ARCTIC SDI
Arctic Spatial Data Infrastructure

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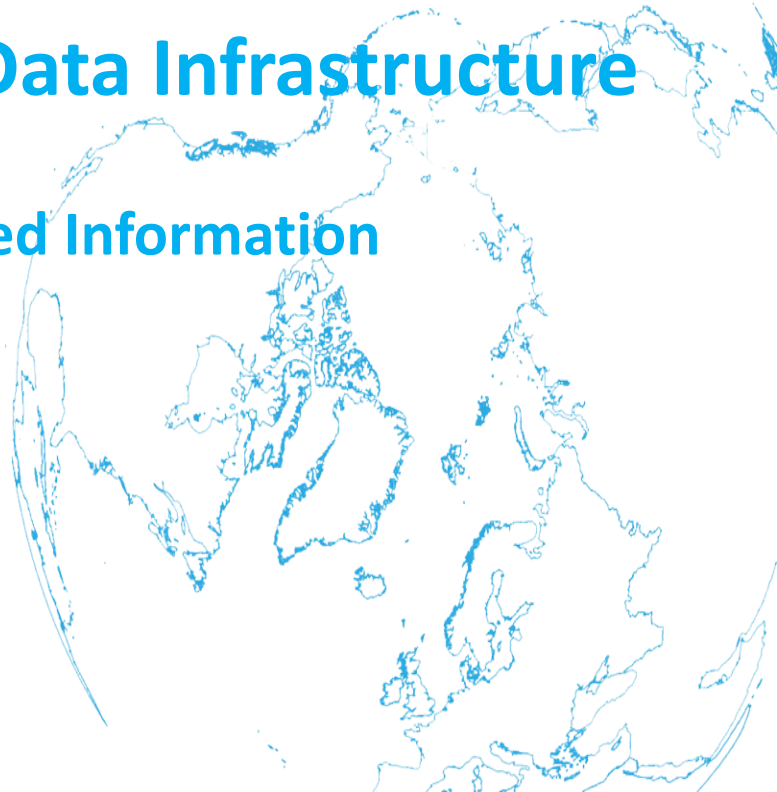
Enabling Access to Arctic Location Based Information

Bengt Kjellson, Sweden



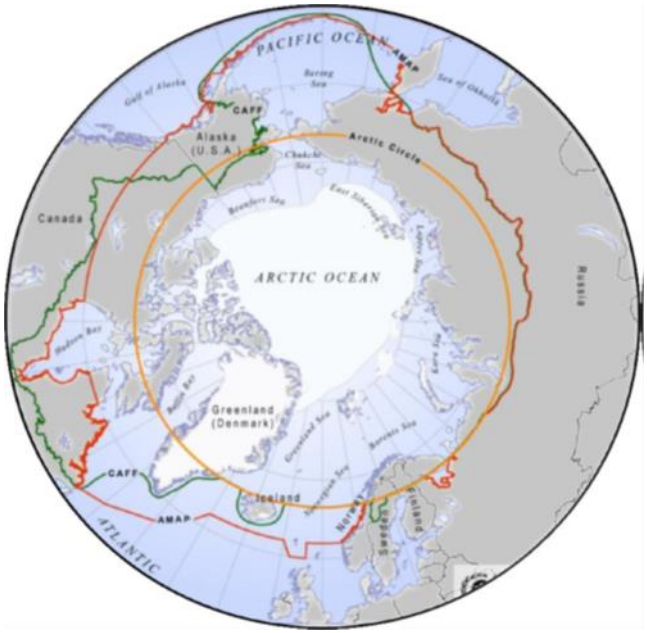
ARCTIC SDI
Arctic Spatial Data Infrastructure

Improve access to reliable data for

Monitoring,
Management,
Emergency preparedness and
Decision making

in the Arctic

arctic-sdi.org



Arctic SDI is based on voluntary commitments by **the National Mapping Agencies from 8 countries** that border the Arctic Circle

