

Eisbericht Nr. 40

Amtsblatt des BSH

Jahrgang 97

Nr. 40

Friday, 12.01.2024

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Übersicht

In der Bottenwiek befindet sich in den nördlichen Schären bis 55 cm dickes, in den südlichen bis 40 cm dickes Festes Eis. Auf See treibt im Osten zuerst 10-30cm dickes, sehr dichtes, übereinandergeschobenes Eis, gefolgt von ebensolchen, aber 10-40 cm dicken Eisschichten, welches dazu noch aufgepresst ist. Im Norden und Westen befinden sich teilweise mit Neueis bedeckte Rinnen. An den Küsten von Norra Kvarken liegt bis 35 cm dickes Festes Eis und auf See treibt im Osten sehr dichtes und im Westen sehr lockeres Eis. An den Küsten der Bottensee kommt im Osten bis 30 cm und im Westen bis 20 cm dickes Festes Eis vor. Davor treibt im Osten ein schmaler Streifen sehr dichtes Eis und im Südwesten sehr lockeres Eis. Das Schärenmeer ist mit dünnem, ebenen Eis bedeckt. Im Osten und Norden des Finnischen Meerbusens liegt bis 35 cm dickes Festes Eis und davor treibt sehr lockeres bis sehr dichtes, dünnes Eis. Im Rigaischen Meerbusen kommt bis zu 30 cm dickes Festes Eis vor und vor den Küsten treibt Neueis. Neueis und örtlich dickeres Eis kommt im Vänern und in geschützten Teilen der zentralen und südöstlichen Ostsee wie auch im Skagerrak vor. Neueis kommt örtlich in der Nordsee, dem Kattegat, in den Belten und Sund sowie der westlichen Ostsee vor.

Overview

In the Bay of Bothnia there is fast ice in the archipelagos, up to 55 cm thick in the north and up to 40 cm thick in the south. At sea in the east there is 10–30 cm thick, rafted, very close ice, followed by 20–40 cm thick very close ice which is rafted and ridged. In the north and west there are leads which are partly covered by new ice. In the Quark there is up to 35 cm thick fast ice at the coasts and at sea there is very close ice in the east and very open ice in the west. At the coasts of the Sea of Bothnia there is fast ice, up to 30 cm thick in the east and up to 20 cm thick in the west. Further out there is a small region with very close ice in the east and very open ice is present further out in the southwest. Thin level ice covers the Archipelago Sea. There is up to 35 cm thick fast ice at the eastern and northern coast of the Gulf of Finland and further out there is very open to very close thin ice. In the Gulf of Riga there is up to 20 cm thick fast ice in the northeast and outside the coasts there is new ice. New ice and at places thicker ice is present in the Vänern and at sheltered places of the central and southeastern Baltic proper as well as in the Skagerrak. New ice occurs also in sheltered places in the North Sea, Kattegat, belts and Sound and the Western Baltic.

Bay of Bothnia

In the archipelagos of the Bay of Bothnia there is fast ice; 20–40 cm thick in the northwest, 30–55 cm thick in the northeast and up to 25–40 cm thick in the southern part. Off the fast ice in the north

there is a new ice covered lead. At sea there is mostly 10–30 cm thick, rafted very close ice in the east with 25–40 cm thick, ridged, very close ice further west. Outside Swedish side there is first up

Herstellung und Vertrieb

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to 20cm thick, close to very close in the north; further out runs a wide navigable lead from about Norströmsgrund down to the Quark. A narrow zone with close ice separates this lead from the one in the north.

The Quark

There is 10–35 cm thick fast ice in the Vaasa archipelago and out to about Norra Glopsten. Further out to about 5 NM west of Norrskär there is 15–25 cm thick, very close ice. Along the Swedish coast there is up to 20 cm thick fast ice in inner bays with in places very close ice slightly further out and then mostly very open ice at sea. Around

Sea of Bothnia

Thin level ice or 5–30 cm thick fast ice is present in bays along both coasts. Further out at the Finnish coast there is a narrow belt of thin very close ice. Outside the Swedish coast there is very open ice, with some ridged, very close ice present in the south. On Ångermanälven, there is 10–25 cm thick fast ice on the upper part and new ice or thin level ice is present in the lower part. North of 63°N there

