



Tristan MacLean,
Evidence for Democracy

“Dimensions offers a robust database of awarded grants to quickly and effectively view the potential return on investment and full impact achieved by national funding programs.”

Using Dimensions’ robust grants database to assess the state of Canadian climate science

In a special project for [Evidence for Democracy](#), a Canadian non-profit organization that advocates for evidence-based policy-making in the government, Tristan’s objective was to assess the current state of climate science resources and funding in Canada and use the results to offer recommendations to strengthen the field. He planned a two-prong approach by consulting the climate science community directly to elicit their needs and opinions as well as studied funding data to analyze past and currently available climate funding programs.

After conducting interviews and surveys from the climate scientists, Tristan aimed to put the data into context. He looked at some of the climate science being conducted and the impact of government funding of climate science. Dimensions allowed him to explore and connect publicly available policy documents, peer-reviewed publications, altmetrics and analytics of global competitive-grant data.

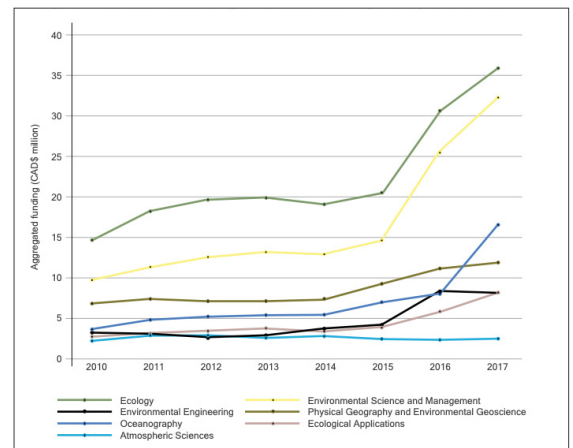
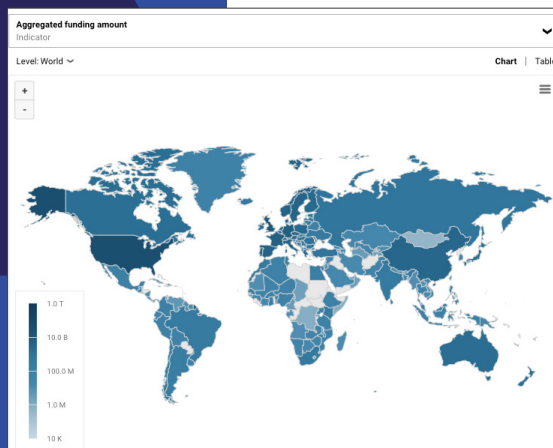
Additionally, Dimensions enabled Tristan to quickly view trends of the state of Canadian climate science in an effort to determine if the scientists were getting the right level of funding to meet their needs. The simple to understand data visualizations could also provide a good starting point for government and funders to explore broader insights such as:

- help identify where to invest tax dollars
- select the best areas of research to see the highest impact of funding
- plan for national-level assessment and priorities
- Spot blindspots for overlooked areas that aren’t receiving enough funding

“Without Dimensions, we would have needed to hire an expert in climate science and data analysis to manually conduct the analysis over several months which wasn’t feasible.”

Measuring funding disbursed to climate scientists is complicated by the lack of a “climate science” definition that can be used in assessment and tracking. Dimensions helped overcome this obstacle as grants provided directly from major funders in Canada are automatically classified by Fields of Research (FOR) according to the Australia/New Zealand Standard Research Classification (ANZSRC) system allowing all R&D activity to be categorized using a single system.

Tristan used Dimensions to look at the funding of competitive grants for climate-related research across Canada. Within seven key climate-related fields of research, disbursed amounts displayed different trends since 2010, with some fields of research showing significant increases, such as ecology, while others, such as atmospheric sciences, remaining fairly consistent, between CAD\$2 and \$3 million, since 2010.



“The ability to create a group filter using the research categories of interest was extremely valuable and really sped up how fast I was able to compare grants in Canada between different funders as well as against the rest of the world,” added Tristan.

Research Categories		
related to your search		
Aggregated		
Classification: Fields of Research		
Name	Grants	Funding amount aggregated
Fields of Research code		
Ecology 0602	72,123	USD 19.5 B
Environmental Science and Management 0502	64,795	USD 22.1 B
Environmental Engineering 0907	35,742	USD 10.4 B
Physical Geography and Environmental Geoscience 0406	29,492	USD 7.1 B
Oceanography 0405	22,859	USD 14.7 B
Genetics 0804	13,651	USD 3.4 B
Atmospheric Sciences 0401	12,758	USD 6.2 B

Tristan was very impressed at how simple Dimensions was to use and appreciated that he didn’t need to be an expert in data visualization in order to generate the analysis. He also shared “I’m impressed that the platform is continuously being improved and can’t wait to see what features will be available in the future.” He will most certainly be

using Dimensions for future projects. The full assessment and underlying results can be viewed [here](#).