

<http://arctic-sdi.org/>

Arctic SDI cooperation

PAME I – 2015 Working Group Meeting
Akureyri Iceland
3. February 2015

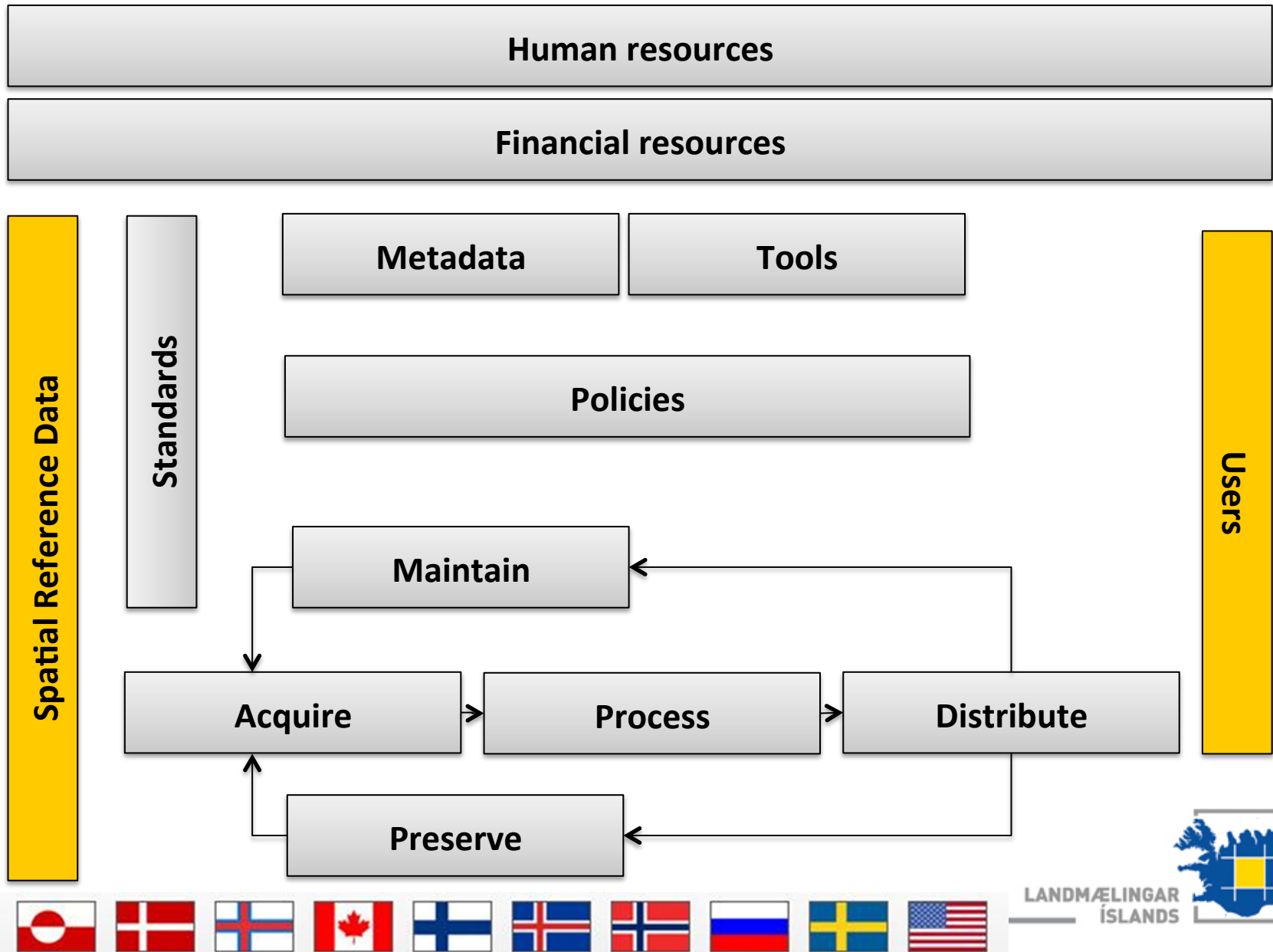
Magnús Guðmundsson
National Land Survey of Iceland

Spatial data infrastructure

- A spatial data infrastructure (SDI) is a framework of **Spatial data, Metadata, Users and Tools** that are interactively connected in order to use spatial data **in an efficient and flexible way**.



