



Norwegian
Meteorological
Institute

Public Sector Information at work: Make Open, Make Available

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Where we are today

National Meteorological Institutes are generally required to generate extra revenue by selling data

In a tough economic situation, there is no short-term economic incentive for an institute to make it's data free

Politics and ideology can also underpin a restrictive data policy

The main changes in the amended PSI

(1) requires public sector bodies to allow the re-use of existing and generally accessible information they create, collect or hold. The effect of this was to make re-use mandatory in most cases

(2) extended its scope to cover PSI held by public sector museums, libraries (including university libraries) and archives in making their information available for re-use

(3) introduced the general principle that charges for re-use should normally be set at marginal cost, with exceptions in certain circumstances

(4) introduced a redress mechanism for complaints by re-users operated by an impartial review body with the power to make binding decisions

The meaning of PSI

Whereas

[...] open data policies which encourage the wide availability and re-use of public sector information for private or commercial purposes, with minimal or no legal, technical or financial constraints, and which promote the circulation of information not only for economic operators but also for the public, can play an important role in kick-starting the development of new services based on novel ways to combine and make use of such information, stimulate economic growth and promote social engagement

The meaning of PSI

whereas

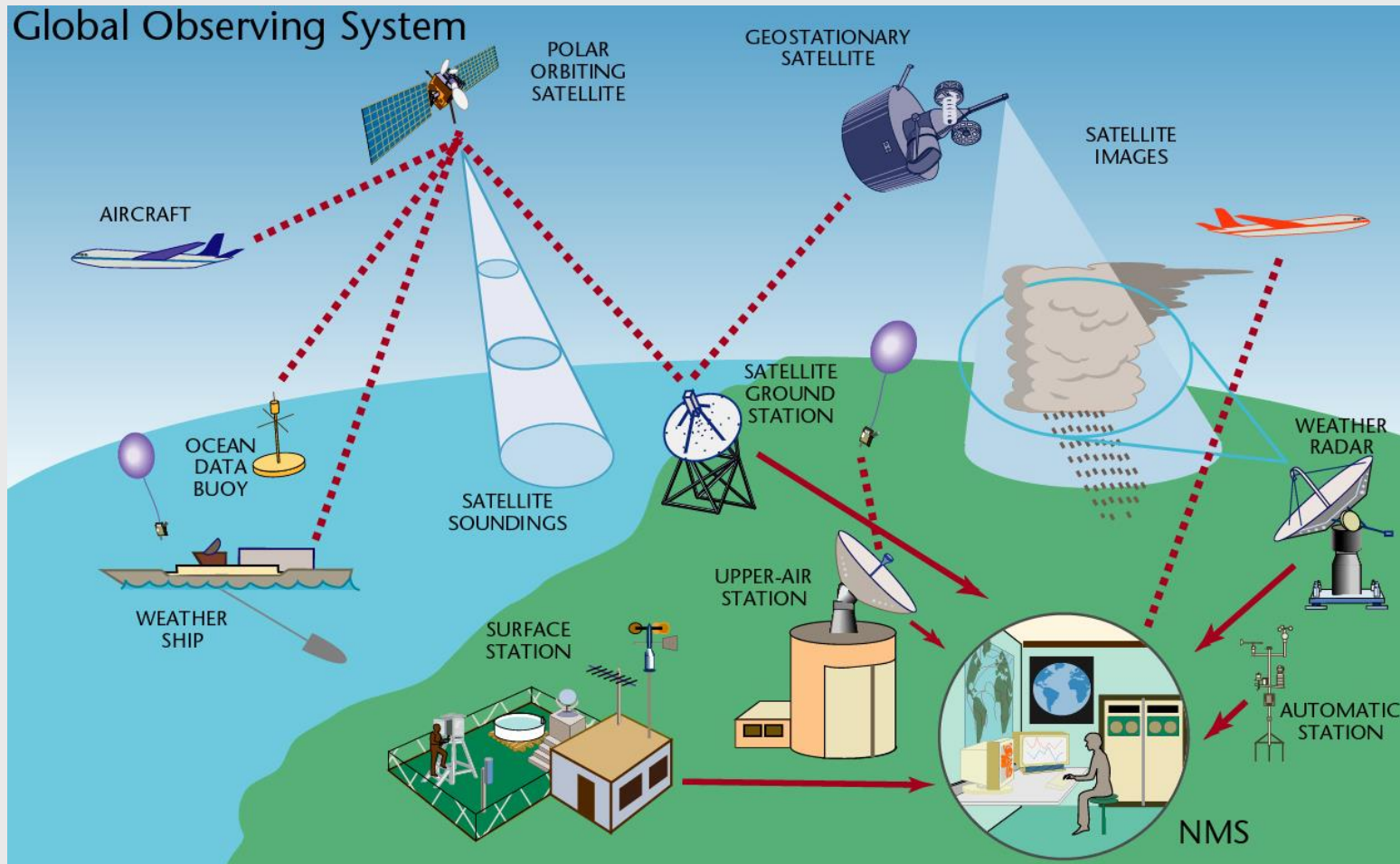
[...] open data policies which encourage the wide availability and re-use of public sector information for private or commercial purposes, with minimal or no legal, technical or financial constraints, and which promote the circulation of information not only for economic operators but also for the public, **can play an important role in kick-starting the development of new services** based on novel ways to combine and make use of such information, stimulate economic growth and promote social engagement

