

# The Antennae and other Peculiar Galaxies

A tutorial on CDS tools and services

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# CDS Portal



CDS Portal

http://cdsportal.u-strasbg.fr/#NGC%204039

CDS Portal

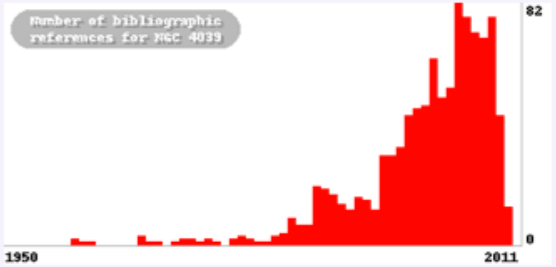
Portal [My data](#) [Login](#) [Preferences](#) [Register](#)

Target:

J2000 position for NGC 4039: 12 01 53.7 -18 53 08

### Object identifiers, measurements and bibliography for NGC 4039

- Object type: Galaxy in Pair of Galaxies
- Morphological type: Sc
- [More SIMBAD data for NGC 4039](#)
- [1014 bibliographic references](#)
- [359 objects within 2'](#)
- [Display map around NGC 4039](#)
- [Display SimPlay interactive map around NGC 4039](#)
- [Related objects in bibliography:](#)




Number of bibliographic references for NGC 4039

### Images for NGC 4039

- [Display region in Aladin \(Web Start\)](#)

Survey	Band	$\lambda$ ( $\mu\text{m}$ )	Size	Epoch	Resolution	Download
DENS	I	0.79	12.5' x 12.4'	1996-03-30	0.9" / pixel	<a href="#">FITS</a>
DENS	J	1.23	12.6' x 12.7'	1996-03-30	0.9" / pixel	<a href="#">FITS</a>
DENS	K	2.16	12.6' x 12.7'	1996-03-30	0.9" / pixel	<a href="#">FITS</a>
2MASS	K	2.16	8.5' x 17.0'	1999-03-20	0.9" / pixel	<a href="#">FITS</a>
2MASS	H	1.65	8.5' x 17.0'	1999-03-20	0.9" / pixel	<a href="#">FITS</a>
2MASS	J	1.24	8.5' x 17.0'	1999-03-20	0.9" / pixel	<a href="#">FITS</a>
AAO	R	0.63	12.9' x 12.9'	1996-02-26	1.0" / pixel	<a href="#">JPEG</a> <a href="#">FITS</a>
SERC	I	0.80	12.9' x 12.9'	1996-05-25	1.0" / pixel	<a href="#">JPEG</a> <a href="#">FITS</a>



[Display color image](#)

### Catalogues for NGC 4039

- [4 catalogues with 'NGC 4039' keyword](#)
- [146 catalogues around NGC 4039:](#)

Name	Description	Local density	Wavelength	Popularity	Coverage map
<a href="#">I/297 Query</a>	NOMAD Catalog (Zacharias+ 2005) <a href="#">[ReadMe]</a>	53	optical, IR	77	
<a href="#">J/A+A/443... Query</a>	NGC 4038/4039 broad and /narrow band photometry (Mengel+, 2005) <a href="#">[ReadMe]</a>	51	optical	27	
<a href="#">I/284 Query</a>	The USNO-B1.0 Catalog (Monet+ 2003) <a href="#">[ReadMe]</a>	51	optical	89	
<a href="#">I/305 Query</a>	The Guide Star Catalog, Version 2.3.2 (GSC2.3) (STScI, 2006) <a href="#">[ReadMe]</a>	49	optical	74	



Identifiers  
Basic Data  
Bibliography

SIMBAD query result

http://simbad.u-strasbg.fr/simbad/sim-id?ident=NGC+4039&radius.unit=arcmin&Radius=2

SIMBAD query result

Object query : NGC 4039 C.D.S. - SIMBAD4 rel 1.172 - 2011.03.02CET13:22:33

Available data : [Basic data](#) • [Identifiers](#) • [Plot & images](#) • [Bibliography](#) • [Measurements](#) • [External archives](#) • [Notes](#) • [Annotations](#)