Spatial Data Infrastructure



Arctic SDI

A cooperation between the Mapping Agencies of:

- ✓ Canada
- ✓ Denmark including Greenland and Faroe island
- ✓ Finland
- ✓ Iceland
- ✓ Russia
- ✓ Sweden
- ✓ USA
- ✓ Norway



Memorandum of understanding (MoU)

signed in Reston USA in February 2014

- (a) exchange of cartographic and other necessary information;
(b) education and training for work with the Arctic-SDI;
(c) liaison with industrial, academic, professional and other organizations that participate in the Arctic-SDI;
(d) organizational and support of technical seminars and meetings;
(e) encouragement of co-operation regarding consulting services, technology assessment and applications development; (f) other forms of co-operation as they may determine



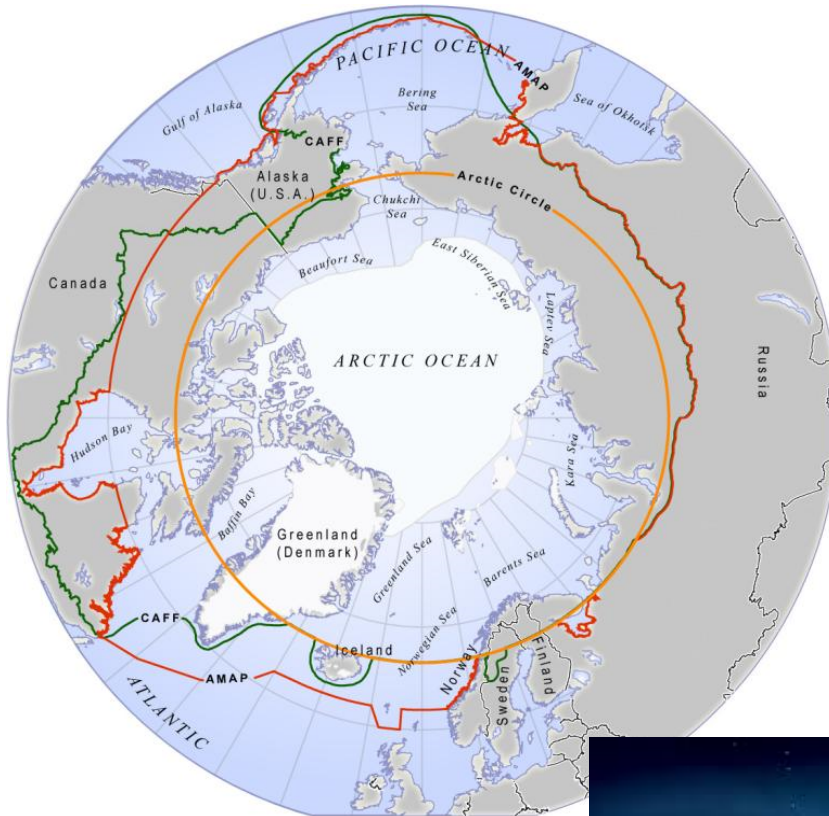
Arctic SDI

- Vision -

An Arctic SDI – based on sustainable co-operation between mandated national mapping organisations – which will provide for access to spatially related reliable information over the Arctic to facilitate monitoring and decision making



Arctic SDI

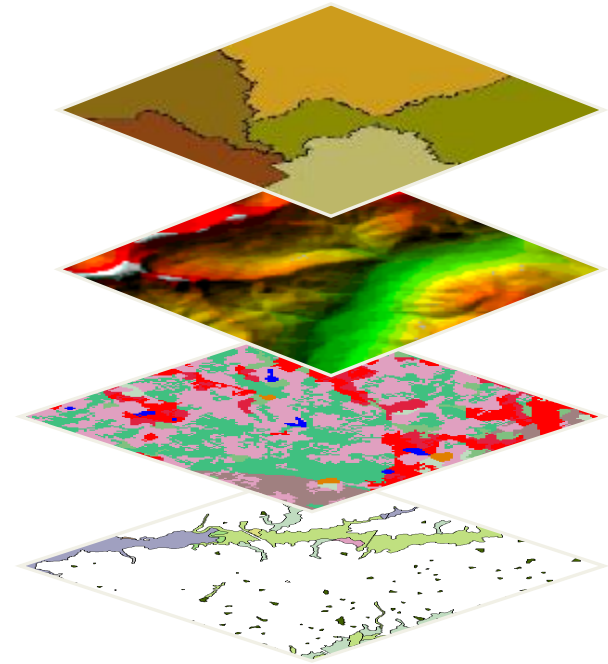


- 1/6 of the earth's landmass
- More than 30 million km²
- 8 countries
- 24 hours all time zones



Why Arctic SDI ?

- Wide array of spatial data around the Arctic
- Datasets are distributed throughout many organisations often not integrated or coordinated
- Arctic SDI would allow for more robust management and manipulation of data for both research and management purposes.



