

Eisbericht Nr. 36 Amtsblatt des BSH

Jahrgang 95	Nr. 36	Tuesday, 18.01.2022	1
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Übersicht

In den Schären der Bottenwiek liegt im Norden 20–50 cm dickes Festeis und im Süden 10–30 cm dickes Festeis. Auf See befindet im Norden und Nordosten dichtes, 10–40 cm dickes, örtlich aufgepresstes Eis. Ansonsten außerhalb des Festeises örtlich lockerem bis dichtem Treibeis, am Eisrand im Osten liegt festgestampftes Eis. In Norra Kvarken liegt in den Schären bis zu 35 cm dickes Festeis und auf See kommt zumeist Neueis vor. Entlang der Küsten und in den Schären der Bottensee, dem Schärenmeer und der Ålandsee liegt Festeis oder dünnes ebenes Eis. Im Finnischen Meerbusen liegt entlang der Nordküste und im Osten bis 35 cm dickes Festeis. Im östlichen Teil treibt auf See sehr dichtes, 10–20 cm dickes Eis. Im Rigaischen Meerbusen befindet sich bis zu 25 cm dickes Eis im Moonsund und in der Pärnubucht. Neueis oder dünnes, ebenes Eis kommt örtlich in der nördlichen Ostsee, dem Vänern und der südöstlichen Ostsee vor. Neueis kommt in geschützten Buchten der zentralen Ostsee vor. In einigen inneren Fjorden des Skagerraks liegt Neueis oder Festeis.

Overview

In the archipelagos of the Bay of Bothnia, there is 20–50 cm thick fast ice in the north and 10–30 cm thick fast ice in the south. At sea, there is very close, 10–40 cm thick very close ice, partly ridged in the north and northeast. Else, outside the fast ice, open to close drift ice at places, with a brash ice barrier at the ice edge in the east. In Norra Kvarken, there is up to 35 cm thick fast ice in the archipelagos and mostly new ice at sea. Along the coasts and archipelagos of the Sea of Bothnia, the Archipelago Sea and Åland Sea, there is fast ice or thin level ice. In the Gulf of Finland, there is up to 35 cm thick fast ice along the northern coast and in the easternmost part. At sea in the east, there is mostly very close, 10–20 cm thick ice. In the Gulf of Riga, there is up to 25 cm thick ice in Moonsund and Pärnu Bay. New ice and thin level ice occurs at places in the northern Baltic, Lake Vänern and the southeastern Baltic. New ice occurs in sheltered areas of the central Baltic. Fast ice or new ice is present in some inner fjords of the Skagerrak.

Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 20–50 cm thick fast ice, from the Finnish coast reaching out to Hebe and Kattilankalla. Off the fast ice in the east, there is 10–35 cm thick consolidated ice to Kemi-3 and Oulu-4. Further out to the line Malören – Merikallat – Raahe, there is close 10–40 cm thick ice, partly ridged; in the northeast the ice is difficult to force in places. More

in the south, a brash ice barrier is present outside Raahe extending also further south and being difficult to force. On the Swedish side, there is 5-20cm thick close ice around of Falkensgrund and else mostly new ice or open water. In the southern Bay of Bothnia, there is 10–35 cm thick fast ice in the archipelagos. At sea there is a small belt of 10-30cm very close ice with a brash ice barriers at the

Herstellung und Vertrieb

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Finnish side. Else, there is some new ice further out. With southwesterly winds, warmer air will enter the region and ice formation will cease, due to the

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wind winds the brash ice barriers at the eastern ice edge will persist.

Norra Kvarken

In the archipelagoes off Vaasa, there is 10-35 cm thick fast ice to Ensten. Further out to Norra Globsten 5-20cm thick very close ice, followed by thin open ice and new ice formation to Vaasa lighthouse. Along the Swedish coast, there is 10-25 cm thick fast in the inner archipelagos and 5-15cm thick close ice west of Holmöarna, an area of 10-25cm thick, very close ice is drifting near Odelgrund. At sea in the north there is mostly new ice. A northeasterly ice drift, but else no larger changes are expected.

Sea of Bothnia

On Ångermanälven, there is 15-35 cm thick fast ice and 5-15 cm level ice in the entrance. Else, there is 10-25 cm fast ice or thin level ice in the eastern archipelagos and the bays in the northwest; in the southwestern bays, there is mostly 5-20cm level or fast ice. Along the eastern ice edge, there is thin very close ice and new ice at places. No larger changes are expected.

Archipelago and Aland Sea

Thin level ice is present in inner archipelagos of the coasts and around the Åland islands. On the larger fairways and the outer archipelago at the eastern coast, there is mainly open water. No larger changes are expected.

