



Eisbericht Nr. 12

Amtsblatt des BSH

Jahrgang 95

Nr. 12

Tuesday, 14.12.2021

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Übersicht

In der nördlichen Bottenwiek liegt in den Schären Festeis und weiter außerhalb sehr dichtes Eis und Neueis. In der südlichen Bottenwiek und Norra Kvarken liegt in den Schären dünnes, ebenes Eis, im Osten örtlich auch Festeis, sowie Neueis. Entlang der Küsten der Bottensee, dem Schärenmeer und der Ålandsee liegt dünnes ebenes Eis oder Neueis. Im Finnischen Meerbusen liegt dünnes, ebenes Eis oder Neueis entlang der Nordküste und im Osten zumeist dünnes, ebenes Eis oder Festeis. Im Rigaischen Meerbusen befindet sich dünnes, ebenes Eis und Neueis im Moonsund und in der Pärnubucht. Neueis und seltener dünnes, ebenes Eis kommt örtlich in der nördlichen Ostsee, den Haffgebieten der südöstlichen Ostsee, dem Skagerrak und dem Vänern vor.

Overview

In the northern Bay of Bothnia, there is fast ice in the archipelagos, and very close ice and new ice further out. In the southern Bay of Bothnia and Norra Kvarken, there is thin level ice, in the east also fast ice at places, and new ice. Along the coasts of the Sea of Bothnia, the Archipelago Sea and Åland Sea, there is thin level ice or new ice. In the Gulf of Finland, thin level ice or new ice is present along the northern coast. Thin level ice or fast ice is present in the eastern part. In the Gulf of Riga, there is thin level ice and new ice in Moonsund and Pärnu Bay. New ice and rarely thin level ice occurs at places in the northern Baltic, in the lagoons of the southeastern Baltic, in the Skagerrak and Lake Vänern.

Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 10–25 cm thick fast ice in the west and 10–30 cm thick fast ice in the east. Further out in the east, there is 5–25 cm thick, very close ice to the line Malören – Kemi-1 – Oulu-1 – Raahe. From Malören to Oulu-1, there is a brash ice barrier at the ice edge. Rafting occurs at places. Further out,

there is some new ice. Off the fast ice in the west, there are areas with 5–15 cm close to very close ice and new ice further out. In the southern Bay of Bothnia, there is thin level ice or 10–20 cm thick fast ice and new ice further out.

No larger changes are expected the coming day. The ice drift will be mostly to the northeast.

Norra Kvarken

In the archipelagoes off Vaasa, there is 5–25 cm thick fast ice. A long the Swedish coast and around Holmöarna, there is mostly thin level ice and new

ice further out.

No larger changes are expected the coming day. Ice drift will be to the northeast.

Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

www.bsh.de/eis

www.bsh.de/ice

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Sea of Bothnia

On upper Ångermanälven, there is 10–20 cm fast ice. At places in the northern Sea of Bothnia and along the Finnish coast, there is thin level ice.

Else, there is new ice along the coast.
No larger changes are expected the coming day.

Archipelago and Åland Sea

New ice and thin level is present in sheltered places in the Archipelago and Åland Sea.

Some ice melt might occur the coming day but else no larger changes.

Gulf of Finland

From St. Petersburg to Kotlin and north of Kotlin, there is 5–15 cm thick very close ice. In the Bay of Vyborg, there is 5–15 cm fast ice in the top and farther out first level ice and close nilas. In the Bjerkesund and the entrance, there is very close nilas. In the archipelagoes of the northern coast, there is thin level ice in the east and new ice in the west. Along the southern coast, there is new ice in

a few places. In the northern lake Saimaa, there is 5–20 cm thick level ice and new ice. In the southern Lake Saimaa and Saimaa Canal, 5–20 cm thick broken ice occurs.

The coming day no larger changes are expected but some ice melt might occur in the west. Ice drift will be mostly north-eastwards.

Gulf of Riga

There is very close nilas in Moonsund and nearby shallow bays. On the fairways, there is very open drift ice in the north and close drift ice in the south.

In Pärnu Bay, there is thin level ice.
Some ice melt might occur the coming day.

Northern Baltic

In Lake Mälaren, thin level ice is present in the westernmost part and some sheltered bays. Else, there is new ice in a few sheltered bays along the

Swedish coast.
No larger change is expected.

Southeastern Baltic

In the Curonian Lagoon and Vistula Lagoon, new ice is present.

Ice is melting the coming day.

Swedish Lakes

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

No larger change is expected.

Skagerrak

New ice is present in a few sheltered bays.

Ice is melting the coming day.

Dr. W. Aldenhoff

Restrictions to Navigation

| | Harbour/District | At least dwt/hp/kW | Ice Class | Begin |
|----------------|--|-----------------------|-----------|---------------|
| Estonia | Pärnu | 1600 kW | 1C | 17.12. |
| Finland | Tornio, Kemi and Oulu | 2000 dwt | I | 11.12. |
| | Kalajoki, Kokkola, Pietarsaari and Vaasa | 2000 dwt | II | 08.12. |
| | Raahe | 2000 dwt | I | 11.12. |
| | Northern Lake Saimaa | 2000 dwt | II | 08.12. |
| | Southern Lake Saimaa and Saimaa Canal | 2000 dwt | II | 11.12. |
| Sweden | Haraholmen and Skelleftehamn | 2000 dwt | II | 04.12. |
| | Karlsborg and Luleå | 2000 dwt | IC | 11.12. |
| | Ångermanälven | 1300/2000 dwt | IC/II | 04.12. |
| | Köping and Västerås | 1300/2000 dwt | IC/II | 06.12. |

Information of the Icebreaker Services

Estonia

Icebreaker: EVA-316 assists to the port of Pärnu.

