

## VI. SNOW TEMPERATURE AT MIZUHO CAMP IN 1971 - 1972

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### 1. Vertical Profile of Snow Temperature from 10m down to 65 m below the Surface

The vertical profile of snow temperature from 10m down to 65m below the surface was measured in a borehole at Mizuho Camp ( $70^{\circ}42.1'S$ ,  $44^{\circ}17.5'E$ ; 2,169m above sea level) on December 25, 1971.

Measurements were conducted successively by a copper-constantan thermo-couple with  $0^{\circ}\text{C}$  as a reference temperature. The value of thermoelectromotive force was converted into the value of temperature difference between the 2 junctions of the thermo-couple, a reference junction and a probing junction, by the result of Powell *et al.* (1962). The accuracy of the measurement was  $\pm 0.3^{\circ}\text{C}$  in temperature difference.

The results are tabulated in Table 1.

### 2. Time Variation of Vertical Profile of Snow Temperature from the Surface down to 10m in Depth

Time variation of the vertical profile of air and snow temperature from 1.8m above the surface of snow down to 10m below was observed at Mizuho Camp during the periods of October 26 - December 20, 1971, and December 27, 1971 - January 13, 1972.

#### 2.1. Measurement

A vertical hole, 10m deep, with a diameter of 10cm was drilled in a snow cover with a SIPRE-type hand auger, while a foam-styrene tube of 10m in length and 5cm and 2.5cm in outer and inner diameter was prepared.

Seven copper-constantan thermo-couples were installed in the tube; the lead wires of the thermo-couples were run through the tube; the probing junctions of the thermo-couples were exposed at the outer surface of the tube at seven different positions along its axis so that they were at the depths of 980cm, 480cm, 230cm, 140cm, 67cm, 27cm and 10cm below the snow surface.

The foam-styrene tube was placed upright in the hole. The gap between the

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drill-hole wall and the tube was filled with crushed snow. Three additional thermo-couples were set at the levels of 0cm, 5cm and 70cm above the snow surface. Air temperature at a height of 1.8 m above the snow surface was measured by a resistance thermometer.

The reference temperature 0°C was prepared by a mixture of snow and water, contained in a vacuum bottle of 2l in capacity. The reference junctions of the thermo-couples were kept in the mixture, and the vacuum bottle was placed inside the living quarters at the temperature of approximately +15°C. The temperature of the mixture was checked almost regularly. As a drift of the reference temperature from 0°C, +1°C at most, was observed (possibly caused by the microscale heterogeneity of temperature in water), even by the replenishment of snow in the vacuum bottle twice or three times a day, the following correction was applied to the reading value.

Snow temperature at a depth about 10m below the surface,  $T_{10}^*$ , was measured when the reference temperature was correctly 0°C, namely, the temperature immediately after the replenishment of snow in the vacuum bottle accompanied by sufficient mixing. On the assumption that  $T_{10}^*$  hardly varies during a short period of time, a correction factor for a drift of the reference temperature for a reading was defined as:

$$\Delta T = T_{10}^* - T_{10},$$

where  $T_{10}^*$  : Reading of snow temperature at 10 m below the surface, when the reference temperature is correctly 0°C,

$T_{10}$  : The same reading as the above, when the reference temperature is not 0°C,

$\Delta T$  : Drift of the reference temperature from 0°C.

Thermo-electromotive forces generated in the thermo-couples set at 10 levels between 70cm above and 980cm below the surface of the snow cover were continuously recorded by a 12-channel recorder. A value of thermo-electromotive force was converted into a temperature difference between the reference junction and the probing junction by the use of the result obtained by Powell *et al.* Applying the correction  $\Delta T$  for the drift of the reference temperature, the correct value of snow or air temperature was obtained. The accuracy of the measurement was  $\pm 0.3^\circ\text{C}$ .

## 2.2. Accumulation of snow on the snow cover

Surface conditions of the snow cover varied frequently as the result of deposition of snow and erosion by wind.

October 26-November 23, 1971: The surface of the snow cover fluctuated by 5 - 8 cm in height, by repetition of snow deposition and wind erosion.

November 24-25, 1971: It was confirmed that the snow surface at the observation site was higher by 5 cm than the initial surface observed on October 26, 1971.

November 26, 1971: A new accumulation of snow, 13 cm thick, was superposed on the previous surface of the snow cover. A fluctuation of the snow surface by 5 cm in height took place by subsequent deposition and erosion, until the observation was over on January 13, 1972.

According to such a variation of the level of the snow surface, the levels of the points of temperature measurement referring to the snow surface varied as follows:

Periods	Level of thermocouple (cm: referring to the snow surface)									
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Oct.26 - Nov.23, 1971	-980	-480	-230	-140	-67	-27	-10	0	5	70
Nov.24 - 25, 1971	-985	-485	-235	-145	-72	-32	-15	-5	0	65
Nov.26, 1971 - Jan.13, 1972	-998	-498	-248	-158	-85	-45	-28	-18	-13	52

Level: The negative sign indicates a level below the snow surface.

### 2.3. Results

Given in Table 2 are the temperature profile measured from 1.8 m above the snow surface down to a depth of approximately 10 m, its variation with the lapse of time, and the description of surface weather conditions at Mizuho Camp from October 26, 1971 to January 13, 1972.

(1) A dash mark in the table indicates a defect of measurement caused by instrument trouble. The thermo-couple #7 placed at a depth of 28 cm in snow did not work after December 28, 1971. Another one #9 at a depth of 13 cm was out of order during a period of December 28 - 30, 1971: it resumed to work properly after then. These measurements and observations were interrupted from December 22 to 26, 1971, owing to the absence of the observer, who was engaged in another field work.

(2) There can be seen apparently in the table, an abrupt drop of snow temperature at 998 cm below the surface by  $0.3^{\circ}\text{C}$  (from  $-33.1^{\circ}\text{C}$  to  $-33.4^{\circ}\text{C}$ ) during a period from 2100 LT, November 30 to 0000 LT, December 1, 1971. This apparent gap was caused by the reading error of the microvolt-meter of the thermo-couples in as much as 0.01 mV in thermo-electromotive force, which corresponded to  $0.3^{\circ}\text{C}$  in temperature difference, while the actual snow temperature at such a deep level showed a continuous and extremely gradual change.

(3) Copper and constantan wires of 0.65 mm in diameter were used for the thermo-couples. The thermo-couples for measuring air temperature were

set in the air without a shelter from the sun; but no correction for the effect of sun radiation was applied on the result of measurement for Table 2. The resistance thermometer for measuring air temperature at a height of 1.8m above the snow surface was set in a shelter against radiation. The air temperature was measured with the accuracy of 1°C.

(4) Weather symbols used in Table 2 were as follows:

- Clear (cloud amount less than 2)
  - ◐ Fine (cloud amount 3-7)
  - ◑ Cloudy (cloud amount more than 8)
  - \* Snow
  - ↑ High blowing snow (higher than 1.8m above the surface)
  - ↓ Low blowing snow (lower than 1.8m above the surface)
- A suffix at the right shoulder of a weather symbol indicates the amount of cloud.

#### Reference

Powell, R.L., L.P. Caywood, Jr. and M.D. Bunch (1962): Low-temperature thermocouples. Temperature, Reinhold, New York, 3, Part 2, 65-77.

Table 1. Vertical profile of temperatures in a snow cover at Mizuho Camp, December 25, 1971 (The levels observed were measured from the surface of the snow cover).

Level	Temperature (°C)
-10 m	-33.4
-15	-33.4
-20	-33.6
-25	-33.7
-30	-33.7
-40	-34.0
-50	-34.1
-55	-34.3
-60	-34.3
-65	-43.3

Table 2. Snow temperature and weather condition at Mizuho Camp, October 26, 1971 – January 13, 1972.  
 (A suffix at the right shoulder of the weather symbol indicates the amount of cloud.)

Date	Time	Snow temperature (°C)							Air temperature (°C)			Wind speed (m/s)	Weather		
		Level (referring to the snow surface)													
		-980 cm	-480 cm	-230 cm	-140 cm	-67 cm	-27 cm	-10 cm	0 cm	+5 cm	+70 cm	+180 cm			
Oct. 26	0	-33.1	-35.7	-37.7	-38.0	-38.0	-38.5	-41.4	-44.0	-44.0	-43.7	-44	10	↗	
	3	-33.1	-35.7	-37.4	-37.7	-37.7	-39.1	-42.6	-45.8	-45.8	-45.2	-45	10	↗	
	6	-33.1	-35.7	-37.4	-38.0	-37.7	-39.7	-42.6	-43.7	-43.7	-44.0	-45	10	↗ <sup>0</sup>	
	9	-33.1	-35.7	-37.4	-37.4	-38.0	-39.7	-40.2	-38.0	-38.8	-38.8	-41	9	↗ <sup>0</sup>	
	12	-33.1	-35.7	-38.0	-37.7	-38.5	-39.7	-37.7	-33.7	-35.1	-34.5	-37	8	↗ <sup>0</sup>	
	15	-33.1	-35.4	-37.4	-37.1	-38.0	-38.8	-35.7	-32.3	-32.3	-32.0	-34	3	○ <sup>0</sup>	
	18	-33.1	-35.4	-37.4	-37.4	-38.2	-38.5	-37.1	-36.2	-36.5	-36.0	-36	4	○ <sup>0</sup>	
	21	-33.1	-35.4	-37.7	-37.4	-38.5	-39.1	-40.8	-43.4	-44.3	-43.4	-41	6	○ <sup>0</sup>	
	27	0	-33.1	-35.4	-37.7	-37.4	-38.2	-39.7	-42.6	-45.5	-46.0	-45.2	-46	7	—
		3	-33.1	-35.1	-37.1	-37.1	-38.2	-40.0	-43.4	-46.0	-46.0	-45.5	-46	9	—
		6	-33.1	-35.4	-37.1	-37.4	-38.0	-40.2	-42.8	-43.7	-42.8	-43.1	-44	10	—
		9	-33.1	-35.4	-37.4	-37.4	-38.5	-40.5	-40.0	-36.5	-37.1	-36.5	-39	7	○ <sup>1</sup>
		12	-33.1	-35.1	-37.1	-37.1	-38.2	-39.7	-35.4	-28.9	-28.1	-27.8	-29	5	* <sup>10</sup>
		15	-33.1	-35.1	-37.7	-36.8	-38.8	-39.1	-33.1	-26.7	-26.7	-25.9	-27	6	*
28	18	-33.1	-35.4	-37.4	-37.4	-38.2	-38.8	-33.4	-30.1	-29.8	-29.2	-29	7	↗ <sup>9</sup>	
	21	-33.1	-35.4	-37.7	-37.4	-39.1	-38.0	-34.3	-32.9	-32.9	-32.3	-33	9	↗	
	0	-33.1	-35.4	-37.4	-37.4	-38.8	-37.4	-34.5	-33.7	-33.4	-32.9	-33	8	↗	
	3	-33.1	-35.4	-37.1	-37.1	-38.5	-36.8	-35.1	-34.5	-34.5	-34.0	-34	8	↗	
	6	-33.1	-35.4	-37.1	-37.1	-38.2	-36.8	-35.7	-35.1	-34.5	-35.1	-36	8	↗	
	9	-33.1	-35.4	-37.1	-37.1	-38.5	-36.5	-33.7	-29.8	-30.3	-29.8	-32	9	↗ <sup>1</sup>	
11/1	12	-33.1	-35.1	-37.1	-37.1	-38.2	-36.0	-30.9	-26.2	-26.4	-25.9	-28	7	○ <sup>1</sup>	
	15	-33.1	-35.4	-37.4	-37.1	-38.5	-35.7	-30.3	-26.4	-26.4	-25.6	-27	6	—	

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Date	Time	Snow temperature (°C)							Air temperature (°C)			Wind speed (m/s)	Weather		
		Level (referring to the snow surface)													
		-980 cm	-480 cm	-230 cm	-140 cm	-67 cm	-27 cm	-10 cm	0 cm	+5 cm	+70 cm	+180 cm			
Oct. 28	18	-33.1	-35.4	-37.4	-37.4	-38.2	-35.1	-31.5	-30.3	-30.3	-29.8	-30	7	↓	
	21	-33.1	-35.4	-37.4	-37.1	-38.2	-35.4	-34.3	-35.4	-35.7	-35.1	-35	8	↓ <sup>2</sup>	
	29	0	-33.1	-35.4	-37.4	-37.1	-38.0	-35.7	-35.7	-36.5	-37.1	-36.2	-36	8	↑
	3	-33.1	-35.4	-37.4	-37.1	-37.7	-36.0	-36.8	-38.0	-38.0	-37.4	-38	8	↑	
	6	-33.1	-35.4	-37.1	-36.8	-37.4	-36.0	-36.5	-36.0	-36.0	-36.0	-37	7	↑	
	9	-33.1	-35.4	-37.1	-37.1	-37.4	-36.2	-34.3	-31.2	-31.5	-31.2	-33	6	○ <sup>2</sup>	
	12	-33.1	-35.1	-36.8	-36.8	-36.8	-35.1	-31.2	-26.2	-26.4	-25.6	-28	5	○ <sup>2</sup>	
	15	-33.1	-35.1	-37.1	-37.1	-37.4	-35.1	-30.3	-26.4	-26.2	-25.6	-27	6	—	
	18	-33.1	-35.1	-37.1	-37.1	-37.1	-34.8	-31.2	-29.5	-29.5	-29.2	-30	8	↑	
	21	-33.1	-35.1	-37.1	-36.8	-37.1	-34.5	-31.7	-30.1	-29.5	-29.5	-30	10	↑	
	30	0	-33.1	-35.4	-37.4	-37.1	-37.4	-34.8	-31.7	-28.7	-28.7	-28.7	14	↑	
	3	-33.1	-35.4	-37.1	-37.1	-37.1	-34.5	-30.9	-28.1	-28.1	-27.8	-29	16	↑	
	6	-33.1	-35.4	-37.1	-37.1	-37.1	-34.3	-30.3	-27.0	-27.0	-26.7	-27	15	↑	
	9	-33.1	-35.1	-37.1	-36.8	-36.8	-34.0	-28.9	-24.2	-24.2	-23.7	-25	14	↑	
	12	-33.1	-35.4	-37.4	-37.1	-36.8	-33.1	-27.0	-22.0	-21.8	-21.8	-23	13	↑	
	15	-33.1	-35.4	-37.1	-36.8	-36.5	-32.3	-26.2	-21.5	-21.2	-21.5	-22	11	↑	
	18	-33.1	-35.4	-37.7	-37.1	-36.8	-32.3	-27.0	-24.0	-22.0	-21.8	-22	10	↑	
	21	-33.1	-35.1	-37.4	-37.1	-36.2	-31.5	-27.0	-25.1	-23.7	-23.7	(-26)	10	↑	
31	0	-33.1	-35.1	-37.1	-36.8	-36.2	-31.2	-27.6	-25.6	-24.8	-24.2	(-30)	—	—	
	3	-33.1	-35.4	-37.1	-37.1	-36.0	-30.9	-28.1	-26.4	-25.1	-24.0	(-32)	—	—	
	6	-33.1	-35.4	-37.1	-37.1	-35.7	-31.2	-28.1	-25.9	-22.6	-22.6	(-31)	—	—	
	9	-33.1	-35.4	-37.1	-37.1	-35.7	-30.6	-26.2	-22.3	-22.0	-22.0	(-28)	—	↑	
	12	-33.1	-35.1	-37.1	-36.8	-35.4	-30.3	-24.8	-21.0	-21.0	-21.0	(-24)	12	↑	
	15	-33.1	-35.1	-37.1	-36.8	-35.4	-29.8	-24.5	-21.2	-21.5	-21.2	-22	12	↑	

