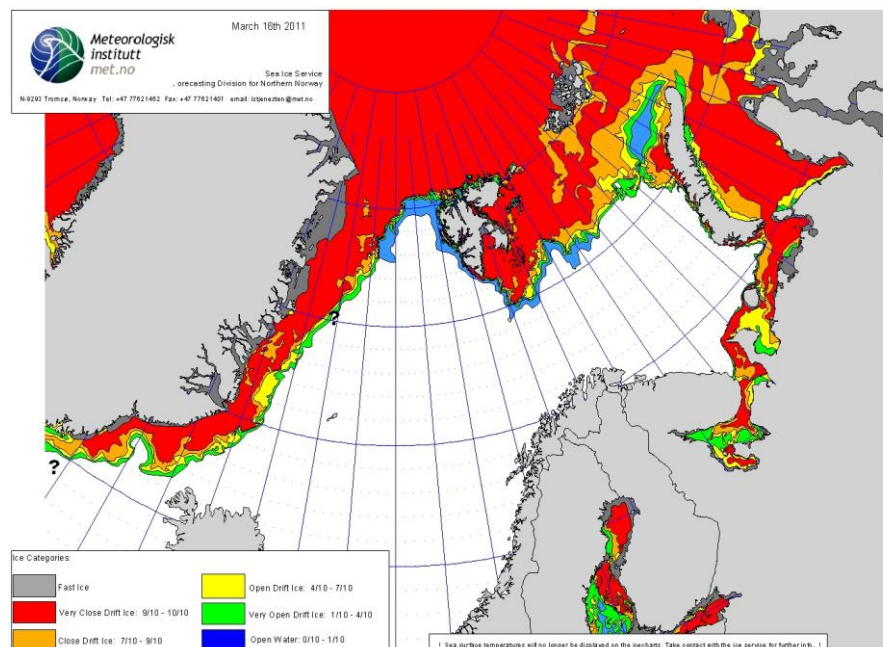




# Ice, icing and temperature conditions around Svalbard

Magnar Reistad, Øyvind Breivik and Frode Dinessen





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# Abstract

The ice extent, icing conditions and temperature at and around Svalbard is estimated from observations, ice charts and a hindcast archive. Icing indices for vessels and low-flying air craft are computed using empirical algorithms. We find a weak rising trend in temperature and a diminishing of winter ice extent over the period 1958-2009.

# Introduction

The following report details the ice and temperature conditions at and around Svalbard and the south-western part of the Barents Sea along with the icing conditions for low-flying craft (helicopters) and small vessels. In addition to observations from five stations at or near the Svalbard archipelago we have used data from a new set of hindcast data produced at The Norwegian Meteorological Institute (Reistad et al. 2007, Reistad et al. 2011). The hindcast data is produced by the HIRLAM10 atmospheric model which is a version of the HIRLAM model (Unden et al. 2002) with 10km horizontal resolution and 40 vertical layers. The boundary values are taken from a global reanalysis project, ERA40 (Uppala et al. 2005), at the European Centre for Medium Range Weather Forecasts (ECMWF). After August 2002 the boundary values are from the operational weather forecasting model at ECMWF. We have also used sea ice charts issued by the Norwegian Ice Service.

# Modelled temperature and vessel icing

An empirical algorithm for vessel icing (Overland et al. 1986 and Overland 1990) has been used. The algorithm classifies the risk of icing as light, moderate, heavy and extreme. The per cent of time for the four categories from light to extreme is listed for all 25 locations during the 52 years from 1958-2009. Table 1 lists the icing index (per cent of time) along with sea ice cover (per cent of time), average sea surface temperature and air temperature for each quarter for the period 1958-2009. The data are taken from the NORA10 hindcast archive (Reistad et al. 2011).

Quarterly averages from 1958-2009																									
Latitude:	73.98	74.00	74.00	74.00	74.02	74.03	74.06	75.98	75.99	75.99	75.99	76.02	76.03	76.05	77.97	77.99	78.01	78.01	78.01	78.05	79.94	79.95	79.96		
Longitude:	27.72	2.29	12.73	32.88	17.34	7.64	22.54	22.47	7.64	17.48	33.11	27.61	12.56	2.41	23.94	12.73	2.33	7.37	32.91	27.57	27.36	32.96	7.50		
Station no:		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Sea surface temperature (SST) and 2 m air temperature (T2) in deg C, icing indices and sea ice coverage in % of time:																									
January-March:																									
SST	2.31	0.32	3.12	2.04	2.70	2.40	2.02	-1.43	1.72	-0.46	-1.20	-1.60	0.88	0.19	-1.70	-0.47	-0.38	0.19	-1.80	-1.77	-1.74	-1.80	-1.23		
T2	-2.88	-3.63	-1.72	-3.49	-2.33	-2.00	-2.93	-9.44	-4.24	-8.11	-9.14	-9.09	-5.29	-5.50	-15.74	-10.07	-9.00	-7.92	-16.07	-15.86	-18.71	-19.35	-14.04		
Light icing	29.32	26.35	34.05	31.28	30.44	36.10	27.73	6.05	37.61	9.72	13.07	10.53	29.76	29.14	0.17	11.49	21.52	26.48	0.29	0.19	0.10	0.07	8.50		
Moderate	13.53	13.39	9.07	13.67	10.85	9.92	12.69	3.12	19.25	6.31	9.15	6.86	20.24	18.59	0.09	11.80	16.48	20.21	0.07	0.05	0.03	0.06	7.08		
Heavy	4.00	4.76	1.08	5.28	2.80	1.41	4.37	1.87	5.83	4.05	5.53	4.35	9.38	8.59	0.03	8.27	9.61	11.06	0.03	0.06	0.05	0.04	5.24		
Extreme	1.23	2.48	0.13	2.32	0.56	0.28	1.72	3.23	2.27	4.00	9.56	8.95	5.31	7.80	0.04	7.05	13.85	12.10	0.06	0.05	0.03	0.03	13.16		
Sea ice	0.64	14.16	0.00	1.47	1.83	0.00	2.34	77.48	0.64	61.74	45.94	56.38	4.85	8.50	99.36	51.48	24.50	12.88	99.32	99.55	99.78	99.79	61.62		
April-June:																									
SST	3.17	1.92	4.35	2.69	3.89	3.58	3.10	-0.47	3.05	0.12	-0.68	-0.59	2.36	1.21	-1.70	0.43	-0.03	1.15	-1.80	-1.81	-1.86	-1.90	-1.42		
T2	0.90	0.48	1.98	0.25	1.61	1.61	1.04	-2.50	0.32	-1.71	-3.04	-2.71	-0.16	-0.78	-4.46	-2.23	-2.68	-1.77	-4.93	-4.74	-5.49	-5.71	-4.55		
Light icing	16.24	15.49	11.76	16.91	13.24	12.94	15.03	7.11	20.01	10.08	12.03	11.23	20.11	20.65	0.09	18.40	18.46	22.55	0.62	0.32	0.17	0.12	8.27		
Moderate	2.50	2.71	0.61	4.16	1.17	0.92	2.31	1.24	3.34	3.47	4.35	3.85	4.24	5.73	0.00	4.97	6.49	6.69	0.03	0.00	0.02	0.00	3.04		
Heavy	0.23	0.62	0.03	0.64	0.18	0.05	0.22	0.34	0.52	1.39	1.88	1.89	0.95	1.61	0.00	1.58	2.26	2.28	0.00	0.00	0.00	0.00	1.49		
Extreme	0.01	0.20	0.00	0.06	0.01	0.00	0.10	0.18	0.18	0.92	1.01	1.61	0.63	0.95	0.00	0.73	1.76	1.06	0.00	0.00	0.00	0.00	2.45		
Sea ice	0.00	1.49	0.00	2.13	0.00	0.00	0.00	48.03	0.42	30.12	37.40	37.43	1.49	1.93	95.15	20.23	22.00	6.78	94.94	94.30	99.14	99.16	63.01		
July-September:																									
SST	6.35	5.55	7.11	6.21	6.57	6.52	6.06	3.37	5.99	4.46	3.71	3.44	5.76	4.09	1.39	3.71	2.41	3.73	1.44	1.16	-0.97	-0.76	0.92		
T2	5.68	4.89	6.16	5.46	5.86	5.72	5.53	3.16	4.73	3.90	3.23	3.13	4.73	3.39	1.28	3.04	1.66	2.78	1.16	0.99	-0.60	-0.63	0.18		
Light icing	0.04	0.08	0.00	0.09	0.02	0.01	0.03	0.77	0.29	0.42	0.78	0.79	0.22	1.22	3.88	3.10	6.07	3.48	4.08	3.67	4.79	4.03	7.58		
Moderate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.09	0.04	0.23	0.03	0.23	0.11	0.76	0.42	0.94		
Heavy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.26	0.09	0.04	0.00		
Extreme	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.01	0.00	0.00		
Sea ice	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.65	0.43	1.08	0.00	0.00	20.70	1.05	0.85	0.00	17.34	18.96	52.81	57.71	23.65		
October-December:																									
SST	3.68	2.66	4.34	3.50	3.90	3.91	3.33	0.81	3.38	2.02	0.64	0.45	2.94	1.98	-0.91	1.30	0.88	1.77	-1.04	-1.10	-1.57	-1.59	-0.20		
T2	-0.08	-0.63	0.68	-0.44	0.31	0.42	-0.14	-3.99	-1.28	-2.83	-4.06	-4.18	-1.58	-2.49	-9.36	-5.01	-5.57	-4.12	-9.42	-9.41	-12.62	-13.34	-9.40		
Light icing	20.60	24.53	21.22	22.46	21.00	22.68	20.21	19.19	32.60	24.10	22.54	20.31	31.36	34.54	12.03	33.19	30.42	36.58	11.35	10.97	5.15	3.73	17.68		
Moderate	5.63	5.29	2.09	6.00	3.75	2.35	5.51	7.07	7.40	7.94	8.73	8.08	8.88	10.70	4.03	18.48	17.13	16.36	5.15	4.23	2.99	1.98	12.83		
Heavy	0.63	1.04	0.13	0.73	0.42	0.19	0.96	2.83	1.07	2.54	4.44	4.37	1.64	3.57	1.05	7.91	7.37	6.01	1.69	1.53	1.47	0.80	7.36		
Extreme	0.08	0.30	0.01	0.15	0.06	0.02	0.11	2.27	0.14	1.11	7.47	5.37	0.27	1.44	0.52	3.02	6.23	3.32	0.87	0.88	1.11	0.47	8.96		
Sea ice	0.65	2.35	0.00	1.06	0.21	0.00	0.85	23.28	0.00	13.16	10.82	17.03	0.00	1.08	66.63	3.55	10.03	0.65	63.80	65.37	84.04	88.27	40.47		

Table 1. Quarterly averages of modelled sea surface temperature (SST), 2 m air temperature (T2), in deg C, and vessel icing (% of time) for selected locations (see Figure 1).

25 NORA10 hindcast locations used for NAW SARH SST, T2 and icing index

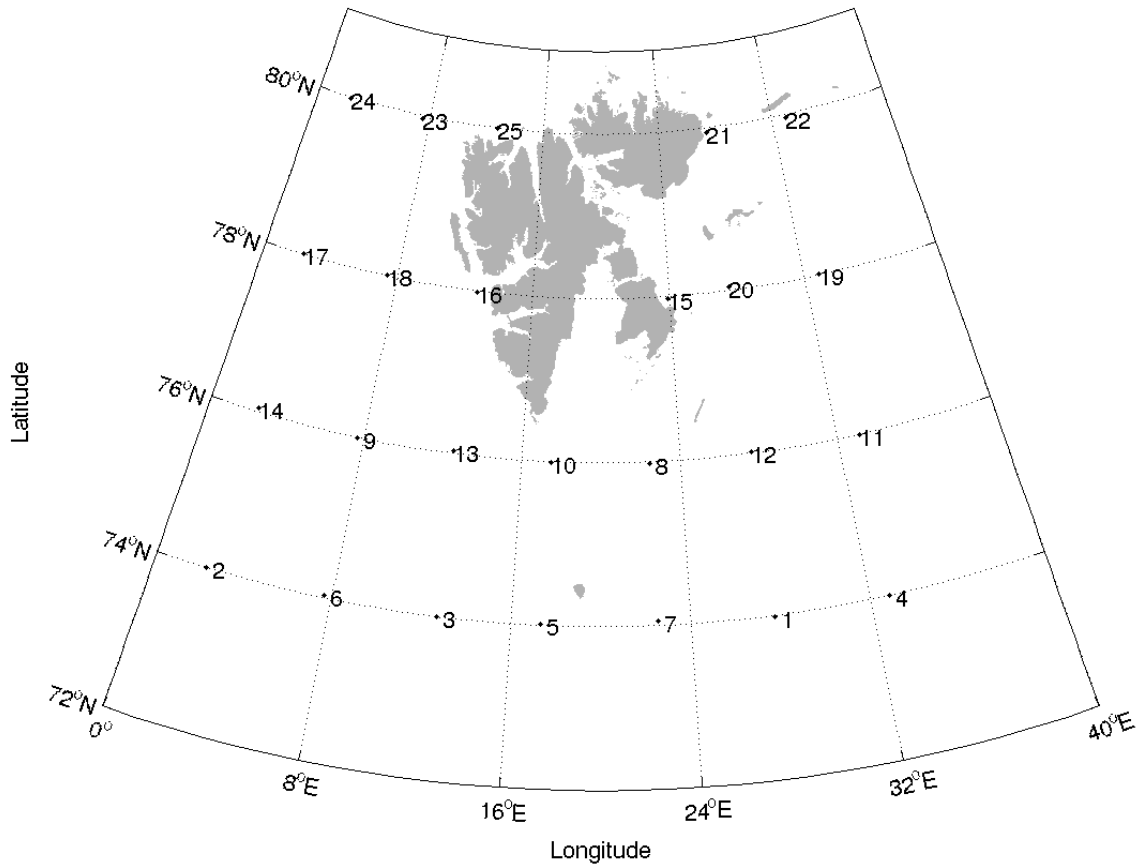


Figure 1. Selected locations taken from the NORA10 hindcast archive (numbering according to Table 1).

## Observed temperature

The observed temperature from five stations at or near the Svalbard archipelago have been collected. We find a weak positive trend in observed temperature. At Hopen we find a trend of 0.14 deg/yr (see Figure 2).

	Bjørnøya	Hopen	Isfjord	Longyear	Ny-Ålesund:
January-March:	-6.91	-12.65	-11.79	-13.68	-12.76
April-June:	-1.17	-4.74	-3.60	-3.62	-3.62
July-September:	4.26	2.15	3.65	4.18	3.26
October-December:	-3.06	-7.09	-6.90	-8.39	-8.12

Table 2. Quarterly averages of observed 2 m air temperature (T2) in deg C for selected stations.

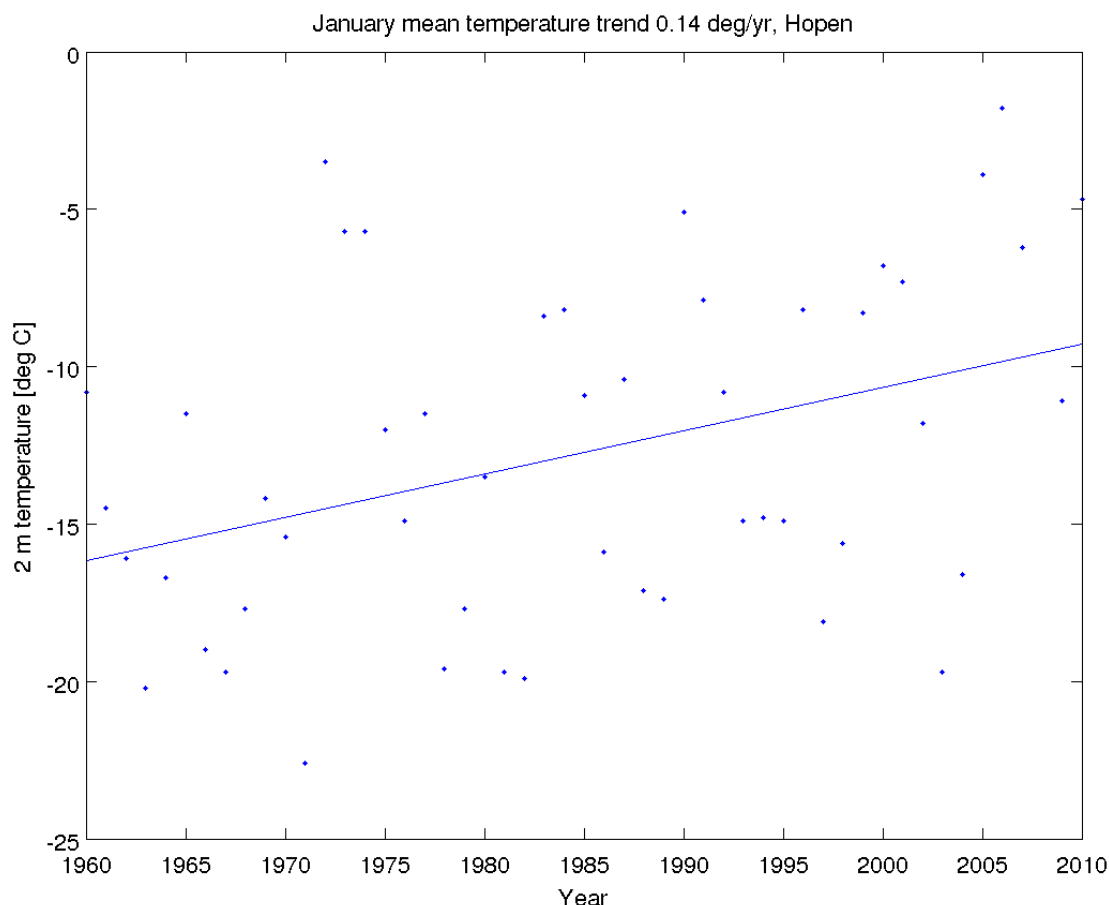


Figure 2. January mean temperature at observing station Hopen. The trend is 0.14 deg/yr.

## Air craft icing

Clouds containing liquid water give a risk of icing if the temperature is 0 °C or less. The most severe icing can be expected to occur at temperatures below, but close to 0 °C since the amount of droplets and the size of the droplets in clouds are greatest at temperatures just below 0°C. Generally, cumuliform cloud structures will contain relatively large droplets which can lead to rapid

ice accretion. Stratiform cloud structures usually contain smaller droplets. But the horizontal extent of stratiform clouds is larger and the accumulation of ice can be considerable during a relative short flying time also in stratiform clouds.

Drizzle or rain in temperatures at or below the freezing point can also generate icing on aircrafts. Freezing rain occurs when the rain droplets are going through a layer of air with temperature below zero. Normally temperatures increase with decreasing altitude. Freezing rain therefore indicates that there is a temperature inversion. Such conditions can occur below an advancing warm front or a warm occlusion where a relatively warm air mass is overrunning colder air.

In this study we have used data for the years 1980-2009 from the NORA10 archive.

Snow usually does not lead to icing since the water is already frozen. However if the snow is mixed with liquid water it can contribute to ice accumulation.

In this study we have computed icing from cloud water content only. Icing from freezing precipitation is not covered by this method.

The icing index is computed with a slightly modified version of the algorithm proposed by Olofsson et al. (2003). Their algorithm was developed for data from the HIRLAM model and has been run operationally at SMHI (Swedish Meteorological and Hydrological Institute). The Swedish icing index has been subjectively evaluated by aviation forecasters using all available information and the general judgement was that the index gave a relatively good picture of the icing conditions.

The data we use in our study also come from the HIRLAM model.

First we compute an index  $A$ :

$$\begin{aligned} \text{For } T > 0: & \quad A = 0 \\ \text{For } -15 < T < 0: & \quad A = 8(5 + \ln c_w)/5 \\ \text{For } -40 < T < -15: & \quad A = 8(5 + \ln c_{wr})/5, \quad \text{where } c_{wr} = c_w(40+T)/25 \\ \text{For } T < -40: & \quad A = 0 \end{aligned}$$

Here  $T$  is the temperature ( $^{\circ}\text{C}$ ) and  $c_w$  is the amount of cloud water (g/kg) from the HIRLAM model, and  $\ln$  is the natural logarithm. The cloud water content is reduced to  $c_{wr}$  when temperatures are lower than  $-15^{\circ}\text{C}$  because it is assumed that at low temperatures some cloud water will turn into a frozen state and thus lower the risk of icing.

Index  $A$  has values from 0 to 8. Index  $A$  is modified to a new index  $B$  using the vertical velocity  $w$  (cm/s) from the model:

$$\begin{aligned} \text{If } w < 0: & \quad B = \max(0, A - 1) \\ \text{If } w = 0: & \quad B = A \\ \text{If } w > 0: & \quad B = A + \min(2, w/0.1) \end{aligned}$$

The reason for using index  $B$  instead of index  $A$  is that it is assumed that updrafts favour the production of large cloud droplets, and we know that larger cloud droplets increases the intensity of icing.

In this way we get an index from 0 to 10 and we decide the icing severity from index  $B$ :

$$B = 0: \quad \text{No icing}$$

$B = 1-3$ : Light icing  
 $B = 4-6$ : Moderate icing  
 $B = 7-10$ : Severe icing

Our index  $B$  differs slightly from index  $B$  in Olofsson et.al. (2003). The vertical velocity has less impact on the index in our algorithm. We have chosen to put less weight on the vertical velocity from the model because we assume that in the far north there are more small scale weather systems that are not so well captured by the model, and the vertical velocities given by the model may differ more from the actual vertical velocities.

The icing index is computed along each route at model levels 26 to 40. The average height of level 40 is about 30 m and the average height of level 26 is approximately 2400m. For every time step for each route and each level an icing index is given as the maximum icing index found in grid points along the actual route at the actual level at the actual time step. The monthly mean of the maximum icing index at each level along the 12 different routes are found in Tables 3-14.

The monthly frequencies of occurrences of each of the icing classes per route and level are computed and shown in the tables in Appendix B.

For each route and time step we have also found the maximum icing index along the route when considering grid points at all model levels from level 40 to level 26. Monthly frequencies of the different icing classes are computed and results are found in appendix A.

