



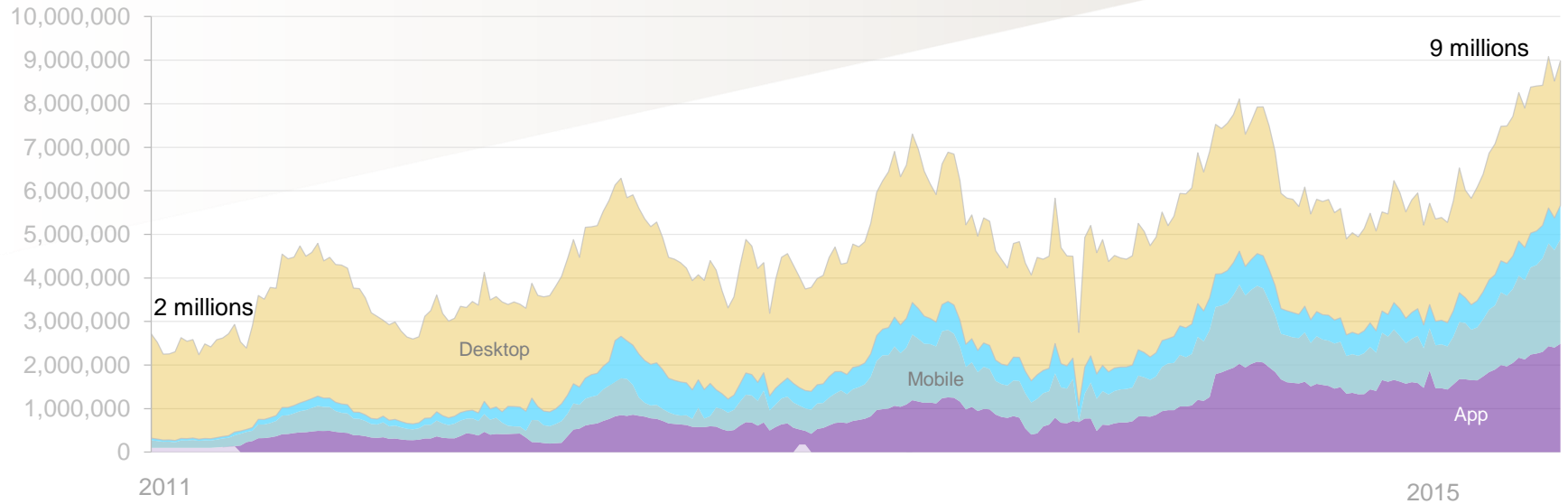
130 millimeter

How Users Drive Us Making the Complex Understandable

Nina Khalayli and Ingrid Støver Jensen, Norwegian Broadcast Corporation (NRK)

Fifth largest weather services in the world*


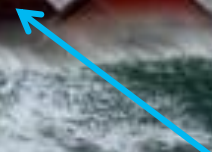
Yr users 2011 - 2015



*alexa.com



Close cooperation is a success criterion!



Responsibility
design, presentation,
the service on
desktop, tablet and
mobile. Journalistic
content

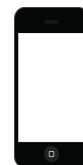


Responsibility
weather data,
forecast quality

Yr on desktop and mobile / app

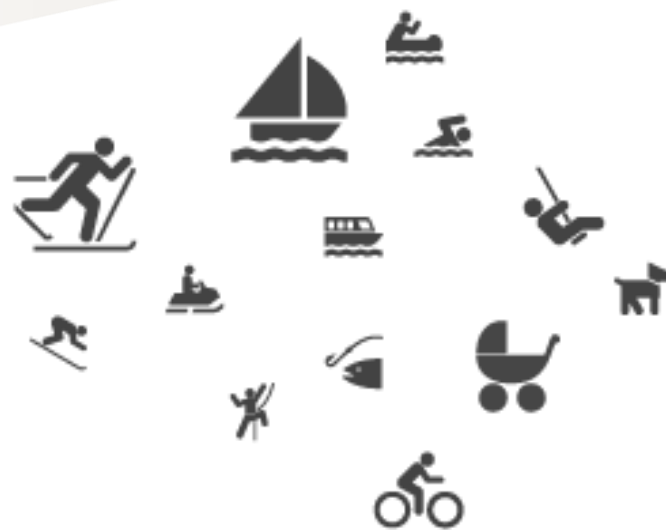
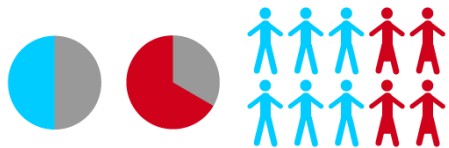


Working on a new version of Yr: How do we fit all the information in our desktop version into a smartphone?

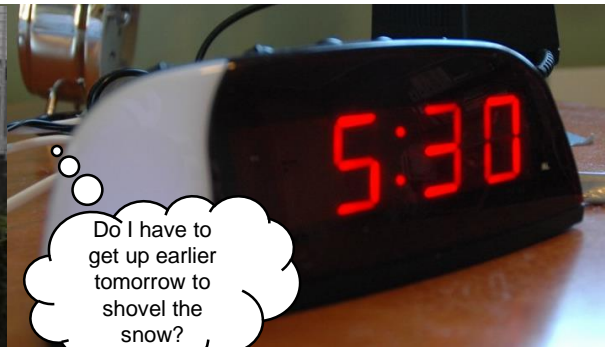
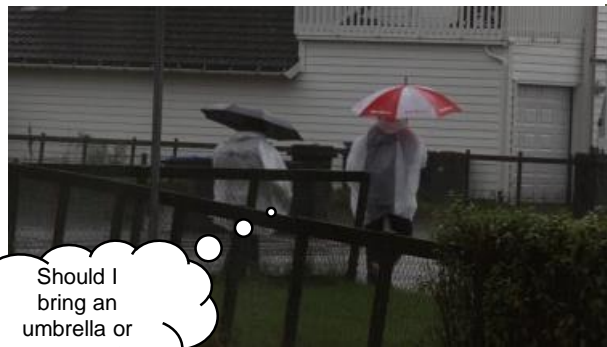


