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Arbeitsbericht

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**204 Aeronautical Climatological
Information Bern LSZB**

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Nummer: 204

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Introduction

This report „Aeronautical Climatological Information Bern LSZB“ may only be used by:

- Civil aviation airlines operating flights to or from Bern airport including their administrative services as well as their crews
- Private pilots and crews operating flights from or to the airport
- Operative and administrative services of the airport
- Aeronautical administration

This report is not intended for any other commercial use than aviation. The above defined users shall receive the right to apply the service solely for own use and for aeronautical purposes. The users shall ensure that no unauthorised use of the services takes place. The “General Terms and Conditions for Standard Range of Services” of MeteoSwiss apply.

The report provides all climatological information required for the long term planning of flight operations in Bern. In part A the reader gets introduced to the geographical setting of the airport, the important meteorological patterns of the region with notes and basic interpretation of the data. Information about the main weather patterns bases on the “Klimaatlas der Schweiz” (MeteoSwiss 1984, 1991, 1995) and the tables of this report. In part B the data is presented mainly in form of tables and graphics, allowing a direct view of the information.

The statistics were established following the ICAO recommendations on aeronautical climatological information (Convention on International Civil Aviation, Annex 3), but is more detailed and enriched with additional information.

The data is based on half-hourly (XX20 and XX50) METAR (Aviation Routine Weather Report) collected on a span of 10 years between

January 1993 and December 2002.

The METAR from 20 to 03 UTC are usually missing due to the regular night break of the observer. This report contains only information about the period from 03 to 20 UTC. Each table or graphic contains the NA (not available) values of missing METAR. Therefore, the amount of NA values between 20 and 03 UTC is quite considerable.

All time information is given in UTC.

An index with the used abbreviations can be found on page 78.

No climatological conclusions in a scientific sense should be drawn of the tables and graphics contained in this report, since the raw METAR data might not satisfy climatological requirements.

We would like to thank the following persons and institutions for their help and contributions:

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Institute of Cartography
ETH Hoenggerberg

A Climatology

1. GEOGRAPHICAL SETTING

1.1. Overview Switzerland

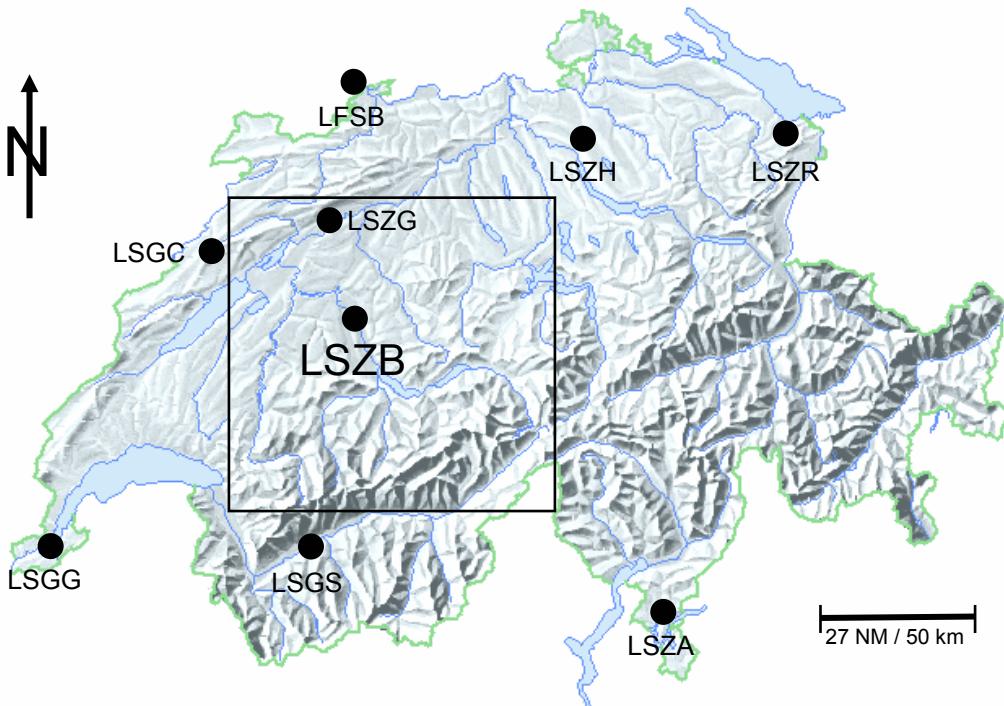


Figure 1: Most important airports of Switzerland

1.2. Overview Region Bern

Bern airport (official elevation 1673 ft / 510 m) is located 5 NM / 9 km south-east of Bern City. (See also figures 1 and 2) It is situated in the Swiss Plateau, a large basin with low hills between the Alps and the Jura. In direction north-east to south-west of the airport the alpine foothills and behind them the Alps rise. The airport is situated in the valley of the river Aare which flows from Thun towards Bern, so the wind gets canalised in two preferred directions: South-east and north-west.



Important Mountains in the Region:

Finsteraarhorn	14022 ft / 4274 m
Jungfrau	13642 ft / 4158 m
Stockhorn	7185 ft / 2190 m
Pilatus	6909 ft / 2106 m
Napf	4613ft / 1406 m
Bantiger	3107 ft / 947 m
Belpberg	2927 ft / 892 m
Gurten	2815 ft / 858 m

Figure 2: 3 D map of the Bern region
© Atlas of Switzerland – interactive 2000

2. METEOROLOGICAL PATTERNS

2.1. Westerly Flow

2.1.1. Synoptic Overview and Associated Weather

Westerly flow is the dominant one among the four flow or advection patterns described here. This is true in respect of frequency and wind speed. The westerly flow pattern is typically associated with the frequent changes from warm to cold air masses and vice versa, which is connected to the passages of frontal zones. The activity depends on the wind speed, the humidity of the air mass and its stability, as well as the altitude and the structure of the mountain range, the air mass is flowing across. The eastern part of the northern alpine ridge is especially exposed to the changeability of this flow pattern. The south side of the Alps enjoys a certain protection during the whole year, the south-western part of Switzerland and the Valais only in the summer.

2.1.2. Season of Encounter

This pattern may appear at any time of the year, but is more frequent during the winter season than in summer. The reason for this is the more frequent development of heavy depressions in the colder seasons due to an increase of the temperature difference between warm and cold air masses at the Polar Front.

The weather is usually unsettled and windy (even sometimes with gales from October to March), due to the succession of warm and cold fronts with dry intervals in between. In March and April westerly flow brings characteristically unstable weather. In eastern Switzerland westerly winds are more frequent than in western Switzerland because of the flow split of the northerly wind (Alps act as barrier).

2.1.3. Local Weather Phenomena

Front Passes over Cold Air Pool of the Swiss Plateau

In winter, after a period of high pressure, a shallow layer of cold air forms on the Swiss Plateau, frequently topped by a layer of stratus (inversion with low clouds). The westerly flow regime starts then with the arrival of a low pressure system and its first front (usually a warm front), preceded by westerly winds. It first passes over the pool of cold air, entrenched in the Swiss Plateau, and starts to entrain the cold air by turbulent mixing from the top downwards. When the frontal precipitation falls into the old humid and cold air mass, the visibility may drop from 2000 - 3000 m to 1000 m or even below. After the passage of the warm front the visibility increases only slightly. After the following cold front the visibility is usually very good.

Freezing Rain

The rather rare occurrence of freezing rain is associated with two situations: 1) The one just described in the paragraph above: Temperatures below the freezing point in the thin cold air layer near the ground and very high freezing level in the warm air above. 2) Warm fronts: Freezing rain can occur when the temperature difference between the lower cold air and the upper warm air masses is high enough.

In Bern freezing rain was only observed in December and January.

Snow

In situations of a warm front with a low freezing level (2500 – 4000 ft / msl), precipitation frequently starts as snow, passes through the cold air mass below and reaches the ground in this form. With the approaching warm front the freezing level rises and after 2 – 3 hours snow turns into rain.

In Bern snowfall occurs usually from November to April with two maxima in December and February.

Thunderstorm

In summer the near alpine foothills reinforce the thunderstorm activity along a cold front coming in from the west. While the thunderstorms are especially active near the mountain range, they may also affect the area of the airport.

2.1.4. Aviation Hazards

- Low ceiling and poor visibility within the frontal zones with onset of precipitation
- Turbulence and icing conditions in clouds
- Wind shear in frontal zones
- Gusts in passing cold fronts
- Snowfall (when temperatures are low enough)
- Rare cases of freezing rain, depending on the vertical temperature structure
- Post frontal weather conditions are very unsteady with gusts and rapid changes between good and bad conditions
- Possibility of embedded CB's in cold fronts (rarely in warm fronts)
- Alps and Jura obscured by clouds
- Crosswinds behind the cold fronts at Geneva airport (Joran wind)

2.2. Northerly Flow

2.2.1. Synoptic Overview and Associated Weather

The northerly flow pattern combines air mass advection from the north-west and north. Typical for this situation is the marked difference in the type of weather between the western and eastern parts as well as between the northern and southern parts of Switzerland. On the continental and the regional scale the northern and the eastern areas of Europe are influenced by more cloudy and rainy weather (cyclonic character). The western and southern parts benefit from the influence of the following anticyclone, because these parts are further away from the dominating depression. In addition to that, the southern regions are favourably influenced by the leeward down draught (Foehn) from the mountain range. Below 2000 m a flow split into north-east (Bise) in the west and into north-west in the east of the Swiss Plateau is observed.

2.2.2. Season of Encounter

This pattern is more frequent in winter and spring, often occurs after a westerly flow and usually leads to a north-easterly flow regime (Bise). It normally lasts between 5 and 7 days, especially in summer and autumn periods of only 3 days are possible.

2.2.3. Local Weather Phenomena

Barrier Clouds and Precipitation

Due to the barrier effect of the Alps the northerly flow gets blocked over the Swiss Plateau, the pressure increases and the air mass rises over the Alps. A closed cloud layer occurs above the Swiss Plateau with the lowest ceiling close to the Alps, accompanied by precipitation along the northern mountain range and in eastern Switzerland. Visibility is poor in the region of the airport Bern especially south towards the Alps due to the stationary clouds and precipitation and even thunderstorms are possible. With low temperatures precipitation falls as snow and often in large amounts and for several hours.

Northerly Foehn

The Foehn wind is caused by the pressure gradient between the northern (higher due to barrier effect) and southern part of the mountain range. The Alps disappear in clouds. In southern Switzerland severe clear air turbulence occur and the dry leeward down draught (Foehn wind) brings warm weather south of the Alps associated with low-level wind gusts.

2.2.4. Aviation Hazards

- North of the Alps:
 - Poor visibility, low ceiling (400 – 800 ft / grd) and precipitation
 - Icing conditions in clouds
 - Mountains obscured by clouds
 - Heavy snowfall for several hours between November and April
- South of the Alps:
 - Severe turbulence over and south of the mountains
 - Low-level wind gusts

2.3. Easterly Flow

2.3.1. Synoptic Overview and Associated Weather

The easterly flow pattern develops after a significant pressure gradient from north-east to south-west across the Alps has been built up. In Switzerland the type of weather connected with this situation has usually an anticyclonic influence. However, in cases of a northern position of an active Mediterranean depression, cyclonic influence is dominating. The plains on either side of the Alps may be under a cover of low stratus combined with a persistent inversion and dry, subsiding air above the low clouds (elevated fog or stratus). The continental easterly wind called Bise accelerates over the Swiss Plateau between the Jura and the Alps and achieves its maximum speed at the "bottleneck" of Geneva. However, Bise is not exclusively associated to an easterly flow weather type.

2.3.2. Season of Encounter

This pattern is very frequent in winter and spring, rarely occurs in summer and can last for several days. It is less frequent than westerly, northerly or southerly flow.

Because of the flow split the Bise is more frequent in the western part of Switzerland. A strong Bise flow leads to a clear north-eastern wind component on the airport in Bern, resulting in a crosswind situation. A weak Bise results in either a north-western or south-eastern wind component on the airport.

2.3.3. Local Weather Phenomena

Elevated Fog

In late autumn and winter the typical situation with elevated fog or stratus up to 2000 m / msl occurs in the cold air pool of the Swiss Plateau. The Bise gets canalized between the Jura and the Alps. The elevated fog situation can last for several days and mainly occurs in autumn and winter with the highest probability in December and January. Above the fog or stratus layer the atmosphere is clear due to anticyclonic influence.

In spring and summer the easterly flow usually is associated with fair weather due to the dry and frequently warm continental air mass.

Turbulence

Attention must be paid to Bise turbulence in the region of Bern.

2.3.4. Aviation Hazards

- Strong winds and turbulence near the ground especially in western Switzerland
- Elevated fog:
 - Poor visibility below the stratus layer
 - Often closed cloud layer over the Swiss Plateau
 - Gaps in the cloud layer may close again quite rapidly

2.4. Southerly Flow

2.4.1. Synoptic Overview and Associated Weather

Southerly flow patterns are considerably rarer than the northerly ones that also belong to the meridional flow types. The activity of the southerly flow pattern is sustained by a surface depression over the eastern Northatlantic and western Europe. The west to east direction of the Alps causes the development of Foehn winds on the leeward side combined with a strong pressure gradient from south to north. Foehn situations are often associated with the southerly flow. The usually dry and rather often sunny "Foehn weather" to the north of the alpine ridge is in striking contrast to the humid weather along the southerly slopes of the Alps. There is also a subtype of the Foehn situation which is restricted to the typical Foehn valleys within the Alps when the pressure gradient is not too accentuated.

2.4.2. Season of Encounter

The southerly flow pattern is very frequent in autumn, less frequent in winter and spring, but sometimes occurs even in summer. Since Foehn winds may also develop in other synoptic situations like south-easterly and westerly flow patterns or in a low pressure system, southerly Foehn winds are more frequent than just the southerly flow patterns.

2.4.3. Local Weather Phenomena

Southerly Foehn

With southerly flow the alpine ridge acts like a barrier. This results in clouds and precipitation on the windward side and a so called Foehn wall forms in the region of the mountain crest. In the Foehn valleys it is mostly warm, windy and dry with high visibility.

When the pressure gradient is big enough, the warm and dry Foehn influences the central and eastern part of Switzerland. Approaching fronts from the west usually are slowed down and the sky keeps relatively clear.

In the region of Bern the Foehn wind can not be observed, except in higher air layers where Foehn influence can not be excluded.

Turbulence

North of the Alps turbulence and lee waves occur and can also reach the region of the airport. Especially in the Foehn valleys attention must be paid to severe turbulence and down draft.

High Temperatures

The warm and dry Foehn wind increases the temperatures north of the Alps. This might affect the performance of the engines.

2.4.4. Aviation Hazards

- South of the Alps:
 - Very low ceiling, poor visibility, persistent precipitation, icing conditions in clouds
 - Thunderstorms with associated heavy turbulence in summer
 - Mountains obscured by clouds
- North of the Alps:
 - Lee waves, turbulence
 - Wind shear when the dry warm Foehn wind flows over the cold air pool of the Swiss Plateau or when the Foehn gets weak by the approaching front in the west
 - High temperatures reduce engine performance

2.5. Flat Pressure Pattern

2.5.1. Synoptic Overview and Associated Weather

Flat Pressure Pattern with Thermal Thunderstorms

Flat pressure leads to a weak or nonexistent synoptic flow. In contrary to the anticyclonic regime there is only little or no subsidence, which leads to a high chance of convection. In the indifferent situation of this pattern the weather shows a distinct diurnal variation: after sunshine during the first half of the day, deep convection clouds are building up, but not exclusively in mountainous terrain. Thermal thunderstorms are induced. Winds aloft carry the upper sections of convective clouds away from the place of formation. Thunderstorms induced by these thermal and orographic conditions show an irregular pattern in the distribution of the total amount of precipitation. Great differences may be observed within a distance of only a few kilometres!

Flat Pressure Pattern with Frontal Thunderstorms

The continuous warming of the land mass in flat pressure situations increases the temperature difference between the continent and the adjacent sea surface. This creates a pressure gradient between the continent and the ocean. In summer this repeatedly leads to outbreaks of cool and moist maritime air masses towards the Alps. With reference to the similar but more pronounced situation in southern Asia, the above development has been named 'European Summer Monsoon'. Thunderstorms which develop in the immediate vicinity of such an outbreak of cold air are called frontal thunderstorms. If the passage of the cold front happens to coincide with the time of greatest diurnal warming or just after, the activity of the frontal thunderstorms is again increased.

2.5.2. Season of Encounter

Synoptic situation with a small horizontal surface pressure gradient over large parts of a continent are most frequent during the summer, since temperature differences between polar and tropical region are smallest in this particular season. This pattern usually lasts for several days.

2.5.3. Local Weather Phenomena

Convection

During hot days a lot of warm air bubbles are lifted and rise up to the condensation base, where they turn into cumulus clouds. Below the convection clouds moderate to severe turbulence with strong vertical winds occur. Cumulus congestus may rise quickly up to the tropopause. Typically cumulonimbus capillatus (CB) with anvil produce thunderstorm. As a rule-of-thumb, the difference between dew-point and temperature multiplied by 400 equals the cloud base height in feet.

Thunderstorm

Thermal thunderstorms occur due to convection at the end of the day while frontal thunderstorms happen at any time of the day. Very heavy thunderstorms are the result of a line of frontal thunderstorms which reach a convecting air mass during the late afternoon in summer. The close Alps and prealpine foothills of Emmental and Schwarzenburg lead to an increased thunderstorm activity to the south-west, south and south-east of the airport.

Thunderstorms are accompanied with different aviation hazard, such as heavy rain and fog with reduced visibility. Occasionally precipitation also falls in the form of hail which can damage the structure of an airplane. Wind shear, strong gusts and strong up and down draughts occur near the thunderstorm.

In Bern thunderstorms are usually observed from May to September.

High Temperatures

This weather pattern is normally accompanied by very high temperatures in summer. The density of hot air decreases and this leads to a dangerous decrease of the engine performance, too.

2.5.4. Aviation Hazards

- Thunderstorm:
 - Heavy rain with reduced visibility and rapid cooling
 - Severe wind shear and gusts in proximity of thunderstorms
 - Sudden gusts up to 60 kt
 - Lightning
 - Hail in strong thunderstorms
 - Outflow of cold air associated with sudden change of the wind regime at distant places from the active thunderstorm
 - Microbursts (very strong and small scaled outflow of cold air usually associated with CB's)
- Visibility frequently reduced due to haze
- High temperatures reduce engine performance

2.6. High Pressure Pattern

2.6.1. Synoptic Overview and Associated Weather

This pattern normally produces favourable conditions for the aviation because of the influence of an anticyclone with strong subsidence. That sinking process increases the temperature of the air masses due to compression. The relative humidity decreases and clouds dissolve. Warm anticyclones are accompanied by distinct flow patterns aloft. On continental scale this prevents cyclones and frontal zones to enter regions with anticyclones.

High Pressure Pattern in Summer

The atmospheric pressure is higher than the average values and only few convective clouds are produced. The convective clouds are mostly limited to mountainous regions. Over the Alps of Switzerland a thermal low can be observed. It is caused by the excessive heating of alpine air during the day in comparison with air over the plain at the same height. The daytime heating is clearly stronger on the valley bottom than at higher levels.

In this season the Azores high can also expand up to central Europe and guarantees high temperatures and clear sky for several days or even weeks.

High Pressure Pattern in the Colder Seasons

From November to March maintained anticyclonic conditions repeatedly occur over the continent. After several days of subsidence a very strong temperature inversion is formed, which is a few hundred meters thick. The negative radiation balance of the surface during the winter half year prevents the subsidence from reaching the lowest atmospheric layer.

2.6.2. Season of Encounter

High Pressure Pattern is observed at any time of the year and can last between one day and several weeks. They usually last longer in summer and winter, because approaching deep Atlantic cyclones in spring and autumn degrade the ridge of the high pressure. In summer this pattern often degenerates to a flat pressure pattern with air mass thunderstorms.

2.6.3. Local Weather Phenomena

Radiation Fog

In the colder seasons during clear and calm nights a radiation deficit occurs over the ground due to the negative long wave radiation budget. Temperature over the ground decreases as a consequence. The visibility in areas with radiation fog can drop from 800 – 1000 m to 100 – 200 m quite rapidly. The important conditions for radiation fog are clear sky (increased radiation with the development of an inversion layer), low wind speed and high relative humidity. Bern airport is situated in a basin between the rivers Aare and Gürbe. The area used to be marshland. Therefore, the conditions are quite favourable for radiation fog.

Radiation fog is an often observed phenomenon in the region of the airport Bern and occurs usually between October and March. There is a chance for no dissolution during the whole day from November to February.

Also in summer formation of radiation fog can not be excluded during the night, especially in the early morning.

High Temperatures

This weather pattern is normally accompanied by very high temperatures in summer. The density of hot air decreases and this leads to a dangerous decrease of the engine performance, too.

2.6.4. Aviation Hazards

- High temperatures reduce engine performance
- Haze reduces visibility in summer
- Isolated thunderstorms in summer when the anticyclone weakens by surface heating
- Radiation fog and fog patches decrease visibility in autumn and winter
- Radiation fog can occur quite quickly and decrease visibility to 100 – 1000 m

B Tables and Graphics

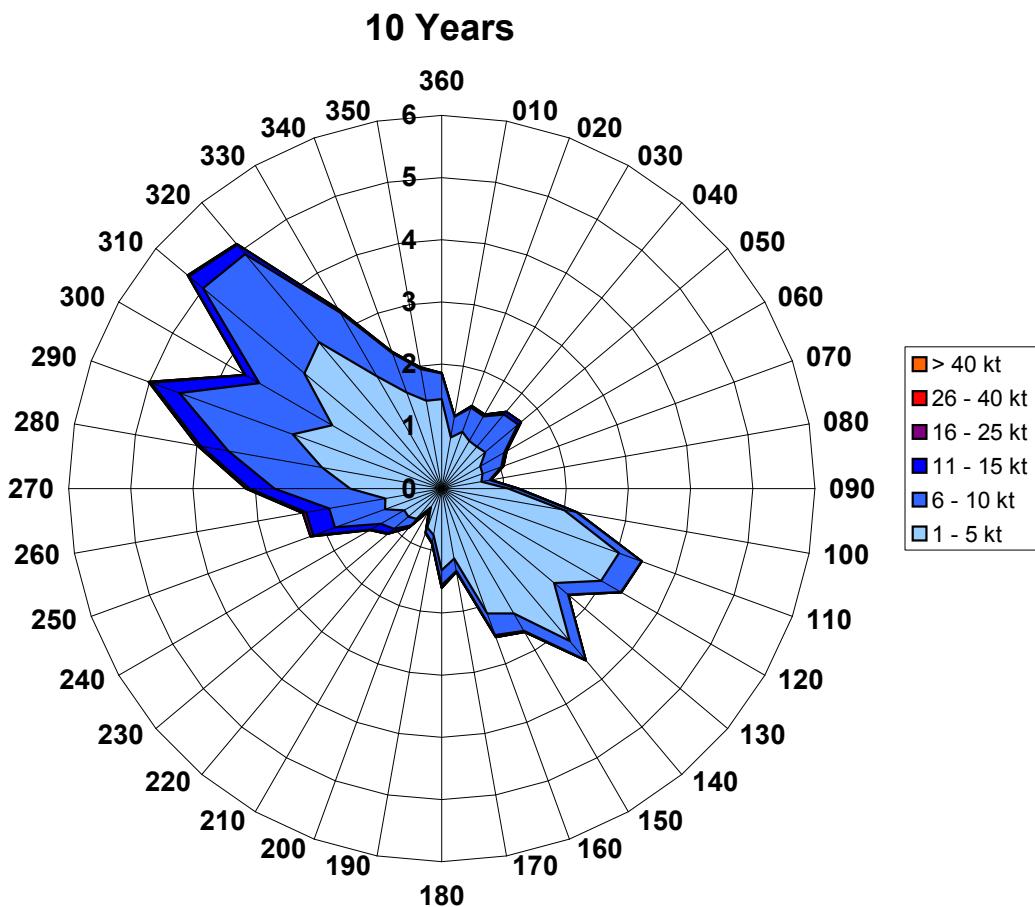
1. WIND

1.1. Wind Polygon

1.1.1. Wind Polygon 10 Years

Frequencies in percent of occurrence of concurrent wind direction every 10° and wind speed within specified ranges (legend). Frequencies are calculated relative to all potentially possible minus the not available (NA) observations. The value of NA is calculated relative to the potentially possible observations. It indicates the reduction of the data base due to NA. Calm is for the wind speed with 0 kt. Variable is for the wind speed between 1 and 3 kt and no wind direction.

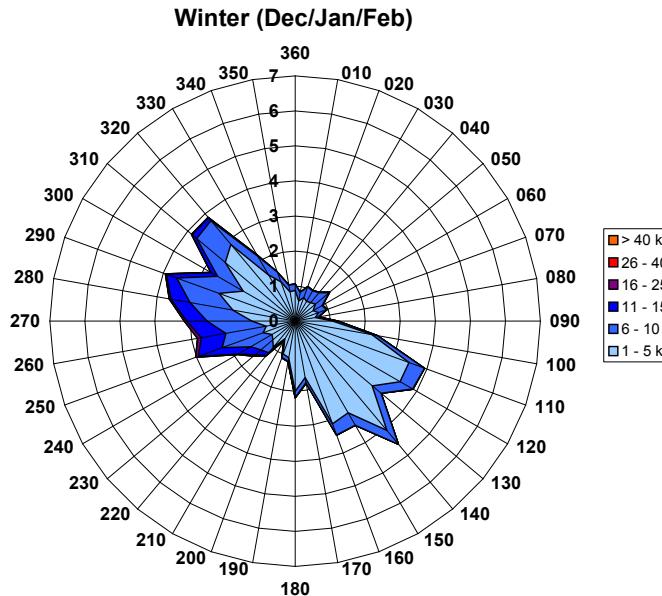
Example: In the 10 years period 5.4% of all observations showed a wind speed between 1 and 15 knots with a concurrent wind direction of 310 degrees.



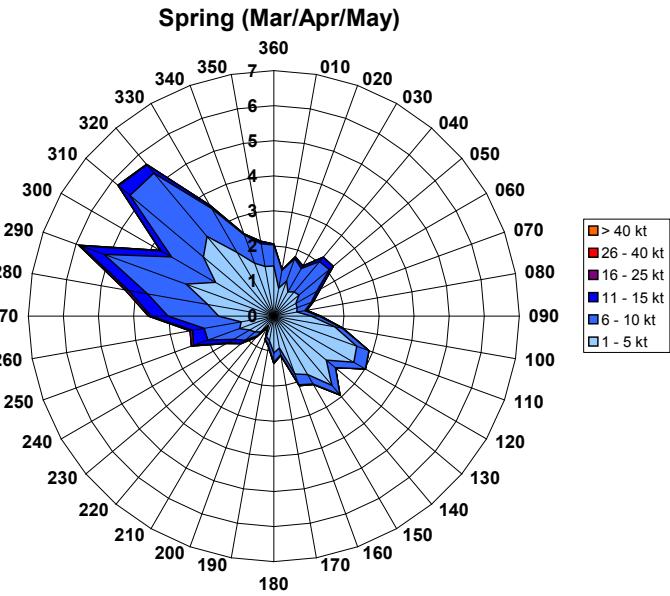
NA: 44.9 %
 Calm: 14.3 %
 Variable: 5.0 %

1.1.2. Wind Polygon per Season

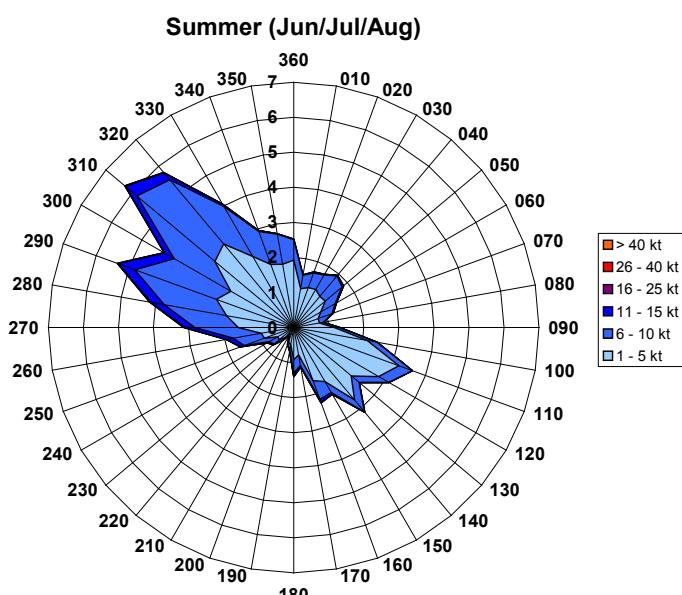
Example: In the 10 years period in winter 4% of all observations showed a wind speed between 1 and 25 knots with a concurrent wind direction of 290 degrees.



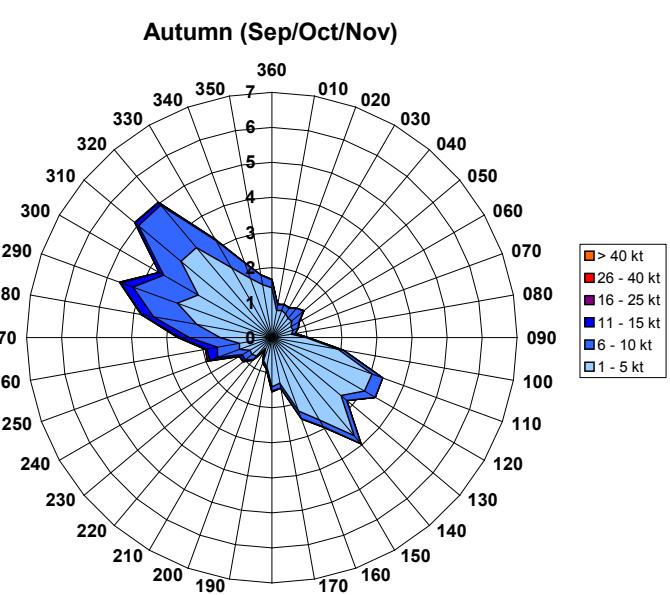
NA: 50.2 %
Calm: 16.2 %
Variable: 5.3 %



NA: 43.3 %
Calm: 11.1 %
Variable: 4.9 %



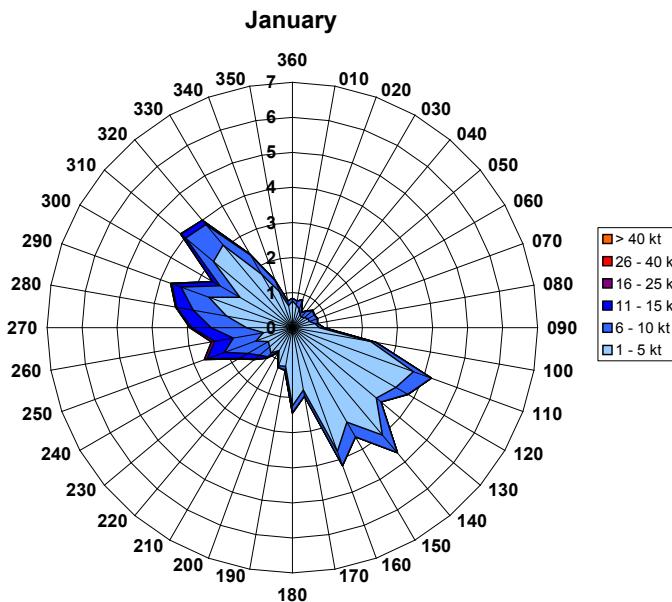
NA: 42.6 %
Calm: 12.1 %
Variable: 4.3 %



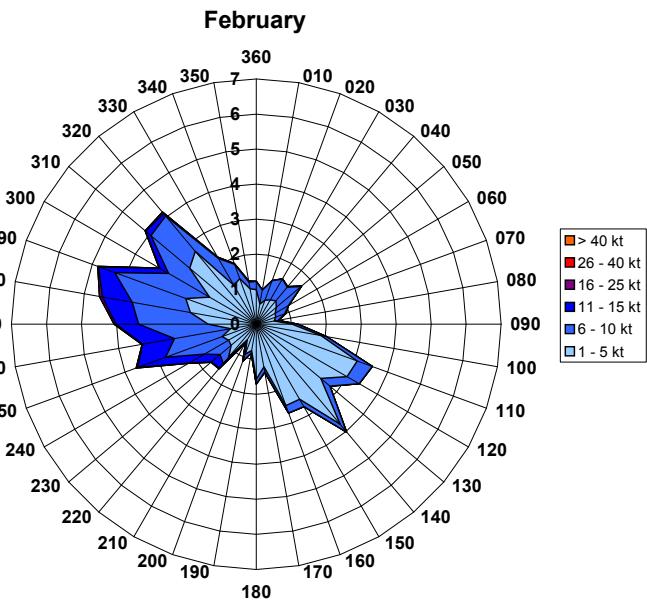
NA: 43.6 %
Calm: 18.6 %
Variable: 5.9 %

1.1.3. Wind Polygon per Month

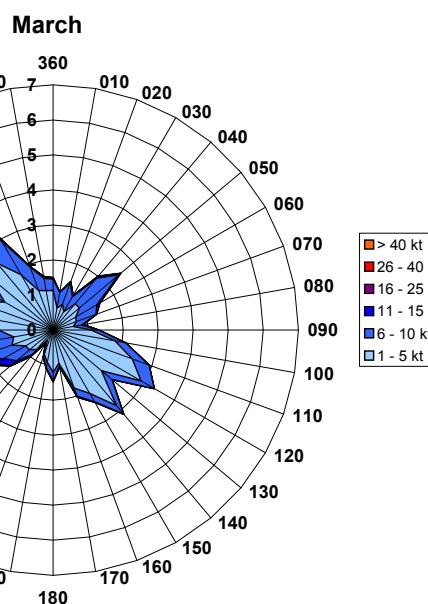
Example: In the 10 years period in January 4.2% of all observations showed a wind speed between 1 and 15 knots with a concurrent wind direction of 310 degrees.