Finland/Sweden

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 78. 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:

OTSO, KONTIO, **FREJ** and YMER assist in the Bay of Bothnia. PROTECTOR and CALYPSO assist in the northern Lake Saimaa. METEOR assists in the southern Lake Saimaa and the Saimaa Canal.

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

| | |
|--|--|
| <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, 14.12.2021

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|----------------------------------|------|
| Shipping route from Narva-Jõssuu | 1000 |
| Kunda, port and bay | 1000 |
| Paernu, port and bay | 5223 |
| Moonsund | 3111 |

Finland, 14.12.2021

| | |
|---|------|
| Roeyttae – Etukari | 8346 |
| Etukari – Ristinmatala | 5756 |
| Ajos – Ristinmatala | 5756 |
| Ristinmatala – Kemi 2 | 5746 |
| Kemi 2 – Kemi 1 | 5746 |
| Sea area SW of Kemi 1 | 4246 |
| Kemi 2 – Ulkokrunni – Virpiniemi | 8346 |
| Oulu harbours – Kattilankalla | 8346 |
| Kattilankalla – Oulu 1 | 4746 |
| Sea area SW of Oulu 1 | 1006 |
| Raahe harbour – Heikinkari | 4746 |
| Heikinkari – Raahe lighthouse | 4126 |
| Raahe lighthouse – Nahkiainen | 0//6 |
| Rahja harbour – Välimatala | 2015 |
| Vaelimatala to line Ulkokalla – Ykskivi | 0//5 |
| Ykspihlaja – Repsaer | 5745 |
| Repskaer – Kokkola lighthouse | 2005 |
| Sea area off Kokkola lighthouse | 0//5 |
| Pietarsaari – Kallan | 1105 |
| Vaskiluoto – Ensten | 5245 |
| Ensten – Vaasa lighthouse | 0//5 |
| Vaasa lighthouse – Norrskær | 0//5 |

| | |
|--------------------------------------|------|
| Kaskinen – Sälgrund | 5242 |
| Rauma, Harbour – Kylmäpihlaja | 5142 |
| Kylmäpihlaja – Rauma lighthouse | 1000 |
| Uusikaupunki harbour – Kirsta | 5142 |
| Naantali and Turku – Rajakari | 1000 |
| Koverhar – Hästö Busö | 4001 |
| Inkoo a. Kantvik – sea area Porkkala | 3001 |
| Helsinki harbours – Harmaja | 2001 |
| Valko Harbour – Täktarn | 5142 |
| Kotka – Viikari | 2001 |
| Hamina – Suurmusta | 5142 |
| Suurmusta – Merikari | 1002 |

Russian Federation, 13.12.2021

| | |
|--|------|
| Port of St. Petersburg | 51/2 |
| St. Petersburg – E-point island Kotlin | 51/2 |
| E-point Kotlin – long. lighth. Tolbukhin | 4011 |
| Vyborg, port and bay | 82/2 |
| Island Vichrevoj – Island Sommers | 51/2 |
| Strait Bjerkesund | 51/2 |
| E-point Bol'–oj Ber'ozovyj – epelevskij | 40/2 |

Sweden, 14.12.2021

| | |
|-----------------------------|------|
| Karlsborg – Maloeren | 8346 |
| Sea area off Maloeren | 4046 |
| Luleå – Bjoernklack | 8346 |
| Bjoernklack – Farstugrunden | 4046 |
| E and SE of Farstugrunden | 4046 |
| Sandgroenn fairway | 8346 |

| | |
|------------------------------------|------|
| Roedkallen – Norstroemsgrund | 4256 |
| Haraholmen – Nygrån | 8346 |
| Sea area off Nygrån | 5256 |
| Skelleftehamn – Gåsoeren | 5246 |
| Sea area off Gåsoeren | 4046 |
| Sea area off Bjuroeklubb | 4041 |
| Western Quark (W of Holmoearna) | 5142 |
| Umeå – Vaektaren | 4041 |
| Fairway to Husum | 4041 |
| Oernskoeldsvik – Hoernskaten | 5142 |
| Hoernskaten – Skagsudde | 4041 |
| Ångermanaelven north Sandoe Bridge | 8344 |
| Ångermanaelven south Sandoe Bridge | 8344 |
| Sundsvall – Draghaellan | 5142 |
| Draghaellan – Åstholmsudde | 5041 |
| Hudiksvallfjaerden | 4041 |
| Iggesund – Agoe | 5041 |
| Sandarne – Haellgrund | 5041 |
| Gaevle – Eggegrund | 4041 |
| Hallstavig – Svartklubben | 5041 |
| Koeping – Kvicksund | 5144 |
| Västerås – Grönsö | 5144 |
| Stockholm – Södertälje | 5144 |
| Norrköping – Hargökalv | 5041 |
| Fairway to Karlstad | 5142 |
| Fairway to Kristinehamn | 5041 |