

Eisbericht Nr. 86

Amtsblatt des BSH

Jahrgang 96

Nr. 86

Wednesday, 29.03.2023

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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 breites Gebiet mit dünnen, ebenem Eis. Auf See treibt ansonsten zumeist sehr dichtes, aufgeschobenes und aufgedrücktes Eis mit Spalten, welches im Norden bis 60 cm dick und im Süden bis 30 cm dick ist. In Kvarnen liegt bis 45 cm dickes Festeis in den Schären und Buchten und auf See kommt 5–25 cm dickes, lockeres bis dichtes Eis vor, was bis in die nördliche Bottensee hineinreicht. 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 bis 35 cm dickes Festeis. Auf See treibt im Norden östlich von etwa 27°O dichtes bis sehr dichtes, 5–20 cm dickes Eis. In den Schären und Buchten entlang der nördlichen Küste kommt Festeis vor.

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 a wide area of thin level ice. 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 2–25 cm thick, open to close ice reaching into the northernmost Sea of Bothnia. 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 rotten ice. In the Gulf of Finland, up to 35 cm thick fast ice is present in the easternmost bays. At sea, there is close to very close, 5–20 cm thick ice in the north east of about 27°E. In the archipelagos and bays along the northern coast, there is 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-3 and Kattilankalla. Outside the fast ice in the north and northeast there is 10–30nm wide area with thin level ice and new ice. At sea there is 30–60 cm thick, ridged, very close ice around 65°N23°E. Further south at sea, there is 10–30 cm thick rafted very close ice in the west

and 20–40 cm thick, ridged and rafted, very close ice in the east down to the fast ice in the Vaasa archipelago. Locally there are cracks in the ice field. The fast ice in the southern archipelagos is 20–40 cm thick.

With mostly moderate frost, ice growth and ice formation will continue. The ice drift will veer from southwesterly towards easterly / northeasterly.

Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

www.bsh.de/eis

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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 30-50cm thick fast ice in inner bays. At sea, there is 2–25 cm thick, open to close ice north

of 63°N.

With mostly moderate frost, ice formation will continue and the drift veers from southerly to easterly.

Sea of Bothnia

In the archipelagos along the eastern coast, there is 10–30 cm thick fast ice. 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 wa-

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

With light to moderate frost, some new ice will form at and near the coast.

Archipelago Sea and Åland Sea

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

inner bays.

With mostly light frost some new ice formation may occur.

Northern Baltic

In Lake Mälaren, there is rotten ice in the western part and open water in the central part.

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

Gulf of Finland

15–35 cm thick fast ice is present along the shores of the Neva bay and 10-30cm thick, very close ice is present from St. Petersburg out to Kotlin; further west there is very open ice. In the Bay of Vyborg, there is 15–30 cm thick fast ice and in the entrance 2-10cm thick close ice. In the Bjerkesund, there is 10–25 cm thick fast ice and open ice in the entrance. At sea there is an area of 5-20cm thick,

very close about north of 60°N and between 26°30'E and 28°40'E. Along the northern coast, there is 10–40 cm thick fast ice in the eastern archipelagos with thin ice outside; rotten ice is present in the western archipelagos.

Although temperatures below 0°C are anticipated, no relevant ice formation is expected; the ice will drift towards the east.

Gulf of Riga

Ice remnants can still be found in sheltered places in Väinameri and near the coast of the Bay of

Pärnu.

No larger change is expected.

Skagerrak and Kattegat

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

fjords

No larger change is expected.

Swedish Lakes

Thin, very open ice or open water is present in sheltered bays of Lake Vänern.

No larger change is expected.

Dr. J. Holfort

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. |
| Sweden | Karlsborg | 4000 dwt (2000 t) | IA | 28.02. |
| | 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, Orrskär 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, 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:</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> |
|--|--|

