

Eisbericht Nr. 84

Amtsblatt des BSH

Jahrgang 97

Nr. 84

Friday, 15.03.2024

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Übersicht

In der Bottenwiek befindet sich in den nördlichen Schären bis 70 cm dickes, in den südlichen bis 50 cm dickes Festeis. Auf See treibt im Norden zumeist 30–70 cm dickes, sehr dichtes, örtlich aufgepresstes und übereinandergeschobenes Eis, das teilweise schwer zu passieren ist. Weiter südlich kommt lockeres Eis vor. An den Küsten von Norra Kvarnen liegt bis 50 cm dickes Festeis; auf See treibt 5-30cm dickes, dichtes Eis und im Westen kommt 15–50 cm dickes, dichtes Eis vor. An den Küsten der Bottensee kommt im Osten bis 55 cm und im Westen bis 30 cm dickes Festeis vor. Im Schärenmeer kommt ebenes Eis oder s vor. Im Osten und Norden des Finnischen Meerbusens liegt bis 55 cm dickes Festeis. Auf See treibt im Norden meist sehr dichtes, 5–35 cm dickes Eis. Im Rigaischen Meerbusen kommt im Nordosten bis zu 40 cm dickes Festeis und an den Küsten treibt örtlich sehr dichtes Eis vor. Ansonsten kommt im Mälaren, Vänern und einigen norwegischen Fjorden örtlich dünnes Eis, teilweise aber auch bis 30 cm dickes Festeis vor.

Overview

In the Bay of Bothnia there is fast ice in the archipelagos, up to 70 cm thick in the north and up to 50 cm thick in the south. At sea in the north, there is mostly 30–70 cm thick, very close, ridged and rafted ice that is difficult to force at places. Further south there is open. In the Quark there is up to 50 cm thick fast ice at the coasts and at sea there is 5-20cm thick, close ice and in the west 15–50 cm thick, close ice. At the coasts of the Sea of Bothnia there is fast ice, up to 55cm thick in the east and up to 30 cm thick in the west. Level ice or fast ice is present in the Archipelago Sea. There is up to 55 cm thick fast ice at the eastern and northern coast of the Gulf of Finland. At sea in the more northern part there is 5-35cm thick, mostly very close ice. In the northeastern Gulf of Riga there is up to 40 cm thick fast ice at the coast with very close ice in places along the coast. Else thin ice is present at places, but also up to 30cm thick fast ice, in the Mälaren, Vänern, and some Norwegian fjords.

Bay of Bothnia

In the archipelagos of the Bay of Bothnia there is fast ice; 40–70 cm thick in the north and up to 25–65 cm thick in the south. In the northeast the fast ice stretches out to Malören, Kemi-3, Oulu-3 and Raahe lighthouse. At sea north of a line Skellefteå to Kalajoki there is 40–70 cm thick, ridged and rafted ice; the field is difficult to force at places.

Further south there is mostly 5-20cm thick open ice with a smaller area of close ice in the east.

With colder air entering the region from the north, temperatures will drop to moderate, but locally also strong frost over the weekend. Ice formation will take place and the ice will drift into southerly directions, turning to northeasterly on Sunday evening.

The Quark

Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

www.bsh.de/eis

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Nachdruck, auch auszugsweise, verboten

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There is 35–60 cm thick fast ice in the Vaasa archipelago out to Ensten. Along the Swedish coast there is up to 40 cm thick fast ice with adjacent consolidated ice. Off this ice, there is a 10-20nm wide region with 15–50 cm thick, partly ridged,

Sea of Bothnia

Along the coasts there is mostly fast ice in the inner bays; 20–55 cm thick in the east and 5–40 cm thick in the west. On Ångermanälven, there is 15–40 cm thick fast ice. Off the coast in the east there is open water with some thicker floes.

Archipelago Sea and Åland Sea

In the Archipelago Sea there is 25–50 cm thick fast ice in the inner archipelago of the Finnish coast. 10–30 cm thick, fast ice or level ice with areas of open water is present in the outer archipelagos to the Åland Islands. In the Åland Sea there is 5–20

Northern Baltic

In Lake Mälaren there is 10–30 cm thick fast ice with some open areas. Along the outer Swedish coast there is open water or thin open ice.

