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BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

Eisbericht Nr. 34

Amtsblatt des BSH

Jahrgang 96	Nr. 34	Friday, 13.01.2023	1

Übersicht

In den Schären der Bottenwiek befindet sich bis 40 cm dickes Festeis. Weiter außerhalb treibt im Nordosten 10–30 cm dickes, sehr dichtes Eis und im Westen liegt dünnes, ebenes Eis. Entlang der gesamten Eiskante befindet sich festgestampftes Eis. In der südlichen Bottenwiek befindet sich in den Buchten dünnes ebenes Eis oder Festeis. In Norra Kvarken liegt bei Vaasa bis 25 cm dickes Festeis. Ansonsten kommt an den Küsten dünnes ebenes Eis vor. Auf See treibt sehr lockeres, dünnes Treibeis. In der Bottensee und dem Schärenmeer kommt dünnes, ebenes Eis oder Festeis entlang der Küsten vor. Im Mälarsee liegt dünnes, ebenes Eis oder Neueis. Im Finnischen Meerbusen liegt in den östlichsten Buchten bis 40 cm dickes Festeis oder sehr dichtes Eis. In den Schären und Buchten entlang der Küsten kommt im Norden Festeis und im Süden örtlich Neueis vor. Im Nordosten des Rigaischen Meerbusen befindet sich 10–25 cm dickes Festeis in geschützten Buchten und etwas weiter außerhalb Treibeis verschiedener Konzentration.

Overview

In the archipelagos of the Bay of Bothnia, there is up to 40 cm thick fast ice. Further out in the northeast, there is 10–30 cm thick, very close ice and in the west, there is thin level ice. A brash ice barrier has formed along the entire ice edge. In the southern Bay of Bothnia, there is thin level ice or fast ice in the inner bays. In the Quark, there is up to 25 cm thick fast ice near Vaasa and else thin level ice along the coasts. At sea, there is thin, very open drift ice. In the Sea of Bothnia and the Archipelago Sea, there is fast ice or thin level ice along the coasts. In Lake Mälaren, there is thin level ice and new ice. In the Gulf of Finland, there is up to 40 cm thick fast ice or very close ice in the easternmost bays. In the archipelagos and bays along the coasts, there is fast ice in the north and new ice in places in the south. In the northeastern Gulf of Riga, there is 10–25 cm thick fast ice in sheltered bays and drifting ice of varying concentration somewhat further out.

Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 15–40 cm thick fast ice. Further out in the west, there is thin level ice with a brash ice barrier to about Rödkallen. In the northeast, there is very close, partly rafted, 15–30 cm thick ice followed by 5-20cm thick very close ice to about south of Malören and east of Kemi-1. The ice is difficult to force in places and a brash ice barrier exists along the ice edge. At sea west of Hailuoto shuga and thin drift ice of varying concentrations. In the southern Bay of Bothnia, there is thin level ice or in places 5–15 cm thick fast ice in the inner bays and open water somewhat further out.
Over the weekend some ice may form, more so

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near the western coast than in the east and overall a northerly ice drift is expected. But the general situation is not expected to change much.

The Quark

There is up to 25 cm thick fast in the Vaasa archipelago to Ensten. Further out, there is open water. On the Swedish side, there is thin level ice or very close ice along the coast. At sea, there open water.
Over the weekend some ice may form near the western coast, but overall no major changes are expected.

Sea of Bothnia

In the archipelagos along the eastern coast, there is fast ice, 5–15 cm thick. Along the western coast there is thin level ice in sheltered bays. On Ångermanälven, there is 10–20 cm thick fast or level ice.

Over the weekend some melt can be expected at the coasts, but more so in the east than in the west. Overall the situation will not change much.

Archipelago Sea

At the eastern coast, there is 3–10 cm fast ice in the inner bays and else new ice in sheltered places.
Some melt is expected over the weekend.

Northern Baltic

In Lake Mälaren, 3–10 cm thick level ice is present in the western part. New ice occurs in sheltered places and along the coast.
Some melt is expected over the weekend.

Gulf of Finland

From St. Petersburg out to Kotlin there is 20-40cm thick fast ice. In the bay north of Kotlin there is 20-30cm thick fast ice at the coast and 10-20cm thick very close ice outside. Further west there is very open to open ice out to about 29°15'E. In the Bay of Vyborg, there is up to 25 cm fast ice. Further out, there is thin level ice followed by 5–15 cm thick, very close ice to about Nerva. In the Bjerkesund, there is 5–15 cm thick fast ice. Along the northern coast, there is 3–15 cm fast ice in the inner bays. Along the southern coast, there is new ice in few places.
Over the weekend southerly winds will advect warmer air into the region. With temperatures slightly above 0°C some minor ice melt is expected and overall the ice will drift towards the north. But the general situation is not expected to change much.

Gulf of Riga

In Väinameri, there is 10–25 cm thick fast ice in sheltered bays and open to very open ice between Hiiumaa and Saaremaa. On the fairway there is very open ice. In the Bay of Pärnu, there is 10–20 cm thick fast ice and further out to the line south tip of Manilaid – Pikla Nina, there is 10–20 cm thick, very close ice.
Over the weekend the slow melt continues and the ice will drift northwards.

Southeastern Baltic

In the Curonian Lagoon, there is 3–10 cm thick, very close drift ice in the western part.

Some melt is expected over the weekend.

