



### #1 The NERC Vocabulary Server (NVS)

#### What is NVS?

- A thesauri and controlled vocabulary server for the marine community and related domains
- Serves the SeaDataNet (SDN) Common Vocabularies
- Community-driven, used globally
- Linked Data
- Machine Readable
- Interoperable

#### Who uses NVS?

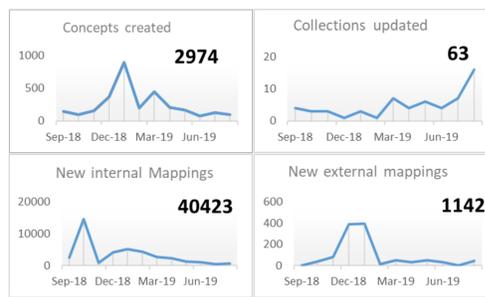


Aug 2018 – Aug 2019

#### Key usage vocabularies

Expressing **What** variable (P01) was observed by **which** instrument (L22) in machine readable, unambiguous terms is crucial for making ocean observations FAIR

#### Last 12 months stats



#### Publication



<http://vocab.nerc.ac.uk/sparql/>



<http://vocab.nerc.ac.uk/vocab2.wsdl>

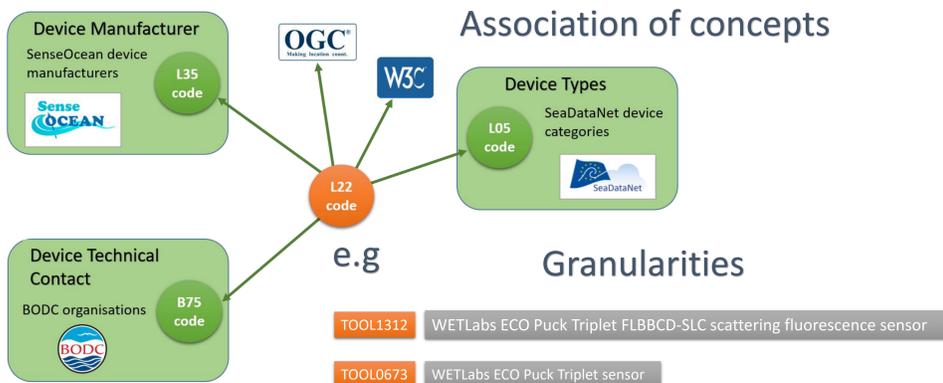


<http://vocab.nerc.ac.uk/collection/>



### #2 L22: The SeaVoX Device Catalogue

- Used for identifying **instrument provenance** in databases and data files
- >1,400 **unique and persistent identifiers (L22 code URI)**
- easily **integrated into workflows**
- supports instrument **granularities** and **web publications** (e.g. SensorML, SSN)



#### NVS Web publication

Resolvable persistent identifier → <http://vocab.nerc.ac.uk/collection/L22/current/TOOL1344/>

Detailed instrument description → **Imagenex Delta T 837B 6000 m (profiling) multibeam echosounder**

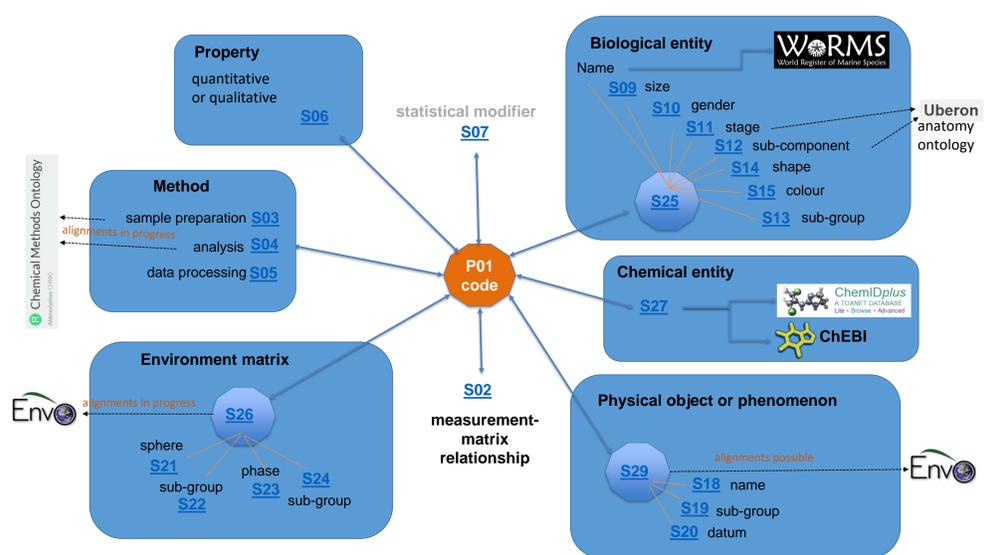
Versioning → **1**

Associated concepts → **Imagenex Delta T 837B 6000m**

<https://github.com/nvs-vocabs/L22>

### #3 P01: The BODC Parameter Usage Vocabulary

- Used for **labelling variables** in databases and data files
- >40,000 **unique and persistent identifiers (P01 code URI)** attached to **structurally logical labels** and textual definitions
- a P01 label is constructed from the following **association of concepts** defined in controlled vocabularies

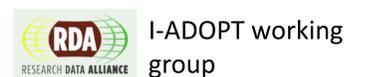


P01 label template: **A PROPERTY of an OBJECT in RELATION to a MATRIX by a METHOD**



Example: **Concentration of chlorophyll-a per unit volume of the water body [particulate >GF/F phase] by filtration, extraction and fluorometry**

<https://github.com/nvs-vocabs/P01>



### #4 Benefits

- Facilitates the **I** of the **FAIR** data principles
- Supports automated processes, Virtual Research Environments, fast data exchange, Linked Data applications
- Optimizes data re-usability by preserving key information close to the data values
- Enables flexible and customisable data aggregations and discovery pathways

### #5 Acknowledgements