Archipelago Sea and Åland Sea

In the Archipelago Sea there is 5–15 cm thick level or fast ice in the inner archipelago and 2–10 cm thick, level ice reaching to the Åland Islands. In the Åland Sea there is 5–15 cm thick fast or level ice in

Northern Baltic

In Lake Mälaren there is 5–20 cm thick fast ice in the west, level ice in the central part and new ice and in the east. New ice or thin level ice is present

Gulf of Finland

From St. Petersburg to Kotlin there is 20–35 cm thick fast ice, further out along the southern shore there is 3-15cm tick, very close ice. In the Bjerkesund there is 10-15cm thick fast and in the Vyborg Bay there is 15–25 cm thick fast ice. At sea, there is thin, very open to open ice east of about 28°20'E and open water further west. Along the northern coast there fast ice in the archipelago, 5–20 cm thick in the west and up to 35 cm thick in the east.

Gulf of Riga

In Väinameri there is 10–30 cm thick fast ice near the coasts. Farther out and on the fairway there is very close ice or level ice. In the Bay of Pärnu, there is 10-20 cm thick fast ice to the line Liu – Voiste followed by very close ice to a line from Manilaid to Häädemeeste. Further out is very open to close ice to the longitude of Kihnu. Off the

Central Baltic

New ice is present along the Swedish coast, the Kalmarsund and along the coast of Öland. At the Latvian coast open water with thin ice is present in

With strong to severe frost further ice formation and ice growth is expected over the weekend. As mostly northerly winds are expected, no larger change is expected in the ice distribution, but the leads will close due to freezing.

Holmöarna there is fast ice and west of it a mix from new ice up to 10-30cm thick, very close ice. With light to moderate frost ice formation and ice growth is expected over the weekend. The wind will veer from southerly to northerly with the expectation of an overall slight southerly ice drift

is open water at sea.

With light to moderate frost ice formation and ice growth is expected over the weekend. The expected wind is mostly weak and will veer from southerly to northerly. The ice distribution will not change very much but will expand slightly towards the open sea.

bays and new ice is drifting close to the coast.

With moderate frost in the east ice formation is expected. The ice drift is mostly slow and in variable directions.

in sheltered places at the outer coast.

With light frost some ice may form, but overall no larger changes are expected.

Further out is thin very open ice in the east and open water in the west. At the southern shore there is level ice near the shore of Luga and Kunda Bay and open ice further out in Luga Bay. There is new ice in the Kunda bay. In Lake Saimaa there is 15–40 cm thick fast ice.

With strong frost, especially in the east, ice formation and growth is expected over the weekend. The overall ice drift will be towards the north.

northern coast of the Gulf of Riga there is thin drifting open ice and new ice. Along the western coast there is some new ice.

With moderate frost expected over the weekend ice formation and growth will take place. The ice drift is variable, but overall the ice will drift in northerly directions.

the harbor of Liepaja.

With light frost over the weekend, some new ice formation, but no larger changes are expected.

Southeastern Baltic

New ice and thin very close ice covers the Vistula Lagoon and the Curonian Lagoon.

With temperatures around or slightly above 0 °C no larger changes are expected.

Southern Baltic

New ice is present in the eastern archipelagos along the Swedish coast.

With temperatures around 0°C no larger changes are expected.

Western Baltic

New ice is present in sheltered coastal areas. With fresher winds and temperatures slightly

above 0 °C the ice present will disappear over the weekend.

Skagerrak, Kattegat, Belts and Sound

In the Svinessund there is 15–30 cm thick open ice, in the Mossesundet there is a lead in very close, 15–30 cm thick ice, in Vestfjorden at Tønsberg and the inner harbour there is 10–15 cm thick fast ice. Near Kragerø there is new ice and 10–15 cm thick fast ice. New ice can also be found in other Nor-

wegian Fjords. Along the Swedish and Danish coast, there is new ice in few sheltered areas. With mostly light frost along the coast in the northern Skagerrak some new ice formation is possible. Else no larger changes are expected with some melt in the Belts and Sound.

Swedish Lakes

Thin level ice is present in the southern part and in sheltered areas elsewhere in Lake Vänern. New ice is forming at sea in the west and north.

With light frost over the weekend some new ice will form but overall no larger changes are expected.

North Sea

Some parts of the Limfjord are covered with new ice and new ice is present also in few sheltered or shallow places along the coast.