Date	Time	Snow temperature (°C)								Air temperature (°C)			Wind speed (m/s)	Weather		
		Level (referring to the snow surface )														
		-980cm	-480cm	-230cm	-140cm	-67cm	-27cm	-10cm	0cm	+5cm	+70cm	+180cm				
Oct. 31	18	-33.1	-35.4	-37.1	-37.1	-34.8	-29.5	-25.1	-23.1	-23.1	-24	-24	10	↑		
	21	-33.1	-35.1	-36.8	-36.8	-34.3	-29.2	-27.3	-28.7	-28.7	-27.8	-28	9	↑ <sup>2</sup>		
Nov. 1	0	-33.1	-35.4	-37.1	-36.8	-34.5	-29.8	-29.8	-32.0	-32.3	-31.7	-32	10	↑ <sup>2</sup>		
	3	-33.1	-35.1	-37.1	-36.8	-34.3	-30.6	-31.7	-33.4	-33.4	-32.9	-34	10	↓		
	6	-33.1	-35.1	-36.8	-36.5	-34.0	-30.9	-31.5	-31.5	-31.5	-31.5	-33	12	↑ <sup>10</sup>		
	9	-33.1	-35.4	-37.4	-36.5	-34.3	-31.2	-29.8	-27.8	-29.5	-29.5	-31	12	↓ <sup>6</sup>		
	12	-33.1	-35.4	-37.1	-36.5	-34.0	-30.9	-28.1	-25.3	-27.0	-26.7	-28	11	↑ <sup>10</sup>		
	15	-33.1	-35.1	-37.1	-36.5	-34.0	-30.3	-27.0	-24.8	-25.9	-25.6	-27	10	↑ <sup>4</sup>		
	18	-33.1	-35.1	-37.1	-36.5	-33.7	-30.3	-28.4	-28.1	-28.4	-28.1	-29	8	↓ <sup>1</sup>		
	21	-33.1	-35.1	-37.4	-36.5	-34.3	-31.2	-31.7	-33.7	-34.0	-33.1	-34	9	↓ <sup>2</sup>		
	2	0	-33.1	-35.1	-37.1	-36.2	-34.0	-31.7	-34.0	-36.2	-36.8	-36.2	10	↓ <sup>0</sup>		
	3	-33.1	-35.1	-36.8	-36.2	-33.7	-32.3	-35.4	-38.2	-38.2	-37.7	-38	10	↓		
	6	-33.1	-35.4	-37.1	-36.5	-33.7	-33.1	-35.7	-36.8	-36.8	-36.8	-38	10	-		
	9	-33.1	-35.1	-37.1	-36.2	-34.0	-33.1	-32.9	-30.9	-31.7	-31.7	-33	9	○ <sup>0</sup>		
	12	-33.1	-35.1	-36.8	-36.2	-34.0	-32.6	-29.8	-25.9	-27.6	-27.0	-30	8	○ <sup>0</sup>		
	15	-33.1	-35.1	-37.4	-36.2	-34.3	-32.6	-28.7	-25.3	-26.2	-25.6	-27	6	○ <sup>0</sup>		
	18	-33.1	-35.1	-37.1	-36.2	-34.3	-32.3	-30.1	-29.5	-29.8	-28.9	-29	5	○ <sup>0</sup>		
	21	-33.1	-35.4	-37.4	-36.5	-34.5	-32.6	-33.1	-35.4	-35.4	-34.5	(-34)	9	↓ <sup>0</sup>		
	3	0	-33.1	-35.4	-37.4	-36.2	-34.3	-33.4	-35.4	-38.0	-38.2	-37.7	(-38)	-	↓ <sup>0</sup>	
	3	-33.1	-35.1	-36.8	-36.2	-34.0	-33.7	-36.5	-38.8	-38.5	-38.2	(-39)	-	↓ <sup>(0)</sup>		
	6	-33.1	-35.1	-36.8	-36.2	-34.0	-34.3	-36.2	-36.2	-36.0	-36.0	(-37)	-	↓ <sup>0</sup>		
	9	-33.1	-35.1	-37.1	-36.0	-34.3	-34.3	-33.4	-30.6	-31.5	-31.2	-33	10	↓ <sup>1</sup>		
	12	-33.1	-35.4	-37.1	-36.2	-34.5	-34.0	-30.1	-25.1	-26.4	-25.9	-27	8	○ <sup>1</sup>		
	15	-33.1	-35.1	-36.8	-35.4	-34.5	-32.3	-28.1	-24.0	-25.1	-24.5	-26	8	↓ <sup>2</sup>		

Date	Time	Snow temperature (°C)							Air temperature (°C)			Wind speed (m/s)	Weather		
		Level (referring to the snow surface)													
		- 980 cm	- 480 cm	- 230 cm	- 140 cm	- 67 cm	- 27 cm	- 10 cm	0 cm	+ 5 cm	+ 70 cm	+ 180 cm			
Nov. 3	18	- 33.1	- 35.4	- 37.1	- 35.7	- 34.8	- 32.6	- 29.8	- 28.4	- 29.2	- 28.7	- 29	7	↑ <sup>2</sup>	
	21	- 33.1	- 35.4	- 37.1	- 36.0	- 34.5	- 32.9	- 32.9	- 34.5	- 35.1	- 34.0	- 35	8	↑ <sup>2</sup>	
	4 0	- 33.1	- 35.1	- 36.8	- 35.7	- 34.3	- 33.1	- 34.8	- 36.8	- 37.1	- 36.5	- 37	10	↑	
	3	- 33.1	- 35.1	- 36.8	- 35.7	- 34.5	- 33.7	- 36.2	- 38.5	- 38.5	- 38.2	- 39	10	↑	
	6	- 33.1	- 35.1	- 36.5	- 35.7	- 34.3	- 34.3	- 36.0	- 36.5	- 36.0	- 36.0	- 37	10	↑ <sup>4</sup>	
	9	- 33.1	- 35.1	- 37.1	- 36.0	- 34.5	- 34.3	- 33.1	- 30.3	- 30.9	- 30.6	- 32	9	↑ <sup>1</sup>	
	12	- 33.1	- 35.1	- 36.8	- 36.0	- 34.5	- 33.7	- 29.8	- 25.1	- 26.2	- 25.6	- 28	8	↑ <sup>5</sup>	
	15	- 33.1	- 35.4	- 37.1	- 36.0	- 34.8	- 33.1	- 28.4	- 24.2	- 24.8	- 24.0	- 26	7	↑ <sup>9</sup>	
	18	- 33.1	- 35.4	- 37.1	- 35.7	- 34.8	- 32.3	- 29.2	- 27.0	- 27.0	- 26.4	- 27	8	↑ <sup>10</sup>	
	21	- 33.1	- 35.1	- 36.8	- 35.7	- 34.8	- 32.3	- 29.2	- 27.0	- 26.7	- 26.7	- 27	10	↑ <sup>10</sup>	
	5 0	- 33.1	- 35.4	- 36.8	- 35.7	- 34.8	- 32.0	- 28.9	- 25.9	- 25.9	- 25.6	- 26	10	↑ <sup>10</sup>	
5	3	- 33.1	- 35.1	- 36.5	- 35.7	- 34.5	- 31.5	- 27.8	- 24.8	- 24.5	- 24.5	- 25	14	↑	
	6	- 33.1	- 35.4	- 36.8	- 36.0	- 34.5	- 31.2	- 27.6	- 25.6	- 23.7	- 22.6	- 23	15	↑	
	9	- 33.1	- 35.1	- 36.8	- 35.7	- 34.5	- 30.9	- 27.3	- 24.5	- 21.2	- 21.0	- 22	16	↑	
	12	- 33.1	- 35.1	- 37.1	- 36.0	- 34.5	- 30.3	- 25.6	- 22.3	- 19.9	- 19.6	- 21	16	↑	
	15	- 33.1	- 34.8	- 36.5	- 35.4	- 34.3	- 29.8	- 24.5	- 20.1	- 18.8	- 18.5	- 19	14	↑	
	18	- 33.1	- 35.1	- 36.5	- 35.7	- 34.0	- 29.2	- 23.4	- 19.3	- 19.3	- 19.1	- 19	12	↑	
	21	- 33.1	- 34.8	- 36.5	- 35.7	- 34.0	- 28.9	- 24.0	- 21.2	- 21.0	- 21.0	- 21	10	↑	
	6 0	- 33.1	- 35.1	- 36.8	- 35.7	- 34.0	- 28.7	- 24.5	- 22.9	- 22.6	- 22.6	- 23	11	↑	
	3	- 33.1	- 35.1	- 36.5	- 35.7	- 33.4	- 28.4	- 25.1	- 24.5	- 24.5	- 24.5	- 25	10	↑	
	6	- 33.1	- 35.1	- 36.5	- 35.7	- 33.1	- 28.1	- 25.6	- 25.1	- 25.1	- 25.1	- 26	9	↑ <sup>10</sup>	
6	9	- 33.1	- 35.1	- 36.5	- 35.4	- 33.1	- 28.1	- 24.2	- 21.5	- 22.3	- 22.3	- 23	9	↑ <sup>10</sup>	
	12	- 33.1	- 35.1	- 36.5	- 35.1	- 32.9	- 27.3	- 22.3	- 18.8	- 19.9	- 19.9	- 21	9	↑ <sup>(10)</sup>	
	15	- 33.1	- 35.4	- 36.8	- 35.1	- 33.4	- 27.8	- 22.9	- 20.1	- 21.2	- 21.0	- 21	8	◎ <sup>10</sup>	

Date	Time	Snow temperature (°C)							Air temperature (°C)			Wind speed (m/s)	Weather		
		Level (referring to the snow surface)													
		-980 cm	-480 cm	-230 cm	-140 cm	-67 cm	-27 cm	-10 cm	0 cm	+5 cm	+70 cm	+180 cm			
Nov. 6	18	-33.1	-35.1	-36.8	-35.1	-32.9	-27.3	-23.4	-22.0	-22.9	-22.9	-23	8	↔ <sup>10</sup>	
	21	-33.1	-35.1	-36.8	-35.1	-32.6	-27.6	-27.3	-29.2	-30.1	-29.2	-30	9	↔ <sup>2</sup>	
	7	0	-33.1	-35.1	-36.8	-35.4	-32.6	-28.4	-29.8	-31.7	-32.6	-32.0	-32	10	↔ <sup>1</sup>
	3	-33.1	-35.4	-36.5	-35.4	-32.3	-29.2	-31.7	-	-35.1	-34.8	-35	10	↔	
	6	-33.1	-34.8	-36.2	-35.4	-31.7	-29.5	-31.7	-32.9	-32.9	-32.9	-34	12	↔ <sup>0</sup>	
	9	-33.1	-35.1	-36.2	-35.4	-31.7	-29.8	-29.2	-27.3	-28.4	-28.4	-30	13	↔ <sup>1</sup>	
	12	-33.1	-35.4	-36.5	-35.4	-32.3	-29.8	-26.7	-23.7	-25.6	-25.3	-27	12	↔ <sup>1</sup>	
	15	-33.1	-35.4	-36.5	-35.4	-32.3	-29.5	-25.9	-23.4	-24.8	-24.8	-26	12	↔ <sup>1</sup>	
	18	-33.1	-35.1	-36.5	-35.1	-32.3	-29.2	-27.3	-27.0	-27.6	-27.3	-27	12	↔ <sup>1</sup>	
	21	-33.1	-35.1	-36.5	-35.1	-32.3	-29.8	-30.3	-32.3	-32.6	-32.0	-32	13	↔ <sup>1</sup>	
	8	0	-33.1	-35.1	-36.5	-35.4	-32.3	-30.6	-32.3	-35.1	-35.1	-35	13	↔	
	3	-33.1	-35.1	-36.0	-35.1	-32.0	-31.5	-33.7	-36.0	-36.0	-35.7	-36	14	↔	
	6	-33.1	-35.1	-36.2	-35.1	-32.0	-32.0	-33.4	-34.3	-34.3	-34.3	-35	14	↔ <sup>0</sup>	
	9	-33.1	-35.1	-36.5	-35.1	-32.3	-32.0	-33.1	-33.4	-33.4	-30.1	-32	14	↔ <sup>0</sup>	
	12	-33.1	-34.8	-36.2	-35.1	-32.3	-31.7	-29.5	-26.2	-27.0	-26.7	-29	15	↔ <sup>0</sup>	
	15	-33.1	-35.1	-36.5	-35.1	-32.3	-31.2	-27.8	-25.3	-27.0	-26.7	-28	14	↔ <sup>1</sup>	
	18	-33.1	-35.1	-36.5	-35.1	-32.6	-31.2	-29.2	-28.7	-29.2	-29.2	-30	13	↔ <sup>2</sup>	
	21	-33.1	-35.1	-36.5	-35.4	-32.9	-32.3	-31.5	-32.3	-34.0	-33.7	-34	12	↔ <sup>2</sup>	
9	0	-33.1	-35.1	-36.2	-35.1	-32.6	-32.0	-34.0	-36.5	-36.8	-36.5	-37	12	↔ <sup>2</sup>	
	3	-33.1	-35.4	-36.2	-35.1	-32.9	-32.9	-35.1	-36.5	-37.1	-36.5	-37	12	↔	
	6	-33.1	-35.1	-36.2	-34.8	-32.6	-32.9	-34.8	-35.4	-36.5	-33.7	-35	14	↔	
	9	-33.1	-35.4	-36.5	-34.8	-32.9	-33.7	-34.5	-34.5	-34.3	-29.8	-31	14	↔	
	12	-33.1	-35.4	-36.5	-35.1	-33.1	-32.9	-30.1	-24.8	-25.9	-25.6	-27	12	↔ <sup>6</sup>	
	15	-33.1	-35.1	-36.2	-34.8	-32.9	-31.7	-27.6	-23.4	-24.2	-24.0	-25	12	↔	