NRK

User driven development



MAIN SCENARIO: EVERYDAY LIFE



OTHER SCENARIO'S: SPECIAL SITUATIONS



Coastal fisherman



Mountain guide, winter



Paraglider



Event agency



Snow plough driver

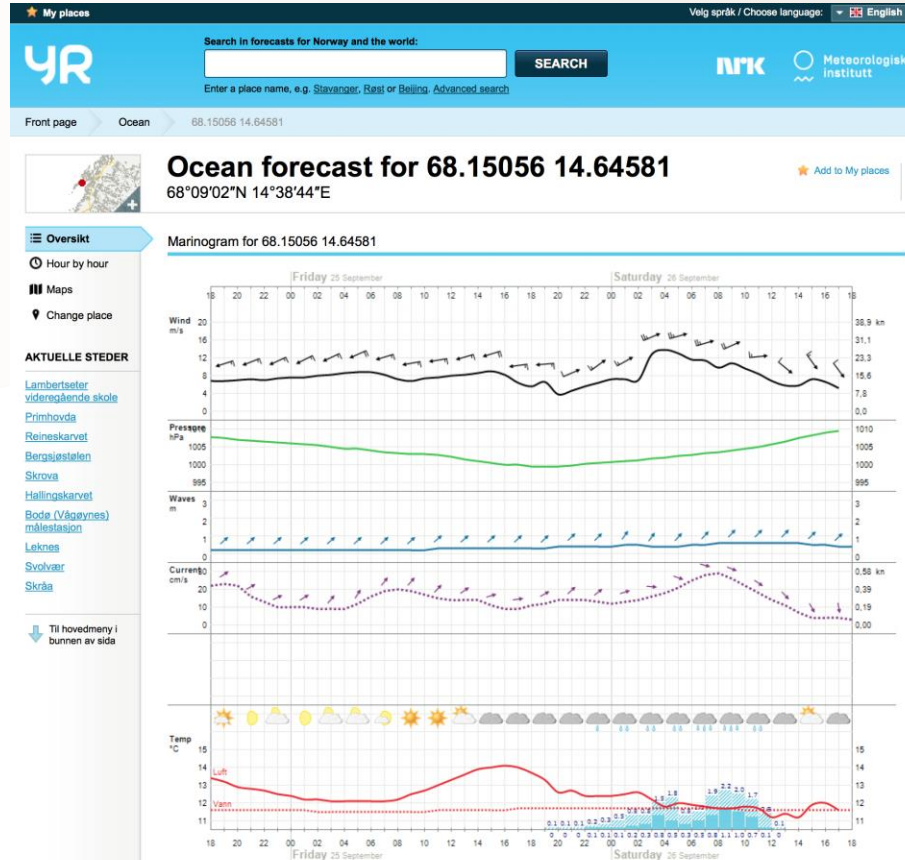


Grain farmer



Yr offers a lot of marine content, in different formats, it's up to the user to choose...

Wind
Pressure
Waves
Currents
Water temp.
Air temp.
Precipitation



Yr offers a lot of marine content, in different formats, it's up to the user to choose...


Wind
Pressure
Waves
Currents
Water temp.
Air temp.
Precipitation

★ My places Velg språk / Choose language: English

YR **SEARCH** MFK Meteorologisk institutt

Enter a place name, e.g. Stavanger, Bæst or Beiling. [Advanced search](#)

Front page > Ocean > 68.15056 14.64581

 **Ocean forecast for 68.15056 14.64581** ★ Add to My places

68°09'02"N 14°38'44"E

☰ Oversikt
Hour by hour
 ☰ Maps
 📍 Change place

AKTUELLE STEDER

- [Lambertseter videregående skole](#)
- [Primhøvda](#)
- [Reineskarvet](#)
- [Bergsjøstien](#)
- [Skrova](#)
- [Hallingskarvet](#)
- [Boda \(Vilgevnes\) idrettsanlegg](#)
- [Leiknes](#)
- [Svolvær](#)
- [Skråa](#)

