



Eisbericht Nr. 75

Amtsblatt des BSH

Jahrgang 97

Nr. 75

Friday, 01.03.2024

1

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 sowie unter Druck stehendes Eis, das teilweise sehr schwer zu passieren ist. Weiter südlich treibt auf See zunächst 10–35 cm dickes, sehr dichtes Eis und dann kommt meist offenes Wasser mit örtlich sehr dichtem Treibeis vor. An den Küsten von Norra Kvarken liegt bis 50 cm dickes Festeis und auf See liegt im Westen 10–40 cm dickes, sehr dichtes Eis. An den Küsten der Bottensee kommt im Osten bis 55 cm und im Westen bis 30 cm dickes Festeis vor. Weiter außerhalb kommt im Westen offenes Wasser vor. Das Schärenmeer ist größtenteils mit ebenem Eis oder Festeis bedeckt. Im Osten und Norden des Finnischen Meerbusens liegt bis 55 cm dickes Festeis. Im Norden treibt nördlich von 60°10'N meist sehr dichtes, 10–35 cm dickes Eis und im Südosten ist meist offenes Wasser. Im Rigaischen Meerbusen kommt im Nordosten zu 35 cm dickes Festeis vor. Auf See treibt im Norden entlang der Küste sehr dichtes Eis. Ansonsten kommt im Mälaren, Vänern, norwegischen Fjorden und entlang der schwedischen Küste nördlich von Oskarshamn bis 30 cm dickes Festeis oder dünnes, ebenes Eis 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 with pressure that is very difficult to force at places. Further south at sea there is 10–35 cm thick very close ice followed by mostly open water with very close drift ice at places. In the Quark there is up to 50 cm thick fast ice at the coasts and at sea in the west there is 10–40 cm thick, very close ice. At the coasts of the Sea of Bothnia there is fast ice, up to 55 cm thick in the east and up to 30 cm thick in the west. Outside the western coast there is open water. Level ice or fast ice covers large parts of the Archipelago Sea. There is up to 55 cm thick fast ice at the eastern and northern coast of the Gulf of Finland. In the northern part there is very close, 10–35 cm thick drift ice north of 60°10'N and in the southeast there is mostly open water at sea. In the Gulf of Riga there is up to 35 cm thick fast ice in the northeast and very close ice is present off the coast in the north. Else up to 30 cm thick fast ice or thin level ice is present in the Mälaren, Vänern, Norwegian fjords and along the Swedish coast north of Oskarshamn.

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 25–50 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 about 64°35'N there is mostly 30–70 cm thick, ridged and rafted ice; ice pressure occurs in the field and it is very difficult to force at places. Further south there is

Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

www.bsh.de/eis

www.bsh.de/ice

© BSH - Alle Rechte vorbehalten

Nachdruck, auch auszugsweise, verboten

Eisaukünfte / Ice Information

Telefon: +49 (0) 381 4563 -780

Telefax: +49 (0) 381 4563 -949

E-Mail: ice@bsh.de

© BSH - All rights reserved

Reproduction in whole or in part prohibited

10–35 cm thick very close ice and at sea south of 64°25'N there is mostly open water. But there are also areas with 10–40 cm thick very close ice stretching northeastwards from Holmöarna to the pack ice.

The Quark

There is 35–50 cm thick fast ice in the Vaasa archipelago out to Ensten followed by 10–30 cm thick very open ice to Norrskär. Along the Swedish coast there is up to 40 cm thick fast ice. Off the Swedish coast, there is 10–40 cm thick, very close ice to about the line Sydostbrotten – Nordvalen.

Sea of Bothnia

Along the coasts there is mostly fast ice in the inner bays; 20–55 cm thick in the east and 5–30 cm thick in the west. On Ångermanälven, there is 15–40 cm thick fast ice. At the fast ice edge in the east there is shuga at places with open water further out. Outside the fast ice in the west there is open water. North of about 63°00' N towards the

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. Mostly 10–30 cm thick, level ice or fast ice is present in the outer archipelagos to the Åland Islands.

