



# Eisbericht Nr. 18

## Amtsblatt des BSH

Jahrgang 97

Nr. 18

Friday, 08.12.2023

1

### Übersicht

In der nördlichen Bottenwiek befindet sich in den Schären bis 35 cm dickes Festeis und ebenes Eis. Weiter außerhalb treibt im Nordosten bis zu 15 cm dickes, zumeist sehr dichtes Eis. Weiter südlich bis Norra Kvarken liegt an den Küsten ebenes Eis oder Festeis und weiter außerhalb treibt 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 vor. Im gesamten südlichen Bereich der Ostsee kommt an geschützten Stellen örtlich Neueis vor. Neueis 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 northeast, up to 15 cm thick, mostly 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. New 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 with adjacent level ice. Off the ice in the west, there are smaller areas of very close ice and a belt of new ice from about Nygrån to Bjuröklubb. At sea in the north-eastern part, very close, 5–15 cm thick drifting ice is present to about a line from Hailuoto to the northwest. Further out, there is open to close, 5–15 cm thick drift ice to south of Merikallat. Off Raahede

there is thin level ice and further out at sea drifting new ice and ice formation from Hailuoto to about Nahkiainen, Ulkokalla und Kokkola. Further south there is up to 15 cm thick level ice at the coast and new ice farther out. Along the Swedish coast there is a band of thin close ice.

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

### The Quark

There is thin fast or level ice in the Vaasa archipelago and from Vaasa to Storhästen. Farther out there is drifting new ice to Vaasa lighthouse. Along the Swedish coast there is thin level ice and up to

10 cm thick very close further out to Holmögadd. At sea there is very open new ice.

With moderate to severe frost and a gentle breeze from the southeast, ice formation and growth will

### Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

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

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continue with the ice drifting northwestwards.

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

### Northern Baltic

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

tered places at the outer coast.

With temperatures around 0 °C 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 dark nilas and very close ice. From St. Petersburg to Kotlin there is 10–15 cm thick compact ice with new ice further out. In Luga Bay is new ice. Along the northern coast there is thin level ice and new ice in the inner

archipelagos. Somewhat further out is open water. In Lake Saimaa there is thin ice and new ice.

With mostly moderate frost in the east and slight frost in the west and a fresh breeze from the southeast, ice formation and ice growth will continue.

### Gulf of Riga

In Väinameri there is up to 10cm thick close ice at sea and level or fast ice at the coasts. In the Bay of Pärnu there is a narrow fast ice band and further

out to Manilaiu-Voiste there is light and dark nilas. With mostly slight frost and a fresh breeze from the southeast no major changes are expected.

### Southeastern Baltic

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

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

### Southwestern Baltic

New ice is present at places in some sheltered places of inner waters like the Schlei and the Peenestrom.

With increasing temperatures over the weekend the ice will melt and most of it vanish.

### Skagerrak and Kattegat

Ice formation and new ice is present in sheltered places of inner Norwegian Fjords and in some sheltered areas along the Swedish coast.

With temperatures mostly around 0°C no larger changes are expected.

### Swedish Lakes

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

With temperatures around 0 °C no larger changes are expected but some melt is possible.

Dr. W. Aldenhoff

## Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
<b>Finland</b>	Tornio, Kemi and Oulu	2000 dwt	II	22.11.
	<b>Tornio, Kemi and Oulu</b>	<b>2000 dwt</b>	<b>I</b>	<b>09.12.</b>
	Raahe, Kalajoki, Kokkola, Pietarsaari and Vaasa	2000 dwt	II	06.12.
	<b>Taalintehdas, Förby, Koverhar, Lap-pohja, Inkoo, Kantvik, Helsinki, Sköldvik, Loviisa, Mussalo, Kotka and Hamina</b>	<b>2000 dwt</b>	<b>II</b>	<b>09.12.</b>
	Lake Saimaa	<b>2000 dwt</b>	<b>I</b>	<b>08.12.</b>
	Lake Saimaa	<b>2000 dwt</b>	<b>IB</b>	<b>13.12.</b>
	Saimaa Canal	<b>2000 dwt</b>	<b>I</b>	<b>08.12.</b>
	Saimaa Canal	<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.
	<b>Holmsund</b>	<b>2000 dwt</b>	<b>II</b>	<b>09.12.</b>
	<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:** KONTIO, ALE, OTSO and YMER assist in the northern Bay of Bothnia. is heading for the 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>
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**Estonia, 08.12.2023**

Paernu, port and bay 4131

Moonsund 3131

**Finland, 08.12.2023**

Röyttä – Etukari 8345

Etukari – Ristinmatala 8345

Ajos – Ristinmatala 5345

Ristinmatala – Kemi 2 5145

Kemi 2 – Kemi 1 5155

Sea area SW of Kemi 1 5155

Kemi 2 – Ulkokrunni – Virpiniemi 8345

Oulu harbours – Kattilankalla 8345

Kattilankalla – Oulu 1 5155

Sea area SW of Oulu 1 5155

High Sea N of the latitude of Marjaniemi 5155

Raahel harbour – Heikinkari 8145

Heikinkari – Raahel lighthouse 5155

Raahel lighthouse – Nahkiainen 4045

Latitude Marjaniemi – Ulkokalla, Sea 4155

Rahja harbour – Välimatala 7145

Välimatala to line Ulkokalla – Ykskivi 4145

Sea betw. lat. of Ulkokalla – Pietarsaari 0//5

Ykspihlaja – Repskär 8245

Repskär – Kokkola lighthouse 4145

Sea area off Kokkola lighthouse 0//5

Pietarsaari – Kallan 5145

Sea area off Kallan 4045

Sea area ENE of Nordvalen 2025

Sea area Nordvalen to W of Norrskär 2025

Vaskiluoto – Ensten 8245

Ensten – Vaasa lighthouse 4145

Vaasa lighthouse – Norrskär 2005

Kaskinen – Sälgrund 4041

Sea area off Sälgrund 2001

Pori harb. to line Pori lighth. – Säppi 4142

Rauma, Harbour – Kymäpihlaja 4041

Uusikaupunki harbour – Kirsta 5142

Kirsta – Isokari 4041

Naantali and Turku – Rajakari 4041

Koverhar – Hästö Busö 4041

Inkoo a. Kantvik – sea area Porkkala 5142

Helsinki harbours – Harmaja 5041

Valko Harbour – Täktarn 4041

Kotka – Viikari 4041

Hamina – Suurmusta 5142

**Latvia, 08.12.2023**

Port of Riga 1000

Riga to the Cape of Mersrags, fairway 1000

Port of Liepaya 1000

**Russian Federation, 08.12.2023**

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//
Luga bay	20//

**Sweden, 08.12.2023**  
No current information