

Eisbericht Nr. 90

Amtsblatt des BSH

Jahrgang 96

Nr. 90

Tuesday, 04.04.2023

1

Übersicht

In den Schären der Bottenwiek befindet sich im Norden bis 70 cm dickes Festeis und im Süden bis 40 cm dickes Festeis. Außerhalb davon befindet sich im Nordosten ein Gebiet mit ebenem Eis und im Norden und Nordwesten verläuft eine Rinne mit Neueis. Auf See treibt ansonsten zumeist sehr dichtes, aufgeschobenes und aufgedichtetes Eis mit Spalten, welches im Norden bis 60 cm dick und im Süden bis 40 cm dick ist. In Kvarken liegt bis 45 cm dickes Festeis in den Schären und Buchten und auf See kommt 5–25 cm dickes, dichtes Eis und Neueis vor. In der Bottensee und dem Schärenmeer kommt entlang der Küsten 5–40 cm dickes, ebenes Eis oder Festeis vor. Im Mälarsee liegt morsches Eis. Im Finnischen Meerbusen liegt in den östlichsten Buchten und den nordöstlichen Schären bis 35 cm dickes Festeis. Auf See treibt um 60°N, 27°30'O 5–30 cm dickes lockeres bis sehr dichtes Eis. In den nordwestlichen Schären liegt morsches Festeis.

Overview

In the archipelagos of the Bay of Bothnia, there is up to 70 cm thick fast ice in the north and up to 40 cm thick fast ice in the south. Further out in the northeast there is an area of level ice and in the north and northwest there is a new ice covered lead. Else 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 5–25 cm thick, very close ice or new ice. In the Sea of Bothnia and the Archipelago Sea, 5–40 cm thick fast ice or level ice is present at the coasts. In Lake Mälaren, there is rotten ice. In the Gulf of Finland, up to 35 cm thick fast ice is present in the easternmost bays and northeastern archipelagos. At sea, 5–30 cm thick open to very close ice is drifting around 60°N 27°30'E. In the northwestern archipelagos there is rotten fast ice.

Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 45–70 cm thick fast ice and compact ice, out to Malören, Kemi-2 and Kattilankalla. Outside the fast ice in the northeast there is 5-15nm wide area with 5-15cm thick level ice down to about 64°20'N. Along the northern and western fast ice there is a lead with new ice from Kemi-2 down to the Skellefteå bay. At sea there is 30–60 cm thick, ridged, very close ice around 64°50N 23°E. East and north of this area there is 10-30cm thick, very

close ice. Further south at sea, there is 20–40 cm thick very close ice down to the fast ice in the Vaasa archipelago. The ice is locally ridged and rafted, but there are also leads and cracks in the ice field. The fast ice in the southern archipelagos is 20–40 cm thick.

The ice growth and ice formation will continue at a slow pace and the overall ice drift will be weak and variable.

Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)
www.bsh.de/eis
www.bsh.de/ice

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Eisankünfte / Ice Information

Telefon: +49 (0) 381 4563 -780
 Telefax: +49 (0) 381 4563 -949
 E-Mail: ice@bsh.de

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The Quark

There is 25–45 cm thick fast ice in the Vaasa archipelago out to Ensten. On the Swedish side, there is 30-50 cm thick fast ice in inner bays. At sea, there is 5–25 cm thick very close in the east and drifting in the central part around 20°20'E there is 5-20cm thick close ice. New ice is present

Sea of Bothnia

In the archipelagos along the eastern coast, there is 10–30 cm thick fast ice, outside the archipelagos there is very open ice and open water in the north-east. 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.

Archipelago Sea and Åland Sea

At the eastern coast, there is rotten ice in the inner bays, further out open water in the archipelago. In the western and central part, thin level ice, new ice

Northern Baltic

In Lake Mälaren, there is rotten fast or level ice in the western part, thin open ice in the east and else open water.

