

# **Weather Statistics for Vága Floghavn 2009-2018, Faroe Islands DMI Report 20-16**

February 7, 2020

## Colophon

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## Abstract

This report contains statistics on visibility, ceiling, wind speed and wind direction observed at Vága Floghavn on Faroe Islands, 01.01.2009 to 31.12.2018.

## Resumé

Rapporten indeholder statistik af sigtbarhed, ceiling, vindhastighed og vindretning fra Vága Floghavn på Færøerne, 01.01.2009 til 31.12.2018.

## Introduction

This report presents 10 years of airport weather statistics from Vága Floghavn (*Table 1*) in the period 01.01.2009 to 31.12.2018. The present report 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.

**Table 1: Airport availability, relevant remarks on airport weather statistics and start date of AUTO METAR.**

Airport	Availability*	Remarks	Start AUTO METAR
<b>EKVG Vága Floghavn</b>	85.2 %	Until May 2010 mostly hourly METAR and/or SPECI during daytime. Since April 2011, half-hourly observations around the clock.	26.11.2009

\*Availability when expecting half hourly observations around the clock from 01.01.2009 to 31.12.2018 (total 175,296 observations).

## Parameters and Terms

In the following, a short explanation of central parameters and terms used in the report is included. The central parameters and terms are METAR and SPECI, MetafDB, wind direction, wind speed, cloud cover, ceiling, visibility and CAVOK.

### 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 *Table 2* below.

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

Ceiling value in MetafDB (feet)	Significance	Situation
<b>0-900</b>	<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.
<b>1,000-29,000</b>	The cloud height (feet) of the bottom cloud layer, which covers more than 4/8.	METAR and SPECI have reported BKN or OVC.
<b>30,000</b>	<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"> <li>• CAVOK or SKC or NSC or NCD or</li> <li>• Only cloud cover with FEW or SCT or</li> <li>• Bottom cloud cover with BKN or OVC with cloud height 30,000 feet or more.</li> </ul>

## 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 the EKVG Vága Floghavn, 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.

## EKVG Vága Floghavn

Airport location: 62.067°N 7.283°W Elevation: 85 m above MSL.

EKVG observations in statistics: 149,400 half-hourly METAR covering the 10 years period 01.01.2009 – 31.12.2018, resulting in an overall availability of 85.2 %, when expecting half-hourly observations around the clock throughout the period.

The availability of observations is mainly lowered by the following facts:

- From Jan 1<sup>st</sup>, 2009, to May 10<sup>th</sup>, 2010, EKVG issued mostly hourly METAR during daytime.
- From May 11<sup>th</sup>, 2010 – March 2011, EKVG issued mostly half-hourly METAR during nighttime and hourly METAR during daytime.

For more information about availability of EKVG go to the chapter 'Availability'.

EKVG METAR were manual until 26.11.2009 and have been partly AUTO METAR since this date.

### Cross Tables Visibility – Ceiling

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

Number of observations = 149,400	<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	0.011	0.023	0.045	0.046	0.046	0.046	0.0027	<b>0.049</b>
<350m	0.16	0.29	0.54	0.57	0.58	0.58	0.039	<b>0.62</b>
<600m	0.32	0.54	0.97	1.04	1.05	1.06	0.065	<b>1.12</b>
<800 m	0.39	0.67	1.21	1.30	1.33	1.34	0.074	<b>1.42</b>
<1.5 km	0.52	1.02	1.77	1.95	2.03	2.06	0.12	<b>2.18</b>
<3.0 km	0.65	1.71	3.45	3.99	4.27	4.38	0.24	<b>4.62</b>
< 5.0 km	0.71	2.12	5.62	7.28	8.03	8.34	0.51	<b>8.85</b>
< 8.0 km	0.75	2.34	7.56	11.25	13.15	14.01	1.16	<b>15.17</b>
>= 8.0 km or CAVOK	0.041	0.25	3.16	10.79	19.61	29.69	55.14	<b>84.83</b>
<b>Total</b>	<b>0.79</b>	<b>2.60</b>	<b>10.71</b>	<b>22.039</b>	<b>32.76</b>	<b>43.70</b>	<b>56.30</b>	<b>100</b>

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

Number of observations = 35,296	<100 ft	<200 ft	<500 ft	<1000 ft	<1,500 ft	<2,000 ft	>=2,000 ft, CAVOK or no ceiling	Total
<150 m	0.0085	0.014	0.028	0.031	0.031	0.031	0	<b>0.031</b>
<350m	0.037	0.10	0.20	0.24	0.24	0.24	0	<b>0.24</b>
<600m	0.062	0.17	0.37	0.47	0.48	0.48	0.0085	<b>0.48</b>
<800 m	0.085	0.22	0.49	0.64	0.66	0.67	0.014	<b>0.69</b>
<1.5 km	0.13	0.38	0.84	1.11	1.20	1.24	0.051	<b>1.29</b>
<3.0 km	0.18	0.86	2.21	2.87	3.25	3.42	0.23	<b>3.65</b>
< 5.0 km	0.22	1.12	4.12	5.84	6.86	7.30	0.66	<b>7.96</b>
< 8.0 km	0.23	1.23	5.65	9.28	11.93	13.15	1.73	<b>14.87</b>
>= 8.0 km or CAVOK	0	0.076	1.56	6.71	15.12	25.53	59.60	<b>85.13</b>
<b>Total</b>	<b>0.23</b>	<b>1.31</b>	<b>7.20</b>	<b>15.99</b>	<b>27.051</b>	<b>38.68</b>	<b>61.32</b>	<b>100</b>

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

Number of observations = 36,521	<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	0.036	0.063	0.063	0.063	0.063	0.0027	<b>0.066</b>
<350m	0.19	0.32	0.68	0.68	0.68	0.69	0.016	<b>0.70</b>
<600m	0.37	0.63	1.22	1.25	1.26	1.26	0.041	<b>1.30</b>
<800 m	0.45	0.76	1.47	1.52	1.53	1.54	0.049	<b>1.59</b>
<1.5 km	0.62	1.17	2.06	2.17	2.22	2.23	0.085	<b>2.31</b>
<3.0 km	0.78	1.90	3.60	3.96	4.16	4.22	0.17	<b>4.40</b>
< 5.0 km	0.85	2.36	5.48	6.51	6.99	7.15	0.29	<b>7.44</b>
< 8.0 km	0.90	2.61	7.34	9.97	11.08	11.49	0.60	<b>12.09</b>
>= 8.0 km or CAVOK	0.071	0.28	3.13	10.71	19.26	29.17	58.75	<b>87.91</b>
<b>Total</b>	<b>0.97</b>	<b>2.90</b>	<b>10.47</b>	<b>20.69</b>	<b>30.33</b>	<b>40.65</b>	<b>59.35</b>	<b>100</b>

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

Number of observations = 38,949	<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	0.015	0.039	0.074	0.074	0.077	0.077	0.0077	<b>0.085</b>
<350m	0.35	0.62	1.10	1.16	1.17	1.18	0.13	<b>1.31</b>
<600m	0.70	1.13	1.89	1.97	1.99	2.008	0.18	<b>2.18</b>
<800 m	0.83	1.37	2.28	2.40	2.42	2.45	0.19	<b>2.64</b>
<1.5 km	1.07	1.96	3.14	3.32	3.37	3.39	0.24	<b>3.63</b>
<3.0 km	1.30	2.93	5.39	5.95	6.052	6.12	0.30	<b>6.42</b>
< 5.0 km	1.44	3.60	8.34	10.13	10.48	10.64	0.46	<b>11.11</b>
< 8.0 km	1.51	3.98	11.12	15.09	16.24	16.70	0.87	<b>17.57</b>
>= 8.0 km or CAVOK	0.077	0.52	6.12	17.65	26.88	36.01	46.42	<b>82.43</b>
<b>Total</b>	<b>1.59</b>	<b>4.51</b>	<b>17.24</b>	<b>32.74</b>	<b>43.12</b>	<b>52.71</b>	<b>47.29</b>	<b>100</b>

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

Number of observations = 38,634	<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	0.0026	0.0052	0.013	0.013	0.013	0.013	0	<b>0.013</b>
<350m	0.057	0.085	0.17	0.18	0.18	0.18	0.0078	<b>0.19</b>
<600m	0.12	0.19	0.38	0.40	0.42	0.43	0.026	<b>0.46</b>
<800 m	0.16	0.27	0.53	0.60	0.63	0.66	0.034	<b>0.69</b>
<1.5 km	0.23	0.54	0.95	1.11	1.26	1.32	0.085	<b>1.40</b>
<3.0 km	0.28	1.064	2.47	3.065	3.53	3.66	0.26	<b>3.92</b>
< 5.0 km	0.30	1.33	4.39	6.45	7.59	8.10	0.61	<b>8.71</b>
< 8.0 km	0.31	1.45	5.91	10.39	13.12	14.48	1.47	<b>15.94</b>
>= 8.0 km or CAVOK	0.010	0.11	1.65	7.66	16.71	27.59	56.46	<b>84.06</b>
<b>Total</b>	<b>0.32</b>	<b>1.56</b>	<b>7.56</b>	<b>18.051</b>	<b>29.83</b>	<b>42.07</b>	<b>57.93</b>	<b>100</b>

## Wind Direction Histograms

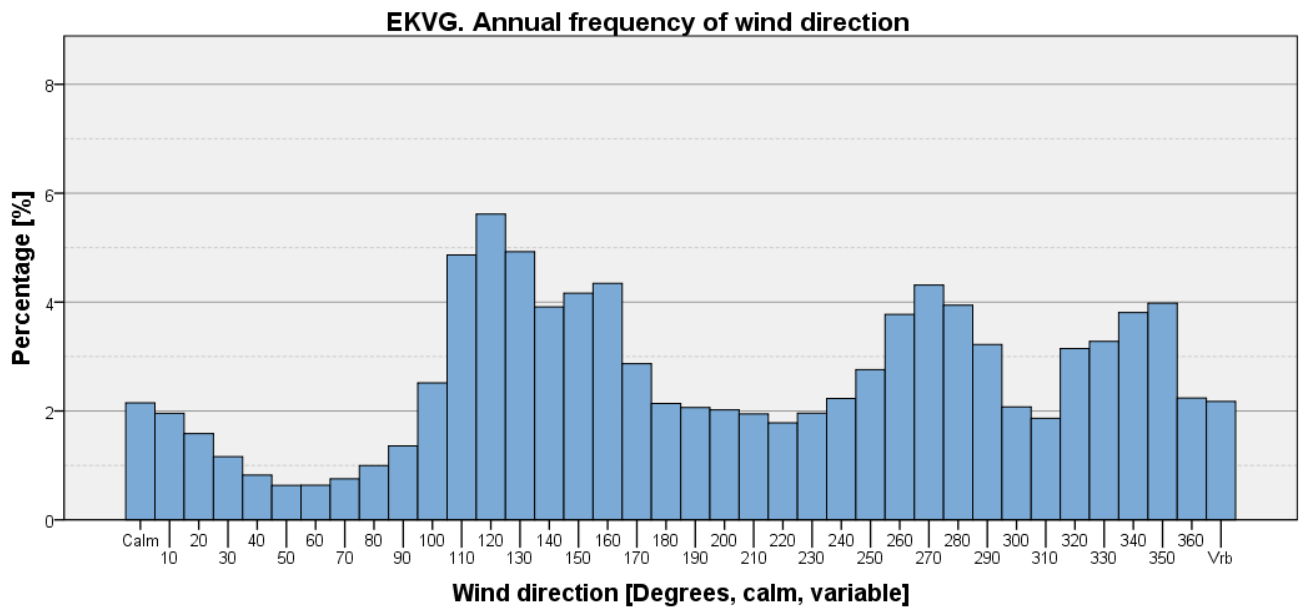


Figure 1

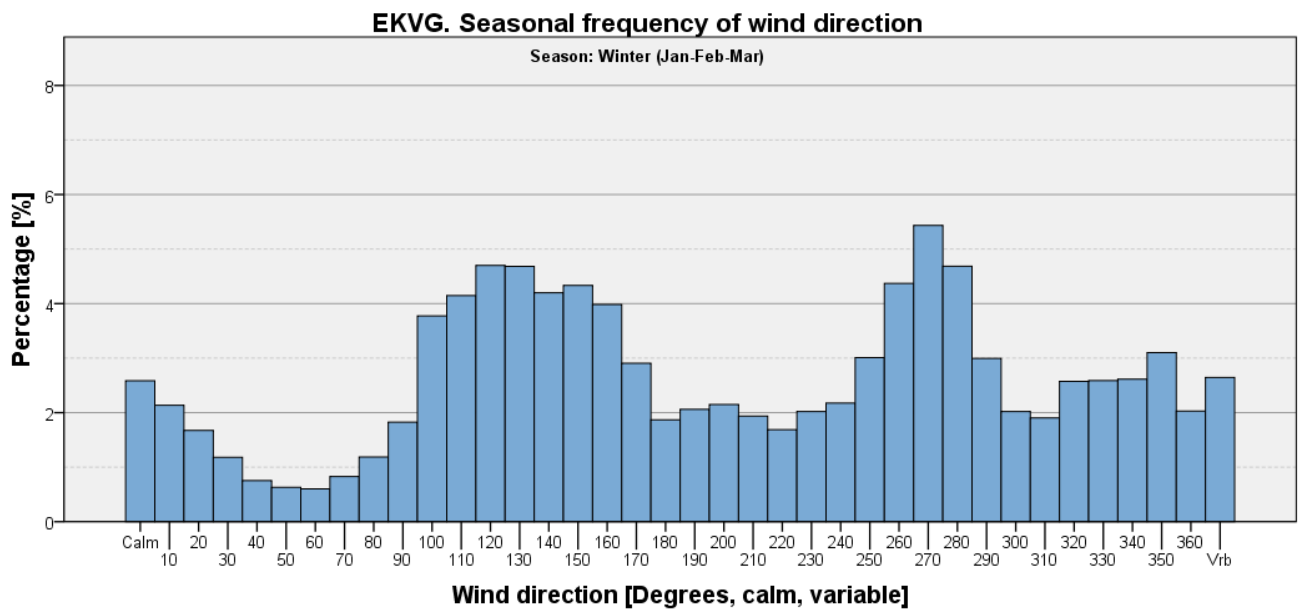


Figure 2

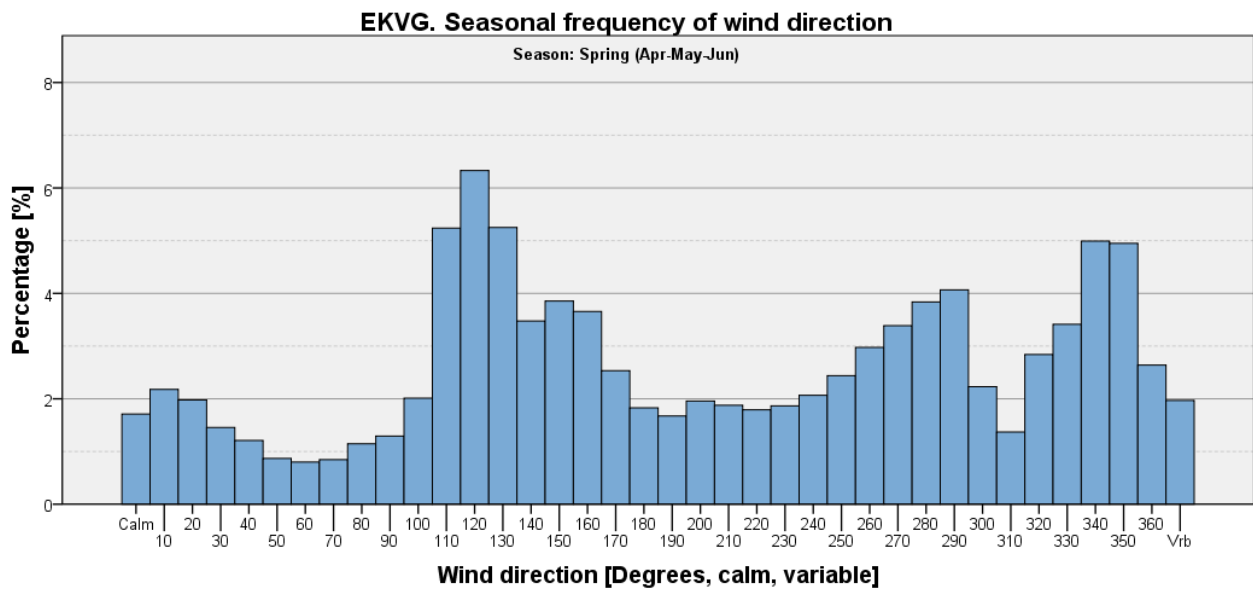


Figure 3

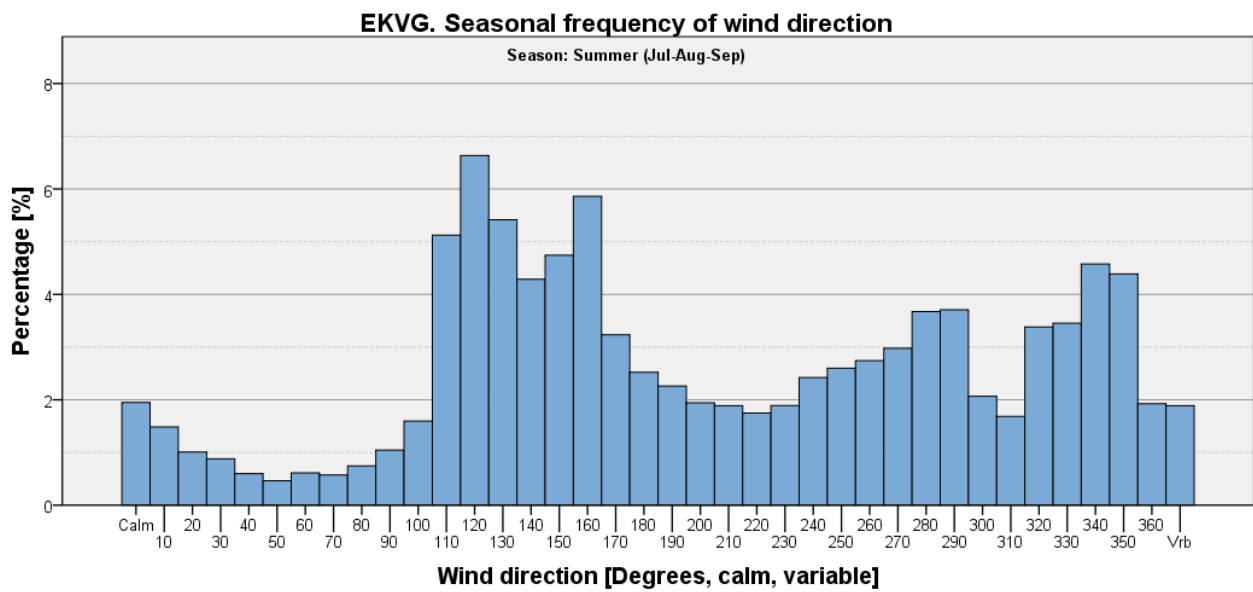
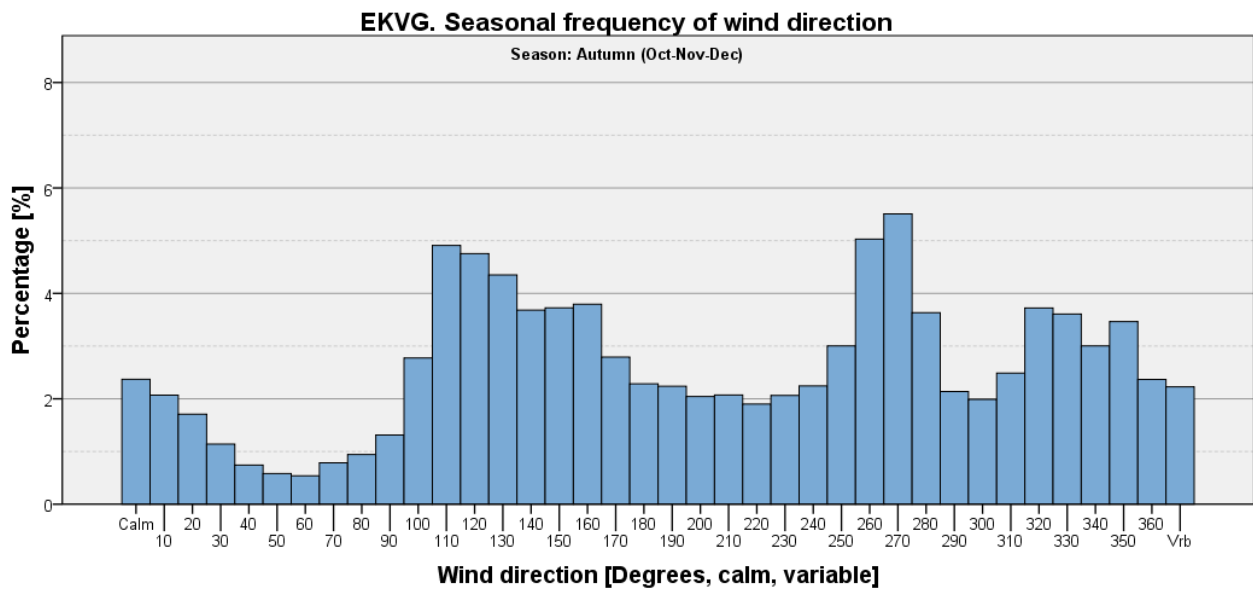


