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BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

Eisbericht Nr. 15

Amtsblatt des BSH

Jahrgang 95	Nr. 15	Friday, 17.12.2021	1

Übersicht

In der nördlichen Bottenwiek liegt in den Schären Festeis und weiter außerhalb sehr dichtes Eis im Nordosten und sehr lockeres bis sehr dichtes Eis im Westen. In der südlichen Bottenwiek und Norra Kvarken liegt in den Schären dünnes, ebenes Eis und im Osten zumeist Festeis. Entlang der Küsten der Bottensee, dem Schärenmeer und der Ålandsee liegt dünnes ebenes Eis oder Neueis. Im Finnischen Meerbusen liegt entlang der Nordküste dünnes, ebenes Eis oder Neueis und im Osten zumeist dünnes, ebenes Eis oder Festeis. Im Rigaischen Meerbusen befindet sich zumeist dünnes, ebenes Eis im Moonsund und in der Pärnubucht. Neueis und seltener dünnes, ebenes Eis kommt örtlich in der nördlichen Ostsee, den Haffgebieten der südöstlichen Ostsee 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 and in the east mostly fast ice in the archipelagos. 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 mostly thin level 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 and Lake Vänern.

Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 15–30 cm thick fast ice. Further out in the east, there is 5–25 cm thick, very close ice to slightly south of the line Malören – Kemi-1 – Hammasmatala. At the ice edge, there is a brash ice barrier. Off the fast ice in the west, there is mostly very open, 5–15 cm thick ice to the line Nygrån – Farstugrunden and open ice further out to Falkensgrund. In the southern Bay of Bothnia, there is thin level ice and in the east mostly 10–20 cm thick fast ice in the archipelagos. Further out in the west is open water.
No larger changes are expected over the weekend but the ice will drift mostly to southeast/east.

Norra Kvarken

In the archipelagoes off Vaasa, there is mostly 5–25 cm thick fast ice. Along the Swedish coast and around Holmöarna, there is mostly thin level ice and open water further out.
Some ice melt will occur the coming days. Ice drift will be to the southeast.

Herstellung und Vertrieb
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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.
Some ice melt is expected over the weekend.

Archipelago and Åland Sea
New ice and thin level is present in sheltered places in the Archipelago and Åland Sea.
Some ice melt is expected over the weekend.

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 10–15 cm fast ice in the top and open nilas in the entrance. In the Bjerkesund, there is very close nilas in the north and open water in the south. In the archipelagoes of the northern coast, there is thin level ice and very open ice further out 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 10–25 cm thick level ice and new ice. In the southern Lake Saimaa and Saimaa Canal, 5–20 cm thick broken ice with some open spots occurs.
With temperatures slightly above or around the freezing point, some ice melt is expected over the weekend. The ice will drift mostly in southeasterly directions, on Saturday also eastwards.

Gulf of Riga
In Moonsund and nearby shallow bays, there is very close, 5–10 cm thick nilas. On the fairways is mostly open water. In Pärnu Bay, there is very close, 5-10 cm thick nilas. In the western part, there is also very open ice at places.
Some ice melt is expected over the weekend. Ice drift will be mostly in southerly directions.

Northern Baltic
In Lake Mälaren, thin level ice is present in the westernmost part and some sheltered bays. Else, there is new ice in very few sheltered bays along the Swedish coast.
Ice melt will continue over the weekend.

Southeastern Baltic
In the Curonian Lagoon new ice is present mostly in the eastern part, and in Vistula Lagoon, new ice is present at places.
Ice melt will continue over the weekend.

Swedish Lakes
New ice and thin level ice are present in sheltered bays of Lake Vänern.
Ice melt will continue over the weekend.

Skagerrak
Almost ice free.

