

# Eisbericht Nr. 24 Amtsblatt des BSH

Jahrgang 96	Nr. 24	Friday, 30.12.2022	1
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#### Übersicht

In den Schären der Bottenwiek befindet sich bis 25 cm dickes Festeis sowie 5–15 cm dickes ebenes Eis. Weiter außerhalb treibt im Nordosten 5–15 cm dickes, sehr dichtes Eis und weiter südliche sehr lockeres dünnes Eis. In Norra Kvarken liegt bei Vaasa bis 20 cm dickes Festeis, ansonsten kommt an den Küsten Neueis oder dünnes ebenes Eis vor. In der Bottensee, dem Schärenmeer und dem Mälarsee kommt entlang der Küsten dünnes, ebenes Eis oder Neueis vor. Im Finnischen Meerbusen kommt in den östlichsten Buchten bis 20 cm dickes Festeis und in geschützten Buchten entlang der Küsten kommt Neueis und dünnes ebenes Eis vor. Im Nordosten des Rigaischen Meerbusen befindet sich 5–15 cm dickes ebenes Eis oder Festeis entlang der Küsten und der Bucht von Pärnu. In den Haffgebieten der Südöstlichen Ostsee befindet sich Neueis oder dünnes, ebenes Eis.

#### Overview

In the archipelagos of the Bay of Bothnia there is up to 25 cm thick fast ice as well as 5–15 cm thick level ice. Further out, there is 5–15 cm thick, very close ice in the northeast and thin, very open drift ice further south. In the Quark there is up to 20 cm thick fast ice near Vaasa and else new ice or thin level ice along the coasts. In the Sea of Bothnia, the Archipelago Sea and Lake Mälaren, there is thin level ice und new ice along the coasts. In the Gulf of Finland, there is up to 20 cm thick fast ice in the easternmost bays. In sheltered places along the coasts, there is new ice and thin level ice. In the northeastern Gulf of Riga, there is 5–15 cm thick level ice or fast ice is present along the coasts and in the Bay of Pärnu. In the lagoons of the southeastern Baltic there is new ice or thin level ice.

#### **Bay of Bothnia**

In the archipelagos of the northern Bay of Bothnia, there is 10–25 cm thick fast ice and thin level ice further out. In the northeast, there is 5–15 cm thick very close ice approximately to the line Malören–Kemi-1. Further south in the east, there is thin very open to open drift ice off the fast ice. In the southern Bay of Bothnia, there is thin level ice or in

places 5-15 cm thick fast ice in the inner bays. Further out in the east there is thin very open drift

Some ice formation and ice growth is expected especially in the northern part. The ice will drift to the northwest/north and from Sunday to the west.

#### The Quark

There is up 20 cm thick fast or level ice in the Vaa-

sa archipelago and mostly very open, 2-10 cm

#### Herstellung und Vertrieb

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

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© BSH - All rights reserved Reproduction in whole or in part prohibited thick drift ice further out to about Norrskär. On the Swedish side, there is thin level ice in sheltered regions and new ice around Holmöarna.

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No larger changes are expected over the weekend.

#### Sea of Bothnia

In the archipelagos along the coasts there is mostly thin level ice and new ice on the Finnish side and new ice on the Swedish side. On the Ånger-

manälven, there is 5–15 cm thick fast or level ice. Some melting but else no larger changes are expected over the weekend.

## Archipelago Sea

New ice is present in sheltered inner bays.

Some melting is expected over the weekend.

#### **Northern Baltic**

In Lake Mälaren, 2–10 cm thick level ice is present in the western part and new ice in sheltered places.

Some melting but else no larger changes are expected over the weekend.

#### **Gulf of Finland**

15–30 cm thick compact ice is present east of the island Kotlin. In the bay to the north of Kotlin, there is 10–20 cm thick very close ice. Further out, there is new ice. In the top of Vyborg Bay, there is 15–25 cm thick fast ice. In places along the northern coast and in sheltered places along the southern

coast, there is thin level ice and new ice. On Lake Saimaa, there is 5–20 cm thick ice and new ice, in the southern part also places with open water. Some melting is expected in the ester parts but else no large changes over the weekend.

#### **Gulf of Riga**

In Väinameri, there is 10–20 cm thick fast ice in sheltered bays and very close ice between Hiiumaa and Saaremaa. On the fairway it is ice free. In the Bay of Pärnu, there is a 10–20 cm thick fast ice out to the line Lindi-Uulu and further out very close

ice to the line port Peerni-Voiste. Latvian fairways are ice free.

Some melting but else no larger changes are expected over the weekend.

#### **Central Baltic**

New ice is present in some sheltered areas.

Melting continues over the weekend.

#### **Southeastern Baltic**

In the Curonian lagoon there is level ice and in the Vistula lagoon there is new ice.

Melting continues over the weekend.