**Basic data :**  
**NGC 4039 -- Galaxy in Pair of Galaxies** query around with radius  arcmin

Other object types: [G1P](#) ( ) , [G](#) (ESO,LEDA,MCG,SGC,UGCA,[M98c]) , [IG](#) (VV) , [PaG](#) (RR95) , [Rad](#) (WISH)

ICRS coord. (ep=J2000): [12 01 53.7 -18 53 08 \( Optical \) \[ - - - \] D 1989ESOLV.C.....0L](#)

FK5 coord. (ep=J2000 eq=2000): [12 01 53.7 -18 53 08 \( Optical \) \[ - - - \] D 1989ESOLV.C.....0L](#)

FK4 coord. (ep=B1950 eq=1950): [11 59 19.9 -18 36 26 \( Optical \) \[ - - - \] D 1989ESOLV.C.....0L](#)

Gal coord. (ep=J2000): [286.9685 +42.4453 \( Optical \) \[ - - - \] D 1989ESOLV.C.....0L](#)

Radial velocity / Redshift / cz: [V\(km/s\) 1637 \[9\] / z\(-\) 0.005474 \[0.000030\] / cz 1641.00 \[9.00\] \(-\) D 1989ESOLV.C.....0L](#)

Morphological type: [Sc D 2004ApJ...602..231C](#)

Angular size (arcmin): [3.1 1.6 50 \(-\) \(-\) D 2007ApJS..173..185G](#)

Fluxes (2): [B 11.08 \[0.21\] D 2007ApJS..173..185G](#)  
[R 9.77 \[-\] D 1989ESOLV.C.....0L](#)

essential notes: • See GALEX UV data in [GALEX data](#) [ 01-Oct-2009 ].

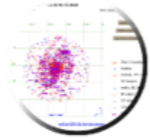
**Hierarchy :** number of linked objects whatever the membership probability is (see description [here](#)) :


: 1     : 1     : 66    Display criteria :

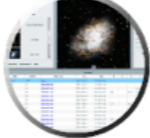
**Identifiers (13) :**


<a href="#">NGC</a> 4039	<a href="#">LEDA</a> 37969	<a href="#">SGC</a> 115920-1836.4	<a href="#">[M98c]</a> 115920.0-183624
<a href="#">ESO-LV</a> 572-0471	<a href="#">MCG</a> -03-31-015	<a href="#">UGCA</a> 265	
<a href="#">ESO-LV</a> 572-0480	<a href="#">RR95</a> 207b	<a href="#">VV</a> 245a	
<a href="#">ESO</a> 572-48	<a href="#">RR95</a> 206b	<a href="#">WISH</a> B1159.3-1835B	

**Plots and Images**

 **plot**  
radius  arcmin

 **CDS portal**

 **CDS Simplay**  
requires flash

 **Aladin applet**

**References (1014 between 1850 and 2011)**



# Catalogues

VizieR Search Page

http://viz-beta.u-strasbg.fr/viz-bin/VizieR-3

Simbad VizieR Aladin Catalogs Dictionary Biblio Tutorials Resources

VizieR Search Page VizieR (beta version)

**Search Criteria**  
Save in CDSportal  
Keywords: VII/192, NGC 4039  
Tables: VII/192, arpard, arplist  
Preferences: max: 50, HTML Table, All columns, Compute, Distance, Distance (x,y), Galactic, J2000, B1950, Ecl. J2000, Sort by Distance  
Position in: Decimal °  
Mirrors: CDS, France

**Simple Target** | List Of Targets

Target Name (resolved by Simbad) or Position: NGC 4039 J2000 2 arcmin  
Target dimension: 2 arcmin  
Radius or Box size

Arp's Peculiar Galaxies (Webb 1996) [Similar Catalogs](#) [ReadMe+ftp](#)  
VII/192 [Post annotation](#)  
1.VII/192/arpord list of Arp views with imaging data (338 rows)

**Simple Constraint** | List Of Constraints

Query by Constraints applied on Columns (Output Order: + -)