Basic economic theory: «Common good»

- A common good can be used by many, without the quality being reduced
- A glass of beer is not a common good
- A traditional radio or TV broadcast is a common good:

A high number of users does not reduce the quality of the broadcast

Expensive infrastructure to produce a weather forecast: Financed by the taxpayers of the world

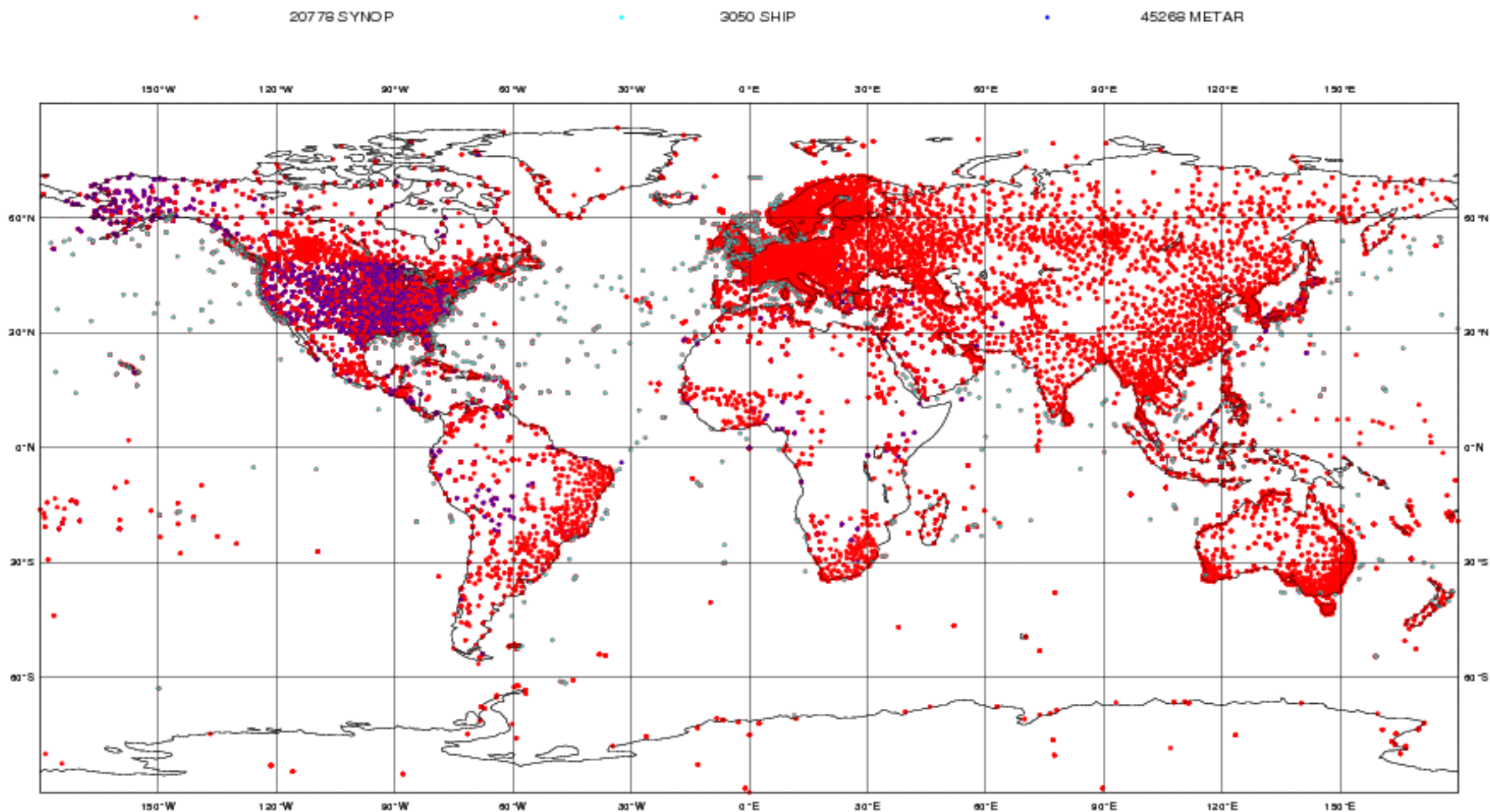


Traditional surface observations, financed by taxes

ECMWF Data Coverage (All obs DA) - Synop-Ship-Metar

04/Apr/2014; 00 UTC

Total number of obs = 69096



Generate extra revenue (1)