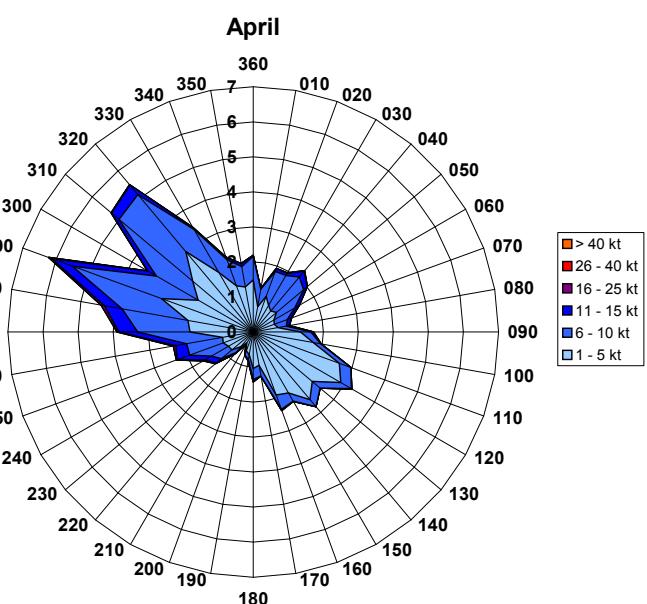
NA: 50.1 %
Calm: 18.3 %
Variable: 5.6 %



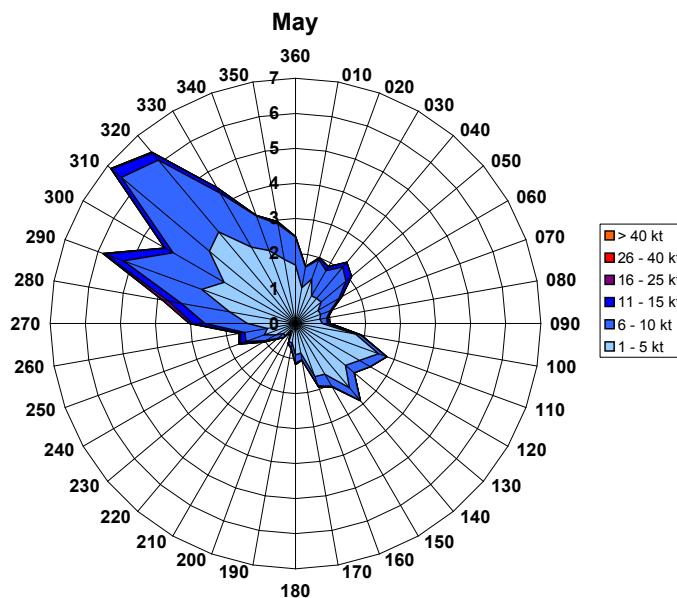
NA: 54.5 %
Calm: 13.8 %
Variable: 4.7 %



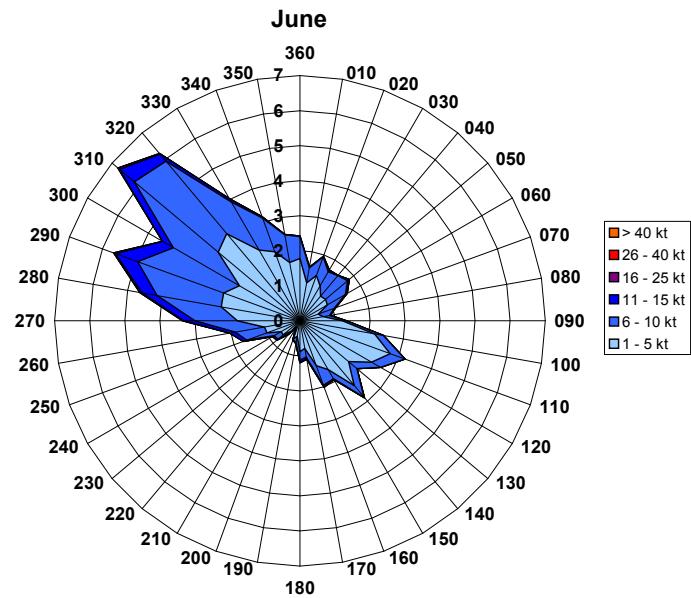
NA: 43.3 %
Calm: 11.9 %
Variable: 4.6 %



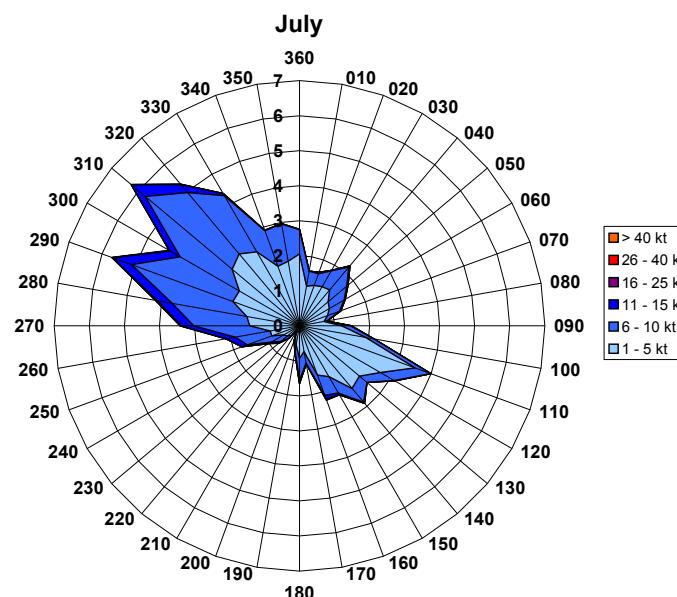
NA: 42.9 %
Calm: 10.0 %
Variable: 5.1 %



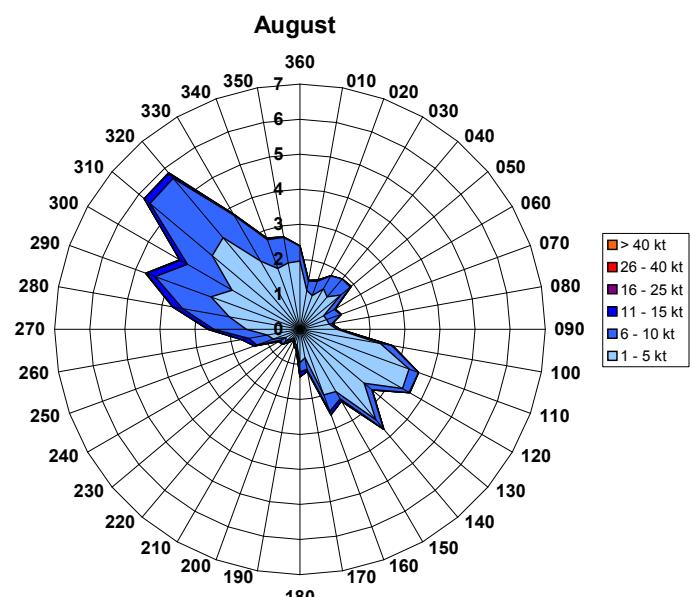
NA: 43.6 %
Calm: 11.4 %
Variable: 4.9 %



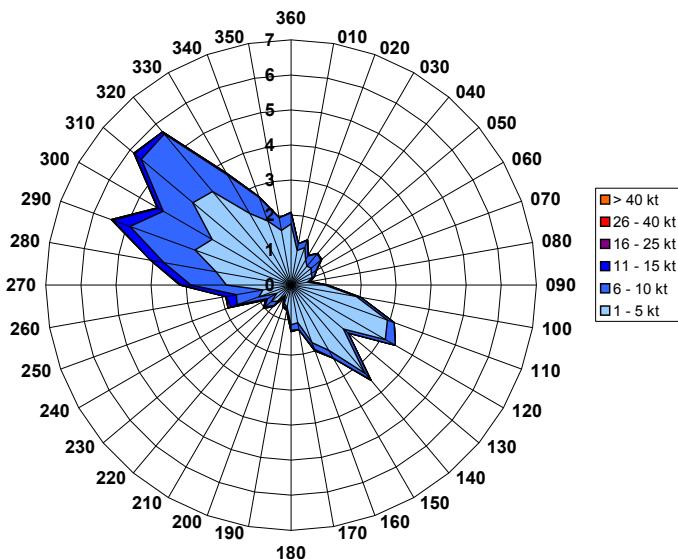
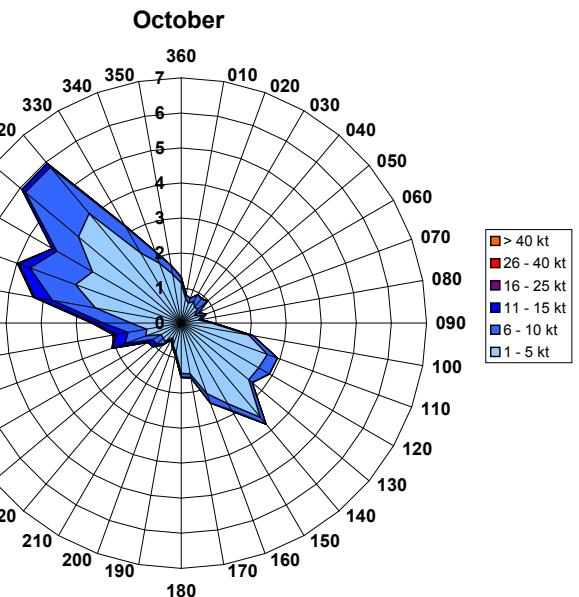
NA: 42.5 %
Calm: 11.9 %
Variable: 4.2 %



NA: 42.3 %
Calm: 10.7 %
Variable: 3.7 %

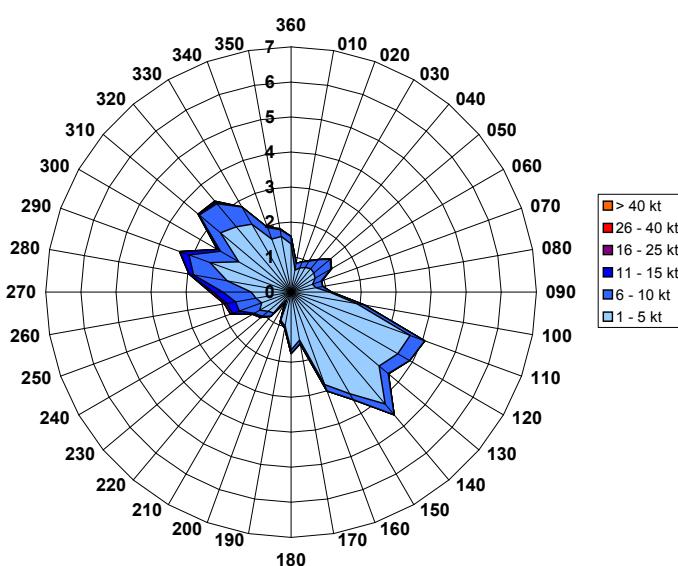
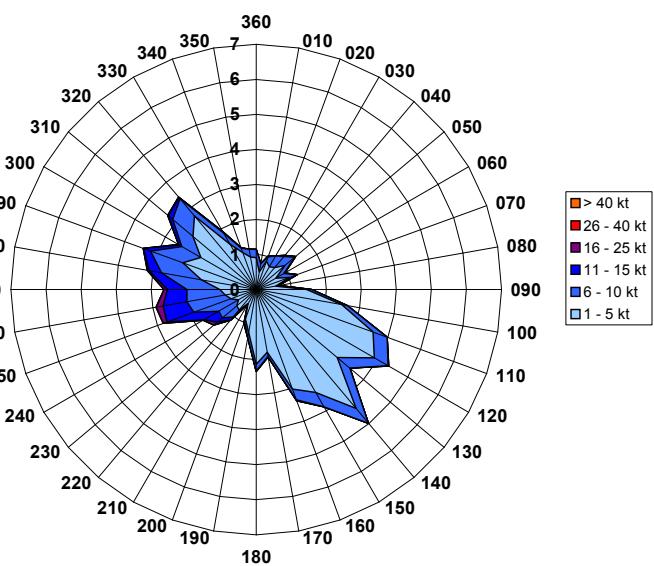


NA: 43.0 %
Calm: 13.7 %
Variable: 4.9 %

September**October**

NA: 43.1 %
Calm: 16.7 %
Variable: 5.6 %

NA: 43.2 %
Calm: 18.4 %
Variable: 6.0 %

November**December**

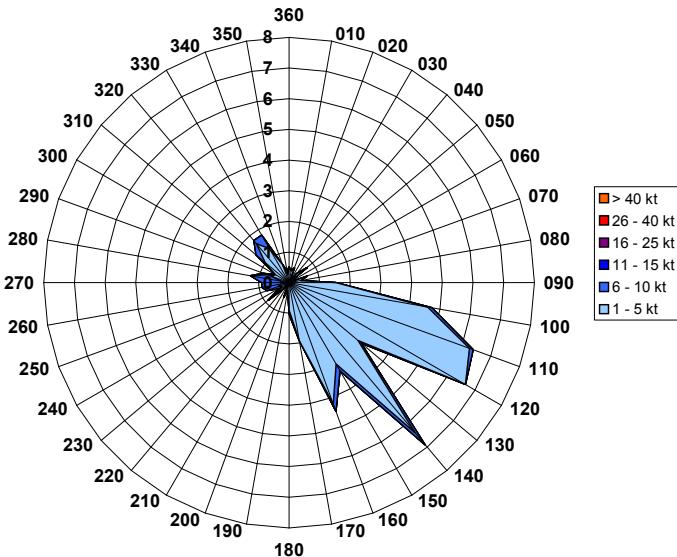
NA: 44.5 %
Calm: 20.7 %
Variable: 5.9 %

NA: 46.1 %
Calm: 16.3 %
Variable: 5.5 %

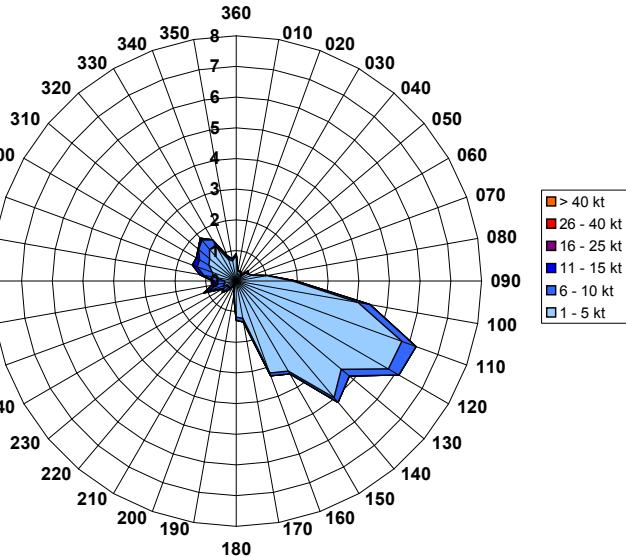
1.1.4. Wind Polygon per Hour

Example: In the 10 years period between 03 and 04 UTC 7% of all observations showed a wind speed between 1 and 10 knots with a concurrent wind direction of 140 degrees.

03 - 04 UTC



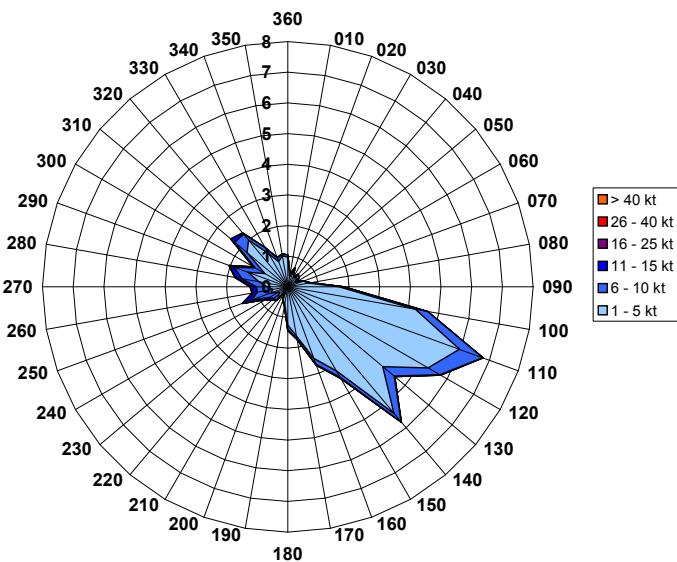
04 - 05 UTC



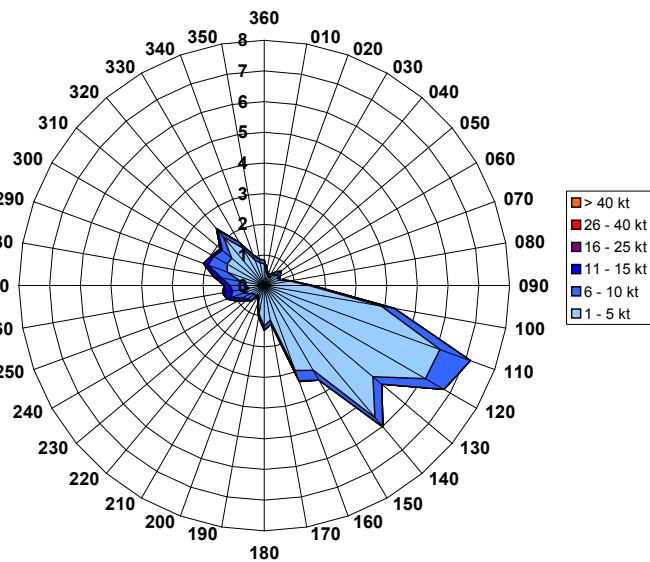
NA: 88.9 %
Calm: 31.9 %
Variable: 11.0 %

NA: 42.2 %
Calm: 35.5 %
Variable: 5.9 %

05 - 06 UTC



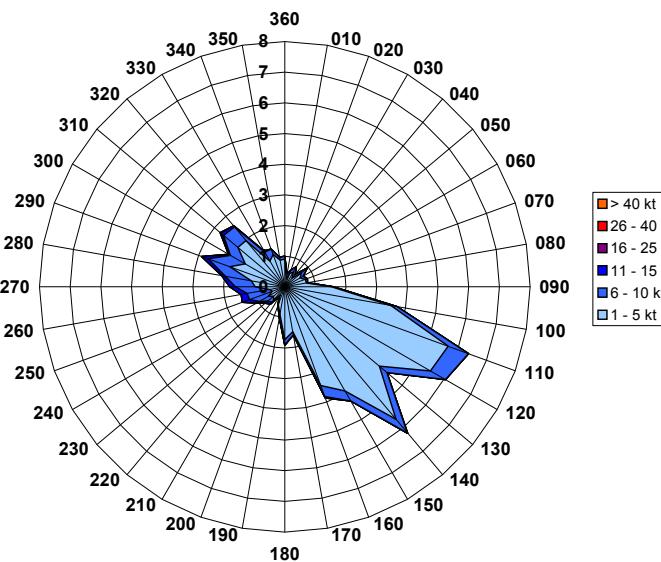
06 - 07 UTC



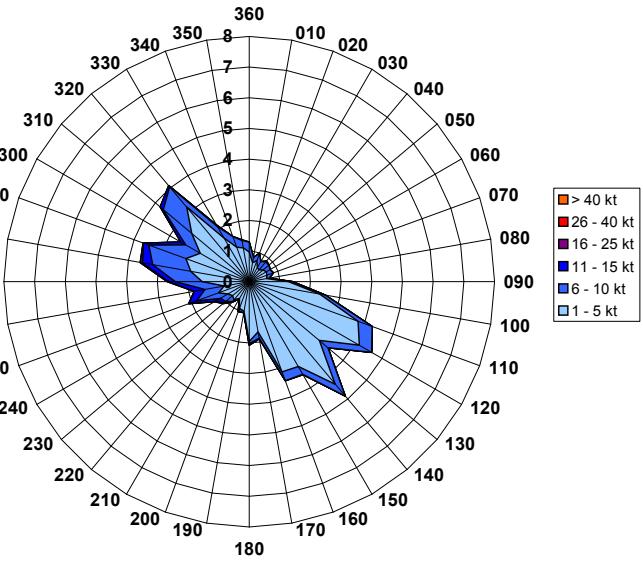
NA: 10.0 %
Calm: 30.6 %
Variable: 4.8 %

NA: 6.5 %
Calm: 27.2 %
Variable: 4.8 %

07 - 08 UTC



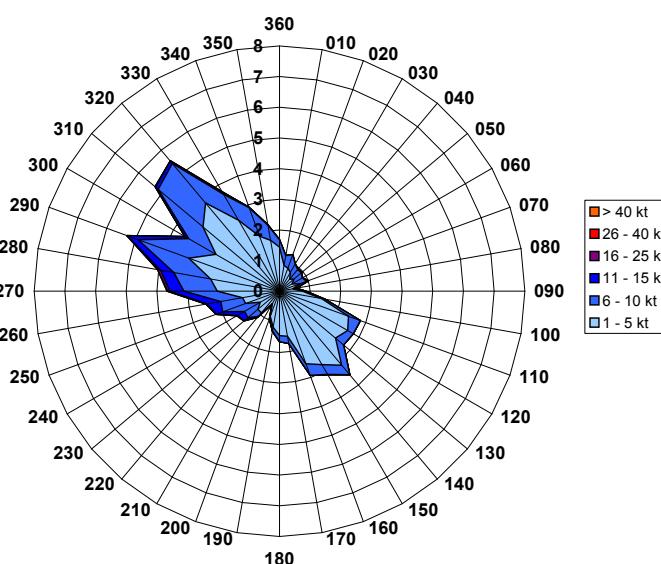
08 - 09 UTC



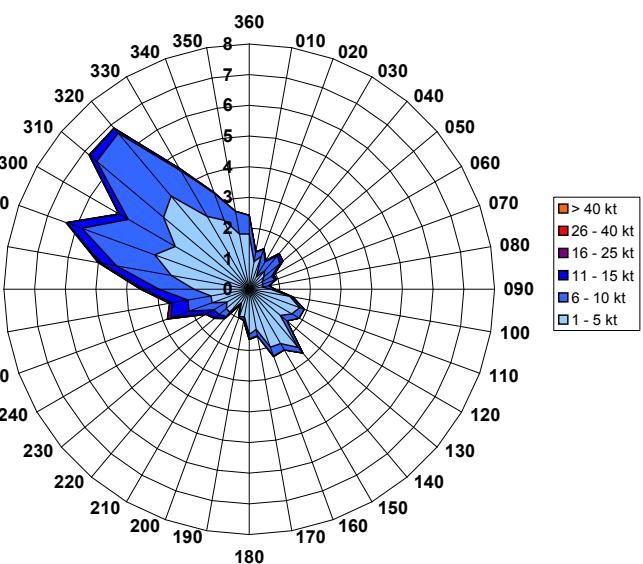
NA: 7.5 %
Calm: 21.9 %
Variable: 6.1 %

NA: 7.4 %
Calm: 18.1 %
Variable: 6.7 %

09 - 10 UTC

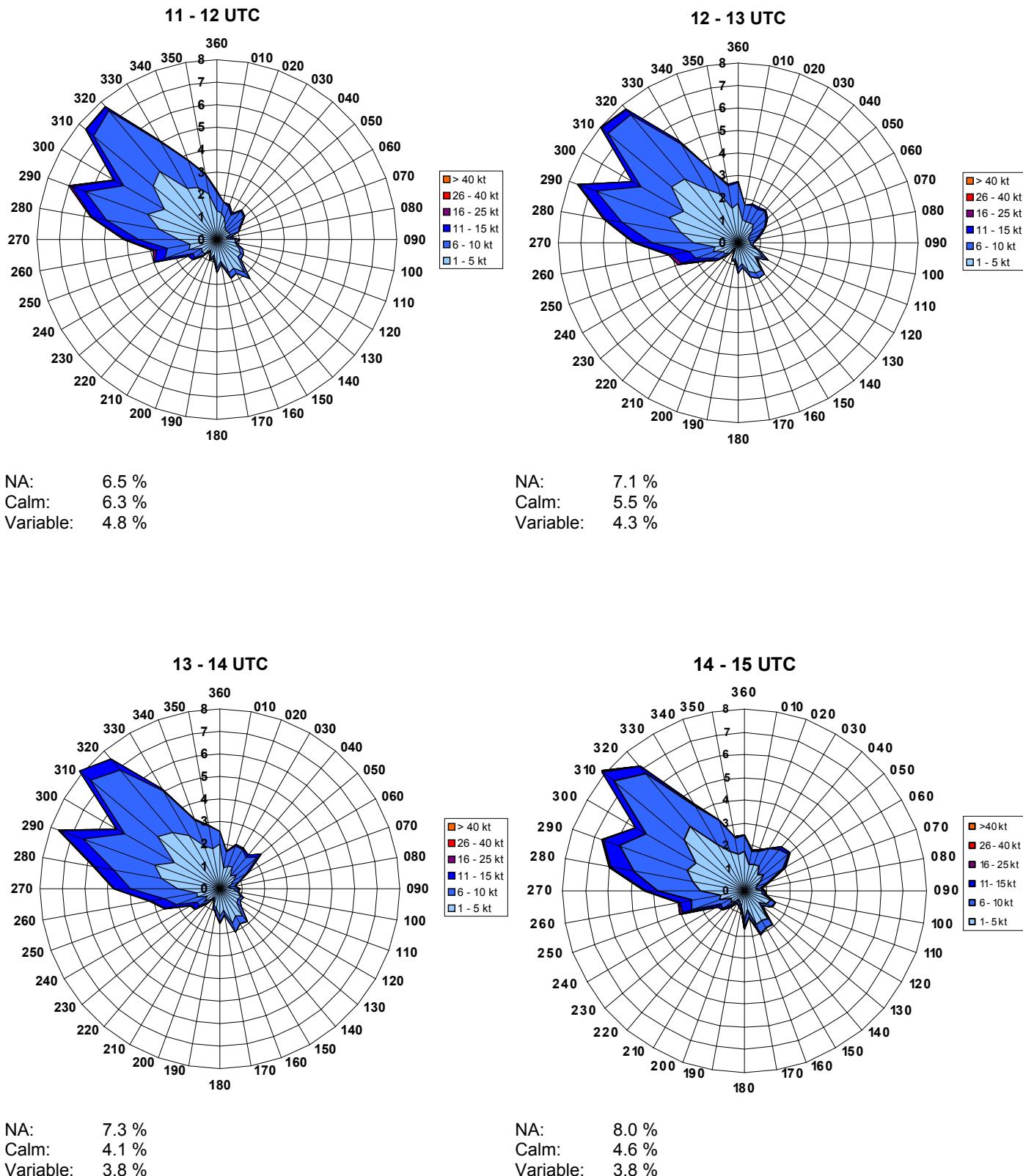


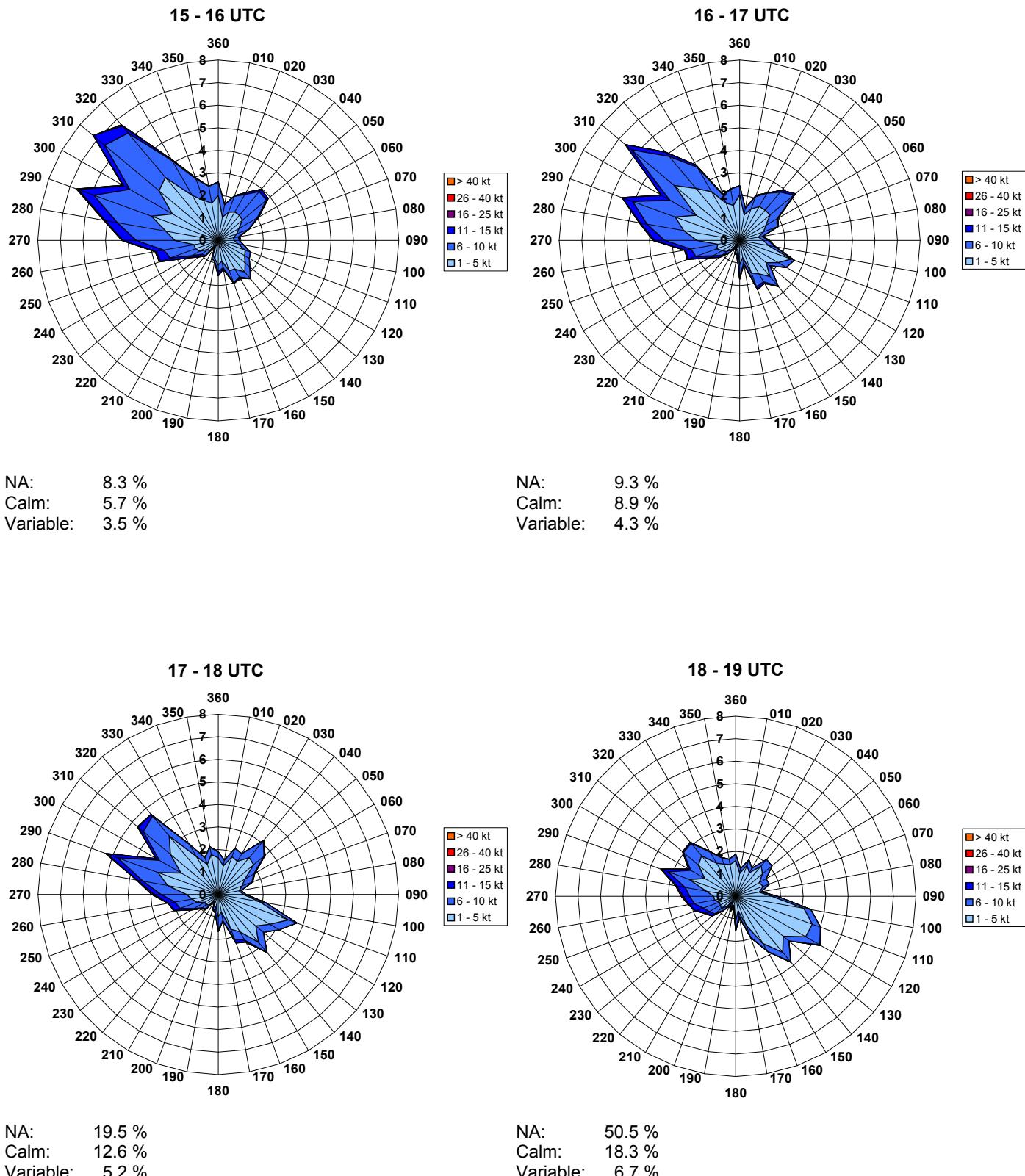
10 - 11 UTC

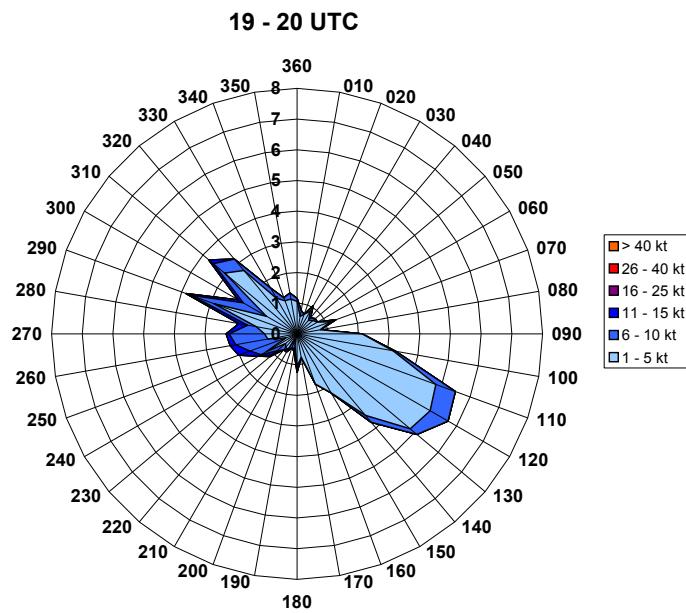


NA: 6.9 %
Calm: 12.9 %
Variable: 6.0 %

NA: 6.7 %
Calm: 8.2 %
Variable: 5.6 %







NA: 85.2 %
Calm: 25.7 %
Variable: 4.1 %

1.2. Wind Speed and Direction

1.2.1. Wind Speed and Direction 10 Years

Frequencies in percent of concurrent wind direction (in 30° sectors) and wind speed within specified ranges. Calm is for the wind speed with 0 kt. Variable is for the wind speed between 1 and 3 kt. Frequencies are calculated relative to all potentially possible minus the not available (NA) observations. The value of NA is calculated relative to the potentially possible observations. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomena were observed.

