Last minute black ice weekends

by Peter Kaarle (SIK)

Fixed date skating weekends

by Rob Mulders (HLSK)

Skating weekends are big fun

and finding not-at-home ice is easier than you think

Plan dates for your skating trip(s)

Arrange all needed preconditions up-front (**ASAP**)

- Leaders, participants and decision process
- Tasks, roles and responsibilities for each participant
- Equipment check, maps to use, apps testing, and so on
- Transportation, internet, logistics, finance and more

But decide where to go at the last moment (ALAP)

Fixed date weekend in december – march:

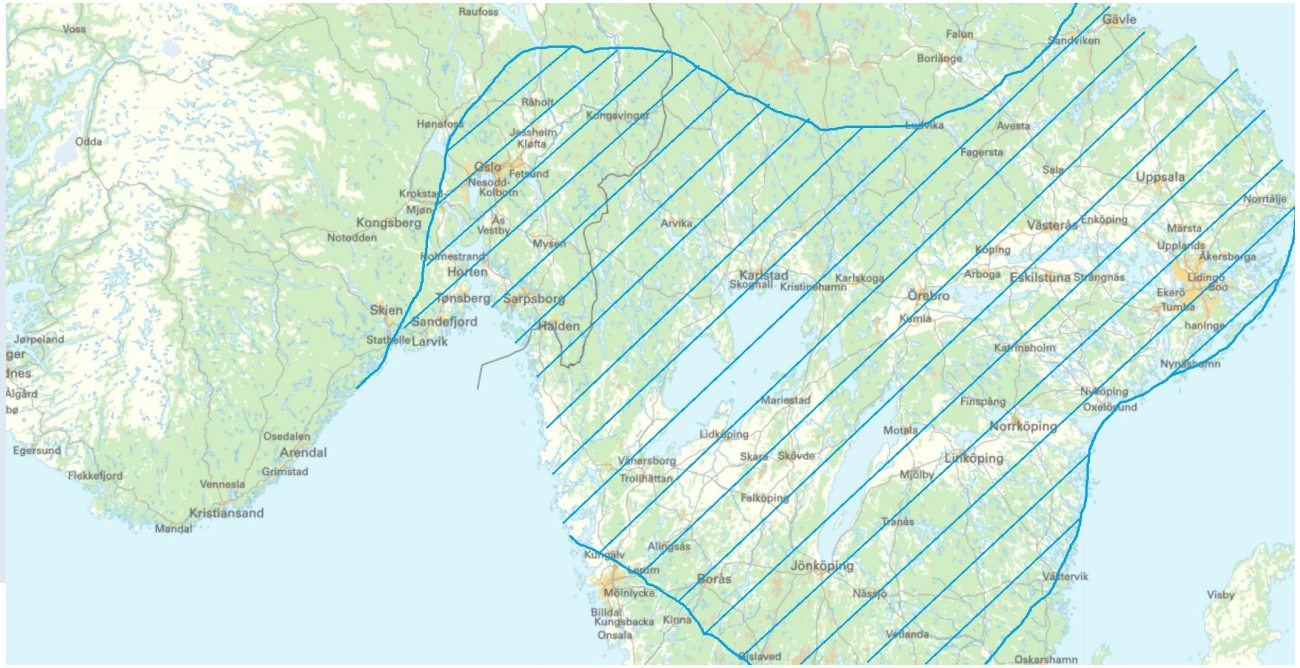
90% ice guarantee

when location is flexible

Ice guarantee for fixed date, flexible location weekend trips

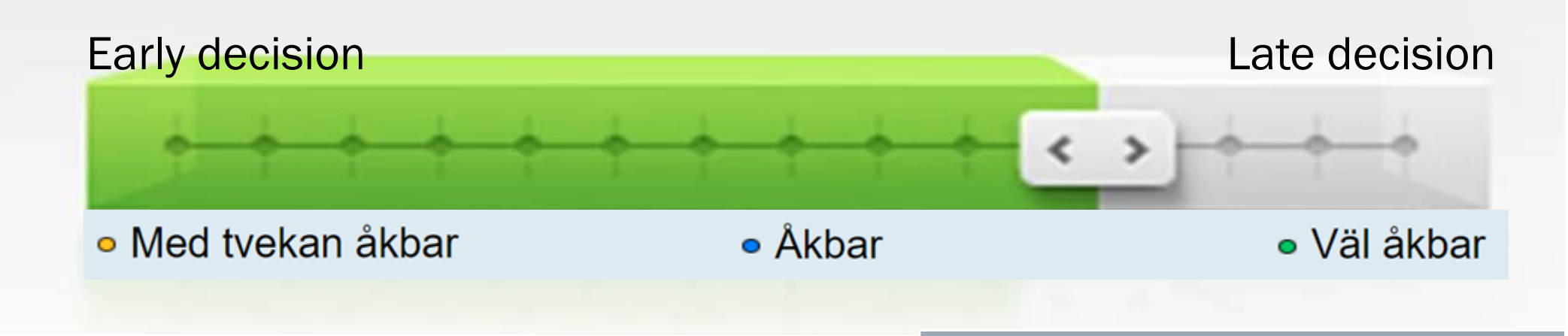
Out of last 100 RobM weekend trips:

	#
Väl åkbar	42
Åkbar	48
Med tvekan åkbar	6
Oåkbar	4
Okänd	0
	100



A weekend trip counts as väl åkbar when at least 2 out of 4 skating days received at least one green dot

Freedom of movement is key



Examples
We fly to Stockholm
We will use stuga of a friend
We book vandrarhem for 4 days

Examples
We drive and decide at Hborg: E6 or E4?
We do not make appointments up front
Vandrarhem booking after skating


Skate
and
test

Driving to Sweden and picking a lake without information gathering is what some of us did pre-HLSK and pre-Skridskonät.

It can work, but chances to find skateable ice are pretty low. In the south of Sweden, lakes are open. If you drive further north or come on higher altitudes, lakes are covered with snow.

The sweet spot where ice is **strong, smooth, solid and snow free** is almost always there, but usually small.

Which lake to choose for tomorrow?

