



# Eisbericht Nr. 47

## Amtsblatt des BSH

Jahrgang 95

Nr. 47

Wednesday, 02.02.2022

1

### Übersicht

In den Schären der Bottenwiek liegt im Norden 25–55 cm dickes Festeis und im Süden 20–55 cm dickes Festeis. Außerhalb des Festeises im Norden und Osten kommt zuerst ebenes Eis vor und dann treibt auf See 20–50 cm dickes, sehr dichtes, aufgepresstes Eis. Außerhalb des Festeises im Westen kommt zuerst ebenes Eis und dann dichtes Eis vor. Im Süden treibt auf See 5-35cm dickes Eis und in der zentralen Bottenwiek kommt ein kleines eisfreies Gebiet vor. In Norra Kvarken liegt in den Schären bis zu 55 cm dickes Festeis und auf See treibt dünnes Eis. Entlang der Küsten und in den Schären der Bottensee, dem Schärenmeer und der Ålandsee liegt Festeis oder dünnes ebenes Eis und Neueis. Im Finnischen Meerbusen liegt entlang der Nordküste und im Osten bis 40 cm dickes Festeis. Im östlichen Teil treibt auf See sehr dichtes, 15–25 cm dickes Eis. Im Rigaischen Meerbusen befindet sich bis zu 25 cm dickes Eis im Moonsund und in der Pärnubucht. Dünnes, teilweise ebenes Eis kommt örtlich in der nördlichen Ostsee, dem Vänern und der südöstlichen Ostsee vor. Dünnes Eis kommt in geschützten Buchten der zentralen Ostsee vor. In einigen inneren Fjorden des Skagerraks liegt dünnes Eis oder Festeis.

### Overview

In the archipelagos of the Bay of Bothnia, there is 25–55 cm thick fast ice in the north and 20–55 cm thick fast ice in the south. Off the eastern and northern fast ice, there a level ice followed by very close, 20–50 cm thick, ridged ice. Off the fast ice in the west, there is level ice followed by close ice. In the southern part, there is 5-35cm thick ice and in the central Bay of Bothnia a small ice free area. In Norra Kvarken, there is up to 55 cm thick fast ice in the archipelagos and thin ice at sea. Along the coasts and archipelagos of the Sea of Bothnia, the Archipelago Sea and Åland Sea, there is fast ice or thin level ice and new ice. In the Gulf of Finland, there is up to 40 cm thick fast ice along the northern coast and in the easternmost part. At sea in the east, there is mostly very close, 15–30 cm thick ice. In the Gulf of Riga, there is up to 25 cm thick ice in Moonsund and Pärnu Bay. Thin ice and thin level ice occurs at places in the northern Baltic, Lake Vänern and the southeastern Baltic. Thin ice occurs in sheltered areas of the central Baltic. Fast ice or thin ice is present in some inner fjords of the Skagerrak.

### Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 25–55 cm thick fast ice, from the Finnish coast reaching out to Kemi-3, Oulu-2 and Johan. Off the fast ice in the east, there is 20–50 cm thick consolidated ice to Kemi-2 – Oulu-1 – Raahe light-house. Farther out there is thin level ice and new

ice east of about 24°E and also north of 65°10'N. Further out ridged 20–50 cm thick close and very close ice. Out of the fast ice in the west, there is level ice out to the line Gasören – Simbgrundet – Norströmsgrund and 5-20cm thick close ice further east. In the southern Bay of Bothnia, there is 20–

#### Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

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

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

© BSH - Alle Rechte vorbehalten

Nachdruck, auch auszugsweise, verboten

#### Eisankünfte / Ice Information

Telefon: +49 (0) 381 4563 -780

Telefax: +49 (0) 381 4563 -949

E-Mail: [ice@bsh.de](mailto:ice@bsh.de)

© BSH - All rights reserved

Reproduction in whole or in part prohibited

40 cm thick fast ice along the Swedish coast and 25–55 cm thick fast ice in the eastern archipelagos. Further out on the Finnish side, there is new ice and 10–35 cm thick close and very close ice. On the Swedish side, there is a belt with close ice