Northern Baltic

In Lake Mälaren there is 10–30 cm thick fast ice. Along the outer Swedish coast there is 5–15 cm thick fast ice or thin level 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 55 cm thick in the east. In the Vyborg Bay and the Bjerkesund there is 35–45 cm thick fast ice and very close ice is present in the entrances. From St. Petersburg to the longitude of lighthouse Tolbuchin there is 45–55 cm thick fast ice. Off the northern fast ice there is 10–25 cm thick very close ice in the west and in the east there is 10–35 cm thick

Gulf of Riga

In Väinameri there is 25–35 cm thick fast ice near the coasts and very close, 10–30 cm thick ice at sea; on the fairway Vohilaid – Rumpo there is open ice. Off the south coast of Saaremaa there is very close, 5–20 cm thick ice off the coast. In the Bay of Pärnu, there is 25–45 cm thick fast ice to about the

Central Baltic

Thin level ice is present at places along the Swedish coast north of Oskarshamn. With temperatures above 0 °C some ice melt but

Skagerrak and Kattegat

In some sheltered Norwegian fjords and bays is

With ceasing but persistent southerly winds and temperatures slightly above or around 0 °C no larger changes to the ice distribution are expected. The ice pressure and difficult conditions in the north will persist over the weekend.

Else at sea there is mostly open water with stripes of drift ice in the northern part.

With temperatures slightly above or around 0°C and a ceasing northward ice drift, no larger change is expected over the weekend.

Quark there is very close, 10–40 cm thick ice outside the western coast with a minor brash ice barrier.

With temperatures slightly above or around 0°C and a ceasing northward ice drift, no larger change is expected over the weekend.

In the Åland Sea there is 5–20 cm thick fast or level ice in bays along the coast.

With temperatures mostly above 0 °C and southeasterly wind no larger change is expected.

With temperatures above 0 °C some ice melt but else no larger changes are expected over the weekend.

and in placed ridged ice reaching out to about the line Porvoo – Kotka lighthouse and further east. Further south there is open water with some stripes at places east of Mosnyj. In Lake Saimaa is 30–50 cm thick ice.

With temperatures mostly above 0 °C and around 0 °C in the eastern part no larger change is expected over the weekend. The ice will drift slightly in northerly directions.

line Lindi – Tahkuranna and further out there is very close ice to the line Manilaid – Voiste and very open ice to island Sorgu. Irben Strait is ice-free.

With temperatures mostly above 0 °C and southeasterly wind no larger change is expected over the weekend.

overall no larger change is expected over the weekend.

thin level ice or fast ice notably near Tønsberg,

Kragerø, Svinesund, and Drammensfjord. Along the Swedish coast of the Skagerrak there is very open ice in few sheltered areas.

Swedish Lakes

In Lake Vänern 10–30 cm thick fast ice is present at the coasts. In the Dalbosjön there is 5–20 cm thick, very close drift ice in the northern part and else very open ice or open water. In the Värm-

With temperatures above 0 °C some ice melt but overall no larger change is expected over the weekend.

landssjön there is open water.

With temperatures above 0 °C some ice melt is expected over the weekend but else no larger changes.

Dr. W. Aldenhoff

Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Estonia	Pärnu	1800 kW	1B (Lloyd's)	27.01.
	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	2000 dwt	IB	17.02.
	Rauma	2000 dwt	IB	14.02.
	Kaskinen and Kristiinankaupunki	2000 dwt	IA	17.02.
	Uusikaupunki	2000 dwt	IA	11.02.
	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	IB	17.02.
	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	30.12.
	Vysotsk	-	Ice 1	30.12.
	Primorsk	-	Ice 1	01.02.
	Ust-Luga	-	Ice 1	29.12.
Sweden	Karlsborg	4000 dwt	IA (2000 t)	14.01.
	Lulea, Haraholmen and Skelleftehamn	4000 dwt	IA	14.01.
	Rundvik, Husum and Örnköldsvik	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.
Trollhätte Canal and Göta Älv	2000 dwt	II	23.02.
Vänern	2000 dwt	IC	26.02.

