

BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

# Eisbericht Nr. 4 Amtsblatt des BSH

Jahrgang 97 Nr. 4

Monday, 20.11.2023

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#### Übersicht

In den Schären der nördlichen Bottenwiek befindet sich bis 25 cm dickes Festeis oder ebenes Eis und im Nordwesten treibt aus See Neueis. Die ersten Schifffahrtsbeschränkungen treten morgen in Kraft. Weiter im Süden kommt bis zu Norra Kwarken Neueis an den Küsten vor. Auch in einigen geschützten Stellen der Bottensee und des Schärenmeers 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 and new ice is present at sea in the northwest. Traffic restrictions start tomorrow.

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 as well as in the Archipelago Sea.

#### **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 Oulo. Further out there is new ice, in the northwest it reaches to around Simpgrundet, Nordströmsgrund, Malören. Further

#### The Quark

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

#### Sea of Bothnia

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

## Archipelago Sea

In some sheltered bays there is new ice.

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

With continuous moderate to severe frost, ice formation will continue.

With mostly light frost some new ice formation is expected in sheltered areas.

lower part. Some new ice formation is expected.

Some new ice formation is expected.

Herstellung und Vertrieb Bundesamt für Seeschifffahrt und Hydrographie (BSH) www.bsh.de/eis 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.

Dr. J. Holfort

## **Restrictions to Navigation**

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Finland	Tornio, Kemi and Oulu	2000 dwt	II	22.11.
Sweden	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:

## Baltic Sea Ice Code

First number: AB Amount and arrangements of sea ice 0 lce free 1 Open water – concentration less than 1/10 2 Very open ice - concentration 1/10 to 3/10 3 Open ice – concentration 4/10 to 6/10 4 Close ice – concentration 7/10 to 8/10 5 Very close ice – concentration 9/10 to 9+/10 6 Compact ice, including consolidated ice – concentration 10/10 7 Fast ice with drift ice outside 8 Fast ice 9 Lead in very close or compact drift ice or along the fast lce edge / Unable to report	Second number: <b>S</b> <sub>B</sub> Stage of ice development 0 New ice or dark nilas (less than 5 cm thick) 1 Light nilas (5 - 10 cm thick) or ice rind 2 Grey ice (10 - 15 cm thick) 3 Grey-white ice (15 - 30 cm thick) 4 White ice, first stage (30 - 50 cm thick) 5 White ice, second stage (50 - 70 cm thick) 6 Medium first year ice (70 - 120 cm thick) 7 Ice predominantly thinner than 15 cm with some thicker ice 8 Ice predominantly grey-white ice (15 - 30 cm) with some thicker ice 9 Ice predominantly thicker than 30 cm with some thinner ice / No information or unable to report
Third number: <b>T<sub>B</sub> Topography or form of ice</b> 0 Pancake ice, ice cakes, brash ice – less than 20 m across 1 Small ice floes – 20 to 100 m across 2 Medium ice floes – 100 to 500 m 3 Big ice foes – 500 to 2000 m across 4 Vast or giant ice floes – more than 2000 m across – or level ice 5 Rafted ice 6 Compact slush or shuga, or compacted brash ice 7 Hummocked or ridged ice 8 Thaw holes or many puddles on the ice 9 Rotten ice / No information or unable to report	<ul> <li>Fourth number:</li> <li>K<sub>B</sub> Navigation conditions in ice</li> <li>Navigation unobscured</li> <li>Navigation difficult or dangerous for wooden vessels without ice sheathing</li> <li>Navigation difficult for unstrengthened or low-powered vessels built of iron or steel. Navigation for wooden vessels even with ice sheathing not advisable</li> <li>Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice</li> <li>Navigation proceeds in lead or broken ice-channel without the assistance of an icebreaker</li> <li>Icebreaker assistance can only be given to vessels of special size</li> <li>Icebreaker assistance can only be given to vessels of special ice class and of special size</li> <li>Icebreaker assistance can only be given to vessels after after special permission</li> <li>Navigation temporarily closed</li> <li>Navigation has ceased</li> <li>Unknown</li> </ul>

## Finland, 20.11.2023

Röyttä – Etukari	5142	
Etukari – Ristinmatala		
Ajos – Ristinmatala		
Ristinmatala – Kemi 2		
Kemi 2 – Kemi 1		
Kemi 2 – Ulkokrunni – Virpiniemi		
Oulu harbours – Kattilankalla		
Kattilankalla – Oulu 1	1000	
High Sea N of the latitude of Marjaniemi	1000	
Raahe harbour – Heikinkari	5142	
Latitude Marjaniemi – Ulkokalla, Sea	5041	
Pietarsaari – Kallan	1001	
Sweden, 20.11.2023	0040	
Karlsborg – Malören	8242	
Sea area off Malören	5041	
Luleå – Björnklack	5242	
Björnklack – Farstugrunden	5041	
E and SE of Farstugrunden	5041	
Sandgrönn fairway	5041	
Rödkallen – Norströmsgrund	5041	
Haraholmen – Nygrån	5142	
Sea area off Nygrån	5041	
Skelleftehamn – Gåsören	5041	
Sea area off Gåsören	5041	
Sea area off Bjuröklubb	5041	
Umeå – Väktaren	4041	
Ångermanälven north Sandö Bridge	5041	
Ångermanälven south Sandö Bridge	5041	
Härnösand – Härnön	4041	
Sundsvall – Draghällan	4041	