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SHARED STEWARDSHIP OF RESEARCH DATA

FRDR DFDR
FEDERATED RESEARCH DATA REPOSITORY
DÉPÔT FÉDÉRÉ DE DONNÉES DE RECHERCHE

NDRIO
New Digital Research Infrastructure Organization
NOIRN
Nouvelle organisation d'infrastructure de recherche numérique

THE UNIVERSITY OF BRITISH COLUMBIA

Geodisy

A New Visual Way to Discover Canadian Research Data

Eugene Barsky, Head, Research Commons, University of British Columbia
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Overview

Geodisy (geo.frdr.ca) is an open source discovery tool that allows users to find open data from Canadian repositories in a visual way

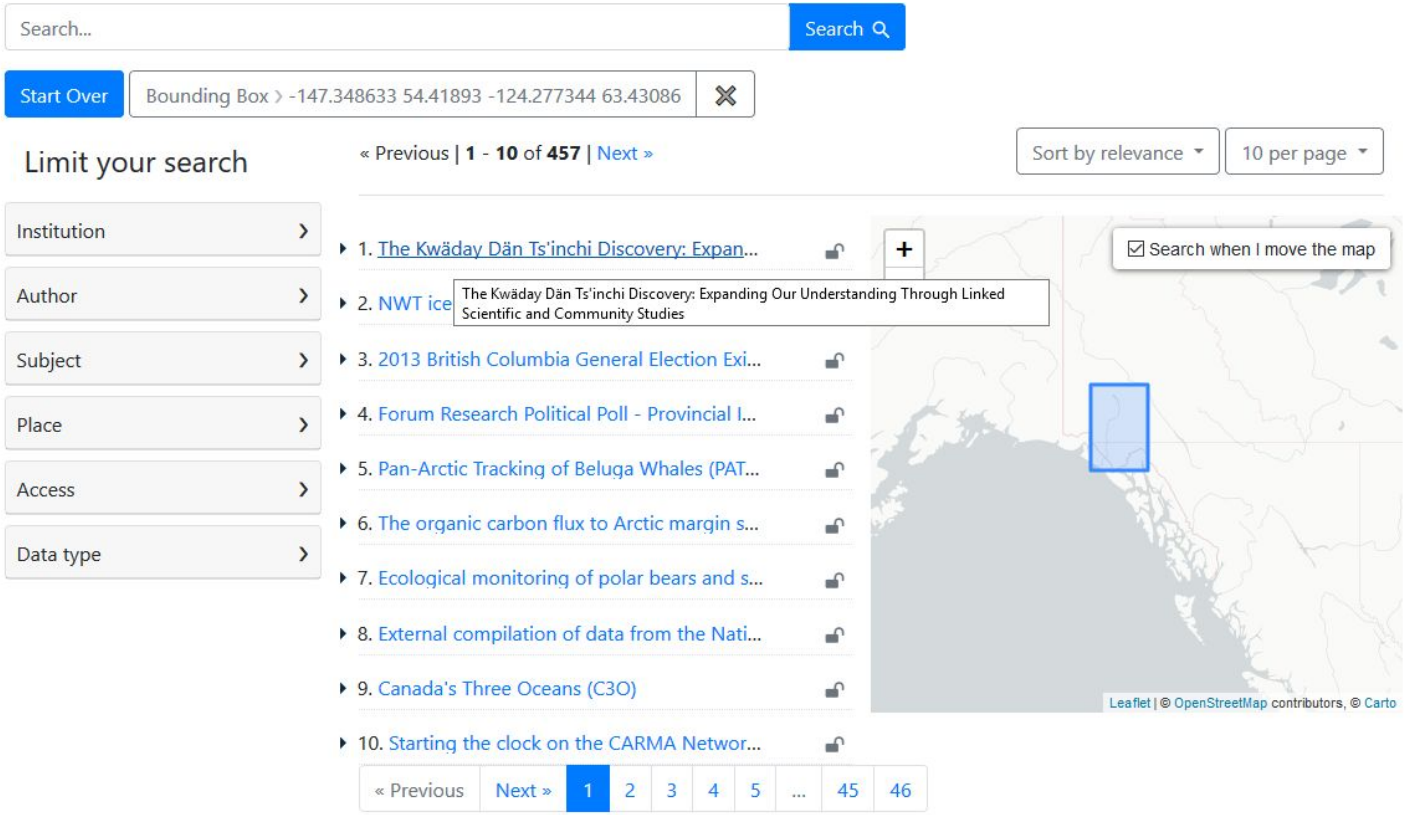
- Search results are driven by an interactive map
- Contains data that is geospatial or simply associated with a location
- Provides a map-based search for Canada's Federated Research Data Repository (FRDR)
- All components are open source and code is freely available for others to adapt

Why is it useful?