Date	Time	Snow temperature (°C)								Air temperature (°C)			Wind speed (m/s)	Weather		
		Level (referring to the snow surface)														
		-980 cm	-480 cm	-230 cm	-140 cm	-67 cm	-27 cm	-10 cm	0 cm	+5 cm	+70 cm	+180 cm				
Nov. 9	18	-33.1	-35.1	-36.2	-34.8	-33.1	-31.2	-28.1	-26.4	-26.4	-26.2	-26	8	↑		
	21	-33.1	-35.1	-36.2	-34.5	-33.1	-31.2	-29.5	-28.7	-28.7	-28.1	-28	10	↑		
	10	0	-33.1	-35.1	-36.2	-34.8	-33.1	-31.2	-30.3	-30.1	-30.1	-29.8	-30	11	↑	
	3	-33.1	-35.1	-36.0	-34.8	-32.9	-31.2	-31.5	-32.0	-31.7	-31.5	-32	10	↑		
	6	-33.1	-35.1	-36.0	-34.5	-32.6	-31.2	-30.3	-29.5	-29.5	-29.5	-30	12	↓ <sup>6</sup>		
	9	-33.1	-35.1	-36.2	-34.8	-32.9	-30.6	-28.4	-25.3	-25.9	-25.9	-27	14	↑ <sup>7</sup>		
	12	-33.1	-35.4	-36.2	-34.8	-32.9	-30.3	-26.4	-23.1	-22.3	-22.9	-24	13	↑		
	15	-33.1	-35.1	-36.0	-34.8	-32.9	-30.1	-26.7	-24.5	-22.9	-21.8	-23	12	↑ <sup>2</sup>		
	18	-33.1	-35.1	-36.0	-34.8	-32.9	-29.5	-26.7	-25.6	-25.6	-24.0	-24	11	↑		
	21	-33.1	-35.1	-36.0	-34.5	-32.6	-29.5	-27.8	-28.1	-29.8	-28.4	-29	11	↑		
Nov. 11	0	-33.1	-35.1	-36.0	-34.5	-32.6	-29.8	-29.5	-30.6	-32.0	-31.5	-32	11	-		
	3	-33.1	-35.1	-36.0	-34.5	-32.3	-30.1	-30.6	-31.7	-32.0	-31.5	-32	11	-		
	6	-33.1	-35.1	-36.0	-34.5	-32.3	-30.6	-30.9	-30.6	-29.5	-29.5	-30	11	↓ <sup>8</sup>		
	9	-33.1	-35.1	-36.0	-34.3	-32.3	-30.1	-28.1	-25.6	-25.3	-25.3	-27	13	↓ <sup>2</sup>		
	12	-33.1	-35.1	-35.7	-34.3	-32.3	-29.2	-25.3	-	-22.0	-21.8	-24	12	↓ <sup>2</sup>		
	15	-33.1	-35.4	-36.0	-34.8	-32.3	-28.9	-24.2	-21.5	-21.0	-20.7	-22	8	○ <sup>3</sup>		
	18	-33.1	-35.1	-36.0	-34.3	-32.6	-28.7	-25.3	-24.2	-23.7	-23.1	-23	6	○ <sup>3</sup>		
	21	-33.1	-35.4	-36.0	-34.5	-32.6	-28.9	-27.8	-28.9	-29.8	-28.9	-29	8	○		
	0	-33.1	-34.8	-35.7	-34.3	-32.0	-28.9	-29.5	-30.9	-30.9	-30.3	-31	9	↓ <sup>2</sup>		
	3	-33.1	-35.1	-36.0	-34.5	-32.0	-29.5	-30.6	-31.7	-31.7	-31.7	-32	9	↓		
Nov. 12	6	-33.1	-35.1	-36.0	-34.5	-32.0	-29.5	-29.8	-28.9	-28.9	-28.9	-30	8	↓ <sup>2</sup>		
	9	-33.1	-35.1	-35.7	-34.3	-31.7	-29.5	-28.4	-26.7	-26.2	-26.4	-27	8	↓ <sup>1</sup>		
	12	-33.1	-35.1	-36.0	-34.5	-31.7	-29.2	-25.9	-23.4	-23.1	-23.1	-24	7	○ <sup>1</sup>		
	15	-33.1	-35.1	-35.7	-34.5	-32.0	-28.9	-24.8	-22.6	-22.0	-21.8	-23	5	○ <sup>1</sup>		

Date	Time	Snow temperature (°C)							Air temperature (°C)			Wind speed (m/s)	Weather		
		Level (referring to the snow surface )													
		-980cm	-480cm	-230 cm	-140cm	- 67cm	- 27cm	- 10cm	0cm	+ 5cm	+ 70cm	+180 cm			
Nov. 12	18	-33.1	-35.1	-36.0	-34.3	-32.0	-28.7	-25.9	-25.6	-25.6	-25.3	-26	5	○ <sup>1</sup>	
	21	-33.1	-35.1	-35.4	-34.0	-31.7	-28.4	-28.7	-30.3	-31.7	-31.2	-32	7	○ <sup>2</sup>	
	13 0	-33.1	-34.8	-35.4	-34.0	-31.5	-29.2	-31.5	-34.0	-35.4	-35.1	-36	10	↓ <sup>1</sup>	
	3	-33.1	-35.1	-36.0	-34.3	-31.7	-30.9	-33.7	-	-36.5	-36.2	-37	10	↓	
	6	-33.1	-34.8	-35.7	-34.0	-31.7	-31.2	-33.7	-34.3	-33.7	-33.7	-35	9	↓ <sup>1</sup>	
	9	-33.1	-35.1	-35.4	-34.0	-31.7	-31.2	-30.9	-	-29.2	-29.5	-31	10	↓ <sup>1</sup>	
	12	-33.1	-35.1	-36.0	-34.5	-32.3	-30.9	-28.1	-25.6	-25.6	-25.6	-27	9	↓ <sup>0</sup>	
	15	-33.1	-35.1	-35.7	-34.3	-32.0	-30.3	-26.4	-24.5	-24.0	-23.7	-25	8	○ <sup>0</sup>	
	18	-33.1	-35.1	-35.7	-34.3	-32.0	-29.8	-27.0	-26.4	-26.4	-25.9	-27	7	○ <sup>1</sup>	
	21	-33.1	-35.1	-35.7	-34.0	-32.0	-30.1	-29.5	-30.6	-30.9	-30.3	-31	8	↓ <sup>3</sup>	
	14 0	-33.1	-35.4	-35.7	-34.5	-32.0	-30.9	-32.0	-33.7	-34.0	-33.7	-34	9	↓ <sup>2</sup>	
	3	-33.1	-35.1	-35.4	-34.3	-32.0	-31.2	-32.0	-32.6	-33.1	-33.1	-34	10	↓	
	6	-33.1	-34.8	-35.4	-34.0	-31.7	-31.2	-31.7	-31.7	-32.0	-32.0	-33	12	↓	
	9	-33.1	-35.1	-36.0	-34.0	-32.0	-30.9	-30.1	-28.4	-28.4	-28.7	-30	11	↓ <sup>1</sup>	
	12	-33.1	-35.1	-35.4	-34.0	-32.0	-30.3	-27.0	-24.2	-24.2	-24.0	-26	10	↓ <sup>6</sup>	
	15	-33.1	-35.1	-35.7	-34.0	-32.3	-30.1	-25.9	-23.1	-22.9	-22.6	-23	7	-	
	18	-33.1	-35.1	-35.7	-34.0	-32.0	-29.5	-25.9	-24.0	-24.0	-23.7	-24	6	-	
	21	-33.1	-35.1	-35.4	-34.0	-32.0	-29.5	-27.6	-27.6	-28.1	-27.8	-28	7	↓ <sup>4</sup>	
15	0	-33.1	-35.1	-35.4	-34.0	-32.0	-29.8	-30.1	-32.3	-33.4	-33.1	-33	9	-	
	3	-33.1	-35.1	-35.7	-34.0	-32.0	-30.3	-31.7	-33.4	-34.3	-34.0	-35	10	-	
	6	-33.1	-34.8	-35.4	-33.7	-31.7	-30.3	-31.2	-30.9	-30.6	-30.6	-32	11	-	
	9	-33.1	-35.1	-35.4	-34.0	-31.7	-30.3	-28.4	-27.0	-26.2	-26.2	-27	10	↓ <sup>6</sup>	
	12	-33.1	-35.1	-35.7	-34.0	-32.0	-29.8	-26.2	-23.4	-23.1	-23.1	(-24)	-	○ <sup>5</sup>	
	15	-33.1	-35.1	-35.4	-33.7	-31.7	-28.9	-24.5	-22.0	-21.5	-21.2	(-23)	-	○ <sup>7</sup>	

Date	Time	Snow temperature (°C)								Air temperature (°C)			Wind speed (m/s)	Weather		
		Level (referring to the snow surface)														
		- 980 cm	- 480 cm	- 230 cm	- 140 cm	- 67 cm	- 27 cm	- 10 cm	0 cm	+ 5 cm	+ 70 cm	+ 180 cm				
Nov. 15	18	- 33.1	- 35.1	- 35.4	- 34.0	- 32.0	- 28.9	- 25.3	- 24.0	- 23.7	- 22.9	( - 25 )	-	○ <sup>9</sup>		
	21	- 33.1	- 35.1	- 35.4	- 33.7	- 31.7	- 28.9	- 27.6	- 28.1	- 28.9	- 28.4	( - 29 )	-	○ <sup>6</sup>		
	16	0	- 33.1	- 35.1	- 35.7	- 34.0	- 32.0	- 29.5	- 30.1	- 32.6	- 33.7	- 32.9	- 33	-	-	
	3	- 33.1	- 35.1	- 35.4	- 34.0	- 31.7	- 30.1	- 31.5	- 33.1	- 34.0	- 33.4	( - 35 )	-	-		
	6	- 33.1	- 35.1	- 35.4	- 33.7	- 31.5	- 30.3	- 31.7	- 32.6	- 31.7	- 31.7	( - 32 )	-	-		
	9	- 33.1	- 35.1	- 35.4	- 33.7	- 31.5	- 30.3	- 28.9	- 27.0	- 26.7	- 26.7	- 28	5	○ <sup>6</sup>		
	12	- 33.1	- 34.8	- 35.4	- 34.0	- 31.5	- 29.5	- 25.6	- 22.9	- 21.5	- 22.3	- 23	2	○ <sup>6</sup>		
	15	- 33.1	- 35.1	- 35.4	- 34.0	- 31.7	- 29.2	- 25.1	- 22.6	- 20.7	- 21.5	- 22	2	○ <sup>7</sup>		
	18	- 33.1	- 35.1	- 35.4	- 34.0	- 32.0	- 29.2	- 26.2	- 25.9	- 25.6	- 24.2	- 25	2	○ <sup>3</sup>		
	21	- 33.1	- 35.4	- 35.7	- 34.3	- 32.0	- 29.5	- 29.5	- 31.5	- 32.0	- 30.6	- 30	4	○ <sup>7</sup>		
17	0	- 33.1	- 35.1	- 35.4	- 33.7	- 31.7	- 30.1	- 31.5	- 33.7	- 34.3	- 33.4	- 33	7	○ <sup>2</sup>		
	3	- 33.1	- 35.1	- 35.4	- 33.7	- 31.7	- 30.9	- 33.1	- 34.8	- 34.5	- 34.0	- 35	7	-		
	6	- 33.1	- 34.8	- 35.1	- 33.7	- 31.7	- 30.9	- 32.3	- 32.0	- 30.6	- 30.6	- 32	7	→ <sup>9</sup>		
	9	- 33.1	- 35.1	- 35.4	- 33.7	- 31.7	- 30.9	- 29.2	- 26.4	- 25.3	- 25.3	- 27	9	→ <sup>9</sup>		
	12	- 33.1	- 35.1	- 35.1	- 33.7	- 31.5	- 30.1	- 25.6	- 22.0	- 22.0	- 21.8	- 24	10	→ <sup>6</sup>		
	15	- 33.1	- 34.8	- 35.1	- 33.7	- 31.7	- 29.5	- 24.2	- 21.2	- 20.4	- 20.1	- 22	8	○ <sup>3</sup>		
	18	- 33.1	- 35.1	- 35.4	- 33.7	- 32.0	- 28.9	- 25.3	- 24.2	- 24.2	- 23.4	- 24	4	○ <sup>4</sup>		
	21	- 33.1	- 35.1	- 35.1	- 33.7	- 31.7	- 28.9	- 28.4	- 29.8	- 30.3	- 29.8	- 30	6	○ <sup>3</sup>		
	0	- 33.1	- 35.1	- 35.1	- 33.4	- 31.7	- 29.2	- 30.3	- 31.7	- 31.5	- 30.9	- 32	7	→ <sup>2</sup>		
	3	- 33.1	- 34.8	- 35.1	- 33.7	- 31.5	- 30.1	- 30.9	- 32.0	- 32.0	- 31.5	- 33	8	→		
18	6	- 33.1	- 34.8	- 34.8	- 33.7	- 31.5	- 30.1	- 30.3	- 30.3	- 29.5	- 29.8	- 31	9	→		
	9	- 33.1	- 35.1	- 35.1	- 33.7	- 31.5	- 29.8	- 28.1	- 25.9	- 25.1	- 25.1	- 27	8	→ <sup>8</sup>		
	12	- 33.1	- 35.1	- 35.1	- 33.7	- 31.5	- 28.9	- 24.8	- 21.5	- 21.8	- 21.5	- 23	8	○ <sup>1</sup>		
	15	- 33.1	- 34.8	- 35.1	- 33.4	- 31.5	- 28.1	- 23.7	- 21.5	- 21.8	- 21.5	- 23	7	○ <sup>1</sup>		

