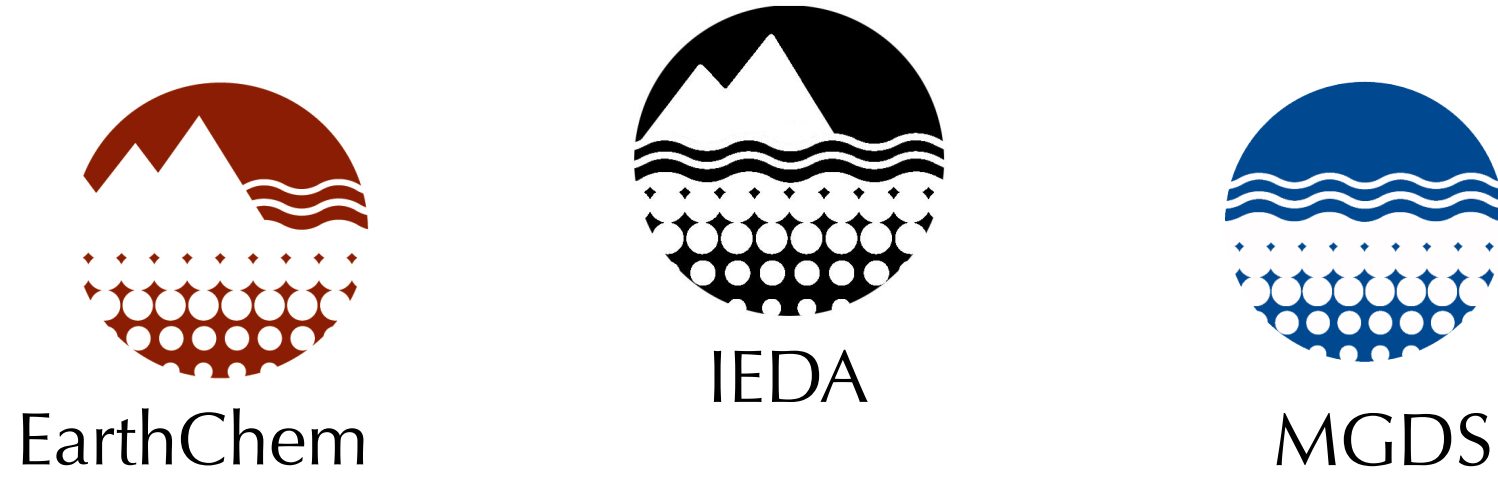


Data Services for Long Tail Science at the Integrated Earth Data Applications (IEDA) Data Facility

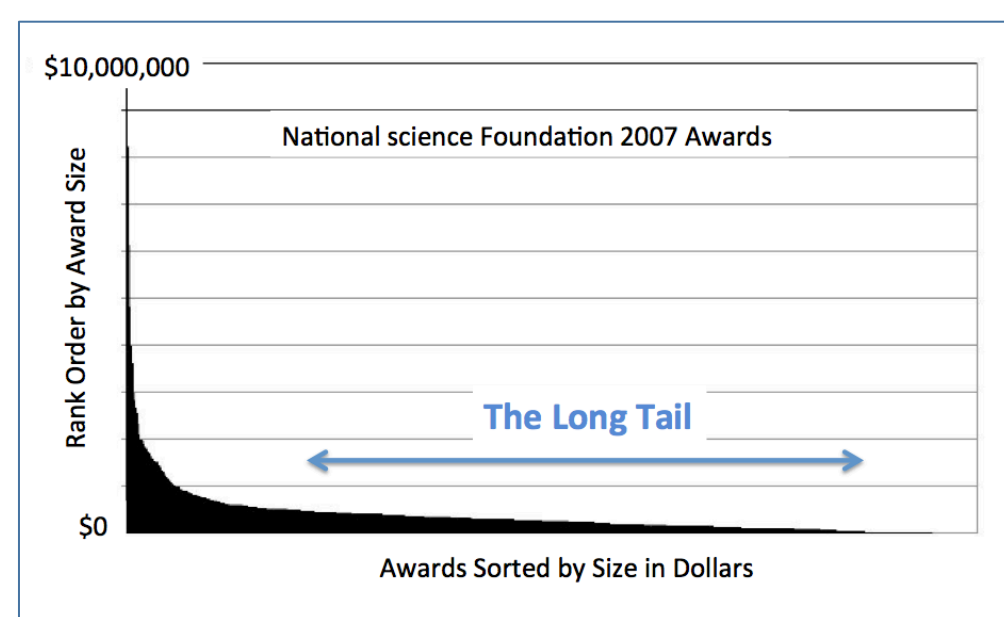
Leslie Hsu, Kerstin A. Lehnert, Suzanne Carbotte, Vicki Ferrini, Suzanne O'Hara, J. Douglas Walker, Robert Arko; Lamont-Doherty Earth Observatory, Columbia University. info@iedadata.org

