



Eisbericht Nr. 87

Amtsblatt des BSH

Jahrgang 97

Nr. 87

Wednesday, 20.03.2024

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Übersicht

In der Bottenwiek befindet sich in den nördlichen Schären bis 70 cm dickes, in den südlichen bis 50 cm dickes Festeis. Auf See treibt im Norden zumeist 30–70 cm dickes, sehr dichtes, örtlich aufgepresstes und übereinandergeschobenes Eis, das teilweise schwer zu passieren ist. Weiter südlich kommt sehr lockeres Eis und offenes Wasser vor. An den Küsten von Norra Kvarken liegt bis 50 cm dickes Festeis; auf See treibt im Westen 10–50 cm dickes, dichtes Eis und ansonsten kommt lockeres Eis vor. An den Küsten der Bottensee kommt im Osten bis 55 cm und im Westen bis 30 cm dickes Festeis vor. Im Schärenmeer kommt Festeis und offenes Wasser vor. Im Osten und Norden des Finnischen Meerbusens liegt bis 55 cm dickes Festeis. Auf See treibt im Norden sehr lockeres bis sehr dichtes, 5–35 cm dickes Eis. Im Rigaischen Meerbusen kommt im Nordosten morsches Festeis vor und an den Küsten treibt örtlich Eis. Ansonsten kommt im Mälaren, Vänern und einigen norwegischen Fjorden örtlich dünnes Eis, teilweise aber auch bis 30 cm dickes Festeis vor.

Overview

In the Bay of Bothnia there is fast ice in the archipelagos, up to 70 cm thick in the north and up to 50 cm thick in the south. At sea in the north, there is mostly 30–70 cm thick, very close, ridged and rafted ice that is difficult to force at places. Further south there is very open ice and open water. In the Quark there is up to 50 cm thick fast ice at the coasts and at sea there is 10–50 cm thick, close ice in the west and open ice elsewhere. At the coasts of the Sea of Bothnia there is fast ice, up to 55cm thick in the east and up to 30 cm thick in the west. Fast ice and open water is present in the Archipelago Sea. There is up to 55 cm thick fast ice at the eastern and northern coast of the Gulf of Finland. At sea in the north there is 5-35cm thick, very open to very close ice. In the northeastern Gulf of Riga there is rotten fast ice at the coast with very open to close ice in places along the coast. Else thin ice is present at places, but also up to 30cm thick fast ice, in the Mälaren, Vänern, and some Norwegian fjords.

Bay of Bothnia

In the archipelagos of the Bay of Bothnia there is fast ice; 45–75 cm thick in the north and up to 25–65 cm thick in the south. In the northeast the fast ice stretches out to Malören, Kemi-3, Oulu-3 and Raahe lighthouse. At sea north of a line Simpgrundet to Kalajoki there is 40–70 cm thick, ridged and rafted ice; the field is difficult to force at places.

Further south there is first 10-40cm thick very close ice and then 2-25cm thick close ice, but open water outside the Swedish coast and very open ice outside the Finnish coast.

With at most light frost and light winds veering from southwest to northwest no larger changes are expected.

Herstellung und Vertrieb

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The Quark

There is 35–60 cm thick fast ice in the Vaasa archipelago out to Ensten with 20-40cm thick close ice further out. Along the Swedish coast there is up to 40 cm thick fast ice with adjacent consolidated ice. Off this ice, there is 10–50 cm thick, partly ridged, close ice from north of Högbonden to

Holmöarna. Else at sea there is close ice in the north and open water in the south.

With temperatures around 0°C and light winds with changing direction no larger changes are expected.

Sea of Bothnia

Along the coasts there is mostly fast ice in the inner bays; 20–55 cm thick in the east and 5–40 cm thick in the west. On Ångermanälven, there is 15–40 cm thick fast ice. Off the coast in the east

there is open water with some thicker floes. In the northwest, north of about Härnösand, there is ridged, 10-50cm thick close ice.

Some ice melt is expected.

Archipelago Sea and Åland Sea

In the Archipelago Sea there is 25–40 cm thick fast ice in the inner archipelago of the Finnish coast. 10–30 cm thick, fast ice is present around the island of the outer archipelagos and the Åland Is-

lands with open water in between. In the Åland Sea there is 5–20 cm thick fast or level ice in bays along the coast.

Ice melt is expected.