⬇️ Til hovedmeny i bunnen av sida

Thursday 24 September 2015

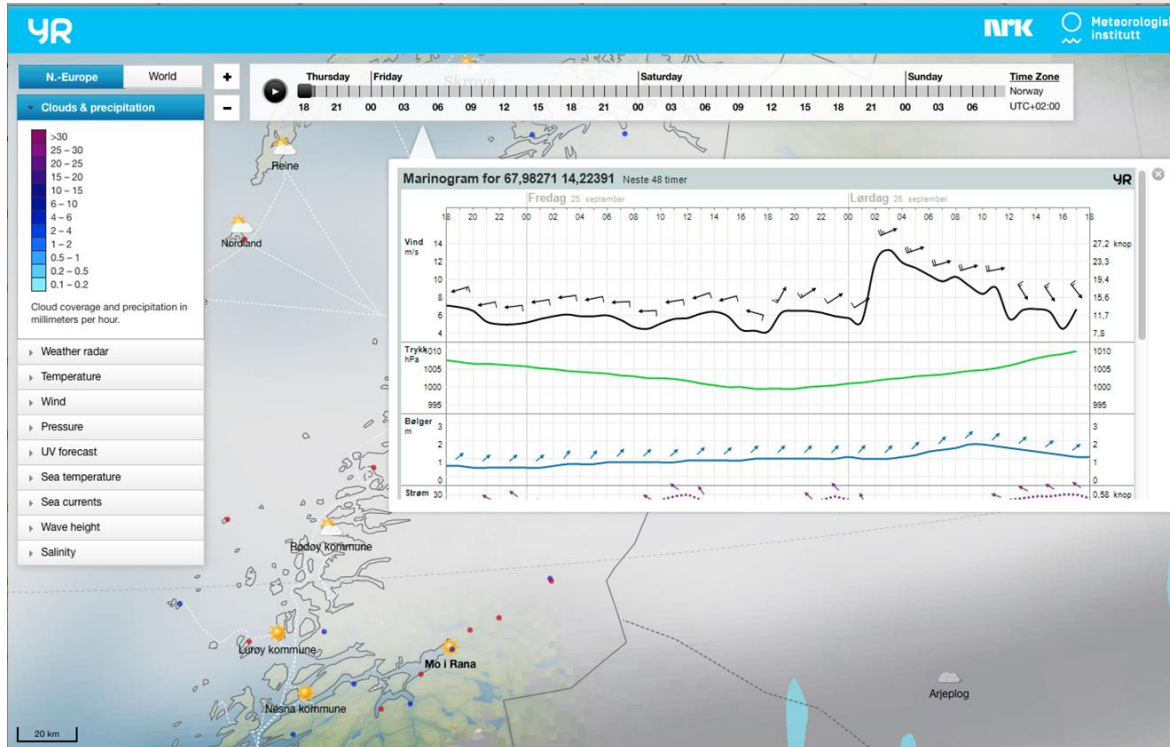
Forecast valid for a period of time			Forecast valid at the time in question									
Time	Weather	Precipitation	Time	Air				Water			Waves	
				Temp.	Wind	Pressure	Fog	Temp.	Current	Sea level	Height	Direction
18:00 – 19:00		0 mm	18:00	13°	Moderate breeze, 7 m/s from east-northeast	1008 hPa	0 %	12°	22 cm/s		0.2 m	SW
19:00 – 20:00		0 mm	19:00	13°	Moderate breeze, 7 m/s from east-northeast	1007 hPa	0 %	12°	23 cm/s		0.2 m	SW
20:00 – 21:00		0 mm	20:00	13°	Moderate breeze, 7 m/s from east-northeast	1007 hPa	0 %	12°	22 cm/s		0.2 m	SW
21:00 – 22:00		0 mm	21:00	13°	Moderate breeze, 7 m/s from east-northeast	1007 hPa	0 %	12°	16 cm/s		0.2 m	SW
22:00 – 23:00		0 mm	22:00	13°	Moderate breeze, 7 m/s from east-northeast	1007 hPa	0 %	12°	13 cm/s		0.2 m	SW
23:00 – 00:00		0 mm	23:00	12°	Moderate breeze, 7 m/s from east-northeast	1006 hPa	0 %	12°	10 cm/s		0.2 m	SW

Friday 25 September 2015

Forecast valid for a period of time			Forecast valid at the time in question									
Time	Weather	Precipitation	Time	Air				Water			Waves	
				Temp.	Wind	Pressure	Fog	Temp.	Current	Sea level	Height	Direction
00:00 – 01:00		0 mm	00:00	12°	Moderate breeze, 8 m/s from east-northeast	1006 hPa	0 %	12°	10 cm/s		0.2 m	SW
01:00 – 02:00		0 mm	01:00	12°	Moderate breeze, 8 m/s from east-northeast	1006 hPa	0 %	12°	10 cm/s		0.2 m	SW
02:00 – 03:00		0 mm	02:00	12°	Fresh breeze, 8 m/s from east-northeast	1005 hPa	0 %	12°	9 cm/s		0.2 m	SW
03:00 – 04:00		0 mm	03:00	12°	Fresh breeze, 8 m/s from east-northeast	1005 hPa	0 %	12°	9 cm/s		0.2 m	SW
04:00 – 05:00		0 mm	04:00	12°	Fresh breeze, 9 m/s from east-northeast	1005 hPa	0 %	12°	9 cm/s		0.2 m	SW