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, Oulu and Raahe	2000 dwt	I	11.12.
	Kalajoki, Kokkola, Pietarsaari and Vaasa	2000 dwt	II	08.12.
	Kokkola and Vaasa	**2000 dwt**	**I**	**22.12.**
	Loviisa, Kotka and Hamina	**2000 dwt**	**I**	**22.12.**
	Northern Lake Saimaa	2000 dwt	II	08.12.
	Southern Lake Saimaa and Saimaa Canal	2000 dwt	II	11.12.
	Lake Saimaa and Saimaa Canal	**2000 dwt**	**I**	**22.12.**
Sweden	Karlsborg and Luleå	2000 dwt	IC	11.12.
	Haraholmen and Skelleftehamn	2000 dwt	II	04.12.
	Haraholmen and Skelleftehamn	**2000 dwt**	**IC**	**22.12.**
	Holmsund, Rundvik and Husum	**2000 dwt**	**II**	**22.12.**
	Örnsköldsvik	**2000 dwt**	**II**	**22.12.**
	Ångermanälven	1300/2000 dwt	IC/II	04.12.
	Ångermanälven	**2000 dwt**	**IC**	**22.12.**
	Härnösand- Skutskär	**2000 dwt**	**II**	**22.12.**
	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

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

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

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

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 after special permission
8 Navigation temporarily closed
9 Navigation has ceased
/ Unknown

Estonia, 17.12.2021

Paernu, port and bay	5282
Moonsund	3181

Finland, 17.12.2021

Roeyttae – Etukari	8346
Etukari – Ristinmatala	5756
Ajos – Ristinmatala	5756
Ristinmatala – Kemi 2	5746
Kemi 2 – Kemi 1	5746
Sea area SW of Kemi 1	5766
Kemi 2 – Ulkokrunni – Virpiniemi	8346
Oulu harbours – Kattilankalla	8346
Kattilankalla – Oulu 1	5266
Sea area SW of Oulu 1	0//6
Raahe harbour – Heikinkari	7246
Heikinkari – Raahe lighthouse	0//6
Raahe lighthouse – Nahkiainen	0//6
Rahja harbour – Välimatala	2015
Vaelimatala to line Ulkokalla – Ykskivi	0//5
Ykspihlaja – Repsaer	4745
Repskaer – Kokkola lighthouse	0//5
Sea area off Kokkola lighthouse	0//5
Pietarsaari – Kallan	1105
Vaskiluoto – Ensten	7245
Ensten – Vaasa lighthouse	0//5
Vaasa lighthouse – Norrskaer	0//5
Kaskinen – Sälgrund	4242
Rauma, Harbour – Kylmäpihlaja	5142
Uusikaupunki harbour – Kirsta	4142
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, 17.12.2021

Port of St. Petersburg	51/2
St. Petersburg – E-point island Kotlin	51/2
E-point Kotlin – long. lighth. Tolbuhkin	1000
Vyborg, port and bay	82/2
Island Vichrevoj – Island Sommers	31/1

Sweden, 17.12.2021

Karlsborg – Maloeren	8346
Sea area off Maloeren	5376
Luleå – Bjoernklack	8346
Bjoernklack – Farstugrunden	3326
E and SE of Farstugrunden	3326
Sandgroenn fairway	8346
Roedkallen – Norstroemsgrund	3326
Haraholmen – Nygrån	8346
Sea area off Nygrån	2326
Skelleftehamn – Gåsoeren	1206
Sea area off Gåsoeren	1206

Sea area off Bjuroeklubb	1201
NE of Nordvalen	1201
SW of Nordvalen	1201
Western Quark (W of Holmoearna)	5142
Umeå – Vaektaren	1201
SE of Vaektaren	1201
NE and SE of Sydostbrotten	1201
Oernskoeldsvik – Hoernskaten	5142
Ångermanaelven north Sandoe Bridge	8344
Ångermanaelven south Sandoe Bridge	8344
Sundsvall – Draghaellan	5142
Draghaellan – Åstholmsudde	1101
Hudiksvallfjaerden	2121
Iggesund – Agoe	2121
Sandarne – Haellgrund	5142
Gaevle – Eggegrund	5142
Hallstavik – Svartklubben	3021
Koeping – Kvicksund	5144
Västerås – Grönsö	5144
Grönsö – Södertälje	5144
Stockholm – Södertälje	5144
Fairway to Karlstad	5142
Fairway to Kristinehamn	5142