

Data Models – Tucson Apr 2005

Data Models

- SED/Spectrum
 - Holds metadata on per data point and per-observation basis for combining spectral observations
 - Implementations by Budavari, Busko
 - Related work by Osuna, Chiligarian
 - SAO implementation and Java library in work (McCusker)
 - Only minor changes in recent discussion
 - Waiting for SSAP protocol document

Characterization

- Define different levels of detail in giving observation context
 - Lowest level : LOCATION, a position in N-d parameter space
 - Next level : BOUNDS, a range bounding the data
 - Next level: SUPPORT, multiple ranges and regions giving the N-d “field-of-view”
 - Deepest level: SENSITIVITY, giving the depth as a function of coordinate
 - Similar approach for Resolution
 - Close relationship to STC objects under discussion

Implementation

- Will continue working on SED library and simple applications (display, convert data).
- Need 'footprint service' library, initially just spatial regions and then full STC. “Is my star in this data?” (at level of detail greater than provided by registry – but still need link to VOQL)
- Need library to convert between different levels of Characterization (given Support, return Bounds or vice versa, etc.)

Kyoto?

- Joint meeting with DAL concentrating on Spectrum/SED
- Characterization – will review XML schemas provided by Strasbourg and Brian...
 - Will have discussions between Characterization groups and Arnold...
- Catalogs, Quantity
 - Continue work merging Quantity and other schemas
 - Pedro Osuna working on Catalogs