## CSP Science Assessment

#### Mark Allen Committee for Science Priorities









- Final plenary as a regular place to report on progress from science view point:
  - Here is what was asked for ...
  - What can we do now?
- Follow projects though
  - standards development / data providers publishing / consumed in applications

### SED

- Progress toward spectral standards (SED, Spectrum, Phot)
- SED tools and services already working (ASDC, IRIS [NED], Vizier, VOSA)
- Introp. btwn these tools and services improved at this meeting

time NED + VizieR SEDs of Circinus

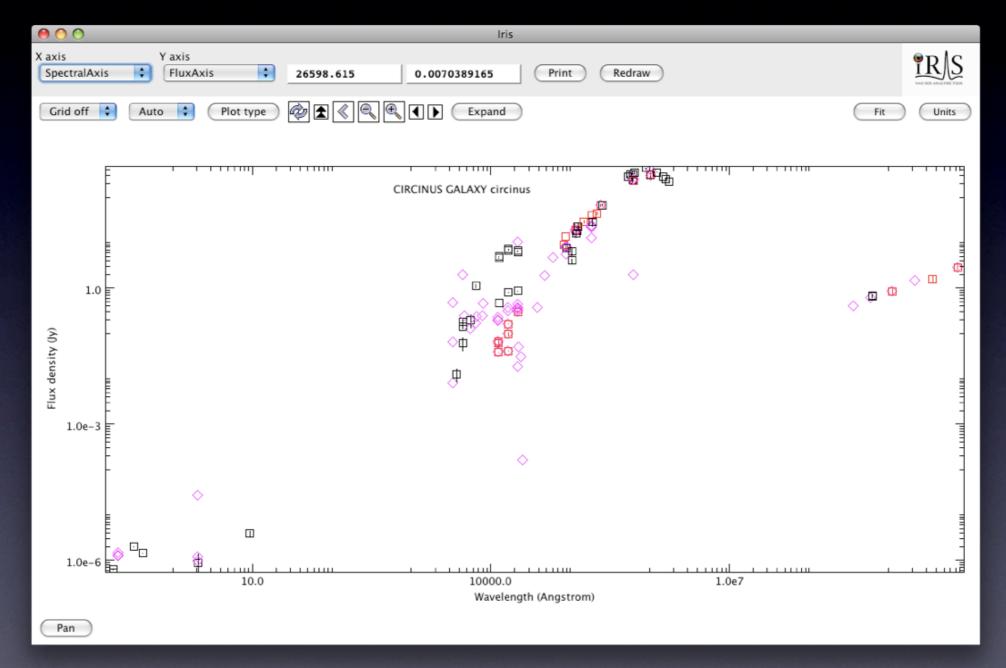
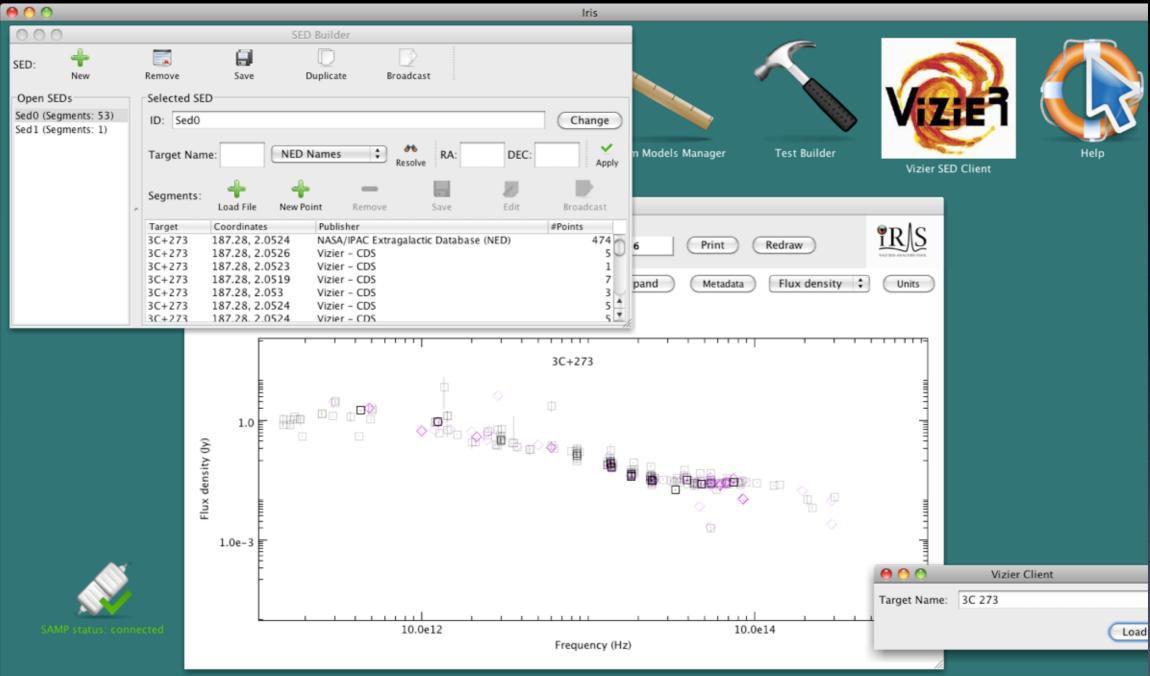


