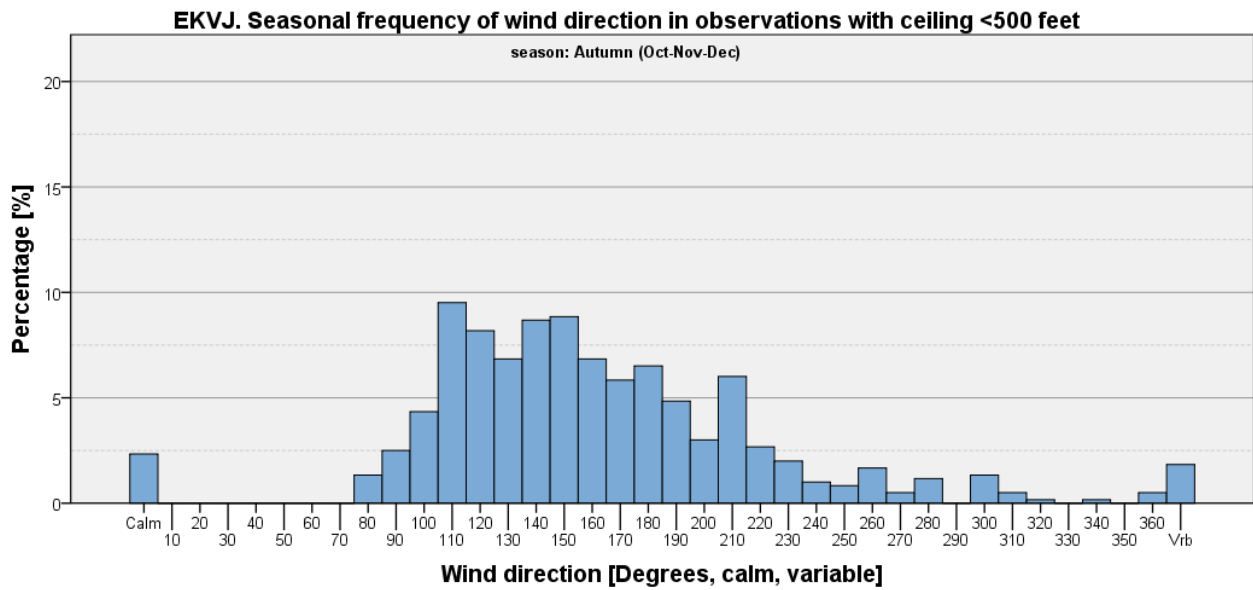


Figure 755

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 211: EKVJ - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	3.69	0.91	0.38	4.02	2.25
All other Observations	96.31	99.09	99.62	95.98	97.75
Total	100	100	100	100	100

EKVJ. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

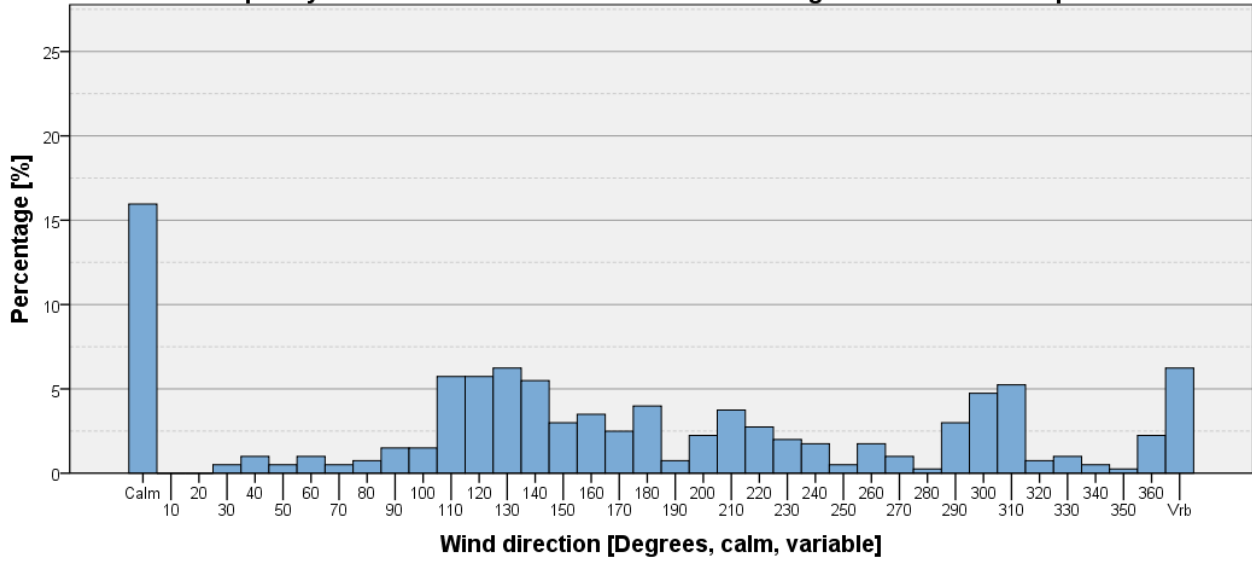


Figure 756

EKVJ. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

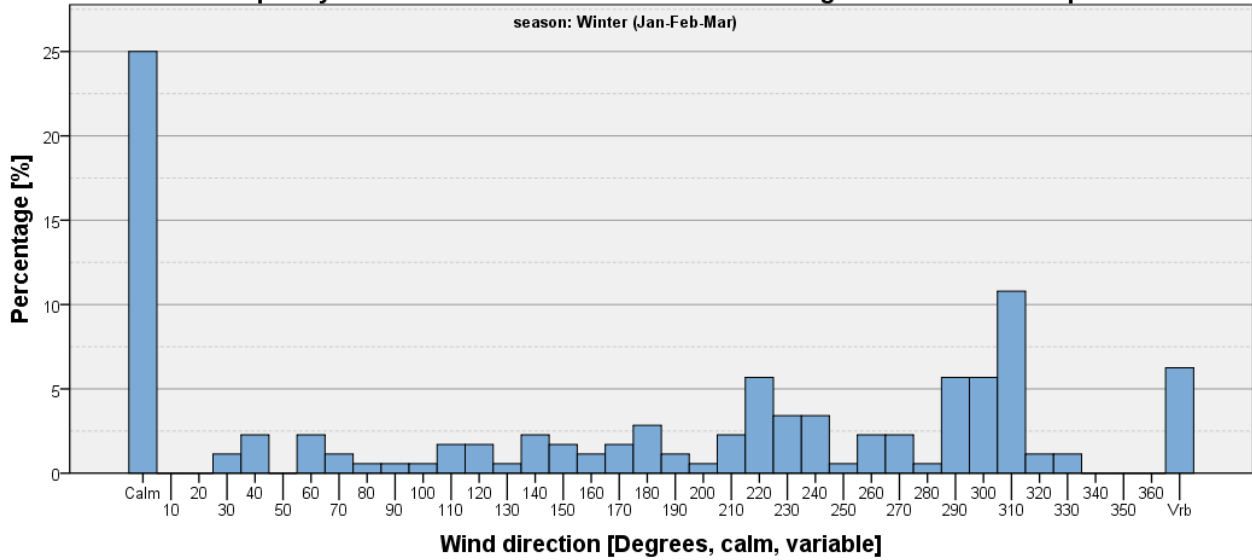


Figure 757

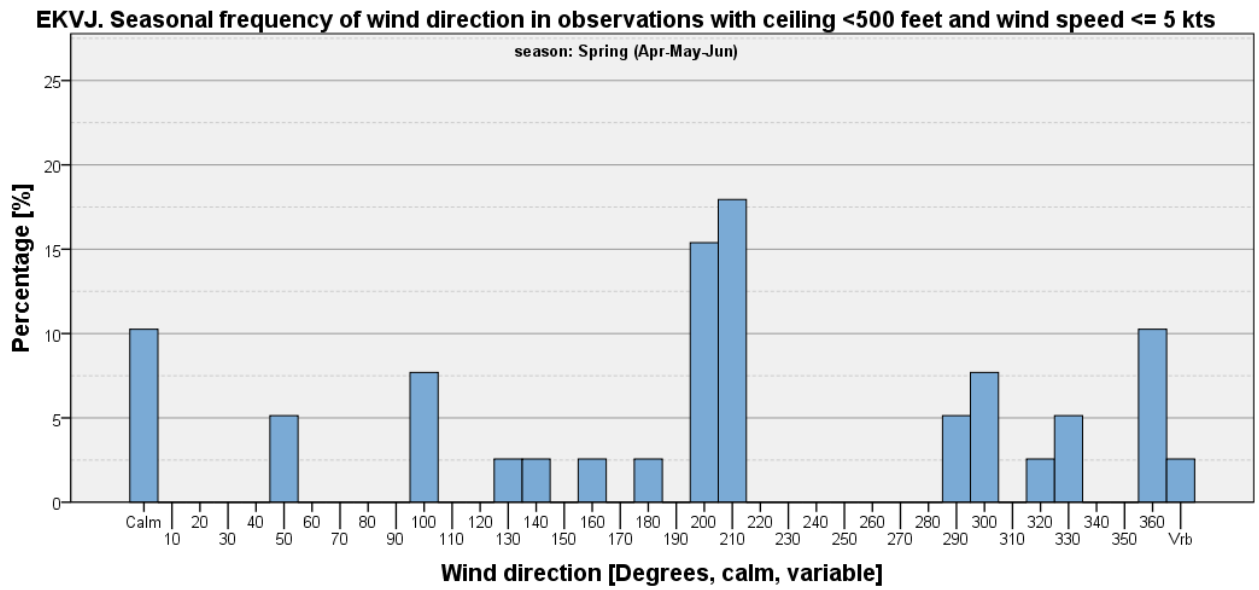


Figure 758

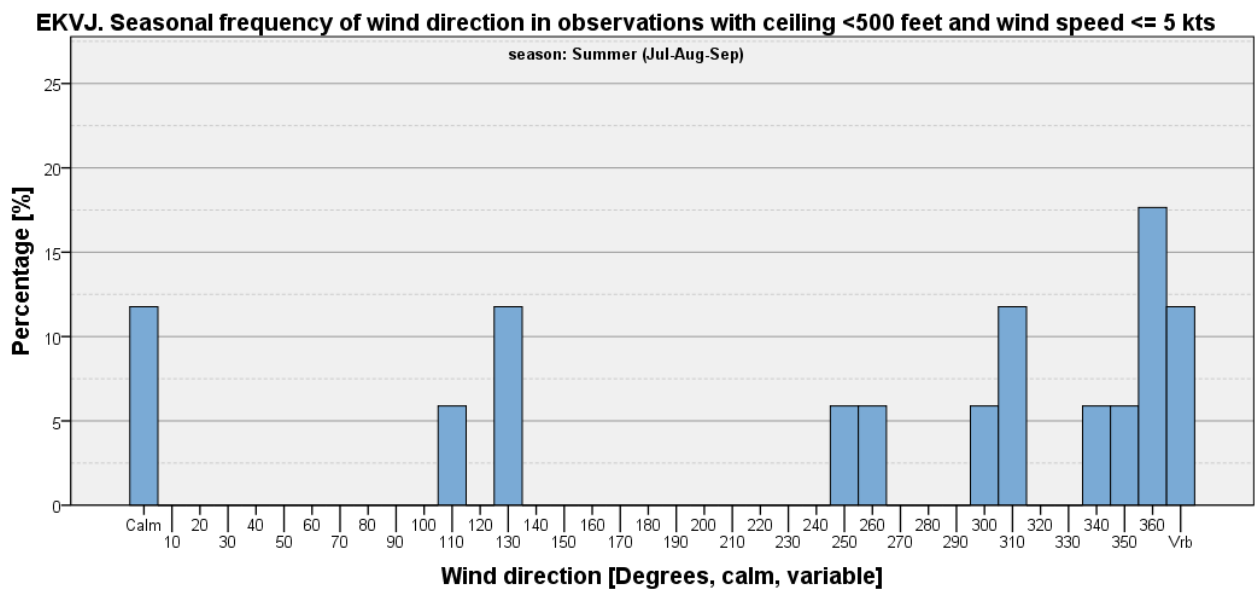


Figure 759

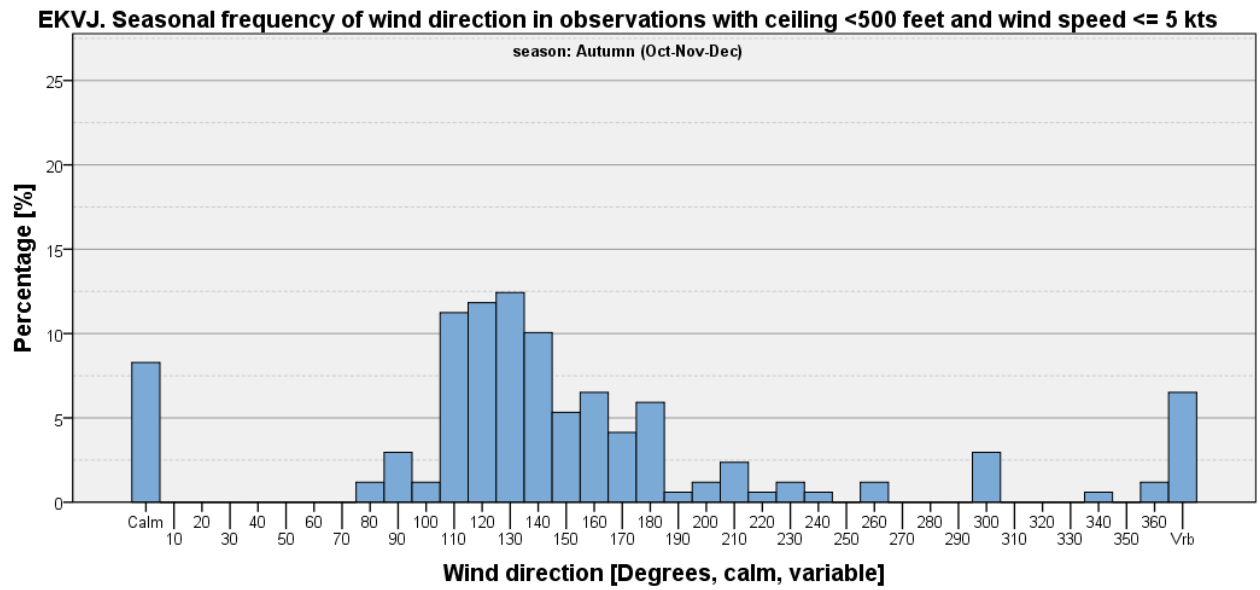


Figure 760

Ceiling < 500 feet and Wind Speed > 5 kts

Table 212: EKVJ - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	10.07	3.57	1.28	10.23	6.30
All other observations	89.93	96.43	98.72	89.77	93.70
Total	100	100	100	100	100

