

BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

Eisbericht Nr. 82 Amtsblatt des BSH

Jahrgang 95 Nr. 82

Wednesday, 23.03.2022

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Übersicht

In den Schären der Bottenwiek liegt im Norden 40–85 cm dickes Festeis und im Süden 30–55 cm dickes Festeis. Auf See treibt im Norden und Osten 30–70 cm dickes, sehr dichtes, aufgeschobenes und aufgepresstes Eis. Im Süden ist meist offenes Wasser oder sehr lockeres Eis. In Norra Kvarken liegt in den Schären bis zu 55 cm dickes Festeis und auf See kommt offenes Wasser 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 45 cm dickes Festeis. Östlich von 28°00' E treibt auf See sehr dichtes, 15–30 cm dickes Eis. Im Rigaischen Meerbusen kommt an der Küste bis zu 25 cm dickes Eis im Moonsund und in der Pärnubucht vor. Dünnes, teilweise morsches Eis kommt örtlich in der nördlichen Ostsee und dem Vänern vor.

Overview

In the archipelagos of the Bay of Bothnia, there is 40–85 cm thick fast ice in the north and 30–55 cm thick fast ice in the south. At sea in the north and east, there is mostly 30–70 cm thick, very close, ridged and rafted ice. In the southern part, there is mostly open water or very open ice. In Norra Kvarken, there is up to 55 cm thick fast ice in the archipelagos and open water 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 45 cm thick fast ice along the northern and eastern coast. At sea east of about 28°00' E, there is very close, 15–30 cm thick ice. In the Gulf of Riga, there is up to 25 cm thick ice at the coasts of Moonsund and in Pärnu Bay. Thin, partly rotten ice occurs at places in the northern Baltic and Lake Vänern.

Bay of Bothnia

In and outside the northeastern archipelagos, there is 55–85 cm thick fast ice, reaching out to Kemi-3, Oulu-2 and Jaakko. In the northwestern archipelagos the fast ice is 40–70 cm thick. Off the fast ice in the north and east, there is 40–70 cm thick consolidated ice, in the east to Kemi-2 and Oulu-1. Off the fast ice in the west, there is very close or consolidated, 30–50 cm thick ice. At sea, there is an area with very close, ridged, 40–70 cm thick ice around 65°15' N 23°30' E. Else at sea, there is very close, 30–60 cm thick, ridged and rafted ice east of the line Simpgrund – Kokkola. There is pressure in the ice field and it is difficult to force in places. A brash ice barrier is present along the western ice edge. In the southern Bay of Bothnia, there is 30–50 cm thick fast ice along the Swedish coast; on the eastern coast there is 30–55 cm thick fast ice followed by a narrow fringe of consolidated or ridged very close ice. At sea, there is mostly open water with some stripes and patches of mostly 10–30 m thick very open ice.

A northeasterly, later veering to southerly ice drift

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Norra Kvarken

In the archipelagoes off Vaasa, there is 30–55 cm thick fast ice to Ensten and then 10–35 cm thick, very close drift ice to Grynge. Along the Swedish coast, there is 20–40 cm thick fast ice in the archi-

Sea of Bothnia

On Ångermanälven, there is 20–50 cm thick very close ice in the upper part and 15–35 cm open or very open ice in the lower part. In the bays along the western coast, there is 10–40 cm thick fast ice. Further out, there is open water. Along the eastern coast, there is 20–45 cm fast ice in the inner archi-

Archipelago and Åland Sea

10–30 cm thick fast ice and level ice are present in the inner archipelagos and bays of both coasts. At the eastern coast, there is mostly open water on the fairways and in the outer archipelagos. Around

Gulf of Finland

From St. Petersburg up to the easternmost tip of Kotlin, there is 35–45 cm thick fast ice. In the Bay of Vyborg and the Bjerkesund, there is mostly 25–45 cm thick compact or fast ice and very close ice in the entrance to Vyborg Bay. At sea, east of a line through Moščnyj to Narva (or 28°E) there is mostly very close, 15–30 cm thick ice. In Luga Bay there is open water. In the archipelagos of the

Gulf of Riga

In Moonsund, there is 10–20 cm thick fast ice at the eastern coast, followed by very close ice. The ice is partly rotten. Further out and on the fairways, there is mostly open water. In Pärnu Bay, there is 15–25 cm thick fast ice near the coast, further out

Northern Baltic

In Lake Mälaren, there is 10–30 cm thick, rotten fast ice or level ice in the western part, and further east, there is mostly thin level ice. In the central part, there are areas with open water. Along the

Skagerrak and Kattegat

It is mostly ice free with further ice melt expected

Swedish Lakes

In Lake Vänern, there is rotten ice in bays of the northern coast.