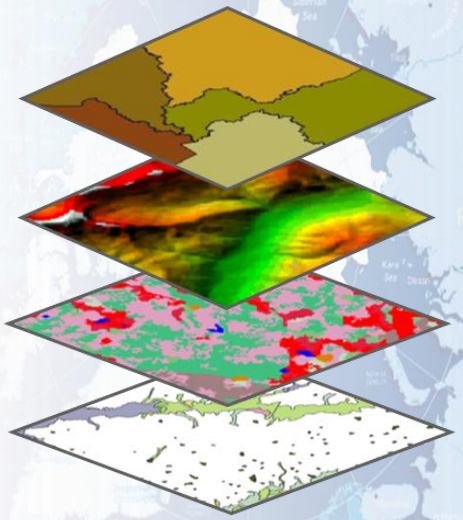
USA, Canada, Russia, Iceland, Denmark, Sweden, Norway, Finland

There is a signed MoU towards cooperative development of an Arctic SDI.

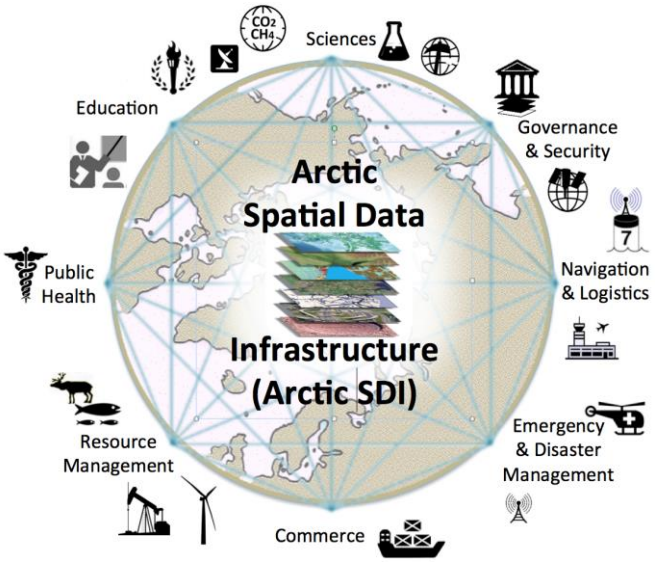
Main Content of the Arctic SDI

The Arctic SDI is an infrastructure that provides a web portal with easy access to:

- A geoportal for geospatial data viewing and discovery
- A searchable metadata catalogue
- Authoritative reference data as a Web Map Service (WMS) 1:250.000
- Thematic data (birds, ice cover, land cover change, flora etc.)



The Arctic SDI is focused on



- Open data standards and provision of authoritative data
- Understanding the needs and requirements of stakeholders
- Working with organizations to make their data available, with a focus on the Arctic Council
- Information Management best practices (geospatial data lifecycle)

Graphic Source: OGC

Data

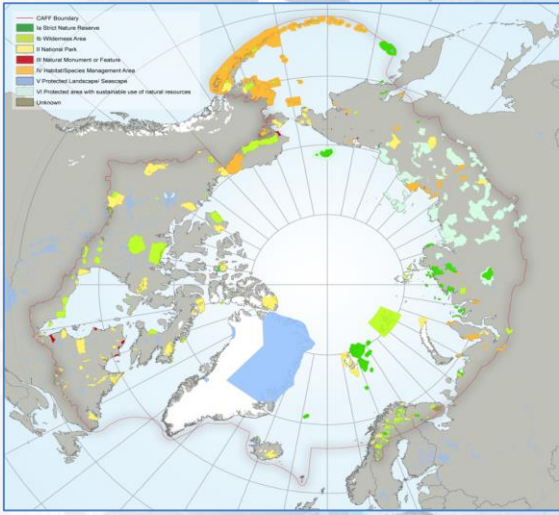
- Ecosystem-based analysis requires seamless sharing of data across jurisdictions and organizations

  - Arctic SDI is providing shared tools and information management practices to Arctic stakeholders to break down silos
  - Arctic SDI brings together the National Mapping Agencies, trusted map data and geospatial data expertise

