



# Eisbericht Nr. 10

## Amtsblatt des BSH

Jahrgang 95

Nr. 10

Friday, 10.12.2021

1

### Übersicht

In der nördlichen Bottenwiek liegt in den Schären Festeis und weiter außerhalb dünnes ebenes Eis und Neueis. In der südlichen Bottenwiek, Norra Kvarken und der Bottensee treibt Neueis und in Schären und geschützten Buchten liegt dünnes, ebenes Eis. Im Finnischen Meerbusen liegt dünnes, ebenes Eis ganz im Osten und Neueis tritt entlang der Küsten auf. Im Rigaischen Meerbusen befindet sich dünnes ebenes Eis und Neueis im Moonsund, und der Pärnubucht. Neueis kommt im Schärenmeer, der Ålandsee, dem Mälarsee, dem Vänern und vereinzelt entlang der schwedischen Küste in der nördlichen Ostsee und im Skagerrak vor.

### Overview

In the northern Bay of Bothnia, there is fast ice in the archipelagoes and thin level ice and new ice further out. In the southern Bay of Bothnia, Norra Kvarken and the Sea of Bothnia, there is new ice and thin level ice in the archipelagos and sheltered bays. In the Gulf of Finland, thin level ice is present in the eastern-most part and new ice along the coasts. In the Gulf of Riga, there is thin level ice and new ice in Moonsund and Pärnu Bay. New ice is present in the Archipelago Sea, Åland Sea, Lake Mälaren, Lake Vänern and at places along the Swedish coast of the northern Baltic and in the Skagerrak.

### Bay of Bothnia

In the northern Bay of Bothnia, there is up to 20 cm thick fast ice in the archipelagoes from Piteå to Oulu. Further out in the east, there is thin level ice and thin very close ice to the line Kemi-1 – Holma – Raahe. Off the fast ice in the west, there is some new ice and very open to very close, 5–15 cm thick

ice to the Line Nygrån – Bjuröklubb. In the southern Bay of Bothnia, there is thin level ice and new ice along the coasts.

Some new ice growth and ice formation is expected over the weekend. The expected ice drift is in northerly directions.

### Norra Kvarken

Up to 10 cm thick, level ice is present in the inner archipelagoes at the Finnish coast and along the Swedish coast. Further out new ice occurs and in the east extends to Norrskär and Strömnings-

bådan.

Some ice formation and ice drift to the north-west/north is expected over the weekend

### Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

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

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### Sea of Bothnia

On upper Ångermanälven and at places in the northern Bay of Bothnia and along the Finnish coast, there is thin level ice. Else, there is new ice along the coast in the west and out ~5nm from the

coast in the east.

With air temperatures around the freezing point, no larger changes are expected.

### Archipelago and Åland Sea

New ice and thin level is present in sheltered places in the Archipelago and Åland Sea.

No larger changes are expected over the weekend.

### Gulf of Finland

From St. Petersburg to Kotlin and north of Kotlin, there is 5–10 cm thick very close ice. Farther out there is close, 2–8 cm thick ice to about 28°30' E. In the Bay of Vyborg, there is 10–15 cm fast ice in the top and farther out first level ice and later open dark nilas. In the Bjerkesund there is very close light nilas and in the entrance close dark nilas. In the archipelagoes of the northern coast, there is thin level ice and new ice somewhat further out. Along the southern coast, in the bays of Luga,

Narva, Kunda und Tallin, there is new ice close to the coast. In the northern lake Saimaa, there is 5–15 cm thick level ice and new ice. In the southern Lake Saimaa and Saimaa Canal, 5–20 cm thick broken ice occurs.

Some ice formation and ice growth is expected in the eastern part. With expected air temperatures around 0 °C no larger changes elsewhere. The ice will drift first to the northwest/north and later in easterly directions.

### Gulf of Riga

There is very close nilas in Moonsund and nearby shallow bays, on the fairways there is close nilas. In Pärnu Bay, there is very close nilas and new ice further out. Nilas and new ice is present along the

northern coast and the eastern coast down to about 57°30' N.

Over the weekend, no larger change is expected.

### Northern Baltic

In Lake Mälaren, thin level ice is present in the westernmost part and some sheltered bays. Else, there is some new ice in sheltered bays along the

Swedish coast. No larger change is expected.

### Southeastern Baltic

In the Curonian Lagoon, new ice is present along the eastern coast.

No larger change is expected.

### Swedish Lakes

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

No larger change is expected.

### Skagerrak

New ice is present at sheltered areas in Norwegian fjords and some other sheltered areas.

No larger change is expected.

## Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
<b>Estonia</b>	<b>Pärnu</b>	<b>1600 kW</b>	<b>1C</b>	<b>17.12.</b>
<b>Finland</b>	Tornio, Kemi and Oulu	2000 dwt	II	04.12.
	<b>Tornio, Kemi and Oulu</b>	<b>2000 dwt</b>	<b>I</b>	<b>11.12.</b>
	Raahe, Kalajoki, Kokkola, Pietarsaari and Vaasa	2000 dwt	II	08.12.
	<b>Raahe</b>	<b>2000 dwt</b>	<b>I</b>	<b>11.12.</b>
	Northern Lake Saimaa	2000 dwt	II	08.12.
<b>Sweden</b>	Southern Lake Saimaa and Saimaa Canal	1300 dwt	II	04.12.
	<b>Southern Lake Saimaa and Saimaa Canal</b>	<b>2000 dwt</b>	<b>II</b>	<b>11.12.</b>
	Karlsborg, Luleå, Haraholmen and Skelleftehamn	2000 dwt	II	04.12.
<b>Sweden</b>	<b>Karlsborg and Luleå</b>	<b>2000 dwt</b>	<b>IC</b>	<b>11.12.</b>
	Ångermanälven	1300/2000 dwt	IC/II	04.12.
	Köping and Västerås	1300/2000 dwt	IC/II	06.12.

## Information of the Icebreaker Services

**Estonia**

**Icebreaker:** EVA-316 assists to the port of Pärnu.

**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 78. 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:**

OTSO and ALE assist in the Bay of Bothnia. KONTIO is heading for the Bay of Bothnia.

CALYPSO assists in the northern Lake Saimaa. METEOR assists in the southern Lake Saimaa and the Saimaa Canal.

**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, 10.12.2021**

Shipping route from Narva-Jõssuu	3000
Kunda, port and bay	3000
Paernu, port and bay	5123
Moonsund	4111

**Finland, 10.12.2021**

Roeyttae – Etukari	8745
Etukari – Ristinmatala	5255
Ajos – Ristinmatala	5245
Ristinmatala – Kemi 2	5245
Kemi 2 – Kemi 1	5245
Sea area SW of Kemi 1	5245
Kemi 2 – Ulkokrunni – Virpiniemi	8245
Oulu harbours – Kattilankalla	8745
Kattilankalla – Oulu 1	4245
Sea area SW of Oulu 1	5245
High Sea N of the latitude of Marjaniemi	0//5
Raahe harbour – Heikinkari	4245
Heikinkari – Raahe lighthouse	3125
Raahe lighthouse – Nahkiainen	2115
Latitude Marjaniemi – Ulkokalla, Sea	0//5
Rahja harbour – Välimatala	3015
Välimatala to line Ulkokalla – Ykskivi	2015
Ykspihlaja – Repsaer	5745
Repsaer – Kokkola lighthouse	2115
Sea area off Kokkola lighthouse	1015
Pietarsaari – Kallan	5145
Vaskiluoto – Ensten	5245

Ensten – Vaasa lighthouse	1015
Vaasa lighthouse – Norrskaer	1015
Kaskinen – Sälgrund	3001
Sea area off Sälgrund	1001
Rauma, Harbour – Kylväpohlaja	3001
Kylväpohlaja – Rauma lighthouse	1000
Uusikaupunki harbour – Kirsta	3001
Kirsta – Isokari	2001
Naantali and Turku – Rajakari	3101
Inkoo a. Kantvik – sea area Porkkala	3001
Helsinki harbours – Harmaja	3001
Valko Harbour – Täktarn	5142
Kotka – Viikari	4001
Hamina – Suurmusta	5142
Suurmusta – Merikari	5142

**Russian Federation, 10.12.2021**

Port of St. Petersburg	51/2
St. Petersburg – E-point island Kotlin	51/2
E-point Kotlin – long. lighth. Tolbuhkin	50/1
Lighth. Tolbuhkin – lighth. –Šepelevskij	40/1
Lighthouse –epelevskij – island Sescar	40/1
Vyborg, port and bay	82/2
Island Vichrevoj – Island Sommers	41/2
Strait Bjerkesund	51/2
E-point Bol'–oj Ber'ozovyj – –epelevskij	40/2

**Sweden, 10.12.2021**

Karlsborg – Maloeren	8346
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Luleå – Bjoernklack	8346
Sandgroenn fairway	8346
Haraholmen – Nygrån	8346
Sea area off Nygrån	5236
Skelleftehamn – Gåsoeren	5146
Sea area off Gåsoeren	5236
Sea area off Bjuroeklubb	2221
Western Quark (W of Holmoearna)	5142
Umeå – Vaektaren	5142
Oernskoeldsvik – Hoernskaten	5041
Ångermanaelven north Sandoe Bridge	5242
Ångermanaelven south Sandoe Bridge	5242
Haernoessand – Haernoen	5242
Sundsvall – Draghaellan	5142
Hudiksvallfjaerden	4041
Iggesund – Agoe	5041
Sandarne – Haellgrund	5041
Gaevle – Eggegrund	4041
Hallstavik – Svartklubben	5041
Koeping – Kvicksund	5142
Västerås – Grönsö	5142
Stockholm – Södertälje	5142
Norrköping – Hargökalv	5041
Fairway to Karlstad	5142
Fairway to Kristinehamn	5041