**Table 3. Monthly average of six-hourly maximum icing index on route Svalbard Airport (LYR)-Bjørnøya at model levels 40 - 26**

Level	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Av.height (m)	30	95	173	263	366	483	616	766	934	1121	1329	1558	1810	2086	2385
January	1.2	1.2	1.4	1.8	2.5	3.2	4.0	4.5	4.7	4.6	4.2	3.8	3.4	3.0	2.6
February	1.3	1.3	1.5	1.9	2.5	3.2	3.8	4.4	4.6	4.5	4.1	3.7	3.2	2.8	2.5
March	1.1	1.2	1.4	1.8	2.4	3.1	3.8	4.3	4.5	4.4	4.0	3.6	3.2	2.9	2.5
April	0.8	0.9	1.1	1.5	2.0	2.7	3.5	4.2	4.4	4.2	3.7	3.2	2.8	2.5	2.1
May	0.5	0.6	0.8	1.1	1.6	2.3	3.1	3.8	4.1	3.9	3.4	2.9	2.4	1.9	1.7
June	0.5	0.5	0.7	1.2	1.8	2.5	3.1	3.4	3.3	2.9	2.5	2.2	1.9	1.7	1.6
July	0.3	0.2	0.4	0.6	1.2	2.0	2.5	2.5	2.1	1.7	1.5	1.5	1.5	1.5	1.5
August	0.2	0.2	0.3	0.5	1.0	1.9	2.7	3.0	3.0	2.7	2.3	2.0	1.8	1.7	1.6
September	0.2	0.2	0.4	0.7	1.4	2.3	3.2	3.9	4.1	4.0	3.8	3.4	3.0	2.7	2.3
October	0.4	0.5	0.7	1.0	1.6	2.4	3.4	4.3	4.8	5.0	4.6	4.1	3.6	3.0	2.6
November	0.7	0.8	1.0	1.4	2.0	2.8	3.7	4.5	5.0	5.0	4.6	4.2	3.7	3.3	2.8
December	1.1	1.2	1.3	1.7	2.3	3.1	3.9	4.6	4.9	4.8	4.4	3.9	3.4	2.9	2.5

**Table 4. Monthly average of six-hourly maximum icing index on route Svalbard Airport (LYR) to Ny-Ålesund at model levels 40 - 26**

Level	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Av.height (m)	30	95	172	261	363	479	611	760	927	1113	1320	1548	1798	2072	2370
January	0.5	0.6	0.7	0.9	1.2	1.7	2.1	2.3	2.4	2.3	2.0	1.8	1.7	1.5	1.4
February	0.5	0.6	0.7	0.9	1.1	1.5	1.9	2.2	2.3	2.1	1.9	1.7	1.5	1.4	1.2
March	0.4	0.4	0.5	0.7	1.0	1.5	1.9	2.2	2.3	2.2	2.0	1.8	1.6	1.4	1.2
April	0.3	0.4	0.5	0.6	0.8	1.2	1.8	2.3	2.3	2.1	1.8	1.6	1.4	1.2	1.1
May	0.1	0.2	0.3	0.4	0.6	1.0	1.6	2.3	2.4	2.2	1.9	1.6	1.3	1.1	0.9
June	0.3	0.4	0.4	0.6	1.0	1.4	1.8	2.0	2.0	1.8	1.6	1.4	1.2	1.1	0.9
July	0.2	0.2	0.3	0.6	1.0	1.5	1.7	1.7	1.4	1.2	1.1	1.0	0.9	0.9	0.8
August	0.2	0.3	0.3	0.5	0.8	1.3	1.7	1.9	1.9	1.7	1.4	1.2	1.1	1.0	0.9
September	0.2	0.2	0.3	0.5	0.8	1.2	1.8	2.2	2.3	2.2	2.1	1.8	1.7	1.5	1.3
October	0.3	0.3	0.4	0.5	0.8	1.2	1.8	2.4	2.6	2.6	2.3	2.0	1.7	1.5	1.4
November	0.3	0.4	0.4	0.6	0.9	1.4	2.0	2.5	2.6	2.6	2.3	2.0	1.8	1.6	1.4
December	0.5	0.6	0.7	0.9	1.2	1.6	2.1	2.5	2.5	2.3	2.0	1.8	1.6	1.4	1.3

**Table 5. Monthly average of six-hourly maximum icing index on route Svalbard Airport (LYR)-Hopen at model levels 40 - 26**

Level	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Av.height (m)	30	94	171	261	363	479	611	760	927	1113	1320	1549	1800	2074	2373
January	1.4	1.5	1.7	2.1	2.7	3.3	3.6	3.6	3.5	3.4	3.1	2.9	2.6	2.3	2.1
February	1.5	1.5	1.8	2.2	2.7	3.1	3.3	3.3	3.3	3.1	3.0	2.7	2.5	2.2	1.9
March	1.1	1.2	1.5	1.9	2.5	3.0	3.3	3.4	3.3	3.1	2.9	2.7	2.4	2.2	1.9
April	0.7	0.8	1.0	1.3	1.8	2.4	3.0	3.3	3.2	2.9	2.6	2.4	2.2	2.0	1.8
May	0.6	0.6	0.7	1.0	1.4	2.1	3.0	3.4	3.6	3.3	2.9	2.4	2.1	1.8	1.5
June	1.2	0.9	0.9	1.2	1.8	2.5	3.0	3.2	3.0	2.7	2.3	2.1	1.9	1.7	1.5
July	1.2	0.8	0.8	1.0	1.5	2.0	2.2	2.1	1.9	1.6	1.4	1.3	1.3	1.2	1.3
August	0.6	0.5	0.5	0.8	1.5	2.3	2.7	2.8	2.8	2.4	2.1	1.8	1.7	1.6	1.5
September	0.4	0.4	0.6	1.0	1.7	2.6	3.3	3.7	3.8	3.6	3.3	2.9	2.6	2.3	2.0
October	0.6	0.7	0.9	1.3	2.1	2.9	3.7	4.3	4.6	4.5	4.0	3.5	3.0	2.6	2.2
November	1.1	1.2	1.4	1.9	2.6	3.3	3.9	4.1	4.1	3.9	3.6	3.3	2.9	2.5	2.2
December	1.4	1.4	1.6	2.0	2.7	3.3	3.7	3.8	3.6	3.3	3.0	2.7	2.4	2.2	1.9



**Table 6. Monthly average of six-hourly maximum icing index on route Svalbard Airport (LYR)-Sørkapp at model levels 40 - 26**

Level	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Av.height (m)	30	95	172	262	364	481	613	763	930	1117	1324	1553	1804	2079	2378
January	0.9	1.0	1.2	1.5	2.1	2.7	3.3	3.6	3.7	3.5	3.1	2.8	2.5	2.2	1.9
February	1.0	1.1	1.2	1.6	2.1	2.6	3.1	3.4	3.4	3.3	3.0	2.7	2.3	2.0	1.8
March	0.8	0.8	1.0	1.4	1.9	2.5	3.1	3.4	3.4	3.3	2.9	2.6	2.4	2.0	1.8
April	0.5	0.5	0.7	0.9	1.4	2.0	2.8	3.4	3.4	3.1	2.7	2.3	2.1	1.8	1.6
May	0.3	0.3	0.5	0.7	1.0	1.6	2.5	3.2	3.5	3.3	2.8	2.3	1.9	1.5	1.3
June	0.5	0.5	0.5	0.8	1.3	1.9	2.5	2.8	2.8	2.5	2.2	1.9	1.6	1.4	1.3
July	0.3	0.3	0.4	0.6	1.0	1.7	2.1	2.1	1.8	1.5	1.3	1.2	1.2	1.1	1.1
August	0.2	0.2	0.3	0.5	0.9	1.6	2.3	2.6	2.6	2.3	1.9	1.7	1.5	1.3	1.2
September	0.2	0.2	0.3	0.5	1.0	1.8	2.7	3.3	3.5	3.3	3.0	2.7	2.4	2.1	1.8
October	0.3	0.4	0.5	0.8	1.3	2.0	3.0	3.8	4.2	4.1	3.6	3.1	2.7	2.2	1.9
November	0.6	0.6	0.8	1.1	1.7	2.5	3.3	4.0	4.2	4.1	3.6	3.2	2.8	2.4	2.0
December	0.9	1.0	1.1	1.4	2.0	2.7	3.4	3.9	3.9	3.7	3.2	2.8	2.4	2.1	1.8

**Table 7. Monthly average of six-hourly maximum icing index on route Sørkapp-Barentsøya at model levels 40 - 26**

Level	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Av.height (m)	30	94	171	261	362	479	611	760	927	1113	1320	1549	1800	2075	2374
January	1.0	1.1	1.3	1.6	2.1	2.6	2.9	3.1	3.1	3.0	2.9	2.7	2.4	2.1	1.9
February	1.2	1.2	1.4	1.7	2.1	2.5	2.7	2.9	3.0	2.9	2.7	2.6	2.3	2.0	1.8
March	0.8	0.9	1.1	1.4	1.9	2.3	2.7	2.8	2.9	2.8	2.6	2.4	2.2	1.9	1.7
April	0.4	0.5	0.6	0.9	1.2	1.7	2.2	2.6	2.7	2.6	2.3	2.2	2.0	1.7	1.6
May	0.3	0.4	0.5	0.6	0.9	1.3	1.9	2.5	2.9	2.9	2.6	2.2	1.9	1.6	1.4
June	0.8	0.6	0.6	0.7	1.0	1.5	1.9	2.2	2.4	2.2	2.0	1.8	1.7	1.5	1.3
July	0.9	0.5	0.4	0.5	0.8	1.1	1.4	1.5	1.4	1.3	1.2	1.1	1.1	1.1	1.1
August	0.5	0.4	0.4	0.5	0.8	1.4	2.0	2.3	2.2	2.0	1.7	1.5	1.4	1.3	1.2
September	0.3	0.3	0.3	0.5	1.0	1.8	2.6	3.2	3.3	3.1	2.9	2.6	2.3	2.0	1.7
October	0.4	0.5	0.6	0.9	1.4	2.2	3.1	3.9	4.2	4.0	3.6	3.1	2.7	2.3	1.9
November	0.9	0.9	1.1	1.4	2.0	2.7	3.4	3.8	3.9	3.7	3.3	3.0	2.6	2.3	1.9
December	1.1	1.1	1.3	1.7	2.2	2.8	3.2	3.4	3.4	3.1	2.8	2.5	2.3	2.0	1.7

**Table 8. Monthly average of six-hourly maximum icing index on route Svalbard Airport-Widjefjorden at model levels 40 - 26**

Level	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Av.height (m)	30	95	171	261	362	478	610	758	924	1109	1314	1540	1789	2061	2357
January	1.1	1.2	1.4	1.8	2.3	2.7	3.0	3.0	2.9	2.7	2.4	2.2	2.0	1.7	1.6
February	1.1	1.1	1.4	1.7	2.2	2.6	2.8	2.8	2.7	2.5	2.2	2.0	1.7	1.6	1.4
March	1.0	1.1	1.3	1.7	2.1	2.5	2.8	2.8	2.7	2.5	2.3	2.1	1.9	1.6	1.4
April	0.6	0.7	0.9	1.3	1.8	2.3	2.7	2.9	2.8	2.5	2.1	1.9	1.6	1.4	1.3
May	0.4	0.4	0.6	0.9	1.5	2.2	2.9	3.2	3.2	2.9	2.5	2.2	1.8	1.5	1.2
June	0.3	0.4	0.7	1.1	1.8	2.4	2.9	3.1	3.1	2.8	2.4	2.1	1.8	1.5	1.3
July	0.1	0.2	0.4	0.7	1.1	1.6	1.9	2.0	2.0	1.8	1.6	1.5	1.3	1.2	1.1
August	0.2	0.4	0.6	0.9	1.3	1.8	2.1	2.4	2.4	2.1	1.9	1.6	1.4	1.2	1.2
September	0.6	0.7	1.0	1.5	2.1	2.6	3.0	3.2	3.1	2.9	2.6	2.3	2.1	1.8	1.6
October	0.8	0.9	1.1	1.6	2.1	2.7	3.2	3.5	3.5	3.3	2.9	2.5	2.2	1.9	1.7
November	0.9	1.0	1.2	1.6	2.2	2.8	3.2	3.4	3.4	3.1	2.7	2.4	2.1	1.8	1.6
December	1.2	1.3	1.5	1.9	2.5	3.0	3.3	3.3	3.0	2.7	2.3	2.1	1.8	1.6	1.4

**Table 9. Monthly average of six-hourly maximum icing index on route NyÅlesund-Verlegenuhuken at model levels 40 - 26**

Level	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Av.height (m)	30	94	171	260	361	477	608	756	923	1108	1314	1542	1792	2065	2363
January	1.5	1.5	1.7	1.9	2.4	2.8	3.2	3.4	3.3	2.9	2.5	2.2	2.0	1.8	1.7
February	1.4	1.4	1.5	1.8	2.2	2.6	3.0	3.1	3.1	2.7	2.3	2.0	1.8	1.6	1.4
March	1.4	1.4	1.6	1.8	2.3	2.7	3.1	3.1	2.9	2.6	2.2	2.0	1.9	1.7	1.5
April	0.8	0.9	1.0	1.2	1.6	2.1	2.7	3.0	2.9	2.5	2.1	1.9	1.7	1.5	1.3
May	0.2	0.3	0.4	0.6	1.0	1.5	2.2	2.8	2.9	2.7	2.3	2.0	1.7	1.4	1.2
June	0.9	0.8	0.9	1.2	1.6	2.0	2.4	2.6	2.6	2.3	2.1	1.8	1.6	1.4	1.3
July	1.5	1.0	1.0	1.3	1.8	2.1	2.3	2.2	2.0	1.8	1.7	1.6	1.4	1.3	1.2
August	1.1	1.0	1.0	1.4	1.8	2.3	2.5	2.6	2.5	2.3	2.0	1.8	1.6	1.4	1.3
September	0.7	0.8	0.9	1.4	2.0	2.7	3.3	3.5	3.4	3.1	2.8	2.5	2.3	2.0	1.8
October	0.9	1.0	1.2	1.5	2.0	2.7	3.3	3.7	3.7	3.5	3.0	2.7	2.4	2.1	1.8
November	1.1	1.2	1.4	1.6	2.1	2.7	3.3	3.7	3.6	3.2	2.8	2.5	2.1	1.9	1.7
December	1.5	1.6	1.7	2.0	2.4	3.0	3.4	3.6	3.5	3.0	2.5	2.1	1.9	1.7	1.5

**Table 10. Monthly average of six-hourly maximum icing index on route Barentsøya-Verlegenuhuken at model levels 40 - 26**

Level	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Av.height (m)	29	94	170	258	359	475	606	754	920	1105	1311	1538	1787	2061	2358
January	1.7	1.8	2.1	2.3	2.6	2.8	2.9	2.8	2.6	2.4	2.2	2.0	1.8	1.7	1.5
February	1.7	1.8	2.0	2.2	2.4	2.6	2.6	2.5	2.4	2.2	2.0	1.8	1.6	1.5	1.4
March	1.3	1.4	1.7	2.0	2.3	2.5	2.5	2.4	2.2	2.1	2.0	1.9	1.7	1.6	1.5
April	0.7	0.9	1.1	1.4	1.7	2.0	2.3	2.3	2.2	2.0	1.8	1.7	1.5	1.4	1.3
May	0.4	0.5	0.7	0.9	1.3	1.7	2.2	2.5	2.6	2.4	2.2	2.0	1.8	1.5	1.3
June	1.1	1.3	1.6	1.8	2.1	2.3	2.5	2.5	2.4	2.3	2.1	1.9	1.7	1.6	1.4
July	1.9	1.7	1.7	1.7	1.7	1.7	1.6	1.5	1.4	1.4	1.4	1.3	1.2	1.2	1.2
August	1.9	1.8	1.9	2.0	2.1	2.1	2.1	2.0	1.9	1.8	1.7	1.5	1.4	1.4	1.3
September	1.1	1.3	1.5	1.9	2.4	2.9	3.2	3.2	3.1	2.8	2.6	2.4	2.2	2.0	1.8
October	1.1	1.3	1.6	2.0	2.5	3.0	3.5	3.7	3.6	3.3	3.0	2.7	2.4	2.2	1.9
November	1.5	1.6	1.9	2.3	2.6	3.0	3.1	3.2	3.0	2.8	2.6	2.3	2.1	1.9	1.7
December	1.7	1.8	2.0	2.3	2.7	3.0	3.0	2.9	2.7	2.3	2.1	1.9	1.7	1.6	1.4

**Table 11. Monthly average of six-hourly maximum icing index on route Hopen-75N,32E at model levels 40 - 26**

Level	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Av.height (m)	30	95	173	263	365	482	615	765	933	1120	1328	1557	1809	2085	2385
January	1.2	1.2	1.4	1.6	2.1	2.7	3.3	3.7	3.9	3.7	3.3	2.9	2.6	2.3	2.0
February	1.2	1.2	1.4	1.7	2.1	2.6	3.2	3.5	3.7	3.7	3.3	3.0	2.7	2.3	2.0
March	1.1	1.2	1.3	1.6	2.1	2.7	3.3	3.6	3.7	3.4	3.0	2.6	2.3	2.0	1.8
April	0.8	0.9	1.1	1.3	1.7	2.3	2.9	3.4	3.4	3.0	2.5	2.2	2.0	1.8	1.6
May	0.6	0.6	0.7	0.9	1.3	1.9	2.5	2.9	3.0	2.6	2.1	1.7	1.5	1.3	1.2
June	1.1	0.8	0.9	1.2	1.5	1.9	2.2	2.3	2.2	2.0	1.7	1.4	1.3	1.3	1.3
July	0.8	0.6	0.7	0.9	1.3	1.6	1.6	1.4	1.2	1.1	0.9	0.8	0.8	0.9	1.1
August	0.3	0.3	0.4	0.6	1.1	1.8	2.3	2.3	2.2	1.9	1.6	1.4	1.3	1.3	1.3
September	0.2	0.2	0.3	0.7	1.2	1.9	2.7	3.2	3.4	3.3	3.0	2.7	2.4	2.1	1.8
October	0.4	0.4	0.6	0.9	1.4	2.0	2.8	3.6	4.2	4.3	3.9	3.5	3.0	2.5	2.0
November	0.8	0.9	1.0	1.3	1.8	2.5	3.1	3.8	4.1	4.0	3.5	3.1	2.7	2.4	2.1
December	1.1	1.2	1.3	1.6	2.1	2.7	3.4	3.9	4.1	3.9	3.4	2.9	2.6	2.3	2.0

**Table 12. Monthly average of six-hourly maximum icing index on route around Edgeøya and Barentsøya at model levels 40 - 26**

Level	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Av.height (m)	30	94	171	260	361	477	609	757	924	1111	1317	1545	1796	2071	2370
January	1.4	1.5	1.6	1.9	2.3	2.6	2.8	2.9	2.9	2.8	2.7	2.5	2.2	2.0	1.8
February	1.5	1.6	1.8	2.0	2.3	2.4	2.6	2.6	2.6	2.6	2.5	2.3	2.1	1.9	1.7
March	1.1	1.2	1.4	1.8	2.1	2.4	2.6	2.6	2.6	2.5	2.4	2.2	2.0	1.8	1.6
April	0.5	0.6	0.8	1.0	1.4	1.7	2.1	2.3	2.4	2.3	2.1	1.9	1.8	1.6	1.5
May	0.5	0.5	0.6	0.7	1.0	1.5	2.1	2.8	3.1	2.9	2.5	2.1	1.8	1.5	1.3
June	1.3	1.0	0.9	1.1	1.4	1.9	2.5	2.8	2.8	2.5	2.3	1.9	1.7	1.5	1.4
July	1.6	1.1	1.0	1.1	1.3	1.5	1.6	1.6	1.5	1.3	1.2	1.1	1.1	1.1	1.1
August	0.9	0.8	0.8	1.1	1.5	2.0	2.4	2.5	2.3	2.0	1.7	1.5	1.4	1.4	1.3
September	0.5	0.6	0.7	1.1	1.6	2.4	3.1	3.5	3.5	3.3	3.0	2.7	2.4	2.1	1.8
October	0.7	0.8	1.0	1.4	1.9	2.7	3.5	4.1	4.3	4.1	3.6	3.1	2.7	2.3	2.0
November	1.3	1.4	1.6	1.9	2.4	2.9	3.2	3.4	3.4	3.3	3.0	2.7	2.5	2.2	1.9
December	1.4	1.4	1.6	2.0	2.4	2.8	3.0	3.0	2.9	2.7	2.4	2.3	2.1	1.9	1.6

**Table 13. Monthly average of six-hourly maximum icing index on route Bjørnøya-Andenes at model levels 40 - 26**

Level	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Av.height (m)	31	97	176	268	372	491	627	778	949	1139	1349	1581	1836	2114	2418
January	0.6	0.6	0.8	1.0	1.6	2.4	3.5	4.5	5.3	5.7	5.7	5.5	5.2	4.8	4.3
February	0.6	0.7	0.9	1.2	1.7	2.6	3.7	4.6	5.3	5.6	5.6	5.5	5.2	4.8	4.3
March	0.5	0.6	0.7	1.0	1.6	2.5	3.5	4.4	5.1	5.5	5.4	5.3	5.0	4.6	4.2
April	0.4	0.4	0.6	0.9	1.4	2.3	3.2	4.1	4.7	5.0	4.9	4.7	4.4	4.0	3.5
May	0.2	0.3	0.4	0.7	1.3	2.2	3.1	3.9	4.3	4.2	3.9	3.7	3.3	3.0	2.6
June	0.0	0.1	0.2	0.4	0.9	1.7	2.6	3.2	3.2	3.1	2.7	2.5	2.2	2.2	2.0
July	0.0	0.0	0.0	0.1	0.3	0.7	1.3	1.6	1.6	1.6	1.5	1.4	1.4	1.6	1.9
August	0.0	0.0	0.0	0.1	0.3	0.7	1.4	2.0	2.3	2.4	2.1	2.0	2.0	2.0	2.0
September	0.0	0.0	0.0	0.1	0.5	1.1	2.2	3.1	3.6	3.8	3.7	3.8	3.6	3.4	3.1
October	0.1	0.2	0.2	0.4	0.9	1.8	2.9	3.9	4.6	5.0	5.0	4.9	4.7	4.3	3.9
November	0.3	0.3	0.4	0.7	1.3	2.2	3.3	4.3	5.0	5.3	5.3	5.2	4.9	4.6	4.2
December	0.5	0.6	0.7	0.9	1.4	2.3	3.3	4.4	5.2	5.6	5.6	5.5	5.3	4.9	4.4

**Table 14. Monthly average of six-hourly maximum icing index on route Bjørnøya-Hammerfest at model levels 40 - 26**

Level	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
Av.height (m)	30	97	175	267	371	490	625	776	946	1136	1346	1577	1832	2109	2412
January	0.6	0.7	0.8	1.0	1.5	2.3	3.3	4.2	4.9	5.3	5.2	4.9	4.5	4.1	3.6
February	0.7	0.8	0.9	1.2	1.7	2.5	3.5	4.3	5.0	5.4	5.3	5.0	4.6	4.2	3.7
March	0.6	0.6	0.8	1.0	1.5	2.3	3.3	4.2	4.8	5.1	5.0	4.8	4.4	4.0	3.5
April	0.4	0.5	0.6	0.9	1.4	2.1	3.0	3.9	4.5	4.8	4.5	4.3	3.9	3.5	3.0
May	0.2	0.3	0.4	0.7	1.3	2.1	3.0	3.7	4.0	4.0	3.7	3.4	2.9	2.6	2.2
June	0.1	0.1	0.2	0.5	1.0	1.8	2.5	3.0	3.1	2.8	2.5	2.2	2.0	1.9	1.9
July	0.0	0.0	0.0	0.1	0.3	0.7	1.3	1.6	1.6	1.5	1.3	1.2	1.2	1.5	1.7
August	0.0	0.0	0.0	0.1	0.3	0.7	1.5	2.0	2.3	2.2	2.0	1.8	1.7	1.8	1.7
September	0.0	0.0	0.0	0.2	0.5	1.1	2.2	3.0	3.4	3.6	3.5	3.5	3.3	3.0	2.6
October	0.1	0.2	0.2	0.4	0.9	1.7	2.8	3.7	4.4	4.8	4.8	4.6	4.3	3.9	3.4
November	0.3	0.4	0.5	0.7	1.2	2.1	3.1	4.0	4.8	5.0	4.9	4.7	4.4	4.0	3.6
December	0.5	0.6	0.7	1.0	1.4	2.2	3.2	4.2	4.9	5.3	5.2	5.0	4.6	4.1	3.6

## Sea ice charts

The Norwegian Ice Service at the Norwegian Meteorological Institute has delivered ice charts since 1967 for the Norwegian part of the Arctic Ocean from the east coast of Greenland to Novaya Semlya. The charts are primarily based on various satellite measurements which are manually interpreted by the ice operator. Until 1997 the charts were based on visual satellite imagery in the visual part of the electromagnetic spectrum and published weekly. Since 1997 charts have been published Mondays through Fridays based on visual satellite imagery as well as passive microwave imagery. The latter see through clouds but have a relatively coarse resolution (25 km). Since 2007 high-resolution active microwave instruments (synthetic aperture radar) have also been used. These instruments have a resolution of approximately 100 m. Figure 3 is an example of a daily ice chart valid for 18 March 2011.