Figure 4



**Figure 5**



## Visibility Criteria on Wind Direction Histograms

Visibility < 800 m

**Table 8: EKVG - 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
<b>Visibility &lt;800 m</b>	0.69	1.59	2.64	0.69	<b>1.42</b>
<b>All other observations</b>	99.31	98.41	97.36	99.31	<b>98.58</b>
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

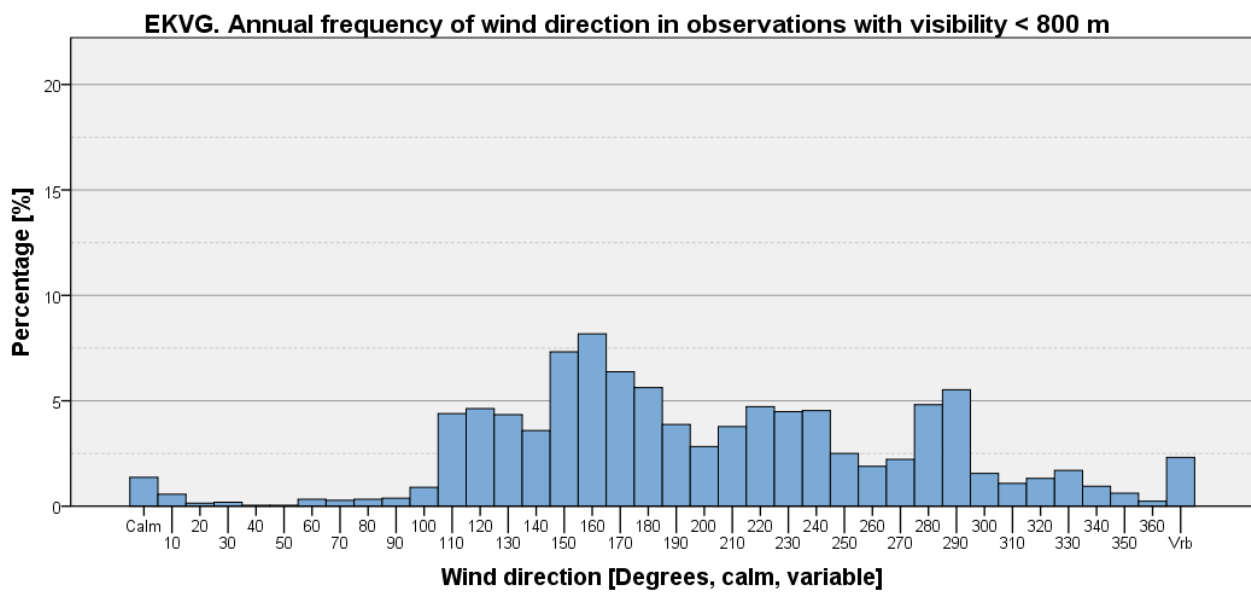


Figure 6

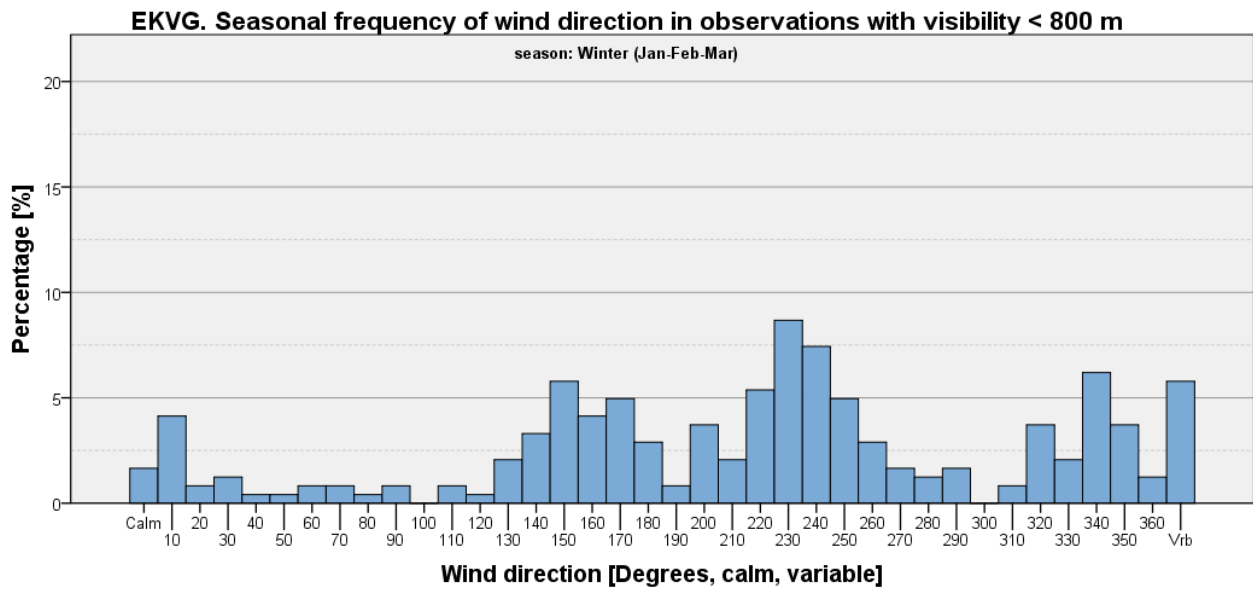


Figure 7

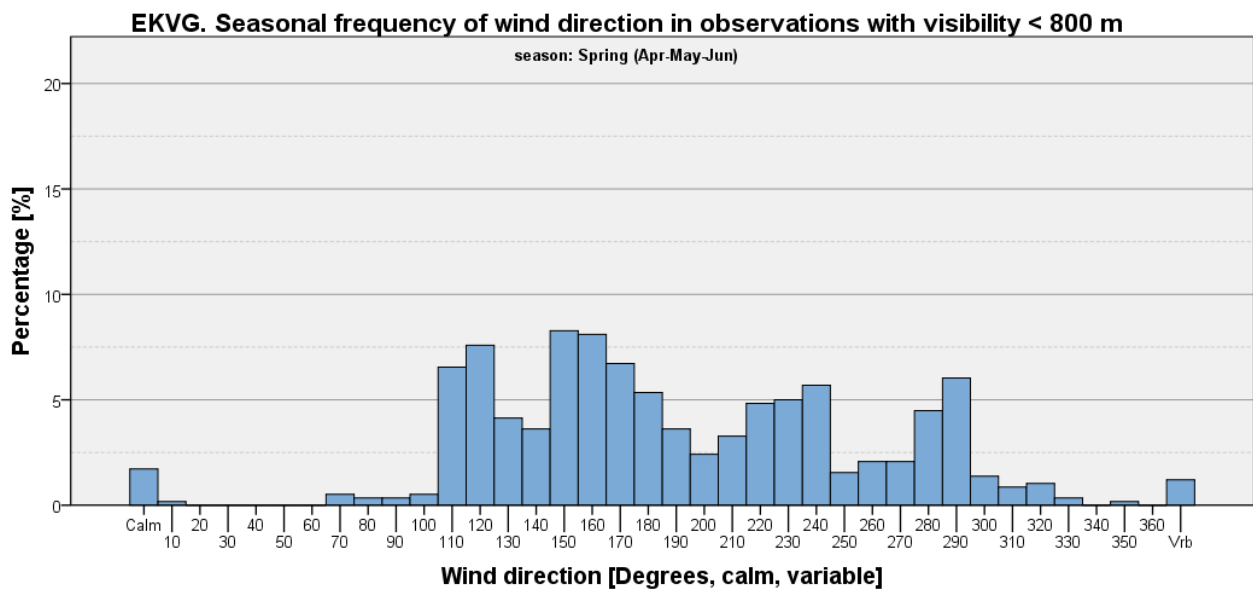


Figure 8

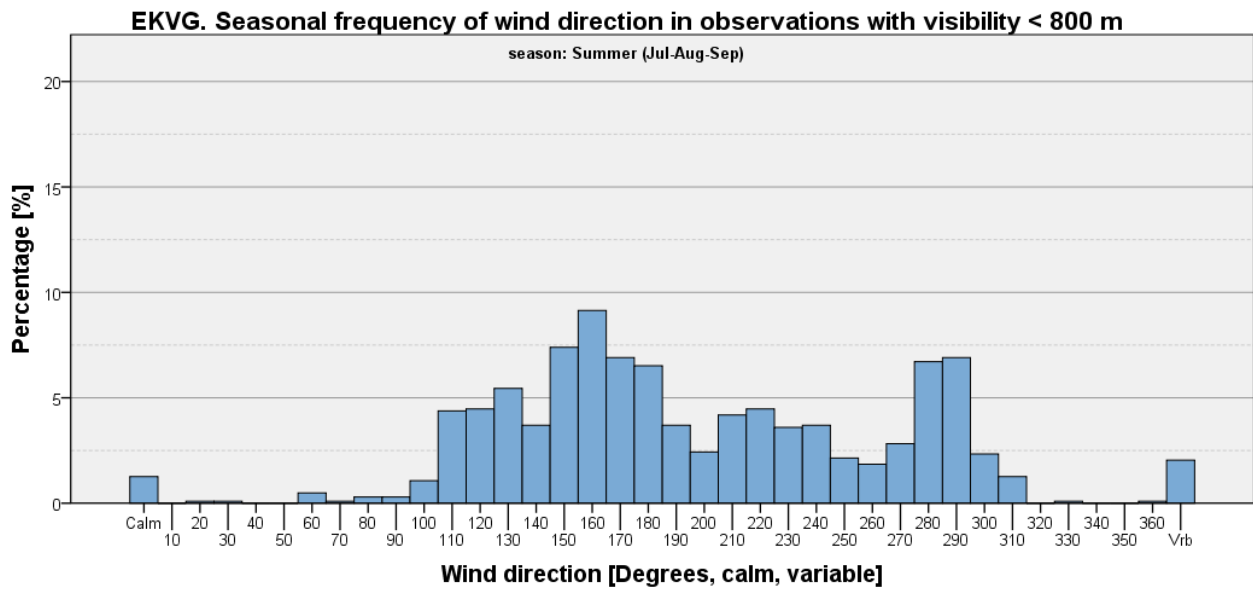


Figure 9

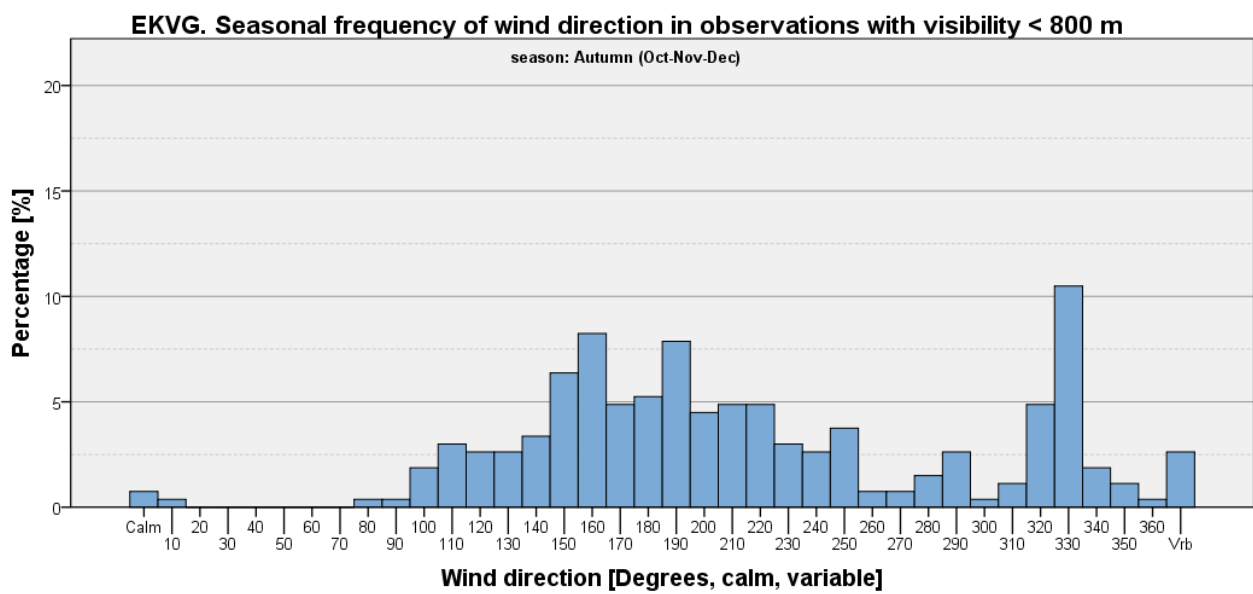


Figure 10

Visibility < 800 m and Wind Speed <= 5 kts

**Table 9: EKVG - 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	0.19	0.47	1.00	0.15	<b>0.46</b>
All other observations	99.81	99.53	99.00	99.85	<b>99.54</b>
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

