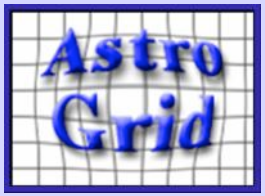



# Why Libraries are too important to be left to Librarians : Part I

or

# What Researchers Really Need

# Messages

- Its a 2D problem
- The market is global
- Find a niche
- Internet ≠ Web

# Who do I identify with ?

- My Library ?
- My University ?
- My Nation ?
- My Discipline ?

try the party test

# Subject vs Institution

| | Univ-A | Univ-B | Univ-C | Univ-D |
|---|---|---|---|---|
| Chemistry | | | | |
| History | | | | |
| Physics | | | | |
| Linguistics | | | | |
| Philosophy | | | | |
| Maths | | | | |

# Trad Solution-1 : Departmental Libraries

| | Univ-A | Univ-B | Univ-C | Univ-D |
|---|---|---|---|---|
| Chemistry | ✪ | ✪ | ✪ | ✪ |
| History | ✪ | ✪ | ✪ | ✪ |
| Physics | ✪ | ✪ | ✪ | ✪ |
| Linguistics | ✪ | ✪ | ✪ | ✪ |
| Philosophy | ✪ | ✪ | ✪ | ✪ |
| Maths | ✪ | ✪ | ✪ | ✪ |

- maximises uses of domain expertise
- inefficient in storage and staff effort

# Trad Solution-2 : Vertical Integration

| | Univ-A | Univ-B | Univ-C | Univ-D |
|---|---|---|---|---|
| Chemistry | ✪ | ✪ | ✪ | ✪ |
| History | ✪ | ✪ | ✪ | ✪ |
| Physics | ✪ | ✪ | ✪ | ✪ |
| Linguistics | ✪ | ✪ | ✪ | ✪ |
| Philosophy | ✪ | ✪ | ✪ | ✪ |
| Maths | ✪ | ✪ | ✪ | ✪ |

- the central library
- efficient locally
- but duplicates nationally

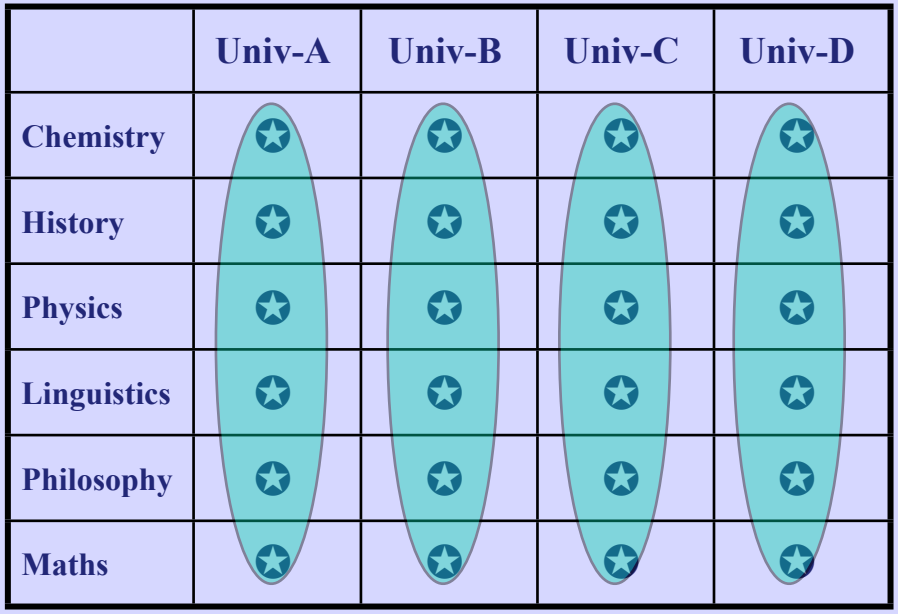
# Trad Solution-3 : National Centre

| | Univ-A | Univ-B | Univ-C | Univ-D |
|---|---|---|---|---|
| Chemistry | ✪ | ✪ | ✪ | ✪ |
| History | ✪ | ✪ | ✪ | ✪ |
| Physics | ✪ | ✪ | ✪ | ✪ |
| Linguistics | ✪ | ✪ | ✪ | ✪ |
| Philosophy | ✪ | ✪ | ✪ | ✪ |
| Maths | ✪ | ✪ | ✪ | ✪ |

