### DM WORKING GROUP

MADRID OCT 2005

#### **WG STATUS**

- Spectral DM: document updated and reformatted
- Spectral DM Java library prototype nearly ready
- Characterization: CDS group held wide discussions. B. Thomas working on Quantity/Char/STC approach. A. Richards presented radio example.
- Goal for this meeting: agree on new version draft as basis for going to PR next interop.
- 3D data: I. Chilingarian presenting approach based on SIA and Characterization. Service implementation later in 05.

## WG STATUS

- Jonathan summary and SED
- Pedro catalogs
- Mireille characterization
- Igor 3D data
- Matteo lines
- Arnold STC
- Jonathan summary

#### WG STATUS

- Space-Time Coordinates: Rots proposed STC-Lite for simple use. RFC drew significant comments, rev in work
- Goal for this meeting: decision to proceed on STC-Lite and agreement on approach. Result: WG does not like the idea of two schemas.
- Atomic Line Data: Osuna, Dubernet, etc. first internal draft in work, discussed in Paris last week.
- Goal for this meeting: gather input and discuss draft.
- Source catalogs: early draft in preparation (Osuna)
- Goal for this meeting: reconcile different approaches, gather requirements from other WGs

### Hot issues

#### Catalogs:

- Implicit VOTable model series of simple tables
- Simple cells, tree hierarchy, plus controlled vocab (Williams, McDowell, in general discussion)
- Specialized source model with small number of predefined fields (Osuna)
- Abstract, general containers to hold any kind of data (Thomas)
- Need more detailed requirements from other working groups (e.g. registry)

### Hot issues

- STC
  - Full STC versus role of simple cases and defaults
  - Requiring all of an STC instance vs reuse of elements
  - role of Quantity in XML serialization of STC
- Use cases and plan:
  - (1) User inspection of metadata: what is this data anyway?
    - requires software to create STC instance and to display
  - (2) Do my object's coords lie in this dataset?
    - requires stc:inside() function, possibly with coord convs
  - (3) Convert dataset to new coord system
- AST (ex Starlink) implementation; CDS, ESO using Regions part

# DM strategies

- We need to deploy VO services useful for astronomers so we must identify simple but useful things to provide, and model the interfaces
- DM model document -> class library and DAL access protocol -> implies transmission format
- Basic reusable DM components Characterization, STC, Curation, SEDCoord etc.
- Use these and UCD tree in other specialized models AtomicLine, Planets etc.

# VOs talking to each other

- IVOA, EGSO, IHY....
- It's hard enough for the IVOA folks to talk to each other we must be realistic about the amount of coordination possible across VOs
- Ideally, common DM components would help a lot.
- At a minimum, expressing the mapping between the DMs offers a route to interoperability.
- Maybe now is the time to identify the relevant people and have an exploratory meeting