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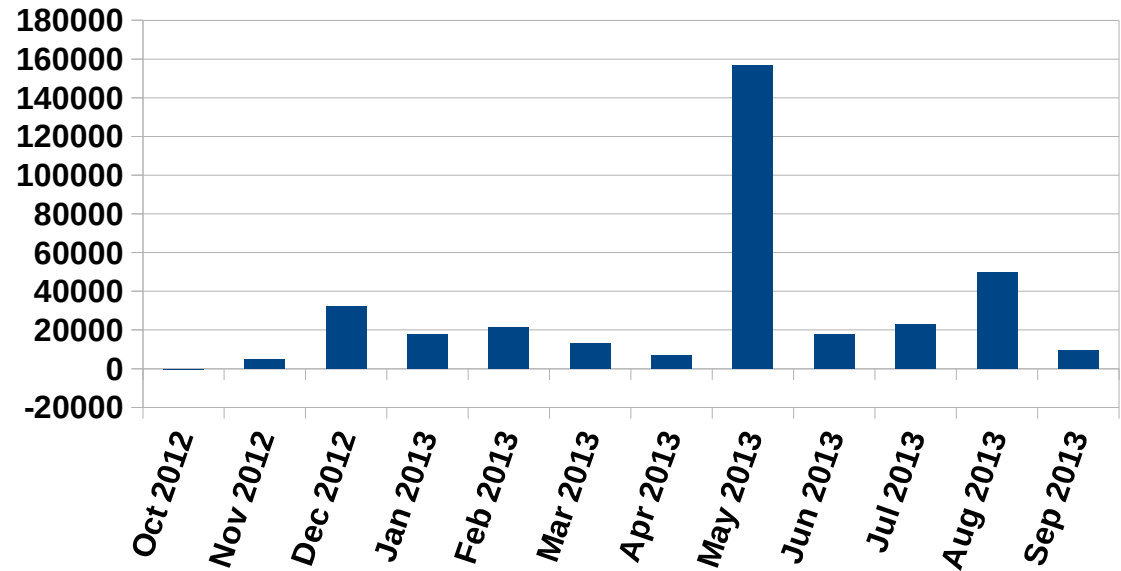
Quick Overview

- An astronomical object database
 - 7,354,000 objects
 - 18,181,000 identifiers
 - 286,000 bibliographical references
- Queries
 - By object name
 - By coordinates
 - By criteria (250 different criteria)
 - By references (bibcode or DOI)
 - Through scripts
 - Through a C language library
 - Using the ADQL (VO SQL-like) language in the TAP interface

Content evolution

- Average increase over the last 12 months

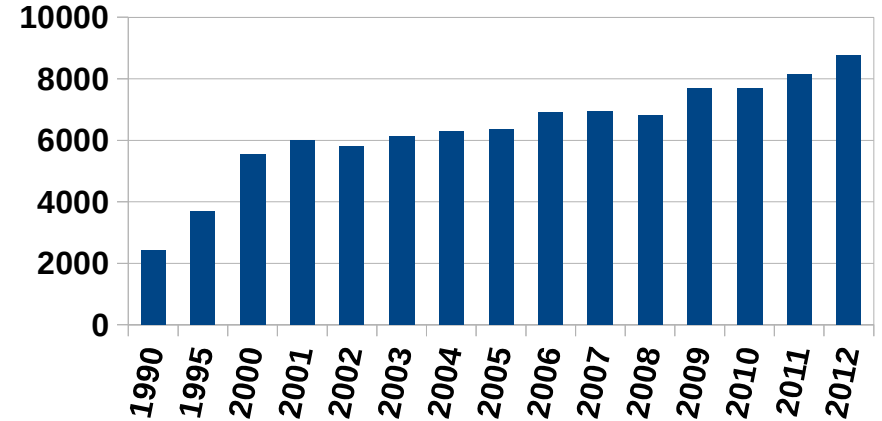
Objects **+29000**
Identifiers **+61000**
References **+900**
Citations **+70000**