EKVJ. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

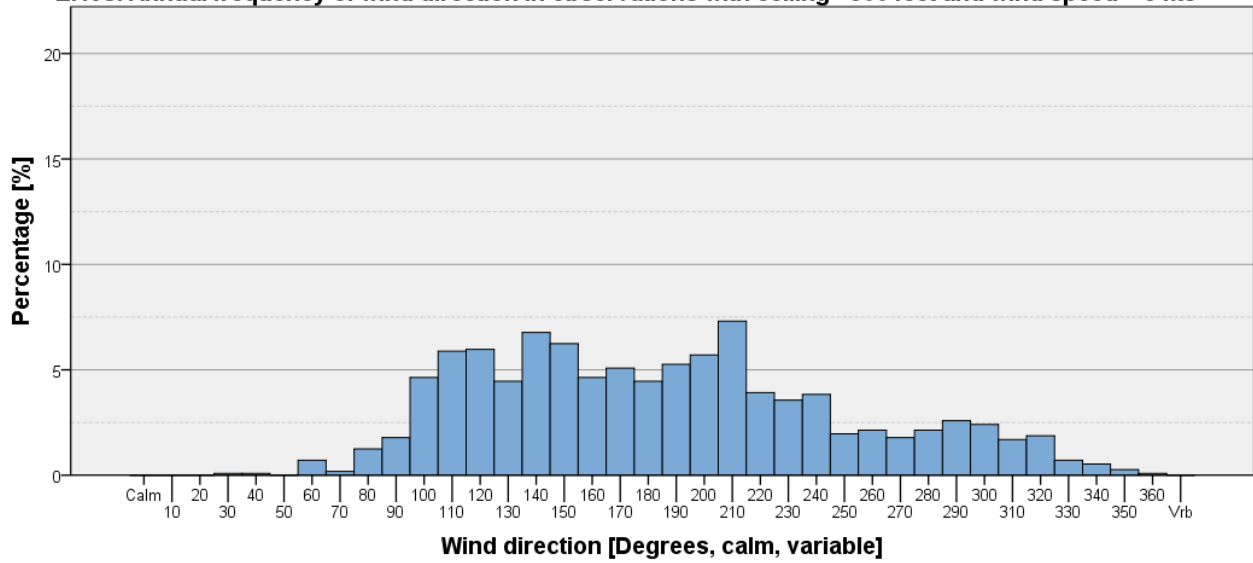


Figure 761

EKVJ. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

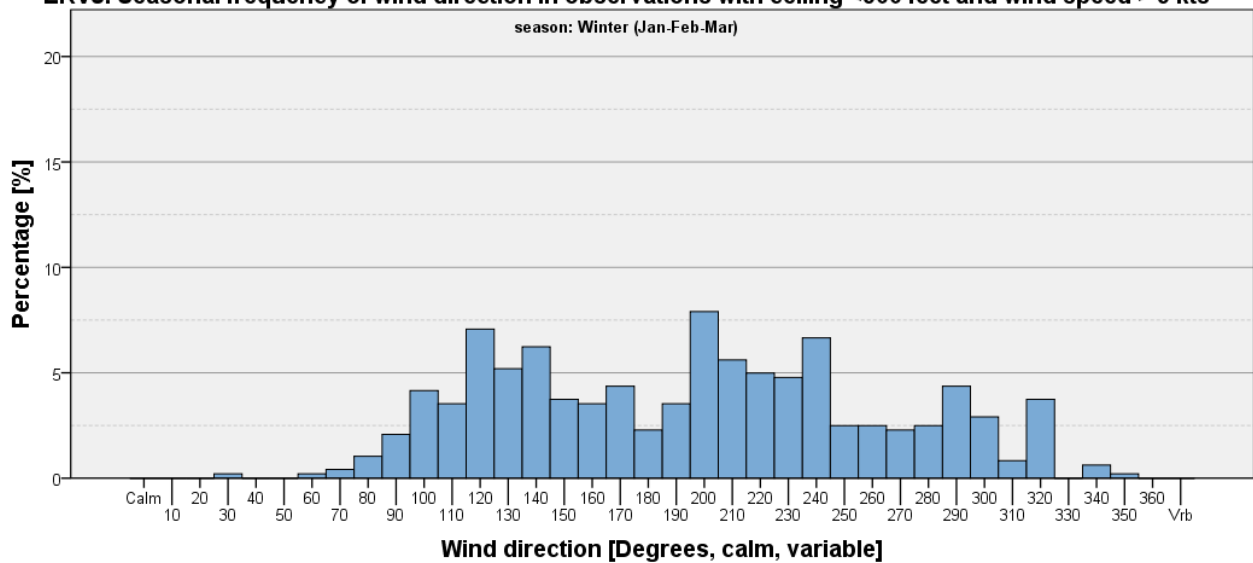


Figure 762

EKVJ. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

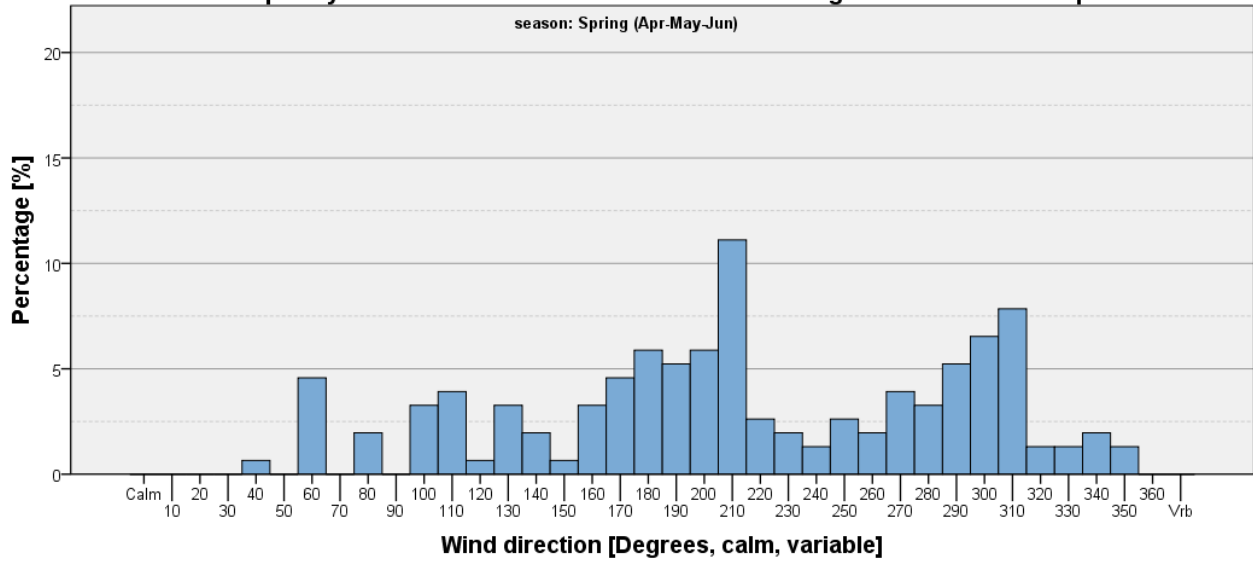


Figure 763

EKVJ. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

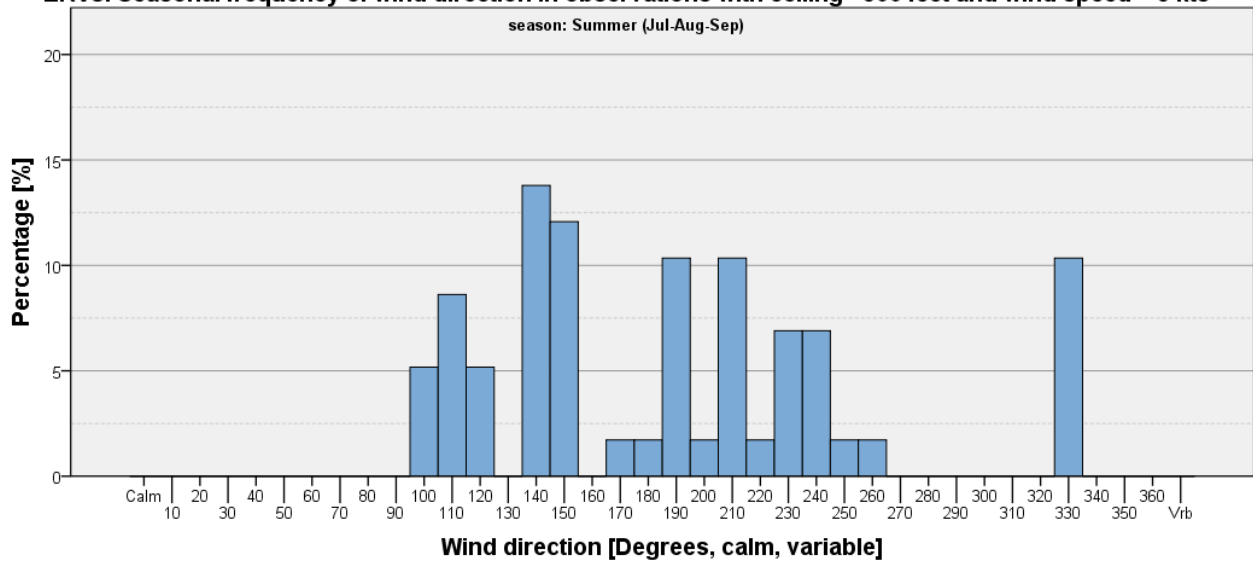


Figure 764

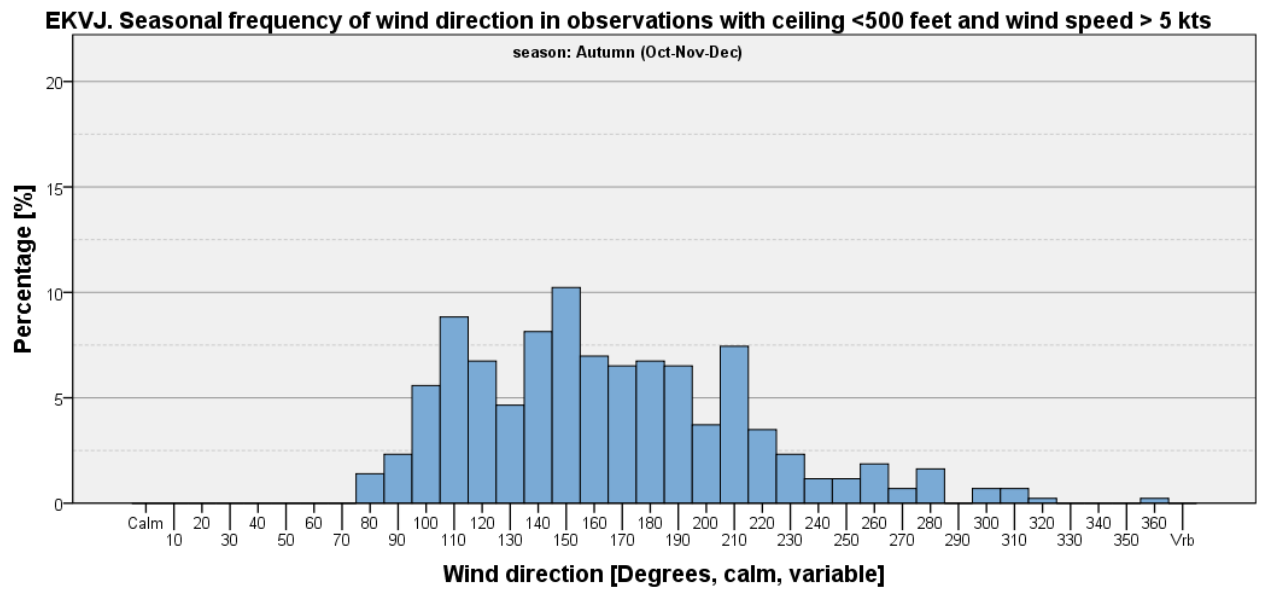
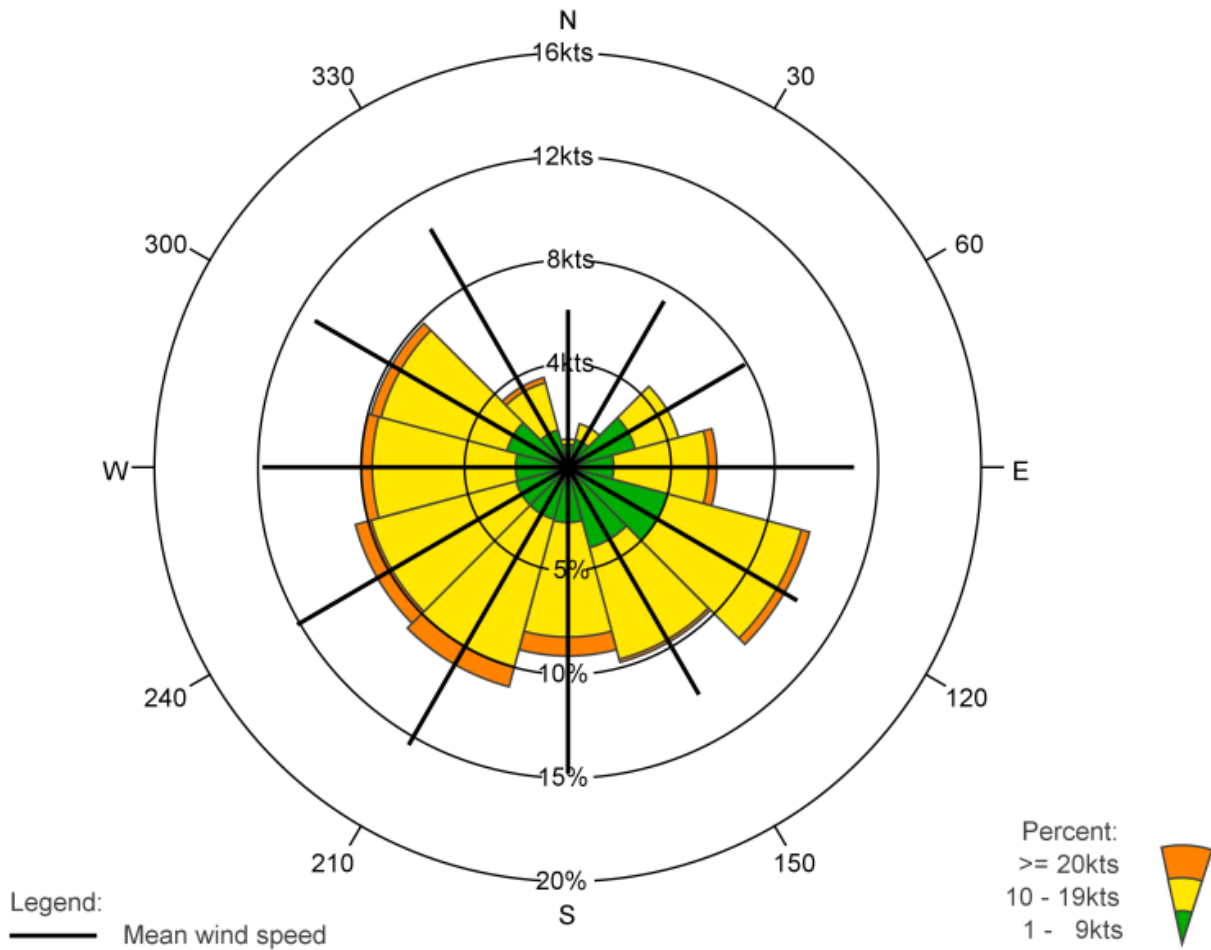


Figure 765

Wind Roses

EKVJ: STAUNING LUFTHAVN, AUTUMN & WINTER

17-05-2011 - 16-05-2019 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	1.4	2.2	5.5	7.2	12.1	9.8	9.1	11.0	10.6	10.0	9.8	4.5	93.2
% 1 - 9kts	1.1	1.4	3.4	2.2	5.0	4.0	2.7	2.6	2.6	2.5	3.1	1.9	32.4
% 10 - 19kts	0.3	0.8	2.1	4.6	6.7	5.6	5.5	7.4	7.3	6.9	6.3	2.4	55.8
% >= 20kts	0.0	0.0	0.0	0.4	0.4	0.2	0.9	1.0	0.8	0.5	0.5	0.3	5.0
Mean wind speed	6.1	7.4	7.9	11.1	10.2	10.1	11.9	12.4	12.1	11.8	11.3	10.6	11.0
Max wind speed	16.0	16.0	17.0	25.0	24.0	22.0	28.0	30.0	34.0	35.0	26.0	23.0	35.0

Number of observations = 8978

Source: DMI

Calm defined as wind speed = 0kts

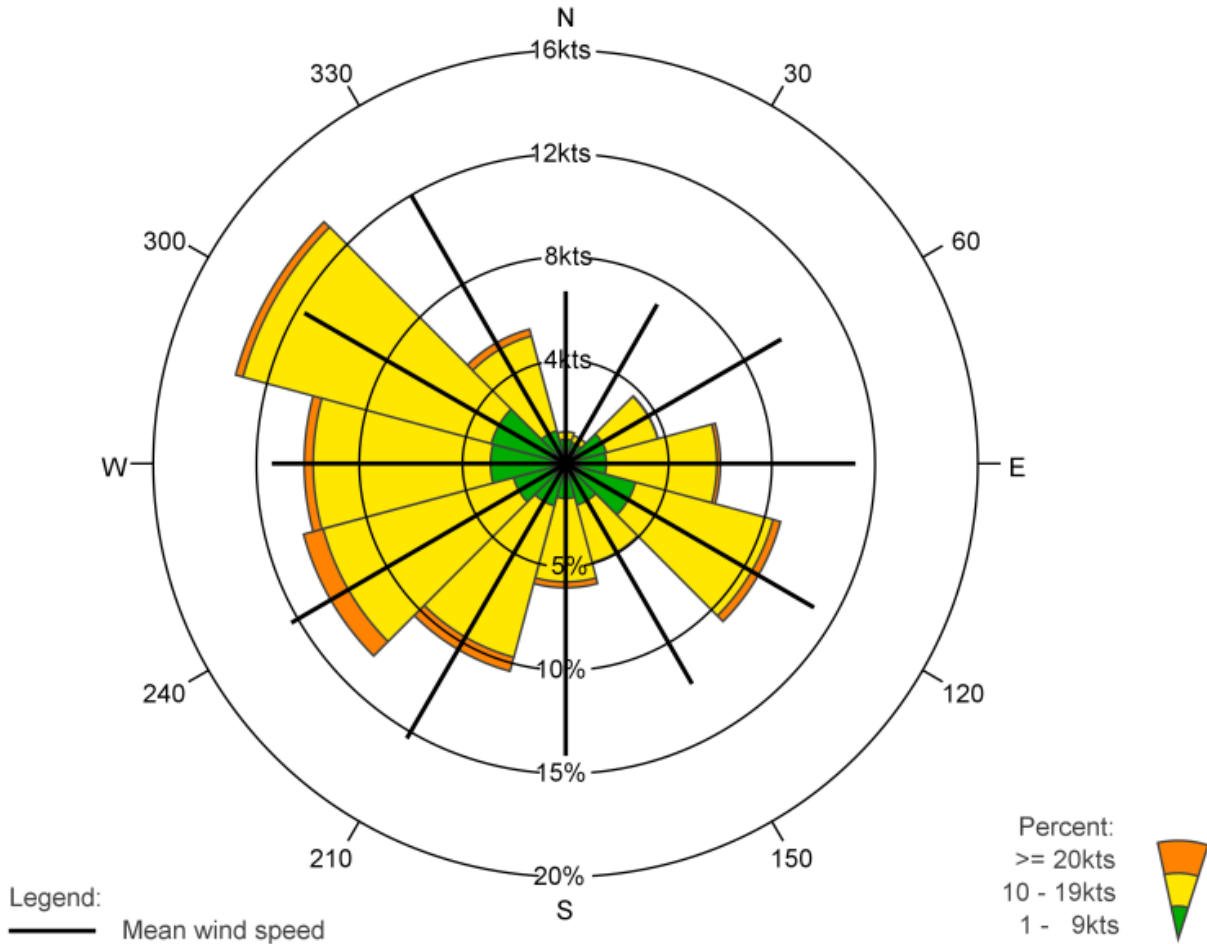
Number of observations with calm/varying wind direction: 613=6.8%

Observations with calm/varying wind direction are not used in the statistics

Figure 766

EKVJ: STAUNING LUFTHAVN, SPRING & SUMMER

17-05-2011 - 16-05-2019 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	1.5	1.4	4.6	7.5	10.8	5.0	6.0	10.4	13.2	12.7	16.6	6.7	96.4
% 1 - 9kts	1.2	1.1	2.0	2.0	3.5	2.1	1.7	2.1	2.6	3.6	3.7	1.7	27.3
% 10 - 19kts	0.4	0.3	2.6	5.4	6.9	2.9	4.0	7.6	9.6	8.6	12.5	4.7	65.4
% >= 20kts	0.0	0.0	0.0	0.2	0.4	0.0	0.3	0.7	1.0	0.4	0.4	0.4	3.8
Mean wind speed	6.7	7.1	9.6	11.3	11.2	9.8	11.3	12.3	12.3	11.4	11.7	12.0	11.4
Max wind speed	16.0	16.0	20.0	25.0	27.0	20.0	25.0	28.0	26.0	28.0	24.0	26.0	28.0

Number of observations = 8819

Source: DMI

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 315=3.6%

Observations with calm/varying wind direction are not used in the statistics

Figure 767

Availability

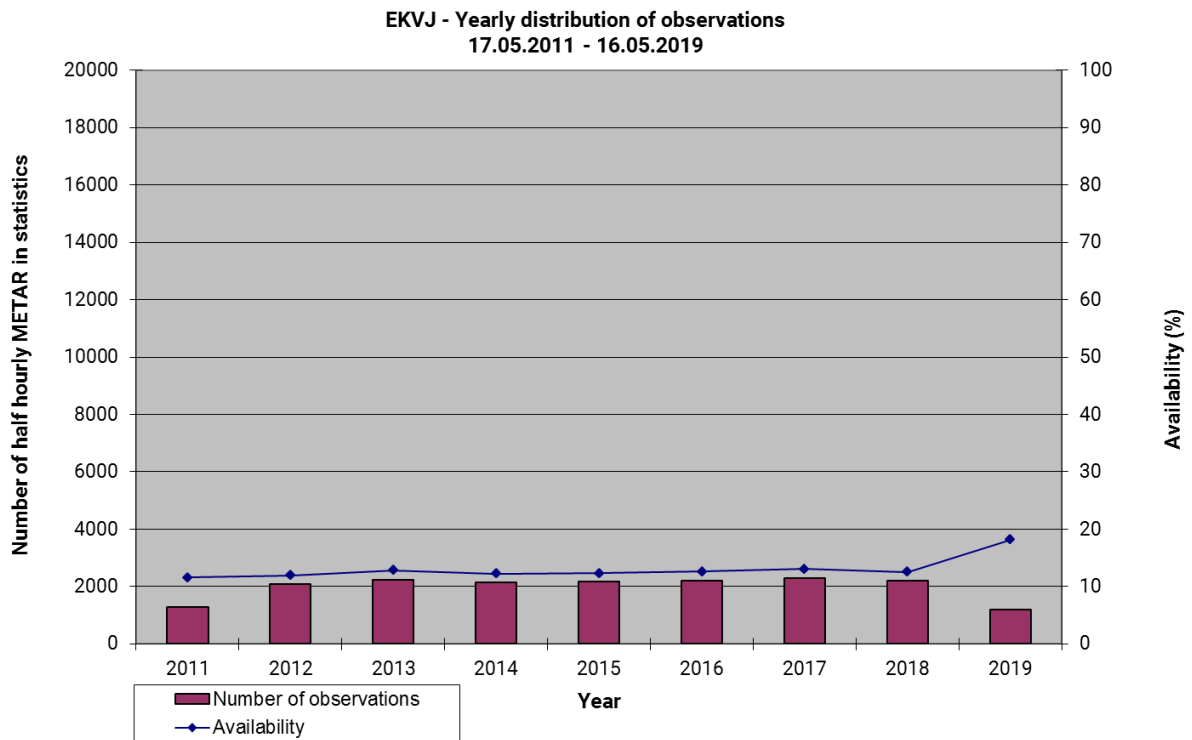


Figure 768

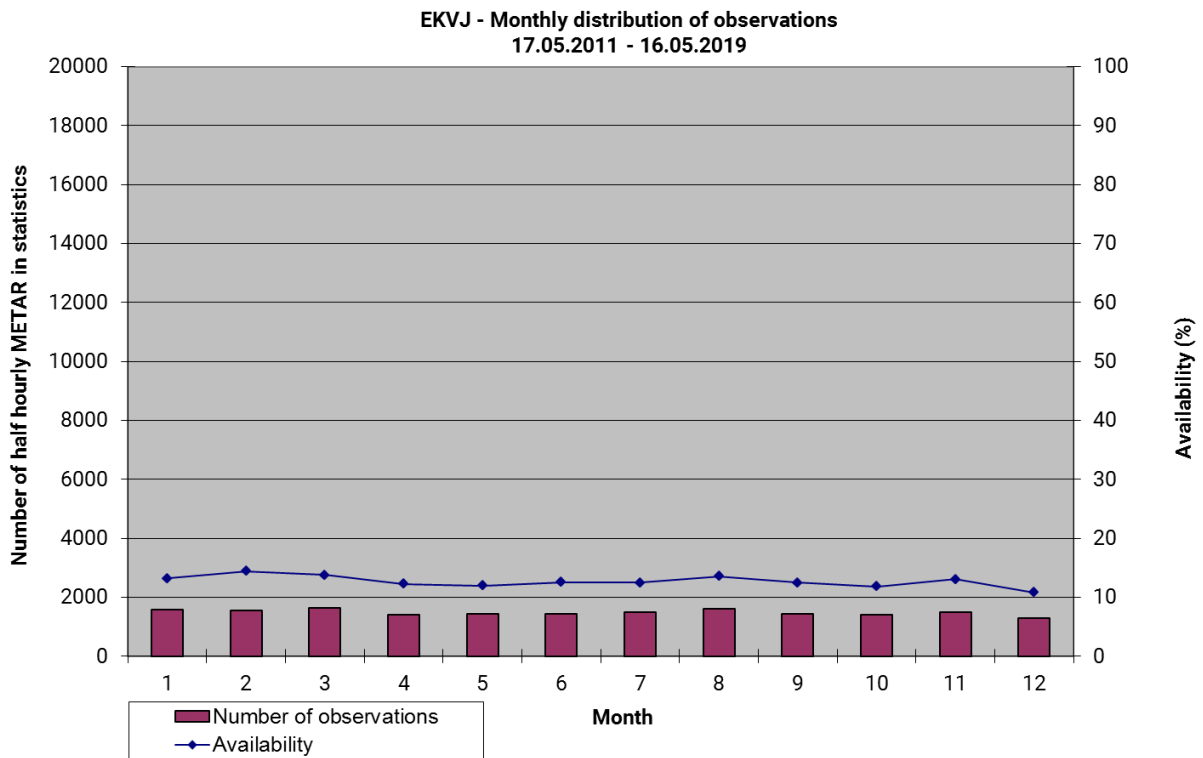


Figure 769

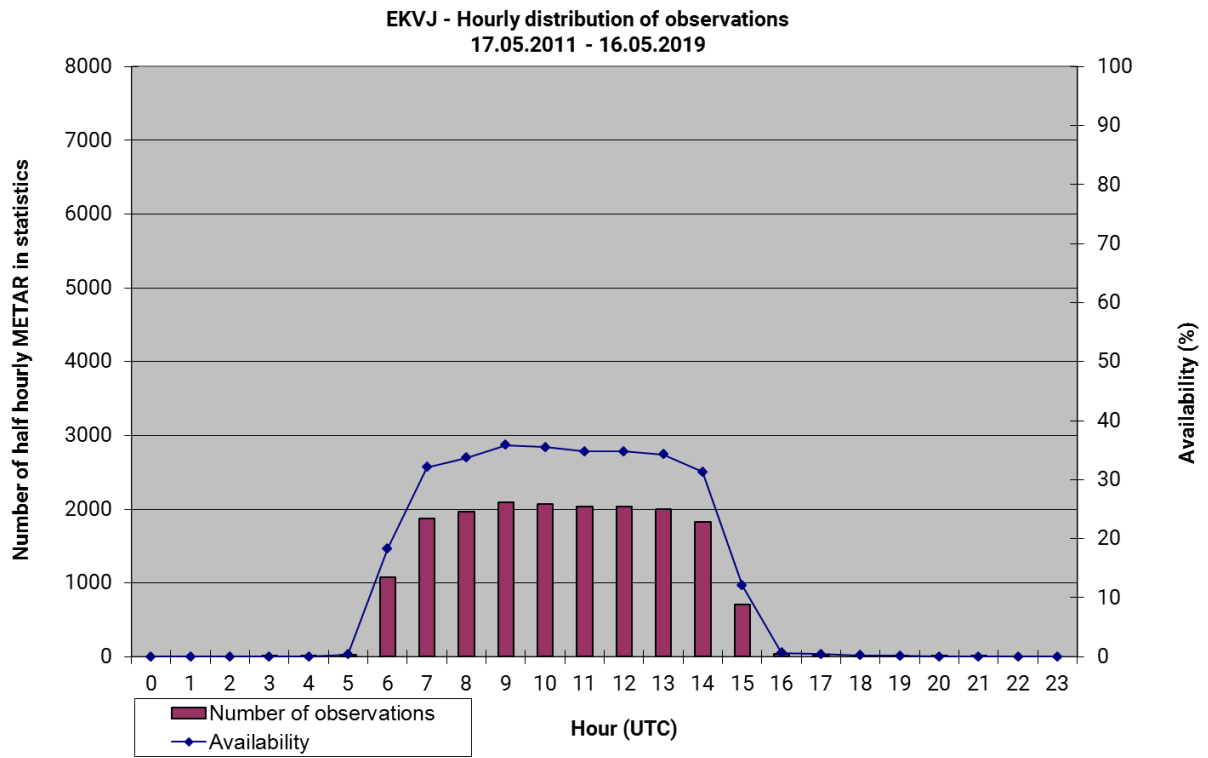


Figure 770

Table 213: EKVJ. Average number of half hourly observations in statistics, 17.05.2011 – 16.05.2019

Hour	Year								
	2011	2012	2013	2014	2015	2016	2017	2018	2019
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.2
7	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.8
8	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	1.0
9	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	1.1
10	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.1
11	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.7	1.0
12	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.1
13	0.6	0.6	0.7	0.7	0.6	0.7	0.7	0.7	1.1
14	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.8
15	0.1	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.3
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

EKYT Aalborg Lufthavn / Flyvestation Aalborg

Airport location: 57,100°N 9,850°E Elevation: 3 m above MSL.

EKYT observations in statistics: 172,748 half-hourly METAR covering the 10 years period 01.01.2009 to 31.12.2018, resulting in an overall availability of 98.5%. For more information, please go to the 'Availability' section.

EKAH METAR are both AUTO METAR and manual METAR.

Cross Tables Visibility – Ceiling

Table 214: EKYT Annual – Frequencies (%) Visibility – Ceiling.

Number of observations = 172,748	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.00058	0.38	0.39	0.39	0.39	0.39	0.15	0.54
<350m	0.00058	0.94	1.04	1.05	1.05	1.06	0.50	1.56
<600m	0.00058	1.15	1.35	1.38	1.39	1.39	0.64	2.04
<800 m	0.00058	1.23	1.54	1.59	1.61	1.62	0.75	2.36
<1.5 km	0.00058	1.33	1.97	2.19	2.27	2.30	0.99	3.29
<3.0 km	0.0012	1.38	2.79	3.89	4.28	4.44	1.74	6.18
< 5.0 km	0.0017	1.39	3.32	5.85	6.93	7.37	3.40	10.78
< 8.0 km	0.0029	1.39	3.63	7.79	10.07	11.19	7.27	18.46
>= 8.0 km or CAVOK	0.0012	0.0029	0.17	2.25	5.72	9.17	72.37	81.54
Total	0.0041	1.40	3.80	10.04	15.79	20.36	79.64	100

Table 215: EKYT - Winter (Jan-Feb-Mar) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,625	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.71	0.72	0.72	0.72	0.72	0.15	0.87
<350m	0	2.07	2.31	2.35	2.36	2.37	0.42	2.79
<600m	0	2.63	3.12	3.19	3.21	3.23	0.53	3.76
<800 m	0	2.84	3.63	3.76	3.80	3.83	0.61	4.43
<1.5 km	0	3.06	4.60	5.16	5.35	5.43	0.88	6.31
<3.0 km	0	3.14	6.27	8.67	9.45	9.73	1.94	11.68
< 5.0 km	0.0023	3.16	7.21	11.89	13.76	14.44	4.36	18.80
< 8.0 km	0.0023	3.17	7.76	15.04	18.84	20.44	8.92	29.35
>= 8.0 km or CAVOK	0.0023	0.0070	0.34	3.32	8.07	12.43	58.22	70.65
Total	0.0047	3.18	8.09	18.37	26.92	32.86	67.14	100

Table 216: EKYT - Spring (Apr-May-Jun) – Frequencies (%) Visibility – Ceiling.

