

Eisbericht Nr. 59 Amtsblatt des BSH

Jahrgang 96	Nr. 59	Friday, 17.02.2023	1

Übersicht

In den Schären der Bottenwiek befindet sich im Norden bis 55 cm dickes Festeis und im Süden bis 25 cm dickes Festeis. Auf das Festeis folgt im Nordosten bis zu 40 cm dickes zusammenhängendes, örtlich aufgepresstes Eis. Auf See treibt im Norden dichtes, 5–20 cm dickes Eis und dünnes ebenes Eis. Außerhalb der südlichen Küsten treibt Eis verschiedener Bedeckungsgrade. In Norra Kvarken liegt bis 35 cm dickes Festeis in den Schären und Buchten und weiter außerhalb treibt sehr lockeres, dünnes Eis und Neueis. In der Bottensee und dem Schärenmeer kommt dünnes, ebenes Eis oder Festeis entlang der Küsten vor. Im Mälarsee liegt dünnes, ebenes Eis oder Neueis. Im Finnischen Meerbusen liegt in den östlichsten Buchten bis 40 cm dickes Festeis und dichtes bis sehr dichtes Eis auf See im Osten. In den Schären und Buchten entlang der nördlichen Küste kommt Festeis vor. Im Nordosten des Rigaischen Meerbusen befindet sich 10–20 cm dickes Festeis oder sehr dichtes Eis und Neueis in geschützten Gebieten.

Overview

In the archipelagos of the Bay of Bothnia, there is up to 55 cm thick fast ice in the north and up to 25 cm thick fast ice in the south. In the northeast there is up to 40 cm thick, partly ridged consolidated ice. At sea in the north, there is close, 5–20 cm thick drift ice and thin level ice. Along the southern coasts drift ice of varying concentrations. In the Quark, there is up to 35 cm thick fast ice in the archipelagos and bays and thin very open ice or new ice further out. In the Sea of Bothnia and the Archipelago Sea, fast ice or thin level ice is present along the coasts. In Lake Mälaren, there is thin level ice and new ice. In the Gulf of Finland, up to 40 cm thick fast ice is present in the easternmost bays and close to very close ice at sea in the east. In the archipelagos and bays along the northern coast, there is fast ice. In the northeastern Gulf of Riga, there is 10–20 cm thick fast ice or very close ice in sheltered bays.

Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 25–55 cm thick fast ice and compact, up to 45 cm thick ice towards Malören and off the eastern fast ice. Further out in the northeast, there is 20–40 cm thick ridged consolidated ice to about Kemi-1 – Oulun portti – Jaako. Close, 5–20 cm thick drift ice or 3–10 cm thick level ice is present north of about 65°N. In the southern Bay of Both-

nia, there is 5–25 cm thick fast ice in the archipelagos and farther out in the east, there is 5-20cm thick ice of varying concentrations out to line Ulkokalla - Helsingkalla. In the west there is very open ice along the coast in places.

With a slow northwesterly ice drift no some ice formation is expected over the weekend.

Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH) www.bsh.de/eis www.bsh.de/ice

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The Quark

There is 10–35 cm thick fast ice in the Vaasa archipelago out to Storhästen. Further out to Norra Gloppsten, there is very close, 5–20 cm thick ice. On the Swedish side, there is mostly fast ice up to 35 cm thick in inner bays. Further out at both

coasts is new ice and open water. At sea, there is thin very open drift ice north of Holmöarna.

Over the course of the weekend some ice will form with a weak ice drift changing from northwesterly to southerly directions.

Sea of Bothnia

In the archipelagos along the eastern coast, there is 10–20 cm thick fast ice. Along the western coast, there is thin level ice or new ice in sheltered bays in the south and up to 40 cm thick fast ice in inner bays in the north. On Ångermanälven, there

is 20-40 cm thick fast or level ice.

Overall no larger changes are expected over the weekend, but over the course of Sunday ice formation may start.

Archipelago Sea and Aland Sea

At the eastern coast, there is 5–15 cm fast or level ice in the inner bays. In the western and central part new ice is present along the coasts.

Overall no larger changes are expected over the weekend, but towards Monday ice formation may start

Northern Baltic

In Lake Mälaren, there is 5–15 cm thick fast ice or thin level ice in the western part, with some areas of partly open water. In the eastern part, there is thin ice in sheltered bays. New ice occurs in sheltered places along the outer coast.

With ice melt expected till Saturday and possible minor ice formation on Sunday, overall no larger changes are expected.

Gulf of Finland

In the Koporye and Luga bay there is very open drift ice and very close ice near the shore. From St. Petersburg out to Kotlin and in the bay north of Kotlin, there is 20–40 cm thick fast ice or compact ice. Further out to about 28°40'E there is 10-20cm thick very close ice and still further very open ice to about 28°20'E. In the Bay of Vyborg, there is 15–25 cm thick fast ice and in the Bjerkesund, there is 10–20 cm thick fast ice. Further west, there is first very close, later close ice to 28°20'E. Along the

northern coast, there is 10–25 cm thick fast ice in the eastern archipelagos. Further out, there is open water or very open ice to the line Haapasaari – Nerva. In the western archipelagos, there is 5–15 cm thick fast ice.