Example (dark shading): In the 10 years period 3.7% of all observations showed a wind speed between 1 and 5 knots with a concurrent wind direction between 350 and 010 degrees.

Wind Direction		Wind Speed (kt) 10 Years												NA
		0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	
	Calm	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Variable	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	350-360-010	0.0	3.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	020-030-040	0.0	2.7	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	050-060-070	0.0	2.3	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	080-090-100	0.0	3.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	110-120-130	0.0	8.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	140-150-160	0.0	7.6	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.9
	170-180-190	0.0	3.2	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	200-210-220	0.0	1.7	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	230-240-250	0.0	2.4	1.6	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	260-270-280	0.0	4.4	3.7	1.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	290-300-310	0.0	7.5	5.4	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	320-330-340	0.0	6.8	3.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

1.2.2. Wind Speed and Direction per Season

Example (dark shading): In the 10 years period in winter 2.3% of all observations showed a wind speed between 1 and 5 knots with a concurrent wind direction between 350 and 010 degrees.

Wind Direction	Wind Speed (kt) Winter (Dec/Jan/Feb)												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	2.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.0	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	3.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	9.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	10.2	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	4.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	2.5	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.6	2.4	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	3.9	3.7	1.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	6.6	3.2	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	5.6	1.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) Spring (Mar/Apr/May)												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	3.7	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	2.8	2.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.4	2.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	3.5	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	7.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	6.3	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.7	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.5	1.9	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	4.4	4.3	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	7.2	6.7	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	6.7	4.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) Summer (Jun/Jul/Aug)												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	12.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	3.6	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.8	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	4.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	8.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	6.1	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.2	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	1.9	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	4.5	3.8	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	7.3	7.2	1.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	7.4	5.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) Autumn (Sep/Oct/Nov)												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	18.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	3.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	2.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	3.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	8.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	8.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	3.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.4	1.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	4.6	2.8	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	8.7	4.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	7.4	2.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.2.3. Wind Speed and Direction per Month

Example (dark shading): In the 10 years period in January 2% of all observations showed a wind speed between 1 and 5 knots with a concurrent wind direction between 350 and 010 degrees.

Wind Direction	Wind Speed (kt) January												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	18.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	2.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	1.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	1.5	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	3.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	10.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	10.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	5.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	2.9	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.7	2.0	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	4.1	2.8	1.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	7.2	2.5	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	5.9	1.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) February												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	2.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	2.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	3.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	8.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	8.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	3.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	2.7	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.9	2.9	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	4.0	5.3	2.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	6.2	5.0	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	5.4	2.6	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) March												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	2.9	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	2.4	2.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.4	2.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	3.5	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	7.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	6.7	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	3.1	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.8	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	3.0	2.5	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	4.6	5.1	1.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	6.3	5.8	2.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	5.5	4.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) April												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	3.5	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	2.7	3.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.2	2.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	3.8	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	7.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	6.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.7	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.5	2.0	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	4.6	4.4	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	6.8	6.8	1.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	6.3	4.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) May												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	11.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.6	2.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	3.2	2.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.5	1.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	3.2	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	6.5	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	5.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.3	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.0	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	4.1	3.3	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	8.4	7.3	1.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	8.1	5.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) June												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.6	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	3.4	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.4	1.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	4.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	6.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	5.4	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.1	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.2	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	5.1	3.9	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	7.4	7.9	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	7.7	5.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) July												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	5.1	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	3.9	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.9	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	3.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	8.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	5.5	1.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.2	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	1.8	1.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	3.8	4.8	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	6.5	8.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	6.9	5.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) August												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	5.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	3.6	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	3.1	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	4.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	9.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	7.4	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.2	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	1.8	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	4.5	2.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	8.2	5.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	7.5	4.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction		Wind Speed (kt) September												NA
		0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	
Calm	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.1
Variable	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
350-360-010	0.0	4.3	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
020-030-040	0.0	2.7	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
050-060-070	0.0	2.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
080-090-100	0.0	3.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
110-120-130	0.0	8.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
140-150-160	0.0	7.2	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
170-180-190	0.0	2.9	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
200-210-220	0.0	1.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
230-240-250	0.0	2.2	1.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
260-270-280	0.0	4.8	3.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
290-300-310	0.0	9.2	5.5	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
320-330-340	0.0	7.8	4.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction		Wind Speed (kt) October												NA
		0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	
Calm	18.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.2
Variable	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
350-360-010	0.0	3.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
020-030-040	0.0	1.9	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
050-060-070	0.0	1.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
080-090-100	0.0	3.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
110-120-130	0.0	7.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
140-150-160	0.0	8.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
170-180-190	0.0	3.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
200-210-220	0.0	1.8	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
230-240-250	0.0	2.4	1.2	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
260-270-280	0.0	4.9	2.6	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
290-300-310	0.0	10.0	4.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
320-330-340	0.0	8.2	2.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction		Wind Speed (kt) November												NA
		0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	
Calm	20.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.5
Variable	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
350-360-010	0.0	3.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
020-030-040	0.0	2.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
050-060-070	0.0	2.3	1.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
080-090-100	0.0	3.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
110-120-130	0.0	10.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
140-150-160	0.0	10.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
170-180-190	0.0	4.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
200-210-220	0.0	1.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
230-240-250	0.0	2.8	1.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
260-270-280	0.0	4.0	2.4	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
290-300-310	0.0	6.8	2.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
320-330-340	0.0	6.3	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction		Wind Speed (kt) December												NA
		0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	
Calm	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.1
Variable	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
350-360-010	0.0	2.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
020-030-040	0.0	2.4	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
050-060-070	0.0	2.7	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
080-090-100	0.0	4.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
110-120-130	0.0	10.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
140-150-160	0.0	10.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
170-180-190	0.0	5.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
200-210-220	0.0	2.1	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
230-240-250	0.0	2.1	2.3	1.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
260-270-280	0.0	3.5	3.2	1.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
290-300-310	0.0	6.4	2.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
320-330-340	0.0	5.4	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

1.2.4. Wind Speed and Direction per Hour

Example (dark shading): In the 10 years period between 03 and 04 UTC 1.1% of all observations showed a wind speed between 1 and 5 knots with a concurrent wind direction between 350 and 010 degrees.

Wind Direction	Wind Speed (kt) 03 - 04 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	31.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	6.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	15.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	13.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	3.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	1.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	0.6	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	2.2	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	3.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 04 - 05 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	35.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	1.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	6.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	15.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	11.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	1.1	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	1.5	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	3.0	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	3.4	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 05 - 06 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	30.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	2.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	1.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	6.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	15.3	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	11.0	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	3.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	1.3	1.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	2.1	1.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	4.0	1.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	4.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 06 - 07 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	27.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	1.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	1.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	6.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	16.8	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	11.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	3.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	1.7	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	1.9	1.7	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	4.1	1.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	4.4	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 07 - 08 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	21.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	2.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	5.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	15.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	13.0	1.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	4.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	1.5	1.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	2.6	2.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	5.4	1.9	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	4.1	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 08 - 09 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	18.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	2.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	1.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	4.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	10.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	10.7	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	4.6	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	2.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.6	1.4	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	4.3	2.8	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	6.5	3.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	6.0	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 09 - 10 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	2.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	1.8	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	2.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	7.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	8.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	4.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	2.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.8	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	5.5	3.0	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	8.8	4.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	8.3	3.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 10 - 11 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.5	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	2.4	1.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	1.6	1.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	2.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	4.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	6.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	3.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	2.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	3.1	1.6	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	5.6	3.7	1.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	9.7	7.2	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	9.1	5.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 11 - 12 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.5	2.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	2.3	2.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	1.8	1.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	2.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	3.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	4.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	2.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	3.0	2.0	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	5.5	5.2	1.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	9.7	8.5	1.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	9.1	7.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 12 - 13 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.4	2.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	3.1	2.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	1.8	2.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	1.6	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	3.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	4.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.7	1.7	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	5.6	5.7	2.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	9.9	9.3	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	8.8	7.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 13 - 14 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.7	2.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	2.9	2.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.2	2.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	1.7	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	2.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	3.1	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.8	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.6	1.8	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	5.6	5.7	2.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	9.0	9.8	2.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	8.0	7.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 14 - 15 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.5	2.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	3.5	2.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	2.5	3.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	2.1	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	3.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	4.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	3.0	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.7	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.6	2.2	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	5.3	5.8	2.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	8.7	9.6	1.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	8.0	6.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 15 - 16 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	4.3	3.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	3.3	2.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	2.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	4.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	4.7	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.9	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.6	1.9	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	5.4	5.2	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	8.9	8.1	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	7.8	5.4	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 16 - 17 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	5.0	2.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	4.2	2.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	3.2	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	5.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	5.3	1.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.2	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.7	1.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	5.4	4.3	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	9.1	5.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	7.3	3.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 17 - 18 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	12.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	5.6	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	4.5	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	3.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	8.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	6.3	1.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.3	1.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.5	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.4	1.6	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	4.9	3.0	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	7.5	4.6	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	6.7	2.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction	Wind Speed (kt) 18 - 19 UTC												
	0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	> 50	NA
Calm	18.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020-030-040	0.0	4.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050-060-070	0.0	4.1	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080-090-100	0.0	5.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110-120-130	0.0	10.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140-150-160	0.0	7.0	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170-180-190	0.0	2.2	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200-210-220	0.0	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
230-240-250	0.0	2.4	1.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-270-280	0.0	3.2	2.9	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290-300-310	0.0	5.9	2.6	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-330-340	0.0	5.6	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Wind Direction		Wind Speed (kt) 19 - 20 UTC												NA
		0	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41- 45	46 - 50	> 50	
	Calm	25.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Variable	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	350-360-010	0.0	2.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	020-030-040	0.0	2.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	050-060-070	0.0	2.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	080-090-100	0.0	6.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	110-120-130	0.0	14.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	140-150-160	0.0	7.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	170-180-190	0.0	2.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	200-210-220	0.0	1.3	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	230-240-250	0.0	2.0	1.8	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	260-270-280	0.0	3.4	2.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	290-300-310	0.0	7.1	2.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	320-330-340	0.0	5.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.3. Cumulative Wind Speed and Direction

1.3.1. Cumulative Wind Speed and Direction 10 Years

Cumulative frequencies in percent of concurrent wind direction (in 30° sectors) and wind speed within specified ranges. Calm is for the wind speed with 0 kt. Variable is for the wind speed between 1 and 3 kt. Frequencies are calculated relative to all potentially possible minus the not available (NA) observations. The value of NA is calculated relative to the potentially possible observations. It indicates the reduction of the data base due to NA. Light grey shading denotes values where cumulative frequencies differ from each other.

Example (dark shading): In the 10 years period 5% of all observations showed a wind speed between 1 and 10 knots with a concurrent wind direction between 350 and 010 degrees.

Wind Direction	Wind Speed (kt) 10 Years												NA
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1-99	
Calm	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	3.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
020-030-040	0.0	2.7	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
050-060-070	0.0	2.3	3.8	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
080-090-100	0.0	3.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
110-120-130	0.0	8.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
140-150-160	0.0	7.6	8.7	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
170-180-190	0.0	3.2	3.8	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
200-210-220	0.0	1.7	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
230-240-250	0.0	2.4	4.0	4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
260-270-280	0.0	4.4	8.0	9.2	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
290-300-310	0.0	7.5	12.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
320-330-340	0.0	6.8	10.5	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8

44.9

1.3.2. Cumulative Wind Speed and Direction per Season

Example (dark shading): In the 10 years period in winter 2.9% of all observations showed a wind speed between 1 and 10 knots with a concurrent wind direction between 350 and 010 degrees.

Wind Direction	Wind Speed (kt) Winter (Dec/Jan/Feb)												NA
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	
Calm	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	2.3	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
020-030-040	0.0	2.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
050-060-070	0.0	2.0	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
080-090-100	0.0	3.9	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
110-120-130	0.0	9.8	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
140-150-160	0.0	10.2	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
170-180-190	0.0	4.7	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
200-210-220	0.0	2.5	2.9	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1
230-240-250	0.0	2.6	4.9	6.3	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
260-270-280	0.0	3.9	7.6	9.4	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
290-300-310	0.0	6.6	9.8	10.5	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
320-330-340	0.0	5.6	7.4	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5

Wind Direction	Wind Speed (kt) Spring (Mar/Apr/May)												NA
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	
Calm	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	3.7	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
020-030-040	0.0	2.8	5.3	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
050-060-070	0.0	2.4	4.6	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
080-090-100	0.0	3.5	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
110-120-130	0.0	7.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
140-150-160	0.0	6.3	7.2	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
170-180-190	0.0	2.7	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
200-210-220	0.0	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
230-240-250	0.0	2.5	4.4	5.2	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
260-270-280	0.0	4.4	8.7	10.0	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
290-300-310	0.0	7.2	13.9	15.3	15.4	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
320-330-340	0.0	6.7	11.3	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8

Wind Direction	Wind Speed (kt) Summer (Jun/Jul/Aug)												NA
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	
Calm	12.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	4.9	6.7	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
020-030-040	0.0	3.6	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
050-060-070	0.0	2.8	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
080-090-100	0.0	4.0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
110-120-130	0.0	8.1	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
140-150-160	0.0	6.1	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
170-180-190	0.0	2.2	3.0	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
200-210-220	0.0	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
230-240-250	0.0	1.9	3.0	3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
260-270-280	0.0	4.5	8.3	9.2	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
290-300-310	0.0	7.3	14.6	15.8	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
320-330-340	0.0	7.4	12.4	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8

Wind Direction	Wind Speed (kt) Autumn (Sep/Oct/Nov)												NA
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	
Calm	18.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	3.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
020-030-040	0.0	2.3	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
050-060-070	0.0	2.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
080-090-100	0.0	3.5	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
110-120-130	0.0	8.7	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
140-150-160	0.0	8.6	9.3	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
170-180-190	0.0	3.6	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
200-210-220	0.0	1.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
230-240-250	0.0	2.4	3.6	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
260-270-280	0.0	4.6	7.3	8.2	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
290-300-310	0.0	8.7	12.7	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
320-330-340	0.0	7.4	10.4	10.5	10.5	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6

1.3.3. Cumulative Wind Speed and Direction per Month

Example (dark shading): In the 10 years period in January 2.4% of all observations showed a wind speed between 1 and 10 knots with a concurrent wind direction between 350 and 010 degrees.

Wind Direction	Wind Speed (kt) January												NA
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	
Calm	18.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	2.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
020-030-040	0.0	1.4	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
050-060-070	0.0	1.5	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
080-090-100	0.0	3.7	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
110-120-130	0.0	10.2	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
140-150-160	0.0	10.9	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
170-180-190	0.0	5.2	5.6	5.6	5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
200-210-220	0.0	2.9	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
230-240-250	0.0	2.7	4.8	5.7	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
260-270-280	0.0	4.1	6.9	8.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
290-300-310	0.0	7.2	9.7	10.4	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
320-330-340	0.0	5.9	7.6	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9

Wind Direction	Wind Speed (kt) February												NA
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	
Calm	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	2.6	3.4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
020-030-040	0.0	2.4	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
050-060-070	0.0	2.0	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
080-090-100	0.0	3.4	3.8	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
110-120-130	0.0	8.5	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
140-150-160	0.0	8.7	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
170-180-190	0.0	3.6	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
200-210-220	0.0	2.7	3.2	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
230-240-250	0.0	2.9	5.8	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
260-270-280	0.0	4.0	9.3	11.8	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
290-300-310	0.0	6.2	11.1	12.1	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
320-330-340	0.0	5.4	8.0	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2

Wind Direction	Wind Speed (kt) March												NA
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	
Calm	11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	2.9	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
020-030-040	0.0	2.4	4.5	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
050-060-070	0.0	2.4	5.2	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
080-090-100	0.0	3.5	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
110-120-130	0.0	7.1	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
140-150-160	0.0	6.7	7.5	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
170-180-190	0.0	3.1	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
200-210-220	0.0	1.8	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
230-240-250	0.0	3.0	5.5	6.8	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
260-270-280	0.0	4.6	9.7	11.5	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
290-300-310	0.0	6.3	12.2	14.2	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
320-330-340	0.0	5.5	9.6	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Wind Direction	Wind Speed (kt) April												NA
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	
Calm	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Variable	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
350-360-010	0.0	3.5	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
020-030-040	0.0	2.7	5.7	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
050-060-070	0.0	2.2	4.3	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
080-090-100	0.0	3.8	4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
110-120-130	0.0	7.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
140-150-160	0.0	6.4	7.4	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
170-180-190	0.0	2.7	3.4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
200-210-220	0.0	1.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
230-240-250	0.0	2.5	4.5	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
260-270-280	0.0	4.6	9.0	10.4	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
290-300-310	0.0	6.8	13.7	14.9	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
320-330-340	0.0	6.3	10.7	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2

Wind Direction	Wind Speed (kt) May												
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	NA
Calm	11.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Variable	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	350-360-010	0.0	4.6	7.0	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
	020-030-040	0.0	3.2	5.8	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
	050-060-070	0.0	2.5	4.3	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	080-090-100	0.0	3.2	3.7	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	110-120-130	0.0	6.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
	140-150-160	0.0	5.7	6.8	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
	170-180-190	0.0	2.3	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	200-210-220	0.0	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
	230-240-250	0.0	2.0	3.1	3.4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	260-270-280	0.0	4.1	7.4	8.2	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
	290-300-310	0.0	8.4	15.7	16.9	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
	320-330-340	0.0	8.1	13.7	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1

Wind Direction	Wind Speed (kt) June												
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	NA
Calm	11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Variable	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	350-360-010	0.0	4.6	6.4	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	020-030-040	0.0	3.4	5.2	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
	050-060-070	0.0	2.4	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	080-090-100	0.0	4.0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
	110-120-130	0.0	6.9	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	140-150-160	0.0	5.4	6.7	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
	170-180-190	0.0	2.1	2.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	200-210-220	0.0	1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
	230-240-250	0.0	2.2	3.3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	260-270-280	0.0	5.1	9.0	9.9	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
	290-300-310	0.0	7.4	15.3	16.9	16.9	16.9	17.0	17.0	17.0	17.0	17.0	17.0
	320-330-340	0.0	7.7	13.0	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4

Wind Direction	Wind Speed (kt) July												
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	NA
Calm	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Variable	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	350-360-010	0.0	5.1	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
	020-030-040	0.0	3.9	5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	050-060-070	0.0	2.9	4.4	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
	080-090-100	0.0	3.8	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
	110-120-130	0.0	8.4	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
	140-150-160	0.0	5.5	7.2	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
	170-180-190	0.0	2.2	3.4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	200-210-220	0.0	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	230-240-250	0.0	1.8	3.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	260-270-280	0.0	3.8	8.6	9.6	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
	290-300-310	0.0	6.5	14.8	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
	320-330-340	0.0	6.9	12.1	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5

Wind Direction	Wind Speed (kt) August												
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	NA
Calm	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Variable	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	350-360-010	0.0	5.0	6.4	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	020-030-040	0.0	3.6	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	050-060-070	0.0	3.1	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	080-090-100	0.0	4.2	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	110-120-130	0.0	9.1	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
	140-150-160	0.0	7.4	8.5	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
	170-180-190	0.0	2.2	2.9	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
	200-210-220	0.0	1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
	230-240-250	0.0	1.8	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	260-270-280	0.0	4.5	7.3	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	290-300-310	0.0	8.2	13.7	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
	320-330-340	0.0	7.5	12.1	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4

Wind Direction	Wind Speed (kt) September												
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	NA
Calm	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Variable	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	350-360-010	0.0	4.3	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
	020-030-040	0.0	2.7	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	050-060-070	0.0	2.0	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	080-090-100	0.0	3.3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	110-120-130	0.0	8.0	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
	140-150-160	0.0	7.2	7.9	7.9	7.9	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	170-180-190	0.0	2.9	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	200-210-220	0.0	1.5	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	230-240-250	0.0	2.2	3.4	3.7	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	260-270-280	0.0	4.8	8.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
	290-300-310	0.0	9.2	14.7	15.6	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7
	320-330-340	0.0	7.8	11.9	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1

Wind Direction	Wind Speed (kt) October												
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	NA
Calm	18.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Variable	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	350-360-010	0.0	3.3	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	020-030-040	0.0	1.9	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	050-060-070	0.0	1.7	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
	080-090-100	0.0	3.3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	110-120-130	0.0	7.7	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
	140-150-160	0.0	8.3	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
	170-180-190	0.0	3.8	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
	200-210-220	0.0	1.8	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
	230-240-250	0.0	2.4	3.6	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	260-270-280	0.0	4.9	7.5	8.6	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
	290-300-310	0.0	10.0	14.5	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
	320-330-340	0.0	8.2	11.1	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3

Wind Direction	Wind Speed (kt) November												
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	NA
Calm	20.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Variable	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	350-360-010	0.0	3.6	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	020-030-040	0.0	2.4	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
	050-060-070	0.0	2.3	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
	080-090-100	0.0	3.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
	110-120-130	0.0	10.4	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
	140-150-160	0.0	10.3	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
	170-180-190	0.0	4.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	200-210-220	0.0	1.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	230-240-250	0.0	2.8	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
	260-270-280	0.0	4.0	6.4	7.0	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	290-300-310	0.0	6.8	8.8	9.2	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
	320-330-340	0.0	6.3	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2

Wind Direction	Wind Speed (kt) December												
	0	1 - 5	1 - 10	1 - 15	1 - 20	1 - 25	1 - 30	1 - 35	1 - 40	1 - 45	1 - 50	1 - 99	NA
Calm	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Variable	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	350-360-010	0.0	2.4	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
	020-030-040	0.0	2.4	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
	050-060-070	0.0	2.7	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
	080-090-100	0.0	4.5	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
	110-120-130	0.0	10.5	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
	140-150-160	0.0	10.8	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
	170-180-190	0.0	5.2	5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	200-210-220	0.0	2.1	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	230-240-250	0.0	2.1	4.4	5.9	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
	260-270-280	0.0	3.5	6.7	8.3	8.6	8.7	8.7	8.7	8.7	8.7	8.7	8.7
	290-300-310	0.0	6.4	8.8	9.2	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
	320-330-340	0.0	5.4	6.5	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6

1.4. Wind RWY 14 (32)

1.4.1. Wind RWY 14 (32) 10 Years

Frequencies in percent of the concurrent wind speed and wind direction relative to runway 14 (headwind, tailwind, left and right crosswind). Calm is for the wind speed with 0 kt. Variable is for the wind speed between 1 and 3 kt. Frequencies are calculated relative to all potentially possible minus the not available (NA) observations. The value of NA is calculated relative to the potentially possible observations. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomena were observed.

Example (dark shading): In the 10 years period 32.1% of all observations showed a headwind relative to runway 14 (tailwind relative to runway 32) with a wind speed between 0 and 5 knots ($0 < X \leq 5$).

Wind Direction	Wind Speed (kt) 10 Years												NA
	0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Calm	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.9
Variable	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Headwind	0.0	32.1	2.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailwind	0.0	34.1	14.0	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right Crosswind	0.0	38.6	6.6	1.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Left Crosswind	0.0	30.3	3.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

1.4.2. Wind RWY 14 (32) per Season

Example (dark shading): In the 10 years period in winter 38.9% of all observations showed a headwind relative to runway 14 (tailwind relative to runway 32) with a wind speed between 0 and 5 knots ($0 < X \leq 5$).

Wind Direction	Wind Speed (kt) Winter (Dec/Jan/Feb)												NA
	0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Calm	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.2
Variable	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Headwind	0.0	38.9	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailwind	0.0	29.9	9.8	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right Crosswind	0.0	37.6	7.8	2.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Left Crosswind	0.0	27.1	2.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction	Wind Speed (kt) Spring (Mar/Apr/May)												NA
	0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Calm	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.3
Variable	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Headwind	0.0	29.6	3.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailwind	0.0	35.9	17.3	2.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right Crosswind	0.0	39.2	7.7	1.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Left Crosswind	0.0	29.6	6.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction	Wind Speed (kt) Summer (Jun/Jul/Aug)												NA
	0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Calm	12.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.6
Variable	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Headwind	0.0	28.7	3.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailwind	0.0	35.8	17.4	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right Crosswind	0.0	38.5	6.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Left Crosswind	0.0	34.9	4.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction	Wind Speed (kt) Autumn (Sep/Oct/Nov)												NA
	0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Calm	18.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.6
Variable	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Headwind	0.0	32.5	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailwind	0.0	34.0	10.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right Crosswind	0.0	39.1	4.8	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Left Crosswind	0.0	29.0	2.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

1.4.3. Wind RWY 14 (32) per Month

Example (dark shading): In the 10 years period in January 39.4% of all observations showed a headwind relative to runway 14 (tailwind relative to runway 32) with a wind speed between 0 and 5 knots ($0 < X \leq 5$).

Wind Direction	Wind Speed (kt) January												NA
	0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Calm	18.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.1
Variable	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Headwind	0.0	39.4	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailwind	0.0	28.5	8.3	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right Crosswind	0.0	39.7	6.3	2.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Left Crosswind	0.0	25.7	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction	Wind Speed (kt) February												NA
	0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Calm	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.5
Variable	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Headwind	0.0	35.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailwind	0.0	32.6	13.9	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right Crosswind	0.0	37.4	10.4	3.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Left Crosswind	0.0	26.1	4.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction	Wind Speed (kt) March												NA
	0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Calm	11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.3
Variable	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Headwind	0.0	31.7	2.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailwind	0.0	33.7	16.2	2.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right Crosswind	0.0	38.7	9.7	2.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Left Crosswind	0.0	27.0	6.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction	Wind Speed (kt) April												NA
	0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Calm	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.9
Variable	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Headwind	0.0	31.0	3.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailwind	0.0	35.7	17.4	1.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right Crosswind	0.0	39.3	8.1	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Left Crosswind	0.0	29.7	6.7	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction	Wind Speed (kt) May												NA
	0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Calm	11.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.6
Variable	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Headwind	0.0	26.2	3.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailwind	0.0	38.2	18.2	2.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right Crosswind	0.0	39.8	5.3	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Left Crosswind	0.0	32.1	6.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction	Wind Speed (kt) June												NA
	0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Calm	11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5
Variable	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Headwind	0.0	26.9	3.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailwind	0.0	36.5	18.5	2.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right Crosswind	0.0	40.3	6.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Left Crosswind	0.0	32.9	4.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction	Wind Speed (kt) July												NA
	0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Calm	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.3
Variable	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Headwind	0.0	28.0	4.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tailwind	0.0	34.8	19.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Right Crosswind	0.0	37.4	7.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Left Crosswind	0.0	36.0	4.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction		Wind Speed (kt) August												NA
		0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Wind Direction	Calm	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.0
	Variable	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Headwind	0.0	31.4	2.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Tailwind	0.0	36.0	14.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Right Crosswind	0.0	37.8	4.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Left Crosswind	0.0	35.7	3.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction		Wind Speed (kt) September												NA
		0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Wind Direction	Calm	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.1
	Variable	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Headwind	0.0	28.9	1.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Tailwind	0.0	36.2	13.9	1.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Right Crosswind	0.0	40.1	5.6	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Left Crosswind	0.0	30.0	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction		Wind Speed (kt) October												NA
		0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Wind Direction	Calm	18.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.2
	Variable	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Headwind	0.0	30.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Tailwind	0.0	35.5	11.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Right Crosswind	0.0	42.4	4.7	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Left Crosswind	0.0	26.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction		Wind Speed (kt) November												NA
		0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Wind Direction	Calm	20.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.5
	Variable	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Headwind	0.0	38.2	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Tailwind	0.0	30.2	6.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Right Crosswind	0.0	34.6	3.9	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Left Crosswind	0.0	30.9	2.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Wind Direction		Wind Speed (kt) December												NA
		0	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	> 50	
Wind Direction	Calm	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.1
	Variable	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Headwind	0.0	41.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Tailwind	0.0	28.9	7.9	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Right Crosswind	0.0	35.5	7.0	2.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Left Crosswind	0.0	29.3	2.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

2.1. Wind Gusts

2.1.1. Wind Gusts 10 Years

Frequencies in per mil of concurrent wind direction (in 10° sectors) and wind gust speed within specified ranges. Frequencies are calculated relative to all potentially possible minus the not available (NA) observations. The value of NA is calculated relative to the potentially possible observations. It indicates the reduction of the data base due to NA (also in per mil). Light grey shading denotes values where the phenomena were observed.

Example (dark shading): In the 10 years period 1.38% of all observations showed a wind gust between 21 and 25 knots with a concurrent wind direction of 260 degrees.