- maximally efficient
- can offer rare items
- but access very slow

# Speed vs Efficiency vs Domain Expertise

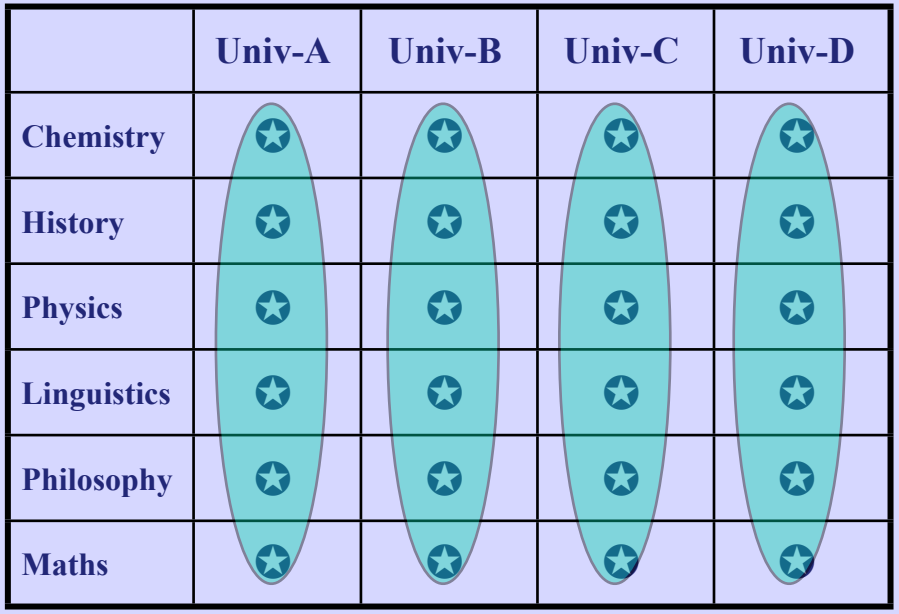
# Speed vs Efficiency vs Domain Expertise

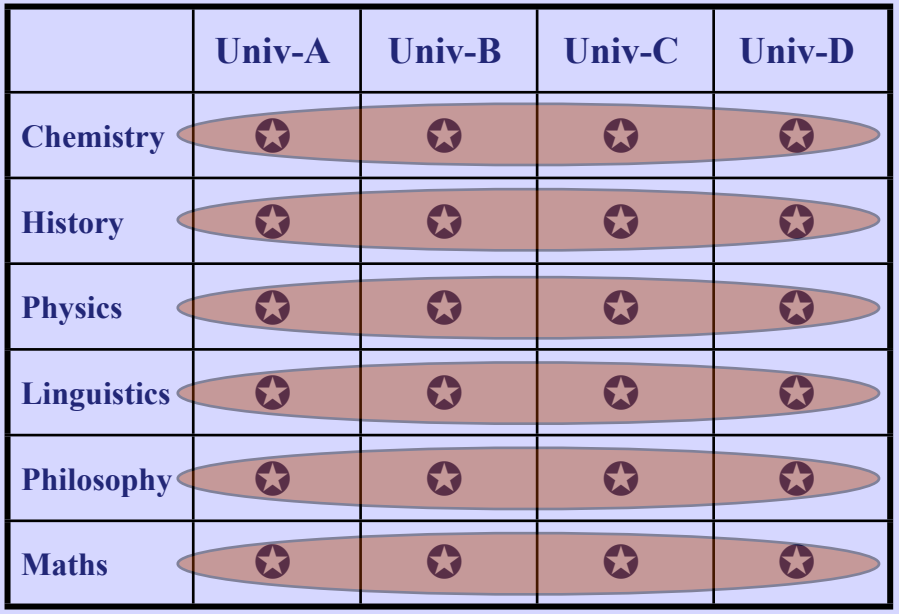



**The good old days**

compromise = Univ library
reasonably efficient
reasonably quick

# Speed vs Efficiency vs Domain Expertise




**The good old days**

compromise = Univ library
reasonably efficient
reasonably quick

**The network age**

speed not an issue
domain expertise wins
horizontal integration wins
global not national