Number of observations = 42,955	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.0023	0.16	0.16	0.16	0.16	0.16	0.068	0.23
<350m	0.0023	0.33	0.35	0.35	0.35	0.35	0.19	0.54
<600m	0.0023	0.39	0.44	0.44	0.44	0.44	0.26	0.70
<800 m	0.0023	0.42	0.49	0.49	0.49	0.49	0.29	0.79
<1.5 km	0.0023	0.46	0.64	0.67	0.69	0.69	0.40	1.09
<3.0 km	0.0047	0.51	1.02	1.34	1.45	1.50	0.86	2.36
< 5.0 km	0.0047	0.51	1.40	2.46	2.83	3.00	1.95	4.95
< 8.0 km	0.007	0.51	1.64	3.67	4.61	5.13	4.89	10.02
>= 8.0 km or CAVOK	0	0.0023	0.16	2.04	4.79	7.11	82.88	89.98
Total	0.0070	0.51	1.80	5.72	9.41	12.23	87.77	100

Table 217: EKYT - Summer (Jul-Aug-Sep) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,545	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.23	0.24	0.24	0.24	0.24	0.21	0.45
<350m	0	0.42	0.45	0.46	0.46	0.46	0.60	1.06
<600m	0	0.45	0.49	0.50	0.51	0.51	0.74	1.24
<800 m	0	0.47	0.52	0.53	0.53	0.53	0.84	1.37
<1.5 km	0	0.50	0.60	0.63	0.64	0.64	1.10	1.75
<3.0 km	0	0.50	0.72	0.93	1.00	1.07	1.68	2.75
< 5.0 km	0	0.52	0.90	1.52	1.90	2.13	2.79	4.93
< 8.0 km	0.0023	0.53	1.02	2.15	2.98	3.55	5.65	9.20
>= 8.0 km or CAVOK	0.0023	0.0023	0.048	1.04	2.98	5.20	85.61	90.80
Total	0.0046	0.53	1.07	3.20	5.97	8.74	91.26	100

Table 218: EKYT - Autumn (Oct-Nov-Dec) – Frequencies (%) Visibility – Ceiling.

Number of observations = 43,623	<100 ft	<200 ft	<500 ft	<1,000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0	0.42	0.44	0.44	0.44	0.44	0.19	0.63
<350m	0	0.95	1.05	1.06	1.06	1.07	0.78	1.85
<600m	0	1.14	1.37	1.40	1.41	1.42	1.04	2.46
<800 m	0	1.21	1.55	1.61	1.64	1.65	1.23	2.89
<1.5 km	0	1.31	2.08	2.35	2.44	2.50	1.56	4.06
<3.0 km	0	1.38	3.18	4.67	5.27	5.54	2.47	8.01
< 5.0 km	0	1.38	3.84	7.61	9.31	10.01	4.50	14.51
< 8.0 km	0	1.39	4.16	10.38	13.94	15.75	9.61	25.36
>= 8.0 km or CAVOK	0	0	0.13	2.60	7.07	11.99	62.65	74.64
Total	0	1.39	4.29	12.98	21.01	27.74	72.26	100

Wind Direction Histograms

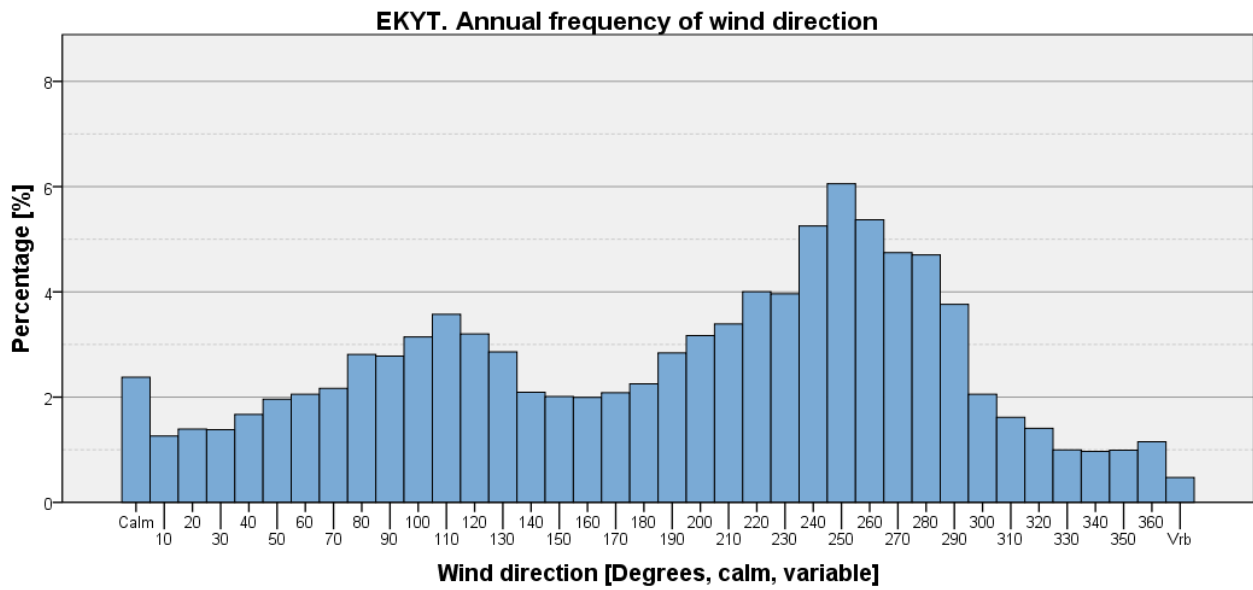


Figure 771

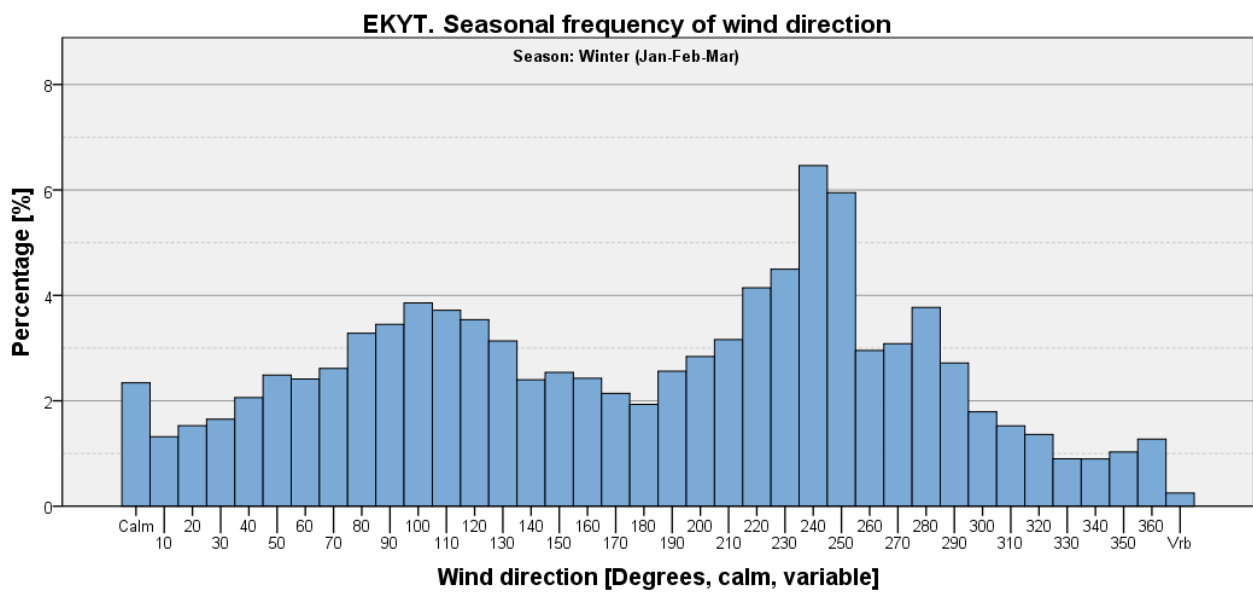


Figure 772

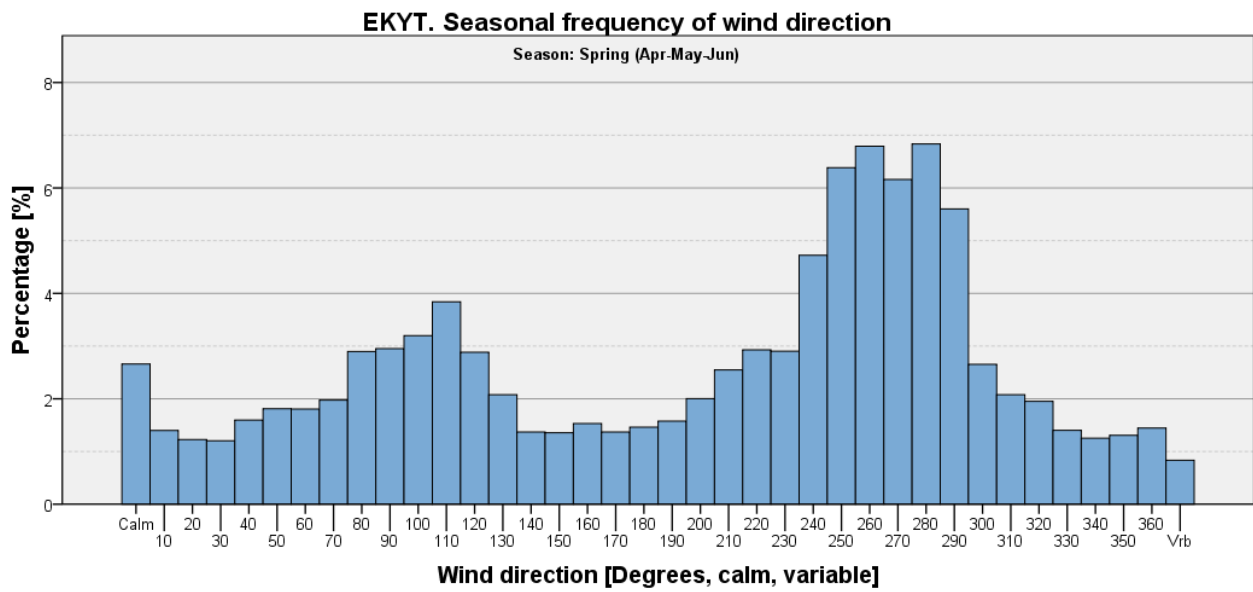


Figure 773

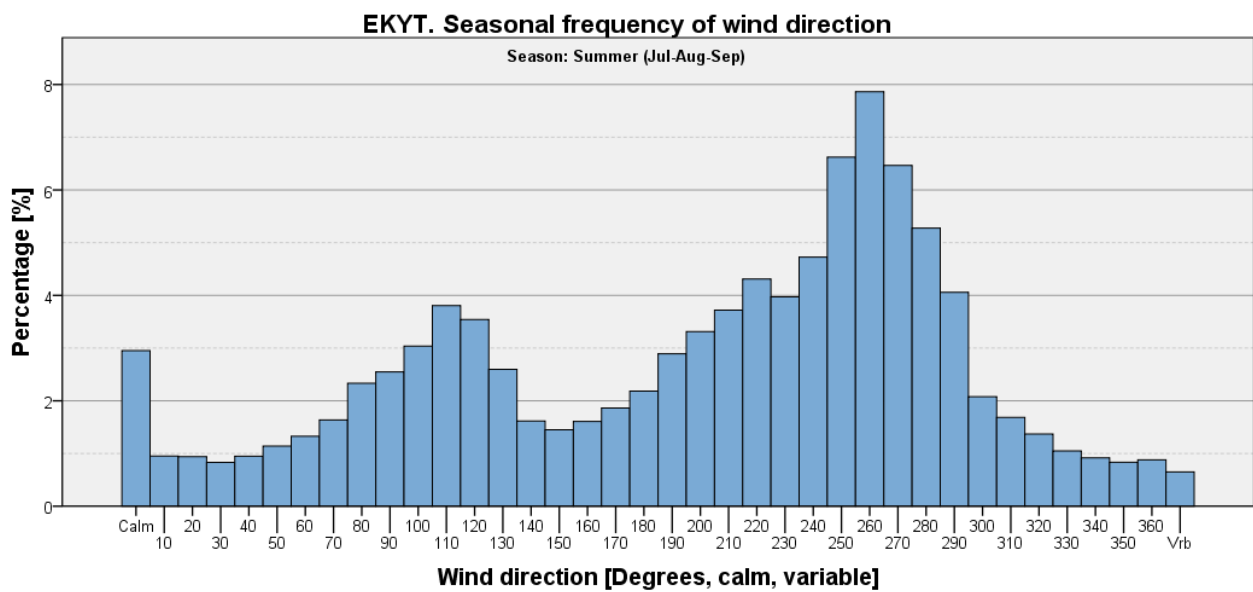


Figure 774

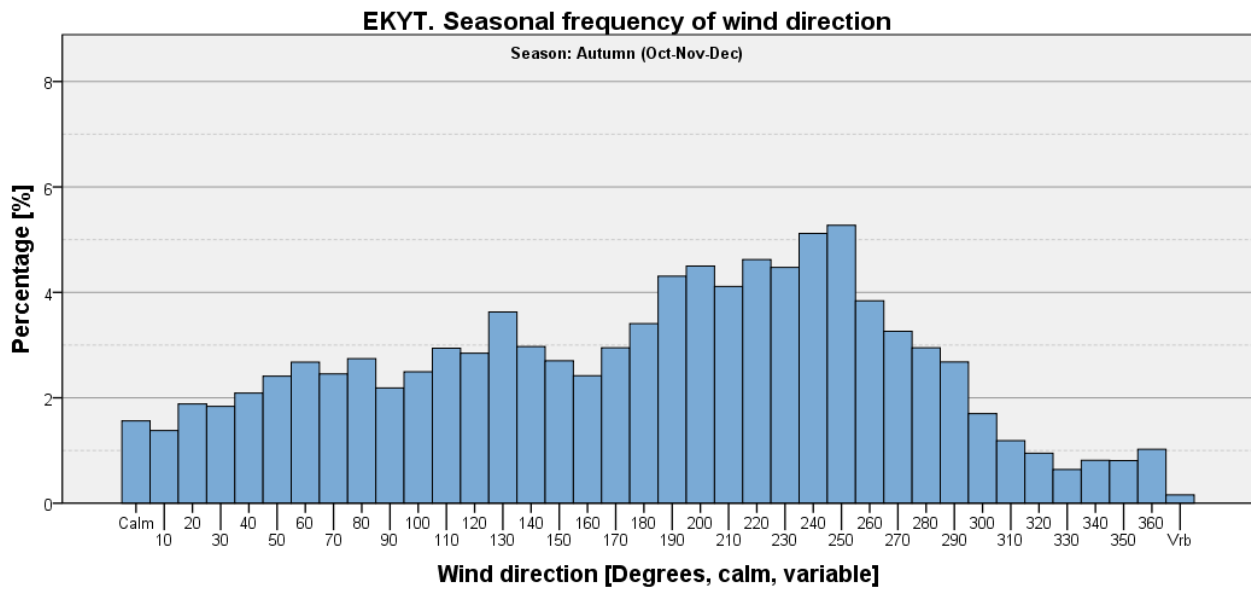


Figure 775

Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

Table 219: EKYT - Seasonal and annual frequencies of visibility <800 m [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m	4.43	0.79	1.37	2.89	2.36
All other observations	95.57	99.21	98.63	97.11	97.64
Total	100	100	100	100	100

