4th Argo Vocabulary Task Team meeting

16-March-2022 on Zoom

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Agenda

1. Review of ADMT-22 actions list
   - Automatic notification of NVS updates
   - BODC Argo vocabulary team / OceanOps metadata team meetings
   - NVS management of experimental, pilot and approved Argo sensors
2. Recent developments
   - Meeting with industry series: follow-up with Teledyne
   - 'Opaque' (vs semantic) IDs for all new Argo collections
3. AST presentation on Argo NVS

1. Review ADMT-22 actions list

Topic	Item	What	Assigned	Status
GDAC	1	A new version of the GDAC netCDF file format checker to use the Argo NVS vocabularies and automatically implement updates: https://github.com/euroargodev/ArgoNetCDF/issues/2	NVS team, Mark, Thierry	
Manuals	16 *	Update Users manual with: • Link to NVS Argo vocabulary 'reference tables' • Instructions for DACs & users on how to use the collections	Violetta, Thierry, Annie	Subscribe to NVS feed
Format	26	R27 – SENSOR_MODEL: • Create new concepts for sensors which have changed manufacturer • Map same sensor models of different manufacturers using 'SYN'	DACs, NVS team, Violetta	
Format	27	NVS team to find a machine2machine solution to find identical sensors	NVS team, Violetta	SKOS relationship 'SYN' (has-exact-match) can be used
Format	28	Open ticket for netCDF format update, so that the 'Conventions' field of metadata netCDF variables includes link to corresponding NVS vocabulary, and rules on how to use that vocabulary.	Thierry, NVS team, Violetta	
NVS	45 *	Finalise the Argo vocabulary list of collections, and identify clearly what is managed at NVS/BODC, what is managed at OceanOps and what tables may need a different solution.	Argo vocab team, Violetta, Magali	BODC Argo NVS team & OceanOps have been having monthly meetings.
NVS	46 *	Clearly identify which sensors are **accepted** and which are **pilot** or **experimental** in R27 – SENSOR_MODEL	Argo vocab team, Thierry, Violetta	Violetta has been reviewing this.
Comms	50	Improve guidelines on ADMT website for DACs/PIs who wish to edit the Argo NVS vocabularies.	Violetta, Thierry	

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How can DACs/GDAC find out about updated information on the NVS?

- **NVS Feed** (XML), linked on the home page of VocPrez (http://vocab.nerc.ac.uk/) under 'Tools'

- Browser add-on can be installed, and NVS Feed added to it to receive notification of updates (e.g. RRS Feed Reader, Feedbro for Chrome)

- Tools available to select only relevant updates (i.e. ADMT vocabularies only)
  - Violetta investigating this with BODC Vocabulary Management Group

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OceanOps / BODC Argo NVS teams meeting monthly since January 2022 (2 meetings so far).

Topic	Outcome
CONTROLLER_BOARD_TYPE	BODC to produce a list of controller board type names, float models and description; OceanOps will constrain this and review historical records
PI_NAME	BODC to finalise vocabulary and assign appropriate editors before publishing; OceanOps will ingest the new vocabulary. BODC to map each PI name to ORCID.
DEPLOYMENT_PLATFORM / SHIPS	Argo to adopt C17 (both ID and Preferred Label; see https://vocab.nerc.ac.uk/search_nvs/C17/)

Future topics include: PROJECT_NAME / PROGRAM, NETWORK, DEPLOYMENT_REFERENCE_STATION_ID, DEPLOYMENT_CRUISE_ID, SENSOR_MODEL, FLOAT_OWNER and INSTITUTION.

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Argo sensors and parameters: stages of AST/IOC approval

1. Stage I: Experimental deployments
   - Very small number of floats, can be Argo or non-Argo
   - Data distributed on an Auxiliary directory on the GDAC (non-regulated)
   - No official list of experimental sensors
   - Mentioned under the SPECIAL_FEATURES netCDF field of the metadata file (unconstrained)
2. Stage II: Global Argo Pilot
   - Received AST approval
   - Includes ~100 floats
   - Data distributed through main Argo data system, with QC flags (regulated)
   - Sensors and parameters captured in NVS collections
3. Stage III: Global Implementation
   - Received AST and IOC Executive Council approval
   - Sensors should be on at least 1000 floats
   - Data distributed through main Argo data system (regulated)
   - Sensors and parameters captured in NVS collections

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SPECIAL_FEATURES

From the Argo User Manual: "SPECIAL_FEATURES = "Extra features of the float (algorithms, compressee etc.)"; Additional float features can be specified here, such as algorithms used by the float. Example: Ice Sensing Algorithm, Interim Storage Algorithm, grounding avoidance or additional hardware such as a compressee (buoyancy compensator)." (…) "The float metadata file in the 'dac' directory includes a text in the SPECIAL_FEATURES variable to indicate that there is additional data in the auxiliary directory and the nature of that data."

The issue

The Argo community would like to be able to clearly identify which sensors are in which stage of approval (experimental, pilot, global) on the NVS. However, the sensors in the experimental phase are not currently captured in any controlled vocabulary.

Q1 - Should the experimental sensors be listed in a controlled vocabulary? If so, which?

Q2 - How do we distinguish between sensors in the different stages?

Q3 - Should SPECIAL_FEATURES be constrained?

Some discussion already initiated on GitHub: https://github.com/nvs-vocabs/ArgoVocabs/discussions/24

2. Recent developments

Meeting with industry series: follow-up with Teledyne

- Reviewed:
  - TECHNICAL_PARAMETER_NAME Argo Excel table
  - CONFIGURATION_PARAMETER_NAME Argo Excel table
  - Mappings between manufacturer metadata names and Argo names – revealed inconsistencies both from manufacturer (Teledyne) and DAC (BODC) side; mappings used by Coriolis decoder shared.
- Outcome:
  - Teledyne to provide a list of technical parameters that Argo should include in tech files
  - Argo to provide Teledyne with specific requirements (e.g. format and level of precision of information provided with floats)
  - New meeting this spring

2. Recent developments

'Opaque' (vs semantic) IDs for all new Argo collections

- Ideally, codes/identifiers should be opaque i.e. contain no semantics
  - e.g.

	ID	Preferred label	Alternative label	Description
L22	TOOL0739	Sea-Bird SBE 63 dissolved oxygen sensor	Sea-Bird SBE 63 DO	(…)
R27	SBE63_OPTODE	Sea-Bird Scientific SBE 63 oxygen optode	SBE63_OPTODE	(…)

- We may have to live with the use of non-opaque identifiers in Argo, but potential benefit in conducting review of opaque code adoption

- Being considered for new PI_NAME and CONTROLLER_BOARD_TYPE vocabularies that are being finalised

3. AST meeting

Presentation on Argo NVS at the Argo Steering Team meeting

Possible topics:

- NVS introduction (RDF, SKOS, Linked Data)
- NVS concepts and collections under Argo governance
  - Workflow
  - AVTT – editors
  - Documentation
- Current developments
- Feedback, suggestions?

Thank you all for your time.

Any outstanding item?