



# Eisbericht Nr. 92

## Amtsblatt des BSH

Jahrgang 95

Nr. 92

Wednesday, 06.04.2022

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### Übersicht

In den Schären der Bottenwiek liegt im Norden 40–85 cm dickes Festeis und im Süden 30–55 cm dickes Festeis. Entlang des Festeises im Norden, Nordosten und Westen liegt eine 20Sm Breite Rinne mit dünnem Eis. Auf See treibt 20–70 cm dickes, sehr dichtes, aufgeschobenes und aufgepresstes Eis bis etwa einer Line von südlich Pietarsaari nach Nordwesten. In Norra Kvarken liegt in den Schären bis zu 50 cm dickes Festeis und auf See kommt örtlich offenes Wasser vor. Entlang der Küsten und in den Schären der Bottensee liegt Festeis oder dünnes, ebenes Eis, im Schärenmeer und der Ålandsee morsches Eis. Im Finnischen Meerbusen liegt entlang der Nordküste und im Osten bis 45 cm dickes Festeis. Östlich von Seskar treibt auf See 15–30 cm dickes Eis. Im Rigaischen Meerbusen kommt an der Küste örtlich morsches Eis im Moonsund und in der Pärnubucht vor. In der nördlichen Ostsee und dem Vänern kommt im geschützten Buchten noch örtlich morsches Eis vor.

### Overview

In the archipelagos of the Bay of Bothnia, there is 40–85 cm thick fast ice in the north and 30–55 cm thick fast ice in the south. Outside the fast ice in the north, northeast and west there is a 20nm wide lead with thin ice. At sea there is mostly 20–70 cm thick, very close, ridged and rafted ice up to a line from south of Pietarsaari to the northwest. In Norra Kvarken, there is up to 50 cm thick fast ice in the archipelagos and open water in places at sea. Along the coasts and archipelagos of the Sea of Bothnia there is fast ice or thin level ice, in the Archipelago Sea and Åland Sea there is rotten ice. In the Gulf of Finland, there is up to 45 cm thick fast ice along the northern and eastern coast. At sea east of Seskar, there is mostly very close 15–30 cm thick ice. In the Gulf of Riga, there is rotten ice in places at the coasts of Moonsund and in Pärnu Bay. In the northern Baltic and Lake Vänern thin rotten ice is still present in some sheltered bays.

### Bay of Bothnia

In and outside the northeastern archipelagos, there is 55–85 cm thick fast ice and consolidated ice, reaching out to Kemi-2, Oulu-2 and Jaakko. In the northwestern archipelagos the fast ice and consolidated is 40–70 cm thick. Further out in the north there is a 15-20nm wide lead with open water and very open ice followed by 5-20cm thick very close ice. A narrower lead is present in the east. In the west there is also a lead with 5-20cm thick very open ice. Further out at sea, there is an area with

very close, ridged, 50–70 cm thick ice around 64°45'N 23°14' E. Southeast of this area, reaching southwards to Kokkola, there is very close, 30–60 cm thick, ridged ice, which is difficult to force in places. Towards the southwest the very close, ridged ice is 20-60cm thick and there are cracks and small openings in the ice field. The ice edge runs from about 63°30' at the eastern coast (south of Pietarsaari) to the northwest. In the southern Bay of Bothnia, there is 30–50 cm thick fast ice

#### Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

[www.bsh.de/eis](http://www.bsh.de/eis)

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along the Swedish coast with new ice and open water outside south of Bjuröklubb; on the eastern coast there is 30–55 cm thick fast ice. Just outside the ice edge there is open water.