Northern Baltic

In Lake Mälaren there is 10–30 cm thick fast ice with mostly open water on the fairways. Along the outer Swedish coast there is open water or thin

open ice.

Ice melt is expected.

Gulf of Finland

Along the northern coast there is fast ice in the archipelago, 10–40 cm thick in the west and up to 55 cm thick in the east. In the Vyborg Bay there is 30-40cm thick fast ice and in the Bjerkesund there is 20–30 cm thick fast ice; very close ice is present in both entrances with thin open ice further out. Off the northern fast ice there is 10-35cm thick ice with different concentrations. Between north of Gogland and north of Seskar there is ridged, 10-35cm thick

very close ice. From St. Petersburg to the longitude of lighthouse Tolbuchin there is 40–50 cm thick fast ice with thin open ice further out. Outside the southern coast there is open water in Koporye and Luga Bay and ice free from Narva Bay to the west. In Lake Saimaa 30-55cm thick ice with open areas.

Some ice melt is expected, but overall no larger change in the distribution.

Gulf of Riga

In Väinameri there is 20–35 cm thick fast ice or very close ice near the coasts and else very open ice or open water. Off the south coast of Saaremaa there is a band with 5–20 cm thick ice different concentrations. In the Bay of Pärnu, there is rotten

near the coast with open water further out. Ice is drifting from about Liuh to Kihnu, ranging from very open to close.

Further ice melt is expected.

Central Baltic

In sheltered areas along the Swedish coast there is open water.

Further ice melt is expected.

Swedish Lakes

In Lake Vänern rotten fast ice is present in the northern archipelagos. In the Dalbosjön there is 5–15 cm thick, very close ice at the northwestern

coast.

Ice melt is expected.

Restrictions to Navigation

| | Harbour/District | At least dwt/hp/kW | Ice Class | Begin |
|----------------|---------------------------------------------------|-----------------------|--------------------------------|---------------|
| Estonia | Pärnu | 1600 kW | 1C (Lloyd's) | 11.03. |
| | Kunda and Sillamäe | 1200 kW | II (Lloyd's) | 04.02. |
| Finland | Tornio, Kemi and Oulu | 2000/4000 dwt | IA Super (2000 t)/ IA (2000 t) | 27.02. |
| | Vaasa | 2000 dwt | IA | 10.01. |
| | Raahe, Kalajoki, Kokkola and Pietarsaari | 4000 dwt | IA | 13.01. |
| | Pori, Rauma | 2000 dwt | I | 06.03. |
| | Kaskinen and Kristiinankaupunki | 2000 dwt | IB | 06.03. |
| | Uusikaupunki | 2000 dwt | I | 18.03. |
| | Langnäs | 2000 dwt | II | 13.01. |
| | Naantali and Turku | 2000 dwt | I | 23.01. |
| | Mussalo | 2000 dwt | IB | 29.01. |
| | Sköldvik | 2000 dwt | I | 29.01. |
| | Koverhar, Lappohja, Inkoo, Kantvik and Helsinki | 2000 dwt | II | 18.03. |
| | Taalintehdas and Förby | 2000 dwt | II | 18.03. |
| | Loviisa, Kotka and Hamina | 2000 dwt | IB | 29.01. |
| | Lake Saimaa | 2000 dwt | IA | 08.01. |
| | Saimaa Canal | 2000 dwt | IA | 08.01. |
| Russia | Vyborg | - | Ice 1/Ice 2 | 11.03. |
| | Vysotsk | - | Ice 1/Ice 2 | 11.03. |
| | Primorsk | - | Ice 1/Ice 2 | 11.03. |
| | St. Petersburg | | Ice 1 | 22.03. |
| | Ust-Luga | - | Ice 1/Ice 2 | 22.03. |
| Sweden | Karlsborg | 4000 dwt | IA (2000 t) | 14.01. |
| | Lulea, Haraholmen and Skelleftehamn | 4000 dwt | IA | 14.01. |
| | Rundvik, Husum and Örnsköldsvik | 2000 dwt | IA | 19.02. |
| | Holmsund | 2000 dwt | IA | 17.02. |
| | Angermanälven | 2000 dwt | IA | 17.02. |
| | Stocka, Hudiksvall, Iggesund and Söderhamn | 2000 dwt | IC | 26.02. |
| | Orrskär, Norrsundet, Gävle, Skutskär and Öregrund | 2000 dwt | II | 18.03. |
| | Härnösand, Söråker and Sundsvall | 2000 dwt | IB | 26.02. |
| | Hargshamn | 2000 dwt | IC | 04.01. |
| | Hallstavig and Grisslehamn | 2000 dwt | IC | 04.01. |
| | Köping and Västerås | 2000 dwt | IC | 26.02. |
| | Balsta | 2000 dwt | IC | 26.02. |
| | Stockholm and Södertälje | 2000 dwt | II | 04.01. |
| Vänern | 2000 dwt | II | 14.03. | |