Arctic SDI Phases and Milestones

Structuring Phase 2010/2011

- Arctic Council Links
- Project Management
- Technical Group
- Steering Committee

Establishing Phase 2011/2014

- Memorandum of Understanding, 2014
- Simplified Governance
- Reference Model
- Working Groups Established

Operational Phase 2014/2015

- Geoportal
- Metadata Catalogue
- Web Map Service- National Mapping Data
- Thematic Data Provider Partnerships- CAFF

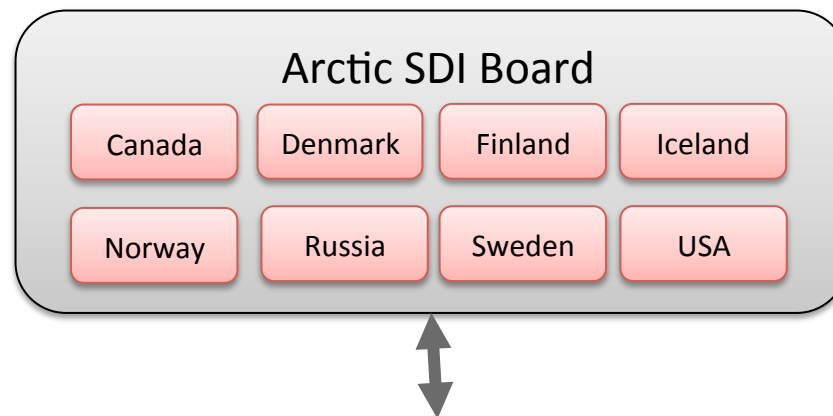
SDI Engagement Phase 2015/2020

- Leverage Global/National SDI Communities
- Stakeholder Engagement and Requirements
- From Strategy to Roadmap to Projects
- SDI Interoperability
- Resource Allocation and Business Models
- Voluntary Resource Commitment to Tasks
- Performance Metrics
- Standards Coordination



Arctic SDI Strategic Plan

Organizational Structure



National Contact Points	Secretariat	Communication	Strategy 2015-2020	Operational Policies	Technical Working Group	Cloud & Cascading Service	Geoportal	Activities
CAN	CAN	NOR	USA, FIN	DEN	SWE	NOR	FIN	Lead Countries
CAN, DEN, FIN, ICE, NOR, RUS, SWE, USA	DEN, NOR, SWE	CAN, DEN, ICE, SWE, USA	CAN, DEN, FIN, ICE, NOR, RUS, SWE, USA	CAN, USA	CAN, DEN, FIN, ICE, NOR, RUS, SWE, USA	FIN, SWE	NOR, SWE	Supporting Countries



The Arctic SDI - primary stakeholders

- ✓ Arctic Council & it's Working Groups: CAFF, EPPR, PAME, AMAP
- ✓ Institutions and organizations managing Arctic data



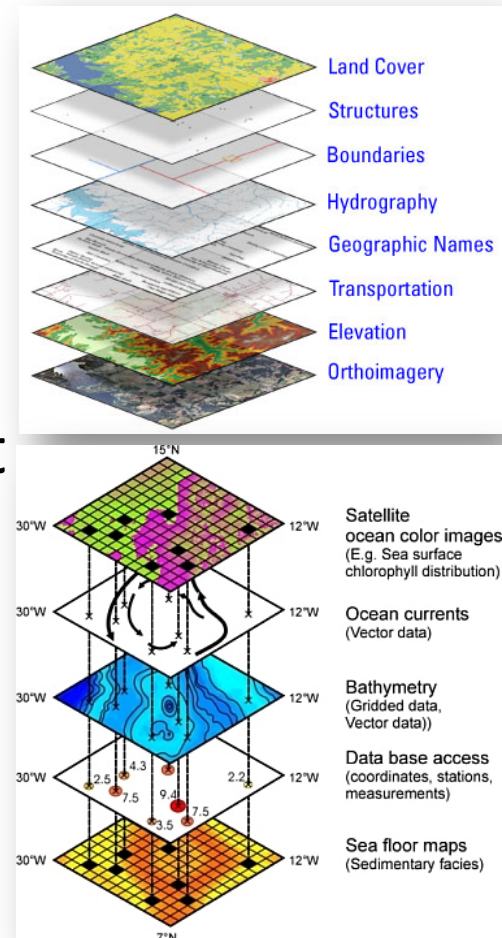
Arctic SDI 2014 - Status

- ✓ Geoportal (<http://159.162.102.133/oskari-map>)
- ✓ Web Map Service with Reference Data 1:250.000
- ✓ CAFF thematic data
- ✓ Strategic Plan 2015 – 2020
- ✓ Senior Arctic Official - invitation to start dialogue with all Arctic Council Working Groups



Use of the Artic SDI

- Research
- Planning
- Political processes
- Public administration and management
- Emergency prevention
- Business development