# What resources does research need ?

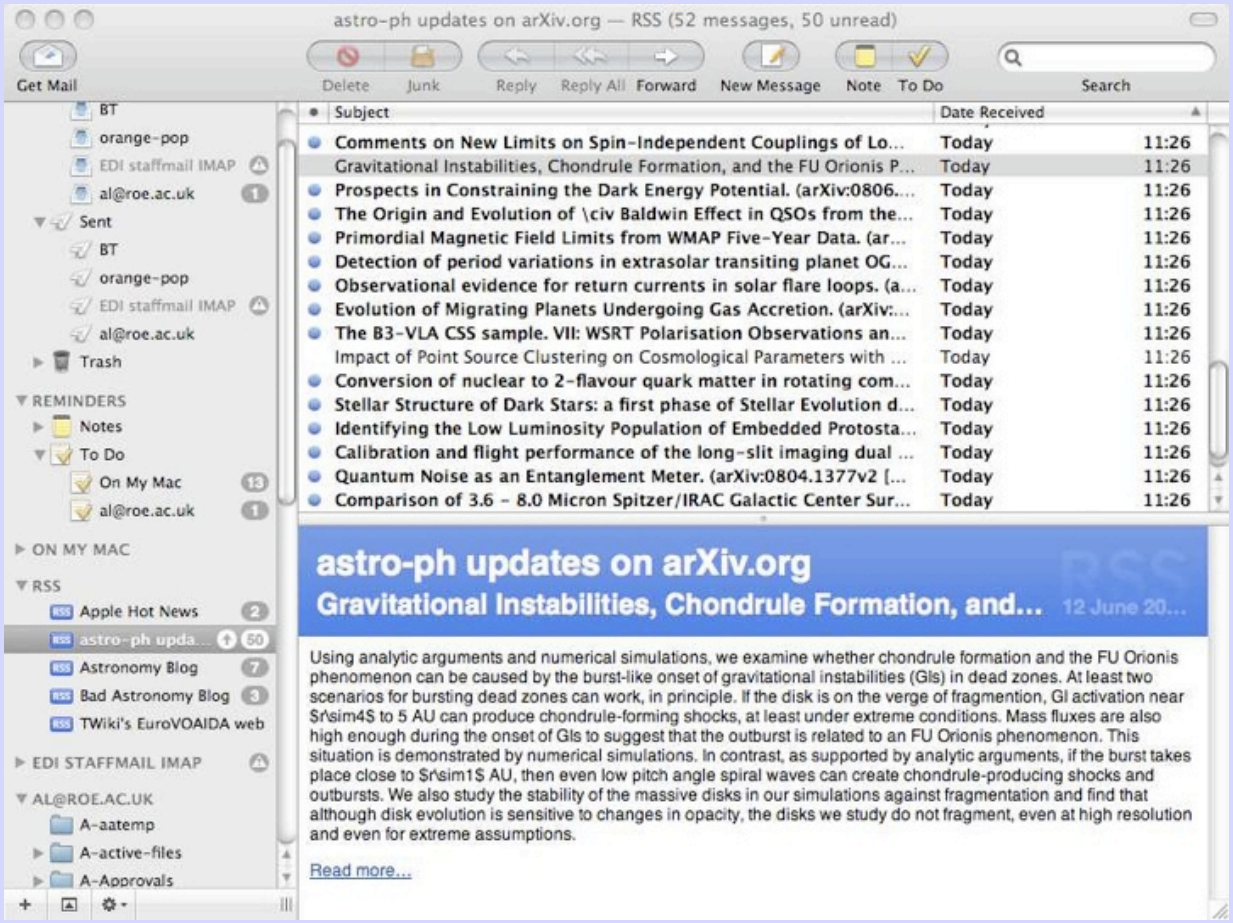
- books
- latest research papers
- archived research papers
- data from research papers
- archived data collections
- live public datasets

# Books

- only need a few specialised books
- most in own office or departmental library
- rare books in national libraries
- no case for institutional libraries ?