Lots of decision factors in your toolbox

Skate and test

Weather forecast

Water temps

Ice history

Micro climates

Skridsko nätet

Weather actuals

Altitudes of lakes

Social media

Contact persons

Weather patterns

Stöp speed

Depths of lakes

Freezing orders

Winters history

Marine traffic

Sea info services

Shape of lakes

Water flows

Radar images

Satellite pictures

Web cams

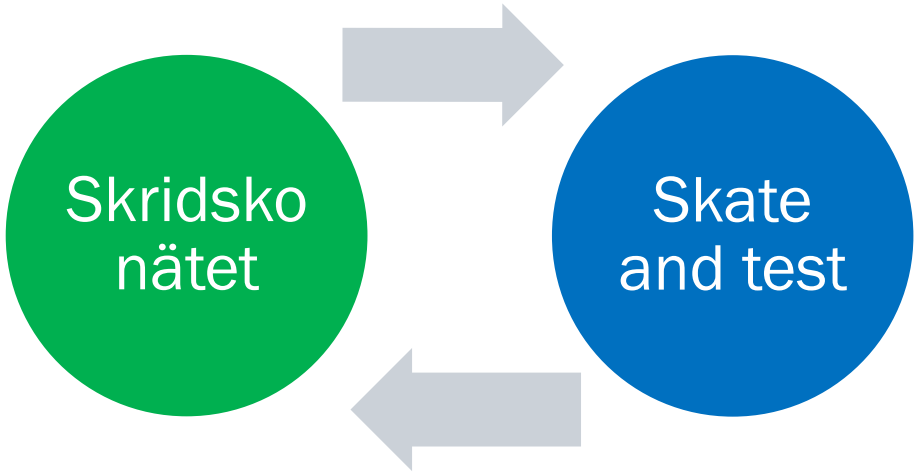
Weather influence on ice

Weather patterns

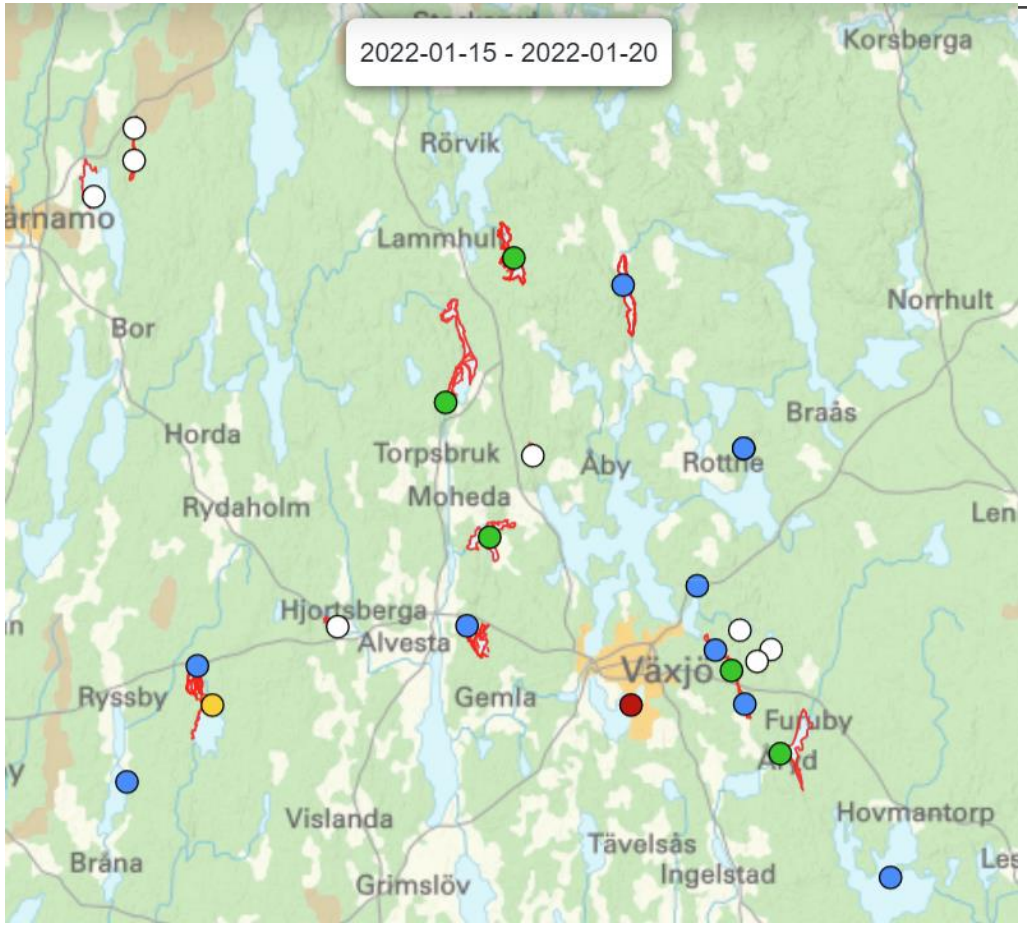
Trafik verket

Finding shiny ice in unknown areas

- Baseline is using isobs, färdrapporter and färdspår on Skridskonätet
- From there, you add information sources in which you feel comfortable
- Talk to your group members to get feedback on your thoughts


Skridsko
nätet
Skate
and test

Using Skridskonät

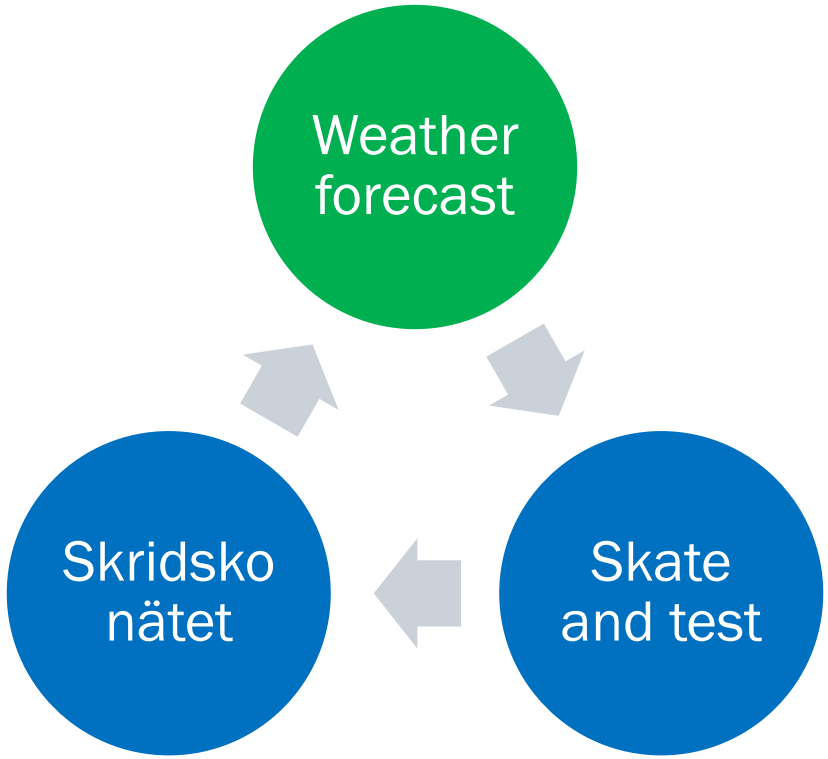


- Väl åkbar
- Åkbar
- Med tvekan åkbar
- Oåkbar
- Okänd

- Well skateable
- Skateable
- Barely skateable
- Not skateable
- Unknown

= tour report (färdrapport) without ice observations

= GPS-track (färdspår)



Level 3

Using the weather forecast

- First question to ask yourself: do I look for new ice (kärnis) or old ice (stöpis)?
- Second question: is the ice already skateable or does it need a change to become skateable?

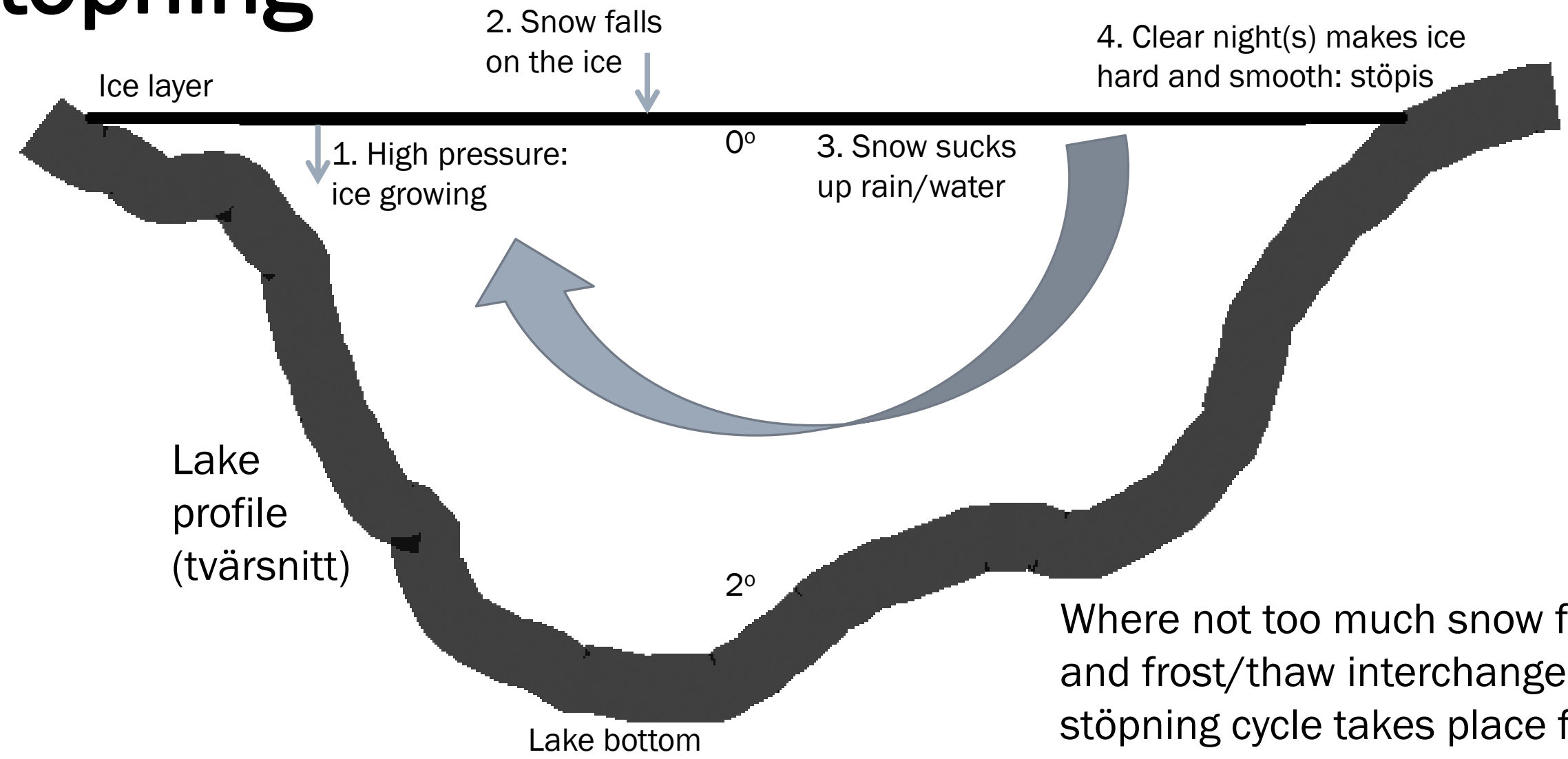
Which weather to look for?	New ice (kärnis)	Old ice (stöpis)
Already skateable	Light frost, no snow, stable weather	Light frost, no snow, stable weather
Not skateable yet • new ice too thin • old ice under snow	Moderate to severe frost = clear night(s), dry air, low temp	Cloudy + warm + rain first, then clear sky