#### **Norra Kvarken**

In the archipelagoes off Vaasa, there is 25–55 cm thick fast ice to Ensten; further out to Norra Globsten, there is 10–30 cm thick very close ice. Along the Swedish coast, there is 15–25 cm thick fast in the inner archipelagos. At sea, there is 5–20cm

#### **Sea of Bothnia**

On Ångermanälven, there is 20–50 cm thick fast ice in the upper part and 10–35 cm fast or level ice in the lower part. Along the eastern coast, there is 10–30 cm fast ice in the inner archipelagos and a new ice further out. In the bays along the western

#### **Archipelago and Åland Sea**

5–20cm thick ice is present in inner archipelagos of the coasts and around the Åland islands. On the larger fairways and the outer archipelago at the eastern coast, there is mainly open water, but

#### **Gulf of Finland**

From St. Petersburg up to the longitude of Tolbuchin lighthouse there is 30–40 cm thick fast ice, followed by 20–30cm thick very open ice out to about 29°08'E. In the Bay of Vyborg, there is 25–35 cm fast ice, followed by 15–30cm thick very close ice out to about 27°39'E. In the Bjerkesund, there is 20–40 cm thick fast ice or 15–25 cm thick compact ice. At sea, south of about 60°15'N and reaching the southern coast, there is 10–20cm thick close ice between 26°50'E and 28°E and 15–30cm thick very close ice further east. In the archi-

#### **Gulf of Riga**

In Moonsund, there is 10–20 cm thick fast ice near the coasts and on the fairways there is new ice; in Suur strait there is very close ice. In Pärnu Bay, there is 15–25 cm thick fast or very close ice in the eastern part and in the western part there is a 2-

#### **Northern Baltic**

In Lake Mälaren, there is 5–30 cm thick fast ice or level ice in the western part; the central part is mostly ice free and in sheltered bays further east, there is thin level or new ice. Along the Swedish

#### **Central Baltic**

Thin very open ice or shuga occurs in few sheltered bays along the Swedish coast. Thin ice is present in the port of Liepaja.

#### **Southeastern Baltic**

In the Curonian Lagoon, there is very close, 5–15 cm thick ice in the eastern part.

with new ice further out. Centered around 64°20'N / 22°40'E there is a small ice free area at sea. New ice formation and a southwesterly ice drift are expected.

thick close ice in the north and new ice found in the southwest and the south. New ice formation and a southwesterly ice drift are expected.

coast, there is 10–30 cm thick fast ice or thin level ice and new ice at places along the coast. New ice formation and an only weak southwesterly/southerly ice drift are expected.

some new ice occurs at places.

New ice formation and a weak mostly southerly ice drift are expected.

pelagos of the northern coast, there is fast ice, 10–30 cm thick in the west and 20–40 cm thick in the east, outside at sea new ice is present east of 26°E. In Luga bay, 15–25 cm thick, very close ice is present with open ice in the entrance; in Narva Bay, there is fast ice near the coast, new ice and open ice is present further out. Else, there is new ice in some sheltered bays of the southern coast. New ice formation and an only weak ice drift are expected.

4km wide fast ice belt. Very open ice is present at sea in the northeast. In the port of Riga there is 5–10cm thick very open ice. New ice formation and an only weak ice drift are expected.

coast, there is new ice or shuga in some sheltered bays. Some ice formation may occur, but overall no larger changes are expected.

Some ice formation may occur, but overall no larger changes are expected.

No larger changes are expected.

**Skagerrak and Kattegat**

In some inner fjords of the Skagerrak, there is fast ice, up to 30 cm thick at a few places.

Some ice formation but else no larger changes are expected.

**Swedish Lakes**

Thin level ice is present in some sheltered bays of Lake Vänern; along the northern coast, there is up to 20 cm thick fast ice.

