



Eisbericht Nr. 58

Amtsblatt des BSH

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1

Übersicht

In der Bottenwiek befindet sich in den nördlichen Schären bis 60 cm dickes, in den südlichen bis 50 cm dickes Festeis. Auf See treibt im Nordosten zumeist 20–50 cm dickes, sehr dichtes Eis, örtlich aufgepresst, übereinandergeschoben und teilweise schwer zu passieren. Im Süden treibt auf See meist Neueis. An den Küsten von Norra Kvarken liegt bis 50 cm dickes Festeis und auf See treibt zumeist Neueis mit örtlich sehr dichtem, bis 30 cm dicken Eis. An den Küsten der Bottensee kommt im Osten bis 45 cm und im Westen bis 30 cm dickes Festeis vor. An der Eiskante befindet sich im Osten festgestampftes Eis und Neueis weiter außerhalb. Das Schärenmeer ist größtenteils mit ebenem Eis oder Festeis bedeckt. Im Osten und Norden des Finnischen Meerbusens liegt bis 45 cm dickes Festeis und ganz im Osten treibt auf See dichtes bis sehr dichtes, bis 35 cm dickes Eis. Im Rigaischen Meerbusen kommt im Nordosten bis zu 35 cm dickes Festeis vor und entlang der nordöstlichen Küste treibt sehr dichtes Eis. Ansonsten kommt im Mälaren, Vänern, norwegischen Fjorden und der schwedischen Küste im Südosten etwas dickeres Eis vor.

Overview

In the Bay of Bothnia there is fast ice in the archipelagos, up to 60 cm thick in the north and up to 50 cm thick in the south. At sea in the northeast, there is mostly 20–50 cm thick, very close, partly ridged and rafted ice that is difficult to force at places. At sea in the south there is mostly new ice. In the Quark there is up to 50 cm thick fast ice at the coasts and at sea there mostly new ice with some very close, up to 30 cm thick drift ice. At the coasts of the Sea of Bothnia there is fast ice, up to 45 cm thick in the east and up to 30 cm thick in the west. At the fast ice edge in the east, there is a brash ice barrier and new ice further out. Level ice or fast ice covers large parts of the Archipelago Sea. There is up to 45 cm thick fast ice at the eastern and northern coast of the Gulf of Finland. In the easternmost part there is up to 35 cm thick close and very close ice at sea. In the Gulf of Riga there is up to 35 cm thick fast ice in the northeast and along the northeastern coast there is very close ice. Else thicker ice is present in the Mälaren, Vänern, Norwegian fjords and the southeastern Swedish coast.

Bay of Bothnia

In the archipelagos of the Bay of Bothnia there is fast ice with some consolidated ice further out; 35–60 cm thick in the north and up to 25–50 cm thick in the southern part. In the northeast the fast ice stretches out to Malören, Kemi-3, Oulu-3 and Raahe lighthouse. In the north and east runs a lead

covered with thin ice past Malören – Kemi-1 – Merikallat to off Raahe. At sea there is mostly 20–50 cm thick, very close, ridged and rafted ice north of about the line Ulkokalla – Nortsrömsgrund. The ice field is difficult to force at places. Further towards the southwest there is 20–40 thick, close

Herstellung und Vertrieb

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drift ice. Compact brash ice is present in places off the fast ice edge along the southern Finnish coast. At sea in the south the eastern part is covered with thin ice and the western part with new ice.

The Quark

There is 20–50 cm thick fast ice in the Vaasa archipelago out to Ensten and very close ice to Vaasa lighthouse. Along the Swedish coast there is up to 40 cm thick fast ice. Around Sydostbrotten there is an area of 10–30 cm thick, very close ice. Else

Sea of Bothnia

Along the coasts there is mostly fast ice in the inner bays; 20–45 cm thick in the east and 5–30 cm thick in the west. On Ångermanälven, there is 15–30 cm thick fast ice. Along the ice edge at the Finnish coast a brash ice barrier has formed and may be difficult to force in places, further out there is thin close ice and ice formation. Off the Swedish

