ISSN 0013-2705

BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

Eisbericht Nr. 38

Amtsblatt des BSH

Jahrgang 96	Nr. 38	Thursday, 19.01.2023	1

Übersicht

In den Schären der Bottenwiek befindet sich bis 40 cm dickes Festeis. Weiter außerhalb treibt im Norden 10–30 cm dickes, sehr dichtes Eis mit festgestampften Eis entlang der Eiskante. In der südlichen Bottenwiek befindet sich in den Buchten dünnes ebenes Eis oder Festeis. In Norra Kvarken liegt bei Vaasa bis 25 cm dickes Festeis. Ansonsten kommt an den Küsten dünnes ebenes Eis vor. 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 oder sehr dichtes Eis. In den Schären und Buchten entlang der Küsten kommt im Norden Festeis vor. Im Nordosten des Rigaischen Meerbusen befindet sich 10–25 cm dickes Festeis in geschützten Buchten und etwas weiter außerhalb Treibeis verschiedener Konzentration.

Overview

In the archipelagos of the Bay of Bothnia, there is up to 40 cm thick fast ice. Further out in the north, there is 10–30 cm thick, very close ice with a brash ice barrier along the ice edge. In the southern Bay of Bothnia, there is thin level ice or fast ice in the inner bays. In the Quark, there is up to 25 cm thick fast ice near Vaasa and else thin level ice along the coasts. In the Sea of Bothnia and the Archipelago Sea, there is fast ice or thin level ice along the coasts. In Lake Mälaren, there is thin level ice and new ice. In the Gulf of Finland, there is up to 40 cm thick fast ice or very close ice in the easternmost bays. In the archipelagos and bays along the coasts, there is fast ice in the north. In the northeastern Gulf of Riga, there is 10–25 cm thick fast ice in sheltered bays and drifting ice of varying concentration somewhat further out.

Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 20–40 cm thick fast ice. Further out, there is a region of 15–30 cm thick, very close ice to about the line Rödkallen – Malören – Oulu5. In the north the ice is partly rafted or ridged. A brash ice barrier has formed along the entire ice edge. New ice has formed along the eastern and western ice edge. In the southern Bay of Bothnia, there is 5–20 cm thick level or fast ice in the archipelagos. Along the eastern coast there is new ice formation and open water further out.
Some ice formation is possible along the coasts. The ice will drift to the northeast.

The Quark

There is 10–25 cm thick fast ice in the Vaasa archipelago out to Storhästen. Further out, there is very open ice in places. On the Swedish side, there is mostly fast ice in inner bays along the

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

Eisauskünfte / Ice Information
Telefon: +49 (0) 381 4563 -780
Telefax: +49 (0) 381 4563 -949
E-Mail: ice@bsh.de

coast. At sea, there is open water with stripes and patches at places.

No major changes with a northeasterly ice drift are expected.

Sea of Bothnia

In the archipelagos along the eastern coast, there is 5–20 cm thick fast ice and in places shuga. Further out along the coast is open water. Along the western coast, there is thin level ice in sheltered bays in the south and fast ice in inner bays in the north. On Ångermanälven, there is 10–20 cm thick fast or level ice.
No major changes are expected but some ice formation is possible in coastal areas. The ice will slightly drift to the northeast.

Archipelago Sea

At the eastern coast, there is 3–10 cm fast or level ice in the inner bays.

No major changes are expected.

Northern Baltic

In Lake Mälaren, 3–10 cm thick level ice is present in the western part and mostly open water in the eastern part. New ice occurs in sheltered places and along the coast.
No major changes are expected.

Gulf of Finland

From St. Petersburg out to Kotlin there is 20–40 cm thick fast ice, with 10–25 cm thick, very close ice on the fairway. In the bay north of Kotlin, there is 20–30 cm thick fast ice at the coast and 10–20 cm thick very close ice outside. In the Bay of Vyborg, there is 15–25 cm thick fast ice. Further out, there is 5–15 cm thick, close ice to about Nerva. In the Bjerkesund, there is 5–15 cm thick fast ice with 5–15 cm thick, very close ice at the entrance. Along the northern coast, there is 5–20 cm thick fast ice in the eastern archipelagos with shuga in places at the edge. In the western archipelagos thin ice.
The general ice situation will not change much the coming day with a ceasing ice drift to the east/northeast.

Gulf of Riga

In Väinameri, there is 10–25 cm thick fast ice in sheltered bays and open water on the fairways. In the Bay of Pärnu, there is 10–20 cm thick fast ice. Further out to the line south tip of Manilaid – island Sorgu – Suurna Nina, there is 10–20 cm thick, very close ice.
No major change is expected the coming day with some ice drift to the east/northeast.

Southeastern Baltic

In the Curonian Lagoon, there is 3–10 cm thick, open to very close drift ice at places in the western part.
No major changes are expected.

Skagerrak and Kattegat

Up to 10 cm thick ice or new ice is present in some Norwegian Fjords.

No major changes are expected.

Swedish Lakes

Thin level ice is present in few sheltered bays of Lake Vänern.

No major changes are expected the coming day.