Estonia

Icebreaker: EVA-316 assists to the port of Pärnu. BOTNICA assists to the ports of Kunda and Sillamäe.

Finland/Sweden

The traffic separation schemes in the Lake Vänern are temporarily out of use from 12 January due to ice conditions.

The transit traffic west of Holmöarna is temporarily prohibited.

Öregrundsgrepen: Transit traffic for low powered vessels is not recommended.

The traffic separation schemes in the Quark are temporarily out of use from 20 December due to ice conditions.

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: YMER, ODEN, FREJ, POLARIS, SISU, KONTIO and URHO assist in the Bay of Bothnia. OTSO assist in the southern Bay of Bothnia. ATLE and FENNICA assist in the Quark. ZEUS assists in the Bothnian Sea. **CALYPSO** moves to the Gulf of Finland. VOIMA and NORDICA assist the Gulf of Finland. ALE assists in the Vänern.

Russia

There are restrictions for small crafts going to St. Petersburg, Vyborg, Vysotsk, Primorsk and Ust-Luga. Barge towed by tug not allowed to navigate in ice.

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

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> |
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Estonia, 20.03.2024

Paernu, port and bay 4435
Moonsund 2/32

Finland, 20.03.2024

Röyttä – Etukari 8546
Etukari – Ristinmatala 8546
Ajos – Ristinmatala 8546
Ristinmatala – Kemi 2 7476
Kemi 2 – Kemi 1 5476
Sea area SW of Kemi 1 5476
Kemi 2 – Ulkokrunni – Virpiniemi 7476
Oulu harbours – Kattilankalla 8546
Kattilankalla – Oulu 1 7476
Sea area SW of Oulu 1 5476
High Sea N of the latitude of Marjaniemi 5476
Raahe harbour – Heikinkari 8546
Heikinkari – Raahe lighthouse 6856
Raahe lighthouse – Nahkiainen 5476
Latitude Marjaniemi – Ulkokalla, Sea 5476
Rahja harbour – Välimatala 7856
Vaelimatala to line Ulkokalla – Ykskivi 5856
Sea betw. lat. of Ulkokalla – Pietarsaari 5356
Ykspihlaja – Repskär 7476
Repskär – Kokkola lighthouse 5476
Sea area off Kokkola lighthouse 1716
Pietarsaari – Kallan 8446
Sea area off Kallan 2726
Sea lat. Pietarsaari – NE Nordvalen 4376
Sea area ENE of Nordvalen 5356
Sea area Nordvalen to W of Norrskär 4376
Vaskiluoto – Ensten 7356
Ensten – Vaasa lighthouse 5356
Vaasa lighthouse – Norrskär 4356
Sea area SW of Norrskär 4376
Kaskinen – Sälgrund 8446
Sea area off Sälgrund 4446
High sea from N to latitude Yttergrund 4376
Pori harb. to line Pori lighth. – Säppi 1706
Sea W of line Pori lighthouse – Säppi 1706
High sea betw. lat. Yttergrund a. Rauma 0//6
Rauma, Harbour – Kymäpihlaja 8846
Kymäpihlaja – Rauma lighthouse 1706
Uusikaupunki harbour – Kirsta 8846
Kirsta – Isokari 7846
Isokari – Sandbäck 2716
Sea area N of Sälskär 0//2
Naantali and Turku – Rajakari 8846
Rajakari – Lövskär 7346
Lövskär – Korra 7346
Korra – Isokari 2716
Lövskär – Berghamn 4346
Berghamn – Stora Sottunga 1706
Stora Sottunga – Ledskär 2116
Lövskär – Grisselborg 4346
Grisselborg – Norparskär 1706
Sea area at Vidskär 0//6
Hanko harbours – Hanko 1 0//2
Hanko – Vitgrund 1312
Vitgrund – Utö 1102

