

IVOA Data Access Layer

Doug Tody (NRAO/NVO/IVOA)

Spectral Data Access / DAL2

- **Topics**

- Data model issues
- Access protocol issues
- Roadmap (WD, implementations)

- **Data model**

- Refactoring the data model (new Spectrum model)
- Generic dataset metadata (Characterization etc.)
- Use of Characterization and STC in SSA
- Data representation issues (UTYPE, FITS, etc.)

Spectral Data Access / DAL2

- **Access protocol**

- Support for version negotiation and multiple operations
 - based on OpenGIS WMS protocol
- General range-list syntax for query parameters
 - band=1E-7/3.2E-7,3.5E-7/4.1E-6
- Revised query interface
 - added since, index, spatres, timeres; other changes
 - ranking algorithm for scoring queries

- **Goals for meeting**

- Resolve key issues (data model, UTYPE, etc.) so that draft V1.0 specification can be completed
- Update roadmap for SSA 1.0 completion

Spectral Line Access (SLAP)

- **Status**

- Draft documents now available for access protocol, line data model
- Minor revisions will likely be required after meeting to be consistent with updated SSA
- Close to V1.0 draft PR

- **Goals for meeting**

- Review specification in WG (new since Madrid)
- Review final changes required to advance to V1.0 WD PR



SIA Upgrade Planning

- **Basic upgrade**
 - Based on SSA technology development (won't discuss here)
- **Special topics**
 - Image indexing and searching issues
 - Time-oriented queries
 - Data cube data access
 - Use-cases (CGPS, SINFONI)
 - Proposal for how to slice/dice/project cube data
 - Complex data
 - Generic dataset proposal
- **Update SIA Roadmap**

Current and Future Implementations

- **New Topic (since Madrid)**
 - Review DAL client/server implementation experiences
 - Review work on reference implementations
 - Feed back into interface planning
- **Talks Scheduled**
 - John Taylor – SIAP client experiences in Astrogrid
 - F. Bonnarel, F. Pierfederici – Footprints
 - D. Tody – VO-client/dalclient
 - Kelly McCusker – Spectrum data model Java implementation
 - John Taylor (for Noel Winstanley) – Astro Runtime