Kärnis (new ice, black)

For kärnis to be created on a lake:

- The whole column of water needs to be colder than 4° Celsius and the upper layer needs to cool down to 0°
- The 0° upper layer of water needs to let energy go again, as much as is needed to cool water of 80° down to 0° degrees
- The sky must be clear, because heat radiation to space lets twice as much energy go compared to low air temperature and/or water evaporation
- The wind must be low to restrict the movement in the water when the first ice crystals appear

Stöpning

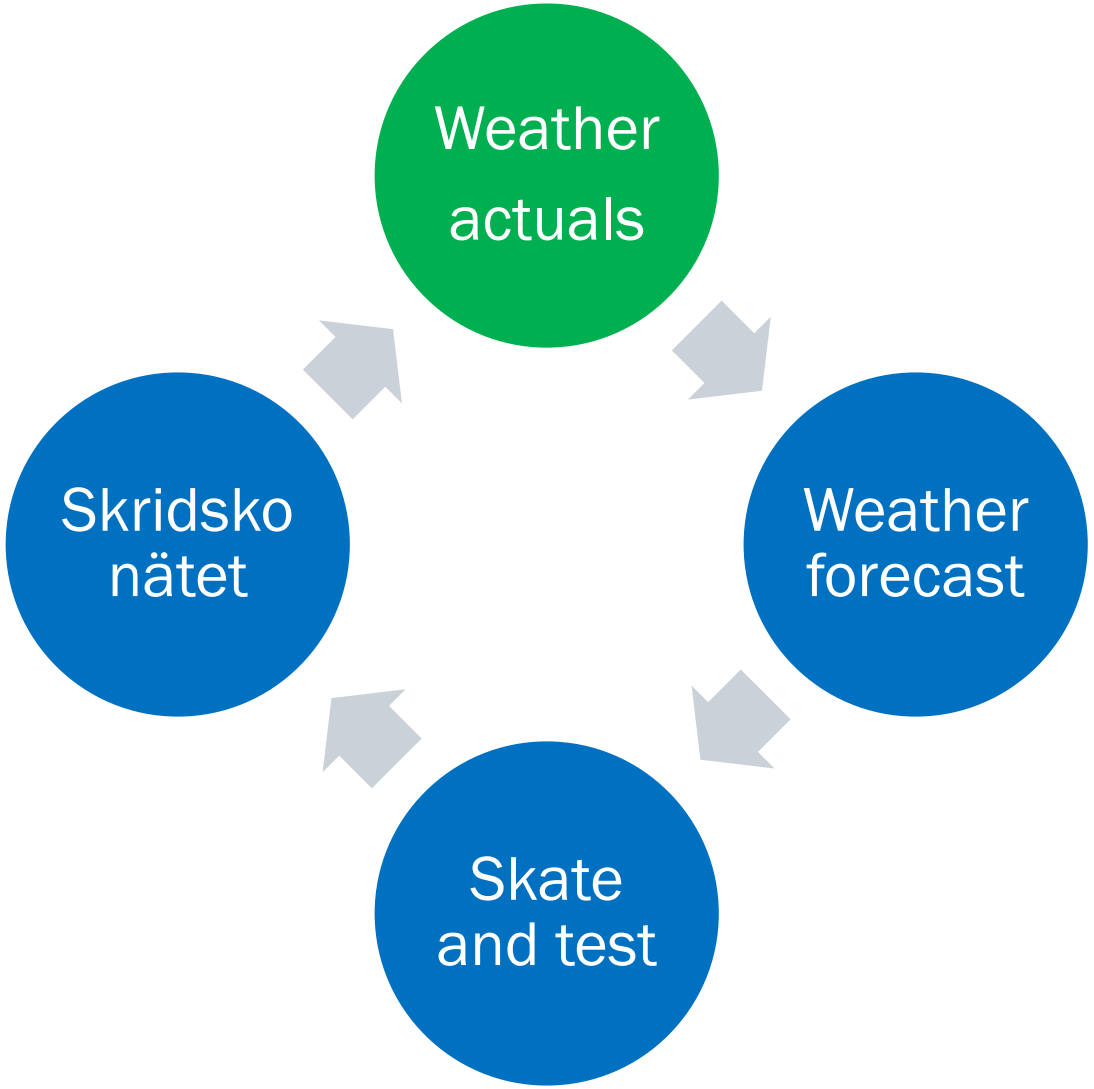


Where not too much snow falls and frost/thaw interchange, the stöpning cycle takes place from December to March

