



From practitioners' knowledge to climate modelling and back: – Using climate model projections to provide relevant climate information to Arctic reindeer herding communities

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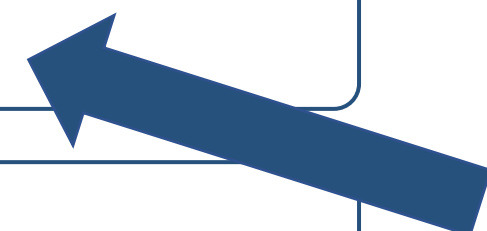


- practical work in environment-dependent livelihoods is constant adaptation to external conditions
- provide relevant and reliable climate change information to practitioners of environment dependent livelihoods
- spark thinking about adaptation of adaptation strategies

3-step process

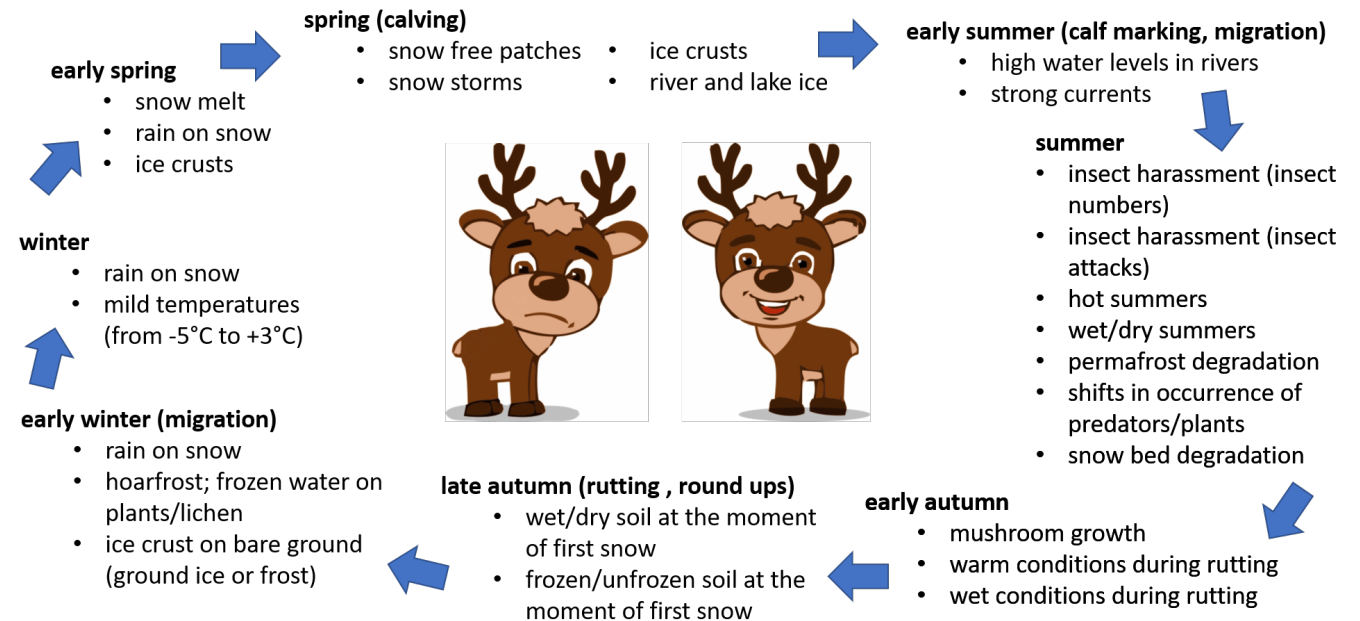
1. Understanding the operational environment
2. Calculating information on critical conditions
3. Present results in reliable and understandable ways

example: reindeer herders (mostly in Finland)



PolarRES
CHARTER

identification of critical climate conditions that impact the livelihood's success



