Co-production of seasonal forecasts: experiences from Norway

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Scientific staff incl. PhD students: about 230
Seasonal Forecasting Engine (SFE)

Forecasting weather 10–100 days ahead
"White box": empirical relationships, dynamical models, statistics, AI

Tailored forecasts
Insurance

- SpareBank 1
- POLYGON
- Tryg

Weather

- StormGeo

Renewable energy

- Lyse
- BKK
- Agder Energi
- Kongsberg

Coast guard

- Norwegian Meteorological Institute
Project milestones

- 2018: First dialogue with each user
- 2019: Product definitions
- 2020: Business models
- 2021: Operational system
How do we co-produce the forecasts with the users?

1. Visit them where they are: builds trust

First dialogue with each user
1040 km
650 miles
How do we co-produce the forecasts with the users?

1. Visit them where they are: builds trust

2. Ask the right questions

First dialogue with each user
We're here because we want to provide you with seasonal forecasts

Mhhhm, that sounds interesting
So what data do you need?

What do you mean "data", we need to know where the sea ice is
Ok, so when do you typically need this information?

When we're going to rescue someone in the ice and need to find the safest route.
So you need information about the current state (nowcasts)?

Yes, we don't have sea ice forecasts, we make our own based on experience.
But might forecasts longer ahead be useful for planning?

(Thinking...) Yes, potentially a few weeks or months ahead
The coast guard gets sea ice charts, but no forecasts

They need nowcasts or short range forecasts for operations, and seasonal forecasts for planning
This only became clear after we met them face to face at their base

Now we have put them in contact with sea ice modellers at the Bjerknes Centre + we will see how well we can forecast sea ice and SSTs with our system.
Most important experiences

• It takes a lot of time to build relationships

• Meet partners at their home turf to learn more about them and build trust

• Ask open ended questions, aim for two-way dialogue

• Meet often, and invite users to meet at your home institution – they are curious!

• Make plans for continuation of forecasts after the end of the project period
First user group meeting in June 2018

Plans for 2018–2021:
Co-production of viable forecast products

sfeproject.wordpress.com
We have now identified so many potential uses and users that we're forming a Climate Risk Alliance.
Thank you!

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