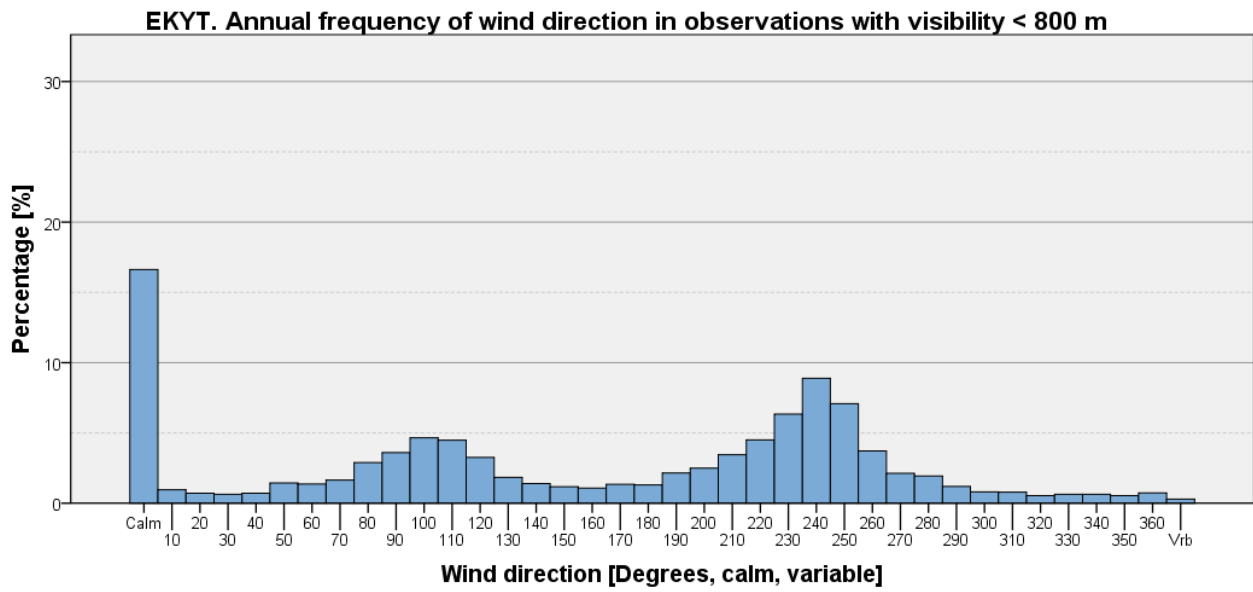


Figure 776

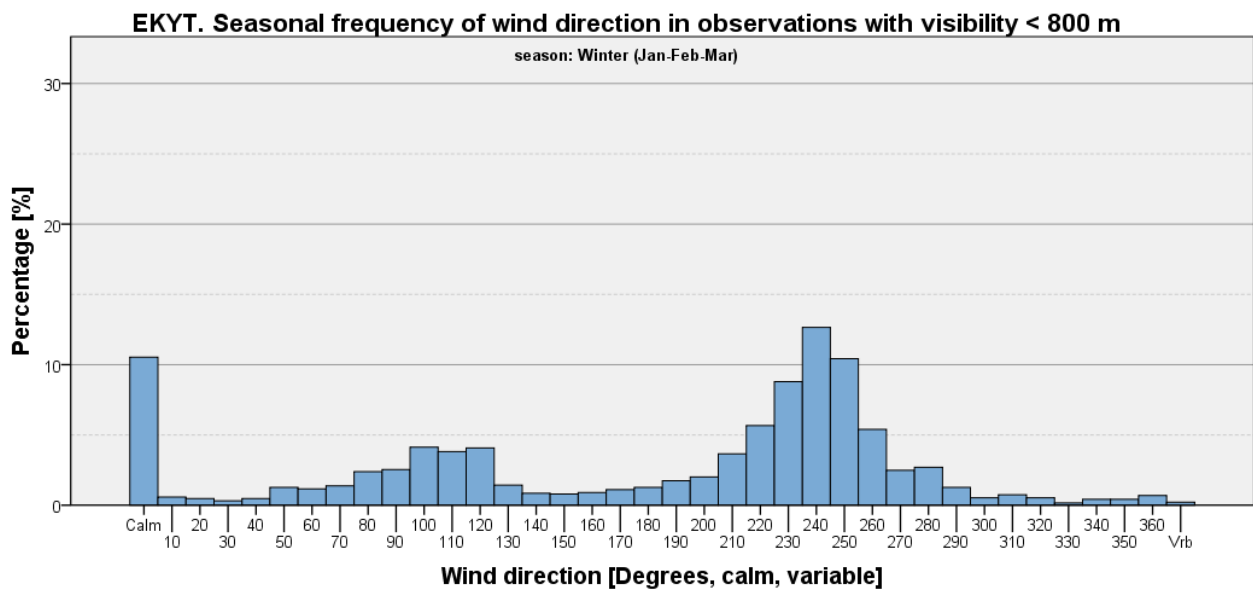


Figure 777

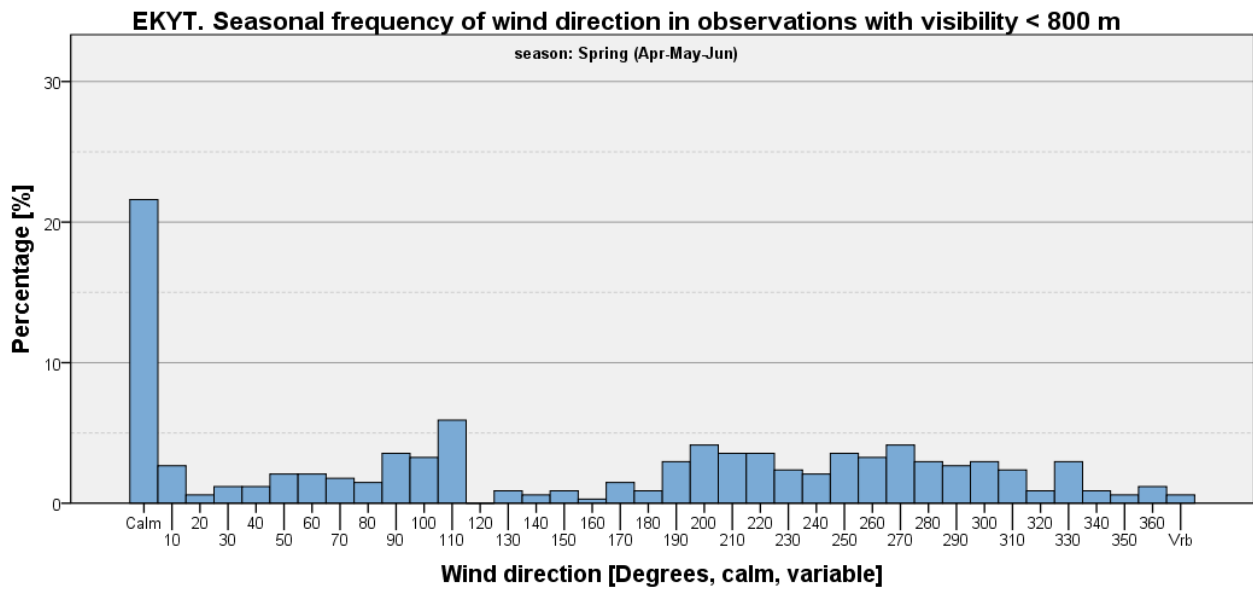


Figure 778

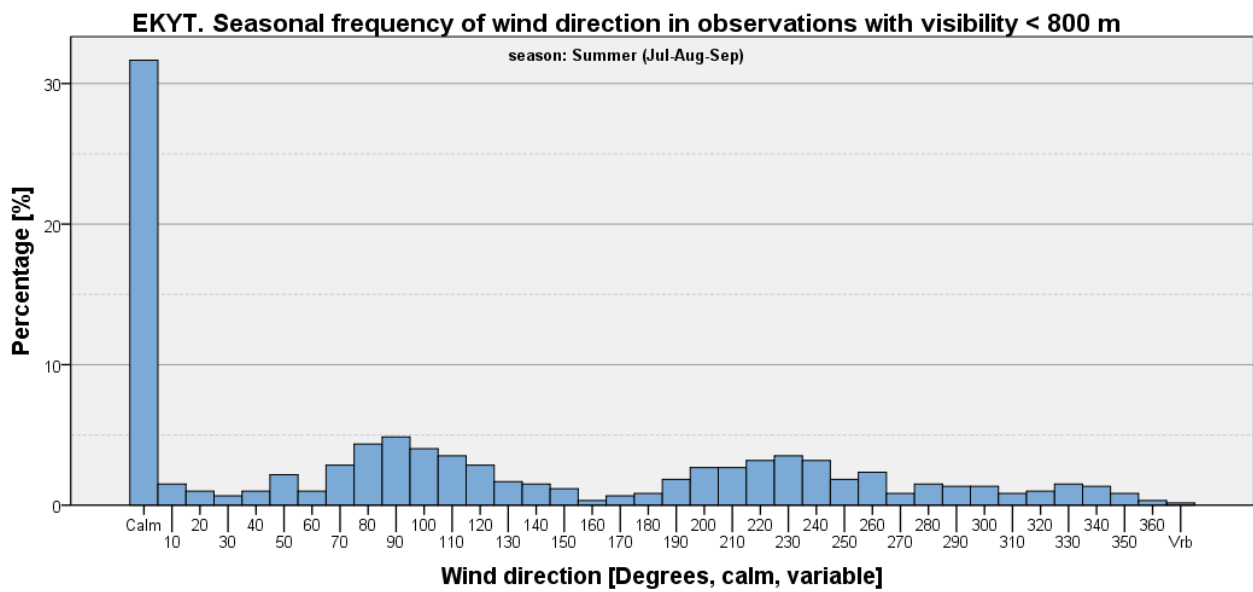


Figure 779

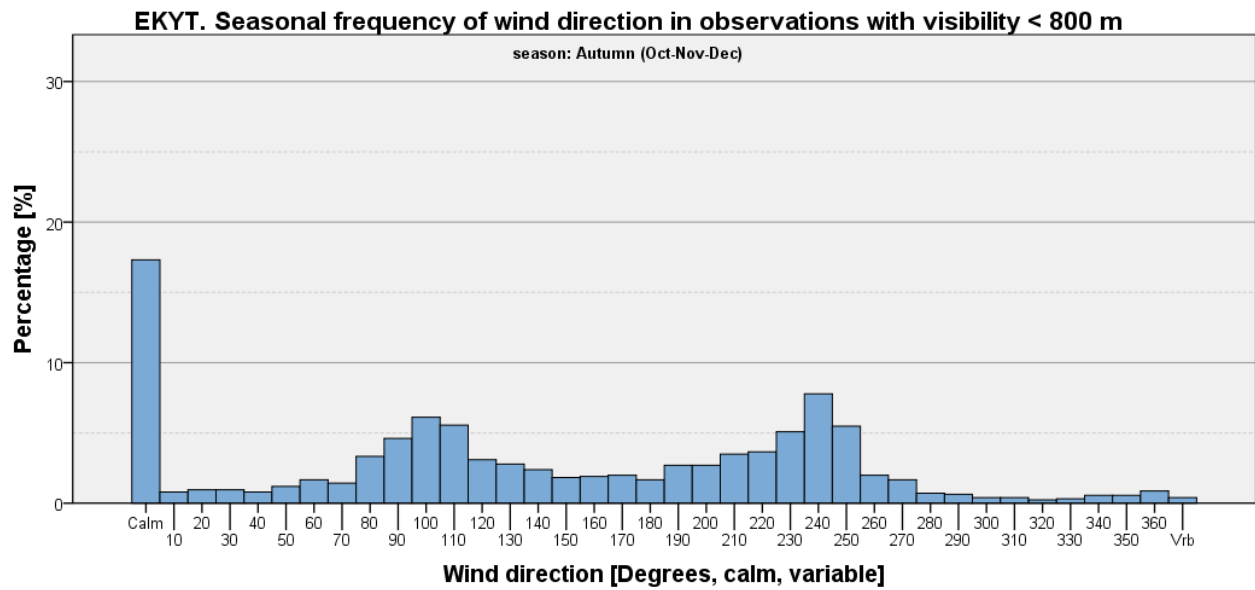


Figure 780

Visibility < 800 m and Wind Speed <= 5 kts

Table 220: EKYT - Seasonal and annual frequencies of visibility <800 m and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed <=5 kts	2.39	0.64	1.32	2.04	1.60
All other observations	97.61	99.36	98.68	97.96	98.40
Total	100	100	100	100	100

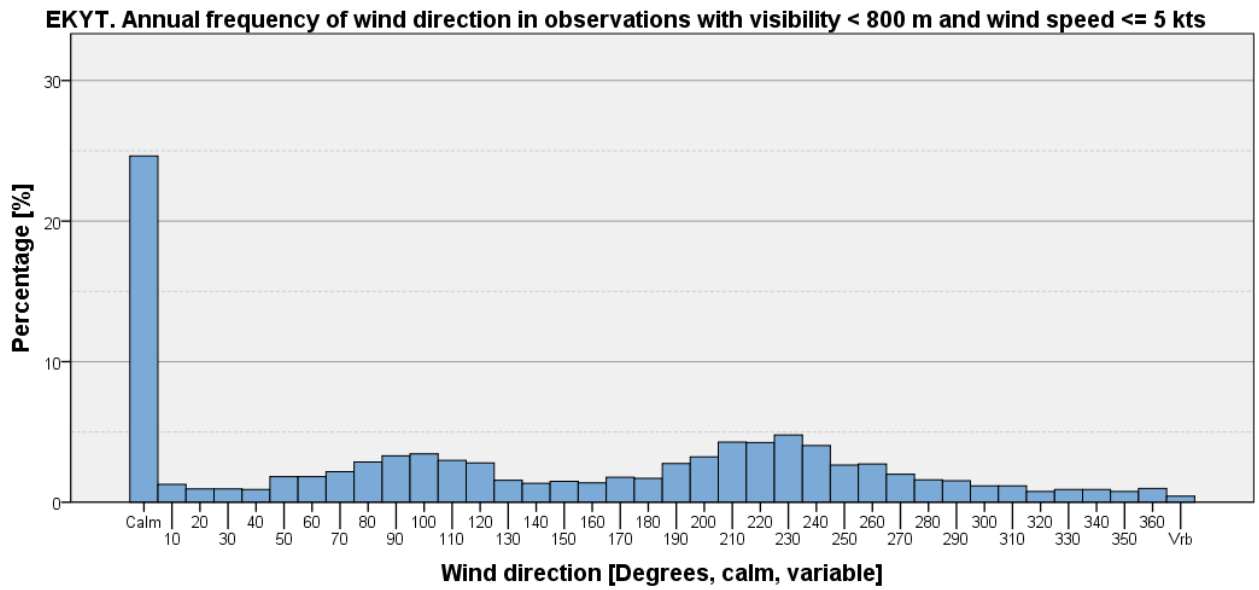


Figure 781

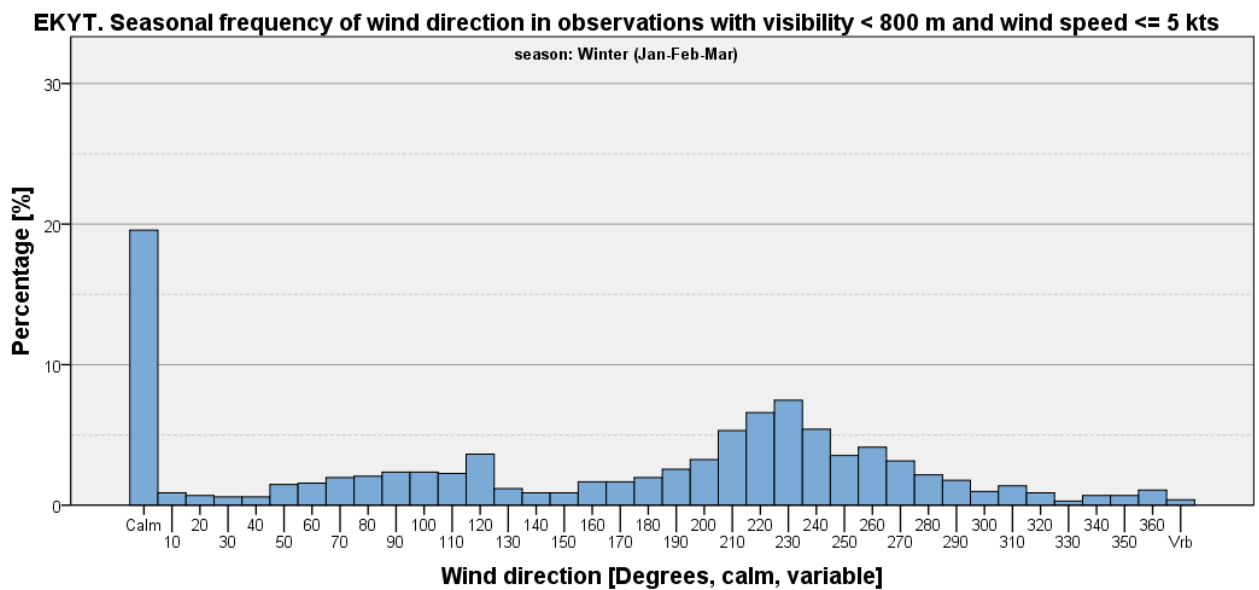


Figure 782

EKYT. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

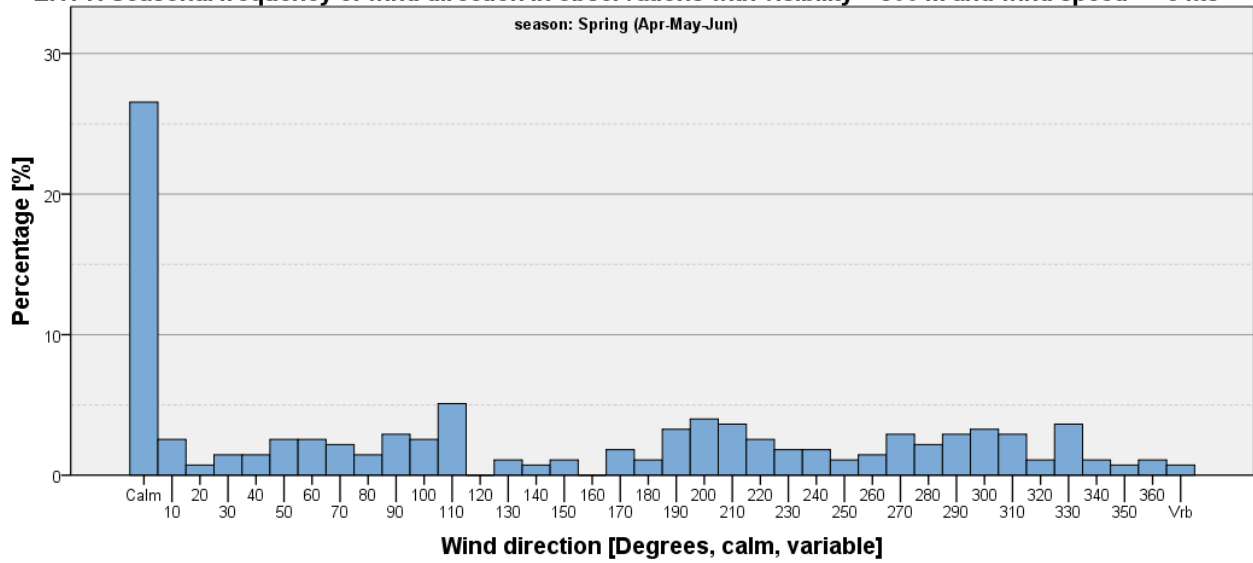


Figure 783

EKYT. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed <= 5 kts

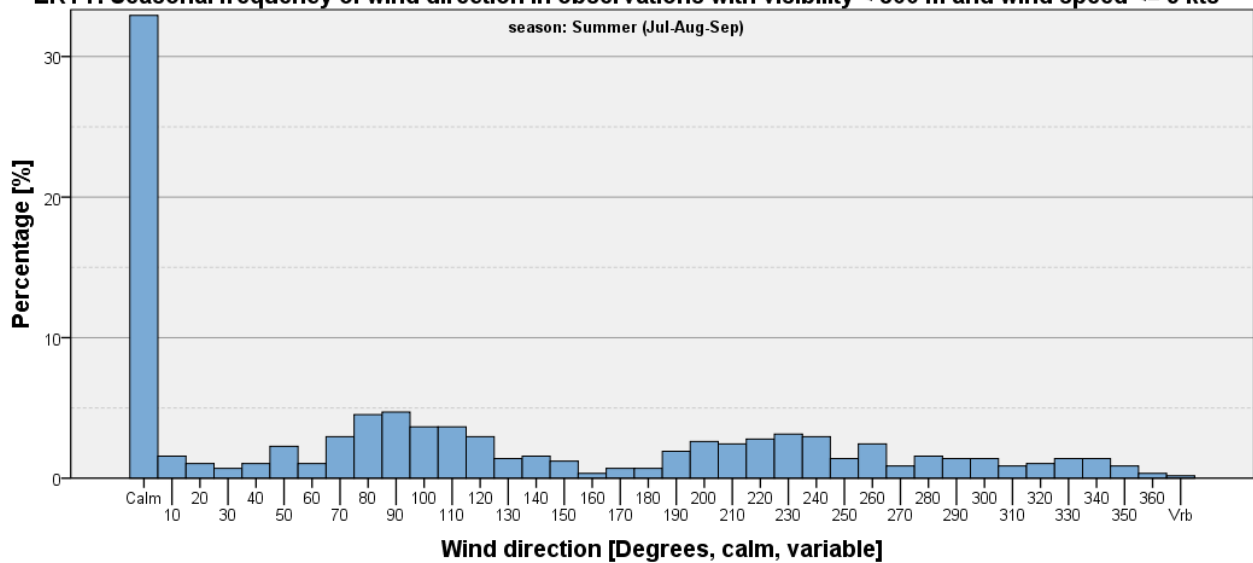


Figure 784

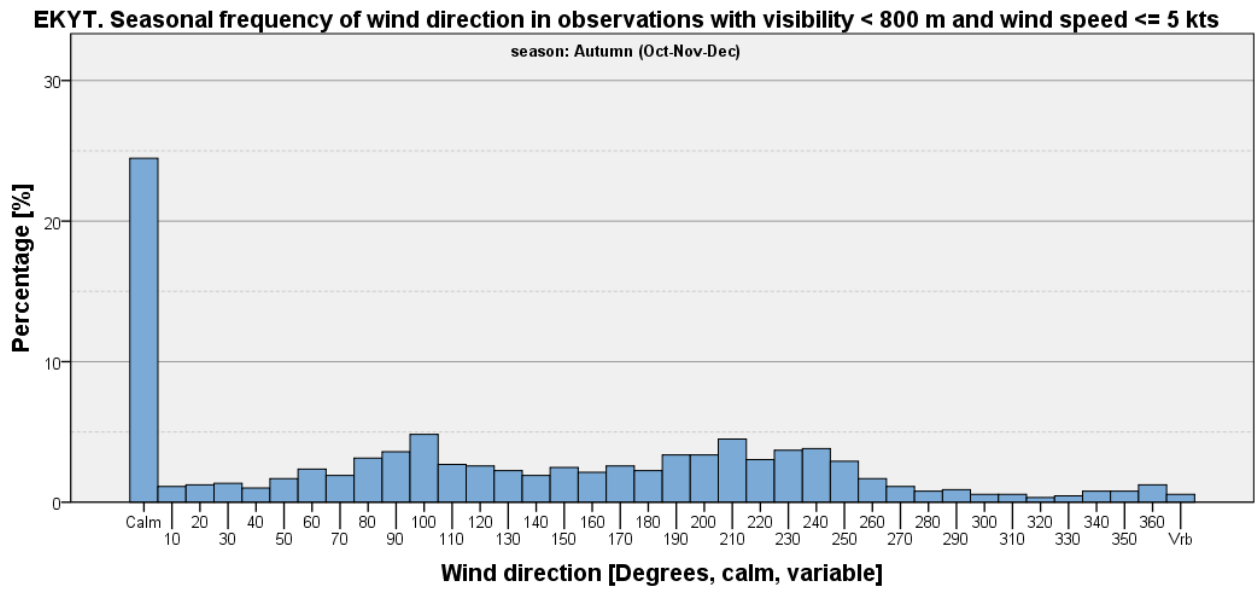


Figure 785

Visibility < 800 m and Wind Speed > 5 kts

Table 221: EKYT - Seasonal and annual frequencies of visibility <800 m and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Visibility <800 m and wind speed >5 kts	2.05	0.15	0.053	0.84	0.77
All other observations	97.95	99.85	99.95	99.16	99.23
Total	100	100	100	100	100

EKYT. Annual frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

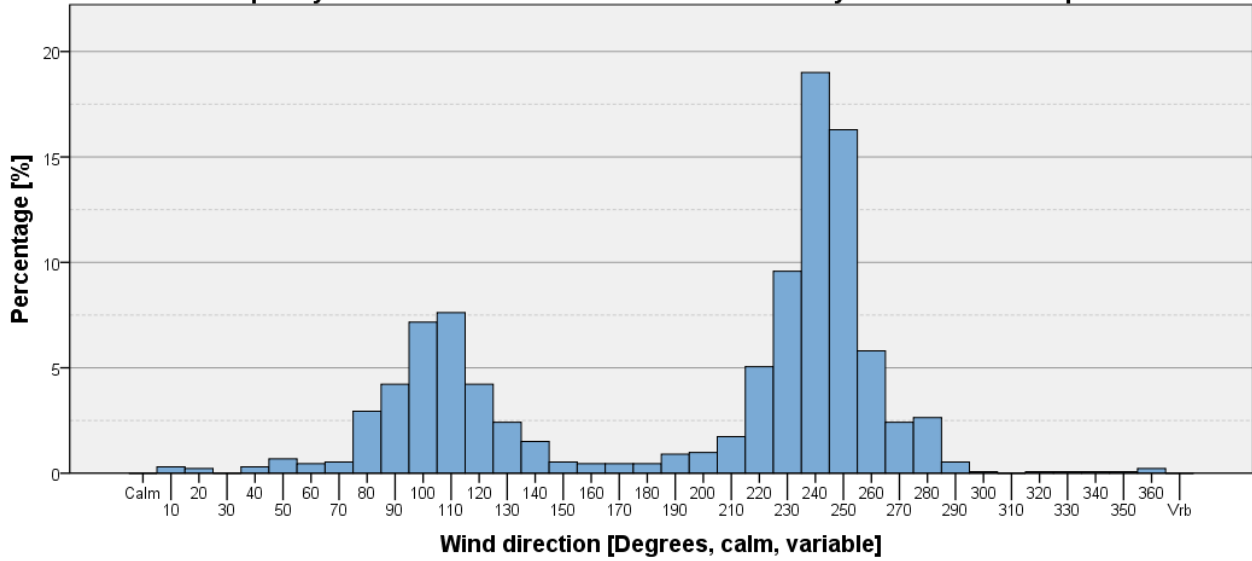


Figure 786

EKYT. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed > 5 kts

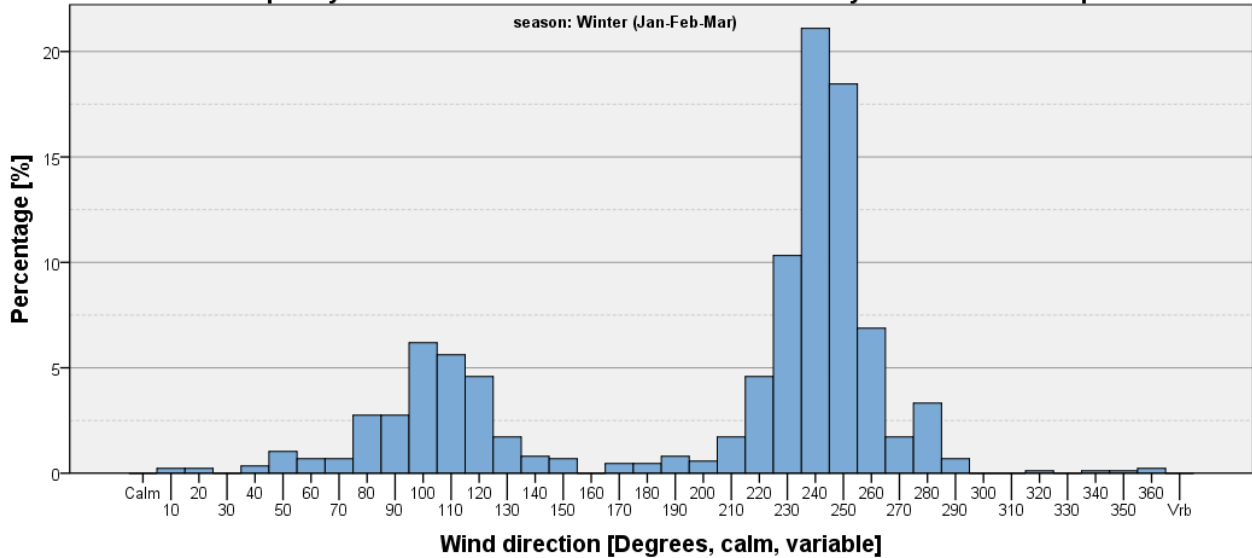


Figure 787

EKYT. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

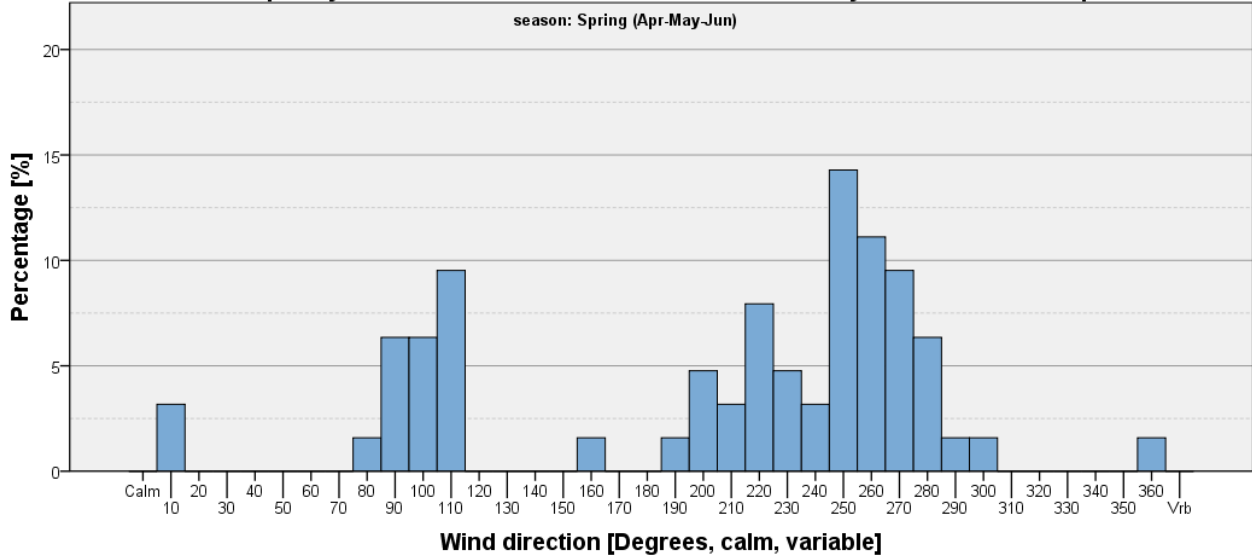


Figure 788

EKYT. Seasonal frequency of wind direction in observations with visibility < 800 m and wind speed >5 kts