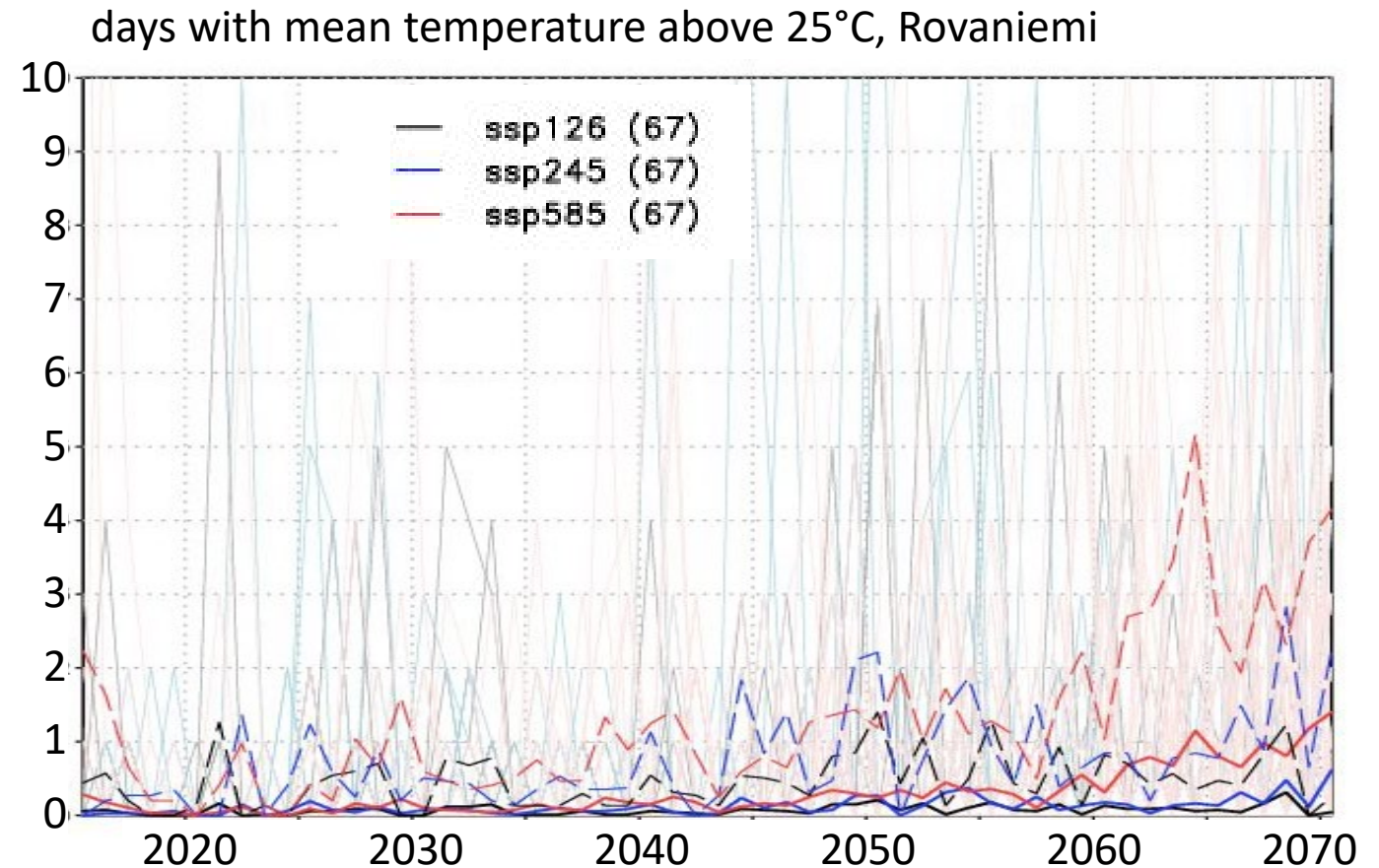
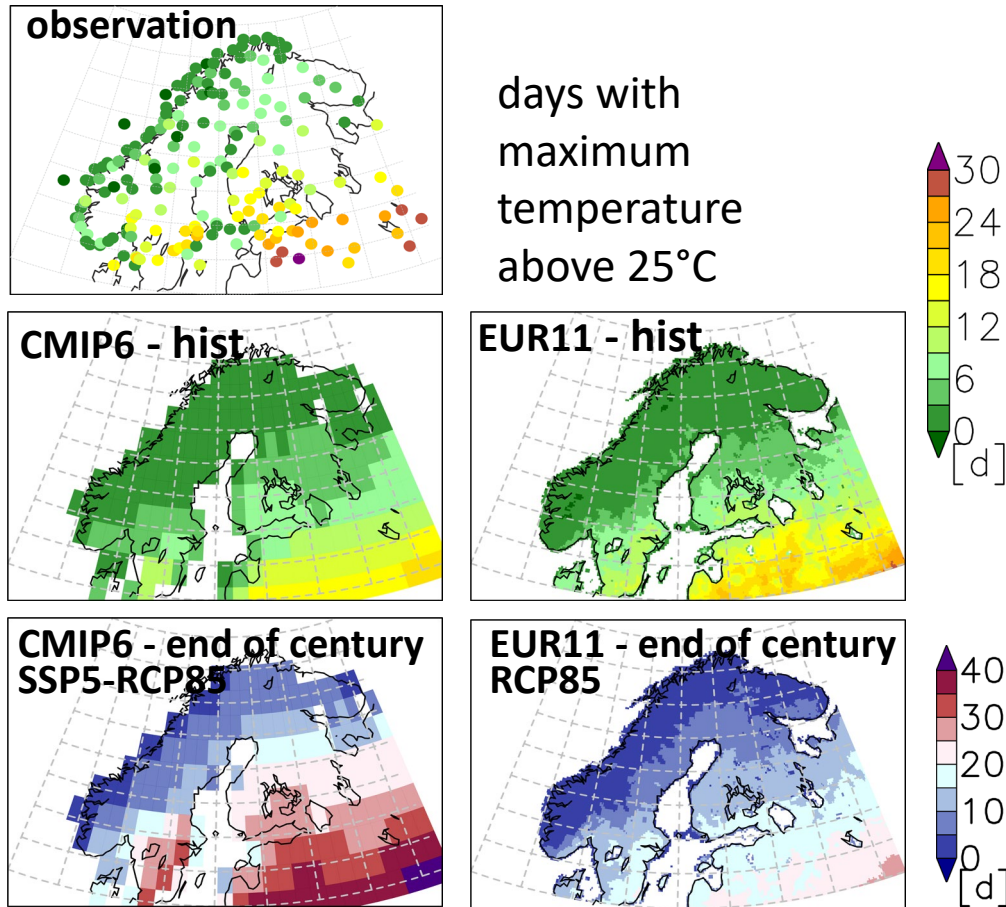
workshop tools & instructions can be found here:
<https://doi.org/10.5281/zenodo.8334153>