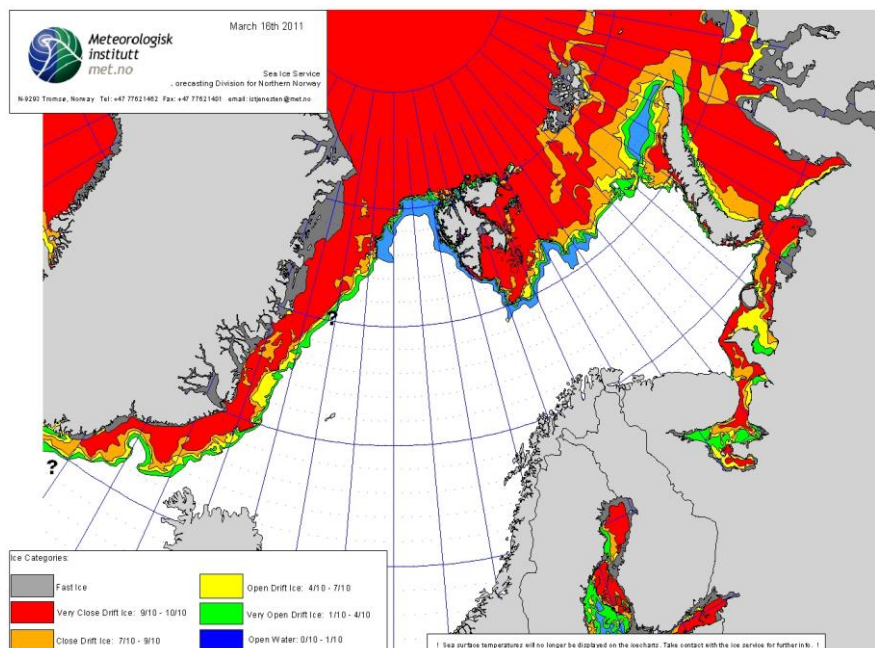


Figure 3. Daily ice chart valid for 18 March 2011. The chart is drawn by an ice operator based on satellite imagery from both active and passive infrared instruments as well as visual-range (optical) instruments.

The ice charts indicate the ice extent according to the following ice concentration classes defined by the Meteorological Organization (WMO):

- Fast Ice: 10/10
- Very Close Drift Ice: 9-10/10
- Close Drift Ice: 7-8/10
- Open Drift Ice: 4-6/10
- Very Open Drift Ice: 1-3/10
- Open Water: < 1/10

The charts do not indicate ice thickness. It is difficult to assess the ice thickness with the satellite instruments presently available. The ice around Svalbard is mainly first-year ice and will rarely exceed a thickness of 2 m.

## Ice extent and concentration

Maximum ice extent in the Arctic Ocean occurs normally in March while the minimum occurs in September. The smallest ice extent was recorded on 15 September 2007. The years since 2007 have all seen an ice extent well below the average over the period 1979-2000. The smallest winter-time maximum ice extent was recorded for the winter of 2006. All years since 2006 have seen a maximum ice extent well below the average for the period 1979-2000. More details about the global ice coverage can be found on the web pages of National Snow and Ice Data Center (<http://nsidc.org>).

We present the ice concentration around Svalbard with special focus on the minimum and maximum ice extent (September and March). The winter maximum ice extent (Figure 4a, area in km<sup>2</sup>) seems to follow the global trend while the summer minimum ice extent (Figure 4b) shows no significant trend. The red lines in Figure 4a and 4b indicate the average ice extent during 1980-1999. The blue lines indicate the average ice extent counting ice concentrations higher than 10% during the period 2000-2010.

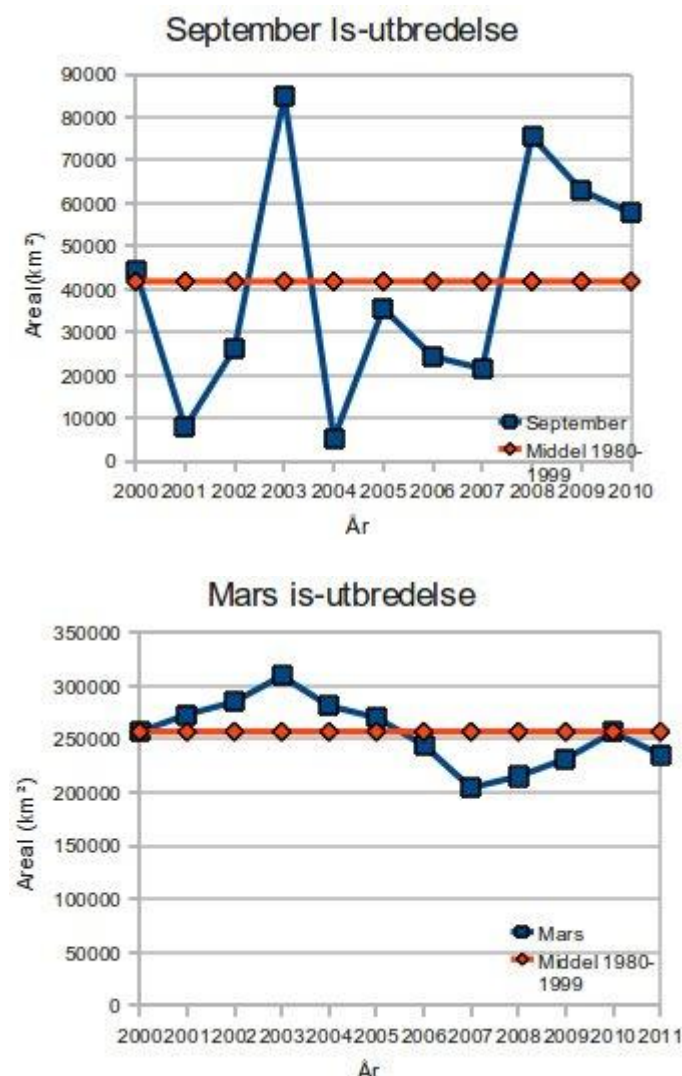


Figure 4. Blue lines: Average extent of waters with higher than 10% ice concentration around Svalbard during the period 2000-2010. Red lines: Average ice extent during the period 1980-1999. Panel a (upper) shows the September minimum while panel b (lower) shows the March maximum. (blue lines)

Figure 5 indicates the ice concentration (left column) and the probability of meeting sea ice concentrations higher than 70% (right column) for the month of September for the periods 1980-

1999, 2000-2010 and the year 2010. As is evident from the figure there is generally little or no ice around Svalbard during the summer season.

Figure 6 indicates the ice concentration (left column) and the probability of meeting sea ice concentrations higher than 70% (right column) for the month of March for the periods 1980-1999, 2000-2010 and the year 2010.

The eastern side of Svalbard is normally ice-infested except for the Hinlopen strait where ocean currents break up and advect the sea ice away from the archipelago. The ocean currents tend to transport ice around South Cape and up along the west coast of Svalbard up to Isfjord (Ice Fjord). The northern coast of Svalbard tends to have somewhat lower ice concentrations.

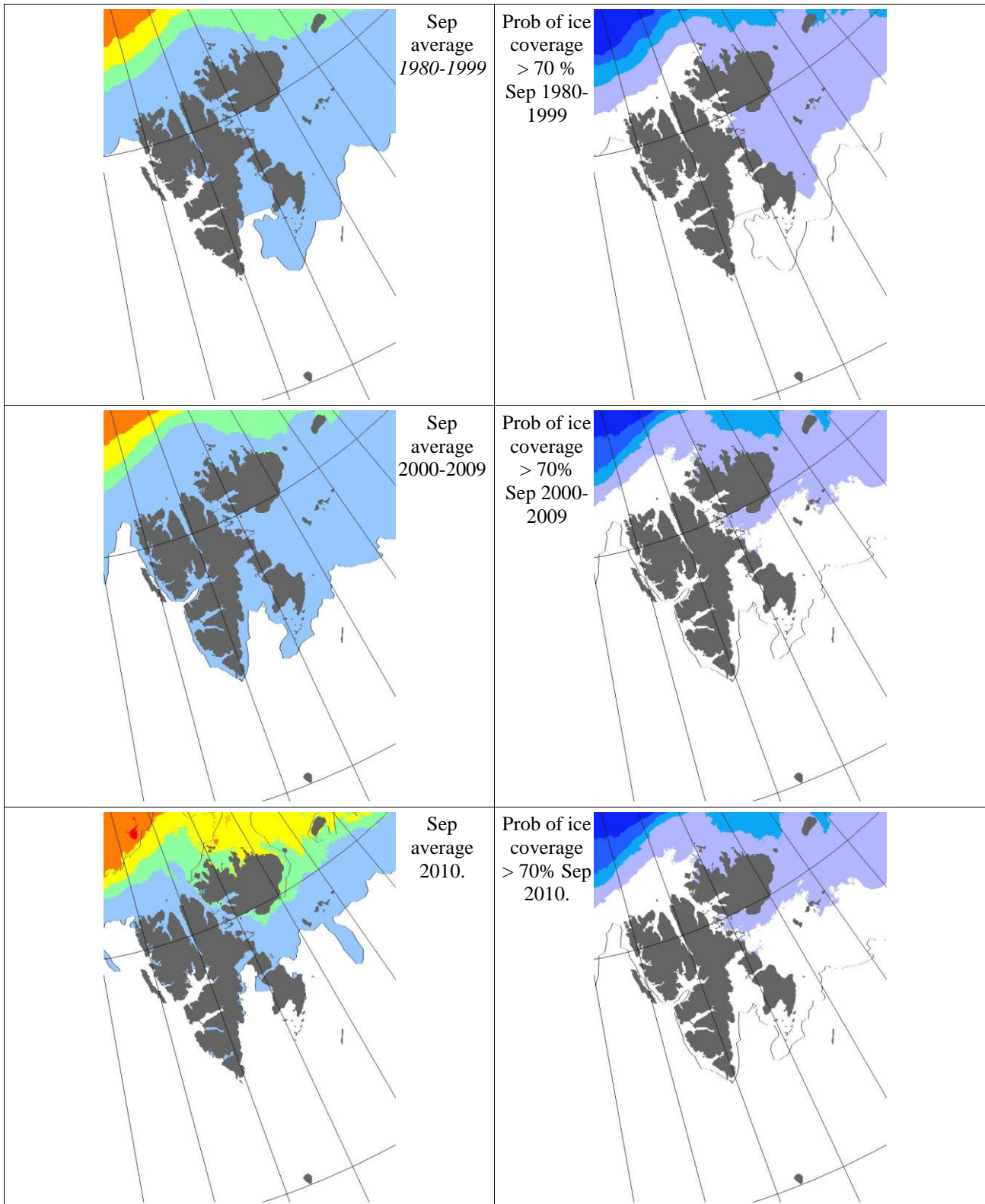


Figure 5. September minimum ice extent. Left column: average ice extent for September during the periods 1980-1999 and 2000-2009 and 2010. Colour scale: Pale blue indicates less than 10% ice concentration, green 10-30%, yellow 40-60%, orange 70-80% and red >90%. Right column: Probability of ice concentrations higher than 70% during the same periods. Colour scale from light blue to dark blue indicates <20%, 21-40%, 41-60%, 61-99% and lilac indicates 100% probability of seeing an ice concentration of more than 70%. The maps show clearly that there is little or no ice during the summer season around Svalbard.



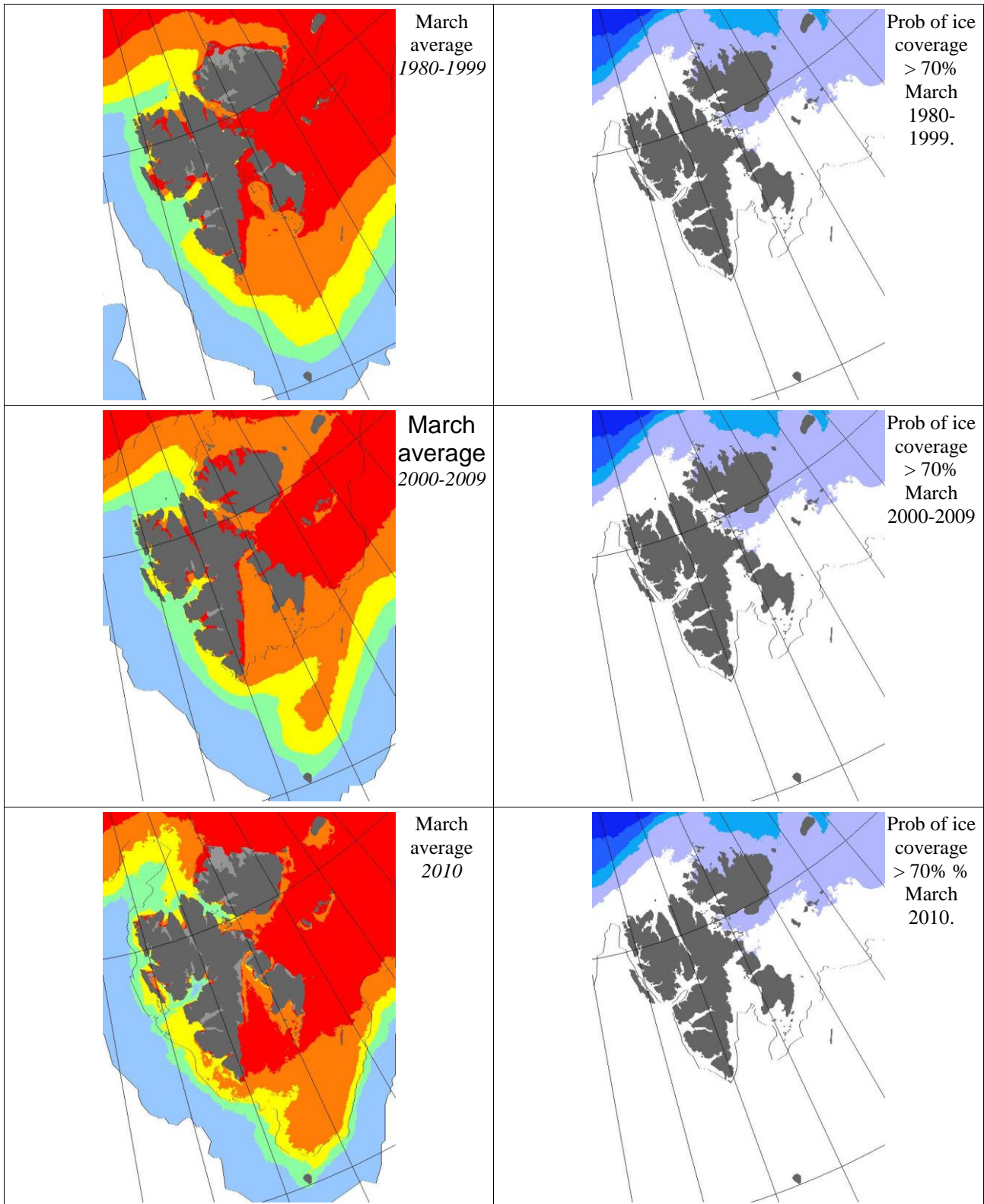


Figure 6. March maximum ice extent. Left column: average ice extent for March during the periods 1980-1999 and 2000-2009 and 2010. Colour scale: Pale blue indicates less than 10% ice concentration, green 10-30%, yellow 40-60%, orange 70-80% and red >90%. Right column: Probability of ice concentrations higher than 70% during the same periods. Colour scale from light blue to dark blue indicates <20%, 21-40%, 41-60%, 61-99% and lilac indicates 100% probability of seeing an ice concentration of more than 70%. The maps show clearly that there is little or no ice during the summer season around Svalbard.



## Ice bergs

The ice service does not currently operate an ice berg detection service and there are few published papers on the presence of ice bergs around Svalbard and in the southern Barents Sea. Abramov (1992, 1996) gathered information on icebergs from ice breakers, transport and fishing vessels, reconnaissance flights and research expeditions. More than 20,000 iceberg records were collected. In general, the probability of meeting ice bergs is low (Abramov, 1996). Figure 7 gives the annual probability of occurrence of ice bergs. For the eastern, northern and north-western coastal waters of the Svalbard archipelago, a probability of 5-10% is given. The western coast from Isfjord and southwards has a probability of 1%.

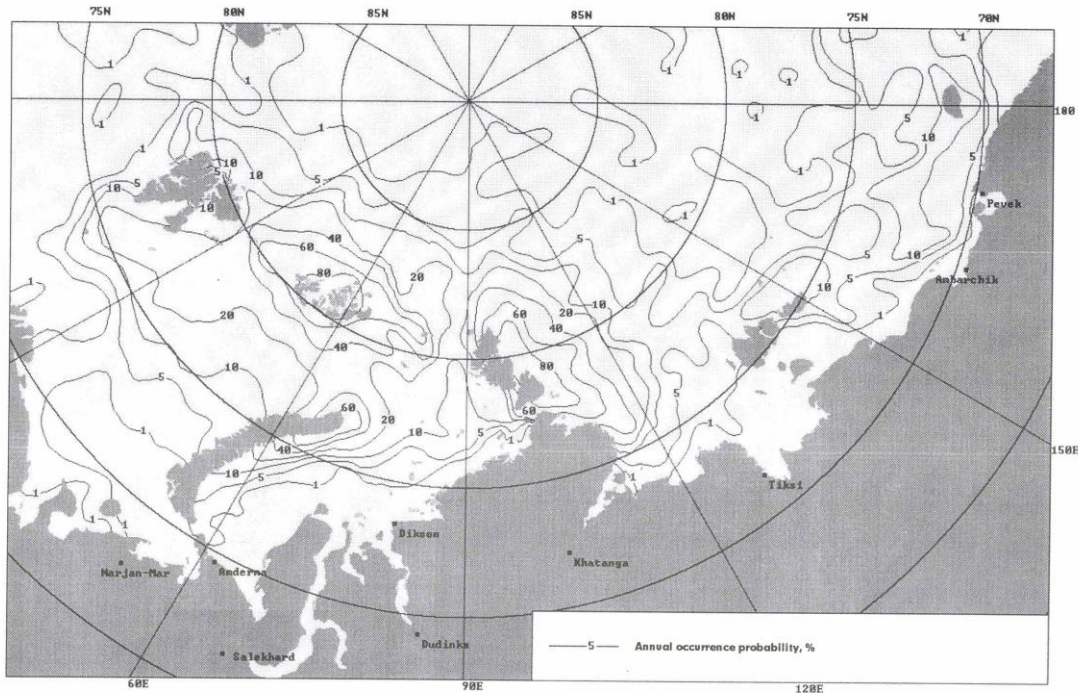


Figure 7. Annual probability of occurrence of icebergs. From Abramov (1996).

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## Appendix A

### Icing statistics on routes:

Icing statistics. Model levels 40 to 26

Svalbard Airport - Bjørnøya

Month:	No icing	Light	Moderate	Severe
January	0.27	7.02	73.76	18.95
February	0.30	7.53	78.28	13.90
March	0.51	8.09	78.06	13.33
April	0.86	9.58	78.39	11.17
May	1.34	7.31	83.28	8.06
June	2.89	9.64	78.14	9.33
July	12.12	8.63	66.10	13.15
August	8.60	5.27	68.71	17.42
September	1.78	3.75	74.92	19.56
October	0.13	2.28	78.23	19.35
November	0.22	3.64	76.44	19.69
December	0.24	4.49	77.58	17.69

Icing statistics. Model levels 40 to 26

Svalbard Airport - Ny Ålesund

Month:	No icing	Light	Moderate	Severe
January	11.64	37.37	42.04	8.95
February	15.05	36.01	41.59	7.35
March	16.56	34.81	40.78	7.85
April	18.22	30.72	45.42	5.64
May	14.06	31.02	51.67	3.25
June	15.33	29.25	49.33	6.08
July	25.40	16.77	47.53	10.30
August	20.30	18.09	51.24	10.38
September	14.94	20.64	53.97	10.44
October	13.82	25.59	52.66	7.93
November	12.25	30.11	47.92	9.72
December	10.67	36.18	44.27	8.87

Icing statistics. Model levels 40 to 26

Svalbard Airport - Hopen

Month:	No icing	Light	Moderate	Severe
January	0.99	26.56	60.08	12.37
February	1.00	28.63	60.57	9.80
March	3.20	28.55	58.23	10.03
April	7.06	26.89	57.44	8.61
May	4.22	16.80	73.25	5.73
June	3.17	15.06	72.61	9.17
July	9.46	10.67	65.94	13.92
August	6.91	6.83	70.48	15.78
September	1.72	6.44	77.53	14.31
October	0.51	6.34	77.61	15.54
November	0.69	12.36	72.31	14.64
December	0.54	23.31	63.79	12.37

## Icing statistics. Model levels 40 to 26

## Svalbard Airport - Sørkapp

Month:	No icing	Light	Moderate	Severe
January	1.21	24.17	60.75	13.87
February	1.53	24.91	61.95	11.60
March	2.66	26.69	60.67	9.97
April	5.72	23.50	61.72	9.06
May	4.54	17.69	72.04	5.73
June	6.42	19.44	66.72	7.42
July	16.67	12.74	58.47	12.12
August	11.64	10.24	64.09	14.03
September	2.72	10.56	72.08	14.64
October	1.26	11.42	72.80	14.52
November	1.19	13.89	69.75	15.17
December	0.86	19.73	65.67	13.74

## Icing statistics. Model levels 40 to 26

## Sørkapp - Bjørnøya

Month:	No icing	Light	Moderate	Severe
January	4.01	27.58	58.92	9.49
February	3.81	30.58	57.17	8.44
March	6.40	30.40	55.78	7.42
April	15.08	26.03	52.61	6.28
May	9.87	21.69	64.41	4.03
June	11.83	23.39	58.56	6.22
July	21.40	17.98	51.05	9.57
August	13.49	15.11	59.92	11.48
September	5.11	14.14	69.67	11.08
October	2.39	12.47	72.37	12.77
November	1.75	17.44	68.89	11.92
December	1.80	27.82	60.56	9.81

## Icing statistics. Model levels 40 to 26

## Svalbard Airport - Wijdefjorden

Month:	No icing	Light	Moderate	Severe
January	5.54	32.39	52.66	9.41
February	7.00	35.04	49.41	8.56
March	9.09	32.04	49.87	9.01
April	13.56	26.14	53.22	7.08
May	9.14	22.02	62.85	5.99
June	8.56	19.36	65.86	6.22
July	27.63	12.96	51.16	8.25
August	17.98	15.16	58.47	8.39
September	6.22	15.14	66.03	12.61
October	4.25	18.44	66.88	10.43
November	6.28	21.11	61.83	10.78
December	5.48	27.28	57.02	10.22

Icing statistics. Model levels 40 to 26

Ny Ålesund - Verlegenhuken

Month:	No icing	Light	Moderate	Severe
January	2.07	27.77	60.91	9.25
February	2.48	29.84	59.12	8.56
March	3.76	28.58	59.27	8.39
April	7.94	27.75	58.17	6.14
May	11.08	22.98	61.77	4.17
June	8.28	20.61	65.11	6.00
July	11.34	11.24	63.44	13.98
August	7.80	11.53	66.83	13.84
September	3.92	10.25	74.61	11.22
October	2.58	12.74	74.65	10.03
November	2.78	16.75	70.19	10.28
December	1.94	21.21	67.31	9.54

Icing statistics. Model levels 40 to 26

Barentsøya - Verlegenhuken

Month:	No icing	Light	Moderate	Severe
January	3.39	35.35	56.13	5.13
February	5.34	35.63	54.75	4.28
March	7.82	35.83	52.20	4.14
April	17.36	31.03	48.00	3.61
May	15.70	23.23	58.04	3.04
June	9.92	19.92	64.25	5.92
July	15.54	14.14	60.91	9.41
August	10.70	14.54	65.11	9.65
September	5.78	13.08	70.94	10.19
October	2.74	14.89	73.49	8.87
November	2.08	25.03	66.14	6.75
December	2.85	32.69	58.82	5.65