Some ice formation may occur, but overall no larger changes are expected.

Dr. J.Holfort

**Restrictions to Navigation**

	<b>Harbour/District</b>	<b>At least dwt/hp/kW</b>	<b>Ice Class</b>	<b>Begin</b>
<b>Estonia</b>	Pärnu	1600 kW	1C	17.12.
<b>Finland</b>	Tornio, Kemi and Oulu	4000 dwt	IA	16.01.
	Raahe	2000 dwt	IA	16.01.
	Kokkola, Kalajoki, Pietarsaari and Vaasa	2000 dwt	IA	01.02.
	Kristiinankaupunki, Pori, Rauma, Uusikaupunki, Naantali, Turku, Koverhar, Lappohja, Helsinki and Sköldvik	2000 dwt	II	01.01.
	Kaskinen, Taalintehdas, Förby, Inkoo, Kantvik	2000 dwt	I	16.01.
	Loviisa and Kotka	2000 dwt	I	04.01.
	Hamina Mussalo	2000 dwt 2000 dwt	I I	01.01. 01.01.
<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 and Luleå	2000 dwt	IB	06.01.
	Haraholmen and Skelleftehamn	2000 dwt	IB	06.01.
	Holmsund, Rundvik and Husum	2000 dwt	IC	15.01.
	Örnsköldsvik	2000 dwt	IC	15.01.
	Ångermanälven	2000 dwt	IB	06.01.
	Härnösand - Skutskär	2000 dwt	II	22.12.
	Köping and Västerås	2000 dwt	IC	27.12.
	Bålsta	1300/2000 dwt	IC/II	27.12.

**Information of the Icebreaker Services****Estonia**

**Icebreaker:** EVA-316 assists to the port of Pärnu.

**Finland/Sweden**

The icebreaking season has ended in Lake Saimaa and Saimaa Canal. The Saimaa Canal was closed for traffic on 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, FREJ and YMER assist in the Bay of Bothnia. ALE and ZEUS assist in the Quark and VOIMA in the eastern Gulf of Finland.

**Norway**

Husøysund, Tønsberg indre havn and Vestfjorden (Tønsberg): Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size. (28.12.21)

Hellefjorden (Kragerø): Navigation temporarily closed. (10.01.22)

**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 foes – 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>
---	--

**Estonia , 02.02.2022**

Shipping route from Narva-Jõssuu	73/2
Kunda, port and bay	30/0
Paernu, port and bay	73/5
Shipp. route from Paernu to Irben Strait	30/2
Moonsund	72/3

**Finland , 02.02.2022**

Roeyttae – Etukari	8446
Etukari – Ristinmatala	8846
Ajos – Ristinmatala	8846
Ristinmatala – Kemi 2	6876

