

The new ESO Science Portal and VO interfaces

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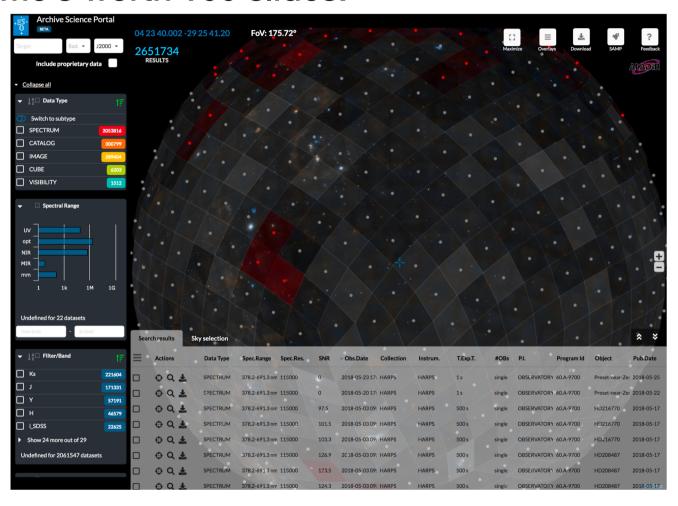


IVOA Interoperability Workshop Victoria, BC, Canada



Archive Science Portal

A demo's worth 100 slides:



http://archive.eso.org/scienceportal



- > Page opens showing all available public processed data
 - raw data will be added in second release
- ➤ Title: Archive Science Portal Beta
 - opened but not yet widely announced (June)
- ➤ Num Results: ~2.6E6
- ➤ 18 facets/properties: statistics on each property
 - computed at query time (think: group by)
 - 17 facets on the left hand side:
 - (Collapse all to see the titles)
 - Quick excursus on facet types: string, numerical, date
 - Data Type (spectrum, image, cube, etc)
 - Spectral range
 - 18th property: spatial coverage shown within sky view
- > Tabular representation of results (no aggregation)





- ➤ All facets adapts to/change with the user's query constraint(s)
- ➤ User's constraints can be placed within the 17 facets or at the top right for the spatial constraint
- ➤ Within the 17 facets: selection on the histograms, or using input boxes (from-to)
- ➤ Auto-completion for string-valued facets





Example 1:

CDFS (10')

- Images
- NIR
- Ks
- ABmag>=24
- Skyres<=0.4"
- Show Footprints
- Image multiscale preview



Example 2:

NGC6388 (3') – Globular cluster

- Stick VHS J image to sky
- Spec.
- 850nm
- Spectrum Preview => Ca Triplett



Example 3:

NGC6664 (30') - JKs color mag

- J+Ks catalogs
- Shift click to find all products containing point
- SAMP to topcat





Archive Science Portal

GUI developed in Angular, Aladin Lite for Sky View

Rich(!) experience requires a lot of attention

Users should not be overwhelmed with information

User experience must be intuitive, self-explanatory, agile, responsive, and useful.

Carefully calibrating all user's actions and responses takes time.





Archive Science Portal

- Previews (first time at ESO)
 - Now: spectra, images;
 - Soon: cubes;
 - Later: source tables, catalogs, visibilites
 - Selected formats for Web and Print
 - Thumbnails (PNG) for all types
 - > 1D Spectra: JSON for interactive plot (zoom, pan)
 - Interactive plot with sliders for wavelength range
 - Large-format images (e.g., 9GB) => HiPS
 - ➤ Catalogs: HiPS & MOCs





VO Interfaces

ESO TAP for observations (tap_obs)

- > Raw data
- Processed data
- Ambient measurements
- MS SQL Server

ESO TAP for catalog by ESO observers (tap_cat)

Sybase IQ

ESO SSAP

Software made available on Github

DataLink (how to register it?)

Registered (EUROVO Registry)



VO Interfaces

How to present VO interfaces to the user community?

Usability is king!

Presented at: http://archive.eso.org/programmatic

That page can be used either to gain:

- Direct Database Access (new for ESO!)
- Direct Data Access (new for ESO!)

or to learn:

- ADQL queries (modifiable examples, validation)
- URLs to query or access data, previews, services
- Script it all with pyvo





ESO ARCHIVE COMMUNITY FORUM

User is king!

The ESO Archive Community Forum is a platform for sharing ideas and methods, asking questions and sending feedback and suggestions on how to improve and use the new ESO Archive Science Portal and on how to gain Programmatic and tool access to the archive.

https://esocommunity.userecho.com/