Icing statistics. Model levels 40 to 26

Hopen - 75N,32E

Month:	No icing	Light	Moderate	Severe
January	0.97	17.66	71.18	10.19
February	0.56	17.09	73.67	8.68
March	1.45	20.03	70.83	7.69
April	4.39	21.72	67.03	6.86
May	5.22	17.90	72.23	4.65
June	8.08	17.17	67.19	7.56
July	19.30	11.26	58.98	10.46
August	13.90	8.49	67.96	9.65
September	5.53	6.50	75.78	12.19
October	1.34	6.37	78.52	13.76
November	0.97	9.89	78.67	10.47
December	0.83	13.95	75.59	9.62

Icing statistics. Model levels 40 to 26

Edgeøya - Barentsøya

Month:	No icing	Light	Moderate	Severe
January	5.51	28.76	56.21	9.52
February	5.49	31.20	54.84	8.47
March	10.86	27.96	53.01	8.17
April	20.56	24.83	48.25	6.36
May	11.16	16.64	68.36	3.84
June	6.53	15.14	70.06	8.28
July	14.95	14.27	58.58	12.20
August	11.24	10.73	64.89	13.15
September	4.58	8.81	73.86	12.75
October	2.15	9.57	73.12	15.16
November	1.67	19.89	66.81	11.64
December	3.44	29.57	57.45	9.54

Icing statistics. Model levels 40 to 26

Bjørnøya - Andenes

Month:	No icing	Light	Moderate	Severe
January	0.27	1.42	59.57	38.74
February	0.35	1.68	59.83	38.13
March	0.40	2.12	64.95	32.53
April	1.44	3.58	69.72	25.25
May	2.66	5.51	73.39	18.44
June	8.19	9.11	66.69	16.00
July	25.59	10.05	49.33	15.03
August	17.61	9.22	53.79	19.38
September	6.11	5.36	59.33	29.19
October	1.64	2.37	60.65	35.35
November	0.69	2.06	63.06	34.19
December	0.35	1.21	58.25	40.19

Icing statistics. Model levels 40 to 26

Bjørnøya - Hammerfest

Month:	No icing	Light	Moderate	Severe
January	0.35	2.66	69.52	27.47
February	0.47	2.57	67.83	29.13
March	0.83	3.23	72.12	23.82
April	2.14	4.86	73.06	19.94
May	3.23	7.02	75.27	14.49
June	8.56	10.31	68.75	12.39
July	28.90	10.19	47.69	13.23
August	20.78	8.52	55.24	15.46
September	8.25	5.36	63.97	22.42
October	2.47	2.82	67.26	27.45
November	1.17	2.64	68.44	27.75
December	0.48	2.69	67.31	29.52

## Appendix B

### Icing statistics for each level on the twelve routes:

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 40. Average height 30m

Month:	No icing	Light	Moderate	Severe
January	47.20	49.97	2.74	0.08
February	45.40	49.91	4.69	0.00
March	49.89	47.20	2.90	0.00
April	59.64	38.28	1.75	0.33
May	79.89	16.85	2.58	0.67
June	85.56	9.06	4.44	0.94
July	94.03	1.59	2.53	1.85
August	96.05	1.51	1.67	0.78
September	90.44	8.58	0.58	0.39
October	75.46	24.03	0.35	0.16
November	63.33	36.33	0.28	0.06
December	47.42	51.59	0.99	0.00

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 39. Average height 95m

Month:	No icing	Light	Moderate	Severe
January	43.71	54.14	2.15	0.00
February	43.06	53.75	3.19	0.00
March	46.53	51.21	2.26	0.00
April	55.14	42.50	2.25	0.11
May	76.26	20.51	2.98	0.24
June	81.53	14.56	3.75	0.17
July	93.76	3.41	2.50	0.32
August	94.65	3.12	2.12	0.11
September	87.64	11.67	0.64	0.06
October	71.96	27.72	0.30	0.03
November	59.39	40.14	0.44	0.03
December	45.16	54.17	0.67	0.00

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 38. Average height 173m

Month:	No icing	Light	Moderate	Severe
January	37.45	59.27	3.28	0.00
February	36.89	57.79	5.31	0.00
March	39.97	55.62	4.41	0.00
April	49.14	46.33	4.47	0.06
May	69.19	25.94	4.70	0.16
June	74.36	20.25	5.36	0.03
July	89.73	6.59	3.63	0.05
August	90.70	7.23	2.02	0.05
September	80.83	18.36	0.75	0.06
October	65.75	33.55	0.65	0.05
November	52.97	45.81	1.19	0.03
December	38.92	59.52	1.56	0.00

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Icing statistics.

Svalbard Airport - Bjørnøya

Model level 37. Average height 263m

Month:	No icing	Light	Moderate	Severe
January	29.06	63.01	7.93	0.00
February	28.45	60.74	10.80	0.00
March	30.70	58.98	10.30	0.03
April	41.03	49.33	9.61	0.03
May	59.35	31.67	8.92	0.05
June	63.47	26.14	10.36	0.03
July	81.29	12.37	6.21	0.13
August	83.17	13.01	3.79	0.03
September	69.39	28.19	2.33	0.08
October	54.60	41.96	3.39	0.05
November	42.11	53.06	4.83	0.00
December	30.03	64.54	5.38	0.05

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 36. Average height 366m

Month:	No icing	Light	Moderate	Severe
January	19.27	61.40	19.17	0.16
February	19.75	59.12	20.90	0.24
March	21.29	57.77	20.62	0.32
April	30.72	52.47	16.67	0.14
May	46.40	38.41	14.95	0.24
June	49.31	31.25	19.42	0.03
July	66.75	19.25	13.95	0.05
August	69.46	20.67	9.81	0.05
September	54.94	33.83	11.06	0.17
October	41.02	46.59	12.26	0.13
November	29.44	56.22	14.33	0.00
December	21.10	62.28	16.37	0.24

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 35. Average height 483m

Month:	No icing	Light	Moderate	Severe
January	11.02	52.23	35.97	0.78
February	11.98	53.51	33.56	0.94
March	12.77	52.42	33.95	0.86
April	19.28	53.61	26.47	0.64
May	31.40	44.06	23.82	0.73
June	35.39	31.78	32.56	0.28
July	54.57	15.43	29.70	0.30
August	54.73	19.68	25.08	0.51
September	40.00	31.42	28.14	0.44
October	26.96	48.39	23.79	0.86
November	17.39	53.67	28.25	0.69
December	12.07	55.43	31.56	0.94



Icing statistics.

Svalbard Airport - Bjørnøya

Model level 34. Average height 616m

Month:	No icing	Light	Moderate	Severe
January	4.62	42.50	50.51	2.37
February	5.22	45.66	46.52	2.60
March	6.02	44.19	47.77	2.02
April	11.03	46.61	40.44	1.92
May	18.04	44.22	36.42	1.32
June	25.78	31.47	41.56	1.19
July	48.04	14.44	36.24	1.29
August	42.61	17.07	39.09	1.24
September	26.28	27.14	44.86	1.72
October	13.15	46.67	38.04	2.15
November	7.75	44.11	45.89	2.25
December	5.27	43.63	48.20	2.90

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 33. Average height 766m

Month:	No icing	Light	Moderate	Severe
January	2.93	30.46	61.83	4.78
February	3.34	33.68	58.94	4.04
March	4.49	31.26	60.81	3.44
April	6.67	32.81	57.67	2.86
May	11.56	34.95	51.88	1.61
June	22.89	28.61	46.64	1.86
July	49.87	11.45	35.86	2.82
August	39.06	13.63	43.74	3.58
September	18.94	22.03	55.06	3.97
October	5.46	33.04	57.07	4.44
November	3.25	29.61	62.72	4.42
December	2.20	28.31	64.49	5.00

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 32. Average height 934m

Month:	No icing	Light	Moderate	Severe
January	5.65	19.65	67.98	6.72
February	4.99	24.20	65.17	5.64
March	7.10	23.31	65.08	4.52
April	9.08	20.83	66.25	3.83
May	13.55	19.73	65.05	1.67
June	27.58	22.33	48.28	1.81
July	56.34	11.26	29.92	2.47
August	41.21	10.89	43.68	4.22
September	17.72	15.64	62.11	4.53
October	4.19	17.18	72.90	5.73
November	3.81	15.08	74.22	6.89
December	2.72	18.12	72.69	6.48

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 31. Average height 1121m

Month:	No icing	Light	Moderate	Severe
January	10.94	16.42	64.35	8.28
February	10.12	19.81	63.75	6.32
March	13.33	18.12	63.31	5.24
April	15.89	16.61	63.19	4.31
May	19.92	15.48	63.23	1.37
June	36.94	16.56	45.22	1.28
July	63.28	10.03	25.27	1.42
August	46.67	10.32	39.09	3.92
September	20.50	14.92	60.06	4.53
October	6.10	11.69	75.08	7.12
November	5.81	12.50	73.39	8.31
December	7.28	15.40	69.33	7.98

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 30. Average height 1329m

Month:	No icing	Light	Moderate	Severe
January	18.98	15.78	55.91	9.33
February	18.06	19.30	55.73	6.91
March	21.02	17.07	55.86	6.05
April	26.28	16.44	52.56	4.72
May	30.13	15.43	52.50	1.94
June	46.69	14.50	37.64	1.17
July	66.51	10.05	22.07	1.37
August	52.77	11.08	32.82	3.33
September	25.75	14.89	54.14	5.22
October	12.45	13.39	66.59	7.58
November	12.14	15.64	63.06	9.17
December	14.78	17.50	58.58	9.14

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 29. Average height 1558m

Month:	No icing	Light	Moderate	Severe
January	27.10	15.40	48.01	9.49
February	27.27	17.77	47.93	7.02
March	29.35	15.62	48.12	6.91
April	37.50	14.03	43.72	4.75
May	40.78	14.38	42.53	2.31
June	52.39	14.92	31.42	1.28
July	67.82	10.13	20.67	1.37
August	57.45	11.72	28.31	2.53
September	33.08	14.81	46.75	5.36
October	21.85	13.49	56.42	8.23
November	20.67	14.78	54.11	10.44
December	25.46	16.80	48.44	9.30

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 28. Average height 1810m

Month:	No icing	Light	Moderate	Severe
January	34.49	14.81	41.05	9.65
February	35.86	16.85	40.41	6.88
March	37.28	13.79	42.34	6.59
April	44.19	13.47	37.58	4.75
May	50.70	13.01	34.22	2.07
June	58.33	14.61	25.11	1.94
July	67.15	12.18	18.95	1.72
August	61.51	12.04	23.66	2.80
September	39.50	13.86	41.25	5.39
October	31.64	13.90	46.08	8.39
November	29.94	13.50	46.28	10.28
December	34.73	15.43	40.78	9.06

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 27. Average height 2086m

Month:	No icing	Light	Moderate	Severe
January	42.04	14.95	34.38	8.63
February	43.80	15.94	33.44	6.82
March	43.63	13.36	36.51	6.51
April	50.28	13.31	31.69	4.72
May	58.95	12.07	26.67	2.31
June	61.72	13.94	22.31	2.03
July	65.86	14.03	18.23	1.88
August	63.55	12.55	21.21	2.69
September	45.42	14.00	35.72	4.86
October	41.72	13.58	37.02	7.69
November	38.64	11.83	39.78	9.75
December	43.12	13.55	35.32	8.01

Icing statistics.

Svalbard Airport - Bjørnøya

Model level 26. Average height 2385m

Month:	No icing	Light	Moderate	Severe
January	48.74	13.92	29.35	7.98
February	50.83	14.23	28.19	6.76
March	49.95	13.01	31.21	5.83
April	56.36	12.17	27.44	4.03
May	64.17	11.53	22.50	1.80
June	64.03	13.75	19.92	2.31
July	65.73	14.44	17.58	2.26
August	64.81	13.49	19.30	2.39
September	51.50	14.31	29.69	4.50
October	49.68	12.74	31.40	6.18
November	46.56	12.17	32.89	8.39
December	50.16	13.49	29.11	7.23

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 40. Average height 30m

Month:	No icing	Light	Moderate	Severe
January	77.37	21.80	0.83	0.00
February	76.68	22.26	1.06	0.00
March	83.09	16.56	0.35	0.00
April	85.64	14.11	0.25	0.00
May	93.79	5.89	0.32	0.00
June	91.94	4.86	2.78	0.42
July	95.27	1.83	2.42	0.48
August	94.30	3.06	2.26	0.38
September	91.75	7.22	1.03	0.00
October	86.72	12.90	0.38	0.00
November	85.61	14.25	0.14	0.00
December	77.26	21.80	0.94	0.00

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 39. Average height 95m

Month:	No icing	Light	Moderate	Severe
January	74.81	24.44	0.75	0.00
February	75.06	24.03	0.91	0.00
March	81.05	18.41	0.54	0.00
April	83.89	15.67	0.44	0.00
May	91.85	7.45	0.70	0.00
June	89.56	6.97	3.42	0.06
July	93.58	3.66	2.58	0.19
August	92.42	4.27	3.15	0.16
September	90.00	8.89	1.11	0.00
October	85.22	14.41	0.35	0.03
November	84.44	15.33	0.22	0.00
December	75.59	23.55	0.86	0.00

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 38. Average height 172m

Month:	No icing	Light	Moderate	Severe
January	71.64	26.59	1.77	0.00
February	71.99	26.39	1.62	0.00
March	77.37	21.29	1.34	0.00
April	80.69	17.94	1.36	0.00
May	89.57	8.76	1.67	0.00
June	86.22	9.33	4.44	0.00
July	90.59	5.43	3.92	0.05
August	89.97	6.51	3.52	0.00
September	87.31	11.50	1.17	0.03
October	83.04	16.10	0.83	0.03
November	81.25	18.00	0.75	0.00
December	72.10	26.24	1.67	0.00

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 37. Average height 261m

Month:	No icing	Light	Moderate	Severe
January	65.38	31.13	3.49	0.00
February	65.97	30.76	3.25	0.03
March	71.72	24.92	3.33	0.03
April	77.17	20.06	2.75	0.03
May	85.86	11.02	3.12	0.00
June	79.75	14.14	6.11	0.00
July	84.87	7.96	7.18	0.00
August	85.03	10.32	4.60	0.05
September	83.44	13.69	2.83	0.03
October	78.95	18.84	2.15	0.05
November	76.33	21.64	2.00	0.03
December	66.26	30.22	3.52	0.00

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 36. Average height 363m

Month:	No icing	Light	Moderate	Severe
January	57.37	35.03	7.39	0.22
February	60.15	33.56	6.08	0.21
March	63.33	30.54	5.97	0.16
April	71.97	22.78	5.14	0.11
May	79.35	15.43	5.05	0.16
June	70.39	19.22	10.31	0.08
July	74.57	13.04	12.20	0.19
August	76.83	13.23	9.84	0.11
September	76.17	16.64	7.08	0.11
October	73.31	21.51	5.03	0.16
November	67.75	27.39	4.78	0.08
December	59.09	34.06	6.69	0.16

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 35. Average height 479m

Month:	No icing	Light	Moderate	Severe
January	46.29	41.42	11.45	0.83
February	51.89	37.22	10.04	0.86
March	52.02	37.47	9.78	0.73
April	62.61	27.50	9.31	0.58
May	67.96	23.33	8.36	0.35
June	60.81	23.56	15.17	0.47
July	65.83	14.57	18.82	0.78
August	65.40	17.93	15.91	0.75
September	66.19	19.75	13.47	0.58
October	62.45	27.45	9.52	0.59
November	56.72	31.86	10.69	0.72
December	47.74	40.08	11.45	0.73

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 34. Average height 611m

Month:	No icing	Light	Moderate	Severe
January	41.05	39.54	17.72	1.69
February	46.22	35.68	16.68	1.42
March	44.87	36.16	17.47	1.51
April	47.17	36.14	15.56	1.14
May	48.84	37.18	13.31	0.67
June	51.58	28.94	18.25	1.22
July	61.94	15.00	20.48	2.58
August	57.28	20.08	21.13	1.51
September	53.86	24.31	20.22	1.61
October	49.73	31.67	16.96	1.64
November	44.33	35.25	19.06	1.36
December	37.98	41.99	18.60	1.42

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 33. Average height 760m

Month:	No icing	Light	Moderate	Severe
January	39.62	34.68	22.96	2.74
February	44.98	28.66	24.32	2.04
March	42.69	31.26	23.87	2.18
April	38.50	36.17	23.72	1.61
May	35.86	41.51	21.85	0.78
June	47.83	29.75	20.83	1.58
July	62.74	14.33	19.95	2.98
August	55.67	17.88	23.95	2.50
September	46.72	25.64	24.97	2.67
October	39.60	31.05	27.18	2.18
November	36.94	33.94	26.31	2.81
December	34.30	37.02	26.05	2.63

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 32. Average height 927m

Month:	No icing	Light	Moderate	Severe
January	42.58	27.74	26.13	3.55
February	47.08	23.41	26.12	3.39
March	45.40	25.05	26.48	3.06
April	42.83	26.47	28.50	2.19
May	36.88	33.04	29.14	0.94
June	49.11	26.94	22.22	1.72
July	67.61	12.80	17.07	2.53
August	57.50	15.30	24.27	2.93
September	47.03	21.78	27.50	3.69
October	38.25	25.89	33.23	2.63
November	38.11	26.06	32.17	3.67
December	38.66	29.17	28.79	3.39

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 31. Average height 1113m

Month:	No icing	Light	Moderate	Severe
January	48.17	22.07	25.73	4.03
February	51.92	20.22	24.17	3.69
March	51.08	18.92	26.40	3.60
April	50.67	20.36	27.06	1.92
May	44.76	25.08	29.25	0.91
June	55.00	22.89	20.81	1.31
July	72.31	11.91	14.38	1.40
August	61.80	14.57	21.13	2.50
September	50.22	18.42	28.08	3.28
October	42.61	21.13	33.20	3.06
November	43.44	21.17	30.89	4.50
December	47.58	21.83	26.45	4.14

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 30. Average height 1320m

Month:	No icing	Light	Moderate	Severe
January	55.00	17.50	23.55	3.95
February	56.76	18.68	20.63	3.93
March	55.78	17.42	23.33	3.47
April	59.25	15.33	23.31	2.11
May	54.57	20.27	24.14	1.02
June	60.75	19.83	18.42	1.00
July	74.87	10.54	13.52	1.08
August	66.99	13.12	18.06	1.83
September	54.17	17.14	25.56	3.14
October	49.17	18.98	28.49	3.36
November	50.14	18.47	27.22	4.17
December	55.38	16.96	23.20	4.46

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 29. Average height 1548m

Month:	No icing	Light	Moderate	Severe
January	59.49	15.78	20.94	3.79
February	62.31	15.67	18.51	3.51
March	60.24	15.46	20.62	3.68
April	64.78	12.81	20.50	1.92
May	62.77	15.13	21.02	1.08
June	65.83	16.50	16.89	0.78
July	75.86	11.24	11.88	1.02
August	71.29	12.45	14.60	1.67
September	57.75	17.14	22.39	2.72
October	55.24	16.69	24.95	3.12
November	56.31	16.22	23.14	4.33
December	61.45	14.65	19.73	4.17

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 28. Average height 1798m

Month:	No icing	Light	Moderate	Severe
January	63.01	14.92	18.41	3.66
February	66.50	12.99	17.36	3.16
March	64.68	13.71	18.28	3.33
April	69.25	11.11	17.81	1.83
May	68.76	12.58	17.96	0.70
June	69.36	15.17	14.67	0.81
July	76.80	11.42	10.83	0.94
August	73.92	12.18	12.74	1.16
September	61.39	16.31	19.89	2.42
October	61.29	14.76	21.02	2.93
November	61.94	13.14	20.50	4.42
December	66.13	12.98	16.91	3.98

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 27. Average height 2072m

Month:	No icing	Light	Moderate	Severe
January	66.56	13.17	17.26	3.01
February	70.16	11.72	15.08	3.04
March	69.09	11.64	16.37	2.90
April	72.50	10.72	15.17	1.61
May	73.44	11.40	14.49	0.67
June	73.06	13.19	12.92	0.83
July	76.75	12.63	9.81	0.81
August	75.65	11.80	11.45	1.10
September	65.92	14.39	17.50	2.19
October	66.59	12.45	18.31	2.66
November	65.81	12.06	17.94	4.19
December	69.11	12.26	15.24	3.39

Icing statistics.

Svalbard Airport - Ny Ålesund

Model level 26. Average height 2370m

Month:	No icing	Light	Moderate	Severe
January	69.14	13.33	14.76	2.77
February	73.08	10.98	13.37	2.57
March	72.77	11.16	13.41	2.66
April	74.89	10.31	13.58	1.22
May	77.18	10.65	11.67	0.51
June	76.33	12.06	10.81	0.81
July	77.96	12.12	9.22	0.70
August	77.37	10.83	11.10	0.70
September	68.53	13.78	15.64	2.06
October	69.52	11.64	16.48	2.37
November	69.50	10.94	16.22	3.33
December	71.99	11.37	13.90	2.74



Icing statistics.

Svalbard Airport - Hopen

Model level 40. Average height 30m

Month:	No icing	Light	Moderate	Severe
January	42.15	52.10	5.75	0.00
February	41.12	52.18	6.67	0.03
March	52.96	42.93	4.11	0.00
April	72.61	24.11	3.22	0.06
May	82.31	12.85	4.44	0.40
June	72.83	11.56	13.19	2.42
July	79.06	4.78	10.19	5.97
August	88.01	3.33	4.84	3.82
September	87.25	9.56	2.25	0.94
October	71.40	26.91	1.32	0.38
November	52.56	44.03	3.25	0.17
December	43.68	51.83	4.38	0.11

Icing statistics.

Svalbard Airport - Hopen

Model level 39. Average height 94m

Month:	No icing	Light	Moderate	Severe
January	37.66	56.64	5.70	0.00
February	37.84	56.64	5.52	0.00
March	47.69	48.71	3.60	0.00
April	68.47	27.75	3.75	0.03
May	79.11	16.16	4.65	0.08
June	74.75	15.00	9.61	0.64
July	81.96	8.09	8.49	1.45
August	87.96	6.69	4.19	1.16
September	84.17	12.75	2.69	0.39
October	67.63	31.05	1.18	0.13
November	49.64	47.08	3.19	0.08
December	41.26	55.05	3.68	0.00

Icing statistics.

Svalbard Airport - Hopen

Model level 38. Average height 171m

Month:	No icing	Light	Moderate	Severe
January	32.26	59.44	8.31	0.00
February	31.85	59.83	8.32	0.00
March	41.05	51.99	6.96	0.00
April	63.78	29.64	6.58	0.00
May	74.92	19.09	5.94	0.05
June	73.00	16.92	10.06	0.03
July	79.33	11.88	8.47	0.32
August	83.82	11.13	4.65	0.40
September	77.17	19.72	3.03	0.08
October	60.46	36.94	2.47	0.13
November	42.67	51.72	5.53	0.08
December	34.68	59.84	5.48	0.00

Icing statistics.

Svalbard Airport - Hopen

Model level 37. Average height 261m

Month:	No icing	Light	Moderate	Severe
January	22.80	63.49	13.66	0.05
February	23.26	61.78	14.94	0.03
March	31.05	55.48	13.44	0.03
April	54.78	33.92	11.31	0.00
May	68.41	22.42	9.14	0.03
June	64.31	21.83	13.86	0.00
July	73.20	15.35	11.32	0.13
August	74.97	17.77	7.15	0.11
September	63.81	28.89	7.19	0.11
October	46.83	46.48	6.53	0.16
November	30.67	58.47	10.78	0.08
December	25.65	63.63	10.73	0.00

Icing statistics.