From around 1990, the Norwegian Meteorological Institute was supposed to generate extra revenue by selling observations and output from numerical weather prediction models.

Only text forecasts should be free of charge

This was not a success: Rather few firms from the private sector bought anything, and private end-users were only using the free text forecasts

This produced a minor income to the institute budget (~2 %).

Generate extra revenue (2)

We reduced our prices, hoping that this would increase the sales. It didn't help.

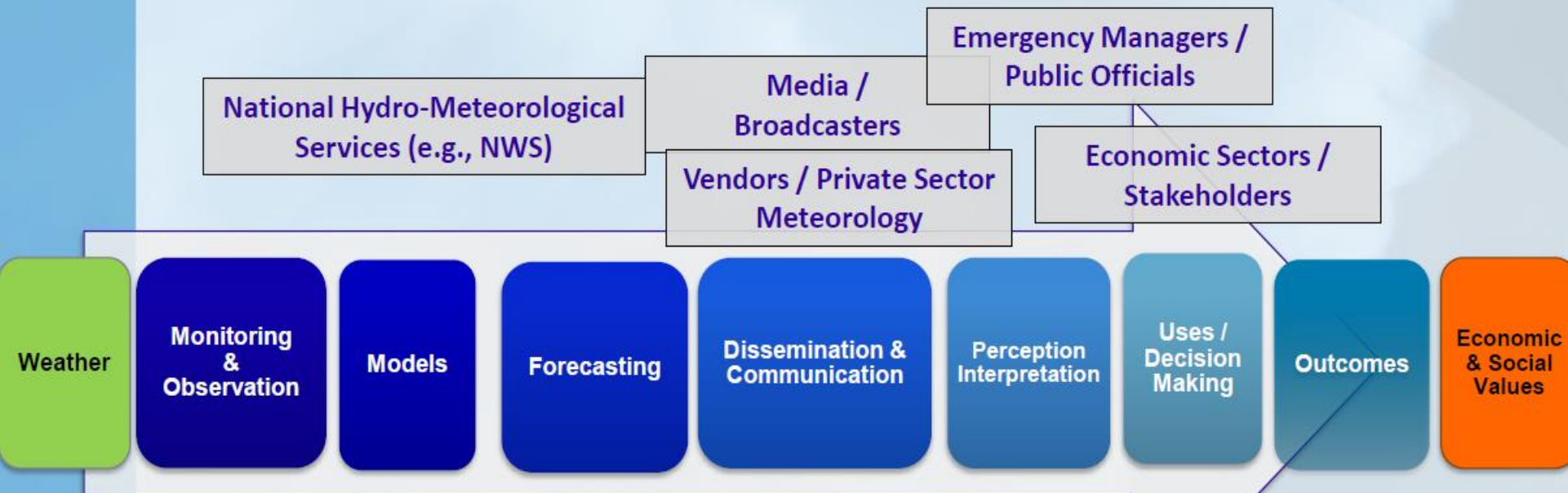
We realized that:

selling of observations and numerical forecasts severely limited their use in society

investments and operating costs were high, but the products were not used much

Weather Information Value Chain

NCAR



- **Characterization of value of any aspect of the weather enterprise**
- **process relating weather and weather info to economic value**
- **based on societal value perspective**
 - **how is value created (or lost) from weather information?**
 - **lots of different other "chains"**
- **tool for discussion about roles, objectives, needs, values of different stakeholders**

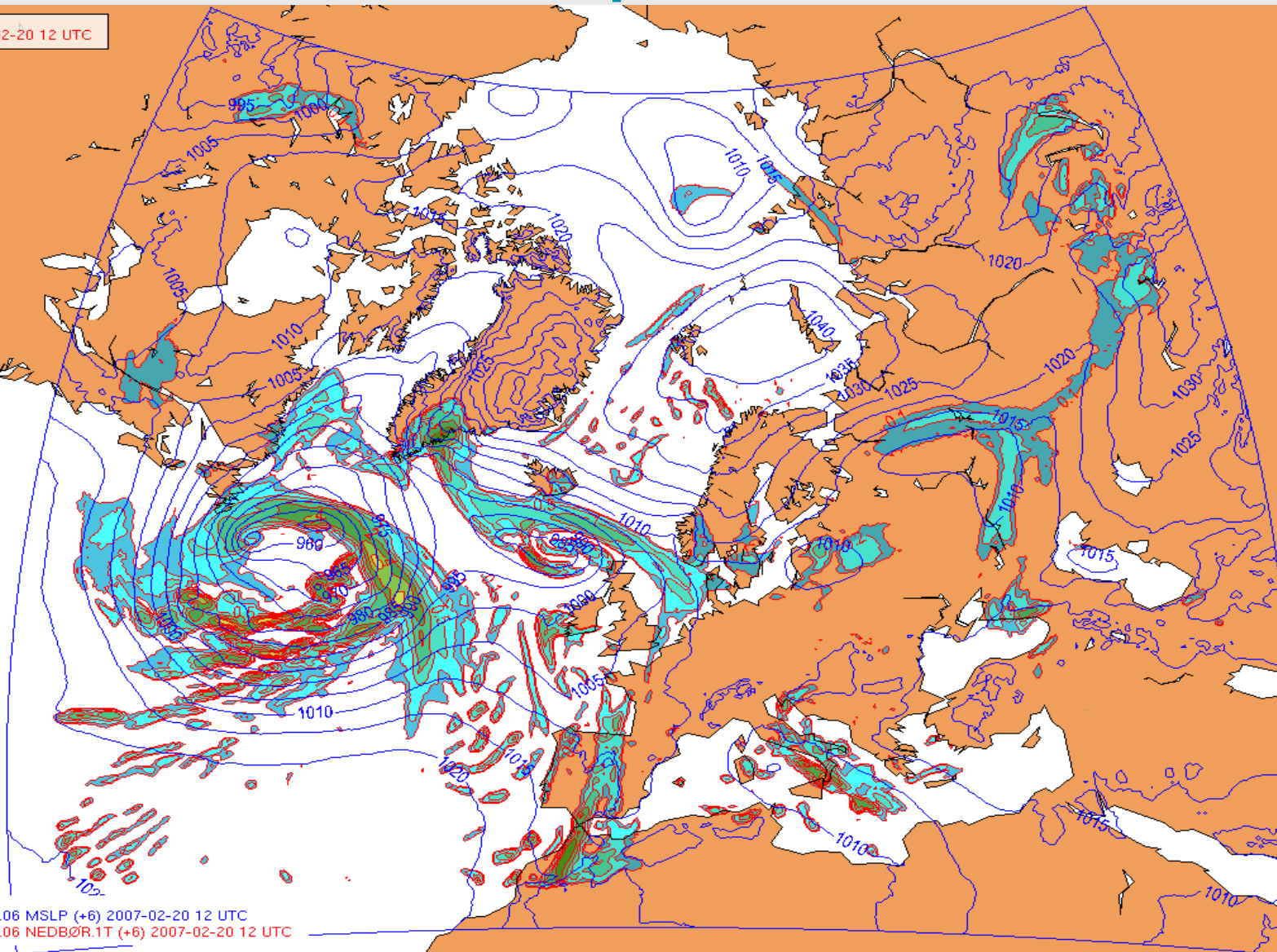
Source: Lazo, J., 2014: WMO/WB/CSP guidance document on assessing the socio-economic benefits of meteorological and hydrological services [presentation]. *World Weather Open Science Conference 2014*, University of Oklahoma, Montreal, QC, CA.