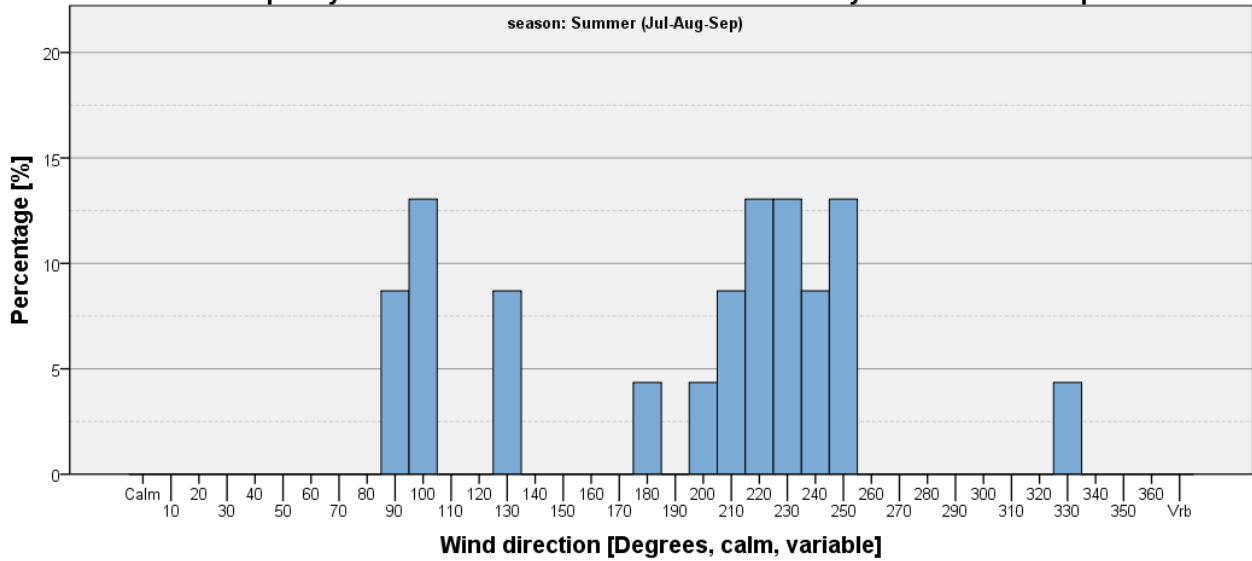


Figure 789

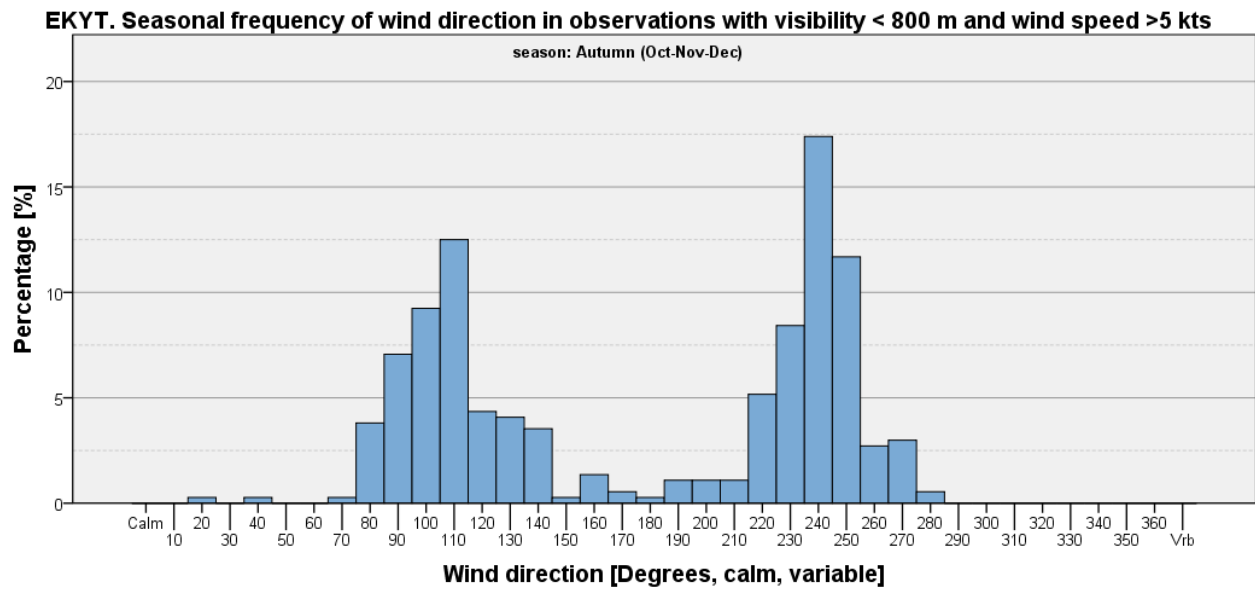


Figure 790

Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

Table 222: EKYT - Seasonal and annual frequencies of ceiling <1000 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet	18.37	5.72	3.20	12.98	10.04
All other observations	81.63	94.28	96.80	87.02	89.96
Total	100	100	100	100	100

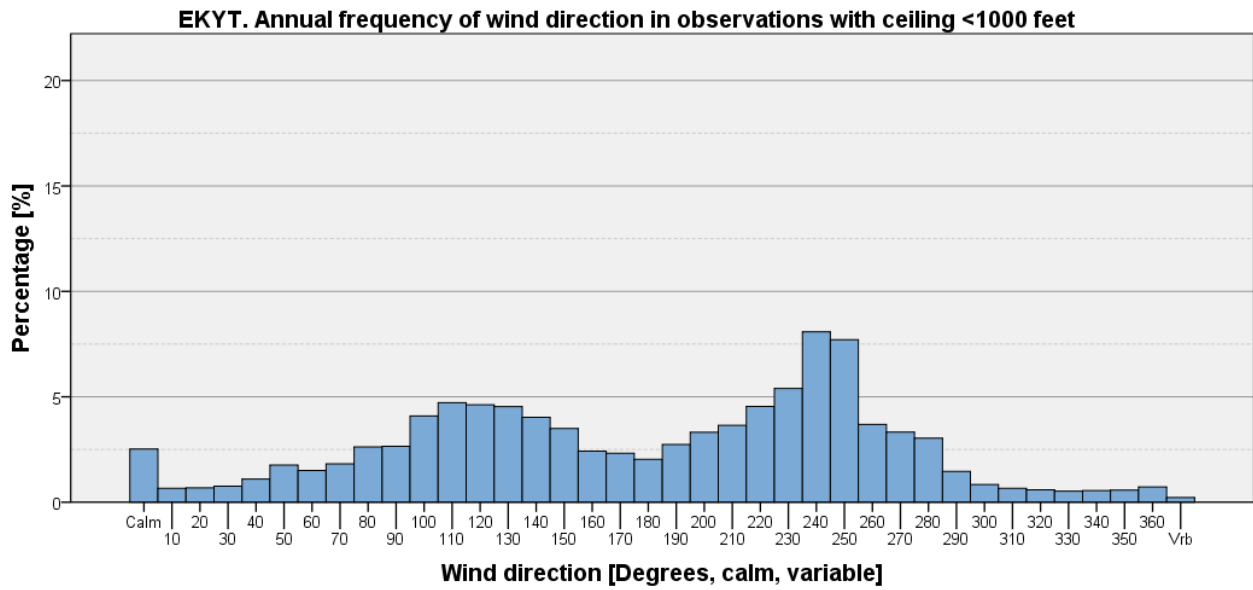


Figure 791

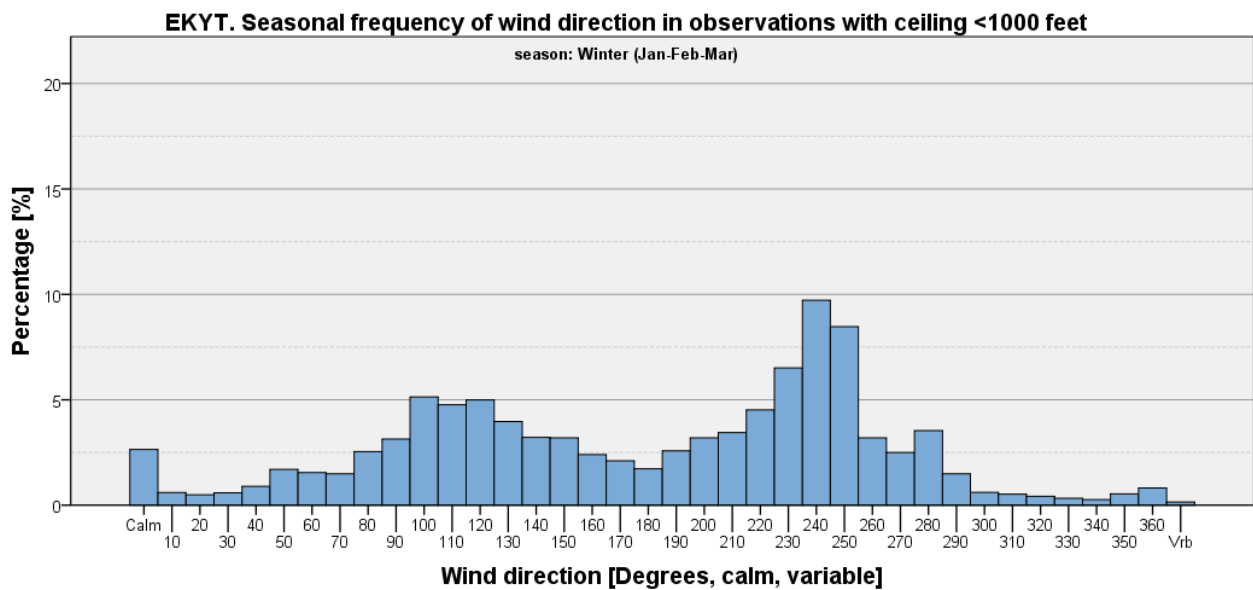


Figure 792

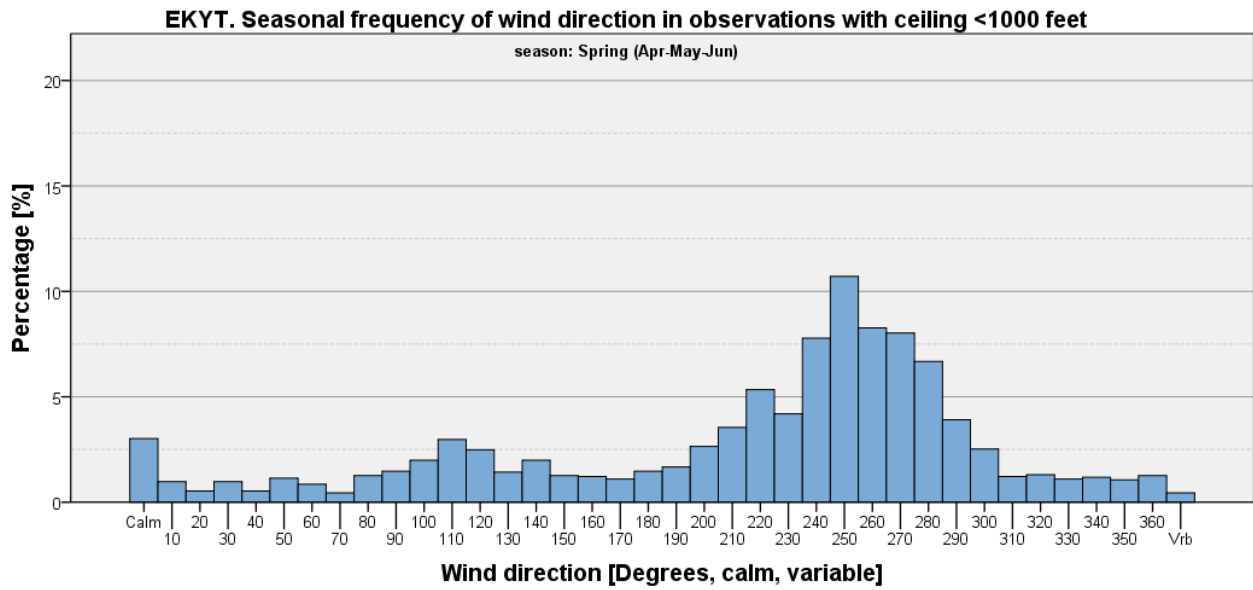


Figure 793

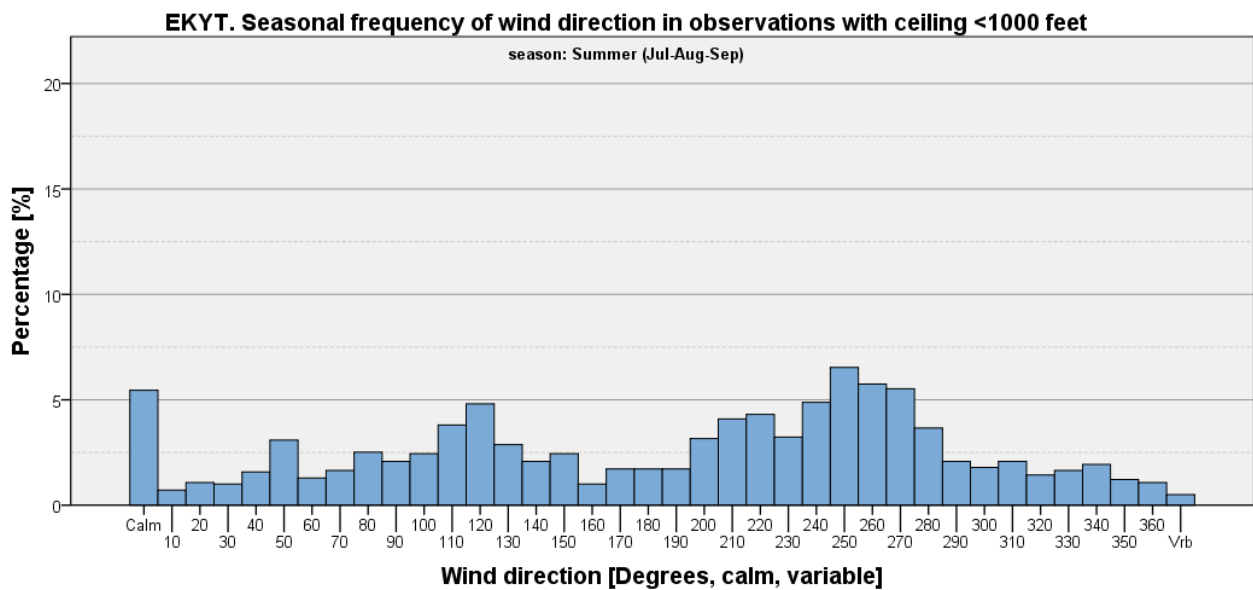


Figure 794

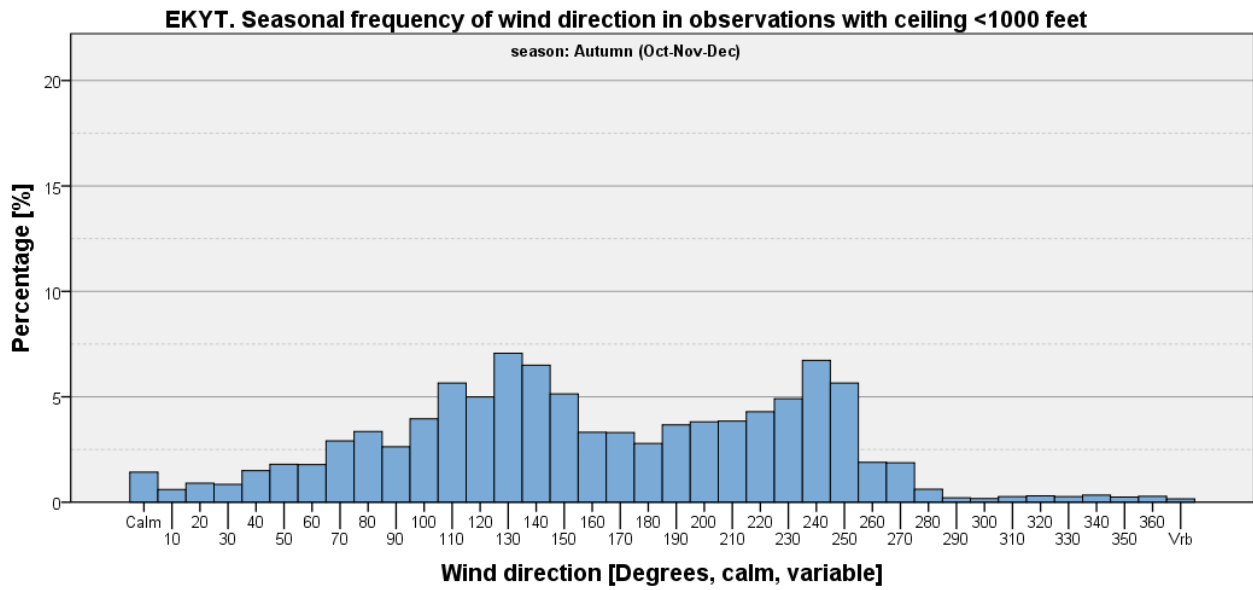


Figure 795

Ceiling < 1000 feet and Wind Speed <= 5 kts

Table 223: EKYT - Seasonal and annual frequencies of ceiling <1000 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed <= 5 kts	4.59	1.41	1.19	2.51	2.42
All other observations	95.41	98.59	98.81	97.49	97.58
Total	100	100	100	100	100

