

National Snow and Ice Data Center

Supporting Cryospheric Research Since 1976



Update on Arctic Data Committee for SAON Board

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30 October 2017



ARCTICDATACOMMITTEE





Arctic Data Committee

- Formed Nov '14
- IASC-SAON partnership
- National and voluntary members + Indigenous (2017)
- Promote and enable:
 - Understanding the system
 - Effective data policy
 - Infrastructure
 - Ethically open access
 - Attribution
 - Standards and interoperability <u>FEDERATED SEARCH,</u> <u>SEMANTICS</u>







//arcticdc.org

eeting Details ceting: Lot Neeting of the IASC Data Standing

Committee on Data and Information Services (CDI Time: 10 November 2014, 14:00 - 18:00, 11 Nov

Lecation: Marcura Hotel Potodam City Lange Bridda 14467 Potodam Statement of Principles and Practices for Arctic Data Management April 16, 2013

ASE endorsed scientific results shall be verifiable and regroducible through ethically open ess to all data necessary to produce these results. Data shall be perserved, accessible, and d is accordance with scientific norms of fair attribution and oze.

- To this end, IASC Council approves the following actions:
- Endorsement of the Statement of Principles and Practices for Arctic Data Management;
- 2. Extablishment of an IASC Data Standing Committee







Montreal 16-18 Sept. 2017



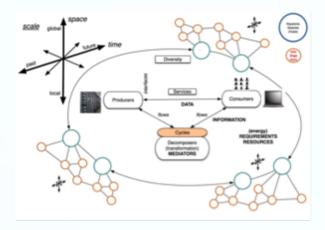


Since 1

https://www.rd-alliance.org/plenaries/rdatenth-plenary-meeting-montr%C3%A9alcanada

Achieving the Vision: Data as a System

Data Ecosystem



Species (nodes): cyberinfrastructures

- Information environments that support:
 - acquisition,
 - storage,
 - management and curation,
 - integration,
 - mining,
 - visualization,
 - other processing services

Species (nodes): mediator organizations

 Organizations that coordinate and drive collaboration to bring about understanding, agreement and a desired result





There are many established and emerging mediator organizations





Understanding the Data E-CoSystem



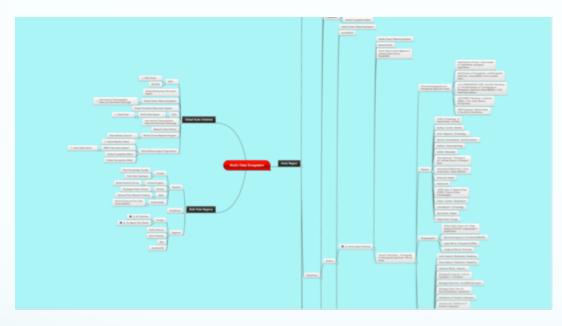


Dr. Katia Kontar



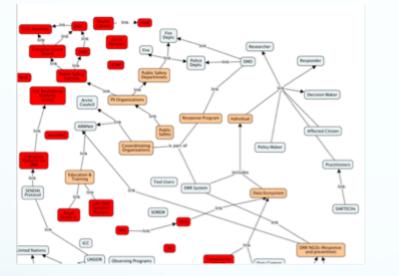
Focus on Arctic Council Corpus

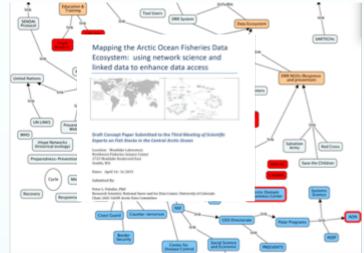
Unpacking the Model



However, further investigation reveals significant complexity

Case Studies: Many "CoSystems"





Possible Collaboration

European Network of Earth Observation Networks 🔰

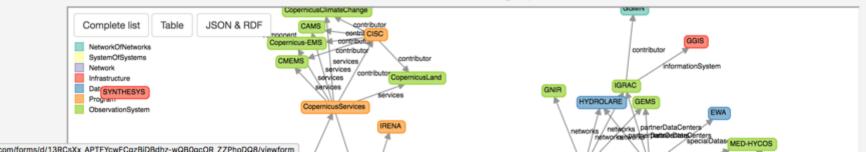
About the Network Services Events Material Contact
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The in-situ node for EuroGEOSS

ENEON is the European Network of Earth Observation Networks, funded by the European Union under the H2020 ConnectinGEO project mainly including non-space networks to better coordinate them, with the aim of providing better observations for resolving interdisciplinary problems, to improve the European in-situ participation in GEO and in support of the implementation and monitoring of the UN SDG.

Become a member!

Current graph of European EO networks elaborated under the ConnectinGEO H2020 project: www.eneon.net/graph



Metadata Elements and Federated Search WG

- Partnership with Arctic Portal, SCADM, SOOS, and others
- Review of existing metadata schemas to establish common elements in use
- Map elements to a target standard (ISO 19115)
- Provide reference implementation based on ADIwg JSON schemas
- Support projects in broadly implementing
- Alexander Smirnov of Arctic Portal taking lead role

Vocabularies and Semantics WG



 Annual II and III
Concert II and III
Concert III and III
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 Promote awareness of existing vocabularies and semantics initiatives to increase effect and reduce or eliminate redundancy
Coordinate vocabulates and semantics development activities across the polar informat

Enable and organize require communication within the community

+ Help members of the community connect to useful and interoperable vocabularies

 Inform polar community about broader activities (e.g. ESP; RDA), and act as ambassadors from the pola community to other initiatives

Monthly meetings started in October 2017, collaborative infrastructure under development

"Polar Data Planning Summit"



cing polar research and decision making: advances in ational data sharing through active collaboration

1. (1) Presente A. Van de Poles (3) P. Rober (3), C. Robertsker (1) H. Horsson), S. Mitsch, M. T. Barrach, M. Weiner, M. J. Barbor, M. S. B

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- Evolved through SAON retreat June 2017
- Aims to bring together practitioners and signing authorities from funded DM efforts, cyberinfrastructures
- Focus on a specific, bounded case study
- ~ May 2018

Abstract submitted to Arctic Change 2017 Conference; POLAR 2018