DeCODER

Democratized Cyberinfrastructure for Open Discovery to Enable Research (DeCODER)

The new NSF CSSI DeCODER project expands and extends the successful EarthCube GeoCODES framework and community to unify data and tool description and reuse across and beyond geoscience domains.

What is DeCODER?

DeCODER is an NSF-funded effort to enable cross-domain discovery of and access to data and research tools.

https://earthcube.org/decoder

Science on Schema

Science On Schema (SOS) is intentionally designed to offer flexibility, offering numerous ways for implementation. What sets DeCODER apart is its distinct approach; it doesn't limit itself to a single community with standardized representations.

DeCODER aims to ingest a wide range of SOS data, requiring diversity to be addressed to efficiently process information and enhance retrieval speed.

DeCODER leverages schema.org and is actively working on its extension, SOS, to enhance data discovery for geoscience repositories.

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VT VIRGINIA TECH.

S Syracuse University

ĀTM

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UNIVERSITY OF CALIFORNIA

Community Engagement

DeCODER has successfully crawled and indexed data from 26 repositories. As a part of the project, the focus is on three key communities:
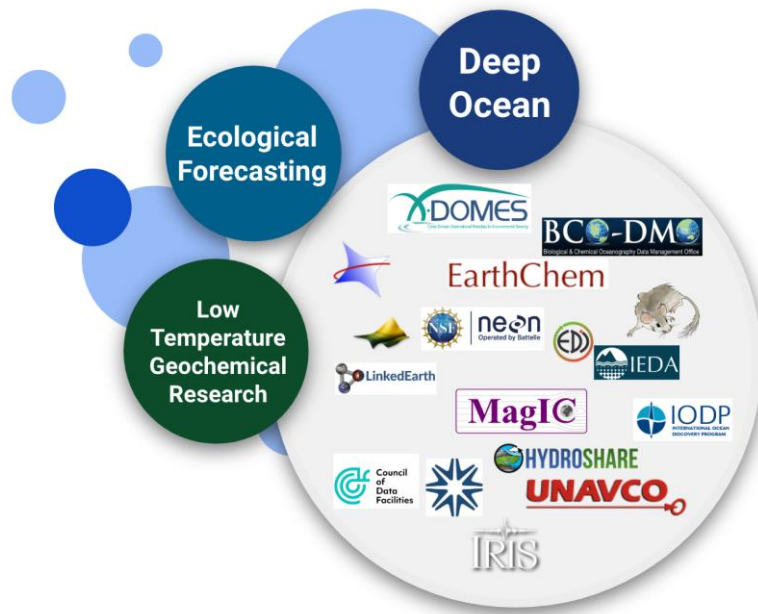
The Deep Ocean Observing Strategy (DOOS): DOOS is an international, community-based group that coordinates deep ocean observing to understand the state of the global deep ocean with respect to baseline conditions, response to climate change, and response to human disturbance.

Ecological Forecasting: Forecasts and scores for all themes included in the NEON Ecological Forecasting Challenge

Low Temperature Geochemical Research: Hydrography focuses on disseminating global, high-resolution layers of the Earth's stream channels along with a suite of topographical and topological information.

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