What is IEDA?

IEDA, or **Integrated Earth Data Applications**, is a community-based data facility funded by the US National Science Foundation (NSF) to support, sustain, and advance the geosciences by providing data services for **observational solid earth data from the Ocean, Earth, and Polar Sciences**. IEDA is a partnership between EarthChem and the Marine Geoscience Data System.



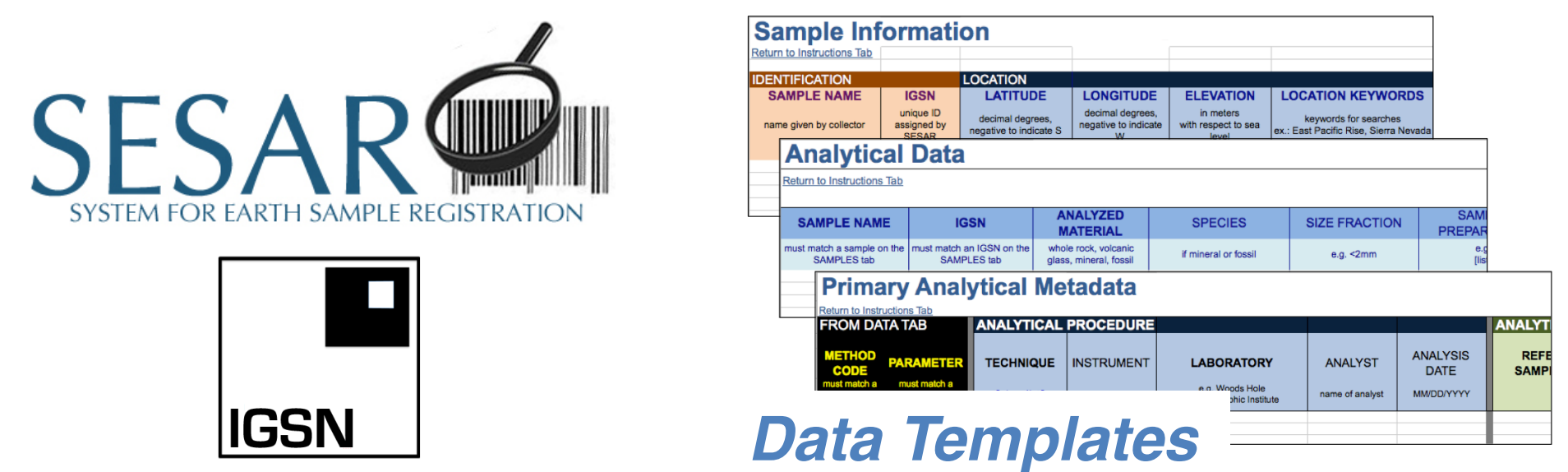
Long Tail Science encompasses that done by individual researchers and relatively small labs. They collectively produce the bulk of scientific knowledge, but due to their heterogeneous nature, tend to have the least developed data services and systems.