Show	Sort Column	Clear	Constraint	Explain (UCD)
<input type="checkbox"/>	recno			Record number within the original table (starting from 1) ( <a href="#">meta_record</a> )
<input checked="" type="checkbox"/>	Arp			Arp number from original catalog ( <a href="#">meta_id;meta_main</a> )
<input checked="" type="checkbox"/>	Name		(char)	Common name (group or brightest) ( <a href="#">Note</a> ) ( <a href="#">meta_id</a> )
<input checked="" type="checkbox"/>	RA2000			"h:m:s" Right Ascension 2000 ( <a href="#">pos.eq.ra;meta_main</a> )
<input checked="" type="checkbox"/>	DE2000			"d:m:s" Declination 2000 ( <a href="#">pos.eq.dec;meta_main</a> )
<input checked="" type="checkbox"/>	Size		arcmin	Long dimension of Arp's original photo ( <a href="#">Note</a> ) ( <a href="#">phys.angSize</a> )
<input checked="" type="checkbox"/>	Orient		(char)	[N,S,E,W,?] Orientation of Arp photo ( <a href="#">Note</a> ) ( <a href="#">meta_note</a> )
<input checked="" type="checkbox"/>	fl_245		2.54cm <sup>(n)</sup>	Focal length for CB245 CCD Camera ( <a href="#">Note 1</a> ) ( <a href="#">instr.tel.focalLength</a> )
<input checked="" type="checkbox"/>	fl_ST6		2.54cm <sup>(n)</sup>	Focal length for SBIG ST6 CCD Camera ( <a href="#">Note 1</a> ) ( <a href="#">instr.tel.focalLength</a> )
<input checked="" type="checkbox"/>	fl_ST5		2.54cm <sup>(n)</sup>	Focal length for SBIG ST5 CCD Camera ( <a href="#">Note 1</a> ) ( <a href="#">instr.tel.focalLength</a> )
<input checked="" type="checkbox"/>	APG	APG		Values from the original Arp's catalog of Peculiar Galaxies (Arp 1966, Cat. VII/74) ( <a href="#">meta_ref.url</a> )
<input checked="" type="checkbox"/>	Simbad	Simbad		ask the <b>Simbad</b> data-base about this object
<input checked="" type="checkbox"/>	NED	NED		ask the <b>NED</b> data-base about this object

ALL cols [Reset All](#) [Clear](#) <sup>(n)</sup> indicates a possible blank or NULL column [Submit](#)

Adapt form: Display your selection only [Modify](#) | Reset to default columns [Modify](#)  
Display  UCD1+  UCD1

elapse time 0

©UDS/CNRS Contact:



