



# Eisbericht Nr. 33

## Amtsblatt des BSH

Jahrgang 96

Nr. 33

Thursday, 12.01.2023

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### Übersicht

In den Schären der Bottenwiek befindet sich bis 40 cm dickes Festeis. Weiter außerhalb treibt im Nordosten 10–30 cm dickes, sehr dichtes Eis und im Westen liegt dünnes, ebenes Eis. Entlang der gesamten Eiskante befindet sich festgestampftes Eis. 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. Auf See treibt sehr lockeres, dünnes Treibeis. 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 30 cm dickes Festeis oder sehr dichtes Eis. Weiter westlich bis Moščnyj treibt 5–15 cm dickes, sehr lockeres Treibeis. In den Buchten entlang der Küsten kommt im Norden Festeis und im Süden örtlich Neueis vor. Im Nordosten des Rigaischen Meerbusen befindet sich 10–25 cm dickes Festeis in geschützten Buchten und Treibeis verschiedener Konzentration. In der Bucht von Pärnu liegt Festeis entlang der Küste und sehr dichtes Eis treibt bis zur Insel Kihnu.

### Overview

In the archipelagos of the Bay of Bothnia, there is up to 40 cm thick fast ice. Further out in the northeast, there is 10–30 cm thick, very close ice and in the west, there is thin level ice. A brash ice barrier has formed along the entire 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. At sea, there is thin, very open drift ice. 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 30 cm thick fast ice or very close ice in the easternmost bays. Further west to about Moščnyj, there is 5–15 cm thick, very open drift ice. In the bays along the coasts, there is fast ice in the north and new ice in places in the south. In the northeastern Gulf of Riga, there is 10–25 cm thick fast ice in sheltered bays and drifting ice of varying concentration. In the Bay of Pärnu, there is fast ice along the coast and very close drift ice to the south tip of Kihnu.

### Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 15–40 cm thick fast ice. Further out in the west, there is thin level ice with a brash ice barrier to about Rödkallen. In the northeast, there is very

close, 10–30 cm thick ice to about Malören – Kemi-1 – Oulu. The ice is difficult to force in places and a brash ice barrier has formed along the ice edge. East of about 24°05'E, there is close, 3–10 cm

#### Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

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

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thick drift ice to Hailuoto and Raahe. In the southern Bay of Bothnia, there is thin level ice or in places 5–15 cm thick fast ice in the inner bays.

#### **The Quark**

There is up to 25 cm thick fast in the Vaasa archipelago to Ensten. Further out, there is thin drift ice in places. On the Swedish side, there is thin level ice or very close ice along the coast. At sea, there

#### **Sea of Bothnia**

In the archipelagos along the eastern coast, there is fast ice, 5–15 cm thick. Along the western coast there is thin level ice in sheltered bays. On Ånger-

#### **Archipelago Sea**

At the eastern coast, there is 3–10 cm fast ice in the inner bays and else new ice in sheltered plac-

#### **Northern Baltic**

In Lake Mälaren, 3–10 cm thick level ice is present in the western part. New ice occurs in sheltered places and along the coast.

#### **Gulf of Finland**

15–30 cm thick fast ice or very close ice is present east of the island Kotlin and in the bay north of Kotlin. Further west to about Moščnyj, there is 5–15 cm thick, very open drift ice. In the Bay of Vyborg, there is up to 25 cm fast ice. Further out, there is thin level ice followed by rafted 5–15 cm thick, very close ice to Nerva. In the Bjerkesund,

#### **Gulf of Riga**

In Väinameri, there is 10–25 cm thick fast ice in sheltered bays and open to very open ice between Hiiumaa and Saaremaa. On the fairway, there is close ice in the north and very open ice in Suur Strait. In the Bay of Pärnu, there is 10–20 cm thick

#### **Central Baltic**

The area is mostly ice free.

#### **Southeastern Baltic**

In the Curonian Lagoon, there is 3–10 cm thick, very close drift ice in the western part.

#### **Skagerrak and Kattegat**

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

#### **Swedish Lakes**

New ice and thin level ice is present in some sheltered bays of Lake Vänern.

No major changes and a northerly ice drift are expected the coming day.

is thin drifting ice at places.