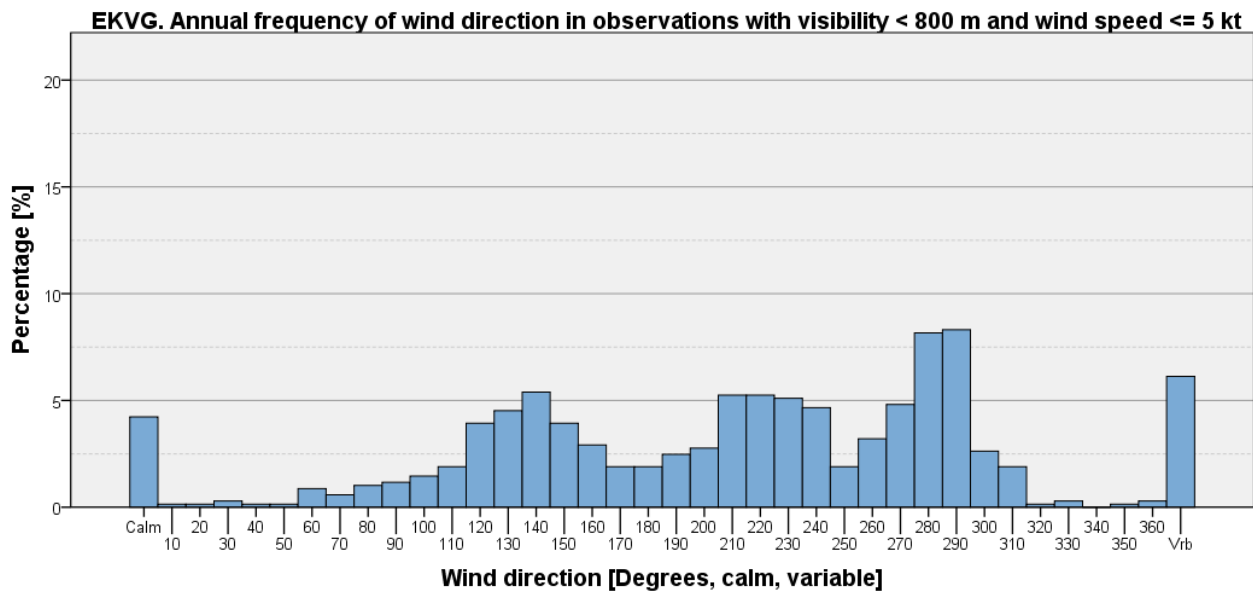


Figure 11

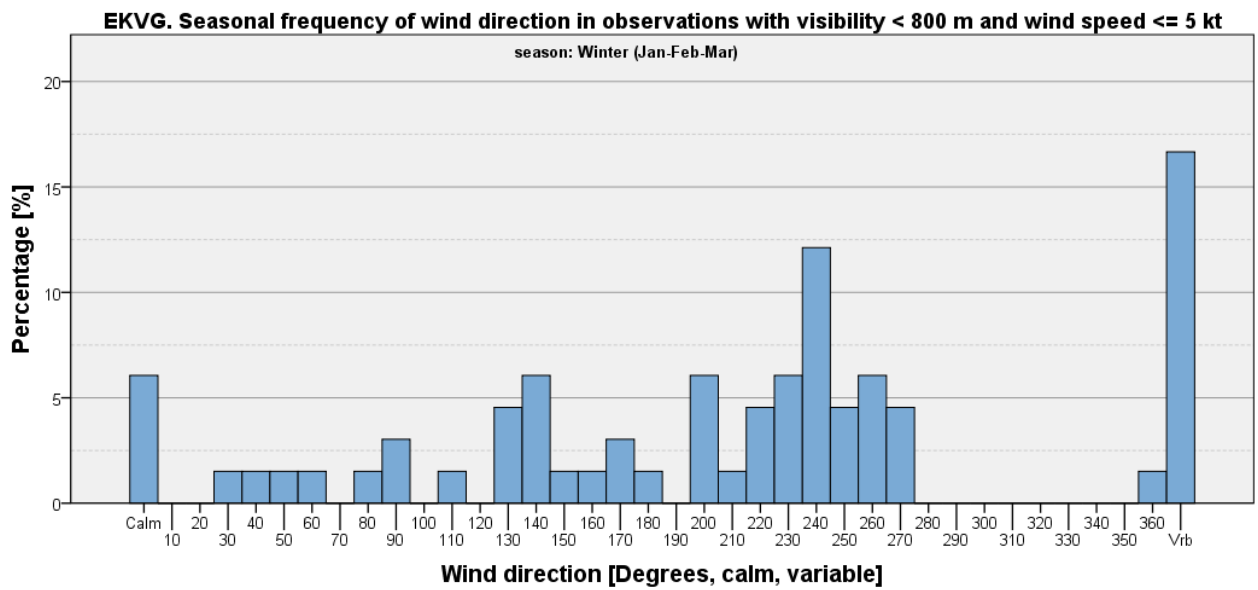


Figure 12

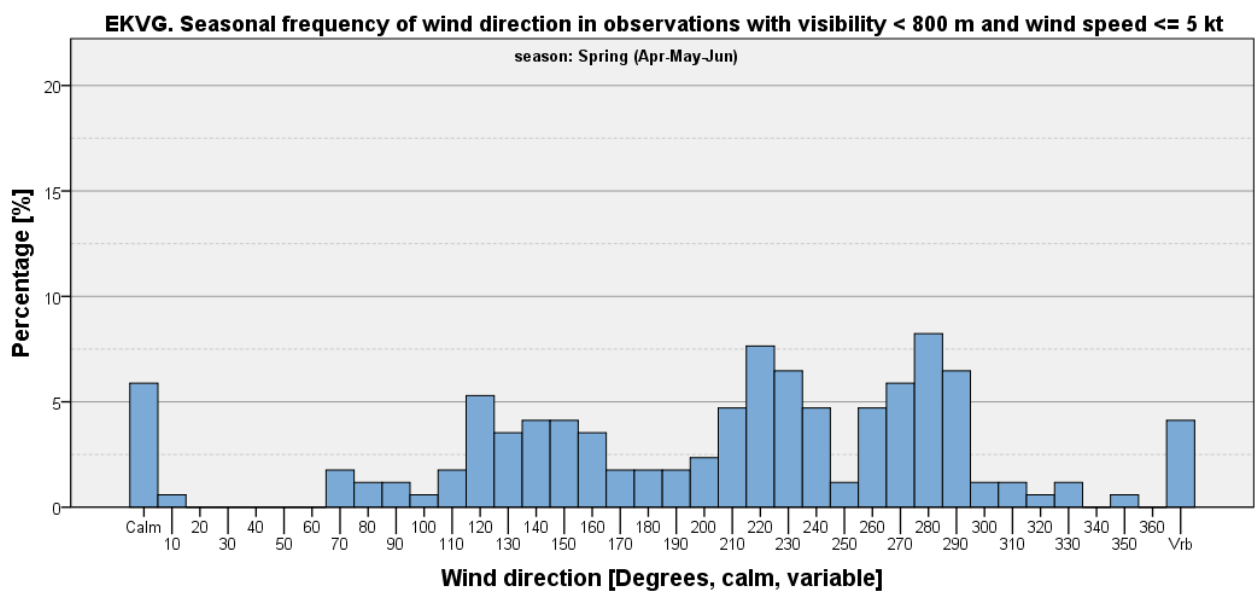


Figure 13

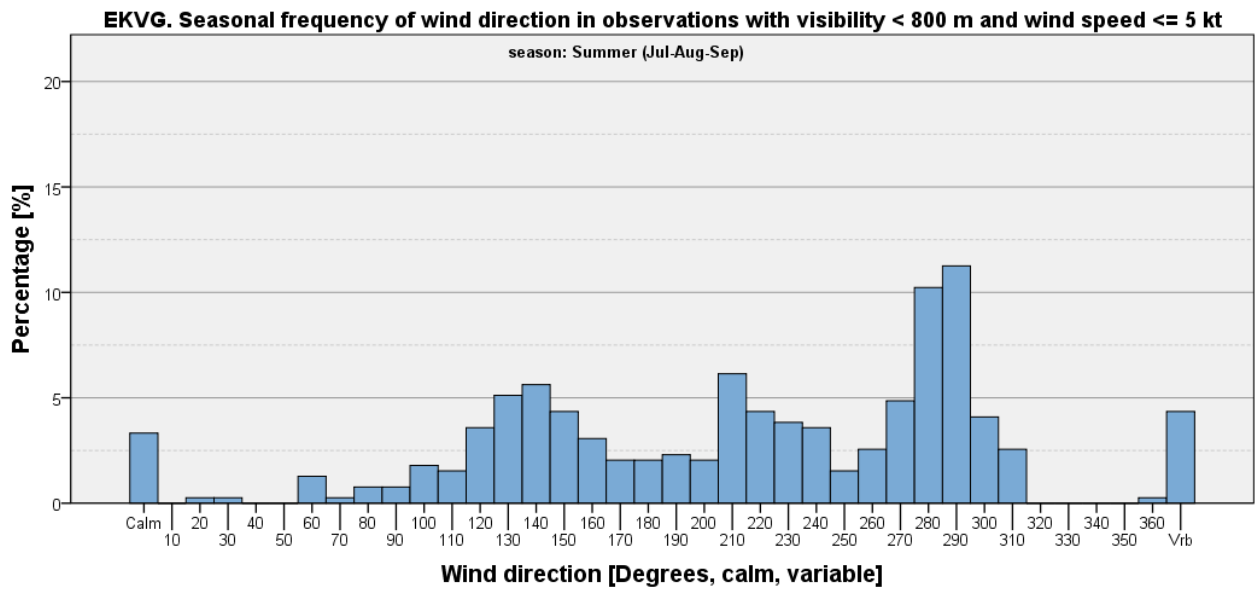


Figure 14

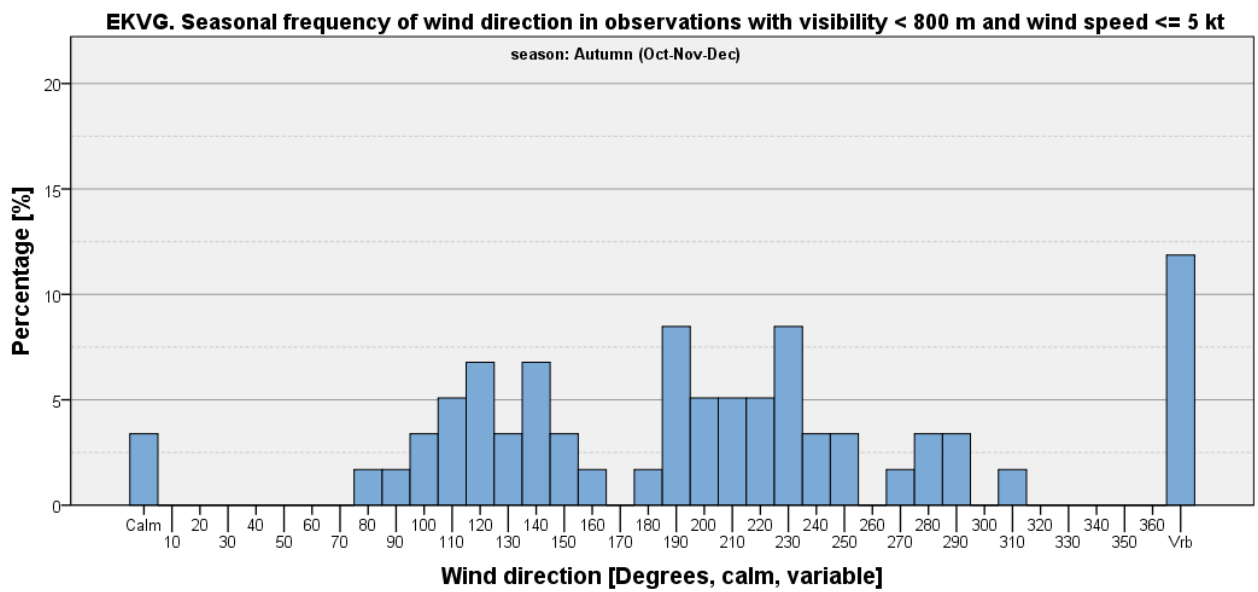


Figure 15

Visibility < 800 m and Wind Speed > 5 kts

**Table 10: EKVG - 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	0.50	1.12	1.64	0.54	<b>0.96</b>
All other observations	99.50	98.88	98.36	99.46	<b>99.04</b>
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

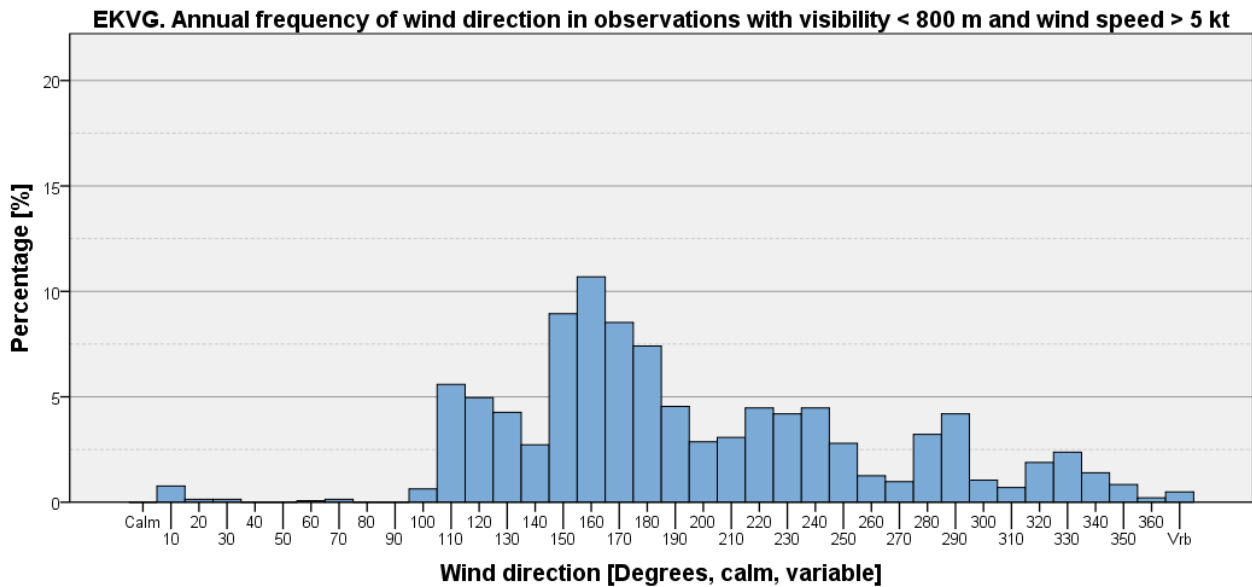


Figure 16

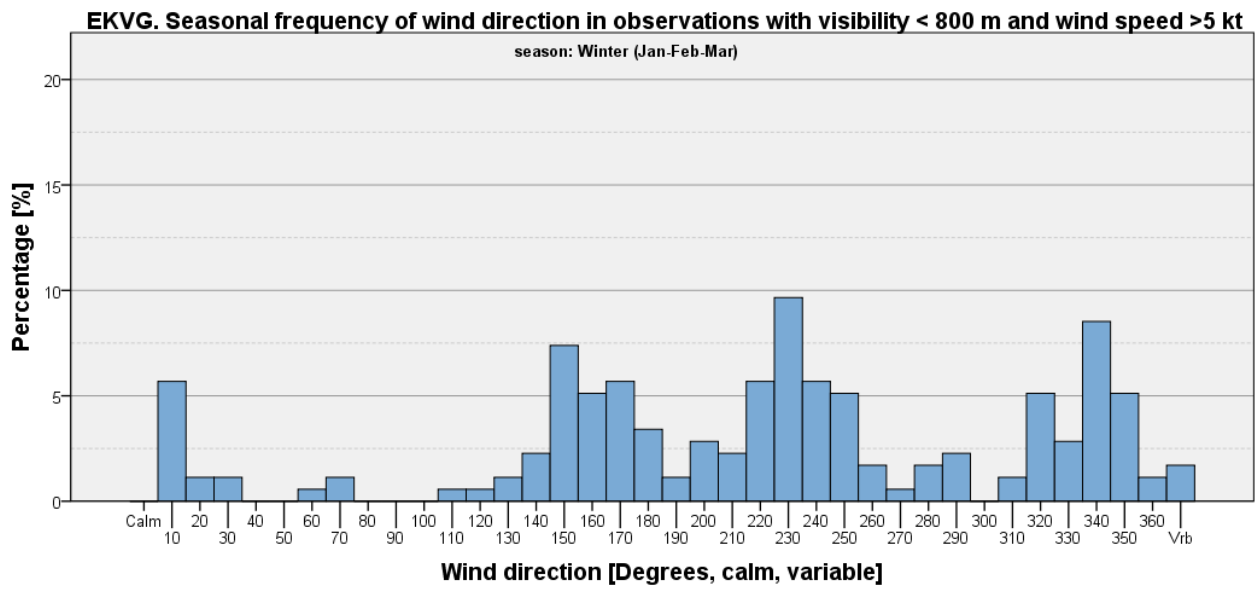


Figure 17

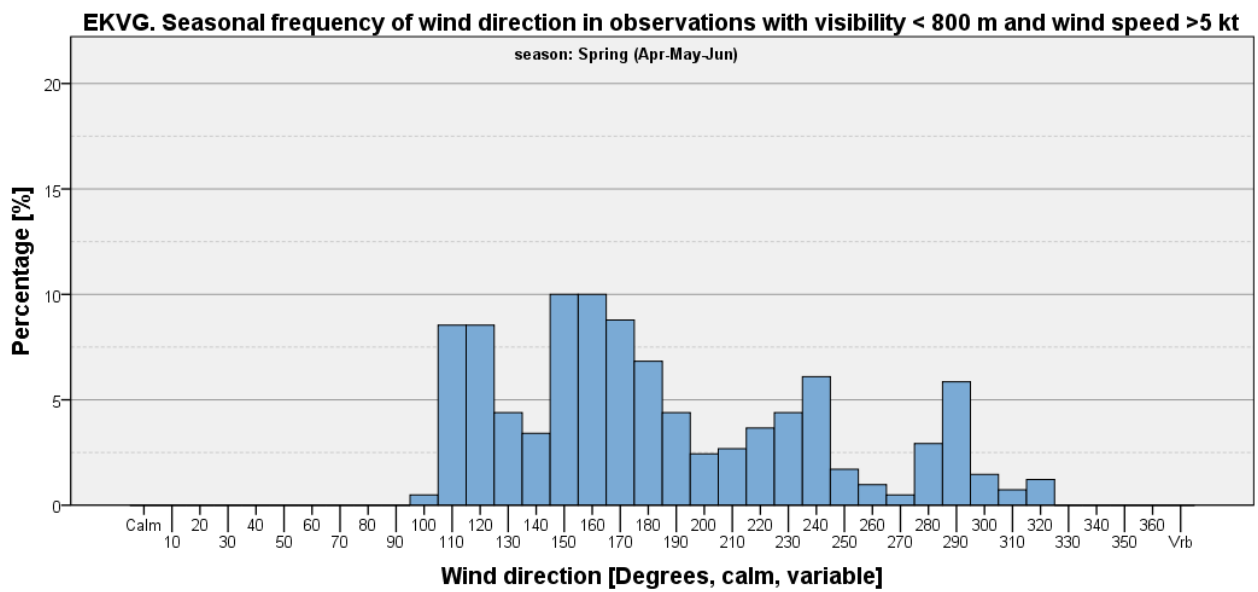


Figure 18



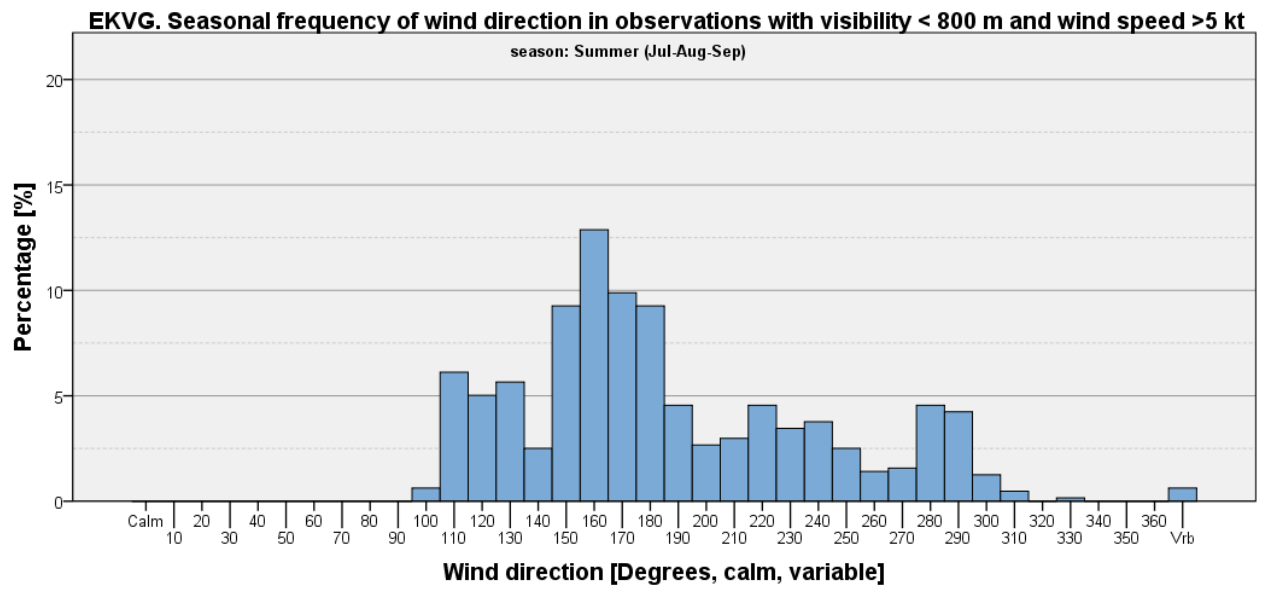


Figure 19

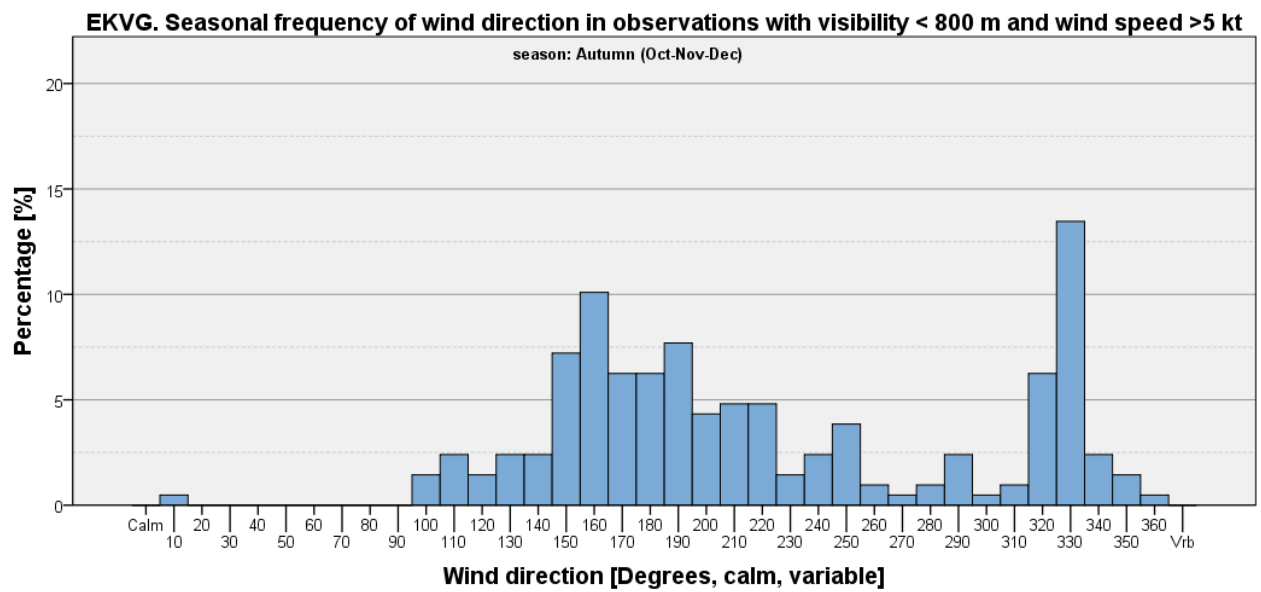


Figure 20

## Ceiling Criteria on Wind Direction Histograms

Ceiling < 1000 feet

**Table 11: EKVG - 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
<b>Ceiling &lt;1,000 feet</b>	15.99	20.69	32.74	18.05	<b>22.04</b>
<b>All other observations</b>	84.01	79.31	67.26	81.95	<b>77.96</b>
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