Gulf of Finland

Along the northern coast there is fast ice in the archipelago, 10–40 cm thick in the west and up to 60 cm thick in the east. In the Vyborg Bay there is 35-45cm thick fast ice and in the Bjerkesund there is 20–45 cm thick fast ice; very close ice is present in both entrances. From St. Petersburg to the longitude of lighthouse Tolbuchin there is 40–50 cm thick fast ice, followed by very open ice to Šepelevskij and close to very close ice to about 28°50'E. Off the northern fast ice there is 10-35cm

Gulf of Riga

In Väinameri there is 20–35 cm thick fast ice near the coasts and very close, 10–30 cm thick ice at sea with some areas of very open ice or open water. Off the south coast of Saaremaa there is a band with very close, 5–20 cm thick ice. In the Bay

Central Baltic

In sheltered areas along the Swedish coast there is open water.

Skagerrak and Kattegat

In some sheltered Norwegian fjords and bays is thin level ice or fast ice, notably near Tønsberg,

Swedish Lakes

In Lake Vänern 5–20 cm thick rotten fast ice is present northern coasts. In the Dalbosjön there is 5–15 cm thick, very close drift ice along the north-

close ice. Else at sea there is mostly 5-35cm thick close ice in the north and open water in the south. With light to moderate frost some ice will form over the weekend and the ice will drift towards the southwest.

With northeasterly winds temperatures will fall over the weekend and on Sunday light frost is also expected in the south, therefore some ice formation is expected with the ice drifting to the southwest.

cm thick fast or level ice in bays along the coast. With temperatures mostly above 0°C on Saturday and light frost on Sunday some ice formation may happen. The ice drifts towards the southwest.

Although temperatures below 0 °C are expected for Sunday, overall ice melt exceeds ice formation.

thick very close ice with ridges present in the east. Areas of very open ice are present extending to south of Tiiskeri and towards Moščnyj and Seskar. Outside the southern coast there is mostly open water in the east and mostly ice free from Narva Bay to the west.

With southerly winds and temperatures above 0°C on Saturday and stronger northeasterly winds and light frost on Sunday the integrated ice drift over the weekend will be towards the southwest.

of Pärnu, there is 20–40 cm thick fast ice to about the line Lindi – Uulu and further out, up to the line Manilaid – Voiste there is very close ice in the western part and open water in the east. Some ice melt is expected over the weekend.

Some ice melt is expected over the weekend.

Kragerø, Svinesund, and Drammensfjord. No larger change is expected.

western coast. At sea mostly ice free. No larger change is expected.

Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Estonia	Pärnu	1600 kW	1C (Lloyd's)	11.03.
	Kunda and Sillamäe	1200 kW	II (Lloyd's)	04.02.
Finland	Tornio, Kemi and Oulu	2000/4000 dwt	IA Super (2000 t)/ IA (2000 t)	27.02.
	Vaasa	2000 dwt	IA	10.01.
	Raahe, Kalajoki, Kokkola and Pietarsaari	4000 dwt	IA	13.01.
	Pori, Rauma	2000 dwt	I	06.03.
	Kaskinen and Kristiinankaupunki	2000 dwt	IB	06.03.
	Uusikaupunki	2000 dwt	IB	06.03.
	Eckerö, Maarianhamina and Langnäs	2000 dwt	II	13.01.
	Naantali and Turku	2000 dwt	I	23.01.
	Mussalo	2000 dwt	IB	29.01.
	Helsinki and Sköldvik	2000 dwt	I	29.01.
	Koverhar, Lappohja, Inkoo and Kantvik	2000 dwt	I	13.01.
	Taalintehdas and Förby	2000 dwt	I	12.03.
	Hanko	2000 dwt	II	13.01.
	Loviisa, Kotka and Hamina	2000 dwt	IB	29.01.
	Lake Saimaa	2000 dwt	IA	08.01.
	Saimaa Canal	2000 dwt	IA	08.01.
Russia	Vyborg	-	Ice 1/Ice 2	11.03.
	Vysotsk	-	Ice 1/Ice 2	11.03.
	Primorsk	-	Ice 1/Ice 2	11.03.
	St. Petersburg, Ust-Luga		Ice 1	22.03.
	Ust-Luga	-	Ice 1/Ice 2	22.03.
Sweden	Karlsborg	4000 dwt	IA (2000 t)	14.01.
	Lulea, Haraholmen and Skelleftehamn	4000 dwt	IA	14.01.
	Rundvik, Husum and Örnsköldsvik	2000 dwt	IA	19.02.
	Holmsund	2000 dwt	IA	17.02.
	Angermanälven	2000 dwt	IA	17.02.
	Stocka, Hudiksvall, Iggesund, Söderhamn, Orrskär, Norrsundet, Gävle, Skutskär and Öregrund	2000 dwt	IC	26.02.
	Härnösand, Söråker and Sundsvall	2000 dwt	IB	26.02.
	Hargshamn	2000 dwt	IC	04.01.
	Hallstavik and Grisslehamn	2000 dwt	IC	04.01.
	Kappelskär and Nynäshamn	2000 dwt	II	04.01.
	Köping and Västerås	2000 dwt	IC	26.02.
	Balsta	2000 dwt	IC	26.02.
	Stockholm and Södertälje	2000 dwt	II	04.01.
	Vänern	2000 dwt	II	14.03.

