

Libre: Freeing your data - Free to share, free to discover and useRuth Duerr[†]; Jess Lacy[†] University of Colorado, USALeading author: rduerr@nsidc.org

Data are the "common wealth of humanity," the fuel that drives the sciences; but much of the data that exist are inaccessible, hidden in one of numerous stove-piped data systems, or entirely undiscoverable without direct knowledge of and contact with the investigator that acquired them. Much of the "wealth" is squandered and overall scientific progress inhibited, a situation that is becoming increasingly untenable with the openness required by data-driven science. What are needed are simple interoperability protocols and advertising mechanisms that allow data from disparate data systems to be easily discovered and accessed. The tools must be simple enough that individual investigators can use them without IT support. They cannot rely on any centralized repository or registry and the protocols must scale to support the discovery and access to the holdings of many archives. NSIDC, in conjunction with other members of the Federation of Earth Science Information Partners and the Polar Information Commons, are working on just such a suite of tools and protocols. In this poster, we discuss data and service casting, data badging, and OpenSearch - a suite of tools and protocols which, when used in conjunction with each other, have the potential of completely changing the way that data and services worldwide are discovered and used.