

Eisbericht Nr. 72

Amtsblatt des BSH

Jahrgang 96

Nr. 72

Thursday, 09.03.2023

1

Übersicht

In den Schären der Bottenwiek befindet sich im Norden bis 60 cm dickes Festeis und im Süden bis 35 cm dickes Festeis. Auf das Festeis folgt im Norden zuerst eine Rinne mit Neueis und dann bis zu 40 cm dickes sehr dichtes, örtlich aufgepresstes oder aufgeschobenes Eis mit Rissen und kleinen Rinnen. Im Westen kommt meist Neueis oder dünnes, meist ebenes Eis. Im Osten treibt auf See zumeist bis 25 cm dickes, sehr dichtes Eis mit Rissen und kleinen Rinnen. In Kvarken liegt bis 35 cm dickes Festeis in den Schären und Buchten und auf See kommt dichtes dünnes Eis oder Neueis vor. In der Bottensee und dem Schärenmeer kommt entlang der Küsten 5-25cm dickes, ebenes Eis oder Festeis vor; weiter außerhalb örtlich Neueis. Im Mälarsee liegt 5-15cm dickes Eis oder Neueis. Im Finnischen Meerbusen liegt in den östlichsten Buchten bis 40 cm dickes Festeis. Auf See treibt im Südosten dichtes bis sehr dichtes Eis und im Norden treibt zumeist Neueis. In den Schären und Buchten entlang der nördlichen Küste kommt Festeis vor sowie Neueis weiter außerhalb. Im Nordosten des Rigaischen Meerbusen befindet sich 10–20 cm dickes Festeis Eis in geschützten Gebieten und Neueis etwas weiter außerhalb.

Overview

In the archipelagos of the Bay of Bothnia, there is up to 60 cm thick fast ice in the north and up to 35 cm thick fast ice in the south. In the north, there is first a lead with new ice and later up to 40 cm thick, partly ridged and rafted very close ice with cracks and smaller leads further out. Along the western coast there is mostly new ice and thin, mostly level ice. In the east, there is up to 25 cm thick, very close ice with cracks and smaller leads. In the Quark, there is up to 35 cm thick fast ice in the archipelagos and bays and at sea, there is new ice or thin close ice. In the Sea of Bothnia and the Archipelago Sea, 5-25cm thick fast ice or level ice is present along the coasts and further out new ice in places. In Lake Mälaren, there is 5-15cm thick ice and new ice. In the Gulf of Finland, up to 40 cm thick fast ice is present in the easternmost bays. At sea there is close to very close ice in the southeast and mostly new ice in the northeast. In the archipelagos and bays along the northern coast, there is fast ice and new ice further out. In the northeastern Gulf of Riga, there is 10–20 cm thick fast ice in sheltered bays and new ice somewhat further out.

Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 30–60 cm thick fast ice and compact ice, out to Malören, Kemi-3 and Kattilankalla. Further out in the northwest there is mostly new or level ice. Further out in the northeast, there is 20–40 cm

thick, ridged and very close ice to Kemi-2 and Oulu-1. In the northeast a navigable lead with new ice runs from southwest of Kemi1 via Oulin Portii to 15nm southwest of Merikallat. Further out at sea in the north, there is a field of 10–40 cm thick, very

Herstellung und Vertrieb

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close ice, rafted and ridged in places, but also with new ice covered leads and cracks. In the southern Bay of Bothnia, there is 15–35 cm thick fast ice in the archipelagos, further out in the east there is 10–25 cm thick very close ice, rafted in places and

The Quark

There is 15–40 cm thick fast ice in the Vaasa archipelago out to Ensten. Further out, there is very close, 5–25 cm thick ice to Norra Glopsten. On the Swedish side, there is mostly up to 35 cm thick fast ice in inner bays. At sea, there is 3–10 cm

Sea of Bothnia

In the archipelagos along the eastern coast, there is 15–25 cm thick fast ice and new ice further out. Along the western coast, there is thin level ice or new ice in sheltered bays in the south and up to 40 cm thick fast ice in inner bays in the north. Further