Archipelago Sea and Åland Sea

In the Archipelago Sea there is 20–40 cm thick fast ice in the inner archipelago of the Finnish coast. Mostly 10–30 cm thick, level or fast ice with new ice at places is present in the outer archipelagos to the Åland Islands. In the Åland Sea there is 5–15

Northern Baltic

In Lake Mälaren there is 10–30 cm thick fast ice. At the outer Swedish coast there is 5–20 cm thick fast ice or level ice in the archipelagos and very open

Gulf of Finland

From St. Petersburg to past Kotlin there is 30–40 cm thick fast ice. Further out is very close, 10–35 cm thick, partly ridged and rafted ice northeast of about a line Koporye Bay – Seskar – Kotka. From Luga Bay to Moščnyj and the eastern Narva Bay, there is close ice, 5–30 cm thick. In the Bjerkesund there is 10–20 cm thick fast and in the Vyborg Bay there is 25–35 cm thick fast ice. Along the northern

Gulf of Riga

In Väinameri there is 25–35 cm thick fast ice near the coasts and very close, 5–20 cm thick ice at sea. Along the northeastern coast to Pärnu Bay, there is 5–20 cm thick, very close ice. In the Bay of Pärnu, there is 25–35 cm thick fast ice to the line

Central Baltic

Thin level ice is present at places along the Swedish coast. In the Kalmarsund there is open water in the central part.

Southeastern Baltic

In the Curonian Lagoon, there is 15–20 cm thick, very close ice in the eastern part and else open water. In Vistula Lagoon some very close, thin ice

With strong to severe frost ice formation and ice growth will continue. With a gentle to moderate breeze from the southwest/south the ice will drift into northerly/northeasterly direction.

at sea, there is new ice.

With mostly strong frost at sea, ice formation and ice growth will continue. A slight ice drift to the northeast is expected.

coast, there is new ice in the south and at places in the north.

With strong frost near the coasts new ice formation will continue and the ice drift is mostly towards the northeast in the west and to the northwest in the east.

cm thick fast or level ice in bays along the coast and new ice at places further out.

With moderate frost some ice formation and ice growth is expected the coming day.

to open drift ice in some larger channels.

With light to moderate frost some new ice formation and ice growth is expected.

coast there is fast ice in the archipelago, 10–30 cm thick in the west and up to 45 cm thick in the east. Further out, there is very open ice with some new ice.

With strong and in the east also severe frost, ice formation and ice growth is expected with only a slight westward ice drift.

Liu – Tahkuranna followed by very close ice to about the line Kihnu – Kabli.

With moderate frost ice formation and ice growth is expected. Only a slight ice drift is expected.

Light frost may occur, but overall no larger changes are expected.

is present near Kaliningrad.

With temperatures mostly above 0°C no larger changes are expected.

Skagerrak and Kattegat

In some sheltered Norwegian fjords and bays is thin level ice or fast ice notably near Tønsberg, Kragerø, Svinesund and Drammensfjord. Along the Swedish coast of the Skagerrak, it is mostly ice free.

With light frost in the northern region but down to strong frost in some Norwegian fjords, some ice formation and ice growth is expected the coming day.

Swedish Lakes

In Lake Vänern 5–30 cm thick fast ice is present at the coasts. Along the coast southeast of Åmal, there is very close ice. In the western part and along the coast there is new ice. At sea in the

eastern part it is mostly ice free.

With light to moderate frost some further ice formation and ice growth is expected the coming day.

Dr. J.Holfort

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/IA	13.01.
	Vaasa	2000 dwt	IA	10.01.
	Raahe, Kalajoki, Kokkola and Pietarsaari	4000 dwt	IA	13.01.
	Pori and Rauma	2000 dwt	I	13.01.
	Kaskinen, Kristiinankaupunki and Uusikaupunki	2000 dwt	IB	23.01.
	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.
	Taalintehdas, Förby, Koverhar, Lapohja, Inkoo and Kantvik	2000 dwt	I	13.01.
	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	IB	17.01.
	Holmsund	2000 dwt	IB	04.01.
	Angermanälven	2000 dwt	IB	18.12.
	Härnösand, Söråker, Sundsvall, Stocka, Hudiksvall, Iggesund, Söderhamn, Orrskär and Norrsundet	2000 dwt	IB	17.01.