Arctic Council Working Groups and other Scientific Communities

Governmental Authorities

Data



Analysis



Decision

Environmental
& other political
issues



Arctic SDI

Arctic SDI
Portal

Thematic
data

NMA national
reference data

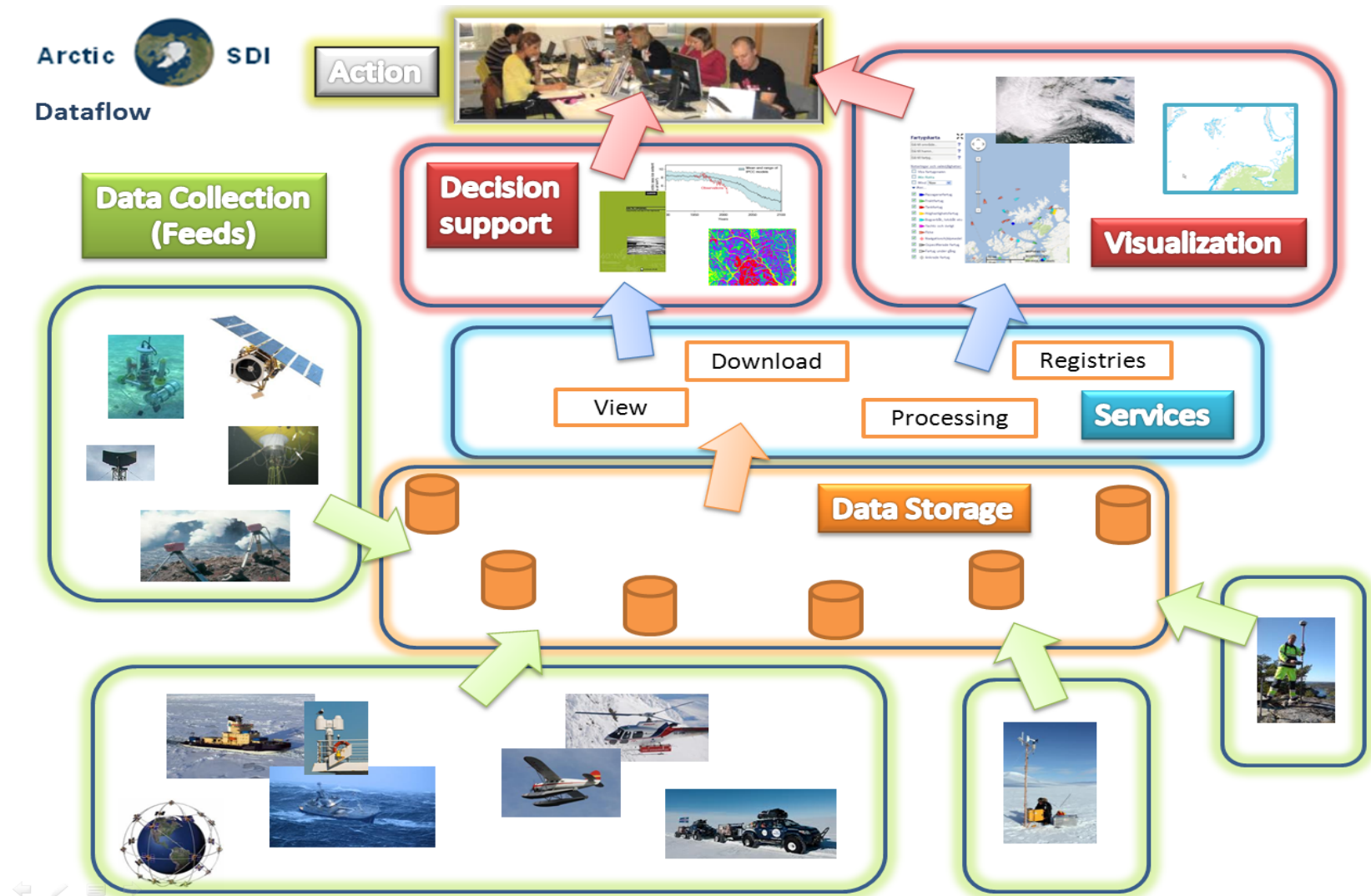
Media, Public &
Education

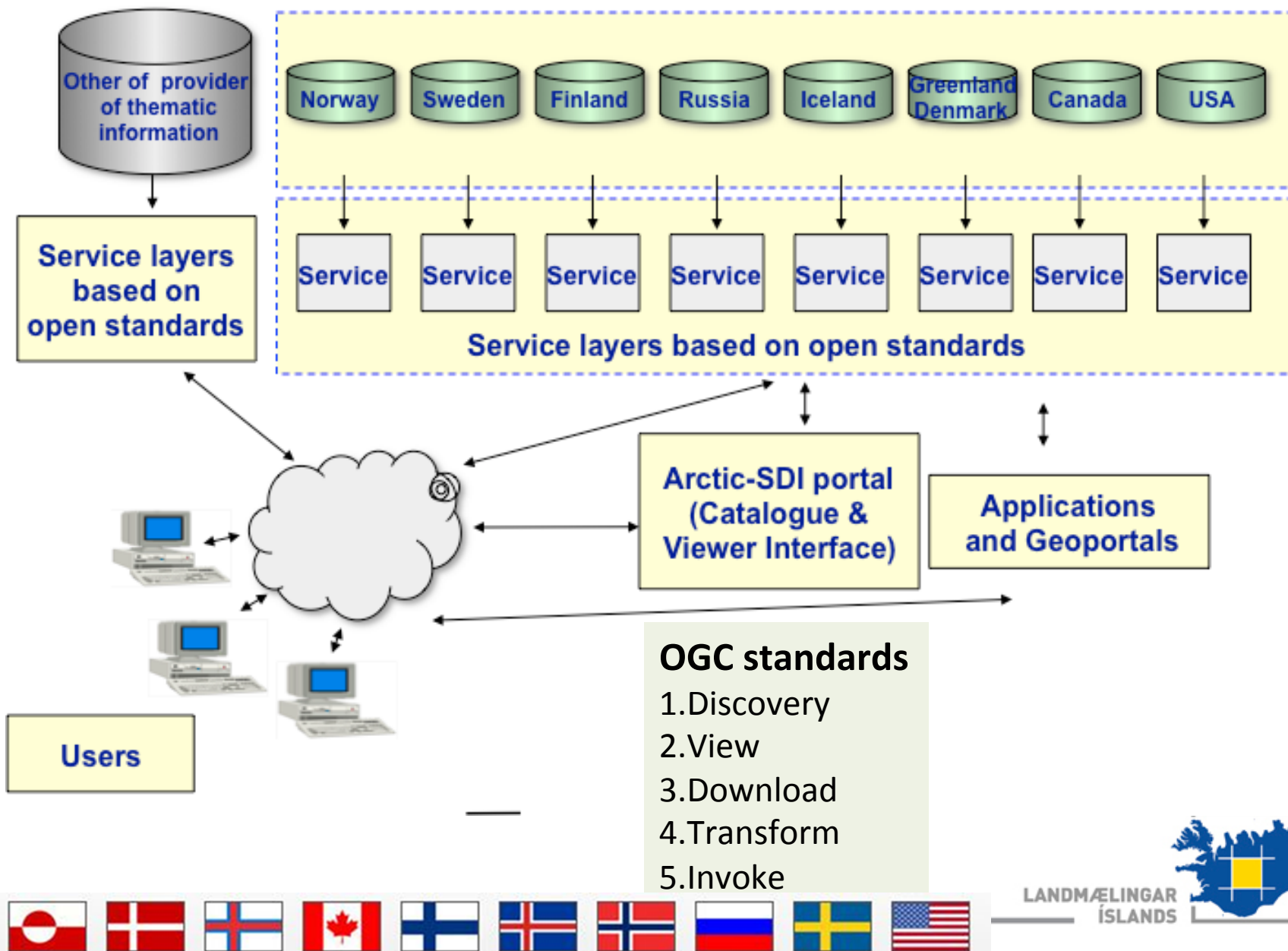


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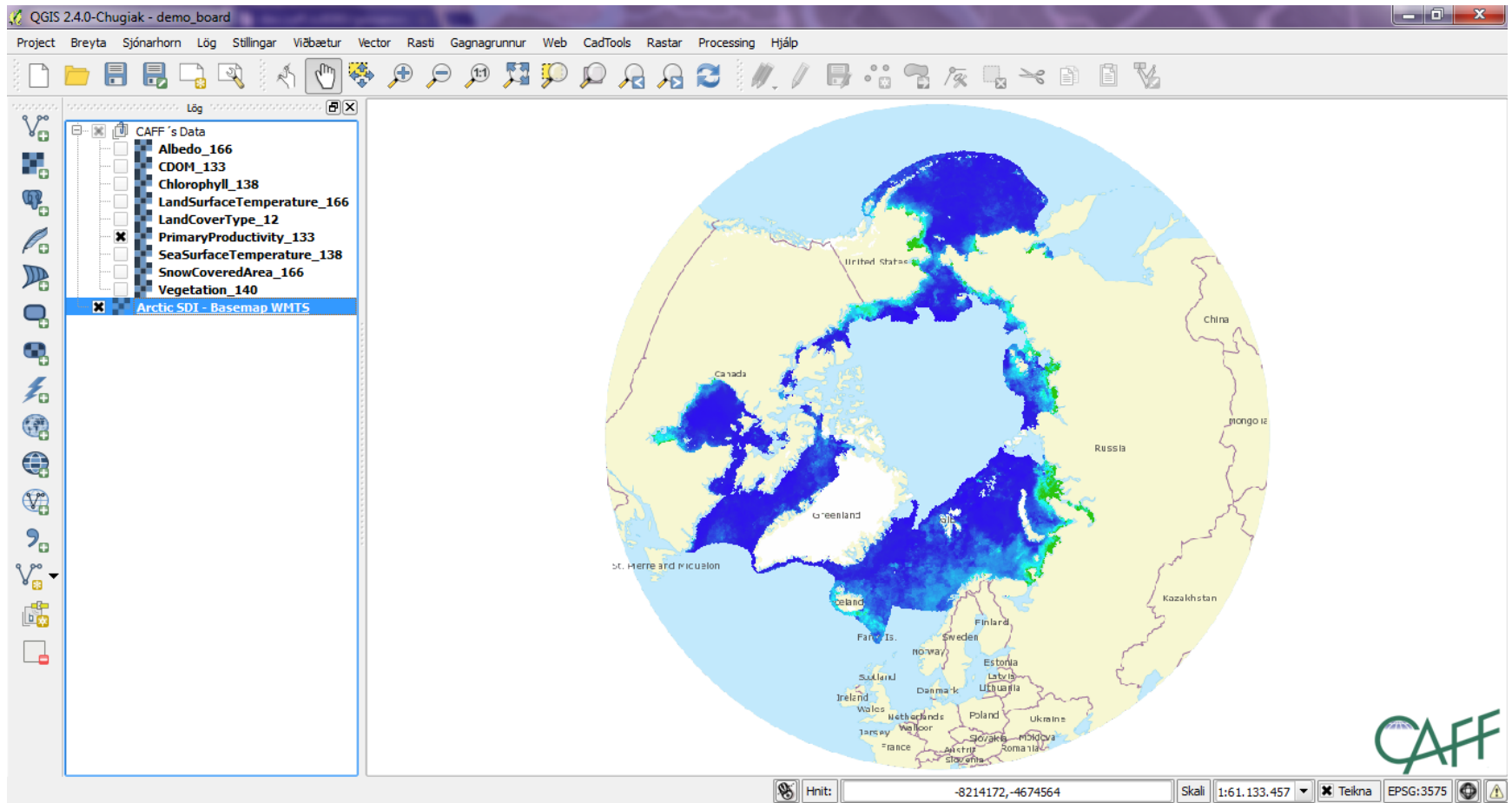


