



# Eisbericht Nr. 19

## Amtsblatt des BSH

Jahrgang 97

Nr. 19

Monday, 11.12.2023

1

### Übersicht

In der nördlichen Bottenwiek befindet sich in den Schären bis 35 cm dickes Festeis und ebenes Eis. Weiter außerhalb treibt im Norden bis zu 25 cm dickes, sehr dichtes Eis. Weiter südlich bis Norra Kvarken liegt an den Küsten ebenes Eis oder Festeis und weiter außerhalb dünnes, ebenes Eis und Neueis. An den Küsten der Bottensee, in den nördlichen Schären und östlichen Buchten des Finnischen Meerbusens und im nördlichen Teil des Rigaischen Meerbusens kommt dünnes ebenes Eis und Neueis sowie örtlich Festeis vor. In der südlichen Ostsee kommt örtlich noch Neueis und Reste von Eis vor. Neueis und örtlich dickeres Eis kommt auch in einigen geschützten Fjorden im Skagerrak vor.

### Overview

In the northern Bay of Bothnia there is up to 35 cm thick fast ice and level ice in the archipelagos. Further out in the north, up to 25 cm thick, very close ice is drifting at sea. Further south, up to Norra Kvarken, there is level ice or fast ice along the coast and further out new ice. At the coasts of the Sea of Bothnia, in the northern archipelagos and the eastern bays of the Gulf of Finland and in the northernmost part of the Gulf of Riga there is new ice and thin level ice and fast ice at places. New ice and remnants of ice can also be found in some sheltered places of the whole southern Baltic region. New ice is also present in sheltered fjords of the Skagerrak.

### Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia there is up to 35 cm thick fast ice. Off the fast ice in the north, very close, 5–25 cm thick drifting ice with minor brash ice barriers is present to about a line from Oulu-1 to Luleå. Further south, there is up to 15 cm thick fast ice in the archipelagos and thin level ice further out from Hailuoto to Kokkola and to

Nahkiainen and Ulkokalla with new ice at the ice edge. Off the fast ice in the west, there is close, 3–8 cm thick ice and new ice along the coast further south.

With moderate to severe frost and a gentle breeze from the east, ice formation and growth will continue with the ice drifting westwards.

### The Quark

There is thin fast ice in the Vaasa archipelago and from Vaasa to Storhåsten. Farther out there is drifting new ice to Norrskär and Utgrynnan. Along the Swedish coast there is thin level ice and up to 10 cm thick very close further out to Holmögdad. At

sea there is very open new ice and strings of shuga.

With moderate to severe frost and a gentle breeze from the northeast, ice formation and growth will continue with the ice drifting to southwest.

### Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

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

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

© BSH - Alle Rechte vorbehalten  
Nachdruck, auch auszugsweise, verboten

### Eisankünfte / Ice Information

Telefon: +49 (0) 381 4563 -780

Telefax: +49 (0) 381 4563 -949

E-Mail: [ice@bsh.de](mailto:ice@bsh.de)

© BSH - All rights reserved  
Reproduction in whole or in part prohibited

**Sea of Bothnia**

Thin level ice is present in bays along the whole Finnish coast with new ice and ice formation slightly further out. Along the Swedish coast, there is new ice or thin level ice in bays and at sea along the coast. On Ångermanälven, there is 5–15 cm thick fast and level ice on the upper part and new

is present in the lower part.

With moderate and light frost at the eastern and north western coast respectively, ice formation and ice growths continue. Along the southwestern coast no larger changes.

**Archipelago Sea and Åland Sea**

In the inner archipelago there is thin level ice and new ice.

With moderate frost in the east some ice growth is expected there and in the west no larger changes.

**Northern Baltic**

In Lake Mälaren there is mostly thin level in the west and new ice in the east with the central part being still ice free. New ice is present in sheltered

places at the outer coast.

With slight frost no larger changes are expected.