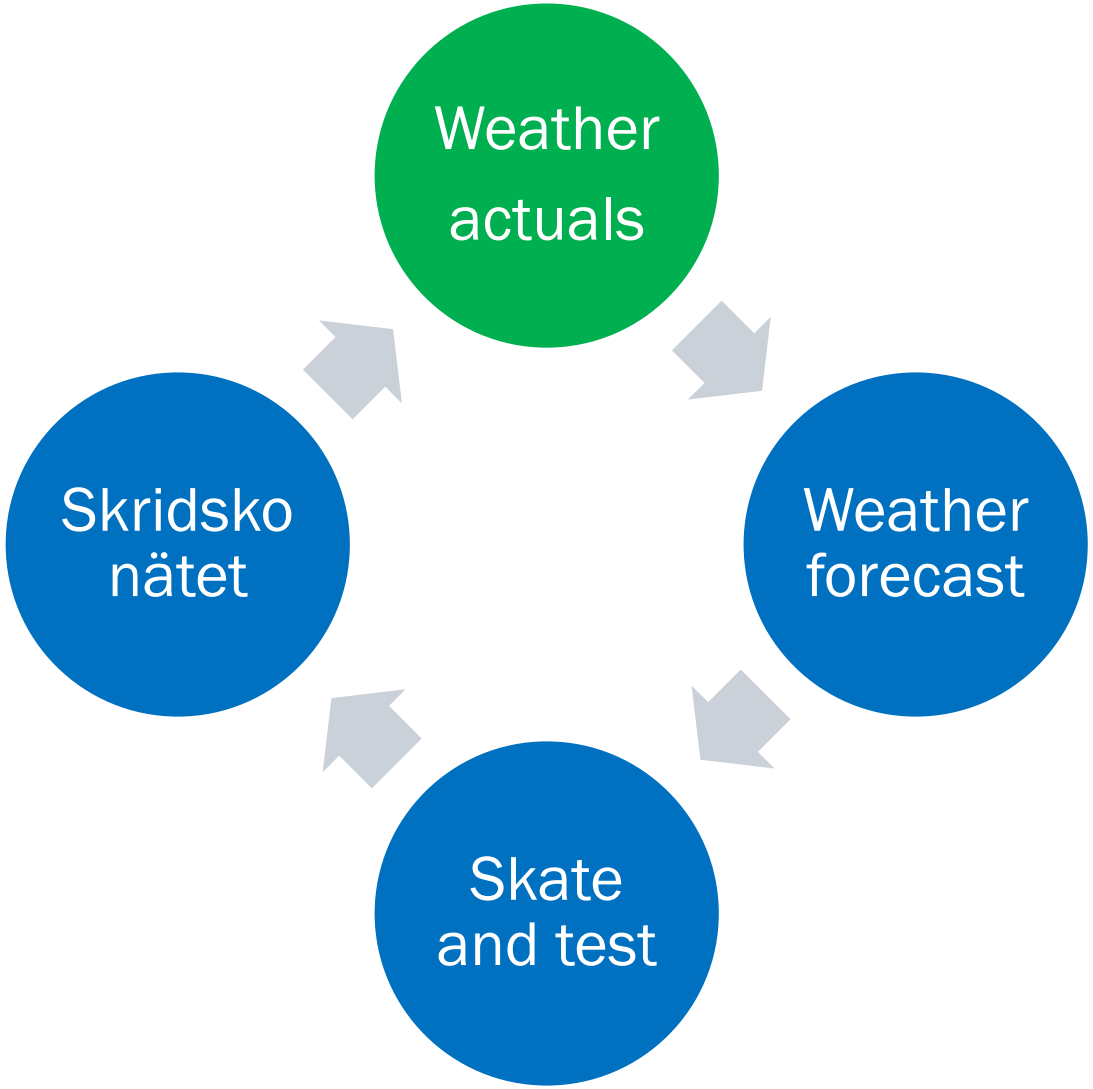
Stöpis in the making

Weather forecast

- Over-estimated, waste of time to spend hours on forecast
- SMHI and YR show only one scenario out of 50 (!) possible scenarios
- Using weather actuals increases your success rate significantly


Weather actuals
Weather forecast
Skate and test
Skridsko nätet

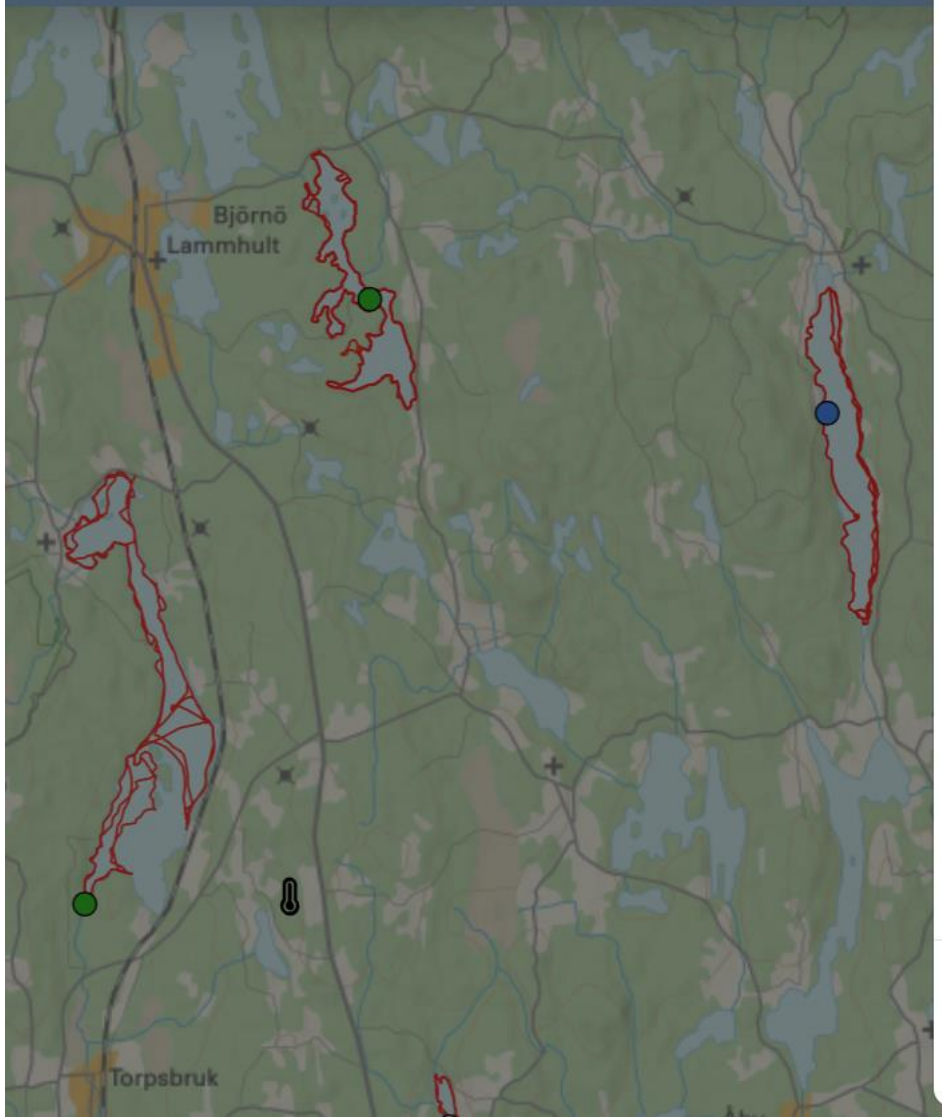
Level 4



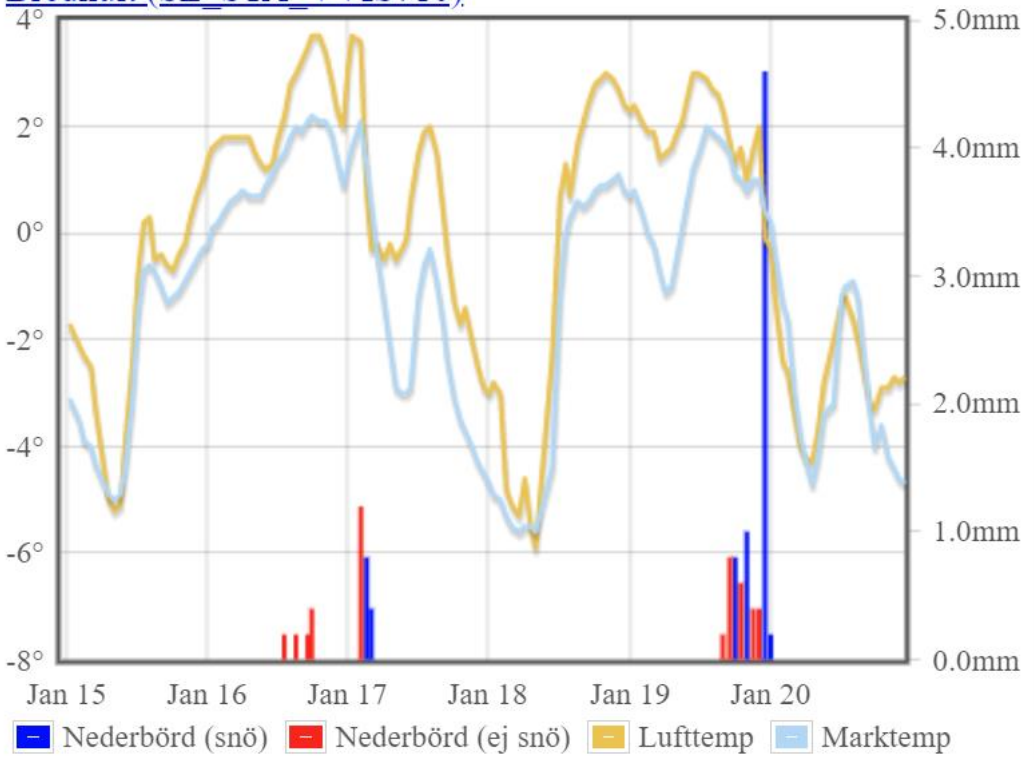
By shifting your attention from weather forecast to weather actuals, on average you skate on better ice.