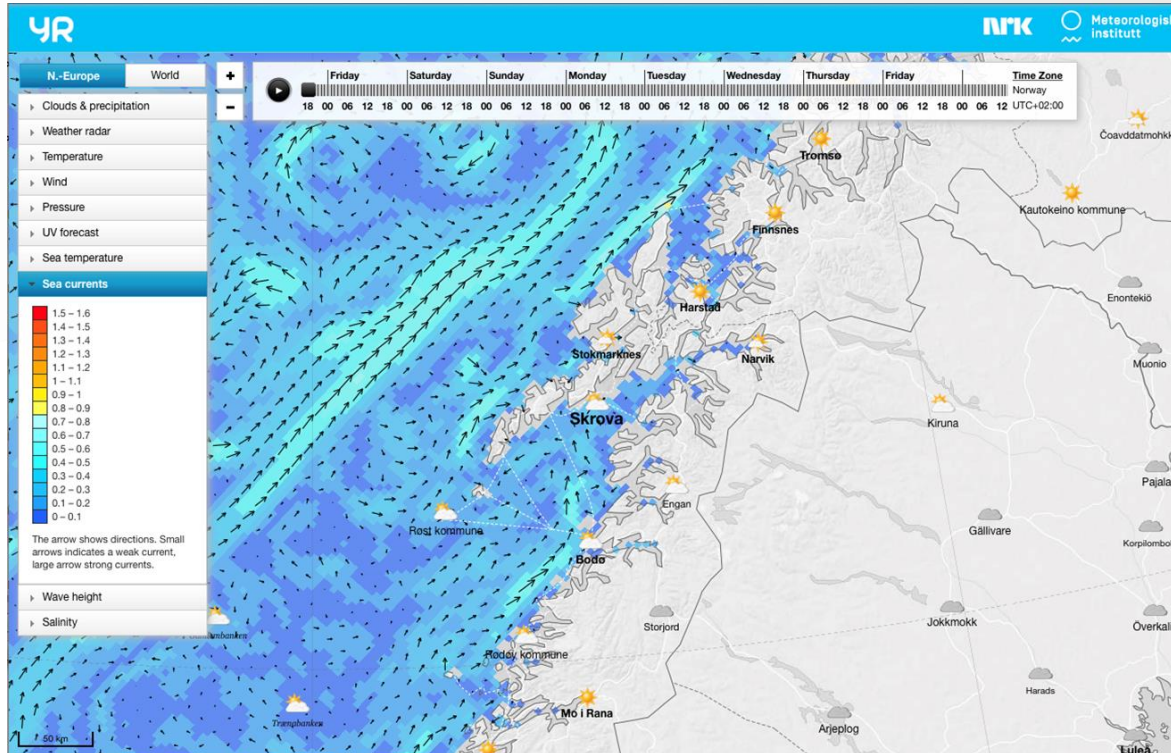
Yr offers a lot of marine content, in different formats, it's up to the user to choose...

Wind
Pressure
Waves
Currents
Water temp.
Air temp.
Precipitation



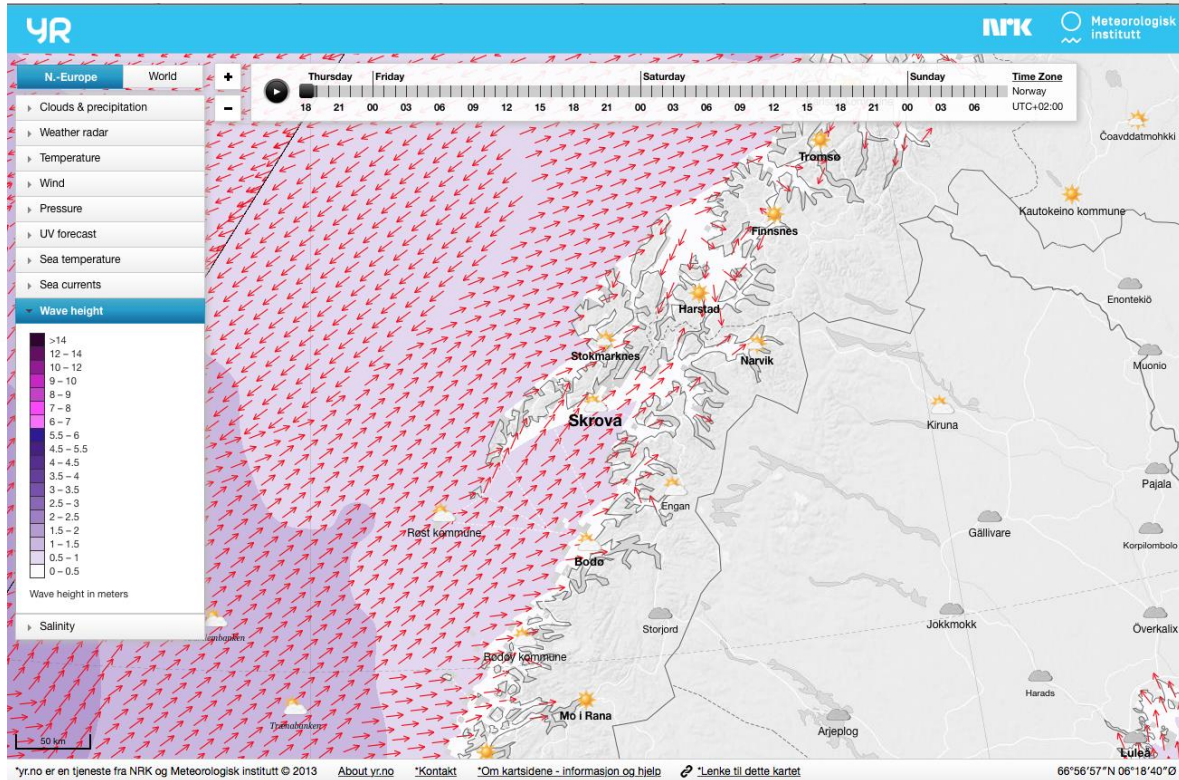
Yr offers a lot of marine content, in different formats, it's up to the user to choose...