Estonia

Icebreaker: EVA-316 assists to the port of Pärnu. BOTNICA assists to the ports of Kunda and Sillamäe.

Finland/Sweden

The traffic separation schemes in the Lake Vänern are temporarily out of use from 12 January due to ice conditions.

The transit traffic west of Holmöarna is temporarily prohibited.

Öregrundsgrepen: Transit traffic for low powered vessels is not recommended.

The traffic separation schemes in the Quark are temporarily out of use from 20 December due to ice conditions.

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: YMER, ODEN, FREJ, POLARIS, SISU, KONTIO and URHO assist in the Bay of Bothnia. OTSO assist in the southern Bay of Bothnia. ATLE and FENNICA assist in the Quark. ZEUS and CALYPSO assist in the eastern Bothnian Sea. VOIMA and NORDICA assist the Gulf of Finland. ALE assists in the Vänern.

Norway

Hellefjorden (Kragerø): Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size. (08.01.24)

Russia

There are restrictions for small crafts going to St. Petersburg, Vyborg, Vysotsk, Primorsk and Ust-Luga. Barge towed by tug not allowed to navigate in ice.

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

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, 15.03.2024

Paernu, port and bay 7475

Moonsund 7343

Finland, 15.03.2024

Röyttä – Etukari 8546

Etukari – Ristinmatala 8546

Ajos – Ristinmatala 8546

Ristinmatala – Kemi 2 7476

Kemi 2 – Kemi 1 5476

Sea area SW of Kemi 1 5476

Kemi 2 – Ulkokrunni – Virpiniemi 7476

Oulu harbours – Kattilankalla 8546

Kattilankalla – Oulu 1 7476

Sea area SW of Oulu 1 5476

High Sea N of the latitude of Marjaniemi 5476

Raaha harbour – Heikinkari 8546

Heikinkari – Raahe lighthouse 6856

Raahe lighthouse – Nahkiainen 5476

Latitude Marjaniemi – Ulkokalla, Sea 5476

Rahja harbour – Välimatala 7356

Vaelimatala to line Ulkokalla – Ykskivi 5356

Sea betw. lat. of Ulkokalla –Pietarsaari 5476

Ykspihlaja – Repskär 7476

Repskär – Kokkola lighthouse 5476

Sea area off Kokkola lighthouse 3736

Pietarsaari – Kallan 8446

Sea area off Kallan 3736

Sea lat. Pietarsaari – NE Nordvalen 5356

Sea area ENE of Nordvalen 5356

Sea area Nordvalen to W of Norrskär 4876

Vaskiluoto – Ensten 7356

Ensten – Vaasa lighthouse 5356

Vaasa lighthouse – Norrskär 1706

Sea area SW of Norrskär 4876

Kaskinen – Sälgrund 8446

Sea area off Sälgrund 8446

High sea from N to latitude Yttergrund 4876

Pori harb. to line Pori lighth. – Säppi 8446

Sea W of line Pori lighthouse – Säppi 1706

High sea betw. lat. Yttergrund a. Rauma 0//6

Rauma, Harbour – Kylmäpihlaja 8846

Kylmäpihlaja – Rauma lighthouse 1706

Sea area W of Rauma lighthouse 0//6

The high sea S of the latitude of Rauma 0//6

Uusikaupunki harbour – Kirsta 8846

Kirsta – Isokari 8846

Isokari – Sandbäck 1706

Sea area off Sandbäck 0//6

Sea area N of Sälskär 5145

Naantali and Turku – Rajakari 8846

Rajakari – Lövskär 7346

Lövskär – Korra 7346

Korra – Isokari 1706

Lövskär – Berghamn 7346

Berghamn – Stora Sottunga 1706

Stora Sottunga – Ledskär	8346	E and SE of Farstugrunden	5576