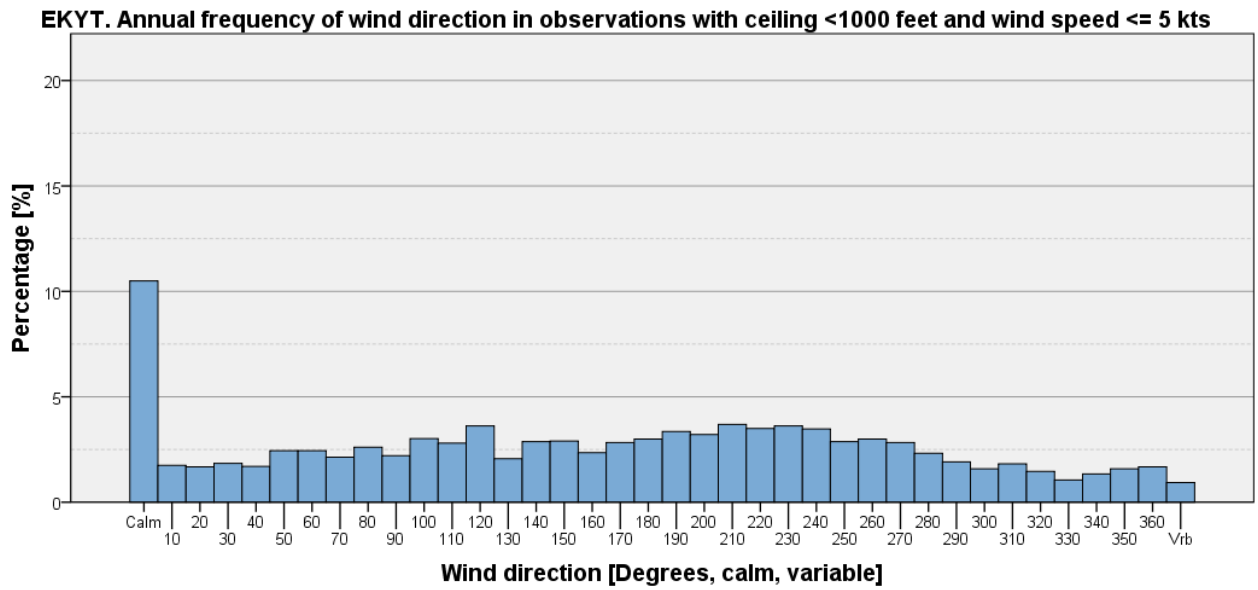


Figure 796

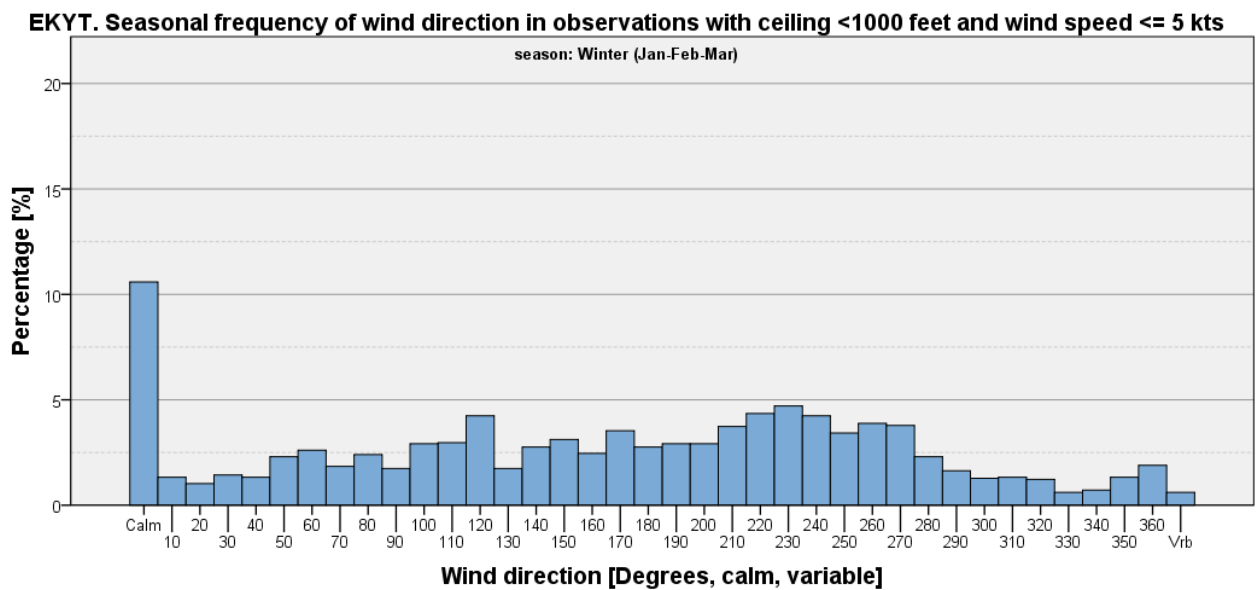


Figure 797

EKYT. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

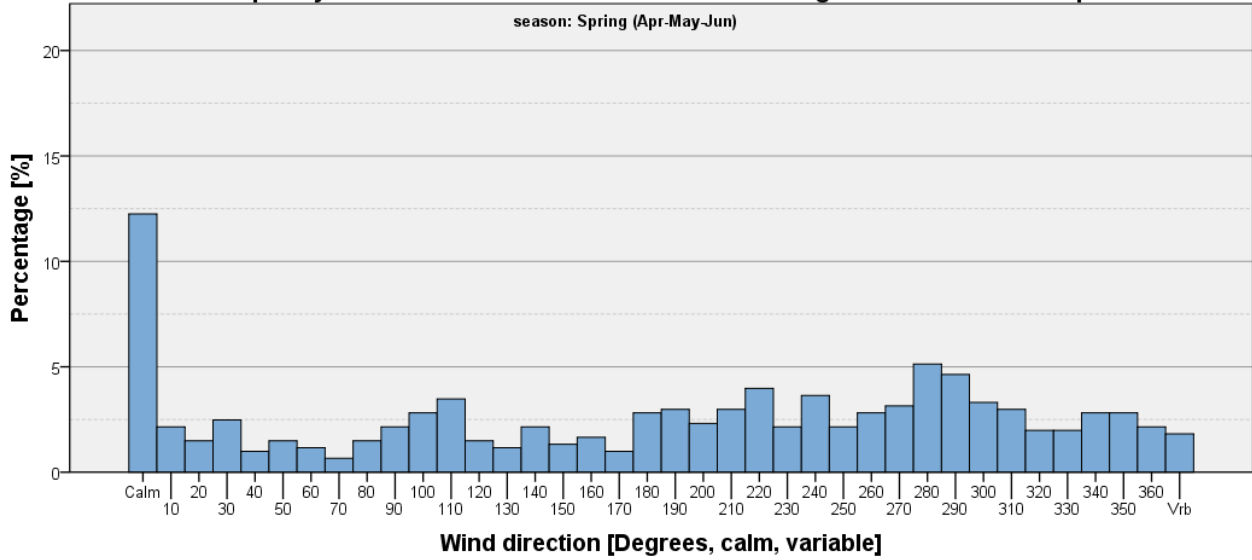


Figure 798

EKYT. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

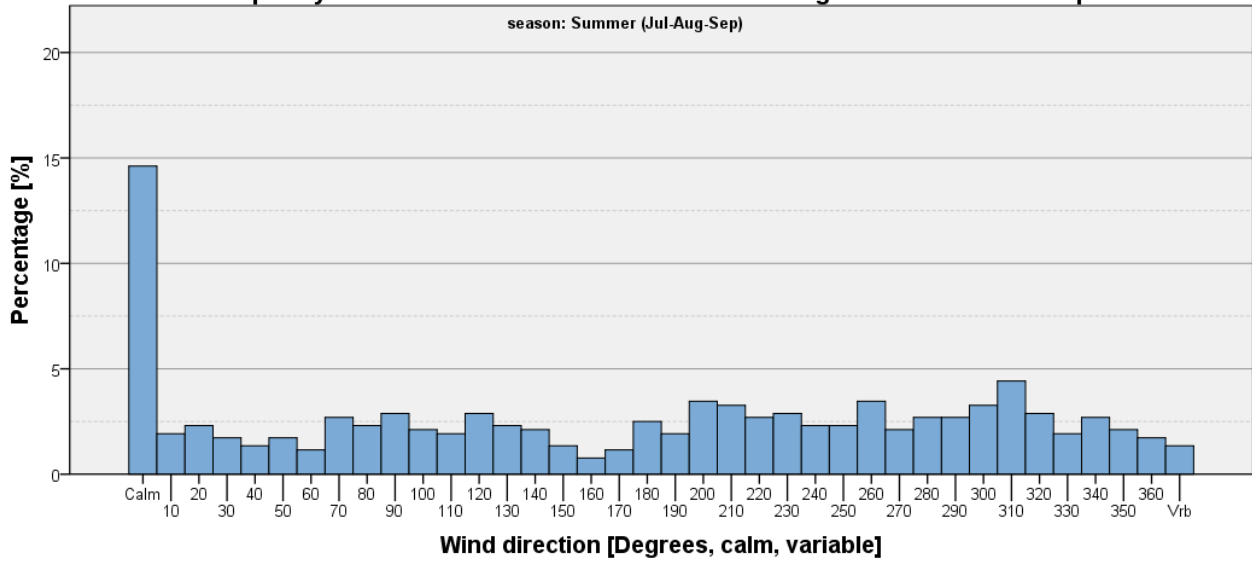


Figure 799

EKYT. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed <= 5 kts

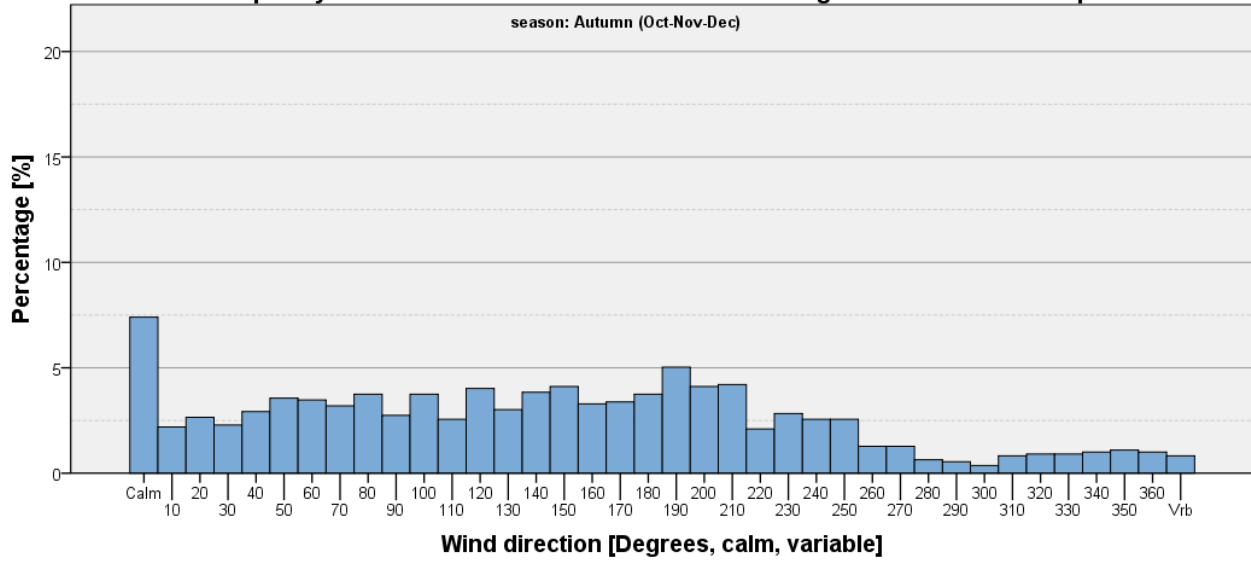


Figure 800

Ceiling < 1000 feet and Wind Speed > 5 kts

Table 224: EKYT - Seasonal and annual frequencies of ceiling <1000 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <1,000 feet and wind speed > 5 kts	13.78	4.31	2.00	10.48	7.62
All other observations	86.22	95.69	98.00	89.52	92.38
Total	100	100	100	100	100

EKYT. Annual frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

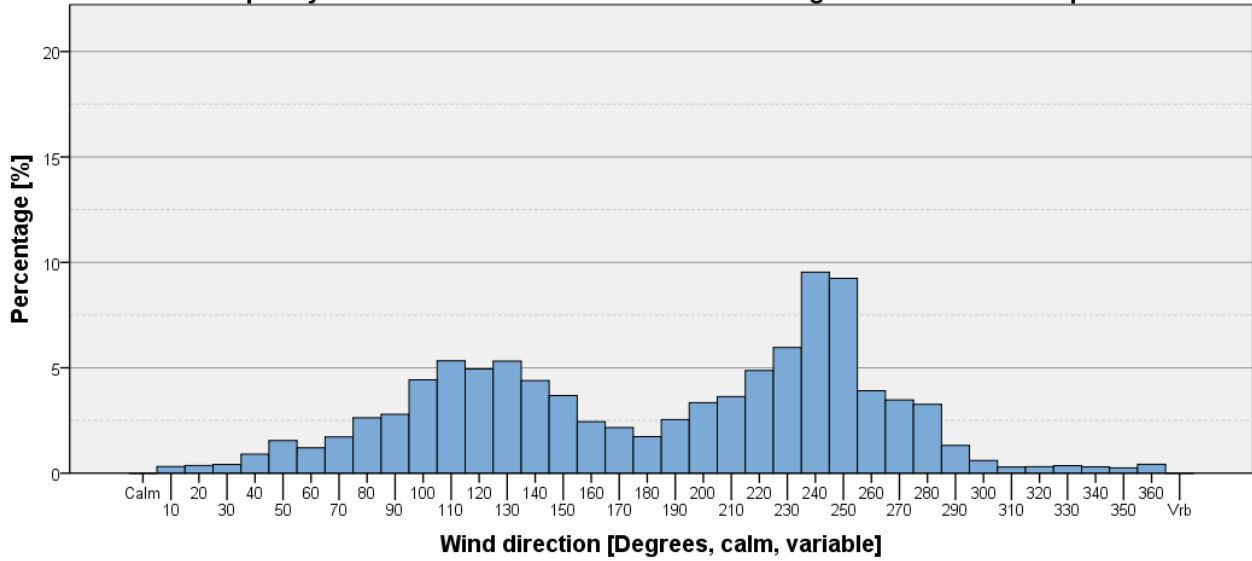


Figure 801

EKYT. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

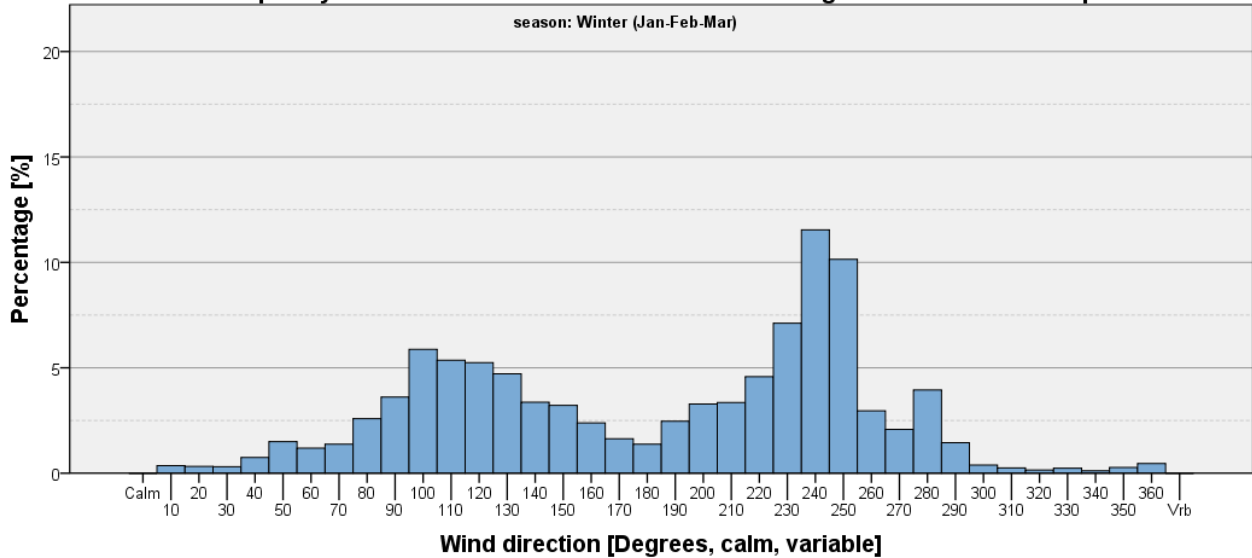


Figure 802

EKYT. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

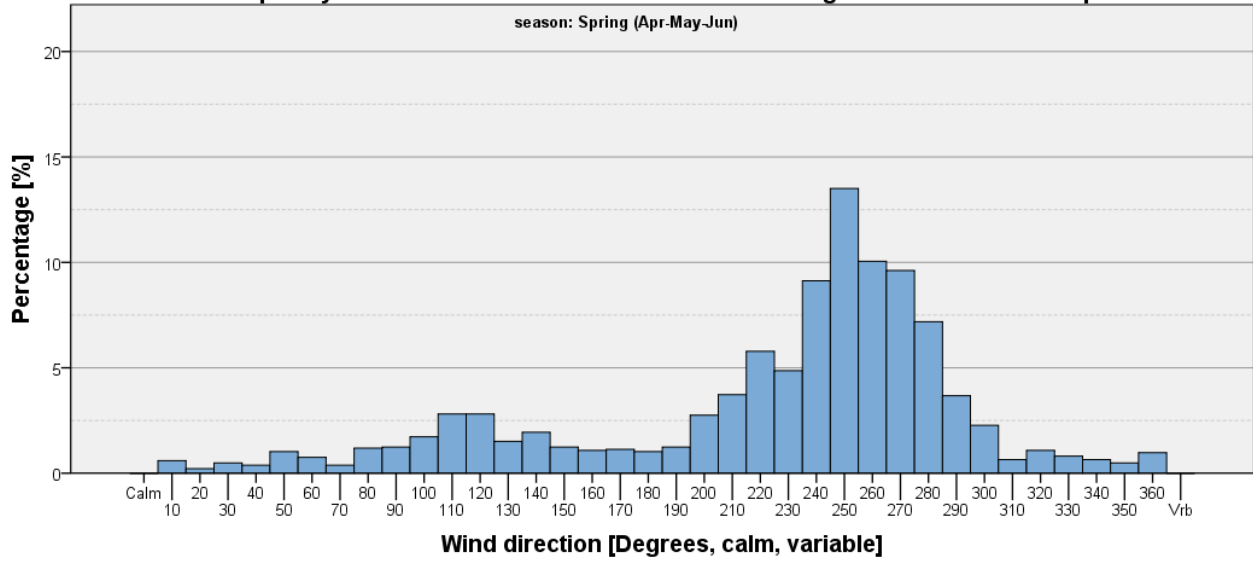


Figure 803

EKYT. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

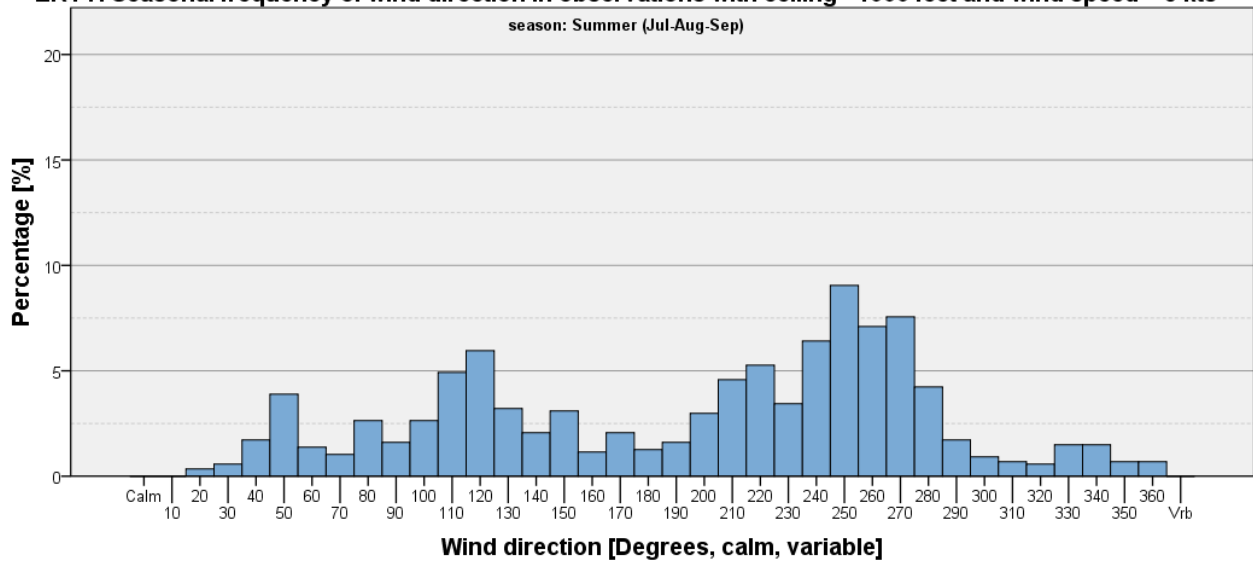


Figure 804

EKYT. Seasonal frequency of wind direction in observations with ceiling <1000 feet and wind speed > 5 kts

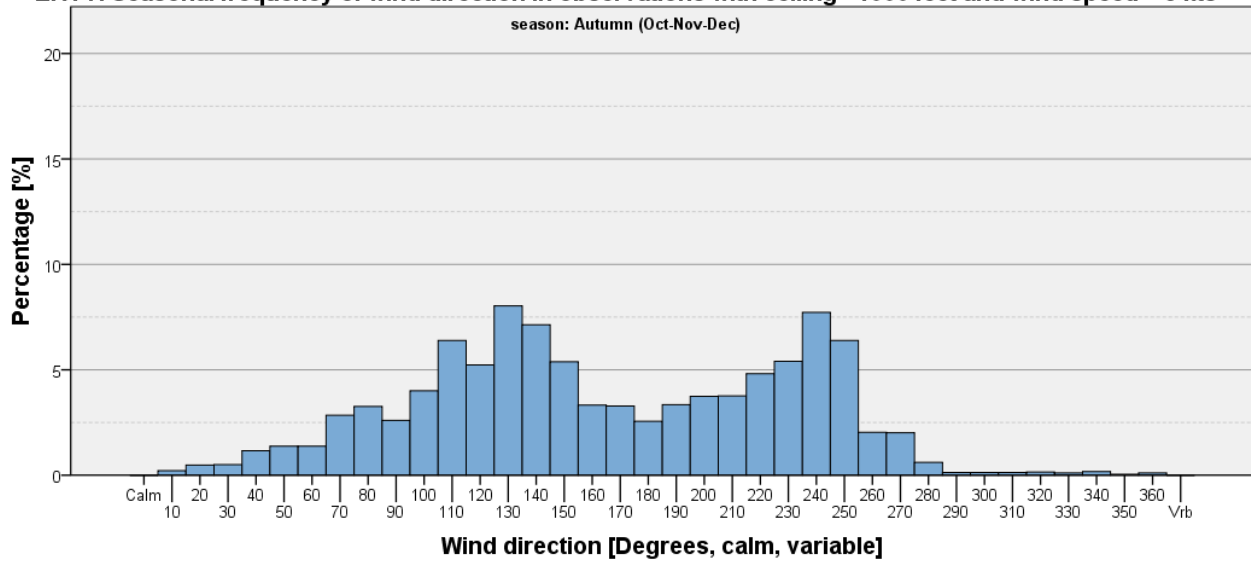


Figure 805

Ceiling < 500 feet

Table 225: EKYT - Seasonal and annual frequencies of ceiling <500 feet [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet	8.09	1.80	1.07	4.29	3.80
All other observations	91.91	98.20	98.93	95.71	96.20
Total	100	100	100	100	100