Gulf of Finland

From St. Petersburg up to longitude of Tolbuchin lighthouse there is 25-35 cm thick fast ice. In the Bay of Vyborg, there is 20-30 cm fast ice. In the Bjerkesund, there is 20-30 cm thick fast ice or 10-15cm thick very close ice. At sea, east of Seskar and lighthouse Hally, there is very close, 10-20 cm thick ice. Further west to Hogland and lighthouse Sommers there are strips of 10-20cm thick very open ice. In the archipelagos of the northern coast, there is fast ice, 10-25cm thick in the west and 20-35 cm thick in the east. Off the fast ice in the east, there is thin very open ice. At the southern coast, new ice is present in some sheltered bays along the shore, in Narva Bay there is fast ice along the coast and further out a fringe withf close ice. In Lake Saimaa and the Saimaa Canal, there is 25-40 cm thick ice. A northeasterly ice drift, but else no larger changes are expected.

Gulf of Riga

In Moonsund, there is very close, 10-25 cm thick ice or fast ice along the coasts, in the central part and on the fairways there is open water or open ice. At the south coast of Saaremaa, there is close ice in places and open water further out. In Pärnu

Bay, there is 10-25 cm thick fast ice or partly ridged very close ice in the eastern part and open water in the western part. A north-easterly ice drift and some ice melt are expected.

Northern Baltic

In Lake Mälaren, there is 5-20 cm thick fast ice or level ice in the western part; the central part is mostly ice free and in sheltered bays further east, there is thin level or new ice. Along the Swedish coast, there is new ice or shuga in some sheltered bays. Some melting expected.

Central Baltic

New ice occurs in some sheltered bays along the Swedish coast.

Some ice melt is expected.

Southeastern Baltic

In the Curonian Lagoon, there is very close, 5-10 cm thick ice in the eastern part.

The ice melt continues.

Skagerrak and Kattegat

In some inner fjords of the Skagerrak, there is fast ice, up to 30 cm thick at a few places, and new ice at places. Else, it is ice free. Some ice melt is expected.

Swedish Lakes

New ice as well as thin level ice is present in shel-

tered bays of Lake Vänern. Along the northern

coast, there is 5-20 cm thick fast ice.

No larger changes are expected.

Dr. J.Holfort

Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Estonia	Pärnu	1600 kW	1C	17.12.
Finland	Tornio, Kemi and Oulu	4000 dwt	IA	16.01.
	Raahe	4000 dwt	IA	16.01.
	Vaasa	2000 dwt	IB	16.01.
	Kokkola, Kalajoki and Pietarsaari	2000 dwt	IB	11.01.
	Kristiinankaupunki, Pori, Rauma, Uusikaupunki, Naantali, Turku, Koverhar, Lappohja, Helsinki and Sköldvik	2000 dwt	II	01.01.
	Kaskinen, Taalintehdas, Förby, Inkoo, Kantvik	2000 dwt	I	16.01.
	Loviisa and Kotka	2000 dwt	I	04.01.
	Hamina	2000 dwt	I	01.01.
	Mussalo	2000 dwt	II	25.12.
	Lake Saimaa and Saimaa Canal	2000 dwt	IB	06.01.
	Lake Saimaa and Saimaa Canal	2000 dwt	IA	22.01.
Russia	Vyborg	-	Ice 1	30.12.
	Vysotsk	-	Ice 1	27.12.
	Primorsk	-	Ice 1	12.01.
	Ust-Luga	-	Ice 1	04.01.
	St. Petersburg	-	required	31.12.
Sweden	Karlsborg and Luleå	2000 dwt	IB	06.01.
	Haraholmen and Skelleftehamn	2000 dwt	IB	06.01.
	Holmsund, Rundvik and Husum	2000 dwt	IC	15.01.
	Örnsköldsvik	2000 dwt	IC	15.01.
	Ångermanälven	2000 dwt	IB	06.01.
	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

The traffic separation schemes in the Quark are temporarily out of use from 15 January 2022.

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, URHO, POLARIS, FREJ and YMER assist in the Bay of Bothnia. ALE and ZEUS assist in the Quark and VOIMA in the eastern Gulf of Finland. PROTECTOR assists in the northern Lake Saimaa. CALYPSO assists in the southern Lake Saimaa and the Saimaa Canal.