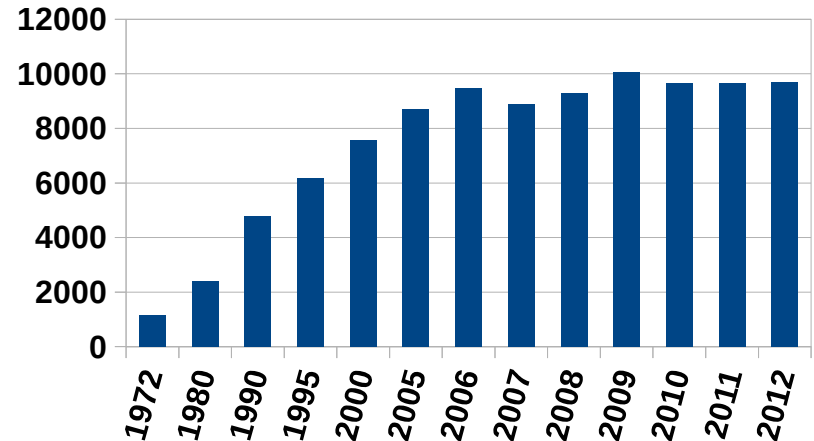
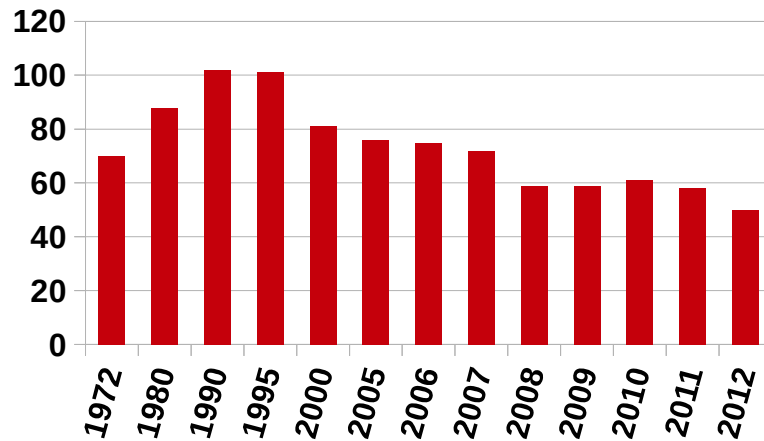
Number of new objects

Bibliography processing

- Increase of articles in the 5 main journals (A&A, AJ, ApJ, ApJS, MNRAS)
- An article has a average of 11 pages



- Whole number of journals and references processed



Bibliography processing - 2013

- Manpower loss (1 documentalist not replaced)
- 19 journals processed
 - 9 journals in priority 1 :
A&A, AJ, ApJ, ApJS, MNRAS, Natur, PASJ, PASP, Sci
 - 10 journals in priority 2 :
A&ARv, AcA, Ap, ARA&A, Arep, AstL, BaltA, GCNR, GCN, IBVS
- They are analyzed by 5 documentalists.
- Most of the articles are processed semi-automatically (with a systematic check by a documentalist) using DJIN, which detects object names in article texts

Table and List Processing

- Many new objects/data in Simbad come from tables (from the journal text or already in electronic form)
- Cross-identification with Simbad content based on :
 - dedicated software *Raccord*
 - expertise of both documentalists and astronomers
- Large Tables (LT) from Vizier (500-700 / year) :
 - Apraisal procedure => Priority 1 or 2 status
 - Apraisal meetings : 2/week with half the team
- Smaller Tables (ST) not in Vizier :
 - number increasing over the last years
 - were not apraised in the past
 - go through apraisal procedure since October 2013

Table and List Processing

Statistics summary ⁽¹⁾	2013 ⁽²⁾	2012	2011
Incoming ST	165	100	73
Incoming LT	525	695	590
Apraised LT	545	710	480
To be done as P1 (LT + ST)	435	480	365
Could be done as P2	150	195	115
Done	450	410	420

(1) Numbers rounded to ± 5

(2) Estimate for 2013 : 10 first months + 20%

- Tables are processed by 3 documentalists

New acronyms processing

- the need for a new acronym is detected by the documentalists
- the new acronyms are created and ingested into the dictionary of nomenclature by M. Brouty (documentalist)

Dictionary of Nomenclature of Celestial Objects (Last update: 05-Nov-2013)