Wind
Pressure
Waves
Currents
Water temp.
Air temp.
Precipitation
Salinity



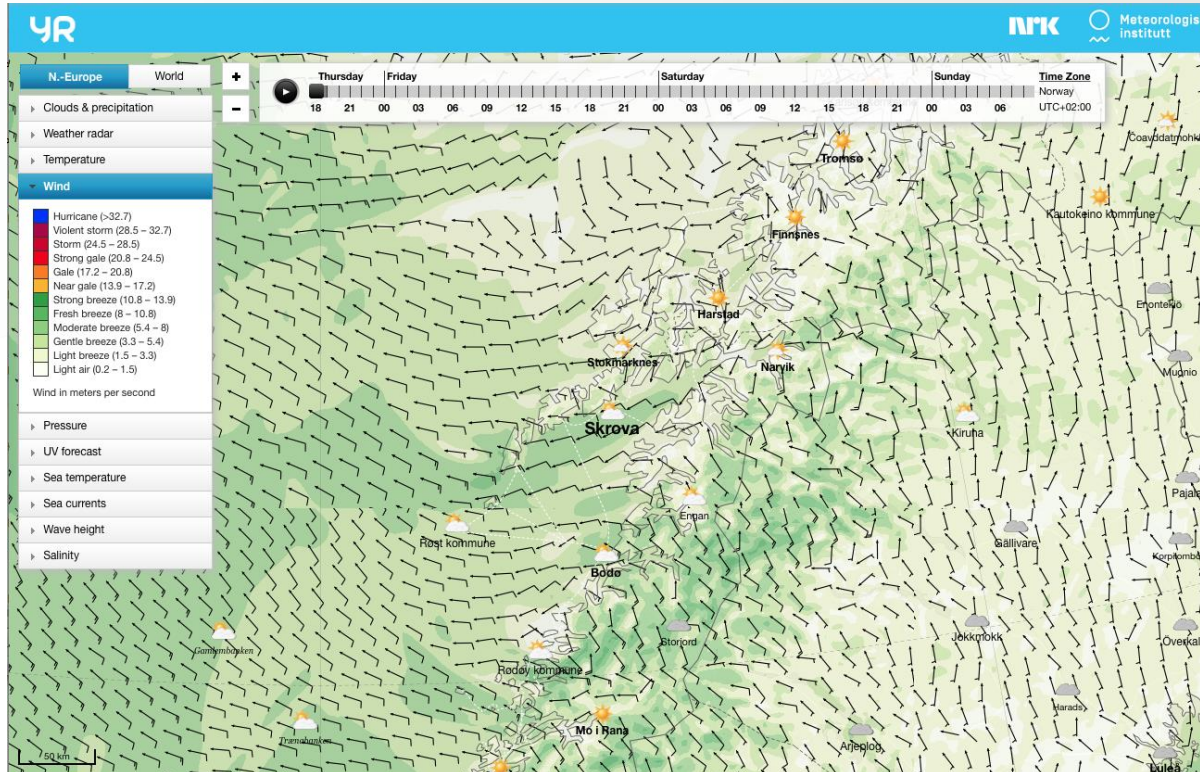
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Salinity



Yr offers a lot of marine content, in different formats, it's up to the user to choose...

Wind
Pressure
Waves
Currents
Water temp.
Air temp.
Precipitation
Salinity



Less use than expected...

Why?



Coastal fisherman



We traveled to Lofoten, Northern Norway to find out

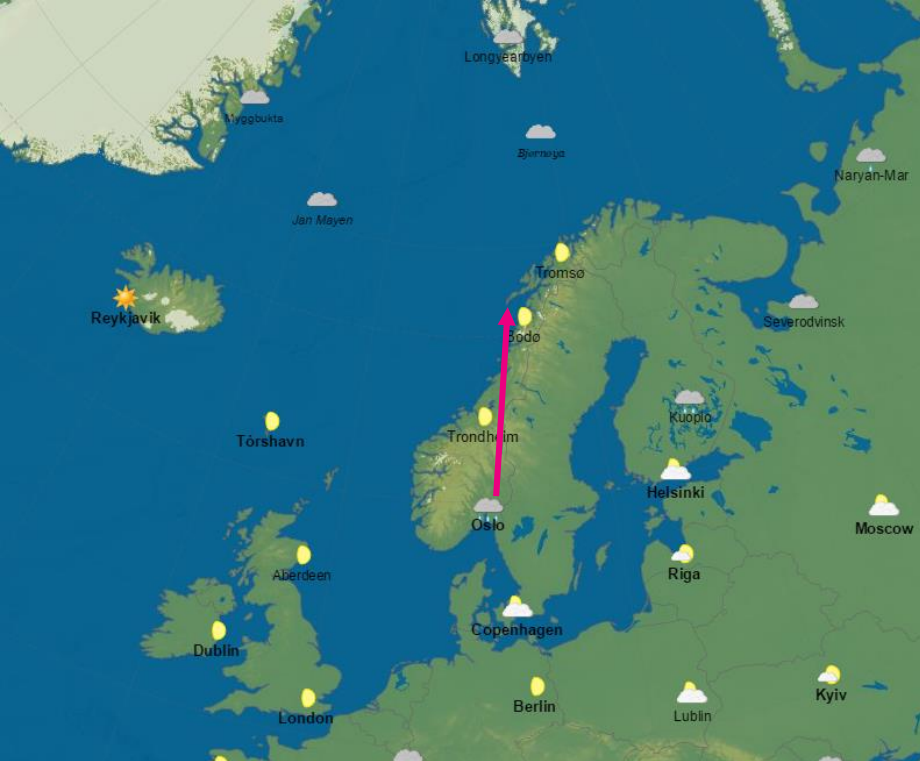


Foto: G.H. Nijssen Antonson

The most lethal occupation





”Northwest is OK,
but northeastly storm is not, then «he» is strong”

Decision making, based on wind conditions

- Checking weather service (Yr) to know what's coming
- Time pressure!
 - Scan quickly to detect changes
 - Mobile
- Observations