With temperatures mostly above 0 °C the ice will mostly disappear over the weekend.

Dr. J. Holfort

Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Estonia	Pärnu	1600 kW	1C (Lloyd's)	22.12.
Finland	Tornio, Kemi and Oulu Tornio, Kemi and Oulu Vaasa Raahe, Kalajoki, Kokkola and Pietarsaari Raahe, Kalajoki, Kokkola and Pietarsaari Pori and Rauma Pori and Rauma Kaskinen, Kristiinankaupunki and Uusikaupunki Naantali, Turku, Eckerö, Maarianhamina and Langnäs Taalintehtdas, Förby, Koverhar, Lap-pohja, Inkoo, Kantvik, Helsinki, Sköldvik and Mussalo Taalintehtdas, Förby, Koverhar, Lap-pohja, Inkoo and Kantvik Hanko Loviisa, Kotka and Hamina Lake Saimaa Saimaa Canal	2000 dwt 2000/4000 dwt 2000 dwt 2000 dwt 4000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt	IA IA Super/IA IA IA IA II I I II II II II I IA IA	07.01. 13.01. 10.01. 07.01. 13.01. 01.01. 13.01. 10.01. 13.01. 09.12. 13.01. 13.01. 07.01. 08.01. 08.01.

Russia	Vyborg Vysotsk Ust-Luga	- - -	Ice 1 Ice 1 Ice 1	30.12. 30.12. 29.12.
Sweden	Karlsborg and Lulea Karlsborg Lulea Haraholmen and Skelleftehamn Haraholmen and Skelleftehamn Rundvik and Husum Örnsköldsvik Rundvik, Husum and Örnsköldsvik Holmsund Angermanälven Härnösand, Söråker, Sundsvall, Stocka, Hudiksvall, Iggesund, Söderhamn, Orrskär and Norrsundet Härnösand, Söråker, Sundsvall, Stocka, Hudiksvall, Iggesund, Söder- hamn, Orrskär and Norrsundet Gävle Gävle Skutskär, Öregrund and Hargshamn Skutskär and Öregrund Hallstavik and Grisslehamn Kappelskär, Stockholm, Nynäshamn and Södertälje Köping and Västeras Balsta Balsta Oxelösund, Norrköping, Västervik, Oskarshamn, Mönsteras, Kalmar, De- gerhamn, Berkvara and Karlskrona Stenungsund and Uddevalla Trollhätté Canal and Göta Älv Vänern Trollhätté Canal and Göta Älv Vänern	2000 dwt 4000 dwt 4000 dwt 2000 dwt 4000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000/4000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt 2000 dwt	IA IA (4000 t) IA IA IA IB IB IB IB IB IC IB IB IB II IB IB II II IC IC IB	09.01. 14.01. 14.01. 09.01. 14.01. 04.01. 18.12. 17.01. 04.01. 18.12. 04.01. 17.01. 04.01. 17.01. 04.01. 17.01. 04.01. 04.01. 04.01. 04.01. 04.01. 04.01. 14.01. 04.01. 16.01.

Estonia

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

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. Kalmarsund and 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, KONTIO, OTSO, SISU and URHO assist in the Bay of Bothnia. ATLE and POLARIS assist in the Quark. ZEUS assists in the Sea of Bothnia. VOIMA and CALYPSO assist the Gulf of Finland. ALE, EMBLA and SCANDICA assist in Vänern.

Norway

Mossesundet (Moss): Icebreaker assistance can only be given to vessels of special ice class and of special size. (05.01.24)

Drammensfjorden (Drammen), Skåtøysund (Kragerø), Kilsfjorden (Kragerø) and Hellefjorden (Kragerø): Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size. (08.01.24)

Langårsund (Kragerø): Navigation temporarily closed. (08.01.24)

Farsund: Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size. (11.01.24)

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

<p>First number: A_B Amount and arrangements of sea ice</p> <p>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</p> <p>Third number: T_B Topography or form of ice</p> <p>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 floes – 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</p>	<p>Second number: S_B Stage of ice development</p> <p>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</p> <p>Fourth number: K_B Navigation conditions in ice</p> <p>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 special permission 8 Navigation temporarily closed 9 Navigation has ceased / Unknown</p>
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Estonia, 12.01.2024

