

Minutes of the CSP Panel session

Topic: Publish your data in the VO

Date: 26.04.2022

Chair of the session: Francesca Civano

Number of participants: 70 participants

Presentations gathered here: <https://wiki.ivoa.net/twiki/bin/view/IVOA/InterOpApr2022CSP>

Questions given to the panel:

- What are your data products and the data distribution plans of your project?
- Which IVOA standards do you make use of and do you plan to use others in the future?
- Where and how did you start from and what were the difficulties you encountered?
- Are there any IVOA standard protocols missing or not sufficiently described for you to make use of them?
- Would you have done something different if you were to start the process again?

Other questions and comments triggered by the project survey:

- Sometimes not sure how to share certain types of data
- Journal engagement is not visible enough
- Some protocols need upgrades to be used by the coming missions
- Extension of protocols towards data manipulation would be beneficial
- How can VO protocols & formats help Machine learning and AI algorithms?
- Funding for making archives VO-compliant is hard to get

Notes

Dongwei Fan

LAMOST: biggest spectrum dataset in the world with more than 11M low resolution spectra and 8M med resolution spectra!

Difficulties: dealing with a big catalog (10^{10} rows)

Tamara Civera

J-PLUS and J-PAS imaging surveys

Original Images, coadded data and catalogs and added value catalogs

Simple Cone Search to access the catalogs

Some columns are Array functions and it would be useful to add this in the ADQL

HiPS images: RGB coadded images. Using hips_order_min.

MOC are used for each release

Public and private data release and they use http authentications

Lesson learned: very important to use VO services; compare with other observatories to correctly understand the use and interpretation of protocols; use external validators; attend IVOA meetings to compare and learn from other projects and experiences

Future: Implement SSAP to offer photo spectra; trying to understand how to publish time series

Alberto Micol

Archive Services Project: interactive access by the users (web based services), programmatic access (queries to access the data in scripts) and tools

Choose the standards and protocols based on the data that you need to serve: raw data, reduced data (the flagship!), ambient data and scientific catalogs.

Spectra, Images and Data Cubes (the biggest one, hence cutouts are very important, thus SODA use)

Future: How to publish Time series (now are published just as tables)

Issues: standards can be hard so contacting IVOA people is important, standards evolve and errata are published

Examples of difficulties and beauties: reported issues are often fixed within few days!

Standards evolves: e.g. TAP, ADQL

Yan Grange

Use of standards: HiPs, SIA, TAP, Obscore, DataLink

Some cutouts tool but not use of SODA

Future: UWS

It is hard to start: the architecture document is a very good read and a introduction; there is a lot that can be done.

A lot of the discussion happens in mailing lists, FAQ could be useful, meetings and forums are really useful and being engaged with the community is excellent way to learn.

MD: <https://saada.unistra.fr/esmail/> really helps with search mailing list content.

===== Questions =====

(answer from LM to ALberto) A TimeSeries model does exist though not a standards. I suggest you to get in touch with MCD (or myself LM)

How many people are interested in JSON in the VO? Rubin are definitely interested so maybe we should set up a small team of interested parties to investigate how JSON could fit into the standards? There is some excellent tooling surrounding JSON these days. (Tim Jenness)

I (LM)'m personally interested in JSON and I'm exercising some serializations.. I'll say a very few words about it is DM2

Splinter session about JSON during this interop to chat about it?

Some previous discussion <https://wiki.ivoa.net/twiki/bin/view/IVOA/VOTable-JSONdiscussion>

[MD in the chat]: <https://saada.unistra.fr/esmail/> really helps with search mailing list content.

BBerriman: how can the IVOA help the community to understand which are the standards to use
Mark Taylor presentation can address this issue

Tom Donaldson: standards should be very simple without fancy addons to address specific science cases

[Anne Raugh] As a reader of standards without years of IVOA background, I have noted that some standards are quite readable and self-contained in their descriptions, while others heavily reference other standards, to the point that they are incomprehensible without having memorized the contents of the references.

[Mark Taylor] If you have ideas about how standards can be written better: please attend the "Operations and Standards" session at the end of this UTC day!