SKRIDSKONATET

Report



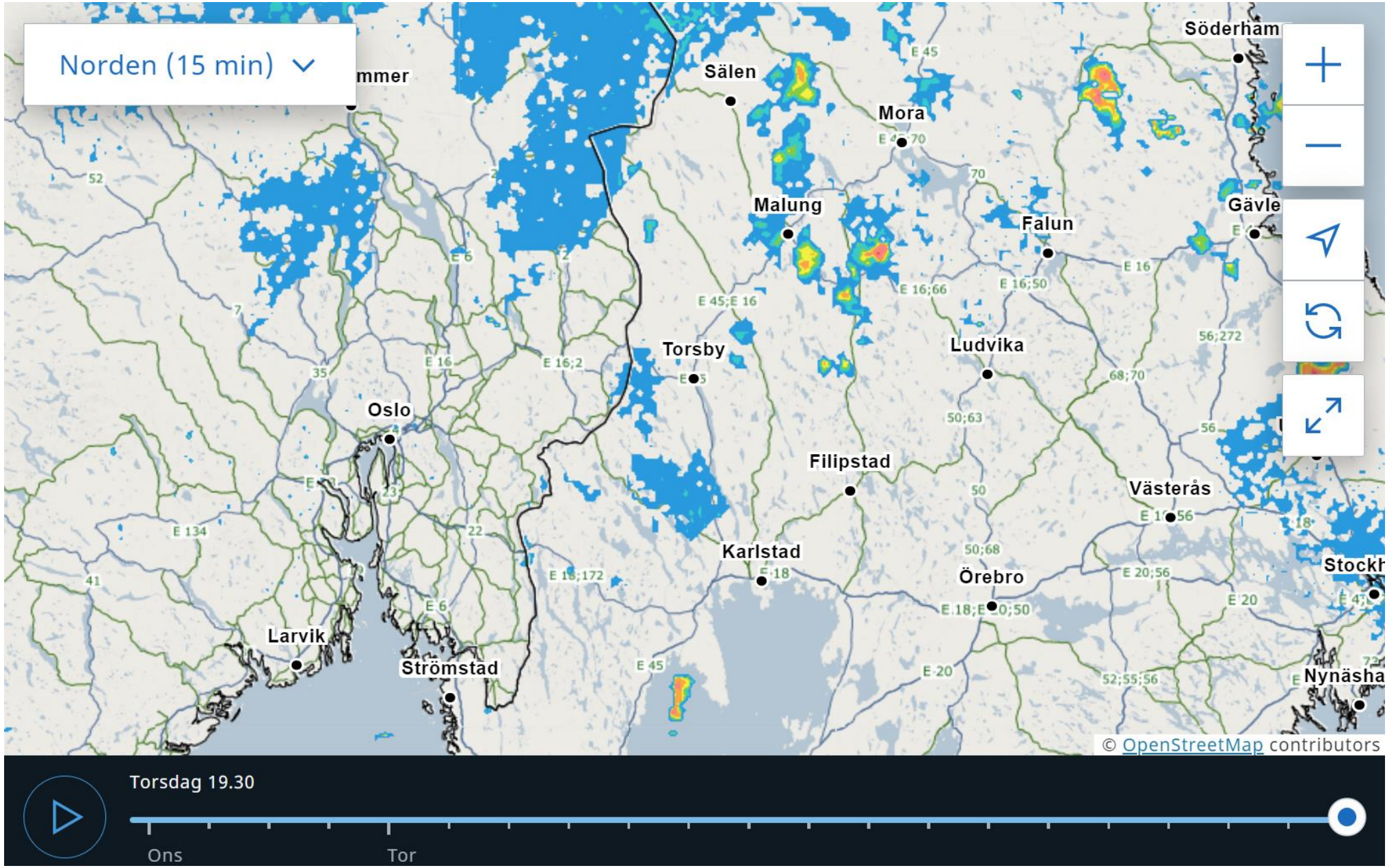
Bredhult (SE_STA_VVIS710)

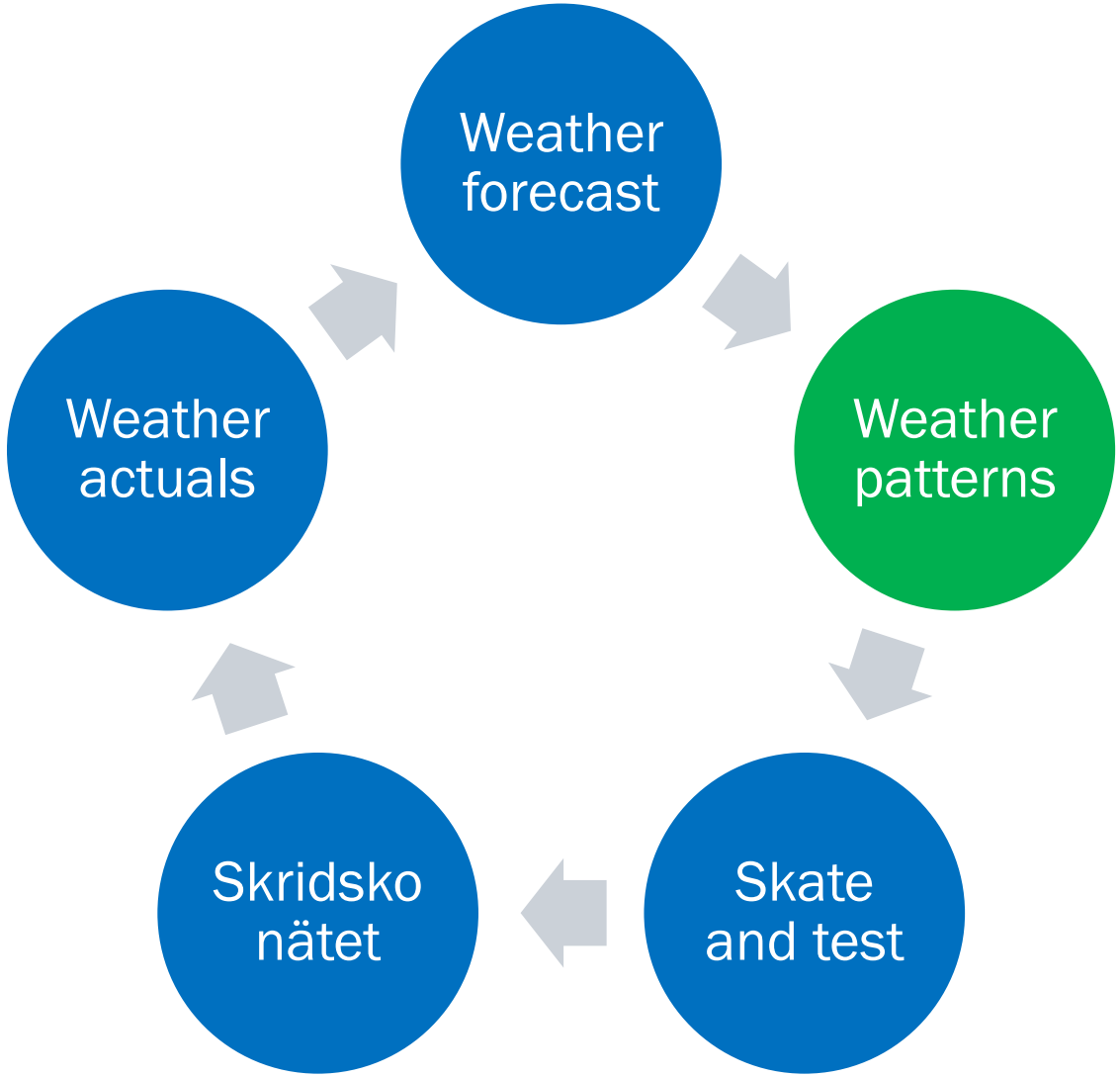


(Antal mm snö i osmält form)