Shipping route from Narva-Jõssuu	4001
Kunda, port and bay	4001
Paernu, port and bay	8345
Shipp. route from Paernu to Irben Strait	4001
Irben Strait	2001
Moonsund	5353

Finland, 12.01.2024

Röyttä – Etukari	8446
Etukari – Ristinmatala	6856
Ajos – Ristinmatala	6856
Ristinmatala – Kemi 2	5356
Kemi 2 – Kemi 1	5876
Sea area SW of Kemi 1	5876

Kemi 2 – Ulkokrunni – Virpiniemi	7356	Sea area at Porkkala	1105
Oulu harbours – Kattilankalla	8446	Sea area S of Porkkala lighthouse	1105
Kattilankalla – Oulu 1	6746	Helsinki harbours – Harmaja	8145
Sea area SW of Oulu 1	5356	Harmaja – Helsinki lighthouse	2125
High Sea N of the latitude of Marjaniemi	5876	Helsinki lighth. – sea S of Porkkala lh.	1105
Raahe harbour – Heikinkari	7346	Fairway Helsinki – Porkkala – Rönnskär	5145
Heikinkari – Raahe lighthouse	5346	Vuosaari harbour – Eestiluoto	8145
Raahe lighthouse – Nahkiainen	5356	Eestiluoto – Helsinki lighthouse	2125
Latitude Marjaniemi – Ulkokalla, Sea	5876	Porvoo harbours – Varlax	8145
Rahja harbour – Välimatala	7356	Varlax – Porvoo lighthouse	2125
Välimatala to line Ulkokalla – Ykskivi	5356	Porvoo lighthouse – Kalbådagrund	0//5
Sea betw. lat. of Ulkokalla – Pietarsaari	5876	Valko Harbour – Täktarn	8746
Yksphlaja – Repskär	8346	Archipelago fairway Boistö – Glosholm	2126
Repskär – Kokkola lighthouse	7356	Archipelago fairway Glosholm–Helsinki	8145
Sea area off Kokkola lighthouse	5356	Kotka – Viikari	8745
Pietarsaari – Kallan	8346	Viikari – Orregrund	2125
Sea area off Kallan	5756	Orregrund – Tiiskeri	2126
Sea lat. Pietarsaari – NE Nordvalen	5876	Tiiskeri – Kalbådagrund	0//5
Sea area ENE of Nordvalen	5746	Hamina – Suurmusta	8746
Sea area Nordvalen to W of Norrskär	5746	Suurmusta – Merikari	8746
Vaskiluoto – Ensten	8346	Merikari – Kaunissaari	2126
Ensten – Vaasa lighthouse	7746		
Vaasa lighthouse – Norrskär	5746		
Sea area SW of Norrskär	5746	Germany, 11.01.2024	
Kaskinen – Sälgrund	8346	Wismar – Walfisch	1001
Sea area off Sälgrund	7746		
High sea from N to latitude Yttergrund	2126	Latvia, 12.01.2024	
Pori harb. to line Pori lighth. – Säppi	5745	Port of Riga	3112
Sea W of line Pori lighthouse – Säppi	0//5	Riga to the Cape of Mersrags, fairway	1000
Rauma, Harbour – Kylmäpihlaja	8745	Mersrags to Irben Strait, fairway	2000
Kylmäpihlaja – Rauma lighthouse	5145	Irben Strait, fairway	2111
Uusikaupunki harbour – Kirsta	8746	Irben Strait to the port of Ventspils	1000
Kirsta – Isokari	5146	Port of Liepaya	1000
Isokari – Sandbäck	5146		
Sea area off Sandbäck	5146	Norway, 12.01.2024	
Sea area N of Sälskär	5142	Svincesund – Halden	33//
Sea area N of Märket	2021	Mossesund	9856
Sea area W of Märket	5142	Drammensfjord	6315
Sea area S of Märket	2021	Tønsberg, inner harbour	82/3
Maarianhamina – Marhällan	5142	Vestfjord (Tønsberg)	82/3
The middle Åland Sea	4041	Larviksfjorden (Stavern – Larvik)	121/
Naantali and Turku – Rajakari	5142	Jomfrulandsrenna	3021
Rajakari – Lövskär	5142	Skåtøysund (Kragerø)	8145
Lövskär – Korra	5142	Langårsund (Kragerø)	8148
Korra – Isokari	5142	Kragerøfjord	3021
Lövskär – Berghamn	5142		
Berghamn – Stora Sottunga	5142	Russian Federation, 12.01.2024	
Stora Sottunga – Ledskär	5142	Port of St. Petersburg	88//
Sea area at Rödhamn	5142	St. Petersburg – E-point island Kotlin	88//
Lövskär – Grisselborg	5142	E-point Kotlin – long. lighth. Tolbuhkin	64//
Grisselborg – Norparskär	5142	Lighth. Tolbuhkin – lighth. –Šepelevskij	43//
Sea area at Vidskär	1101	Lighthouse Šepelevskij – island Sescar	42//
Hanko harbours – Hanko 1	1101	Island Sescar – Island Sommers	10//
Sea area S of Hanko 1	1101	Vyborg, port and bay	83//
Hanko – Vitgrund	5142	Island Vichrevoj – Island Sommers	42//
Vitgrund – Utö	5142	Strait Bjerkesund	82//
Koverhar – Hästö Busö	5145	E-point Bol'soj Ber'ozovyj – Šepelevskij	42//
Hästö Busö – Ajax	5145	Luga bay	41//
Sea area S of Ajax	1105	Appr. Luga bay – line Moš.-Šepel.	41//
Inkoo a. Kantvik – sea area Porkkala	8745		