Capacity Building

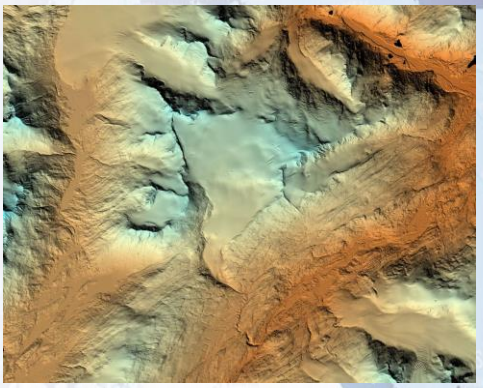
SDI Manual for the Arctic with guidelines & practices for

- Data management and sharing
- SDI development
- Standardization guidelines
- Efficient monitoring and decision making
- Key Performance Indicators

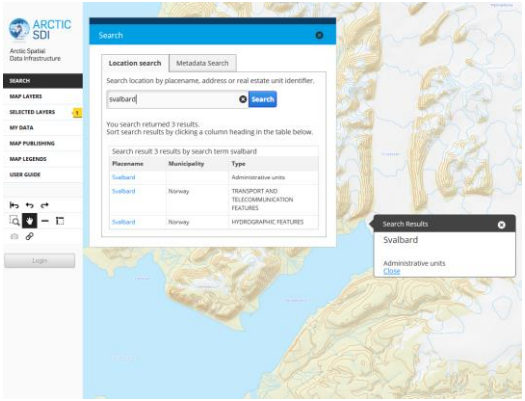


Data Resources

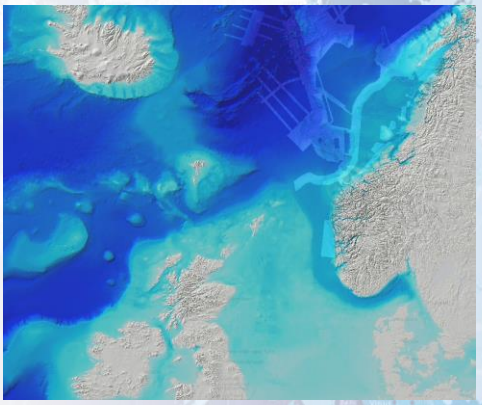
- Pan-Arctic Digital Elevation Map
- Marine Data
- Gazetteer Database and Search
- Arctic Reference Basemap



Pan-Arctic DEM



Gazetteer search



Shaded relief for depths

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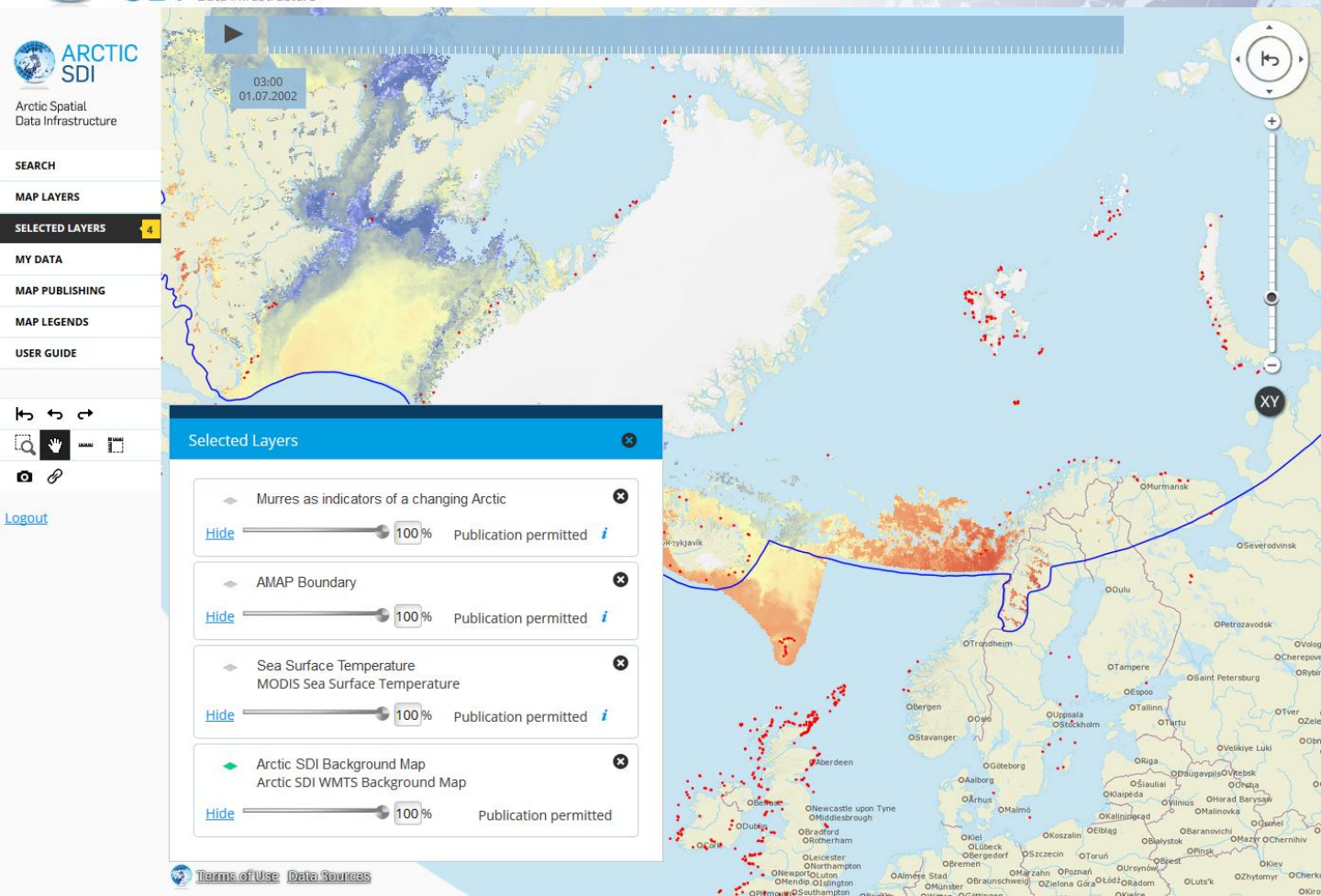
Authoritative Reference Basemap