Wind Direction	Wind Speed (kt) 10 Years							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.01	0.06	0.01	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
030	0.08	0.09	0.03	0.00	0.00	0.00	0.00	
040	0.00	0.22	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.10	0.01	0.00	0.00	0.00	0.00	
060	0.00	0.09	0.05	0.00	0.00	0.00	0.00	
070	0.00	0.05	0.02	0.00	0.00	0.00	0.00	
080	0.01	0.01	0.02	0.00	0.00	0.00	0.00	
090	0.00	0.02	0.01	0.00	0.00	0.00	0.00	
100	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.02	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.01	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.02	0.00	0.00	0.00	0.00	0.00	
160	0.01	0.02	0.01	0.01	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.01	0.02	0.03	0.01	0.00	0.00	
190	0.00	0.02	0.01	0.00	0.00	0.00	0.00	
200	0.01	0.03	0.08	0.01	0.00	0.01	0.00	
210	0.02	0.04	0.03	0.03	0.00	0.00	0.00	
220	0.01	0.25	0.23	0.10	0.00	0.00	0.00	
230	0.01	0.49	0.53	0.32	0.06	0.00	0.00	
240	0.03	0.60	0.73	0.38	0.12	0.01	0.00	
250	0.08	1.13	1.31	0.65	0.23	0.00	0.00	
260	0.04	0.95	1.38	0.48	0.22	0.03	0.00	
270	0.10	1.31	0.92	0.58	0.20	0.02	0.00	
280	0.04	1.05	1.09	0.53	0.10	0.02	0.01	
290	0.04	0.68	0.70	0.28	0.11	0.00	0.00	
300	0.01	0.38	0.22	0.01	0.02	0.00	0.00	
310	0.05	0.29	0.30	0.08	0.01	0.00	0.00	
320	0.01	0.14	0.18	0.03	0.02	0.00	0.00	
330	0.01	0.05	0.03	0.00	0.00	0.00	0.00	
340	0.02	0.04	0.01	0.00	0.01	0.00	0.00	
350	0.00	0.01	0.00	0.02	0.00	0.00	0.00	

449

2.1.2. Maximum Wind Gust in 10 Years

On the 26th of December 1999 at 1020 UTC a wind gust of 72 kt was measured. This extreme value was caused by the gale Lothar.

2.1.3. Wind Gusts per Season

Example (dark shading): In the 10 years period in winter 3.65% of all observations showed a wind gust between 21 and 25 knots with a concurrent wind direction of 260 degrees.

Wind Direction	Wind Speed (kt) Winter (Dec/Jan/Feb)							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.05	0.00	0.00	0.00	0.00	0.00	
030	0.00	0.05	0.00	0.00	0.00	0.00	0.00	
040	0.00	0.10	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
070	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.05	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.10	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.05	0.00	0.00	0.00	0.00	0.00	
190	0.00	0.05	0.00	0.00	0.00	0.00	0.00	
200	0.05	0.10	0.14	0.05	0.00	0.00	0.00	
210	0.00	0.05	0.00	0.10	0.00	0.00	0.00	
220	0.00	0.72	0.58	0.34	0.00	0.00	0.00	
230	0.00	0.91	1.20	0.91	0.14	0.00	0.00	
240	0.05	0.77	1.83	1.06	0.19	0.05	0.00	
250	0.14	2.69	3.03	1.25	0.53	0.00	0.00	
260	0.05	1.83	3.65	0.67	0.53	0.14	0.00	
270	0.10	2.55	1.11	0.77	0.34	0.10	0.00	
280	0.05	1.44	1.49	0.77	0.14	0.05	0.05	
290	0.05	0.62	0.67	0.29	0.14	0.00	0.00	
300	0.00	0.43	0.34	0.00	0.05	0.00	0.00	
310	0.10	0.53	0.19	0.14	0.05	0.00	0.00	
320	0.05	0.05	0.19	0.00	0.00	0.00	0.00	
330	0.00	0.05	0.05	0.00	0.00	0.00	0.00	
340	0.00	0.05	0.00	0.00	0.05	0.00	0.00	
350	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

502

Wind Direction	Wind Speed (kt) Spring (Mar/Apr/May)							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.16	0.04	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.08	0.00	0.00	0.00	0.00	0.00	
030	0.20	0.20	0.08	0.00	0.00	0.00	0.00	
040	0.00	0.60	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.32	0.04	0.00	0.00	0.00	0.00	
060	0.00	0.28	0.12	0.00	0.00	0.00	0.00	
070	0.00	0.12	0.04	0.00	0.00	0.00	0.00	
080	0.04	0.04	0.04	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.04	0.00	0.00	0.00	0.00	
100	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.04	0.04	0.04	0.00	0.00	
190	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200	0.00	0.04	0.04	0.00	0.00	0.00	0.00	
210	0.04	0.08	0.04	0.00	0.00	0.00	0.00	
220	0.00	0.20	0.16	0.08	0.00	0.00	0.00	
230	0.04	0.68	0.64	0.36	0.08	0.00	0.00	
240	0.08	0.84	0.80	0.28	0.24	0.00	0.00	
250	0.08	1.28	1.32	0.72	0.04	0.00	0.00	
260	0.12	1.36	0.92	0.56	0.20	0.00	0.00	
270	0.16	1.40	1.44	0.60	0.24	0.00	0.00	
280	0.08	1.08	1.52	0.64	0.20	0.04	0.00	
290	0.04	1.00	1.00	0.40	0.16	0.00	0.00	
300	0.04	0.32	0.16	0.00	0.04	0.00	0.00	
310	0.04	0.44	0.64	0.08	0.00	0.00	0.00	
320	0.00	0.20	0.28	0.08	0.08	0.00	0.00	
330	0.00	0.12	0.08	0.00	0.00	0.00	0.00	
340	0.08	0.04	0.00	0.00	0.00	0.00	0.00	
350	0.00	0.00	0.00	0.08	0.00	0.00	0.00	

433

Wind Direction	Wind Speed (kt) Summer (Jun/Jul/Aug)							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.04	0.04	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
030	0.08	0.08	0.04	0.00	0.00	0.00	0.00	
040	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.04	0.08	0.00	0.00	0.00	0.00	
070	0.00	0.00	0.04	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.04	0.00	0.00	0.00	0.00	
090	0.00	0.08	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.04	0.04	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.04	0.04	0.00	0.00	0.00	
190	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
200	0.00	0.00	0.00	0.00	0.00	0.04	0.00	
210	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
220	0.04	0.04	0.08	0.00	0.00	0.00	0.00	
230	0.00	0.08	0.08	0.04	0.04	0.00	0.00	
240	0.00	0.32	0.08	0.00	0.00	0.00	0.00	
250	0.00	0.32	0.20	0.16	0.04	0.00	0.00	
260	0.00	0.16	0.56	0.04	0.00	0.00	0.00	
270	0.00	0.76	0.56	0.20	0.04	0.00	0.00	
280	0.00	0.88	0.56	0.40	0.00	0.00	0.00	
290	0.04	0.68	0.64	0.24	0.00	0.00	0.00	
300	0.00	0.48	0.20	0.00	0.00	0.00	0.00	
310	0.04	0.16	0.12	0.08	0.00	0.00	0.00	
320	0.00	0.12	0.12	0.00	0.00	0.00	0.00	
330	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
340	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
350	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

426

Wind Direction	Wind Speed (kt) Autumn (Sep/Oct/Nov)							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.05	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
040	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.05	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
070	0.00	0.09	0.00	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.05	0.05	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.00	0.05	0.00	0.00	0.00	
190	0.00	0.00	0.05	0.00	0.00	0.00	0.00	
200	0.00	0.00	0.14	0.00	0.00	0.00	0.00	
210	0.05	0.05	0.09	0.05	0.00	0.00	0.00	
220	0.00	0.09	0.14	0.00	0.00	0.00	0.00	
230	0.00	0.36	0.27	0.05	0.00	0.00	0.00	
240	0.00	0.50	0.36	0.27	0.05	0.00	0.00	
250	0.09	0.41	0.95	0.54	0.36	0.00	0.00	
260	0.00	0.54	0.68	0.72	0.18	0.00	0.00	
270	0.14	0.68	0.59	0.81	0.23	0.00	0.00	
280	0.05	0.86	0.81	0.32	0.05	0.00	0.00	
290	0.05	0.36	0.45	0.18	0.14	0.00	0.00	
300	0.00	0.27	0.18	0.05	0.00	0.00	0.00	
310	0.05	0.05	0.23	0.00	0.00	0.00	0.00	
320	0.00	0.18	0.14	0.05	0.00	0.00	0.00	
330	0.05	0.00	0.00	0.00	0.00	0.00	0.00	
340	0.00	0.05	0.05	0.00	0.00	0.00	0.00	
350	0.00	0.05	0.00	0.00	0.00	0.00	0.00	

436

2.1.4. Wind Gusts per Month

Example (dark shading): In the 10 years period in January 2.69% of all observations showed a wind gust speed between 21 and 25 knots with a concurrent wind direction of 260 degrees.

Wind Direction	Wind Speed (kt) January							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
040	0.00	0.13	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
070	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.27	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
190	0.00	0.13	0.00	0.00	0.00	0.00	0.00	
200	0.00	0.13	0.00	0.00	0.00	0.00	0.00	
210	0.00	0.00	0.00	0.13	0.00	0.00	0.00	
220	0.00	0.67	0.13	0.27	0.00	0.00	0.00	
230	0.00	0.27	1.08	0.40	0.27	0.00	0.00	
240	0.00	1.21	0.94	0.67	0.00	0.00	0.00	
250	0.00	1.75	2.69	1.21	0.13	0.00	0.00	
260	0.00	1.89	2.69	0.40	0.27	0.00	0.00	
270	0.00	2.69	0.40	0.54	0.40	0.00	0.00	
280	0.00	1.21	1.48	0.67	0.13	0.13	0.00	
290	0.00	0.27	0.40	0.27	0.13	0.00	0.00	
300	0.00	0.54	0.00	0.00	0.00	0.00	0.00	
310	0.00	0.54	0.27	0.00	0.00	0.00	0.00	
320	0.00	0.13	0.13	0.00	0.00	0.00	0.00	
330	0.00	0.00	0.13	0.00	0.00	0.00	0.00	
340	0.00	0.00	0.00	0.00	0.13	0.00	0.00	
350	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

501

Wind Direction	Wind Speed (kt) February							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.16	0.00	0.00	0.00	0.00	0.00	
030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
040	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
070	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
190	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200	0.00	0.00	0.49	0.00	0.00	0.00	0.00	
210	0.00	0.16	0.00	0.16	0.00	0.00	0.00	
220	0.00	0.49	1.30	0.16	0.00	0.00	0.00	
230	0.00	0.81	1.63	0.33	0.00	0.00	0.00	
240	0.00	0.81	1.95	0.49	0.16	0.00	0.00	
250	0.00	4.23	3.58	0.33	0.16	0.00	0.00	
260	0.00	1.79	4.71	0.65	0.00	0.00	0.00	
270	0.16	3.41	0.98	0.65	0.16	0.00	0.00	
280	0.00	2.11	1.95	1.14	0.00	0.00	0.00	
290	0.16	0.81	0.81	0.33	0.00	0.00	0.00	
300	0.00	0.49	0.81	0.00	0.00	0.00	0.00	
310	0.16	0.49	0.16	0.16	0.00	0.00	0.00	
320	0.16	0.00	0.16	0.00	0.00	0.00	0.00	
330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
340	0.00	0.16	0.00	0.00	0.00	0.00	0.00	
350	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

545

Wind Direction	Wind Speed (kt) March							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.12	0.12	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
030	0.00	0.24	0.00	0.00	0.00	0.00	0.00	
040	0.00	0.71	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.47	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
070	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.12	0.00	0.00	0.00	0.00	
190	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
210	0.12	0.12	0.12	0.00	0.00	0.00	0.00	
220	0.00	0.24	0.47	0.00	0.00	0.00	0.00	
230	0.12	1.30	1.42	0.71	0.12	0.00	0.00	
240	0.12	1.07	1.66	0.59	0.47	0.00	0.00	
250	0.12	2.02	2.61	1.78	0.12	0.00	0.00	
260	0.12	2.37	1.66	1.07	0.47	0.00	0.00	
270	0.36	1.42	1.90	0.36	0.36	0.00	0.00	
280	0.12	1.54	2.37	0.83	0.00	0.00	0.00	
290	0.00	1.54	1.54	0.36	0.12	0.00	0.00	
300	0.12	0.71	0.36	0.00	0.00	0.00	0.00	
310	0.12	0.83	0.71	0.00	0.00	0.00	0.00	
320	0.00	0.24	0.24	0.12	0.12	0.00	0.00	
330	0.00	0.24	0.12	0.00	0.00	0.00	0.00	
340	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
350	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

433

Wind Direction	Wind Speed (kt) April							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.24	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
030	0.61	0.24	0.24	0.00	0.00	0.00	0.00	
040	0.00	0.61	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.24	0.12	0.00	0.00	0.00	0.00	
060	0.00	0.61	0.24	0.00	0.00	0.00	0.00	
070	0.00	0.12	0.12	0.00	0.00	0.00	0.00	
080	0.12	0.12	0.12	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.12	0.00	0.00	0.00	0.00	
100	0.00	0.24	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.00	0.12	0.00	0.00	0.00	
190	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200	0.00	0.12	0.12	0.00	0.00	0.00	0.00	
210	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
220	0.00	0.24	0.00	0.24	0.00	0.00	0.00	
230	0.00	0.49	0.36	0.12	0.12	0.00	0.00	
240	0.12	0.85	0.49	0.24	0.24	0.00	0.00	
250	0.12	1.34	1.22	0.24	0.00	0.00	0.00	
260	0.12	1.46	0.73	0.36	0.12	0.00	0.00	
270	0.00	1.95	1.22	0.97	0.24	0.00	0.00	
280	0.12	1.09	1.58	0.36	0.12	0.12	0.00	
290	0.12	0.85	0.73	0.49	0.36	0.00	0.00	
300	0.00	0.12	0.12	0.00	0.12	0.00	0.00	
310	0.00	0.24	0.73	0.12	0.00	0.00	0.00	
320	0.00	0.24	0.12	0.12	0.12	0.00	0.00	
330	0.00	0.00	0.12	0.00	0.00	0.00	0.00	
340	0.12	0.00	0.00	0.00	0.00	0.00	0.00	
350	0.00	0.00	0.00	0.12	0.00	0.00	0.00	

429

Wind Direction	Wind Speed (kt) May							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
030	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
040	0.00	0.48	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.24	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.12	0.12	0.00	0.00	0.00	0.00	
070	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.00	0.00	0.12	0.00	0.00	
190	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
210	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
220	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
230	0.00	0.24	0.12	0.24	0.00	0.00	0.00	
240	0.00	0.60	0.24	0.00	0.00	0.00	0.00	
250	0.00	0.48	0.12	0.12	0.00	0.00	0.00	
260	0.12	0.24	0.36	0.24	0.00	0.00	0.00	
270	0.12	0.83	1.19	0.48	0.12	0.00	0.00	
280	0.00	0.60	0.60	0.72	0.48	0.00	0.00	
290	0.00	0.60	0.72	0.36	0.00	0.00	0.00	
300	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
310	0.00	0.24	0.48	0.12	0.00	0.00	0.00	
320	0.00	0.12	0.48	0.00	0.00	0.00	0.00	
330	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
340	0.12	0.00	0.00	0.00	0.00	0.00	0.00	
350	0.00	0.00	0.00	0.12	0.00	0.00	0.00	

436

Wind Direction	Wind Speed (kt) June							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
030	0.12	0.00	0.12	0.00	0.00	0.00	0.00	
040	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
070	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.12	0.00	0.00	0.00	0.00	
090	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.00	0.12	0.00	0.00	0.00	
190	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200	0.00	0.00	0.00	0.00	0.00	0.00	0.12	
210	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
220	0.12	0.12	0.12	0.00	0.00	0.00	0.00	
230	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
240	0.00	0.48	0.00	0.00	0.00	0.00	0.00	
250	0.00	0.12	0.24	0.00	0.00	0.00	0.00	
260	0.00	0.00	0.36	0.00	0.00	0.00	0.00	
270	0.00	0.97	0.36	0.36	0.00	0.00	0.00	
280	0.00	0.48	0.60	0.36	0.00	0.00	0.00	
290	0.00	0.60	0.72	0.00	0.00	0.00	0.00	
300	0.00	0.48	0.00	0.00	0.00	0.00	0.00	
310	0.12	0.00	0.12	0.12	0.00	0.00	0.00	
320	0.00	0.00	0.12	0.00	0.00	0.00	0.00	
330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
340	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
350	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

425

Wind Direction	Wind Speed (kt) July							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.12	0.00	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
030	0.00	0.23	0.00	0.00	0.00	0.00	0.00	
040	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.12	0.23	0.00	0.00	0.00	0.00	
070	0.00	0.00	0.12	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
090	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.12	0.12	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.12	0.00	0.00	0.00	0.00	
190	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
210	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
220	0.00	0.00	0.12	0.00	0.00	0.00	0.00	
230	0.00	0.12	0.12	0.12	0.12	0.00	0.00	
240	0.00	0.23	0.23	0.00	0.00	0.00	0.00	
250	0.00	0.35	0.23	0.47	0.00	0.00	0.00	
260	0.00	0.47	0.93	0.00	0.00	0.00	0.00	
270	0.00	0.58	0.82	0.23	0.12	0.00	0.00	
280	0.00	1.52	0.70	0.82	0.00	0.00	0.00	
290	0.00	1.17	1.17	0.35	0.00	0.00	0.00	
300	0.00	0.58	0.47	0.00	0.00	0.00	0.00	
310	0.00	0.12	0.23	0.00	0.00	0.00	0.00	
320	0.00	0.12	0.12	0.00	0.00	0.00	0.00	
330	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
340	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
350	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

423

Wind Direction	Wind Speed (kt) August							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
030	0.12	0.00	0.00	0.00	0.00	0.00	0.00	
040	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
070	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
190	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
210	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
220	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
230	0.00	0.12	0.12	0.00	0.00	0.00	0.00	
240	0.00	0.25	0.00	0.00	0.00	0.00	0.00	
250	0.00	0.49	0.12	0.00	0.12	0.00	0.00	
260	0.00	0.00	0.37	0.12	0.00	0.00	0.00	
270	0.00	0.74	0.49	0.00	0.00	0.00	0.00	
280	0.00	0.62	0.37	0.00	0.00	0.00	0.00	
290	0.12	0.25	0.00	0.37	0.00	0.00	0.00	
300	0.00	0.37	0.12	0.00	0.00	0.00	0.00	
310	0.00	0.37	0.00	0.12	0.00	0.00	0.00	
320	0.00	0.25	0.12	0.00	0.00	0.00	0.00	
330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
340	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
350	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

430

Wind Direction	Wind Speed (kt) September							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
040	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
070	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.14	0.14	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.00	0.14	0.00	0.00	0.00	
190	0.00	0.00	0.14	0.00	0.00	0.00	0.00	
200	0.00	0.00	0.27	0.00	0.00	0.00	0.00	
210	0.00	0.14	0.27	0.00	0.00	0.00	0.00	
220	0.00	0.27	0.14	0.00	0.00	0.00	0.00	
230	0.00	0.14	0.00	0.00	0.00	0.00	0.00	
240	0.00	0.14	0.27	0.00	0.00	0.00	0.00	
250	0.00	0.27	0.81	0.41	0.00	0.00	0.00	
260	0.00	0.68	0.00	0.27	0.00	0.00	0.00	
270	0.14	0.54	0.41	0.54	0.00	0.00	0.00	
280	0.00	0.81	0.68	0.54	0.00	0.00	0.00	
290	0.14	0.54	0.41	0.00	0.27	0.00	0.00	
300	0.00	0.14	0.00	0.14	0.00	0.00	0.00	
310	0.14	0.00	0.54	0.00	0.00	0.00	0.00	
320	0.00	0.41	0.00	0.00	0.00	0.00	0.00	
330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
340	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
350	0.00	0.14	0.00	0.00	0.00	0.00	0.00	

431

Wind Direction	Wind Speed (kt) October							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.13	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
040	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
070	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
190	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200	0.00	0.00	0.13	0.00	0.00	0.00	0.00	
210	0.13	0.00	0.00	0.00	0.00	0.00	0.00	
220	0.00	0.00	0.26	0.00	0.00	0.00	0.00	
230	0.00	0.53	0.53	0.13	0.00	0.00	0.00	
240	0.00	0.79	0.79	0.39	0.13	0.00	0.00	
250	0.13	0.53	1.45	0.39	0.53	0.00	0.00	
260	0.00	0.66	1.31	0.66	0.26	0.00	0.00	
270	0.00	0.92	0.53	0.92	0.26	0.00	0.00	
280	0.00	1.05	1.71	0.26	0.00	0.00	0.00	
290	0.00	0.26	0.39	0.53	0.00	0.00	0.00	
300	0.00	0.53	0.26	0.00	0.00	0.00	0.00	
310	0.00	0.13	0.13	0.00	0.00	0.00	0.00	
320	0.00	0.13	0.13	0.13	0.00	0.00	0.00	
330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
340	0.00	0.13	0.13	0.00	0.00	0.00	0.00	
350	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

432

Wind Direction	Wind Speed (kt) November							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
040	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.14	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
070	0.00	0.28	0.00	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
190	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
210	0.00	0.00	0.00	0.14	0.00	0.00	0.00	
220	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
230	0.00	0.42	0.28	0.00	0.00	0.00	0.00	
240	0.00	0.56	0.00	0.42	0.00	0.00	0.00	
250	0.14	0.42	0.56	0.83	0.56	0.00	0.00	
260	0.00	0.28	0.70	1.25	0.28	0.00	0.00	
270	0.28	0.56	0.83	0.97	0.42	0.00	0.00	
280	0.14	0.70	0.00	0.14	0.14	0.00	0.00	
290	0.00	0.28	0.56	0.00	0.14	0.00	0.00	
300	0.00	0.14	0.28	0.00	0.00	0.00	0.00	
310	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
320	0.00	0.00	0.28	0.00	0.00	0.00	0.00	
330	0.14	0.00	0.00	0.00	0.00	0.00	0.00	
340	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
350	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

445

Wind Direction	Wind Speed (kt) December							
	10-15	16-20	21-25	26-30	31-40	41-60	>60	NA
360	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
030	0.00	0.14	0.00	0.00	0.00	0.00	0.00	
040	0.00	0.14	0.00	0.00	0.00	0.00	0.00	
050	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
060	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
070	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
080	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
090	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120	0.00	0.00	0.14	0.00	0.00	0.00	0.00	
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
180	0.00	0.14	0.00	0.00	0.00	0.00	0.00	
190	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200	0.14	0.14	0.00	0.14	0.00	0.00	0.00	
210	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
220	0.00	0.97	0.42	0.55	0.00	0.00	0.00	
230	0.00	1.66	0.97	1.94	0.14	0.00	0.00	
240	0.14	0.28	2.63	1.94	0.42	0.14	0.00	
250	0.42	2.35	2.91	2.08	1.25	0.00	0.00	
260	0.14	1.80	3.74	0.97	1.25	0.42	0.00	
270	0.14	1.66	1.94	1.11	0.42	0.28	0.00	
280	0.14	1.11	1.11	0.55	0.28	0.00	0.14	
290	0.00	0.83	0.83	0.28	0.28	0.00	0.00	
300	0.00	0.28	0.28	0.00	0.14	0.00	0.00	
310	0.14	0.55	0.14	0.28	0.14	0.00	0.00	
320	0.00	0.00	0.28	0.00	0.00	0.00	0.00	
330	0.00	0.14	0.00	0.00	0.00	0.00	0.00	
340	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
350	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

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3. VISIBILITY AND CEILING

3.1. Visibility

3.1.1. Hourly Visibility 10 Years

Cumulative frequencies in percent of visibility below specified values at specified times (months in 3.1.2.). Frequencies are calculated relative to all potentially possible observations each hour (month) minus the not available (NA) observations. The value of NA is calculated relative to the potentially possible observations. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomena were observed.

Example (dark shading): In the 10 years period between 04 and 05 UTC showed a visibility below 5000 m.

Time (UTC)	Visibility (m) 10 Years											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.3	1.9	2.8	3.3	4.8	8.2	15.4	36.7	63.3	88.9
04 - 05	0.0	0.0	0.3	2.3	3.3	3.9	5.6	8.8	17.0	35.4	64.6	42.2
05 - 06	0.0	0.0	0.5	3.6	4.8	5.5	7.4	12.1	21.6	39.7	60.3	10.0
06 - 07	0.0	0.0	0.7	3.5	4.3	4.9	7.1	12.5	21.8	39.2	60.8	6.3
07 - 08	0.0	0.0	0.5	2.5	3.3	3.8	5.6	11.1	20.3	37.3	62.7	7.2
08 - 09	0.0	0.0	0.2	1.7	2.3	2.7	4.2	8.8	17.4	34.2	65.8	7.1
09 - 10	0.0	0.0	0.1	0.8	1.2	1.5	2.5	6.4	14.4	32.0	68.0	6.8
10 - 11	0.0	0.0	0.0	0.4	0.7	0.8	1.7	5.3	11.9	29.4	70.6	6.7
11 - 12	0.0	0.0	0.0	0.3	0.3	0.4	1.2	4.0	10.0	26.3	73.7	6.4
12 - 13	0.0	0.0	0.0	0.1	0.2	0.3	1.0	3.4	8.8	24.2	75.8	7.0
13 - 14	0.0	0.0	0.0	0.1	0.1	0.2	0.9	2.9	7.7	22.9	77.1	7.2
14 - 15	0.0	0.0	0.0	0.1	0.2	0.3	0.7	2.7	7.5	22.5	77.5	7.9
15 - 16	0.0	0.0	0.0	0.1	0.2	0.4	0.9	3.2	7.8	22.5	77.5	8.2
16 - 17	0.0	0.0	0.1	0.2	0.4	0.5	1.2	3.7	9.0	23.8	76.2	9.1
17 - 18	0.0	0.0	0.1	0.4	0.6	0.8	1.4	4.0	9.7	24.0	76.0	19.3
18 - 19	0.0	0.1	0.1	0.8	0.9	1.2	2.0	5.6	12.5	28.8	71.2	50.5
19 - 20	0.0	0.1	0.2	1.3	1.8	2.2	3.7	10.4	21.8	44.1	55.9	85.2

3.1.2. Monthly Visibility 10 Years

Example (dark shading): In the 10 years period in March 10.5% of all observations showed a visibility below 5000 m.

Time (Months)	Visibility (m) 10 Years											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
January	0.0	0.0	0.4	2.6	3.6	4.2	7.3	18.9	34.4	53.6	46.4	50.0
February	0.0	0.0	0.2	1.2	1.5	2.0	3.9	10.5	19.5	40.7	59.3	54.6
March	0.0	0.0	0.1	0.6	0.8	0.9	1.9	4.3	10.5	29.4	70.6	43.1
April	0.0	0.0	0.0	0.1	0.2	0.3	0.9	2.4	6.5	21.5	78.5	42.8
May	0.0	0.0	0.0	0.2	0.3	0.4	0.6	1.5	5.1	17.1	82.9	43.7
June	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.5	2.5	10.0	90.0	42.4
July	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.2	7.9	92.1	42.4
August	0.0	0.0	0.1	0.2	0.3	0.4	0.8	1.9	4.8	16.3	83.7	42.9
September	0.0	0.0	0.1	1.1	1.6	2.0	2.7	4.7	10.8	29.1	70.9	42.7
October	0.0	0.0	0.3	2.5	3.3	3.8	4.9	8.5	18.5	41.7	58.3	43.1
November	0.0	0.0	0.6	3.6	4.9	5.5	7.9	15.6	28.7	54.7	45.3	44.3
December	0.0	0.1	0.3	2.0	2.6	3.2	5.5	11.3	24.0	45.3	54.7	46.0

3.1.3. Hourly Visibility per Season

Example (dark shading): In the 10 years period in winter 27.5 % of all observations between 04 and 05 UTC showed a visibility below 5000 m.

	Visibility (m) Winter (Dec/Jan/Feb)											
Time (UTC)	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
04 - 05	0.0	0.0	0.0	3.1	4.7	5.0	7.2	13.4	27.5	49.7	50.3	81.6
05 - 06	0.0	0.1	1.0	4.9	5.8	6.4	9.1	16.2	29.9	53.3	46.7	23.2
06 - 07	0.0	0.0	0.8	4.4	5.1	6.5	10.3	19.1	31.9	53.6	46.4	14.4
07 - 08	0.0	0.0	0.6	4.6	6.3	7.5	11.1	21.4	34.9	53.6	46.4	14.9
08 - 09	0.0	0.0	0.4	3.6	5.4	6.5	10.4	20.3	35.0	53.8	46.2	14.7
09 - 10	0.0	0.0	0.2	2.6	3.2	4.0	7.1	16.9	32.1	52.0	48.0	14.9
10 - 11	0.0	0.0	0.1	1.5	2.5	2.6	5.1	14.9	27.9	49.4	50.6	14.8
11 - 12	0.0	0.0	0.2	1.1	1.3	1.7	3.7	12.1	23.9	45.2	54.8	14.2
12 - 13	0.0	0.0	0.1	0.5	0.8	1.1	2.8	10.3	21.8	41.7	58.3	14.5
13 - 14	0.0	0.0	0.0	0.3	0.5	0.6	2.6	8.8	19.3	39.4	60.6	13.6
14 - 15	0.0	0.0	0.0	0.3	0.7	0.9	2.0	8.3	19.7	39.9	60.1	14.9
15 - 16	0.0	0.1	0.2	0.5	0.7	0.9	2.8	10.1	20.6	41.0	59.0	15.2
16 - 17	0.1	0.1	0.5	0.8	1.2	1.5	3.4	10.7	22.7	42.6	57.4	16.2
17 - 18	0.0	0.0	0.3	1.1	1.8	2.1	4.2	11.3	24.0	44.4	55.6	29.3
18 - 19	0.0	0.2	0.3	1.4	1.6	2.3	4.0	11.5	23.4	44.8	55.2	39.0
19 - 20	0.0	0.2	0.4	1.6	1.9	1.9	4.5	14.6	29.2	49.3	50.7	70.6

	Visibility (m) Spring (Mar/Apr/May)											
Time (UTC)	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.0	0.5	0.5	0.5	3.7	5.6	12.1	31.2	68.8	88.3
04 - 05	0.0	0.0	0.4	1.4	2.1	2.6	4.5	7.6	15.1	32.3	67.7	34.1
05 - 06	0.0	0.0	0.1	1.6	2.1	2.3	3.9	8.2	17.1	33.3	66.7	6.0
06 - 07	0.0	0.0	0.1	0.9	1.1	1.2	2.7	7.0	15.2	32.6	67.4	4.7
07 - 08	0.0	0.0	0.2	0.6	0.8	0.9	1.7	4.7	12.5	29.9	70.1	5.4
08 - 09	0.0	0.0	0.1	0.3	0.4	0.6	0.7	3.0	8.9	25.8	74.2	4.8
09 - 10	0.0	0.0	0.0	0.1	0.1	0.2	0.2	1.6	7.0	24.4	75.6	4.0
10 - 11	0.0	0.0	0.0	0.0	0.1	0.1	0.2	1.2	4.8	22.1	77.9	4.2
11 - 12	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.0	4.5	19.9	80.1	3.8
12 - 13	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.9	3.7	17.2	82.8	4.9
13 - 14	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.7	3.4	16.6	83.4	5.2
14 - 15	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.8	3.0	16.4	83.6	5.7
15 - 16	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.8	3.0	16.1	83.9	6.1
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.9	3.4	16.8	83.2	7.7
17 - 18	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.4	4.2	17.4	82.6	14.3
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.3	6.0	19.6	80.4	49.3
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	8.0	27.8	72.2	88.5

	Visibility (m) Summer (Jun/Jul/Aug)											
Time (UTC)	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.3	0.3	1.5	1.5	1.5	4.0	9.7	28.6	71.4	81.9
04 - 05	0.0	0.0	0.1	0.7	1.2	1.5	2.3	4.3	10.0	25.4	74.6	10.3
05 - 06	0.0	0.0	0.3	0.6	0.7	0.8	1.5	3.4	7.9	21.9	78.1	2.9
06 - 07	0.0	0.0	0.0	0.2	0.2	0.2	0.6	1.7	6.1	18.6	81.4	3.1
07 - 08	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	3.6	14.7	85.3	5.2
08 - 09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.9	11.8	88.2	5.0
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.3	10.4	89.6	4.7
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.4	8.9	91.1	4.5
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0	7.2	92.8	3.9
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.2	7.4	92.6	4.0
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8	6.8	93.2	4.9
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	5.9	94.1	4.9
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	5.5	94.5	5.2
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	6.6	93.4	5.1
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.4	6.3	93.7	14.8
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	5.8	94.2	61.8
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Visibility (m) Autumn (Sep/Oct/Nov)											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.4	5.4	6.7	8.3	10.4	16.3	26.3	52.9	47.1	85.3
04 - 05	0.0	0.0	0.9	6.1	8.3	9.5	12.3	16.6	28.6	52.7	47.3	44.6
05 - 06	0.0	0.0	0.9	8.5	11.7	13.6	16.9	23.1	35.5	55.7	44.3	8.2
06 - 07	0.0	0.1	1.9	9.1	11.5	12.6	16.0	24.3	36.9	55.8	44.2	2.9
07 - 08	0.0	0.0	1.1	5.4	7.0	7.9	10.9	19.7	33.4	54.8	45.2	3.4
08 - 09	0.0	0.0	0.4	3.3	4.2	4.6	6.6	13.8	27.5	49.5	50.5	4.0
09 - 10	0.0	0.0	0.1	1.0	1.8	2.2	3.4	8.6	20.4	45.2	54.8	3.7
10 - 11	0.0	0.0	0.0	0.3	0.6	0.8	2.0	6.4	16.3	41.3	58.7	3.2
11 - 12	0.0	0.0	0.0	0.1	0.1	0.2	1.1	4.1	13.0	36.6	63.4	3.9
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.8	3.3	10.7	34.2	65.8	4.6
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.5	9.0	31.9	68.1	5.2
14 - 15	0.0	0.0	0.0	0.1	0.1	0.2	0.8	2.3	8.3	31.2	68.8	6.2
15 - 16	0.0	0.0	0.0	0.1	0.3	0.5	0.7	2.5	9.1	30.8	69.2	6.5
16 - 17	0.0	0.0	0.0	0.2	0.6	0.7	1.1	3.8	11.5	33.0	67.0	7.6
17 - 18	0.0	0.0	0.0	0.6	1.1	1.1	1.4	4.8	12.9	33.4	66.6	19.1
18 - 19	0.0	0.0	0.1	1.5	2.0	2.3	2.8	6.4	15.1	38.2	61.8	51.4
19 - 20	0.0	0.0	0.0	1.9	2.9	4.1	4.8	9.2	19.1	46.5	53.5	80.8

3.1.4. Hourly Visibility per Month

Example (dark shading): In the 10 years period in January 34.3 % of all observations between 04 and 05 UTC showed a visibility below 5000 m.

