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BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

Eisbericht Nr. 17

Amtsblatt des BSH

Jahrgang 97	Nr. 17	Thursday, 07.12.2023	1

Übersicht

In der nördlichen Bottenwiek befindet sich in den Schären bis 35 cm dickes Festeis und ebenes Eis. Weiter außerhalb treibt bis zu 15 cm dickes, dichtes bis sehr dichtes Eis. Weiter südlich bis Norra Kvarken liegt an den Küsten ebenes Eis und weiter außerhalb treibt dünnes, dichtes Eis und Neueis. An den Küsten der Bottensee, in den nördlichen Schären und östlichen Buchten des Finnischen Meerbusens und im nördlichen Teil des Rigaischen Meerbusen kommt dünnes, ebenes Eis und Neueis vor. Im gesamten südlichen Bereich der Ostsee kommt an geschützten Stellen örtlich Neueis vor. Neueis kommt auch in einigen geschützten Fjords im Skagerrak vor.

Overview

In the northern Bay of Bothnia there is up to 35 cm thick fast ice and level ice in the archipelagos. Further out, up to 15 cm thick, close to very close ice is drifting at sea. Further south, up to Norra Kvarken, there is level ice along the coast and further out new ice and thin close ice. At the coasts of the Sea of Bothnia, in the northern archipelagos and the eastern bays of the Gulf of Finland and in the northernmost part of the Gulf of Riga there is new ice and thin level ice. New ice can also be found in some sheltered places of the whole southern Baltic region. New ice is also present in sheltered fjords of the Skagerrak.

Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia there is up to 35 cm thick fast ice with adjacent level ice. Off the ice in the west, there is new ice and smaller areas of very close ice. At sea in the northern and eastern part, close to very close, 5–15 cm thick drifting ice is present to about a line from east of Farstugrunden to west of Nahkiainen and Ulkokalla. Off Raahe there is thin level ice and further out at sea drifting new ice and ice formation. Further south there is up to 15cm thick level ice at the coast and new ice and up to 15cm thick, close ice farther out.
With moderate frost and a moderate breeze from the southeast, ice formation and growth will continue with the ice drifting northwestwards.

The Quark

There is thin fast or level ice in the Vaasa archipelago and from Vaasa to Storhästen. Farther out there is drifting new ice to Norra Glopsten and new ice formation further out to Norrskär. Along the Swedish coast there is thin level ice and up to 10 cm thick very close further out to Nordvalen and Holmögadd. At sea there is very open new ice.
With light to moderate frost ice formation and ice growth will continue. With a moderate southeasterly breeze the ice will drift northwestwards.

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Sea of Bothnia
Thin level ice is present in bays along the whole Finnish coast with new ice and ice formation slightly further out. Along the Swedish coast, there is new ice or thin level ice in bays and at sea along the coast. On Ångermanälven, there is 5–15 cm thick fast and level ice on the upper part and new is present in the lower part.
With light frost at the eastern coast and temperature around 0°C in the southwest, ice formation and ice growth will be low.

Archipelago Sea and Åland Sea
In the inner archipelago there is thin level ice and new ice.

With light frost in the east some ice growth is expected there.

Northern Baltic
In Lake Mälaren there is thin level and new ice in the west and new ice in the east with the central part being still ice free. New ice is present in sheltered places at the outer coast.
With light frost ice formation and ice growth will be low.

Gulf of Finland
In the top of Vyborg Bay there is 10-15cm thick fast ice and new ice further out. In the northern part of the Bjerkesund there is dark nilas and very close ice. From St. Petersburg to Kotlin there is 10-15cm thick compact ice with new ice further out. Along the northern coast there is thin level ice and new ice in the inner archipelagos. Somewhat further out open water. In Lake Saimaa there is thin ice and new ice.
With moderate frost in the east and slight frost in the west and a gentle breeze from the southeast, ice formation and ice growth will continue.

Gulf of Riga
In Väinameri there is up to 10cm thick close ice at sea and level or fast ice at the coasts. In the Bay of Pärnu there is a narrow fast ice band and further out to Manilaiu-Voiste there is light and dark nilas.
With mostly slight frost and a fresh breeze from the southeast no major changes are expected.

Southeastern Baltic
New ice is present in the Curonian Lagoon and in the Vistula lagoon.

With mostly slight frost some ice formation may occur, but overall no larger changes are expected.

Southwestern Baltic
New ice is present at places in some sheltered places of inner waters like the Schlei and the Peenestrom.

With air temperatures around zero, no larger changes are expected .

Skagerrak and Kattegat
Ice formation and new ice is present in sheltered places of inner Norwegian Fjords and in some sheltered areas along the Swedish coast.