Date	Time	Snow temperature (°C)								Air temperature (°C)			Wind speed (m/s)	Weather		
		Level (referring to the snow surface )														
		- 980 cm	- 480 cm	- 230 cm	- 140 cm	- 67 cm	- 27 cm	- 10 cm	0 cm	+ 5 cm	+ 70 cm	+ 180 cm				
Nov. 18	18	- 33.1	- 35.1	- 35.1	- 33.4	- 31.7	- 28.4	- 25.3	- 25.1	- 25.1	- 24.8	- 25	3	○ <sup>1</sup>		
	21	- 33.1	- 35.1	- 35.1	- 33.4	- 31.7	- 31.5	- 31.5	- 30.3	- 31.7	- 31.2	- 32	5	○ <sup>1</sup>		
	19	0	- 33.1	- 34.8	- 35.1	- 33.7	- 31.5	- 29.5	- 31.5	- 34.3	- 35.4	- 34.5	7	○ <sup>1</sup>		
	3	- 33.1	- 35.1	- 35.1	- 33.7	- 31.5	- 30.3	- 32.3	- 33.1	- 33.1	- 33.4	- 35	6	○		
	6	- 33.1	- 35.1	- 35.1	- 33.4	- 31.2	- 30.3	- 31.2	- 31.7	- 31.5	- 31.5	- 33	5	○		
	9	- 33.1	- 34.8	- 34.8	- 33.4	- 31.5	- 30.3	- 28.9	- 27.3	- 27.0	- 27.0	- 29	5	○ <sup>0</sup>		
	12	- 33.1	- 35.1	- 34.8	- 33.4	- 31.5	- 29.8	- 25.9	- 22.6	- 23.4	- 23.1	- 25	5	○ <sup>1</sup>		
	15	- 33.1	- 34.8	- 34.8	- 33.4	- 31.5	- 28.9	- 24.2	- 21.2	- 21.0	- 19.6	- 21	1	○ <sup>0</sup>		
	18	- 33.1	- 35.1	- 35.1	- 33.4	- 31.5	- 28.7	- 25.6	- 24.8	- 24.2	- 23.1	- 23	1	○ <sup>0</sup>		
	21	- 33.1	- 35.1	- 35.1	- 33.4	- 31.5	- 29.2	- 29.2	- 31.5	- 32.9	- 31.5	- 31	3	○ <sup>0</sup>		
	20	0	- 33.1	- 35.1	- 35.1	- 33.4	- 31.5	- 30.1	- 32.6	- 35.7	- 37.4	- 36.8	5	○ <sup>0</sup>		
	3	- 33.1	- 34.8	- 34.8	- 33.1	- 31.5	- 30.9	- 34.5	- 37.1	- 38.0	- 37.4	- 39	7	○ <sup>0</sup>		
	6	- 33.1	- 34.8	- 34.8	- 33.1	- 31.2	- 31.7	- 34.3	- 35.1	- 34.3	- 34.3	- 36	7	○ <sup>0</sup>		
21	9	- 33.1	- 35.1	- 35.1	- 33.4	- 31.5	- 31.5	- 31.2	- 29.2	- 28.9	- 29.2	- 31	6	○ <sup>0</sup>		
	12	- 33.1	- 35.1	- 34.8	- 33.4	- 31.5	- 30.9	- 27.3	- 23.7	- 23.7	- 23.1	- 26	4	○ <sup>0</sup>		
	15	- 33.1	- 35.1	- 35.1	- 33.7	- 31.7	- 30.3	- 25.6	- 22.3	- 21.0	- 20.7	- 22	2	○ <sup>0</sup>		
	18	- 33.1	- 35.1	- 35.1	- 33.4	- 32.0	- 29.8	- 26.4	- 25.3	- 25.1	- 24.0	- 23	2	○ <sup>0</sup>		
	21	- 33.1	- 35.1	- 35.1	- 33.7	- 32.0	- 30.1	- 29.8	- 31.2	- 32.0	- 31.2	- 31	5	○ <sup>0</sup>		
	0	- 33.1	- 34.8	- 34.8	- 33.1	- 31.7	- 30.3	- 32.3	- 34.8	- 35.4	- 34.8	- 35	7	↑ <sup>0</sup>		
	3	- 33.1	- 35.1	- 35.1	- 33.4	- 31.7	- 31.5	- 34.0	- 35.7	- 35.7	- 35.1	- 36	9	↑ <sup>0</sup>		
	6	- 33.1	- 34.8	- 34.8	- 33.4	- 31.5	- 31.7	- 33.1	- 33.7	- 32.3	- 32.3	- 34	11	↑ <sup>0</sup>		
	9	- 33.1	- 35.1	- 34.8	- 33.4	- 31.7	- 31.5	- 29.8	- 27.3	- 26.4	- 26.4	- 29	11	↑ <sup>0</sup>		
	12	- 33.1	- 34.8	- 34.8	- 33.1	- 31.5	- 30.3	- 25.9	- 22.0	- 22.0	- 22.0	- 24	12	↑ <sup>5</sup>		
	15	- 33.1	- 35.1	- 35.1	- 33.4	- 32.0	- 29.8	- 24.5	- 21.2	- 21.0	- 20.7	- 22	13	↑ <sup>0</sup>		

Date	Time	Snow temperature (°C)							Air temperature (°C)			Wind speed (m/s)	Weather		
		Level (referring to the snow surface)													
		-980 cm	-480 cm	-230 cm	-140 cm	-67 cm	-27 cm	-10 cm	0 cm	+5 cm	+70 cm	+180 cm			
Nov. 21	18	-33.1	-35.1	-35.1	-33.7	-32.0	-28.9	-24.5	-21.8	-21.5	-21.2	-22	14	↑	
	21	-33.1	-35.1	-35.1	-33.7	-32.0	-28.7	-24.8	-21.8	-21.8	-21.8	-22	16	↑	
	22	0	-33.1	-35.1	-35.1	-33.4	-32.0	-28.1	-24.5	-21.5	-21.0	-21.0	21	15	↑
	3	-33.1	-34.8	-35.1	-33.7	-31.7	-27.3	-23.4	-20.4	-20.1	-20.1	-20	15	↑	
	6	-33.1	-34.5	-34.8	-33.4	-31.2	-26.4	-22.3	-19.6	-19.3	-19.1	-20	14	↑	
	9	-33.1	-34.8	-35.1	-33.7	-31.2	-25.9	-21.0	-17.9	-17.3	-16.9	-18	14	↑	
	12	-33.1	-34.3	-34.8	-33.7	-30.6	-25.3	-19.1	-16.1	-15.5	-15.3	-16	18	↑	
	15	-33.1	-34.3	-34.8	-33.7	-30.6	-24.5	-18.2	-15.5	-15.3	-15.0	-15	16	↑	
	18	-33.1	-34.8	-35.4	-34.0	-30.9	-24.5	-19.1	-16.2	-16.6	-16.4	-16	16	↑	
	21	-33.1	-34.5	-34.8	-33.7	-30.6	-24.2	-19.6	-17.9	-18.5	-18.5	-18	16	↑	
	23	0	-33.1	-34.8	-35.1	-33.7	-30.1	-24.0	-20.4	-19.6	-19.9	-19	16	↑	
	3	-33.1	-34.5	-34.8	-33.7	-29.8	-24.2	-20.7	-19.6	-20.1	-19.9	-20	15	↑	
	6	-33.1	-34.8	-34.8	-33.7	-29.5	-24.5	-20.7	-19.6	-18.8	-18.8	-19	16	↑	
	9	-33.1	-34.8	-35.1	-33.4	-29.2	-24.0	-19.3	-16.8	-17.3	-17.3	-18	18	↑	
	12	-33.1	-35.4	-35.4	-34.0	-29.5	-23.4	-18.5	-14.5	-15.0	-15.5	-16	17	↑	
	15	-33.1	-35.1	-35.1	-33.7	-28.9	-22.6	-16.8	-14.5	-14.7	-14.7	-14	15	↑	
	18	-33.1	-34.8	-35.1	-34.0	-28.7	-22.3	-17.3	-16.1	-16.6	-16.6	-16	16	↑	
	21	-33.1	-34.5	-34.8	-33.4	-28.4	-22.6	-18.5	-16.9	-17.3	-18.5	-18	16	↑	

Date	Time	Snow temperature (°C)									Wind speed (m/s)	Weather			
		Level (referring to the snow surface )													
		- 985 cm	- 485 cm	- 235 cm	- 145 cm	- 72 cm	- 32 cm	- 15 cm	- 5 cm	0 cm	+ 65 cm	+ 180 cm			
Nov. 24	0	- 33.1	- 35.4	- 35.7	- 33.7	- 28.7	- 22.9	- 20.1	- 19.6	- 20.4	- 21.5	- 21	15	↑	
	3	- 33.1	- 34.8	- 34.8	- 32.6	- 28.1	- 22.3	- 20.7	- 20.1	- 21.0	- 22.0	- 22	13	↑	
	6	- 33.1	- 35.1	- 34.8	- 32.9	- 28.7	- 23.1	- 21.2	- 21.2	- 21.5	- 20.4	- 21	13	↑	
	9	- 33.1	- 34.8	- 34.8	- 32.6	- 28.1	- 22.9	- 21.5	- 21.2	- 21.2	- 16.9	- 18	13	↑ <sup>4</sup>	
	12	- 33.1	- 34.8	- 35.1	- 32.9	- 28.1	- 22.9	- 21.5	- 20.4	- 14.7	- 13.4	- 14	12	↑ <sup>2</sup>	
	15	- 33.1	- 35.1	- 34.8	- 33.1	- 27.8	- 23.1	- 21.0	- 19.3	- 16.2	- 15.0	- 15	14	↑ <sup>3</sup>	
	18	- 33.1	- 35.1	- 34.5	- 32.6	- 27.8	- 22.9	- 20.7	- 19.1	- 16.9	- 16.9	- 17	12	↑ <sup>4</sup>	
	21	- 33.1	- 35.1	- 34.8	- 32.6	- 27.6	- 22.9	- 21.0	- 20.1	- 20.1	- 21.8	- 23	13	↑ <sup>2</sup>	
	25	0	- 33.1	- 34.8	- 34.5	- 33.1	- 27.6	- 23.1	- 21.8	- 21.8	- 23.4	- 25.6	- 26	12	↑ <sup>2</sup>
	3	- 33.1	- 34.8	- 34.8	- 32.9	- 27.3	- 23.4	- 22.9	- 23.4	- 25.3	- 26.4	- 27	13	↑	
	6	- 33.1	- 35.1	- 34.8	- 33.1	- 27.6	- 24.5	- 23.7	- 24.2	- 25.3	- 25.6	- 26	15	↑	
	9	- 33.1	- 35.4	- 35.4	- 33.4	- 27.8	- 25.1	- 24.2	- 23.7	- 23.1	- 22.6	- 23	16	↑	
	12	- 33.1	- 35.1	- 34.8	- 32.9	- 27.6	- 24.8	- 23.1	- 22.0	- 20.1	- 19.6	- 21	16	↑	
	15	- 33.1	- 35.1	- 35.1	- 32.9	- 27.3	- 24.8	- 22.9	- 21.2	- 19.3	- 18.5	- 19	16	↑	
	18	- 33.1	- 35.1	- 35.1	- 33.4	- 27.8	- 25.3	- 22.9	- 21.2	- 19.3	- 19.9	- 20	17	↑	
	21	- 33.1	- 35.1	- 35.1	- 32.9	- 27.8	- 24.8	- 22.9	- 21.2	- 20.7	- 22.0	- 22	17	↑	

Date	Time	Snow temperature (°C)								Air temperature (°C)		Wind speed (m/s)	Weather		
		Level (referring to the snow surface)													
		- 99.8 cm	- 49.8 cm	- 24.8 cm	- 15.8 cm	- 8.5 cm	- 4.5 cm	- 2.8 cm	- 1.8 cm	- 1.3 cm	+ 5.2 cm	+ 18.0 cm			
Nov. 26	0	-33.1	-35.1	-34.8	-33.1	-27.3	-24.8	-23.1	-22.3	-22.9	-23.7	-24	17	↑ <sup>3</sup>	
	3	-33.1	-34.8	-34.5	-32.9	-27.6	-24.8	-23.4	-23.1	-23.7	-24.5	-25	18	↑	
	6	-33.1	-35.1	-34.8	-32.6	-27.6	-25.3	-24.0	-23.7	-23.4	-23.7	-24	17	↑	
	9	-33.1	-34.8	-34.5	-32.6	-27.6	-25.1	-24.0	-22.9	-21.5	-19.6	-21	16	↑ <sup>2</sup>	
	12	-33.1	-34.8	-34.5	-32.0	-27.3	-24.8	-23.4	-22.0	-20.4	-16.4	-18	15	↑ <sup>1</sup>	
	15	-33.1	-35.1	-34.8	-32.3	-27.8	-25.1	-23.4	-22.0	-20.7	-16.6	-17	13	↑ <sup>1</sup>	
	18	-33.1	-35.1	-34.5	-32.3	-27.6	-24.8	-23.1	-21.8	-20.7	-20.7	-20	13	↑	
	21	-33.1	-34.8	-34.5	-32.0	-27.6	-24.5	-22.9	-21.8	-21.5	-24.5	-24	10	↑ <sup>1</sup>	
	27	0	-33.1	-34.8	-34.3	-32.0	-27.6	-24.5	-23.1	-22.6	-23.7	-28.4	-29	10	↑
		3	-33.1	-34.8	-34.3	-32.0	-27.6	-24.5	-23.4	-23.7	-25.6	-29.5	-30	10	↑
		6	-33.1	-35.1	-34.3	-32.0	-27.6	-24.8	-24.5	-25.1	-26.7	-27.8	-29	12	↑
		9	-33.1	-35.1	-34.5	-32.0	-27.8	-25.1	-24.8	-25.3	-26.2	-24.2	-26	11	↑ <sup>0</sup>
		12	-33.1	-34.8	-34.3	-32.0	-27.6	-25.1	-24.8	-24.8	-24.8	-21.0	-23	11	↑ <sup>0</sup>
	28	15	-33.1	-35.1	-34.3	-32.0	-27.6	-25.3	-24.8	-24.0	-23.1	-19.9	-21	9	○ <sup>1</sup>
		18	-33.1	-35.1	-34.3	-31.7	-27.8	-25.6	-24.5	-23.7	-23.1	-21.2	-21	4	○ <sup>0</sup>
		21	-33.1	-35.1	-34.3	-31.7	-27.8	-25.6	-24.5	-24.0	-24.2	-27.0	-26	3	○ <sup>0</sup>
		0	-33.1	-34.8	-34.0	-31.5	-27.6	-25.1	-24.8	-24.5	-26.2	-29.8	-30	5	○ <sup>0</sup>
		3	-33.1	-34.8	-34.3	-31.7	-27.8	-25.6	-25.6	-26.2	-28.4	-30.3	-34	6	○
	29	6	-33.1	-34.8	-34.3	-31.7	-27.8	-25.6	-25.9	-26.7	-28.1	-26.2	-27	5	○ <sup>1</sup>
		9	-33.1	-35.1	-34.3	-31.7	-28.1	-26.2	-26.4	-26.7	-27.3	-23.7	-25	6	○
		12	-33.1	-35.1	-34.3	-31.7	-28.1	-26.2	-26.2	-26.2	-25.3	-19.9	-21	7	○ <sup>1</sup>
		15	-33.1	-34.8	-34.3	-31.7	-28.1	-26.2	-25.9	-25.1	-23.4	-18.5	-20	6	○
		18	-33.1	-34.5	-34.0	-31.5	-27.8	-26.2	-25.1	-24.2	-22.9	-19.9	-20	6	○
	21	-33.1	-34.8	-34.0	-31.5	-27.8	-26.2	-25.1	-24.2	-24.0	-25.1	-23	6	○ <sup>2</sup>	

