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BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

Eisbericht Nr. 97

Amtsblatt des BSH

Jahrgang 95	Nr. 97	Wednesday, 13.04.2022	1

Übersicht

In den Schären der Bottenwiek liegt im Norden 45–85 cm dickes Festeis und im Süden 30–55 cm dickes Festeis. Entlang des Festeises im Nordosten und Osten liegt eine 5–15 sm breite Rinne mit Treibeis verschiedener Konzentrationen oder offenem Wasser. Auf See treibt 20–80 cm dickes, sehr dichtes, aufgeschobenes und aufgepresstes Eis bis zu den Holmöarna. In Norra Kvarken liegt in den Schären bis zu 50 cm dickes Festeis. Auf See kommt im Norden sehr dichtes und dichtes, 20–60 cm dickes Eis und im Süden offenes Wasser vor. Entlang der Küsten und in den Schären der Bottensee liegt Festeis und im Süden auch morsches Eis; im Schärenmeer und der Ålandsee morsches Eis. Im Finnischen Meerbusen liegt entlang der Nordküste und im Osten bis 45 cm dickes Festeis und im Westen morsches Eis. Östlich und nördlich von Seskar treibt auf See 15–30 cm dickes, sehr dichtes Eis und entlang der Südküste bis St. Petersburg sehr lockeres oder dichtes Eis. Im Rigaischen Meerbusen kommt in der Pärnubucht ein schmaler Streifen morsches Festeis und sehr lockeres Eis vor. In der nördlichen Ostsee und dem Mälarsee ist offenes Wasser oder es ist eisfrei.

Overview

In the archipelagos of the Bay of Bothnia, there is 45–85 cm thick fast ice in the north and 30–55 cm thick fast ice in the south. Outside the fast ice in the northeast and east, there is a 5–15 NM wide lead with drift ice of varying concentration or open water. At sea, there is mostly 20–80 cm thick, very close, ridged and rafted ice to Holmöarna. In Norra Kvarken, there is up to 50 cm thick fast ice in the archipelagos. At sea, there is very close or close, 20–60 cm thick ice in the north and open water in the south. Along the coasts and archipelagos of the Sea of Bothnia, there is fast ice and in the south also rotten ice; in the Archipelago Sea and Åland Sea, there is rotten ice. In the Gulf of Finland, there is up to 45 cm thick fast ice along the northern and eastern coast and rotten ice in the western part. At sea east and north of Seskar, there is mostly very close, 15–30 cm thick ice and along the southern coast to St. Petersburg, there is very open or close ice. In the Gulf of Riga, a narrow belt of rotten fast ice is present in Pärnu Bay and very open ice further out. In the northern Baltic and Lake Mälaren, there is open water or it is ice free.

Bay of Bothnia

In and outside the northeastern archipelagos, there is 55–85 cm thick fast ice and consolidated ice, reaching out to Kemi-2, Oulu-2 and Johan. In the northwestern archipelagos the fast ice and consolidated ice is 45–85 cm thick. Further out east of Malören, there is an up to 15 NM wide lead with open water or open to very open ice. The lead continues up to 5 NM wide along the eastern fast ice edge to Norra Kvarken. In the lead are areas with thicker drifting floes of varying concentration. At sea, there is mostly 20–60 cm thick, very close, ridged and rafted ice. Around 64°50’N 22°30’E,

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there is an area with 50-80 cm thick and ridged very close ice. The ice field is difficult to force in places. In the southern Bay of Bothnia, there is 30–50 cm thick fast ice along the Swedish coast and along the eastern coast, there is 30–55 cm thick fast ice or consolidated ice. At sea, there is 20–60 cm thick, very close ice, partly ridged and rafted but also cracks and leads occur. In the southeastern part, there is mostly close ice.
Some new ice formation is possible the coming day and the ice will drift slightly to the north/northeast.

Norra Kvarken

In the archipelagos off Vaasa, there is 20–60 cm thick fast ice to about Storhästen. Along the Swedish coast, there is 20–50 cm thick fast ice in the archipelagos. At sea north of about 63°30', there is very close to close, 20–60 cm thick ice. Further south to Nordvalen and along the coasts is open water.
No larger changes are expected the coming day with a weak ice drift to north/northeast.

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 sheltered bays along the western coast, there is 10–35 cm thick fast ice and rotten ice in the south. Along the eastern coast, there is 20–45 cm fast ice in the inner archipelagos and rotten fast ice in the south. Further out, there is open water in places.
Some ice melt is expected especially in the south the coming day but else no larger changes.

Archipelago and Åland Sea

Rotten ice, up to 30 cm thick, is present in the inner archipelagos and sheltered bays of both coasts. At the eastern coast, there is mostly open water on the fairways and ice free in the outer archipelagos.
Continued ice melt is expected the coming days.

Gulf of Finland

From St. Petersburg up to the dike, there is 25–35 cm thick close ice and very open drift ice in the harbours. In the Bay of Vyborg and the Bjerkesund, there is mostly 15–35 cm thick compact or fast ice and very close ice somewhat further out. At sea northeast of Seskar, there is 15–30 cm thick, very close and partly ridged ice. Along the southern coast, there is close to very open ice from about 29°00'E to St. Petersburg. Further west to 28°00'E is open water. In the archipelagos of the northern coast, there is 10–40 cm thick partly rotting fast ice in the west and 25–60 cm thick fast ice in the east. Further out in the east, there is mostly open water or very open ice.
Ice melt is expected in the west and in the east some ice melt is expected the coming day. Ice drift will be slightly to the east and later northeast.