**Gulf of Finland**

In the top of Vyborg Bay there is 10–15 cm thick fast ice and new ice further out. In the northern part of the Bjerkesund there is close dark nilas. From St. Petersburg to Kotlin there is 10–15 cm thick compact ice with new ice further out. Along

the northern coast there is thin level ice and new ice in the inner archipelagos. In Lake Saimaa there is level ice with varying concentration.

With mostly slight frost and a moderate breeze from the east, some ice growth is expected.

**Gulf of Riga**

In Väinameri there is up to 10 cm thick close ice at sea and level or fast ice at the coasts. In the Bay of Pärnu there is 5–15 cm fast ice. Further out, there

is thin level ice and 2–8 cm very open to open ice.

With mostly slight frost and gentle breeze from east to northeast some ice formation is expected.

**Southeastern Baltic**

New ice or thin ice are present in the Curonian Lagoon and in the Vistula lagoon.

With temperatures around 0°C or slightly above no larger changes are expected.

**Southwestern Baltic**

New ice is still present in the Peenestrom and few other sheltered places.

Ice melt will continue the coming day.

**Skagerrak and Kattegat**

Ice formation and new ice is present in sheltered places of inner Norwegian Fjords and in few sheltered areas along the Swedish coast. At places thicker ice is possible in inner bays.

In the northern Skagerrak, some new ice formation is possible with slight frost. Else no larger changes are expected.

**Swedish Lakes**

Thin level ice and new ice is present in sheltered areas of Lake Vänern.

With mostly slight frost, no larger changes are expected.

## Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
<b>Finland</b>	Tornio, Kemi and Oulu	2000 dwt	I	09.12.
	Raahe, Kalajoki, Kokkola, Pietarsaari and Vaasa	2000 dwt	II	06.12.
	Taalintehdas, Förby, Koverhar, Lap-pohja, Inkoo, Kantvik, Helsinki, Sköldvik, Loviisa, Mussalo, Kotka and Hamina	2000 dwt	II	09.12.
	Lake Saimaa	2000 dwt	I	08.12.
	<b>Lake Saimaa</b>	<b>2000 dwt</b>	<b>IB</b>	<b>13.12.</b>
	Saimaa Canal	2000 dwt	I	08.12.
	<b>Saimaa Canal</b>	<b>2000 dwt</b>	<b>IB</b>	<b>13.12.</b>
<b>Sweden</b>	Haraholmen	2000 dwt	IC	05.12.
	Karlsborg and Lulea	2000 dwt	IC	02.12.
	Skelleftehamn	2000 dwt	IC	05.12.
	Holmsund	2000 dwt	II	09.12.
	<b>Rundvik, Husum and Örnsköldsvik</b>	<b>2000 dwt</b>	<b>II</b>	<b>12.12.</b>
	Angermanälven	1300/2000 dwt	IC/II	29.11.
	<b>Angermanälven</b>	<b>2000 dwt</b>	<b>IC</b>	<b>12.12.</b>
	Köping	1300 dwt	IC	05.12.
	Västeras	1300/2000 dwt	IC/II	05.12.
	Trollhätte Canal and Göta Älv	1300/2000 dwt	IC/II	05.12.
Vänern	1300/2000 dwt	IC/II	05.12.	

**Finland/Sweden**

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:** ATLE, KONTIO, ALE, OTSO and YMER assist in the northern Bay of Bothnia.

**Russia**

There are restrictions for small crafts going to St. Petersburg, Vyborg, Vysotsk, Primorsk and Ust-Luga.