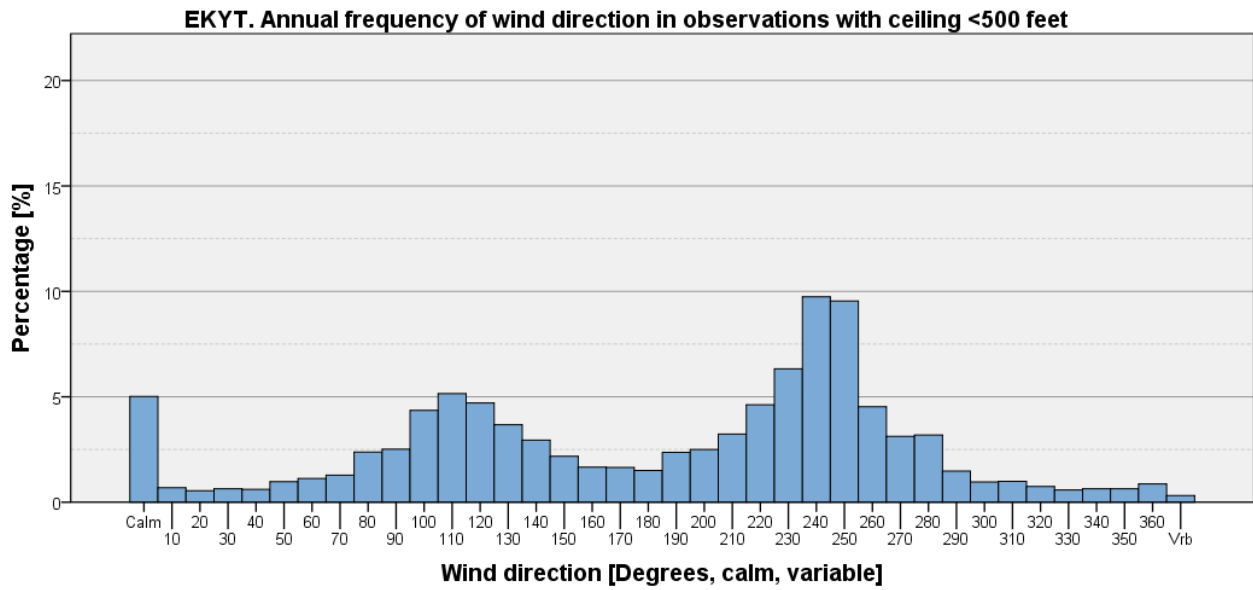


Figure 806

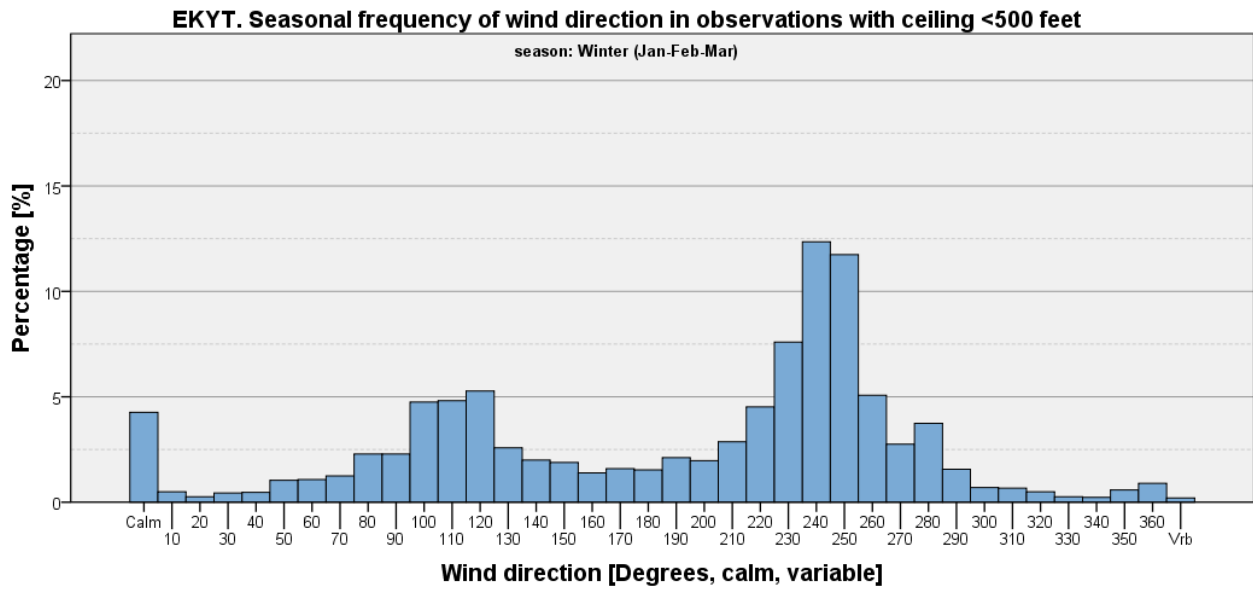


Figure 807

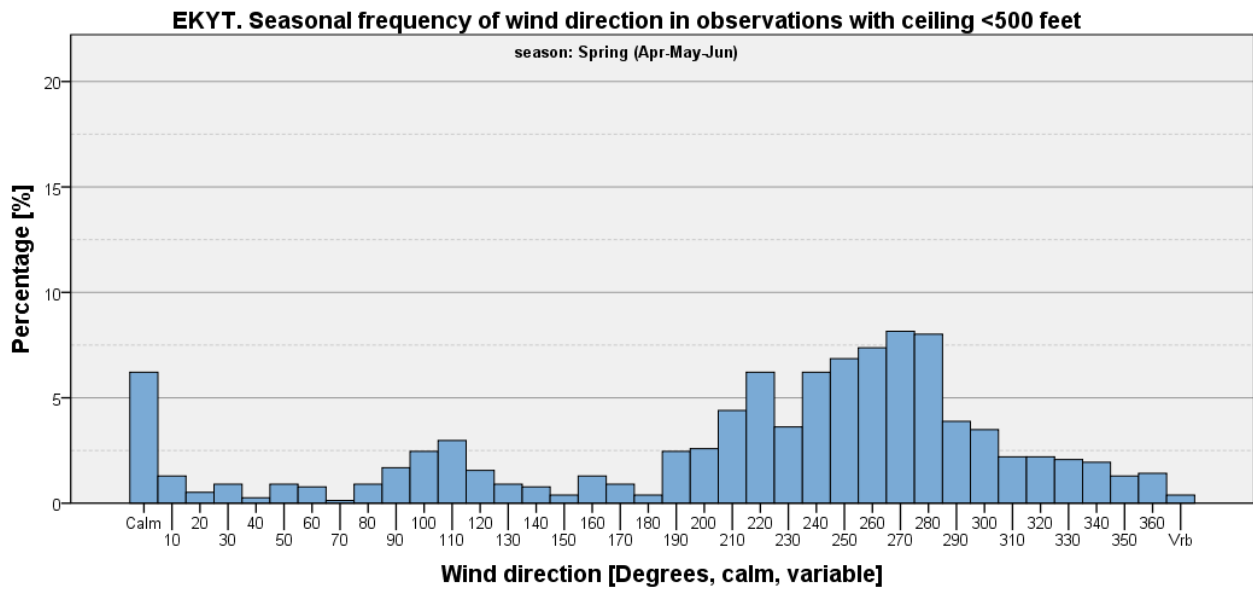


Figure 808

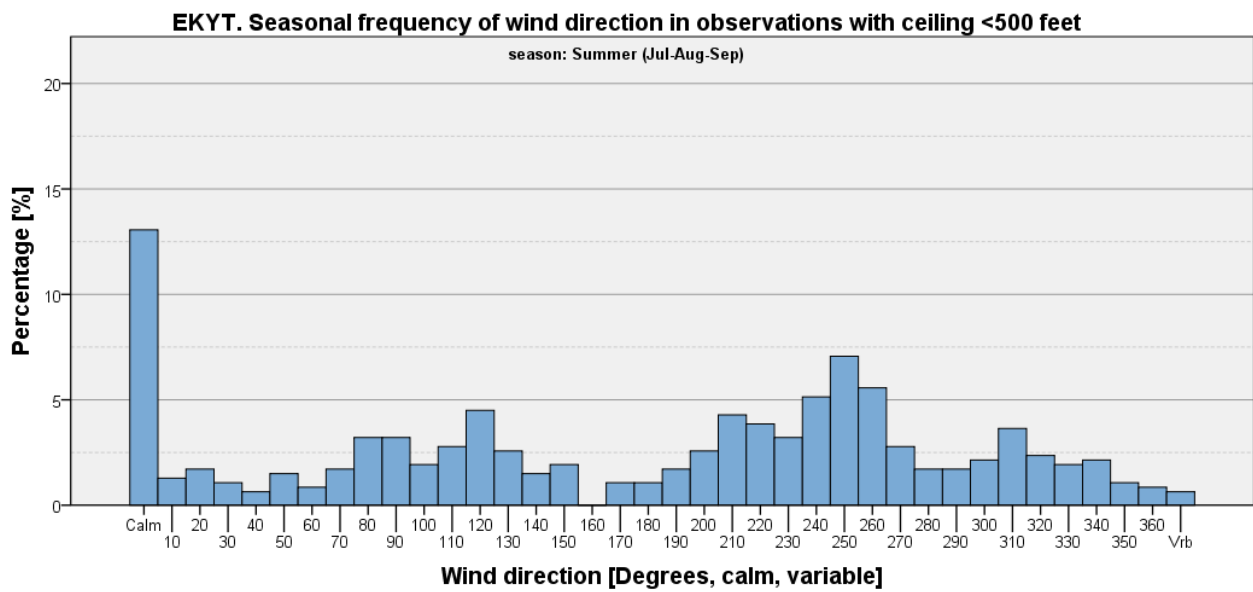


Figure 809

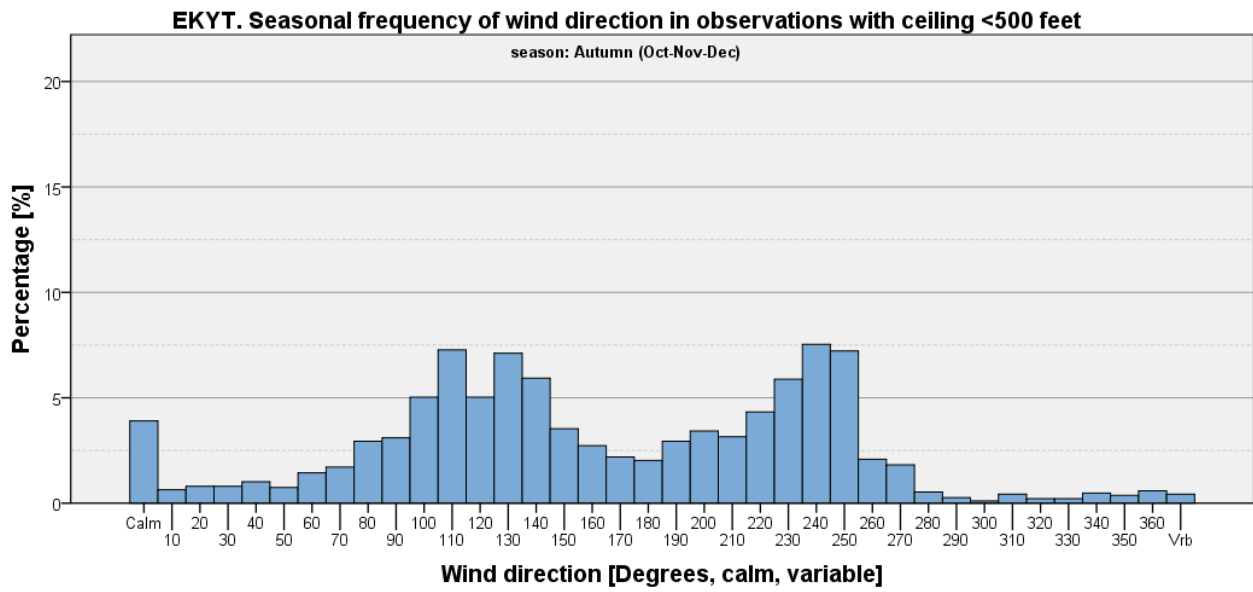


Figure 810

Ceiling < 500 feet and Wind Speed <= 5 kts

Table 226: EKYT - Seasonal and annual frequencies of ceiling <500 feet and wind speed <= 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed <= 5 kts	2.91	0.69	0.76	1.48	1.46
All other Observations	97.09	99.31	99.24	98.52	98.54
Total	100	100	100	100	100

EKYT. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

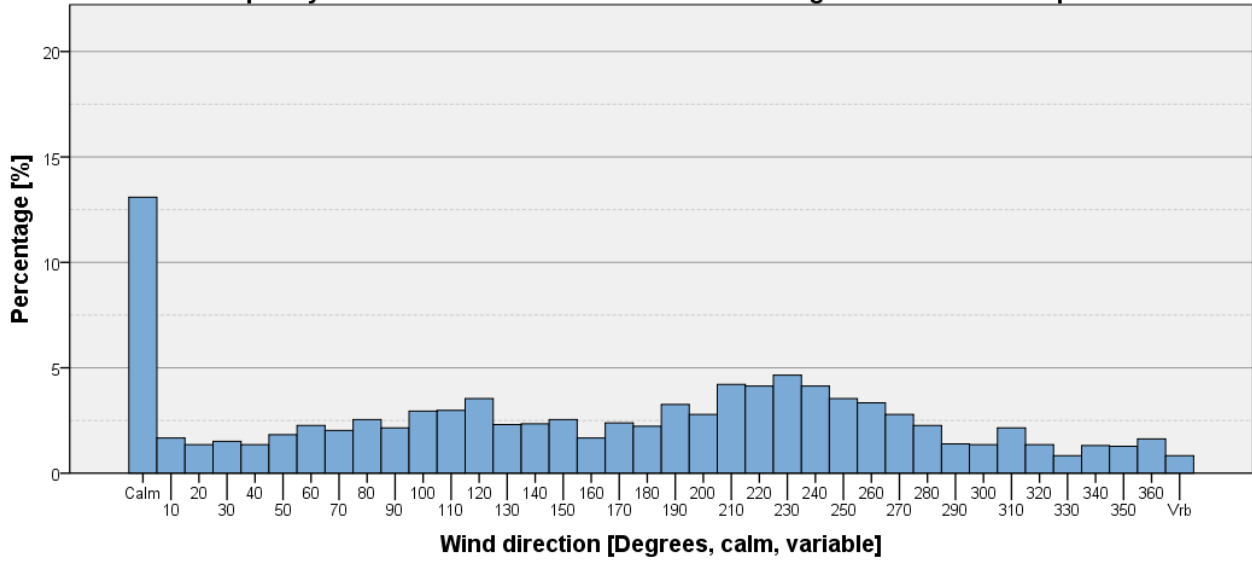


Figure 811

EKYT. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

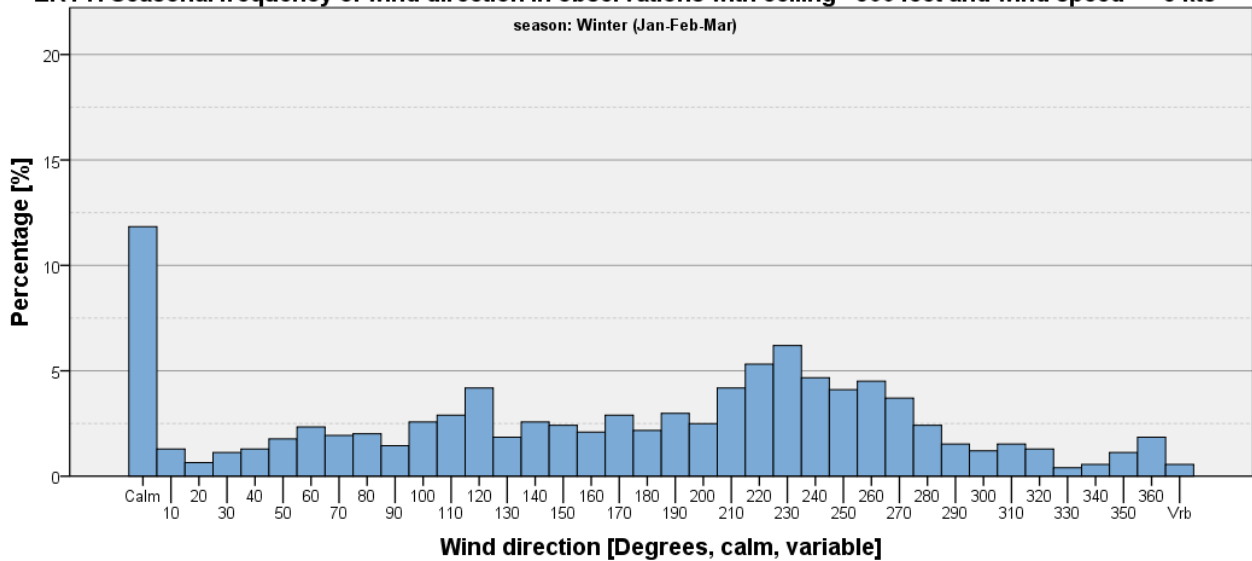


Figure 812

EKYT. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

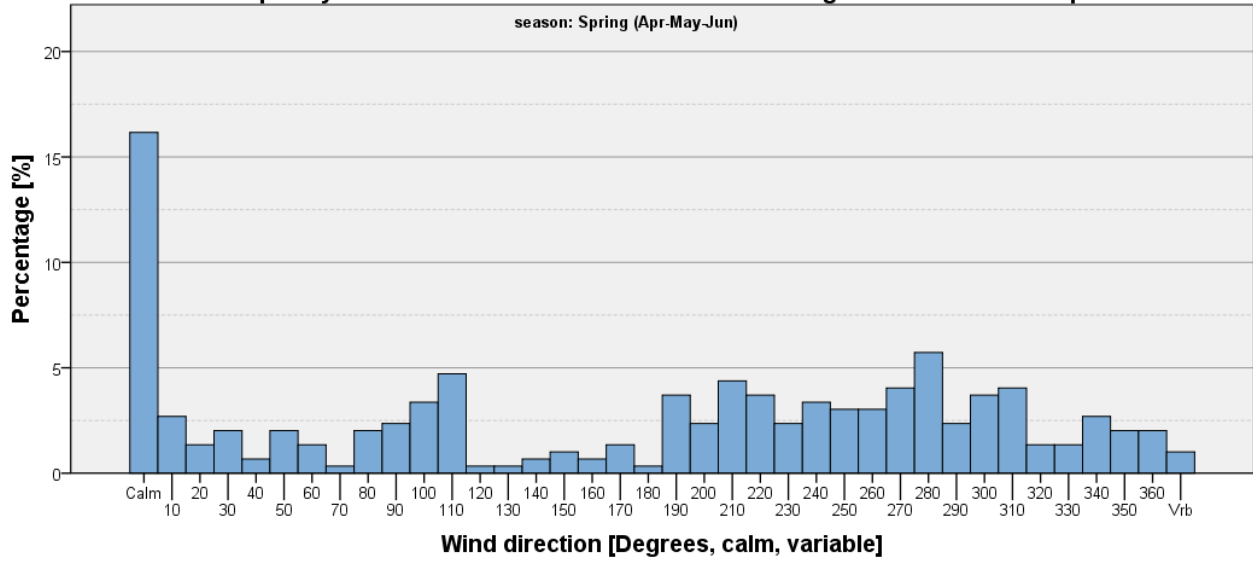


Figure 813

EKYT. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed <= 5 kts

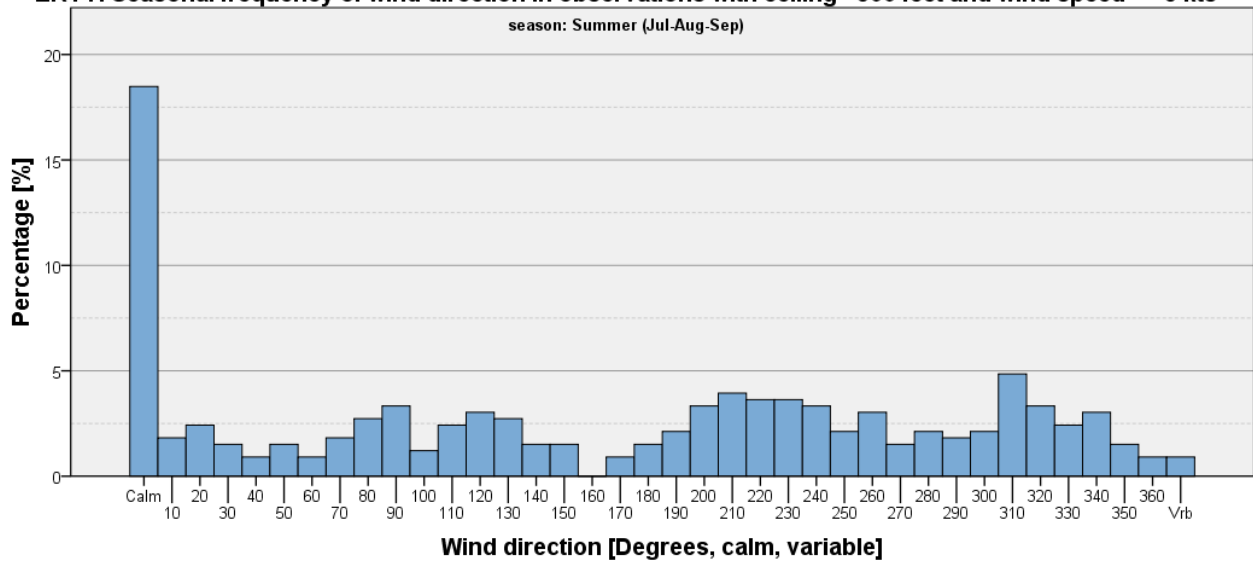


Figure 814

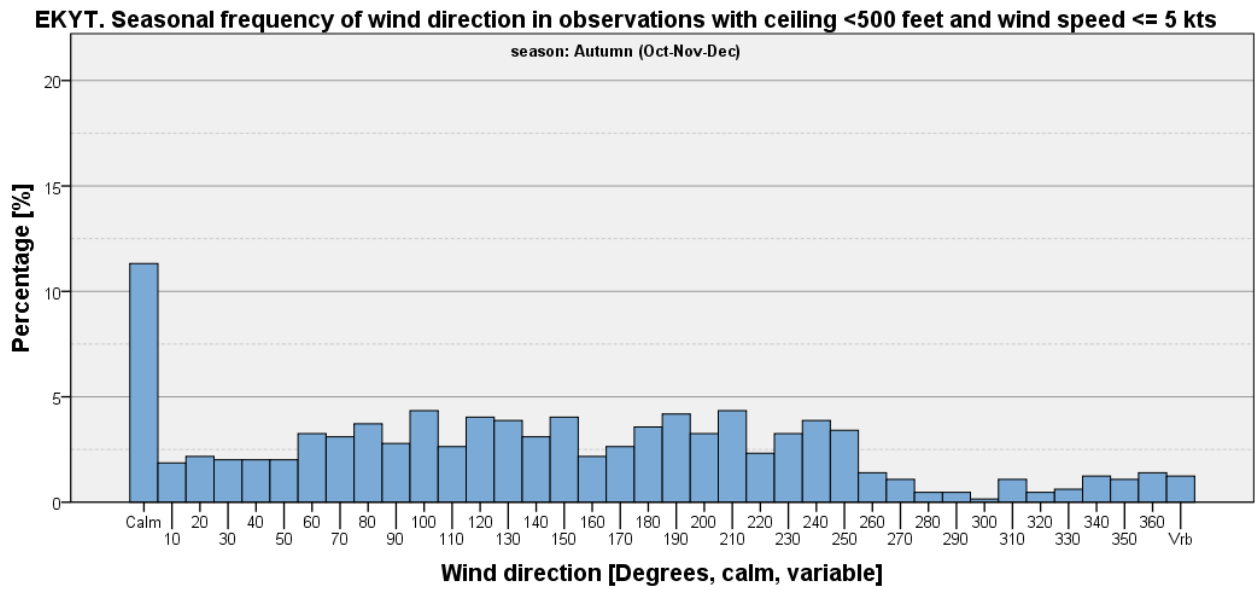


Figure 815

Ceiling < 500 feet and Wind Speed > 5 kts

Table 227: EKYT - Seasonal and annual frequencies of visibility <500 feet and wind speed > 5 kts [%].

	Winter (Jan-Feb-Mar)	Spring (Apr-May-Jun)	Summer (Jul-Aug-Sep)	Autumn (Oct-Nov-Dec)	Annual
Ceiling <500 feet and wind speed > 5 kts	5.18	1.11	0.31	2.81	2.34
All other observations	94.82	98.89	99.69	97.19	97.66
Total	100	100	100	100	100

EKYT. Annual frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

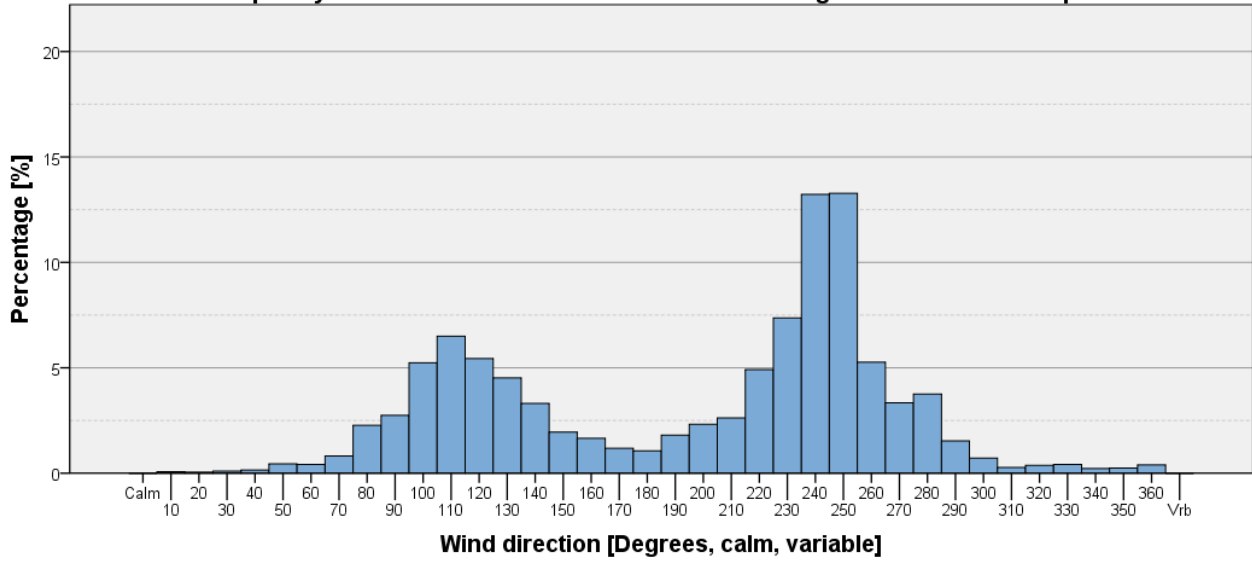


Figure 816

EKYT. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

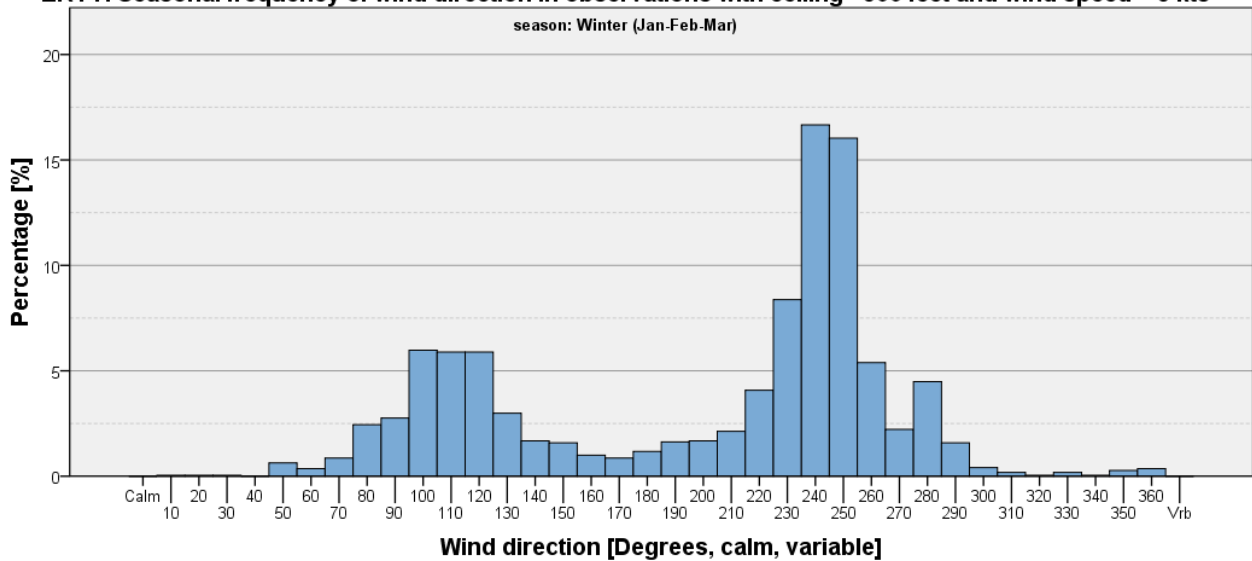


Figure 817

EKYT. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

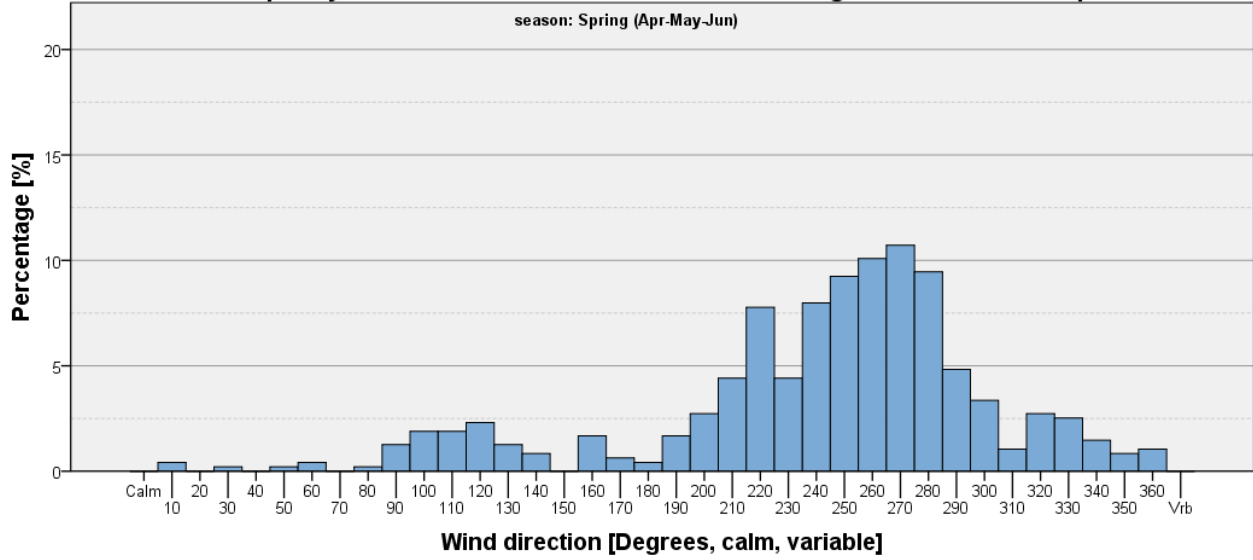


Figure 818

EKYT. Seasonal frequency of wind direction in observations with ceiling <500 feet and wind speed > 5 kts

