

Solutions for providing web-accessible, semi-standardised ecosystem research site information

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Outline

- Site information is an integral part of site-based environmental research infrastructures
- However, there is no common standard available for the description of research sites (site name, location, observed properties, scale, infrastructure, ...)
- There are a number of different site catalogues with their own respective data models
 - DEIMS-SDR (deims.org)
 - NEMSR (<http://www.neii.gov.au/nemsr>)
 - SIOS OFC (<https://sios-svalbard.org/sios-ri-catalogue>)
 - ...

How can you at least somewhat standardise data provision and access?



Solution: Provision of site information through a standardised API

- Using a REST-API following OpenAPI Specification 3.0
 - Implemented in DEIMS-SDR: <https://deims.org/api>
- Site records can be called using site IDs
 - <https://deims.org/8eda49e9-1f4e-4f3e-b58e-e0bb25dc32a6>
("DEIMS.ID" pointing to human-readable landing page)
 - <https://deims.org/api/sites/8eda49e9-1f4e-4f3e-b58e-e0bb25dc32a6>
(api call returning machine-readable site information)
- Exposes sites and associated records as JSON records
 - JSON schemas used to describe structure of JSON records
 - JSON records features all available information of sites
 - Name, Location, Contact, Research Focus, Infrastructure, Datasets, ...
- Simple to parse and interpret while containing all available information

