Geodisy: Geospatial Discovery for Canadian Research Data

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GEODISY: **GEO**SPATIAL **DIS**COVER**Y**

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

Search   🔍   Deposit Data ☁⬆

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
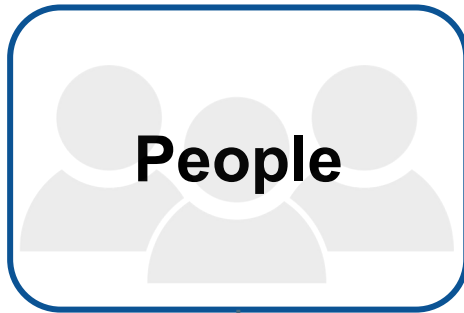
GEODISY: **GEO**SPATIAL **DIS**COVER**Y**

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: **GEO**SPATIAL **DIS**COVER**Y**

Who will use it?

People

Researchers, students, journalists, etc

Institutions

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

GEODISY: GEOSPATIAL DISCOVERY

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.

GEODISY: GEOSPATIAL DISCOVERY
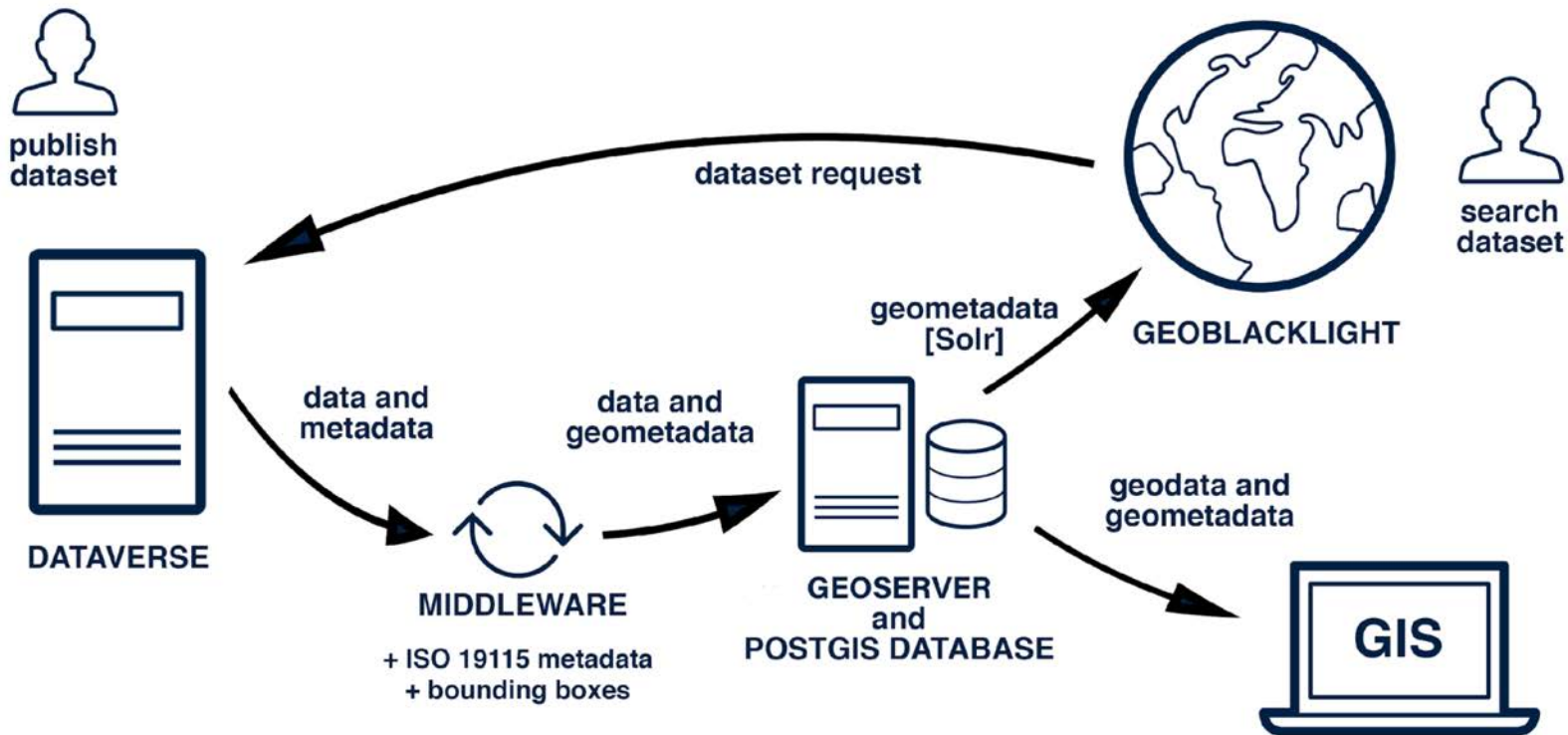
GEODISY: GEOSPATIAL DISCOVERY

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

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

GEODISY: GEOSPATIAL DISCOVERY

Reminder:

- For the initial step, for March 2020, Geodisy is funded to work with Canadian Dataverses only...
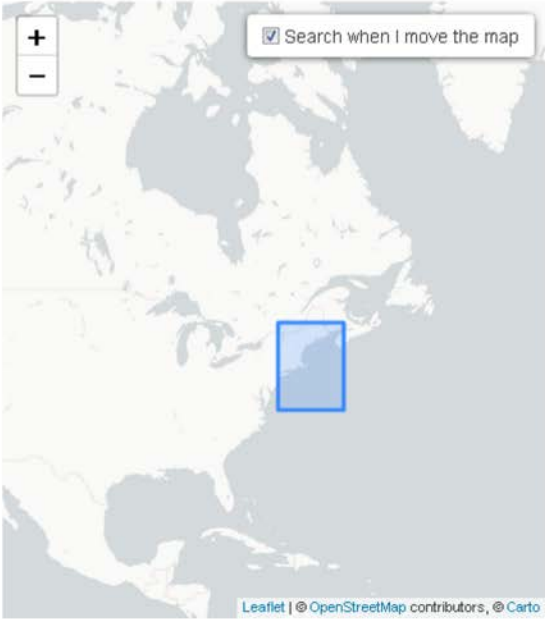
GEODISY: GEOSPATIAL DISCOVERY (EXPECTED UI – example from NYU)

GEODISY: GEOSPATIAL DISCOVERY (EXPECTED UI – NYU)

GEODISY: GEOSPATIAL DISCOVERY

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: **GEO**SPATIAL **DIS**COVER**Y**

Keep up to date:

#Geodisy on social media

researchdata.library.ubc.ca/find/geodisy

github.com/ubc-library/geodisy

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Thank you!