# WHAT is DataverseNO?

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# **Key facts about** & DataverseNO

DataverseNO ...

- ☐ is a **national**, **generic** repository for **open** research data;
- ☐ is **curated**, aligned with the **FAIR principles** and **CoreTrustSeal**-certified;
- runs on the **Dataverse software**;
- ☐ is operated at **UiT The Arctic University of Norway**, and thereby
- ☐ the **northernmost** Dataverse repository in the world.

# ... a national repository

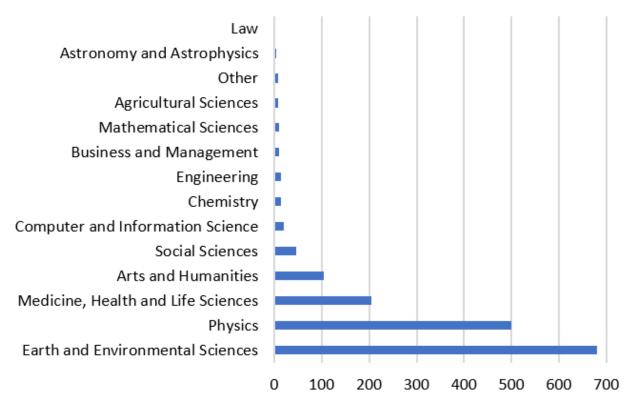
- ☐ Institutional Focused Installation (cf. Schlatter & Ji, 2021)
- ☐ Currently 10 partner institutions Universities and university colleges... But also open for (individual) researchers from other Norwegian research organizations
- Contains currently data from researchers affiliated with 37
   Norwegian organizations



69 Installations



# ... a generic repository



- Data from all domains of science
- Graph shows distribution across domains
- □ High numbers within Physics and Earth Sciences are due to large time series.

Numbers as of May 15, 2021

Note: Many datasets are classified as belonging to more than one domain.

## **WHY DataverseNO?**

## DataverseNO is one among many repositories ...

Based on the OpenAIRE Guides for Researchers, UiT gives the following advice to its researchers on how to select a data repository:

- 1. Funder or journal may **require** to use a **specific** repository.
- 2. Certified repository already established for your research **domain**. (... use the re3data registry to find a suitable repository).
- 3. UiT's **institutional** collection within **DataverseNO**.
- 4. For data containing **person-identifying information**, we advise you to use **NSD**'s repository.

# **Brief history of DataverseNO --- or: Why DataverseNO?**



#### The Tromsø Repository of Language and Linguistics (TROLLing):

- Linguists at UiT needed a repository to share their data worldwide
- Result: **TROLLing** launched in 2014
- Based on Dataverse
- Part of CLARIN-ERIC

## 8 DataverseNO

- Other universities in Norway became interested in UiT Open Research Data
- UiT decided to expand service to become a national repository
- DataverseNO launched in 2017 (inspired by DataverseNL) with UiT and the University of Agder (UiA) as the first partners

2015

2017 **UiT** Open Research Data



- UiT needed an institutional repository for research data
- UiT Open Research Data established in 2015 based on experiences and solutions used in TROLLing

#### DataverseNO is CoreTrustSeal certified

- More details below

2020



## Number of published datasets (as of May 15, 2021)

Collection	2014	2015	2016	2017	2018	2019	2020	2021	Total
HVL							2		2
INN						2	5	3	10
NMBU					1	4	6	4	15
NORD							4	106	110
NTNU						5	10	6	21
<b>TROLLing</b>	21	12	17	12	10	7	19	12	110
UiA				1	2	3	3	1	10
UiB						3	66	16	85
UiS								1	1
UiT			14	24	186	346	61	18	649
Total	21	12	31	37	201	371	182	169	1 024