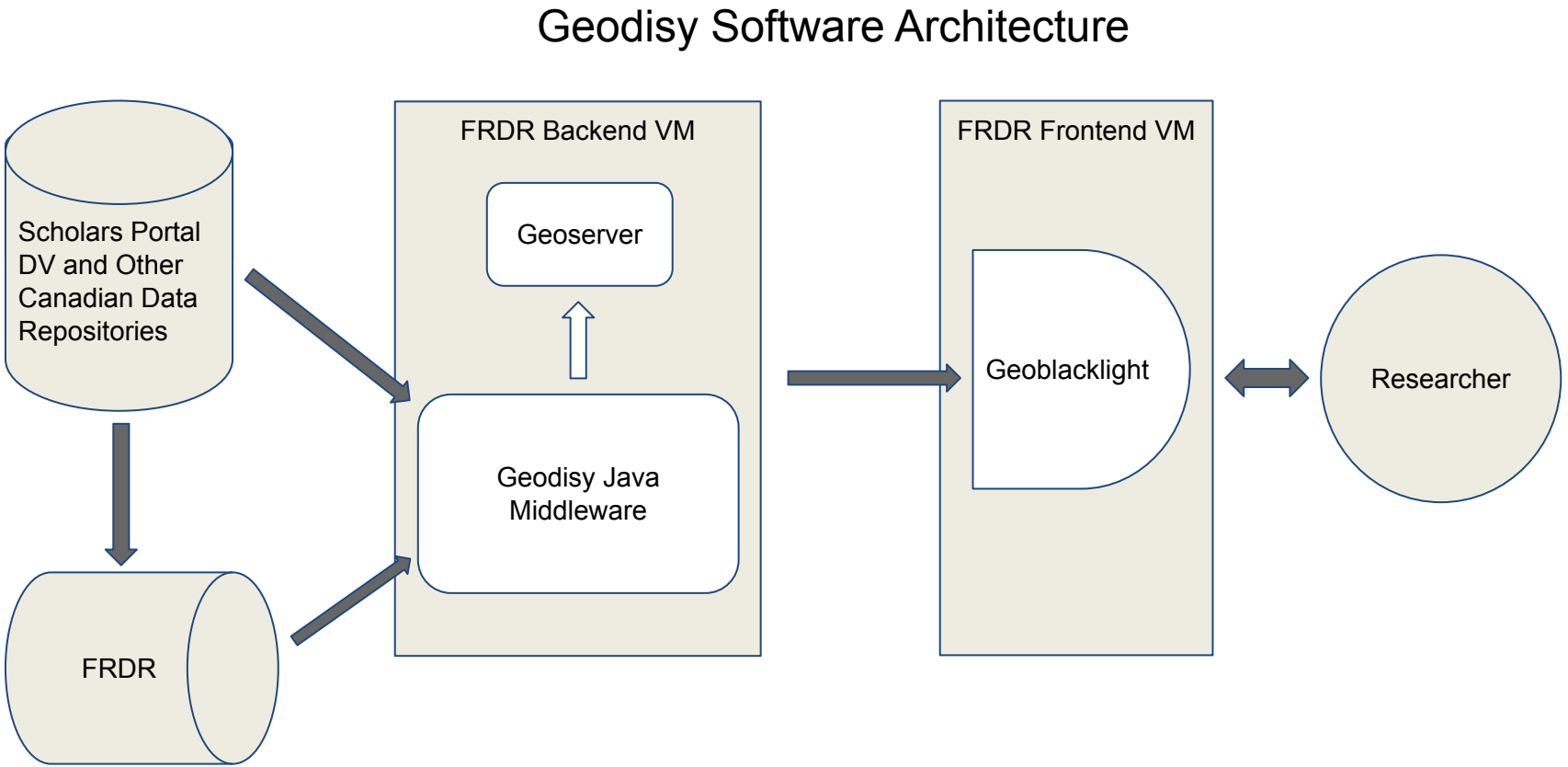
Data can be difficult to find! When searching for data about a particular place, keywords can be hit or miss. A text search for a forest in Northern BC might look something like this:

((British Columbia OR BC OR B.C.) N2 (north*)) OR (Alaska N2 south*) OR (Yukon N2 south*) OR (Tatshenshini-Alsek ADJ2 park) OR (Glacier Bay ADJ2 (park or preserve)) OR (Kluane ADJ2 (park OR reserve)) OR (Atlin ADJ2 (park OR recreation area) OR …

Geodisy Interface



Geodisy Software Architecture



Bounding Boxes in Geodisy

Geodisy requires bounding boxes for discovery.

