

SIAV2, DataLink and SODA interface in Aladin



Chaitra (ASTERICS contractant)
François Bonnarel (CDS/CNRS)



□ CASDA SIAV2 service + DataLink

- SIAV2 interface
- List of observations around a 2MASS object at 344.72 -55.97
- DataLink with authorization

List of CASDA observations around 344.72 -55.97

Aladin v9.0 *** BETA VERSION (based on v9.039) ***

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location 344.57835 -55.91674

Frame ICRS4

DSS SDDS 2MASS WISE GALEX PLANCK AKARI XMM Fermi Gaia Simbad NED +

DSS colored

Server selector

Others: CASDA Tools...

Image servers: Aladin images, SkyView, UKIDSS, Sloan, DSS..., VLA..., Archives..., Others...

Catalog servers: All, VizierR, surveys, Missions, SIMBAD, NED, MOC, TAP, SkyBot, Gaia, Others..

Server: CASDA SIAV2 implementation

Position: CIRCLE 340.4567 -64.4194 2

Radius: 0.25 0.30

Buttons: Reset, Clear, SUBMIT, Close

9.707° x 4.352°

obs	publ	access url	target	n	s ra	s dec	s fov	s region	t min	Observat	t max	Observat	t exptime	t resolu	em min	Spectral	em max	Spectral	em res p	o ucd	pol states	dataprod	em ucd	em unit	em resolu	s res
cube-24		https://			344.6289...	-55.9409...	153.5149...	FoV	0.0	1858-11...	0.0	1858-11...	0.0	0.0	0.319074	939,5931...	0.347154	863,5912...	11.86275	/I/	/I/		em.wi	m		0.016
cube-25		https://			344.6230...	-55.9411...	158.5882...	FoV	0.0	1858-11...	0.0	1858-11...	0.0	0.0	0.347157...	863,5854...	0.380658...	787,5834...	10.86267...	phot.flu...	/I/	/I/	em.wi	m		0.016
cube-26		https://			344.6258...	-55.9394...	164.6950...	FoV	0.0	1858-11...	0.0	1858-11...	0.0	0.0	0.380660...	787,5776...	0.421318...	711,5757...	9.862602...	phot.flu...	/I/	/I/	em.wi	m		0.016

TIP: Point the cursor over the current image to Display Catalog

Authorization

Aladin v9.0 *** BETA VERSION (based on v9.039) ***

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location 344.62898 -55.94099

DSS + SDSS + 2MASS + WISE + GALEX + PLANCK + AKARI + XMM + Fermi + Gaia + Simbad + NED +

DSS colored

Authentication

Authentication required for accessing data [ATNF OPAL Login] on machine data.csiro.au :

User name: harel@astro.unistra.fr

Password:

Ok Cancel

This source at the reticle location (zoom on it via the mousewheel)

obs	publ.	access url	target n.	s ra	s dec	s fov	s region	t min	Observat.	t max	Observat.	t exptime	t resolu.	em min	Spectral...	em max	Spectral...	em res p...	o ucd	poi states	dataprod	em ucd	em unit	em resolu.	s res
cube-24		https://		344.6289	-55.9409	153.5149	FoV	0.0	1858-11...	0.0	1858-11...	0.0	0.319074	939,5931...	0.347154	863,5912	11.86275	phot.flu...	/I/		em.wi	n		0.016	
cube-25		https://		344.6230	-55.9411	158.5882	FoV	0.0	1858-11...	0.0	1858-11...	0.0	0.347157	863,5854	0.380658	787,5834	10.86267	phot.flu...	/I/		em.wi	n		0.016	
cube-26		https://		344.6258	-55.9394	164.6950	FoV	0.0	1858-11...	0.0	1858-11...	0.0	0.380660	787,5776	0.421318	711,5757	9.862602	phot.flu...	/I/		em.wi	n		0.016	