Calculating information on critical conditions

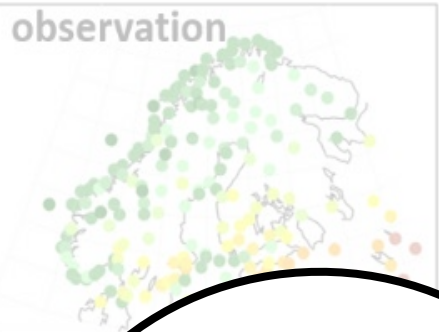
translating these conditions
into climate indices

identifying data sources: gaps in understanding,
data availability and data quality

calculating indices from
appropriate data sources



Present results in relatable and understandable ways



days with
maximum
temperature
above 2



days with mean temperature above 25°C, Rovaniemi



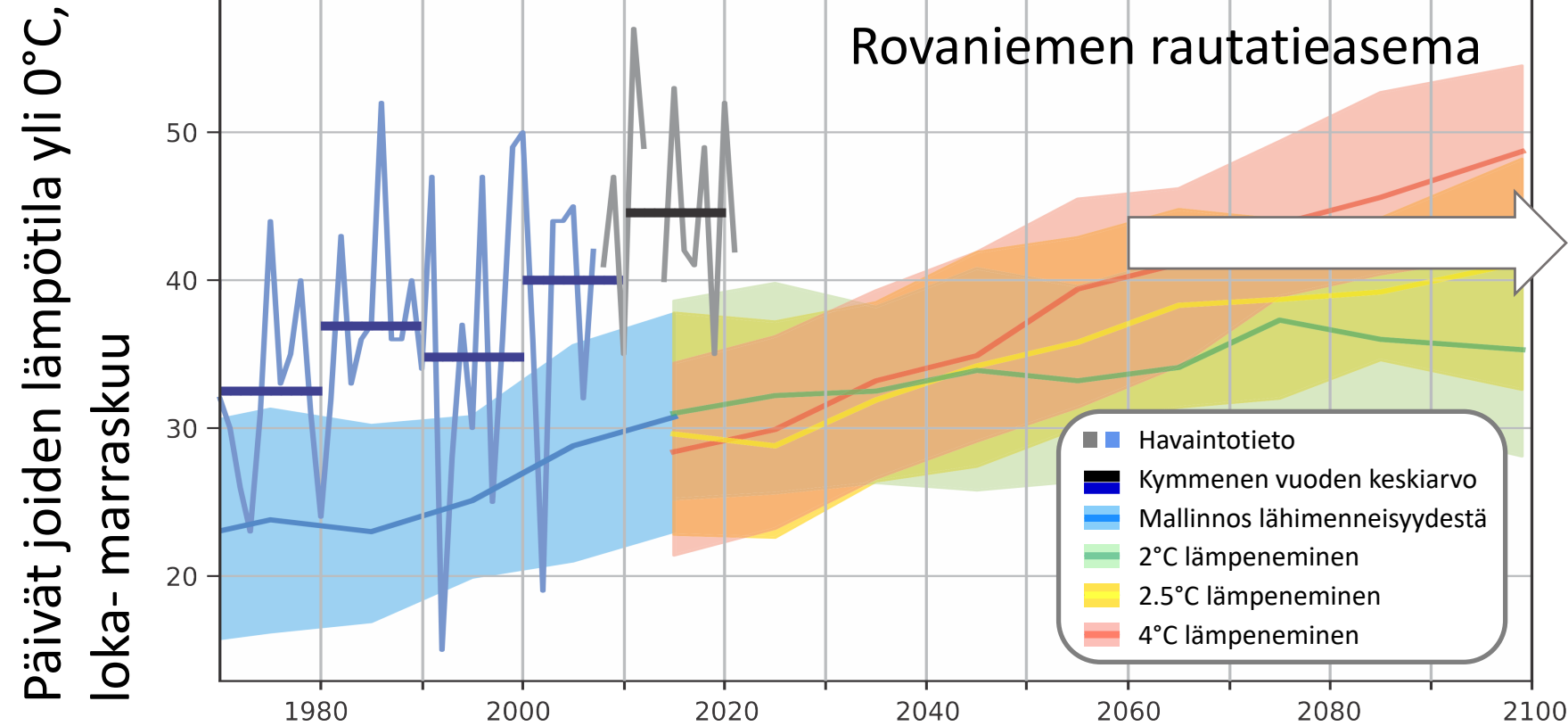
What do you
mean? This
is
visualization
of climate
change!



Ok, and how do
we visualize
climate change?

Yes, yes. But are
you sure people
understand your
fancy maps and
graphs?

Present results in relatable and understandable ways



What if people don't want to look at graphs?

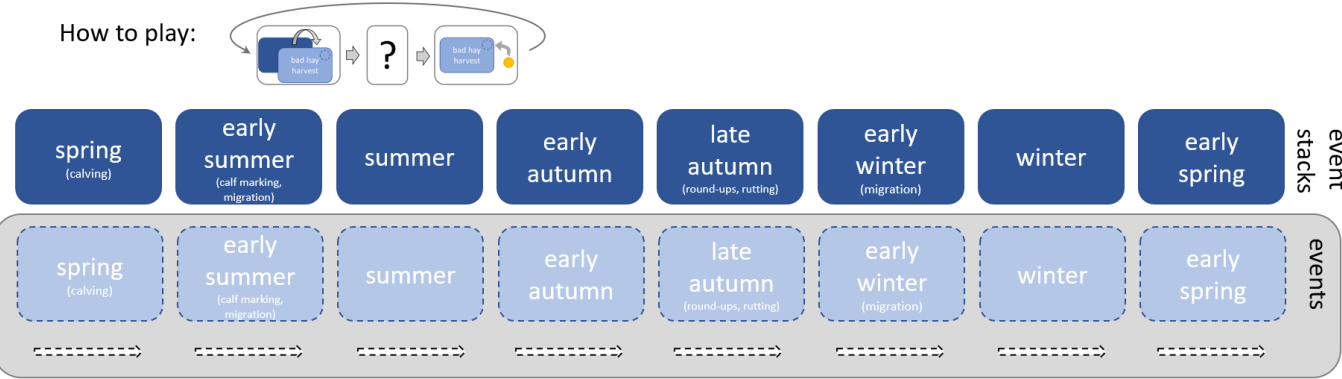
Sanna: "So this means we will be working in the wet and in the dark." *