All datasets that go through the Geodisy pipeline either have:

- Bounding box coordinates entered into the metadata by the depositor
- Bounding box that is programmatically generated from:
  - Geospatial files in the dataset
  - Place name metadata

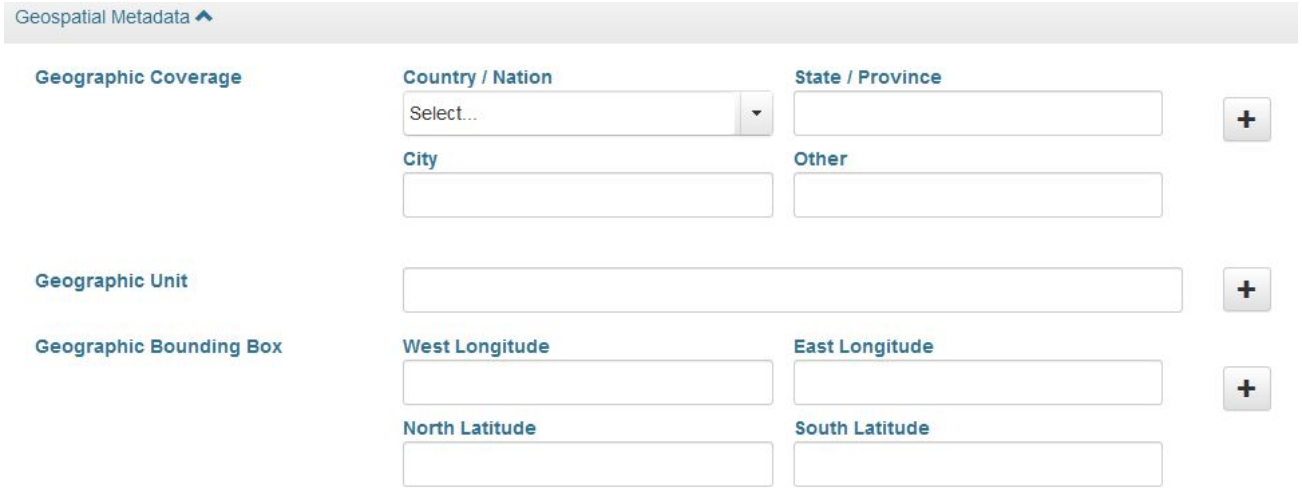
Bounding Boxes in Geodisy

- 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

