



# Eisbericht Nr. 5

## Amtsblatt des BSH

Jahrgang 97

Nr. 5

Tuesday, 21.11.2023

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### Übersicht

In den Schären der nördlichen Bottenwiek befindet sich bis 25 cm dickes Festeis oder ebenes Eis. Im Nordwesten und Norden treibt auf See örtlich lockeres Eis und ansonsten Neueis. Weiter im Süden kommt bis Norra Kvarken Neueis an den Küsten vor. Auch in einigen geschützten Stellen der Bottensee, des Schärenmeers und im Rigaischen Meerbusen hat sich Neueis gebildet.

### Overview

In the archipelagos of the northern Bay of Bothnia, there is up to 25 cm thick fast ice or level ice. Open drift ice at places and elsewhere new ice are present at sea in the northwest and north. Further south there is new ice in places along the coast down to the Quark and in some sheltered places in the Sea of Bothnia, the Archipelago Sea and the Gulf of Riga.

### Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, up to 25 cm thick fast ice or level ice is present from about Piteå to Oulu. Further out, there is open, 5–15 cm thick drift ice around Farstugrunden and Kemi-1 and new ice at sea elsewhere to about the line Bjuröklubb – Norströmsgrund – south of Kemi-1. Further south along the coast, there is thin

level and new ice.

With increasing temperatures from severe frost to around freezing point and upcoming gale force wind from the south, some new ice formation is expected along the coast. At sea the ice will drift to the north.

### The Quark

New ice and thin level ice is present in sheltered places along the coasts and in the Vaasa archipelago.

With temperatures increasing to around the freezing point some new ice formation is expected in sheltered areas.

### Sea of Bothnia

New ice can be found in sheltered bays in the north. On the Ångermanälven there is 3–10 cm thick ice on the upper part and new is present in

the lower part.

Some new ice formation is expected.

### Archipelago Sea

In some sheltered bays there is new ice.

Some new ice formation is expected.

### 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)

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**Gulf of Finland**

Some ice formation takes place in Lake Saimaa.  
Further new ice formation is expected in Lake

Saimaa and even in the Gulf itself some ice formation could be possible in sheltered places.

**Gulf of Riga**

Some new ice is present in sheltered bays in Väinameri.

No larger changes are expected the coming day.

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>Sweden</b>	Karlsborg, Lulea and Haraholmen	2000 dwt	II	21.11.

**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** will be heading for the Bay of Bothnia on Thursday 23<sup>rd</sup> November.

## 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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**Finland, 21.11.2023**

Röyttä – Etukari	5142
Etukari – Ristinmatala	5142
Ajos – Ristinmatala	4041
Ristinmatala – Kemi 2	4041
Kemi 2 – Kemi 1	3132
Sea area SW of Kemi 1	3132
Kemi 2 – Ulkokrunni – Virpiniemi	5142
Oulu harbours – Kattilankalla	7142
Kattilankalla – Oulu 1	3001
High Sea N of the latitude of Marjaniemi	1000
Raahe harbour – Heikinkari	5142
Heikinkari – Raahe lighthouse	3001
Vaskiluoto – Ensten	4041

**Sweden, 21.11.2023**

Karlsborg – Malören	8242
Sea area off Malören	4041
Luleå – Björnklack	8342
Björnklack – Farstugrunden	3222
E and SE of Farstugrunden	3222
Sandgrönn fairway	5242
Rödallen – Norströmsgrund	4041
Haraholmen – Nygrån	8342
Sea area off Nygrån	4041
Skelleftehamn – Gåsören	4041
Sea area off Gåsören	4041
Sea area off Bjuröklubb	4041
Umeå – Väktaren	4041

Ångermanälven north Sandö Bridge	5041
Ångermanälven south Sandö Bridge	5041
Härnösand – Härnön	4041
Sundsvall – Draghällan	4041