

# Eisbericht Nr. 45 Amtsblatt des BSH

Jahrgang 96	Nr. 45	Monday, 30.01.2023	1
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### Übersicht

In den Schären der Bottenwiek befindet sich bis 55 cm dickes Festeis. Weiter außerhalb treibt im Norden 10–35 cm dickes, dichtes bis sehr dichtes Treibeis. In der südlichen Bottenwiek befindet sich in den Buchten dünnes ebenes Eis oder Festeis. In Norra Kvarken liegt bei Vaasa bis 30 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 und sehr dichtes Eis weiter außerhalb. In den Schären und Buchten entlang der Küsten kommt im Norden Festeis vor. Im Nordosten des Rigaischen Meerbusen befindet sich 10–20 cm dickes Festeis oder sehr dichtes Eis in geschützten Buchten.

### Overview

In the archipelagos of the Bay of Bothnia, there is up to 55 cm thick fast ice. Further out in the north, there is 10–35 cm thick, close to very close drifting ice. 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 30 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 in the easternmost bays and very close ice somewhat further out. In the archipelagos and bays along the coasts, there is fast ice in the north. 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. In the north follows by 15–35 cm thick, very close, partly rafted ice to about 3 NM north of Kemi-1. At the ice edge is close shuga with a brash ice barrier. New ice is present along the eastern ice edge and along the coast. Further out in the west, there is close, 15-30 cm thick ice with new ice at places to Norströms-

grund in the south and about 23°35' E in the east. Further south, there is new ice. In the southern Bay of Bothnia, there is 5–20 cm thick level or fast ice in the archipelagos. Further out, there is new ice in the east and open water in the west.

New ice formation and ice growth is expected the coming day with a strong ice drift to the south/southeast.

### 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 10–30 cm thick fast ice in the Vaasa archipelago out to Storhästen. Further out, there is thin close ice and new ice to Vaasa lighthouse. Along the northern fast ice edge, there is new ice. On the Swedish side, there is mostly fast ice in

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#### 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 fast ice in inner bays in the north.

## Archipelago Sea and Aland Sea

At the eastern coast, there is 3–10 cm fast or level ice in the inner bays and new ice somewhat further

#### **Northern Baltic**

In Lake Mälaren, 3–10 cm thick level ice is present in the western part and sheltered places. Else there is mostly open water. New ice occurs in few

#### **Gulf of Finland**

From St. Petersburg out to Kotlin there is 20–40 cm thick fast ice or compact ice. In the bay north of Kotlin, there is 20–30 cm thick fast ice. In the Bay of Vyborg, there is 15–25 cm thick fast ice. Further out, there is 5–20 cm thick, very close and partly rafted ice to about the line Hamiina – Kotlin and open water to Moščnyj. In the Bjerkesund, there is

## **Gulf of Riga**

In Väinameri, there is 10–20 cm thick fast ice or very close ice in sheltered bays. On the fairways, there is open water and very open drift ice at places. In the Bay of Pärnu, there is 10–20 cm thick fast ice along the coast and further out to Hääde-

#### **Southeastern Baltic**

In the Curonian Lagoon, there is very open thin ice at a few places.

#### Skagerrak and Kattegat

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

# **Swedish Lakes**

Thin level ice or new ice is present in few sheltered bays in the north and east of Lake Vänern.

inner bays along the coast and open water further out. West of Holmöarna, there is new ice.

Some new ice formation and ice growth is expected the coming day. The ice will drift to the south/southeast.

On Ångermanälven, there is 10–20 cm thick fast or level ice.

Some new ice formation or ice growth may occur in inner bays.

ice. In the western part new ice along the coast. No larger change is expected the coming day.

sheltered places along the coast.

No major changes with a slight ice melt are expected the coming day.

10–20 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. Further out, there is open water. In the western archipelagos is thin ice.

No major changes are expected the coming day. The ice will drift to the northeast/east.

meste, there is 10-20 cm thick, very close or very open ice.

Some ice melt is expected the coming day and the ice will drift to the east/southeast.

Some ice melting is expected.

No major changes are expected the coming day.

No major change is 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.
	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.
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 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.