Data från Trafikverket

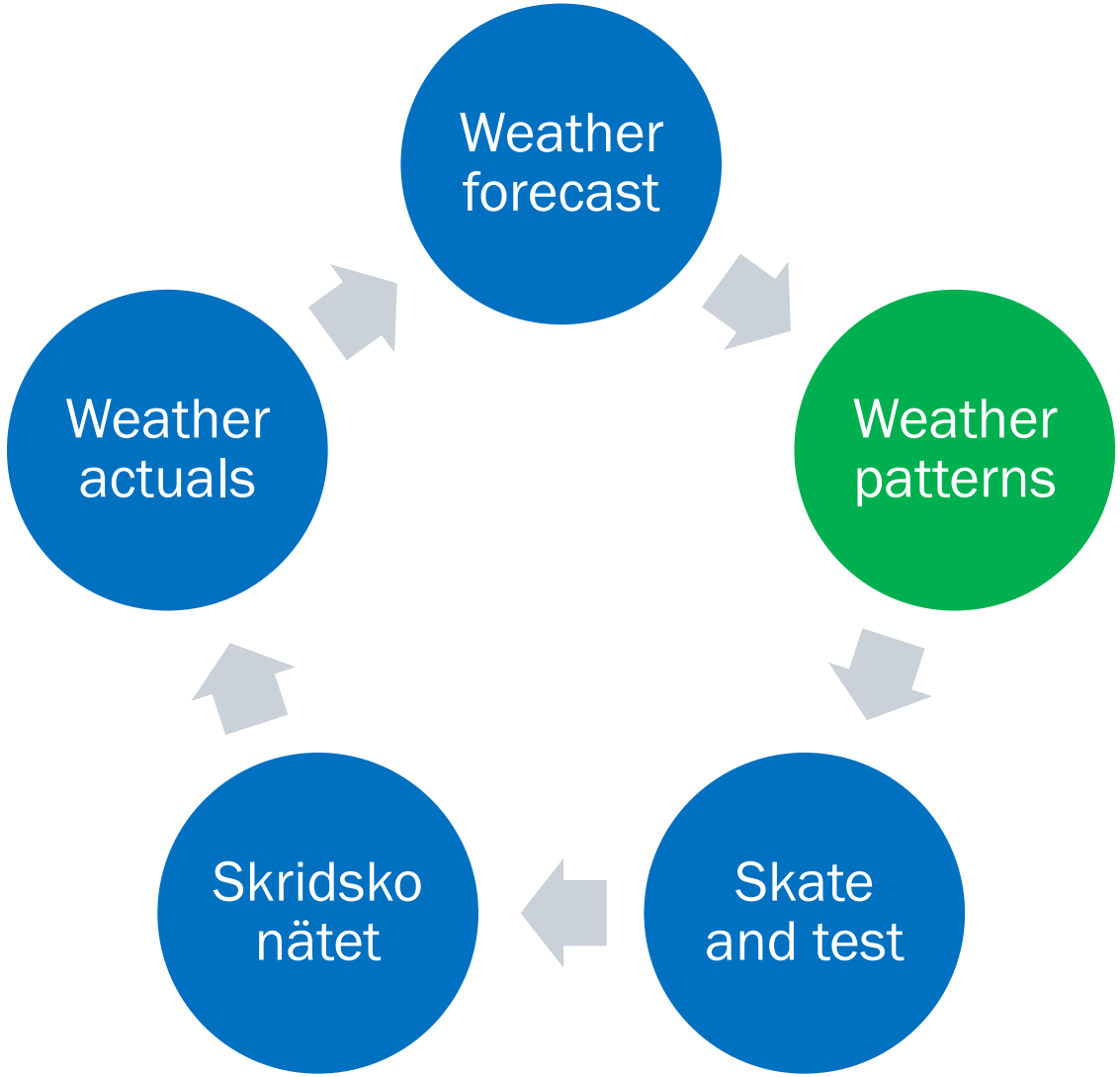
OK

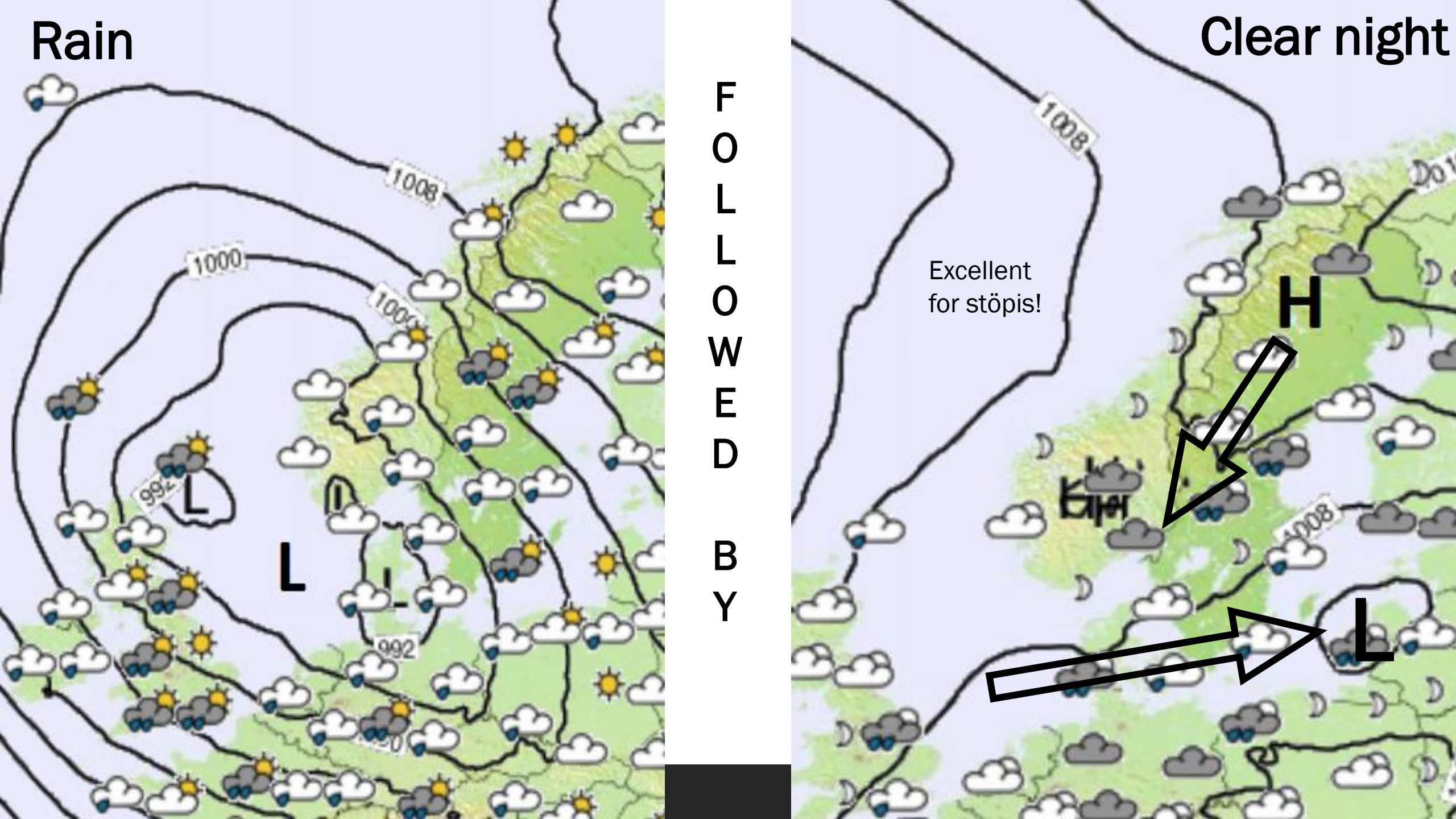

Norden (15 min)
Söderham
Sälen
Mora
Malung
Falun
Gävle
Ludvika
Torsby
Oslo
Filipstad
Västerås
Karlstad
Örebro
Larvik
Strömstad
Nynäsha
© OpenStreetMap contributors
Torsdag 19.30
Ons
Tor


Weather forecast
Weather patterns
Skate and test
Skridsko nätet
Weather actuals

Level 5

By looking at the weather patterns for a (larger) region, instead of the forecast for a particular (smaller) area, it is easier to understand if next weeks weather will do good (or bad) to the ice.




