

Contents of the Catalogue & VizieR Services

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Summary

- 1 The Catalogue service

- 2 The VizieR Connection
 - Addition into VizieR
 - VizieR Contents

- 3 Sesame
 - What is Sesame ?
 - Usage statistics

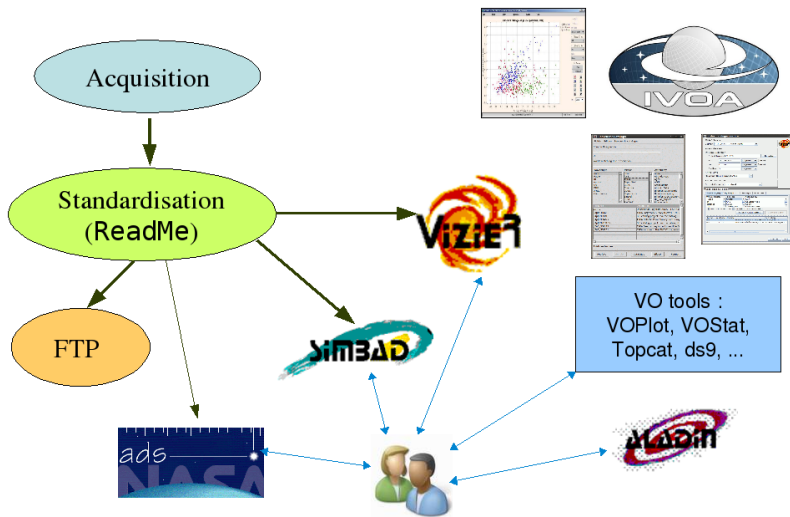
The Catalogue service



The CDS from its early days has been storing & distributing the astronomical catalogs in electronic form.

What is a Catalogue

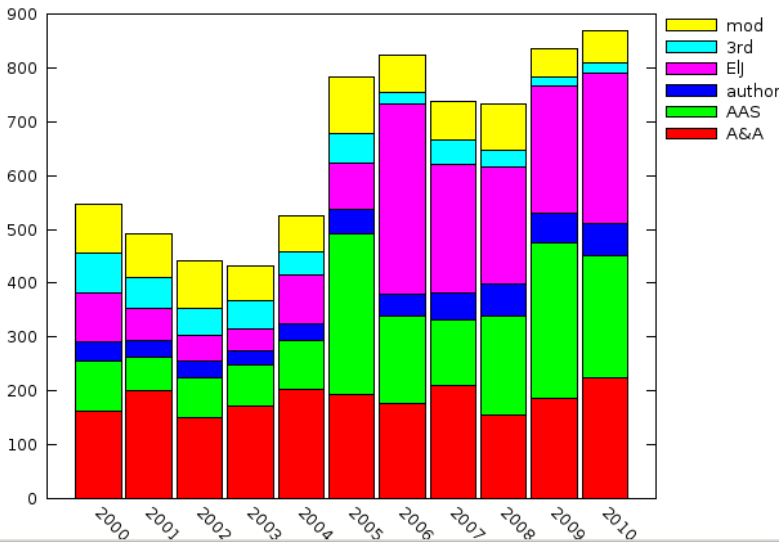
- one catalog = set of one or more related tables (e.g. *observations, sources, references to literature data*)
- standard way for describing the catalogs ([ReadMe](#) file)
⇒ homogenized *metadata*
- catalogs can also include *non-tabular* data (*spectra, time series, images, cubes...*) or give *links* to such data



About 800 catalogs added yearly to the *CDS Catalogue Service*.

Origin of the Catalogues

- in *A&A* editorial process (since 1994)
- prepared by *AAS* (Greg Schwarz, since 2000)
- supplied at author's initiative
- acquired from electronic journal, essentially for Simbad needs
- prepared by third parties (Russia, Japan, B. Skiff, H. Andernach...)
- modifications of existing catalogs (*errata, standardisation*)



Insertion into VizieR



Rules

- 1 ensure quality & correctness (as much as we can)
 - 2 insertion into VizieR done in a [stand-alone pipeline](#)
-
- 1 checking procedures (software and proofreading)
 - 2 additional details (*metadata*) saved in a dedicated file
 - assigned UCDs (*column descriptors*)
 - links to internal/external resources
 - how to transform the tables (merge/paste tables, positions, significant digits, errors)...

VizieR Contents

Current Contents *(on 20 June 2011)*

Catalogues : 9,204

Tables : 20,245 *(2.2 tables/catalog)*Columns : 283,145 *(14 columns/table)*

Actual size in rows

	With position	No position
current catalogues	6.89×10^9	133×10^6
+ old (superseded)	1.80×10^9	10^6
Total	8.69×10^9	134×10^6

Additional data



About 10% of catalogues give an access from VizieR to associated data, physically stored at CDS or outside :

time series	679
spectra	232
images	86
data cubes	27
results of models	37
observed profiles	14
filters	11

Regularly Updated catalogs



About 20 catalogues are regularly updated.

- **archive logs** : HST 1999–; Chandra 2002–; XMM 2002–; IRAM 2004–; Subaru 2005–; CoRoT 2009–; ESO 2011–
- **reference databases** : asteroid orbits 1997–; comets 2007–; General Cat. Variable Stars 2008–; VSX 2009–; WDS (Washington Double Stars) 2009–; Pastel ([Fe/H]) 2010–; Pollux (synthetic spectra) 2010–

Large catalogues



28 large catalogues ($> 10^7$ rows)

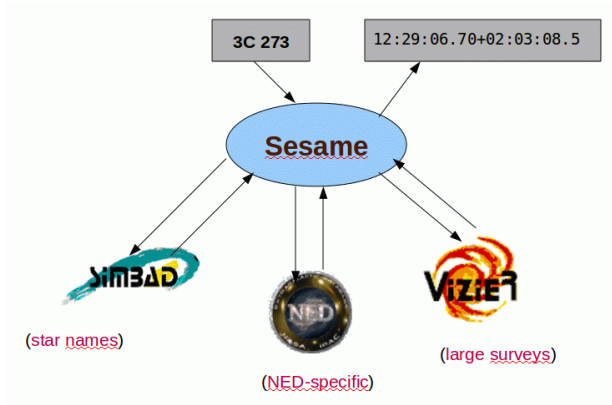
are managed by dedicated software to ensure very fast answers over the Internet (*includes 10 catalogues superseded by newer versions*).

Recent additions (2010) :

- Kepler Input Catalog (13M)
- PPMXL catalog of positions and proper motions (910M)
- Spitzer GLIMPSE (104M)
- UCAC3 (101M)
- SDSS-DR7 (357M)

What is Sesame?

Query the 3 services with can answer to the question :
what is the position of this named celestial object ?





Sesame

Name Resolver



The **Sesame** Service queries several databases from the name of an astronomical object (outside the Solar System bodies), and displays some fundamental parameters (type of object, J2000 position). The databases queried are [Simbad](#), [NED](#), and [VizieR](#). (For more explanations, see the [Documentation](#)).

Target	OType	J2000 Position	Refs	Resolver
3C 273	QSO	12:29:06.70 +02:03:08.5 ± 0.007"	4031	3C 273 [Simbad]
	QSO	12:29:06.69 +02:03:08.5 ± 0.001"	2109	3C 273 [NED]
		12:29:06.79 +02:03:07.1		{3CR } 273.0 [VizieR]

- Simbad first
- Ned first
- All Resolvers
- Ignore cache
- XML output

Enter the name of the astronomical object

Alternatively enter the name of the file containing object names, one per line (lines starting by # are comments)

Sesame usage (~ 10% SOAP)