Table input via VOTable and SED importer

NOW



more direct input, metadata preserved

## Search by classification/ lists

- Main focus on implementation
- Targeted Simbad, NED, VizieR and pushed for TAP clients

| Proto MVC - Mozilla Firefox  |  |   |                                     |                         |  |                  | - <u>×</u> × |  |
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| III/281 2MASS 6X Point Source Working Database /<br>Catalog (Cutri+ 2006)<br>wavelength : IR ;   | Sample of 2MASS-62   |   |                                     |                         |  |                  | ſ            |  |
| VII/233 The 2MASS Extended sources (IPAC/UMass, 2003-2006)<br>wavelength : IR ;  | Quickview : only 10 results Vour query is correct !  | b   |                                     |                         |  | ×                |              |  |
| astronomy : Galaxies ;       catalogues     description       Showing 1 to 4 of 4 entries  | SELECT c2mass.e_Kmag AS e_Kmag , c2mass.Aflg AS Aflg , c2mass.Xflg AS Xflg , c2mass.Cflg AS Cflg , c2mass.Bflg AS Bflg , c2mass.Rflg AS<br>Rflg , c2mass.Qflg AS Qflg , c2mass.e_Hmag AS e_Hmag , c2mass.Jmag AS Jmag , c2massMASS AS _MASS , c2mass.e_Jmag AS e_Jmag ,<br>c2mass.RAJ2000 AS RAJ2000 , c2mass.DEJ2000 AS DEJ2000 , c2mass.Kmag AS Kmag , c2mass.Hmag AS Hmag FROM c2mass AS c2mass WHERE '1' = |   |                                     |                         |  |                  |              |  |
| h3c_radial_query(c2mass.raj2000,c2mass.dej2000,0,0,1.0*2/60.) Limit 10   |  |   |                                     |                         |  |                  |              |  |
| columns and constraints  |  | bflg         rflg         qflg         e_hmag           110         220         DCU         0.158999999 | jmagmass<br>17.025 00000516-0001254 | e_jmag<br>4 0.22        | raj2000<br>0.02154100000000000                                     | -0.02373         |              |  |
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| unit change of coordinates   |  |   |                                     |                         |  |                  |              |  |
| Iimits and output  |  |   |                                     |                         |  |                  | •            |  |
| create query   |  |   |                                     |                         |  |                  |              |  |
| <pre>1 output formst : votable 2 SELECT TOP 100 c2mass.Aflg, c2mass.Xflg, c2mass.Bflg, c2mass.Rflg, c2mass.Qflg, 3 c2mass.e_Hmag, c2mass.Tmag, c2mass.*_MASS*, c2mass.e_Jmag, c2mass.DEJ2000, c2mass.DEJ2000, c2mass.DEJ2000, c2mass.Hmag 4 FROM c2mass 5 WHERE 1=CONTAINS(POINT('ICRS', c2mass.RAJ2000, c2mass.DEJ2000), CIRCLE('ICRS', 0, 0, 2/60.))</pre> |  |   |                                     |                         |  |                  |              |  |
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#### Vizier TAP in development...

# other highlights

- Interest from big projects ALMA, DES, ODI
- Units
- VO-IRAF introducing large user base to VO
- WWT going beyond Windows
- SAMP making archive web pages interoperable
- Footprints STC and MOC
- Planning of VO Science schools/workshops

### Next Priorities

- IMPLEMENTATION need critical mass of services to be useful as a system
- Finish spectral standards and units
- Improve SSA services
- Time Series
- Radio Astronomy
- Theory/Observation connections

## New Priority Projects

- Radio Astronomy
- Time Series

Science use cases being developed by CSP + input from projects (e.g. ALMA)

Goal: Projects proposed to exec, and analysis by TCG at next interop

### CSP

- trying to improve representation of science community needs
- open science priority session at next interop
- more VO scientists at IVOA meetings helps