Estonia, 29.03.2023

Paernu, port and bay

1//0

Sea area Nordvalen to W of Norrskär

4756

Vaskiluoto – Ensten

7756

Ensten – Vaasa lighthouse

5146

Vaasa lighthouse – Norrskär

4156

Finland, 29.03.2023

Röyttä – Etukari

8546

Sea area SW of Norrskär

4756

Etukari – Ristinmatala

6456

Kaskinen – Sälgrund

3015

Ajos – Ristinmatala

6456

Sea area off Sälgrund

3015

Ristinmatala – Kemi 2

5476

High sea from N to latitude Yttergrund

3232

Kemi 2 – Kemi 1

5476

Rauma, Harbour – Kylmäpihlaja

1005

Sea area SW of Kemi 1

5146

Uusikaupunki harbour – Kirsta

8795

Kemi 2 – Ulkokrunni – Virpiniemi

6456

Kirsta – Isokari

1005

Oulu harbours – Kattilankalla

6456

Naantali and Turku – Rajakari

1001

Kattilankalla – Oulu 1

6456

Rajakari – Lövskär

1001

Sea area SW of Oulu 1

5476

Lövsjär – Korra

1001

High Sea N of the latitude of Marjaniemi

5476

Lövsjär – Berghamn

1001

Raahe harbour – Heikinkari

8446

Lövsjär – Grisselborg

1001

Heikinkari – Raahe lighthouse

7356

Hanko – Vitgrund

1001

Raahe lighthouse – Nahkiainen

9146

Inkoo a. Kantvik – sea area Porkkala

1005

Latitude Marjaniemi – Ulkokalla, Sea

5476

Helsinki harbours – Harmaja

1005

Rahja harbour – Välimatala

7856

Vuosaari harbour – Eestiluoto

1705

Vaelimatala to line Ulkokalla – Ykskivi

9046

Porvoo harbours – Varlax

1705

Sea betw. lat. of Ulkokalla – Pietarsaari

7856

Varlax – Porvoo lighthouse

1705

Ykspihlaja – Repskär

7356

Valko Harbour – Täktarn

3135

Repskär – Kokkola lighthouse

5856

Archipelago fairway Boistö – Glosholm

3135

Sea area off Kokkola lighthouse

5856

Archipelago fairway Glosholm–Helsinki

1705

Pietarsaari – Kallan

7856

Kotka – Viikari

8845

Sea area off Kallan

5856

Viikari – Orregrund

3135

Sea lat. Pietarsaari – NE Nordvalen

5856

Orregrund – Tiiskeri

3135

Sea area ENE of Nordvalen

5856

Tiiskeri – Kalbådgrund

1102

Hamina – Suurmusta 5756
 Suurmusta – Merikari 4756
 Merikari – Kaunissaari 4756

Norway, 29.03.2023

Svinesund – Halden 31//
 Drammensfjord 1001
 Husøysund – Tønsberg channel 8345
 Tønsberg, inner harbour 8353
 Vestfjord (Tønsberg) 8555
 Langårsund (Kragerø) 8144

Russian Federation, 29.03.2023

Port of St. Petersburg 84/2
 St. Petersburg – E-point island Kotlin 53/2
 E-point Kotlin – long. lighth. Tolbuhkin 3302
 Lighth. Tolbuhkin – lighth. –Šepelevskij 22/2
 Lighthouse Šepelevskij – island Sescar 53/2
 Island Sescar – Island Sommers 53/2
 Island Sommers– S-point island Gogland 12/1
 Vyborg, port and bay 83/3
 Island Vichrevoj – Island Sommers 53/3
 Strait Bjerkesund 83/3
 E-point Bol'šoj Ber'ozovyj – Šepelevskij 32/2

Sweden, 28.03.2023

Karlsborg – Malören 6456
 Sea area off Malören 5576
 Luleå – Björnklack 6356
 Björnklack – Farstugrunden 6356
 E and SE of Farstugrunden 5356
 Sandgrönn fairway 6356
 Rödkallen – Norströmsggrund 6356
 Haraholmen – Nygrån 6356
 Sea area off Nygrån 5246
 Skelleftehamn – Gåsören 6356
 Sea area off Gåsören 6356
 Sea area off Bjuröklubb 6356
 NE of Nordvalen 5356
 SW of Nordvalen 3356
 Western Quark (W of Holmöarna) 3356
 Umeå – Väktaren 8446
 SE of Väktaren 3356
 NE and SE of Sydostbrotten 4356
 Fairway to Husum 5246
 Örnköldsvik – Hörnskatan 8446
 Hörnskatan – Skagsudde 8446
 Sea area off Skagsudde 4356
 Fairway W of Ulvöarna 2356
 Sea area E of Ulvöarna 2356
 Ångermanälven north Sandö Bridge 8444
 Ångermanälven south Sandö Bridge 8444
 Härnösand – Härnön 5144
 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 1101
 Fairway to Kristinehamn 1000
 Fairway to Otterbäcken 1000