Arctic SDI
Dataflow





WMS service from CAFF



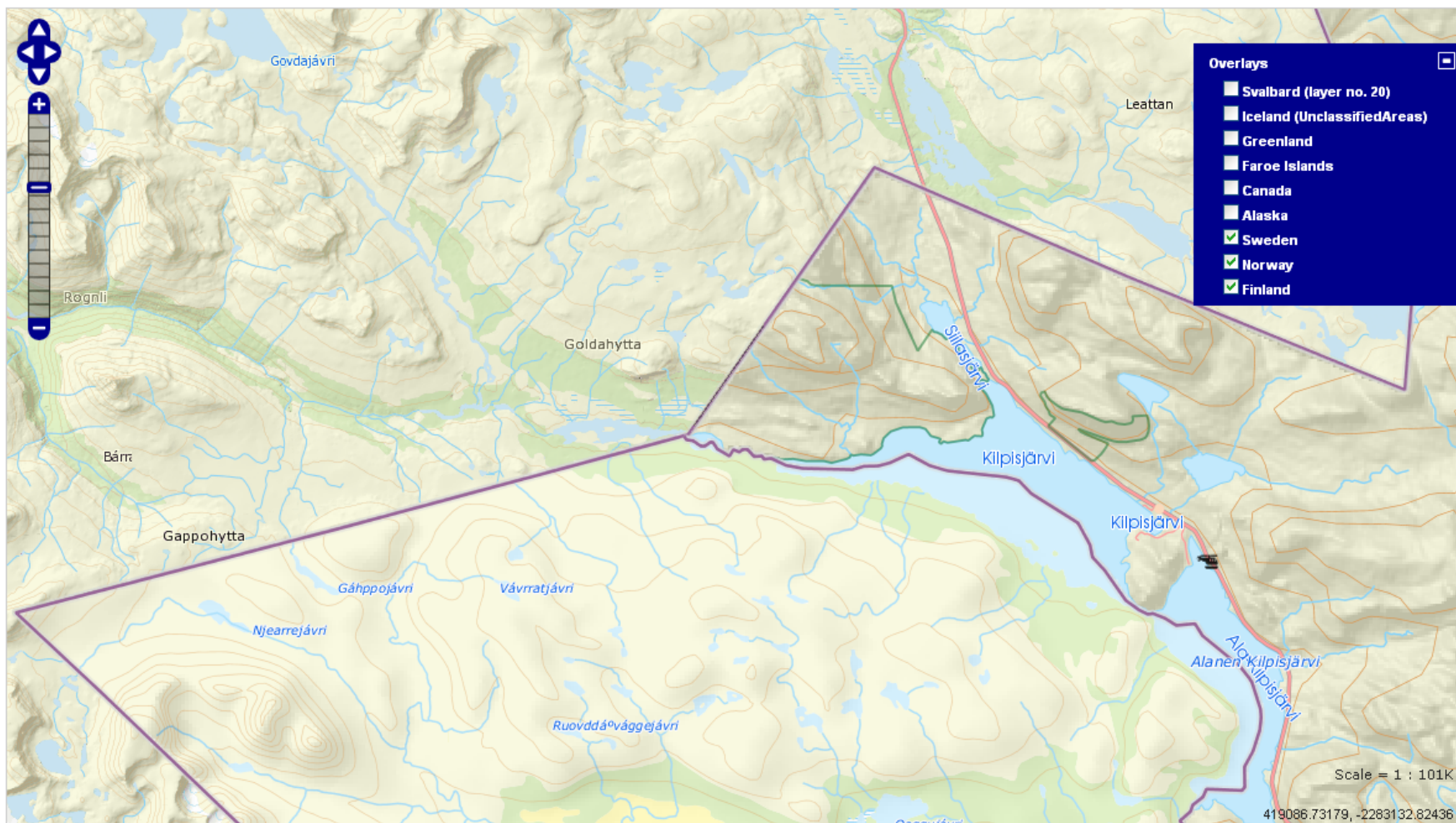
CAFF