Date	Time	Snow temperature (°C)									Air temperature (°C)		Wind speed (m/s)	Weather		
		Level (referring to the snow surface)														
		-998cm	-498cm	-248cm	-158cm	-85cm	-45cm	-28cm	-18cm	-13cm	+52cm	+180cm				
Nov. 29	0	-33.1	-34.8	-34.0	-31.5	-28.1	-26.2	-25.3	-25.1	-25.9	-28.7	-28	8	-		
	3	-33.1	-34.8	-34.0	-31.5	-27.8	-26.2	-25.1	-25.9	-27.3	-28.1	-29	9	↗		
	6	-33.1	-34.8	-33.7	-31.5	-27.8	-26.2	-25.9	-26.2	-26.4	-24.0	-26	10	↗		
	9	-33.1	-34.8	-34.0	-31.5	-28.1	-26.4	-26.2	-25.6	-25.1	-20.4	-23	9	↗		
	12	-33.1	-35.1	-34.3	-31.5	-28.4	-26.7	-25.9	-25.1	-23.4	-16.2	-20	9	◎ <sup>9</sup>		
	15	-33.1	-34.8	-33.7	-31.2	-27.8	-26.2	-24.8	-23.4	-21.0	-15.5	-16	8	◎ <sup>8</sup>		
	18	-33.1	-34.8	-33.7	-31.2	-28.1	-26.2	-24.5	-22.9	-20.7	-16.9	-17	6	○ <sup>1</sup>		
	21	-33.1	-34.8	-33.7	-31.5	-28.1	-26.2	-24.2	-22.9	-22.0	-22.9	-21	6	○ <sup>1</sup>		
	30	0	-33.1	-34.5	-33.7	-31.2	-28.1	-25.6	-24.2	-23.4	-23.7	-26.2	-26	9	↗ <sup>1</sup>	
	3	-33.1	-34.8	-34.0	-31.5	-28.4	-25.9	-25.1	-24.8	-23.1	-27.3	-28	11	↗ <sup>1</sup>		
	6	-33.1	-35.1	-34.0	-31.5	-28.1	-26.2	-25.3	-25.6	-26.4	-25.6	-27	11	↗ <sup>1</sup>		
	9	-33.1	-35.1	-34.0	-31.5	-28.4	-26.2	-25.6	-25.3	-25.3	-21.8	-25	11	↗ <sup>1</sup>		
	12	-33.1	-34.8	-34.0	-31.5	-28.4	-26.2	-25.3	-24.5	-23.7	-19.1	-21	12	↗ <sup>1</sup>		
	15	-33.1	-34.8	-34.0	-31.2	-28.1	-25.9	-25.1	-23.7	-22.0	-17.9	-19	11	-		
	18	-33.1	-34.8	-33.7	-30.9	-28.1	-25.9	-24.5	-22.9	-21.5	-19.6	-19	9	○ <sup>1</sup>		
	21	-33.1	-34.5	-33.7	-31.2	-28.1	-25.9	-24.2	-23.1	-22.9	-24.0	-24	7	○ <sup>1</sup>		
Dec. 1	0	-33.4	-35.1	-34.0	-31.5	-28.4	-25.9	-24.8	-24.2	-25.3	-28.1	-29	7	○ <sup>1</sup>		
	3	-33.4	-35.1	-34.0	-31.5	-28.4	-26.2	-25.6	-25.9	-27.6	-29.2	-30	7	○ <sup>1</sup>		
	6	-33.4	-35.1	-34.3	-31.5	-28.7	-26.4	-26.2	-26.7	-28.1	-27.3	-27	8	○ <sup>1</sup>		
	9	-33.4	-35.1	-34.0	-31.5	-28.7	-26.4	-26.2	-26.2	-26.4	-22.0	-23	8	○ <sup>1</sup>		
	12	-33.4	-35.1	-34.0	-31.5	-28.4	-26.7	-26.2	-25.6	-24.2	-19.1	-20	9	○ <sup>1</sup>		
	15	-33.4	-35.1	-34.3	-31.7	-28.4	-26.4	-25.6	-24.8	-22.9	-18.5	-19	8	○ <sup>1</sup>		
	18	-33.4	-35.1	-34.0	-31.5	-28.4	-26.4	-25.1	-24.0	-22.3	-20.1	-20	6	○ <sup>1</sup>		
	21	-33.4	-34.8	-34.0	-31.5	-28.4	-26.4	-24.8	-24.0	-23.7	-24.8	-25	7	○ <sup>1</sup>		

Date	Time	Snow temperature (°C)									Wind speed (m/s)	Weather		
		Level (referring to the snow surface)												
		- 998 cm	- 498 cm	- 248 cm	- 158 cm	- 85 cm	- 45 cm	- 28 cm	- 18 cm	- 13 cm	+ 52 cm	+180 cm		
Dec. 2	0	- 33.4	- 34.8	- 33.7	- 31.2	- 28.1	- 26.2	- 25.3	- 24.8	- 25.6	- 27.8	- 28	8	○ <sup>1</sup>
	3	- 33.4	- 34.8	- 33.7	- 31.5	- 28.1	- 26.2	- 25.6	- 25.9	- 27.3	- 28.4	- 29	8	○
	6	- 33.4	- 34.8	- 33.7	- 31.2	- 28.1	- 26.4	- 26.2	- 26.4	- 27.6	- 25.9	- 27	9	○ <sup>4</sup>
	9	- 33.4	- 35.1	- 34.0	- 31.2	- 28.4	- 26.4	- 26.2	- 26.4	- 26.2	- 20.1	- 21	9	○ <sup>2</sup>
	12	- 33.4	- 35.1	- 34.0	- 31.2	- 28.4	- 26.7	- 25.9	- 25.3	- 23.4	- 16.1	- 17	8	○ <sup>1</sup>
	15	- 33.4	- 35.1	- 34.0	- 31.2	- 28.4	- 26.7	- 25.6	- 24.0	- 21.5	- 15.0	- 15	7	○
	18	- 33.4	- 35.1	- 33.7	- 31.2	- 28.4	- 26.4	- 24.5	- 23.1	- 20.7	- 16.9	- 17	6	○ <sup>2</sup>
	21	- 33.4	- 35.1	- 33.7	- 31.5	- 28.1	- 25.9	- 24.5	- 23.1	- 22.0	- 21.8	- 22	7	○
3	0	—	—	—	—	—	—	—	—	—	- 27	8	○ <sup>1</sup>	
	3	—	—	—	—	—	—	—	—	—	- 28	9	○	
	6	—	—	—	—	—	—	—	—	—	- 25	9	○	
	9	- 33.4	- 34.8	- 33.7	- 31.2	- 28.1	- 26.2	- 25.6	- 25.6	- 25.3	- 19.6	- 20	9	○ <sup>2</sup>
	12	- 33.4	- 35.1	- 33.7	- 31.2	- 28.4	- 26.4	- 25.3	- 24.5	- 22.9	- 15.3	- 16	8	○ <sup>4</sup>
	15	- 33.4	- 35.1	- 33.7	- 31.2	- 27.8	- 26.4	- 24.8	- 23.4	- 20.4	- 13.9	- 14	7	○ <sup>4</sup>
	18	- 33.4	- 35.1	- 34.0	- 31.5	- 28.7	- 26.4	- 24.5	- 22.6	- 20.4	- 16.2	- 16	5	○
	21	- 33.4	- 35.1	- 33.7	- 31.2	- 28.4	- 26.2	- 24.0	- 22.6	- 21.5	- 20.7	- 20	7	○ <sup>7</sup>
4	0	- 33.4	- 34.8	- 33.4	- 31.2	- 28.1	- 25.6	- 24.0	- 22.9	- 22.9	- 23.4	- 24	7	○ <sup>9</sup>
	3	- 33.4	- 34.8	- 33.4	- 31.2	- 28.4	- 25.6	- 24.2	- 24.0	- 24.2	- 24.2	- 24	8	—
	6	- 33.4	- 35.1	- 33.7	- 30.9	- 28.4	- 25.9	- 24.5	- 24.5	- 24.5	- 22.6	- 23	8	—
	9	- 33.4	- 35.1	- 33.4	- 31.2	- 27.8	- 25.6	- 24.5	- 24.0	- 23.1	- 18.8	- 19	8	○ <sup>8</sup>
	12	- 33.4	- 35.1	- 33.7	- 31.2	- 28.4	- 25.6	- 24.2	- 23.1	- 21.0	- 14.7	- 15	7	○ <sup>7</sup>
	15	- 33.4	- 35.1	- 33.4	- 31.2	- 28.4	- 25.6	- 23.7	- 22.0	- 19.1	- 12.1	- 12	5	○
	18	- 33.4	- 35.1	- 33.7	- 31.2	- 28.4	- 25.3	- 23.1	- 21.2	- 18.5	- 13.4	- 12	2	○ <sup>2</sup>
	21	- 33.4	- 34.8	- 33.4	- 30.6	- 28.1	- 24.8	- 22.6	- 21.2	- 19.9	- 18.8	- 18	4	○ <sup>6</sup>

Date	Time	Snow temperature (°C)									Air temperature (°C)		Wind speed (m/s)	Weather		
		Level (referring to the snow surface )														
		- 998 cm	- 498 cm	- 248 cm	- 158 cm	- 85 cm	- 45 cm	- 28 cm	- 18 cm	- 13 cm	+ 52 cm	+ 180 cm				
Dec. 5	0	- 3 3.4	- 3 4.8	- 3 3.4	- 3 1.2	- 2 8.1	- 2 5.1	- 2 2.9	- 2 1.8	- 2 1.5	- 2 4.0	- 2 4	5	○ 2		
	3	- 3 3.4	- 3 4.8	- 3 3.4	- 3 0.9	- 2 8.1	- 2 4.8	- 2 3.1	- 2 2.6	- 2 3.7	- 2 4.2	- 2 5	6	-		
	6	- 3 3.4	- 3 4.8	- 3 3.4	- 3 0.9	- 2 7.8	- 2 5.1	- 2 3.7	- 2 3.4	- 2 4.0	- 2 1.5	- 2 2	7	↗ 7		
	9	- 3 3.4	- 3 4.8	- 3 3.4	- 3 0.6	- 2 7.8	- 2 4.8	- 2 3.7	- 2 3.1	- 2 2.3	- 1 7.9	- 1 9	7	◎ 9		
	12	- 3 3.4	- 3 4.8	- 3 3.4	- 3 1.2	- 2 8.1	- 2 5.1	- 2 3.7	- 2 2.6	- 2 0.7	- 1 3.7	- 1 4	5	① 3		
	15	- 3 3.4	- 3 5.1	- 3 3.4	- 3 0.9	- 2 8.1	- 2 4.8	- 2 2.6	- 2 1.2	- 1 8.2	- 1 2.6	- 1 3	4	① 5		
	18	- 3 3.4	- 3 4.8	- 3 3.4	- 3 0.9	- 2 7.8	- 2 5.1	- 2 2.3	- 2 0.7	- 1 8.5	- 1 5.3	- 1 5	4	-		
	21	- 3 3.4	- 3 5.1	- 3 3.7	- 3 1.2	- 2 7.8	- 2 4.8	- 2 2.3	- 2 1.0	- 2 0.1	- 1 9.6	- 1 9	3	-		
	6	0	- 3 3.4	- 3 4.8	- 3 3.4	- 3 0.9	- 2 7.6	- 2 4.2	- 2 2.0	- 2 1.2	- 2 0.7	- 2 1.0	- 2 1	2	-	
	3	- 3 3.4	- 3 5.1	- 3 3.4	- 3 1.2	- 2 7.8	- 2 4.5	- 2 2.6	- 2 1.5	- 2 1.5	- 2 1.2	- 2 2	4	-		
	6	- 3 3.4	- 3 4.8	- 3 3.4	- 3 0.9	- 2 7.8	- 2 4.2	- 2 2.6	- 2 1.8	- 2 1.2	- 1 9.3	- 2 0	4	-		
	9	- 3 3.4	- 3 5.1	- 3 3.1	- 3 0.9	- 2 7.8	- 2 4.5	- 2 2.6	- 2 1.8	- 2 0.4	- 1 6.2	- 1 7	3	*		
	12	- 3 3.4	- 3 4.5	- 3 3.1	- 3 0.6	- 2 7.6	- 2 4.0	- 2 2.3	- 2 0.7	- 1 8.8	- 1 1.8	- 1 2	4	*		
	15	- 3 3.4	- 3 4.8	- 3 3.1	- 3 0.6	- 2 7.3	- 2 4.2	- 2 1.5	- 2 0.1	- 1 7.9	- 1 4.5	- 1 4	5	*		
	18	- 3 3.4	- 3 5.1	- 3 3.4	- 3 0.9	- 2 7.6	- 2 4.2	- 2 1.8	- 1 9.9	- 1 7.9	- 1 5.5	- 1 5	4	*		
	21	- 3 3.4	- 3 4.8	- 3 3.1	- 3 0.9	- 2 7.3	- 2 3.4	- 2 1.2	- 1 9.6	- 1 8.2	- 1 6.6	- 1 6	1	*		
7	0	- 3 3.4	- 3 4.8	- 3 3.1	- 3 0.9	- 2 7.3	- 2 3.4	- 2 1.2	- 1 9.9	- 1 8.8	- 1 7.3	- 1 7	1	-		
	3	- 3 3.4	- 3 4.8	- 3 3.4	- 3 0.6	- 2 7.3	- 2 3.7	- 2 1.2	- 2 0.1	- 1 9.3	- 1 8.5	- 1 9	2	-		
	6	- 3 3.4	- 3 5.1	- 3 3.4	- 3 0.9	- 2 7.6	- 2 4.0	- 2 1.5	- 2 0.4	- 1 9.9	- 1 7.9	- 1 8	2	-		
	9	- 3 3.4	- 3 4.8	- 3 3.1	- 3 0.6	- 2 7.3	- 2 3.1	- 2 1.2	- 2 0.1	- 1 9.1	- 1 4.5	- 1 3	1	◎ 10		
	12	- 3 3.4	- 3 5.1	- 3 3.7	- 3 0.9	- 2 7.3	- 2 3.4	- 2 1.5	- 1 9.9	- 1 7.3	- 1 3.1	- 1 1	1	-		
	15	- 3 3.4	- 3 5.1	- 3 3.4	- 3 0.6	- 2 7.3	- 2 3.7	- 2 1.2	- 1 9.3	- 1 6.8	- 1 3.4	- 1 0	2	-		
	18	- 3 3.4	- 3 5.1	- 3 3.4	- 3 0.9	- 2 7.3	- 2 3.7	- 2 1.0	- 1 8.8	- 1 6.6	- 1 5.3	- 1 4	1	◎ 9		
	21	- 3 3.4	- 3 4.8	- 3 3.1	- 3 0.6	- 2 7.0	- 2 3.1	- 2 0.4	- 1 8.8	- 1 7.3	- 1 9.1	- 1 5	0	① 6		