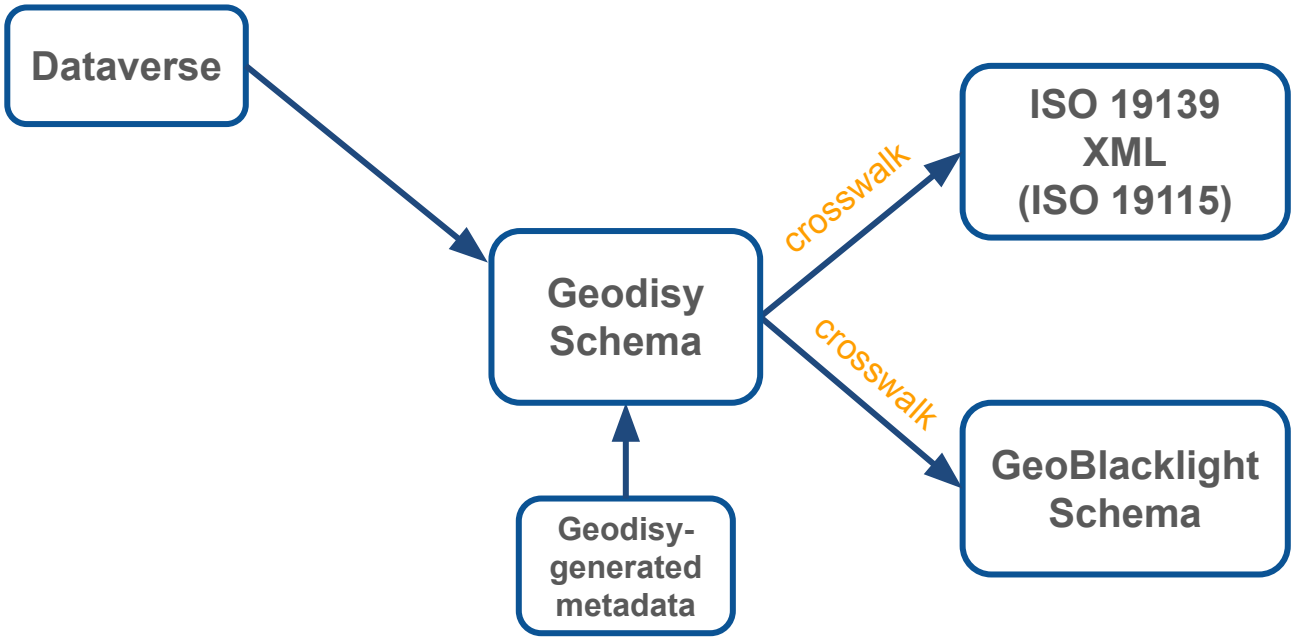
Geospatial Metadata

Geodisy first attempts to analyze geospatial files using GDAL. If unsuccessful, it utilizes bounding box and place name metadata entered by the depositor. In Dataverse:



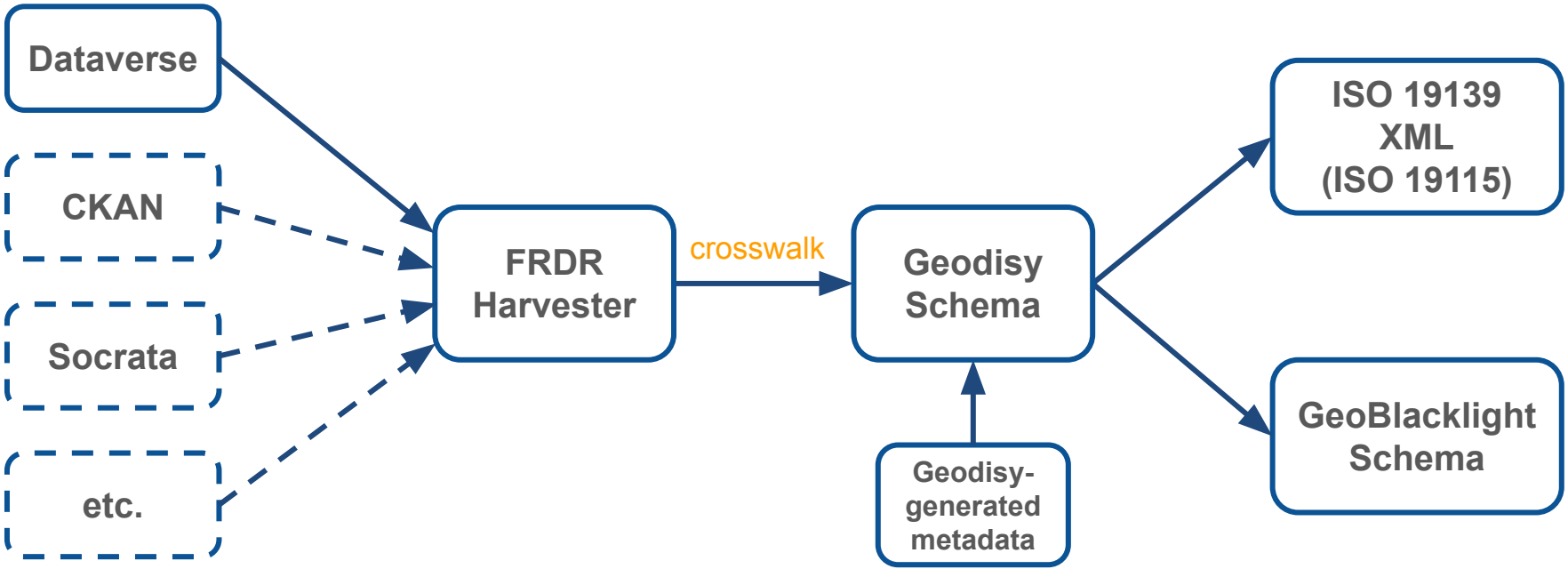
Geodisy Metadata Process

Phase 1 (current)