Archipelago Sea and Åland Sea

At the eastern coast, there is 5–15 cm fast or level ice in the inner bays and new ice further out. In the western and central part new ice is present along

Northern Baltic

In Lake Mälaren, there is 5–15 cm thick fast ice or thin level ice in the western part, with areas of open water. In the eastern part, there is thin ice in sheltered bays and open water. New ice occurs in

Gulf of Finland

From St. Petersburg out to Kotlin and in the bay north of Kotlin, there is 30–50 cm thick fast ice and 20–35 cm thick compact ice in the fairway. In the Bay of Vyborg, there is 20–35 cm thick fast ice and in the Bjerkesund, there is 10–20 cm thick fast ice. At sea in the south, there is 10–25 cm thick, very close ice out to about Moščnyj; in Narva Bay there is 10–15 cm thick close to very close ice. At sea in the north, there is close new ice in the entrance to Vyborg bay out Nerva and then close drift ice to about Sommers. Else there is mostly new ice out to a line from west of Sillamäe at the southern

Gulf of Riga

In Väinameri, there is 10–20 cm thick fast ice near the coasts. Further out, there is new ice and on the fairway there is very open ice. In the Bay of Pärnu, there is a belt of very close ice at the eastern coast and else there is close new ice up to the line Ma-

Skagerrak and Kattegat

New ice and up to 30 cm thick fast is present in some inner Norwegian Fjords. At some places also thicker ice occurs. Close new ice is present near Oslo and in the Drammensfjord.

Swedish Lakes

Thin level ice or new ice is present in some shel-

tered bays in the northeast of Lake Vänern.

new ice covered cracks and smaller lead are present. Outside the Swedish coast there is a mix of new ice, thin close ice and level ice.

Continuing ice formation and ice growth and a northeasterly ice drift are expected the coming day.

thick, close ice in the central part north of about Norrskär and new ice elsewhere.

Ice growth and ice formation is expected with ice drift mostly in northeasterly directions.

out in the north, there is new ice. On Ångermanälven, there is 20–40 cm thick fast or level ice.

With moderate frost in the south and in places strong frost in the north, ice formation and ice growth will continue along the coasts.

the coasts.

With mostly light frost, some ice formation and ice growth is expected.

sheltered places along the outer coast.

With light, but in Lake Mälaren also moderate frost, some ice formation and ice growth is expected at sheltered places.

coast to east of Helsinki at the northern coast. Along the northern coast, there is 15–30 cm thick fast ice in the eastern archipelagos. Further out, there is thin level ice or very close ice off Kotka and Hamina. In the western archipelagos, there is 5–15 cm thick fast ice and new ice further out. At the southern coast there is very close drift ice near the coast in Kunda bay.

With only light winds, veering from northwest to southwest, and temperatures around -10°C further new ice formation, but only weak ice drift is expected.

nilaid to Haademeste. In the port of Riga there is open water.

With light to moderate frost some ice formation and ice growth is expected, due to light winds no larger ice drift is expected.

With light to moderate frost some ice formation is expected in sheltered places.

With mostly only light frost, some ice formation is expected the coming day.