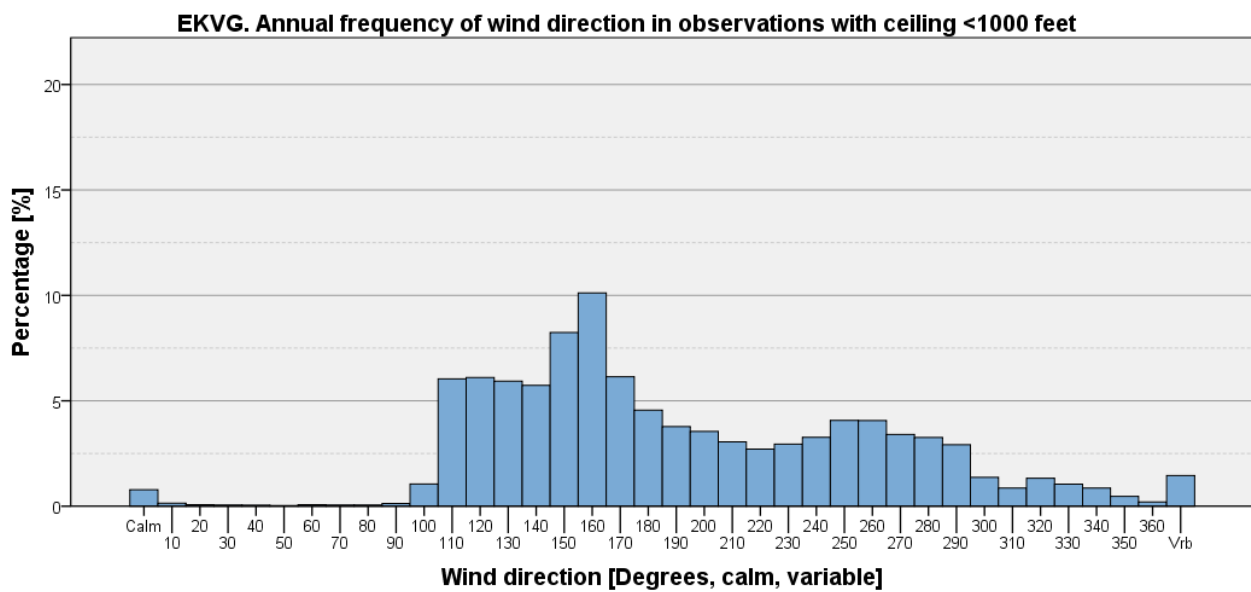


Figure 21

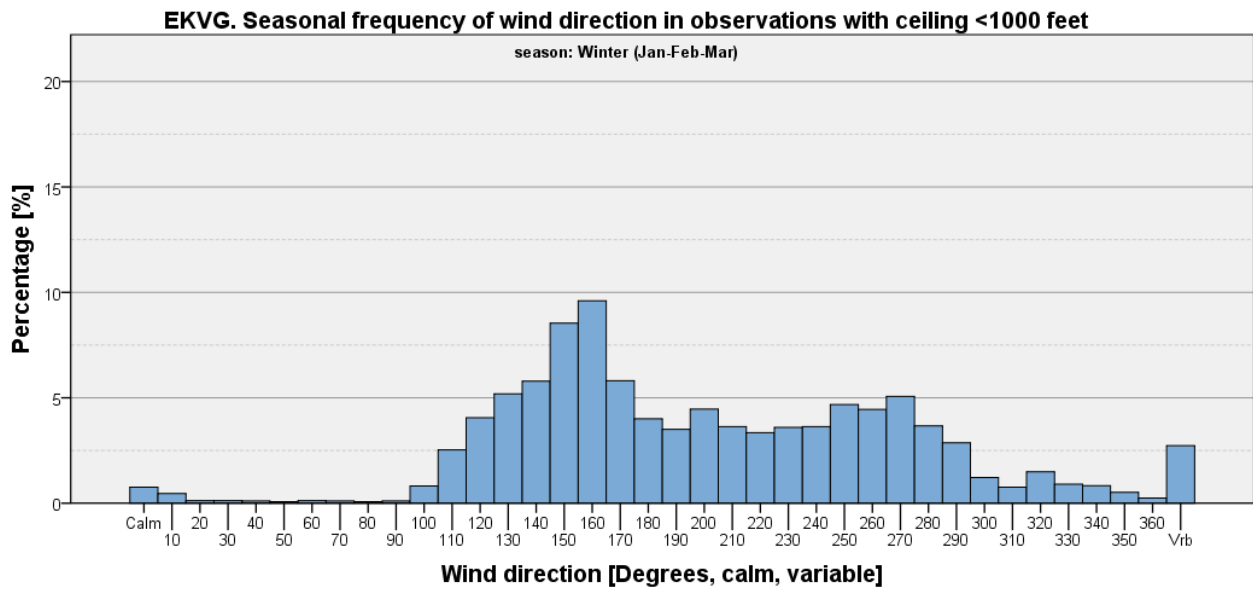


Figure 22

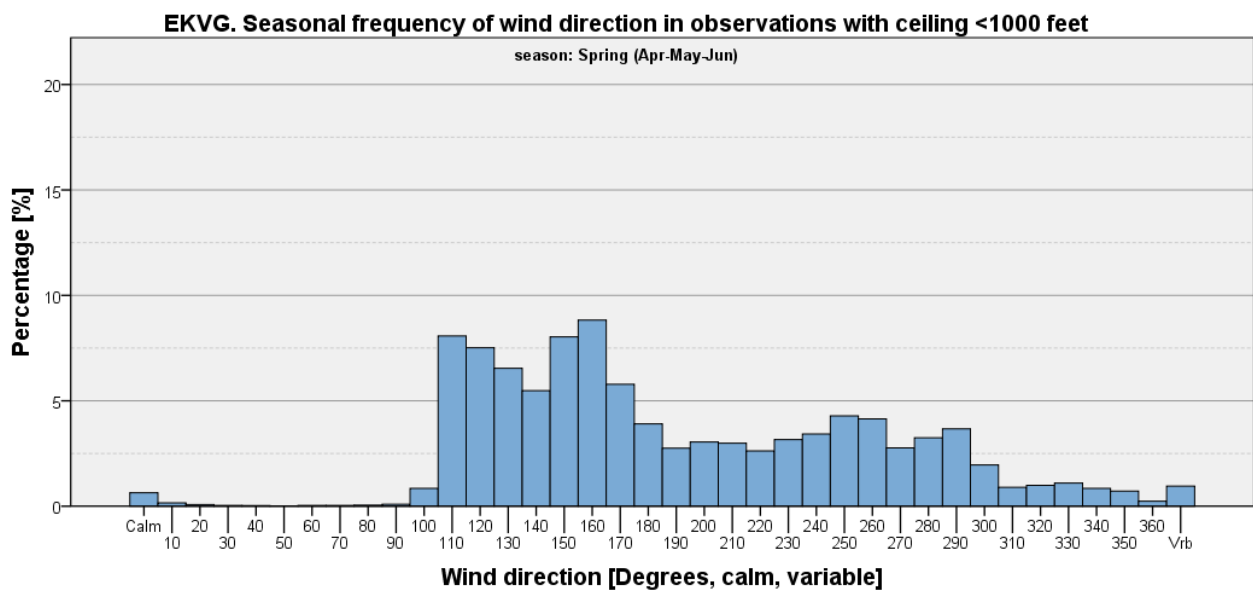


Figure 23

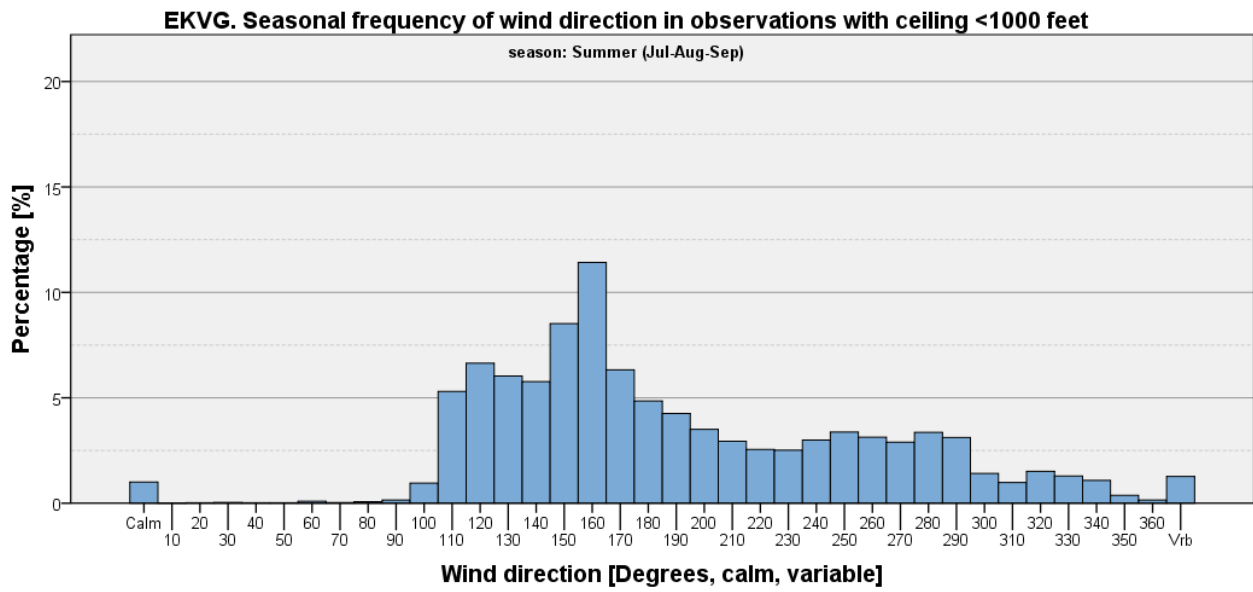


Figure 24

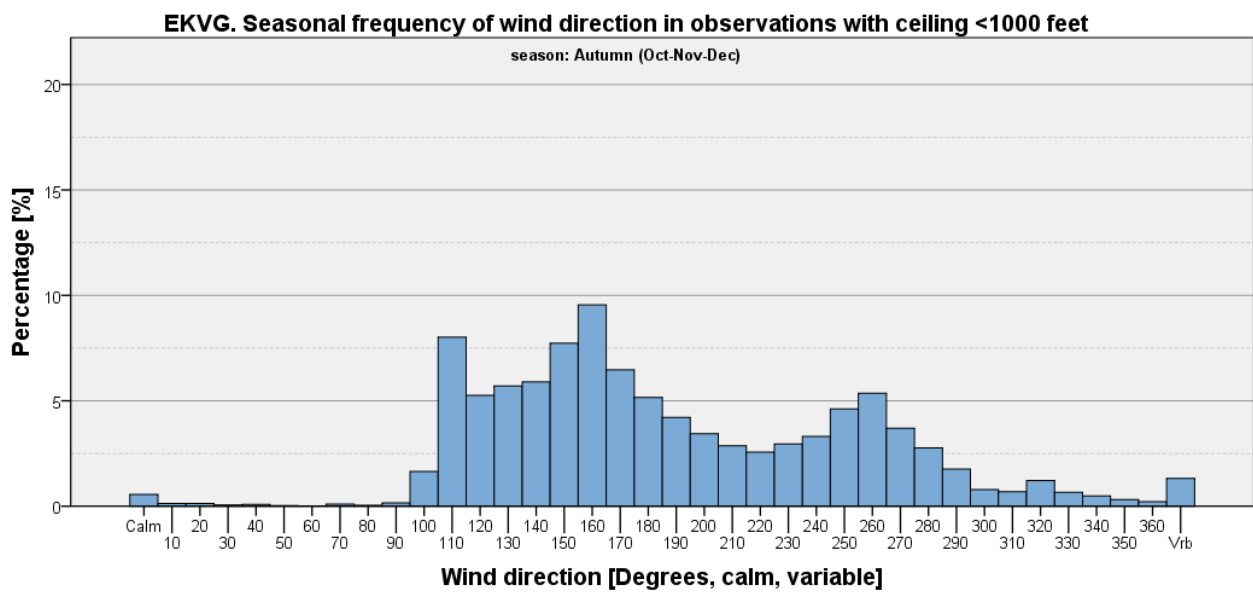


Figure 25

Ceiling < 1000 feet and Wind Speed <= 5kts

**Table 12: EKVG - 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
<b>Ceiling &lt;1,000 feet and wind speed &lt;= 5 kts</b>	2.02	3.01	5.71	1.60	<b>3.11</b>
<b>All other observations</b>	97.98	96.99	94.29	98.40	<b>96.89</b>
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