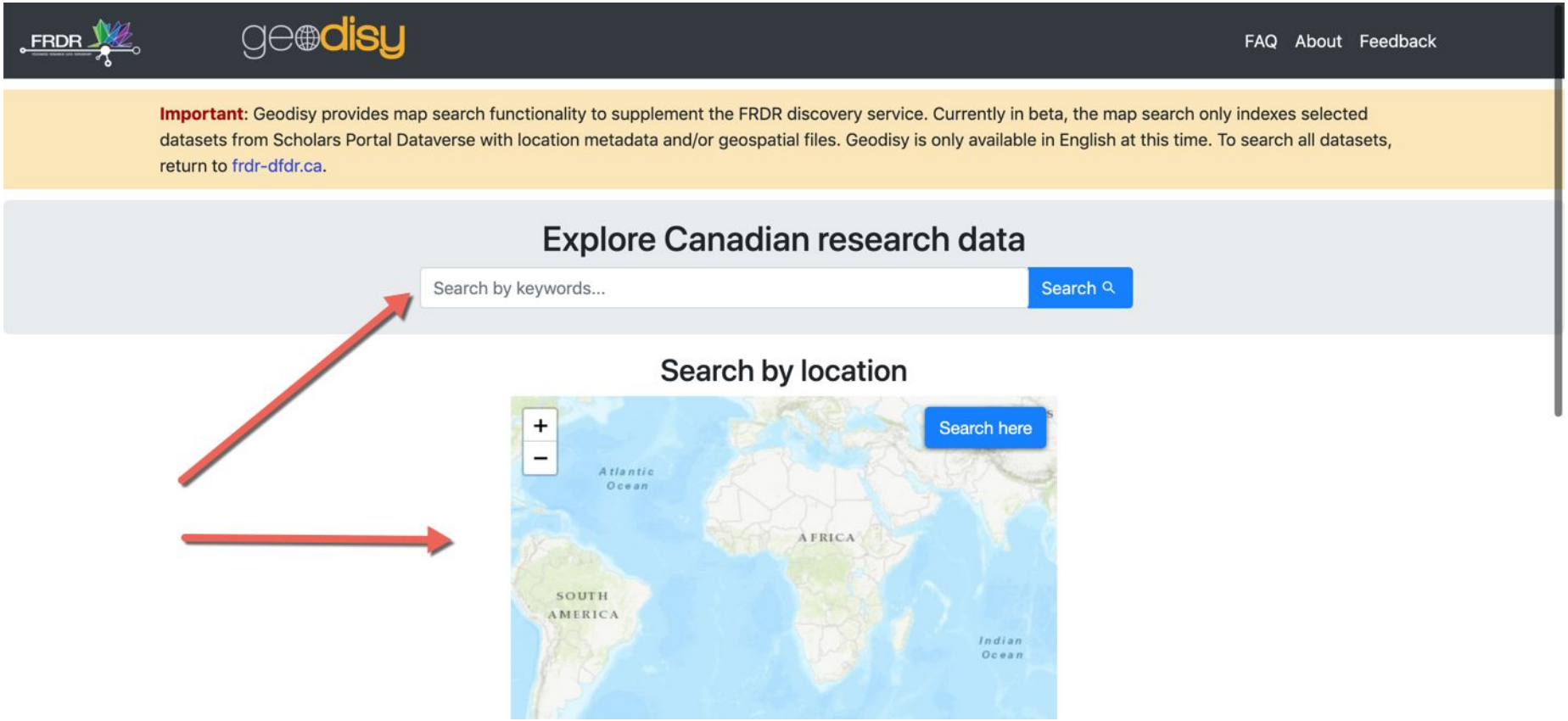
Geodisy Metadata Process

Plan for Phase 2

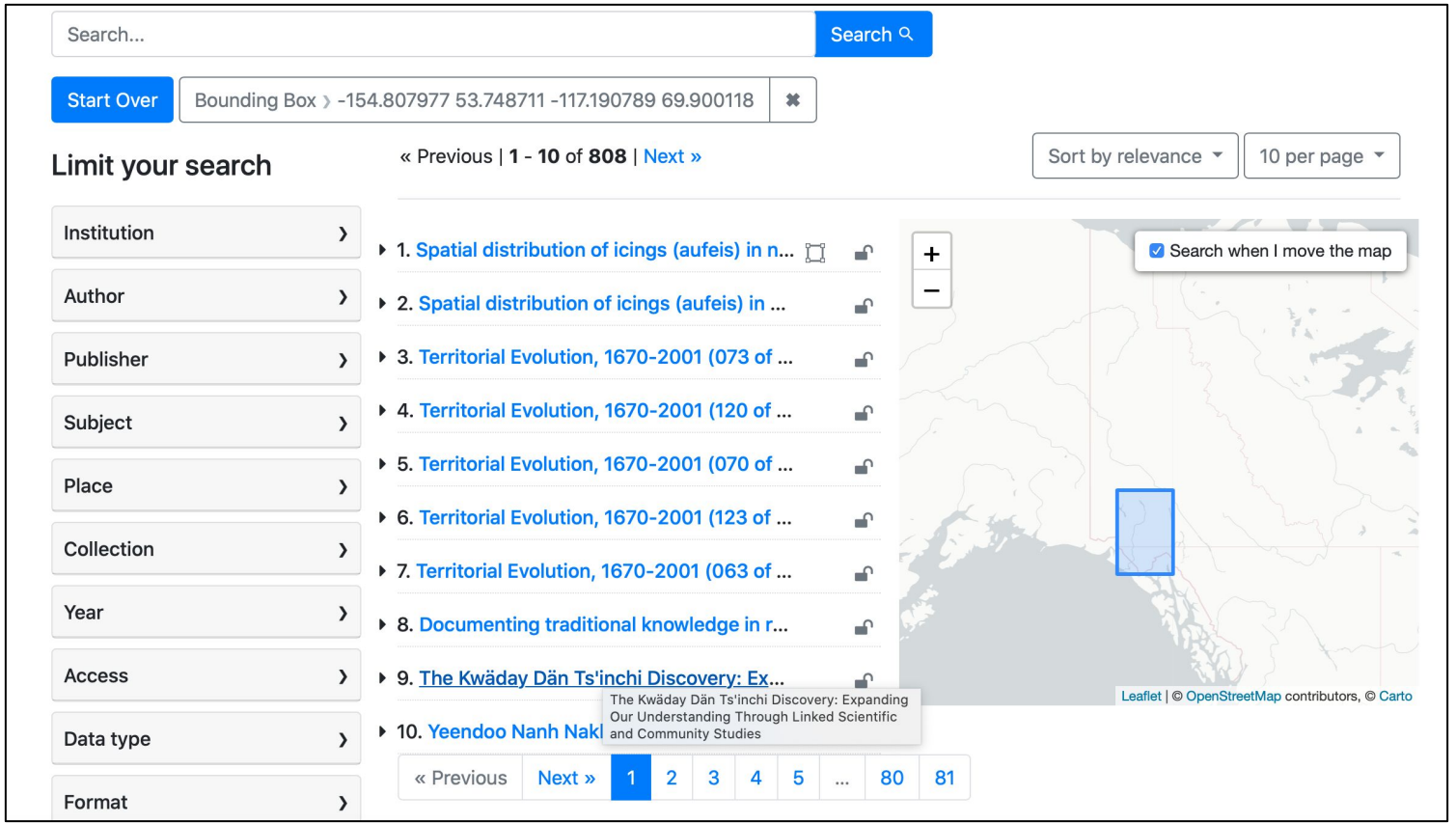


FRDR and Geodisy

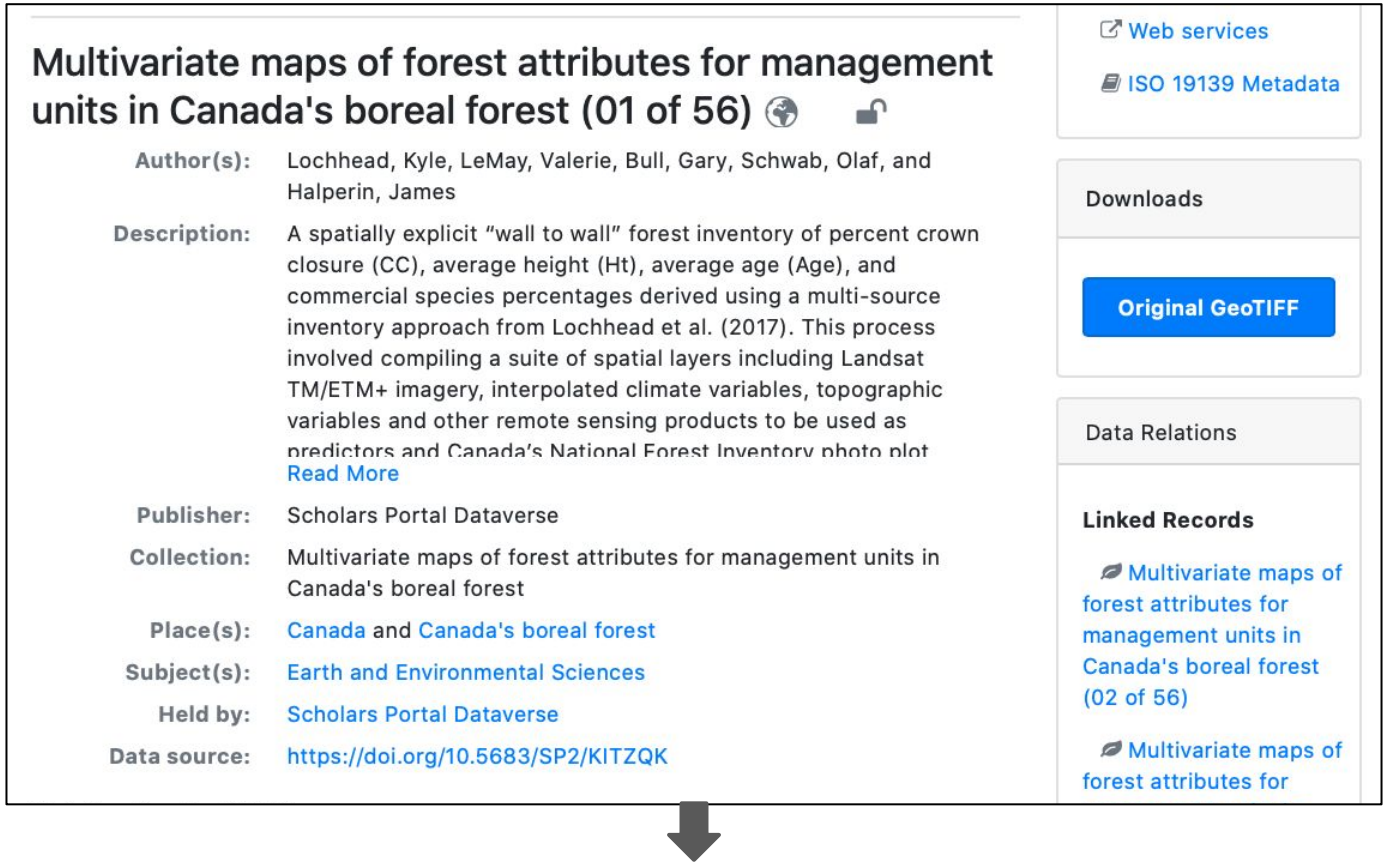
Geodisy Search Portal Page



Geodisy Search Results Page



Geodisy Record Page



Multivariate maps of forest attributes for management units in Canada's boreal forest (01 of 56)

Author(s): Lochhead, Kyle, LeMay, Valerie, Bull, Gary, Schwab, Olaf, and Halperin, James

Description: A spatially explicit "wall to wall" forest inventory of percent crown closure (CC), average height (Ht), average age (Age), and commercial species percentages derived using a multi-source inventory approach from Lochhead et al. (2017). This process involved compiling a suite of spatial layers including Landsat TM/ETM+ imagery, interpolated climate variables, topographic variables and other remote sensing products to be used as predictors and Canada's National Forest Inventory photo plot

Read More

Publisher: Scholars Portal Dataverse

Collection: Multivariate maps of forest attributes for management units in Canada's boreal forest