Dr. J.Holfort

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	4000 dwt	IA	22.02.
	Raahe	4000 dwt	IA	08.03.
	Kalajoki, Kokkola and Pietarsaari	2000 dwt	IA	08.03.
	Vaasa	2000 dwt	IB	08.03.
	Kristiinankaupunki, Pori, Rauma and Uusikaupunki	2000 dwt	II	12.03.
	Kaskinen, Inkoo, Kantvik, Helsinki, Sköldvik and Mussalo	2000 dwt	II	07.01.
	Loviisa, Kotka and Hamina	2000 dwt	I	08.03.
Russia	Vyborg and Vysotsk	-	Ice 1	08.02.
Sweden	Karlsborg	4000 dwt (2000 t)	IA	28.02.
	Lulea	4000 dwt	IA	28.02.
	Haraholmen and Skelleftehamn	4000 dwt	IA	04.03.
	Holmsund	2000 dwt	IC	07.02.
	Rundvik and Husum	2000 dwt	IC	04.03.
	Örnsköldsvik	2000 dwt	IC	13.02.
	Angermanälven	2000 dwt	IB	07.01.
	Söraker, Sundsvall and Söderhamn	2000 dwt	IC	13.02.
	Köping and Västerås	2000 dwt	IC	06.03.
	Balsta	1300/2000 dwt	IC/II	22.12.
	Härnösand, Stocka, Hudiksvall, Iggesund, Orrskär and Norrsundet	2000 dwt	II	06.03.

Estonia

Icebreakers:

EVA-316 assists in the port of Pärnu. BOTNICA assists to the port of Sillamäe.

Finland/Sweden

The Saimaa Canal is closed for traffic since 4th January.

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.

The traffic separation schemes in the Quark are temporarily out of use from 7 February due to ice conditions.

Icebreakers:

POLARIS, KONTIO, OTSO, SISU, ATLE, YMER and FREJ assist in the Bay of Bothnia. ZEUS assists in the southern Bay of Bothnia and in the Quark. ALE assists in the Quark. **URHO** and CALYPSO assist in the eastern Gulf of Finland.

Norway

Husøysund and Vestfjorden (Tønsberg): Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size. 31.01.23

Tønsberg indre havn (Tønsberg): Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice. 31.01.23

Russia

There are restrictions for small crafts going to Vysotsk, Vyborg, St. Petersburg, Ust-Luga and Primorsk. No sailing of barge by tug to Vyborg and Vysotsk.

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>A_B Amount and arrangements of sea ice</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>T_B Topography or form of ice</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>S_B Stage of ice development</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>K_B Navigation conditions in ice</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, 09.03.2023

Shipping route from Narva-Jõssuu	42/2
Kunda, port and bay	21/0
Paernu, port and bay	40/5
Moonsund	2000

Finland, 09.03.2023

Röyttä – Etukari	8446
Etukari – Ristinmatala	6456
Ajos – Ristinmatala	6456
Ristinmatala – Kemi 2	5856
Kemi 2 – Kemi 1	5856
Sea area SW of Kemi 1	9046

Kemi 2 – Ulkokrunni – Virpiniemi	6456
Oulu harbours – Kattilankalla	7456
Kattilankalla – Oulu 1	6456
Sea area SW of Oulu 1	9046
High Sea N of the latitude of Marjaniemi	5856
Raahe harbour – Heikinkari	8346
Heikinkari – Raahe lighthouse	7756
Raahe lighthouse – Nahkiainen	5756
Latitude Marjaniemi – Ulkokalla, Sea	5856
Rahja harbour – Välimatala	5756
Vaelimatala to line Ulkokalla – Ykskivi	5756
Sea betw. lat. of Ulkokalla – Pietarsaari	5756
Ykspihlaja – Repskär	7756

