



## Applications Working Group – Closing Remarks

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Virtual IVOA Interoperability Meeting, May 2021  
Tom Donaldson and Raffaele D'Abrusco (chairs)

Thanks to everyone for participating in these sessions!

See the [program pages](#) for more details.

- Slides
- Notes
- Audio and video recordings

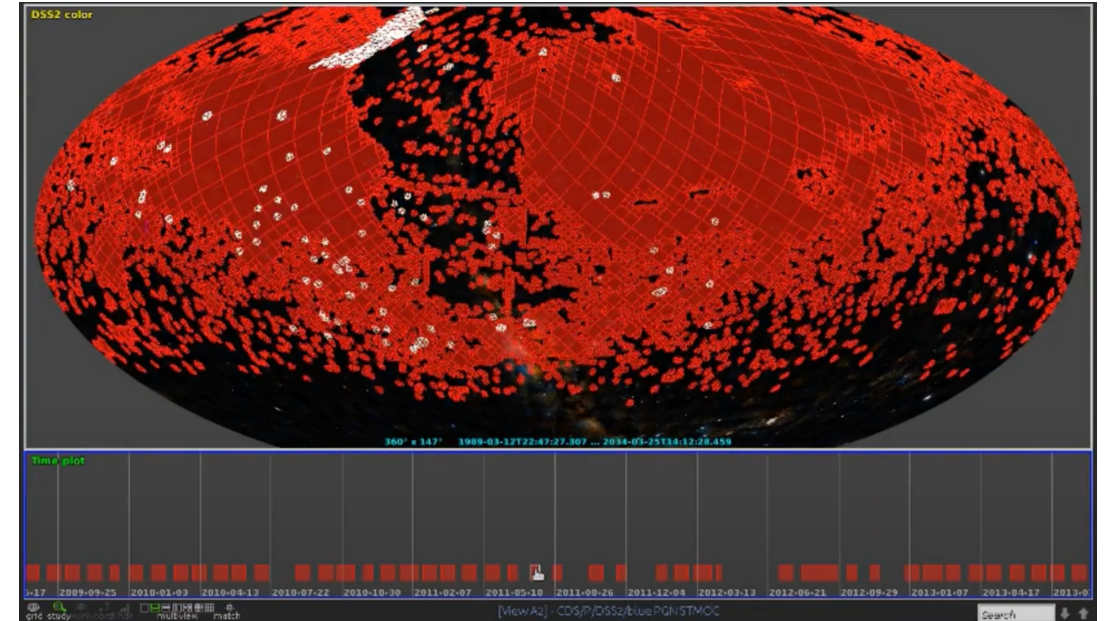


# Active Standards Development

## MOC 2.0 WD— Temporal and Spatial Coverage

- Compelling uses cases (see the [demo video](#))
- Proposed Recommendation and RFC soon
  - See [MocInfo page](#) for details on
    - ▶ MOCJava API (WD 2.0 compliant)
    - ▶ MOCpy (Nearing WD 2,0 compliance)
    - ▶ MOC validator (MocLint.jar)
- Document is [on github](#)
  - Not too late to file
    - ▶ issues for discussion or PRs for fixes
  - Latest PDF generated after each merge.

Preview PDF





## Active Standards Development (2)

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### VOTable

- No Working Draft in progress
- However, from the [Data Model Workshop](#), we know it is time to include VODML mapping
  - Version 2.0 (needed for backward compatibility unless we hack an existing element)
  - Minimize the impact on clients during the transition and VODML mapping changes
- Also, there are several smaller [issues waiting to be addressed on github](#)
  - Several could go into a version 1.5
- Likely will need splinter meetings to spur progress on these issues.
  - Monitor mail list and Slack



## Session summaries – [Astropy/PyVO/Astroquery Discussion](#)

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Well-attended and productive session with >80 participants, including:

- All Astroquery and PyVO maintainers.
- Many more contributors to those projects.

### Main topics

- Review of the goals and recent history of IVOA/Astropy collaboration (Bruno Merin)
- Where to handle more advanced VOTable metadata
  - Must be addressed for VODML mapping
  - Good start to the discussion
- Unifying PyVO's TAP with Astroquery's TAPPlus
  - Both are working well and in use in Astroquery.
  - Renewed commitment to move any needed TAPPlus functionality in PyVO
    - Will deprecate TAPPlus in Astroquery
    - Will avoid having multiple packages that do the same thing
  - Design questions about managing non-standard code in PyVO to be hashed out on github, Slack, and splinter meetings as needed.



## Session summaries – Applications Presentations

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Pierre Fernique, Ada Nebot, Sébastien Derriere – *MOC 2.0*

Dave Morris- *Registering IVOA software in ESCAPE*

- Nice to hear about the European Science Cluster
- Many IVOA s/w packages already registered! Contact Dave if you would like yours added.

Baptiste Cecconi, Pierre Le Sidaner, Philippe Hamy - *VESPA-Cloud*

- Ready-to-use EPN-TAP servers for data providers
- Wraps DaCHS in Docker for cloud deployment

Jiří Nádvorník - *HDF5 and the VO*

- Interesting possibilities for exposing combined data in HDF5 through TAP, Cone Search, DataLink



## Session summaries – DAL/Applications Presentations

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### Brent Miszalski – *Data Central's Data Aggregation Service*

- Dockerized Django/Python service for performing a query across multiple TAP/SIA/SSA services
- Front end integrates Aladin-Lite for visualizing catalog and image results

### Mathieu Servillat – *Provenance Information Management*

- Nice coverage of provenance use cases (capture, store, access, visualize)
- Introduces voprov and logprov Python packages

### Volodymyr Savchenko- *Workflow interoperability for telescope operations and time domain astronomy*

- FAIRness in time-domain astronomy requires sharing resources, including s/w workflows
- Many challenges in discovering and composing s/w elements in automated workflows

### Valentin Lefranc – *Astro Colibri*

- Cool new application that aggregates data from multiple sources to keep up with transients
- Includes notifications and visualizations



# Many Ways to Participate

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## Join discussions

- E-mail: [apps@ivoa.net](mailto:apps@ivoa.net) (subscribe at <http://mail.ivoa.net/mailman/listinfo/apps>)
- Slack channel: [#applications](https://ivoa.slack.com)
- VOTable standard on [github](https://github.com)
- MOC 2.0 comments and discussion [apps@ivoa.net](mailto:apps@ivoa.net) and [github](https://github.com)

## Implement code that uses VO standards

- Present your work, and feedback on standards, here
- Community efforts like Astropy are great way to make VO standards more accessible
  - **PyVO**: <https://github.com/astropy/pyvo>
    - ▶ Client code, reference implementations, validators
  - **Astropy** io.votable: <https://github.com/astropy/astropy>
  - Please contribute your expertise!!
    - ▶ Issue and PR discussions
    - ▶ New fixes and features