Rain
1008
1000
1004
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992
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FOLLOWED BY
Clear night
Excellent
for stöpis!
H
1008
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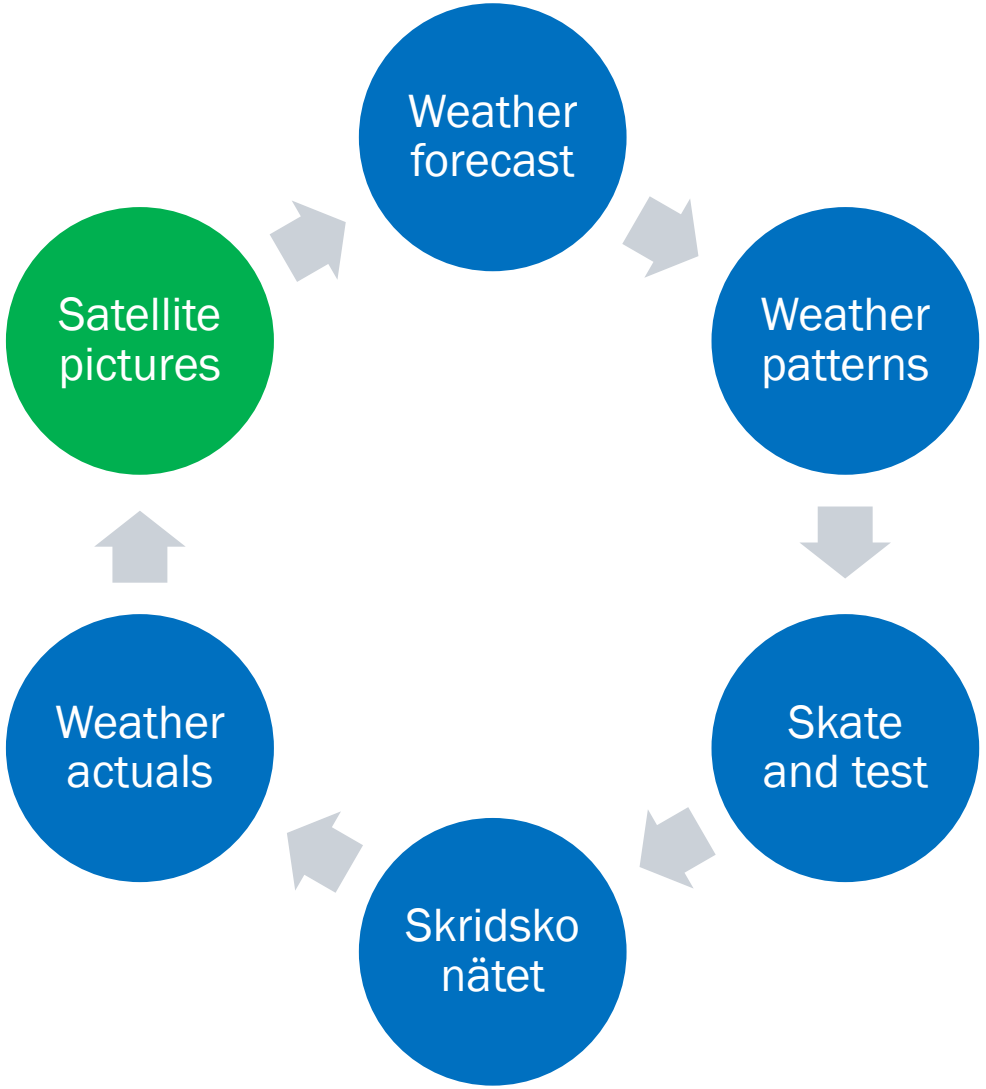
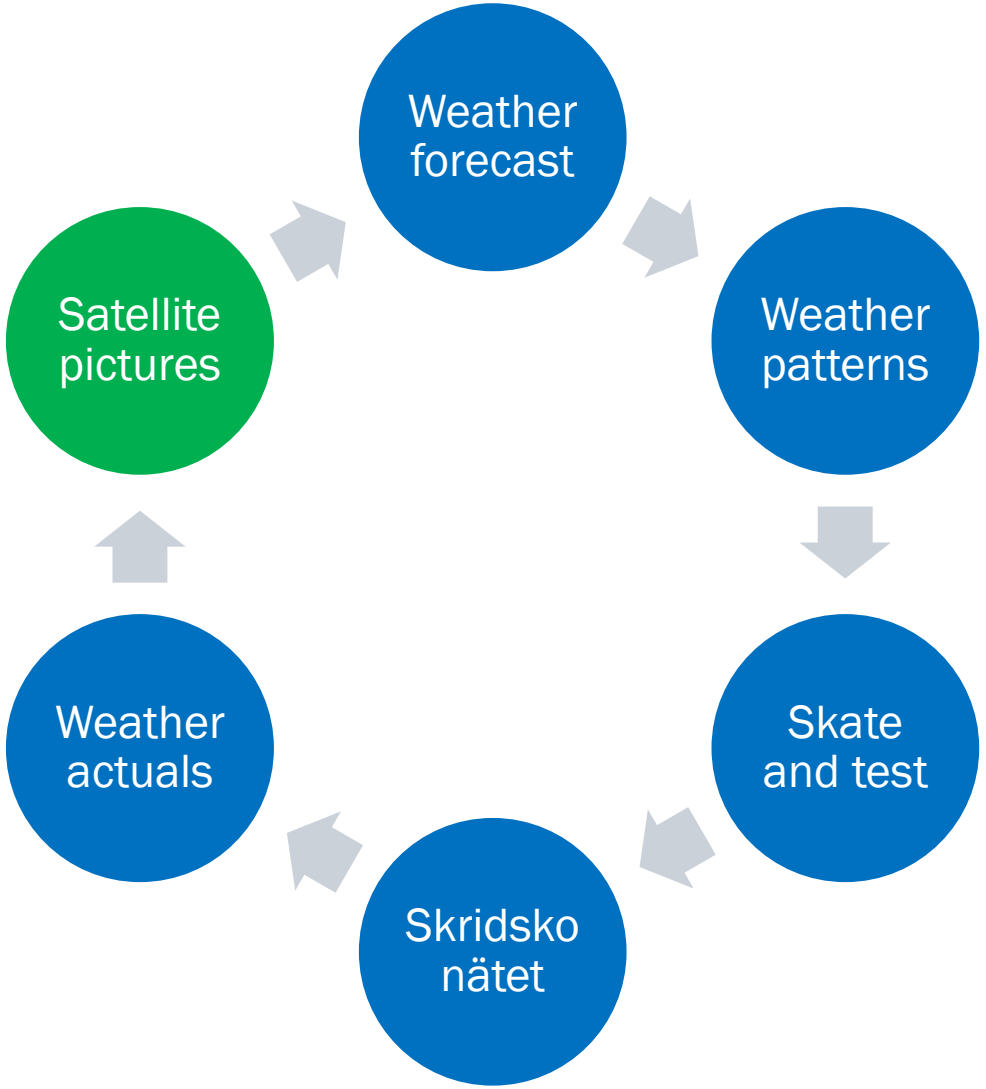

Weather forecast
Weather patterns
Skate and test
Skridsko nätet
Weather actuals
Satellite pictures

Satellite pictures will increase your chance to find skateable ice dramatically, especially if you want to skate where nobody skated before.



Plan A and B

Simple trick to increase the chances:

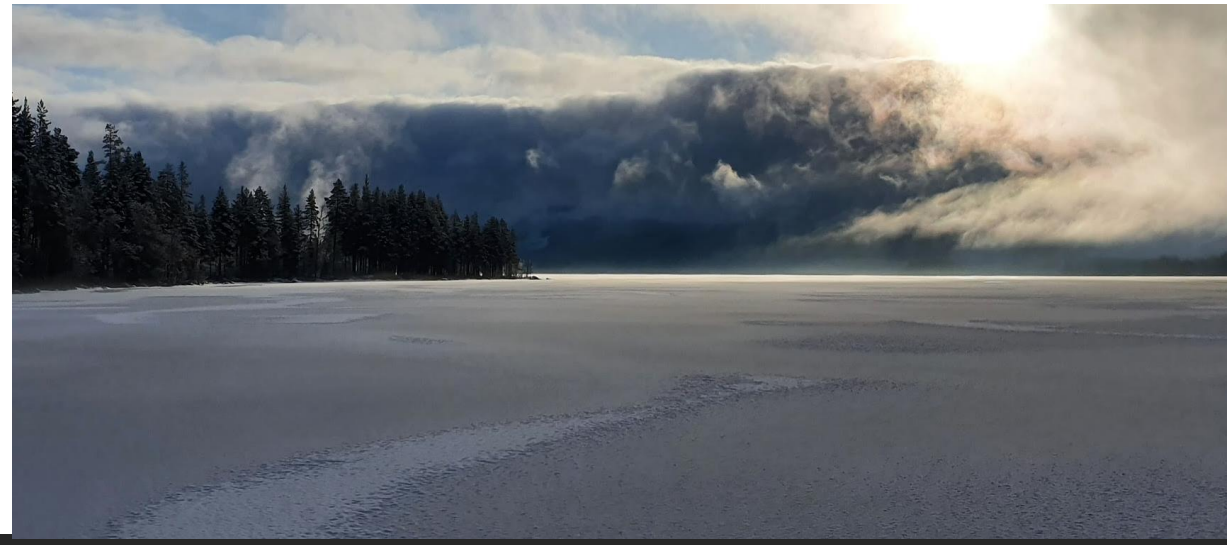
- start plan A early, to have **time for plan B**
- **prepare plan A and B** the evening before
- use variables for plan B: **size, altitude, sweet/salt, currents, …**