Repskär – Kokkola lighthouse	5756	Lighth. Tolbuhkin – lighth. –Šepelevskij	52/2
Sea area off Kokkola lighthouse	5756	Lighthouse Šepelevskij – island Sescar	42/2
Pietarsaari – Kallan	8346	Island Sescar – Island Sommers	32/2
Sea area off Kallan	9046	Island Sommers– S-point island Gogland	22/1
Sea lat. Pietarsaari – NE Nordvalen	5756	Vyborg, port and bay	83/3
Sea area ENE of Nordvalen	5756	Island Vichrevoj – Island Sommers	32/3
Sea area Nordvalen to W of Norrskär	4146	Strait Bjerkesund	83/3
Vaskiluoto – Ensten	7756	E-point Bol'šoj Ber'ozovyj – Šepelevskij	32/2
Ensten – Vaasa lighthouse	5756	Luga bay	52/2
Vaasa lighthouse – Norrskär	4146	Appr. Luga bay – line Moš.-Šepel.	52/2
Sea area SW of Norrskär	2006		
Kaskinen – Sälgrund	4045	Sweden, 09.03.2023	
Sea area off Sälgrund	4045	Karlsborg – Malören	6456
High sea from N to latitude Yttergrund	3000	Sea area off Malören	5356
Pori harb. to line Pori lighth. – Säppi	8742	Luleå – Björnklack	8546
Sea W of line Pori lighthouse – Säppi	2000	Björnklack – Farstugrunden	5146
Rauma, Harbour – Kymäpihlaja	3000	E and SE of Farstugrunden	5146
Kymäpihlaja – Rauma lighthouse	3000	Sandgrönn fairway	8546
Sea area W of Rauma lighthouse	2000	Rödkaullen – Norströmsgrund	5146
Uusikaupunki harbour – Kirsta	8142	Haraholmen – Nygrån	8346
Naantali and Turku – Rajakari	5142	Sea area off Nygrån	4046
Rajakari – Lövskär	2000	Skelleftehamn – Gåsören	5336
Lövskär – Korra	3000	Sea area off Gåsören	5336
Lövskär – Berghamn	2000	Sea area off Bjuröklubb	5336
Hanko – Vitgrund	2000	NE of Nordvalen	4136
Koverhar – Hästö Busö	4041	SW of Nordvalen	4136
Inkoo a. Kantvik – sea area Porkkala	8145	Western Quark (W of Holmöarna)	5236
Helsinki harbours – Harmaja	2005	Umeå – Väktaren	5146
Fairway Helsinki – Porkkala – Rönnskär	0//5	SE of Väktaren	4136
Vuosaari harbour – Eestiluoto	4045	NE and SE of Sydostbrotten	4046
Porvoo harbours – Varlax	2005	Fairway to Husum	4046
Varlax – Porvoo lighthouse	3005	Örnsköldsvik – Hörnskatan	8446
Porvoo lighthouse – Kalbådagrund	3005	Hörnskatan – Skagsudde	4046
Sea Kalbådagrund – Helsinki lighthouse	2000	Sea area off Skagsudde	4046
Valko Harbour – Täktarn	5146	Fairway W of Ulvöarna	4046
Archipelago fairway Boistö – Glosholm	3006	Sea area E of Ulvöarna	4046
Archipelago fairway Glosholm–Helsinki	4145	Ångermanälven north Sandö Bridge	8444
Kotka – Viikari	8345	Ångermanälven south Sandö Bridge	4044
Viikari – Orregrund	4145	Härnösand – Härnön	4044
Orregrund – Tiiskeri	3006	Sea area off Härnön	4044
Tiiskeri – Kalbådagrund	4041	Sundsvall – Draghällan	4046
Hamina – Suurmusta	5246	Draghällan – Åstholmsudde	4046
Suurmusta – Merikari	5146	Hudiksvallfjärden	8346
Merikari – Kaunissaari	3006	Iggesund – Agö	8346
		Sandarne – Hällgrund	8346
Latvia, 09.03.2023		Ljusnefjärden – Storzjungfrun	8346
Port of Riga	1000	Gävle – Eggegrund	4046
		Hallstavik – Svartklubben	5142
Norway, 09.03.2023		Köping – Kvicksund	8244
Svinesund – Halden	31//	Västerås – Grönsö	4134
Drammensfjord	4011	Grönsö – Södertälje	4044
Husøysund – Tønsberg channel	8345	Stockholm – Södertälje	4044
Tønsberg, inner harbour	8353	Fairway to Karlstad	4041
Vestfjord (Tønsberg)	8555	Fairway to Kristinehamn	5142
Langårsund (Kragerø)	8144	Fairway to Otterbäcken	4041
Russian Federation, 08.03.2023			
Port of St. Petersburg	84/3		
St. Petersburg – E-point island Kotlin	54/3		
E-point Kotlin – long. lighth. Tolbuhkin	5303		