Svalbard Airport - Hopen

Model level 36. Average height 363m

Month:	No icing	Light	Moderate	Severe
January	15.51	61.02	23.17	0.30
February	15.82	61.13	22.79	0.27
March	19.57	58.71	21.51	0.22
April	42.39	40.64	16.67	0.31
May	54.84	31.05	13.95	0.16
June	49.31	29.67	20.78	0.25
July	62.72	17.96	19.06	0.27
August	58.95	24.27	16.48	0.30
September	47.92	34.72	17.06	0.31
October	30.56	54.41	14.62	0.40
November	18.89	59.44	21.36	0.31
December	16.59	61.59	21.59	0.24

Icing statistics.

Svalbard Airport - Hopen

Model level 35. Average height 479m

Month:	No icing	Light	Moderate	Severe
January	11.37	53.23	34.19	1.21
February	13.55	53.84	31.73	0.89
March	16.37	52.20	30.35	1.08
April	30.22	45.08	23.75	0.94
May	35.54	44.44	19.54	0.48
June	34.94	34.72	29.78	0.56
July	52.98	17.55	28.74	0.73
August	45.56	23.04	30.48	0.91
September	33.08	34.97	30.92	1.03
October	19.03	52.42	27.31	1.24
November	11.94	50.97	35.86	1.22
December	10.70	53.79	34.57	0.94

Icing statistics.

Svalbard Airport - Hopen

Model level 34. Average height 611m

Month:	No icing	Light	Moderate	Severe
January	12.82	41.18	43.36	2.63
February	16.32	43.27	38.25	2.15
March	17.02	41.48	39.57	1.94
April	22.36	42.50	33.11	2.03
May	18.39	49.54	31.05	1.02
June	24.97	37.22	36.67	1.14
July	50.54	16.72	31.77	0.97
August	40.40	19.22	38.63	1.75
September	23.08	31.28	43.58	2.06
October	10.81	41.21	45.22	2.77
November	8.72	39.17	49.31	2.81
December	9.38	43.09	45.08	2.45

Icing statistics.

Svalbard Airport - Hopen

Model level 33. Average height 760m

Month:	No icing	Light	Moderate	Severe
January	17.74	31.85	46.08	4.33
February	21.84	34.12	40.91	3.13
March	21.99	30.91	44.22	2.88
April	23.50	32.75	41.00	2.75
May	15.35	39.19	44.17	1.29
June	23.44	35.17	39.92	1.47
July	51.99	16.96	29.49	1.56
August	39.57	16.69	41.24	2.50
September	19.00	25.83	51.97	3.19
October	6.83	27.98	61.05	4.14
November	9.69	30.08	55.50	4.72
December	12.72	36.13	47.12	4.03

Icing statistics.

Svalbard Airport - Hopen

Model level 32. Average height 927m

Month:	No icing	Light	Moderate	Severe
January	24.38	25.46	44.49	5.67
February	27.04	27.01	41.94	4.01
March	28.52	24.95	42.77	3.76
April	29.81	24.50	42.25	3.44
May	19.06	29.01	50.16	1.77
June	28.33	30.72	38.67	2.28
July	57.28	14.70	26.64	1.37
August	41.48	16.13	39.62	2.77
September	21.19	20.39	54.75	3.67
October	7.31	19.06	68.17	5.46
November	14.69	22.33	57.36	5.61
December	20.65	28.98	45.46	4.92

Icing statistics.

Svalbard Airport - Hopen

Model level 31. Average height 1113m

Month:	No icing	Light	Moderate	Severe
January	30.16	20.83	42.88	6.13
February	32.08	22.87	40.64	4.40
March	33.90	20.22	41.59	4.30
April	37.94	19.17	39.61	3.28
May	26.42	23.92	48.12	1.53
June	37.25	26.14	35.03	1.58
July	63.66	13.58	21.88	0.89
August	46.91	17.61	33.41	2.07
September	24.72	19.44	52.25	3.58
October	11.59	16.24	66.56	5.62
November	20.92	17.67	55.58	5.83
December	30.91	21.56	41.91	5.62

Icing statistics.

Svalbard Airport - Hopen

Model level 30. Average height 1320m

Month:	No icing	Light	Moderate	Severe
January	35.27	19.70	38.87	6.16
February	36.66	20.34	38.75	4.25
March	39.09	18.71	37.53	4.68
April	44.67	16.64	35.03	3.67
May	36.42	21.26	40.56	1.75
June	45.36	21.50	31.69	1.44
July	66.61	13.28	19.06	1.05
August	53.92	15.54	28.82	1.72
September	30.67	19.28	46.31	3.75
October	19.81	18.71	55.51	5.97
November	27.61	17.89	48.47	6.03
December	37.61	19.95	36.96	5.48

Icing statistics.

Svalbard Airport - Hopen

Model level 29. Average height 1549m

Month:	No icing	Light	Moderate	Severe
January	41.42	17.18	34.95	6.45
February	41.91	18.54	35.42	4.13
March	43.84	18.09	33.09	4.97
April	50.03	14.97	31.00	4.00
May	46.40	17.74	33.98	1.88
June	51.19	19.67	28.08	1.06
July	69.27	12.74	16.91	1.08
August	58.58	16.18	23.52	1.72
September	37.25	19.06	40.22	3.47
October	30.30	17.90	45.51	6.29
November	34.08	17.58	42.17	6.17
December	45.38	16.02	32.88	5.73

Icing statistics.

Svalbard Airport - Hopen

Model level 28. Average height 1800m

Month:	No icing	Light	Moderate	Severe
January	46.26	17.39	29.65	6.69
February	47.58	17.33	30.43	4.66
March	50.08	15.67	29.46	4.78
April	54.83	13.17	27.75	4.25
May	54.62	14.70	28.60	2.07
June	57.22	16.44	24.83	1.50
July	69.09	14.25	15.40	1.26
August	61.51	14.95	21.88	1.67
September	44.11	17.33	34.92	3.64
October	39.97	15.89	38.28	5.86
November	41.56	15.61	36.56	6.28
December	51.02	14.68	28.44	5.86

Icing statistics.

Svalbard Airport - Hopen

Model level 27. Average height 2074m

Month:	No icing	Light	Moderate	Severe
January	51.64	15.65	26.64	6.08
February	53.54	16.00	25.80	4.66
March	54.57	14.73	25.78	4.92
April	58.83	13.67	23.36	4.14
May	60.73	13.60	23.60	2.07
June	60.50	16.00	21.78	1.72
July	69.73	14.38	14.57	1.32
August	64.27	13.84	19.62	2.26
September	49.86	16.39	30.47	3.28
October	48.23	14.35	31.67	5.75
November	49.11	13.11	31.92	5.86
December	55.24	15.11	23.92	5.73

Icing statistics.

Svalbard Airport - Hopen

Model level 26. Average height 2373m

Month:	No icing	Light	Moderate	Severe
January	56.69	15.08	22.66	5.56
February	58.85	14.46	22.23	4.46
March	58.66	14.44	22.61	4.30
April	61.92	13.28	21.19	3.61
May	65.27	14.35	18.68	1.69
June	64.14	14.67	19.19	2.00
July	69.46	14.54	14.46	1.53
August	65.38	14.11	18.60	1.91
September	55.67	15.47	25.83	3.03
October	54.06	13.63	27.34	4.97
November	54.58	13.28	26.97	5.17
December	59.84	13.92	20.81	5.43

Icing statistics.

Svalbard Airport - Sørkapp

Model level 40. Average height 30m

Month:	No icing	Light	Moderate	Severe
January	54.92	43.66	1.40	0.03
February	53.66	44.10	2.21	0.03
March	62.96	35.83	1.21	0.00
April	77.64	20.83	1.47	0.06
May	88.58	9.09	1.99	0.35
June	86.28	7.86	5.19	0.67
July	93.71	1.83	2.74	1.72
August	96.48	1.24	1.88	0.40
September	92.72	6.11	0.86	0.31
October	81.05	18.49	0.38	0.08
November	68.69	30.92	0.33	0.06
December	53.95	45.16	0.89	0.00

Icing statistics.

Svalbard Airport - Sørkapp

Model level 39. Average height 95m

Month:	No icing	Light	Moderate	Severe
January	53.09	45.94	0.97	0.00
February	52.51	45.60	1.89	0.00
March	61.02	37.77	1.21	0.00
April	76.28	22.00	1.72	0.00
May	87.69	10.11	2.15	0.05
June	85.69	9.81	4.31	0.19
July	92.82	3.68	3.12	0.38
August	94.73	3.12	2.02	0.13
September	90.50	8.78	0.69	0.03
October	79.44	20.22	0.32	0.03
November	66.14	33.53	0.33	0.00
December	52.26	47.26	0.48	0.00

Icing statistics.

Svalbard Airport - Sørkapp

Model level 38. Average height 172m

Month:	No icing	Light	Moderate	Severe
January	47.72	50.03	2.26	0.00
February	47.96	48.41	3.63	0.00
March	55.22	41.94	2.85	0.00
April	70.81	26.06	3.14	0.00
May	83.55	13.06	3.36	0.03
June	82.22	13.06	4.69	0.03
July	89.52	6.64	3.74	0.11
August	91.48	6.10	2.26	0.16
September	85.53	13.72	0.69	0.06
October	74.27	25.13	0.51	0.08
November	60.47	38.81	0.72	0.00
December	47.15	51.21	1.64	0.00

Icing statistics.

Svalbard Airport - Sørkapp

Model level 37. Average height 262m

Month:	No icing	Light	Moderate	Severe
January	39.35	54.76	5.83	0.05
February	39.64	52.89	7.44	0.03
March	46.18	46.77	7.02	0.03
April	63.67	30.11	6.22	0.00
May	77.82	16.56	5.59	0.03
June	74.64	19.19	6.14	0.03
July	82.31	12.04	5.59	0.05
August	84.25	12.34	3.39	0.03
September	77.11	21.17	1.67	0.06
October	65.03	32.82	2.04	0.11
November	50.22	45.97	3.81	0.00
December	38.06	57.72	4.17	0.05

Icing statistics.

Svalbard Airport - Sørkapp

Model level 36. Average height 364m

Month:	No icing	Light	Moderate	Severe
January	28.23	58.90	12.61	0.27
February	29.37	56.76	13.67	0.21
March	34.52	52.98	12.28	0.22
April	52.36	36.92	10.36	0.36
May	67.55	22.74	9.49	0.22
June	61.03	26.47	12.47	0.03
July	70.75	18.74	10.38	0.13
August	72.85	19.35	7.69	0.11
September	63.83	29.61	6.44	0.11
October	51.32	41.94	6.59	0.16
November	36.36	52.97	10.56	0.11
December	27.69	61.59	10.54	0.19

Icing statistics.

Svalbard Airport - Sørkapp

Model level 35. Average height 481m

Month:	No icing	Light	Moderate	Severe
January	18.06	58.12	22.96	0.86
February	20.37	56.58	21.90	1.15
March	22.80	56.85	19.22	1.13
April	38.33	44.08	16.53	1.06
May	49.84	35.13	14.17	0.86
June	46.72	32.14	20.94	0.19
July	58.28	19.09	22.31	0.32
August	58.47	21.96	19.06	0.51
September	47.58	33.72	18.25	0.44
October	34.89	48.31	16.02	0.78
November	23.58	54.25	21.17	1.00
December	17.69	59.03	22.07	1.21

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Icing statistics.

Svalbard Airport - Sørkapp

Model level 34. Average height 613m

Month:	No icing	Light	Moderate	Severe
January	12.53	51.24	33.33	2.90
February	15.82	51.56	30.52	2.10
March	16.67	50.89	30.59	1.85
April	23.58	46.72	27.75	1.94
May	28.90	46.18	23.44	1.48
June	34.36	35.94	28.61	1.08
July	52.66	17.58	28.17	1.59
August	47.42	20.70	30.43	1.45
September	32.00	35.11	31.31	1.58
October	17.63	49.87	30.38	2.12
November	12.39	48.89	36.11	2.61
December	9.84	52.77	34.68	2.72

Icing statistics.

Svalbard Airport - Sørkapp

Model level 33. Average height 763m

Month:	No icing	Light	Moderate	Severe
January	13.71	39.52	42.50	4.27
February	17.89	39.96	38.78	3.36
March	18.23	38.23	40.51	3.04
April	17.72	40.00	39.61	2.67
May	17.85	45.51	34.97	1.67
June	29.67	34.53	33.97	1.83
July	53.98	14.92	28.28	2.82
August	43.84	17.45	35.62	3.09
September	24.00	30.33	42.06	3.61
October	9.33	40.83	46.48	3.36
November	8.58	37.97	48.86	4.58
December	9.14	40.30	46.10	4.46

Icing statistics.

Svalbard Airport - Sørkapp

Model level 32. Average height 930m

Month:	No icing	Light	Moderate	Severe
January	20.32	26.85	47.18	5.65
February	23.61	28.42	43.62	4.34
March	23.76	28.71	43.39	4.14
April	23.06	27.83	45.61	3.50
May	20.40	29.25	48.52	1.83
June	33.58	28.08	36.06	2.28
July	60.19	13.66	23.55	2.61
August	45.56	15.65	35.27	3.52
September	24.97	24.64	45.69	4.69
October	9.84	26.37	59.19	4.60
November	11.42	26.11	56.28	6.19
December	14.41	29.65	49.92	6.02



Icing statistics.

Svalbard Airport - Sørkapp

Model level 31. Average height 1117m

Month:	No icing	Light	Moderate	Severe
January	27.74	21.94	43.39	6.94
February	29.07	24.94	40.58	5.40
March	30.67	22.61	41.99	4.73
April	32.36	21.22	42.69	3.72
May	27.80	22.23	48.04	1.94
June	41.53	22.08	34.56	1.83
July	67.04	11.61	19.65	1.69
August	51.10	14.44	30.99	3.47
September	29.56	21.61	44.53	4.31
October	14.76	22.23	57.61	5.40
November	18.06	20.72	54.17	7.06
December	23.25	23.60	46.53	6.61

Icing statistics.

Svalbard Airport - Sørkapp

Model level 30. Average height 1324m

Month:	No icing	Light	Moderate	Severe
January	35.38	19.78	37.96	6.88
February	36.19	21.84	36.63	5.34
March	37.20	20.00	37.63	5.16
April	42.72	17.28	36.36	3.64
May	38.76	18.82	40.51	1.91
June	49.86	18.33	30.53	1.28
July	70.86	11.08	16.72	1.34
August	58.15	12.93	26.42	2.50
September	36.22	19.19	40.50	4.08
October	24.03	22.37	47.69	5.91
November	26.78	19.94	45.97	7.31
December	33.52	20.40	39.46	6.61

Icing statistics.

Svalbard Airport - Sørkapp

Model level 29. Average height 1553m

Month:	No icing	Light	Moderate	Severe
January	41.77	18.82	32.37	7.04
February	43.62	18.92	32.29	5.17
March	45.11	17.10	32.42	5.38
April	51.67	13.58	30.97	3.78
May	49.38	17.07	31.75	1.80
June	56.28	16.64	25.86	1.22
July	72.23	10.91	15.46	1.40
August	62.74	13.20	21.83	2.23
September	42.83	17.31	36.06	3.81
October	35.54	18.15	40.16	6.16
November	36.19	18.11	38.28	7.42
December	43.15	16.94	33.23	6.69

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Icing statistics.

Svalbard Airport - Sørkapp

Model level 28. Average height 1804m

Month:	No icing	Light	Moderate	Severe
January	48.60	17.42	27.53	6.45
February	50.56	16.32	27.95	5.17
March	50.59	15.86	28.28	5.27
April	57.22	12.53	26.50	3.75
May	59.17	14.01	25.16	1.67
June	62.81	13.92	22.00	1.28
July	72.50	12.45	13.52	1.53
August	67.28	12.80	18.01	1.91
September	49.56	15.17	31.53	3.75
October	45.19	16.48	32.80	5.54
November	44.67	15.58	32.78	6.97
December	50.70	15.32	27.23	6.75

Icing statistics.

Svalbard Airport - Sørkapp

Model level 27. Average height 2079m

Month:	No icing	Light	Moderate	Severe
January	55.22	14.49	24.30	5.99
February	56.94	15.02	22.99	5.05
March	57.50	13.76	23.84	4.89
April	62.14	11.89	22.61	3.36
May	66.26	11.96	20.38	1.40
June	66.67	13.86	18.17	1.31
July	72.45	13.28	13.09	1.18
August	69.87	11.72	16.34	2.07
September	54.75	15.08	26.50	3.67
October	53.87	13.74	26.85	5.54
November	51.92	13.69	27.94	6.44
December	56.94	13.63	23.25	6.18

Icing statistics.

Svalbard Airport - Sørkapp

Model level 26. Average height 2378m

Month:	No icing	Light	Moderate	Severe
January	59.89	14.41	20.43	5.27
February	62.34	13.08	19.78	4.81
March	62.74	12.53	20.56	4.17
April	65.92	11.94	18.94	3.19
May	70.32	12.07	16.48	1.13
June	69.67	12.58	16.53	1.22
July	73.33	12.85	12.45	1.37
August	71.48	11.94	14.87	1.72
September	60.00	14.64	22.64	2.72
October	61.13	11.34	22.96	4.57
November	58.44	13.00	23.44	5.11
December	62.02	12.88	19.70	5.40

Icing statistics.

Sørkapp - Bjørnøya

Model level 40. Average height 30m

Month:	No icing	Light	Moderate	Severe
January	57.72	37.85	4.44	0.00
February	53.69	39.91	6.40	0.00
March	66.18	30.56	3.23	0.03
April	84.69	12.44	2.83	0.03
May	90.11	6.37	3.23	0.30
June	81.42	7.56	9.53	1.50
July	84.57	2.42	9.11	3.90
August	90.27	2.07	5.65	2.02
September	92.58	4.42	2.36	0.64
October	79.57	19.49	0.89	0.05
November	61.56	35.67	2.67	0.11
December	51.85	44.14	4.01	0.00

Icing statistics.

Sørkapp - Bjørnøya

Model level 39. Average height 94m

Month:	No icing	Light	Moderate	Severe
January	54.46	41.18	4.35	0.00
February	51.71	43.24	5.05	0.00
March	62.31	35.51	2.18	0.00
April	81.47	15.56	2.97	0.00
May	89.06	7.50	3.25	0.19
June	84.53	8.81	6.44	0.22
July	88.92	3.60	6.59	0.89
August	91.08	3.68	4.41	0.83
September	91.94	5.72	2.00	0.33
October	78.01	21.08	0.75	0.16
November	60.06	37.44	2.50	0.00
December	49.78	47.12	3.09	0.00

Icing statistics.

Sørkapp - Bjørnøya

Model level 38. Average height 171m

Month:	No icing	Light	Moderate	Severe
January	49.65	44.33	6.02	0.00
February	46.55	45.87	7.59	0.00
March	56.67	38.20	5.13	0.00
April	78.36	16.42	5.19	0.03
May	85.97	9.41	4.60	0.03
June	83.92	9.78	6.25	0.06
July	88.76	6.59	4.27	0.38
August	90.00	5.97	3.60	0.43
September	88.86	9.00	1.97	0.17
October	73.33	25.19	1.37	0.11
November	53.64	42.97	3.39	0.00
December	44.33	51.45	4.22	0.00

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Icing statistics.

Sørkapp - Bjørnøya

Model level 37. Average height 261m

Month:	No icing	Light	Moderate	Severe
January	41.45	48.44	10.05	0.05
February	39.99	47.37	12.63	0.00
March	48.82	41.67	9.49	0.03
April	70.64	20.67	8.61	0.08
May	81.99	11.24	6.75	0.03
June	79.53	13.25	7.11	0.11
July	85.40	9.03	5.32	0.24
August	84.11	11.45	4.27	0.16
September	81.92	14.94	3.00	0.14
October	63.79	32.02	4.06	0.13
November	46.31	46.61	7.06	0.03
December	36.88	54.49	8.60	0.03

Icing statistics.

Sørkapp - Bjørnøya

Model level 36. Average height 362m

Month:	No icing	Light	Moderate	Severe
January	32.98	49.70	17.04	0.27
February	33.41	46.49	19.95	0.15
March	39.25	45.27	15.32	0.16
April	62.00	25.14	12.78	0.08
May	73.92	16.75	9.33	0.00
June	69.75	19.33	10.92	0.00
July	78.06	13.49	8.28	0.16
August	75.32	16.26	8.06	0.35
September	67.14	24.89	7.81	0.17
October	50.35	39.84	9.41	0.40
November	35.61	48.14	16.06	0.19
December	28.66	54.03	17.18	0.13

Icing statistics.

Sørkapp - Bjørnøya

Model level 35. Average height 479m

Month:	No icing	Light	Moderate	Severe
January	26.88	45.27	26.94	0.91
February	30.67	42.21	26.30	0.83
March	32.02	45.35	22.07	0.56
April	52.11	28.64	18.58	0.67
May	61.85	23.68	14.27	0.19
June	57.36	26.36	15.97	0.31
July	69.68	17.50	12.55	0.27
August	61.91	21.88	15.75	0.46
September	49.86	30.75	18.89	0.50
October	35.56	44.06	19.33	1.05
November	25.44	44.53	29.00	1.03
December	21.32	50.27	27.58	0.83

Icing statistics.

Sørkapp - Bjørnøya

Model level 34. Average height 611m

Month:	No icing	Light	Moderate	Severe
January	25.54	38.28	34.22	1.96
February	28.96	38.02	31.02	2.01
March	29.76	38.36	30.46	1.42
April	41.25	32.50	24.92	1.33
May	45.32	33.41	20.54	0.73
June	46.72	31.28	21.08	0.92
July	63.66	19.03	16.94	0.38
August	50.94	23.41	24.60	1.05
September	34.56	32.58	31.44	1.42
October	21.80	40.48	35.81	1.91
November	17.64	38.58	41.56	2.22
December	17.63	43.60	36.56	2.20

Icing statistics.

Sørkapp - Bjørnøya

Model level 33. Average height 760m

Month:	No icing	Light	Moderate	Severe
January	26.26	32.28	38.47	2.98
February	29.49	33.77	33.62	3.13
March	30.99	31.05	36.08	1.88
April	34.72	32.75	30.50	2.03
May	31.40	39.57	27.96	1.08
June	41.50	31.33	25.94	1.22
July	62.34	18.71	18.44	0.51
August	47.10	20.83	30.67	1.40
September	26.25	29.75	42.08	1.92
October	11.53	33.63	51.24	3.60
November	13.19	33.75	49.47	3.58
December	17.45	38.28	40.54	3.74

Icing statistics.

Sørkapp - Bjørnøya

Model level 32. Average height 927m

Month:	No icing	Light	Moderate	Severe
January	30.11	25.73	39.97	4.19
February	32.29	27.89	35.92	3.90
March	34.38	25.51	37.55	2.55
April	36.47	26.53	34.61	2.39
May	28.60	33.55	36.56	1.29
June	39.72	30.61	28.39	1.28
July	65.40	15.00	18.98	0.62
August	49.06	18.95	30.27	1.72
September	26.92	25.61	45.06	2.42
October	11.13	26.80	57.31	4.76
November	16.53	27.36	51.50	4.61
December	23.04	31.59	40.62	4.76

Icing statistics.

Sørkapp - Bjørnøya

Model level 31. Average height 1113m

Month:	No icing	Light	Moderate	Severe
January	34.60	21.56	39.19	4.65
February	36.13	22.99	36.72	4.16
March	38.66	21.83	36.53	2.98
April	42.58	21.06	33.97	2.39
May	33.66	25.05	40.00	1.29
June	46.36	24.00	28.44	1.19
July	69.52	12.72	16.80	0.97
August	53.87	17.63	26.64	1.85
September	31.92	23.58	41.36	3.14
October	16.99	21.83	55.91	5.27
November	22.39	23.36	48.78	5.47
December	32.02	24.46	38.58	4.95

Icing statistics.

