

Geodisy: Geospatial Discovery for Canadian Research Data

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GEODISY: GEOSPATIAL DISCOVERY

**WE AIM FOR CANADIAN RESEARCH DATA TO BE SEARCHED,
FILTERED, AND BROWSED USING GEOGRAPHIC LOCATIONS AS WELL
AS WITH TEXT.**



- Search results are driven by an interactive map
- Location is the primary search facet, linking resources from a similar area
- Relies less on textual searching, which is not ideal for spatial data



Find and Share **Canadian** Research Data

[Deposit Data](#) [Advanced search](#)

Find Data

Search FRDR to find research datasets originating from researchers affiliated with Canadian institutions. Data

Deposit Data

Any researcher affiliated with a Canadian institution can deposit data into FRDR. The platform can efficiently ingest datasets of

GEODISY: GEOSPATIAL DISCOVERY

Why use it?



- Data can be difficult to find! When searching for data about a particular place, keywords can be hit or miss. Geodisy will show you where, in addition to what.
- Geodisy will benefit any research area that has use for location-based discovery, including climate change, community development, public health, conservation, and many more.

GEODISY: GEOSPATIAL DISCOVERY

Who will use it?



Researchers,
students, journalists,
etc



Canada's Federated
Research Data
Repository (FRDR)

Any entity with the
available
infrastructure

GEODISY: GEOSPATIAL DISCOVERY



Geospatial discovery is possible using location descriptions and metadata

- Geospatial data = machine readable using a GIS
- Non-geospatial data = discovery comes from descriptive metadata*
- Bounding boxes = rectangles representing the spatial extent of a data set

*to generate bounding boxes from non-geospatial data we are using geonames.org

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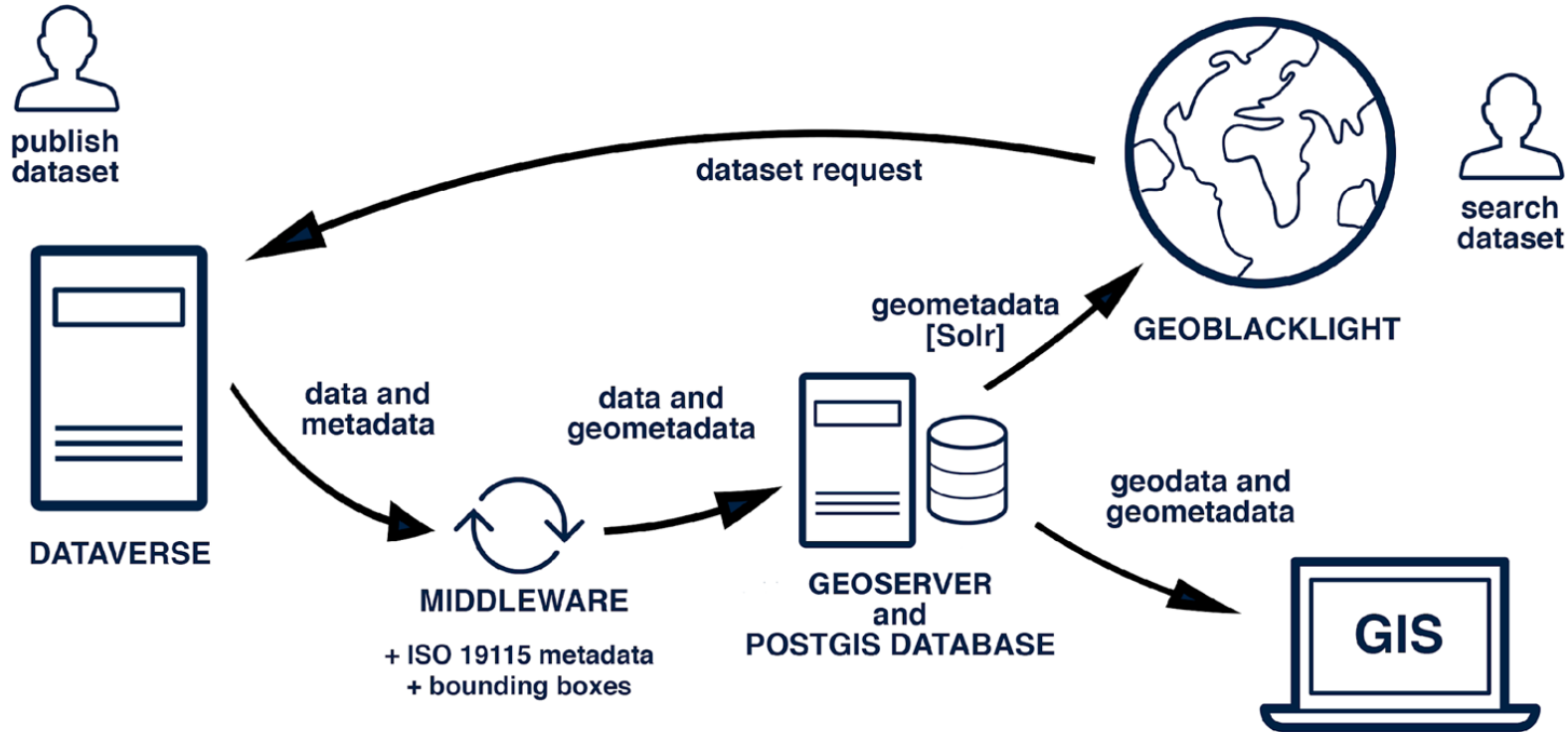
Geodisy (re-)uses 3 open-source software components