Lövsjär – Grisselborg	7346	Sandgrönn fairway	8546
Grisselborg – Norparskär	4346	Rödkallen – Norströmsgrund	5456
Sea area at Vidskär	1706	Haraholmen – Nygrån	8546
Hanko harbours – Hanko 1	1705	Sea area off Nygrån	5456
Hanko – Vitgrund	8342	Skelleftehamn – Gåsören	8446
Vitgrund – Utö	5145	Sea area off Gåsören	5456
Koverhar – Hästö Busö	8346	Sea area off Bjuröklubb	3326
Hästö Busö – Ajax	1706	NE of Nordvalen	4476
Inkoo a. Kantvik – sea area Porkkala	7756	SW of Nordvalen	4476
Sea area at Porkkala	1706	Western Quark (W of Holmöarna)	6456
Sea area S of Porkkala lighthouse	0//6	Umeå – Väktaren	6456
Helsinki harbours – Harmaja	7376	SE of Väktaren	5476
Harmaja – Helsinki lighthouse	5376	NE and SE of Sydostbrotten	4476
Helsinki lighth. – sea S of Porkkala lh.	0//6	Fairway to Husum	6476
Fairway Helsinki – Porkkala – Rönnskär	5376	Örnsköldsvik – Hörnskatan	8446
Vuosaari harbour – Eestiluoto	5376	Hörnskatan – Skagsudde	6476
Eestiluoto – Helsinki lighthouse	1706	Sea area off Skagsudde	6476
Porvoo harbours – Varlax	7376	Fairway W of Ulvöarna	6476
Varlax – Porvoo lighthouse	5376	Sea area E of Ulvöarna	5476
Porvoo lighthouse – Kalbådagrund	1706	Ångermanälven north Sandö Bridge	8444
Sea Kalbådagrund – Helsinki lighthouse	1706	Ångermanälven south Sandö Bridge	8444
Valko Harbour – Tåktarn	7346	Härnösand – Härnön	8444
Archipelago fairway Boistö – Glosholm	5376	Sundsvall – Draghallan	4436
Archipelago fairway Glosholm–Helsinki	7376	Hudiksvallfjärden	8346
Kotka – Viikari	7346	Iggesund – Agö	8346
Viikari – Orregrund	5376	Sandarne – Hällgrund	8346
Orregrund – Tiiskeri	5376	Ljusnefjärden – Storsjungfrun	8346
Tiiskeri – Kalbådagrund	2726	Gävle – Eggegrund	8346
Hamina – Suurmusta	8446	Öregrundsgrepen	8346
Suurmusta – Merikari	7346	Hallstavik – Svartklubben	8346
Merikari – Kaunissaari	5346	Trälhavet – Furusund – Kapellskär	1006
		Stockholm – Trälhavet – Klövholmen	3026
Norway, 13.03.2024		Klövholmen – Sandhamn	1006
Svinesund – Halden	33//	Trollharan – Langgarn	1006
Drammensfjord	2201	Köping – Kvicksund	8344
Tønsberg, inner harbour	82/3	Västerås – Grönsö	8344
Vestfjord (Tønsberg)	6963	Grönsö – Södertälje	8344
Larviksfjorden (Stavern – Larvik)	121/	Stockholm – Södertälje	8344
		Södertälje – Fifong	1104
Russian Federation, 15.03.2024		Norrköping – Hargökalv	1000
Port of St. Petersburg	89//	Västervik – Marsholmen – Idö	1101
St. Petersburg – E-point island Kotlin	89//	Fairway to Gruvön	8396
E-point Kotlin – long. lighth. Tolbuhkin	53//	Fairway to Karlstad	5376
Lighth. Tolbuhkin – lighth. –Šepelevskij	53//	Fairway to Kristinehamn	8396
Lighthouse Šepelevskij – island Sescar	42//		
Island Sescar – Island Sommers	53//		
Island Sommers– S-point island Gogland	32//		
S-point isl. Gogland – long. p. Kunda	32//		
Vyborg, port and bay	89//		
Island Vichrevoj – Island Sommers	53//		
Strait Bjerkesund	89//		
E-point Bol'šoj Ber'ozovyj – Šepelevskij	53//		
Appr. Luga bay – line Moš.-Šepel.	21//		
Sweden, 15.03.2024			
Karlsborg – Malören	8546		
Sea area off Malören	5576		
Luleå – Björnklack	8546		
Björnklack – Farstugrunden	5576		