Time (UTC)	Visibility (m) January											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	0.0	0.0	0.0	2.0	6.9	6.9	9.8	20.6	34.3	53.9	46.1	83.5
05 - 06	0.0	0.0	0.9	5.5	7.5	7.9	10.7	20.7	36.9	60.1	39.9	24.4
06 - 07	0.0	0.0	0.8	4.6	5.5	7.6	11.8	22.4	39.1	59.2	40.8	15.0
07 - 08	0.0	0.0	0.8	5.5	8.2	9.4	14.7	28.1	43.1	59.5	40.5	15.5
08 - 09	0.0	0.0	0.7	5.2	7.2	8.2	13.8	27.1	43.1	59.7	40.3	13.2
09 - 10	0.0	0.0	0.6	3.7	4.8	5.8	9.3	23.6	41.0	57.2	42.8	13.4
10 - 11	0.0	0.0	0.4	2.6	3.9	3.9	7.3	21.8	38.2	55.3	44.7	14.2
11 - 12	0.0	0.0	0.2	2.1	2.6	2.6	4.5	17.0	32.3	51.7	48.3	14.5
12 - 13	0.0	0.0	0.0	0.8	1.3	1.5	2.7	14.4	29.7	49.2	50.8	14.8
13 - 14	0.0	0.0	0.0	0.6	0.9	0.9	1.9	11.9	26.1	46.9	53.1	13.4
14 - 15	0.0	0.0	0.0	0.6	1.1	1.1	2.3	12.9	26.8	47.4	52.6	15.0
15 - 16	0.0	0.0	0.4	0.8	0.8	0.8	3.7	13.3	28.0	47.4	52.6	16.6
16 - 17	0.0	0.0	1.0	1.0	1.3	1.9	4.9	15.6	31.4	50.0	50.0	15.2
17 - 18	0.0	0.0	0.7	1.3	1.8	2.5	6.3	16.6	31.9	52.1	47.9	28.2
18 - 19	0.0	0.0	0.3	2.1	2.6	4.1	7.4	16.9	31.3	52.8	47.2	37.1
19 - 20	0.0	0.0	0.0	3.0	3.4	3.4	7.9	20.7	39.4	58.1	41.9	67.3

Time (UTC)	Visibility (m) February											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	0.0	0.0	0.0	4.3	4.3	4.3	5.4	7.5	21.5	41.9	58.1	83.5
05 - 06	0.0	0.0	1.7	4.2	4.2	5.0	7.2	13.4	23.8	45.2	54.8	28.5
06 - 07	0.0	0.0	1.1	4.8	5.0	6.1	9.3	19.1	27.0	50.2	49.8	22.0
07 - 08	0.0	0.0	0.2	4.1	4.6	5.8	8.8	19.1	29.0	48.8	51.2	23.0
08 - 09	0.0	0.0	0.0	1.8	3.5	5.3	8.5	17.1	28.6	50.0	50.0	23.0
09 - 10	0.0	0.0	0.0	0.7	0.9	2.1	5.8	14.1	24.7	47.7	52.3	23.0
10 - 11	0.0	0.0	0.0	0.0	0.2	0.2	2.8	10.4	19.1	44.2	55.8	23.0
11 - 12	0.0	0.0	0.0	0.0	0.0	0.2	1.6	8.3	17.7	38.9	61.1	22.9
12 - 13	0.0	0.0	0.0	0.0	0.2	0.5	1.2	6.9	14.1	33.0	67.0	23.2
13 - 14	0.0	0.0	0.0	0.0	0.0	0.2	0.5	2.1	6.2	12.1	31.9	68.1
14 - 15	0.0	0.0	0.0	0.0	0.0	0.5	0.9	1.2	4.4	12.6	31.8	68.2
15 - 16	0.0	0.0	0.0	0.2	0.5	0.5	1.8	6.4	12.6	34.4	65.6	22.7
16 - 17	0.2	0.2	0.2	0.2	0.5	0.5	1.4	6.1	14.8	35.4	64.6	24.5
17 - 18	0.0	0.0	0.0	0.0	0.3	0.3	1.3	7.5	17.4	37.7	62.3	31.7
18 - 19	0.0	0.0	0.0	0.3	0.3	0.3	0.9	8.5	17.6	40.4	59.6	41.7
19 - 20	0.0	0.0	0.0	0.0	0.6	0.6	1.9	8.7	20.5	39.1	60.9	71.5

Time (UTC)	Visibility (m) March											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	13.3	13.3	26.7	46.7	53.3	97.6
04 - 05	0.0	0.0	1.3	3.1	3.8	3.8	5.0	9.4	18.1	39.4	60.6	74.2
05 - 06	0.0	0.0	0.4	2.9	3.9	4.5	6.8	11.8	21.1	38.4	61.6	10.0
06 - 07	0.0	0.0	0.3	2.3	2.5	2.7	6.2	11.7	21.3	37.8	62.2	3.9
07 - 08	0.0	0.0	0.7	1.8	2.3	2.5	4.0	9.5	19.3	36.2	63.8	3.2
08 - 09	0.0	0.0	0.2	1.0	1.2	1.7	2.2	6.3	15.3	34.3	65.7	2.7
09 - 10	0.0	0.0	0.0	0.2	0.2	0.5	0.5	3.5	12.1	32.2	67.8	2.7
10 - 11	0.0	0.0	0.0	0.0	0.2	0.2	0.5	2.7	8.2	29.5	70.5	4.2
11 - 12	0.0	0.0	0.0	0.0	0.0	0.2	0.8	1.8	7.4	27.3	72.7	3.7
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.5	6.1	24.4	75.6	4.7
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.4	5.7	24.0	76.0	5.8
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.9	4.3	23.9	76.1	5.5
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	1.2	4.7	22.5	77.5
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.7	5.1	24.1	75.9	5.5
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.4	6.7	27.4	72.6	11.1
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.9	7.9	27.2	72.8	28.9
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	8.1	28.0	72.0	66.0

Time (UTC)	Visibility (m) April											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	3.0	6.9	12.9	34.7	65.3	83.2
04 - 05	0.0	0.0	0.0	0.6	1.1	1.5	4.0	6.3	14.3	31.2	68.8	12.8
05 - 06	0.0	0.0	0.0	0.5	1.0	1.0	2.4	6.7	15.9	33.4	66.6	3.3
06 - 07	0.0	0.0	0.0	0.2	0.3	0.3	1.2	6.1	14.6	33.6	66.4	4.3
07 - 08	0.0	0.0	0.0	0.0	0.0	0.0	0.9	3.7	10.6	29.7	70.3	5.7
08 - 09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	7.4	25.0	75.0	5.2
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.2	24.8	75.2	3.3
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.5	22.1	77.9	3.3
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.2	3.6	19.2	80.8	3.5
12 - 13	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.9	3.0	15.3	84.7	5.0
13 - 14	0.0	0.0	0.0	0.0	0.0	0.3	0.7	0.7	2.1	13.9	86.1	4.0
14 - 15	0.0	0.0	0.0	0.0	0.0	0.4	0.7	1.1	2.1	14.8	85.2	5.7
15 - 16	0.0	0.0	0.0	0.0	0.0	0.4	0.7	0.7	1.6	13.6	86.4	5.8
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.9	2.5	13.7	86.3	7.3
17 - 18	0.0	0.0	0.0	0.0	0.0	0.4	0.6	1.0	2.8	12.0	88.0	15.2
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.1	4.6	13.0	87.0	60.2
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Visibility (m) May											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.0	1.0	1.0	1.0	3.0	9.1	25.3	74.7	84.0	
04 - 05	0.0	0.0	0.6	1.7	2.6	3.2	4.9	8.3	14.9	31.2	68.8	14.7
05 - 06	0.0	0.0	0.0	1.5	1.5	1.5	2.7	6.1	14.5	28.4	71.6	4.5
06 - 07	0.0	0.0	0.0	0.2	0.5	0.5	0.7	2.9	9.6	26.2	73.8	5.8
07 - 08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	7.1	23.5	76.5	7.4
08 - 09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.6	17.8	82.2	6.6
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.6	16.0	84.0	6.0
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	14.6	85.4	5.2
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	13.1	86.9	4.2
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.9	11.7	88.3	5.2
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.6	12.0	88.0	5.6
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.6	10.5	89.5	6.0
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.6	11.9	88.1	7.7
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.3	12.2	87.8	10.2
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.9	12.0	88.0	16.6
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	4.0	12.6	87.4	59.2
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Visibility (m) June											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	9.4	24.5	75.5	82.3
04 - 05	0.0	0.0	0.0	0.9	1.1	1.1	1.5	2.6	9.7	22.9	77.1	10.5
05 - 06	0.0	0.0	0.0	0.3	0.5	0.9	1.2	2.0	7.7	19.8	80.2	2.2
06 - 07	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.7	5.7	17.2	82.8	2.8
07 - 08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.3	12.4	87.6	4.8
08 - 09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	8.4	91.6	4.8
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	8.0	92.0	5.8
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.4	8.3	91.7	5.2
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	5.9	94.1	3.8
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	6.4	93.6	4.3
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	5.2	94.8	4.5
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9	5.1	94.9	5.2
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.7	5.1	94.9	4.8
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.2	7.2	92.8	4.7
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.4	7.6	92.4	14.2
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	6.4	93.6	58.5
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Visibility (m) July											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.0	0.0	0.9	0.9	0.9	2.7	6.2	23.9	76.1	81.8
04 - 05	0.0	0.0	0.0	0.0	0.4	0.5	0.5	1.4	4.7	18.5	81.5	10.0
05 - 06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.2	14.0	86.0	3.2
06 - 07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	10.4	89.6	3.4
07 - 08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	9.8	90.2	6.1
08 - 09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	8.6	91.4	4.7
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	8.0	92.0	3.5
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	6.3	93.7	4.7
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	5.8	94.2	3.1
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	6.6	93.4	4.0
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	6.1	93.9	4.2
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	5.1	94.9	4.4
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	97.0	4.4
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.6	96.4	4.8
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.3	4.0	96.0	14.7
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	3.0	97.0	61.8
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Visibility (m) August											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.9	0.9	3.6	3.6	3.6	6.4	13.6	37.3	62.7	81.5
04 - 05	0.0	0.0	0.2	1.1	2.3	3.0	5.1	9.0	15.9	35.1	64.9	10.3
05 - 06	0.0	0.0	0.9	1.4	1.6	1.6	3.5	8.0	14.2	32.3	67.7	3.4
06 - 07	0.0	0.0	0.0	0.3	0.3	0.3	1.6	4.4	11.9	28.6	71.4	3.2
07 - 08	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.6	7.1	22.2	77.8	4.7
08 - 09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	3.4	18.8	81.3	5.4
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.1	15.4	84.6	4.7
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.6	12.3	87.7	3.7
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.6	9.9	90.1	4.9
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.1	9.1	90.9	3.5
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.3	9.2	90.8	6.1
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.1	7.7	92.3	5.1
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	8.5	91.5	6.4
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.3	9.1	90.9
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	7.6	92.4	15.5
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	8.3	91.7	65.2
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Visibility (m) September											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.0	0.8	1.6	2.4	3.3	8.9	17.9	41.5	58.5	77.2
04 - 05	0.0	0.0	0.9	4.8	6.8	7.8	10.2	13.9	23.3	45.1	54.9	15.0
05 - 06	0.0	0.0	0.4	6.2	8.6	10.7	13.0	18.7	28.6	47.5	52.5	4.8
06 - 07	0.0	0.0	0.8	3.4	6.7	7.5	10.1	15.7	25.4	45.1	54.9	3.1
07 - 08	0.0	0.0	0.0	1.3	1.5	1.9	4.2	8.2	19.7	41.6	58.4	3.3
08 - 09	0.0	0.0	0.0	0.2	0.4	0.4	0.8	4.5	14.2	34.5	65.5	5.0
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	8.5	31.1	68.9	4.1
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	6.7	28.3	71.7	3.1
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	5.0	23.1	76.9	3.1
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	3.5	21.0	79.0	4.6
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	3.1	18.6	81.4	5.6
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.8	19.0	81.0	5.4
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	17.0	83.0
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	17.9	82.1
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	5.3	17.5	82.5
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	5.6	19.7	80.3
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	7.4	33.3	66.7
												95.0

Time (UTC)	Visibility (m) October											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.9	10.3	12.0	14.5	17.9	23.9	35.0	65.0	35.0	79.0
04 - 05	0.0	0.0	0.6	7.2	10.0	11.6	15.6	21.3	34.7	61.3	38.8	42.7
05 - 06	0.0	0.0	1.0	9.9	13.3	16.0	19.9	25.7	39.0	57.1	42.9	8.1
06 - 07	0.0	0.0	2.2	12.2	14.0	15.7	18.5	26.2	38.3	56.4	43.6	3.0
07 - 08	0.0	0.0	0.6	5.0	7.8	8.7	10.7	19.6	33.7	54.4	45.6	3.2
08 - 09	0.0	0.0	0.0	1.9	3.2	3.5	5.8	10.8	24.7	47.7	52.3	3.4
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	1.7	5.7	17.0	42.9	57.1	3.0
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.9	12.7	38.1	61.9	2.7
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	10.6	35.4	64.6	3.9
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	9.2	34.3	65.7	4.3
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	7.5	32.0	68.0	4.3
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	6.0	29.5	70.5	7.2
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.9	30.3	69.7	5.9
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.5	10.3	33.5	66.5	7.9
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	14.6	34.7	65.3	20.4
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	11.7	35.9	64.1	58.6
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	14.5	42.7	57.3	76.5

Time (UTC)	Visibility (m) November											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	0.0	0.0	1.6	7.8	9.4	10.2	11.7	14.8	32.0	58.6	41.4	76.3
05 - 06	0.0	0.0	1.5	9.4	13.4	14.3	17.8	25.2	39.2	63.1	36.9	11.7
06 - 07	0.0	0.2	2.7	11.6	13.7	14.6	19.4	31.0	47.0	65.8	34.2	2.6
07 - 08	0.0	0.0	2.7	10.0	11.7	13.1	17.7	31.3	46.6	68.5	31.5	3.5
08 - 09	0.0	0.0	1.3	7.9	9.0	9.8	13.3	26.2	43.5	66.2	33.8	3.7
09 - 10	0.0	0.0	0.2	3.1	5.4	6.6	8.7	18.9	35.8	61.7	38.3	3.9
10 - 11	0.0	0.0	0.0	1.0	1.9	2.5	5.8	15.0	29.9	57.6	42.4	3.9
11 - 12	0.0	0.0	0.0	0.2	0.4	0.6	3.5	10.5	23.5	51.5	48.5	4.6
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	2.3	8.8	19.6	47.5	52.5	4.8
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	1.4	6.5	16.5	45.2	54.8	5.7
14 - 15	0.0	0.0	0.0	0.2	0.4	0.6	2.4	6.1	17.3	45.3	54.7	5.9
15 - 16	0.0	0.0	0.0	0.2	1.0	1.4	2.0	6.6	17.8	45.3	54.7	7.2
16 - 17	0.0	0.0	0.0	0.6	1.8	2.2	3.0	7.9	20.3	48.2	51.8	8.9
17 - 18	0.0	0.0	0.0	1.9	3.3	3.5	4.2	9.9	19.3	49.2	50.8	21.3
18 - 19	0.0	0.0	0.3	3.1	4.1	4.7	5.7	11.9	21.4	48.1	51.9	28.3
19 - 20	0.0	0.0	0.0	3.8	5.8	8.3	9.6	16.7	25.0	51.9	48.1	71.1

Time (UTC)	Visibility (m) December											
	< 50	< 100	< 150	< 350	< 600	< 800	< 1500	< 3000	< 5000	< 8000	≥ 8000	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	0.0	0.0	0.0	3.2	3.2	4.0	6.4	12.0	26.4	52.0	48.0	77.6
05 - 06	0.0	0.4	0.4	4.7	5.6	6.2	9.0	14.0	28.2	53.3	46.7	16.7
06 - 07	0.0	0.0	0.6	4.0	4.8	5.7	9.5	15.8	28.8	50.9	49.1	5.9
07 - 08	0.0	0.0	0.8	4.0	5.7	7.0	9.5	16.8	31.6	51.6	48.4	5.9
08 - 09	0.0	0.0	0.4	3.5	5.1	5.6	8.6	16.0	31.9	51.0	49.0	7.9
09 - 10	0.0	0.0	0.0	2.9	3.5	3.9	5.9	12.3	29.0	50.1	49.9	8.4
10 - 11	0.0	0.0	0.0	1.7	2.9	3.3	4.8	11.6	24.7	47.6	52.4	7.0
11 - 12	0.0	0.0	0.4	0.9	0.9	1.9	4.5	10.4	20.8	44.0	56.0	5.0
12 - 13	0.0	0.0	0.2	0.6	0.8	1.1	4.3	8.9	20.2	41.2	58.8	5.2
13 - 14	0.0	0.0	0.0	0.4	0.4	0.4	3.8	7.8	18.5	38.0	62.0	5.2
14 - 15	0.0	0.0	0.0	0.4	0.4	0.6	2.3	6.8	18.4	39.0	61.0	5.4
15 - 16	0.0	0.2	0.2	0.6	0.8	1.3	2.7	10.1	20.0	40.2	59.8	5.9
16 - 17	0.0	0.0	0.2	1.2	1.8	2.0	3.5	9.4	20.5	40.9	59.1	9.0
17 - 18	0.0	0.0	0.2	2.0	3.2	3.5	4.7	9.0	21.4	42.4	57.6	28.1
18 - 19	0.0	0.6	0.6	1.7	1.7	2.0	3.2	8.1	20.1	39.8	60.2	38.4
19 - 20	0.0	0.7	1.3	1.3	1.3	1.3	2.7	12.8	24.8	48.3	51.7	73.3

3.2. Ceiling

3.2.1. Hourly Ceiling 10 Years

Frequencies in percent of the base height of the lowest cloud layer of BKN or OVC extent below specified values at specified times (months in 3.3.2). Frequencies are calculated relative to all potentially possible observations each hour (month) minus the not available (NA) observations. The value of NA is calculated relative to the potentially possible observations. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomena were observed.

Example (dark shading): In the 10 years period 2.9% of all observations between 04 and 05 UTC showed a base height of the lowest cloud layer of BKN or OVC below 1000 ft.

Time (UTC)	Ceiling (ft) 10 Years								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.1	0.1	0.4	0.9	2.1	2.6	3.8	45.5	89.1
04 - 05	0.3	0.5	1.3	1.9	2.9	3.7	5.5	47.2	43.9
05 - 06	0.1	0.8	2.1	3.2	4.7	5.6	7.8	51.3	13.7
06 - 07	0.2	0.7	2.0	3.1	4.8	5.7	8.1	52.0	9.8
07 - 08	0.1	0.5	1.6	2.7	4.4	5.3	7.6	52.7	10.2
08 - 09	0.1	0.4	1.5	2.5	4.2	5.4	7.4	52.1	9.2
09 - 10	0.0	0.4	1.5	2.4	3.8	4.7	6.6	52.6	8.2
10 - 11	0.1	0.3	1.4	2.4	3.7	4.5	5.9	52.8	7.4
11 - 12	0.0	0.1	0.7	1.5	2.6	3.5	4.8	54.1	7.1
12 - 13	0.0	0.1	0.5	1.1	2.3	3.0	4.2	54.7	7.5
13 - 14	0.0	0.0	0.3	0.9	1.8	2.6	3.8	55.0	7.7
14 - 15	0.0	0.0	0.4	0.9	1.7	2.2	3.3	56.0	8.5
15 - 16	0.0	0.1	0.5	0.9	1.6	2.2	3.2	56.4	8.9
16 - 17	0.0	0.1	0.5	1.0	1.8	2.3	3.3	56.1	9.9
17 - 18	0.0	0.1	0.9	1.6	2.3	2.9	3.8	55.2	20.1
18 - 19	0.0	0.1	1.5	2.1	3.3	4.1	5.6	55.5	51.3
19 - 20	0.1	0.4	2.9	4.8	6.8	8.0	9.9	54.7	85.6

3.2.2. Monthly Ceiling 10 Years

Example (dark shading): In the 10 years period 6.1% of all observations in October showed a base height of the lowest cloud layer of BKN or OVC below 1200 ft.

Time (Month)	Ceiling (ft) 10 Years								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
January	0.2	1.1	4.8	7.9	12.2	14.6	18.8	49.5	52.3
February	0.0	0.3	1.4	2.9	5.0	5.6	7.7	60.3	56.1
March	0.0	0.1	0.4	0.5	0.7	1.0	1.6	55.4	44.1
April	0.0	0.0	0.1	0.4	0.9	1.2	2.5	58.4	43.1
May	0.1	0.2	0.2	0.3	0.4	0.5	1.3	52.7	43.7
June	0.1	0.1	0.1	0.2	0.2	0.3	0.5	49.1	42.5
July	0.0	0.0	0.0	0.0	0.1	0.2	0.5	44.3	42.5
August	0.0	0.1	0.3	0.4	0.6	0.8	1.5	42.6	43.2
September	0.1	0.2	0.4	0.8	1.2	1.8	3.1	55.2	43.2
October	0.1	0.2	1.3	2.0	4.1	6.1	8.8	53.0	44.7
November	0.1	1.0	3.0	5.3	8.4	10.2	13.0	61.5	46.6
December	0.1	0.5	2.1	3.7	6.5	8.0	10.4	66.2	47.6

3.2.3. Hourly Ceiling per Season

Example (dark shading): In the 10 years period in winter 7.2% of all observations between 04 and 05 UTC showed a base height of the lowest cloud layer of BKN or OVC below 1000 ft.

	Ceiling (ft) Winter (Dec/Jan/Feb)								
Time (UTC)	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	0.0	0.3	2.6	4.6	7.2	10.1	13.1	50.7	82.4
05 - 06	0.1	1.1	3.6	6.7	10.4	11.9	15.0	54.5	27.9
06 - 07	0.3	1.4	4.1	6.7	10.6	12.2	16.0	56.6	19.4
07 - 08	0.4	1.5	4.2	6.7	10.5	11.8	15.7	58.9	19.8
08 - 09	0.3	1.0	3.9	6.6	10.4	12.6	16.2	57.3	19.4
09 - 10	0.1	1.2	4.2	6.6	10.0	11.8	16.5	55.9	18.7
10 - 11	0.2	1.0	3.9	6.4	10.0	11.5	14.9	56.5	16.9
11 - 12	0.0	0.2	2.4	4.2	7.5	9.0	12.2	58.3	16.1
12 - 13	0.0	0.5	1.7	3.1	7.0	8.5	11.3	59.2	16.1
13 - 14	0.0	0.2	1.2	2.6	5.4	7.3	9.7	60.1	15.2
14 - 15	0.0	0.1	1.4	2.7	5.3	6.4	8.7	61.4	16.6
15 - 16	0.1	0.3	1.6	2.7	4.9	6.3	8.6	62.5	17.5
16 - 17	0.0	0.1	1.6	3.3	5.4	6.7	8.4	62.5	18.8
17 - 18	0.0	0.3	2.8	5.0	7.2	8.6	10.4	59.9	31.5
18 - 19	0.0	0.2	3.6	5.2	7.8	9.3	11.8	57.9	40.9
19 - 20	0.0	0.4	4.2	7.8	11.3	12.7	14.7	57.1	71.5

	Ceiling (ft) Spring (Mar/Apr/May)								
Time (UTC)	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.5	0.9	2.3	2.8	4.2	50.0	88.4
04 - 05	0.6	0.8	1.3	1.6	2.5	3.1	4.5	48.1	35.3
05 - 06	0.1	0.5	0.8	1.1	1.9	2.2	4.3	53.0	8.1
06 - 07	0.0	0.3	0.6	0.9	1.5	2.1	4.1	53.8	6.4
07 - 08	0.0	0.1	0.3	0.4	0.6	1.1	2.7	53.8	6.7
08 - 09	0.0	0.1	0.1	0.1	0.5	0.7	2.1	53.2	5.4
09 - 10	0.0	0.0	0.0	0.0	0.2	0.2	1.4	55.0	4.5
10 - 11	0.0	0.0	0.1	0.2	0.3	0.3	0.9	55.9	4.6
11 - 12	0.0	0.1	0.1	0.3	0.3	0.5	1.1	56.7	4.3
12 - 13	0.0	0.0	0.0	0.3	0.3	0.5	0.7	58.3	5.2
13 - 14	0.0	0.0	0.0	0.2	0.2	0.4	0.7	58.7	5.5
14 - 15	0.1	0.1	0.2	0.3	0.3	0.6	0.8	58.5	5.9
15 - 16	0.0	0.0	0.1	0.3	0.3	0.5	0.7	58.1	6.3
16 - 17	0.0	0.0	0.1	0.2	0.3	0.4	0.8	57.8	7.8
17 - 18	0.0	0.0	0.2	0.3	0.3	0.4	1.1	56.3	14.5
18 - 19	0.0	0.0	0.2	0.2	0.2	0.5	1.7	52.2	49.7
19 - 20	0.0	0.0	0.0	0.0	0.0	0.5	1.0	50.0	88.6

	Ceiling (ft) Summer (Jun/Jul/Aug)								
Time (UTC)	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.0	0.3	1.2	1.2	1.2	40.3	82.1
04 - 05	0.2	0.3	0.7	0.9	1.2	1.5	2.7	42.8	11.5
05 - 06	0.1	0.3	0.9	1.0	1.1	1.5	2.5	42.3	3.5
06 - 07	0.2	0.3	0.8	1.0	1.2	1.5	2.6	41.2	3.5
07 - 08	0.0	0.0	0.0	0.2	0.5	0.9	1.6	42.1	5.6
08 - 09	0.0	0.0	0.0	0.1	0.2	0.5	0.9	43.1	5.1
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.2	43.5	4.7
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.2	43.9	4.4
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.1	45.4	4.0
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.1	46.0	3.9
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.2	45.7	4.7
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.1	48.1	4.9
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.1	48.7	5.2
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.2	49.4	5.1
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.2	51.1	15.1
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.3	54.5	61.9
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Ceiling (ft) Autumn (Sep/Oct/Nov)								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.4	0.4	0.9	1.8	3.1	4.4	7.1	48.7	86.2
04 - 05	0.2	0.6	1.9	3.1	4.9	6.6	9.5	53.0	48.4
05 - 06	0.3	1.7	3.8	5.5	7.3	9.3	12.3	57.8	16.2
06 - 07	0.2	1.1	3.1	4.7	7.6	8.9	11.9	58.5	10.3
07 - 08	0.1	0.6	2.7	4.3	7.4	8.9	12.4	57.7	8.9
08 - 09	0.2	0.8	2.7	4.2	7.4	9.8	12.5	56.3	7.1
09 - 10	0.1	0.7	2.3	3.8	6.5	8.4	10.4	56.9	5.2
10 - 11	0.1	0.4	1.9	3.7	5.6	7.5	9.4	55.9	3.7
11 - 12	0.0	0.1	0.8	2.1	3.7	5.5	7.3	56.8	4.0
12 - 13	0.0	0.1	0.4	1.1	2.8	4.0	6.0	56.4	4.8
13 - 14	0.0	0.0	0.2	0.9	2.0	3.6	5.7	56.5	5.5
14 - 15	0.0	0.0	0.2	0.7	1.6	2.5	4.5	56.9	6.7
15 - 16	0.0	0.1	0.3	0.8	1.7	2.8	4.6	57.2	7.0
16 - 17	0.0	0.1	0.5	1.1	2.3	3.0	4.7	55.5	8.1
17 - 18	0.0	0.2	0.9	2.0	3.1	4.0	5.4	54.5	19.7
18 - 19	0.0	0.4	1.7	2.2	3.8	5.2	6.7	57.2	52.3
19 - 20	0.3	0.7	2.6	3.3	4.3	5.6	8.2	53.9	81.4

3.2.4. Hourly Ceiling per Month

Example (dark shading): In the 10 years period in January 13.4% of all observations between 04 and 05 UTC showed a base height of the lowest cloud layer of BKN or OVC below 1000 ft.

