

IHDEA-2020 [October 20th (day 2)]

SPASE 2.3.2 (T. King)

Community developed information model started in 1998.

Simulation Extension developed by IMPEx, adopted in 2014

Version 2.3.2 released 15 Oct 2020

SPASE document: XML

Can describe: Catalog, DisplayData, NumericalData, Document... Instrument, observatory, Person, registry, repository, service...

New features (since 2.3.0):

- support for DOI
- Improved Access URL (classification)
- platform (more than 1 instrument)
- more type of roles (e.g., for contacts)

Metadata is managed on github, HPDE repositories. Community development.

Online XML editor and validator

Q: What about the registry explorer? (B Cecconi)

SPASE Website is now generated (hosted on github) => that piece was difficult to implement. Not ready now.

Q: continuous integration and validation on repo? (B Cecconi)

Check current implementation SMWG.

Q: tool to add tag resources? (B Cecconi)

Use the editor and submit it. Could use a simple form. With content check

Q: (J Vandegriff) What is the intended use case for the AccessURL? (This came up when talking amongst HAPI folks about adding HAPI access URLs.) This is likely a longer discussion, so I'm mentioning it here as a placeholder for discussion at a future SPASE telecon.

IUGONET activity for upper atmosphere study (Y. Tanaka)

IUGONET observation network of upper atmosphere (founded by 5 organisations). Develop tools for sharing upper atm data. facilitate interdisciplinary studies. upper atm science

Many kind of data + wide range of latitudes. Collaboration with various STP projects (EISCAT, SuperDarn...)

Tools to connect large dataset. Remove barriers between missions, communities. Metadata database (IUGONET Type-A) and analysis software (SPEDAS).

Search workflow from data search to specific events. IUGONET based on SPASE metadata. Use of SPEDAS enhance interdisciplinary studies. Multi-project display and analysis, including ground ionospheric observatories.

Outreach activity (Asia, Africa). Future plan includes outreach teaching, workshop

(A Roberts): to be generalized with other instrument

(S Fung): international collaboration and sharing of data. Linking registries to archives. How can we share metadata? Search interface?

(R Candey): extensions have been added by IUGONET. We should try to merge into base model.

DOI at ESAC science data center & SPASE (A Masson)

Linking data and archive, citation

DOI = persistent ID (URL) => landing page. 1 DOI per experiment.

Currently 47 experiment registered.

[Google dataset search \(https://datasetsearch.research.google.com/\)](https://datasetsearch.research.google.com/): ESA landing page are registered in GDS. json-schema metadata required. Keywords are important for the indexing! e.g. for finding data with specific type of measurement, measurement techniques, or scientific phenomena.

Direct links to data download page. (latest version of archived file)

What about other topics (at ESA):

- Planetary GSF (Guest Storage Facility): hosting of data associated to publications (not archive quality), but high level advanced products, will include DOI and landing page
- Astronomy: catalogues, proposals. automatic conversion, with AI techniques

Next steps: provide DOI on demand, with specific data bundle. Used for citation in publication. Solved the reproducibility issue (with data version). Data quality: for newcomers, difficult to know what data to use.

(T King): on slide 13, HPDE.io is there too! Check if we can merge entries?

(J Vandegriff): Is it possible to automatically populate the Google JSON from existing SPASE?

NASA HP Use of Digital Object Identifiers for Data (A Roberts)

NASA HPDE approach. SPASE pages (at HPDE.io) as landing pages.

DOI minted from Datacite. Mapping from SPASE to Datacite. Publisher is data hosting facility.

Use "relation" element in Datacite schema for coordination.

(T King): use the DOI tag if you have one. SpaseResourceId are also mapped

(B Cecconi): use the "isMetadataFor" relationship?

(T King): possibly in SPASE 3.0 => DOI for metadata and DOI for data. work for a working group?

(JC Malapert): What features does google dataset search offer compared to datacite search?

(C Wiegand): Anyone is thinking of or planning to create DOI for model output?

=> yes, of course

SPASE/HAPI inside & Open metadata (S Fung)

SPASE/HAPI: better communication needed
=> better coordination between partners with open metadata registries

Need definition of "naming authority".

Different system with similar resources.
User should see only 1 registry interface
=> distributed registries / single registries

Increase community awareness
Lower potential barrier to ease usage.

(T King): data portals are aggregators

Showcase

J Vandegriff: EPN-TAP paper: <https://arxiv.org/pdf/1407.5738.pdf>

C Piker: Usage of VO Table?
[https://www.ivoa.net/documents/VO Table/20191021/REC-VO Table-1.4-20191021.html](https://www.ivoa.net/documents/VO%20Table/20191021/REC-VO%20Table-1.4-20191021.html)

B Cecconi: Assessment needed => better for tables and catalogues

J Vandegriff: less adapted for large data?

T King: allowed format in SPASE (access information)

A Roberts: where is the CNES.git repository

B Cecconi: push to HPDE github ?

D Boucon: not pushed yet, under migration process.

L Bargatzke: it's ok use any public repository

D Boucon: who validates what is pushed on repositories on HPDE?

B Cecconi: Naming authorities should

S Fung: other data model out there?

B Mampaey: Solarnet document for specific FITS format

A Roberts: CDF-ISTP metadata

A Masson: CEF (Cluster Exchange Format)

B Cecconi: Mapping between SPASE and other format specification

A Roberts: not always possible

B Cecconi: VO Event for events

C Piker: PDS information model

J Fadden: Citation core metadata Dublin Core

L Bargatzke: "A" in SPASE is archive

T King: HAPI has simplify model (subset focussed on access)

R Candey: SPASE metadata is enough for HAPI ?

T King: there is no HAPI server based on SPASE metadata only.