

Eisbericht Nr. 83

Amtsblatt des BSH

Jahrgang 96

Nr. 83

Friday, 24.03.2023

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Übersicht

In den Schären der Bottenwiek befindet sich im Norden bis 65 cm dickes Festeis und im Süden bis 40 cm dickes Festeis. Im Norden und Osten befindet sich eine Rinne bis nach Kvarken. Auf See treibt zumeist sehr dichtes, aufgeschobenes und aufgepresstes Eis mit Spalten, welches im Norden bis 60 cm dick und im Süden bis 30 cm dick ist. In Kvarken liegt bis 45 cm dickes Festeis in den Schären und Buchten und auf See kommt 5–20 cm dickes, sehr lockeres bis dichtes Eis vor. In der Bottensee und dem Schärenmeer kommt entlang der Küsten 5–40 cm dickes, ebenes Eis oder Festeis vor. Im Mälarsee liegt 5–15 cm dickes Eis oder Neueis. Im Finnischen Meerbusen liegt in den östlichsten Buchten bis 50 cm dickes Festeis. Auf See treibt östlich von etwa 27°30'E sehr dichtes, 5–25 cm dickes Eis und im Süden treibt in und außerhalb der Koproye und Luga Bucht sehr lockeres Eis. In den Schären und Buchten entlang der nördlichen Küste kommt Festeis vor. Im Nordosten des Rigaischen Meerbusen befindet sich in geschützten Buchten morsches Festeis oder lockeres Treibeis.

Overview

In the archipelagos of the Bay of Bothnia, there is up to 65 cm thick fast ice in the north and up to 40 cm thick fast ice in the south. In the north and the east there is a lead of very open ice down to the Quark. At sea, there is ridged and rafted, very close ice with cracks, which is up to 60 cm thick in the north and up to 30 cm thick in the south. In the Quark, there is up to 45 cm thick fast ice in the archipelagos and bays and at sea, there is 5–20 cm thick, very open to close ice. In the Sea of Bothnia and the Archipelago Sea, 5–40 cm thick fast ice or level ice is present along the coasts. In Lake Mälaren, there is 5–15 cm thick ice and new ice. In the Gulf of Finland, up to 50 cm thick fast ice is present in the easternmost bays. At sea east of about 27°30'E, there is very close, 5–25 cm thick ice and in and outside Koproye and Luga bay there is very open ice. In the archipelagos and bays along the northern coast, there is fast ice. In sheltered bays of the northeastern Gulf of Riga, there is rotten fast ice or open ice.

Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 45–65 cm thick fast ice and compact ice, out to Malören, Kemi-3 and Kattilankalla. Outside the fast ice in the north and east there is a lead with very open ice. At sea, north of about 65°00'N, there is 30–60 cm thick, ridged, very close ice. Further south at sea, there is 10–30 cm thick rafted

very close ice in the west and 10–40 cm thick, ridged and rafted, very close ice in the east. There are cracks in the whole ice field. In the southern Bay of Bothnia, there is 15–40 cm thick fast ice in the archipelagos.

With a predominant southerly ice drift, ice growth and ice formation will continue over the weekend.

Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

www.bsh.de/eis

www.bsh.de/ice

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The Quark

There is 25–45 cm thick fast ice in the Vaasa archipelago out to Ensten. Further out, there is 5–20 cm thick ice of varying concentrations to about Norrskär. On the Swedish side, there is mostly up

Sea of Bothnia

In the archipelagos along the eastern coast, there is 10–30 cm thick fast ice. Further out there is thin ice and shuga. Along the western coast, there is thin level ice or thin ice in sheltered bays in the south and up to 40 cm thick fast ice in inner bays in the north. Outside there is open water in places.

Archipelago Sea and Åland Sea

At the eastern coast, there is 5–20 cm fast or level ice in the inner bays and thin ice further out in the archipelago. In the western and central part, thin level ice is present in inner bays and thin ice fur-

Northern Baltic

In Lake Mälaren, there is 5–15 cm thick fast in the inner western part; else, there is thin ice or open water.

Gulf of Finland

From St. Petersburg out to Kotlin and in the bay north of Kotlin, there is 30–50 cm thick fast ice and 20–35 cm thick compact ice in the fairway. In the Bay of Vyborg, there is 15–35 cm thick fast ice and in the Bjerkesund, there is 15–25 cm thick fast ice. East of about 27°30'E, there is mostly very close, 5–25 cm thick drift ice. The ice field is ridged and rafted at places. 5-15cm thick, very open ice drifts in and outside the Luga and Koproye Bay. Along

Gulf of Riga

In Väinameri, there is rotten fast ice near the coasts. Outside there is open water or ice free. In

Skagerrak and Kattegat

New ice and up to 30 cm thick fast is present in some inner Norwegian Fjords and the Oslo area. Close new ice is present in the Drammensfjord.