Result of query: info cati **hip**

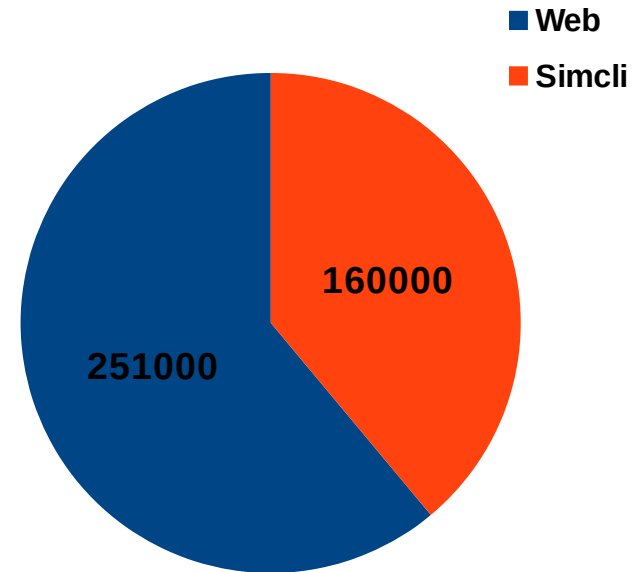
Obj. Type	Acronym	(Explanation)	Format
E Star	HIP	(Hipparcos catalogue)	HIP NNNNNN
+ Star	[HIP2003]	(Helmi+Ivezic+Prada+ 2003)	[HIP2003] JHHMSS.s+DDMMSS.s
E HI	HIPASS	(HI Parkes All Sky Survey)	HIPASS JHHMM+DDa
+ Galaxy (NAME CEN A GROUP)	HIPASS	(HI Parkes All Sky Survey)	[K99b] HIPASS JHHMM+DD
+ Cloud	HIPASS	(HI Parkes All Sky Survey)	[KSM2000] HIPASS JHHMM+DD [KSM2000] HIPASS JHHMM+DD WW
E+ HI	HIPASS	(HI Parkes All Sky Survey)	[PDS2002] HIPASS HVC NNNN
Galaxy	HIPASS	(HI Parkes All Sky Survey)	[RKS2002] HIPASS JHHMM+DDA
+ Galaxy (NAME FORNAX CLUSTER)	HIPASS	(HI Parkes All Sky Survey)	[WDW2002] HIPASS JHHMM+DDa
E Galaxy	HIPEQ	(HI Parkes Equatorial Survey)	HIPEQ JHHMM+DDa HIPEQ HHMM+DDa (L)
+ Galaxy	HIPPIES	(Hubble Infrared Pure Parallel Imaging Extragalactic Survey)	HIPPIES YsDropNN

New acronyms processing

- acronym verification and coding by B. Vollmer (astronomer)
==> Available in SIMBAD after this step
- **21450** acronyms defined in the Dictionary of Nomenclature
- **11700** acronyms available in SIMBAD
- about 600 acronyms created per year

SIMBAD – Usage statistics

- Queries/day :
 - Web accesses : 251,000
 - Simcli (client C library) : 160,000
- ➔ 410,000 queries / day



- Different IP addresses : 1,966,000
On C classes (IP limited to n1.n2.n3): 1,085,000

SIMBAD – software evolutions

- TAP interface : most of the bugs discovered by the first users have been fixed
- Updating : a new version of RACCORD is close to be delivered to the documentalist team.
- From september 2013, references can be sorted by relevance : identifier in the title, abstract or keywords or found in a table.
 - Since 2008, *position* of the object name in the paper obtained with DJIN
 - Names in titles and abstracts have been collected for all previous references.
 - We are working on a new sorting formula combining all localisations, frequency, total number of objects studied in the paper, year, ...

References sorted by name in the title or abstract

References (1585 between 2000 and 2014)

Simbad bibliographic survey began in 1950 for stars (at least bright stars) and in 1983 for all other objects (outside the solar system).

display

from: to:

Sort reference summaries by : (not exhaustive, [explanation here](#))

Date

Title|Abstract|Keyword

In table

[2013A&A...552A..34T](#) (in *title, abstract, caption, table, text, \object*) [t a o x c d ,35]

Astron. Astrophys., 552A, 34-34 (2013)

Detection of ammonia in M 51.

TAKANO S., TAKANO T., NAKAI N., KAWAGUCHI K. and SCHILKE P.

Comments & notes:

flags: (abstract)

[2013AJ....145....6J](#) (in *abstract, caption, table, text*) [a x c d ,24]

Astron. J., 145, 6 (2013)

Extending the nearby galaxy heritage with WISE: first results from the WISE Enhanced Resolution Galaxy Atlas.