*Sanna Hast, Finish Reindeer Herders' Association

We need a "translation" of what this means in the context of the people who are affected.

Present results in relatable and understandable ways

How can else can we communicate climate change? ➡ situation room game



- ?
- How do you realize this is happening?
 - What do you need to know about it?
 - Can you get that information? How and from whom?
 - What would you do?
 - What would you need others (who?) to do?

action tokens (one colour per player)



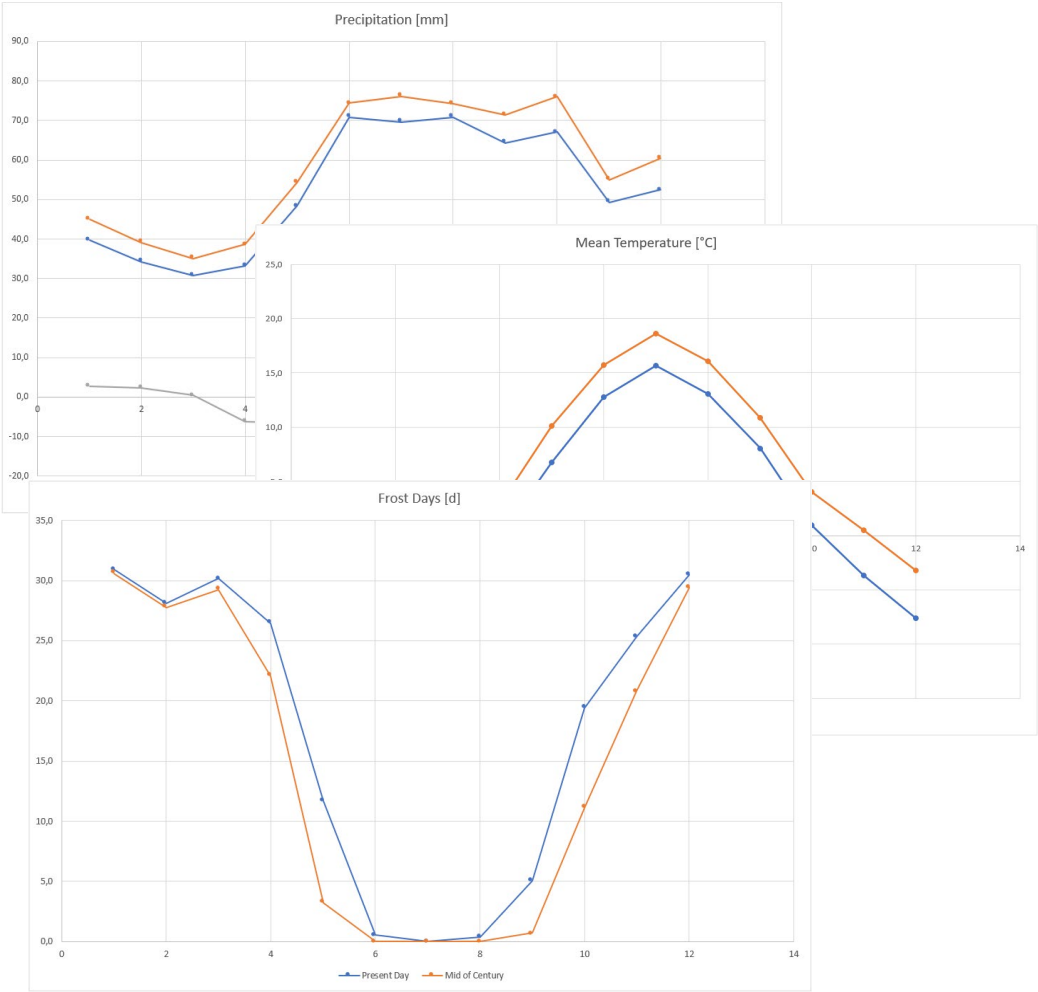
- practitioner level action (What would you do?)
- stakeholder level action (What would you need others to do?)