How to create value of a forecast

A forecast has no value until it is understood and changes behaviour

NWP output at a given time: not useful for the private end-user

Tirsdag 2007-02-20 12 UTC



HIRLAM.20KM.06 MSLP (+6) 2007-02-20 12 UTC
HIRLAM.20KM.06 NEDBØR.1T (+6) 2007-02-20 12 UTC

Location forecast from NWP: useful for the private end-user (should be available for free, but is generally not)

Mobilversjon

Språk / Language ▾



Søk etter sted...



Avansert søk

★ Mine steder

Forsiden

Norge

Nord-Trøndelag

Stjørdal

Hell

Værvarsel time for time for

Hell, Stjørdal (Nord-Trøndelag)

Sist oppdatert kl 10:46. Ny oppdatering ca. kl 17:00



☰ Oversikt

🕒 Time for time

📄 Detaljert

📅 Langtidsvarsel

🌩️ Værradar

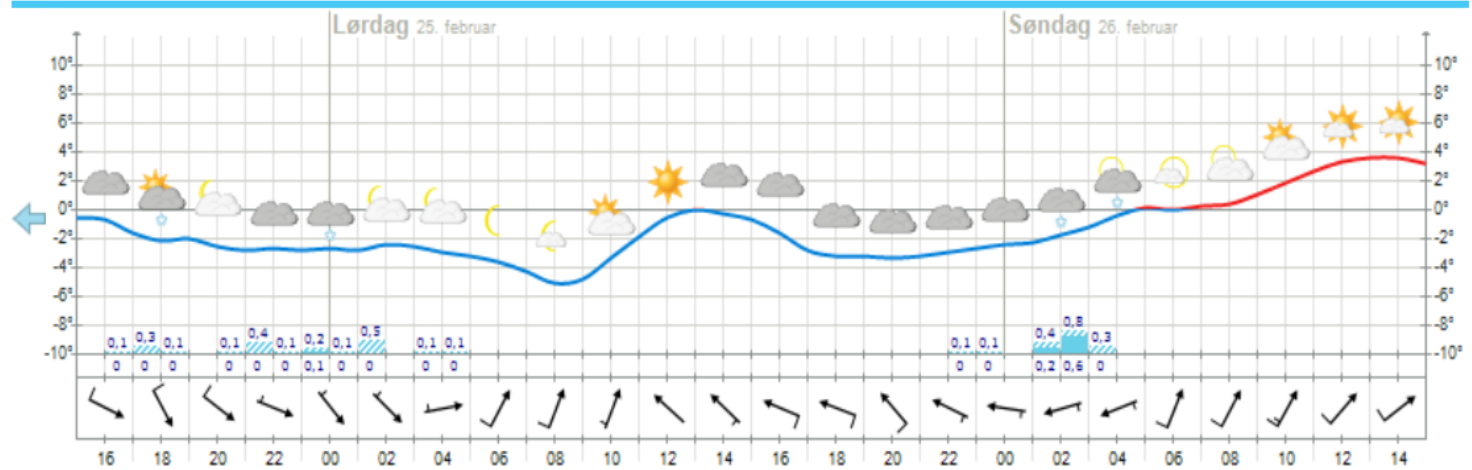
🌤️ Været som var

🗺️ Kart

📍 Kystvarsel

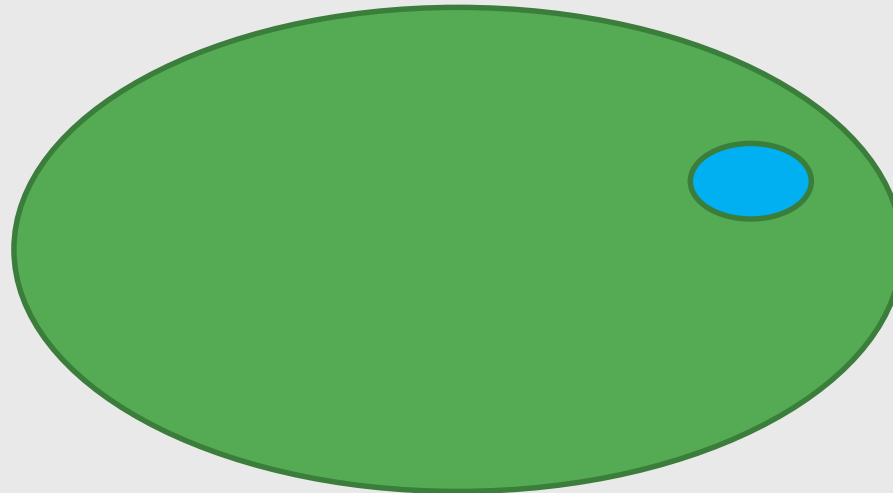
AKTUELLE STEDER

Meteogram, neste 48 timer



Be the best weather service for your nation (your tax payers)

New services vs the meteorological market



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Turn your phone into an interactive, personalised radio show. It's your life as you've never heard it before.