# Latest research papers

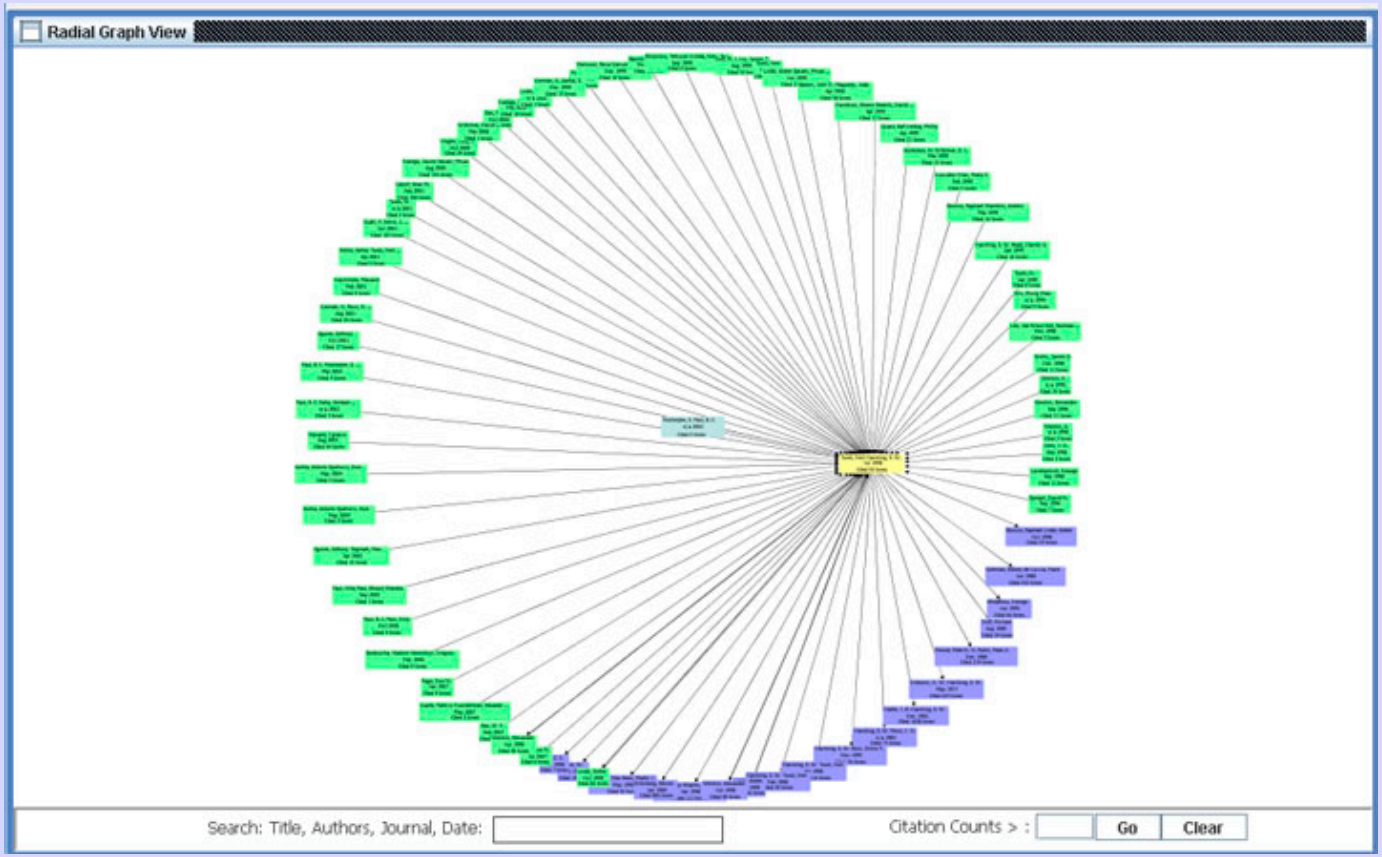
- ALL astronomers put preprints on ArXiv
- available on web or RSS reader