It's about minimizing risk

Consequences of stormy weather

- Death
- Injuries
- Lost equipment
- Miss the day's catch (£1.500 – 2.400)

Weather forecast for Skrova, Vågan (Nordland)

Today, Thursday 24/09/2015

Time	Forecast	Temp.	Precipitation	Wind
18:00-00:00		13°	0 mm	Moderate breeze, 7 m/s from east-northeast
00:00-06:00		12°	0 mm	Moderate breeze, 8 m/s from east-northeast
06:00-12:00		12°	0 mm	Fresh breeze, 9 m/s from east-northeast
12:00-18:00		13°	0 mm	Moderate breeze, 8 m/s from east-northeast
18:00-00:00		14°	0-0.6 mm	Gentle breeze, 8 m/s from east-northeast

Tomorrow, Friday 25/09/2015

Time	Forecast	Temp.	Precipitation	Wind
00:00-06:00		12°	2.2-1.1 mm	Moderate breeze, 7 m/s from west-southwest
06:00-12:00		12°	4.5-4.8 mm	Strong breeze, 12 m/s from west-southwest
12:00-18:00		11°	0-0.1 mm	Moderate breeze, 7 m/s from northwest
18:00-00:00		11°	0-0.1 mm	Moderate breeze, 8 m/s from northwest

Observations from the closest weather stations

Skrova lightwave observation site, 11 m

Weather	Temp.	Wind	Temperature last 30 days
	13.8°	Gentle breeze, 5.8 m/s from east-northeast	Max: 23° Min: 8.9°

Boiløyer Airport observation site, 9 m

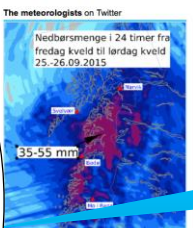
Weather	Temp.	Wind	Temperature last 30 days
	15.0°	Gentle breeze, 4.1 m/s from east-northeast	Max: 21° Min: 8.8°

Lattnes Airport observation site, 28 m

Weather	Temp.	Wind	Temperature last 30 days
	15.4°	Light breeze, 2.7 m/s from east	Max: 22° Min: 12°

Precipitation last week

	Thu 24.09	Fri 25.09	Sat 26.09	Sun 27.09	Mon 28.09	Tue 29.09	Wed 30.09	Thu 01.10
Ståen	1.6	0.0	0.1	0.0	25.2	1.8	0.7	0.0
Boiløyer	0.2	0.0	0.0	0.0	11.3	0.1	0.0	0.0
Tømmerneset	3.5	0.0	0.1	0.0	12.0	5.0	0.3	0.6



Meteorologene @Meteorologene
 Uvertet svært kraftig regn i Bodø og sør i Lofoten nå. Følg regnet på på radaren: yrnordland#NorgeNor... #Nordland
 7:51 PM - 24 Sep 2015



The meteorologist's text forecast

THURSDAY AND FRIDAY
 Høytt: Lavtrykk 990 hPa posisjon 61 N 14 W, sentert 090 km fra (coasting) 12 W vedlag 06 ut.
 Lavtrykk 1000 hPa posisjon 57 N 18 E er ligger omkring 140 km fra oss.
 Skiløyer - Andenes: Skiløyer fra 18 til 10. Oppholdsvær. Fredag kveld skiftende bris. Regn.
 THURSDAY
 Nordland: Saraullig til, frisk bris utalle steder. Oppholdsvær og en del sol.
 Finnøy
 Ofoten, Lofoten og Vesterålen: Saraullig til bris utalle steder. Delvis skyet oppholdsvær og skiftende bris. Regn.

Use Yr today?

"Arrow forecast"

Ignore

"Observations are Mandatory"

Has to know *when*, Reads the exact strenght in the table

Reads the text forecast in order to validate the table (larger area). Confused when differs

When there is something, more details

Weather forecast for Skrova, Vågan (Nordland)



RELEVANT PLACES

Time	Forecast	Temp.	Precip.	Wind
Thursday 18:00		13°	0 mm	Moderate breeze, 7 m/s from east-northeast
Thursday 19:00		13°	0 mm	Moderate breeze, 7 m/s from east-northeast
Thursday 20:00		13°	0 mm	Moderate breeze, 7 m/s from east-northeast
Thursday 21:00		13°	0 mm	Moderate breeze, 7 m/s from east-northeast
Thursday 22:00		13°	0 mm	Moderate breeze, 7 m/s from east-northeast
Thursday 23:00		12°	0 mm	Moderate breeze, 7 m/s from east-northeast

Today and tonight, 24 September 2015

Time	Forecast	Temp.	Precip.	Wind
01:00		12°	0 mm	Moderate breeze, 6 m/s from east-northeast
02:00		12°	0 mm	Moderate breeze, 6 m/s from east-northeast
03:00		12°	0 mm	Moderate breeze, 6 m/s from east-northeast
04:00		12°	0 mm	Moderate breeze, 6 m/s from east-northeast
05:00		12°	0 mm	Moderate breeze, 6 m/s from east-northeast

