



# Eisbericht Nr. 22

## Amtsblatt des BSH

Jahrgang 95

Nr. 22

Tuesday, 28.12.2021

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### Übersicht

In der nördlichen Bottenwiek liegt in den Schären 15–30 cm dickes Festeis und weiter außerhalb treibt meist dünnes Eis oder Neueis. In der südlichen Bottenwiek und Norra Kvarken liegt in den Schären bis zu 30 cm dickes Festeis. Auf See treibt in Norra Kvarken Neueis. Entlang der Küsten der Bottensee, dem Schärenmeer und der Ålandsee liegt dünnes ebenes Eis oder Neueis. Im Finnischen Meerbusen liegt entlang der Nordküste dünnes, ebenes Eis. Im Osten kommt bis zu 25 cm dickes Festeis und auf See Neueis vor. Im Rigaischen Meerbusen befindet sich Neueis und bis zu 15 cm dickes Eis im Moonsund und in der Pärnubucht. Neueis oder dünnes, ebenes Eis kommt in der nördlichen Ostsee, den Haffgebieten der südöstlichen Ostsee und dem Vänern vor. Neueis kommt in geschützten Buchten der zentralen Ostsee, der südlichen Ostsee, der westlichen Ostsee, in Bereich Belte und Sund, dem Kattegat und dem Skagerrak vor.

### Overview

In the northern Bay of Bothnia, there is 15–30 cm thick fast ice in the archipelagos, and mostly thin ice or new ice further out. In the southern Bay of Bothnia and Norra Kvarken, there is up to 30 cm thick fast ice in the archipelagos. There is new ice at sea in Norra Kvarken. Along the coasts of the Sea of Bothnia, the Archipelago Sea and Åland Sea, there is thin level ice or new ice. In the Gulf of Finland, thin level ice is present along the northern coast. In the eastern part, there is up to 25 cm thick fast ice and new ice at sea. In the Gulf of Riga, there is new ice and up to 15 cm thick ice in Moonsund and Pärnu Bay. New ice and thin level ice occurs at places in the northern Baltic, in the lagoons of the southeastern Baltic and Lake Vänern. New ice occurs in sheltered areas of the central Baltic, the southern Baltic, the western Baltic, in the Belts and Sound, Kattegat and Skagerrak.

### Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 15–30 cm thick fast ice, from the Finnish coast reaching out to Hebe-3 and Kattilankalla. Adjacent to the fast ice in the east, there is a thin band with 10–25 cm thick, very close ice; followed by level ice to about the line Kemi-1 – Ulkokalla – Kokkola. Off the fast ice in the west, there is new

ice to about Falkens grund – Farstugrunden – Malören. In the southern Bay of Bothnia, there is 10–25 cm thick fast ice in the archipelagos and new ice farther out.

Ice formation and ice growth is expected the coming day. The ice is drifting to the north.

### Norra Kvarken

In the archipelagoes off Vaasa, there is 10–30 cm

thick fast ice out to Storhästen with 5–15 cm thick,

### Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

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very close ice out to Norra Globsten. New ice and ice formation follows to Vaasa lighthouse. Along the Swedish coast, there is 5-20 cm thick fast in the inner archipelagos. New ice formation occurs

### Sea of Bothnia

On Ångermanälven, there is 10–25 cm thick fast ice in the upper part and open ice and new ice in the lower part. Else, there is 10–20 cm fast ice or thin level ice in the archipelagos and bays. Along

### Archipelago and Åland Sea

Thin level ice is present in places along the eastern coast. Else, there is new ice in the archipelago

### Gulf of Finland

From St. Petersburg up to the dike, there is 15–25 cm thick fast ice. Farther out, there is very close, 5–20 cm thick ice to Šepelevskij. In the Bay of Vyborg, there is 15–25 cm fast ice. 5–15 cm very close ice or fast ice is present in the Bjerkesund. In the archipelagos of the northern coast, there is 5-20 cm thick level ice or fast ice. Further out, there

### Gulf of Riga

In Moonsund, there is very close, 10–20 cm thick ice near the coasts and new ice in the central part. New ice occurs south of Saaremaa. Along the northeastern coast to Kihnu, there is very close ice. In Pärnu Bay, there is 10–25 cm thick very

### Northern Baltic

In Lake Mälaren, there is 5–20 cm thick fast ice or level ice in the western part. In sheltered bays further east, there is thin level or new ice. Along the

### Central Baltic

New ice occurs in sheltered bays along the Swedish coast and the coast of Gotland.