Sørkapp - Bjørnøya

Model level 30. Average height 1320m

Month:	No icing	Light	Moderate	Severe
January	38.25	20.75	36.21	4.78
February	40.05	20.57	35.21	4.16
March	43.04	19.52	34.25	3.20
April	48.81	16.67	31.92	2.61
May	41.75	20.19	36.67	1.40
June	52.17	19.69	26.97	1.17
July	71.42	12.66	15.16	0.75
August	59.97	15.75	22.69	1.59
September	36.81	21.14	38.78	3.28
October	26.18	20.56	47.77	5.48
November	30.92	20.75	42.92	5.42
December	40.38	20.40	34.38	4.84

Icing statistics.

Sørkapp - Bjørnøya

Model level 29. Average height 1549m

Month:	No icing	Light	Moderate	Severe
January	43.95	18.47	32.39	5.19
February	45.31	17.92	32.70	4.07
March	47.93	17.55	30.86	3.66
April	53.72	14.78	28.64	2.86
May	50.46	17.20	30.86	1.48
June	57.33	16.75	24.75	1.17
July	73.23	11.77	14.17	0.83
August	63.28	15.86	19.35	1.51
September	44.08	18.36	34.28	3.28
October	35.19	18.66	40.40	5.75
November	38.22	18.56	37.75	5.47
December	47.20	17.63	30.19	4.97

Icing statistics.

Sørkapp - Bjørnøya

Model level 28. Average height 1800m

Month:	No icing	Light	Moderate	Severe
January	49.76	16.21	28.71	5.32
February	50.94	16.09	28.78	4.19
March	52.72	16.32	26.69	4.27
April	58.47	13.03	25.25	3.25
May	57.63	14.87	26.16	1.34
June	60.53	16.00	22.25	1.22
July	73.76	11.48	13.58	1.18
August	67.88	13.63	16.59	1.91
September	50.78	15.08	31.28	2.86
October	44.78	15.91	33.87	5.43
November	46.31	16.86	31.53	5.31
December	53.12	15.30	26.53	5.05

Icing statistics.

Sørkapp - Bjørnøya

Model level 27. Average height 2075m

Month:	No icing	Light	Moderate	Severe
January	55.81	15.13	23.90	5.16
February	57.11	14.26	24.47	4.16
March	58.90	13.92	22.74	4.44
April	62.50	12.50	21.78	3.22
May	63.60	13.90	21.10	1.40
June	64.53	15.19	18.94	1.33
July	73.17	13.31	12.45	1.08
August	69.84	12.77	15.43	1.96
September	56.14	14.67	26.36	2.83
October	52.85	13.92	28.25	4.97
November	53.72	14.03	27.28	4.97
December	58.66	14.38	22.04	4.92

Icing statistics.

Sørkapp - Bjørnøya

Model level 26. Average height 2374m

Month:	No icing	Light	Moderate	Severe
January	60.16	14.84	20.30	4.70
February	62.72	12.69	20.43	4.16
March	62.90	13.31	19.89	3.90
April	66.17	11.64	19.08	3.11
May	68.55	13.39	16.88	1.18
June	68.11	14.00	16.58	1.31
July	73.20	13.60	11.83	1.37
August	71.18	12.37	14.76	1.69
September	61.03	14.58	21.97	2.42
October	59.54	13.23	23.31	3.92
November	59.81	12.75	22.97	4.47
December	64.30	12.34	18.84	4.52

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 40. Average height 30m

Month:	No icing	Light	Moderate	Severe
January	54.46	42.90	2.63	0.00
February	54.34	43.36	2.30	0.00
March	60.38	37.72	1.91	0.00
April	71.11	28.53	0.36	0.00
May	83.01	16.94	0.05	0.00
June	90.89	7.17	1.94	0.00
July	97.10	1.67	1.24	0.00
August	92.61	5.05	2.34	0.00
September	77.53	20.17	2.31	0.00
October	65.22	33.79	0.99	0.00
November	61.61	37.22	1.17	0.00
December	50.54	47.45	2.02	0.00

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 39. Average height 95m

Month:	No icing	Light	Moderate	Severe
January	52.28	44.30	3.41	0.00
February	52.42	44.60	2.98	0.00
March	56.72	40.67	2.61	0.00
April	68.28	30.61	1.11	0.00
May	80.97	18.28	0.75	0.00
June	85.94	10.72	3.33	0.00
July	94.70	2.69	2.61	0.00
August	88.66	7.34	4.01	0.00
September	74.14	21.72	4.14	0.00
October	63.41	34.49	2.10	0.00
November	58.94	38.97	2.08	0.00
December	48.63	48.82	2.55	0.00

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 38. Average height 171m

Month:	No icing	Light	Moderate	Severe
January	46.99	46.99	6.02	0.00
February	46.99	46.69	6.32	0.00
March	51.80	41.80	6.40	0.00
April	63.61	33.36	3.03	0.00
May	76.67	21.08	2.26	0.00
June	78.89	14.14	6.97	0.00
July	90.00	4.22	5.78	0.00
August	83.28	9.73	6.99	0.00
September	68.06	23.94	8.00	0.00
October	58.66	36.67	4.68	0.00
November	53.69	41.44	4.86	0.00
December	43.01	51.18	5.81	0.00



Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 37. Average height 261m

Month:	No icing	Light	Moderate	Severe
January	38.66	49.25	12.07	0.03
February	39.76	48.94	11.28	0.03
March	43.84	44.27	11.85	0.03
April	55.06	36.97	7.97	0.00
May	68.74	25.56	5.70	0.00
June	66.86	21.81	11.33	0.00
July	83.01	7.72	9.22	0.05
August	76.80	11.21	11.94	0.05
September	58.33	25.94	15.64	0.08
October	49.46	39.09	11.45	0.00
November	45.83	42.89	11.28	0.00
December	35.81	51.99	12.12	0.08

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 36. Average height 362m

Month:	No icing	Light	Moderate	Severe
January	30.38	49.81	19.17	0.65
February	30.90	50.15	18.33	0.62
March	36.13	44.01	19.41	0.46
April	45.31	39.14	15.36	0.19
May	53.55	34.19	12.12	0.13
June	50.72	29.89	19.28	0.11
July	74.17	10.65	14.78	0.40
August	67.88	14.81	17.10	0.22
September	48.22	24.94	26.42	0.42
October	38.79	39.30	21.59	0.32
November	36.28	42.75	20.81	0.17
December	27.69	49.25	22.50	0.56

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 35. Average height 478m

Month:	No icing	Light	Moderate	Severe
January	23.71	48.15	26.40	1.75
February	27.21	46.02	25.03	1.74
March	30.54	41.75	26.37	1.34
April	36.14	39.58	23.56	0.72
May	35.83	41.42	22.10	0.65
June	36.61	35.61	27.44	0.33
July	65.22	12.93	20.70	1.16
August	57.93	18.28	22.88	0.91
September	38.97	25.81	34.25	0.97
October	28.82	37.63	32.69	0.86
November	26.31	40.39	32.31	1.00
December	21.51	44.92	31.69	1.88

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 34. Average height 610m

Month:	No icing	Light	Moderate	Severe
January	22.26	43.41	31.61	2.72
February	28.84	38.78	29.22	3.16
March	28.60	39.11	29.41	2.88
April	30.42	36.58	31.31	1.69
May	23.39	43.58	31.80	1.24
June	27.44	36.14	35.06	1.36
July	59.25	13.31	25.24	2.20
August	51.83	18.04	28.60	1.53
September	33.19	25.14	38.78	2.89
October	22.96	33.20	41.83	2.02
November	22.44	34.53	40.47	2.56
December	19.84	38.33	38.55	3.28

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 33. Average height 758m

Month:	No icing	Light	Moderate	Severe
January	26.69	35.38	34.19	3.74
February	32.97	31.32	31.61	4.10
March	31.80	33.31	31.29	3.60
April	30.47	31.00	36.22	2.31
May	21.80	36.18	40.43	1.59
June	26.94	29.97	41.31	1.78
July	57.37	12.50	27.34	2.80
August	48.58	16.29	32.88	2.26
September	30.64	24.19	40.94	4.22
October	21.96	28.20	46.10	3.74
November	22.89	28.06	44.83	4.22
December	23.25	31.67	40.51	4.57

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 32. Average height 924m

Month:	No icing	Light	Moderate	Severe
January	33.12	27.98	34.70	4.19
February	37.96	27.07	30.31	4.66
March	38.20	26.83	30.65	4.33
April	36.72	24.83	35.67	2.78
May	26.77	27.80	43.25	2.18
June	31.31	24.86	41.47	2.36
July	58.58	12.63	26.18	2.61
August	49.95	15.13	32.50	2.42
September	33.53	21.47	39.89	5.11
October	25.19	23.31	47.31	4.19
November	27.00	24.50	43.42	5.08
December	31.18	27.20	36.45	5.16

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 31. Average height 1109m

Month:	No icing	Light	Moderate	Severe
January	38.95	25.89	30.70	4.46
February	41.88	26.09	27.51	4.52
March	45.08	21.88	28.47	4.57
April	44.72	20.47	31.83	2.97
May	35.40	21.99	40.08	2.53
June	38.58	21.39	38.03	2.00
July	62.18	11.77	24.01	2.04
August	52.98	16.34	28.47	2.20
September	37.44	21.22	37.00	4.33
October	29.44	22.10	44.68	3.79
November	33.39	22.00	39.61	5.00
December	39.95	23.25	32.04	4.76

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 30. Average height 1314m

Month:	No icing	Light	Moderate	Severe
January	45.86	22.80	27.02	4.33
February	47.73	23.76	24.56	3.96
March	49.27	19.38	27.45	3.90
April	52.28	17.17	27.78	2.78
May	42.90	19.41	35.56	2.12
June	46.81	18.69	33.03	1.47
July	64.89	11.75	21.64	1.72
August	58.76	14.35	24.97	1.91
September	42.39	21.22	33.03	3.36
October	36.32	22.31	38.28	3.09
November	40.00	21.53	33.75	4.72
December	48.06	20.30	27.20	4.44

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 29. Average height 1540m

Month:	No icing	Light	Moderate	Severe
January	51.21	19.57	25.16	4.06
February	54.49	20.25	21.64	3.63
March	54.30	17.26	24.76	3.68
April	58.69	14.81	23.81	2.69
May	50.51	18.01	30.03	1.45
June	52.86	18.31	27.81	1.03
July	66.75	12.45	19.57	1.24
August	63.12	14.73	20.67	1.48
September	48.14	20.08	28.56	3.22
October	43.74	20.86	32.72	2.69
November	47.14	20.00	28.56	4.31
December	54.03	18.17	23.87	3.92

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 28. Average height 1789m

Month:	No icing	Light	Moderate	Severe
January	55.59	18.52	22.28	3.60
February	60.42	17.27	19.07	3.25
March	59.25	15.19	22.34	3.23
April	63.03	14.28	20.39	2.31
May	57.77	16.02	25.19	1.02
June	59.19	16.22	23.31	1.28
July	68.60	13.33	17.15	0.91
August	66.77	15.03	17.23	0.97
September	53.31	19.19	24.81	2.69
October	51.61	18.06	27.69	2.63
November	53.44	18.08	24.58	3.89
December	58.44	17.74	20.19	3.63

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 27. Average height 2061m

Month:	No icing	Light	Moderate	Severe
January	60.51	16.59	19.62	3.28
February	64.14	15.76	17.18	2.92
March	63.60	13.79	19.27	3.33
April	67.14	13.47	17.19	2.19
May	64.09	15.89	18.95	1.08
June	64.53	14.56	19.69	1.22
July	70.99	13.76	14.49	0.75
August	69.54	14.57	14.81	1.08
September	59.00	16.44	21.92	2.64
October	57.61	16.13	23.71	2.55
November	60.00	15.39	21.22	3.39
December	63.76	15.00	17.80	3.44

Icing statistics.

Svalbard Airport - Wijdefjorden

Model level 26. Average height 2357m

Month:	No icing	Light	Moderate	Severe
January	63.95	16.48	16.24	3.33
February	67.53	14.88	14.88	2.72
March	67.31	13.79	15.81	3.09
April	69.28	13.94	15.00	1.78
May	69.06	15.13	14.65	1.16
June	67.81	15.22	15.64	1.33
July	72.53	14.49	12.20	0.78
August	70.97	14.25	13.79	0.99
September	63.06	15.33	19.33	2.28
October	61.67	15.59	20.35	2.39
November	63.89	15.39	17.39	3.33
December	67.10	14.35	15.70	2.85

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 40. Average height 30m

Month:	No icing	Light	Moderate	Severe
January	42.31	52.04	5.65	0.00
February	44.48	51.27	4.25	0.00
March	44.84	51.83	3.31	0.03
April	61.67	37.50	0.83	0.00
May	88.63	10.65	0.70	0.03
June	78.61	10.53	9.86	1.00
July	68.63	11.85	15.75	3.76
August	72.20	13.39	12.72	1.69
September	69.97	26.08	3.61	0.33
October	54.97	44.38	0.65	0.00
November	50.69	47.89	1.42	0.00
December	40.62	55.32	4.06	0.00

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 39. Average height 94m

Month:	No icing	Light	Moderate	Severe
January	40.59	55.81	3.60	0.00
February	43.09	54.49	2.42	0.00
March	42.58	55.22	2.20	0.00
April	59.94	39.28	0.78	0.00
May	87.23	12.10	0.67	0.00
June	77.89	14.06	7.92	0.14
July	73.04	15.43	10.89	0.65
August	72.66	16.64	10.22	0.48
September	67.03	29.75	3.00	0.22
October	53.28	45.99	0.73	0.00
November	48.75	50.00	1.25	0.00
December	39.35	57.42	3.23	0.00

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 38. Average height 171m

Month:	No icing	Light	Moderate	Severe
January	37.20	57.37	5.43	0.00
February	40.05	56.23	3.72	0.00
March	39.95	56.64	3.41	0.00
April	55.83	42.53	1.64	0.00
May	83.04	15.46	1.51	0.00
June	73.72	17.94	8.31	0.03
July	70.99	17.47	11.18	0.35
August	69.22	19.81	10.91	0.05
September	61.86	34.06	4.06	0.03
October	48.66	49.60	1.67	0.08
November	45.06	52.58	2.36	0.00
December	35.94	59.22	4.84	0.00

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 37. Average height 260m

Month:	No icing	Light	Moderate	Severe
January	31.05	59.57	9.35	0.03
February	33.68	59.06	7.23	0.03
March	33.31	59.87	6.83	0.00
April	49.50	46.92	3.58	0.00
May	75.24	21.69	3.04	0.03
June	64.56	23.58	11.86	0.00
July	64.14	20.22	15.40	0.24
August	61.69	22.34	15.89	0.08
September	51.56	38.94	9.50	0.00
October	41.77	53.28	4.89	0.05
November	38.75	55.92	5.33	0.00
December	29.87	61.91	8.20	0.03

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 36. Average height 361m

Month:	No icing	Light	Moderate	Severe
January	22.53	60.97	16.42	0.08
February	26.24	59.45	14.11	0.21
March	25.54	60.13	14.33	0.00
April	41.39	51.25	7.31	0.06
May	65.03	28.79	6.13	0.05
June	54.44	28.25	17.19	0.11
July	56.75	18.87	24.09	0.30
August	53.55	22.26	23.92	0.27
September	40.44	38.47	20.94	0.14
October	33.55	53.39	12.96	0.11
November	29.94	58.33	11.53	0.19
December	21.75	62.20	15.91	0.13

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 35. Average height 477m

Month:	No icing	Light	Moderate	Severe
January	17.63	55.59	26.34	0.43
February	21.34	54.96	23.11	0.59
March	20.35	54.01	25.30	0.35
April	32.39	52.42	14.92	0.28
May	51.26	36.99	11.59	0.16
June	45.81	30.56	23.19	0.44
July	52.20	16.42	30.46	0.91
August	47.80	19.84	31.13	1.24
September	32.22	32.75	34.44	0.58
October	25.62	46.69	27.10	0.59
November	22.86	51.36	25.22	0.56
December	15.67	55.16	28.44	0.73

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DNBANOKK

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 34. Average height 608m

Month:	No icing	Light	Moderate	Severe
January	16.85	45.38	36.42	1.34
February	21.31	42.86	34.53	1.30
March	20.62	41.91	36.21	1.26
April	25.56	45.56	28.14	0.75
May	36.08	41.83	21.56	0.54
June	38.69	32.33	27.72	1.25
July	51.99	14.49	30.91	2.61
August	44.62	18.39	34.89	2.10
September	27.06	25.22	45.94	1.78
October	18.71	37.26	42.58	1.45
November	18.42	38.36	41.83	1.39
December	14.11	41.34	42.80	1.75

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 33. Average height 756m

Month:	No icing	Light	Moderate	Severe
January	19.11	35.78	42.55	2.55
February	24.85	31.40	41.17	2.57
March	26.18	31.32	40.24	2.26
April	25.75	34.33	38.44	1.47
May	29.06	37.04	33.06	0.83
June	35.83	31.61	31.17	1.39
July	53.87	13.31	29.62	3.20
August	44.54	16.21	36.05	3.20
September	25.69	20.25	51.06	3.00
October	18.12	25.19	54.41	2.28
November	17.97	26.03	52.78	3.22
December	16.51	30.11	50.08	3.31

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 32. Average height 923m

Month:	No icing	Light	Moderate	Severe
January	25.46	29.14	41.80	3.60
February	31.40	25.00	39.82	3.78
March	33.58	25.35	38.04	3.04
April	33.28	25.69	38.86	2.17
May	30.75	27.04	41.13	1.08
June	38.03	27.53	33.31	1.14
July	57.20	13.60	26.75	2.45
August	46.91	15.05	34.52	3.52
September	28.44	19.06	48.97	3.53
October	22.04	19.11	55.56	3.28
November	22.67	21.69	51.36	4.28
December	23.52	24.52	47.53	4.44

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 31. Average height 1108m

Month:	No icing	Light	Moderate	Severe
January	35.00	25.75	35.08	4.17
February	39.26	22.82	33.29	4.63
March	42.58	21.61	31.77	4.03
April	45.22	19.42	32.47	2.89
May	38.15	22.37	38.25	1.24
June	45.33	22.28	31.17	1.22
July	60.32	13.79	24.17	1.72
August	51.48	14.09	31.16	3.28
September	34.53	17.61	44.03	3.83
October	28.60	18.60	48.66	4.14
November	31.33	19.97	43.92	4.78
December	35.03	21.42	38.76	4.78

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 30. Average height 1314m

Month:	No icing	Light	Moderate	Severe
January	45.38	20.83	29.41	4.38
February	48.52	20.81	26.15	4.52
March	50.13	19.68	25.97	4.22
April	53.97	15.97	27.14	2.92
May	48.06	17.90	32.47	1.56
June	50.92	20.06	28.14	0.89
July	62.55	13.55	22.69	1.21
August	56.05	14.25	26.96	2.74
September	40.39	18.06	37.94	3.61
October	36.96	18.66	39.62	4.76
November	40.33	19.25	35.50	4.92
December	46.75	18.20	30.24	4.81

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 29. Average height 1542m

Month:	No icing	Light	Moderate	Severe
January	51.69	17.88	26.24	4.19
February	55.64	17.74	22.70	3.93
March	56.10	15.70	24.06	4.14
April	59.25	14.25	23.81	2.69
May	55.22	16.10	27.39	1.29
June	56.53	17.39	25.31	0.78
July	63.63	14.81	20.67	0.89
August	59.73	14.70	23.68	1.88
September	46.19	16.94	33.25	3.61
October	45.00	16.10	33.98	4.92
November	47.86	17.31	30.22	4.61
December	54.30	16.21	25.38	4.11



Icing statistics.

Ny Ålesund - Verlegenuken

Model level 28. Average height 1792m

Month:	No icing	Light	Moderate	Severe
January	57.04	16.18	22.80	3.98
February	60.63	14.99	20.90	3.48
March	60.05	14.25	21.96	3.74
April	63.50	13.14	20.92	2.44
May	61.85	13.84	23.06	1.24
June	62.72	14.97	21.47	0.83
July	66.05	14.68	18.55	0.73
August	62.39	14.81	21.53	1.26
September	50.28	16.78	30.08	2.86
October	50.35	15.19	30.16	4.30
November	54.47	15.22	25.86	4.44
December	58.98	15.56	21.53	3.92

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 27. Average height 2065m

Month:	No icing	Light	Moderate	Severe
January	59.97	15.43	20.43	4.17
February	64.40	13.46	19.19	2.95
March	63.39	13.63	19.54	3.44
April	67.22	12.61	17.83	2.33
May	67.18	12.07	19.70	1.05
June	65.25	14.75	19.25	0.75
July	67.58	14.78	17.07	0.56
August	65.99	15.13	17.90	0.97
September	55.50	15.31	26.92	2.28
October	56.61	13.33	26.13	3.92
November	59.94	13.64	22.33	4.08
December	63.31	14.03	18.90	3.76

Icing statistics.

Ny Ålesund - Verlegenuken

Model level 26. Average height 2363m

Month:	No icing	Light	Moderate	Severe
January	62.96	14.78	18.47	3.79
February	67.62	13.13	16.68	2.57
March	66.56	13.25	16.83	3.36
April	69.92	12.00	16.36	1.72
May	71.10	11.75	16.34	0.81
June	68.50	14.06	16.58	0.86
July	68.76	15.40	15.32	0.51
August	67.98	14.76	16.34	0.91
September	60.31	15.56	22.06	2.08
October	60.99	12.69	22.90	3.41
November	63.47	13.36	19.42	3.75
December	66.72	12.96	16.75	3.58

Icing statistics.

Barentsøya - Verlegenuken

Model level 40. Average height 29m

Month:	No icing	Light	Moderate	Severe
January	34.70	58.01	7.28	0.00
February	37.69	53.78	8.53	0.00
March	48.09	47.18	4.73	0.00
April	70.47	27.03	2.50	0.00
May	84.19	14.17	1.64	0.00
June	70.53	16.53	12.56	0.39
July	60.62	10.51	26.21	2.66
August	59.27	13.41	25.81	1.51
September	65.50	25.28	8.92	0.31
October	56.75	38.95	4.25	0.05
November	42.67	51.14	6.19	0.00
December	35.46	56.94	7.61	0.00

Icing statistics.

Barentsøya - Verlegenuken

Model level 39. Average height 94m

Month:	No icing	Light	Moderate	Severe
January	30.35	61.45	8.20	0.00
February	33.59	57.50	8.91	0.00
March	43.09	52.15	4.76	0.00
April	65.89	31.03	3.08	0.00
May	81.08	16.10	2.82	0.00
June	64.03	19.83	16.08	0.06
July	62.18	12.50	24.84	0.48
August	58.82	14.73	25.83	0.62
September	61.94	25.47	12.53	0.06
October	52.96	40.86	6.18	0.00
November	39.06	53.25	7.69	0.00
December	32.18	60.97	6.85	0.00

Icing statistics.

Barentsøya - Verlegenuken

Model level 38. Average height 170m

Month:	No icing	Light	Moderate	Severe
January	26.96	60.59	12.45	0.00
February	31.02	55.46	13.52	0.00
March	38.55	51.99	9.46	0.00
April	60.64	33.33	6.03	0.00
May	77.07	17.82	5.05	0.05
June	59.78	19.78	19.89	0.56
July	61.80	13.09	23.55	1.56
August	57.04	16.40	25.35	1.21
September	57.39	25.19	17.19	0.22
October	46.26	43.33	10.40	0.00
November	33.25	54.97	11.78	0.00
December	28.68	60.67	10.65	0.00

Icing statistics.