Provided Directly from the **8 Arctic National Mapping Agencies**

- **Common Cartographic Specification**
- **A Trusted Source of Detailed Information**

Arctic SDI Geoportal



Oskari - Geoportals and Embedded maps

- For setting up Geoportals or Web GIS systems
- For creating Embedded map clients onto other websites very efficiently
- For setting up advanced web-based tools, such as decision making support services and data analysis tools
- Multilingual – English, Swedish & Finnish full coverage, 15 other languages with partial coverage
- Open Source (MIT) - see oskari.org and Oskari GitHub for more info

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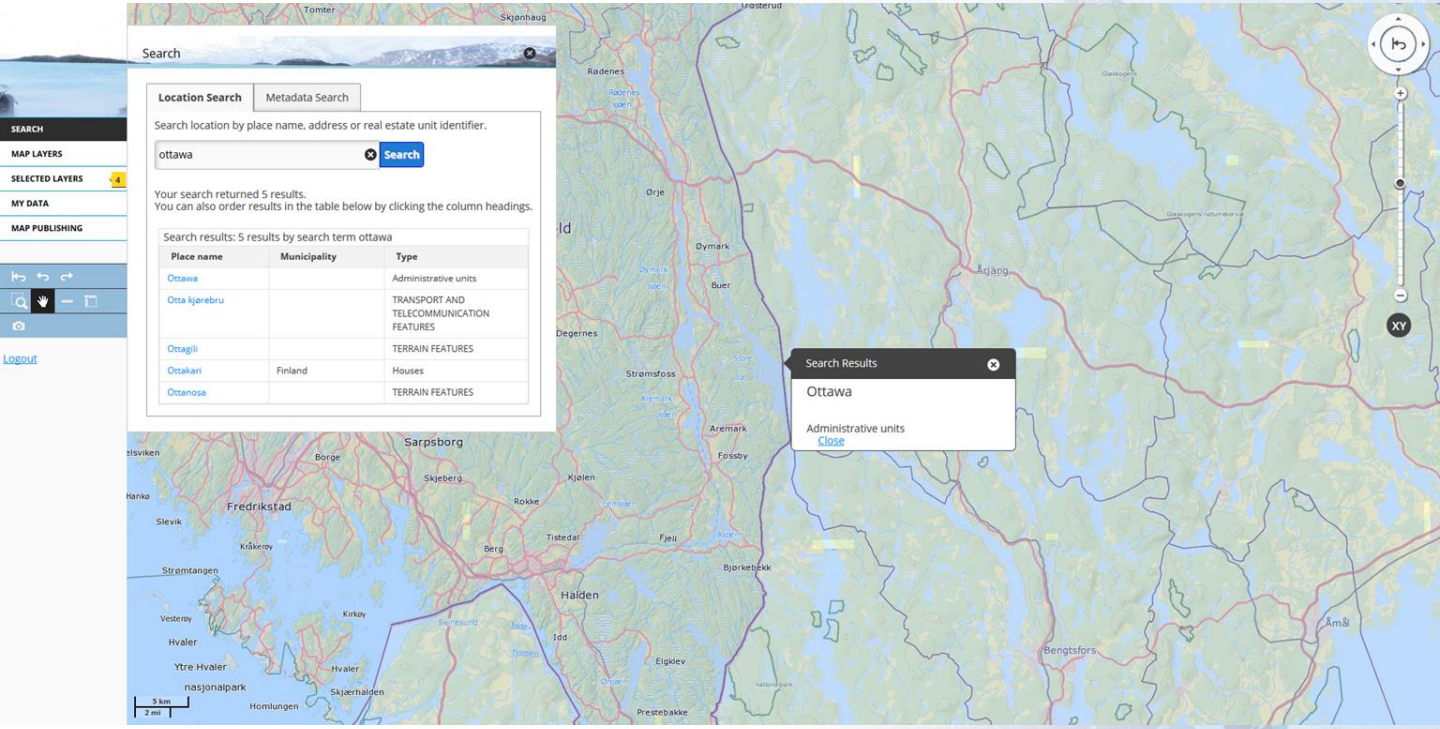
Location Search