#### 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: AB Amount and arrangements of sea ice 0 Ice free Open water – concentration less than 1/10 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**<sub>B</sub> **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<sub>B</sub> Stage of ice development

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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

8 Ice predominantly grey-white ice (15 – 30 cm) with some thicker ice

9 Ice predominantly thicker than 30 cm with some thinner

No information or unable to report

Fourth number:

#### K<sub>B</sub> 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 the assistance of an icebreaker

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

Icebreaker assistance can only be given to vessels after

after special permission Navigation temporarily closed

Navigation has ceased Unknown

Estonia, 30.01.2023 Uusikaupunki harbour - Kirsta 8142 Paernu, port and bay 7385 Naantali and Turku – Rajakari 4041 Inkoo a. Kantvik - sea area Porkkala Moonsund 1//0 8145 Helsinki harbours - Harmaja 1005 Finland, 30.01.2023 Harmaja – Helsinki lighthouse 0//5 Vuosaari harbour – Eestiluoto Röyttä – Etukari 8446 2005 Etukari – Ristinmatala Porvoo harbours - Varlax 7856 1005 Ajos – Ristinmatala 7856 Varlax – Porvoo lighthouse 0//5 Ristinmatala - Kemi 2 5856 Valko Harbour - Täktarn 8745 Kemi 2 - Kemi 1 5356 Archipelago fairway Boistö – Glosholm 1005 Kemi 2 – Ulkokrunni – Virpiniemi 7856 Archipelago fairway Glosholm-Helsinki 0//5 Oulu harbours - Kattilankalla Kotka - Viikari 8446 8745 Kattilankalla - Oulu 1 7356 Viikari - Orrengrund 1005 Sea area SW of Oulu 1 3106 Orrengrund – Tiiskeri 0//5 High Sea N of the latitude of Marjaniemi 5346 Hamina – Suurmusta 8745 Raahe harbour – Heikinkari 5146 Suurmusta – Merikari 1005 Heikinkari – Raahe lighthouse 3006 Merikari – Kaunissaari 1005 Latitude Marjaniemi – Ulkokalla, Sea 2006 Rahja harbour – Välimatala Latvia, 29.01.2023 5146 Ykspihlaja - Repskär 5146 Port of Riga 1000 Repskär - Kokkola lighthouse 3006 Pietarsaari - Kallan 5746 Russian Federation, 30.01.2023 Sea area off Kallan 1106 Port of St. Petersburg 83/3 Sea lat. Pietarsaari - NE Nordvalen St. Petersburg – E-point island Kotlin 53/2 1106 E-point Kotlin – long. lighth. Tolbuhkin Sea area ENE of Nordvalen 5202 1106 Lighth. Tolbuhkin – lighth. –Šepelevskij Sea area Nordvalen to W of Norrskär 1106 4201 Vaskiluoto – Ensten 8746 Lighthouse Šepelevskij – island Sescar 11/1 Ensten – Vaasa lighthouse 5746 Vyborg, port and bay 83/3 Kaskinen - Sälgrund 5745 Island Vichrevoj - Island Sommers 42/2

Strait Bjerkesund E-point Bol'šoj Ber'ozovyj – Šepelevskij	82/2 51/2
Sweden, 30.01.2023 Karlsborg – Malören Sea area off Malören Luleå – Björnklack Björnklack – Farstugrunden E and SE of Farstugrunden Sandgrönn fairway Rödkallen – Norströmsgrund Haraholmen – Nygrån Sea area off Nygrån Skelleftehamn – Gåsören Sea area off Gåsören Sea area off Bjuröklubb NE of Nordvalen SW of Nordvalen Western Quark (W of Holmöarna) Umeå – Väktaren SE of Väktaren Örnsköldsvik – Hörnskaten Hörnskaten – Skagsudde Ångermanälven north Sandö Bridge Ångermanälven south Sandö Bridge Sundsvall – Draghällan Hudiksvallfjärden Iggesund – Agö Sandarne – Hällgrund Ljusnefjärden – Storjungfrun Hallstavik – Svartklubben Köping – Kvicksund Västerås – Grönsö Grönsö – Södertälje Stockholm – Södertälje Fairway to Karlstad	8446 5366 8446 4336 4336 5336 4336 1106 5236 4046 1106 5136 4046 1106 8246 3226 8344 8322 5242 5142 5142 5144 5144 1004 5142
Fairway to Kristinehamn	5142