Swedish Lakes

Thin, very open ice or open water is present in sheltered bays of Lake Vänern. With ice melt in the beginning and possible minor

to 35 cm thick fast ice in inner bays. At sea, there is 5–20 cm thick, open ice.

With a predominant southerly/southwesterly ice drift, ice formation will continue over the weekend.

On Ångermanälven, there is 20–40 cm thick fast or level ice.

With temperatures slightly below 0°C in the south and down to -10°C in the north, some new ice will form at and near the coast over the weekend.

ther out.

With air temperatures mostly slightly below 0°C some new ice formation may occur over the weekend, but overall no larger change are expected.

Some ice formation may occur in Lake Mälaren, but overall no larger change is expected over the weekend.

the northern coast, there is 15–35 cm thick fast ice in the eastern archipelagos. Further out, there is open to very close ice. In the western archipelagos, there is 5–20 cm thick fast ice.

In the beginning warmer south-westerly winds will lead to a north-easterly ice drift, later during the weekend some ice formation may occur with a light, more westerly ice drift.

the Bay of Pärnu, there is open drift ice. Ice melt will continue over the weekend.

Overall no larger change is expected over the weekend.

ice formation at the end of the weekend, overall no larger change is expected.

Restrictions to Navigation

| | Harbour/District | At least dwt/hp/kW | Ice Class | Begin |
|--|--|-----------------------|-------------------|--------|
| Finland | Tornio, Kemi and Oulu | 4000 dwt | IA | 22.02. |
| | Raahe | 4000 dwt | IA | 08.03. |
| | Kalajoki, Kokkola and Pietarsaari | 2000 dwt | IA | 08.03. |
| | Vaasa | 2000 dwt | IB | 08.03. |
| | Kristiinankaupunki, Pori, Rauma and Uusikaupunki | 2000 dwt | II | 12.03. |
| | Kaskinen, Inkoo, Kantvik, Helsinki, Sköldvik and Mussalo | 2000 dwt | II | 07.01. |
| | Loviisa, Kotka and Hamina | 2000 dwt | I | 08.03. |
| | Sweden | Karlsborg | 4000 dwt (2000 t) | IA |
| Lulea | | 4000 dwt | IA | 28.02. |
| Haraholmen and Skelleftehamn | | 4000 dwt | IA | 04.03. |
| Holmsund | | 2000 dwt | IC | 07.02. |
| Rundvik and Husum | | 2000 dwt | IC | 04.03. |
| Örnsköldsvik | | 2000 dwt | IC | 13.02. |
| Angermanälven | | 2000 dwt | IB | 07.01. |
| Söraker, Sundsvall and Söderhamn | | 2000 dwt | IC | 13.02. |
| Köping and Västerås | | 1300/2000 dwt | IC/II | 23.03. |
| Balsta | | 1300/2000 dwt | IC/II | 22.12. |
| Härnösand, Stocka, Hudiksvall, Iggesund, Orrrskär and Norrsundet | | 2000 dwt | II | 06.03. |

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.

The traffic separation schemes in the Quark are temporarily out of use from 7 February due to ice conditions.

Icebreakers:

POLARIS, KONTIO, OTSO, SISU, ODEN, ATLE, YMER and FREJ assist in the Bay of Bothnia. ZEUS assists in the southern Bay of Bothnia and in the Quark. ALE assists in the Quark. URHO assists in the eastern Gulf of Finland.

Norway

Husøysund and Vestfjorden (Tønsberg): Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size. 31.01.23

Russia

There are restrictions for small crafts going to Vysotsk, Vyborg, St. Petersburg, Ust-Luga and Primorsk. No sailing of barge by tug to Vyborg and Vysotsk.

Icebreakers: Several icebreakers assist vessels to the port of Vyborg, Vysotsk, Primorsk, Ust-Luga and St. Petersburg.

Baltic Sea Ice Code

| | |
|---|--|
| <p>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</p> <p>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</p> | <p>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</p> <p>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 special permission 8 Navigation temporarily closed 9 Navigation has ceased / Unknown</p> |
|---|--|

Estonia, 24.03.2023

Paernu, port and bay 3//1

Finland, 24.03.2023

Röyttä – Etukari 8546
 Etukari – Ristinmatala 6456
 Ajos – Ristinmatala 6456
 Ristinmatala – Kemi 2 5476
 Kemi 2 – Kemi 1 5476
 Sea area SW of Kemi 1 5476
 Kemi 2 – Ulkokrunni – Virpiniemi 6456
 Oulu harbours – Kattilankalla 6456
 Kattilankalla – Oulu 1 6456
 Sea area SW of Oulu 1 5476
 High Sea N of the latitude of Marjaniemi 5476
 Raahe harbour – Heikinkari 8446
 Heikinkari – Raahe lighthouse 7356
 Raahe lighthouse – Nahkiainen 5856
 Latitude Marjaniemi – Ulkokalla, Sea 5476
 Rahja harbour – Välimatala 7856
 Vaelimatala to line Ulkokalla – Ykskivi 5856
 Sea betw. lat. of Ulkokalla –Pietarsaari 7856
 Ykspihlaja – Repskär 7356
 Repskär – Kokkola lighthouse 5856
 Sea area off Kokkola lighthouse 5856
 Pietarsaari – Kallan 8846
 Sea area off Kallan 2356
 Sea lat. Pietarsaari – NE Nordvalen 5856
 Sea area ENE of Nordvalen 5356