### Southeastern Baltic

The Curonian Lagoon is covered by new ice and in the Vistula Lagoon, there are areas with up to 8cm

### Southern Baltic

New ice occurs in the Szczecin Lagoon, along the river Peene and in sheltered bays of the Bay of Greifswald. New ice is also present along the

### Western Baltic

New ice occurs in some sheltered areas, inside the Darss-Zigst Bodden Chain and the Bodden waters

### Belts and Sound

New ice occurs in a few places.

### Skagerrak und Kattegat

New ice occurs in a few sheltered places. Ice melting will occur in the Kattegat. In sheltered

at sea north of the line Holmögadd – Valasaaret. Ice formation continues the coming day and ice drift is mainly to the north.

the Finnish coast, there 3–10 cm thick, close drift ice further out.

Ice growth and ice formation is expected the coming day.

gos and along the western coast.

No larger changes are expected.

is some new ice. East of the line Porvoo lighthouse – Gogland – Moščnyj, there is new ice or new ice formation at sea. At the southern coast, new ice is present in places near the shore. In Lake Saimaa and the Saimaa Canal, there is 10–25 cm thick ice. New ice formation and ice growth will take place the coming days and the ice will drift to the north.

close ice or thin level ice to Kihnu. In the port of Riga, there is consolidated ice.

Some ice growth is expected. Ice drift is to the north

Swedish coast, there is new ice or shuga in some sheltered bays.

Some ice formation will occur.

Almost unchanged conditions are expected the coming day.

thick ice in the southern part.

Some ice formation is expected the coming day.

Swedish coast off Karlshamn.

Almost unchanged conditions but ice melting comes from the west.

around Rügen.

Ice melt is expected the coming days.

Ice melting occurs the coming days.

fjords of the Skagerrak, some ice formation is expected.

**Swedish Lakes**

New ice as well as 5–15 cm thick level ice is present in sheltered bays of Lake Vänern.

No larger changes the coming day.

Dr. W. Aldenhoff

**Restrictions to Navigation**

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin	
<b>Estonia</b>	Pärnu	1600 kW	1C	17.12.	
<b>Finland</b>	Tornio, Kemi, Oulu and Raahe	2000 dwt	IB	25.12.	
	Kokkola and Vaasa	2000 dwt	I	22.12.	
	Kalajoki and Pietarsaari	2000 dwt	I	25.12.	
	Loviisa, Kotka and Hamina	2000 dwt	II	22.12.	
	Mussalo	2000 dwt	II	25.12.	
	Lake Saimaa and Saimaa Canal	2000 dwt	I	22.12.	
	<b>Kaskinen, Kristinnankaupunki, Pori, Rauma, Uusikaupunki, Naantali, Turku, Taalintehdas, Förby, Koverhar, Lappohja, Inkoo, Kantvik, Helsinki, Sköldvik</b>	<b>2000 dwt</b>	<b>II</b>	<b>01.01.</b>	
	<b>Hamina</b>	<b>2000 dwt</b>	<b>I</b>	<b>01.01</b>	
	<b>Sweden</b>	Karlsborg and Luleå	2000 dwt	IC	11.12.
		Haraholmen and Skelleftehamn	2000 dwt	IC	22.12.
Holmsund, Rundvik and Husum		2000 dwt	II	22.12.	
Örnsköldsvik		2000 dwt	II	22.12.	
Ångermanälven		2000 dwt	IC	22.12.	
Härnösand- Skutskär		2000 dwt	II	22.12.	
Köping and Västerås		2000 dwt	IC	27.12.	
Bålsta		1300/2000 dwt	IC/II	27.12.	