Date	Time	Snow temperature (°C)										Wind speed (m/s)	Weather		
		Level (referring to the snow surface )													
		- 998 cm	- 498 cm	- 248 cm	- 158 cm	- 85 cm	- 45 cm	- 28 cm	- 18 cm	- 13 cm	+ 52 cm	+ 180 cm			
Dec. 8	0	- 33.4	- 35.1	- 33.4	- 30.9	- 27.3	- 23.1	- 20.7	- 19.6	- 20.1	- 25.6	- 25	3	① <sup>5</sup>	
	3	- 33.4	- 35.1	- 33.7	- 30.9	- 27.3	- 23.1	- 21.2	- 20.7	- 21.2	- 19.9	- 19	3	-	
	6	- 33.4	- 34.8	- 33.1	- 30.6	- 27.0	- 22.9	- 21.5	- 20.7	- 20.7	- 17.3	- 18	4	② <sup>10</sup>	
	9	- 33.4	- 34.8	- 33.1	- 30.3	- 26.4	- 22.9	- 21.2	- 20.1	- 19.3	- 14.7	- 15	6	② <sup>9</sup>	
	12	- 33.4	- 35.1	- 33.1	- 30.6	- 27.0	- 23.1	- 21.2	- 20.1	- 17.9	- 13.9	- 14	7	②	
	15	- 33.4	- 34.8	- 33.1	- 30.3	- 26.4	- 23.1	- 21.0	- 19.3	- 16.6	- 14.2	- 14	7	① <sup>7</sup>	
	18	- 33.4	- 34.8	- 33.1	- 30.6	- 26.7	- 22.6	- 20.4	- 19.1	- 16.8	- 16.1	- 16	6	②	
	21	- 33.4	- 34.8	- 33.1	- 30.3	- 26.4	- 22.6	- 21.2	- 19.3	- 18.5	- 20.4	- 20	5	-	
	9	0	- 33.4	- 35.1	- 33.1	- 30.6	- 26.7	- 22.9	- 20.7	- 20.4	- 21.2	- 24.2	- 24	8	① <sup>7</sup>
	3	- 33.4	- 34.8	- 33.1	- 30.3	- 26.2	- 22.6	- 21.2	- 21.5	- 22.9	- 24.5	- 25	10	-	
	6	- 33.4	- 34.8	- 33.1	- 30.6	- 26.2	- 22.9	- 22.0	- 22.3	- 23.1	- 23.1	- 24	11	↓ <sup>3</sup>	
	9	- 33.4	- 34.5	- 32.6	- 30.1	- 25.9	- 22.6	- 22.0	- 22.0	- 22.0	- 19.3	- 20	13	↑ <sup>1</sup>	
	12	- 33.4	- 34.5	- 32.9	- 30.6	- 26.2	- 23.1	- 22.0	- 21.5	- 19.6	- 15.8	- 16	12	↑ <sup>1</sup>	
	15	- 33.4	- 34.5	- 32.9	- 30.3	- 26.2	- 22.9	- 21.2	- 20.1	- 18.2	- 14.7	- 15	11	↑	
	18	- 33.4	- 34.8	- 33.1	- 30.3	- 26.2	- 23.1	- 21.2	- 19.6	- 18.2	- 16.1	- 16	9	↑ <sup>1</sup>	
	21	- 33.4	- 34.8	- 32.9	- 30.1	- 26.2	- 22.9	- 21.0	- 19.9	- 19.6	- 20.1	- 20	10	↑ <sup>1</sup>	
10	0	-	-	-	-	-	-	-	-	-	-	- 24	12	↑	
	3	-	-	-	-	-	-	-	-	-	-	- 25	12	↑	
	6	-	-	-	-	-	-	-	-	-	-	- 24	12	↑	
	9	- 33.4	- 34.8	- 33.1	- 30.6	- 26.2	- 23.4	- 22.6	- 22.9	- 22.6	- 19.3	- 20	11	↑ <sup>0</sup>	
	12	- 33.4	- 34.8	- 32.9	- 30.1	- 25.9	- 22.9	- 22.0	- 21.2	- 19.9	- 15.8	- 17	12	↑ <sup>0</sup>	
	15	- 33.4	- 34.8	- 32.9	- 30.3	- 26.2	- 23.1	- 21.8	- 21.0	- 18.8	- 15.5	- 15	11	↑ <sup>0</sup>	
	18	- 33.4	- 34.5	- 32.9	- 30.1	- 26.2	- 23.1	- 21.5	- 20.4	- 18.8	- 16.9	- 17	10	↑ <sup>0</sup>	
	21	- 33.4	- 34.8	- 32.9	- 30.1	- 26.2	- 23.1	- 21.8	- 20.7	- 20.1	- 21.2	- 21	9	↓ <sup>0</sup>	

Date	Time	Snow temperature (°C)									Wind speed (m/s)	Weather			
		Level (referring to the snow surface)													
		- 998 cm	- 498 cm	- 248 cm	- 158 cm	- 85 cm	- 45 cm	- 28 cm	- 18 cm	- 13 cm	+ 52 cm	+ 180 cm			
Dec. 11	0	- 33.4	- 34.5	- 32.9	- 30.1	- 25.9	- 23.1	- 22.0	- 21.5	- 22.0	- 24.2	- 24	10	↑	
	3	- 33.4	- 34.5	- 32.6	- 30.1	- 25.9	- 23.1	- 22.3	- 22.3	- 24.0	- 25.1	- 26	10	↑	
	6	- 33.4	- 34.5	- 32.9	- 30.1	- 26.2	- 23.4	- 23.1	- 23.1	- 24.2	- 23.1	- 24	10	↑	
	9	- 33.4	- 34.8	- 32.9	- 30.3	- 26.2	- 23.4	- 23.1	- 23.1	- 22.9	- 19.9	- 21	11	↑ <sup>0</sup>	
	12	- 33.4	- 34.8	- 32.6	- 30.1	- 25.9	- 23.7	- 23.1	- 22.3	- 20.1	- 16.1	- 17	11	↑	
	15	- 33.4	- 34.5	- 32.6	- 29.8	- 25.9	- 23.4	- 21.8	- 20.4	- 18.2	- 14.2	- 14	11	↑	
	18	- 33.4	- 34.5	- 32.6	- 29.8	- 25.6	- 23.4	- 21.2	- 20.1	- 18.5	- 16.8	- 14	9	↑ <sup>1</sup>	
	21	- 33.4	- 34.5	- 32.6	- 30.1	- 26.4	- 23.4	- 21.8	- 20.4	- 20.1	- 19.3	- 18	10	↑ <sup>2</sup>	
	12	0	- 33.4	- 34.8	- 32.9	- 30.1	- 26.2	- 23.4	- 21.8	- 21.2	- 20.4	- 20	11	↑ <sup>9</sup>	
		3	- 33.4	- 34.8	- 33.1	- 30.1	- 26.4	- 23.4	- 22.0	- 21.5	- 21.8	- 20	9	↑	
		6	- 33.4	- 34.8	- 32.6	- 30.1	- 26.4	- 23.4	- 22.0	- 21.2	- 20.4	- 18	11	↑	
		9	- 33.4	- 34.5	- 32.9	- 29.8	- 26.2	- 23.1	- 21.5	- 20.1	- 18.2	- 13.1	- 14	12	↑ <sup>8</sup>
		12	- 33.4	- 34.5	- 32.6	- 29.8	- 26.2	- 23.1	- 21.0	- 19.1	- 16.4	- 12.1	- 12	12	↑ <sup>8</sup>
		15	- 33.4	- 34.8	- 32.9	- 30.1	- 26.2	- 22.9	- 20.4	- 18.8	- 16.2	- 12.1	- 12	11	↑
	13	0	-	-	-	-	-	-	-	-	-	- 16	8	-	
		3	-	-	-	-	-	-	-	-	-	- 16	10	-	
		6	-	-	-	-	-	-	-	-	-	- 14	5	-	
		9	- 33.4	- 34.5	- 32.3	- 29.2	- 25.6	- 22.0	- 19.3	- 18.5	- 16.1	- 10.2	- 11	7	○ <sup>10</sup>
		12	- 33.4	- 34.8	- 32.9	- 29.8	- 25.9	- 22.6	- 19.6	- 16.9	- 14.5	- 8.9	- 8	9	-
		15	- 33.4	- 34.5	- 32.6	- 29.8	- 25.9	- 21.2	- 18.5	- 16.2	- 13.4	- 9.7	- 8	6	① <sup>7</sup>
	18	- 33.4	- 34.5	- 32.6	- 29.8	- 25.9	- 21.8	- 18.8	- 16.6	- 15.3	- 14.5	- 10	8	① <sup>3</sup>	
		21	- 33.4	- 34.5	- 32.6	- 29.5	- 25.3	- 21.5	- 18.5	- 16.9	- 16.8	- 18.2	- 15	9	○ <sup>1</sup>

Date	Time	Snow temperature (°C)									Wind speed (m/s)	Weather			
		Level (referring to the snow surface)													
		-998 cm	-498 cm	-248 cm	-158 cm	-85 cm	-45 cm	-28 cm	-18 cm	-13 cm	+52 cm	+180 cm			
Dec. 14	0	-33.4	-34.5	-32.3	-29.8	-25.9	-21.5	-19.3	-18.8	-19.6	-21.0	-19	10	○ <sup>1</sup>	
	3	-33.4	-34.5	-32.3	-29.5	-25.3	-21.2	-19.6	-19.6	-20.4	-19.6	-21	10	—	
	6	-33.4	-34.5	-32.6	-29.5	-25.3	-21.5	-20.1	-20.1	-20.1	-16.4	-19	10	—	
	9	-33.4	-34.5	-32.6	-29.8	-25.6	-21.8	-20.4	-19.3	-17.3	-12.6	-15	11	○ <sup>1</sup>	
	12	—	—	—	—	—	—	—	—	—	—	-11	10	○ <sup>3</sup>	
	15	—	—	—	—	—	—	—	—	—	—	-10	10	○ <sup>3</sup>	
	18	-33.4	-34.8	-32.3	-29.5	-25.3	-21.5	-19.1	-16.8	-15.3	-12.9	-11	9	○	
	21	-33.4	-34.8	-32.6	-29.8	-25.6	-21.2	-19.1	-16.9	-16.6	-16.4	-16	8	○ <sup>1</sup>	
	15	0	-33.4	-34.5	-32.3	-29.5	-25.1	-21.2	-19.1	-18.2	-18.5	-19.6	-20	8	↓ <sup>1</sup>
	3	-33.4	-34.8	-32.6	-29.5	-25.1	-21.2	-19.9	-19.6	-20.7	-21.2	-21	9	—	
	6	-33.4	-34.8	-32.6	-29.2	-24.2	-21.5	-20.4	-20.1	-21.0	-19.1	-19	10	—	
	9	-33.4	-34.5	-32.3	-29.2	-25.1	-21.5	-20.4	-19.9	-19.3	-15.0	-14	9	○ <sup>0</sup>	
16	12	—	—	—	—	—	—	—	—	—	—	-11	8	○ <sup>1</sup>	
	15	—	—	—	—	—	—	—	—	—	—	-9	6	○ <sup>1</sup>	
	18	-33.4	-34.5	-32.3	-29.2	-24.8	-21.5	-19.1	-16.8	-15.3	-12.3	-10	4	○ <sup>0</sup>	
	21	-33.4	-34.5	-32.3	-29.2	-25.1	-21.2	-19.1	-16.9	-16.6	-17.3	-16	4	○ <sup>1</sup>	
	0	-33.4	-34.5	-32.3	-29.2	-24.8	-21.0	-19.1	-18.5	-19.3	-21.2	-21	8	↓ <sup>1</sup>	
	3	-33.4	-34.5	-32.0	-29.2	-24.5	-21.0	-19.6	-19.9	-21.2	-22.3	-23	9	↓	
	6	-33.4	-34.5	-32.3	-29.2	-24.8	-21.2	-20.1	-20.7	-21.5	-21.2	-22	9	↓	
	9	-33.4	-34.5	-32.3	-29.2	-24.5	-21.2	-20.7	-20.4	-20.4	-16.8	-17	10	↓ <sup>1</sup>	
	12	-33.4	-34.5	-32.3	-28.9	-24.5	-21.2	-20.1	-19.3	-17.9	-13.4	-14	10	↓ <sup>0</sup>	
	15	-33.4	-34.8	-32.6	-29.2	-24.8	-21.5	-19.9	-18.5	-16.2	-12.1	-12	8	↓ <sup>0</sup>	
	18	-33.4	-34.5	-32.3	-29.2	-24.8	-21.5	-19.3	-17.9	-16.2	-15.0	-14	8	○ <sup>0</sup>	
	21	-33.4	-34.5	-32.0	-28.7	-24.5	-21.5	-19.3	-18.2	-17.9	-18.5	-18	5	○ <sup>0</sup>	

