

DAL Running Meeting #20 - Spectral lines

Date: 12 May 2025 - 02:00 PM UTC

Participants: Carlo Maria Zwölf (CMZ), Nicolas Moreau (NM), Mathieu Servillat (MS), Renaud Savalle (RS), Markus Demleitner (MD), Margarida Castro Neves (MCN), Mark Cresitello Dittmar (MCD), Marco Molinaro (MM), Mark Taylor (MT), Jon Juaristi Campillo (JJC), Grégory Mantelet (GM)

Useful links

- Introduction notes: <https://seafire.unistra.fr/f/3184f17116fe47c595fe/?dl=1>

Notes

- [NM] OK with MD's proposition: "OK for SLAPv2 if it's OK for VAMDC but use the LineTAP data model instead of SSLDM"
 - but need to add some missing things like quantum numbers, ...
- [MD] Quantum numbers are not in the LineTAP DM because not easy to add in an interoperable way
 - [NM] In VAMDC they are stored and managed in a quite complicated and circular way with a hierarchy of elements
 - [MD] maybe just a simple free text field would be enough for a such complicated piece of information
- [MCD] It would worth it having a separate document to describe the DM. Even though there was a precedence with ObsCore, the current solution with this latter shows it was not a good approach.
 - [MD] The LineTAP's DM is actually so simple - just a list of columns - that it can not really be a DM.
 - [GM] Let's say that for the moment we just describe the list of columns in SLAPv2 and then see later if it is complex enough to have a separate DM.
 - MCD and MD have to speak together about this.
- [GM] Is it ok for you CMZ to just have the provenance accessible through a link the LineTAP's DM?
 - [CMZ] XSAMS do not actually exist as such. They are generated by a VAMDC query. So, if we have a link to that query, the spectral line version may be different from the one described in SLAPv2. A solution would be to keep a frozen XSAMS copy.
 - [MD] Another solution: VAMDC propose a version parameter in its queries. When querying with an incorrect/unsupported version, an error would be returned.
 - [CMZ] Or to have an extra column.

- More discussion needed between CMZ and MD
- [CMZ] In order to manage species (the 2nd table in LineTAP), a solution would be to have an additional endpoint in SLAPv2 which would be entirely dedicated to query species.
 - MD agrees
 - [NM] already possible with the current SLAPv2 draft
 - [MD] yes, but we have to think to a way to have constraints on them so that we can search them more easily (probably using regexp)
 - More discussions needed here between NM and MD

Conclusions

- Freeze LineTAP
- Use SLAPv2
- Do not use anymore SSLDM

Actions

- MD will provide the ivoatex version of SLAPv2 to NM
- NM will push the document modifications on GitHub
- With the help of MD and CMZ, NM will update the SLAPv2 document with:
 - The "DM" of LineTAP (= list of columns of the main table) instead of SSLDM
 - ■ quantum numbers?
 - ■ other missing information?
 - The entrypoint for species (with constraints possibilities)
 - All use cases of LineTAP
 - OpenAPI description (with the help of GM and JF)
 - MD will add a chapter about publication in IVOA Registries
- NM will update its SLAPv2 prototype to map this new version