Interactive Sky Atlas

Images

Catalogues

VO Access

VO Interoperability

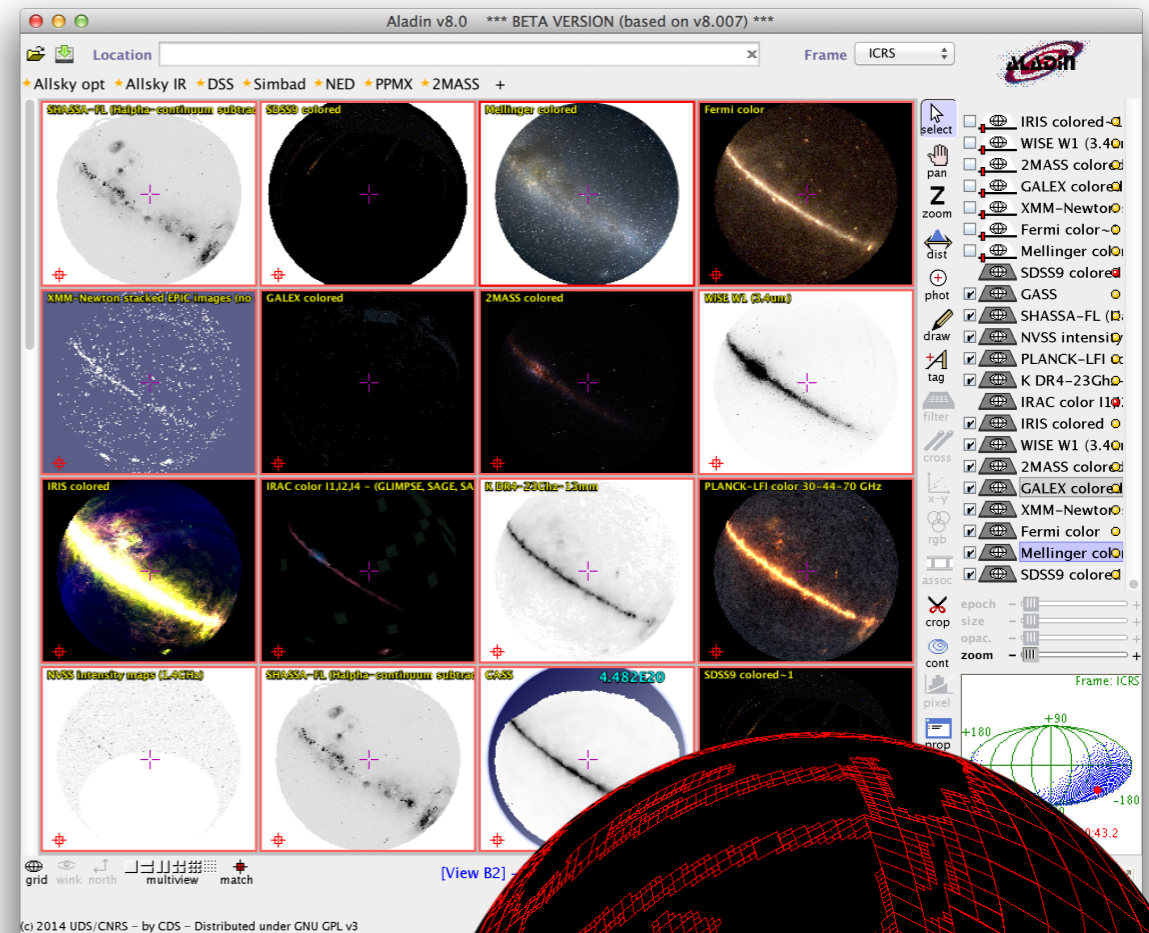
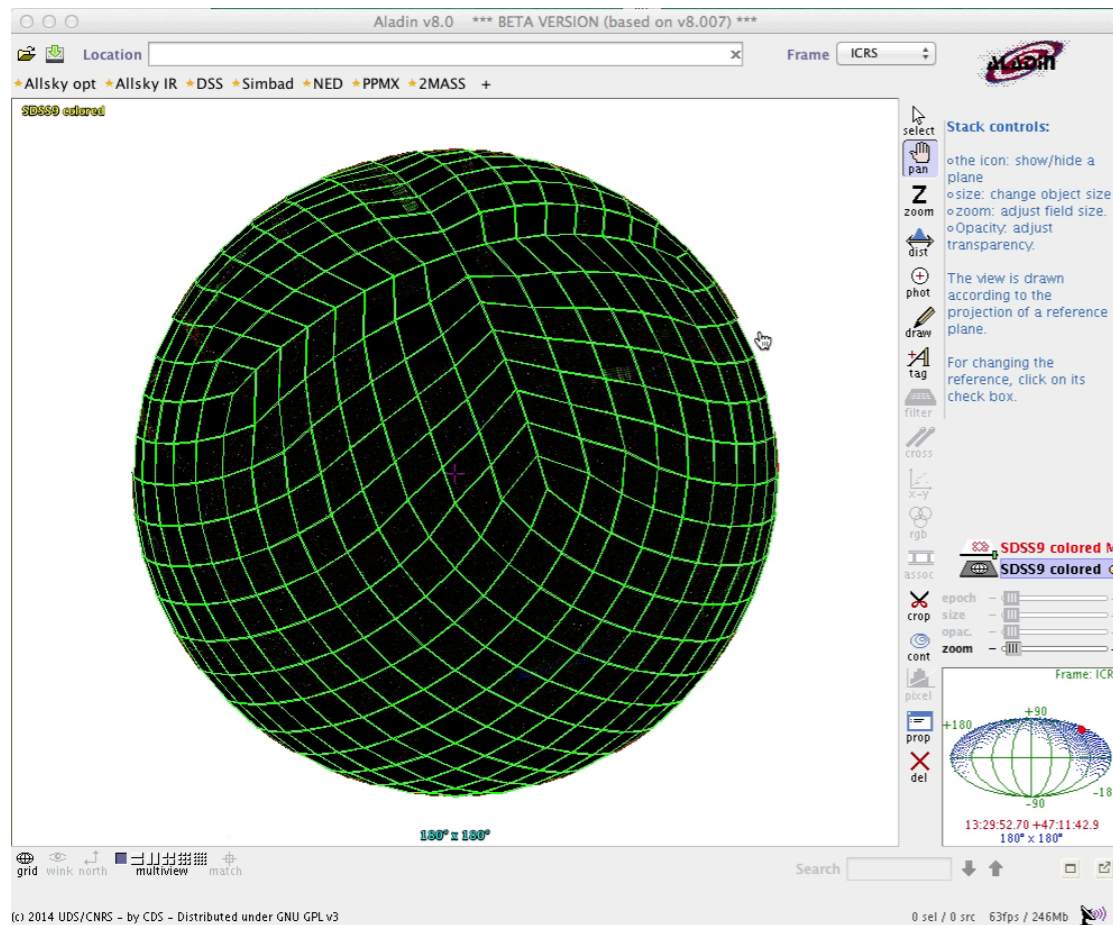
All Sky

