



# Eisbericht Nr. 29

## Amtsblatt des BSH

Jahrgang 96

Nr. 29

Friday, 06.01.2023

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### Übersicht

In den Schären der Bottenwiek befindet sich 10–30 cm dickes Festeis. Weiter außerhalb treibt im Nordosten 5–20 cm dickes, sehr dichtes Eis gefolgt von Neueis. Weiter außerhalb im Westen liegt dünnes Eis. Zwischen Farstugrunden und Oulun portti treibt ein Band von sehr dichtem, 10–20 cm dickem Treibeis. 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 30 cm dickes Festeis sowie dünnes Treibeis oder Neueis weiter außerhalb vor. In geschützten Buchten entlang der Küsten kommt Neueis und dünnes ebenes Eis vor. Im Nordosten des Rigaischen Meerbusen befindet sich 10–20 cm dickes ebenes Eis oder Festeis entlang der Küsten. In der Bucht von Pärnu treibt sehr dichtes Eis im westlichen Teil.

### Overview

In the archipelagos of the Bay of Bothnia there is 10–30 cm thick fast ice. Further out in the northeast, there is 5–20 cm thick, very close ice and new ice further out. In the west, there is thin ice. A belt of 5–20 cm thick, very close drift ice is present between Farstugrunden and Oulun portti. 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 and new ice along the coasts. In the Gulf of Finland, there is up to 30 cm thick fast ice in the easternmost bays and thin drifting or new ice further out. In sheltered places along the coasts, there is new ice and thin level ice. In the northeastern Gulf of Riga, there is 10–20 cm thick level ice or fast ice along the coasts. In the Bay of Pärnu, there is very close drift ice in the western part.

### Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 10–30 cm thick fast ice. Further out in the northeast, there is 5–20 cm thick and rafted very close ice to about Malören–Lallinmöyly. Further out there is new ice to 8 nm south of Kemi-1 – Oulun portti – Merikallat – Nahkiainen – Ulkokalla. Further out in the west, there is thin level ice or new ice to about Malören–Farstugrunden–Nygrån. In the central part east of Farstugrunden, there is a belt

of very close, 5–20 cm thick drift ice to about Merikallat and Oulun portti. 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, there is new ice and new ice formation.

Ice formation and ice growth and an increasing ice drift to the north/northwest are expected over the weekend.

#### 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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### The Quark

There is up to 20 cm thick fast or level ice in the Vaasa archipelago and thin drift ice and new ice further out to west of Vaasa lighthouse. On the Swedish side, there is thin level ice in sheltered

regions and new ice further out.

New ice formation and ice growth and an increasing ice drift to the north/northwest are expected over the weekend.

### Sea of Bothnia

In the archipelagos along the coasts there is mostly thin level ice and new ice further out on the Finnish side. On the Ångermanälven, there is 10–20 cm thick fast or level ice.

New ice formation is expected along the Finnish coast over the weekend. Along the Swedish coast slight plus degrees may occur during the weekend.

### Archipelago Sea

New ice is present in sheltered inner bays. Some new ice formation is expected in sheltered

places over the weekend.

### Northern Baltic

In Lake Mälaren, 3–10 cm thick level ice is present in the western part. New ice occurs in sheltered places and along the coast.

Some new ice formation is expected the coming day but warmer temperatures are expected from Saturday afternoon.

### Gulf of Finland

15–30 cm thick compact ice is present east of the island Kotlin. Between the line Šepelevskij– Seskar and the south coast, there is open drift ice, 5–20 cm thick. New ice is present in the eastern gulf approximately to a line from Seskar to Kotka. In the top of Vyborg Bay, there is 15–25 cm thick fast ice and in the Bjerkesund, there is thin level ice.

Along the northern coast, there is thin level ice and new ice further out. Along the southern coast, there is new ice in places. On Lake Saimaa, there is 10–25 cm thick ice and new ice.

New ice formation and an increasing ice drift to the north are expected over the weekend.

### Gulf of Riga

In Väinameri, there is 10–20 cm thick fast ice in sheltered bays and open to very close ice and new ice between Hiiumaa and Saaremaa. On the fairway, there is new ice. In the Bay of Pärnu, there is 10–20 cm thick fast ice out to the line Valgeranna–Tahku Nina. Further out in the western part of the bay to the island Kihnu, there is 10–20 cm thick,

close to very close drift ice. New ice forms in the central part. In the port of Riga and from Riga to Kolka, there is open water.

New ice formation is expected over the weekend in the entire gulf. The ice drifts mostly to the northwest.

### Central Baltic

The area is mostly ice free.

### Southeastern Baltic

In the Curonian lagoon, there is close ice in the eastern part and Vistula lagoon is mostly ice free.

No major changes are expected with warmer temperatures from Saturday.

### Western and Southern Baltic

The area is ice free.

### Skagerrak and Kattegat

Up to 10 cm thick ice or new ice is present in some Norwegian Fjords.

No larger change are expected over the weekend.

### Swedish Lakes

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

No major changes are expected over the weekend.

## Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
<b>Estonia</b>	Pärnu	1600 kW	1 C	23.12.
<b>Finland</b>	Tornio, Kemi and Oulu	2000 dwt	I	24.12.
	<b>Tornio, Kemi and Oulu</b>	<b>2000 dwt</b>	<b>IB</b>	<b>07.01.</b>
	Raahe and Vaasa	2000 dwt	II	24.12.
	Kalajoki, Kokkola and Pietarsaari	2000 dwt	II	01.01.
	<b>Raahe, Kalajoki, Kokkola, Pietarsaari and Vaasa</b>	<b>2000 dwt</b>	<b>I</b>	<b>07.01.</b>
	<b>Kaskinen, Inkoo, Kantvik, Helsinki, Sköldvik and Mussalo</b>	<b>2000 dwt</b>	<b>II</b>	<b>07.01.</b>
	Loviisa, Kotka and Hamina	2000 dwt	II	24.12.
Lake Saimaa and Saimaa Canal	2000 dwt	IA	05.01.	
<b>Sweden</b>	Karlsborg and Lulea	2000 dwt	IC	25.12.
	<b>Karlsborg and Lulea</b>	<b>2000 dwt</b>	<b>IB</b>	<b>08.01.</b>
	Haraholmen and Skelleftehamn	2000 dwt	IC	25.12.
	Holmsund, Rundvik, Husum and Örnköldvik	2000 dwt	II	21.12.
	Angermanälven	2000 dwt	IC	21.12.
	<b>Angermanälven</b>	<b>2000 dwt</b>	<b>IB</b>	<b>07.01.</b>
	Köping	1300/2000 dwt	IC/II	17.12.
	<b>Köping</b>	<b>2000 dwt</b>	<b>IC</b>	<b>07.01.</b>
	Västeras and Balsta	1300/2000 dwt	IC/II	22.12.
	<b>Västeras</b>	<b>2000 dwt</b>	<b>IC</b>	<b>07.01.</b>

**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, FREJ and ALE assist in the Bay of Bothnia. TYRSKY assists in the Lake Saimaa. **ZEUS** is heading to the Quark.

**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, 06.01.2023**

Paernu, port and bay	7235
Moonsund	3000

**Finland, 06.01.2023**

Röyttä – Etukari	8346
Etukari – Ristinmatala	7756
Ajos – Ristinmatala	7756
Ristinmatala – Kemi 2	5756
Kemi 2 – Kemi 1	4046
Sea area SW of Kemi 1	4046
Kemi 2 – Ulkokrunni – Virpiniemi	7756
Oulu harbours – Kattilankalla	8746
Kattilankalla – Oulu 1	4146
Sea area SW of Oulu 1	5746
High Sea N of the latitude of Marjaniemi	5746
Raahe harbour – Heikinkari	4045
Heikinkari – Raahe lighthouse	4045
Raahe lighthouse – Nahkiainen	4045
Latitude Marjaniemi – Ulkokalla, Sea	3135
Rahja harbour – Välimatala	4145
Välimatala to line Ulkokalla – Ykskivi	3005
Ykskivi – Repskär	5145
Repskär – Kokkola lighthouse	4045
Pietarsaari – Kallan	5145
Sea area off Kallan	3005
Vaskiluoto – Ensten	5745
Ensten – Vaasa lighthouse	3125
Vaasa lighthouse – Norrskär	2005

Kaskinen – Sälgrund	3001
Sea area off Sälgrund	2000
Pori harb. to line Pori lighth. – Säppi	3001
Rauma, Harbour – Kymäpihlaja	4042
Uusikaupunki harbour – Kirsta	3001
Naantali and Turku – Rajakari	3001
Inkoo a. Kantvik – sea area Porkkala	4142
Helsinki harbours – Harmaja	4042
Vuosaari harbour – Eestiluoto	3001
Porvoo harbours – Varlax	3000
Valko Harbour – Täktarn	5145
Archipelago fairway Boistö – Glosholm	3000
Kotka – Viikari	4145
Viikari – Orregrund	4042
Orregrund – Tiiskeri	2000
Hamina – Suurmusta	5145
Suurmusta – Merikari	3005
Merikari – Kaunissaari	3005

**Latvia, 06.01.2023**

Port of Riga	1000
Riga to the Cape of Mersrags, fairway	1000
Mersrags to Irben Strait, fairway	1000

**Norway, 05.01.2023**

Svinesund – Halden	31//
Mossesund	9223
Drammensfjord	4234
Tønsberg, inner harbour	8101

Langårsund (Kragerø) 8144

**Russian Federation, 06.01.2023**

Port of St. Petersburg 63/3  
St. Petersburg – E-point island Kotlin 53/2  
E-point Kotlin – long. lighth. Tolbuhkin 4101  
Lighth. Tolbuhkin – lighth. –Šepelevskij 4001  
Lighthouse Šepelevskij – island Sescar 3000  
Vyborg, port and bay 83/3  
Island Vichrevoj – Island Sommers /001  
Strait Bjerkesund 50/2  
E-point Bol'šoj Ber'ozovjy – Šepelevskij 50/2  
Luga bay 1000

**Sweden, 06.01.2023**

Karlsborg – Malören 8346  
Sea area off Malören 5336  
Luleå – Björnklack 8346  
Björnklack – Farstugrunden 5146  
E and SE of Farstugrunden 5336  
Sandgrönn fairway 8346  
Rödkaullen – Norströmsgrund 5146  
Haraholmen – Nygrån 8346  
Sea area off Nygrån 4046  
Skelleftehamn – Gåsören 5246  
Sea area off Bjuröklubb 5246  
Umeå – Väktaren 5146  
Fairway to Husum 4046  
Örnsköldsvik – Hörnskatan 5146  
Ångermanälven north Sandö Bridge 8344  
Ångermanälven south Sandö Bridge 8344  
Sundsvall – Draghällan 5142  
Hudiksvallfjärden 5142  
Iggesund – Agö 5142  
Sandarne – Hällgrund 4041  
Ljusnefjärden – Storjungfrun 4041  
Gävle – Eggegrund 5142  
Hallstavik – Svartklubben 4041  
Köping – Kvicksund 5144  
Västerås – Grönsö 5144  
Grönsö – Södertälje 2024  
Stockholm – Södertälje 4044  
Fairway to Karlstad 5142  
Fairway to Kristinehamn 4041