### **Norra Kvarken**

In the archipelagoes off Vaasa, there is 20–50 cm thick fast ice to about Nygrund followed by narrow belt of 20-30cm thick, close ice. Along the Swedish coast, there is 20–40 cm thick fast ice in the archi-

### **Sea of Bothnia**

On Ångermanälven, there is 20–50 cm thick very close ice in the upper part and mostly thin very open ice in the lower part. In sheltered bays along the western coast, there is 10–35 cm thick fast ice. Along the eastern coast, there is 20–45 cm fast ice

### **Archipelago and Åland Sea**

Rotten ice, up to 30cm thick, are present in the inner archipelagos and sheltered bays of both coasts. At the eastern coast, there is mostly open

### **Gulf of Finland**

From St. Petersburg up to the dike, there is 25–35 cm thick very close ice. In the Bay of Vyborg and the Bjerkesund, there is mostly 15–35 cm thick compact or fast ice and very close ice somewhat further out. At sea, starting some miles east of Seskar there is mostly very close 15–30 cm thick drift ice, which is under pressure; around Seskar

### **Gulf of Riga**

In Moonsund, there is rotten fast ice at the eastern coast and further out there is open water. In Pärnu Bay, there is rotten fast ice in the eastern part and

### **Northern Baltic**

In Lake Mälaren, there is rotten fast ice in sheltered bays and else open water. Along the Swedish coast, there is partly broken and rotten thin ice

### **Swedish Lakes**

In Lake Vänern, there is rotten ice in bays of the northern coast.

Dr. J.Holfort

With only light frost, the ice will drift west-/southwestwards and thus the more open spaces in the west will slowly close and cracks open in the east.

pelagos. At sea, there is open water near the coasts and it is mostly ice free still further out. With only light frost and light winds no larger change in the ice conditions is expected.

in the inner archipelagos, and belts of 10-30cm thick ice are drifting in places somewhat further out. Overall no larger changes are expected.

water on the fairways and in the outer archipelagos. Overall no larger changes are expected.

and southwards very open ice and open water. In Luga Bay and the entrance there is open water. In the archipelagos of the northern coast, there is 10–35 cm thick rotting fast ice in the west and 30–55 cm thick fast ice in the east. Further out very open ice and open water  
No larger changes are expected.

else open water.  
Slowly increasing temperatures will lead to ice melt.

in the Stockholm archipelago.  
The ice will gradually disappear.

The ice will gradually disappear.

## Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
<b>Finland</b>	Tornio, Kemi and Oulu	4000 dwt	IA	21.03.
	Raahe and Kalajoki	4000 dwt	IA	08.03.
	Kokkola and Pietarsaari	2000 dwt	IA	01.02.
	Vaasa	2000 dwt	I	31.03.
	Kaskinen	2000 dwt	II	31.03.
	Kristiinankaupunki, Pori, Rauma, Uusikaupunki, Naantali and Turku	2000 dwt	II	01.01.
	Loviisa	2000 dwt	II	24.03.
	Kotka and Hamina	2000 dwt	II	29.03.
	Mussalo	2000 dwt	II	25.12.
<b>Russia</b>	Vyborg	-	Ice 1	30.12.
	Vysotsk	-	Ice 2	14.01.
	Primorsk	-	Ice 2	27.01.
	Ust-Luga	-	Ice 1	04.01.
	St. Petersburg	-	required	31.12.
<b>Sweden</b>	Karlsborg	4000 dwt (2000 t)	IA	30.03.
	Luleå	4000 dwt	IA	19.02.
	Haraholmen and Skelleftehamn	4000 dwt	IA	19.02.
	Holmsund, Rundvik and Husum	2000 dwt	IC	14.03.
	Örnsköldsvik	2000 dwt	II	30.03.
	Ångermanälven	2000 dwt	IB	06.01.
	Härnösand	2000 dwt	II	22.12.

## Information of the Icebreaker Services

**Finland/Sweden**

The Saimaa Canal is closed for traffic from 30th of January.

The traffic separation schemes in the Quark are temporarily out of use from 15 January 2022.

Vessels bound for Gulf of Bothnia ports in which assistance restrictions apply, shall when passing latitude 60° 00' N report their nationality, name, destination, ETA and speed to ICE INFO on VHF channel 78. This report can also be given directly by telephone to +46 10 492 7600.