With mostly slight frost, some ice formation may occur especially in the northern Fjords.

Swedish Lakes
Thin level ice and new ice is present in sheltered areas of Lake Vänern.

With only slight frost expected, no larger changes will occur.

Dr. J.Holfort

Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Finland	Tornio, Kemi and Oulu	2000 dwt	II	22.11.
	Tornio, Kemi and Oulu	**2000 dwt**	**I**	**09.12.**
	Raahe, Kalajoki, Kokkola, Pietarsaari and Vaasa	2000 dwt	II	06.12.
	Taalintehdas, Förby, Koverhar, Lappohja, Inkoo, Kantvik, Helsinki, Sköldvik, Loviisa, Mussalo, Kotka and Hamina	**2000 dwt**	**II**	**09.12.**
	Lake Saimaa	2000 dwt	II	02.12.
	Lake Saimaa	**2000 dwt**	**I**	**08.12.**
	Saimaa Canal	2000 dwt	II	02.12.
	Saimaa Canal	**2000 dwt**	**I**	**08.12.**
Sweden	Haraholmen	2000 dwt	IC	05.12.
	Karlsborg and Lulea	2000 dwt	IC	02.12.
	Skelleftehamn	2000 dwt	IC	05.12.
	Holmsund	**2000 dwt**	**II**	**09.12.**
	Rundvik, Husum and Örnsköldsvik	**2000 dwt**	**II**	**12.12.**
	Angermanälven	1300/2000 dwt	IC/II	29.11.
	Angermanälven	**2000 dwt**	**IC**	**12.12.**
	Köping	1300 dwt	IC	05.12.
	Västeras	1300/2000 dwt	IC/II	05.12.
	Trollhätte Canal and Göta Älv	1300/2000 dwt	IC/II	05.12.
	Vänern	1300/2000 dwt	IC/II	05.12.

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 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: KONTIO, ALE, OTSO and YMER assist in the northern Bay of Bothnia. is heading for the Bay of Bothnia.

Russia

There are restrictions for small crafts going to St. Petersburg, Vyborg, Vysotsk, Primorsk and Ust-Luga.

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

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

Finland, 06.12.2023

Röyttä – Etukari	8345
Etukari – Ristinmatala	8345
Ajos – Ristinmatala	5755
Ristinmatala – Kemi 2	5145
Kemi 2 – Kemi 1	5145
Sea area SW of Kemi 1	5145
Kemi 2 – Ulkokrunni – Virpiniemi	7745
Oulu harbours – Kattilankalla	8345
Kattilankalla – Oulu 1	5155
Sea area SW of Oulu 1	5255
High Sea N of the latitude of Marjaniemi	5145
Raahe harbour – Heikinkari	5145
Heikinkari – Raahe lighthouse	5145
Raahe lighthouse – Nahkiainen	5155
Latitude Marjaniemi – Ulkokalla, Sea	5155
Rahja harbour – Välimatala	7145
Vaelimatala to line Ulkokalla – Ykskivi	4145
Sea betw. lat. of Ulkokalla –Pietarsaari	4145
Ykspihlaja – Repskär	5245
Repskär – Kokkola lighthouse	4145
Sea area off Kokkola lighthouse	4005
Pietarsaari – Kallan	4045
Sea area off Kallan	4045
Sea area ENE of Nordvalen	5145
Sea area Nordvalen to W of Norrskär	5145
Vaskiluoto – Ensten	5245
Ensten – Vaasa lighthouse	4145
Vaasa lighthouse – Norrskär	4045
Kaskinen – Sälgrund	4041
Sea area off Sälgrund	4041
Pori harb. to line Pori lighth. – Säppi	4142
Rauma, Harbour – Kylmäpihlaja	4041
Kylmäpihlaja – Rauma lighthouse	3001
Uusikaupunki harbour – Kirsta	5142
Kirsta – Isokari	4041
Naantali and Turku – Rajakari	4041
Koverhar – Hästö Busö	4041
Inkoo a. Kantvik – sea area Porkkala	5142
Helsinki harbours – Harmaja	4041
Valko Harbour – Täktarn	4041
Archipelago fairway Boistö – Glosholm	4041
Kotka – Viikari	4041
Viikari – Orrengrund	4041
Hamina – Suurmusta	5142

Estonia, 07.12.2023

Paernu, port and bay	4131
Moonsund	3131

Russian Federation, 07.12.2023

Port of St. Petersburg	62//
St. Petersburg – E-point island Kotlin	52//
E-point Kotlin – long. lighth. Tolbuhkin	40//
Lighth. Tolbuhkin – lighth. –Šepelevskij	20//
Vyborg, port and bay	82//
Strait Bjerkesund	50//
Luga bay	20//