3. Data Management and Reporting

IEDA offers simple tools to help **investigators manage data and comply with funding agency data policies**.

1. The **Data Management Plan Tool** allows a user to create new plans, save, and retrieve past plans.
2. The **Data Compliance Reporting Tool** for demonstrating data products from U.S. NSF Grants
3. SESAR (System for Earth Sample Registration) is a **sample registry that distributes the International Geo Sample Number (IGSN)** unique sample identifiers.
4. **Data Templates** for organizing and documenting analytical lab data



1. Data Access

IEDA operates and **maintains a suite of data systems and data collections** that provide access to a wide variety of solid earth data from the marine, terrestrial, and polar environments.

Catalogs, maps, and data are delivered through standard programmatic interfaces, and a variety of OGC-enabled clients can be used to **directly access some of our content through web services**.

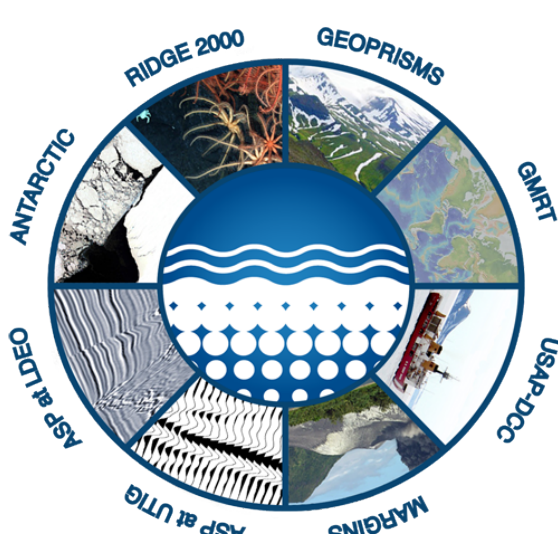
Sample-based data

- EarthChem Portal, PetDB, Geochron

Sensor-based data

- MGDS Data portals, Global Multi-Resolution Topography Portal

Images, videos, photos, diagrams



Data Management Plan Tool

Use this form to generate a data management plan PDF for inclusion in your NSF proposals. Please note that data management plans are limited to two pages in length. For more information about NSF's Data Management Plan requirements, see the NSF Data Management & Sharing FAQ. A list of suggested repositories is provided for your convenience, but additional repositories can be identified using the "Other" option.

Form fields for Data Management Plan Tool including: Proposal Information (Lead PI, Institution, Project Title), NSF Submission (NSF Submitter, Target, Program Info), Data Acquisition/Processing Summary (Overview, Data Description, Includes field work, Will existing data/samples be used?, Data Analysis Summary), and Proposed Data Products (Data Product #1, Responsible Investigator(s), Data Product Description, Data Repository).

Data Compliance Reporting Tool

NSF Award Info
Award Title: Collaborative Research: A MCS Investigation to Study Axial Crustal Structure and Alteration of Upper Crust at the Juan de Fuca Spreading Center
Investigator(s): John Diebold, Suzanne Carbotte
Award ID: 0002488

Expedition/Completion	Data Type(s)	# of Data Instrument Sets	Investigator(s)	Release Information	Citation
EW0207	Geophysical	1	Maurice Ewing Gravimeter, Sonar:Multibeam	Released	Not Supplied
EW0207	Navigation:Primary	2	Maurice Ewing Navigation	Released	Not Supplied
EW0207	LayerThickness:Crust, LayerThickness:Seismic, LayerThickness:Seismic:Anchored:MCS, Seismic:Navigation, Seismic:Reflection:MCS, Seismic:SeismicHistory:MCS, Seismic:ShotTimes:MCS, Seismic:ShotTimes>Status	9	Seismic:MCS	Released	Canales, Juan Pablo, Carbotte, Suzanne, Harding, Alistair, Kent, Graham, Nedimovic, Miaden, et al., 2005, 2006, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 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