No major changes and a northerly ice drift are expected the coming day.

manälven, there is 10–20 cm thick fast or level ice. No major changes are expected the coming day with a northerly ice drift.

es.

No major changes are expected the coming day.

No major changes are expected the coming day but some melting is possible.

there is 5–15 cm thick fast ice. Along the northern coast, there is 3–15 cm fast ice in the inner bays. Along the southern coast, there is new ice in few places.

No major changes are expected the coming day and the ice will drift to the north.

fast ice and further out to the line south tip of Kihnu – Rannametsa, there is 10–20 cm thick, very close ice. Latvian fairways are ice free.

No major changes are expected the coming day. The ice drifts to the north.

No major changes are expected the coming day, but some melting is possible.

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No major changes are expected the coming day but some melting is possible.

## Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
<b>Estonia</b>	Pärnu	1600 kW	1 C	23.12.
<b>Finland</b>	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.
<b>Sweden</b>	Karlsborg and Lulea	2000 dwt	IB	08.01.
	Haraholmen and Skelleftehamn	2000 dwt	IC	25.12.
	Holmsund, Rundvik, Husum and Örnköldvik	2000 dwt	II	21.12.
	Angermanälven	2000 dwt	IB	07.01.
	Köping	2000 dwt	IC	07.01.
	Västerås	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 4<sup>th</sup> 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, ATLE, **YMER**, FREJ and ALE assist in the Bay of Bothnia. ZEUS 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

<p>First number:</p> <p><b>A<sub>B</sub> Amount and arrangements of sea ice</b></p> <p>0 Ice free</p> <p>1 Open water – concentration less than 1/10</p> <p>2 Very open ice - concentration 1/10 to 3/10</p> <p>3 Open ice – concentration 4/10 to 6/10</p> <p>4 Close ice – concentration 7/10 to 8/10</p> <p>5 Very close ice – concentration 9/10 to 9+/10</p> <p>6 Compact ice, including consolidated ice – concentration 10/10</p> <p>7 Fast ice with drift ice outside</p> <p>8 Fast ice</p> <p>9 Lead in very close or compact drift ice or along the fast ice edge</p> <p>/ Unable to report</p> <p>Third number:</p> <p><b>T<sub>B</sub> Topography or form of ice</b></p> <p>0 Pancake ice, ice cakes, brash ice – less than 20 m across</p> <p>1 Small ice floes – 20 to 100 m across</p> <p>2 Medium ice floes – 100 to 500 m</p> <p>3 Big ice floes – 500 to 2000 m across</p> <p>4 Vast or giant ice floes – more than 2000 m across – or level ice</p> <p>5 Rafted ice</p> <p>6 Compact slush or shuga, or compacted brash ice</p> <p>7 Hummocked or ridged ice</p> <p>8 Thaw holes or many puddles on the ice</p> <p>9 Rotten ice</p> <p>/ No information or unable to report</p>	<p>Second number:</p> <p><b>S<sub>B</sub> Stage of ice development</b></p> <p>0 New ice or dark nilas (less than 5 cm thick)</p> <p>1 Light nilas (5 - 10 cm thick) or ice rind</p> <p>2 Grey ice (10 - 15 cm thick)</p> <p>3 Grey-white ice (15 - 30 cm thick)</p> <p>4 White ice, first stage (30 - 50 cm thick)</p> <p>5 White ice, second stage (50 - 70 cm thick)</p> <p>6 Medium first year ice (70 - 120 cm thick)</p> <p>7 Ice predominantly thinner than 15 cm with some thicker ice</p> <p>8 Ice predominantly grey-white ice (15 – 30 cm) with some thicker ice</p> <p>9 Ice predominantly thicker than 30 cm with some thinner ice</p> <p>/ No information or unable to report</p> <p>Fourth number:</p> <p><b>K<sub>B</sub> Navigation conditions in ice</b></p> <p>0 Navigation unobscured</p> <p>1 Navigation difficult or dangerous for wooden vessels without ice sheathing</p> <p>2 Navigation difficult for unstrengthened or low-powered vessels built of iron or steel. Navigation for wooden vessels even with ice sheathing not advisable</p> <p>3 Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice</p> <p>4 Navigation proceeds in lead or broken ice-channel without the assistance of an icebreaker</p> <p>5 Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size</p> <p>6 Icebreaker assistance can only be given to vessels of special ice class and of special size</p> <p>7 Icebreaker assistance can only be given to vessels after special permission</p> <p>8 Navigation temporarily closed</p> <p>9 Navigation has ceased</p> <p>/ Unknown</p>
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**Estonia, 12.01.2023**