Time (UTC)	Ceiling (ft) January								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	0.0	1.0	5.2	11.3	13.4	17.5	20.6	43.3	84.4
05 - 06	0.2	1.6	5.3	11.1	16.2	18.5	22.9	47.9	30.3
06 - 07	0.6	2.2	6.3	10.3	16.2	19.3	24.7	46.2	20.5
07 - 08	0.6	2.4	7.6	10.8	16.3	18.6	23.7	50.2	21.0
08 - 09	0.8	2.4	7.0	10.6	15.9	18.9	24.1	48.0	19.0
09 - 10	0.2	2.2	6.3	9.3	13.9	17.0	23.6	46.1	18.5
10 - 11	0.4	1.7	5.6	9.9	15.3	18.0	23.3	45.5	16.8
11 - 12	0.0	0.2	3.5	5.6	10.9	13.8	17.9	49.4	17.1
12 - 13	0.0	0.6	3.3	5.8	10.5	12.3	16.8	50.3	17.3
13 - 14	0.0	0.2	2.1	3.6	7.4	10.7	13.5	51.4	15.3
14 - 15	0.0	0.2	2.5	4.5	7.6	9.7	13.0	52.1	16.8
15 - 16	0.2	0.4	2.6	4.6	7.4	9.0	12.9	55.8	19.0
16 - 17	0.0	0.0	3.0	5.6	8.8	10.4	13.1	53.8	19.0
17 - 18	0.0	0.7	5.9	8.5	11.3	12.9	15.5	48.1	31.3
18 - 19	0.0	0.5	7.1	9.0	11.7	13.7	16.4	48.6	41.0
19 - 20	0.0	0.0	5.8	11.0	16.8	18.8	22.5	49.2	69.2

Time (UTC)	Ceiling (ft) February								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	0.0	0.0	0.0	0.0	0.0	1.1	3.3	56.7	84.0
05 - 06	0.0	1.0	2.9	5.7	6.8	6.8	9.9	53.8	31.7
06 - 07	0.0	0.5	2.9	5.6	6.8	7.1	10.5	58.9	27.1
07 - 08	0.0	0.5	2.2	5.1	6.1	6.8	10.5	58.5	27.3
08 - 09	0.0	0.5	2.4	4.6	6.3	7.3	10.0	59.1	27.1
09 - 10	0.0	0.2	3.4	5.3	7.0	7.9	12.3	57.0	26.2
10 - 11	0.0	0.5	2.8	4.7	7.5	8.2	10.6	58.5	24.5
11 - 12	0.0	0.0	1.2	3.0	4.7	5.4	7.7	58.3	24.3
12 - 13	0.0	0.0	0.0	0.5	3.5	4.5	5.4	58.5	24.5
13 - 14	0.0	0.0	0.0	0.9	2.6	3.7	4.7	62.2	23.9
14 - 15	0.0	0.0	0.0	0.5	2.9	3.1	4.1	65.6	26.8
15 - 16	0.0	0.0	0.0	0.0	3.1	3.8	4.5	64.6	25.9
16 - 17	0.0	0.0	0.0	0.5	2.7	3.1	4.1	67.1	26.8
17 - 18	0.0	0.0	1.0	2.4	5.0	5.5	6.6	63.5	32.4
18 - 19	0.0	0.0	1.5	2.5	5.5	6.4	8.9	59.2	42.2
19 - 20	0.0	1.3	1.9	3.8	6.3	6.9	6.9	61.3	71.6

Time (UTC)	Ceiling (ft) March								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	97.6
04 - 05	0.0	0.0	1.3	1.3	1.3	1.9	4.5	50.6	75.2
05 - 06	0.0	0.6	1.5	1.7	1.9	2.9	4.2	54.6	15.2
06 - 07	0.0	0.3	0.7	1.2	1.4	1.9	3.5	55.8	7.7
07 - 08	0.0	0.3	0.3	0.5	0.7	1.0	2.1	55.0	6.5
08 - 09	0.0	0.2	0.2	0.2	0.8	1.0	1.4	54.1	4.5
09 - 10	0.0	0.0	0.0	0.0	0.5	0.5	1.2	55.2	4.2
10 - 11	0.0	0.0	0.3	0.3	0.7	0.7	0.9	56.3	5.2
11 - 12	0.0	0.2	0.3	0.5	0.7	1.0	1.0	58.6	4.8
12 - 13	0.0	0.0	0.0	0.7	0.7	1.0	1.0	59.4	5.5
13 - 14	0.0	0.0	0.0	0.3	0.3	0.5	0.7	60.1	6.9
14 - 15	0.2	0.2	0.5	0.5	0.5	0.7	0.9	56.8	6.3
15 - 16	0.0	0.0	0.3	0.3	0.3	0.7	1.4	55.4	5.3
16 - 17	0.0	0.0	0.2	0.2	0.3	0.5	1.2	52.7	6.3
17 - 18	0.0	0.0	0.2	0.4	0.4	0.5	1.1	52.9	11.6
18 - 19	0.0	0.0	0.5	0.5	0.5	0.7	1.8	49.7	29.5
19 - 20	0.0	0.0	0.0	0.0	0.0	0.5	1.0	49.8	66.3

Time (UTC)	Ceiling (ft) April								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	1.0	2.0	5.0	6.0	7.0	51.0	83.3
04 - 05	0.2	0.6	1.2	1.7	3.1	4.1	4.5	49.1	14.2
05 - 06	0.0	0.2	0.2	0.7	2.3	2.3	4.5	54.2	4.0
06 - 07	0.0	0.0	0.2	0.5	1.9	2.8	5.3	54.0	5.5
07 - 08	0.0	0.0	0.2	0.2	0.7	1.8	4.3	54.5	6.5
08 - 09	0.0	0.0	0.0	0.0	0.4	0.9	3.9	55.2	5.2
09 - 10	0.0	0.0	0.0	0.0	0.0	0.2	2.4	58.0	3.7
10 - 11	0.0	0.0	0.0	0.2	0.2	0.3	1.4	60.2	3.3
11 - 12	0.0	0.0	0.0	0.3	0.3	0.5	1.7	60.7	3.8
12 - 13	0.0	0.0	0.0	0.4	0.4	0.5	1.1	61.8	5.3
13 - 14	0.0	0.0	0.0	0.3	0.3	0.7	1.0	63.0	4.2
14 - 15	0.0	0.0	0.0	0.5	0.5	1.1	1.4	63.3	5.7
15 - 16	0.0	0.0	0.0	0.5	0.7	0.7	0.7	63.2	5.8
16 - 17	0.0	0.0	0.0	0.4	0.5	0.7	1.1	62.9	7.3
17 - 18	0.0	0.0	0.4	0.4	0.4	0.6	1.4	59.9	15.2
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	1.3	55.7	60.5
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Ceiling (ft) May								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	2.0	46.5	84.0
04 - 05	1.1	1.3	1.5	1.5	2.3	2.5	4.4	46.4	15.8
05 - 06	0.3	0.7	0.8	1.0	1.5	1.7	4.2	50.4	5.0
06 - 07	0.0	0.5	0.9	0.9	1.0	1.5	3.6	51.6	6.0
07 - 08	0.0	0.0	0.3	0.5	0.5	0.5	1.9	52.0	7.3
08 - 09	0.0	0.0	0.0	0.2	0.2	0.2	1.0	50.5	6.5
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.7	52.0	5.6
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.5	51.4	5.2
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.5	50.8	4.2
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.2	53.9	4.8
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.3	53.2	5.3
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.2	55.5	5.8
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0	7.6
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.2	58.1	9.8
17 - 18	0.0	0.0	0.0	0.0	0.0	0.2	0.8	56.3	16.6
18 - 19	0.0	0.0	0.0	0.0	0.0	0.8	2.0	53.4	59.5
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	99.8

Time (UTC)	Ceiling (ft) June								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.0	0.0	0.9	0.9	0.9	37.7	82.3
04 - 05	0.4	0.4	0.8	1.1	1.3	1.3	1.7	42.8	11.2
05 - 06	0.3	0.3	1.0	1.0	1.0	1.4	1.5	43.7	2.3
06 - 07	0.2	0.2	0.3	0.7	0.7	1.0	1.5	42.4	3.0
07 - 08	0.0	0.0	0.0	0.0	0.0	0.2	0.4	43.9	5.0
08 - 09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.5	4.8
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.2	47.3	5.8
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.4	49.3	5.3
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5	3.8
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.2	52.4	4.3
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.2	50.5	4.3
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.4	52.5	5.2
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.2	53.4	4.8
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.4	53.9	4.8
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.4	56.5	14.2
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.8	60.2	58.5
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Ceiling (ft) July								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.0	0.0	0.9	0.9	0.9	43.8	81.9
04 - 05	0.0	0.0	0.4	0.4	0.9	0.9	2.2	45.5	10.6
05 - 06	0.0	0.0	0.3	0.3	0.3	0.7	1.5	43.8	3.2
06 - 07	0.0	0.0	0.0	0.0	0.0	0.2	1.2	41.7	3.4
07 - 08	0.0	0.0	0.0	0.0	0.0	0.2	0.9	43.2	6.3
08 - 09	0.0	0.0	0.0	0.0	0.0	0.2	0.5	44.3	4.7
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.2	43.5	3.9
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.7	4.5
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.7	3.2
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.2	43.4	3.7
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.2	43.5	3.9
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.2	4.4
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.9	4.4
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.1	4.8
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.8	15.0
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.2	61.9
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Ceiling (ft) August								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.0	0.9	1.9	1.9	1.9	39.3	82.0
04 - 05	0.2	0.6	1.2	1.3	1.5	2.3	4.4	40.1	12.6
05 - 06	0.0	0.7	1.4	1.8	2.1	2.5	4.6	39.1	4.9
06 - 07	0.5	0.9	2.1	2.5	3.0	3.3	5.3	39.3	4.1
07 - 08	0.0	0.0	0.0	0.5	1.4	2.3	3.8	39.3	5.4
08 - 09	0.0	0.0	0.0	0.2	0.7	1.3	2.2	40.3	5.7
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.4	39.8	4.6
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.3	39.6	3.2
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.2	40.0	4.9
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.1	3.7
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.4	43.0	6.1
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.6	5.1
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.2	47.8	6.4
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.4	48.4	5.7
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.2	48.9	16.0
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.7	65.4
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Ceiling (ft) September								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.8	2.5	43.0	77.6
04 - 05	0.0	0.5	0.7	1.9	1.9	3.0	4.9	53.5	20.0
05 - 06	0.4	1.0	1.4	2.6	3.0	4.4	6.7	57.6	8.3
06 - 07	0.0	0.6	1.0	1.8	2.8	3.8	5.3	58.7	6.3
07 - 08	0.4	0.4	1.8	2.7	4.3	5.5	7.6	55.9	5.2
08 - 09	0.2	0.4	0.8	1.8	3.5	4.5	7.0	54.6	5.0
09 - 10	0.0	0.0	0.0	0.4	1.0	2.1	3.7	56.9	4.1
10 - 11	0.0	0.0	0.0	0.4	0.8	1.0	2.5	57.5	2.8
11 - 12	0.0	0.0	0.0	0.2	0.4	0.4	1.1	54.8	3.0
12 - 13	0.0	0.0	0.0	0.0	0.2	0.4	1.2	54.9	4.3
13 - 14	0.0	0.0	0.0	0.0	0.0	0.4	1.2	54.2	5.4
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.4	54.4	5.4
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.6	55.1	6.3
16 - 17	0.0	0.0	0.0	0.0	0.0	0.4	0.8	53.7	5.9
17 - 18	0.0	0.0	0.0	0.0	0.0	0.4	1.1	53.0	15.7
18 - 19	0.0	0.0	0.0	0.0	0.0	1.1	1.1	55.7	67.4
19 - 20	0.0	0.0	0.0	0.0	0.0	7.4	11.1	59.3	95.0

Time (UTC)	Ceiling (ft) October								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	1.0	1.0	1.9	3.8	6.7	8.6	12.4	55.2	81.2
04 - 05	0.3	0.7	3.7	4.7	7.8	10.8	14.2	50.0	47.0
05 - 06	0.2	0.9	4.2	5.5	7.7	11.4	13.4	57.0	18.3
06 - 07	0.0	0.4	2.6	4.1	8.3	10.3	12.8	56.0	11.6
07 - 08	0.0	0.2	2.2	3.7	8.3	10.0	12.8	55.2	8.8
08 - 09	0.4	0.4	2.7	4.0	7.9	10.6	13.8	52.4	6.6
09 - 10	0.2	0.6	2.2	3.5	7.9	9.2	11.6	51.8	3.0
10 - 11	0.0	0.0	0.7	1.7	4.6	7.2	9.2	52.2	2.9
11 - 12	0.0	0.0	0.0	0.7	2.2	5.0	7.5	54.2	4.1
12 - 13	0.0	0.0	0.0	0.6	1.1	3.6	6.4	53.9	4.8
13 - 14	0.0	0.0	0.0	0.0	0.4	3.2	5.8	54.0	5.0
14 - 15	0.0	0.0	0.0	0.0	0.0	0.8	3.9	52.7	7.9
15 - 16	0.0	0.0	0.0	0.0	0.4	1.5	4.2	54.5	6.6
16 - 17	0.0	0.0	0.4	0.6	1.0	2.2	4.7	52.8	8.4
17 - 18	0.0	0.2	0.9	1.4	2.7	3.4	6.3	49.3	20.4
18 - 19	0.0	0.0	0.9	1.7	2.2	4.3	6.9	46.8	58.6
19 - 20	0.0	0.0	0.0	0.0	0.0	0.8	3.8	41.2	76.5

Time (UTC)	Ceiling (ft) November								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	0.9	0.9	1.7	3.4	8.5	9.4	14.5	59.0	78.3
05 - 06	0.2	3.3	6.2	9.0	11.9	12.8	17.8	58.9	22.0
06 - 07	0.6	2.3	6.0	8.5	11.9	13.0	18.1	61.1	13.0
07 - 08	0.0	1.3	4.2	6.6	9.7	11.4	17.2	62.5	12.6
08 - 09	0.0	1.6	4.7	7.0	11.1	14.5	17.0	62.3	9.6
09 - 10	0.2	1.6	4.9	7.7	10.7	14.2	16.2	62.3	8.5
10 - 11	0.4	1.2	5.1	9.2	11.7	14.7	16.8	58.1	5.4
11 - 12	0.0	0.2	2.3	5.5	8.6	11.1	13.5	61.6	5.0
12 - 13	0.0	0.2	1.2	2.7	7.2	8.0	10.6	60.7	5.4
13 - 14	0.0	0.0	0.6	2.8	5.7	7.1	10.1	61.5	6.1
14 - 15	0.0	0.0	0.6	2.2	4.8	6.8	9.1	63.8	6.9
15 - 16	0.0	0.4	0.8	2.4	4.8	7.0	9.1	62.2	8.0
16 - 17	0.0	0.4	1.2	2.7	6.0	6.6	8.6	60.3	10.0
17 - 18	0.0	0.5	1.9	4.8	7.0	8.4	9.1	61.6	22.8
18 - 19	0.0	0.8	2.9	3.5	6.7	7.8	9.1	64.4	30.7
19 - 20	0.7	1.4	5.5	6.8	8.9	9.6	11.6	64.4	73.0

Time (UTC)	Ceiling (ft) December								
	< 200	< 300	< 500	< 700	< 1000	< 1200	< 1500	≥ 1500	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	0.0	0.0	2.5	2.5	7.6	10.9	14.3	52.1	78.7
05 - 06	0.0	0.7	2.5	3.2	8.0	9.8	11.8	61.7	21.3
06 - 07	0.2	1.2	3.0	4.0	8.2	9.4	12.0	65.0	10.4
07 - 08	0.4	1.4	2.6	4.0	8.2	9.3	12.3	67.8	10.9
08 - 09	0.0	0.0	2.0	4.3	8.1	10.6	13.4	65.4	12.0
09 - 10	0.0	1.0	2.6	5.1	8.5	9.7	12.9	64.8	11.3
10 - 11	0.2	0.8	3.0	4.4	6.5	7.5	10.1	65.9	9.5
11 - 12	0.0	0.4	2.3	3.6	6.3	7.3	10.2	67.2	6.6
12 - 13	0.0	0.8	1.5	2.7	6.3	8.2	10.7	68.5	6.3
13 - 14	0.0	0.4	1.1	2.9	5.7	6.9	9.9	67.2	6.1
14 - 15	0.0	0.0	1.3	2.7	5.0	5.7	8.0	67.3	6.3
15 - 16	0.0	0.4	1.9	3.1	4.1	5.8	7.5	67.3	7.3
16 - 17	0.0	0.4	1.6	3.2	4.2	6.0	7.2	67.4	10.4
17 - 18	0.0	0.3	1.3	3.9	4.9	7.0	8.5	69.4	30.8
18 - 19	0.0	0.0	1.8	3.6	5.6	7.4	9.5	66.8	39.6
19 - 20	0.0	0.0	4.8	8.2	9.6	11.0	13.0	63.0	73.8

3.3. Visibility and Ceiling

3.3.1. Hourly Visibility and Ceiling 10 Years

Cumulative frequencies in percent of visibility or base height of the lowest cloud layer of BKN or OVC extent below specified values at specified times (months in 3.5.2.). Frequencies are calculated relative to all potentially possible observations each hour (month) minus the not available (NA) observations. The value of NA is calculated relative to the potentially possible observations. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomena were observed.

Example (dark shading): In the 10 years period 29.9% of all observations between 10 and 11 UTC showed a visibility below 8000 m or a base height of the lowest cloud layer of BKN or OVC below 2000 ft.

Time (UTC)	10 Years						
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥ 8000
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥ 2000
03 - 04	3.4	5.2	9.4	16.4	37.1	78.7	88.8
04 - 05	4.0	6.3	9.9	18.3	35.7	80.0	42.1
05 - 06	5.5	8.5	13.8	23.1	40.4	77.6	9.8
06 - 07	4.9	8.0	14.1	23.2	39.9	78.2	6.2
07 - 08	3.9	6.5	12.5	21.6	37.9	79.9	7.2
08 - 09	2.7	4.8	10.4	18.5	34.6	81.4	7.0
09 - 10	1.5	3.2	7.9	15.3	32.4	83.2	6.7
10 - 11	0.8	2.3	6.5	12.7	29.9	85.2	6.5
11 - 12	0.4	1.5	4.9	10.7	26.7	86.9	6.2
12 - 13	0.3	1.2	4.3	9.4	24.5	88.1	6.8
13 - 14	0.2	1.0	3.7	8.3	23.2	88.8	7.1
14 - 15	0.3	0.9	3.4	7.9	22.7	89.5	7.8
15 - 16	0.4	1.1	3.7	8.2	22.5	90.1	8.1
16 - 17	0.5	1.5	4.3	9.4	23.9	89.9	9.0
17 - 18	0.8	1.9	4.8	10.2	24.1	89.6	19.2
18 - 19	1.2	3.0	6.7	13.4	29.0	86.2	50.4
19 - 20	2.2	5.1	12.8	23.1	44.2	75.3	85.2

3.3.2. Monthly Visibility and Ceiling 10 Years

Example (dark shading): In the 10 years period 55.6% of all observations in November showed a visibility below 8000 m or a base height of the lowest cloud layer of BKN or OVC below 2000 ft.

Time (Month)	10 Years						
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥ 8000
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥ 2000
January	4.2	9.9	23.1	37.3	54.3	65.1	50.0
February	2.0	4.6	11.5	20.7	40.9	79.4	54.5
March	0.9	2.0	4.4	10.7	29.6	85.7	43.0
April	0.3	1.0	2.7	7.2	22.1	92.1	42.8
May	0.4	0.6	1.6	5.5	17.6	94.4	43.6
June	0.1	0.3	0.7	2.7	10.2	97.6	42.4
July	0.0	0.1	0.2	1.5	7.9	97.1	42.3
August	0.4	0.9	2.1	5.1	16.4	92.3	42.9
September	2.0	2.8	5.2	11.1	29.4	86.0	42.5
October	3.8	5.8	10.3	19.9	42.0	75.2	43.1
November	5.5	9.2	18.6	30.0	55.6	69.6	44.2
December	3.2	6.4	14.3	25.3	46.0	76.3	46.0

3.3.3. Hourly Visibility and Ceiling per Season

Example (dark shading): In the 10 years period in winter 50.1% of all observations between 10 and 11 UTC showed a visibility below 8000 m or a base height of the lowest cloud layer of BKN or OVC below 2000 ft.

Time (UTC)	Winter (Dec/Jan/Feb)							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	100	
04 - 05	5.0	9.4	15.6	30.6	50.6	69.7	81.6	
05 - 06	6.5	11.1	20.8	33.1	54.9	67.8	23.2	
06 - 07	6.5	12.1	22.8	34.6	54.9	67.1	14.3	
07 - 08	7.5	12.9	24.5	37.5	54.0	67.4	14.8	
08 - 09	6.5	12.1	23.7	37.3	54.2	66.6	14.6	
09 - 10	4.0	9.1	20.5	34.5	52.3	67.5	14.6	
10 - 11	2.6	7.1	18.3	29.7	50.1	70.2	14.5	
11 - 12	1.7	4.9	14.7	25.5	46.1	74.4	13.8	
12 - 13	1.1	3.9	12.9	23.1	42.2	76.5	14.4	
13 - 14	0.6	3.3	11.0	20.6	39.9	78.1	13.6	
14 - 15	0.9	2.7	10.5	20.9	40.4	78.8	14.8	
15 - 16	0.9	3.6	11.6	21.7	41.2	79.2	15.2	
16 - 17	1.5	4.3	12.5	23.6	42.7	78.8	16.2	
17 - 18	2.1	5.8	13.5	25.2	44.5	77.6	29.2	
18 - 19	2.3	6.3	14.0	25.7	45.0	76.4	39.0	
19 - 20	1.9	6.6	19.2	31.5	49.1	73.2	70.4	

Time (UTC)	Summer (Jun/Jul/Aug)							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	1.5	1.5	4.9	10.0	28.9	86.0	81.9	
04 - 05	1.5	2.7	5.0	10.7	25.4	86.7	10.0	
05 - 06	0.8	1.9	3.6	8.3	21.9	89.0	2.6	
06 - 07	0.3	1.0	2.1	6.7	18.7	91.0	3.0	
07 - 08	0.0	0.1	1.0	4.2	15.0	93.9	5.2	
08 - 09	0.0	0.0	0.5	2.3	11.9	95.0	4.9	
09 - 10	0.0	0.0	0.1	1.4	10.6	96.7	4.6	
10 - 11	0.0	0.1	0.2	1.6	9.2	97.6	4.2	
11 - 12	0.0	0.0	0.1	1.0	7.2	97.8	3.9	
12 - 13	0.0	0.0	0.1	1.3	7.3	98.2	3.9	
13 - 14	0.0	0.0	0.1	0.9	6.9	98.3	4.7	
14 - 15	0.0	0.0	0.1	0.8	6.1	98.9	4.9	
15 - 16	0.0	0.0	0.2	0.5	5.5	99.1	5.1	
16 - 17	0.0	0.0	0.3	0.9	6.6	99.1	5.0	
17 - 18	0.0	0.0	0.1	1.4	6.3	99.3	14.8	
18 - 19	0.0	0.0	0.0	1.3	5.8	98.7	61.8	
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	100	

Time (UTC)	Spring (Mar/Apr/May)							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	0.5	4.2	6.9	13.4	31.5	84.3	88.3	
04 - 05	2.7	4.9	8.4	16.1	33.0	83.9	34.1	
05 - 06	2.3	4.2	8.7	18.1	34.0	83.8	5.9	
06 - 07	1.2	3.0	7.4	16.1	33.4	84.6	4.6	
07 - 08	0.9	1.9	4.9	13.3	30.7	87.4	5.4	
08 - 09	0.6	0.7	3.2	9.3	26.5	89.4	4.8	
09 - 10	0.2	0.2	1.6	7.2	25.1	90.2	3.9	
10 - 11	0.1	0.2	1.2	5.0	22.4	91.6	4.1	
11 - 12	0.1	0.5	1.0	4.7	20.1	91.9	3.7	
12 - 13	0.1	0.5	0.9	3.8	17.5	93.2	4.8	
13 - 14	0.1	0.6	0.7	3.5	16.8	94.1	5.0	
14 - 15	0.2	0.5	0.9	3.2	16.5	94.0	5.5	
15 - 16	0.2	0.4	0.8	3.1	16.1	94.4	5.9	
16 - 17	0.0	0.5	0.9	3.6	16.8	94.7	7.6	
17 - 18	0.1	0.4	1.4	4.4	17.4	94.5	14.3	
18 - 19	0.0	0.6	2.3	6.3	19.6	93.7	49.3	
19 - 20	0.0	0.0	1.9	8.0	27.8	89.6	88.5	

Time (UTC)	Autumn (Sep/Oct/Nov)							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	8.8	11.3	17.9	27.9	53.3	63.8	85.3	
04 - 05	9.7	13.8	18.9	30.5	52.9	66.6	44.6	
05 - 06	13.6	18.6	25.4	37.1	56.5	65.9	7.8	
06 - 07	12.6	17.7	26.4	38.4	56.5	67.7	2.8	
07 - 08	7.9	12.6	22.2	34.5	55.4	68.1	3.2	
08 - 09	4.6	7.9	16.6	28.8	49.9	71.3	3.9	
09 - 10	2.2	4.4	11.7	21.4	45.9	75.2	3.7	
10 - 11	0.9	2.6	8.3	17.4	41.8	78.7	3.1	
11 - 12	0.2	1.2	5.4	14.2	37.2	80.9	3.7	
12 - 13	0.0	0.8	4.6	11.8	34.6	82.0	4.5	
13 - 14	0.0	0.5	3.7	10.1	32.2	82.8	5.1	
14 - 15	0.2	0.8	3.2	8.7	31.2	84.1	6.1	
15 - 16	0.5	0.7	3.4	9.5	30.8	85.5	6.3	
16 - 17	0.7	1.5	4.9	11.7	33.4	84.6	7.4	
17 - 18	1.1	2.1	6.2	13.3	33.7	83.5	19.0	
18 - 19	2.3	3.9	8.0	15.8	38.6	79.8	51.3	
19 - 20	4.1	6.1	9.6	19.4	47.1	69.1	80.8	

3.3.4. Hourly Visibility and Ceiling per Month

Example (dark shading): In the 10 years period in January 56.4% of all observations between 10 and 11 UTC showed a visibility below 8000 m or a base height of the lowest cloud layer of BKN or OVC below 2000 ft.

Time (UTC)	January							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	100	
04 - 05	6.9	13.7	23.5	39.2	55.9	63.7	83.5	
05 - 06	8.1	14.3	27.9	42.2	62.9	59.9	24.4	
06 - 07	7.6	14.8	28.7	44.4	61.3	60.2	15.0	
07 - 08	9.5	17.9	32.6	47.6	60.2	59.0	15.3	
08 - 09	8.2	16.7	32.1	46.6	59.9	58.6	13.1	
09 - 10	5.8	12.8	28.6	44.1	57.8	59.9	13.2	
10 - 11	3.9	10.2	27.3	40.6	56.4	61.5	14.2	
11 - 12	2.6	6.4	20.8	34.7	52.7	66.2	14.0	
12 - 13	1.5	4.9	17.2	31.6	49.2	67.4	14.8	
13 - 14	0.9	3.4	14.3	27.4	47.3	71.1	13.4	
14 - 15	1.1	4.0	15.7	28.1	47.8	70.6	15.0	
15 - 16	1.0	5.2	15.9	29.8	47.4	72.0	16.6	
16 - 17	1.9	6.7	18.6	32.9	50.0	71.1	15.2	
17 - 18	2.5	9.4	20.4	33.9	52.4	68.8	28.2	
18 - 19	4.1	11.0	20.8	34.1	53.1	67.4	37.1	
19 - 20	3.4	10.2	27.8	43.4	57.6	62.0	66.9	

Time (UTC)	February							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
04 - 05	4.3	5.4	7.5	23.7	43.0	78.5	83.5	
05 - 06	5.0	8.4	15.9	26.3	45.7	73.7	28.5	
06 - 07	6.1	10.7	20.5	28.4	50.5	69.1	22.0	
07 - 08	5.8	9.9	19.8	30.6	48.8	71.4	23.0	
08 - 09	5.3	9.4	17.7	30.0	50.0	71.0	23.0	
09 - 10	2.1	7.1	15.4	26.6	47.7	72.5	22.7	
10 - 11	0.2	4.3	12.1	20.6	44.4	76.4	22.5	
11 - 12	0.2	2.3	9.4	18.7	39.7	80.4	22.3	
12 - 13	0.5	1.1	8.0	14.9	33.6	83.9	22.9	
13 - 14	0.5	2.1	7.1	13.2	32.3	85.4	22.2	
14 - 15	0.9	1.2	5.4	14.0	31.7	86.7	23.9	
15 - 16	0.5	1.8	7.1	13.8	34.4	85.6	22.7	
16 - 17	0.5	1.4	6.6	15.0	35.4	85.9	24.5	
17 - 18	0.3	1.8	8.0	17.8	37.7	85.3	31.4	
18 - 19	0.3	2.4	9.1	19.5	40.7	83.9	41.7	
19 - 20	0.6	2.5	10.6	20.5	39.1	83.9	71.5	

Time (UTC)	March							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	0.0	13.3	13.3	26.7	46.7	73.3	97.6	
04 - 05	3.8	6.3	10.0	19.4	39.4	76.9	74.2	
05 - 06	4.5	7.5	12.4	21.7	38.7	78.3	10.0	
06 - 07	2.7	6.4	11.9	21.3	37.9	79.7	3.9	
07 - 08	2.5	4.2	9.5	19.5	36.3	81.7	3.2	
08 - 09	1.7	2.2	6.6	15.3	34.3	82.6	2.7	
09 - 10	0.5	0.5	3.6	12.4	32.5	83.9	2.7	
10 - 11	0.2	0.7	2.7	8.4	29.5	85.9	3.9	
11 - 12	0.2	0.8	1.8	7.3	27.5	86.5	3.4	
12 - 13	0.0	0.8	1.5	6.1	24.7	87.3	4.5	
13 - 14	0.0	1.0	1.4	5.6	24.3	89.2	5.6	
14 - 15	0.2	0.7	1.0	4.4	24.0	88.3	5.2	
15 - 16	0.2	0.5	1.2	5.1	22.4	89.4	4.4	
16 - 17	0.0	0.7	1.7	5.3	24.2	89.9	5.5	
17 - 18	0.0	0.7	2.4	6.7	27.6	89.1	11.1	
18 - 19	0.0	1.1	2.9	7.9	27.2	89.8	28.9	
19 - 20	0.0	0.0	1.9	8.1	28.0	89.6	66.0	

Time (UTC)	April							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	0.0	4.0	9.9	13.9	34.7	83.2	83.2	
04 - 05	1.5	4.4	7.5	14.9	31.5	84.9	12.8	
05 - 06	1.0	2.4	7.6	17.2	34.1	84.8	3.3	
06 - 07	0.3	1.4	6.8	15.5	34.7	84.3	4.3	
07 - 08	0.0	1.1	3.9	12.0	31.3	88.0	5.7	
08 - 09	0.0	0.0	2.5	8.4	26.9	91.6	5.2	
09 - 10	0.0	0.0	1.0	6.6	26.2	92.6	3.3	
10 - 11	0.0	0.0	1.0	5.0	22.8	93.3	3.3	
11 - 12	0.0	0.5	1.2	4.3	19.3	94.6	3.5	
12 - 13	0.2	0.7	0.9	3.3	15.6	95.6	5.0	
13 - 14	0.3	0.7	0.7	2.4	14.2	95.7	4.0	
14 - 15	0.4	0.7	1.1	2.5	14.8	95.4	5.7	
15 - 16	0.4	0.7	0.7	1.6	13.6	95.8	5.8	
16 - 17	0.0	0.7	0.9	2.9	13.7	95.7	7.3	
17 - 18	0.4	0.6	1.0	3.1	12.0	96.7	15.2	
18 - 19	0.0	0.4	2.1	5.0	13.0	96.7	60.2	
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100

Time (UTC)	May							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	1.0	3.0	3.0	11.0	26.0	87.0	83.9	
04 - 05	3.6	4.9	8.9	16.3	32.5	85.1	14.7	
05 - 06	1.5	2.7	6.2	15.7	29.3	87.9	4.4	
06 - 07	0.5	1.2	3.2	11.3	27.7	89.7	5.6	
07 - 08	0.0	0.3	1.0	8.2	24.3	92.7	7.3	
08 - 09	0.0	0.0	0.3	4.0	18.1	94.3	6.5	
09 - 10	0.0	0.0	0.2	2.6	16.2	94.4	5.6	
10 - 11	0.0	0.0	0.0	1.7	15.0	95.6	5.2	
11 - 12	0.0	0.0	0.0	2.5	13.5	94.8	4.2	
12 - 13	0.0	0.0	0.3	1.9	12.0	96.8	4.8	
13 - 14	0.0	0.0	0.2	2.6	11.9	97.4	5.3	
14 - 15	0.0	0.0	0.5	2.6	10.6	98.3	5.6	
15 - 16	0.0	0.0	0.3	2.6	12.0	98.3	7.6	
16 - 17	0.0	0.0	0.2	2.5	12.2	98.7	9.8	
17 - 18	0.0	0.0	0.8	3.3	12.0	98.1	16.6	
18 - 19	0.0	0.0	1.2	4.7	12.6	97.6	59.2	
19 - 20	0.0	0.0	0.0	0.0	100.0	99.8		

Time (UTC)	June							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	0.0	0.0	3.8	9.4	24.5	90.6	82.3	
04 - 05	1.1	1.9	3.5	9.7				