Koverhar – Hästö Busö 8345
Hästö Busö – Ajax 0//5
Inkoo a. Kantvik – sea area Porkkala 7755
Sea area at Porkkala 0//5
Sea area S of Porkkala lighthouse 0//5
Helsinki harbours – Harmaja 7745
Harmaja – Helsinki lighthouse 4745
Helsinki lighth. – sea S of Porkkala lh. 0//5
Fairway Helsinki – Porkkala – Rönnskär 5375
Vuosaari harbour – Eestiluoto 3735
Eestiluoto – Helsinki lighthouse 5355
Porvoo harbours – Varlax 7376
Varlax – Porvoo lighthouse 5376
Porvoo lighthouse – Kalbådagrund 5356
Sea Kalbådagrund – Helsinki lighthouse 1706
Valko Harbour – Täktarn 7346
Archipelago fairway Boistö – Glosholm 5376
Archipelago fairway Glosholm–Helsinki 4376
Kotka – Viikari 7346
Viikari – Orregrund 4346
Orregrund – Tiiskeri 5346
Tiiskeri – Kalbådagrund 3356
Hamina – Suurmusta 8446
Suurmusta – Merikari 7346
Merikari – Kaunissaari 4346

Russian Federation, 20.03.2024

Port of St. Petersburg 89//
St. Petersburg – E-point island Kotlin 89//
E-point Kotlin – long. lighth. Tolbuhkin 53//
Lighth. Tolbuhkin – lighth. – Šepelevskij 11//
Lighthouse Šepelevskij – island Sescar 11//
Island Sescar – Island Sommers 42//
Island Sommers– S-point island Gogland 43//
Vyborg, port and bay 89//
Island Vichrevoj – Island Sommers 43//
Strait Bjerkesund 89//
E-point Bol'šoj Ber'ozovyj – Šepelevskij 43//

Sweden, 20.03.2024

Karlsborg – Malören 8646
Sea area off Malören 5576
Luleå – Björnklack 8646
Björnklack – Farstugrunden 5576
E and SE of Farstugrunden 5576
Sandgrönn fairway 8646
Rödkallen – Norströmsgrund 5576
Haraholmen – Nygrån 8646
Sea area off Nygrån 5456
Skelleftehamn – Gåsören 8446
Sea area off Gåsören 1306
Sea area off Bjuröklubb 1306
NE of Nordvalen 4476
SW of Nordvalen 4476
Western Quark (W of Holmöarna) 6456
Umeå – Väktaren 6456
SE of Väktaren 4476
NE and SE of Sydostbrotten 1306
Fairway to Husum 6476
Örnsköldsvik – Hörnskatan 8446

| | |
|------------------------------------|------|
| Hörnskatan – Skagsudde | 6476 |
| Sea area off Skagsudde | 4476 |
| Fairway W of Ulvöarna | 8446 |
| Sea area E of Ulvöarna | 2476 |
| Ångermanälven north Sandö Bridge | 8444 |
| Ångermanälven south Sandö Bridge | 8444 |
| Härnösand – Härnön | 8444 |
| Sea area off Härnö | 1306 |
| Sundsvall – Draghallan | 1306 |
| Draghallan – Åstholmsudde | 1306 |
| Off Åstholmsudde and Brämön | 1306 |
| Hudiksvallfjärden | 8346 |
| Iggesund – Agö | 8346 |
| Sandarne – Hällgrund | 8346 |
| Ljusnefjärden – Storjungfrun | 8346 |
| Gävle – Eggegrund | 8346 |
| Hallstavik – Svartklubben | 8346 |
| Trälhavet – Furusund – Kapellskär | 1000 |
| Stockholm – Trälhavet – Klövholmen | 1000 |
| Klövholmen – Sandhamn | 1000 |
| Trollharan – Langgarn | 1000 |
| Köping – Kvicksund | 8344 |
| Västerås – Grönsö | 8344 |
| Grönsö – Södertälje | 8344 |
| Stockholm – Södertälje | 1204 |
| Södertälje – Fifong | 1104 |
| Västervik – Marsholmen – Idö | 1101 |
| Fairway to Gruvön | 8396 |
| Fairway to Karlstad | 8396 |
| Fairway to Kristinehamn | 8396 |