Gulf of Finland

15–35 cm thick fast ice is present along the northern shores of the Neva bay and 10-20cm thick, compact ice is present from St. Petersburg out to Kotlin; further west there is open water. In the Bay of Vyborg, there is 15–30 cm thick fast ice and in the entrance 10-20cm thick close ice out to the latitude of lighthouse Rondo and further out open water. In the Bjerkesund, there is 10–20 cm thick very close ice and open water in the entrance. At sea there is an area of 10-25cm thick, very close

Skagerrak and Kattegat

Remnants of thin ice and up to 30 cm thick, partly rotten fast are present in some inner Norwegian

Swedish Lakes

Rotten ice is present in some sheltered bays in the northern part of Lake Vänern.

in the west. In the north there is 10-40cm thick, very close ice east of Holmöarna.

Some ice formation is expected during night and the weak ice drift will change from northeastwards to westwards.

On Ångermanälven, there is 30–50 cm thick fast ice. At sea, in the northernmost part, there is open water and very open ice.

Some freezing is expected near the Finnish coast, but overall no larger change is expected.

and open water is present in inner bays.

Some freezing may occur over night, but overall no larger change is expected.

Melting during the day and some ice formation during night is expected, with an only minor overall change.

ice between Malyj and Gogland. South of this area there is open ice down to about 59°40'N and north of this area there is open water with smaller areas with close ice. Along the northern coast, there is 20–40 cm thick fast ice in the eastern archipelagos and rotten ice is present in the western archipelagos.

The ice at sea will continue to drift towards the south/ southwest. During daytime some ice melt, at night minor, only local ice formation is expected.

fjords

Some melting is expected.

Some melting 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 and Kotka | 2000 dwt | II | 28.03. |
| | Hamina | 2000 dwt | I | 08.03. |
| | Lake Saimaa | 2000 dwt | IB | 01.04. |
| | 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 and Sundsvall | | 2000 dwt | IC | 13.02. |
| Härnösand, | | 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, 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. TYRSKY assists in Lake Saimaa.

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

| | |
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| <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 floes – 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> |
|--|--|

Finland, 04.04.2023

| | | | |
|--|------|---|------|
| Röyttä – Etukari | 8546 | Vaasa lighthouse – Norrskär | 5756 |
| Etukari – Ristinmatala | 6456 | Sea area SW of Norrskär | 5756 |
| Ajos – Ristinmatala | 6456 | Kaskinen – Sälgrund | 4155 |
| Ristinmatala – Kemi 2 | 5476 | Sea area off Sälgrund | 4155 |
| Kemi 2 – Kemi 1 | 5476 | High sea from N to latitude Yttergrund | 2752 |
| Sea area SW of Kemi 1 | 5146 | Pori harb. to line Pori lighth. – Säppi | 2125 |
| Kemi 2 – Ulkokrunni – Virpiniemi | 6456 | Sea W of line Pori lighthouse – Säppi | 2125 |
| Oulu harbours – Kattilankalla | 6456 | High sea betw. lat. Yttergrund a. Rauma | 1102 |
| Kattilankalla – Oulu 1 | 6456 | Rauma, Harbour – Kylmäpihlaja | 1105 |
| Sea area SW of Oulu 1 | 5476 | Uusikaupunki harbour – Kirsta | 8795 |
| High Sea N of the latitude of Marjaniemi | 5476 | Kirsta – Isokari | 1005 |
| Raahe harbour – Heikinkari | 8446 | Naantali and Turku – Rajakari | 1000 |
| Heikinkari – Raahe lighthouse | 7356 | Rajakari – Lövskär | 1001 |
| Raahe lighthouse – Nahkiainen | 5476 | Lövskär – Korra | 1001 |
| Latitude Marjaniemi – Ulkokalla, Sea | 5476 | Lövskär – Berghamn | 1001 |
| Rahja harbour – Välimatala | 7856 | Lövskär – Grisselborg | 1001 |
| Vaelimatala to line Ulkokalla – Ykskivi | 5856 | Inkoo a. Kantvik – sea area Porkkala | 0//5 |
| Sea betw. lat. of Ulkokalla –Pietarsaari | 7856 | Porvoo harbours – Varlax | 0//5 |
| Ykspihlaja – Repskär | 8846 | Varlax – Porvoo lighthouse | 0//5 |
| Repskär – Kokkola lighthouse | 7856 | Valko Harbour – Täktarn | 1705 |
| Sea area off Kokkola lighthouse | 5856 | Archipelago fairway Boistö – Glosholm | 1705 |
| Pietarsaari – Kallan | 7856 | Kotka – Viikari | 1705 |
| Sea area off Kallan | 5856 | Viikari – Orregrund | 1705 |
| Sea lat. Pietarsaari – NE Nordvalen | 5856 | Orregrund – Tiiskeri | 1705 |
| Sea area ENE of Nordvalen | 5856 | Hamina – Suurmusta | 1706 |
| Sea area Nordvalen to W of Norrskär | 5756 | Suurmusta – Merikari | 4756 |
| Vaskiluoto – Ensten | 7756 | Merikari – Kaunissaari | 1706 |
| Ensten – Vaasa lighthouse | 5756 | | |