## What kind of data?

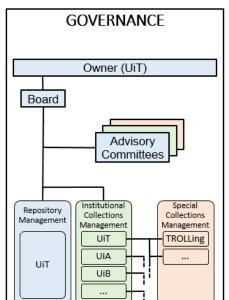
- ☐ Most typically: **Background data for** article/book **publications** (other terms: supporting data, replication data, ...)
- ☐ Some larger sub-collections with **time series**:
  - ☐ UiT: Tromsø Geophysical Observatory: One dataset per month; so far: **402** datasets
  - ☐ Nord: Spawning behavior of Arctic charr: so far **127** datasets
  - ☐ UiT: NMDC Node UiT: so far **98** datasets
  - ☐ UiB: UiB Global Navigation Satellite System Data: so far **65** datasets

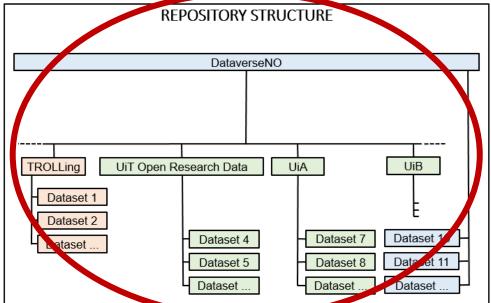
## **HOW does DataverseNO work?**

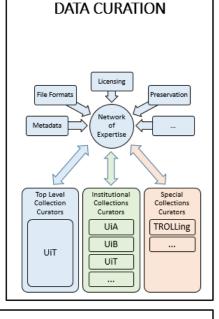
# ... basically as outlined in the DataverseNO Organization Chart:

#### Organization of DataverseNO









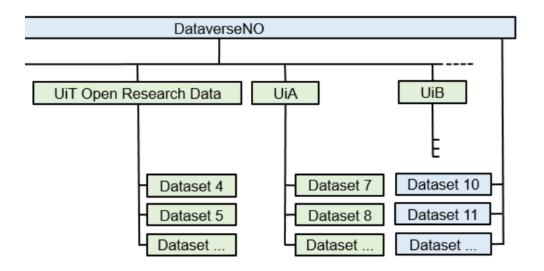
Researchers within User Groups of Special Collections

Linguists ...

Researchers from Partner Institutions in Norway
HVL INN NMBU NORD NTNU
UIA UIB UIS UIT ...

Researchers from Non-Partner Institutions in Norway

## **Repository structure**



- □ Each partner institution has its own collection (sub-dataverse)
- □ Researchers from nonpartner institutions publish their data in the top-collection



















Search this dataverse...



Advanced Search









#### **Dataverse Category**

Organization or Institution (10)

Research Project (4)

Research Group (2)

Department (1)

#### **Publication Year**

2021 (288)

2020 (185)

2019 (375)

2018 (205)

2017 (40)

#### 1 to 10 of 1.159 Results



#### Replication Data for: Closure Law Model Uncertainty Quantification



Dec 5, 2021 - NTNU Open Research Data

Strand, Andreas; Kjølaas, Jørn; Bergstrøm, Trond H.; Steinsland, Ingelin; Hellevik, Leif R., 2021, "Replication Data for: Closure Law Model Uncertainty Quantification", https://doi.org/10.18710/30JHDN, DataverseNO, V1

The prediction uncertainty in simulators for industrial processes is due to uncertainties in the input variables and uncertainties in specification of the models, in particular the closure laws. In this work, the uncertainty in each closure law was modeled as a random variable an...

#### TGO Ramfjordmoen Ionosonde Data November 2021



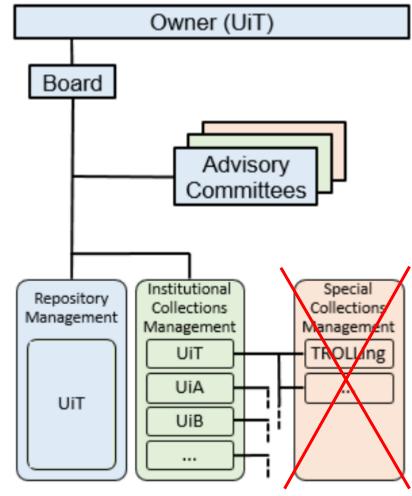
Dec 1, 2021 - Tromsø Geophysical Observatory

Tromsø Geophysical Observatory, 2021, "TGO Ramfjordmoen Ionosonde Data November 2021", https://doi.org/10.18710/P1EMYF, DataverseNO, V1

About this dataset: This dataset contains ionosonde data in SAO format and ionograms in PNG format, and covers data from November 01-30, 2021, About the Tromsø Ionosonde (1993-present); Since 1980, the ionosonde was situated at 69° 35' N, 19° 13' E at Ramfiordmoen near Tromsø. No...