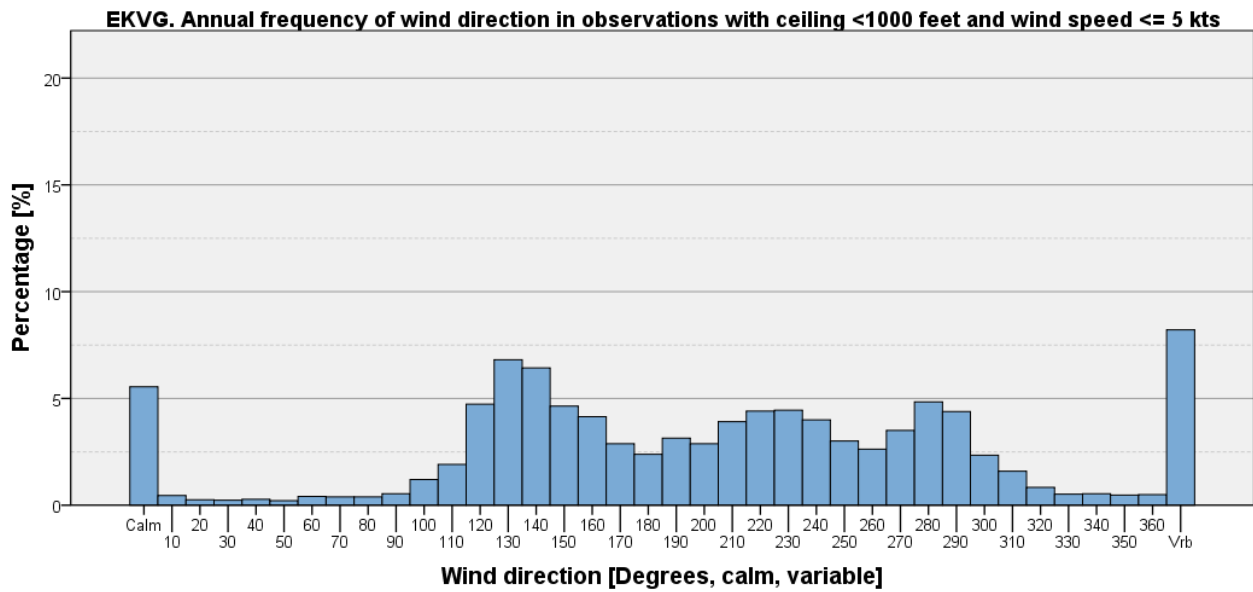


Figure 26

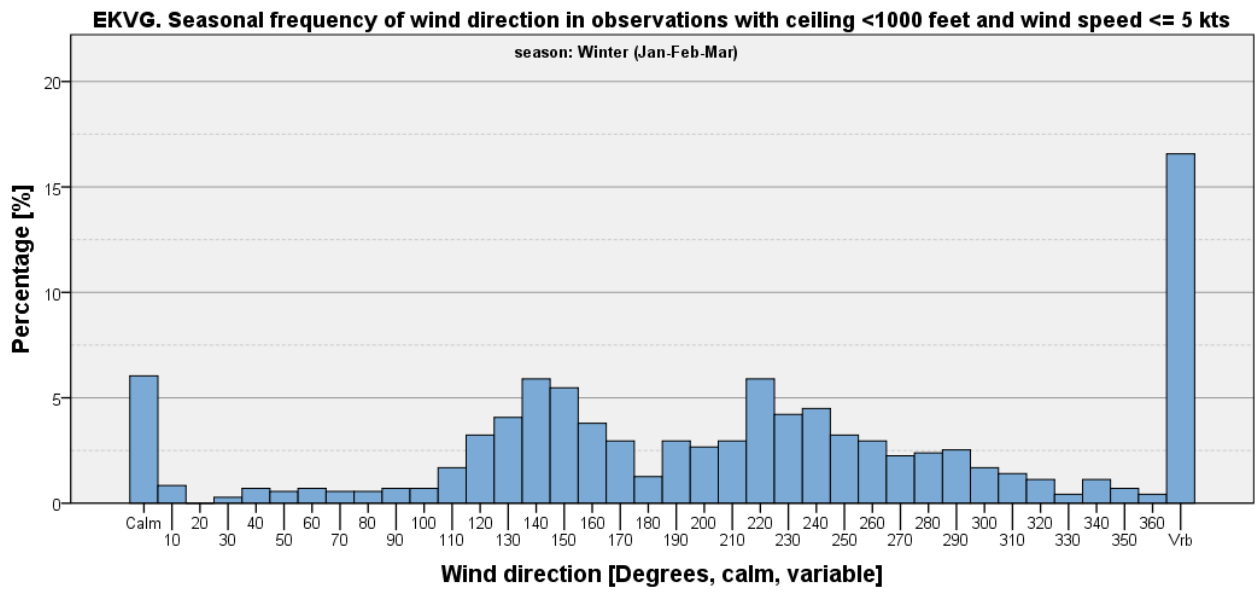


Figure 27

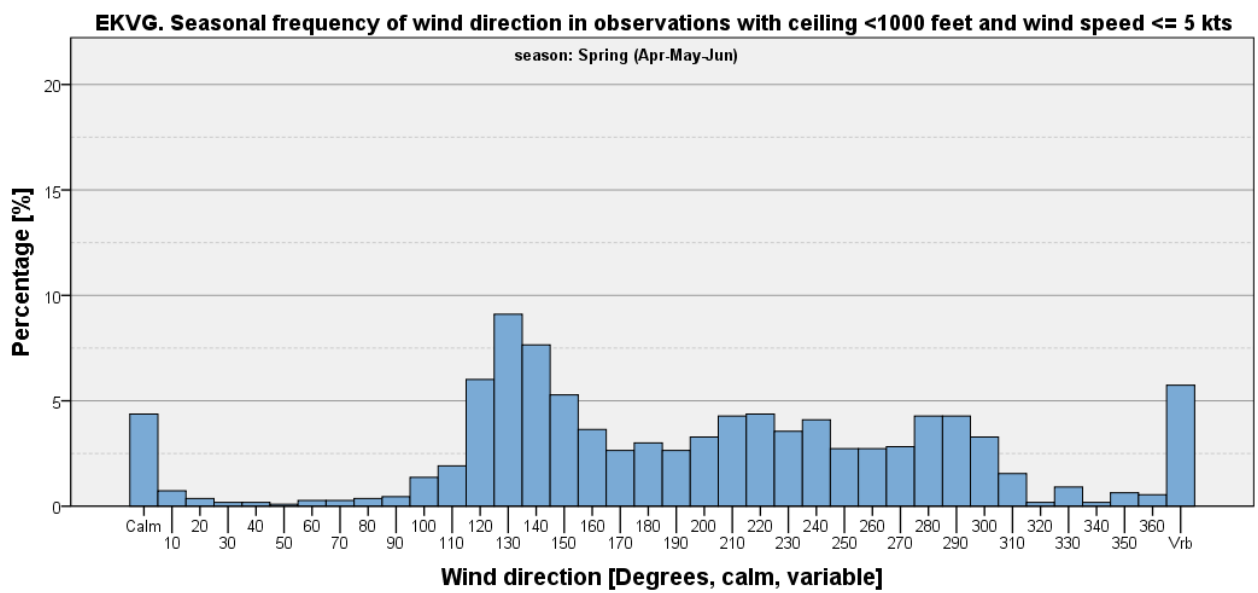


Figure 28

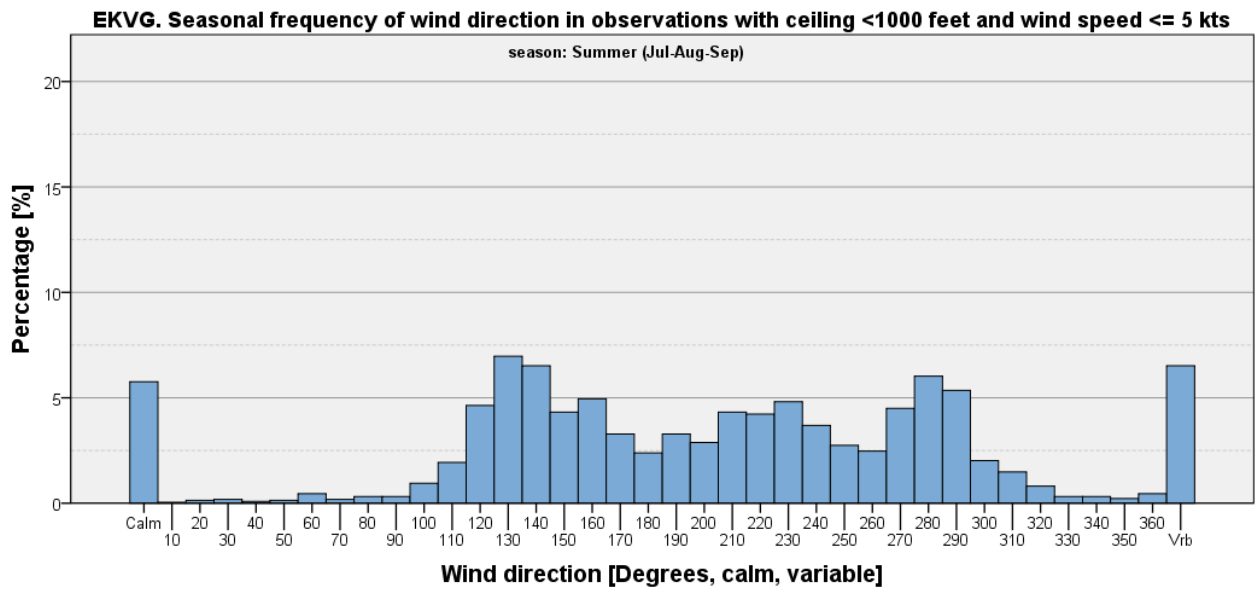


Figure 29

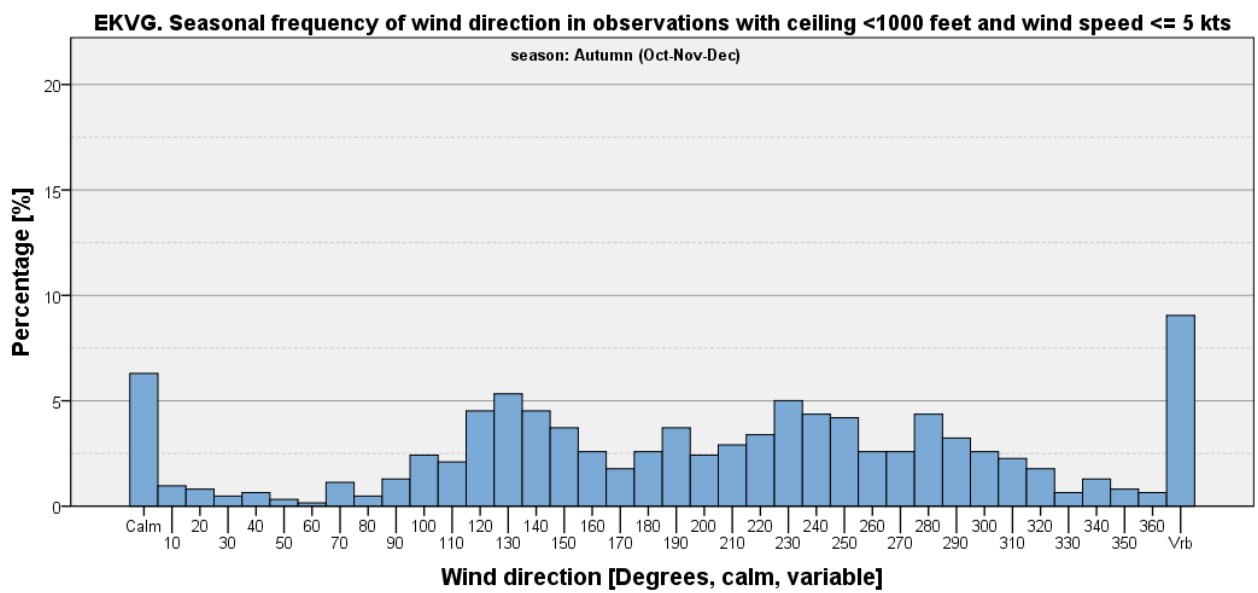


Figure 30

Ceiling < 1000 feet and Wind Speed > 5kts

**Table 13: EKVG - 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
<b>Ceiling &lt;1,000 feet and wind speed &gt; 5 kts</b>	13.98	17.68	27.04	16.45	<b>18.93</b>
<b>All other observations</b>	86.02	82.32	72.96	83.55	<b>81.07</b>
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

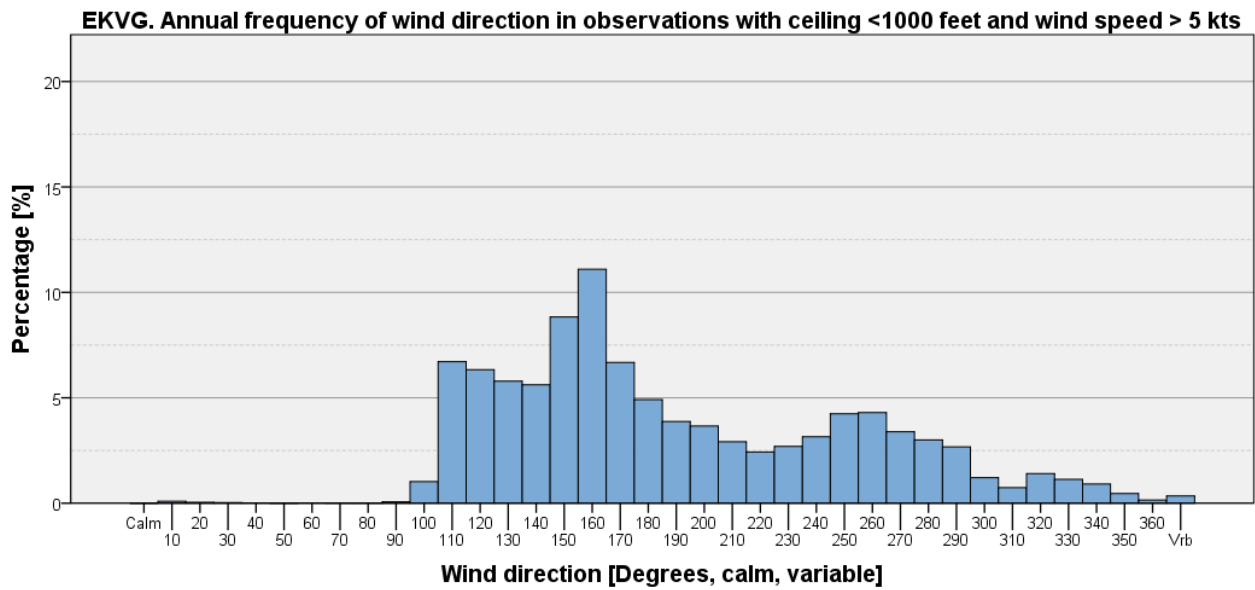


Figure 31



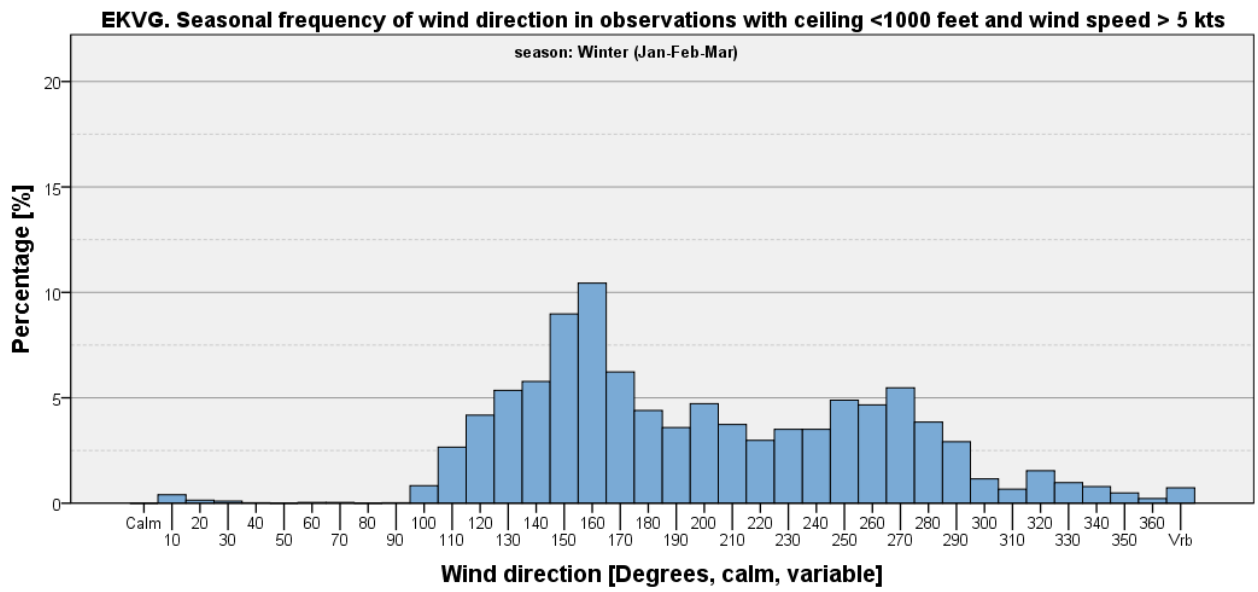


Figure 32

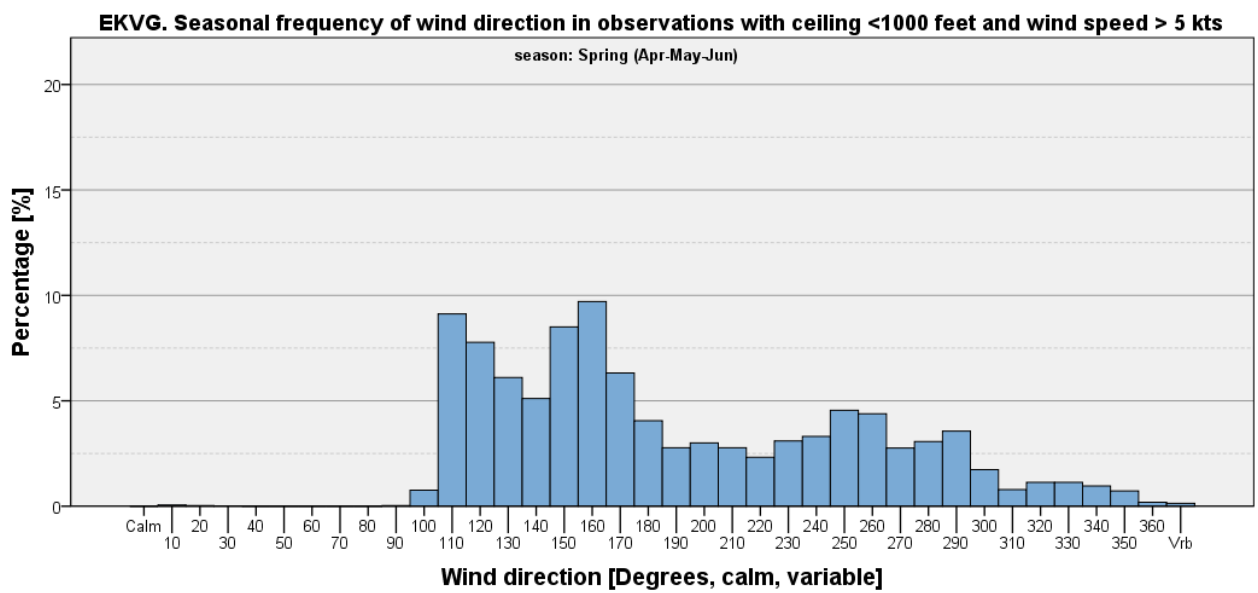


Figure 33

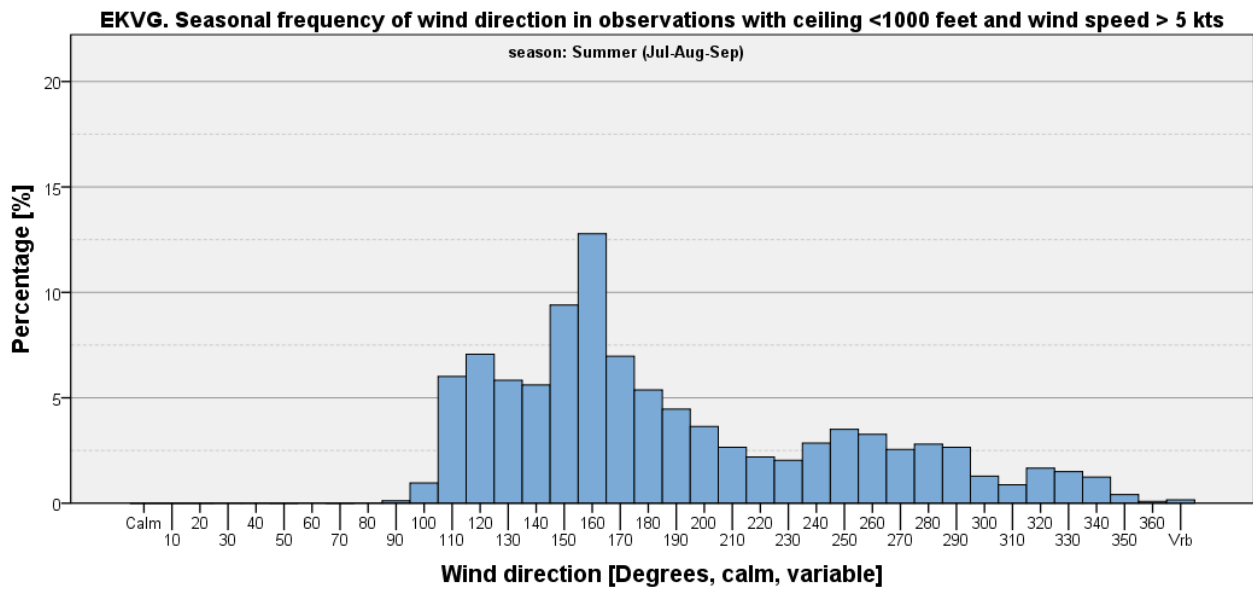


Figure 34

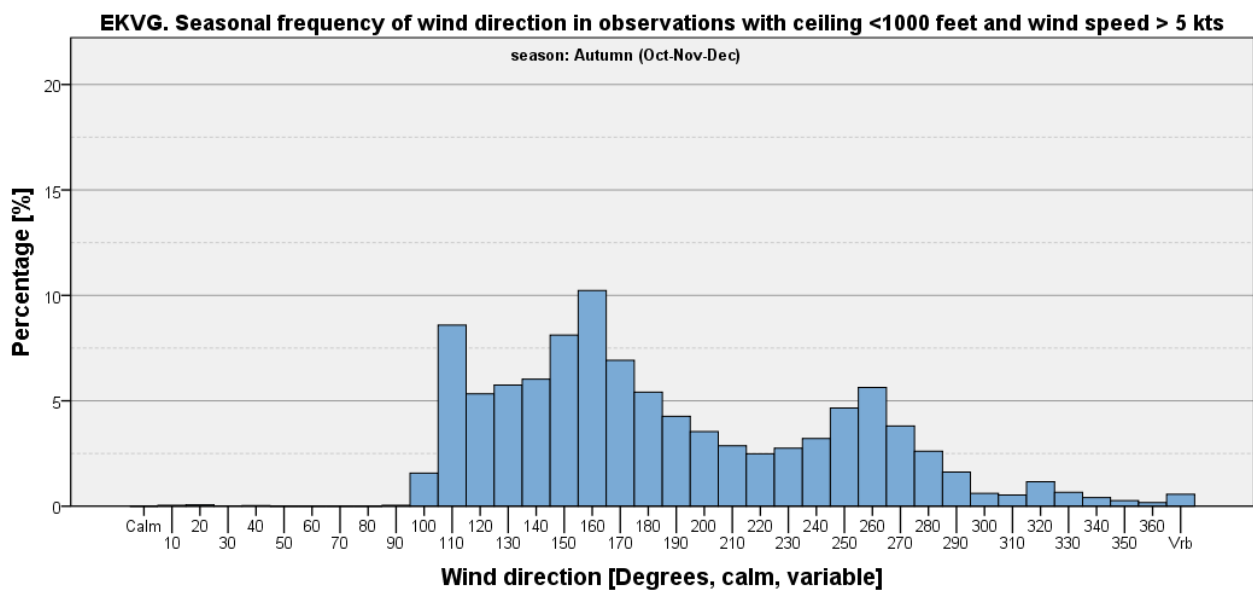


Figure 35

Ceiling < 500 feet

**Table 14: EKVG - 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
<b>Ceiling &lt;500 feet</b>	7.20	10.47	17.24	7.56	<b>10.71</b>
<b>All other observations</b>	92.80	89.53	82.76	92.44	<b>89.29</b>
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