Time (UTC)	July							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	0.9	0.9	2.7	6.2	24.8	90.3	81.8	
04 - 05	0.5	0.9	2.1	5.7	18.5	91.1	9.4	
05 - 06	0.0	0.3	0.5	3.2	13.9	93.5	2.7	
06 - 07	0.0	0.0	0.0	2.0	10.3	95.8	3.2	
07 - 08	0.0	0.0	0.0	2.1	9.8	96.2	6.0	
08 - 09	0.0	0.0	0.0	1.5	8.6	96.0	4.4	
09 - 10	0.0	0.0	0.0	0.8	8.0	97.2	3.5	
10 - 11	0.0	0.0	0.0	1.2	6.2	97.5	4.4	
11 - 12	0.0	0.0	0.0	1.0	5.8	97.7	2.9	
12 - 13	0.0	0.0	0.0	0.8	6.5	98.2	3.7	
13 - 14	0.0	0.0	0.0	0.5	6.0	98.3	3.9	
14 - 15	0.0	0.0	0.0	0.2	5.1	99.2	4.4	
15 - 16	0.0	0.0	0.0	0.0	3.0	99.7	4.2	
16 - 17	0.0	0.0	0.0	0.2	3.6	99.8	4.8	
17 - 18	0.0	0.0	0.2	1.3	4.0	99.4	14.7	
18 - 19	0.0	0.0	0.0	0.8	3.0	99.2	61.8	
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	100	

Time (UTC)	August							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	3.6	3.6	8.2	14.5	37.3	77.3	81.5	
04 - 05	3.0	5.4	9.4	16.9	35.0	77.0	10.1	
05 - 06	1.6	3.8	8.4	14.5	32.4	80.0	3.0	
06 - 07	0.9	2.6	5.2	12.2	29.0	82.5	3.2	
07 - 08	0.0	0.2	2.5	8.2	22.5	87.8	4.7	
08 - 09	0.0	0.0	1.4	4.1	18.8	91.1	5.4	
09 - 10	0.0	0.0	0.4	2.1	15.9	94.0	4.6	
10 - 11	0.0	0.0	0.3	1.7	12.7	95.8	3.2	
11 - 12	0.0	0.0	0.2	1.6	9.9	96.1	4.9	
12 - 13	0.0	0.0	0.4	2.1	9.1	97.4	3.5	
13 - 14	0.0	0.0	0.2	1.6	9.2	97.7	6.1	
14 - 15	0.0	0.0	0.2	1.1	7.8	98.4	5.1	
15 - 16	0.0	0.0	0.0	0.7	8.5	98.2	6.4	
16 - 17	0.0	0.0	0.5	1.4	9.1	98.4	5.7	
17 - 18	0.0	0.0	0.0	1.4	7.6	99.2	15.5	
18 - 19	0.0	0.0	0.0	2.4	8.3	99.5	65.2	
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	100	

Time (UTC)	September							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	2.4	3.3	8.9	17.9	42.3	70.7	77.2	
04 - 05	7.8	10.4	14.1	23.7	45.0	72.0	14.8	
05 - 06	10.6	13.2	19.2	29.0	47.6	72.7	3.5	
06 - 07	7.4	10.5	16.4	26.1	45.7	77.1	2.8	
07 - 08	2.1	5.0	10.7	20.7	41.8	77.4	3.3	
08 - 09	0.4	1.0	6.8	15.0	34.8	81.9	4.8	
09 - 10	0.0	0.0	2.3	8.9	31.7	85.5	4.1	
10 - 11	0.0	0.0	1.0	6.7	28.4	87.2	2.8	
11 - 12	0.0	0.0	0.4	5.0	23.6	90.1	2.8	
12 - 13	0.0	0.0	0.4	3.5	21.1	91.3	4.3	
13 - 14	0.0	0.0	0.4	3.1	18.6	92.6	5.4	
14 - 15	0.0	0.0	0.2	1.8	19.0	92.4	5.4	
15 - 16	0.0	0.0	0.0	3.0	17.2	94.5	6.3	
16 - 17	0.0	0.0	0.0	4.1	18.5	95.3	5.9	
17 - 18	0.0	0.0	1.3	5.5	17.8	94.7	15.6	
18 - 19	0.0	0.0	1.7	5.6	19.7	94.4	67.0	
19 - 20	0.0	0.0	3.7	11.1	33.3	77.8	95.0	

Time (UTC)	October							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	15.4	19.7	27.4	38.5	65.0	56.4	79.0	
04 - 05	11.9	18.8	25.3	37.5	61.6	59.1	42.7	
05 - 06	16.0	22.2	28.7	40.0	57.5	62.4	8.1	
06 - 07	15.7	20.3	28.7	39.4	56.9	64.9	3.0	
07 - 08	8.7	12.6	22.2	34.6	54.5	67.1	3.0	
08 - 09	3.5	7.2	13.9	26.5	47.7	70.5	3.4	
09 - 10	0.2	2.4	10.2	18.7	43.1	75.4	3.0	
10 - 11	0.0	0.7	5.7	15.1	38.3	80.7	2.7	
11 - 12	0.0	0.0	2.4	12.9	35.8	81.9	3.9	
12 - 13	0.0	0.0	1.5	10.9	34.8	81.6	4.3	
13 - 14	0.0	0.0	1.1	9.6	32.4	81.8	4.3	
14 - 15	0.0	0.0	0.6	6.7	29.5	82.9	7.0	
15 - 16	0.0	0.0	1.3	7.4	30.3	84.0	5.9	
16 - 17	0.0	0.6	3.7	10.5	33.5	81.7	7.9	
17 - 18	0.0	0.9	4.7	14.9	34.7	78.6	20.4	
18 - 19	0.0	0.9	3.0	12.6	36.8	74.5	58.6	
19 - 20	0.0	0.0	1.5	14.5	43.5	70.2	76.5	

Time (UTC)	November							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	100	
04 - 05	10.9	13.3	20.3	37.5	59.4	66.4	76.3	
05 - 06	14.3	20.5	28.7	43.0	65.2	62.3	11.7	
06 - 07	14.6	22.1	34.0	49.8	66.7	61.0	2.6	
07 - 08	13.0	20.1	33.7	48.3	69.9	60.0	3.3	
08 - 09	9.8	15.4	29.0	44.7	67.2	61.8	3.5	
09 - 10	6.6	10.8	22.5	36.6	63.0	64.5	3.9	
10 - 11	2.7	7.3	18.3	30.6	59.2	68.0	3.9	
11 - 12	0.6	3.7	13.5	25.0	52.4	70.6	4.3	
12 - 13	0.0	2.3	12.1	21.2	47.9	73.2	4.8	
13 - 14	0.0	1.6	9.8	17.7	45.6	74.1	5.7	
14 - 15	0.6	2.6	8.9	17.7	45.3	77.2	5.9	
15 - 16	1.4	2.2	8.9	18.1	45.1	77.9	6.9	
16 - 17	2.2	4.0	11.1	20.8	48.7	76.6	8.3	
17 - 18	3.5	5.6	12.9	20.0	49.8	76.5	21.1	
18 - 19	4.6	7.5	13.9	22.4	48.5	76.3	28.1	
19 - 20	8.3	12.2	17.3	25.0	52.6	66.7	71.1	

Time (UTC)	December							
	Vis. (m)	<800	<1500	<3000	<5000	<8000	≥8000	NA
	Ceil. (ft)	<200	<500	<1000	<1500	<2000	≥2000	
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	100	
04 - 05	4.0	8.8	15.2	28.8	52.0	68.0	77.6	
05 - 06	6.2	10.3	17.8	29.7	54.8	70.5	16.7	
06 - 07	5.7	10.5	19.0	30.0	52.3	72.4	5.7	

4. TEMPERATURE

4.1. Temperature

4.1.1. Temperature 10 Years

Frequencies in percent of surface temperature in specified ranges of 5° C at specified times. Frequencies are calculated relative to all potentially possible observations each hour minus the not available (NA) observations. The value of NA is calculated relative to the potentially possible observations. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomena were observed.

Example (dark shading): In the 10 years period 17.8% of all observations between 14 and 15 UTC showed a temperature between 5 and 9 degrees Celsius.

Time (UTC)	Temperature (°C) 10 Years													
	< -20	-20 – -16	-15 – -11	-10 – -6	-5 – -1	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 35	≥35	NA
03 - 04	0.0	0.0	0.0	0.0	0.9	14.0	33.8	40.9	10.2	0.1	0.0	0.0	0.0	88.9
04 - 05	0.0	0.0	0.2	1.1	5.2	19.4	29.4	35.1	9.5	0.0	0.0	0.0	0.0	42.1
05 - 06	0.0	0.1	0.6	2.5	11.4	25.9	23.0	26.1	10.3	0.2	0.0	0.0	0.0	10.2
06 - 07	0.0	0.1	0.6	2.7	10.9	25.3	20.4	21.9	16.5	1.6	0.0	0.0	0.0	6.7
07 - 08	0.0	0.1	0.6	2.1	9.5	23.7	19.1	19.9	19.1	5.9	0.1	0.0	0.0	7.8
08 - 09	0.0	0.1	0.3	1.5	7.7	21.6	18.7	19.7	19.5	10.1	0.8	0.0	0.0	7.7
09 - 10	0.0	0.0	0.1	1.3	5.9	19.8	18.5	19.1	19.9	13.0	2.4	0.0	0.0	7.2
10 - 11	0.0	0.0	0.0	0.7	4.9	18.3	18.1	19.4	19.1	14.4	4.9	0.1	0.0	7.0
11 - 12	0.0	0.0	0.0	0.4	3.8	16.8	18.3	18.6	19.7	15.2	6.7	0.5	0.0	6.6
12 - 13	0.0	0.0	0.0	0.2	3.2	15.6	18.0	18.9	19.4	16.0	8.0	0.7	0.0	7.1
13 - 14	0.0	0.0	0.0	0.2	3.0	15.2	18.1	18.2	19.3	16.1	9.1	0.9	0.0	7.4
14 - 15	0.0	0.0	0.0	0.2	3.2	15.4	17.8	18.4	18.7	16.1	9.1	1.1	0.0	8.1
15 - 16	0.0	0.0	0.0	0.3	3.8	16.3	17.5	18.1	18.7	15.5	8.6	1.1	0.0	8.4
16 - 17	0.0	0.0	0.0	0.6	4.3	18.3	17.4	18.2	18.5	14.1	7.7	0.8	0.0	9.2
17 - 18	0.0	0.0	0.0	0.8	4.9	19.3	18.4	18.9	18.1	13.5	5.6	0.5	0.0	19.5
18 - 19	0.0	0.0	0.1	1.3	8.2	28.8	21.4	17.5	12.2	8.8	1.7	0.0	0.0	50.6
19 - 20	0.0	0.1	0.1	2.3	14.0	44.8	28.5	9.7	0.6	0.0	0.0	0.0	0.0	85.3

4.1.2. Temperature per Month

Example (dark shading): In the 10 years period in January 21.5% of all observations between 14 and 15 UTC showed a temperature between 5 and 9 degrees Celsius.

Time (UTC)	Temperature (° C) January													
	< -20	-20 – -16	-15 – -11	-10 – -6	-5 – -1	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 35	≥35	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	0.0	0.0	2.9	19.6	30.4	44.1	2.9	0.0	0.0	0.0	0.0	0.0	0.0	83.5
05 - 06	0.0	0.9	3.0	13.9	30.4	43.9	6.6	1.3	0.0	0.0	0.0	0.0	0.0	24.7
06 - 07	0.0	0.6	2.9	15.6	30.0	42.1	7.9	0.6	0.4	0.0	0.0	0.0	0.0	16.1
07 - 08	0.0	0.2	2.9	15.6	29.0	43.8	7.4	1.0	0.2	0.0	0.0	0.0	0.0	17.1
08 - 09	0.0	0.2	1.5	10.8	30.8	48.8	6.4	1.3	0.2	0.0	0.0	0.0	0.0	14.7
09 - 10	0.0	0.0	0.4	9.6	28.5	49.9	9.8	1.3	0.4	0.0	0.0	0.0	0.0	14.7
10 - 11	0.0	0.0	0.2	5.7	25.5	50.8	15.2	2.3	0.4	0.0	0.0	0.0	0.0	15.2
11 - 12	0.0	0.0	0.0	2.6	22.0	52.0	19.9	3.4	0.2	0.0	0.0	0.0	0.0	14.0
12 - 13	0.0	0.0	0.0	1.1	18.2	52.9	22.8	4.6	0.4	0.0	0.0	0.0	0.0	15.0
13 - 14	0.0	0.0	0.0	0.6	17.2	50.8	25.2	6.0	0.2	0.0	0.0	0.0	0.0	13.7
14 - 15	0.0	0.0	0.0	0.8	17.5	54.5	21.5	5.7	0.0	0.0	0.0	0.0	0.0	15.3
15 - 16	0.0	0.0	0.0	1.6	20.1	54.2	21.1	3.1	0.0	0.0	0.0	0.0	0.0	17.3
16 - 17	0.0	0.0	0.4	5.2	19.7	57.4	14.3	3.1	0.0	0.0	0.0	0.0	0.0	15.6
17 - 18	0.0	0.0	0.5	7.0	23.3	56.0	11.7	1.6	0.0	0.0	0.0	0.0	0.0	28.5
18 - 19	0.0	0.0	0.5	6.2	25.8	55.7	9.8	2.1	0.0	0.0	0.0	0.0	0.0	37.4
19 - 20	0.0	0.5	0.5	6.9	23.2	58.6	7.9	2.5	0.0	0.0	0.0	0.0	0.0	67.3

Time (UTC)	Temperature (° C) February													
	< -20	-20 – -16	-15 – -11	-10 – -6	-5 – -1	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 35	≥35	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	1.1	1.1	1.1	7.5	30.1	43.0	15.1	1.1	0.0	0.0	0.0	0.0	0.0	83.5
05 - 06	0.5	0.5	1.5	7.8	34.3	45.5	9.8	0.3	0.0	0.0	0.0	0.0	0.0	29.1
06 - 07	0.5	0.5	2.1	8.0	32.1	48.6	8.3	0.0	0.0	0.0	0.0	0.0	0.0	22.7
07 - 08	0.0	0.9	1.6	5.6	30.1	52.3	9.5	0.0	0.0	0.0	0.0	0.0	0.0	23.4
08 - 09	0.0	0.7	0.9	4.2	22.1	57.7	14.4	0.0	0.0	0.0	0.0	0.0	0.0	23.8
09 - 10	0.0	0.0	1.2	2.1	17.1	56.9	21.3	1.4	0.0	0.0	0.0	0.0	0.0	23.4
10 - 11	0.0	0.0	0.0	1.6	12.9	52.1	29.3	4.1	0.0	0.0	0.0	0.0	0.0	23.0
11 - 12	0.0	0.0	0.0	0.7	10.1	46.5	34.8	8.0	0.0	0.0	0.0	0.0	0.0	22.5
12 - 13	0.0	0.0	0.0	0.2	7.6	43.1	34.3	14.7	0.0	0.0	0.0	0.0	0.0	23.0
13 - 14	0.0	0.0	0.0	0.0	5.7	43.7	33.5	16.6	0.5	0.0	0.0	0.0	0.0	22.2
14 - 15	0.0	0.0	0.0	0.0	6.8	40.9	35.3	16.6	0.5	0.0	0.0	0.0	0.0	24.1
15 - 16	0.0	0.0	0.0	0.5	8.8	42.6	33.9	14.1	0.2	0.0	0.0	0.0	0.0	23.0
16 - 17	0.0	0.0	0.0	0.7	10.1	49.4	34.1	5.6	0.0	0.0	0.0	0.0	0.0	24.6
17 - 18	0.0	0.0	0.0	1.3	13.4	57.9	25.1	2.3	0.0	0.0	0.0	0.0	0.0	31.4
18 - 19	0.0	0.0	0.0	2.7	13.4	62.8	19.2	1.8	0.0	0.0	0.0	0.0	0.0	41.8
19 - 20	0.0	0.0	0.0	1.9	18.9	61.6	17.6	0.0	0.0	0.0	0.0	0.0	0.0	71.8

Time (UTC)	Temperature (° C) March													
	< -20	-20 – -16	-15 – -11	-10 – -6	-5 – -1	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 35	≥35	NA
03 - 04	0.0	0.0	0.0	0.0	20.0	66.7	13.3	0.0	0.0	0.0	0.0	0.0	0.0	97.6
04 - 05	0.0	0.0	0.0	1.9	23.8	48.8	23.1	2.5	0.0	0.0	0.0	0.0	0.0	74.2
05 - 06	0.0	0.0	0.0	3.8	27.7	46.3	19.8	2.3	0.0	0.0	0.0	0.0	0.0	10.5
06 - 07	0.0	0.0	0.0	2.2	24.3	47.5	23.8	2.2	0.0	0.0	0.0	0.0	0.0	4.5
07 - 08	0.0	0.0	0.0	0.3	14.2	49.6	32.2	3.5	0.0	0.0	0.0	0.2	0.0	3.4
08 - 09	0.0	0.0	0.0	0.0	5.5	41.5	42.4	10.6	0.0	0.0	0.0	0.0	0.0	2.9
09 - 10	0.0	0.0	0.0	0.0	1.5	32.2	44.1	20.9	1.3	0.0	0.0	0.0	0.0	2.7
10 - 11	0.0	0.0	0.0	0.0	1.0	24.5	40.8	29.2	4.5	0.0	0.0	0.0	0.0	3.9
11 - 12	0.0	0.0	0.0	0.0	0.5	20.5	36.6	33.1	9.4	0.0	0.0	0.0	0.0	3.9
12 - 13	0.0	0.0	0.0	0.0	0.0	17.1	35.0	33.6	14.2	0.2	0.0	0.0	0.0	4.5
13 - 14	0.0	0.0	0.0	0.0	0.3	15.7	32.1	33.7	17.6	0.5	0.0	0.0	0.0	5.6
14 - 15	0.0	0.0	0.0	0.0	0.2	15.1	32.5	33.3	17.9	1.0	0.0	0.0	0.0	5.2
15 - 16	0.0	0.0	0.0	0.0	0.3	15.2	33.4	33.1	17.0	1.0	0.0	0.0	0.0	4.4
16 - 17	0.0	0.0	0.0	0.0	0.3	20.0	33.2	32.4	13.7	0.3	0.0	0.0	0.0	5.8
17 - 18	0.0	0.0	0.0	0.0	0.7	26.7	39.6	28.5	4.5	0.0	0.0	0.0	0.0	11.1
18 - 19	0.0	0.0	0.0	0.0	3.4	33.0	42.5	19.5	1.6	0.0	0.0	0.0	0.0	29.0
19 - 20	0.0	0.0	0.0	0.0	6.6	37.9	42.2	11.8	1.4	0.0	0.0	0.0	0.0	66.0

Time (UTC)	Temperature (° C) April														
	< -20	-20 -- 16	-15 -- 11	-10 -- 6	-5 -- 1	0 -- 4	5 -- 9	10 -- 14	15 -- 19	20 -- 24	25 -- 29	30 -- 35	≥35	NA	
03 - 04	0.0	0.0	0.0	0.0	4.0	52.5	41.6	2.0	0.0	0.0	0.0	0.0	0.0	0.0	83.2
04 - 05	0.0	0.0	0.0	0.0	9.4	55.1	34.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	12.8
05 - 06	0.0	0.0	0.0	0.0	8.7	52.6	35.6	3.1	0.0	0.0	0.0	0.0	0.0	0.0	3.7
06 - 07	0.0	0.0	0.0	0.0	1.9	44.4	46.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	4.3
07 - 08	0.0	0.0	0.0	0.0	0.0	29.0	49.4	20.4	1.2	0.0	0.0	0.0	0.0	0.0	6.2
08 - 09	0.0	0.0	0.0	0.0	0.0	16.2	46.0	30.6	7.2	0.0	0.0	0.0	0.0	0.0	5.3
09 - 10	0.0	0.0	0.0	0.0	0.0	12.8	38.2	35.6	13.3	0.2	0.0	0.0	0.0	0.0	3.5
10 - 11	0.0	0.0	0.0	0.0	0.0	11.4	33.3	35.0	18.6	1.7	0.0	0.0	0.0	0.0	3.3
11 - 12	0.0	0.0	0.0	0.0	0.0	7.1	32.1	32.5	24.9	3.5	0.0	0.0	0.0	0.0	3.5
12 - 13	0.0	0.0	0.0	0.0	0.0	6.7	29.3	31.1	26.9	6.0	0.0	0.0	0.0	0.0	5.2
13 - 14	0.0	0.0	0.0	0.0	0.0	5.4	28.7	28.6	29.3	8.0	0.0	0.0	0.0	0.0	4.3
14 - 15	0.0	0.0	0.0	0.0	0.0	6.4	27.8	30.1	26.6	9.0	0.0	0.0	0.0	0.0	6.0
15 - 16	0.0	0.0	0.0	0.0	0.0	6.9	26.4	30.9	27.5	8.3	0.0	0.0	0.0	0.0	6.0
16 - 17	0.0	0.0	0.0	0.0	0.0	8.1	28.7	32.1	26.2	4.9	0.0	0.0	0.0	0.0	7.7
17 - 18	0.0	0.0	0.0	0.0	0.0	10.1	29.7	34.1	23.2	3.0	0.0	0.0	0.0	0.0	15.8
18 - 19	0.0	0.0	0.0	0.0	0.0	17.2	34.9	37.4	10.5	0.0	0.0	0.0	0.0	0.0	60.3
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Temperature (° C) May														
	< -20	-20 -- 16	-15 -- 11	-10 -- 6	-5 -- 1	0 -- 4	5 -- 9	10 -- 14	15 -- 19	20 -- 24	25 -- 29	30 -- 35	≥35	NA	
03 - 04	0.0	0.0	0.0	0.0	0.0	9.0	50.0	39.0	2.0	0.0	0.0	0.0	0.0	0.0	83.9
04 - 05	0.0	0.0	0.0	0.0	0.4	15.0	51.2	32.8	0.6	0.0	0.0	0.0	0.0	0.0	15.0
05 - 06	0.0	0.0	0.0	0.0	0.2	5.1	45.0	46.7	2.9	0.0	0.0	0.0	0.0	0.0	5.8
06 - 07	0.0	0.0	0.0	0.0	0.0	1.4	28.6	57.8	11.8	0.3	0.0	0.0	0.0	0.0	7.1
07 - 08	0.0	0.0	0.0	0.0	0.0	0.4	15.3	54.0	27.9	2.5	0.0	0.0	0.0	0.0	8.5
08 - 09	0.0	0.0	0.0	0.0	0.0	0.4	9.1	43.9	39.6	7.0	0.0	0.0	0.0	0.0	8.1
09 - 10	0.0	0.0	0.0	0.0	0.0	0.3	6.4	34.8	43.3	14.5	0.7	0.0	0.0	0.0	6.8
10 - 11	0.0	0.0	0.0	0.0	0.0	0.5	5.3	29.2	40.1	23.2	1.7	0.0	0.0	0.0	6.0
11 - 12	0.0	0.0	0.0	0.0	0.0	0.3	4.9	24.4	38.8	26.8	4.7	0.0	0.0	0.0	4.8
12 - 13	0.0	0.0	0.0	0.0	0.0	0.5	4.8	23.6	35.7	29.6	5.8	0.0	0.0	0.0	5.2
13 - 14	0.0	0.0	0.0	0.0	0.0	0.3	5.1	20.6	34.3	31.4	8.2	0.0	0.0	0.0	6.0
14 - 15	0.0	0.0	0.0	0.0	0.0	0.7	3.6	21.6	35.0	30.2	9.0	0.0	0.0	0.0	6.5
15 - 16	0.0	0.0	0.0	0.0	0.0	0.7	3.7	22.7	33.6	31.1	8.3	0.0	0.0	0.0	8.2
16 - 17	0.0	0.0	0.0	0.0	0.0	0.7	5.0	26.7	33.3	28.1	6.1	0.0	0.0	0.0	10.0
17 - 18	0.0	0.0	0.0	0.0	0.0	0.6	6.4	27.7	39.1	22.5	3.7	0.0	0.0	0.0	16.8
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	13.0	37.9	36.4	12.3	0.4	0.0	0.0	0.0	59.2
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	99.8

Time (UTC)	Temperature (° C) June														
	< -20	-20 -- 16	-15 -- 11	-10 -- 6	-5 -- 1	0 -- 4	5 -- 9	10 -- 14	15 -- 19	20 -- 24	25 -- 29	30 -- 35	≥35	NA	
03 - 04	0.0	0.0	0.0	0.0	0.0	3.8	29.2	53.8	12.3	0.9	0.0	0.0	0.0	0.0	82.3
04 - 05	0.0	0.0	0.0	0.0	0.0	2.2	30.7	54.7	11.7	0.4	0.2	0.0	0.0	0.0	10.5
05 - 06	0.0	0.0	0.0	0.0	0.0	0.0	17.1	55.8	25.9	1.2	0.0	0.0	0.0	0.0	2.3
06 - 07	0.0	0.0	0.0	0.0	0.0	0.0	7.9	45.4	40.6	6.2	0.0	0.0	0.0	0.0	2.7
07 - 08	0.0	0.0	0.0	0.0	0.0	0.0	4.6	32.2	43.8	19.0	0.5	0.0	0.0	0.0	5.2
08 - 09	0.0	0.0	0.0	0.0	0.0	0.0	3.3	23.9	43.1	27.2	2.5	0.0	0.0	0.0	5.2
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	2.3	18.7	38.2	34.5	6.4	0.0	0.0	0.0	6.2
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	2.1	16.8	34.0	33.9	13.1	0.2	0.0	0.0	5.5
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	1.6	15.5	31.1	32.5	18.3	1.0	0.0	0.0	4.2
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	1.2	10.8	31.6	34.4	21.1	0.9	0.0	0.0	4.5
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.9	11.9	29.0	33.7	23.2	1.4	0.0	0.0	4.5
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.7	13.2	28.9	31.0	24.9	1.2	0.0	0.0	5.5
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	1.1	13.0	31.5	30.9	21.6	1.9	0.0	0.0	5.2
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.9	14.0	32.5	31.3	18.7	2.6	0.0	0.0	4.7
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	1.4	16.8	34.2	33.0	13.1	1.6	0.0	0.0	14.7
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	1.2	26.9	33.7	33.7	4.4	0.0	0.0	0.0	58.5
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Temperature (°C) July														
	< -20	-20 - -16	-15 - -11	-10 - -6	-5 - -1	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 35	≥35	NA	
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	14.3	60.7	25.0	0.0	0.0	0.0	0.0	0.0	81.9
04 - 05	0.0	0.0	0.0	0.0	0.0	0.2	14.5	57.0	28.3	0.0	0.0	0.0	0.0	0.0	8.9
05 - 06	0.0	0.0	0.0	0.0	0.0	0.0	5.6	49.9	43.8	0.7	0.0	0.0	0.0	0.0	2.4
06 - 07	0.0	0.0	0.0	0.0	0.0	0.0	0.7	27.1	63.6	8.7	0.0	0.0	0.0	0.0	3.1
07 - 08	0.0	0.0	0.0	0.0	0.0	0.0	0.3	14.4	59.2	25.4	0.7	0.0	0.0	0.0	6.0
08 - 09	0.0	0.0	0.0	0.0	0.0	0.0	0.3	11.1	44.4	40.5	3.7	0.0	0.0	0.0	4.4
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.2	7.7	38.0	43.5	10.5	0.2	0.0	0.0	3.5
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.2	6.1	30.4	43.2	19.8	0.3	0.0	0.0	4.5
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	26.0	43.3	22.8	2.2	0.0	0.0	3.1
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.2	4.7	23.9	39.8	27.7	3.7	0.0	0.0	4.0
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	21.1	37.0	31.4	4.9	0.0	0.0	4.5
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	17.4	38.1	31.3	5.6	0.0	0.0	4.7
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	19.6	38.6	30.7	5.1	0.0	0.0	4.4
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.2	6.9	21.0	40.2	28.3	3.4	0.0	0.0	4.8
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9	24.0	41.3	22.8	2.1	0.0	0.0	15.2
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2	28.8	48.7	11.9	0.4	0.0	0.0	61.9
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Temperature (°C) August														
	< -20	-20 - -16	-15 - -11	-10 - -6	-5 - -1	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 35	≥35	NA	
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	8.3	63.3	28.4	0.0	0.0	0.0	0.0	0.0	81.6
04 - 05	0.0	0.0	0.0	0.0	0.0	1.7	9.2	63.9	25.2	0.0	0.0	0.0	0.0	0.0	10.4
05 - 06	0.0	0.0	0.0	0.0	0.0	1.2	5.2	60.7	32.7	0.2	0.0	0.0	0.0	0.0	3.4
06 - 07	0.0	0.0	0.0	0.0	0.0	0.0	1.9	33.7	61.2	3.1	0.0	0.0	0.0	0.0	3.4
07 - 08	0.0	0.0	0.0	0.0	0.0	0.0	0.9	14.2	64.5	20.2	0.2	0.0	0.0	0.0	4.7
08 - 09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	49.9	37.9	3.0	0.0	0.0	0.0	5.6
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	36.5	47.2	9.2	0.0	0.0	0.0	4.7
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	27.8	45.5	20.6	0.5	0.0	0.0	3.4
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	23.2	41.7	28.7	2.3	0.0	0.0	5.2
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	19.3	39.5	32.6	3.5	0.0	0.0	3.7
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	17.5	38.0	36.0	4.3	0.0	0.0	6.3
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	18.8	36.9	33.2	6.1	0.0	0.0	5.7
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	21.0	36.0	32.0	6.0	0.0	0.0	6.6
16 - 17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	25.3	34.9	31.0	3.0	0.0	0.0	5.7
17 - 18	0.0	0.0	0.0	0.0	0.0	0.0	0.2	7.7	29.2	39.3	22.0	1.6	0.0	0.0	16.2
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	9.3	46.1	34.8	8.8	0.0	0.0	65.5
19 - 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Temperature (°C) September														
	< -20	-20 - -16	-15 - -11	-10 - -6	-5 - -1	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 35	≥35	NA	
03 - 04	0.0	0.0	0.0	0.0	0.0	11.4	34.1	50.4	4.1	0.0	0.0	0.0	0.0	0.0	77.2
04 - 05	0.0	0.0	0.0	0.0	0.0	10.5	36.4	48.1	5.0	0.0	0.0	0.0	0.0	0.0	15.0
05 - 06	0.0	0.0	0.0	0.0	0.0	10.2	37.8	47.0	5.0	0.0	0.0	0.0	0.0	0.0	3.9
06 - 07	0.0	0.0	0.0	0.0	0.0	4.6	33.0	55.1	7.3	0.0	0.0	0.0	0.0	0.0	3.5
07 - 08	0.0	0.0	0.0	0.0	0.0	1.7	20.2	58.3	19.8	0.0	0.0	0.0	0.0	0.0	3.7
08 - 09	0.0	0.0	0.0	0.0	0.0	0.2	10.9	51.4	35.8	1.8	0.0	0.0	0.0	0.0	4.8
09 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	41.5	45.0	7.5	0.0	0.0	0.0	4.1
10 - 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	35.0	46.1	14.9	0.2	0.0	0.0	3.1
11 - 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	26.9	48.4	20.2	1.5	0.0	0.0	2.8
12 - 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	24.6	45.8	24.0	3.1	0.0	0.0	4.3
13 - 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	22.0	43.3	27.3	4.5	0.0	0.0	5.6
14 - 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	23.6	41.5	26.9	4.5	0.0	0.0	5.7
15 - 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	24.4	42.0	24.8	5.0	0.0	0.0	6.5
16 - 17	0.0	0.0	0.0	0.0	0.0	0.2	4.5	30.6	44.2	18.9	1.6	0.0	0.0	0.0	6.1
17 - 18	0.0	0.0	0.0	0.0	0.0	0.2	6.6	40.1	42.8	10.3	0.0	0.0	0.0	0.0	15.6
18 - 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4	60.5	24.9	2.3	0.0	0.0	0.0	67.2
19 - 20	0.0	0.0	0.0	0.0	0.0	3.8	34.6	61.5	0.0	0.0	0.0	0.0	0.0	0.0	95.2

