

# Eisbericht Nr. 7

## Amtsblatt des BSH

Jahrgang 97

Nr. 7

Thursday, 23.11.2023

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### Übersicht

In den Schären der nördlichen Bottenwiek befindet sich bis 25 cm dickes Festeis oder ebenes Eis. Das Eis auf See ist größtenteils nach Norden verdriftet und bildet jetzt die Eisgrenze. Weiter im Süden kommt bis Norra Kvarken Neueis an den Küsten vor. Auch in einigen geschützten Stellen der Bottensee, des Schärenmeers, im Rigaischen Meerbusen und Finnischen Meerbusen kommt Neueis vor.

### Overview

In the archipelagos of the northern Bay of Bothnia, there is up to 25 cm thick fast ice or level ice. The ice at sea has drifted northwards and has formed a region of very close ice at the ice edge. 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, the Gulf of Riga and the Gulf of Finland.

### 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. West of Kemi there is a zone of very close ice at the ice edge. South of Kemi, down to Raahe, there is thin very open to open ice at sea outside the fast and level ice. Fur-

ther south along the coast, there is thin level and new ice.

With decreasing temperature and winds slowly veering towards north, some ice formation and ice growth is possible and the ice will start drifting southwards.

### The Quark

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

Although temperature are decreasing, no larger ice formation is expected.

### 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.

Although light frost is expected, ice formation, if any, will be only minor and no larger changes are expected.

### Archipelago Sea

In some sheltered bays there is new ice. With temperatures around the freezing point, no

larger change in the ice situation 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. New ice is present in the top of Vyborg Bay.

No larger changes are expected the coming day.

**Gulf of Riga**

Some new ice is present in sheltered bays in Väinameri and the Bay of Pärnu.

With temperatures above the freezing point no larger changes are expected the coming day.

Dr. J.Holfort

**Restrictions to Navigation**

	<b>Harbour/District</b>	<b>At least dwt/hp/kW</b>	<b>Ice Class</b>	<b>Begin</b>
<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 is heading for the Bay of Bothnia.

## 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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## Sweden, 22.11.2023

Karlsborg – Malören	8246
Luleå – Björnklack	8346
Björnklack – Farstugrunden	5246
E and SE of Farstugrunden	3226
Sandgrönn fairway	5246
Rödkaullen – Norströmsgrund	5246
Haraholmen – Nygrån	8346
Sea area off Nygrån	4046
Skelleftehamn – Gåsören	5242
Sea area off Gåsören	5242
Sea area off Bjuröklubb	4041
Umeå – Väktaren	4041
Ångermanälven north Sandö Bridge	5041
Ångermanälven south Sandö Bridge	5041
Härnösand – Härnön	4041
Sundsvall – Draghällan	4041

## Finland, 23.11.2023

Röyttä – Etukari	5145
Etukari – Ristinmatala	5145
Ajos – Ristinmatala	5145
Ristinmatala – Kemi 2	0//5
Kemi 2 – Kemi 1	0//5
Sea area SW of Kemi 1	0//5
Kemi 2 – Ulkokrunni – Virpiniemi	3135
Oulu harbours – Kattilankalla	8145
Kattilankalla – Oulu 1	3135
Sea area SW of Oulu 1	1005
High Sea N of the latitude of Marjaniemi	0//5
Raahe harbour – Heikinkari	2011
Heikinkari – Raahe lighthouse	2011
Vaskiluoto – Ensten	4041