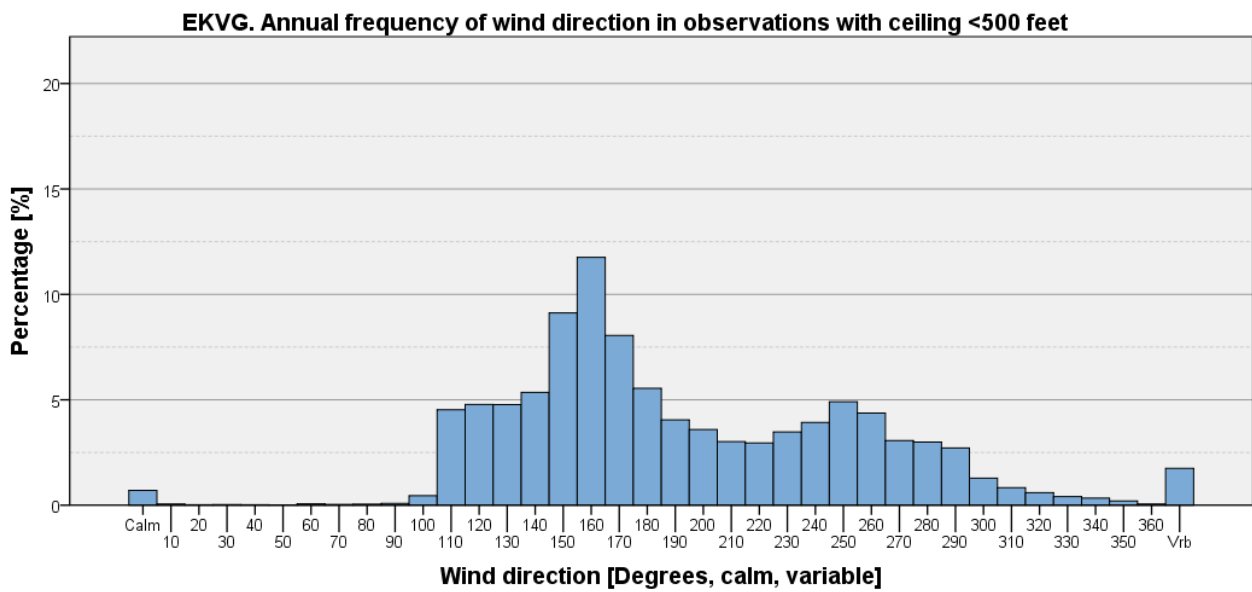


Figure 36

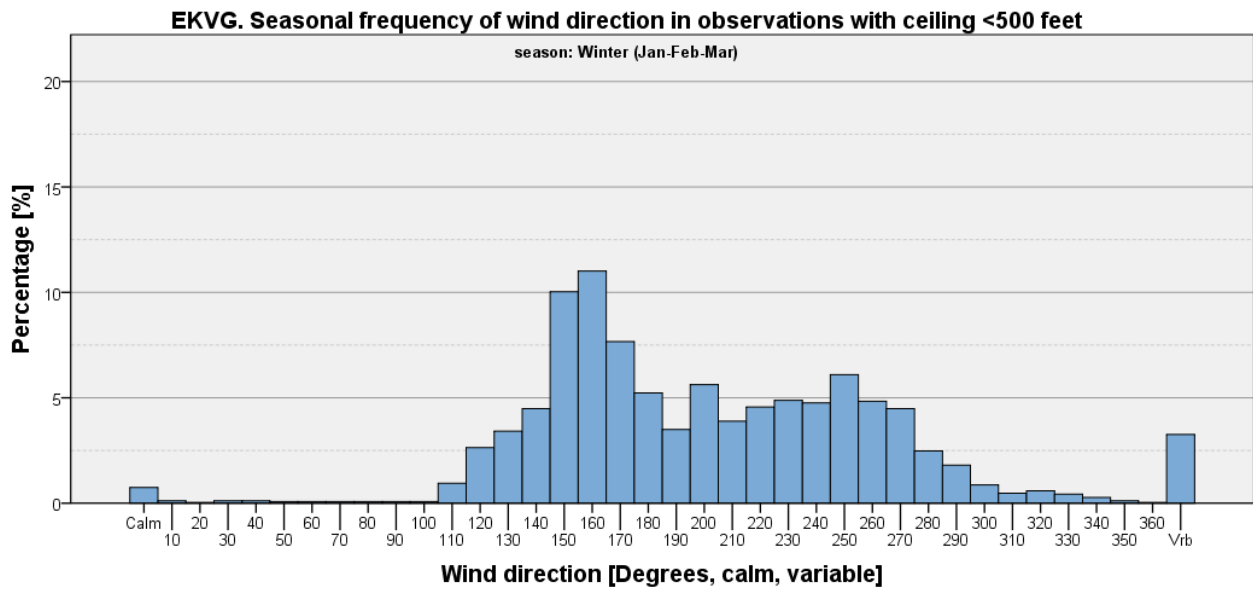


Figure 37

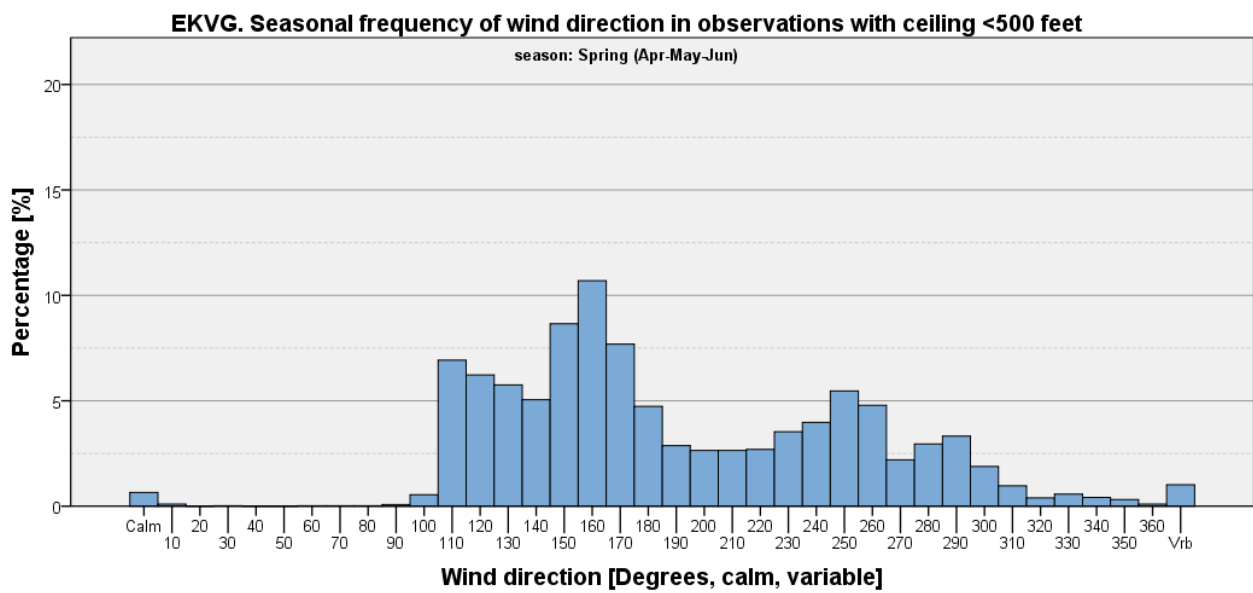


Figure 38

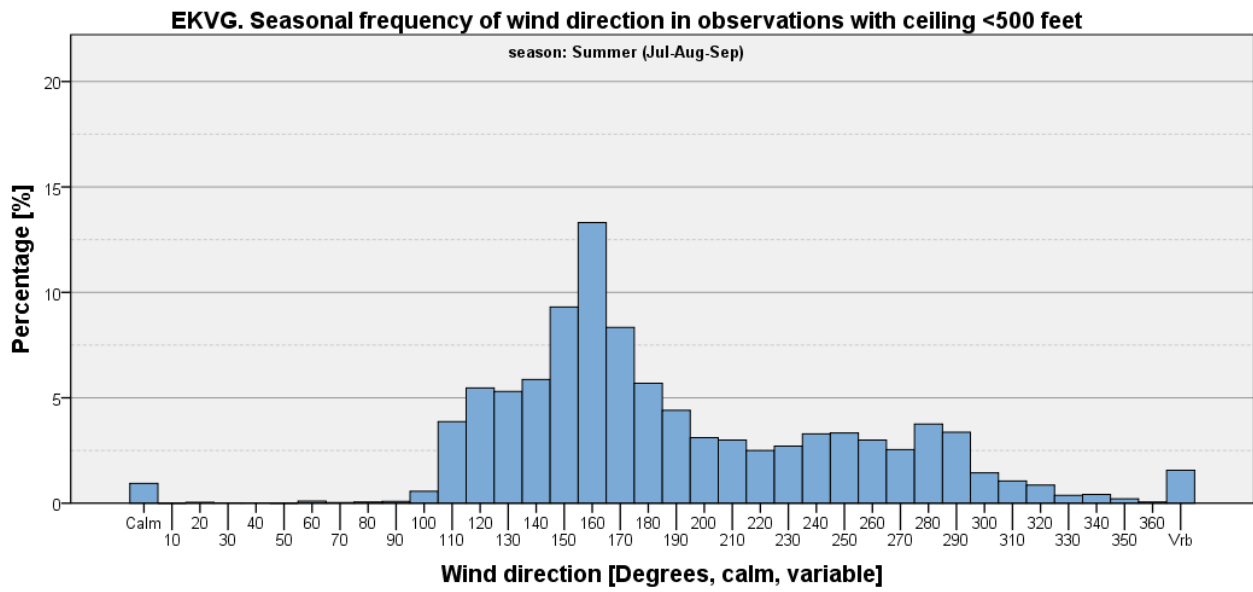


Figure 39

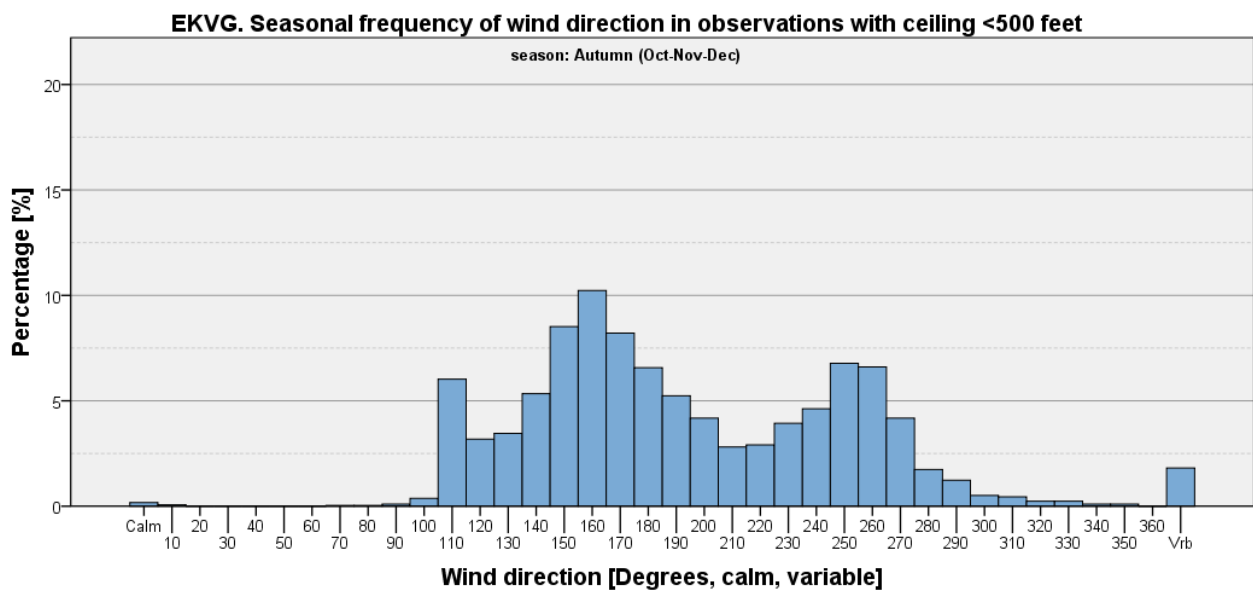
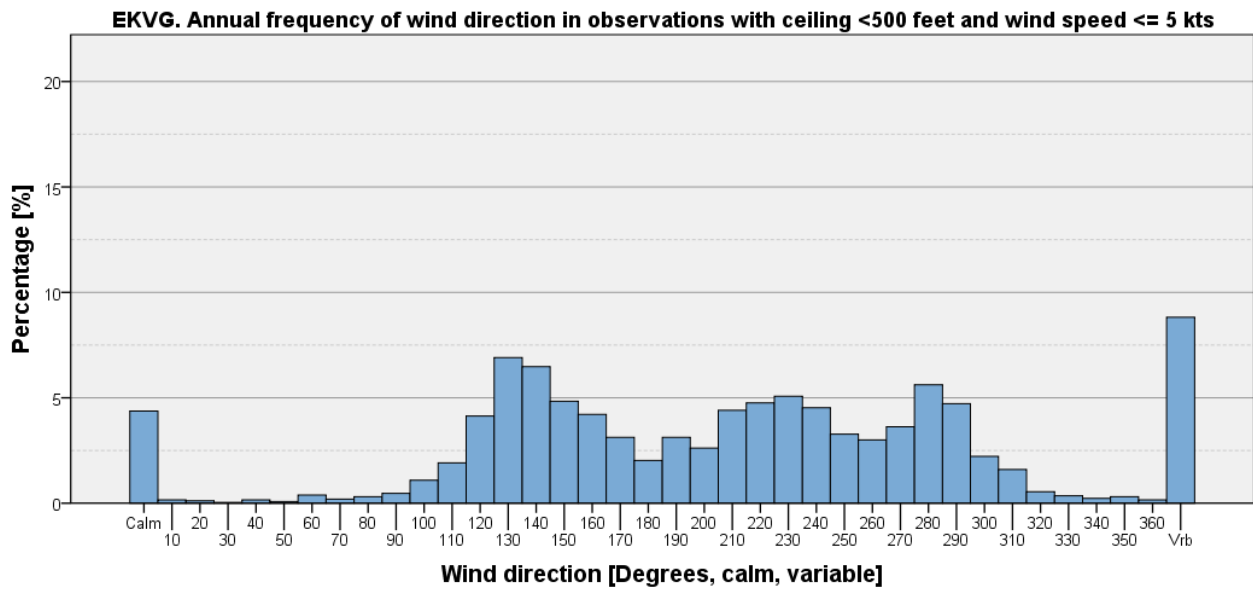


Figure 40

Ceiling < 500 feet and Wind Speed <= 5 kts

**Table 15: EKVG - 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
<b>Ceiling &lt;500 feet and wind speed &lt;= 5 kts</b>	1.07	1.62	3.40	0.69	<b>1.72</b>
<b>All other Observations</b>	98.93	98.38	96.60	99.31	<b>98.28</b>
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>



**Figure 41**

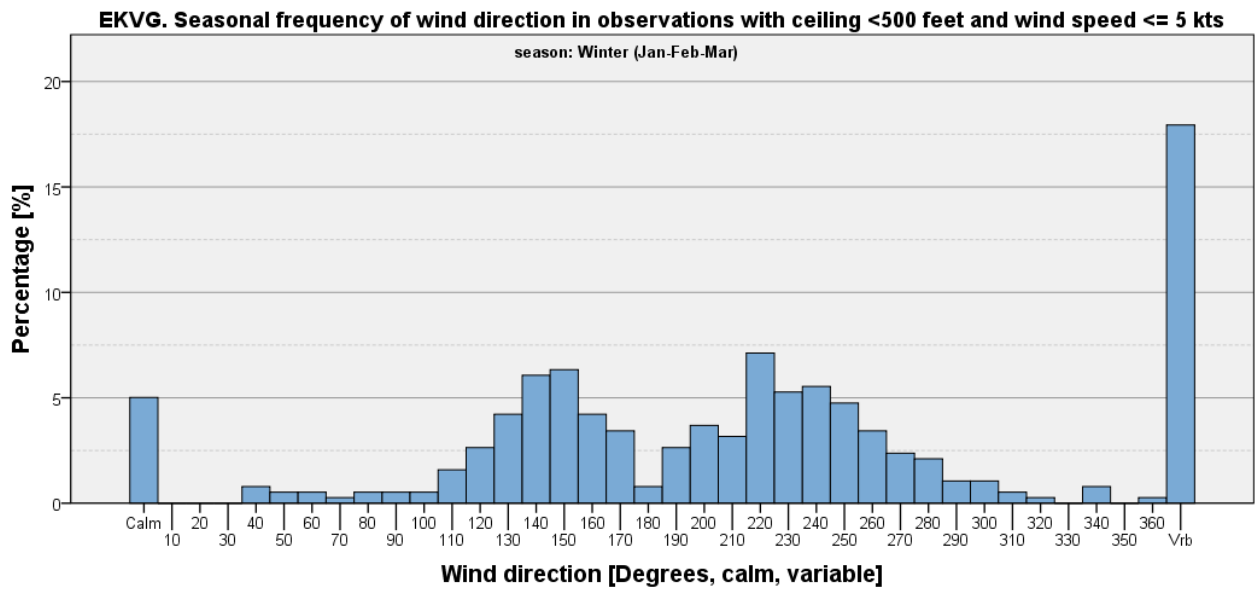


Figure 42

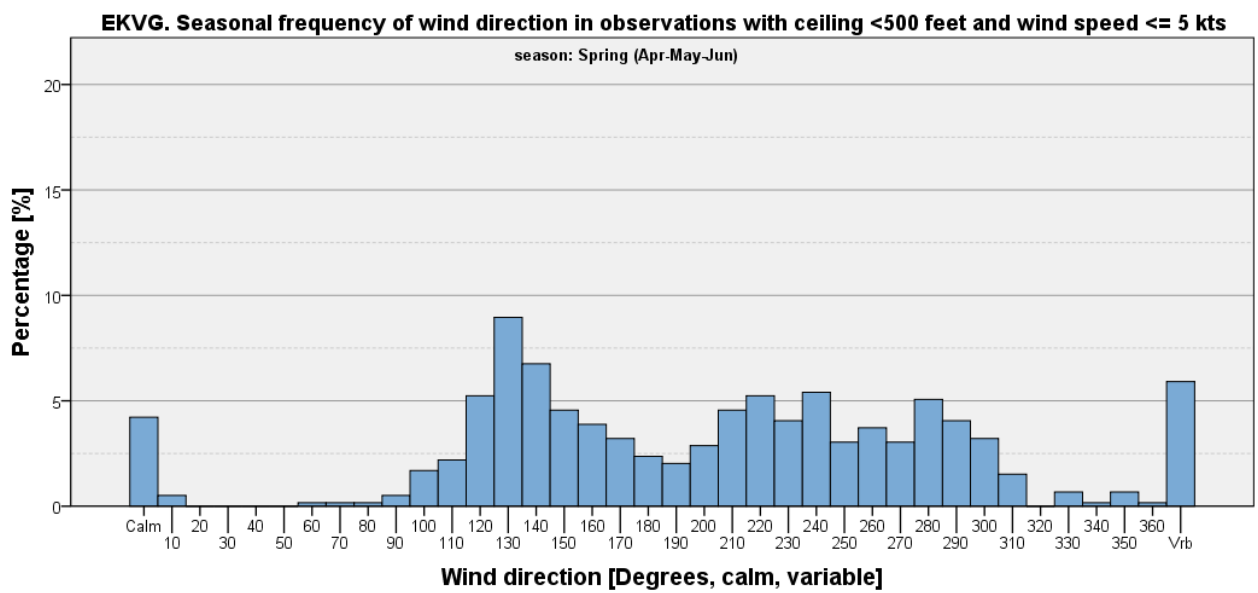


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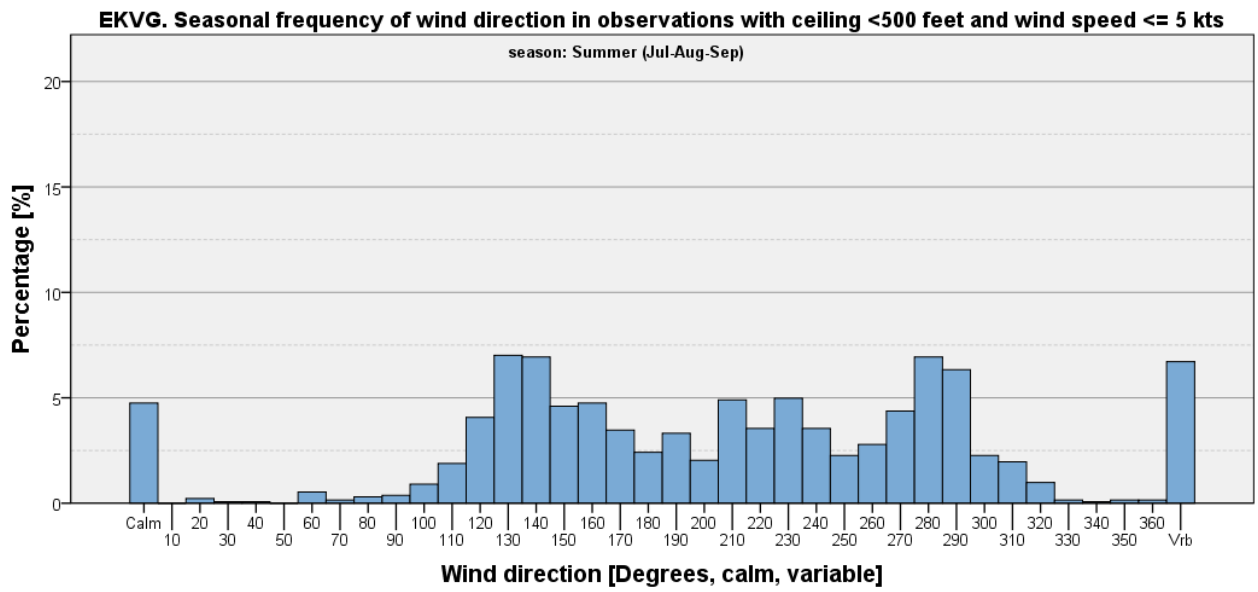