JARRETT TH., MASCI F., TSAI C.W., PETTY S., CLUVER M.E., ASSEF R.J., BENFORD D., BLAIN A., BRIDGE C., DONOSO E., EISENHARDT P., KORIBALSKI B., LAKE S., NEILL J.D., SEIBERT M., SHETH S. and WRIGHT E.

Comments & notes:

CDS status: *waiting for electronic table*

flags: (abstract)

[2013ApJ...762...74B](#) (in *title, text*) [t x ,3]

Astrophys. J., 762, 74 (2013)

A binary progenitor for the type IIb supernova 2011dh in M51.

BENVENUTO O.G., BERSTEN M.C. and NOMOTO K.

Comments & notes:

flags: (abstract)

[2013ApJ...762L..27H](#) (in *title, abstract, keyword, caption, table, text*) [t k a x c d ,38]

Astrophys. J., 762, L27 (2013)

New estimates of the inclination, position angle, pitch angle, and scale height of the whirlpool galaxy.

HU T., SHAO Z. and PENG Q.

Comments & notes:

flags: (abstract)

[2013ApJ...763...94L](#) (in *title, abstract, keyword, text*) [t k a x ,20]

Astrophys. J., 763, 94 (2013)

Geometric offsets across spiral arms in M51: nature of gas and star formation tracers.

LOUIE M., KODA J. and EGUSA F.