Barentsøya - Verlegenuken

Model level 37. Average height 258m

Month:	No icing	Light	Moderate	Severe
January	23.20	57.77	19.01	0.03
February	28.75	51.42	19.83	0.00
March	33.12	50.89	15.99	0.00
April	54.14	35.61	10.14	0.11
May	70.67	21.13	8.12	0.08
June	54.78	21.72	21.83	1.67
July	61.45	14.22	21.61	2.72
August	54.49	17.93	25.32	2.26
September	50.39	26.44	22.53	0.64
October	37.88	44.65	17.34	0.13
November	27.56	53.58	18.83	0.03
December	23.63	59.33	17.02	0.03

Icing statistics.

Barentsøya - Verlegenuken

Model level 36. Average height 359m

Month:	No icing	Light	Moderate	Severe
January	22.39	53.15	24.35	0.11
February	28.16	46.99	24.82	0.03
March	30.62	46.40	22.96	0.03
April	47.22	36.92	15.58	0.28
May	61.59	26.13	12.12	0.16
June	47.14	27.69	23.08	2.08
July	60.54	15.89	20.75	2.82
August	51.53	21.05	24.70	2.72
September	41.11	27.81	29.61	1.47
October	29.70	44.54	25.22	0.54
November	23.33	50.00	26.50	0.17
December	20.11	54.95	24.70	0.24

Icing statistics.

Barentsøya - Verlegenuken

Model level 35. Average height 475m

Month:	No icing	Light	Moderate	Severe
January	23.41	44.60	31.48	0.51
February	29.63	40.91	29.07	0.38
March	30.94	41.77	27.02	0.27
April	40.78	37.86	20.83	0.53
May	49.01	33.49	17.28	0.22
June	39.94	32.44	25.78	1.83
July	60.75	16.42	20.78	2.04
August	51.13	20.05	26.37	2.45
September	33.64	27.61	36.03	2.72
October	22.77	40.59	34.97	1.67
November	23.03	42.06	34.22	0.69
December	20.19	47.31	31.72	0.78

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Icing statistics.

Barentsøya - Verlegenuken

Model level 34. Average height 606m

Month:	No icing	Light	Moderate	Severe
January	25.43	38.76	34.60	1.21
February	33.41	34.62	31.29	0.68
March	33.68	36.13	29.70	0.48
April	38.50	35.03	25.50	0.97
May	37.45	37.93	23.98	0.65
June	36.58	33.25	28.64	1.53
July	62.72	15.62	20.11	1.56
August	51.72	18.95	27.18	2.15
September	30.17	25.47	41.08	3.28
October	18.63	32.23	46.05	3.09
November	24.39	33.97	39.69	1.94
December	24.22	37.53	36.77	1.48

Icing statistics.

Barentsøya - Verlegenuken

Model level 33. Average height 754m

Month:	No icing	Light	Moderate	Severe
January	30.43	33.84	33.82	1.91
February	38.49	29.04	31.23	1.24
March	39.65	29.92	29.62	0.81
April	41.19	28.78	29.03	1.00
May	35.51	32.69	30.59	1.21
June	36.25	33.06	29.39	1.31
July	64.68	14.25	19.84	1.24
August	52.45	19.87	26.26	1.42
September	29.94	23.78	42.61	3.67
October	19.54	25.16	51.13	4.17
November	27.44	27.36	42.33	2.86
December	29.27	32.34	36.16	2.23

Icing statistics.

Barentsøya - Verlegenuken

Model level 32. Average height 920m

Month:	No icing	Light	Moderate	Severe
January	36.75	29.62	31.29	2.34
February	42.18	26.30	29.99	1.53
March	45.24	25.46	28.06	1.24
April	46.83	24.17	27.89	1.11
May	38.52	26.32	33.82	1.34
June	39.36	28.83	30.92	0.89
July	66.10	14.68	18.41	0.81
August	54.46	19.19	25.48	0.86
September	31.33	24.53	40.97	3.17
October	23.25	21.85	51.05	3.84
November	30.58	26.75	39.39	3.28
December	35.97	28.44	33.15	2.45

Icing statistics.

Barentsøya - Verlegenuken

Model level 31. Average height 1105m

Month:	No icing	Light	Moderate	Severe
January	42.74	26.21	28.87	2.18
February	46.84	24.59	27.04	1.53
March	50.03	21.24	27.53	1.21
April	51.61	22.25	24.78	1.36
May	43.01	23.58	32.07	1.34
June	44.53	24.72	29.53	1.22
July	66.85	13.52	18.95	0.67
August	56.61	19.52	22.98	0.89
September	36.50	23.92	37.31	2.28
October	27.26	23.15	46.26	3.33
November	35.42	24.97	36.72	2.89
December	43.23	25.48	29.19	2.10

Icing statistics.

Barentsøya - Verlegenuken

Model level 30. Average height 1311m

Month:	No icing	Light	Moderate	Severe
January	47.12	24.54	26.29	2.04
February	52.45	22.37	23.82	1.36
March	53.09	19.92	25.38	1.61
April	55.75	20.56	22.47	1.22
May	48.58	20.99	29.27	1.16
June	50.03	21.14	27.67	1.17
July	66.56	14.76	18.17	0.51
August	58.74	18.79	21.53	0.94
September	40.69	22.97	34.06	2.28
October	34.30	22.77	40.24	2.69
November	41.39	23.25	32.69	2.67
December	50.89	21.94	25.03	2.15

Icing statistics.

Barentsøya - Verlegenuken

Model level 29. Average height 1538m

Month:	No icing	Light	Moderate	Severe
January	52.72	21.18	24.14	1.96
February	57.11	19.27	22.14	1.48
March	56.32	18.17	23.55	1.96
April	59.14	19.00	20.67	1.19
May	52.82	20.19	26.16	0.83
June	54.75	19.72	24.47	1.06
July	67.66	16.29	15.43	0.62
August	62.23	17.47	19.35	0.94
September	45.22	21.06	31.39	2.33
October	41.69	19.30	36.24	2.77
November	47.14	20.56	29.72	2.58
December	56.08	19.57	22.80	1.56

Icing statistics.

Barentsøya - Verlegenuken

Model level 28. Average height 1787m

Month:	No icing	Light	Moderate	Severe
January	56.75	18.68	22.47	2.10
February	62.07	15.94	20.25	1.74
March	59.84	16.45	21.77	1.94
April	63.61	16.19	19.00	1.19
May	57.47	18.39	23.39	0.75
June	58.64	17.61	22.83	0.92
July	68.63	15.97	14.89	0.51
August	63.90	17.47	17.45	1.18
September	49.17	20.44	28.25	2.14
October	47.18	17.82	32.23	2.77
November	51.97	18.94	26.17	2.92
December	59.54	17.72	20.65	2.10

Icing statistics.

Barentsøya - Verlegenuken

Model level 27. Average height 2061m

Month:	No icing	Light	Moderate	Severe
January	60.43	17.47	19.84	2.26
February	64.91	14.70	18.45	1.95
March	62.93	14.76	20.46	1.85
April	66.61	14.19	17.94	1.25
May	61.80	17.50	20.11	0.59
June	61.94	16.17	20.86	1.03
July	68.66	17.28	13.47	0.59
August	65.56	16.61	16.59	1.24
September	54.28	18.33	25.17	2.22
October	52.88	16.99	27.20	2.93
November	57.17	16.92	22.92	3.00
December	63.17	16.48	18.06	2.28

Icing statistics.

Barentsøya - Verlegenuken

Model level 26. Average height 2358m

Month:	No icing	Light	Moderate	Severe
January	64.57	15.86	17.39	2.18
February	67.15	14.82	16.35	1.68
March	66.10	13.84	18.47	1.59
April	69.19	13.19	16.33	1.28
May	66.34	16.13	16.72	0.81
June	64.47	15.89	18.81	0.83
July	69.46	16.13	13.74	0.67
August	67.47	16.05	15.27	1.21
September	59.44	16.69	21.69	2.17
October	57.77	15.83	23.74	2.66
November	61.56	15.28	20.28	2.89
December	66.80	15.13	15.78	2.28

Icing statistics.

Hopen - 75N,32E

Model level 40. Average height 30m

Month:	No icing	Light	Moderate	Severe
January	52.20	43.66	4.14	0.00
February	50.00	45.37	4.55	0.09
March	52.26	44.46	3.25	0.03
April	60.72	36.72	1.86	0.69
May	78.28	16.05	4.38	1.29
June	73.47	13.44	9.81	3.28
July	84.89	4.73	6.59	3.79
August	93.47	2.82	2.34	1.37
September	93.47	5.19	0.67	0.67
October	81.32	17.88	0.40	0.40
November	63.53	34.11	2.19	0.17
December	52.45	44.76	2.61	0.19

Icing statistics.

Hopen - 75N,32E

Model level 39. Average height 95m

Month:	No icing	Light	Moderate	Severe
January	49.33	48.23	2.45	0.00
February	48.05	49.38	2.57	0.00
March	48.92	48.98	2.10	0.00
April	57.11	40.33	2.42	0.14
May	75.62	19.62	4.30	0.46
June	75.25	16.81	7.25	0.69
July	84.78	7.80	5.89	1.53
August	91.83	5.43	2.34	0.40
September	90.72	8.42	0.75	0.11
October	77.61	21.83	0.40	0.16
November	60.94	37.42	1.56	0.08
December	49.97	48.33	1.69	0.00

Icing statistics.

Hopen - 75N,32E

Model level 38. Average height 173m

Month:	No icing	Light	Moderate	Severe
January	44.27	52.10	3.63	0.00
February	42.95	52.66	4.40	0.00
March	44.73	51.77	3.49	0.00
April	52.33	44.28	3.33	0.06
May	70.67	24.33	4.95	0.05
June	71.89	20.25	7.67	0.19
July	80.48	11.96	7.18	0.38
August	86.96	10.59	2.28	0.16
September	84.69	13.94	1.36	0.00
October	70.99	27.85	1.10	0.05
November	56.08	41.00	2.89	0.03
December	44.78	52.34	2.88	0.00

Icing statistics.

Hopen - 75N,32E

Model level 37. Average height 263m

Month:	No icing	Light	Moderate	Severe
January	37.58	54.70	7.72	0.00
February	36.75	54.75	8.50	0.00
March	38.06	54.76	7.18	0.00
April	45.97	47.08	6.94	0.00
May	64.57	28.06	7.28	0.08
June	65.78	22.22	11.97	0.03
July	74.49	14.97	10.24	0.30
August	78.58	16.56	4.81	0.05
September	74.31	21.58	4.11	0.00
October	60.94	34.68	4.33	0.05
November	48.56	45.39	6.06	0.00
December	37.66	55.19	7.15	0.00

Icing statistics.

Hopen - 75N,32E

Model level 36. Average height 365m

Month:	No icing	Light	Moderate	Severe
January	29.01	55.75	15.08	0.16
February	27.42	57.23	15.29	0.06
March	28.33	56.34	15.30	0.03
April	37.58	49.86	12.53	0.03
May	54.76	34.09	11.05	0.11
June	57.08	25.31	17.50	0.11
July	68.68	13.84	17.34	0.13
August	67.88	20.03	11.94	0.16
September	62.19	25.25	12.44	0.11
October	49.73	38.92	11.21	0.13
November	37.69	48.89	13.36	0.06
December	29.73	55.56	14.62	0.08

Icing statistics.

Hopen - 75N,32E

Model level 35. Average height 482m

Month:	No icing	Light	Moderate	Severe
January	19.35	55.62	24.73	0.30
February	18.33	57.02	24.29	0.35
March	18.87	53.82	27.10	0.22
April	28.22	51.28	20.31	0.19
May	41.53	40.78	17.50	0.19
June	48.61	27.86	23.44	0.08
July	62.82	14.54	22.53	0.11
August	55.99	19.68	24.03	0.30
September	49.00	26.72	24.06	0.22
October	36.83	42.98	19.54	0.65
November	25.94	50.06	23.53	0.47
December	19.41	53.25	26.96	0.38



Icing statistics.

Hopen - 75N,32E

Model level 34. Average height 615m

Month:	No icing	Light	Moderate	Severe
January	12.04	49.62	37.31	1.02
February	12.78	52.42	34.03	0.77
March	12.04	48.20	38.92	0.83
April	19.75	46.56	33.25	0.44
May	29.78	43.15	26.72	0.35
June	41.78	30.00	27.94	0.28
July	63.17	13.84	22.47	0.51
August	49.22	17.93	31.96	0.89
September	35.97	27.97	35.22	0.83
October	21.72	46.08	30.56	1.64
November	15.75	47.25	36.08	0.92
December	11.16	47.88	39.73	1.24

Icing statistics.

Hopen - 75N,32E

Model level 33. Average height 765m

Month:	No icing	Light	Moderate	Severe
January	10.86	38.74	48.15	2.26
February	12.37	41.94	44.36	1.33
March	12.85	36.83	48.87	1.45
April	17.97	36.11	44.56	1.36
May	25.22	37.23	37.07	0.48
June	40.17	30.83	28.58	0.42
July	68.31	11.59	19.57	0.54
August	48.82	16.64	33.31	1.24
September	28.22	24.39	45.72	1.67
October	11.91	39.60	45.62	2.88
November	8.56	40.56	48.92	1.97
December	8.25	39.52	50.32	1.91

Icing statistics.

Hopen - 75N,32E

Model level 32. Average height 933m

Month:	No icing	Light	Moderate	Severe
January	13.95	28.87	53.90	3.28
February	16.17	29.25	52.45	2.13
March	18.79	26.48	52.69	2.04
April	24.36	25.92	47.92	1.81
May	28.74	26.91	43.82	0.54
June	46.03	23.47	30.06	0.44
July	72.04	10.78	16.40	0.78
August	52.66	14.54	31.45	1.34
September	27.94	19.08	50.64	2.33
October	9.49	26.21	60.97	3.33
November	9.28	29.22	59.03	2.47
December	10.03	30.13	56.69	3.15

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Icing statistics.

Hopen - 75N,32E

Model level 31. Average height 1120m

Month:	No icing	Light	Moderate	Severe
January	21.75	21.61	52.58	4.06
February	22.31	20.54	53.90	3.25
March	26.59	21.88	48.66	2.88
April	34.61	19.00	43.92	2.47
May	40.24	19.46	39.76	0.54
June	53.25	18.36	27.78	0.61
July	75.54	8.74	15.24	0.48
August	58.58	13.47	26.56	1.40
September	31.75	15.69	49.83	2.72
October	13.01	18.28	64.84	3.87
November	15.42	19.92	61.31	3.36
December	17.74	22.45	55.83	3.98

Icing statistics.

Hopen - 75N,32E

Model level 30. Average height 1328m

Month:	No icing	Light	Moderate	Severe
January	31.91	18.55	44.62	4.92
February	30.52	17.89	47.76	3.84
March	37.45	17.98	41.18	3.39
April	47.00	15.19	34.97	2.83
May	52.50	16.56	30.48	0.46
June	60.92	14.97	23.56	0.56
July	78.58	8.63	12.42	0.38
August	64.38	12.82	21.37	1.42
September	37.11	15.81	44.22	2.86
October	21.05	17.23	56.67	5.05
November	26.25	18.94	50.56	4.25
December	30.40	17.37	47.77	4.46

Icing statistics.

Hopen - 75N,32E

Model level 29. Average height 1557m

Month:	No icing	Light	Moderate	Severe
January	40.91	15.38	38.31	5.40
February	38.43	15.88	40.88	4.81
March	45.70	16.02	34.46	3.82
April	55.50	12.06	29.33	3.11
May	61.08	12.98	24.89	1.05
June	66.00	13.44	19.83	0.72
July	80.62	7.74	11.24	0.40
August	67.96	10.75	20.05	1.24
September	44.00	14.00	39.22	2.78
October	30.43	15.78	47.98	5.81
November	36.36	16.69	42.08	4.86
December	40.54	15.08	39.33	5.05

Icing statistics.

Hopen - 75N,32E

Model level 28. Average height 1809m

Month:	No icing	Light	Moderate	Severe
January	48.06	13.12	33.01	5.81
February	44.98	15.70	34.06	5.25
March	53.09	13.68	28.66	4.57
April	59.56	11.67	25.33	3.44
May	66.02	12.20	20.48	1.29
June	69.89	12.08	16.97	1.06
July	80.73	8.23	10.11	0.94
August	70.86	11.18	16.61	1.34
September	49.72	14.08	33.22	2.97
October	41.51	13.71	38.98	5.81
November	45.00	14.94	34.61	5.44
December	47.69	13.55	33.79	4.97

Icing statistics.

Hopen - 75N,32E

Model level 27. Average height 2085m

Month:	No icing	Light	Moderate	Severe
January	53.31	12.88	27.88	5.94
February	52.07	14.23	28.87	4.84
March	57.85	12.63	24.81	4.70
April	62.92	10.72	22.89	3.47
May	70.16	10.51	18.12	1.21
June	70.75	11.89	16.11	1.25
July	78.47	9.60	10.35	1.59
August	71.51	10.73	16.13	1.64
September	56.03	12.56	28.86	2.56
October	50.73	12.63	32.02	4.62
November	52.25	12.97	29.50	5.28
December	53.74	12.85	29.06	4.35

Icing statistics.

Hopen - 75N,32E

Model level 26. Average height 2385m

Month:	No icing	Light	Moderate	Severe
January	58.63	11.67	24.92	4.78
February	58.09	13.84	24.32	3.75
March	62.20	12.10	21.94	3.76
April	65.86	10.47	20.75	2.92
May	73.25	10.43	15.38	0.94
June	71.58	11.22	15.78	1.42
July	75.83	9.81	11.88	2.47
August	71.16	10.99	16.02	1.83
September	60.58	12.81	24.28	2.33
October	58.44	11.64	25.94	3.98
November	58.08	11.72	25.72	4.47
December	58.95	12.69	24.65	3.71

Icing statistics.

Edgeøya - Barentsøya

Model level 40. Average height 30m

Month:	No icing	Light	Moderate	Severe
January	48.17	43.76	8.06	0.00
February	44.78	44.13	11.10	0.00
March	58.92	35.08	5.99	0.00
April	80.78	15.86	3.33	0.03
May	87.42	8.12	4.27	0.19
June	71.00	12.11	14.22	2.67
July	68.90	9.14	16.61	5.35
August	81.16	6.96	8.79	3.09
September	83.78	10.78	4.56	0.89
October	67.53	29.17	3.06	0.24
November	49.78	42.81	7.39	0.03
December	45.67	47.34	6.91	0.08

Icing statistics.

Edgeøya - Barentsøya

Model level 39. Average height 94m

Month:	No icing	Light	Moderate	Severe
January	45.16	46.51	8.33	0.00
February	41.97	47.79	10.24	0.00
March	54.27	40.43	5.30	0.00
April	77.53	18.69	3.72	0.06
May	85.38	9.78	4.81	0.03
June	74.08	12.97	12.50	0.44
July	74.81	10.40	13.17	1.61
August	80.43	10.24	8.06	1.26
September	80.31	14.64	4.42	0.64
October	65.35	31.51	2.96	0.19
November	46.67	45.33	7.92	0.08
December	43.55	50.75	5.70	0.00

Icing statistics.

Edgeøya - Barentsøya

Model level 38. Average height 171m

Month:	No icing	Light	Moderate	Severe
January	40.83	48.25	10.91	0.00
February	38.75	46.81	14.43	0.00
March	49.78	39.68	10.54	0.00
April	73.53	19.83	6.64	0.00
May	82.42	11.75	5.73	0.11
June	75.36	12.86	11.67	0.11
July	75.91	10.51	12.90	0.67
August	77.80	12.37	9.33	0.51
September	75.17	18.33	6.22	0.28
October	59.27	35.73	4.78	0.22
November	41.61	47.92	10.42	0.06
December	39.03	51.69	9.19	0.08

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Icing statistics.

Edgeøya - Barentsøya

Model level 37. Average height 260m

Month:	No icing	Light	Moderate	Severe
January	36.24	47.53	16.13	0.11
February	35.57	44.01	20.40	0.03
March	43.60	40.81	15.59	0.00
April	66.19	23.50	10.31	0.00
May	78.09	14.65	7.20	0.05
June	71.47	14.92	13.47	0.14
July	72.72	12.61	14.27	0.40
August	71.64	16.21	11.64	0.51
September	65.75	24.64	9.33	0.28
October	49.35	41.85	8.63	0.16
November	34.19	50.97	14.72	0.11
December	32.26	52.18	15.56	0.00

Icing statistics.

Edgeøya - Barentsøya

Model level 36. Average height 361m

Month:	No icing	Light	Moderate	Severe
January	32.02	45.67	21.94	0.38
February	33.80	40.64	25.47	0.09
March	36.96	41.05	21.83	0.16
April	59.25	26.50	14.11	0.14
May	69.19	20.65	10.00	0.16
June	62.42	21.72	15.64	0.22
July	68.20	15.43	15.70	0.67
August	61.21	19.62	18.44	0.73
September	52.83	30.00	16.67	0.50
October	37.39	47.12	15.00	0.48
November	27.47	50.28	21.92	0.33
December	26.45	51.26	21.99	0.30

Icing statistics.

Edgeøya - Barentsøya

Model level 35. Average height 477m

Month:	No icing	Light	Moderate	Severe
January	30.38	40.62	27.69	1.32
February	35.48	34.89	29.04	0.59
March	35.51	36.02	27.77	0.70
April	52.11	29.44	17.72	0.72
May	55.78	29.38	14.62	0.22
June	47.33	31.61	20.28	0.78
July	62.53	17.85	19.19	0.43
August	51.48	21.51	25.59	1.42
September	39.75	31.31	27.61	1.33
October	25.51	47.20	25.32	1.96
November	22.78	46.22	29.75	1.25
December	24.35	46.29	28.47	0.89

Icing statistics.

Edgeøya - Barentsøya

Model level 34. Average height 609m

Month:	No icing	Light	Moderate	Severe
January	30.59	34.11	32.69	2.61
February	37.04	30.46	30.81	1.68
March	35.32	31.34	31.80	1.53
April	44.97	29.92	23.72	1.39
May	39.09	38.25	22.07	0.59
June	34.78	35.03	29.28	0.92
July	60.00	18.04	21.51	0.46
August	46.69	19.11	32.90	1.29
September	28.94	27.28	41.36	2.42
October	15.75	39.97	40.75	3.52
November	21.50	39.53	36.08	2.89
December	25.73	38.33	33.98	1.96

Icing statistics.

Edgeøya - Barentsøya

Model level 33. Average height 757m

Month:	No icing	Light	Moderate	Severe
January	33.06	28.68	34.73	3.52
February	37.81	27.54	31.67	2.98
March	38.68	25.27	33.47	2.58
April	43.11	26.25	28.81	1.83
May	28.39	36.59	34.35	0.67
June	30.53	31.94	36.47	1.06
July	60.97	16.08	22.47	0.48
August	45.38	16.96	36.05	1.61
September	24.25	23.64	49.64	2.47
October	11.51	28.31	55.11	5.08
November	22.83	31.11	41.56	4.50
December	29.22	31.94	35.81	3.04

Icing statistics.

Edgeøya - Barentsøya

Model level 32. Average height 924m

Month:	No icing	Light	Moderate	Severe
January	36.61	23.01	35.89	4.49
February	40.23	23.58	32.94	3.25
March	42.55	20.30	34.14	3.01
April	45.36	20.75	31.78	2.11
May	27.72	26.24	45.32	0.73
June	33.47	27.36	38.08	1.08
July	65.56	13.28	20.62	0.54
August	49.57	16.42	32.31	1.69
September	25.50	20.22	51.53	2.75
October	14.01	19.11	61.08	5.81
November	26.53	22.89	45.83	4.75
December	34.65	25.89	35.73	3.74

Icing statistics.