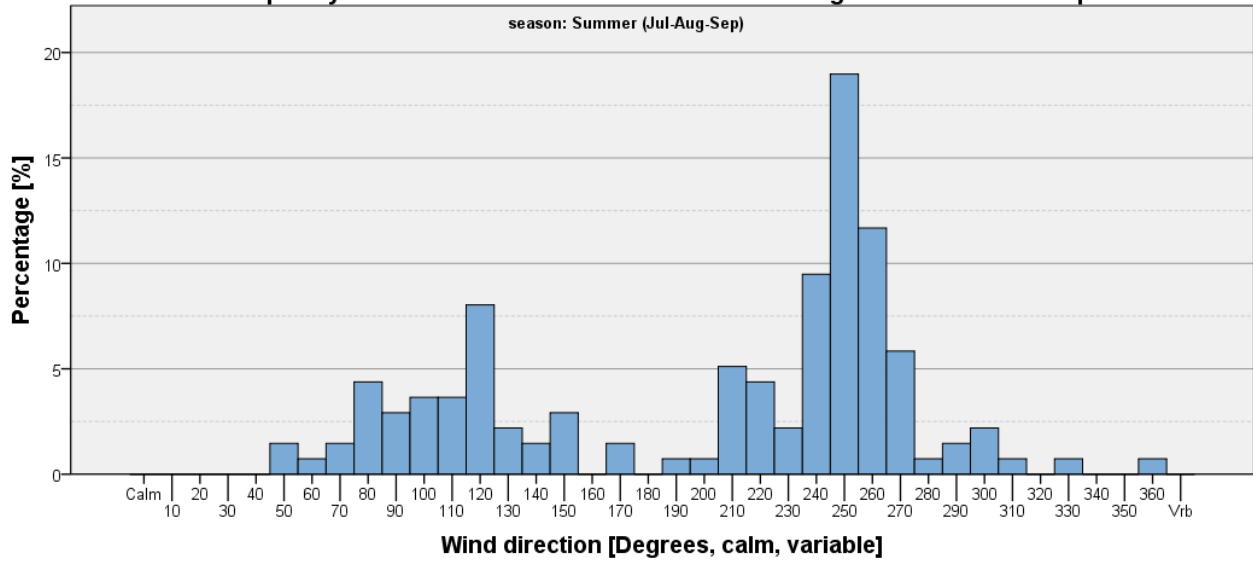


Figure 819

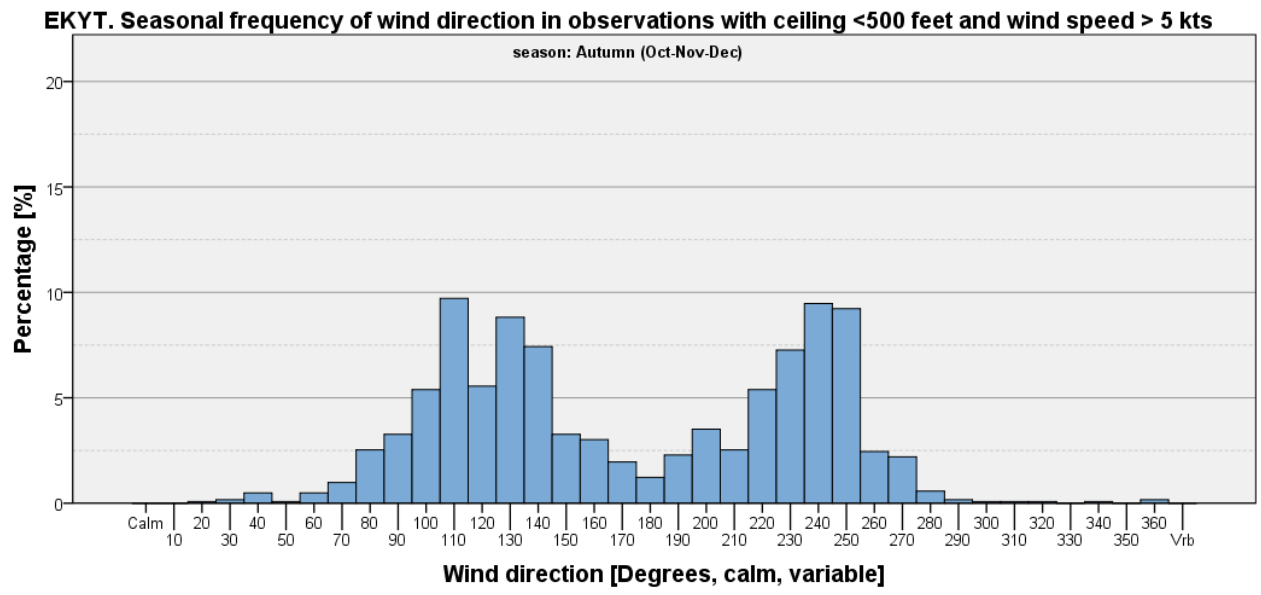
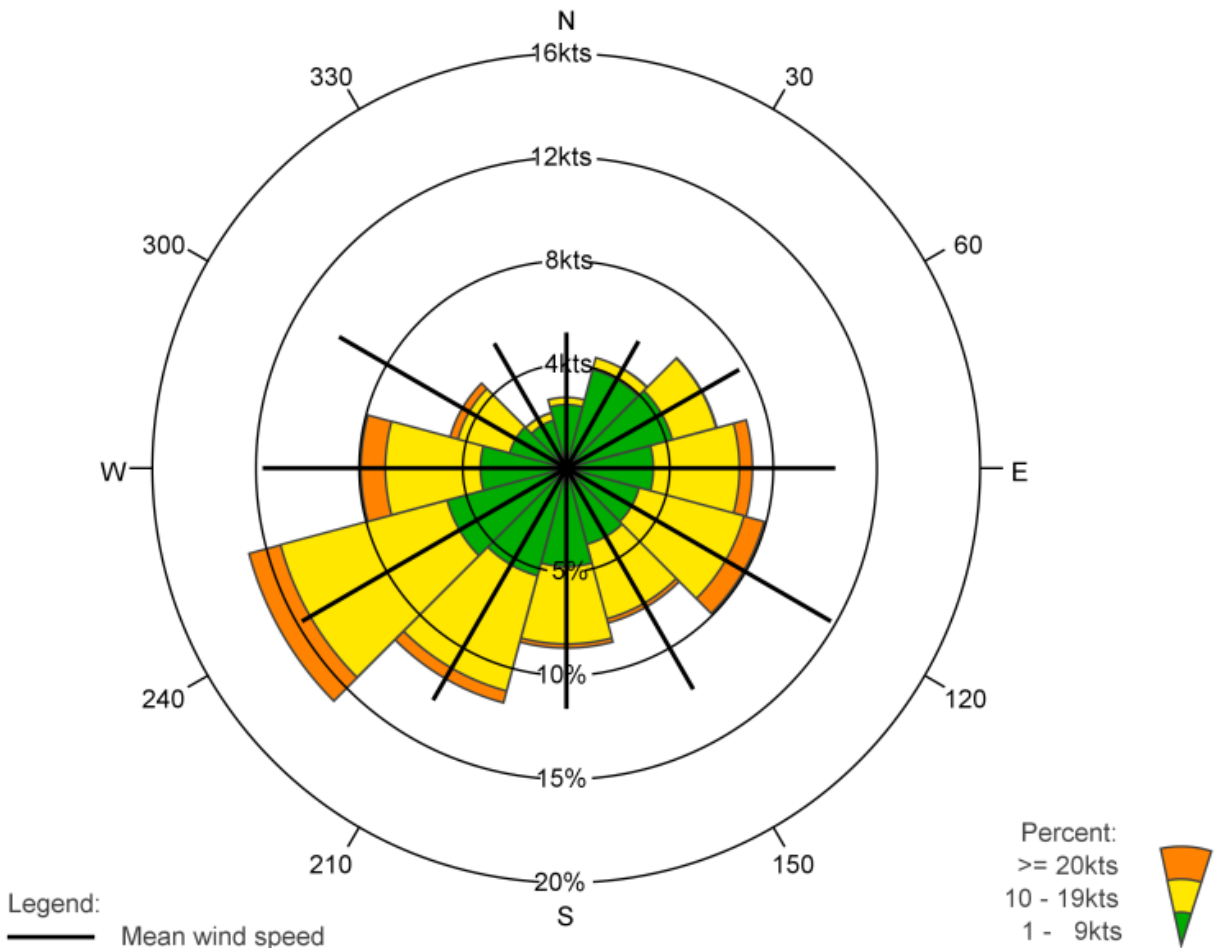


Figure 820

Wind Roses

EKYT: AALBORG LUFTHAVN, AUTUMN & WINTER

01-01-2009 - 31-12-2018 : Jan, Feb, Mar, Oct, Nov, Dec



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.4	5.5	7.5	9.0	9.9	7.7	8.7	11.7	15.9	9.9	5.8	2.8	97.8
% 1 - 9kts	3.1	4.9	5.3	4.2	3.6	3.8	4.7	5.4	6.0	4.2	2.8	2.4	50.4
% 10 - 19kts	0.3	0.6	2.2	4.1	5.2	3.7	3.7	5.7	8.3	4.6	2.6	0.4	41.6
% >= 20kts	0.0	0.0	0.0	0.6	1.0	0.2	0.2	0.6	1.6	1.2	0.4	0.0	5.9
Mean wind speed	5.2	5.6	7.7	10.4	11.8	9.9	9.3	10.3	11.8	11.8	10.1	5.5	9.9
Max wind speed	22.0	22.0	22.0	29.0	31.0	26.0	29.0	35.0	49.0	42.0	41.0	23.0	49.0

Number of observations = 86248

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 1855=2.2%

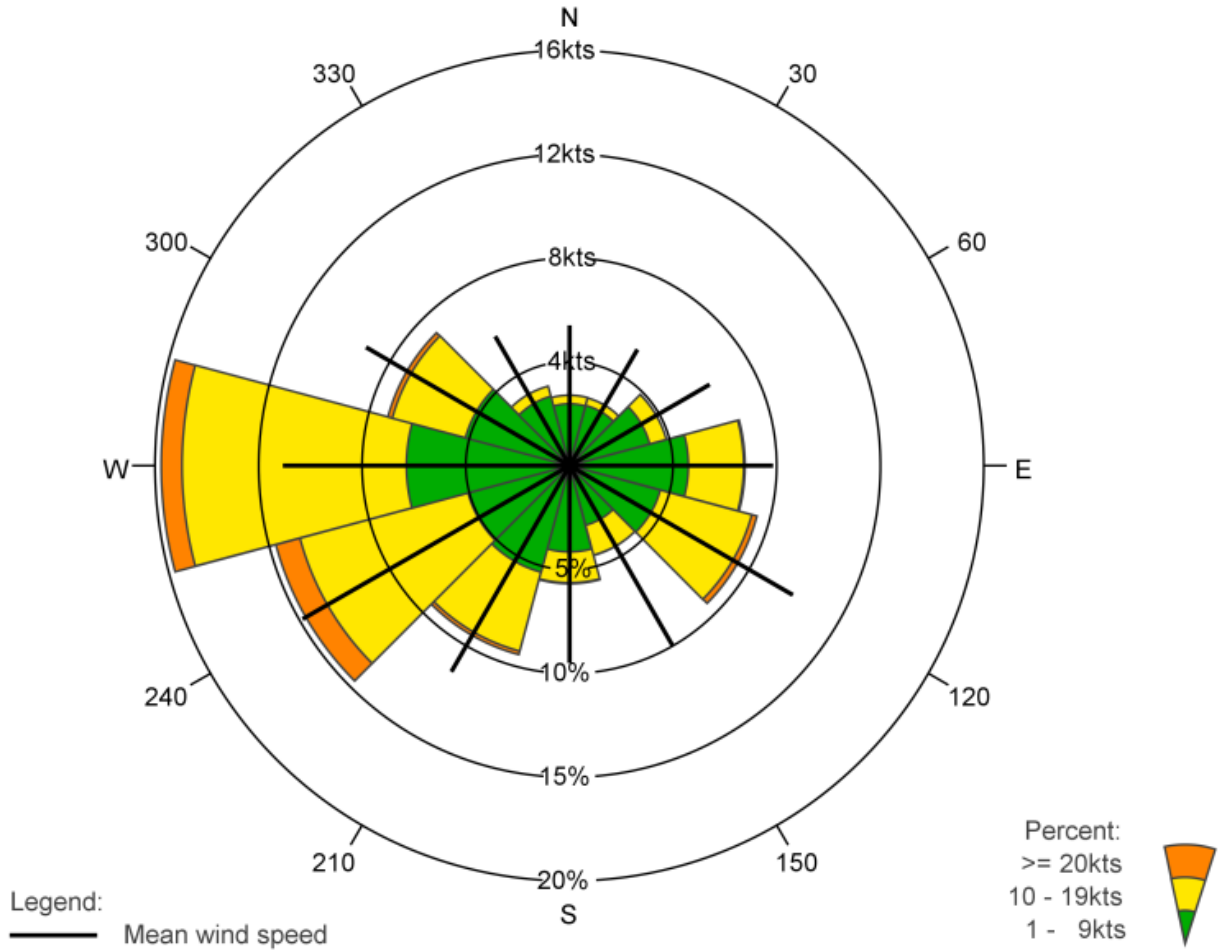
Observations with calm/varying wind direction are not used in the statistics

Source: DMI

Figure 821

EKYT: AALBORG LUFTHAVN, SPRING & SUMMER

01-01-2009 - 31-12-2018 : Apr, May, June, Jul, Aug, Sep



	N	30	60	E	120	150	S	210	240	W	300	330	Total
%	3.4	3.4	4.8	8.5	9.4	4.5	5.7	9.4	14.7	19.7	9.1	4.0	96.5
% 1 - 9kts	3.0	3.0	4.0	5.7	4.5	3.0	4.2	5.3	5.1	7.9	5.2	3.5	54.2
% 10 - 19kts	0.4	0.4	0.8	2.7	4.6	1.5	1.5	3.9	8.4	10.8	3.7	0.5	39.2
% >= 20kts	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.2	1.2	1.0	0.2	0.0	3.0
Mean wind speed	5.4	5.2	6.3	7.9	9.9	8.0	7.6	9.2	11.9	11.1	9.1	5.7	9.2
Max wind speed	21.0	20.0	21.0	25.0	26.0	21.0	24.0	33.0	46.0	30.0	30.0	19.0	46.0

Number of observations = 86500

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 3069=3.5%

Observations with calm/varying wind direction are not used in the statistics

Source: DMI

Figure 822

Availability

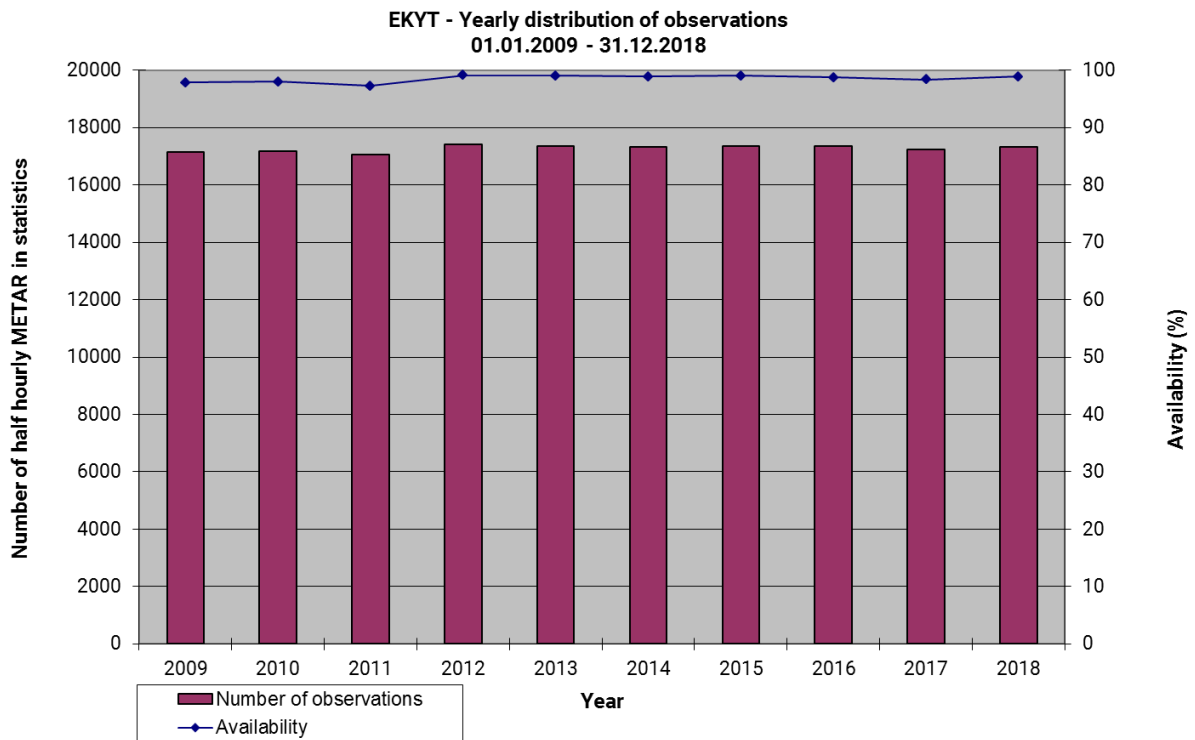


Figure 823

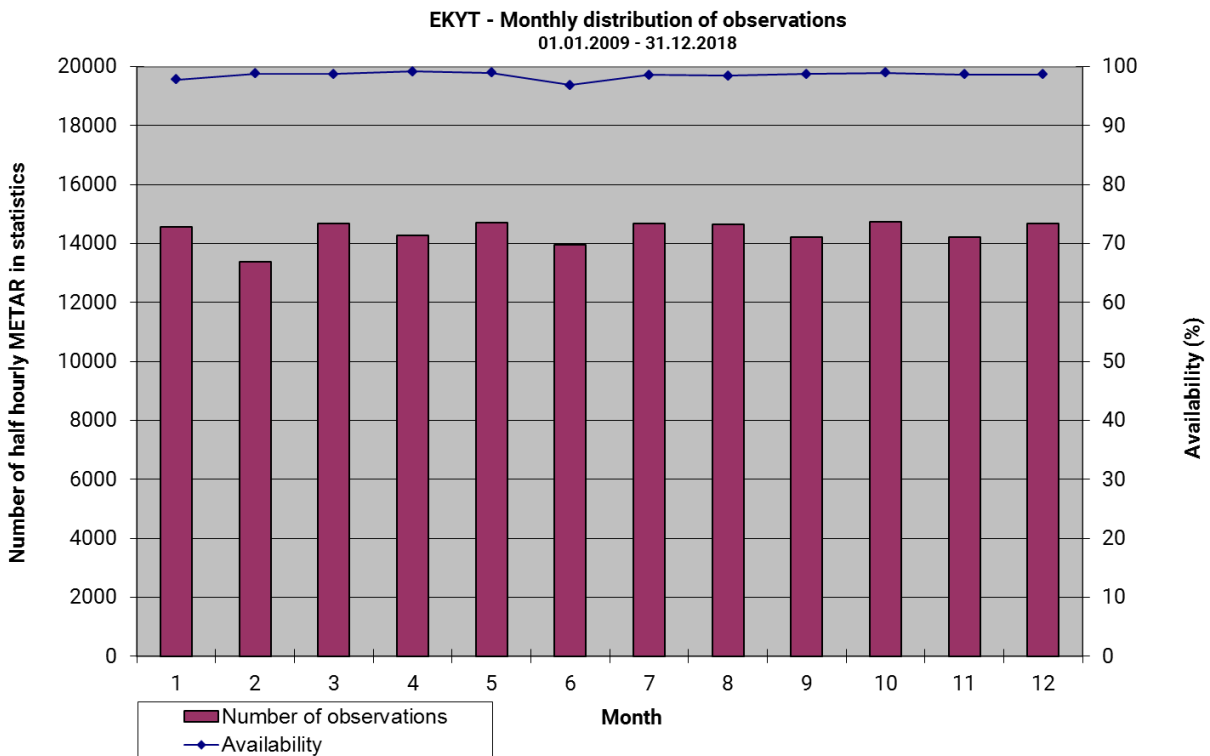


Figure 824

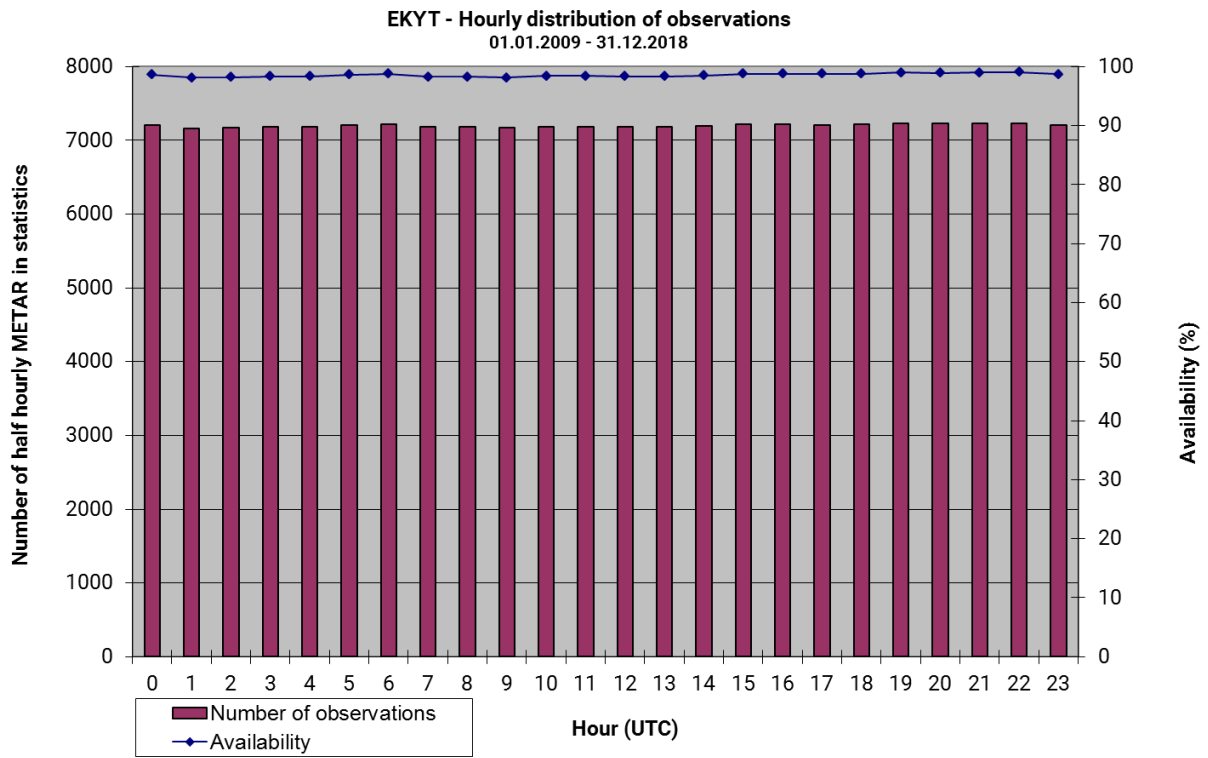


Figure 825

Table 228: EKYT. Average number of half hourly observations in statistics, 01.01.2009 – 31.12.2018

Hour	Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
1	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
2	2.0	2.0	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0
3	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
4	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
5	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
6	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
7	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.0
10	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
11	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.0
12	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
13	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
14	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
15	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0
16	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
17	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
18	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
19	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
20	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
21	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
22	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
23	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0

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