Norway

Husøysund, Tønsberg indre havn and Vestfjorden (Tønsberg): Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size. (28.12.21) Hellefjorden (Kragerø): Navigation temporarily closed. (10.01.22)

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

First number: AB Amount and arrangements of sea ice 1 Copen 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: 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) Ice predominantly thinner than 15 cm with some thicker ice Ice predominantly grey-white ice (15 - 30 cm) with some thicker ice Ice predominantly thicker than 30 cm with some thinner ice No information or unable to report
Third number: Tb Topography or form of ice 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	Fourth number: KB Navigation conditions in ice Navigation unobscured 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

Estonia , 18.01.2022		Oulu harbours – Kattilankalla	8446
Shipping route from Narva-Jõssuu	72/2	Kattilankalla – Oulu 1	6846
Kunda, port and bay	10/0	Sea area SW of Oulu 1	5766
Paernu, port and bay	7347	High Sea N of the latitude of Marjaniemi	4756
Shipp. route from Paernu to Irben Strait	42/2	Raahe harbour – Heikinkari	8346
Moonsund	32/2	Heikinkari – Raahe lighthouse	6766
		Raahe lighthouse – Nahkiainen	5756
Finland , 18.01.2022		Latitude Marjaniemi – Ulkokalla, Sea	3006
Roeyttae – Etukari	8446	Rahja harbour – Välimatala	6366
Etukari – Ristinmatala	8846	Vaelimatala to line Ulkokalla – Ykskivi	5756
Ajos – Ristinmatala	8846	Sea betw. lat. of Ulkokalla –Pietarsaari	3006
Ristinmatala – Kemi 2	5876	Ykspihlaja – Repsaer	8346
Kemi 2 – Kemi 1	5376	Repskaer – Kokkola lighthouse	6766
Sea area SW of Kemi 1	3376	Sea area off Kokkola lighthouse	3006
Kemi 2 – Ulkokrunni – Virpiniemi	7876	Pietarsaari – Kallan	8346

Haraholmen – Nygrån

Sea area off Nygrån

Sea area off Kallan	6266	Skelleftehamn – Gåsoeren
Sea lat. Pietarsaari – NE Nordvalen	3216	Sea area off Gåsoeren
Sea area ENE of Nordvalen	3216	Sea area off Bjuroeklubb
Sea area Nordvalen to W of Norrskaer	5746	NE of Nordvalen
Vaskiluoto – Ensten	8846	SW of Nordvalen
Ensten – Vaasa lighthouse	5746	Western Quark (W of Holmoearna)
Vaasa lighthouse – Norrskaer	1116	Umeå – Vaektaren
Sea area SW of Norrskaer	0//6	Fairway to Husum
Kaskinen – Sälgrund	5746	Oernskoeldsvik – Hoernskaten
Sea area off Sälgrund	5146	Ångermanaelven north Sandoe Bridge
Pori harb. to line Pori lighth. – Säppi	3145	Ångermanaelven south Sandoe Bridge
Rauma, Harbour – Kylmäpihlaja	5745	Haernoesand – Haernoen
Uusikaupunki harbour – Kirsta	8745	Sundsvall – Draghaellan
Kirsta – Isokari	2215	Hudiksvallfjaerden
Naantali and Turku – Rajakari	3015	Iggesund – Agoe
Rajakari – Lövskär	1005	Sandarne – Haellgrund
Lövskär – Korra	1005	Ljusnefjaerden – Storjungfrun
Korra – Isokari	1005	Gaevle – Eggegrund
Lövskär – Berghamn	1005	Hallstavik – Svartklubben
Hanko – Vitgrund	1005	Koeping – Kvicksund
Koverhar – Hästö Busö	1005	Västerås – Grönsö
Inkoo a. Kantvik – sea area Porkkala	5746	Fairway to Karlstad
Helsinki harbours – Harmaja	5745	Fairway to Kristinehamn
Harmaja – Helsinki lighthouse	1015	rain way to renounce name
Helsinki lighth. – sea S of Porkkala lh.	0//5	
Fairway Helsinki – Porkkala – Rönnskär	2215	
Vuosaari harbour – Eestiluoto	2715	
Eestiluoto – Helsinki lighthouse	1005	
Porvoo harbours – Varlax	2115	
Varlax – Porvoo lighthouse	1115	
Porvoo lighthouse – Kalbådagrund	0//5	
Valko Harbour – Täktarn	7746	
Archipelago fairway Boistö – Glosholm	1115	
Archipelago fairway Glosholm-Helsinki	1115	
Kotka – Viikari	5246	
Viikari – Orrengrund	1215	
Orrengrund – Tiiskeri	1125	
Tiiskeri – Kalbådagrund	1015	
Hamina – Suurmusta	8846	
Suurmusta – Merikari	1216	
Merikari – Kaunissaari	1216	
Russian Federation , 18.01.2022		
Vyborg, port and bay	83/3	
Island Vichrevoj – Island Sommers	52/3	
Strait Bjerkesund	52/2	
E-point Bol'šoj Ber'ozovyj – –epelevskij	52/3	
Luga bay	52/3	
Appr. Luga bay – line Moepel.	52/3	
Sweden , 17.01.2022		
Karlsborg – Maloeren	8446	
Sea area off Maloeren	5356	
Luleå – Bjoernklack	8446	
Bjoernklack – Farstugrunden	4046	
E and SE of Farstugrunden	4046	
Sandgroenn fairway	8446	
Roedkallen – Norstroemsgrund	4356	