Filtering

Scripting and more...

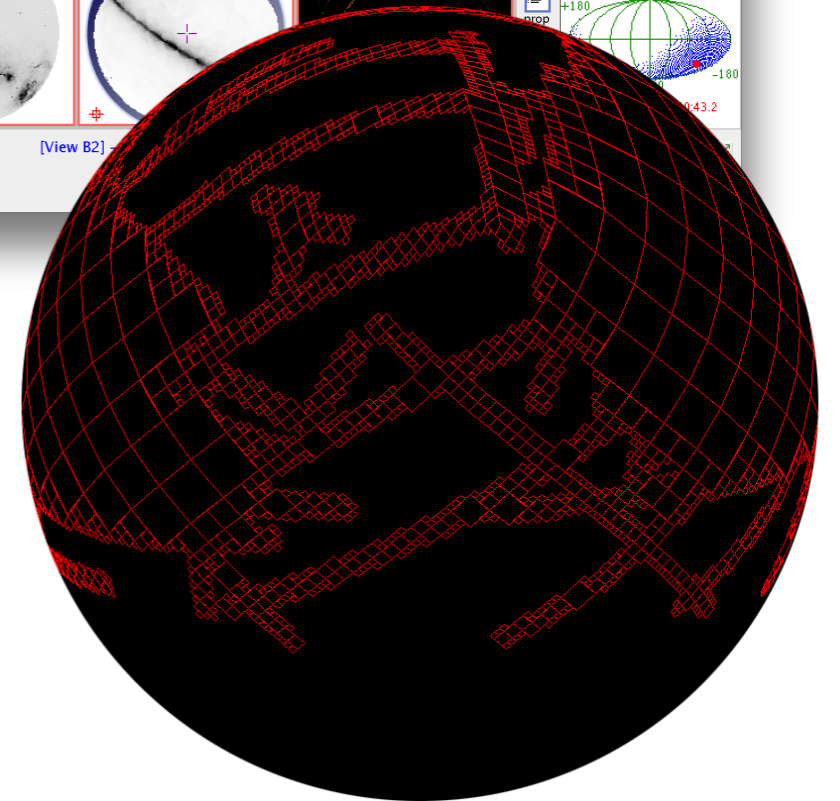
A screenshot of the ALADIN v7.0 software interface. The main window displays a grid of six panels. The top-left panel shows a color image of "The Antennae Galaxies / NGC 4038-4039". The top-middle panel shows a contour plot of the same region, labeled "SERC-I-DSS2.S572". The top-right panel shows a grayscale image of the same region, labeled "2MASS.K.9903205\_KI0690221" with a magnitude of 5.779. The bottom-left panel shows another grayscale image, labeled "2MASS.J.9903205\_JI0690221" with a magnitude of 6.06. The bottom-middle panel shows a grayscale image, labeled "2MASS.H.9903205\_HI0690221" with a magnitude of 5.98. The bottom-right panel shows an RGB image, labeled "RGB img" with magnitudes 4.779, 6.98, and 6.059. A "Server selector" dialog box is open in the foreground, showing a search for "ngc 4039" with a radius of 14'. The dialog includes checkboxes for "Images", "Catalogs", and "Spectra", and a list of servers such as "Chandra X-Ray Observatory Data Archive", "The XMM-Newton Science Archive InterOperability System", "ESO Science Archive Image Service", "Sloan", "DSS...", "VLA...", "Archives...", and "Others...". The interface also features a toolbar on the right with various tools like "select", "pan", "zoom", "dist", "phot", "draw", "tag", "filter", "cross", "rgb", "assoc", "crop", "cont", "mgiss", "pixel", and "prop". A list of catalogues is visible on the right side of the main window, including "The Antennae (", "Fireworks Show", "RGB img", "2MASS.H.99032", "Simbad", "2MASS.J.99032", "2MASS.K.99032", "Contours", and "SERC-I-DSS2.S5".