Sweden, 12.01.2024

Karlsborg – Malören	8546	Västervik – Marsholmen – Idö	4046
Sea area off Malören	6456	Blå Jungfrun – Kalmar	4046
Luleå – Björnklack	8446	Kalmar – Utgrunden	4046
Björnklack – Farstugrunden	5476	Karlskrona – Aspö	4046
E and SE of Farstugrunden	5476	Uddevalla – Stenungsund	4046
Sandgrönn fairway	8446	Vänernborgsviken	5146
Rödkallen – Norströmsgrund	5476	Fairway through Lurö archipelago	5146
Haraholmen – Nygrån	8446	Fairway to Gruvön	5146
Sea area off Nygrån	4336	Fairway to Karlstad	5146
Skelleftehamn – Gåsören	8346	Fairway to Kristinehamn	5146
Sea area off Gåsören	5276	Fairway to Otterbäcken	5146
Sea area off Bjuröklubb	5276	Fairway to Lidköping	5146
NE of Nordvalen	2226		
SW of Nordvalen	3226		
Western Quark (W of Holmöarna)	5356		
Umeå – Väktaren	5356		
SE of Väktaren	3226		
NE and SE of Sydostbotten	2226		
Fairway to Husum	4046		
Örnsköldsvik – Hörnskaten	8346		
Hörnskaten – Skagsudde	8346		
Sea area off Skagsudde	2026		
Fairway W of Ulvöarna	5146		
Sea area E of Ulvöarna	2026		
Ångermanälven north Sandö Bridge	8344		
Ångermanälven south Sandö Bridge	8344		
Härnösand – Härnön	8344		
Sea area off Härnö	2024		
Sundsvall – Draghällan	8346		
Draghällan – Åstholsudde	2026		
Off Åstholsudde and Brämön	2026		
Hudiksvallfjärden	8246		
Igesund – Agö	8246		
Sea area off Agö	2026		
Sandarne – Hällgrund	8146		
Sea area off Hällgrund	2026		
Ljusnefjärden – Storjungfrun	8146		
Sea area off Storjungfrun	2026		
Gävle – Eggegrund	5236		
Sea area off Eggegrund	2026		
Sea area off Orskär	2026		
Öregrundsgrepen	5146		
Passage at Understen	2026		
Sea area off Svartklubben	2026		
Hallstavik – Svartklubben	8246		
Trälhavet – Furusund – Kapellskär	5146		
Stockholm – Trälhavet – Klövholmen	5146		
Klövholmen – Sandhamn	4046		
Trollharan – Langgarn	4046		
Mysingen	4046		
Nynäshamn – Landsort	4046		
Köping – Kvicksund	8344		
Västerås – Grönsö	8344		
Grönsö – Söderläje	5244		
Stockholm – Söderläje	5244		
Söderläje – Fifong	5144		
Fifong – Landsort	4046		
Norrköping – Hargökalv	5146		
Järnverket-Lillhammaren – N Kränkan	4046		