- **Dataverse:** Research data repository
- +
- **GeoServer:** Server for publishing and distributing geospatial data
- +
- **GeoBlacklight:** Geospatial discovery layer

*Geodisy source code and documentation is available in github - <https://github.com/ubc-library/geodisy>.

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Project pipeline (in steps):

1. Software will query datasets from the Scholars Portal Dataverses (and later from UAlberta, Dal, UNB, UManitoba, etc.) to determine which have geospatial information
2. Software will harvest metadata from relevant non-geospatial datasets
3. Software will harvest metadata and data files from geospatial datasets
4. Software will transform metadata to more universal standard (**ISO 19115**) and add bounding boxes if needed (GDAL or Geonames)
5. Software will deposit geospatial data and “geo”metadata into **Geoserver**
6. Metadata will be harvested by **GeoBlacklight** for discovery
7. GeoBlacklight will be customized to the needs of **FRDR** (Federated Research Data Repository), providing a unified map-based search interface for research data in Canada



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Reminder:

- For the initial step, for March 2020, Geodisy is funded to work with Canadian Dataverses only...



Scholars Portal Dataverse For testing Dataverse, go to the demo site. // Pour tester Dataverse, allez sur notre site de démonstration.

Metrics 122,931 Downloads Contact Share

Ryerson University
Ryerson University Dataverse

TRENT UNIVERSITY
Trent University Dataverse

UBC
University of British Columbia

UNIVERSITY OF GUELPH
University of Guelph Dataverse

Search this dataverse... Find Advanced Search

1 to 10 of 1,913 Results

Dataverse de l'Université du Québec à Trois-Rivières (Université du Québec à Trois-Rivières)
Apr 15, 2019

University of Manitoba

Metrics 2,574 Downloads

Search this dataverse... Find Advanced Search

1 to 10 of 57 Results

Dataverses (17)
Datasets (40)

Dataverse

Search User Guide Support Sign Up Log In

UAL Dataverse (Digital Initiatives, University of Alberta Libraries) data.management@ualberta.ca

Metrics 27,671 Downloads Contact Share

Welcome to the University of Alberta Libraries' Dataverse network. This service is provided to help researchers publish, analyze, distribute, and preserve their data and datasets.

Search this dataverse... Find Advanced Search

1 to 10 of 460 Results

Dataverses (80)
Datasets (380)
Files (3,965)

Replication data for: Species-specific size vulnerabilities in a competitive arena. Nutrient heterogeneity and soil fertility alter plant competitive size-asymmetries

DALHOUSIE UNIVERSITY 1818 18

User Guide Support Sign Up Log In

Dalhousie University Dataverse (Dalhousie University) Test out dataverse using our demo site!