Russian Federation, 04.04.2023

| | |
|--|------|
| Port of St. Petersburg | 83/2 |
| St. Petersburg – E-point island Kotlin | 53/2 |
| E-point Kotlin – long. lighth. Tolbuhkin | 3302 |
| Lighth. Tolbuhkin – lighth. –Šepelevskij | 12/0 |
| Lighthouse Šepelevskij – island Sescar | 13/0 |
| Island Sescar – Island Sommers | 53/2 |
| Island Sommers– S-point island Gogland | 52/1 |
| S-point isl. Gogland – long. p. Kunda | 12/0 |
| Vyborg, port and bay | 83/3 |
| Island Vichrevoj – Island Sommers | 53/1 |
| Strait Bjerkesund | 53/2 |
| E-point Bol'šoj Ber'ozovyj – Šepelevskij | 12/1 |
| Appr. Luga bay – line Moš.-Šepel. | 11/1 |

Sweden, 04.04.2023

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|----------------------------------|------|
| Karlsborg – Malören | 6456 |
| Sea area off Malören | 6456 |
| Luleå – Björnklack | 6356 |
| Björnklack – Farstugrunden | 6356 |
| E and SE of Farstugrunden | 5046 |
| Sandgrönn fairway | 6356 |
| Rödkaullen – Norströmsgrund | 6356 |
| Haraholmen – Nygrån | 6356 |
| Sea area off Nygrån | 5046 |
| Skelleftehamn – Gåsören | 6356 |
| Sea area off Gåsören | 6356 |
| Sea area off Bjuröklubb | 6356 |
| NE of Nordvalen | 5456 |
| SW of Nordvalen | 5456 |
| Western Quark (W of Holmöarna) | 5146 |
| Umeå – Väktaren | 8446 |
| SE of Väktaren | 4356 |
| NE and SE of Sydostbrotten | 4356 |
| Fairway to Husum | 5246 |
| Örnsköldsvik – Hörnskatan | 8446 |
| Hörnskatan – Skagsudde | 8446 |
| Sea area off Skagsudde | 1206 |
| Fairway W of Ulvöarna | 1206 |
| Sea area E of Ulvöarna | 1206 |
| Ångermanälven north Sandö Bridge | 8444 |
| Ångermanälven south Sandö Bridge | 8444 |
| Härnösand – Härnön | 5144 |
| Sea area off Härnön | 1206 |
| Sundsvall – Draghällan | 5146 |
| Draghällan – Åstholmsudde | 1206 |
| Hudiksvallfjärden | 8342 |
| Iggesund – Agö | 8342 |
| Sandarne – Hällgrund | 8342 |
| Ljusnefjärden – Storsjungfrun | 8342 |
| Öregrundsgrepen | 2020 |
| Hallstavik – Svartklubben | 5142 |
| Köping – Kvikksund | 1201 |
| Västerås – Grönsö | 8292 |
| Grönsö – Södertälje | 4041 |
| Stockholm – Södertälje | 2121 |