Paernu, port and bay	7335
Moonsund	4112

**Finland, 12.01.2023**

Röyttä – Etukari	8846
Etukari – Ristinmatala	7356
Ajos – Ristinmatala	7356
Ristinmatala – Kemi 2	5356
Kemi 2 – Kemi 1	5356
Sea area SW of Kemi 1	1706
Kemi 2 – Ulkokrunni – Virpiniemi	7356
Oulu harbours – Kattilankalla	8356
Kattilankalla – Oulu 1	2126
Sea area SW of Oulu 1	4746
High Sea N of the latitude of Marjaniemi	0//6
Raahe harbour – Heikinkari	5146
Heikinkari – Raahe lighthouse	1106
Raahe lighthouse – Nahkiainen	2126
Latitude Marjaniemi – Ulkokalla, Sea	0//6
Rahja harbour – Välimatala	5146
Välimatala to line Ulkokalla – Ykskivi	1106
Sea betw. lat. of Ulkokalla – Pietarsaari	0//6
Ykspihlaja – Repskär	5146
Repskär – Kokkola lighthouse	1106
Sea area off Kokkola lighthouse	1106
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	1005
Rauma, Harbour – Kylmäpihlaja	8142
Uusikaupunki harbour – Kirsta	8142
Naantali and Turku – Rajakari	2001
Inkoo a. Kantvik – sea area Porkkala	5145
Helsinki harbours – Harmaja	5145
Vuosaari harbour – Eestiluoto	5145
Porvoo harbours – Varlax	1005
Valko Harbour – Täktarn	8145
Kotka – Viikari	5165
Viikari – Orregrund	1005
Hamina – Suurmusta	5245
Suurmusta – Merikari	2005

**Latvia, 11.01.2023**

Port of Riga	1000
Riga to the Cape of Mersrags, fairway	1000
Mersrags to Irben Strait, fairway	1000

**Norway, 12.01.2023**

Svinesund – Halden	31//
Drammensfjord	4212
Tønsberg, inner harbour	8101

Langårsund (Kragerø) 8144

**Russian Federation, 12.01.2023**

Port of St. Petersburg 83/3  
St. Petersburg – E-point island Kotlin 53/2  
E-point Kotlin – long. lighth. Tolbuhkin 5102  
Lighth. Tolbuhkin – lighth. –Šepelevskij 2001  
Lighthouse Šepelevskij – island Sescar 2001  
Island Sescar – Island Sommers 2001  
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, 12.01.2023**

Karlsborg – Malören 8346  
Sea area off Malören 5366  
Luleå – Björnklack 8346  
Björnklack – Farstugrunden 5366  
Sandgrönn fairway 8346  
Rödallen – Norströmsgrund 5366  
Haraholmen – Nygrån 8346  
Sea area off Nygrån 1106  
Skelleftehamn – Gåsören 5236  
Sea area off Gåsören 1106  
Sea area off Bjuröklubb 5246  
NE of Nordvalen 1106  
SW of Nordvalen 1106  
Western Quark (W of Holmöarna) 1106  
Umeå – Väktaren 5136  
SE of Väktaren 1106  
Fairway to Husum 1106  
Örnsköldsvik – Hörnskatan 5146  
Ångermanälven north Sandö Bridge 8344  
Ångermanälven south Sandö Bridge 8344  
Sundsvall – Draghällan 5242  
Hudiksvallfjärden 5242  
Iggesund – Agö 5242  
Sandarne – Hällgrund 4041  
Ljusnefjärden – Störjungfrun 4041  
Gävle – Eggegrund 5142  
Hallstavik – Svartklubben 4041  
Köping – Kvicksund 5144  
Västerås – Grönsö 5144  
Grönsö – Södertälje 2024  
Stockholm – Södertälje 4044  
Norrköping – Hargökalv 4041  
Fairway to Karlstad 5142  
Fairway to Kristinehamn 5142