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. ATLE and OTSO assist in the southern Bay of Bothnia and in the Quark. FENNICA and BRAGE VIKING assist in the Quark. ZEUS and CALYPSO assist in the Sea of Bothnia. VOIMA and NORDICA assist the Gulf of Finland. ALE assists in the Vänern.

Norway

Kilsfjorden (Kragerø) and 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, Primorsk and Ust-Luga.

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>
--	--

Estonia, 01.03.2024

Paernu, port and bay 7475

Moonsund 7353

Finland, 01.03.2024

Röyttä – Etukari 8546

Etukari – Ristinmatala 7476

Ajos – Ristinmatala 7476

Ristinmatala – Kemi 2 5476

Kemi 2 – Kemi 1 5476

Sea area SW of Kemi 1 5476

Kemi 2 – Ulkokrunni – Virpiniemi 7476

Oulu harbours – Kattilankalla 8446

Kattilankalla – Oulu 1 7476

Sea area SW of Oulu 1 5476

High Sea N of the latitude of Marjaniemi 5476

Raaha harbour – Heikinkari 8446

Heikinkari – Raaha lighthouse 6856

Raaha lighthouse – Nahkiainen 5856

Latitude Marjaniemi – Ulkokalla, Sea 5476

Rahja harbour – Välimatala 8446

Vaelimatala to line Ulkokalla – Ykskivi 5476

Sea betw. lat. of Ulkokalla –Pietarsaari 2336

Ykspihlaja – Repskär 8446

Repskär – Kokkola lighthouse 5476

Sea area off Kokkola lighthouse 2726

Pietarsaari – Kallan 8446

Sea area off Kallan 2726

Sea lat. Pietarsaari – NE Nordvalen 2336

Sea area ENE of Nordvalen 3376

Sea area Nordvalen to W of Norrskär 2376

Vaskiluoto – Ensten 8446

Ensten – Vaasa lighthouse 5356

Vaasa lighthouse – Norrskär 3356

Sea area SW of Norrskär 1106

Kaskinen – Sälgrund 8446

Sea area off Sälgrund 7356

Pori harb. to line Pori lighth. – Säppi 4366

Rauma, Harbour – Kylmäpihlaja 7766

Kylmäpihlaja – Rauma lighthouse 2726

Uusikaupunki harbour – Kirsta 8846

Kirsta – Isokari 7756

Isokari – Sandbäck 2726

Sea area N of Märket 0//5

Sea area W of Märket 0//5

Maarianhamina – Marhällan 0//5

Naantali and Turku – Rajakari 8846

Rajakari – Lövskär 8846

Lövskär – Korra 8846

Korra – Isokari 2726

Lövskär – Berghamn 8346

Berghamn – Stora Sottunga 5146

Stora Sottunga – Ledskär 8746

Lövskär – Grisselborg 8346

Grisselborg – Norparskär 5146

Hanko – Vitgrund 8342

Vitgrund – Utö	4145	NE of Nordvalen	1406
Koverhar – Hästö Busö	7356	SW of Nordvalen	1406
Hästö Busö – Ajax	0//6	Western Quark (W of Holmöarna)	5476
Inkoo a. Kantvik – sea area Porkkala	7356	Umeå – Väktaren	5476
Sea area at Porkkala	0//6	SE of Väktaren	5476
Helsinki harbours – Harmaja	7356	NE and SE of Sydostbrotten	1406
Harmaja – Helsinki lighthouse	5356	Fairway to Husum	5476
Fairway Helsinki – Porkkala – Rönnskär	5356	Örnsköldsvik – Hörnskatan	8446