Figure 44

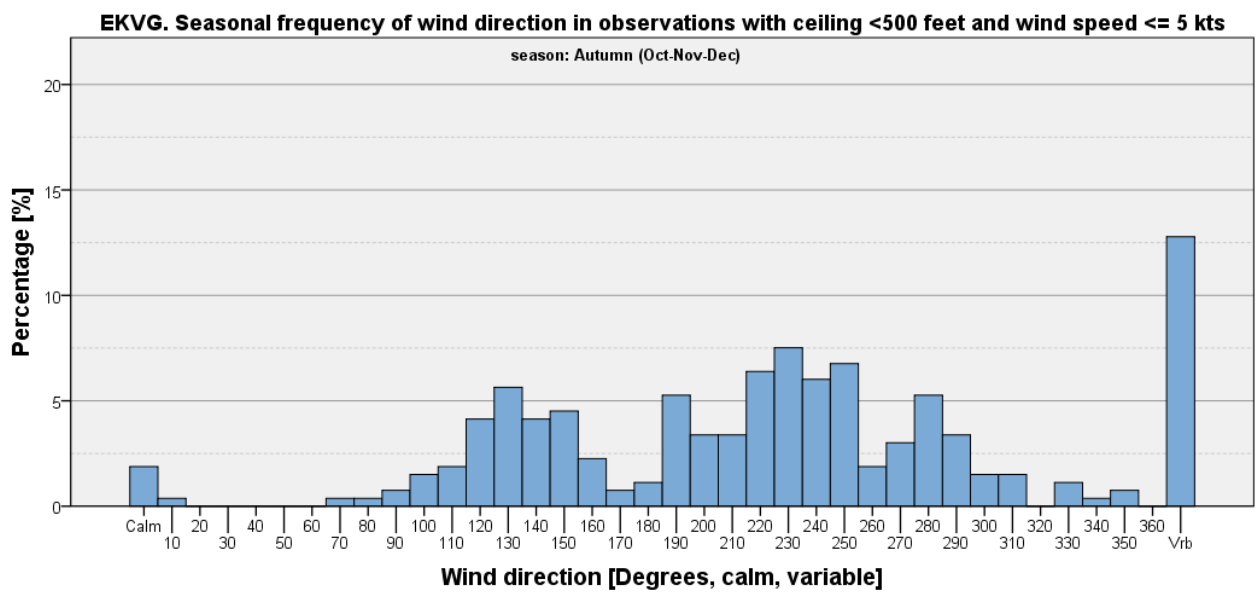


Figure 45



Ceiling < 500 feet and Wind Speed > 5 kts

**Table 16: EKVG - 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
<b>Ceiling &lt;500 feet and wind speed &gt; 5 kts</b>	6.13	8.85	13.84	6.87	<b>9.00</b>
<b>All other observations</b>	93.87	91.15	86.16	93.13	<b>91.00</b>
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

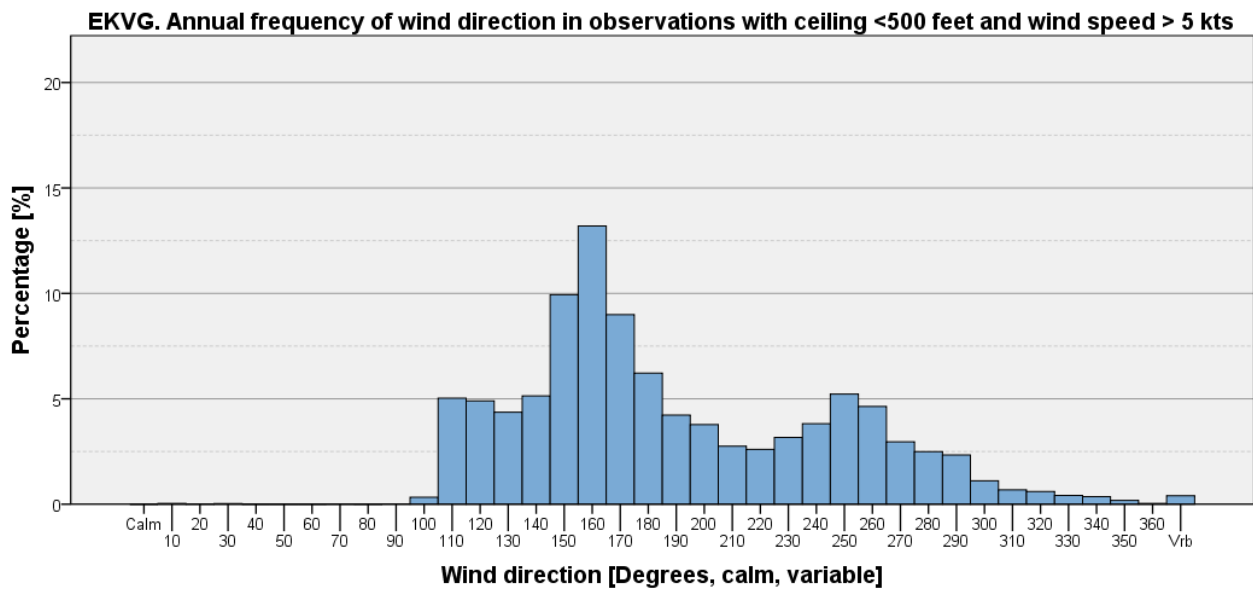


Figure 46

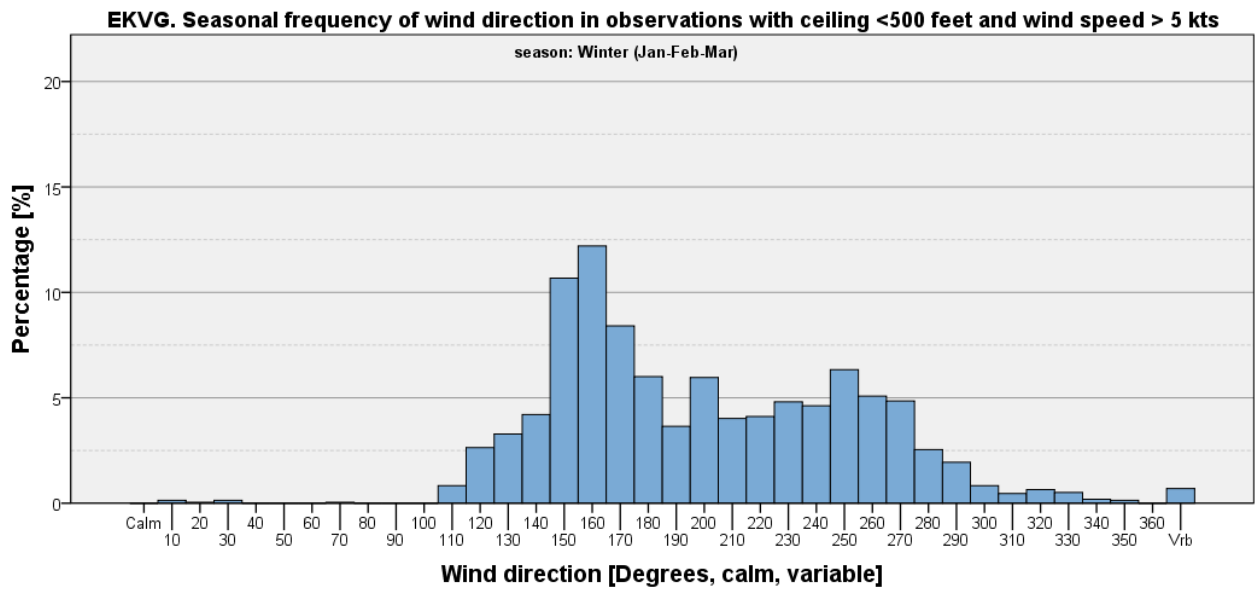


Figure 47

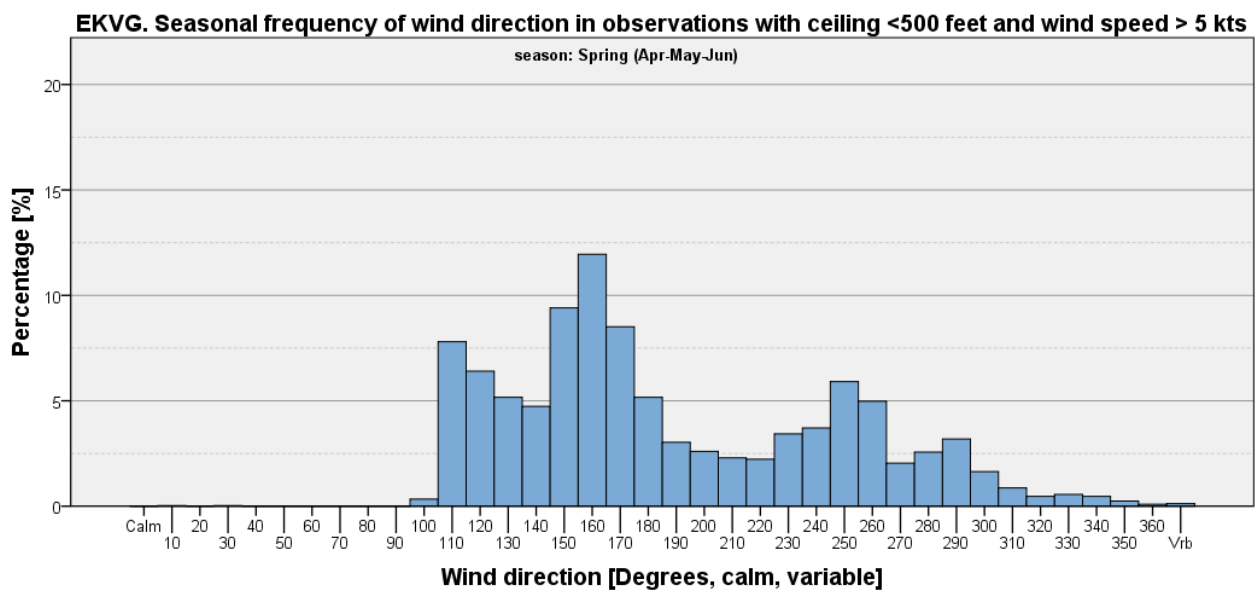


Figure 48

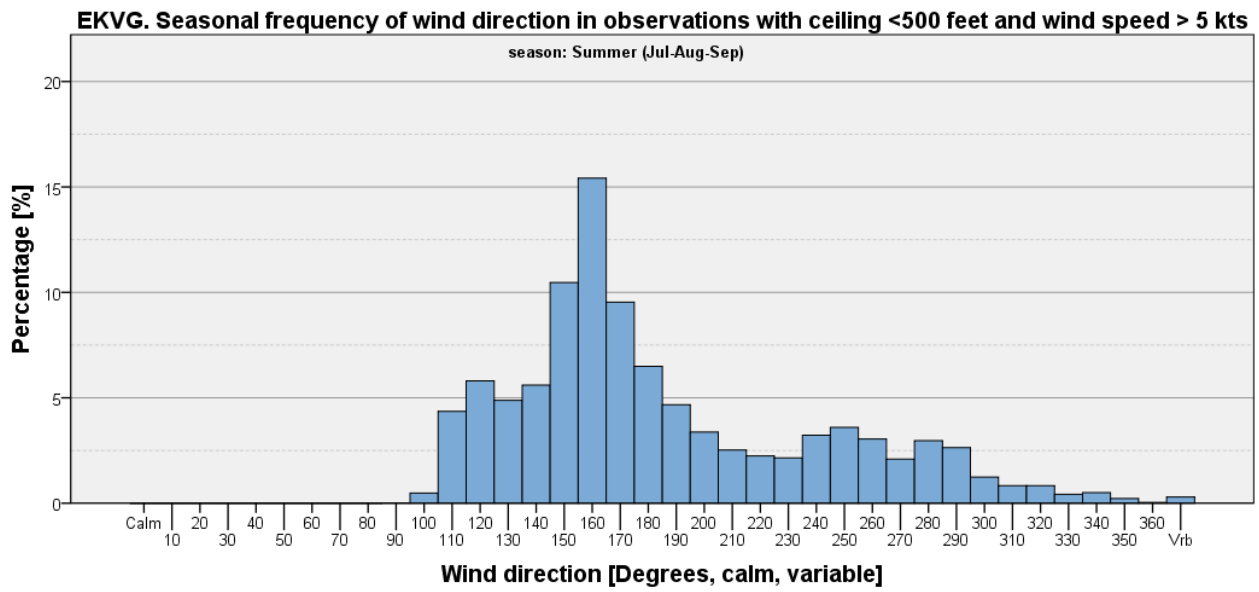


Figure 49

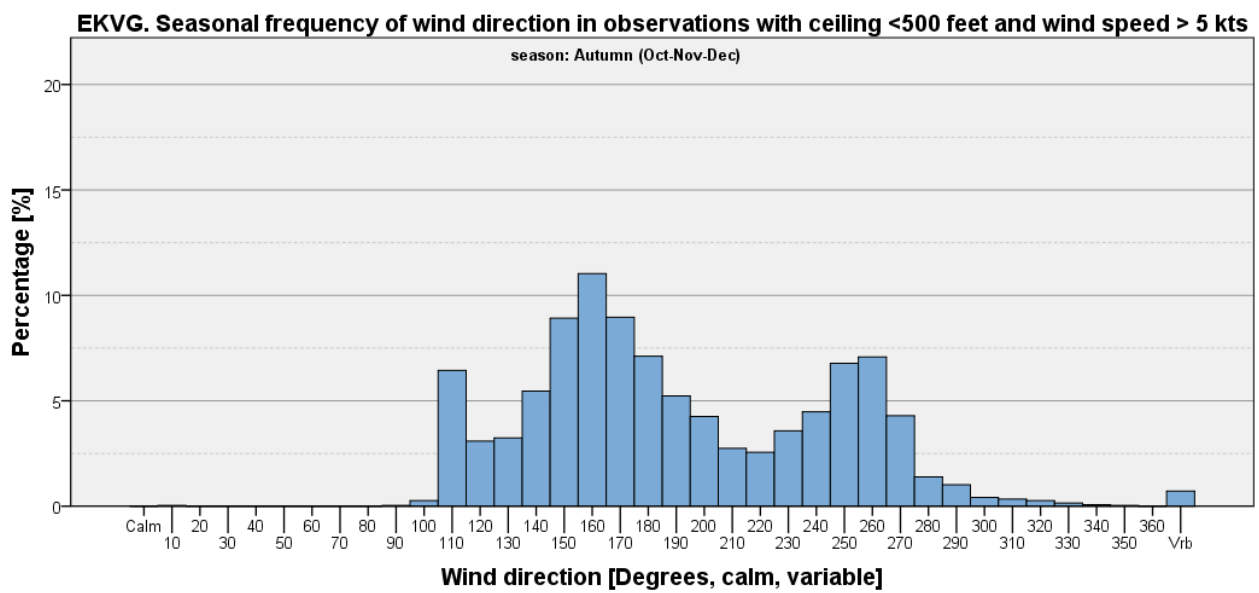
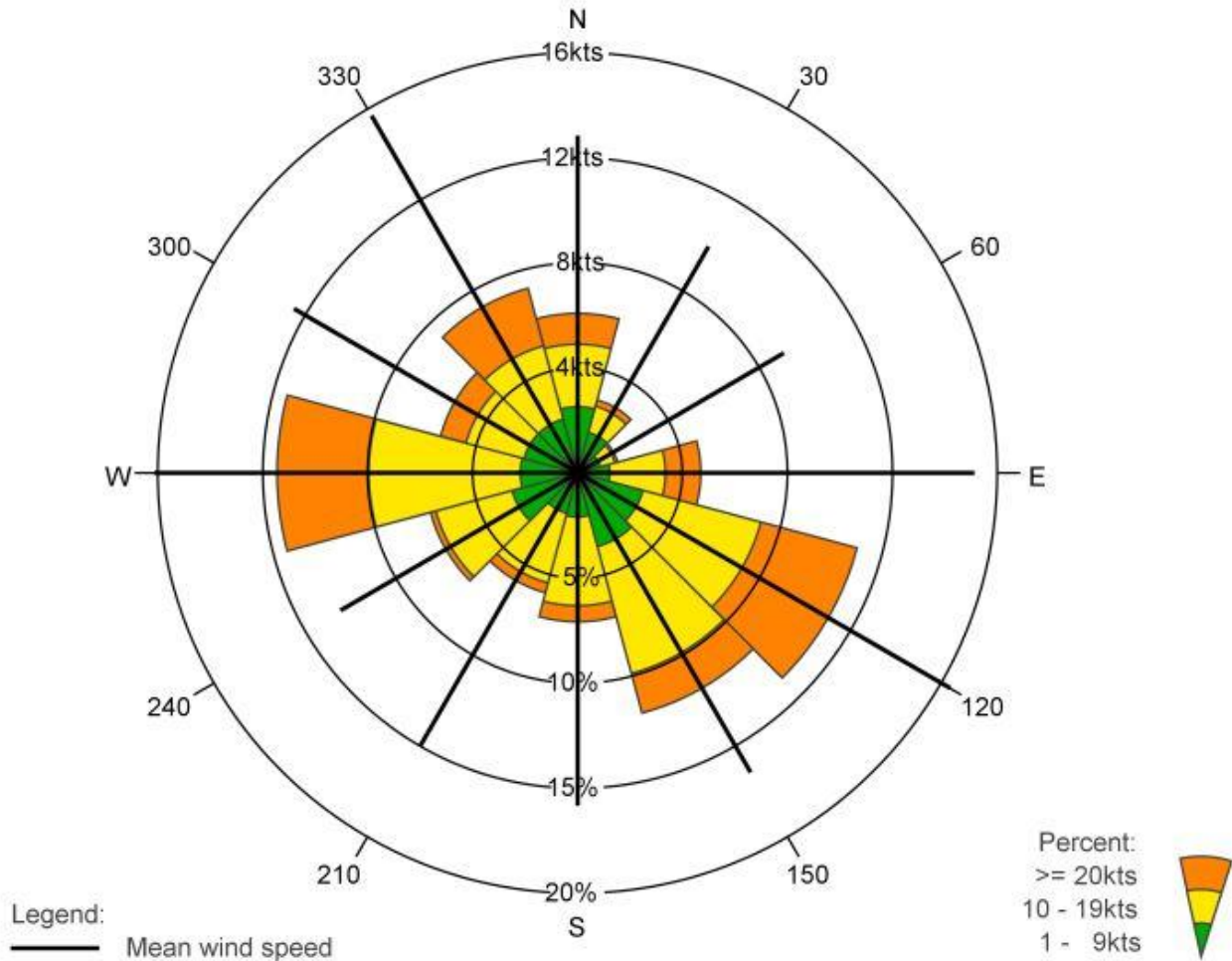