Edgeøya - Barentsøya

Model level 31. Average height 1111m

Month:	No icing	Light	Moderate	Severe
January	40.19	18.63	36.37	4.81
February	43.12	19.92	33.62	3.34
March	46.10	18.25	32.37	3.28
April	49.81	17.44	30.58	2.17
May	35.16	21.88	42.26	0.70
June	41.25	22.44	35.25	1.06
July	69.60	12.74	17.02	0.65
August	54.68	16.45	27.50	1.37
September	30.69	19.81	46.17	3.33
October	18.82	17.80	57.37	6.02
November	31.22	19.06	44.86	4.86
December	40.91	21.67	33.41	4.01

Icing statistics.

Edgeøya - Barentsøya

Model level 30. Average height 1317m

Month:	No icing	Light	Moderate	Severe
January	43.33	18.92	32.90	4.84
February	46.58	17.41	32.94	3.07
March	48.98	17.10	30.46	3.47
April	54.14	15.97	27.47	2.42
May	44.52	19.49	35.08	0.91
June	48.17	19.36	31.28	1.19
July	72.20	11.72	15.27	0.81
August	61.05	15.05	22.69	1.21
September	37.06	18.22	41.67	3.06
October	27.50	16.88	49.49	6.13
November	37.81	17.39	40.08	4.72
December	48.09	16.77	30.70	4.44

Icing statistics.

Edgeøya - Barentsøya

Model level 29. Average height 1545m

Month:	No icing	Light	Moderate	Severe
January	48.17	16.77	29.87	5.19
February	50.71	15.61	30.22	3.45
March	53.76	14.76	27.15	4.33
April	58.56	13.61	25.31	2.53
May	52.88	16.42	29.38	1.32
June	55.03	17.50	26.44	1.03
July	73.87	11.61	13.47	1.05
August	64.76	14.03	19.54	1.67
September	43.97	16.31	36.64	3.08
October	37.12	16.13	40.70	6.05
November	44.28	15.39	35.19	5.14
December	52.90	14.70	28.25	4.14

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Icing statistics.

Edgeøya - Barentsøya

Model level 28. Average height 1796m

Month:	No icing	Light	Moderate	Severe
January	53.41	14.78	26.61	5.19
February	55.14	15.02	26.39	3.45
March	57.88	13.33	24.49	4.30
April	61.44	12.78	22.78	3.00
May	59.95	14.27	24.44	1.34
June	60.58	16.00	22.00	1.42
July	74.57	11.48	12.88	1.08
August	66.61	13.49	18.28	1.61
September	50.94	14.83	30.89	3.33
October	46.10	14.25	33.82	5.83
November	50.14	14.08	30.42	5.36
December	56.99	14.22	24.38	4.41

Icing statistics.

Edgeøya - Barentsøya

Model level 27. Average height 2071m

Month:	No icing	Light	Moderate	Severe
January	58.15	13.23	23.74	4.89
February	59.80	14.20	22.43	3.57
March	61.88	12.34	21.21	4.57
April	65.00	11.75	20.14	3.11
May	65.22	13.33	20.16	1.29
June	64.17	14.72	19.42	1.69
July	74.14	12.47	12.15	1.24
August	68.52	12.93	16.64	1.91
September	55.44	14.69	27.58	2.28
October	53.82	12.45	28.12	5.62
November	55.36	13.61	26.19	4.83
December	61.45	12.88	21.26	4.41

Icing statistics.

Edgeøya - Barentsøya

Model level 26. Average height 2370m

Month:	No icing	Light	Moderate	Severe
January	62.82	12.66	20.38	4.14
February	63.90	12.96	19.66	3.48
March	65.38	12.34	17.96	4.33
April	67.92	11.64	17.39	3.06
May	68.98	13.58	15.99	1.45
June	66.44	15.28	16.67	1.61
July	73.15	13.23	12.20	1.42
August	70.05	12.50	15.65	1.80
September	60.83	14.08	22.92	2.17
October	60.30	11.40	23.36	4.95
November	59.86	13.08	22.72	4.33
December	65.91	11.72	18.12	4.25



## Icing statistics.

Bjørnøya - Andenes

Model level 40. Average height 31m

Month:	No icing	Light	Moderate	Severe
January	68.87	30.89	0.22	0.03
February	66.15	33.62	0.18	0.06
March	71.85	27.88	0.27	0.00
April	79.61	20.00	0.36	0.03
May	91.69	7.47	0.27	0.56
June	98.17	1.50	0.31	0.03
July	99.78	0.11	0.05	0.05
August	99.68	0.08	0.19	0.05
September	99.69	0.19	0.00	0.11
October	94.25	5.56	0.08	0.11
November	84.64	15.17	0.08	0.11
December	71.91	27.80	0.30	0.00

## Icing statistics.

Bjørnøya - Andenes

Model level 39. Average height 97m

Month:	No icing	Light	Moderate	Severe
January	64.70	35.11	0.19	0.00
February	61.22	38.64	0.15	0.00
March	68.04	31.72	0.24	0.00
April	76.17	23.44	0.33	0.06
May	87.93	11.24	0.73	0.11
June	96.72	3.17	0.11	0.00
July	99.41	0.51	0.08	0.00
August	99.44	0.38	0.19	0.00
September	99.39	0.58	0.00	0.03
October	91.91	7.96	0.13	0.00
November	81.14	18.75	0.08	0.03
December	68.25	31.51	0.24	0.00

## Icing statistics.

Bjørnøya - Andenes

Model level 38. Average height 176m

Month:	No icing	Light	Moderate	Severe
January	58.76	41.02	0.22	0.00
February	54.69	45.04	0.27	0.00
March	62.37	37.18	0.46	0.00
April	69.28	30.08	0.58	0.06
May	80.97	18.12	0.91	0.00
June	91.92	7.86	0.22	0.00
July	98.71	1.16	0.13	0.00
August	98.68	1.21	0.11	0.00
September	97.64	2.36	0.00	0.00
October	87.69	12.10	0.22	0.00
November	75.33	24.33	0.31	0.03
December	63.15	36.56	0.30	0.00

Icing statistics.

Bjørnøya - Andenes

Model level 37. Average height 268m

Month:	No icing	Light	Moderate	Severe
January	48.23	50.99	0.75	0.03
February	44.04	54.75	1.21	0.00
March	51.59	46.37	2.04	0.00
April	58.25	39.08	2.67	0.00
May	69.11	27.82	3.06	0.00
June	83.14	15.58	1.28	0.00
July	96.85	2.58	0.54	0.03
August	96.45	3.20	0.35	0.00
September	92.92	6.92	0.17	0.00
October	78.63	20.46	0.91	0.00
November	65.08	33.47	1.44	0.00
December	53.09	45.78	1.13	0.00

Icing statistics.

Bjørnøya - Andenes

Model level 36. Average height 372m

Month:	No icing	Light	Moderate	Severe
January	34.27	59.49	6.21	0.03
February	31.52	59.50	8.91	0.06
March	37.15	54.78	7.98	0.08
April	44.94	45.19	9.83	0.03
May	53.28	37.18	9.52	0.03
June	68.89	25.28	5.81	0.03
July	91.48	6.13	2.39	0.00
August	90.24	7.82	1.94	0.00
September	81.92	15.78	2.28	0.03
October	64.49	30.75	4.73	0.03
November	48.64	44.36	6.89	0.11
December	39.03	55.30	5.65	0.03

Icing statistics.

Bjørnøya - Andenes

Model level 35. Average height 491m

Month:	No icing	Light	Moderate	Severe
January	21.21	57.20	21.29	0.30
February	18.77	56.26	24.26	0.71
March	22.55	54.38	22.45	0.62
April	31.22	44.92	23.17	0.69
May	37.47	36.88	25.27	0.38
June	53.33	25.92	20.61	0.14
July	82.12	9.25	8.60	0.03
August	80.16	12.45	7.39	0.00
September	64.61	24.81	10.50	0.08
October	43.36	39.57	16.85	0.22
November	29.67	49.56	20.28	0.50
December	25.51	55.62	18.58	0.30

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Icing statistics.

Bjørnøya - Andenes

Model level 34. Average height 627m

Month:	No icing	Light	Moderate	Severe
January	10.51	46.59	40.30	2.61
February	9.33	43.92	43.21	3.54
March	11.61	46.13	39.35	2.90
April	19.00	41.94	36.06	3.00
May	23.58	35.67	38.87	1.88
June	38.72	24.03	36.47	0.78
July	71.88	7.88	20.03	0.22
August	67.02	11.69	20.99	0.30
September	46.72	23.44	29.03	0.81
October	28.06	32.61	37.50	1.83
November	15.69	42.47	39.86	1.97
December	12.80	47.04	37.55	2.61

Icing statistics.

Bjørnøya - Andenes

Model level 33. Average height 778m

Month:	No icing	Light	Moderate	Severe
January	4.33	31.72	55.83	8.12
February	3.81	30.52	55.67	10.01
March	4.54	31.77	56.48	7.20
April	10.39	33.28	50.31	6.03
May	14.97	29.01	51.32	4.70
June	32.69	20.44	44.03	2.83
July	67.77	7.20	23.79	1.24
August	58.31	9.84	30.43	1.42
September	35.58	17.75	43.67	3.00
October	17.28	26.02	51.21	5.48
November	7.69	30.94	55.25	6.11
December	5.19	32.74	54.17	7.90

Icing statistics.

Bjørnøya - Andenes

Model level 32. Average height 949m

Month:	No icing	Light	Moderate	Severe
January	1.59	16.72	68.01	13.68
February	1.74	16.65	67.74	13.87
March	2.28	16.40	70.40	10.91
April	6.97	19.56	66.00	7.47
May	15.05	15.81	63.52	5.62
June	34.47	15.00	46.22	4.31
July	68.17	6.26	23.04	2.53
August	54.81	8.47	32.98	3.74
September	31.47	11.19	52.03	5.31
October	11.75	15.43	62.77	10.05
November	4.86	17.64	67.56	9.94
December	2.66	17.53	66.24	13.58

Icing statistics.

Bjørnøya - Andenes

Model level 31. Average height 1139m

Month:	No icing	Light	Moderate	Severe
January	2.02	8.01	71.75	18.23
February	2.39	7.70	72.20	17.71
March	3.20	8.01	74.27	14.52
April	8.19	9.72	72.94	9.14
May	18.66	11.24	64.97	5.13
June	39.64	11.11	45.28	3.97
July	69.62	5.59	21.40	3.39
August	55.32	7.61	32.02	5.05
September	30.14	8.78	53.44	7.64
October	10.27	8.90	67.90	12.93
November	5.53	8.67	71.50	14.31
December	2.77	8.17	70.48	18.58

Icing statistics.

Bjørnøya - Andenes

Model level 30. Average height 1349m

Month:	No icing	Light	Moderate	Severe
January	4.54	8.25	65.03	22.18
February	4.31	7.17	68.27	20.25
March	5.62	8.76	69.09	16.53
April	11.31	10.58	67.33	10.78
May	24.62	11.34	59.38	4.65
June	46.31	9.89	39.86	3.94
July	72.02	5.91	18.25	3.82
August	59.19	7.61	28.15	5.05
September	30.53	10.22	51.03	8.22
October	10.70	9.65	64.14	15.51
November	7.17	8.92	67.39	16.53
December	5.05	7.34	65.81	21.80

Icing statistics.

Bjørnøya - Andenes

Model level 29. Average height 1581m

Month:	No icing	Light	Moderate	Severe
January	7.77	9.30	59.33	23.60
February	7.44	8.59	61.95	22.02
March	9.30	8.15	64.41	18.15
April	15.53	10.69	62.14	11.64
May	29.89	12.07	52.58	5.46
June	50.94	10.75	34.81	3.50
July	72.80	6.16	18.06	2.98
August	61.32	8.47	25.08	5.13
September	30.42	11.25	48.58	9.75
October	14.06	10.19	59.19	16.56
November	10.53	9.61	62.14	17.72
December	7.85	7.47	61.21	23.47

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Icing statistics.

Bjørnøya - Andenes

Model level 28. Average height 1836m

Month:	No icing	Light	Moderate	Severe
January	12.39	10.22	54.17	23.23
February	11.92	10.36	55.25	22.46
March	13.01	10.62	57.88	18.49
April	20.61	12.28	55.42	11.69
May	35.03	13.47	45.35	6.16
June	53.89	13.17	29.58	3.36
July	71.69	7.26	18.09	2.96
August	60.94	10.00	23.82	5.24
September	32.28	12.31	45.39	10.03
October	18.01	10.91	55.35	15.73
November	13.89	11.11	56.89	18.11
December	11.45	8.47	56.37	23.71

Icing statistics.

Bjørnøya - Andenes

Model level 27. Average height 2114m

Month:	No icing	Light	Moderate	Severe
January	18.17	11.91	48.01	21.91
February	17.53	11.16	48.64	22.67
March	19.11	11.61	51.88	17.39
April	26.47	12.67	48.78	12.08
May	40.94	14.25	39.33	5.48
June	54.72	13.53	27.86	3.89
July	64.92	11.56	20.38	3.15
August	59.38	11.83	24.33	4.46
September	35.97	12.17	41.72	10.14
October	22.55	11.75	50.67	15.03
November	19.64	11.56	52.03	16.78
December	16.72	11.53	49.49	22.26

Icing statistics.

Bjørnøya - Andenes

Model level 26. Average height 2418m

Month:	No icing	Light	Moderate	Severe
January	24.46	12.50	42.55	20.48
February	24.29	12.57	43.42	19.72
March	24.87	13.58	45.97	15.59
April	33.58	12.97	43.39	10.06
May	47.61	14.19	33.15	5.05
June	56.81	14.28	25.11	3.81
July	59.41	14.52	22.15	3.92
August	56.99	14.11	24.46	4.44
September	41.00	12.94	37.00	9.06
October	29.09	12.77	43.90	14.25
November	25.69	12.11	46.69	15.50
December	24.06	11.64	44.01	20.30

Icing statistics.

Bjørnøya - Hammerfest

Model level 40. Average height 30m

Month:	No icing	Light	Moderate	Severe
January	67.18	32.53	0.30	0.00
February	63.11	36.63	0.21	0.06
March	68.71	30.89	0.40	0.00
April	77.94	21.56	0.33	0.17
May	90.89	8.01	0.35	0.75
June	97.78	1.78	0.28	0.17
July	99.68	0.13	0.13	0.05
August	99.62	0.05	0.22	0.11
September	99.64	0.28	0.00	0.08
October	94.11	5.75	0.05	0.08
November	81.92	17.72	0.25	0.11
December	71.24	28.41	0.35	0.00

Icing statistics.

Bjørnøya - Hammerfest

Model level 39. Average height 97m

Month:	No icing	Light	Moderate	Severe
January	62.85	36.96	0.19	0.00
February	60.09	39.70	0.21	0.00
March	65.08	34.62	0.30	0.00
April	74.53	25.00	0.42	0.06
May	87.39	11.51	1.02	0.08
June	95.97	3.83	0.17	0.03
July	99.44	0.46	0.08	0.03
August	99.27	0.51	0.19	0.03
September	99.33	0.67	0.00	0.00
October	92.50	7.31	0.16	0.03
November	78.83	20.69	0.44	0.03
December	67.04	32.66	0.30	0.00

Icing statistics.

Bjørnøya - Hammerfest

Model level 38. Average height 175m

Month:	No icing	Light	Moderate	Severe
January	57.28	42.47	0.24	0.00
February	54.07	45.60	0.32	0.00
March	59.14	40.32	0.54	0.00
April	68.67	30.47	0.83	0.03
May	79.81	18.79	1.37	0.03
June	91.06	8.56	0.39	0.00
July	98.49	1.24	0.27	0.00
August	98.44	1.34	0.19	0.03
September	97.64	2.36	0.00	0.00
October	88.68	11.10	0.19	0.03
November	73.97	25.50	0.53	0.00
December	60.78	38.87	0.35	0.00

Icing statistics.

Bjørnøya - Hammerfest

Model level 37. Average height 267m

Month:	No icing	Light	Moderate	Severe
January	49.68	49.38	0.94	0.00
February	45.01	53.69	1.30	0.00
March	51.02	47.31	1.67	0.00
April	58.58	38.72	2.69	0.00
May	69.65	26.75	3.60	0.00
June	81.28	16.89	1.83	0.00
July	96.40	2.96	0.65	0.00
August	96.32	3.09	0.59	0.00
September	92.28	7.31	0.42	0.00
October	78.55	20.62	0.83	0.00
November	65.75	32.64	1.61	0.00
December	51.67	47.15	1.18	0.00

Icing statistics.

Bjørnøya - Hammerfest

Model level 36. Average height 371m

Month:	No icing	Light	Moderate	Severe
January	37.82	56.26	5.91	0.00
February	34.42	57.56	7.94	0.09
March	38.23	54.81	6.94	0.03
April	47.25	43.39	9.31	0.06
May	55.40	34.06	10.54	0.00
June	67.25	24.64	8.08	0.03
July	90.27	6.34	3.39	0.00
August	89.78	7.72	2.50	0.00
September	81.81	15.53	2.64	0.03
October	65.48	29.73	4.73	0.05
November	51.61	41.22	7.14	0.03
December	40.11	54.73	5.11	0.05

Icing statistics.

Bjørnøya - Hammerfest

Model level 35. Average height 490m

Month:	No icing	Light	Moderate	Severe
January	24.68	55.54	19.57	0.22
February	22.08	55.61	21.87	0.44
March	25.00	54.68	20.19	0.13
April	33.64	45.50	20.19	0.67
May	40.32	34.92	24.41	0.35
June	53.22	25.03	21.69	0.06
July	81.48	9.17	9.35	0.00
August	79.62	12.47	7.88	0.03
September	65.22	22.36	12.22	0.19
October	46.75	35.94	17.10	0.22
November	33.72	46.25	19.81	0.22
December	26.77	54.84	18.06	0.32

Icing statistics.

Bjørnøya - Hammerfest

Model level 34. Average height 625m

Month:	No icing	Light	Moderate	Severe
January	12.98	48.49	36.56	1.96
February	10.71	46.02	40.32	2.95
March	13.31	47.88	37.10	1.72
April	20.33	45.67	31.56	2.44
May	24.65	38.33	35.51	1.51
June	41.00	24.25	34.03	0.72
July	71.77	7.88	20.08	0.27
August	65.86	12.55	21.26	0.32
September	48.00	22.78	28.33	0.89
October	29.97	34.27	34.25	1.51
November	18.19	44.06	35.69	2.06
December	14.46	47.63	35.67	2.23

Icing statistics.

Bjørnøya - Hammerfest

Model level 33. Average height 776m

Month:	No icing	Light	Moderate	Severe
January	5.22	38.04	50.67	6.08
February	4.52	34.18	54.34	6.97
March	6.24	35.48	53.95	4.33
April	11.08	35.25	49.28	4.39
May	16.67	30.94	49.46	2.93
June	34.89	21.78	41.25	2.08
July	67.63	7.37	22.88	2.12
August	58.15	10.22	30.51	1.13
September	36.64	18.69	41.56	3.11
October	17.82	30.03	47.82	4.33
November	9.28	34.08	51.17	5.47
December	6.56	35.99	51.37	6.08

Icing statistics.

Bjørnøya - Hammerfest

Model level 32. Average height 946m

Month:	No icing	Light	Moderate	Severe
January	2.31	23.09	65.16	9.44
February	2.15	21.31	66.35	10.18
March	3.66	21.16	67.93	7.26
April	8.39	20.22	65.28	6.11
May	16.56	19.14	60.70	3.60
June	36.64	16.14	44.22	3.00
July	68.74	6.51	22.26	2.50
August	55.86	8.09	33.47	2.58
September	32.47	11.67	51.28	4.58
October	12.72	18.20	62.12	6.96
November	5.97	20.44	64.69	8.89
December	3.15	22.39	64.06	10.40



Icing statistics.

Bjørnøya - Hammerfest

Model level 31. Average height 1136m

Month:	No icing	Light	Moderate	Severe
January	3.15	12.66	71.42	12.77
February	3.19	10.86	72.70	13.25
March	4.95	11.34	73.74	9.97
April	9.89	11.58	71.36	7.17
May	21.13	13.44	62.18	3.25
June	42.14	12.58	42.58	2.69
July	71.21	6.40	19.87	2.53
August	57.45	7.80	30.83	3.92
September	32.19	9.56	51.83	6.42
October	10.99	11.34	68.20	9.46
November	7.58	10.56	70.64	11.22
December	4.46	10.73	70.81	14.01

Icing statistics.

Bjørnøya - Hammerfest

Model level 30. Average height 1346m

Month:	No icing	Light	Moderate	Severe
January	7.07	12.88	65.08	14.97
February	6.23	9.83	68.33	15.61
March	8.36	11.61	67.96	12.07
April	14.64	13.08	64.28	8.00
May	27.34	14.09	54.84	3.74
June	48.58	13.03	36.00	2.39
July	74.38	5.89	16.88	2.85
August	61.37	8.25	26.29	4.09
September	32.28	11.44	50.06	6.22
October	12.74	11.29	65.00	10.97
November	10.86	11.64	64.53	12.97
December	7.31	10.22	66.94	15.54

Icing statistics.

Bjørnøya - Hammerfest

Model level 29. Average height 1577m

Month:	No icing	Light	Moderate	Severe
January	12.02	12.37	59.57	16.05
February	11.04	11.95	60.18	16.82
March	13.23	11.99	62.12	12.66
April	19.83	13.22	57.83	9.11
May	33.49	14.06	47.88	4.57
June	53.69	13.00	30.75	2.56
July	75.48	6.45	15.81	2.26
August	63.12	9.52	23.95	3.41
September	33.42	12.53	46.94	7.11
October	16.77	11.37	60.48	11.37
November	14.83	11.17	60.28	13.72
December	12.15	10.32	60.56	16.96

Icing statistics.

Bjørnøya - Hammerfest

Model level 28. Average height 1832m

Month:	No icing	Light	Moderate	Severe
January	18.20	13.31	52.50	15.99
February	17.59	12.19	53.01	17.21
March	19.78	12.23	55.00	12.98
April	26.81	12.94	50.72	9.53
May	40.99	14.35	39.60	5.05
June	57.25	13.36	26.72	2.67
July	74.57	7.96	15.24	2.23
August	64.06	10.11	22.42	3.41
September	37.17	11.83	44.03	6.97
October	22.15	12.28	53.95	11.61
November	19.83	12.83	53.75	13.58
December	17.55	12.26	53.76	16.42

Icing statistics.

Bjørnøya - Hammerfest

Model level 27. Average height 2109m

Month:	No icing	Light	Moderate	Severe
January	25.24	14.01	45.83	14.92
February	23.79	13.46	46.64	16.12
March	26.56	13.98	47.07	12.39
April	34.00	13.33	44.44	8.22
May	47.28	14.17	33.66	4.89
June	58.42	14.53	23.53	3.53
July	68.23	10.78	18.25	2.74
August	62.47	12.39	22.04	3.09
September	42.61	12.64	38.28	6.47
October	28.17	12.72	48.60	10.51
November	26.61	13.56	46.64	13.19
December	25.81	13.28	45.73	15.19

Icing statistics.

Bjørnøya - Hammerfest

Model level 26. Average height 2412m

Month:	No icing	Light	Moderate	Severe
January	33.09	14.97	39.09	12.85
February	31.26	14.17	40.85	13.72
March	34.30	13.52	41.75	10.43
April	41.00	13.36	38.28	7.36
May	53.95	13.15	28.63	4.27
June	59.61	13.92	22.83	3.64
July	63.84	12.53	20.22	3.41
August	62.77	12.74	20.81	3.68
September	48.03	13.44	32.67	5.86
October	35.32	13.15	41.75	9.78
November	33.53	13.61	41.06	11.81
December	34.22	14.03	38.71	13.04