Vuosaari harbour – Eestiluoto	7356	Hörnskatan – Skagsudde	8446
Eestiluoto – Helsinki lighthouse	5356	Sea area off Skagsudde	5476
Porvoo harbours – Varlax	5246	Fairway W of Ulvöarna	8446
Varlax – Porvoo lighthouse	5356	Sea area E of Ulvöarna	5476
Valko Harbour – Täktarn	7346	Ångermanälven north Sandö Bridge	8444
Archipelago fairway Boistö – Glosholm	5356	Ångermanälven south Sandö Bridge	8444
Archipelago fairway Glosholm–Helsinki	8346	Härnösand – Härnön	8444
Kotka – Viikari	8346	Sea area off Härnö	1104
Viikari – Orregrund	5356	Sundsvall – Draghällan	4436
Orregrund – Tiiskeri	5356	Draghällan – Åstholmsudde	4436
Tiiskeri – Kalbådagrund	5356	Off Åstholmsudde and Brämön	1106
Hamina – Suurmusta	8446	Hudiksvallfjärden	8346
Suurmusta – Merikari	7346	Iggesund – Agö	8346
Merikari – Kaunissaari	5346	Sea area off Agö	1106
		Sandarne – Hällgrund	8346
Latvia, 01.03.2024		Sea area off Hällgrund	1106
Irben Strait, fairway	1000	Ljusnefjärden – Storjungfrun	8346
		Sea area off Storjungfrun	1106
Norway, 01.03.2024		Gävle – Eggegrund	8346
Svinesund – Halden	33//	Sea area off Eggegrund	1106
Drammensfjord	3202	Sea area off Orskär	1106
Tønsberg, inner harbour	82/3	Öregrundsgrepen	8346
Vestfjord (Tønsberg)	6963	Hallstavik – Svartklubben	8346
Larviksfjorden (Stavern – Larvik)	121//	Trälhavet – Furusund – Kapellskär	2026
		Stockholm – Trälhavet – Klövholmen	2026
Russian Federation, 01.03.2024		Klövholmen – Sandhamn	1006
Port of St. Petersburg	89//	Trollharan – Langgarn	1006
St. Petersburg – E-point island Kotlin	89//	Köping – Kvicksund	8344
E-point Kotlin – long. lighth. Tolbuhkin	89//	Västerås – Grönsö	8344
Lighth. Tolbuhkin – lighth. –Šepelevskij	22//	Grönsö – Södertälje	8344
Lighthouse Šepelevskij – island Sescar	22//	Stockholm – Södertälje	8344
Island Sescar – Island Sommers	22//	Södertälje – Fifong	8244
Vyborg, port and bay	89//	Norrköping – Hargökalv	1000
Island Vichrevoj – Island Sommers	53//	Västervik – Marshalmen – Idö	5242
Strait Bjerkesund	89//	Uddevalle – Stenungsund	2121
E-point Bol'šoj Ber'ozovyj – Šepelevskij	53//	Vänernborgsviken	1306
Luga bay	22//	Fairway through Lurö archipelago	3356
Appr. Luga bay – line Moš.-Šepel.	22//	Fairway to Gruvön	8346
		Fairway to Karlstad	8346
Sweden, 01.03.2024		Fairway to Kristinehamn	8346
Karlsborg – Malören	8546	Fairway to Otterbäcken	8346
Sea area off Malören	5576		
Luleå – Björnklack	8546		
Björnklack – Farstugrunden	5576		
E and SE of Farstugrunden	5576		
Sandgrönn fairway	8546		
Rödkallen – Norströmsggrund	5576		
Haraholmen – Nygrån	8546		
Sea area off Nygrån	5456		
Skelleftehamn – Gåsören	8446		
Sea area off Gåsören	5456		
Sea area off Bjuröklubb	1406		