Kemi 2 – Kemi 1	9146	Port of Liepaya	2001
Sea area SW of Kemi 1	9146		
Kemi 2 – Ulkokrunni – Virpiniemi	8446	<b>Norway , 01.02.2022</b>	
Oulu harbours – Kattilankalla	8446	Langårsund (Kragerø)	4212
Kattilankalla – Oulu 1	6876		
Sea area SW of Oulu 1	9146	<b>Russian Federation , 02.02.2022</b>	
High Sea N of the latitude of Marjaniemi	5846	Port of St. Petersburg	84/3
Raahe harbour – Heikinkari	8346	St. Petersburg – E-point island Kotlin	84/3
Heikinkari – Raahe lighthouse	6366	E-point Kotlin – long. lighth. Tolbuhkin	84/3
Raahe lighthouse – Nahkiainen	9746	Lighth. Tolbuhkin – lighth. –Šepelevskij	2312
Latitude Marjaniemi – Ulkokalla, Sea	5876	Lighthouse Šepelevskij – island Sescar	53/3
Rahja harbour – Välimatala	6366	Island Sescar – Island Sommers	53/3
Vaelimatala to line Ulkokalla – Ykskivi	4746	Island Sommers– S-point island Gogland	43/2
Sea betw. lat. of Ulkokalla –Pietarsaari	4346	S-point isl. Gogland – long. p. Kunda	3322
Ykspihlaja – Repsaer	8846	Vyborg, port and bay	84/3
Repskaer – Kokkola lighthouse	6366	Island Vichrevoj – Island Sommers	53/1
Sea area off Kokkola lighthouse	4746	Strait Bjerkesund	53/3
Pietarsaari – Kallan	7846	E-point Bol'šoj Ber'ozovyj – Šepelevskij	53/3
Sea area off Kallan	9226	Luga bay	53/3
Sea lat. Pietarsaari – NE Nordvalen	4746	Appr. Luga bay – line Mo–.Šepel.	3312
Sea area ENE of Nordvalen	4146		
Sea area Nordvalen to W of Norrskaer	2116	<b>Sweden , 01.02.2022</b>	
Vaskiluoto – Ensten	8446	Karlsborg – Maloeren	8546
Ensten – Vaasa lighthouse	5346	Sea area off Maloeren	5046
Vaasa lighthouse – Norrskaer	3016	Luleå – Bjoernklack	8546
Kaskinen – Sälgrund	5726	Bjoernklack – Farstugrunden	4236
Sea area off Sälgrund	3226	E and SE of Farstugrunden	4236
High sea from N to latitude Yttergrund	2016	Sandgroenn fairway	8546
Pori harb. to line Pori lighth. – Säppi	3115	Roedkallen – Norstroemsgrund	5046
Sea W of line Pori lighthouse – Säppi	3115	Haraholmen – Nygrån	8446
Rauma, Harbour – Kylmäpihlaja	7745	Sea area off Nygrån	5046
Kylmäpihlaja – Rauma lighthouse	4145	Skelleftehamn – Gåsoeren	3226
Uusikaupunki harbour – Kirsta	8745	Sea area off Gåsoeren	3226
Kirsta – Isokari	4145	Sea area off Bjuroeklubb	4136
Isokari – Sandbaeck	3115	NE of Nordvalen	2126
Naantali and Turku – Rajakari	4145	SW of Nordvalen	2126
Rajakari – Lövskär	2005	Western Quark (W of Holmoearna)	8346
Lövskär – Korra	3005	Umeå – Vaektaren	1106
Korra – Isokari	4145	SE of Vaektaren	3126
Lövskär – Berghamn	1005	NE and SE of Sydostbrotten	1106
Lövskär – Grisselborg	1005	Oernskoeldsvik – Hoernskaten	8346
Hanko – Vitgrund	2005	Hoernskaten – Skagsudde	8346
Koverhar – Hästö Busö	1005	Ångermanaelven north Sandoe Bridge	8444
Inkoo a. Kantvik – sea area Porkkala	7206	Ångermanaelven south Sandoe Bridge	8444
Sea area at Porkkala	1005	Haernoessand – Haernoen	1204
Helsinki harbours – Harmaja	1005	Sundsvall – Draghaellan	8346
Fairway Helsinki – Porkkala – Rönnskär	1005	Hudiksvallfjaerden	8346
Porvoo harbours – Varlax	1005	Iggesund – Agoe	8346
Varlax – Porvoo lighthouse	1115	Sandarne – Haellgrund	8346
Valko Harbour – Täktarn	7746	Ljusnefjaerden – Storjungfrun	4046
Archipelago fairway Boistö – Glosholm	3015	Gaeve – Eggegrund	8346
Archipelago fairway Glosholm–Helsinki	1005	Hallstavik – Svartklubben	8342
Kotka – Viikari	3006	Koeping – Kvicksund	8344
Viikari – Orregrund	2005	Västerås – Grönsö	8344
Hamina – Suurmusta	7846	Stockholm – Södertälje	4044
Suurmusta – Merikari	2006	Fairway to Karlstad	8342
Merikari – Kaunissaari	2006		
<b>Latvia , 02.02.2022</b>			
Port of Riga	2001		