Gulf of Riga

In Moonsund it is mostly ice free. In Pärnu Bay, there is a few kilometre wide belt of rotten fast ice along the northern coast and very open drift ice further south.
With temperatures above the freezing point, ice melt will continue.

Northern Baltic

In Lake Mälaren, there is mostly open water or it is ice free. Along the Swedish coast, there is open water or it is ice free.
The ice will gradually disappear.

Swedish Lakes

Lake Vänern is ice free.

Dr. W. Aldenhoff

Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Finland	Tornio, Kemi and Oulu	4000 dwt	IA	21.03.
	Raahe and Kalajoki	4000 dwt	IA	08.03.
	Kokkola and Pietarsaari	2000 dwt	IA	01.02.
	Vaasa	2000 dwt	I	31.03.
	Hamina	2000 dwt	II	29.03.
Russia	Vyborg	-	Ice 1	30.12.
	Vysotsk	-	Ice 1	01.04.
	Primorsk	-	Ice 1	06.04.
	Ust-Luga	-	Ice 1	04.01.
	St. Petersburg	-	required	31.12.
Sweden	Karlsborg	4000 dwt	IA	12.04.
	Luleå	4000 dwt	IA	19.02.
	Haraholmen and Skelleftehamn	4000 dwt	IA	19.02.
	Holmsund, Rundvik and Husum	2000 dwt	II	07.04.
	Örnsköldsvik	2000 dwt	II	30.03.
	Ångermanälven	2000 dwt	IB	06.01.
	Härnösand	2000 dwt	II	22.12.

Information of the Icebreaker Services

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, SISU, ODEN, FREJ, ALE and YMER assist in the Bay of Bothnia.
ZEUS assist in the Quark and in the Sea of Bothnia.

Norway

Hellefjorden (Kragerø): Navigation temporarily closed. (30.03.22)

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, 13.04.2022

Paernu, port and bay	7293

Finland, 13.04.2022

Röyttä – Etukari	8646
Etukari – Ristinmatala	8546
Ajos – Ristinmatala	8546
Ristinmatala – Kemi 2	6476
Kemi 2 – Kemi 1	9226
Sea area SW of Kemi 1	2216
Kemi 2 – Ulkokrunni – Virpiniemi	8546
Oulu harbours – Kattilankalla	8546
Kattilankalla – Oulu 1	6476
Sea area SW of Oulu 1	9476
High Sea N of the latitude of Marjaniemi	9476
Raahe harbour – Heikinkari	8546
Heikinkari – Raahe lighthouse	9216
Raahe lighthouse – Nahkiainen	3726
Latitude Marjaniemi – Ulkokalla, Sea	5476
Rahja harbour – Välimatala	6366
Vaelimatala to line Ulkokalla – Ykskivi	9116
Sea betw. lat. of Ulkokalla –Pietarsaari	5476
Ykspihlaja – Repskär	8846
Repskär – Kokkola lighthouse	9716
Sea area off Kokkola lighthouse	9426
Pietarsaari – Kallan	7856
Sea area off Kallan	9716
Sea lat. Pietarsaari – NE Nordvalen	3826
Sea area ENE of Nordvalen	1326
Vaskiluoto – Ensten	7446
Ensten – Vaasa lighthouse	1326
Vaasa lighthouse – Norrskär	1326
Uusikaupunki harbour – Kirsta	1100
Naantali and Turku – Rajakari	1190
Inkoo a. Kantvik – sea area Porkkala	3791
Valko Harbour – Täktarn	5742
Hamina – Suurmusta	7145
Suurmusta – Merikari	1015

Russian Federation, 13.04.2022

Port of St. Petersburg	2413
St. Petersburg – E-point island Kotlin	44/3
E-point Kotlin – long. lighth. Tolbuhkin	43/3
Lighth. Tolbuhkin – lighth. –Šepelevskij	53/2
Lighthouse Šepelevskij – island Sescar	53/2
Vyborg, port and bay	84/3
Island Vichrevoj – Island Sommers	53/2
Strait Bjerkesund	63/2
E-point Bol'šoj Ber'ozovyj – Šepelevskij	52/2

Sweden, 13.04.2022

Karlsborg – Malören	6576
Sea area off Malören	5576
Luleå – Björnklack	6576
Björnklack – Farstugrunden	6576
E and SE of Farstugrunden	2526

Sandgrönn fairway	6576
Rödkallen – Norströmsgrund	5556
Haraholmen – Nygrån	6456
Sea area off Nygrån	6456
Skelleftehamn – Gåsören	6456
Sea area off Gåsören	6456
Sea area off Bjuröklubb	5556
NE of Nordvalen	1506
SW of Nordvalen	1506
Western Quark (W of Holmöarna)	5556
Umeå – Väktaren	4046
SE of Väktaren	1506
Örnsköldsvik – Hörnskaten	2326
Hörnskaten – Skagsudde	2326
Ångermanälven north Sandö Bridge	5434
Ångermanälven south Sandö Bridge	1404
Hudiksvallfjärden	8492
Hallstavik – Svartklubben	3392
Köping – Kvicksund	1000
Västerås – Grönsö	1000
Stockholm – Södertälje	1000