Sea area Nordvalen to W of Norrskär 4756
 Vaskiluoto – Ensten 7756
 Ensten – Vaasa lighthouse 5756
 Vaasa lighthouse – Norrskär 3736
 Sea area SW of Norrskär 3736
 Kaskinen – Sälgrund 5755
 Sea area off Sälgrund 5755
 High sea from N to latitude Yttergrund 3732
 Pori harb. to line Pori lighth. – Säppi 8745
 Rauma, Harbour – Kylmäpihlaja 2025
 Uusikaupunki harbour – Kirsta 8745
 Kirsta – Isokari 2025
 Naantali and Turku – Rajakari 1001
 Rajakari – Lövskär 1000
 Lövskär – Korra 1000
 Lövskär – Berghamn 1001
 Lövskär – Grisselborg 1001
 Hanko – Vitgrund 1001
 Inkoo a. Kantvik – sea area Porkkala 1205
 Helsinki harbours – Harmaja 1005
 Vuosaari harbour – Eestiluoto 1755
 Porvoo harbours – Varlax 5145
 Varlax – Porvoo lighthouse 1755
 Valko Harbour – Täktarn 5146
 Archipelago fairway Boistö – Glosholm 1756
 Archipelago fairway Glosholm–Helsinki 5145
 Kotka – Viikari 8345
 Viikari – Orregrund 5755
 Orregrund – Tiiskeri 1756

Hamina – Suurmusta 5756
 Suurmusta – Merikari 5756
 Merikari – Kaunissaari 5756

Norway, 24.03.2023

Svinesund – Halden 31//
 Drammensfjord 5011
 Husøysund – Tønsberg channel 8345
 Tønsberg, inner harbour 8353
 Vestfjord (Tønsberg) 8555
 Langårsund (Kragerø) 8144

Russian Federation, 24.03.2023

Port of St. Petersburg 84/3
 St. Petersburg – E-point island Kotlin 53/3
 E-point Kotlin – long. lighth. Tolbukhin 5303
 Lighth. Tolbukhin – lighth. –Šepelevskij 42/3
 Lighthouse Šepelevskij – island Sescar 53/2
 Island Sescar – Island Sommers 53/2
 Vyborg, port and bay 83/3
 Island Vichrevoj – Island Sommers 53/3
 Strait Bjerkesund 83/3
 E-point Bol'šoj Ber'ozovij – Šepelevskij 52/2
 Luga bay 22/2
 Appr. Luga bay – line Moš.-Šepel. 22/1

Sweden, 24.03.2023

Karlsborg – Malören 6456
 Sea area off Malören 5576
 Luleå – Björnklack 8546
 Björnklack – Farstugrunden 5356
 E and SE of Farstugrunden 5356
 Sandgrönn fairway 8546
 Rödkallen – Norströmsgrund 5356
 Haraholmen – Nygrån 8546
 Sea area off Nygrån 5356
 Skelleftehamn – Gåsören 5356
 Sea area off Gåsören 5356
 Sea area off Bjuröklubb 5356
 NE of Nordvalen 3326
 SW of Nordvalen 3326
 Western Quark (W of Holmöarna) 5356
 Umeå – Väktaren 8446
 SE of Väktaren 4356
 NE and SE of Sydostbrotten 3326
 Fairway to Husum 1356
 Örnköldsvik – Hörnskatan 8446
 Hörnskatan – Skagsudde 8446
 Sea area off Skagsudde 1356
 Fairway W of Ulvöarna 1356
 Ångermanälven north Sandö Bridge 8444
 Ångermanälven south Sandö Bridge 4044
 Härnösand – Härnön 2124
 Sundsvall – Draghällan 5146
 Draghällan – Åstholmsudde 1006
 Hudiksvallfjärden 8346
 Iggesund – Agö 8346
 Sandarne – Hällgrund 8346
 Ljusnefjärden – Storjungfrun 8346
 Gävle – Eggegrund 1000

Hallstavik – Svartklubben 5142
 Köping – Kvikksund 8294
 Västerås – Grönsö 8294
 Grönsö – Södertälje 1004
 Stockholm – Södertälje 3124
 Fairway to Karlstad 2121
 Fairway to Kristinehamn 2020
 Fairway to Otterbäcken 1000