Gävle	2000 dwt	IB	17.01.
Hargshamn	2000 dwt	IC	04.01.
Skutskär and Öregrund	2000 dwt	IB	17.01.
Hallstavik and Grisslehamn	2000 dwt	IC	04.01.
Kappelskär, Stockholm, Nynäshamn and Södertälje	2000 dwt	II	04.01.
Köping and Västerås	2000 dwt	IB	04.01.
Balsta	2000 dwt	IB	14.01.
Oxelösund, Norrköping, Västervik, Oskarshamn, Mönsterås, Kalmar, Degerhamn, Berkvara, Karlskrona, Stenungsund and Uddevalla	2000 dwt	II	04.01.
Trollhätte Canal and Göta Älv	2000 dwt	IB	16.01.
Vänern	2000 dwt	IB	16.01.

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.

Kalmarsund and 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, BRAGE VIKING, ODEN, FREJ, POLARIS, KONTIO, SISU and URHO assist in the Bay of Bothnia. ATLE and OTSO assist in the southern Bay of Bothnia and in the Quark. ZEUS assists in the Sea of Bothnia. VOIMA, CALYPSO, FENNICA and NORDICA assist the Gulf of Finland.

Norway

Mossesundet (Moss): Icebreaker assistance can only be given to vessels of special ice class and of special size. (05.01.24)

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)

Langårsund (Kragerø): Navigation temporarily closed. (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 foes – 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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Finland, 07.02.2024

Oulu harbours – Kattilankalla	8446	Pori harb. to line Pori lighth. – Säppi	5366
Kattilankalla – Oulu 1	7476	Sea W of line Pori lighthouse – Säppi	4146
Sea area SW of Oulu 1	9146	Rauma, Harbour – Kylmäpihlaja	7766
High Sea N of the latitude of Marjaniemi	5476	Kylmäpihlaja – Rauma lighthouse	4146
Raahe harbour – Heikinkari	8446	Sea area W of Rauma lighthouse	4146
Heikinkari – Raahe lighthouse	6856	Uusikaupunki harbour – Kirsta	8846
Raahe lighthouse – Nahkiainen	9146	Kirsta – Isokari	7766
Latitude Marjaniemi – Ulkokalla, Sea	5476	Isokari – Sandbäck	4146
Rahja harbour – Välimatala	8446	Maarianhamina – Marhällan	2725
Vaelimatala to line Ulkokalla – Ykskivi	5476	Naantali and Turku – Rajakari	8846
Sea betw. lat. of Ulkokalla – Pietarsaari	5146	Rajakari – Lövskär	8846
Ykspihlaja – Repskär	8846	Lövskär – Korra	7766
Repskär – Kokkola lighthouse	5476	Korra – Isokari	5766
Sea area off Kokkola lighthouse	5476	Lövskär – Berghamn	8346
Pietarsaari – Kallan	7366	Berghamn – Stora Sottunga	3026
Sea area off Kallan	5366	Stora Sottunga – Ledskär	7746
Sea lat. Pietarsaari – NE Nordvalen	5146	Sea area at Rödhamn	3026
Sea area ENE of Nordvalen	5146	Lövskär – Grisselborg	8346
Sea area Nordvalen to W of Norrskär	4356	Grisselborg – Norparskär	1106
Vaskiluoto – Ensten	8446	Hanko harbours – Hanko 1	2725
Ensten – Vaasa lighthouse	5366	Hanko – Vitgrund	8342
Vaasa lighthouse – Norrskär	4046	Vitgrund – Utö	8345
Sea area SW of Norrskär	3006	Koverhar – Hästö Busö	7346
Kaskinen – Sälgrund	8846	Hästö Busö – Ajax	2006
Sea area off Sälgrund	7366	Inkoo a. Kantvik – sea area Porkkala	7346
High sea from N to latitude Yttergrund	4146	Sea area at Porkkala	0//6
		Helsinki harbours – Harmaja	7706