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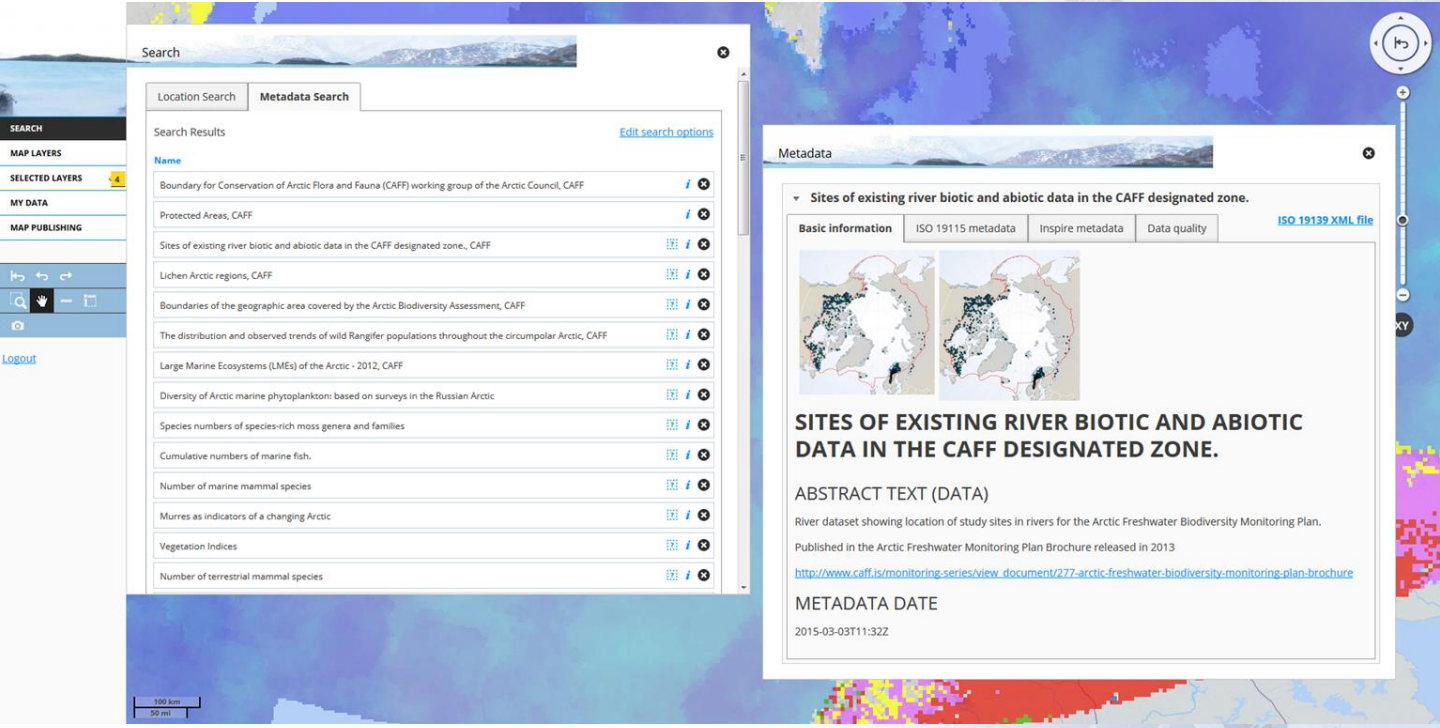
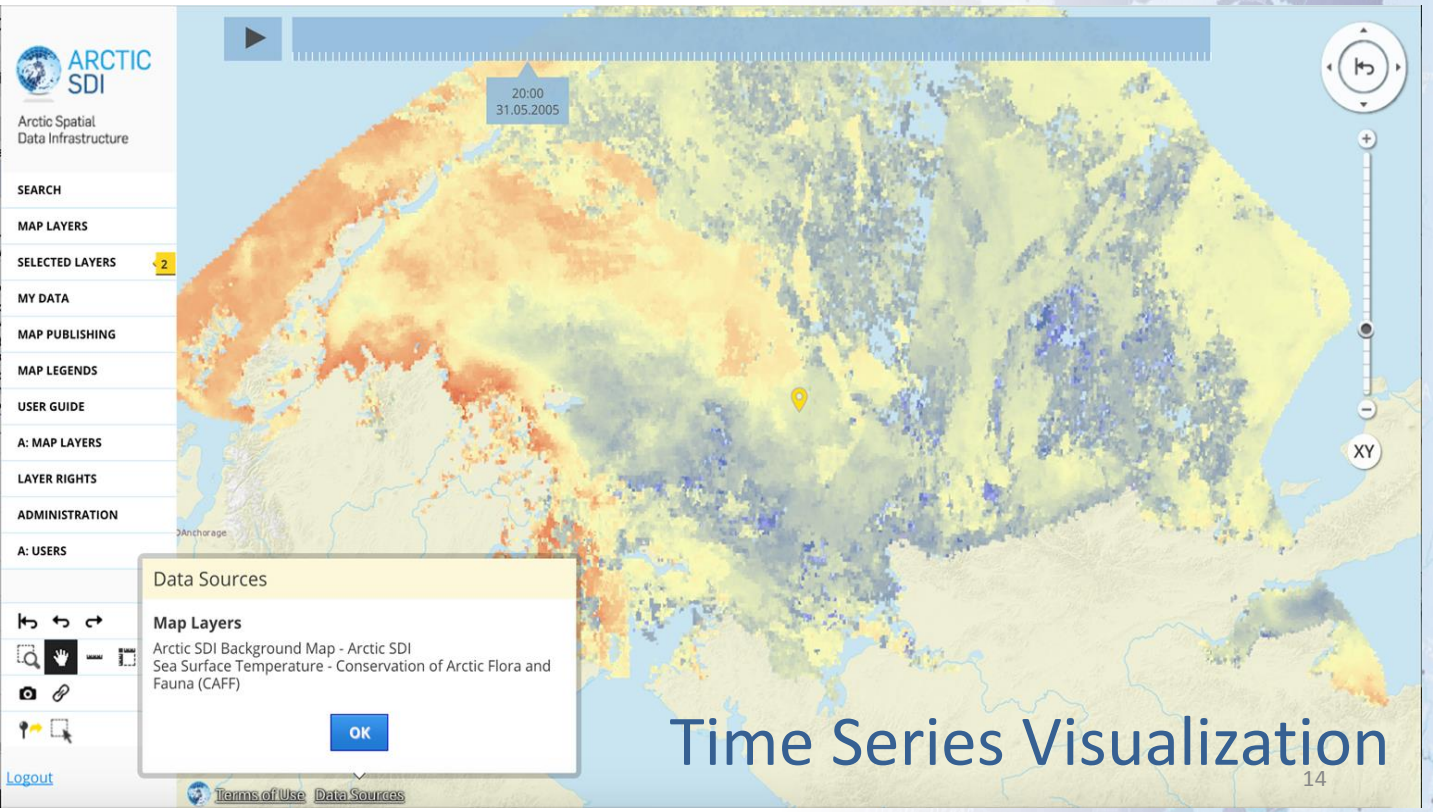