Ylläs workshop, August 2024

Present results in relatable and understandable ways

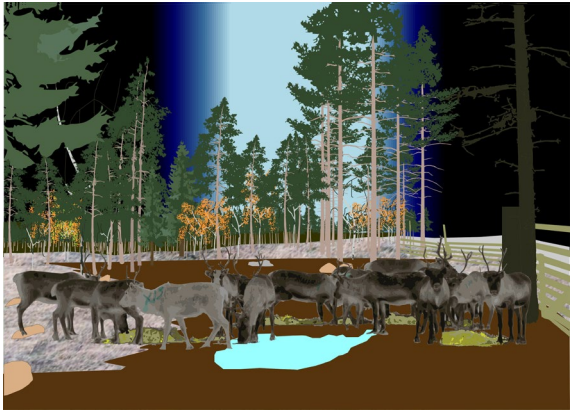
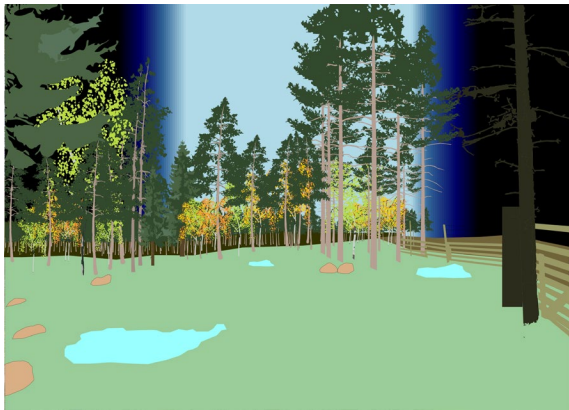
How can we visualize climate change differently? ➡ In 2050, what will your backyard look like?



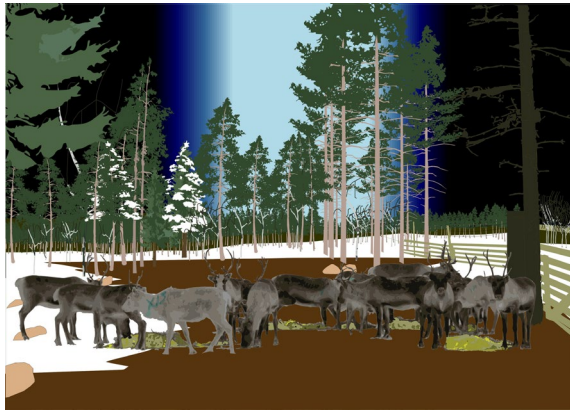
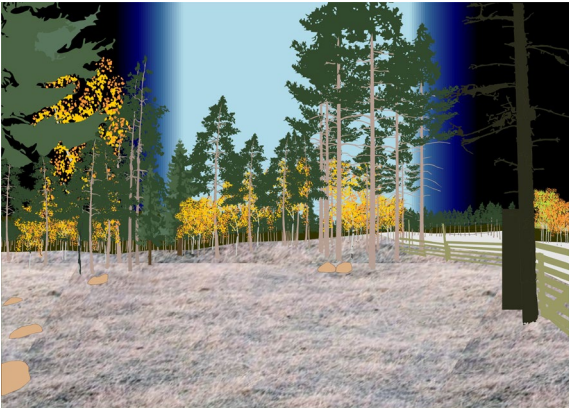
2050