Metrics 184 Downloads Contact Share

Search this dataverse... Find Advanced Search

1 to 10 of 29 Results

Dataverses (7)
Datasets (22)

2016 Census of Population: ADA and DA Maps for Annapolis County, Nova Scotia

GEODISY: GEOSPATIAL DISCOVERY (EXPECTED UI – example from NYU)

Limit your search

- Institution >
- Author >
- Publisher >
- Subject >
- Place >
- Collection >
- Year >
- Access >
- Data type >
- Format >

You searched for: Bounding Box > -111.621094 11.350797 -37.265625 68.720441 ✖

[Start Over](#)

« Previous | 1 - 10 of 24,439 | Next »

Sort by relevance ▾

10 per page ▾

▶ 1. [1 Degree Graticule, Northeast United States, 2...](#) 🔗 📄 📍

2010. United States. National Oceanic and Atmospheric Administration, United States. Department of Commerce, United States. National Ocean Service, and Coastal Services Center (U.S.). This line shapefile displays graticules (grid lines of latitude parallels and longitude meridians) for the Northeastern United States at 1 degree i... Coastal Services Center (U.S.).

▶ 2. [10 Degree Graticule, Northeast United States, ...](#) 🔗 📄 📍

▶ 3. [100-Meter Resolution Color Shaded Relief of ...](#) 🌐 📄 📍

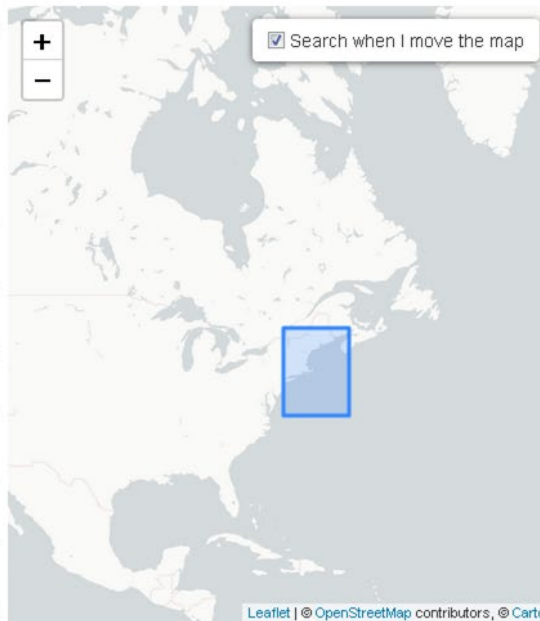
▶ 4. [100-Meter Resolution Color-Sliced Elevation o...](#) 🌐 📄 📍

▶ 5. [100-Meter Resolution Elevation of Puerto Rico...](#) 🌐 📄 📍

▶ 6. [100-Meter Resolution Grayscale Shaded Relie...](#) 🌐 📄 📍

▶ 7. [100-Meter Resolution Impervious Surface of P...](#) 🌐 📄 📍

▶ 8. [100-Meter Resolution Land Cover of Puerto Ri...](#) 🌐 📄 📍



GEODISY: GEOSPATIAL DISCOVERY (EXPECTED UI – NYU)

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[Back to Search](#)

[Start Over](#)

2010 Buildings

Publisher: [New York \(City\). Department of City Planning](#)

Place(s): [New York City, New York, United States](#)

Subject(s): [Buildings and Urban density](#)

Format(s): [Shapefile](#)

Year(s): 2010

Held by: [NYU](#)

Preservation record: <http://hdl.handle.net/2451/34043>



Tools

 [Email](#)

 [Web services](#)

 [Open in Carto](#)

Download(s)

[Shapefile](#)

Other Formats

Derived Shapefile

[Download](#)

KMZ

[Download](#)

GeoJSON

[Download](#)



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CORE PROJECT TEAM (UBC)

- Eugene Barsky – Principal Investigator
- Paul Dante – Software Developer
- Edith Domingue – ARC Client Services Manager
- Mark Goodwin – Geospatial Metadata Coordinator
- Tang Lee – Project Manager
- Paul Lesack – Co-Principal Investigator
- Evan Thornberry – Co-Principal Investigator

PROJECT PARTNERS

- Jason Brodeur – McMaster University
- Marcel Fortin – University of Toronto
- Alex Garnett – SFU
- Amber Leahey – Scholars Portal
- Jason Hlady – University of Saskatchewan
- Venkat Mahadevan – UBC ARC
- Todd Trann – University of Saskatchewan
- Lee Wilson – Portage Network



Launching in spring 2020

GEODISY: GEOSPATIAL DISCOVERY

Keep up to date:



#Geodisy on social media

researchdata.library.ubc.ca/find/geodisy

github.com/ubc-library/geodisy

Email: geodisy.info@ubc.ca

Twitter: [@MarkJWGoodwin](#), [@thornberry_evan](#)

Thank you!