#### **Western and Southern Baltic**

The area is ice mostly free.

## Skagerrak and Kattegat

Up to 10 cm thick ice is present in some Norwegian fjords near Halden, Moss, Tønsberg and Kragerø. Over the weekend, some melting is expected along the coasts. In the top of Oslofjord some ice formation may occur.

#### **Swedish Lakes**

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

Some melting is expected over the weekend.

Dr. W. Aldenhoff

## **Restrictions to Navigation**

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Estonia	Pärnu	1600 kW	1 C	23.12.
Finland	Tornio, Kemi and Oulu	2000 dwt		24.12.
	Raahe and Vaasa	2000 dwt	II	24.12.
	Loviisa, Kotka and Hamina	2000 dwt	II	24.12.
	Lake Saimaa and Saimaa Canal	2000 dwt	IB	27.12.
	Kalajoki, Kokkola and Pietarsaari	2000 dwt	II	01.01.
Sweden	Karlsborg and Lulea	2000 dwt		25.12.
	Haraholmen and Skelleftehamn	2000 dwt	1	25.12.
	Holmsund, Rundvik, Husum and	2000 dwt	II	21.12.
	Örnsköldvik			
	Angermanälven	2000 dwt	IC	21.12.
	Köping	1300/2000 dwt	IC/II	17.12.
	Västeras and Balsta	1300/2000 dwt	IC/II	22.12.

#### **Estonia**

#### Icebreakers:

EVA-316 assists in 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 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, ATLE, OTSO and ALE assist in the Bay of Bothnia. TYRSKY assists in the Lake Saimaa.

#### 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.

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## **Baltic Sea Ice Code**

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

Namuov 20 42 2022		Sea betw. lat. of Ulkokalla –Pietarsaari	2121
Norway, 28.12.2022	24 //		5142
Svinesund – Halden	31//	Ykspihlaja – Repskär	
Mossesund	9223	Repskär – Kokkola lighthouse	2121
Drammensfjord	3112	Pietarsaari – Kallan	5142
Tønsberg, inner harbour	8101	Sea area off Kallan	2121
Skåtøysund (Kragerø)	8143	Sea area ENE of Nordvalen	2121
Langårsund (Kragerø)	8144	Sea area Nordvalen to W of Norrskär	2125
		Vaskiluoto – Ensten	5145
Estonia, 30.12.2022		Ensten – Vaasa lighthouse	2125
Paernu, port and bay	7235	Vaasa lighthouse – Norrskär	2125
·		Naantali and Turku – Rajakari	4042
Finland, 30.12.2022		Inkoo a. Kantvik – sea area Porkkala	4042
Röyttä – Etukari	8346	Helsinki harbours – Harmaja	4042
Etukari – Ristinmatala	7756	Valko Harbour – Täktarn	5145
Ajos – Ristinmatala	7756	Kotka – Viikari	5042
Ristinmatala – Kemi 2	5756	Hamina – Suurmusta	5145
Kemi 2 – Kemi 1	5756		
Sea area SW of Kemi 1	3136	Russian Federation, 30.12.2022	
Kemi 2 – Ulkokrunni – Virpiniemi	7756	Port of St. Petersburg	63/3
Oulu harbours – Kattilankalla	8746	St. Petersburg – E-point island Kotlin	53/2
Kattilankalla – Oulu 1	2126	E-point Kotlin – long. lighth. Tolbuhkin	4101
Sea area SW of Oulu 1	3136	Lighth. Tolbuhkin – lighth. –Šepelevskij	2001
High Sea N of the latitude of Marjaniemi	2126	Vyborg, port and bay	83/3
Raahe harbour – Heikinkari	5145	, , ,	
Heikinkari – Raahe lighthouse	2125	Sweden, 30.12.2022	
Raahe lighthouse – Nahkiainen	2125	Karlsborg – Malören	8346
Latitude Marjaniemi – Ulkokalla, Sea	2125	Luleå – Björnklack	8346
Rahja harbour – Välimatala	2121	Sandgrönn fairway	5136
Vaelimatala to line Ulkokalla – Ykskivi	2121	Haraholmen – Nygrån	8246

Skelleftehamn – Gåsören	5136
Sea area off Bjuröklubb	5246
Umeå – Väktaren	5146
Örnsköldsvik – Hörnskaten	5146
Hörnskaten – Skagsudde	5146
Ångermanälven north Sandö Bridge	8244
Ångermanälven south Sandö Bridge	8244
Sundsvall – Draghällan	5041
Hudiksvallfjärden	5142
Iggesund – Agö	5142
Sandarne – Hällgrund	4041
Ljusnefjärden – Storjungfrun	4041
Gävle – Eggegrund	5142
Hallstavik – Svartklubben	4041
Köping – Kvicksund	5144
Västerås – Grönsö	5144
Fairway to Karlstad	5041
Fairway to Kristinehamn	4041