Vessels bound for Finnish or Swedish ports with assistance restrictions in the Quark or the Bay of Bothnia shall, 20 nautical miles before Nordvalen Lighthouse (63° 32.15' N 20° 46.60' E), report in accordance with the instructions for winter navigation to Bothnia VTS on VHF channel 67.

**Icebreakers:**

OTSO, KONTIO, URHO, POLARIS, NORDICA, SISU, **ATLE**, FREJ, ALE and YMER assist in the Bay of Bothnia. ZEUS assist in the Quark and in the Sea of Bothnia, VOIMA in the eastern Gulf of Finland.

**Norway**

Hellefjorden (Kragerø): Navigation temporarily closed. (30.03.22)

**Russia**

There are restrictions for small crafts going to Vysotsk, Vyborg, St. Petersburg, Ust-Luga and Primorsk.

**Icebreakers:** Several icebreakers assist vessels to the port of Vyborg, Vysotsk, Primorsk, Ust-Luga and St. Petersburg.

## Baltic Sea Ice Code

<p>First number:  <b>A<sub>B</sub> Amount and arrangements of sea ice</b>  0 Ice free  1 Open water – concentration less than 1/10  2 Very open ice - concentration 1/10 to 3/10  3 Open ice – concentration 4/10 to 6/10  4 Close ice – concentration 7/10 to 8/10  5 Very close ice – concentration 9/10 to 9+/10  6 Compact ice, including consolidated ice – concentration 10/10  7 Fast ice with drift ice outside  8 Fast ice  9 Lead in very close or compact drift ice or along the fast ice edge  / Unable to report</p> <p>Third number:  <b>T<sub>B</sub> Topography or form of ice</b>  0 Pancake ice, ice cakes, brash ice – less than 20 m across  1 Small ice floes – 20 to 100 m across  2 Medium ice floes – 100 to 500 m  3 Big ice floes – 500 to 2000 m across  4 Vast or giant ice floes – more than 2000 m across – or level ice  5 Rafted ice  6 Compact slush or shuga, or compacted brash ice  7 Hummocked or ridged ice  8 Thaw holes or many puddles on the ice  9 Rotten ice  / No information or unable to report</p>	<p>Second number:  <b>S<sub>B</sub> Stage of ice development</b>  0 New ice or dark nilas (less than 5 cm thick)  1 Light nilas (5 - 10 cm thick) or ice rind  2 Grey ice (10 - 15 cm thick)  3 Grey-white ice (15 - 30 cm thick)  4 White ice, first stage (30 - 50 cm thick)  5 White ice, second stage (50 - 70 cm thick)  6 Medium first year ice (70 - 120 cm thick)  7 Ice predominantly thinner than 15 cm with some thicker ice  8 Ice predominantly grey-white ice (15 – 30 cm) with some thicker ice  9 Ice predominantly thicker than 30 cm with some thinner ice  / No information or unable to report</p> <p>Fourth number:  <b>K<sub>B</sub> Navigation conditions in ice</b>  0 Navigation unobscured  1 Navigation difficult or dangerous for wooden vessels without ice sheathing  2 Navigation difficult for unstrengthened or low-powered vessels built of iron or steel. Navigation for wooden vessels even with ice sheathing not advisable  3 Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice  4 Navigation proceeds in lead or broken ice-channel without the assistance of an icebreaker  5 Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size  6 Icebreaker assistance can only be given to vessels of special ice class and of special size  7 Icebreaker assistance can only be given to vessels after special permission  8 Navigation temporarily closed  9 Navigation has ceased  / Unknown</p>
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**Estonia , 06.04.2022**