Harmaja – Helsinki lighthouse	2126	Härnösand – Härnön	4044
Fairway Helsinki – Porkkala – Rönnskär	2126	Sea area off Härnön	4046
Vuosaari harbour – Eestiluoto	7706	Sundsvall – Draghällan	4046
Eestiluoto – Helsinki lighthouse	2126	Draghällan – Åstholmsudde	4046
Porvoo harbours – Varlax	4756	Off Åstholmsudde and Brämön	4046
Varlax – Porvoo lighthouse	2126	Hudiksvallfjärden	8346
Porvoo lighthouse – Kalbådgrund	0//6	Iggesund – Agö	8346
Valko Harbour – Tåktarn	8846	Sandarne – Hällgrund	8346
Archipelago fairway Boistö – Glosholm	2126	Ljusnefjärden – Storjungfrun	8346
Archipelago fairway Glosholm–Helsinki	7756	Sea area off Storjungfrun	4046
Kotka – Viikari	8346	Gävle – Eggegrund	8346
Viikari – Orregrund	2126	Sea area off Eggegrund	4041
Orregrund – Tiiskeri	2126	Sea area off Orskär	4046
Tiiskeri – Kalbådgrund	2126	Öregrundsgrepen	8246
Hamina – Suurmusta	8346	Passage at Grundkallen	4046
Suurmusta – Merikari	8346	Hallstavik – Svartklubben	8346
Merikari – Kaunissaari	4046	Trälhavet – Furusund – Kapellskär	3026
		Stockholm – Trälhavet – Klövholmen	2026
		Klövholmen – Sandhamn	2026
Norway, 06.02.2024		Köping – Kviksund	8344
Svinesund – Halden	33//	Västerås – Grönsö	8344
Mossesund	3745	Grönsö – Södertälje	8344
Drammensfjord	5354	Stockholm – Södertälje	8344
Tønsberg, inner harbour	82/3	Södertälje – Fifong	8244
Vestfjord (Tønsberg)	82/3	Fifong – Landsort	2226
Larviksfjorden (Stavør – Larvik)	121/	Norrköping – Hargökalv	2126
Langårsund (Kragerø)	8284	Hargökalv – Vinterklasen – N Kränkan	2126
		Järnverket-Lillhammaren – N Kränkan	3226
Russian Federation, 07.02.2024		Västervik – Marsholmen – Idö	5246
Port of St. Petersburg	89//	Blå Jungfrun – Kalmar	1106
St. Petersburg – E-point island Kotlin	89//	Kalmar – Utgrunden	1106
E-point Kotlin – long. lighth. Tolbuhkin	89//	Uddevalle – Stenungsund	2126
Lighth. Tolbuhkin – lighth. –Šepelevskij	53//	Vänernborgsviken	4046
Lighthouse Šepelevskij – island Sescar	43//	Fairway through Lurö archipelago	4046
Vyborg, port and bay	83//	Fairway to Gruvön	8346
Island Vichrevoj – Island Sommers	53//	Fairway to Karlstad	8346
Strait Bjerkesund	83//	Fairway to Kristinehamn	8346
E-point Bol'šoj Ber'ozovyj – Šepelevskij	82//	Fairway to Otterbäcken	8346
Luga bay	42//	Fairway to Lidköping	8346
Appr. Luga bay – line Moš.-Šepel.	42//		
Sweden, 07.02.2024			
Haraholmen – Nygrån	8546		
Sea area off Nygrån	4456		
Skelleftehamn – Gåsören	8446		
Sea area off Gåsören	8446		
Sea area off Bjuröklubb	5046		
NE of Nordvalen	5146		
SW of Nordvalen	5146		
Western Quark (W of Holmöarna)	4046		
Umeå – Väktaren	4046		
SE of Väktaren	4046		
NE and SE of Sydostbrotten	4356		
Fairway to Husum	4046		
Örnsköldsvik – Hörnskatan	8346		
Hörnskatan – Skagsudde	8346		
Sea area off Skagsudde	4046		
Fairway W of Ulvöarna	8246		
Sea area E of Ulvöarna	4046		
Ångermanälven north Sandö Bridge	8344		
Ångermanälven south Sandö Bridge	8344		