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

## 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>
--	--

**Estonia, 10.12.2023**

Paernu, port and bay	4142
Moonsund	3132

**Finland, 11.12.2023**

Röyttä – Etukari	8346
Etukari – Ristinmatala	7346
Ajos – Ristinmatala	5346
Ristinmatala – Kemi 2	5746
Kemi 2 – Kemi 1	5756
Sea area SW of Kemi 1	5756
Kemi 2 – Ulkokrunni – Virpiniemi	7746
Oulu harbours – Kattilankalla	8346
Kattilankalla – Oulu 1	5756
Sea area SW of Oulu 1	5146
High Sea N of the latitude of Marjaniemi	5156
Raahe harbour – Heikinkari	8045
Heikinkari – Raahe lighthouse	5145
Raahe lighthouse – Nahkiainen	5145
Latitude Marjaniemi – Ulkokalla, Sea	5165
Rahja harbour – Välimatala	7145
Vaelimatala to line Ulkokalla – Ykskivi	5145
Sea betw. lat. of Ulkokalla –Pietarsaari	2005
Ykspihlaja – Repskär	8245
Repskär – Kokkola lighthouse	4145
Sea area off Kokkola lighthouse	2015
Pietarsaari – Kallan	4045
Sea area off Kallan	2015

Sea lat. Pietarsaari – NE Nordvalen	3015
Sea area ENE of Nordvalen	3015
Sea area Nordvalen to W of Norrskär	3015
Vaskiluoto – Ensten	8245
Ensten – Vaasa lighthouse	4145
Vaasa lighthouse – Norrskär	4045
Sea area SW of Norrskär	2005
Kaskinen – Sälgrund	8142
Sea area off Sälgrund	4041
Pori harb. to line Pori lighth. – Säppi	2001
Rauma, Harbour – Kylmäpihlaja	4041
Uusikaupunki harbour – Kirsta	8142
Kirsta – Isokari	4041
Koverhar – Hästö Busö	5145
Inkoo a. Kantvik – sea area Porkkala	5145
Helsinki harbours – Harmaja	2005
Valko Harbour – Täktarn	5145
Kotka – Viikari	5145
Hamina – Suurmusta	5145

**Russian Federation, 11.12.2023**

Port of St. Petersburg	62//
St. Petersburg – E-point island Kotlin	62//
E-point Kotlin – long. lighth. Tolbukhin	62//
Lighth. Tolbukhin – lighth. –Šepelevskij	30//
Vyborg, port and bay	82//
Strait Bjerkesund	50//

**Sweden, 11.12.2023**

Karlsborg – Malören	8346
Sea area off Malören	5356
Luleå – Björnklack	8346
Björnklack – Farstugrunden	4136
E and SE of Farstugrunden	4046
Sandgrönn fairway	8346
Rödkaullen – Norströmsgrund	5266
Haraholmen – Nygrån	5336
Sea area off Nygrån	4136
Skelleftehamn – Gåsören	5236
Sea area off Gåsören	4136
Sea area off Bjuröklubb	4136
NE of Nordvalen	4046
SW of Nordvalen	4046
Western Quark (W of Holmöarna)	8146
Umeå – Väktaren	5166
SE of Väktaren	4046
Fairway to Husum	5142
Örnsköldsvik – Hörnskatan	5142
Ångermanälven north Sandö Bridge	5144
Ångermanälven south Sandö Bridge	5144
Härnösand – Härnön	4041
Sundsvall – Draghallan	4041
Draghallan – Åstholmsudde	4041
Hudiksvallfjärden	5142
Iggesund – Agö	5142
Sandarne – Hällgrund	5142
Ljusnefjärden – Störjungfrun	5142
Gävle – Eggegrund	5142
Öregrundsgrepen	4041
Hallstavik – Svartklubben	4041
Stockholm – Trälhavet – Klövholmen	4041
Köping – Kvicksund	5144
Västerås – Grönsö	5144
Stockholm – Södertälje	4041
Södertälje – Fifong	4041
Norrköping – Hargökalv	5142
Järnverket-Lillhammaren – N Kränkan	4041
Uddevalla – Stenungsund	4041
Brofjorden – Dynabrott	4041
Vänersborgsviken	5146
Fairway to Karlstad	5146
Fairway to Kristinehamn	5146
Fairway to Lidköping	5146