Dr. J. Holfort

changes.

pelagos. At sea, there is open water in the northern part and also along the coasts.

No larger changes, just some ice melt, are expected the coming day.

pelagos, followed by a very narrow belt of 10– 30cm thick ice of varying concentrations. In the north, there is a brash ice barrier at the ice edge. No larger changes, just some ice melt, are expected.

the Åland Islands, there is thin level ice. The ice in the area gets rotten.

Some ice melt is expected the coming day.

northern coast, there is fast ice, 10–35 cm thick in the west and 30–55 cm thick in the east. Off the fast ice east of Loviisa, there is 5–30 cm thick very open ice in the west and very close ice south of Hamina.

Ice melt is expected in the west. In the east no larger changes are expected.

there is very close, ridged ice not quite reaching the line Manilaid –Häädemeeste. Some ice melt is expected the coming days, but else no larger changes

Swedish coast, there is partly broken and rotten thin level ice at a few sheltered places. Ice melt is expected the coming days.

the coming days.

Ice melt will continue the coming days.

	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	21.03.
	Raahe	4000 dwt	IA	08.03.
	Kokkola, Pietarsaari and Vaasa	2000 dwt	IA	01.02.
	Kalajoki	4000 dwt	IA	08.03.
	Kristiinankaupunki, Pori, Rauma,	2000 dwt	II	01.01.
	Uusikaupunki, Naantali, Turku, Koverhar,			
	Lappohja, Helsinki and Sköldvik			
	Kaskinen	2000 dwt		16.01.
	Taalintehdas and Förby	2000 dwt	II	21.03.
	Inkoo and Kantvik	2000 dwt	II	15.03.
	Loviisa and Kotka	2000 dwt	I	04.01.
	Hamina	2000 dwt	I	01.01.
	Mussalo	2000 dwt	Ш	25.12.
Russia	Vyborg	-	Ice 1	30.12.
	Vysotsk	-	Ice 2	14.01.
	Primorsk	-	Ice 2	27.01.
	Ust-Luga	-	Ice 1	04.01.
	St. Petersburg	-	required	31.12.
Sweden	Karlsborg	4000 dwt (4000 t)	IA	23.03.
	Luleå	4000 dwt	IA	19.02.
	Haraholmen and Skelleftehamn	4000 dwt	IA	19.02.
	Holmsund, Rundvik and Husum	2000 dwt	IC	14.03.
	Örnsköldsvik	2000 dwt	IC	15.01.
	Ångermanälven	2000 dwt	IB	06.01.

Restrictions to Navigation

Information of the Icebreaker Services

2000 dwt

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Estonia

Icebreaker: EVA-316 assists to the port of Pärnu.

Finland/Sweden

Härnösand

The Saimaa Canal is closed for traffic from 30th of January.

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, NORDICA, SISU, FREJ, ODEN, ALE and YMER assist in the Bay of Bothnia. ZEUS assist in the Sea of Bothnia, **VOIMA** in the eastern Gulf of Finland.

Norway

Hellefjorden (Kragerø): Navigation temporarily closed. (28.02.22)

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.

22.12.

Baltic Sea Ice Code

First number: AB Amount and arrangements of sea ice 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	Second number: SB 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: T_B 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: K_B 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 Unknown

Estonia, 23.03.2022

Paernu, port and bay	7375
Moonsund	1//0

Finland , 23.03.2022

Roeyttae – Etukari	8646
Etukari – Ristinmatala	8546
Ajos – Ristinmatala	8546
Ristinmatala – Kemi 2	6476
Kemi 2 – Kemi 1	5476
Sea area SW of Kemi 1	5476
Kemi 2 – Ulkokrunni – Virpiniemi	8546
Oulu harbours – Kattilankalla	8546
Kattilankalla – Oulu 1	6476
Sea area SW of Oulu 1	5476
High Sea N of the latitude of Marjaniemi	5476
Raahe harbour – Heikinkari	8546
Heikinkari – Raahe lighthouse	7476
Raahe lighthouse – Nahkiainen	5476
Latitude Marjaniemi – Ulkokalla, Sea	5476
Rahja harbour – Välimatala	6366
Vaelimatala to line Ulkokalla – Ykskivi	5476
Sea betw. lat. of Ulkokalla –Pietarsaari	5456
Ykspihlaja – Repskaer	8846
Repskaer – Kokkola lighthouse	6866
Sea area off Kokkola lighthouse	1726
Pietarsaari – Kallan	7856
Sea area off Kallan	5876