Skagerrak and Kattegat

Up to 10 cm thick ice or new ice is present in some Norwegian Fjords.

No major changes are expected over the weekend.

Swedish Lakes

New ice and thin level ice is present in some sheltered bays of Lake Vänern.

Some melt is expected over the weekend.

Dr. J.Holfort

Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Estonia	Pärnu	1600 kW	1 C	23.12.
Finland	Tornio, Kemi and Oulu	2000 dwt	IB	07.01.
	Raahe, Kalajoki, Kokkola, Pietarsaari and Vaasa	2000 dwt	I	07.01.
	Kaskinen, Inkoo, Kantvik, Helsinki, Sköldvik and Mussalo	2000 dwt	II	07.01.
	Loviisa, Kotka and Hamina	2000 dwt	II	24.12.
Sweden	Karlsborg and Lulea	2000 dwt	IB	08.01.
	Haraholmen and Skelleftehamn	2000 dwt	IC	25.12.
	Holmsund, Rundvik, Husum and Örnsköldvik	2000 dwt	II	21.12.
	Angermanälven	2000 dwt	IB	07.01.
	Köping	2000 dwt	IC	07.01.
	Västeras	2000 dwt	IC	07.01.
	Balsta	1300/2000 dwt	IC/II	22.12.

Estonia

Icebreakers:
EVA-316 assists in the port of Pärnu.

Finland/Sweden

The Saimaa Canal is closed for traffic since 4th January.

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:
KONTIO, OTSO, ATLE, YMER, FREJ and ALE assist in the Bay of Bothnia. ZEUS assists in the Quark. CALYPSO assists in the region of Kotka and Hamina.

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 , 13.01.2023

Paernu, port and bay	7375
Moonsund	2//0

Finland , 13.01.2023

Röyttä – Etukari	8846
Etukari – Ristinmatala	7356
Ajos – Ristinmatala	7356
Ristinmatala – Kemi 2	5356
Kemi 2 – Kemi 1	5366
Sea area SW of Kemi 1	5146
Kemi 2 – Ulkokrunni – Virpiniemi	7356
Oulu harbours – Kattilankalla	7356
Kattilankalla – Oulu 1	5356
Sea area SW of Oulu 1	5146
High Sea N of the latitude of Marjaniemi	0//6
Raahe harbour – Heikinkari	5146
Heikinkari – Raahe lighthouse	2126
Raahe lighthouse – Nahkiainen	1106
Latitude Marjaniemi – Ulkokalla, Sea	2126
Rahja harbour – Välimatala	5146
Vaelimatala to line Ulkokalla – Ykskivi	1106
Sea betw. lat. of Ulkokalla –Pietarsaari	1106
Ykspihlaja – Repskär	5146
Repskär – Kokkola lighthouse	1106
Sea area off Kokkola lighthouse	1106
Pietarsaari – Kallan	5146
Sea area off Kallan	1106
Sea lat. Pietarsaari – NE Nordvalen	1106
Sea area ENE of Nordvalen	1106
Sea area Nordvalen to W of Norrskär	1106
Vaskiluoto – Ensten	8746
Ensten – Vaasa lighthouse	1106
Vaasa lighthouse – Norrskär	1106
Kaskinen – Sälgrund	8745
Sea area off Sälgrund	8745
Uusikaupunki harbour – Kirsta	8142
Naantali and Turku – Rajakari	2001
Inkoo a. Kantvik – sea area Porkkala	8145
Helsinki harbours – Harmaja	5145
Vuosaari harbour – Eestiluoto	5145
Porvoo harbours – Varlax	0//5
Valko Harbour – Täktarn	8145
Kotka – Viikari	5165
Viikari – Orrengrund	0//5
Hamina – Suurmusta	5245
Suurmusta – Merikari	5045

Norway , 12.01.2023

Svinesund – Halden	31//
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Langårsund (Kragerø)	8144

Russian Federation , 13.01.2023

Port of St. Petersburg	83/3
St. Petersburg – E-point island Kotlin	53/2
E-point Kotlin – long. lighth. Tolbuhkin	5102

Lighth. Tolbuhkin – lighth. –Šepelevskij	2001
Vyborg, port and bay	83/3
Island Vichrevoj – Island Sommers	4002
Strait Bjerkesund	81/2
E-point Bol'šoj Ber'ozovyj – Šepelevskij	50/2

Sweden , 13.01.2023

Karlsborg – Malören	8346
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Luleå – Björnklack	8346
Björnklack – Farstugrunden	5146
Sandgrönn fairway	8346
Rödkallen – Norströmsgrund	5366
Haraholmen – Nygrån	8346
Sea area off Nygrån	1106
Skelleftehamn – Gåsören	5236
Sea area off Gåsören	1106
Sea area off Bjuröklubb	5246
NE of Nordvalen	1106
SW of Nordvalen	1106
Western Quark (W of Holmöarna)	1106
Umeå – Väktaren	5136
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Fairway to Husum	1106
Örnsköldsvik – Hörnskaten	5146
Ångermanälven north Sandö Bridge	8344
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Hudiksvallfjärden	5242
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Sandarne – Hällgrund	5142
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Gävle – Eggegrund	5142
Hallstavik – Svartklubben	4041
Köping – Kvicksund	5144
Västerås – Grönsö	5144
Grönsö – Södertälje	2024
Stockholm – Södertälje	4044
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