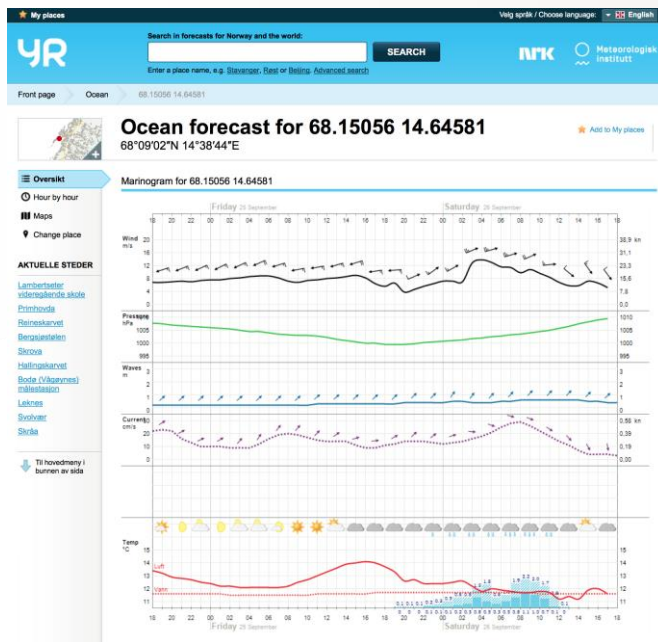
Tomorrow, 25 September 2015

Time	Forecast	Temp.	Precip.	Wind
06:00		12°	0 mm	Fresh breeze, 8 m/s from east-northeast
07:00		12°	0 mm	Moderate breeze, 8 m/s from east-northeast
08:00		12°	0 mm	Moderate breeze, 7 m/s from east-northeast
09:00		12°	0 mm	Moderate breeze, 7 m/s from east-northeast
10:00		13°	0 mm	Moderate breeze, 7 m/s from east-northeast
11:00		13°	0 mm	Moderate breeze, 8 m/s from east-northeast
12:00		13°	0 mm	Moderate breeze, 8 m/s from east-northeast
13:00		14°	0 mm	Moderate breeze, 8 m/s from east-northeast
14:00		14°	0 mm	Moderate breeze, 8 m/s from east-northeast
15:00		14°	0 mm	Moderate breeze, 8 m/s from east-northeast
16:00		14°	0 mm	Moderate breeze, 8 m/s from east-northeast
17:00		14°	0 mm	Moderate breeze, 8 m/s from east-northeast

26 September 2015

Time	Forecast	Temp.	Precip.	Wind
00:00		12°	0.1-0.9 mm	Moderate breeze, 7 m/s from east-northeast
01:00		12°	0.3-0.8 mm	Moderate breeze, 7 m/s from east-northeast
02:00		12°	0.1-1.8 mm	Moderate breeze, 7 m/s from east-northeast
03:00		12°	0.1-1.8 mm	Moderate breeze, 7 m/s from east-northeast
04:00		12°	0.1-1.8 mm	Moderate breeze, 7 m/s from east-northeast
05:00		12°	0.3-0.8 mm	Strong breeze, 14 m/s from east-southeast
06:00		12°	0.3-0.8 mm	Strong breeze, 13 m/s from east-southeast
07:00		12°	0.8-1.9 mm	Strong breeze, 14 m/s from east-southeast
08:00		12°	1.1-2.2 mm	Strong breeze, 16 m/s from east-southeast
09:00		12°	1.0-2.0 mm	Strong breeze, 16 m/s from east-southeast
10:00		12°	0.7-1.7 mm	Strong breeze, 16 m/s from east-southeast
11:00		12°	0.1-0.9 mm	Moderate breeze, 8 m/s from east-northeast
12:00		11°	0-0.1 mm	Moderate breeze, 8 m/s from east-northeast
13:00		11°	0 mm	Moderate breeze, 8 m/s from east-northeast
14:00		11°	0 mm	Moderate breeze, 7 m/s from east-northeast
15:00		12°	0 mm	Moderate breeze, 7 m/s from east-northeast
16:00		12°	0 mm	Moderate breeze, 7 m/s from east-northeast
17:00		12°	0 mm	Gentle breeze, 5 m/s from east-southeast

Reflections on... ... graph (meteo- or marinogram) versus table



Ocean forecast for 68.15056 14.64581
68°09'02"N 14°38'44"E

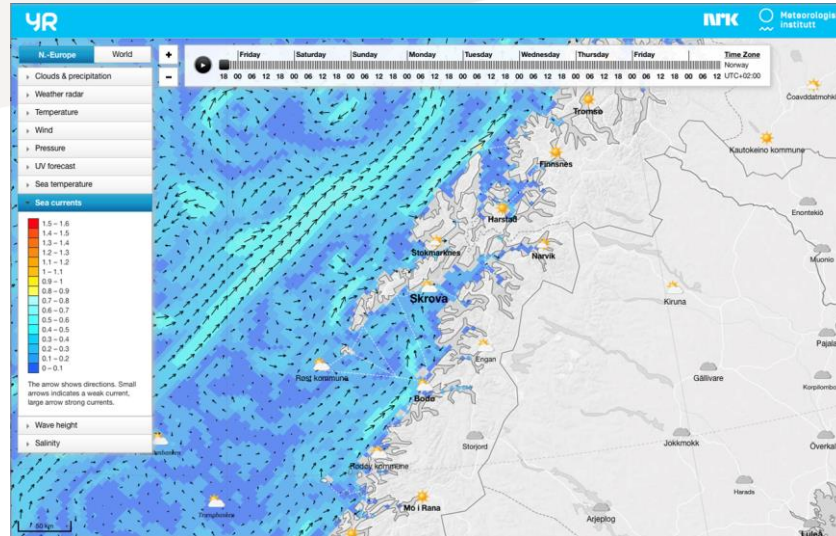
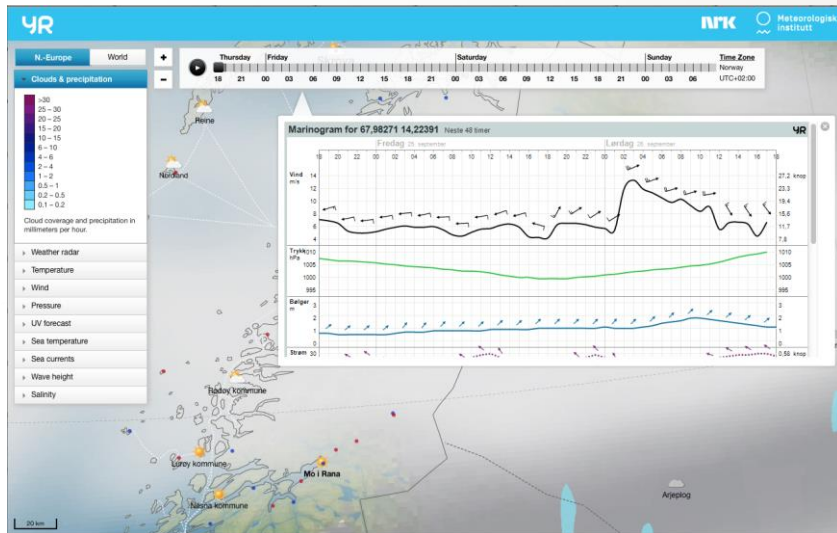
Thursday 24 September 2015

