ROUND TABLE DISCUSSION ON THE SESSION: “SURVEYS”

Moderators: F. Carrera, G. Verdoes

Introduction: During this workshop we have conducted a poll from people involved in multi-wavelength surveys, asking the question: What would people like from the VO? The results are the following:

- Sophisticated cross matching:
  - likelihood ratios and reliabilities.
  - non trivial error boxes.
  - aperture matching across wavelength for building SEDS.
  - Upper limits/coverage of surveys.
  - Non-limits/coverage of surveys.

Quality information:
- Voluntary flags (e.g. 0: raw data, 1: wavelength calibrated, 2: flux calibrated)
- Quantitative information.
- Upper limits/coverage of surveys.

Executive information on VO applications:
- How on Earth do I know which one suits my needs, without spending months?
- Table with clear summary of capabilities of each application (which one does what).
- Connectivity of local applications to data in the VO.
- Tools.

Table protocol
- Survey of surveys?
- Will the VO swallow the terabytes of data from new facilities?

We’d like to open the floor for discussion on these topics and to ask you which are the priority issues with regards to surveys?

Participant: Cross matching is very important, for example cross matching between three catalogues and selecting the specific areas for cross matching.

Santander-Vela: All those cross matches can be done using Topcat from a command line, i.e. using STILTS.

Noddle: There are many different meanings behind cross matching. A tool should be able to say, this survey was conducted in this area, and it saw something.

Osuna: It would be good to be able to call routine algorithms from VO Tools that work in both directions, meaning, people with the algorithms work with the VO developers. The community is asking for mathematical algorithms, therefore why not create an interface that allows VO Tools to use already available developed algorithms or scripts?

Padovani: Cross matching is complicated, people doing surveys already have their own individual tools. Why is there a need for a full blown cross matching VO tool?

Verdoes Kliejn: I agree with this, a full blown cross matching tool is not needed.

Noddle: Regarding the table protocol, a version of TAP is on it’s way. Please subscribe to the DAL IVOA email list to see the latest version and give comments.

Hatziminaoglou: With regards to the issue of having a table with a clear summary of capabilities of each application, there currently is a comprehensive list on the Euro-VO web page at www.euro-vo.org/pub/fo/software.html.

Participant: How about having quality flags on the data in the registry? What if the user can comment on how good they think the catalogue or data is?

Noddle: The metadata quality is currently low and I believe that data centres should include more information. Feedback from the community is a good suggestion. If the metadata isn’t good the VO currently gets the blame, but it is actually the data centres publishing the data. Perhaps there is the need to filter the data before it’s published in the VO.

Verdoes Kliejn: Summarising our discussions we put the prioritisation of issues in the following order, with most important first:

- Sophisticated cross matching:
- Coverage of surveys (and any data, e.g. from individual PIs).

- Quality information:
  - Quantitative information - List of metadata should be enlarged - error bars MUST be included.

- Table Access protocol; most useful data in tables.