## Repurposing Climate Data

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*INES - <u>Infrastructure for Norwegian Earth System modelling</u>* (*NRC grant* 270061)



https://nordicesmhub.github.io/

#### **Wardic Infrastructure Collaboration on Earth System Tools (NICEST)**



#### Overview

- Why and what for?
- What have we done so far to make climate data and models more reusable?
- What have we learned?
- What is the way forward?

#### What for?

There is a wealth of data<sup>1</sup> and information available about the past, current and future climate.

- Is this information easily accessible, discoverable or reusable?
- Which information is authoritative and trustworthy and which information to use when and how?
- What about local and regional impacts of global change?
- Should we better **support education** and **innovation**?

#### One constraint

# Be inclusive

- Cover needs from students, researchers, decision makers, businesses, media, artists, citizen, etc.
- Cater for cross-disciplinary aspects
- Cater for different expectations and different level of expertise in climate Science, data & visualization analysis, programming, etc.

#### Our approach: the front end



#### Our approach: behind the scene



Share and publish tools & workflows

#### Example: climate and economic models

PhD Research Fellow working on climate modelling and economic impacts of climate change



#### Example: NorESM/CESM & DIAM in Galaxy



NorESM/CESM & DIAM package and containers for all

#### Example: Coupling climate and economic models





# First, be patient...

### Second, training is paramount











#### What's next?