Over the weekend the wind will veer from southeasterly to easterly while air temperatures will slowly drop, therefore some ice formation is expected in the eastern part and the ice will drift westwards.

Gulf of Riga

In Väinameri, there is 5–15 cm thick very close ice or fast ice near the coasts. On the fairway is open water. In the Bay of Pärnu, there is a narrow belt of 5–15 cm thick fast ice along the coast. Further out to the line Valgeranna – Cape Suurna, there is very close ice. Further out to the line southern part

of Manilaid to Cape Pikla Nina is open water.

Towards Sunday northwesterly winds will bring somewhat lower temperatures, so that minor ice formation may start and the ice will drift towards the southeast.

Skagerrak and Kattegat

Up to 15 cm thick ice or new ice is present in some inner Norwegian Fjords. At a few places thicker ice occurs.

Swedish Lakes

Thin level ice or new ice is present in some sheltered bays in the northeast of Lake Vänern.

On Sunday some ice formation may occur, but

A cold spell on Sunday could lead to some minor ice formation, but else no larger change is expected over the weekend.

during the rest of the weekend ice melt is expected, so no larger overall changes are expected.

Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Estonia	Pärnu	1600 kW	1 C	23.12.
Finland	Tornio, Kemi and Oulu Tornio, Kemi and Oulu Raahe, Kalajoki, Kokkola, Pietarsaari	2000 dwt 4000 dwt 2000 dwt	IA IA I	01.02. 22.02. 07.01.
	and Vaasa Raahe Kaskinen, Inkoo, Kantvik, Helsinki, Sköldvik and Mussalo Loviisa, Kotka and Hamina	2000 dwt 2000 dwt 2000 dwt	IB II	22.02. 07.01. 24.12.
Russia	Vyborg and Vysotsk	-	Ice 1	08.02.
Sweden	Karlsborg and Lulea Haraholmen and Skelleftehamn Holmsund Rundvik and Husum Örnsköldsvik Angermanälven Söraker, Sundsvall and Söderhamn Köping and Västeras	2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 1300/2000 dwt	IB IC IC II IC IB IC	08.01. 25.12. 07.02. 21.12. 13.02. 07.01. 13.02. 25.01.
	Balsta	1300/2000 dwt	IC/II	22.12.

Estonia

Icebreakers:

EVA-316 assists in the port of Pärnu.

Finland/Sweden

The Saimaa Canal is closed for traffic since 4th January.

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 82. 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.

The traffic separation schemes in the Quark are temporarily out of use from 7 February due to ice conditions.

Icebreakers:

KONTIO, OTSO, SISU, ZEUS, ATLE and FREJ assist in the Bay of Bothnia. ALE assists in the Quark. CALYPSO assists in the region of Kotka and Hamina.

Russia

There are restrictions for small crafts going to Vysotsk, Vyborg, St. Petersburg, Ust-Luga and Primorsk. No sailing of barge by tug to Vyborg and Vysotsk.

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

Jahrgang 96 Nr. 59 Friday, 17.02.2023

Baltic Sea Ice Code

First number: AB Amount and arrangements of sea ice 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 Fast ice with drift ice outside Fast ice Lead in very close or compact drift ice or along the fast Ice edge Unable to report Third number: T_B Topography or form of ice
0 Pancake ice, ice cakes, brash ice – less than 20 m across 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 Rafted ice Compact slush or shuga, or compacted brash ice Hummocked or ridged ice Thaw holes or many puddles on the ice Rotten ice No information or unable to report

Second number: S_B Stage of ice development

New ice or dark nilas (less than 5 cm thick) Light nilas (5 - 10 cm thick) or ice rind Grey ice (10 - 15 cm thick)

Grey-white ice (15 - 30 cm thick)

White ice, first stage (30 - 50 cm thick)
White ice, second stage (50 - 70 cm thick)
Medium first year ice (70 - 120 cm thick)
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

Fourth number:

K_B Navigation conditions in ice

Navigation unobscured

Navigation difficult or dangerous for wooden vessels without ice sheathing

Navigation difficult for unstrengthened or low-powered vessels built of iron or steel. Navigation for wooden vessels even with ice sheathing not advisable

Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice

Navigation proceeds in lead or broken ice-channel without

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 after special permission
8 Navigation temporarily closed
9 Navigation has ceased
7 Inknown