Forecast valid for a period of time			Forecast valid at the time in question										
Time	Weather	Precipitation	Time	Temp.	Wind	Air	Pressure	Fog	Temp.	Water	Current	Sea level	Waves
18:00 – 19:00	☀️	0 mm	18:00	13°	↙️ Moderate breeze, 7 m/s from east-northeast	1008 hPa	0%	12°	22 cm/s			0.2 m	SW
19:00 – 20:00	☀️	0 mm	19:00	13°	↙️ Moderate breeze, 7 m/s from east-northeast	1007 hPa	0%	12°	23 cm/s			0.2 m	SW
20:00 – 21:00	☀️	0 mm	20:00	13°	↙️ Moderate breeze, 7 m/s from east-northeast	1007 hPa	0%	12°	22 cm/s			0.2 m	SW
21:00 – 22:00	☁️	0 mm	21:00	13°	↙️ Moderate breeze, 7 m/s from east-northeast	1007 hPa	0%	12°	18 cm/s			0.2 m	SW
22:00 – 23:00	☁️	0 mm	22:00	13°	↙️ Moderate breeze, 7 m/s from east-northeast	1007 hPa	0%	12°	13 cm/s			0.2 m	SW
23:00 – 00:00	☁️	0 mm	23:00	12°	↙️ Moderate breeze, 7 m/s from east-northeast	1006 hPa	0%	12°	10 cm/s			0.2 m	SW

Friday 25 September 2015

Forecast valid for a period of time			Forecast valid at the time in question										
Time	Weather	Precipitation	Time	Temp.	Wind	Air	Pressure	Fog	Temp.	Water	Current	Sea level	Waves
00:00 – 01:00	☀️	0 mm	00:00	12°	↙️ Moderate breeze, 8 m/s from east-northeast	1006 hPa	0%	12°	10 cm/s			0.2 m	SW
01:00 – 02:00	☀️	0 mm	01:00	12°	↙️ Moderate breeze, 8 m/s from east-northeast	1006 hPa	0%	12°	10 cm/s			0.2 m	SW
02:00 – 03:00	☁️	0 mm	02:00	12°	↙️ Fresh breeze, 8 m/s from east-northeast	1005 hPa	0%	12°	9 cm/s			0.2 m	SW
03:00 – 04:00	☁️	0 mm	03:00	12°	↙️ Fresh breeze, 8 m/s from east-northeast	1005 hPa	0%	12°	9 cm/s			0.2 m	SW
04:00 – 05:00	☁️	0 mm	04:00	12°	↙️ Fresh breeze, 9 m/s from east-northeast	1005 hPa	0%	12°	9 cm/s			0.2 m	SW

Reflections on... ... maps



Catch



- Enlightening!
- Too much information in maps, too time-consuming
- Make some of the data more easily accessible

Example...

... more speedy access to the relevant data

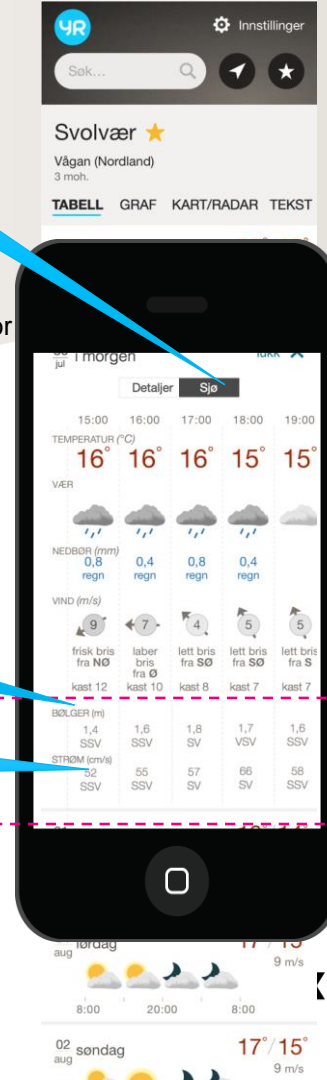
Regular overview
«everyday life-scenario»



Regular
hour by hour



Extended
marine data for
fisherman



Waves

Currents



Curious?

We are happy if you would like to try new site under development!

beta.yr.no

Thank you!



Questions?