Sea lat. Pietarsaari – NE Nordvalen	1716
Sea area ENE of Nordvalen	1216
Vaskiluoto – Ensten	8446
Ensten – Vaasa lighthouse	5326
Kaskinen – Sälgrund	5746
Sea area off Sälgrund	5766
Pori harb. to line Pori lighth. – Säppi	4245
Rauma, Harbour – Kylmäpihlaja	7765
Kylmäpihlaja – Rauma lighthouse	0//5
Uusikaupunki harbour – Kirsta	8745
Kirsta – Isokari	1705
Naantali and Turku – Rajakari	7245
Rajakari – Lövskär	2215
Lövskär – Korra	2215
Korra – Isokari	1105
Lövskär – Berghamn	1105
Lövskär – Grisselborg	1105
Inkoo a. Kantvik – sea area Porkkala	7205
Helsinki harbours – Harmaja	1005
Vuosaari harbour – Eestiluoto	2005
Porvoo harbours – Varlax	2005
Varlax – Porvoo lighthouse	1005
Valko Harbour – Täktarn	7716
Archipelago fairway Boistö – Glosholm	1105
Archipelago fairway Glosholm–Helsinki	1105
Kotka – Viikari	4346
Viikari – Orrengrund	2715
Orrengrund – Tiiskeri	1005

Hamina – Suurmusta	7846
Suurmusta – Merikari	5746
Merikari – Kaunissaari	2716

Russian Federation , 23.03.2022

Port of St. Petersburg	84/3
St. Petersburg – E-point island Kotlin	84/3
E-point Kotlin – long. lighth. Tolbuhkin	53/3
Lighth. Tolbuhkin – lighth. –Šepelevskij	52/2
Lighthouse Šepelevskij – island Sescar	53/3
Island Sescar – Island Sommers	53/3
Vyborg, port and bay	84/3
Island Vichrevoj – Island Sommers	53/3
Strait Bjerkesund	63/3
E-point Bol'šoj Ber'ozovyj – Šepelevskij	53/2
Luga bay	1212
Appr. Luga bay – line MošŠepel.	52/2

Sweden , 23.03.2022 Karlsborg – Malören

Sweden , 23.03.2022	
Karlsborg – Malören	6456
Sea area off Malören	5576
Luleå – Björnklack	6456
Björnklack – Farstugrunden	5576
E and SE of Farstugrunden	5576
Sandgrönn fairway	6456
Rödkallen – Norströmsgrund	5456
Haraholmen – Nygrån	6456
Sea area off Nygrån	6456
Skelleftehamn – Gåsören	5456
Sea area off Gåsören	5456
Sea area off Bjuröklubb	6456
Western Quark (W of Holmöarna)	1306
Umeå – Väktaren	8446
Fairway to Husum	1206
Örnsköldsvik – Hörnskaten	8446
Hörnskaten – Skagsudde	8446
Fairway W of Ulvöarna	1306
Ångermanälven north Sandö Bridge	5434
Ångermanälven south Sandö Bridge	1304
Härnösand – Härnön	1306
Sundsvall – Draghällan	1101
Draghällan – Åstholmsudde	1101
Hudiksvallfjärden	8442
Iggesund – Agö	1302
Sandarne – Hällgrund	1302
Ljusnefjärden – Storjungfrun	1302
Gävle – Eggegrund	1302
Öregrundsgrepen	1302
Hallstavik – Svartklubben	8392
Koeping – Kvicksund	8392
Västerås – Grönsö	4232
Grönsö – Södertälje	5242
Stockholm – Södertälje	5242
Fairway to Gruvön	5041
Fairway to Karlstad	8392
Fairway to Kristinehamn	8392