Date	Time	Snow temperature (°C)									Wind speed (m/s)	Weather		
		Level (referring to the snow surface )												
		- 998 cm	- 498 cm	- 248 cm	- 158 cm	- 85 cm	- 45 cm	- 28 cm	- 18 cm	- 13 cm	+ 52 cm	+ 180 cm		
Dec. 17	0	-33.4	-34.5	-32.3	-28.7	-24.8	-21.5	-19.6	-19.3	-19.9	-20.1	-19	9	-
	3	-33.4	-34.8	-32.6	-29.2	-24.8	-21.5	-20.1	-20.1	-21.2	-21.0	-21	8	-
	6	-33.4	-34.5	-32.3	-28.9	-24.8	-21.5	-20.4	-20.1	-21.0	-19.3	-20	10	↗
	9	-33.4	-34.5	-32.3	-29.2	-24.5	-21.5	-20.4	-20.1	-19.6	-15.5	-16	10	↗ <sup>1</sup>
	12	-33.4	-34.3	-32.0	-28.7	-24.5	-21.5	-20.1	-19.1	-16.9	-12.9	-13	10	↗ <sup>1</sup>
	15	-33.4	-34.5	-32.3	-28.9	-24.5	-21.5	-19.6	-18.2	-16.1	-12.3	-12	9	↗ <sup>1</sup>
	18	-33.4	-34.5	-32.3	-28.7	-24.5	-21.5	-19.1	-17.3	-16.1	-13.4	-13	6	○ <sup>0</sup>
	21	-33.4	-34.5	-32.0	-28.7	-24.2	-21.5	-19.1	-17.9	-16.9	-17.9	-17	5	○ <sup>1</sup>
18	0	-33.4	-34.5	-32.0	-28.9	-24.5	-21.2	-19.6	-19.1	-20.1	-22.0	-21	6	○
	3	-33.4	-34.5	-32.0	-28.9	-24.5	-21.2	-20.1	-20.1	-21.0	-18.2	-18	6	-
	6	-33.4	-34.5	-32.0	-28.7	-24.5	-21.2	-20.1	-19.9	-19.9	-16.2	-16	5	-
	9	-33.4	-34.5	-31.5	-28.7	-24.2	-21.0	-19.9	-19.3	-18.2	-16.2	-17	13	↗ <sup>9</sup>
	12	-33.4	-34.5	-32.0	-28.9	-24.5	-21.2	-19.9	-18.5	-16.6	-12.9	-14	14	↗ <sup>3</sup>
	15	-33.4	-34.8	-32.3	-28.9	-24.8	-21.5	-19.6	-17.9	-15.5	-12.6	-12	14	↗
	18	-33.4	-34.8	-32.3	-28.9	-24.8	-21.5	-19.1	-16.9	-15.5	-12.6	-12	12	↗
19	0	-33.4	-34.5	-32.0	-28.7	-24.5	-20.7	-18.5	-16.9	-16.6	-15.8	-15	12	↗
	3	-33.4	-34.5	-32.0	-28.7	-24.5	-21.0	-18.8	-17.9	-16.8	-15.8	-15	14	↗
	6	-33.4	-34.3	-31.7	-28.7	-24.2	-20.7	-18.8	-17.9	-16.8	-15.0	-15	13	↗
	9	-33.4	-34.8	-32.3	-28.9	-24.5	-21.0	-18.8	-17.9	-16.2	-13.1	-13	14	↗ <sup>9</sup>
	12	-33.4	-34.5	-31.7	-28.9	-24.5	-20.7	-18.2	-16.6	-14.5	-11.3	-11	14	↗
	15	-33.4	-34.3	-31.7	-28.7	-24.2	-20.4	-17.3	-15.8	-13.4	-10.7	-10	12	↗ <sup>8</sup>
	18	-33.4	-34.5	-32.0	-28.7	-24.2	-20.1	-16.9	-15.5	-13.9	-12.9	-12	12	↗ <sup>9</sup>
	21	-33.4	-34.5	-31.7	-28.4	-24.0	-19.9	-16.9	-15.8	-15.0	-16.2	-15	11	↗ <sup>3</sup>

-13.8+

Date	Time	Snow temperature (°C)									Wind speed (m/s)	Weather		
		Level (referring to the snow surface)												
		-998cm	-498cm	-248cm	-158cm	-85cm	-45cm	-28cm	-18cm	-13cm	+52cm	+180cm		
Dec. 20	0	-33.4	-34.5	-32.0	-28.7	-24.2	-20.1	-17.9	-16.8	-17.3	-19.1	-18	1.2	↗ <sup>9</sup>
	3	-33.4	-34.5	-31.7	-28.7	-24.0	-19.9	-18.2	-17.9	-19.1	-19.9	-20	1.2	↗
	6	-33.4	-34.5	-31.7	-28.7	-24.0	-19.9	-18.8	-18.8	-19.3	-18.8	-19	1.2	↗
	9	-33.4	-34.5	-31.5	-28.4	-23.7	-20.1	-18.8	-18.5	-17.9	-14.5	-15	1.3	↗ <sup>6</sup>
	12	-33.4	-34.5	-31.7	-28.7	-24.0	-19.9	-18.5	-16.9	-15.5	-10.7	-11	1.1	↗ <sup>8</sup>
	15	-33.4	-34.5	-32.0	-28.4	-24.0	-20.1	-18.2	-16.2	-13.9	-9.4	-9	8	○ <sup>9</sup>
	18	-33.4	-34.5	-32.0	-28.4	-24.0	-20.1	-17.3	-15.5	-13.4	-9.9	-8	6	○ <sup>9</sup>
	21	-33.4	-34.3	-31.7	-28.1	-24.0	-19.9	-16.9	-15.5	-14.5	-13.7	-12	6	—
	21	0	-33.4	-34.3	-31.5	-28.1	-23.7	-19.9	-16.8	-16.1	-15.8	-15	9	—
	3	-33.4	-34.3	-31.5	-27.8	-23.7	-19.6	-17.3	-16.6	-16.9	-19.3	-18	9	—
	6	-33.4	-34.3	-31.7	-28.1	-23.7	-19.6	-17.9	-17.3	-17.9	-17.9	-18	7	—
	9	-33.4	-34.5	-31.5	-27.6	-23.7	-19.9	-18.2	-17.3	-16.9	-16.2	-16	1.2	① <sup>6</sup>
	12	—	—	—	—	—	—	—	—	—	—	-12	9	—
	15	—	—	—	—	—	—	—	—	—	—	-9	8	—
	18	—	—	—	—	—	—	—	—	—	—	—	—	—
	21	—	—	—	—	—	—	—	—	—	—	—	—	—
27	0	-33.4	-34.3	-30.9	-27.3	-22.6	-18.8	—	-16.2	-16.8	—	-18	1.0	↗ <sup>6</sup>
	3	-33.4	-34.5	-30.9	-27.3	-22.6	-18.8	—	-16.9	-18.5	—	-20	1.0	↗
	6	-33.4	-34.3	-30.6	-27.0	-22.3	-18.5	—	-17.9	-18.8	—	-19	1.0	↗
	9	-33.4	-34.3	-30.6	-27.3	-22.3	-19.3	—	-17.9	-17.3	—	-16	1.4	↗
	12	-33.4	-34.3	-30.6	-27.3	-22.3	-19.1	—	-16.6	-15.3	—	-12	1.3	↗ <sup>1</sup>
	15	-33.4	-34.3	-30.6	-27.3	-22.3	-19.1	—	-15.8	-13.7	—	-10	1.2	↗ <sup>3</sup>
	18	-33.4	-34.3	-30.6	-27.0	-22.3	-19.1	—	-15.5	-13.9	—	-11	9	↗ <sup>4</sup>
	21	-33.4	-34.0	-30.6	-27.0	-22.0	-18.8	—	-15.5	-15.0	—	-15	8	↗

Date	Time	Snow temperature (°C)									Wind speed (m/s)	Weather			
		Level (referring to the snow surface)													
		-998cm	-498cm	-248cm	-158cm	-85cm	-45cm	-28cm	-18cm	-13cm	+52cm	+180cm			
Dec. 28	0	-33.4	-34.0	-30.6	-27.0	-22.3	-18.8	-	-16.6	-	-	-19	10	↑ <sup>1</sup>	
	3	-33.4	-34.3	-30.3	-27.0	-22.0	-18.8	-	-17.9	-	-	-21	11	↑	
	6	-33.4	-34.3	-30.9	-27.3	-22.3	-19.1	-	-19.1	-	-	-21	11	↑	
	9	-33.4	-34.3	-30.6	-26.7	-22.0	-19.1	-	-18.5	-	-	-17	12	↑ <sup>1</sup>	
	12	-33.4	-34.3	-30.6	-27.0	-22.0	-19.3	-	-17.3	-	-	-14	13	↑ <sup>1</sup>	
	15	-33.4	-34.0	-30.6	-26.7	-22.3	-19.1	-	-16.4	-	-	-13	11	↑ <sup>1</sup>	
	18	-33.4	-34.0	-30.3	-26.4	-22.0	-19.1	-	-16.1	-	-	-13	9	↑ <sup>1</sup>	
	21	-33.4	-34.0	-30.6	-26.7	-22.3	-19.1	-	-16.4	-16.2	-	-17	8	↑ <sup>0</sup>	
	29	0	-33.4	-34.0	-30.3	-26.4	-21.8	-19.1	-	-17.3	-18.8	-	-21	9	↑ <sup>0</sup>
	3	-33.4	-33.4	-30.3	-26.7	-22.0	-19.1	-	-19.1	-	-	-23	10	↑	
	6	-33.4	-34.3	-30.6	-26.7	-22.0	-19.1	-	-19.9	-	-	-22	12	↑	
	9	-33.4	-34.0	-30.6	-26.7	-22.0	-19.3	-	-19.6	-	-	-19	13	↑ <sup>0</sup>	
30	12	-33.4	-34.0	-30.3	-26.7	-21.8	-19.3	-	-18.2	-	-	-15	12	↑ <sup>0</sup>	
	15	-33.4	-34.0	-30.6	-26.7	-22.0	-19.6	-	-16.9	-	-	-13	11	↑ <sup>0</sup>	
	18	-33.4	-34.0	-30.3	-26.4	-22.0	-19.6	-	-16.6	-	-	-14	9	↑ <sup>1</sup>	
	21	-33.4	-34.0	-30.3	-26.7	-22.3	-19.6	-	-16.9	-	-	-17	8	○ <sup>0</sup>	
	0	-33.4	-33.7	-30.1	-26.4	-22.0	-19.3	-	-18.2	-	-	-22	9	○ <sup>1</sup>	
	3	-33.4	-34.3	-30.6	-26.4	-22.3	-19.6	-	-19.6	-	-	-23	10	-	
	6	-33.4	-34.0	-30.3	-26.4	-22.0	-19.6	-	-16.9	-	-	-22	10	○ <sup>1</sup>	
	9	-33.4	-34.3	-30.6	-26.7	-22.3	-20.1	-	-19.9	-	-	-18	10	○ <sup>0</sup>	
	12	-33.4	-34.0	-30.3	-25.9	-21.8	-20.1	-	-18.5	-	-	-14	10	○ <sup>0</sup>	
	15	-33.4	-34.0	-30.3	-26.4	-22.3	-19.9	-	-16.9	-	-	-12	10	○ <sup>0</sup>	
	18	-33.4	-34.0	-30.3	-26.2	-22.0	-19.9	-	-16.6	-	-	-13	9	○ <sup>0</sup>	
	21	-33.4	-34.0	-30.1	-26.2	-22.3	-19.6	-	-16.8	-18.8	-	-17	7	○ <sup>0</sup>	

Date	Time	Snow temperature (°C)								Air temperature (°C)		Wind speed (m/s)	Weather		
		Level (referring to the snow surface)													
		- 998 cm	- 498 cm	- 248 cm	- 158 cm	- 85 cm	- 45 cm	- 28 cm	- 18 cm	- 13 cm	+ 52 cm	+ 180 cm			
Dec. 31	0	-33.4	-34.0	-30.1	-26.2	-22.3	-19.6	—	-18.5	-22.9	—	-21	8	○	
	3	-33.4	-34.0	-30.3	-26.4	-22.3	-19.9	—	-19.9	-23.1	—	-23	9	—	
	6	-33.4	-34.0	-30.3	-26.4	-22.3	-19.9	—	-20.1	-19.1	—	-20	10	—	
	9	-33.4	-34.0	-30.3	-26.2	-22.3	-20.1	—	-19.6	-15.3	—	-16	12	↗ <sup>1</sup>	
	12	-33.4	-34.0	-30.3	-26.4	-22.6	-20.1	—	-17.9	-13.4	—	-13	11	↗ <sup>0</sup>	
	15	-33.4	-33.7	-30.3	-26.2	-22.3	-19.9	—	-16.4	-12.9	—	-12	11	↗ <sup>0</sup>	
	18	-33.4	-34.0	-30.1	-25.9	-22.3	-19.6	—	-16.1	-14.5	—	-12	10	↗ <sup>1</sup>	
	21	-33.4	-34.0	-30.1	-26.2	-22.6	-19.6	—	-16.6	-16.6	—	-16	9	① <sup>7</sup>	
	Jan. 1	0	-33.4	-34.0	-29.8	-25.3	-22.3	-19.9	—	-17.3	-16.8	—	-16	7	* <sup>10</sup>
		3	-33.4	-34.0	-30.1	-26.2	-22.6	-19.6	—	-16.9	-16.6	—	-16	5	*
		6	-33.4	-33.7	-30.1	-25.9	-22.3	-19.3	—	-16.9	-15.3	—	-15	6	*
		9	-33.4	-34.0	-30.1	-25.9	-22.6	-19.1	—	-16.6	-12.3	—	-12	6	*
		12	-33.4	-34.0	-30.3	-25.9	-22.6	-19.3	—	-16.1	-10.2	—	-10	6	* <sup>10</sup>
		15	-33.4	-34.0	-30.3	-26.2	-22.6	-19.3	—	-15.0	-9.9	—	-9	4	* <sup>10</sup>
		18	-33.4	-34.0	-30.1	-26.2	-22.6	-19.3	—	-14.7	-10.2	—	-9	4	* <sup>10</sup>
		21	-33.4	-34.0	-30.3	-26.4	-22.6	-19.1	—	-15.3	-15.3	—	-17	4	① <sup>4</sup>
	2	0	-33.4	-34.0	-30.1	-26.2	-22.3	-18.8	—	-15.8	-17.9	—	-21	6	—
		3	-33.4	-34.0	-30.1	-25.9	-22.3	-18.5	—	-16.6	-20.7	—	-21	8	↗
		6	-33.4	-34.0	-30.1	-26.2	-22.3	-18.8	—	-17.3	-18.5	—	-20	9	↗
		9	-33.4	-33.7	-29.8	-25.9	-22.0	-18.8	—	-17.3	-15.0	—	-10	10	↗
		12	-33.4	-34.0	-29.8	-26.2	-22.0	-18.8	—	-16.2	-12.6	—	-10	10	↗
		15	-33.4	-33.7	-29.8	-25.6	-22.0	-18.8	—	-15.5	-12.3	—	-8	8	↗ <sup>1</sup>
		18	-33.4	-33.7	-29.8	-25.9	-22.0	-18.8	—	-15.3	-14.5	—	-4	○ <sup>1</sup>	
	21	-33.4	-33.7	-29.5	-25.9	-22.0	-18.5	—	-16.1	-18.8	—	-5	5	○ <sup>1</sup>	

