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BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

Eisbericht Nr. 84

Amtsblatt des BSH

Jahrgang 95	Nr. 84	Friday, 25.03.2022	1

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. 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 ungefähr 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. 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, but in other places there are also numerous fractures and leads. A slowly dissolving 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 northerly wind will bring falling temperatures over

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the weekend and therefore new ice formation is expected. But due to the more southerly ice drift also the difficult situation in the northeast as well as the brash ice barriers will dissipate and get easier.

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 archipelagos. At sea, there is open water in the northern part and also along the coasts.
With falling temperatures some ice formation can be expected, especially with calm wind conditions on Sunday morning. But overall the changes expected over the weekend will be small.

Sea of Bothnia

On Ångermanälven, there is 20–50 cm thick very close ice in the upper part and mostly open water 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 archipelagos, followed by a very narrow belt of 10–30cm thick ice of varying concentrations.
Some ice formation is possible during night, but overall the expected changes over the weekend will be only minor.

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 the Åland Islands, there is thin level ice. The ice in the area gets rotten.
Some ice melt could happen but overall no larger changes are expected over the weekend.

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 about 28°00’ E there is mostly very close, 15–30 cm thick ice. In Luga Bay there is very open ice. In the archipelagos of the northern coast, there is fast ice, 15–35 cm thick in the west and 30–55 cm thick in the east. Off the fast ice east of Loviisa, there is mostly open water in the west, but very close ice south of Hamina.
Easterly, and later southeasterly ice drift with some ice formation is expected in the eastern part over the weekend.

Gulf of Riga

In Moonsund, there is 10–20 cm thick rotten fast ice at the eastern coast, followed by very close ice. Further out and on the fairways, there is open water. In Pärnu Bay, there is 15–25 cm thick fast ice near the coast, further out there is close, ridged ice not quite reaching the line Manilaid – Häädemeeste.
Overall some ice melt, but else no larger changes are expected over the weekend.

Northern Baltic

In Lake Mälaren, there is rotten fast or level ice and in the central part areas with open water. Along the Swedish coast, there is partly broken and rotten thin level ice in the Stockholm archipelago.
Ice melt is expected the coming days.

Swedish Lakes

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

Ice melt will continue the coming days.

Dr. J.Holfort

Restrictions to Navigation

	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 and Kalajoki	4000 dwt	IA	08.03.
	Kokkola, Pietarsaari and Vaasa	2000 dwt	IA	01.02.
	Kaskinen	2000 dwt	I	16.01.
	Kristiinankaupunki, Pori, Rauma, Uusikaupunki, Naantali and Turku	2000 dwt	II	01.01.
	Loviisa	2000 dwt	II	24.03.
	Kotka	2000 dwt	I	01.04.
	Hamina	2000 dwt	I	01.01.
	Mussalo	2000 dwt	II	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.
	Härnösand	2000 dwt	II	22.12.

Information of the Icebreaker Services

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

Finland/Sweden
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.

Baltic Sea Ice Code

First number:
A_B 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:
S_B 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
0 Navigation unobscured
1 Navigation difficult or dangerous for wooden vessels without ice sheathing
2 Navigation difficult for unstrengthened or low-powered vessels built of iron or steel. Navigation for wooden vessels even with ice sheathing not advisable
3 Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice
4 Navigation proceeds in lead or broken ice-channel without the assistance of an icebreaker
5 Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size
6 Icebreaker assistance can only be given to vessels of special ice class and of special size
7 Icebreaker assistance can only be given to vessels after after special permission
8 Navigation temporarily closed
9 Navigation has ceased
/ Unknown

Estonia , 25.03.2022

Pärnu, port and bay	7375
Moonsund	1//0

Finland , 25.03.2022

Röyttä – 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
Välimatala to line Ulkokalla – Ykskivi	5476
Sea betw. lat. of Ulkokalla –Pietarsaari	5456
Ykspihlaja – Repskär	8846
Repskär – 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	1215
Rauma, Harbour – Kylmäpihlaja	7765
Uusikaupunki harbour – Kirsta	8745
Kirsta – Isokari	0//5
Naantali and Turku – Rajakari	1205
Rajakari – Lövskär	1205
Lövskär – Korra	1205
Korra – Isokari	0//5
Lövskär – Berghamn	1105
Lövskär – Grisselborg	1105
Inkoo a. Kantvik – sea area Porkkala	7201
Vuosaari harbour – Eestiluoto	1000
Porvoo harbours – Varlax	1000
Varlax – Porvoo lighthouse	1000
Valko Harbour – Täktarn	7715
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	1716

Russian Federation , 25.03.2022

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 Moš.-Šepel.	52/2

Sweden , 25.03.2022

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)	2326
Umeå – Väktaren	8446
Fairway to Husum	0//6
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
Hallstavik – Svartklubben	8392
Köping – Kvicksund	8392
Västerås – Grönsö	8392
Grönsö – Södertälje	8392
Stockholm – Södertälje	8392
Fairway to Karlstad	8392
Fairway to Kristinehamn	8392