ISSN 0013-2705

BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

Eisbericht Nr. 57

Amtsblatt des BSH

Jahrgang 96	Nr. 57	Wednesday, 15.02.2023	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 sehr dichtes bis 40 cm dickes und örtlich aufgepresstes Eis mit festgestampftem Eis an der Kante. Auf See treibt im Norden dichtes, 5–20 cm dickes Eis und dünnes ebenes Eis. Entlang der Küsten befindet sich Neueis. In Norra Kvarken liegt bis 35 cm dickes Festeis in den Schären und Buchten und auf See 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 follows very close, up to 40 cm thick and partly ridged ice with a brash ice barrier at the ice edge. At sea in the north, there is close, 5–20 cm thick drift ice and thin level ice. Along the coasts is new ice. 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 at sea. 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 very close, ridged ice to about Kemi-1 – Oulun portti – Raahe lighthouse. There is a brash ice barrier at the ice edge. Further out, there is 5–25 cm thick, very close and partly rafted ice to about the line Karlsborg – Raahe. Close, 5–20 cm thick drift ice or 3–10 cm thick level ice is present north of about 64°45'N. In the southern Bay of Bothnia, there is 5–25 cm thick fast ice in the archipelagos and farther out in the east, there is a band of very close ice. New ice is present further out at both coasts. In the western part, there is also very open, 3–10 thick ice at places.
New ice formation is expected the coming day. The ice will drift to the north with increasing speed.

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

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. At sea, there is thin very open drift ice or new ice north of about Nordvalen.
Some ice formation is possible the coming day. The ice will drift to the north.

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. Further out, there is open water in the north. On Ångermanälven, there is 20–40 cm thick fast or level ice.
Some ice formation or ice growth is possible in inner bays but overall no larger changes are expected.

Archipelago Sea and Åland 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.

Some ice melt is possible the coming day but overall no larger changes are expected.

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.
Some ice melt is possible the coming day but overall no larger changes are expected.

Gulf of Finland
From St. Petersburg out to Kotlin and in the bay north of Kotlin, there is 20–40 cm thick fast ice or compact ice. In the Bay of Vyborg, there is 15–30 cm thick fast ice. In the Bjerkesund, there is 10–25 cm thick fast ice. Further west, there is very close and partly rafted, 10–20 cm thick ice to the longitude of Bol'šoj Ber'ozovyj. Further north to the Bay of Vyborg there is open to close drift ice. Further west to Seskar and Luga Bay, there is new ice or very open drift ice. 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 – Seskar. In the western archipelagos, there is 5–15 cm thick fast ice.
The ice will slowly drift to the north and some ice formation is possible in the eastern part.

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 5–15 cm thick fast ice along the northeastern coast. Further out to the line port Lindi – Cape Suurna, there is very close ice in the eastern part and open water in the western part. Further out to the line Liu – Voiste is open water.
No larger changes are expected the coming day and the ice will drift to the northeast/north.

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.

Some ice melt is expected the coming day.

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

Some ice melt is possible but else no larger changes are expected.

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	IA	01.02.
	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.
Russia	Vyborg and Vysotsk	-	Ice 1	08.02.
Sweden	Karlsborg and Lulea	2000 dwt	IB	08.01.
	Haraholmen and Skelleftehamn	2000 dwt	IC	25.12.
	Holmsund	2000 dwt	IC	07.02.
	Rundvik and Husum	2000 dwt	II	21.12.
	Örnsköldsvik	2000 dwt	IC	13.02.
	Angermanälven	2000 dwt	IB	07.01.
	Söraker, Sundsvall and Söderhamn	2000 dwt	IC	13.02.
	Köping and Västeras	1300/2000 dwt	IC/II	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, ATLE and FREJ assist in the Bay of Bothnia. ZEUS assists in the Quark and the Sea of Bothnia. 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.