Unknown

Sea area ENE of Nordvalen 2106
Moonsund 1//0 Ensten – Vaasa lighthouse 5756 Vaasa lighthouse – Norrskär 0//6 Finland, 17.02.2023 Röyttä – Etukari 8446 Inkoo a. Kantvik – sea area Porkkala 8145 Etukari – Ristinmatala 6456 Valko Harbour – Täktarn 1715 Ajos – Ristinmatala 6456 Archipelago fairway Boistö – Glosholm 0//5 Ristinmatala – Kemi 2 5876 Kotka – Viikari 2005 Kemi 2 – Kemi 1 5876 Viikari – Orrengrund 0//5 Sea area SW of Kemi 1 5876 Hamina – Suurmusta 8345 Kemi 2 – Ulkokrunni – Virpiniemi 6456 Suurmusta – Merikari 1105 Oulu harbours – Kattilankalla 8456 Merikari – Kaunissaari 0//5 Kattilankalla – Oulu 1 5856 Norway, 15.02.2023 High Sea N of the latitude of Marjaniemi 5756 Svinesund – Halden 31// Raahe harbour – Heikinkari 8346 Drammensfjord 2111 Heikinkari – Raahe lighthouse 7856 Husøysund – Tønsberg channel 8345 Raahe lighthouse – Nahkiainen 3216 Tønsberg, inner harbour 8353 Latitude Marjaniemi – Ulkokalla, Sea 3106 Vestfjord (Tønsberg) 8555 Rahja harbour – Välimatala 3216 Langårsund (Kragerø) 8144
Finland, 17.02.2023 Röyttä – Etukari Etukari – Ristinmatala Ajos – Ristinmatala Ajos – Ristinmatala Ajos – Kemi 2 Kemi 2 – Kemi 1 Sea area SW of Kemi 1 Sea area SW of Oulu 1 Sea area SW of Oulu 1 Sea area SW of Oulu 1 High Sea N of the latitude of Marjaniemi Paahe harbour – Heikinkari Heikinkari – Raahe lighthouse Raahe lighthouse – Nahkiainen Latitude Marjaniemi – Ulkokalla, Sea Röyttä – Etukari Sea 446 Lusikaupunki harbour – Kirsta Stat4 Stat4 Suurika – Sea area Porkkala Stat5 Valko Harbour – Täktarn 1715 Archipelago fairway Boistö – Glosholm O//5 Kotka – Viikari Coulkari – Orrengrund O//5 Suurmusta – Orrengrund O//5 Suurmusta – Merikari Suurmusta – Merikari Svinesund – Halden Svinesund – Halden Svinesund – Halden Svinesund – Tønsberg channel Stat5 Statitude Marjaniemi – Ulkokalla, Sea Stat6 Stat6 Suurmusta – Vorrengrund Stat6 Svinesund – Halden Stat6 Suurmusta – Merikari Svinesund – Halden Stat6 Svinesund – Halden Stat6 Suurmusta – Merikari Stat6 Svinesund – Halden Stat6 Suurmusta – Merikari Stat6 Svinesund – Halden Stat6 Suurmusta – Merikari Stat6 Suurm
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Vaelimatala to line Ulkokalla – Ykskivi 3216
Vacinitatala to into dikokana Triokivi OZTO
Sea betw. lat. of Ulkokalla –Pietarsaari 5746 Russian Federation, 17.02.2023
Ykspihlaja – Repskär 7756 Port of St. Petersburg 84/3
Repskär – Kokkola lighthouse 2726 St. Petersburg – E-point island Kotlin 54/3
Sea area off Kokkola lighthouse 5746 E-point Kotlin – long. lighth. Tolbuhkin 4303
Pietarsaari – Kallan 7756 Lighth. Tolbuhkin – lighth. –Šepelevskij 42/2
Sea area off Kallan 5746 Lighthouse Šepelevskij – island Sescar 23/2
Sea lat. Pietarsaari – NE Nordvalen 2716 Island Sescar – Island Sommers 2//1

Vyborg, port and bay Island Vichrevoj – Island Sommers Strait Bjerkesund E-point Bol'šoj Ber'ozovyj – Šepelevskij Luga bay Appr. Luga bay – line MošŠepel.	83/3 42/3 83/3 32/2 22/2 2//1
Sweden, 17.02.2023 Karlsborg – Malören	6456
Sea area off Malören	5356
Luleå – Björnklack	8546
Björnklack – Farstugrunden	5136
E and SE of Farstugrunden	3126
Sandgrönn fairway	5356
Rödkallen – Norströmsgrund	3126
Haraholmen – Nygrån	5236
Skelleftehamn – Gåsören	5236
Sea area off Gåsören	2026
Western Quark (W of Holmöarna)	2026
Umeå – Väktaren	5146
Örnsköldsvik – Hörnskaten	8446
Hörnskaten – Skagsudde	5146
Ångermanälven north Sandö Bridge	8444
Ångermanälven south Sandö Bridge	8444
Härnösand – Härnön	1004
Sundsvall – Draghällan	4046
Draghällan – Åstholmsudde	4046
Hudiksvallfjärden	8342
Iggesund – Agö	8342
Sandarne – Hällgrund	8346
Ljusnefjärden – Storjungfrun	8346
Gävle – Eggegrund	5142
Hallstavik – Svartklubben	5142
Köping – Kvicksund	8244
Västerås – Grönsö	8244
Grönsö – Södertälje	2020
Stockholm – Södertälje	2020
Södertälje – Fifong	2024 5142
Fairway to Karlstad	5142

5142

Fairway to Kristinehamn