October

November



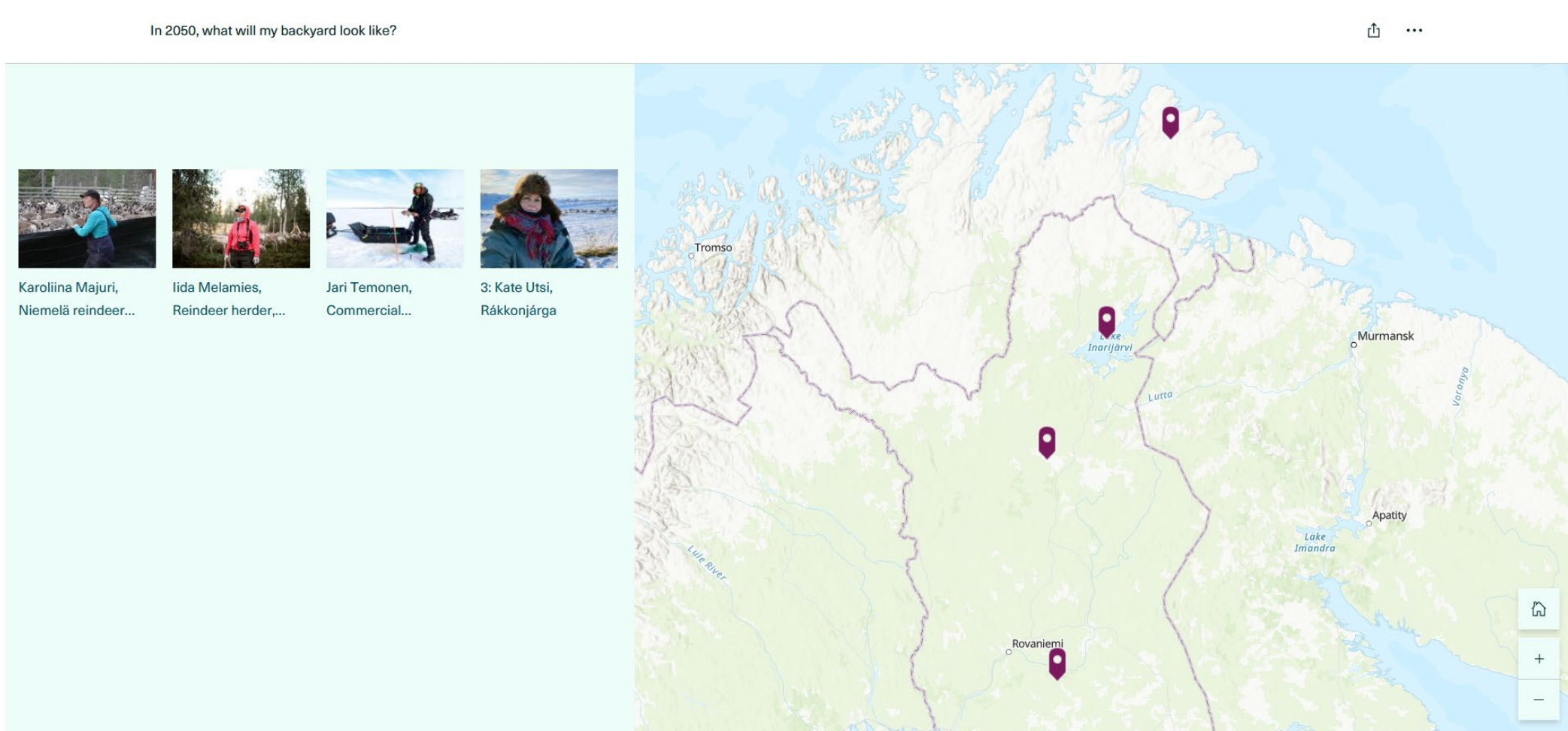
Present Day



Present results in relatable and understandable ways

How can we visualize climate change differently?

StoryMaps by Philip



<https://storymaps.arcgis.com/stories/95207a47d7bf4d5bb674a66da6a3db79>

Communication is everything!

- Who is your audience?
- What is their background?
- Why might they want your information?
- How is information presented?
- Who has access to your presentation?
- Who provides context? Who is the translator?