Figure 50

## Wind Roses

### EKVG: VÁGA FLOGHAVN, 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
%	7.6	3.6	2.0	5.9	13.8	11.8	7.1	5.9	7.3	14.3	6.8	9.1	95.1
% 1 - 9kts	3.1	2.0	1.1	1.5	3.2	3.6	2.1	2.0	3.2	2.7	2.6	2.6	30.0
% 10 - 19kts	3.0	1.3	0.7	2.6	5.8	6.2	4.2	3.4	3.8	7.2	2.8	3.6	44.8
% >= 20kts	1.5	0.3	0.1	1.7	4.7	2.0	0.8	0.5	0.3	4.4	1.3	2.8	20.3
Mean wind speed	12.9	9.9	9.1	15.1	16.3	13.2	12.7	12.0	10.5	16.2	12.5	15.7	13.8
Max wind speed	47.0	40.0	32.0	48.0	47.0	39.0	45.0	45.0	45.0	53.0	50.0	55.0	55.0

Number of observations = 73930

Source: DMI

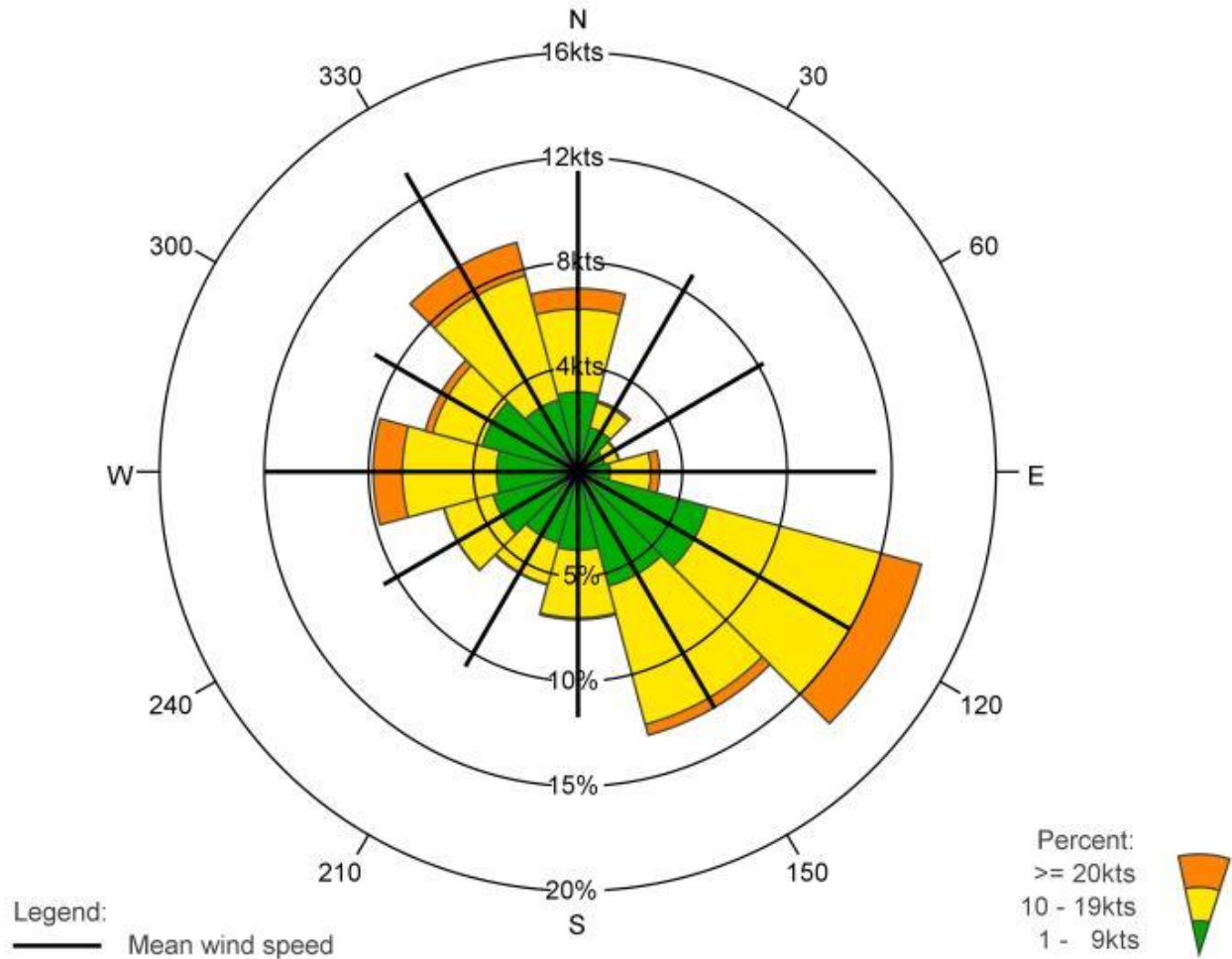
Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 3622=4.9%

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

## EKVG: VÁGA FLOGHAVN, 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
%	8.7	3.5	2.1	3.9	17.0	13.0	7.1	5.6	6.7	9.8	7.6	11.3	96.2
% 1 - 9kts	3.8	2.2	1.3	1.5	6.4	5.6	3.7	3.5	4.2	3.9	4.7	3.6	44.5
% 10 - 19kts	4.0	1.2	0.7	1.9	8.6	6.8	3.2	2.0	2.4	4.5	2.5	6.1	44.0
% >= 20kts	1.0	0.1	0.1	0.4	2.0	0.5	0.1	0.1	0.0	1.4	0.4	1.6	7.7
Mean wind speed	11.5	8.7	8.2	11.4	12.0	10.4	9.4	8.6	8.6	12.0	9.0	13.1	10.8
Max wind speed	41.0	34.0	36.0	34.0	40.0	36.0	29.0	33.0	25.0	42.0	34.0	42.0	42.0

Number of observations = 75470

Source: DMI

Calm defined as wind speed = 0kts

Number of observations with calm/varying wind direction: 2839=3.8%

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

## Availability

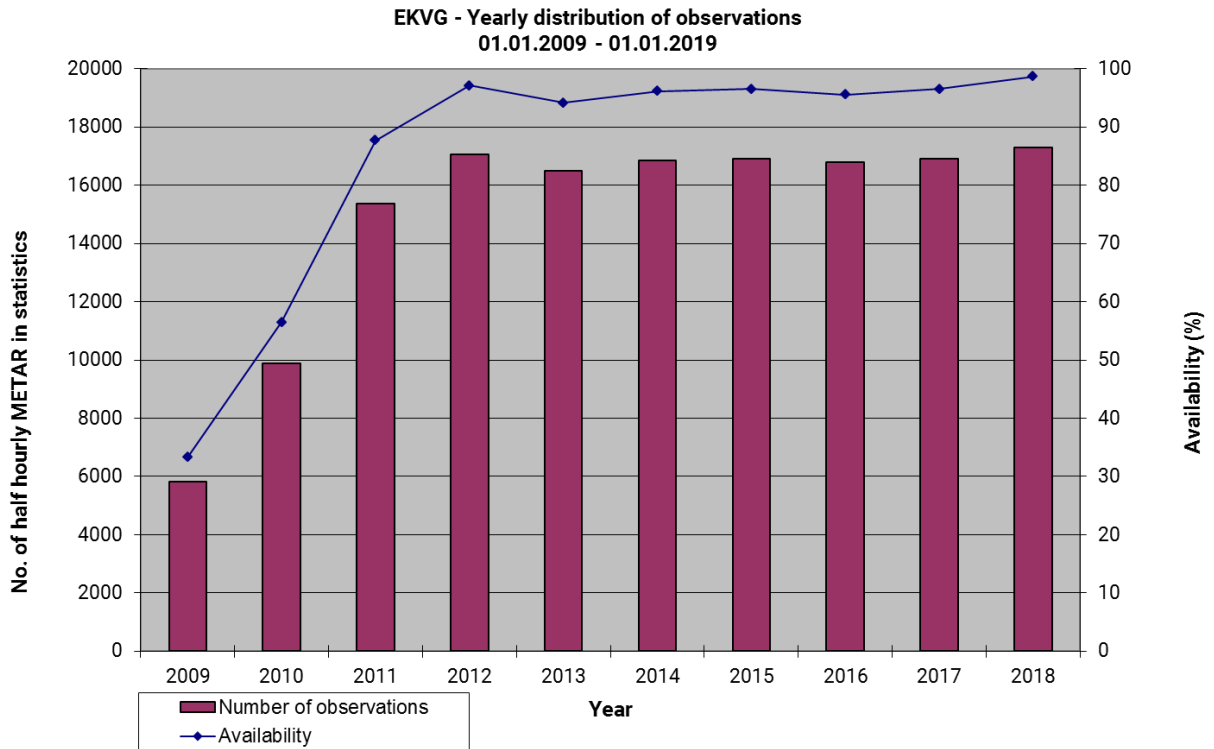


Figure 51

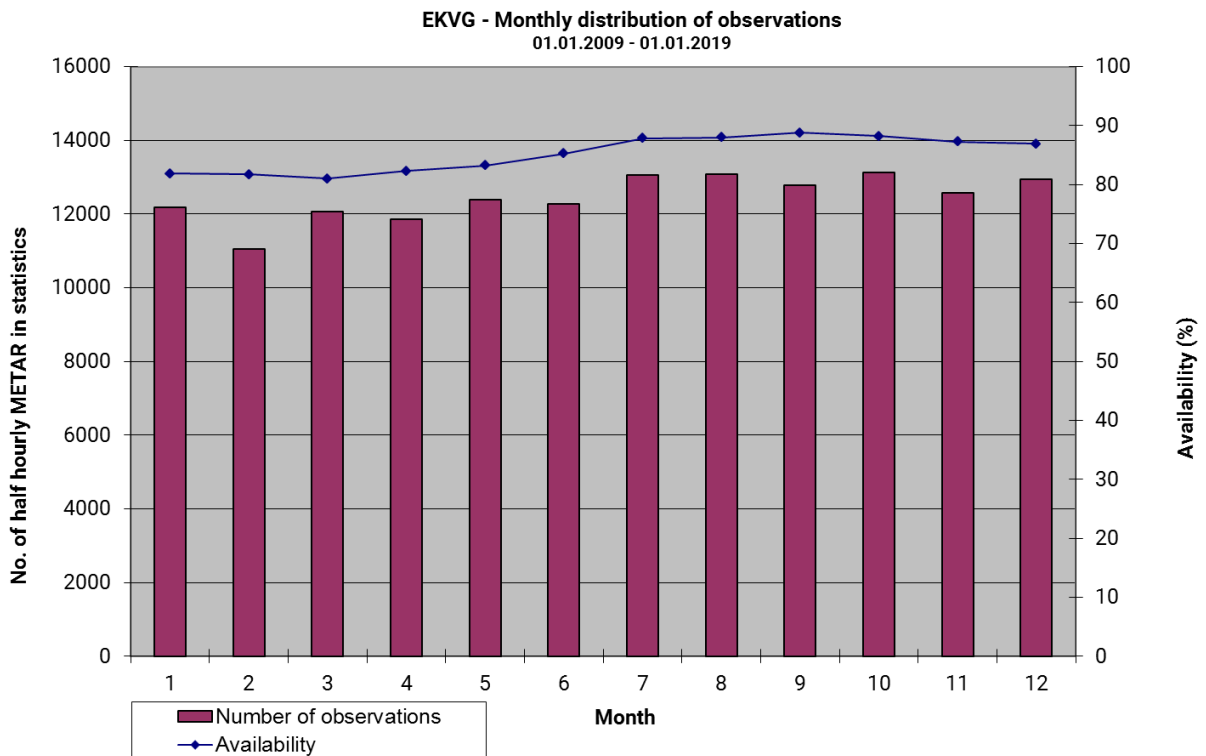
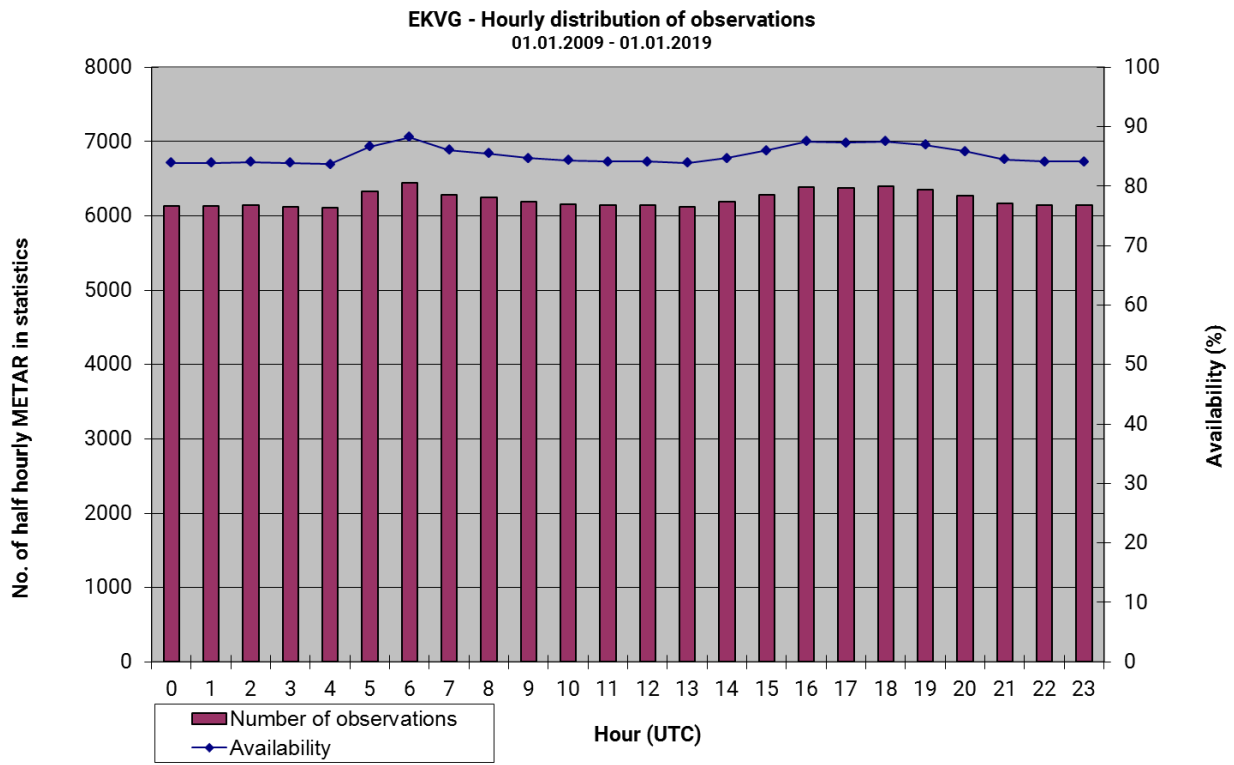


Figure 52



**Figure 53**

**Table 17: EKVG. 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	1.1	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
1	0.0	1.1	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0
2	0.0	1.1	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0
3	0.0	1.1	1.9	2.0	2.0	1.9	2.0	1.9	2.0	2.0
4	0.0	1.1	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0
5	0.5	1.2	1.8	1.9	2.0	1.9	2.0	2.0	2.0	2.0
6	0.9	1.1	1.9	2.0	2.0	1.9	2.0	1.9	2.0	2.0
7	1.0	1.1	1.7	2.0	1.8	1.9	1.9	1.9	2.0	2.0
8	1.1	1.1	1.7	1.9	1.8	1.9	1.9	1.8	1.9	2.0
9	1.1	1.2	1.7	1.9	1.7	1.9	1.9	1.8	1.9	2.0
10	1.1	1.1	1.7	1.9	1.7	1.9	1.9	1.8	1.9	2.0
11	1.1	1.1	1.6	1.9	1.8	1.8	1.9	1.8	1.8	2.0
12	1.1	1.1	1.7	1.9	1.7	1.8	1.9	1.8	1.8	1.9
13	1.1	1.1	1.6	1.9	1.8	1.8	1.9	1.8	1.9	2.0
14	1.1	1.1	1.6	1.9	1.8	1.9	1.9	1.8	1.9	2.0
15	1.0	1.1	1.7	1.9	1.9	1.9	1.9	1.9	1.9	2.0
16	1.1	1.1	1.7	1.9	1.9	2.0	1.9	1.9	1.9	2.0
17	1.0	1.1	1.7	2.0	1.9	2.0	1.9	1.9	1.9	2.0
18	1.0	1.1	1.7	2.0	1.9	2.0	2.0	1.9	2.0	2.0
19	1.0	1.1	1.7	1.9	1.9	2.0	2.0	2.0	1.9	2.0
20	0.5	1.2	1.7	1.9	2.0	2.0	2.0	2.0	1.9	2.0
21	0.2	1.1	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
22	0.1	1.1	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
23	0.0	1.2	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0



## References

Laursen, Ellen Vaarby (2012): *Weather statistics for Airports, 2003-2012 - Denmark and Faroe Islands*. DMI Technical Report 12-19, Copenhagen: Danish Meteorological Institute.

*Manual on Codes - International Codes - Part A – Alphanumeric Codes*. (2018). WMO-No. 306, Volume I.1. [online] Geneva 2, Switzerland: World Meteorological Organization.

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[https://library.wmo.int/index.php?lvl=notice\\_display&id=13617#.XiW2uP5KhE](https://library.wmo.int/index.php?lvl=notice_display&id=13617#.XiW2uP5KhE) [Accessed 20 Jan. 2020].

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