**Information of the Icebreaker Services****Estonia**

**Icebreaker:** EVA-316 assists to 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 78. 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:**

OTSO, KONTIO, FREJ, ALE and YMER assist in the Bay of Bothnia. VOIMA assists in the eastern Gulf of Finland. PROTECTOR and CALYPSO assist in the northern Lake Saimaa. METEOR assists in the southern Lake Saimaa and the Saimaa Canal.

**Russia**

There are restrictions for small crafts going to Vysotsk, Vyborg, St. Petersburg, Ust-Luga and Primorsk.

**There is a requirement of ice class ice 1 or icebreaker assistance to Vyborg from 30.12., Ust-Luga from 04.01.2022 and Primorsk from 12.01.2022. Icebreaker assistance is required for vessels without ice reinforcement to St. Petersburg from 31.12.**

**Icebreakers:** Several icebreakers assist vessels to the port of Vyborg, Vysotsk, Primorsk, Ust-Luga and St. Petersburg.

## Baltic Sea Ice Code

<p>First number:  <b>A<sub>B</sub> Amount and arrangements of sea ice</b>  0 Ice 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 ice edge  / Unable to report</p> <p>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 floes – 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</p>	<p>Second number:  <b>S<sub>B</sub> Stage of ice development</b>  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</p> <p>Fourth number:  <b>K<sub>B</sub> Navigation conditions in ice</b>  0 Navigation unobscured  1 Navigation difficult or dangerous for wooden vessels without ice sheathing  2 Navigation difficult for unstrengthened or low-powered vessels built of iron or steel. Navigation for wooden vessels even with ice sheathing not advisable  3 Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice  4 Navigation proceeds in lead or broken ice-channel without the assistance of an icebreaker  5 Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size  6 Icebreaker assistance can only be given to vessels of special ice class and of special size  7 Icebreaker assistance can only be given to vessels after special permission  8 Navigation temporarily closed  9 Navigation has ceased  / Unknown</p>
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**Germany, 28.12.2021**

Anklam, Hafen – Peenestrom	3112
Rankwitz, Peenestrom	6041
Wismar, Hafen	3000
Schlei, Schleswig – Kappeln	3001
Flensburg – Holnis	1000
Husum, Hafen	2000

**Estonia, 28.12.2021**

Narva-Jõesuu, Fahrwasser	51/2
Kunda, Hafen und Bucht	51/1
Pärnu, Hafen und Bucht	53/5
Moonsund	42/2

**Finland, 28.12.2021**

Röyttä – Etukari	8346
Etukari – Ristinmatala	7346
Ajos – Ristinmatala	7346
Ristinmatala – Kemi 2	5246
Kemi 2 – Kemi 1	5246
Kemi 1, Seegebiet im SW	0//6
Kemi 2 – Ulkokrunni – Virpiniemi	7346
Oulu, Hafen – Kattilankalla	8346
Kattilankalla – Oulu 1	5346
Oulu 1, Seegebiet im SW	5246
Offene See N-lich Breite Marjaniemi	3026
Raahe, Hafen – Heikinkari	7246
Heikinkari – Raahe Leuchtturm	5766
Raahe Leuchtturm – Nahkiainen	5246