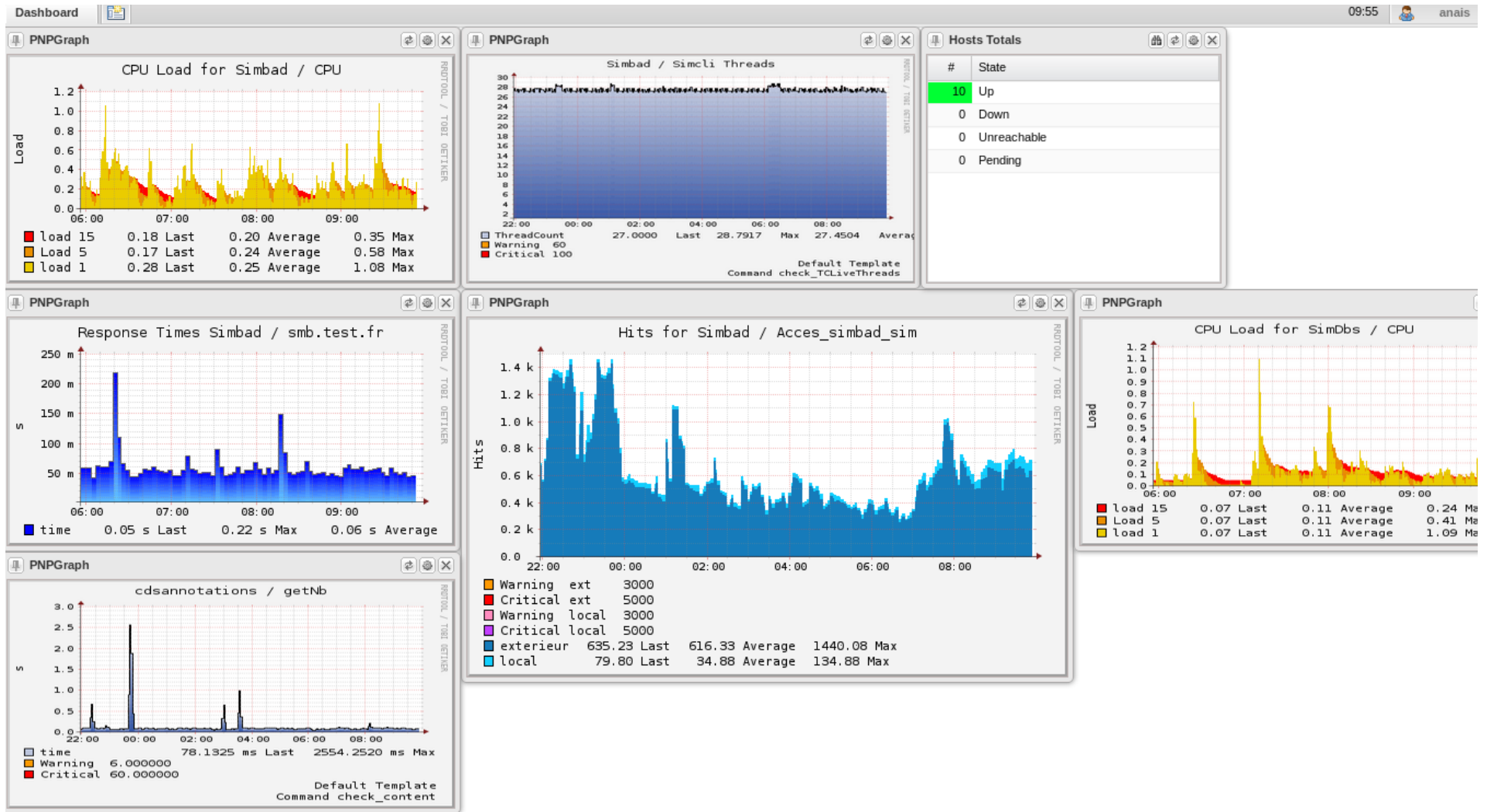
SIMBAD service quality

- Data are constantly updated and fixed through various checks, special operations, or mails and annotations from the users.
- An astronomy course has been provided for the documentalists. Currently two sessions on stars, basic physical parameters and evolution by Caroline Bot.
- New features were implemented this year to improve quality :
 - Implementation of a monitoring of many aspects of the service
 - Development of a documentation for the documentalists

Monitoring Simbad

- Using Nagios on the different Simbad servers to implement 50 different checks from server response time to filling of the hard drives and query abuse
- Graphical display of the check status
- Alert mails with status (Warning, Critical, Recovery)
- Weekly reports

Nagios dashboard



Documentation for documentalists

- A general documentation for the documentalist team has been developed by themselves in a cooperative way

CDS Twiki



Equipe Biblio -> Sommaire : <ul style="list-style-type: none">• Status et suivis des MAJ (SIMBAD/VizieR/Dic)• Qui fait quoi ?<ul style="list-style-type: none">◦ Organigramme (Sept. 2012) et organisation (qui indexe quoi, domaines de compétences)• Réunions biblio => points importants• Présentations CDS	SIMBAD (mise à jour) -> <ul style="list-style-type: none">• Manuel des commandes de mise à jour• Manuel détaillé du bibliographe• Autres points abordés dans cette section : les problèmes d'identification et les réunions qui abordent la MAJ SIMBAD	RACCORD -> <ul style="list-style-type: none">• Manuel de Raccord• Trucs/bon à savoir sur les commandes et options• Projet du nouveau Raccord : Projet NIDS
DJIN -> <ul style="list-style-type: none">• Manuel de DJIN• Réunions	VizieR -> Sommaire : <ul style="list-style-type: none">• Standards et Documentation<ul style="list-style-type: none">◦ Le ReadMe pour les utilisateurs◦ Les unités dans VizieR• Procédures de MAJ FTP/VizieR<ul style="list-style-type: none">◦ Explication de la procédure◦ Commandes de création, vérifications et entrées des données : exemples◦ Documentation d'ingestion par Francois	Dictionnaire -> <ul style="list-style-type: none">• Procédure• Quelques points sur l'identification des objets
Astrophysique -> <ul style="list-style-type: none">• Cours astro (1 et 2) de Caroline• Eclaircissements sur certains points :<ul style="list-style-type: none">◦ étoiles doubles,◦ Lentilles (schéma)◦ Champs profonds◦ Les types spectraux dans Simbad◦ Qualités des z/RV/cz dans Simbad◦ Instruments/missions : qualités et λ, précisions cross-id Simbad◦ ...	Informatique -> Sommaire : <ul style="list-style-type: none">• Outils du cdspack• Aladin (tutoriels)• TOPCAT• Formation interne à Linux• Exemples de requêtes SQL dans SIMBAD : SQL• Manipulation de fichiers de données avec grep, awk et sed ou l'éditeur VI• ...	Liens utiles -> Sommaire : <ul style="list-style-type: none">• Par type d'objet :<ul style="list-style-type: none">◦ Etoiles<ul style="list-style-type: none">▪ Variable stars▪ SNe◦ GRBs◦ etc.• Archives de missions• Convertisseurs• Astronomie vulgarisée

Recherche Pdf

SIMBAD – next steps

- The new web interface in 2014
- SIMBAD documentation
- Improving the links between SIMBAD and VizieR
- ...