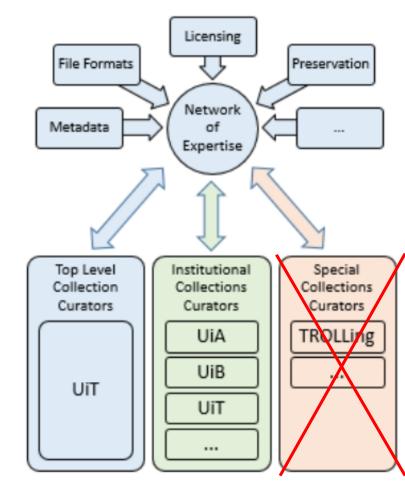
## Governance

- □ **UiT** is responsible for management and development of **technical and functional core** of the **repository**, and training and support for collections managers.
- ☐ Each **partner** is responsible for management of **institutional collection**.
- ☐ The **Board** of DataverseNO is the highest management body of the repository.
- □ An advisory committee discusses RDM and collaboration issues and gives advice to the board.



## **Data curation**

- ☐ In order to make published data as FAIR as possible, each dataset is curated by research support staff at the partner institutions before publication.
- Only curators can publish datasets.
- ☐ Curators share knowledge and experience in **curator network** across partner institutions.
- ☐ More details tomorrow!



## **Organizational documents**

The organization of DataverseNO is based on a set of **well-defined documents** describing the **responsibilities** of partners and the FAIR-aligned **stewardship of data** handled in the repository:

#### **DataverseNO Policy Framework:**

- Access and Use Policy
- □ Accession Policy
- □ Deposit Agreement
- Preservation Policy

#### **DataverseNO Guidelines:**

- ☐ Guidelines for Repository Managers
- ☐ Guidelines for Collection Managers
- Curatoration Guidelines
- Deposit Guidelines

#### **DataverseNO Steering documents:**

- ☐ Establishment of a Board for
  - DataverseNO
- Mandate Board for DataverseNO
- Steering Document for DataverseNO

**DataverseNO Partner Agreement** (including data processor agreement):

 Partners commit to manage their collections according to DataverseNO policies and guidelines To demonstrate its commitment to FAIR data stewardship and trustworthy and sustainable repository management, DataverseNO has documented its approaches and workflows to obtain CoreTrustSeal certification.



### CoreTrustSeal Certification

- ✓ in March, DataverseNO earned the CoreTrustSeal
- ✓ **long process:** about 2 years from start to certification
- ✓ challenging issues due to multi-institutional organization of DataverseNO
- ✓ one common set of policies and guidelines applied to all collections and datasets
- ✓ all datasets are curated

2018
28 JUNE
FIRST VERSION
SUBMITTED

2019

**6 MARCH** 

SECOND VERSION SUBMITTED

2019

12 OCTOBER

THIRD VERSION SUBMITTED

2020

26 MARCH

RTIFICATION RECEIVED

## Strengths and weaknesses/challenges

## **Strengths:**

- Based on approved technical solutions
- □ Provides strong user support co-located researchers embedded at partner institutions
- □ Part of strong international collaborative networks, e.g.
   □ Dataverse community (Harvard, DANS, ...), FAIRsFAIR, ...
- Curate all datasets

## **Challenges:**

- Many subjects/domains to be covered
- Challenging for small
   organizations to provide
   extensive user curation support

But: What are the alternatives in cases where no other, more appropriate (e.g. domain-specific) repositories are available?

# Questions (if time).....?







info.dataverse.no