Breitengrad Marjaniemi – Ulkokalla, See	3026
Rahja, Hafen – Välimatala	5745
Välimatala bis Linie Ulkokalla – Ykskivi	5246
Ykspihlaja – Repskär	7766
Repskär – Kokkola Leuchtturm	5146
Pietarsaari – Kallan	5745
Kallan, Seegebiet außerhalb	3025
Breite Pietarsaari – Nordvalen im NE	3005
Nordvalen, Seegebiet im ENE	3005
Vaskiluoto – Ensten	7346
Ensten – Vaasa Leuchtturm	5246
Vaasa Leuchtturm – Norrskär	0//6
Kaskinen – Sälgrund	4145
Sälgrund, Seegebiet außerhalb	4145
Pori – Linie Pori Leuchtturm – Säppi	4045
Rauma, Hafen – Kymäpihlaja	4105
Uusikaupunki, Hafen – Kirsta	3215
Koverhar – Hästö Busö	3005
Inkoo u. Kantvik – Porkkala See	3005
Helsinki, Hafen – Harmaja	4045
Harmaja – Helsinki Leuchtturm	2005
Helsinki – Porkkala – Rönnskär, Fahrw.	3005
Vuosaari Hafen – Eestiluoto	4045
Porvoo, Hafen – Varlax	4045
Varlax – Porvoo Leuchtturm	3005
Porvoo Leuchtturm – Kalbådagrund	3005
Valko, Hafen – Täktarn	5245
Boistö – Glosholm, Schärenfahrwasser	3005
Glosholm–Helsinki, Schärenfahrwasser	3005

Kotka – Viikari	4145	Västerås – Grönsö	8344
Viikari – Orrengrund	4045	Grönsö – Södertälje	5144
Orrengrund – Tiiskeri	3005	Stockholm – Södertälje	5244
Tiiskeri – Kalbådagrund	3005	Södertälje – Fifong	4041
Hamina – Suurmusta	8746	Norrköping – Hargökalv	4041
Suurmusta – Merikari	5146	Karlskrona – Aspö	5041
Merikari – Kaunissaari	4045	Karlshamn, Fahrwasser nach	4041
		Uddevalla – Stenungsund	5041
<b>Latvia, 28.12.2021</b>		Vänernborgsviken	5041
Riga, Hafen	6161	Karlstad, Fahrwasser nach	5242
Riga – Mersrags, Fahrwasser	3021	Kristinehamn, Fahrwasser nach	5242
Mersrags – Irbenstraße, Fahrwasser	3021	Otterbäcken, Fahrwasser nach	5041
<b>Poland, 28.12.2021</b>			
Ustka, Hafen	300/		
Zalew Szczecinski	311/		
Swinoujscie, Hafen	310/		
<b>Russian Federation, 28.12.2021</b>			
St. Petersburg, Hafen	83/3		
St. Petersburg – Ostspitze Kotlin	83/3		
Ostspitze Kotlin – Länge Lt. Tolbuchin	83/3		
Lt. Tolbuchin – Lt. Šepelevskij	51/2		
Lt. Šepelevskij – Seskar	40/1		
Seskar – Sommers	40/2		
Sommers – Südspitze Gogland	40/2		
Vyborg Hafen und Bucht	83/3		
Vichrevoj – Sommers	40/2		
Bjerkesund	50/2		
E-Spitze Bol'šoj Ber'ozovy – Šepelevskij	40/2		
Luga Bucht	40/2		
Zuf. Luga B. – Linie Mošcnyj-Šepel.	2001		
<b>Sweden, 28.12.2021</b>			
Karlsborg – Malören	8346		
Luleå – Björnklack	8346		
Björnklack – Farstugrunden	4046		
Sandgrönn Fahrwasser	8346		
Rödkallen – Norströmsgrund	4046		
Haraholmen – Nygrån	8346		
Nygrån, Seegebiet außerhalb	4046		
Skelleftehamn – Gåsören	5136		
Gåsören, Seegebiet außerhalb	5136		
Bjuröklubb, Seegebiet außerhalb	4046		
Nordvalen, See im NE	4046		
Västra Kvarnen W-lich Holmöarna	8246		
Umeå – Väktaren	4046		
Husum, Fahrwasser nach	4046		
Örnsköldsvik – Hörnskatan	5246		
Ångermanälv oberhalb Sandöbrücke	8344		
Ångermanälv unterhalb Sandöbrücke	8344		
Sundsvall – Draghällan	8346		
Draghällan – Åstholmsudde	4046		
Hudiksvallfjärden	5146		
Iggesund – Agö	4046		
Sandarne – Hällgrund	4046		
Gävle – Eggegrund	5146		
Öregrundsgrepen	5041		
Hallstavik – Svartklubben	5041		
Köping – Kvicksund	8344		