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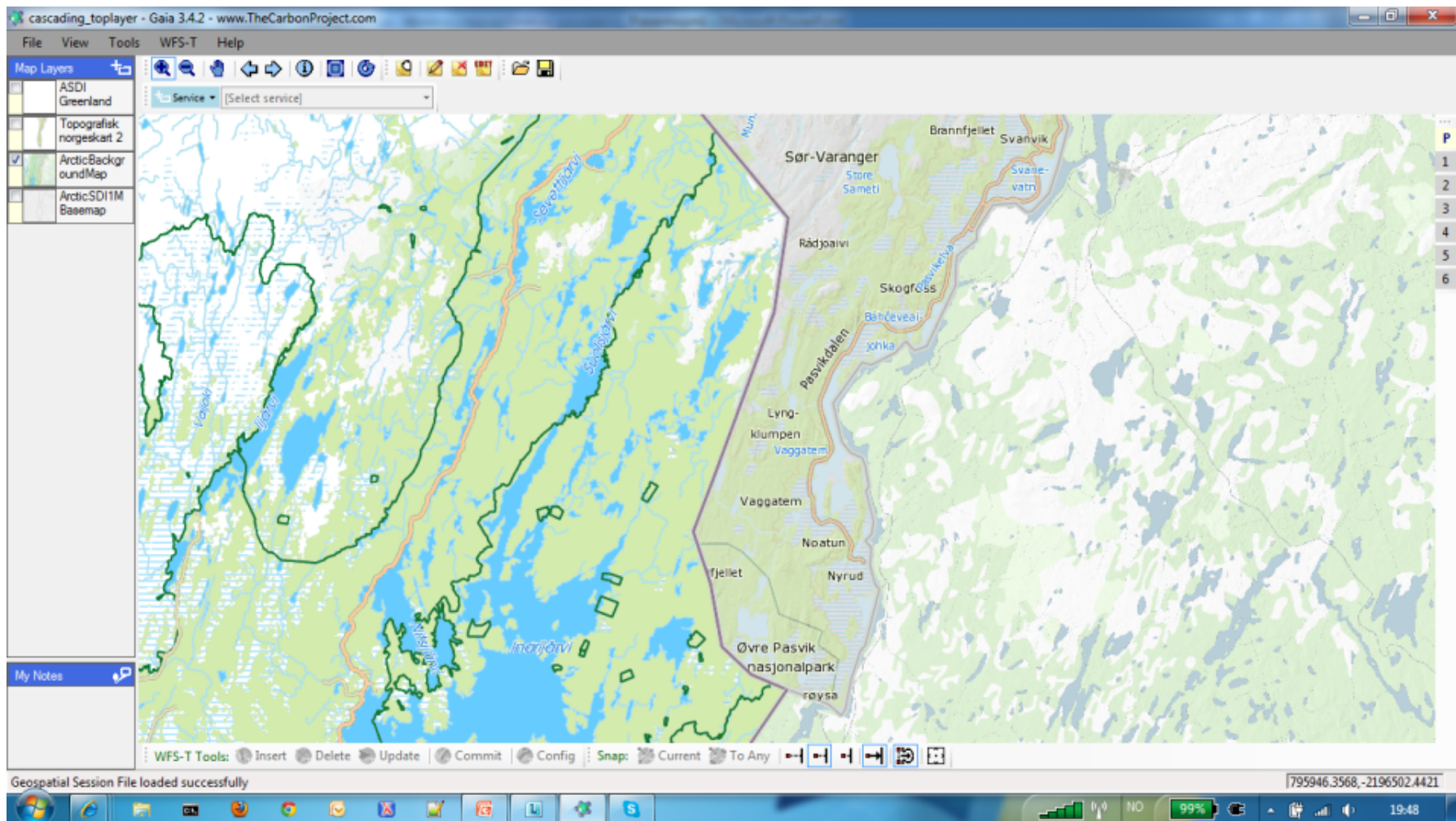