# All-sky perspective

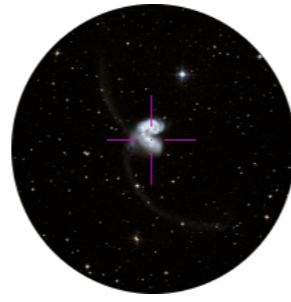


## HiPS and MOC

Hierarchical Progressive Survey  
Multi-Order Coverage maps

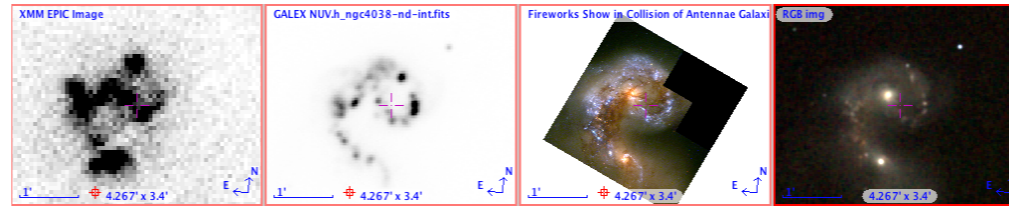


Single object search



*Tutorial*

Find Multi- $\lambda$  data



Use catalogues to select a sample

Full	RAJ2000 deg	DEJ2000 deg	Arp	Name	RA2000 "h:m:s"	DE2000 "d:m:s"	Size arcmin
1	141.158	+49.357	1	NGC 2857	09 24 38	+49 21.4	5.2 E
2	244.075	+47.047	2	UGC 10310	16 16 18	+47 02.8	3.5 E
3	339.143	-2.905	3	MCG-01-57-016	22 36 34	-02 54.3	5.2 N
4	027.108	-12.382	4	MCG-02-05-50+A	01 48 26	-12 22.9	3.5 E
5	171.103	+3.327	5	NGC 3664	11 24 25	+03 19.6	2.6 N
6	123.310	+45.992	6	NGC 2537	08 13 14	+45 59.5	2.6 E
7	132.573	-16.577	7	MCG-03-23-009	08 50 17	-16 34.6	2.6 N
8	020.598	-0.875	8	NGC 0497	01 22 23	-00 52.5	3.5 S
9	123.748	+73.580	9	NGC 2523	08 14 59	+73 34.8	3.5 E
10	034.610	+5.653	10	UGC 01775	02 18 26	+05 39.2	2.6 E
11	017.240	+14.227	11	NGC 00717	01 00 22	+14 20.0	5.0 W

Extract data on sample from Surveys  
- via HiPS & MOC, and also scripts



```

#AJS
reset
grid on
"ARP-$2_DSS" = get DSS.STScI(POSS2UKSTU_Red,15,15) $3
#"ARP-$2_Simbad" = get Simbad $3 $5'
viz_logHST=get vizier(logHST) $3
viz_logESO=get vizier(logESO) $3
viz_logChandra=get vizier(logChandra) $3
sync
#export B/hst/hstlog /Users/allen/Desktop/Arp/Arp-$2_HST.x
save /Users/allen/Desktop/Arp/Arp-$2_chart.png
backup /Users/allen/Desktop/Arp/Arp-$2_stack.aj

```