Enabling Access to Arctic Location Based Information

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Alaska Surveying and Mapping Conference / GeoJam

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arctic-sdi.org
What is Arctic SDI?

Video:
- Arctic SDI 101
- AC endorsed 2009
- MoU in Place
- Strategic Plan
- Technical Implementations
- Publications
Introduction to the Arctic Spatial Data Infrastructure

Arctic SDI Video on YouTube

Arctic SDI Fact Sheet
A Cooperative Model in the Arctic

The Arctic SDI is focused on

- Working with organizations to make their data available, with a focus on the Arctic Council,
- Understanding the needs and requirements of stakeholders,
- Information Management best practices (lifecycle of geospatial data),
- Open data standards and provision of authoritative data,
- Helping users and data contributors understand how to participate and why it’s important.
Arctic SDI provides an Authoritative Reference Basemap Provided Directly from the 8 Arctic National Mapping Agencies

Arctic SDI provides access to all forms of authoritative data

Southern Svalbard: Arctic SDI Basemap vs. Google Maps
Authoritative Reference Basemap

Provided Directly from the 8 Arctic National Mapping Agencies

- Common Cartographic Specification
- A Trusted Source of Detailed Information
Arctic SDI Geoportal

Selected Layers

- Murre as indicators of a changing Arctic
  - Hide
  - Publication permitted

- AMAP Boundary
  - Hide
  - Publication permitted

- Sea Surface Temperature MODIS Sea Surface Temperature
  - Hide
  - Publication permitted

- Arctic SDI Background Map
  - Hide
  - Publication permitted

- Arctic SDI WMTS Background Map
  - Hide
  - Publication permitted
Location Search

Search

Location search

Search location by placename, address or real estate unit identifier.

anchorage

Search

Search result 1 results by search term anchorage

<table>
<thead>
<tr>
<th>Placename</th>
<th>Municipality</th>
<th>Type</th>
</tr>
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<tbody>
<tr>
<td>Anchorage</td>
<td></td>
<td>POPULATED PLACES</td>
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Anchorage

POPULATED PLACES

Close
Arctic SDI is Partnering to Enhance Data Management Best Practices

Collaborating with Arctic Council Working Groups to develop common data sharing methodologies and best practices:

- MODIS satellite data derived products (2002-2012) and migratory birds index published ABDS based SDI web standards (ISO, OGC),
- Contributing to the data management plan of the Biodiversity Monitoring Stations (Iceland, Canada, Greenland) project lead by CAFF,
- Collaborating with CAFF and PAME to enable time series embedded maps of the new protected areas database (1900-2016),
- Assisting with CAFF’s Earth Observation Plan to acquire and distribute derived products for Landsat EO data (1970 to present),
- Arctic Council Working Group Meeting, September 2015, Tromsø; Standardized Geospatial Data Management and Sharing.

The SDI Manual for the Arctic provides data management practices and guidelines for efficient monitoring and decision making in the Arctic.
Sponsored by USGS and NRCan, in collaboration with the Arctic SDI participants, this Open Geospatial Consortium Arctic Spatial Data Pilot will:

- Define land and sea scenarios to break down *information management silos* with technical piloting activities:
  - Improve access to reliable data for monitoring, management, emergency preparedness and decision making in the Arctic,
  - Produce a video to showcase value of available data when standards and a common approaches to data management are deployed.

- Address technology issues to meet the realities of Arctic frontier economies, such as in zero/low bandwidth Internet.

Pan-Arctic Digital Elevation Map

US Arctic Council Chairmanship Initiative

- Funded by the USA National Science Foundation,
- Arctic SDI Board provided elevation experts to review and increase product accuracy,
- Arctic SDI published a position statement providing enthusiastic support,
- National Mapping Authorities provide sustainable support of elevation models and continuous improvement as part of their operations.

Major step forward: A significantly important contribution to national and international mapping of the Arctic
We Are All Stakeholders

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

- Arctic SDI is providing shared tools and information management practices to Arctic Council WGs to break down silos.

- Arctic SDI brings together the National Mapping Agencies, trusted map data and geospatial data expertise.

Source: blogs.vmware.com

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Data Resources

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