run by Cornell

# Archived research papers

- ALL papers available thru ADS
- available on web or Java tool

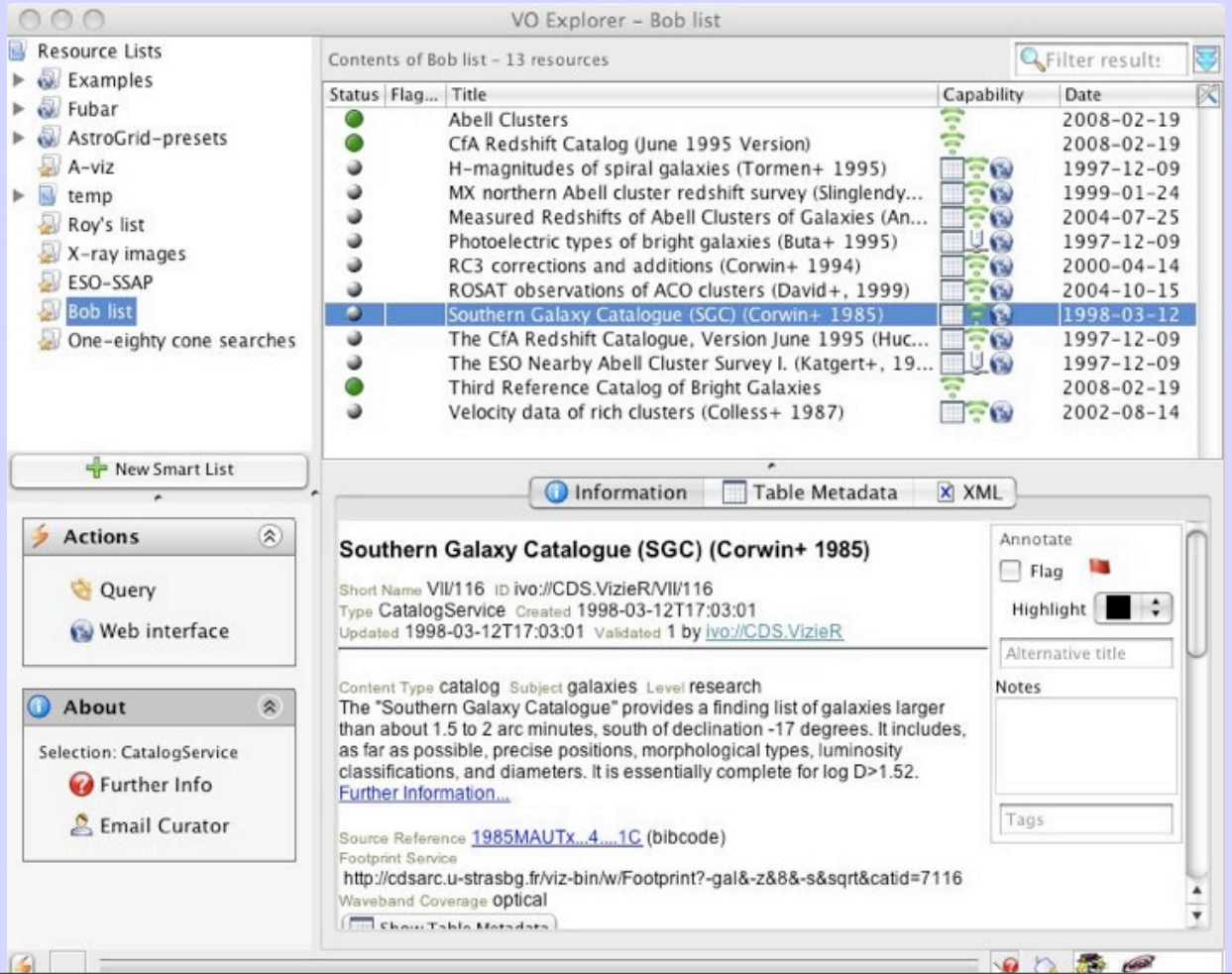



run by
Smithsonian

# Data from research papers

- ALL tables available thru Vizier
- available on web or Java tools

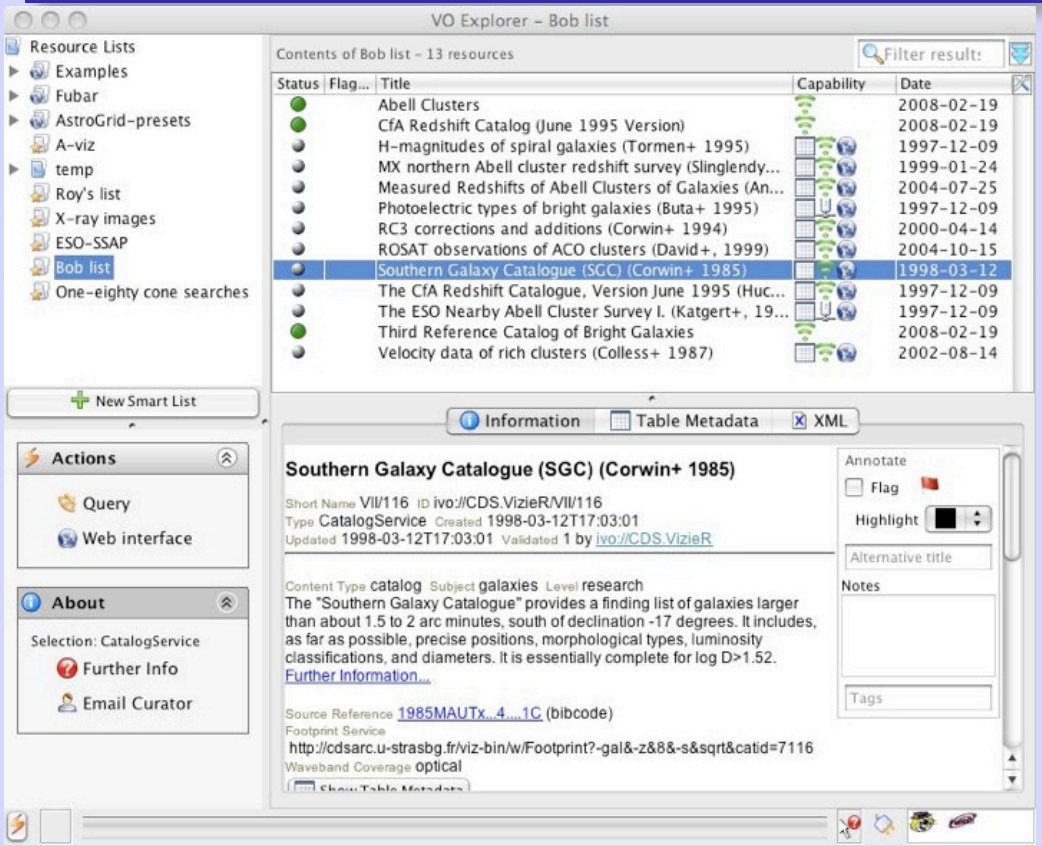
run by U.Strasbourg



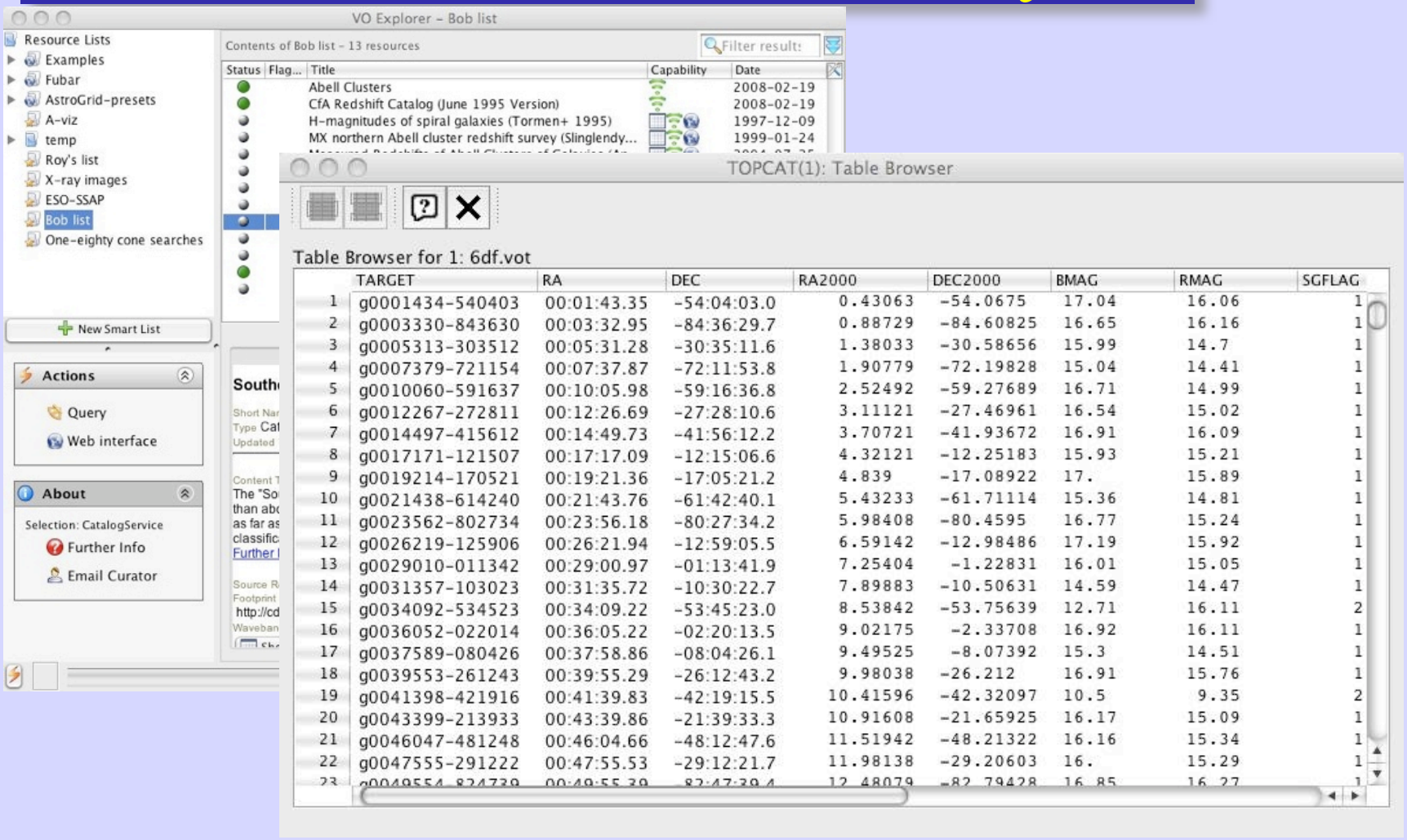

run by AstroGrid consortium

# Direct connection to analysis

# Direct connection to analysis



# Direct connection to analysis

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| 2 | g0003330-843630 | 00:03:32.95 | -84:36:29.7 | 0.88729 | -84.60825 | 16.65 | 16.16 | 1 |
| 3 | g0005313-303512 | 00:05:31.28 | -30:35:11.6 | 1.38033 | -30.58656 | 15.99 | 14.7 | 1 |