Dr. W. Aldenhoff

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	2000 dwt	IB	07.01.
	Raahe, Kalajoki, Kokkola, Pietarsaari and Vaasa	2000 dwt	I	07.01.
	Kaskinen, Inkoo, Kantvik, Helsinki, Sköldvik and Mussalo	2000 dwt	II	07.01.
	Loviisa, Kotka and Hamina	2000 dwt	II	24.12.
Sweden	Karlsborg and Lulea	2000 dwt	IB	08.01.
	Haraholmen and Skelleftehamn	2000 dwt	IC	25.12.
	Holmsund, Rundvik, Husum and Örnsköldvik	2000 dwt	II	21.12.
	Angermanälven	2000 dwt	IB	07.01.
	Köping	2000 dwt	IC	07.01.
	Västeras	2000 dwt	IC	07.01.
	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.

Icebreakers:
KONTIO, OTSO, YMER and FREJ assist in the Bay of Bothnia. ZEUS assists in the Quark and the Sea 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.

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

Baltic Sea Ice Code

First number:
A_B 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
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

Second number:
S_B Stage of ice development
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

Third number:
T_B Topography or form of ice
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

Fourth number:
K_B Navigation conditions in ice
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 after special permission
8 Navigation temporarily closed
9 Navigation has ceased
/ Unknown

Estonia, 19.01.2023

Paernu, port and bay	7385
Moonsund	1//0

Finland, 19.01.2023

Röyttä – Etukari	8846
Etukari – Ristinmatala	7356
Ajos – Ristinmatala	7356
Ristinmatala – Kemi 2	5356
Kemi 2 – Kemi 1	5356
Kemi 2 – Ulkokrunni – Virpiniemi	7356
Oulu harbours – Kattilankalla	7356
Kattilankalla – Oulu 1	3016
Sea area SW of Oulu 1	3016
High Sea N of the latitude of Marjaniemi	2016
Raahe harbour – Heikinkari	1106
Heikinkari – Raahe lighthouse	1106
Raahe lighthouse – Nahkiainen	0//6
Latitude Marjaniemi – Ulkokalla, Sea	0//6
Rahja harbour – Välimatala	5146
Vaelimatala to line Ulkokalla – Ykskivi	1006
Sea betw. lat. of Ulkokalla –Pietarsaari	0//6
Ykspihlaja – Repskär	5146
Repskär – Kokkola lighthouse	3006
Sea area off Kokkola lighthouse	1006
Pietarsaari – Kallan	5146
Sea area off Kallan	1106
Sea lat. Pietarsaari – NE Nordvalen	1106
Sea area ENE of Nordvalen	1106
Sea area Nordvalen to W of Norrskär	1106
Vaskiluoto – Ensten	8746
Ensten – Vaasa lighthouse	1106
Vaasa lighthouse – Norrskär	1106
Kaskinen – Sälgrund	8745
Sea area off Sälgrund	1105
Pori harb. to line Pori lighth. – Säppi	1101
Uusikaupunki harbour – Kirsta	8142
Inkoo a. Kantvik – sea area Porkkala	7105
Helsinki harbours – Harmaja	5145
Vuosaari harbour – Eestiluoto	5145
Valko Harbour – Täktarn	8745
Kotka – Viikari	5165
Hamina – Suurmusta	8745
Suurmusta – Merikari	8745

Norway, 19.01.2023

Svinesund – Halden	31//
Drammensfjord	3212
Tønsberg, inner harbour	8101
Langårsund (Kragerø)	8144

Russian Federation, 19.01.2023

Port of St. Petersburg	83/3
St. Petersburg – E-point island Kotlin	33/2
E-point Kotlin – long. lighth. Tolbuhkin	2202
Vyborg, port and bay	83/3
Island Vichrevoj – Island Sommers	4002
Strait Bjerkesund	81/2

E-point Bol'šoj Ber'ozovyj – Šepelevskij	50/2

Sweden, 19.01.2023

Karlsborg – Malören	8446
Sea area off Malören	5366
Luleå – Björnklack	8446
Björnklack – Farstugrunden	4046
E and SE of Farstugrunden	4046
Sandgrönn fairway	8446
Rödkallen – Norströmsgrund	5366
Haraholmen – Nygrån	8346
Skelleftehamn – Gåsören	5236
Sea area off Gåsören	1006
NE of Nordvalen	1106
SW of Nordvalen	1106
Western Quark (W of Holmöarna)	1106
Umeå – Väktaren	8346
Örnsköldsvik – Hörnskaten	8246
Ångermanälven north Sandö Bridge	8344
Ångermanälven south Sandö Bridge	8344
Härnösand – Härnön	4044
Sundsvall – Draghällan	8242
Hudiksvallfjärden	5242
Iggesund – Agö	5242
Sandarne – Hällgrund	5142
Ljusnefjärden – Storjungfrun	5142
Gävle – Eggegrund	5041
Hallstavik – Svartklubben	4041
Köping – Kvicksund	5144
Västerås – Grönsö	5144
Grönsö – Södertälje	1004
Stockholm – Södertälje	1004
Fairway to Karlstad	5142