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App Store



Produkter ▾

Tips & guider ▾

Om oss ▾

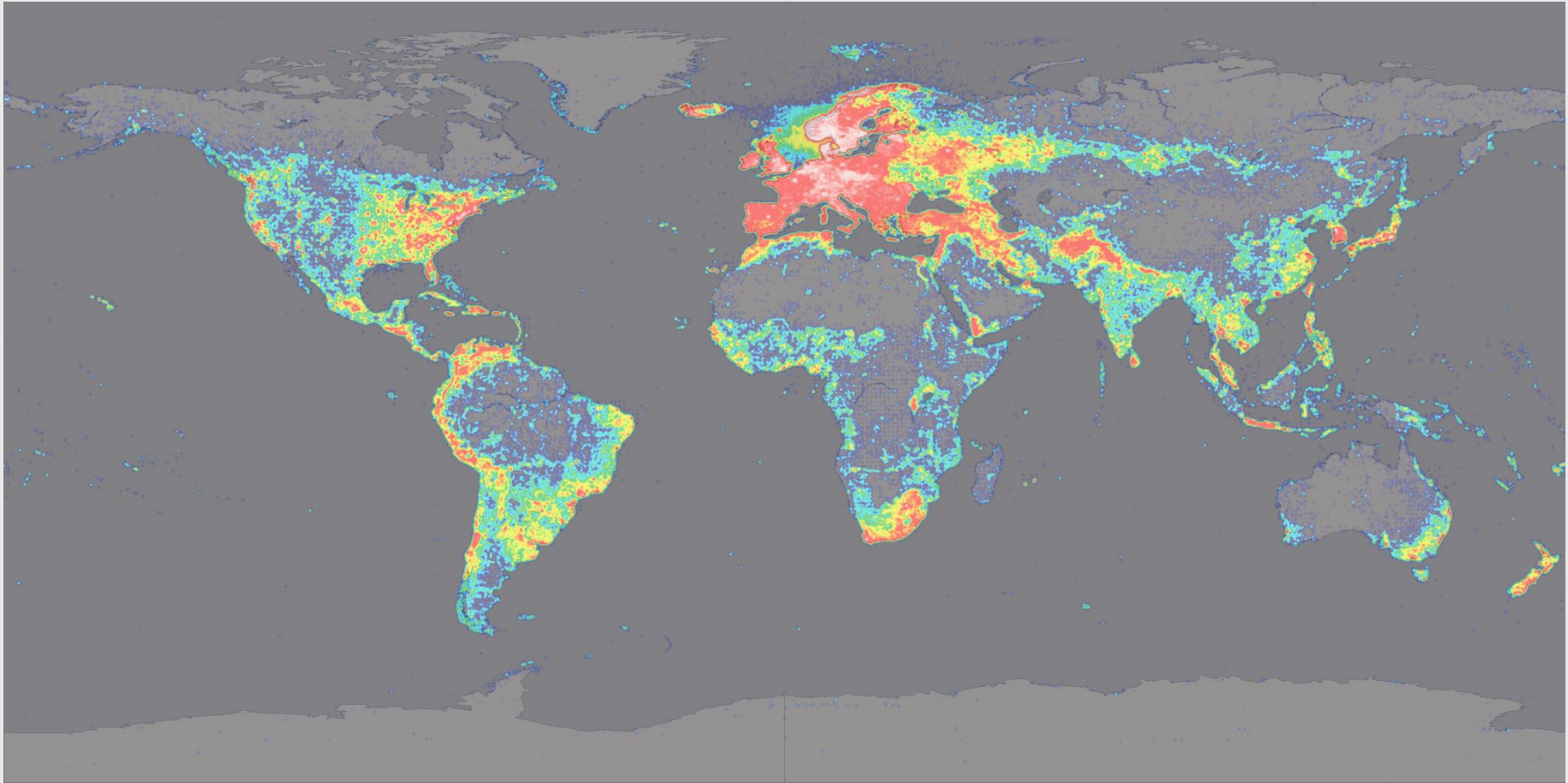
Sponsor/Terminliste ▾

B

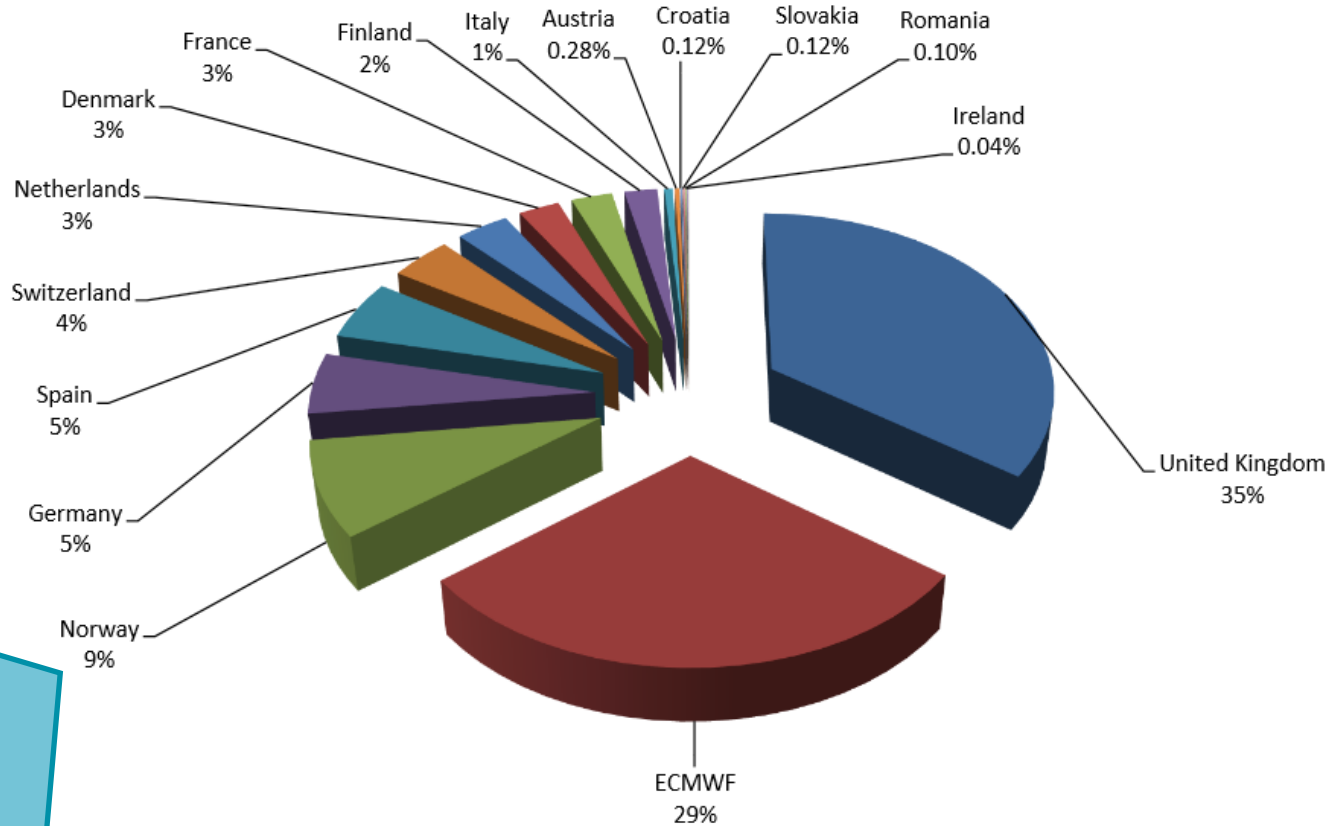
The background of the page is a photograph of a ski track winding through a snowy forest. The track is groomed with visible grooves and is flanked by snow-covered banks. Tall, dark evergreen trees are scattered throughout the landscape under a soft, overcast sky.

SWIX SMØRETIPS BASERT PÅ YR.NO WAX WIZARD

Downloads of location forecasts (mostly based on ECMWF fields)



Selling of ECMWF Numerical output



In short...

1. If you sell forecasts, only those who pay get this forecast

→ this will significantly reduce the use of the high-quality forecasts.
many decisions will be taken based on lower-quality information

2. If you sell weather information, you will prevent kick starting the development of new services

Possible effects:

→ small economic benefit to the institute selling the forecast

→ cost of producing the forecast is not reduced, even if the use of the forecast is reduced

→ large economic loss to society



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Thank you!

Questions?

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