| 4 | g0007379-721154 | 00:07:37.87 | -72:11:53.8 | 1.90779 | -72.19828 | 15.04 | 14.41 | 1 |
| 5 | g0010060-591637 | 00:10:05.98 | -59:16:36.8 | 2.52492 | -59.27689 | 16.71 | 14.99 | 1 |
| 6 | g0012267-272811 | 00:12:26.69 | -27:28:10.6 | 3.11121 | -27.46961 | 16.54 | 15.02 | 1 |
| 7 | g0014497-415612 | 00:14:49.73 | -41:56:12.2 | 3.70721 | -41.93672 | 16.91 | 16.09 | 1 |
| 8 | g0017171-121507 | 00:17:17.09 | -12:15:06.6 | 4.32121 | -12.25183 | 15.93 | 15.21 | 1 |
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| 16 | g0036052-022014 | 00:36:05.22 | -02:20:13.5 | 9.02175 | -2.33708 | 16.92 | 16.11 | 1 |
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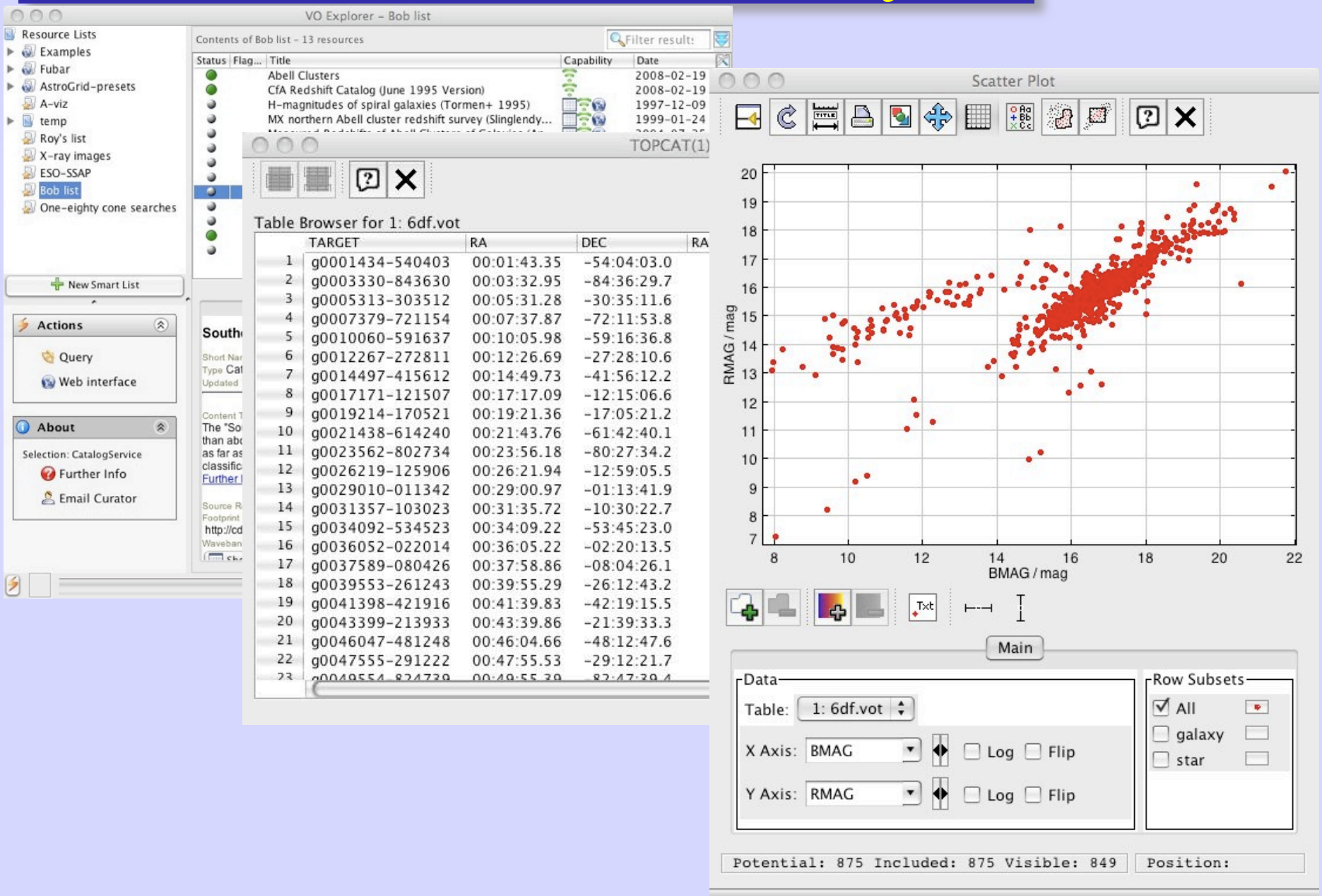