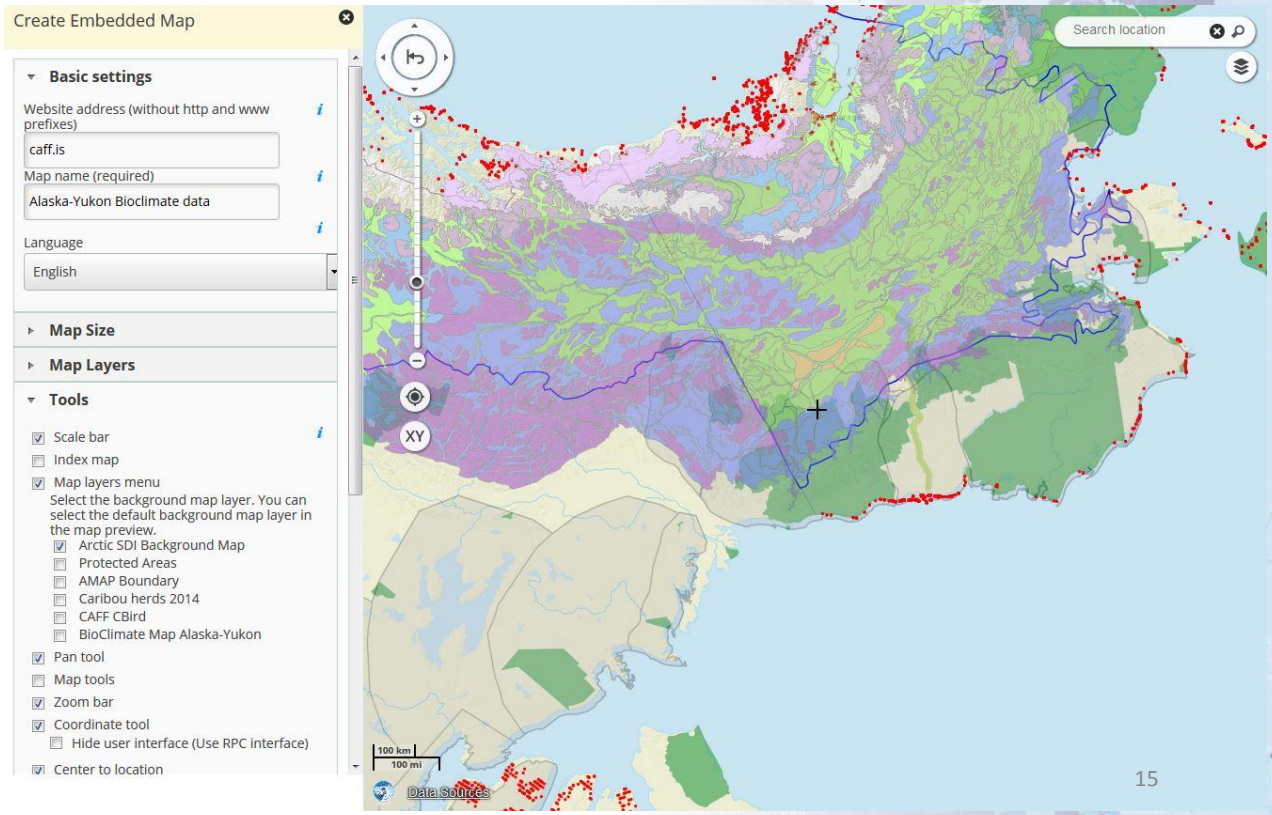
Metadata Search