Time (UTC)	Temperature (° C) October													
	< -20	-20 -- -16	-15 -- -11	-10 -- -6	-5 -- -1	0 -- 4	5 -- 9	10 -- 14	15 -- 19	20 -- 24	25 -- 29	30 -- 35	≥35	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	16.9	61.9	20.3	0.8	0.0	0.0	0.0	0.0	78.9
04 - 05	0.0	0.0	0.0	0.0	0.3	19.9	59.2	19.9	0.6	0.0	0.0	0.0	0.0	42.5
05 - 06	0.0	0.0	0.0	0.4	1.9	24.6	55.0	17.7	0.4	0.0	0.0	0.0	0.0	8.1
06 - 07	0.0	0.0	0.0	0.4	1.5	25.4	53.0	19.3	0.6	0.0	0.0	0.0	0.0	3.2
07 - 08	0.0	0.0	0.0	0.2	0.7	16.8	50.3	30.7	1.3	0.0	0.0	0.0	0.0	3.0
08 - 09	0.0	0.0	0.0	0.0	0.7	8.2	41.7	44.5	4.8	0.0	0.0	0.0	0.0	3.4
09 - 10	0.0	0.0	0.0	0.0	0.0	5.2	32.3	47.9	14.2	0.4	0.0	0.0	0.0	3.0
10 - 11	0.0	0.0	0.0	0.0	0.0	4.1	22.6	51.6	19.4	2.4	0.0	0.0	0.0	3.0
11 - 12	0.0	0.0	0.0	0.0	0.0	3.0	17.9	46.5	25.9	6.7	0.0	0.0	0.0	3.9
12 - 13	0.0	0.0	0.0	0.0	0.0	2.1	15.0	46.5	26.8	9.6	0.0	0.0	0.0	4.5
13 - 14	0.0	0.0	0.0	0.0	0.0	1.9	15.6	40.7	31.1	10.7	0.0	0.0	0.0	4.5
14 - 15	0.0	0.0	0.0	0.0	0.0	1.9	15.1	39.6	31.5	11.8	0.2	0.0	0.0	7.2
15 - 16	0.0	0.0	0.0	0.0	0.0	2.7	17.0	47.6	25.1	7.6	0.0	0.0	0.0	5.9
16 - 17	0.0	0.0	0.0	0.0	0.0	3.5	25.3	51.0	18.7	1.6	0.0	0.0	0.0	7.9
17 - 18	0.0	0.0	0.0	0.0	0.5	3.8	40.5	46.2	8.3	0.7	0.0	0.0	0.0	20.4
18 - 19	0.0	0.0	0.0	0.0	1.7	13.0	43.0	37.4	4.8	0.0	0.0	0.0	0.0	58.8
19 - 20	0.0	0.0	0.0	0.0	4.6	16.8	41.2	35.9	1.5	0.0	0.0	0.0	0.0	76.5
23 - 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Time (UTC)	Temperature (° C) November													
	< -20	-20 -- -16	-15 -- -11	-10 -- -6	-5 -- -1	0 -- 4	5 -- 9	10 -- 14	15 -- 19	20 -- 24	25 -- 29	30 -- 35	≥35	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	0.0	0.0	0.8	1.6	18.0	57.8	19.5	2.3	0.0	0.0	0.0	0.0	0.0	76.3
05 - 06	0.0	0.0	0.4	2.1	20.3	52.3	22.8	2.1	0.0	0.0	0.0	0.0	0.0	12.2
06 - 07	0.0	0.0	0.4	2.9	20.8	51.4	21.4	3.1	0.0	0.0	0.0	0.0	0.0	3.1
07 - 08	0.0	0.0	0.2	1.7	20.5	49.4	25.0	3.1	0.0	0.0	0.0	0.0	0.0	4.4
08 - 09	0.0	0.0	0.4	1.0	14.6	47.5	33.7	2.9	0.0	0.0	0.0	0.0	0.0	4.8
09 - 10	0.0	0.0	0.0	0.6	10.8	41.7	42.9	4.1	0.0	0.0	0.0	0.0	0.0	5.4
10 - 11	0.0	0.0	0.0	0.0	8.0	37.4	45.2	9.4	0.0	0.0	0.0	0.0	0.0	5.0
11 - 12	0.0	0.0	0.0	0.0	5.5	33.1	47.2	13.7	0.6	0.0	0.0	0.0	0.0	5.4
12 - 13	0.0	0.0	0.0	0.0	5.9	28.4	44.4	20.2	1.2	0.0	0.0	0.0	0.0	5.4
13 - 14	0.0	0.0	0.0	0.0	5.3	28.3	43.3	21.9	1.2	0.0	0.0	0.0	0.0	6.3
14 - 15	0.0	0.0	0.0	0.0	5.5	27.9	46.3	19.4	0.8	0.0	0.0	0.0	0.0	6.5
15 - 16	0.0	0.0	0.0	0.2	6.4	32.3	47.5	13.6	0.0	0.0	0.0	0.0	0.0	7.2
16 - 17	0.0	0.0	0.0	0.0	8.3	39.4	46.9	5.5	0.0	0.0	0.0	0.0	0.0	8.3
17 - 18	0.0	0.0	0.0	0.5	9.9	41.5	46.0	2.1	0.0	0.0	0.0	0.0	0.0	21.1
18 - 19	0.0	0.0	0.0	0.8	11.6	43.2	42.1	2.3	0.0	0.0	0.0	0.0	0.0	28.3
19 - 20	0.0	0.0	0.0	0.6	10.3	38.5	48.1	2.6	0.0	0.0	0.0	0.0	0.0	71.1

Time (UTC)	Temperature (° C) December													
	< -20	-20 -- -16	-15 -- -11	-10 -- -6	-5 -- -1	0 -- 4	5 -- 9	10 -- 14	15 -- 19	20 -- 24	25 -- 29	30 -- 35	≥35	NA
03 - 04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
04 - 05	0.0	0.0	4.0	8.9	33.1	40.3	12.1	1.6	0.0	0.0	0.0	0.0	0.0	77.8
05 - 06	0.0	0.0	2.8	6.1	27.9	48.3	11.9	3.0	0.0	0.0	0.0	0.0	0.0	17.2
06 - 07	0.0	0.4	2.7	5.5	28.4	49.0	11.4	2.7	0.0	0.0	0.0	0.0	0.0	5.9
07 - 08	0.0	0.0	2.7	4.1	27.1	51.6	12.2	1.9	0.4	0.0	0.0	0.0	0.0	7.5
08 - 09	0.0	0.0	1.4	3.6	25.9	51.9	14.5	2.4	0.4	0.0	0.0	0.0	0.0	9.5
09 - 10	0.0	0.0	0.2	3.9	18.9	53.6	19.6	3.3	0.4	0.0	0.0	0.0	0.0	8.8
10 - 11	0.0	0.0	0.0	2.3	15.9	53.9	23.6	3.9	0.4	0.0	0.0	0.0	0.0	7.5
11 - 12	0.0	0.0	0.0	1.9	11.2	52.0	28.8	5.7	0.4	0.0	0.0	0.0	0.0	5.6
12 - 13	0.0	0.0	0.0	1.3	9.5	48.9	33.8	6.1	0.4	0.0	0.0	0.0	0.0	5.7
13 - 14	0.0	0.0	0.0	1.3	9.1	46.9	36.1	6.3	0.4	0.0	0.0	0.0	0.0	5.6
14 - 15	0.0	0.0	0.0	1.5	10.5	47.7	35.0	5.3	0.0	0.0	0.0	0.0	0.0	5.7
15 - 16	0.0	0.0	0.0	1.5	13.6	52.9	29.3	2.7	0.0	0.0	0.0	0.0	0.0	6.5
16 - 17	0.0	0.0	0.0	1.6	17.1	55.9	23.5	2.0	0.0	0.0	0.0	0.0	0.0	9.9
17 - 18	0.0	0.0	0.0	2.3	19.4	56.4	19.1	2.8	0.0	0.0	0.0	0.0	0.0	28.9
18 - 19	0.0	0.0	0.0	2.9	22.2	56.9	14.9	3.2	0.0	0.0	0.0	0.0	0.0	38.5
19 - 20	0.0	0.0	0.0	4.0	21.5	56.4	16.1	2.0	0.0	0.0	0.0	0.0	0.0	73.3

4.2. Maximum Temperature

4.2.1. Maximum Temperature per Month

Maximum temperatures in ° C in specified time periods of 3 hours each month. Light grey shading denotes absolute maximum values for the respective period (day or year).

Example (dark shading): In the 10 years period in July the maximum temperature reported between 15 and 18 UTC was 34 degrees Celsius.

Time (Month)	Time Period (UTC)	Maximum Temperature (° C) 10 Years							NA
		03 - 06	06 - 09	09 - 12	12 - 15	15 - 18	18 - 21	Day	
January		12	19	16	15	13	12	19	50.4
February		11	9	13	16	15	13	16	54.7
March		13	14	19	21	20	17	21	43.1
April		12	18	22	24	24	18	24	43.0
May		19	23	27	28	29	25	29	44.1
June		25	27	31	33	34	28	34	42.6
July		20	27	31	33	34	30	34	42.4
August		20	27	32	34	34	28	34	43.0
September		19	22	25	27	27	24	27	42.7
October		17	18	24	25	23	19	25	43.1
November		13	13	15	16	14	14	16	44.6
December		14	16	17	16	14	14	17	46.4
Year		25	27	32	34	34	30	34	45.0

4.2.2. Maximum Temperature in 10 Years

On the 23rd of July 1996 at 1750 UTC a temperature of 34° C was reported.

4.3. Average Maximum Temperature

Average maximum temperatures in ° C in specified time periods of 3 hours each month.

Example (dark shading): In the 10 years period in July the average maximum temperature reported between 12 and 15 UTC was 29.8 degrees Celsius.

Time (Months)	Time Period (UTC)	Average Maximum Temperature (° C) 10 Years							NA
		03 - 06	06 - 09	09 - 12	12 - 15	15 - 18	18 - 21	Day	
January		4.8	5.8	8.2	9.3	8.1	5.6	50.4	
February		4.7	5.9	9.3	11.3	10.4	6.6	54.7	
March		8.2	11.6	15.4	17.3	16.9	12.1	43.1	
April		8.4	13.5	17.5	19.4	18.9	13.8	43.0	
May		13.3	19.8	23.7	24.9	24.7	19.7	44.1	
June		17.7	23.8	27.2	28.8	28.8	23.5	42.6	
July		18.1	24.3	28.0	29.8	29.5	24.9	42.4	
August		17.2	23.7	27.9	29.7	29.4	22.6	43.0	
September		14.0	18.3	22.4	24.2	23.7	15.9	42.7	
October		11.7	14.0	18.7	20.1	19.0	12.8	43.1	
November		7.1	7.9	10.5	11.7	10.2	7.8	44.6	
December		6.9	8.1	9.6	9.8	8.8	7.7	46.4	

4.4. Minimum Temperature

4.4.1. Minimum Temperature per Month

Minimum temperatures in ° C in specified time periods of 3 hours each month. Light grey shading denotes absolute minimum values for the respective period (day or year).

Example (dark shading): In the 10 years period in February the minimum temperature reported between 03 and 06 UTC was -22 degrees Celsius.

	Time Period (UTC)	Minimum Temperature (° C) 10 Years							NA
		03 - 06	06 - 09	09 - 12	12 - 15	15 - 18	18 - 21	Day	
January	-17	-19	-13	-7	-14	-16	-19	50	
February	-22	-21	-15	-6	-8	-9	-22	55	
March	-9	-9	-4	-1	-2	-3	-9	43	
April	-5	-2	0	0	0	0	-5	43	
May	-1	1	3	3	2	5	-1	44	
June	3	5	6	8	8	9	3	43	
July	4	8	9	9	9	11	4	42	
August	2	5	10	10	9	8	2	43	
September	0	0	5	5	4	4	0	43	
October	-6	-6	0	0	-1	-3	-6	43	
November	-13	-13	-8	-4	-7	-9	-13	45	
December	-15	-16	-12	-8	-10	-10	-16	46	
Year	-22	-21	-15	-8	-14	-16	-22	45	

4.4.2. Minimum Temperature in 10 Years

On the 2nd of February 1999 at 0520 UTC a temperature of -22° C was reported.

4.5. Average Minimum Temperature

Average minimum temperatures in ° C in specified time periods of 3 hours each month.

Example (dark shading): In the 10 years period in January the average minimum temperature reported between 06 and 09 UTC was -9.4 degrees Celsius.

Time Period (UTC)	Average Minimum Temperature (° C) 10 Years							NA
	03 - 06	06 - 09	09 - 12	12 - 15	15 - 18	18 - 21	Day	
January	-8.8	-9.4	-6.6	-3.5	-5.6	-5.9	50.4	
February	-7.8	-8.2	-4.4	-1.3	-2.4	-3.1	54.7	
March	-4.6	-4.1	0.5	2.2	1.3	0.2	43.1	
April	-1.3	0.7	3.5	4.7	3.8	4.4	43.0	
May	3.1	6.4	8.5	9.5	9.2	10.0	44.1	
June	5.5	9.2	11.0	12.5	12.1	13.3	42.6	
July	7.9	11.5	13.7	13.7	13.5	15.5	42.4	
August	8.5	11.0	14.4	14.9	14.1	15.5	43.0	
September	3.9	5.2	9.5	10.5	9.3	10.2	42.7	
October	1.1	1.3	5.4	6.5	5.2	4.6	43.1	
November	-3.3	-4.0	-1.3	0.5	-0.4	-0.6	44.6	
December	-6.6	-6.6	-4.3	-2.5	-3.8	-3.6	46.4	

5. PRESSURE

5.1. Average Pressure (QNH)

Average pressure in hPa in specified time periods of 3 hours each month. Light grey shading denotes average pressure values for the times indicated during the whole day or year, respectively.

Example (dark shading): In the 10 years period in January the average pressure reported between 09 and 12 UTC was 1020 hPa.

	Time (Month)	Average QNH 10 Years							
		03 - 06	06 - 09	09 - 12	12 - 15	15 - 18	18 - 21	Day	NA
	January	1019.6	1019.8	1020.0	1019.0	1019.3	1019.2	1019.5	50.4
	February	1018.6	1018.7	1018.7	1017.7	1017.6	1017.7	1018.2	54.8
	March	1016.8	1018.1	1017.9	1017.0	1016.8	1018.9	1017.5	43.4
	April	1013.2	1013.6	1013.2	1012.5	1012.3	1013.9	1013.0	43.2
	May	1015.3	1015.5	1015.1	1014.4	1014.1	1013.9	1014.8	44.1
	June	1018.3	1018.4	1018.0	1017.3	1016.9	1016.9	1017.7	42.8
	July	1017.4	1017.7	1017.3	1016.7	1016.5	1017.5	1017.1	42.6
	August	1017.9	1018.2	1017.8	1017.0	1016.7	1017.0	1017.5	43.0
	September	1015.8	1016.4	1016.2	1015.4	1015.1	1016.7	1015.8	42.7
	October	1017.3	1018.1	1017.9	1016.9	1016.9	1018.8	1017.5	43.4
	November	1016.6	1016.9	1016.9	1016.2	1016.2	1017.1	1016.6	44.7
	December	1017.4	1017.5	1017.5	1016.5	1016.9	1017.6	1017.2	46.2
	Year	1016.8	1017.4	1017.2	1016.3	1016.2	1017.5	1016.8	45.1

5.2. Minimum Pressure (QNH)

5.2.1. Minimum QNH per Month

Minimum pressure in hPa in specified time periods of 3 hours each month. Light grey shading denotes minimum pressure values for the time indicated during the whole day or year, respectively.

Example (dark shading): In the 10 years period in December the minimum pressure reported between 03 and 06 UTC was 980 hPa.

	Time (Month)	Minimum QNH 10 Years							
		03 - 06	06 - 09	09 - 12	12 - 15	15 - 18	18 - 21	Day	NA
	January	991	989	989	987	987	988	987	50.4
	February	990	991	992	992	990	991	990	54.8
	March	985	986	989	990	990	990	985	43.4
	April	989	989	991	989	989	993	989	43.2
	May	992	992	994	992	992	992	992	44.1
	June	996	997	998	998	998	998	996	42.8
	July	1000	1001	1002	1002	1002	1002	1000	42.6
	August	1003	1004	1005	1004	1004	1007	1003	43.0
	September	995	996	999	999	997	1000	995	42.7
	October	990	991	992	992	993	999	990	43.4
	November	987	987	989	986	985	986	985	44.7
	December	980	985	989	989	990	989	980	46.2
	Year	980	985	989	986	985	986	980	45.1

5.2.2. Minimum QNH in 10 Years

On the 28th of December 1999 at 0450 UTC a minimum pressure of 980 hPa was reported. This extreme value was caused by the gale Martin.

5.3. Maximum Pressure (QNH)

5.3.1. Maximum QNH per Month

Maximum pressure in hPa in specified time periods of 3 hours each month. Light grey shading denotes maximum pressure values for the time indicated during the whole day or year, respectively.

Example (dark shading): In the 10 years period in February the maximum pressure reported between 06 and 09 UTC was 1039 hPa.

Time (Month)	Time Period (UTC)	Maximum QNH 10 Years							NA
		03 - 06	06 - 09	09 - 12	12 - 15	15 - 18	18 - 21	Day	
January	1036	1037	1038	1037	1037	1037	1037	1038	50.4
February	1038	1039	1039	1038	1038	1038	1039	1039	54.8
March	1036	1036	1036	1035	1035	1036	1036	1036	43.4
April	1032	1033	1033	1033	1032	1030	1033	1033	43.2
May	1029	1029	1028	1026	1025	1025	1029	1029	44.1
June	1028	1029	1029	1027	1027	1028	1029	1029	42.8
July	1027	1027	1027	1026	1027	1027	1027	1027	42.6
August	1027	1028	1027	1029	1027	1025	1029	1029	43.0
September	1028	1029	1029	1029	1028	1026	1029	1029	42.7
October	1033	1033	1033	1032	1030	1030	1033	1033	43.4
November	1036	1037	1036	1035	1035	1035	1037	1037	44.7
December	1034	1035	1035	1035	1036	1036	1036	1036	46.2
Year	1038	1039	1039	1038	1038	1038	1039	1039	45.1

5.3.2. Maximum QNH in 10 Years

On the 11th of February 2001 at 0750 UTC a maximum pressure of 1039 hPa was reported.

6. WEATHER PHENOMENA

6.1. Freezing Rain

Cases of freezing rain in specified time periods of 3 hours per month. The value of NA is calculated relative to the potentially possible observations and is given in percent. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomenon was observed

Example (dark shading): In the 10 years period in December between 15 and 18 UTC 3 observations reported freezing rain.

Time (UTC)	Cases of Freezing Rain During 10 Years													NA %
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	
03 - 06	0	0	0	0	0	0	0	0	0	0	0	0	0	47.0
06 - 09	1	0	0	0	0	0	0	0	0	0	0	1	2	7.1
09 - 12	0	0	0	0	0	0	0	0	0	0	0	0	0	6.7
12 - 15	2	0	0	0	0	0	0	0	0	0	0	2	4	7.5
15 - 18	1	0	0	0	0	0	0	0	0	0	0	3	4	12.3
18 - 21	0	0	0	0	0	0	0	0	0	0	0	2	2	78.6
Day	4	0	0	0	0	0	0	0	0	0	0	8	12	44.9

6.2. Freezing Drizzle

Cases of freezing drizzle in specified time periods of 3 hours per month. The value of NA is calculated relative to the potentially possible observations and is given in percent. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomenon was observed

Example (dark shading): In the 10 years period in January between 06 and 09 UTC 7 observations reported freezing drizzle.

Time (UTC)	Cases of Freezing Drizzle During 10 Years													NA %	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year		
03 - 06	0	0	0	0	0	0	0	0	0	0	0	0	0	47.0	
06 - 09	7	0	0	0	0	0	0	0	0	0	0	0	7	7.1	
09 - 12	0	0	0	0	0	0	0	0	0	0	0	0	0	6.7	
12 - 15	0	0	0	0	0	0	0	0	0	0	0	3	0	7.5	
15 - 18	0	0	0	0	0	0	0	0	0	0	0	2	0	12.3	
18 - 21	0	0	0	0	0	0	0	0	0	0	0	0	0	78.6	
Day	7	0	0	0	0	0	0	0	0	0	0	5	0	12	44.9

6.3. Snowfall

Frequencies in percent of snowfall in specified time periods of 3 hours per month. The value of NA is calculated relative to the potentially possible observations and is given in percent. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomenon was observed

Example (dark shading): In the 10 years period in February between 06 and 09 UTC 8.3 % of all observations reported snowfall.

Time (UTC)	Frequencies of Snowfall During 10 Years													NA %
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	
03 - 06	6.7	5.5	3.4	3.8	0.0	0.0	0.0	0.0	0.0	0.0	4.3	6.3	1.8	47.0
06 - 09	4.7	8.3	2.2	3.5	0.0	0.0	0.0	0.0	0.0	0.0	3.7	5.7	2.2	7.1
09 - 12	2.8	7.0	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	2.9	5.5	1.8	6.7
12 - 15	2.0	5.0	1.5	1.1	0.1	0.0	0.0	0.0	0.0	0.0	2.0	5.1	1.3	7.5
15 - 18	3.2	4.7	2.0	1.0	0.1	0.0	0.0	0.0	0.0	0.0	1.5	5.7	1.4	12.3
18 - 21	3.0	6.8	2.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	1.3	5.9	2.4	78.6
Day	3.4	6.2	2.1	2.3	0.0	0.0	0.0	0.0	0.0	0.0	2.6	5.6	1.7	44.9

6.4. Hail

Cases of hail in specified time periods of 3 hours per month. The value of NA is calculated relative to the potentially possible observations and is given in percent. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomenon was observed.

Example (dark shading): In the 10 years period in September between 15 and 18 UTC 2 observations reported hail.

Time (UTC)	Cases of Hail During 10 Years													NA %
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	
03 - 06	0	0	0	0	0	0	0	0	0	0	0	0	0	47.0
06 - 09	0	0	0	0	0	0	0	0	0	0	0	0	0	7.1
09 - 12	0	0	0	0	0	0	0	0	0	0	0	0	0	6.7
12 - 15	0	0	0	0	0	0	0	0	0	0	0	0	0	7.5
15 - 18	0	0	0	0	1	0	0	0	2	0	0	0	3	12.3
18 - 21	0	0	0	0	0	0	0	0	0	0	0	0	0	78.6
Day	0	0	0	0	1	0	0	0	2	0	0	0	3	44.9

6.5. Snow Pellets

Cases of snow pellets in specified time periods of 3 hours per month. The value of NA is calculated relative to the potentially possible observations and is given in percent. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomenon was observed.

Example (dark shading): In the 10 years period in June between 12 and 15 UTC 1 observation reported snow pellets.

Time (UTC)	Cases of Snow Pellets During 10 Years													NA %
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	
03 - 06	0	0	0	0	0	0	0	0	0	0	0	0	0	47.0
06 - 09	0	0	0	0	0	0	0	0	0	0	0	0	0	7.1
09 - 12	0	0	0	0	0	0	0	0	0	0	0	0	0	6.7
12 - 15	0	0	0	0	0	1	0	0	0	0	0	0	1	7.5
15 - 18	0	0	0	0	0	0	0	0	0	0	0	0	0	12.3
18 - 21	0	0	0	0	0	0	0	0	0	0	0	0	0	78.6
Day	0	0	0	0	0	1	0	0	0	0	0	0	1	44.9

6.6. Thunderstorm

Frequencies in percent of thunderstorm in specified time periods of 3 hours per month. The value of NA is calculated relative to the potentially possible observations and is given in percent. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomenon was observed

Example (dark shading): In the 10 years period in August between 18 and 21 UTC 3.4 % of all observations reported thunderstorm.

Time (UTC)	Frequencies of Thunderstorm During 10 Years													NA %
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	
03 - 06	0.0	0.0	0.0	0.0	0.1	0.3	1.1	0.6	0.6	0.0	0.0	0.0	0.3	47.0
06 - 09	0.0	0.1	0.0	0.0	0.0	0.6	0.8	0.4	0.1	0.0	0.0	0.0	0.2	7.1
09 - 12	0.0	0.0	0.0	0.0	0.2	0.1	0.9	0.3	0.0	0.0	0.0	0.0	0.1	6.7
12 - 15	0.0	0.0	0.0	0.1	0.5	0.8	1.2	0.4	0.5	0.1	0.0	0.0	0.3	7.5
15 - 18	0.1	0.1	0.0	1.2	1.6	2.5	1.9	1.6	0.1	0.0	0.0	0.1	0.8	12.3
18 - 21	0.0	0.0	0.0	0.0	0.8	2.4	3.0	3.4	1.5	0.0	0.0	0.0	0.6	78.6
Day	0.0	0.0	0.0	0.2	0.5	0.9	1.2	0.7	0.3	0.0	0.0	0.0	0.4	44.9

6.7. Fog (Without Shallow and Vicinity Fog)

Frequencies in percent of fog in specified time periods of 3 hours per month. The value of NA is calculated relative to the potentially possible observations and is given in percent. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomenon was observed.

Example (dark shading): In the 10 years period in October between 03 and 06 UTC 24.7 % of all observations reported fog.

Time (UTC)	Frequencies of Fog During 10 Years													NA %
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	
03 - 06	14.4	8.9	11.1	5.0	6.1	3.1	2.2	9.7	20.2	24.7	17.9	11.4	10.4	47.0
06 - 09	14.1	9.3	4.7	0.5	0.2	0.1	0.0	0.6	7.5	13.8	17.3	10.6	6.3	7.1
09 - 12	6.4	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	5.1	4.1	1.4	6.7
12 - 15	1.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.2	0.3	7.5
15 - 18	4.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	3.1	0.8	12.3
18 - 21	10.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.5	3.3	7.6	5.3	3.2	78.6
Day	7.5	3.3	2.0	0.8	0.9	0.5	0.3	1.6	4.6	6.2	7.6	5.3	3.2	44.9

6.8. Shallow and Vicinity Fog

Frequencies in percent of shallow **or** vicinity fog in specified time periods of 3 hours per month. The value of NA is calculated relative to the potentially possible observations and is given in percent. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomenon was observed.

Example (dark shading): In the 10 years period in October between 06 and 09 UTC 4.7% of all observations reported shallow or vicinity fog.

Time (UTC)	Frequencies of Shallow and Vicinity Fog During 10 Years													NA %
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	
03 - 06	2.5	2.8	3.0	5.7	4.9	2.9	3.9	8.9	6.6	4.1	4.0	1.5	4.6	47.0
06 - 09	3.9	2.3	1.6	0.5	0.2	0.1	0.0	0.2	1.5	4.7	3.1	2.5	1.7	7.1
09 - 12	1.8	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.2	1.5	0.4	6.7
12 - 15	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.4	0.1	7.5
15 - 18	1.3	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.7	0.9	0.3	12.3
18 - 21	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	1.1	1.6	0.7	78.6
Day	1.8	0.9	0.7	0.9	0.8	0.5	0.6	1.4	1.4	1.9	1.5	1.4	1.1	44.9

6.9. Freezing Fog

Frequencies in percent of freezing fog in specified time periods of 3 hours per month. The value of NA is calculated relative to the potentially possible observations and is given in percent. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomenon was observed

Example (dark shading): In the 10 years period in January between 03 and 06 UTC 3.9 % of all observations reported freezing fog.

Time (UTC)	Frequencies of Freezing Fog During 10 Years													NA %
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	
03 - 06	3.9	3.2	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4	3.7	2.6	0.9	47.1
06 - 09	3.8	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.1	1.9	1.0	7.4
09 - 12	1.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.2	0.3	6.9
12 - 15	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	7.5
15 - 18	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.2	12.4
18 - 21	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.0	0.5	78.6
Day	1.9	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.4	1.2	0.4	45.0

6.10. Rain

Frequencies in percent of rain in specified time periods of 3 hours per month. The value of NA is calculated relative to the potentially possible observations and is given in percent. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomenon was observed

Example (dark shading): In the 10 years period in May between 18 and 21 UTC 15.7 % of all observations reported rain.

Time (UTC)	Frequencies of Rain During 10 Years													NA %
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	
03 - 06	11.6	10.9	14.4	15.3	12.9	11.9	10.9	9.6	14.2	9.7	13.7	14.3	12.4	47.0
06 - 09	9.6	11.8	11.6	13.8	11.2	10.6	7.2	8.1	13.2	12.5	14.2	14.5	11.5	7.1
09 - 12	9.6	9.9	8.7	11.3	9.8	8.4	6.9	7.1	10.2	10.4	13.4	9.4	9.5	6.7
12 - 15	9.3	9.4	7.9	10.5	10.6	8.4	8.5	7.7	10.5	7.8	11.9	11.9	9.5	7.5
15 - 18	10.8	12.2	11.6	12.1	13.9	9.3	7.8	9.3	12.7	9.0	12.4	13.0	11.1	12.3
18 - 21	11.1	10.5	11.9	14.6	15.7	6.8	7.2	11.7	15.2	9.1	9.9	12.6	11.2	78.6
Day	10.0	10.8	10.5	12.5	11.7	9.5	8.1	8.4	12.1	9.9	12.8	12.4	10.7	44.9

6.11. Drizzle

Frequencies in percent of drizzle in specified time periods of 3 hours per month. The value of NA is calculated relative to the potentially possible observations and is given in percent. It indicates the reduction of the data base due to NA. Light grey shading denotes values where the phenomenon was observed

Example (dark shading): In the 10 years period in February between 18 and 21 UTC 1.8 % of all observations reported drizzle.

Time (UTC)	Frequencies of Drizzle During 10 Years													NA %
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	
03 - 06	1.2	0.4	0.1	0.7	1.0	0.4	0.2	0.4	0.7	2.3	0.8	0.9	0.7	47.0
06 - 09	0.7	0.4	0.1	0.4	0.9	0.1	0.3	0.3	0.4	0.9	0.4	0.7	0.5	7.1
09 - 12	0.3	0.1	0.0	0.0	0.3	0.2	0.0	0.1	0.3	0.6	0.5	0.3	0.2	6.7
12 - 15	0.4	0.6	0.1	0.4	0.2	0.2	0.0	0.2	0.0	0.3	0.1	0.1	0.2	7.5
15 - 18	0.5	0.6	0.0	0.1	0.1	0.1	0.0	0.1	0.3	0.4	0.1	0.5	0.2	12.3
18 - 21	0.3	1.8	0.5	0.0	1.2	0.8	0.0	0.0	1.0	0.0	1.1	0.4	0.6	78.6
Day	0.5	0.5	0.1	0.3	0.5	0.2	0.1	0.2	0.3	0.8	0.4	0.4	0.3	44.9

Abbreviations

Aeronautical Abbreviations

METAR	Aviation Routine Weather Report
ICAO	International Civil Aviation Organisation
RWY	Runway
GRD	Ground
msl	Mean sea level
UTC	Coordinated Universal Time

Meteorological Abbreviations

RVR	Runway Visual Range
QNH	Reduced pressure to sea level according to ISA (International Standard Atmosphere)
CB	Cumulonimbus
Cloud amount: FEW	Few (1–2 Octas)
SCT	Scattered (3–4 Octas)
BKN	Broken (5–7 Octas)
OVC	Overcast (8 Octas)

Airports

LSZH	Zurich Airport
LSGG	Geneva Airport
LSZB	Bern Airport
LSZA	Lugano Airport
LSZR	Altenrhein Airport
LSZG	Grenchen Airport
LSGS	Sion Airport
LSGC	Les Eplatures Airport
LFSB	Basel Airport

Units of Measurement

ft	Feet
m	Metre
km	Kilometre
NM	Nautical mile
kt	Knot (nautical mile / hour)
°C	Degrees Celsius
hPa	Hectopascal
hr	Hour

Months

Jan	January
Feb	February
Mar	March
Apr	April
May	May
Jun	June
Jul	July
Aug	August
Sep	September
Oct	October
Nov	November
Dec	December

Other

NA	Not available
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