Paernu, port and bay 7293  
Moonsund 1//0

**Finland , 06.04.2022**

Röyttä – Etukari 8646  
Etukari – Ristinmatala 8546  
Ajos – Ristinmatala 8546  
Ristinmatala – Kemi 2 6476  
Kemi 2 – Kemi 1 9246  
Sea area SW of Kemi 1 9246  
Kemi 2 – Ulkokrunni – Virpiniemi 8546  
Oulu harbours – Kattilankalla 8546  
Kattilankalla – Oulu 1 6476  
Sea area SW of Oulu 1 9476  
High Sea N of the latitude of Marjaniemi 9476  
Raahe harbour – Heikinkari 8546  
Heikinkari – Raahe lighthouse 7476  
Raahe lighthouse – Nahkiainen 5476  
Latitude Marjaniemi – Ulkokalla, Sea 5476  
Rahja harbour – Välimatala 6366  
Vaelimatala to line Ulkokalla – Ykskivi 5476  
Sea betw. lat. of Ulkokalla –Pietarsaari 5476  
Ykspihlaja – Repskär 8846  
Repskär – Kokkola lighthouse 6866  
Sea area off Kokkola lighthouse 5476  
Pietarsaari – Kallan 7856  
Sea area off Kallan 5876

Sea lat. Pietarsaari – NE Nordvalen 1716  
Vaskiluoto – Ensten 7446  
Ensten – Vaasa lighthouse 1726  
Kaskinen – Sälgrund 1715  
Pori harb. to line Pori lighth. – Säppi 1215  
Rauma, Harbour – Kylmäpihlaja 1725  
Uusikaupunki harbour – Kirsta 8795  
Naantali and Turku – Rajakari 1205  
Rajakari – Lövskär 1205  
Lövskär – Korra 1205  
Lövskär – Berghamn 1105  
Lövskär – Grisselborg 1105  
Inkoo a. Kantvik – sea area Porkkala 7201  
Helsinki harbours – Harmaja 1000  
Vuosaari harbour – Eestiluoto 1000  
Porvoo harbours – Varlax 1000  
Varlax – Porvoo lighthouse 1000  
Valko Harbour – Täktarn 7715  
Archipelago fairway Boistö – Glosholm 1105  
Archipelago fairway Glosholm–Helsinki 1105  
Kotka – Viikari 1015  
Viikari – Orrengrund 1105  
Hamina – Suurmusta 7145  
Suurmusta – Merikari 1015  
Merikari – Kaunissaari 1105

**Russian Federation , 06.04.2022**

Port of St. Petersburg	54/3
St. Petersburg – E-point island Kotlin	54/3
E-point Kotlin – long. lighth. Tolbukhin	53/3
Lighth. Tolbukhin – lighth. –Šepelevskij	53/2
Lighthouse Šepelevskij – island Sescar	53/2
Island Sescar – Island Sommers	1311
Vyborg, port and bay	84/3
Island Vichrevoj – Island Sommers	53/3
Strait Bjerkesund	63/3
E-point Bol'šoj Ber'ozovyj – Šepelevskij	52/3
Luga bay	1211
Appr. Luga bay – line Moš.-Šepel.	1211

**Sweden , 06.04.2022**

Karlsborg – Malören	6476
Sea area off Malören	5576
Luleå – Björnklack	6476
Björnklack – Farstugrunden	6476
E and SE of Farstugrunden	2326
Sandgrönn fairway	6476
Rödallen – Norströmsgrund	2326
Haraholmen – Nygrån	6456
Sea area off Nygrån	6456
Skelleftehamn – Gåsören	5146
Sea area off Gåsören	5456
Sea area off Bjuröklubb	5556
NE of Nordvalen	1306
SW of Nordvalen	1306
Western Quark (W of Holmöarna)	1306
Umeå – Väktaren	1306
SE of Väktaren	1306
Örnsköldsvik – Hörnskatan	8446
Hörnskatan – Skagsudde	8446
Ångermanälven north Sandö Bridge	5434
Ångermanälven south Sandö Bridge	2024
Härnösand – Härnön	2024
Hudiksvallfjärden	8442
Hallstavik – Svartklubben	8392
Köping – Kvicksund	1000
Västerås – Grönsö	1000
Grönsö – Södertälje	1000
Stockholm – Södertälje	1000