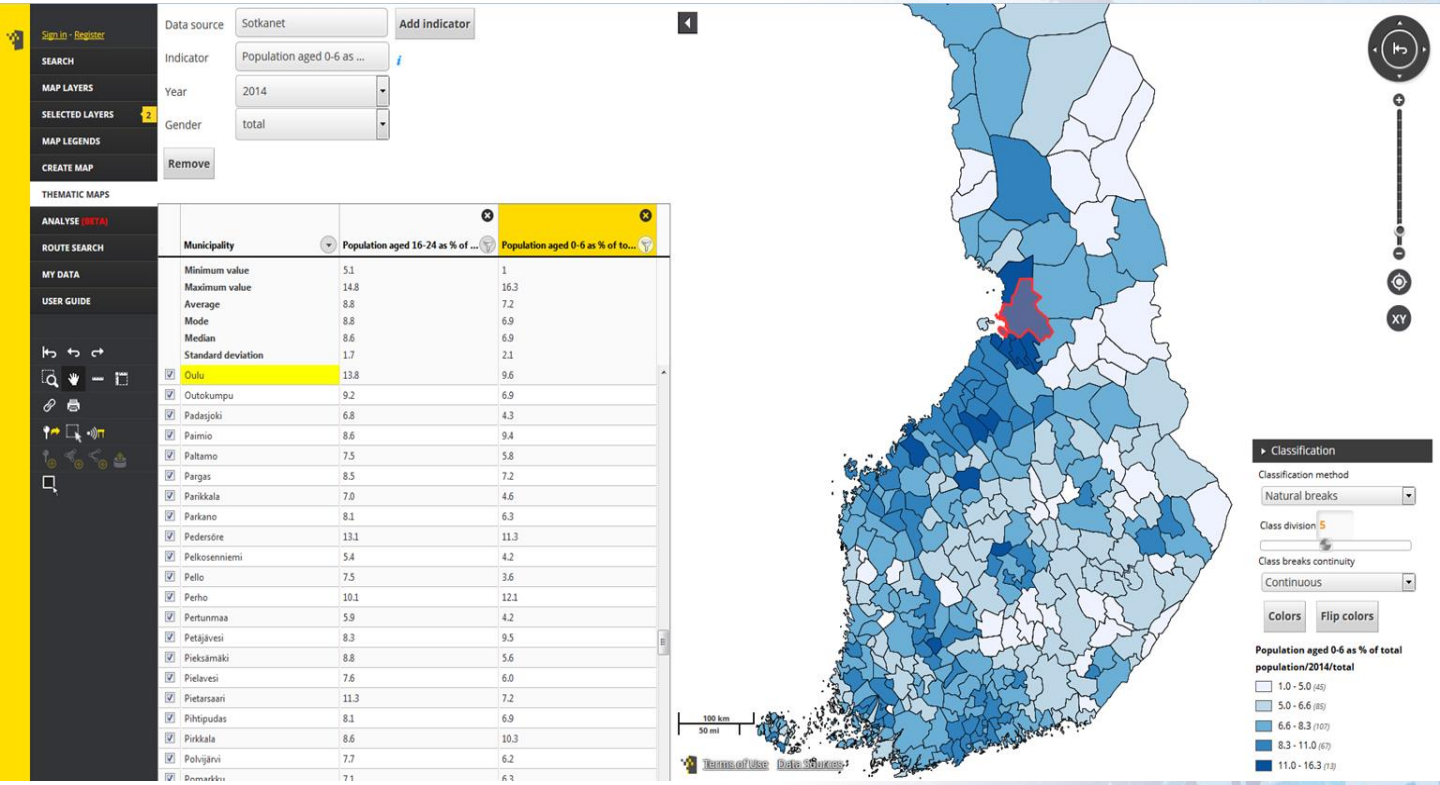


Time Series Visualization

Embedded Map Tool



Future development: Spatial and Statistical Data combined over Arctic



Arctic SDI Video on YouTube

Arctic SDI Fact Sheet

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geoportal.arctic-sdi.org