

## Raise the odds to be included in VizieR!

Ensure that your published tables will be usable by following this **checklist** of essential points:

❑ For tables containing known astronomical objects, an existing **non-altered name** must be given along with the **coordinates**.

❑ All columns must be well explained, with **their corresponding unit**.

Please make your columns homogeneous, and avoid mixing measurements with different meanings: errors mixed with limits, or values with different units (that should be in different columns).

❑ When there is more than one table, the objects in common must be identified with the **same name between tables**.

## Why a checklist?

To face the increasing amount of data, the CDS selects the articles to be processed with various scientific criteria but also by the effort required to make the data reusable.

Please use this **essential checklist** to help the CDS processing of your tables to ensure the quality and reusability of data.

A table of astronomical objects with no coordinates will not be discoverable in VizieR, and will not be processed in SIMBAD. Shortened names like 2M1427+3400 can be ambiguous because they can be matched to multiple objects; use the full **non-altered** object name instead:  
2MASS J14270471+3400138

If too many conditions are needed to understand a column, an additional script is needed to process it, and so, it is not easily interoperable.

A common key is fundamental for any action between tables.

## What about FITS spectra/images?

VizieR offers a specific search for images, spectra and data-cubes in FITS format.

The screenshot shows the VizieR search interface. At the top, it says "Search associated data among the VizieR catalogues". Below that, there's a search form with fields for "Search by position", "Search by spectral band", "Search by time data", and "Search by catalog". There are also checkboxes for "Spectrum / Time series" and "Image". A "Search" button is visible. To the right, there's a small image preview. Below the search form, there's a table of results with columns: "Preview", "Target", "Data collection", "Ra", "Dec", "Band min", "Band max", "Begin time", "End time", and "Facility". The table shows three rows of data for observations from HST/WFC3.

Preview	Target	Data collection	Ra	Dec	Band min	Band max	Begin time	End time	Facility
		JApJ83051	53.127	-27.800	108.000	973.600			HST/WFC3
		JApJ83051	150.130	2.289	108.000	973.600			HST/WFC3
		JApJ83051	34.312	-5.200	108.000	973.600			HST/WFC3

A good FITS header is the key for reusability - the CDS encourages the usage of the FITS standards: <https://fits.gsfc.nasa.gov/>

**Check** that FITS file headers include:

- coordinates and wavelengths in the WCS system.
- observation dates.
- telescope/instrument names.

If the FITS file is not in the standard WCS system, the reusability of the file is compromised.

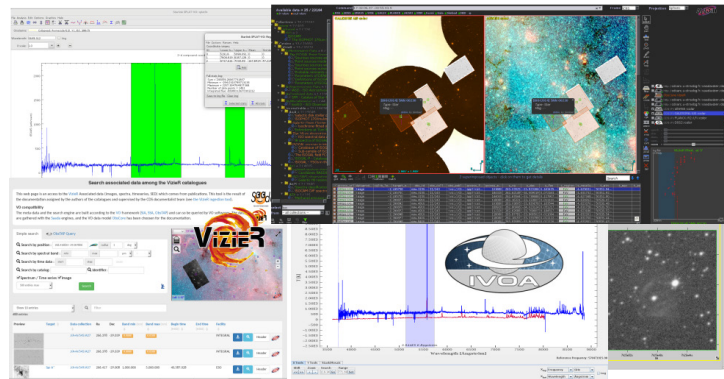
Try this tool to check the completeness of your FITS header:

<http://cdsarc.u-strasbg.fr/vizier.submit/fitsvalidator.html>

# Why distribute your data through Vizier?

Get more citations thanks to the increased visibility

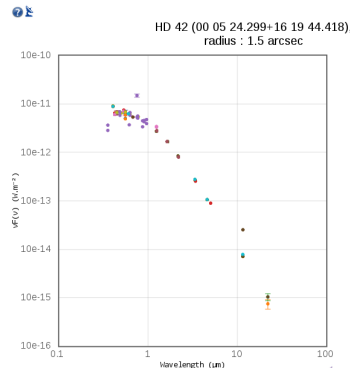
- **Multiple accesses through :**
- A simple search : <http://vizier.unistra.fr/>
- VO tools: TOPCAT, Aladin, CASSIS, ...
- Various APIs: cdsclient, astroquery



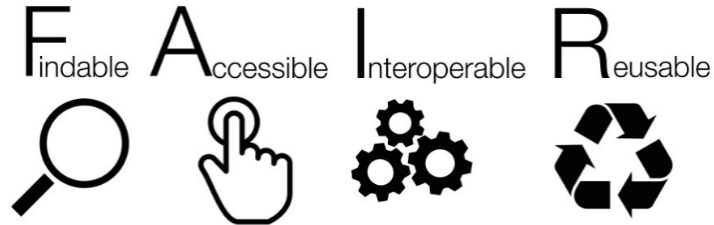
- The Vizier associated data interface for images and spectra in FITS format.
- The **SimBAD** database for astronomical objects.

## Advanced usage :

- Use ADQL/SQL queries in TAPVizier
- Merge your data with large catalogs using the X-Match service.
- Plot the photometry of your favourite objects in the Vizier photometry viewer, using photometry from a collection of thousands of Vizier catalogues.



Preservation commitment :

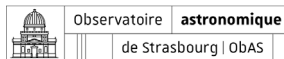


To publish/update a catalogue :  
[cats@cdsarc.u-strasbg.fr](mailto:cats@cdsarc.u-strasbg.fr)  
<http://cdsarc.u-strasbg.fr/vizier.submit/>

Publication support:  
<http://cdsarc.u-strasbg.fr/vizier/submit.htx>

For any question, remark, or feedback,  
 send us an e-mail :  
[cds-question@unistra.fr](mailto:cds-question@unistra.fr)

There is always someone to help!



# MAKE YOUR DATA VISIBLE