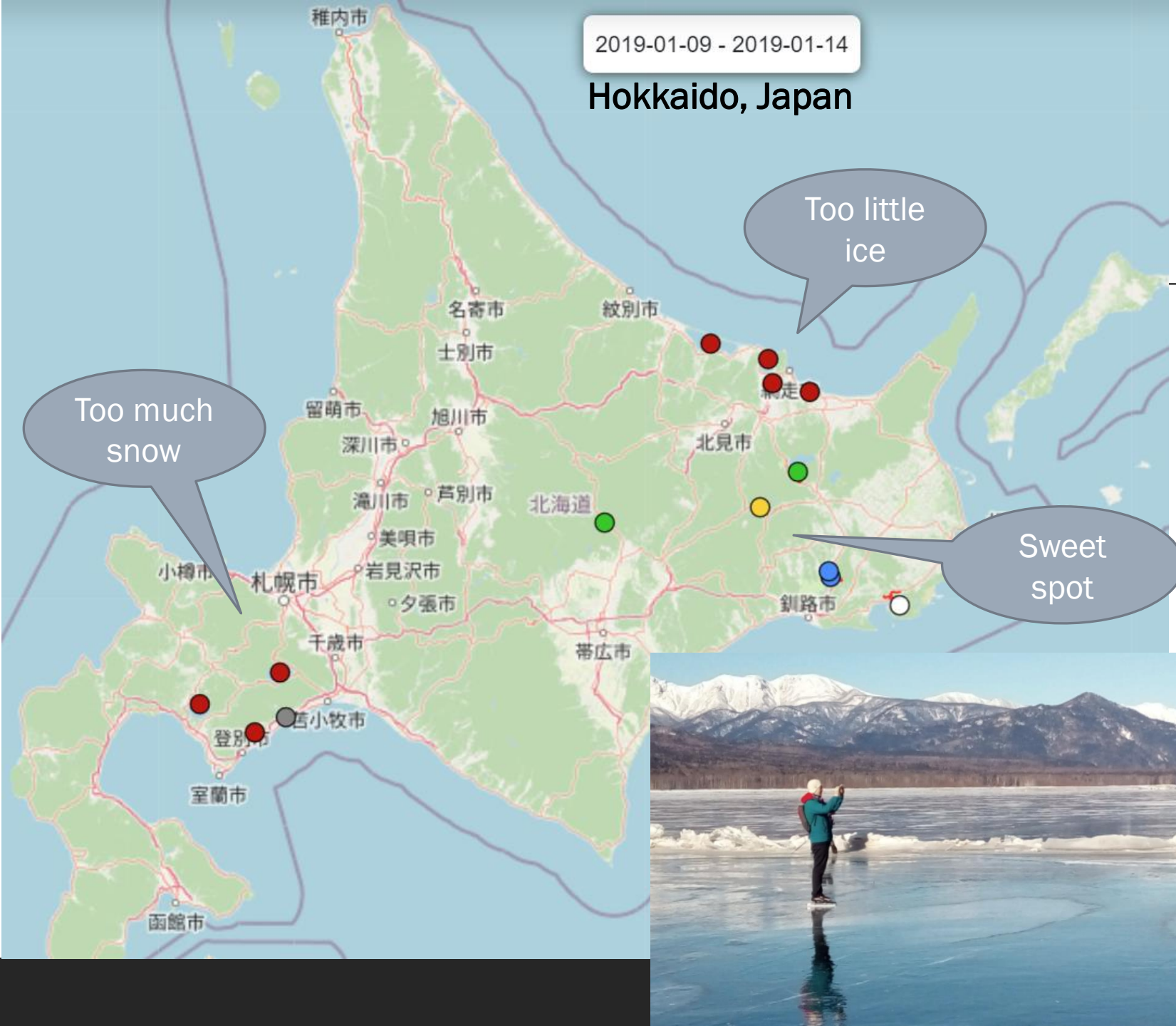
Because time is of an essence!

Best ice can be bad ice

But you still can make it a very nice day!

- Landkall åkning around the lake
- Skating through snow doing ice judgement training
- Skating along the water line
- Bad ice training
- .....



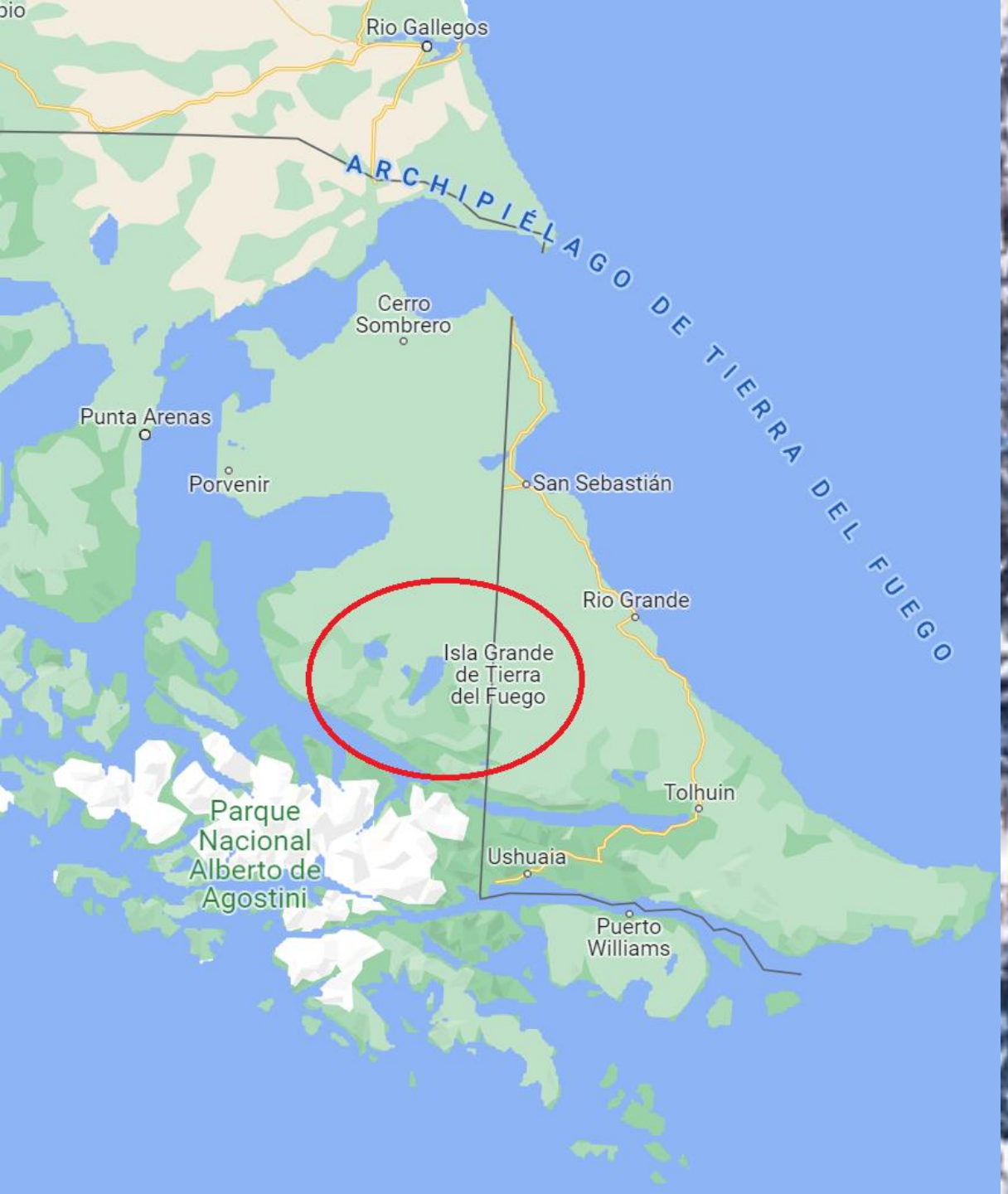


The system works everywhere

If you find the **sweet spot** where snow is moderate and frost and thaw interchange the whole winter, than you can book your skating trip!

“There is always skateable ice, somewhere”

- KRISTER VALTONEN, LLK


Rio Gallegos
ARCHIPIÉLAGO DE TIERRA DEL FUEGO
Cerro Sombrero
Punta Arenas
Porvenir
San Sebastián
Rio Grande
Isla Grande de Tierra del Fuego
Tolhuin
Parque Nacional Alberto de Agostini
Ushuaia
Puerto Williams


Patagonia, July 23rd, 2022

Fjärrturer

THE FUTURE OF NORDIC SKATING