# Direct connection to analysis



# Data collections

- curated by various data centres world wide
- published in various registries
  - no need for central repository
  - registries are "smart repositories"
- follows standards agreed by IVOA
  - global subject based standards body
  - but built on Dublin core ..
- searchable and analysable by various tools

run by AstroGrid, Strasbourg, Caltech, ESA, NASA

# Whats left for libraries ?

- many global services provided by Universities
  - find a niche; solve *one problem* at a time
- physicists like rolling their own
- but others will prefer pret-a-porter
- not just storage
  - curation, databases, tools

# Conclusions

# Conclusions

- The Library is dead

# Conclusions

- The Library is dead
- Long Live Librarians

# Conclusions

- The Library is dead
- Long Live Librarians
- Sprinkle them over the garden

FIN

# Traditional Library Tasks

- store
- provide study space
- organise and catalogue
- preserve
- provide access
- purchase

# Traditional Library Tasks

| TASK | STILL NEEDED ? | WHY ? |
|---|---|---|
| store | no | who needs books ? |
| provide study space | no | was only needed because of the books |
| organise and catalogue | maybe | better done by domain experts ? |
| preserve | maybe | better done by domain experts ? |
| provide access | maybe | better done by domain experts ? |
| purchase | maybe | depends on outcome of open access war |