Date	Time	Snow temperature (°C)									Air temperature (°C)		Wind speed (m/s)	Weather			
		Level (referring to the snow surface)															
		- 998 cm	- 498 cm	- 248 cm	- 158 cm	- 85 cm	- 45 cm	- 28 cm	- 18 cm	- 13 cm	+ 52 cm	+ 180 cm					
Jan. 3	0	- 33.4	- 33.7	- 29.5	- 25.9	- 22.0	- 18.8	-	- 17.3	- 22.6	-	-	7	↗ <sup>1</sup>			
	3	- 33.4	- 33.7	- 29.8	- 25.9	- 22.0	- 19.1	-	- 18.8	- 22.9	-	-	6	-			
	6	- 33.4	- 33.7	- 29.5	- 25.9	- 22.0	- 18.8	-	- 19.1	- 18.2	-	-	6	-			
	9	- 33.4	- 33.7	- 29.8	- 25.9	- 22.0	- 19.3	-	- 18.8	- 13.4	-	- 12	5	○ <sup>10</sup>			
	12	- 33.4	- 33.7	- 29.8	- 25.6	- 21.8	- 19.3	-	- 16.8	- 9.9	-	- 14	4	○ <sup>10</sup>			
	15	- 33.4	- 33.7	- 29.8	- 25.6	- 22.0	- 19.1	-	- 15.5	- 9.4	-	- 10	5	○ <sup>10</sup>			
	18	- 33.4	- 33.7	- 29.8	- 25.3	- 22.0	- 19.3	-	- 15.3	- 11.8	-	- 11	5	○ <sup>10</sup>			
	21	- 33.4	- 34.0	- 29.8	- 25.9	- 22.0	- 19.1	-	- 15.5	- 15.8	-	- 15	6	○ <sup>9</sup>			
	4	0	- 33.4	- 33.7	- 29.5	- 25.9	- 22.0	- 18.8	-	- 16.2	- 17.9	-	- 18	6	○ <sup>9</sup>		
	3	- 33.4	- 33.7	- 29.5	- 25.6	- 21.8	- 18.8	-	- 16.4	- 16.9	-	- 17	7	-			
	6	- 33.4	- 33.7	- 29.8	- 25.9	- 22.0	- 18.8	-	- 16.8	- 15.8	-	- 16	8	-			
	9	- 33.4	- 33.7	- 29.5	- 25.6	- 21.8	- 18.5	-	- 16.2	- 13.1	-	- 15	9	○			
14	12	- 33.4	- 33.7	- 29.5	- 25.9	- 22.0	- 18.5	-	- 15.8	- 12.6	-	- 14	7	○ <sup>4</sup>			
	15	- 33.4	- 33.7	- 29.8	- 25.9	- 21.8	- 18.5	-	- 15.3	- 13.4	-	- 13	6	○ <sup>4</sup>			
	18	- 33.4	- 33.7	- 29.5	- 25.6	- 21.5	- 18.5	-	- 15.3	- 15.0	-	- 12	2	○ <sup>3</sup>			
	21	- 33.4	- 33.7	- 28.9	- 25.9	- 22.0	- 18.8	-	- 16.2	- 19.9	-	- 18	3	-			
	5	0	- 33.4	- 33.7	- 29.5	- 25.9	- 22.0	- 18.8	-	- 17.9	- 23.1	-	- 22	4	-		
	3	- 33.4	- 34.0	- 29.8	- 25.6	- 22.0	- 18.8	-	- 18.8	- 19.6	-	- 18	4	-			
	6	- 33.4	- 33.7	- 29.2	- 25.1	- 21.2	- 18.8	-	- 18.5	- 16.2	-	- 16	4	-			
	9	- 33.4	- 33.7	- 29.5	- 25.1	- 21.8	- 19.1	-	- 17.3	- 13.1	-	- 13	5	○ <sup>8</sup>			
	12	- 33.4	- 33.4	- 28.9	- 25.3	- 21.8	- 18.8	-	- 16.2	- 11.0	-	- 12	5	○ <sup>10</sup>			
	15	- 33.4	- 33.7	- 29.5	- 25.6	- 21.8	- 18.2	-	- 15.8	- 10.5	-	- 11	5	○ <sup>10</sup>			
	18	- 33.4	- 33.7	- 28.9	- 25.6	- 21.8	- 18.8	-	- 15.3	- 12.3	-	- 11	2	○ <sup>10</sup>			
	21	- 33.4	- 33.7	- 29.2	- 25.3	- 21.5	- 18.5	-	- 15.3	- 16.1	-	- 15	4	○ <sup>2</sup>			

Date	Time	Snow temperature (°C)									Air temperature (°C)		Wind speed (m/s)	Weather		
		Level (referring to the snow surface)														
		-998 cm	-498 cm	-248 cm	-158 cm	-85 cm	-45 cm	-28 cm	-18 cm	-13 cm	+52 cm	+180 cm				
Jan. 6	0	-33.4	-33.7	-29.2	-25.6	-21.5	-18.5	-	-16.1	-17.3	-	-17	5	-		
	3	-33.4	-33.7	-29.2	-25.6	-21.5	-18.5	-	-16.6	-19.9	-	-20	8	→		
	6	-33.4	-33.7	-29.2	-25.6	-21.8	-18.5	-	-17.9	-20.1	-	-22	9	→		
	9	-33.4	-33.1	-29.2	-25.6	-21.2	-18.5	-	-17.3	-16.4	-	-19	10	→ <sup>1</sup>		
	12	-33.4	-33.7	-29.5	-25.6	-21.2	-18.5	-	-16.8	-13.9	-	-15	8	→ <sup>1</sup>		
	15	-33.4	-33.7	-29.2	-25.1	-21.5	-18.5	-	-15.8	-13.1	-	-13	6	○ <sup>1</sup>		
	18	-33.4	-33.1	-29.2	-24.5	-21.0	-18.8	-	-15.5	-15.0	-	-12	3	○ <sup>1</sup>		
	21	-33.4	-33.4	-29.2	-25.3	-21.5	-18.8	-	-16.2	-19.6	-	-18	3	○ <sup>1</sup>		
	7	0	-33.4	-33.7	-29.2	-25.6	-21.8	-18.8	-	-18.2	-24.2	-	-24	5	-	
		3	-33.4	-33.7	-29.2	-25.6	-21.8	-19.1	-	-19.6	-23.1	-	-23	7	-	
		6	-33.4	-33.4	-29.5	-25.6	-21.8	-19.3	-	-19.9	-16.9	-	-17	5	-	
		9	-33.4	-33.7	-29.5	-25.6	-21.8	-19.3	-	-18.5	-13.4	-	-14	6	○ <sup>10</sup>	
		12	-33.4	-33.7	-29.2	-25.3	-21.5	-19.3	-	-16.6	-10.5	-	-12	5	○ <sup>10</sup>	
		15	-33.4	-34.0	-29.5	-25.6	-22.0	-19.6	-	-16.1	-11.3	-	-10	3	* <sup>9</sup>	
8	18	-33.4	-34.0	-29.2	-25.1	-21.8	-19.1	-	-15.5	-14.5	-	-12	4	① <sup>4</sup>		
	21	-33.4	-33.7	-28.9	-24.2	-21.8	-19.1	-	-16.2	-19.3	-	-17	4	① <sup>3</sup>		
	0	-33.4	-34.0	-29.5	-25.6	-21.8	-19.1	-	-17.9	-22.0	-	-20	6	① <sup>7</sup>		
	3	-33.4	-33.7	-29.5	-25.6	-22.0	-19.3	-	-19.1	-23.1	-	-23	7	-		
	6	-33.4	-34.0	-29.2	-25.6	-21.8	-19.3	-	-19.6	-20.4	-	-22	7	-		
	9	-33.4	-33.7	-29.2	-25.3	-21.8	-19.3	-	-19.1	-15.3	-	-18	7	* <sup>9</sup>		
	12	-33.4	-33.7	-29.5	-25.6	-21.8	-19.6	-	-17.9	-11.5	-	-14	-	○ <sup>10</sup>		
	15	-33.4	-34.0	-29.5	-25.6	-21.8	-19.6	-	-16.6	-10.2	-	-11	-	* <sup>10</sup>		
	18	-33.4	-33.7	-29.2	-25.3	-22.0	-19.3	-	-16.1	-12.1	-	-12	-	* <sup>10</sup>		
	21	-33.4	-33.7	-29.2	-25.3	-22.0	-19.3	-	-16.1	-15.5	-	-15	-	○ <sup>10</sup>		

Date	Time	Snow temperature (°C)									Wind speed (m/s)	Weather			
		Level (referring to the snow surface)													
		- 998 cm	- 498 cm	- 248 cm	- 158 cm	- 85 cm	- 45 cm	- 28 cm	- 18 cm	- 13 cm	+ 52 cm	+ 180 cm			
Jan. 9	0	- 33.4	- 33.7	- 28.9	- 25.3	- 21.5	- 19.1	-	- 16.6	- 16.9	-	- 1.6	1	* <sup>10</sup>	
	3	- 33.4	- 33.4	- 29.2	- 25.1	- 21.8	- 19.3	-	- 16.8	- 17.9	-	- 1.4	1	-	
	6	- 33.4	- 33.7	- 29.2	- 25.3	- 22.0	- 19.1	-	- 17.3	- 16.8	-	- 1.4	2	-	
	9	- 33.4	- 33.4	- 28.9	- 25.1	- 21.8	- 18.8	-	- 16.8	- 13.1	-	- 1.2	2	◎ <sup>9</sup>	
	12	- 33.4	- 33.4	- 29.2	- 25.3	- 21.5	- 18.8	-	- 16.6	- 9.7	-	- 1.0	0	◎ <sup>9</sup>	
	15	- 33.4	- 33.7	- 29.2	- 25.3	- 22.0	- 18.5	-	- 15.0	- 8.6	-	( - 4 )	0	◎ <sup>9</sup>	
	18	- 33.4	- 33.7	- 29.2	- 25.3	- 21.8	- 18.8	-	- 14.7	- 12.1	-	- 1.1	1	* <sup>10</sup>	
	21	- 33.4	- 33.7	- 29.2	- 25.3	- 21.8	- 18.8	-	- 15.0	- 14.7	-	- 1.5	3	* <sup>10</sup>	
	10	0	- 33.4	- 33.4	- 29.2	- 25.3	- 21.8	- 18.5	-	- 15.8	- 17.3	-	- 1.8	2	◎ <sup>9</sup>
	3	- 33.4	- 33.7	- 29.2	- 25.3	- 22.0	- 18.5	-	- 16.4	- 18.8	-	- 2.0	3	-	
	6	- 33.4	- 33.4	- 28.9	- 25.1	- 21.8	- 18.2	-	- 16.4	- 16.4	-	- 1.8	4	-	
Jan. 10	9	- 33.4	- 33.7	- 28.9	- 25.3	- 21.8	- 18.5	-	- 16.6	- 13.7	-	- 1.7	4	① <sup>5</sup>	
	12	- 33.4	- 33.7	- 28.9	- 24.8	- 21.8	- 18.2	-	- 16.1	- 10.5	-	- 1.3	5	○ <sup>1</sup>	
	15	- 33.4	- 33.4	- 28.9	- 25.1	- 21.5	- 18.2	-	- 15.0	- 11.0	-	- 1.3	6	◎ <sup>8</sup>	
	18	- 33.4	- 33.7	- 29.2	- 25.1	- 21.8	- 18.5	-	- 15.3	- 14.7	-	- 1.5	8	◎ <sup>10</sup>	
	21	- 33.4	- 33.4	- 28.9	- 24.5	- 21.5	- 18.5	-	- 15.5	- 20.7	-	- 1.9	4	◎ <sup>9</sup>	
	11	0	- 33.4	- 33.7	- 28.9	- 25.3	- 21.8	- 18.5	-	- 16.6	- 19.9	-	- 1.9	6	↓ <sup>8</sup>
	3	- 33.4	- 33.4	- 28.9	- 25.1	- 21.5	- 18.5	-	- 17.3	- 19.9	-	- 2.1	9	↓	
	6	- 33.4	- 33.4	- 28.7	- 24.8	- 21.2	- 18.8	-	- 17.9	- 18.2	-	- 2.0	10	↓	
	9	- 33.4	- 33.4	- 29.2	- 25.1	- 21.5	- 18.8	-	- 17.9	- 15.8	-	- 1.9	10	↓ <sup>9</sup>	
	12	- 33.4	- 33.7	- 28.9	- 25.1	- 21.5	- 18.8	-	- 16.6	- 13.4	-	- 1.6	10	↓ <sup>10</sup>	
	15	- 33.4	- 33.4	- 28.9	- 25.1	- 21.5	- 18.5	-	- 16.1	- 12.9	-	- 1.4	7	↓ <sup>10</sup>	
	18	- 33.4	- 33.4	- 28.9	- 25.1	- 21.5	- 18.8	-	- 15.5	- 13.9	-	- 1.4	4	◎	
	21	- 33.4	- 33.4	- 28.7	- 24.8	- 21.2	- 18.5	-	- 16.1	- 19.9	-	- 1.8	3	①	

Date	Time	Snow temperature (°C)									Wind speed (m/s)	Weather			
		Level (referring to the snow surface)													
		-998cm	-498cm	-248cm	-158cm	-85cm	-45cm	-28cm	-18cm	-13cm	+52 cm	+180 cm			
Jan. 12	0	-33.4	-33.4	-28.9	-25.3	-21.5	-18.8	—	-17.9	-24.8	—	-24	6	○ <sup>1</sup>	
	3	-33.4	-33.4	-28.9	-25.1	-21.5	-18.8	—	-19.9	-22.6	—	-23	6	—	
	6	-33.4	-33.4	-28.9	-25.3	-21.5	-18.8	—	-20.1	-20.7	—	-23	8	↗	
	9	-33.4	-33.4	-28.7	-25.1	-21.0	-18.8	—	-19.6	-16.2	—	-20	8	↗ <sup>1</sup>	
	12	-33.4	-33.4	-28.7	-25.1	-21.2	-18.5	—	-17.9	-13.9	—	-16	10	↗ <sup>3</sup>	
	15	-33.4	-33.4	-28.7	-25.1	-21.2	-18.5	—	-16.6	-13.4	—	-14	9	↗ <sup>5</sup>	
	18	-33.4	-33.4	-28.9	-25.1	-21.5	-18.8	—	-16.4	-15.5	—	-14	9	↗ <sup>3</sup>	
	21	-33.4	-33.4	-28.9	-25.1	-21.5	-18.8	—	-16.8	-19.3	—	-18	9	↗ <sup>3</sup>	
	13	0	-33.4	-33.4	-28.7	-25.1	-21.2	-19.1	—	-18.2	-21.0	—	-20	10	↗ <sup>7</sup>
	3	-33.4	-33.4	-28.9	-25.3	-21.5	-18.8	—	-19.1	-22.0	—	-22	10	↗	
	6	-33.4	-33.4	-28.7	-25.1	-21.5	-19.1	—	-19.1	-19.3	—	-22	10	↗	
	9	-33.4	-33.4	-28.7	-25.1	-21.2	-19.1	—	-18.8	-15.8	—	-19	10	↗ <sup>2</sup>	
	12	-33.4	-33.4	-28.7	-25.1	-21.5	-19.3	—	-16.9	-13.4	—	-15	10	↗ <sup>1</sup>	
	15	-33.4	-33.4	-28.7	-24.8	-21.5	-19.1	—	-16.2	-13.1	—	-13	9	↗ <sup>2</sup>	
	18	-33.4	-33.4	-28.7	-24.8	-21.5	-19.3	—	-16.2	-15.0	—	-13	6	↗	
	21	-33.4	-33.4	-28.7	-24.8	-21.5	-19.1	—	-16.6	-19.3	—	-16	7	↗ <sup>8</sup>	