Place(s): Canada and Canada's boreal forest

Subject(s): Earth and Environmental Sciences

Held by: Scholars Portal Dataverse

Data source: https://doi.org/10.5683/SP2/KITZQK

Web services

ISO 19139 Metadata

Downloads

Original GeoTIFF

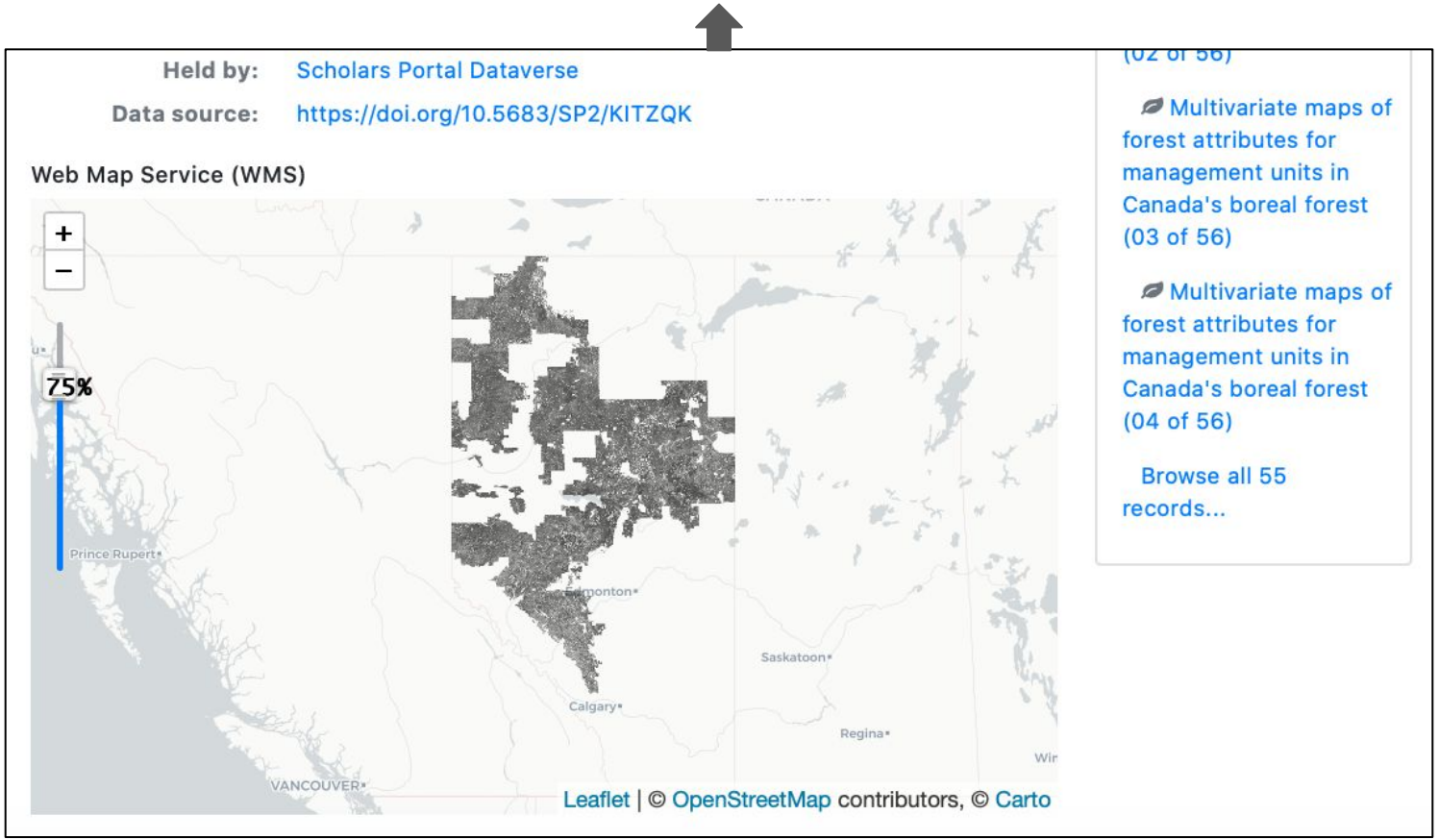
Data Relations

Linked Records

Multivariate maps of forest attributes for management units in Canada's boreal forest (02 of 56)

Multivariate maps of forest attributes for

Geodisy Geospatial Preview



Live Demo

- Access from https://geo.frdr-dfdr.ca/ or https://www.frdr-dfdr.ca/repo/

Next Steps

- Back-end integration of Geodisy with the FRDR metadata harvester
- French translation of user interface
- Data from more repositories made available for discovery

Acknowledgments

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NDRIO
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NOIRN
Nouvelle organisation d'infrastructure de recherche numérique

Thanks to our partners

Questions?

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GitHub: https://github.com/ubc-library/geodisy