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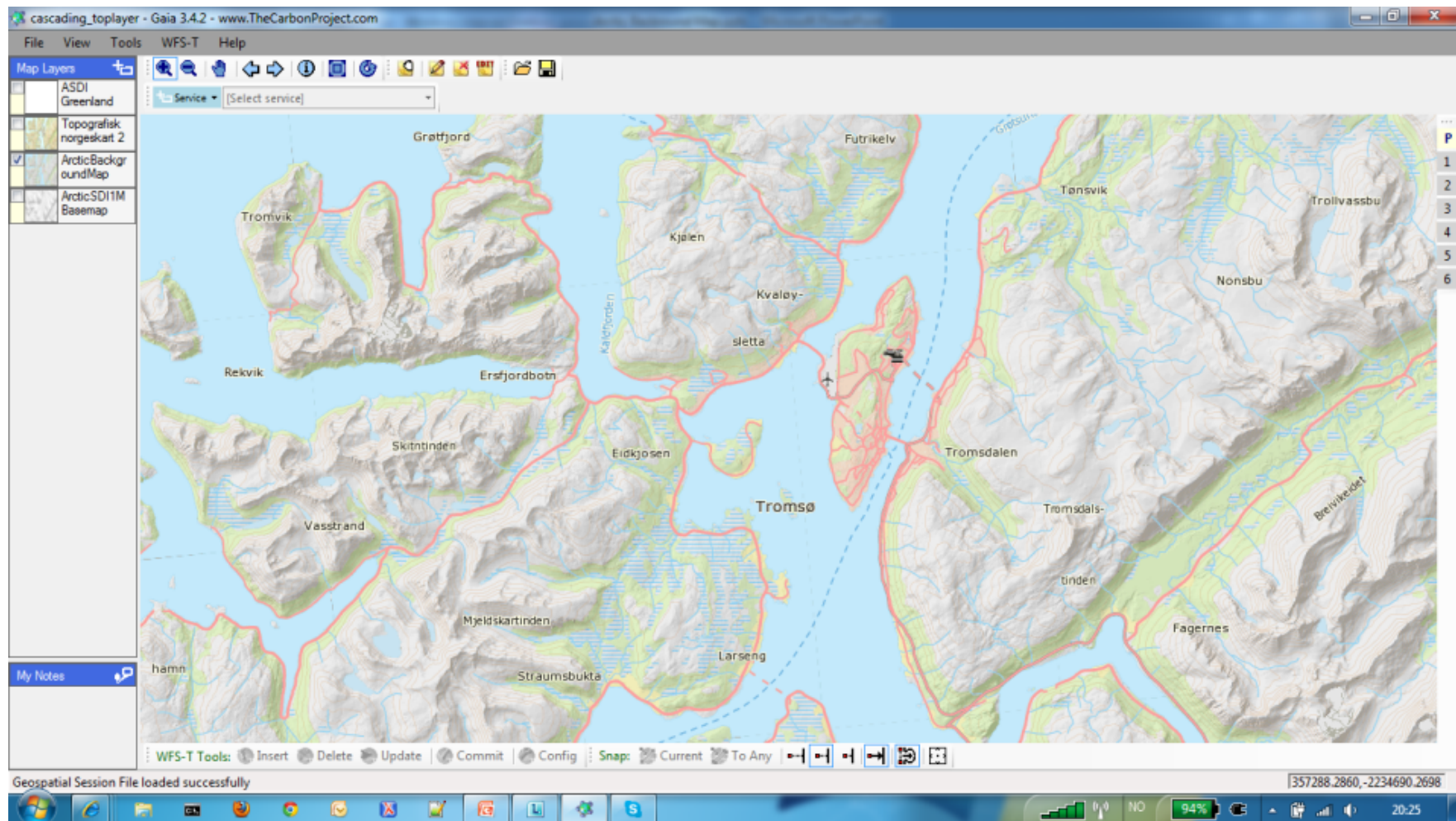
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Thank you

www.arctic-sdi.org