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, 15.02.2023

Paernu, port and bay	43/5
Moonsund	1//0

Finland, 14.02.2023

Röyttä – Etukari	8446
Etukari – Ristinmatala	6456
Ajos – Ristinmatala	6456
Ristinmatala – Kemi 2	5876
Kemi 2 – Kemi 1	5876
Sea area SW of Kemi 1	5766
Kemi 2 – Ulkokrunni – Virpiniemi	6456
Oulu harbours – Kattilankalla	8456
Kattilankalla – Oulu 1	6456
Sea area SW of Oulu 1	5866
High Sea N of the latitude of Marjaniemi	5756
Raahe harbour – Heikinkari	8346
Heikinkari – Raahe lighthouse	7866
Raahe lighthouse – Nahkiainen	0//6
Latitude Marjaniemi – Ulkokalla, Sea	4146
Rahja harbour – Välimatala	7756
Vaelimatala to line Ulkokalla – Ykskivi	0//6
Sea betw. lat. of Ulkokalla –Pietarsaari	2116
Ykspihlaja – Repskär	5756
Repskär – Kokkola lighthouse	2116
Sea area off Kokkola lighthouse	0//6
Pietarsaari – Kallan	5756
Sea area off Kallan	5756
Sea lat. Pietarsaari – NE Nordvalen	2116
Sea area ENE of Nordvalen	2016
Sea area Nordvalen to W of Norrskär	2016
Vaskiluoto – Ensten	7756
Ensten – Vaasa lighthouse	5756
Vaasa lighthouse – Norrskär	1006
Uusikaupunki harbour – Kirsta	7142
Inkoo a. Kantvik – sea area Porkkala	7145
Valko Harbour – Täktarn	1715
Archipelago fairway Boistö – Glosholm	1105
Kotka – Viikari	2315
Viikari – Orrengrund	1105
Orrengrund – Tiiskeri	0//5
Hamina – Suurmusta	7345
Suurmusta – Merikari	1105
Merikari – Kaunissaari	1105

Norway, 15.02.2023

Svinesund – Halden	31//
Drammensfjord	2111
Husøysund – Tønsberg channel	8345
Tønsberg, inner harbour	8353
Vestfjord (Tønsberg)	8555
Langårsund (Kragerø)	8144

Russian Federation, 15.02.2023

Port of St. Petersburg	84/3
St. Petersburg – E-point island Kotlin	54/3
E-point Kotlin – long. lighth. Tolbuhkin	4303
Lighth. Tolbuhkin – lighth. –Šepelevskij	42/2

Lighthouse Šepelevskij – island Sescar	23/2
Island Sescar – Island Sommers	1//1
Vyborg, port and bay	83/3
Island Vichrevoj – Island Sommers	42/3
Strait Bjerkesund	83/3
E-point Bol'šoj Ber'ozovyj – Šepelevskij	42/2
Luga bay	22/2
Appr. Luga bay – line Moš.-Šepel.	2//1

Sweden, 15.02.2023

Karlsborg – Malören	6456
Sea area off Malören	4376
Luleå – Björnklack	8546
Björnklack – Farstugrunden	5146
E and SE of Farstugrunden	5146
Sandgrönn fairway	5356
Rödkallen – Norströmsgrund	5146
Haraholmen – Nygrån	5136
Sea area off Nygrån	4046
Skelleftehamn – Gåsören	5236
Sea area off Gåsören	4046
Sea area off Bjuröklubb	4046
Western Quark (W of Holmöarna)	4046
Umeå – Väktaren	5146
Örnsköldsvik – Hörnskaten	8446
Hörnskaten – Skagsudde	5146
Fairway W of Ulvöarna	1006
Ångermanälven north Sandö Bridge	8444
Ångermanälven south Sandö Bridge	8444
Härnösand – Härnön	1004
Sundsvall – Draghällan	1006
Draghällan – Åstholmsudde	1006
Off Åstholmsudde and Brämön	1006
Hudiksvallfjärden	8342
Iggesund – Agö	8342
Sandarne – Hällgrund	8346
Ljusnefjärden – Storjungfrun	8346
Gävle – Eggegrund	5142
Hallstavik – Svartklubben	5142
Köping – Kvicksund	8244
Västerås – Grönsö	8244
Södertälje – Fifong	2024
Fairway to Karlstad	5142
Fairway to Kristinehamn	5142