# FRDR Map Search

# Powered by Geodisy

**Project funded by NDRIO** 

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# FRDR = Federated Research Data Repository (DFDR en français)

https://www.frdr -dfdr.ca/

A scalable, federated platform for digital research data management and the discovery of Canadian research data

Discovery Preservation **Deposit** 

## FRDR: A Collaborative Effort

A collaboration among libraries, institutions, and federal organizations, involving many stakeholders across the RDM & ARC spheres

d'infrastructure de

recherche numérique

































# **FRDR Map Search** is a discovery tool that allows users to find FRDR indexed datasets visually, spatially, and quickly

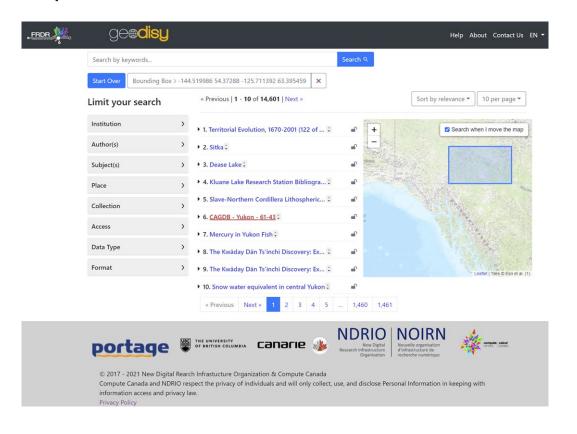
- An adaptation of the open source Geodisy project
- Search results are driven by an interactive map
- Directly tied to FRDR's research data indexing
- Contains datasets that are geospatial in nature or simply associated with a location
  - 84,000+ datasets (in June 2021)

# Why Use FRDR Map Search?

• Data can be difficult to find! When searching for data about a particular place, keywords can be hit or miss. A text search might look something like this:

```
((Wyoming OR WY OR W.Y.) N2 (south*)) OR (Colorado N2 north*)
OR (Medicine Bow National Forest) OR (Encampment River Wilderness)
OR (Encampment ADJ4 (national (park OR forest)) OR (Houston Park Wilderness) OR ...
```

# FRDR Map Search interface



# FRDR Map Search (re-)uses 4 main open-source software components

- Geodisy: Metadata and data retrieval and processing
  - +
- GDAL: Geospatial file processing
  - -
- GeoServer: Server for publishing and distributing geospatial data
- **GeoBlacklight:** Geospatial discovery layer

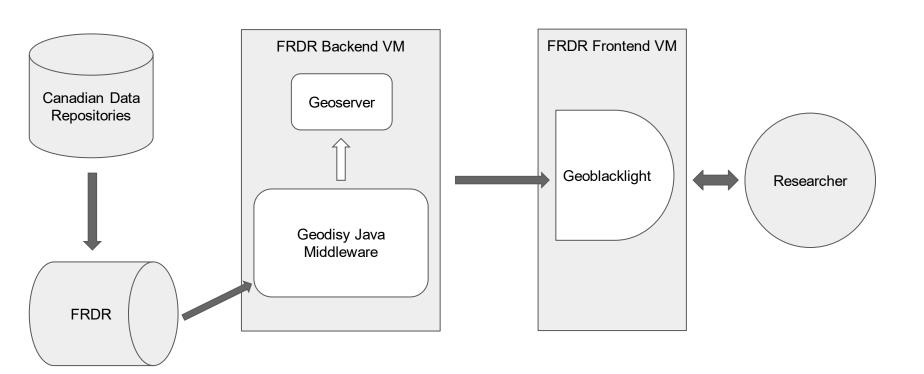
# Project pipeline summary

- 1. Metadata are harvested from the FRDR Harvester database, and, when available, geospatial data files are downloaded as well
- 2. Bounding boxes are generated for each dataset
- 3. Geospatial data files are deposited into GeoServer
- 4. Metadata are crosswalked to an international standard (ISO 19115) and GeoBlacklight JSON
- 5. Metadata and geospatial data files are indexed into GeoBlacklight for discovery
- 6. Metadata are also available on OpenGeoMetadata (<a href="https://github.com/OpenGeoMetadata">https://github.com/OpenGeoMetadata</a>)

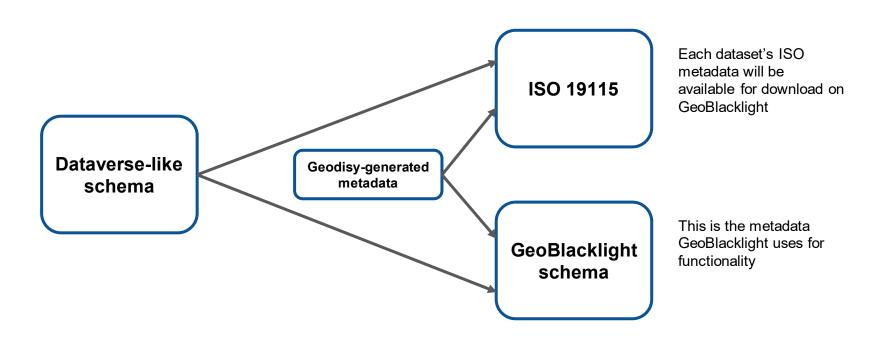
# Bounding boxes in FRDR Map Search

- Without bounding boxes, Map Search cannot function GeoBlacklight requires bounding boxes for discovery
- All datasets that go through the Map Search pipeline either have bounding box coordinates entered into the metadata by the depositor or a bounding box that is programmatically generated by Geodisy using dataset files or other metadata
- Each geospatial file or set of coordinates (even if there are multiple in a single dataset) will get its own GeoBlacklight record
- Datasets that do not include coordinates, geospatial filetypes, or geographic coverage metadata are not eligible for inclusion

# FRDR Map Search Software Architecture



## Metadata treatment







#### **Explore Canadian research data**

Search by keywords...

Search Q

#### Search by location



To use the map search:

- 1. Move the map to display your area of interest. You can also hold the shift key and click to draw a box for the map to zoom toward
- 2. Click "Search Here" to see the results



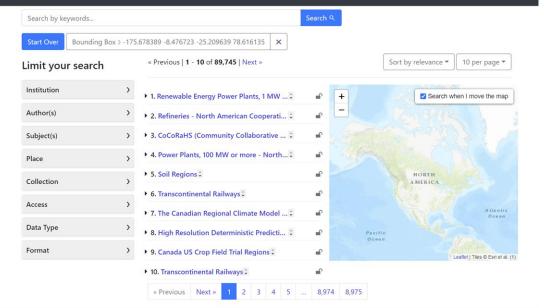
























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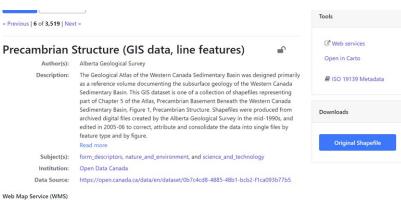
### No geospatial file associated with bounding box

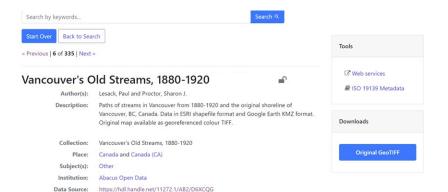






### Geospatial file-associated bounding box with file preview







#### Web Map Service (WMS)



# Keep up to date

#Geodisy on social media

www.frdr-dfdr.ca/docs/en/about/#geodisy-project

researchcommons.library.ubc.ca/geodisy-phase-2/

github.com/ubc-library/geodisy

Email: support@frdr-dfdr.ca

# **Thanks! Questions?**



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