21 sel / 31 src 169Mb

06:42 22/10/2016

Full dataset download

The screenshot shows the Aladin v9.0 web interface. The main window displays a star field with a central crosshair. The interface includes a menu bar (File, Edit, Image, Catalog, Overlay, Coverage, Tool, View, Interop, Help), a location bar (22:58:31.71 -55:56:33.2), and a toolbar with various icons. A right-hand panel contains 'Stack controls' and a 'CASDA SIAv2' logo. A data table is overlaid at the bottom, listing observation details for cubes 10 through 19. A tooltip is visible over the table, providing download instructions.

obs publ...	access url	target n...	s ra	s dec	s fov	s region	t min	Observat...	t max	Observat...	t experie	t resolu...	em min	Spectral...	em max
<input type="checkbox"/>	https://...		225.200	55.000	150.000		0.01000	11.000	0.01000	11.000	0.0	0.01000	100.000	0.01000	150.000
<input type="checkbox"/>	https://...														
<input type="checkbox"/>	https://...														
<input type="checkbox"/>	https://...														
<input type="checkbox"/>	https://...														
<input type="checkbox"/>	https://...														
<input type="checkbox"/>	https://...														
<input type="checkbox"/>	https://...														
<input type="checkbox"/>	https://...														
<input type="checkbox"/>	https://...														

TIP: Do you know that you can subtract, divide, ... images => Images > Operations

□ CALIFA

- Start from a list on AllSky
- Select one object
- Browse the recursive DataLink
- Select previews and metadata

CALIFA galaxies on all sky

Aladin v9.0 *** BETA VERSION (based on v9.039) ***

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location Frame: ICRS

DSS SDSS 2MASS WISE GALEX PLANCK AKARI XMM Fermi Gaia Simbad NED +

666 selected

Stack controls:

- o the icon: show/hide a plane
- o size: change object size
- o zoom: adjust field size
- o Opacity: adjust transparency

The view is drawn according to the projection of a reference plane.

For changing the reference, click on its check box.

dataprod.	obs title	obs publ.	obs crea.	access url	target n.	target c.	s ra	s dec	s fov	s region	t min	Observat...	t max	Observat...	t exptime	t resolu...	em min	Spectral	em max	Spectral	em res p.	o ucd	poi states
<input type="checkbox"/>	CALIFA V...	1702//ot...		https://d...	NGC7194	Galaxy	330.8789	12.636782	0.01	FoV	55396.01	2010-07...	55395.07	2010-07...	5400.0	0.0	0.0	1.0E-6	lum	2044.989	phot.fiu.		
<input type="checkbox"/>	CALIFA V...	1702//ot...		https://d...	NGC7321	Galaxy	338.52832	5.570324	0.01	FoV	55804.96	2011-08...	55804.89	2011-08...	5400.0	0.0	0.0	1.0E-6	lum	2010.050	phot.fiu.		
<input type="checkbox"/>	CALIFA V...	1702//ot...		https://d...	NGC7321	Galaxy	339.11676	21.621765	0.01	FoV	55801.98	2011-08...	55801.00	2011-08...	5400.0	0.0	0.0	1.0E-6	lum	2113.048	phot.fiu.		
<input type="checkbox"/>	CALIFA V...	1702//ot...		https://d...	NGC7489	Galaxy	346.88623	22.998009	0.01	FoV	56161.98	2012-08...	56161.92	2012-08...	5400.0	0.0	0.0	1.0E-6	lum	2027.369	phot.fiu.		
<input type="checkbox"/>	CALIFA V...	1702//ot...		https://d...	NGC7549	Galaxy	348.82196	19.041788	0.01	FoV	55396.11	2010-07...	55396.03	2010-07...	5400.0	0.0	0.0	1.0E-6	lum	1979.218	phot.fiu.		

Warning: Aladin is running in low memory configuration (90MB)

48 sel / 400 src 0fps / 128Mb

06:56 22/10/2016

Selection of a galaxy. DataLinks

Aladin v9.0 *** BETA VERSION (based on v9.039) ***

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location 23:29:03.82 +11:26:42.6

DSS + SDSS + 2MASS + WISE + GALEX + PLANCK + AKARI + XMM + Fermi + Gaia + Simbad + NED +

obscore - access_url - The URL at which to obtain the data set.

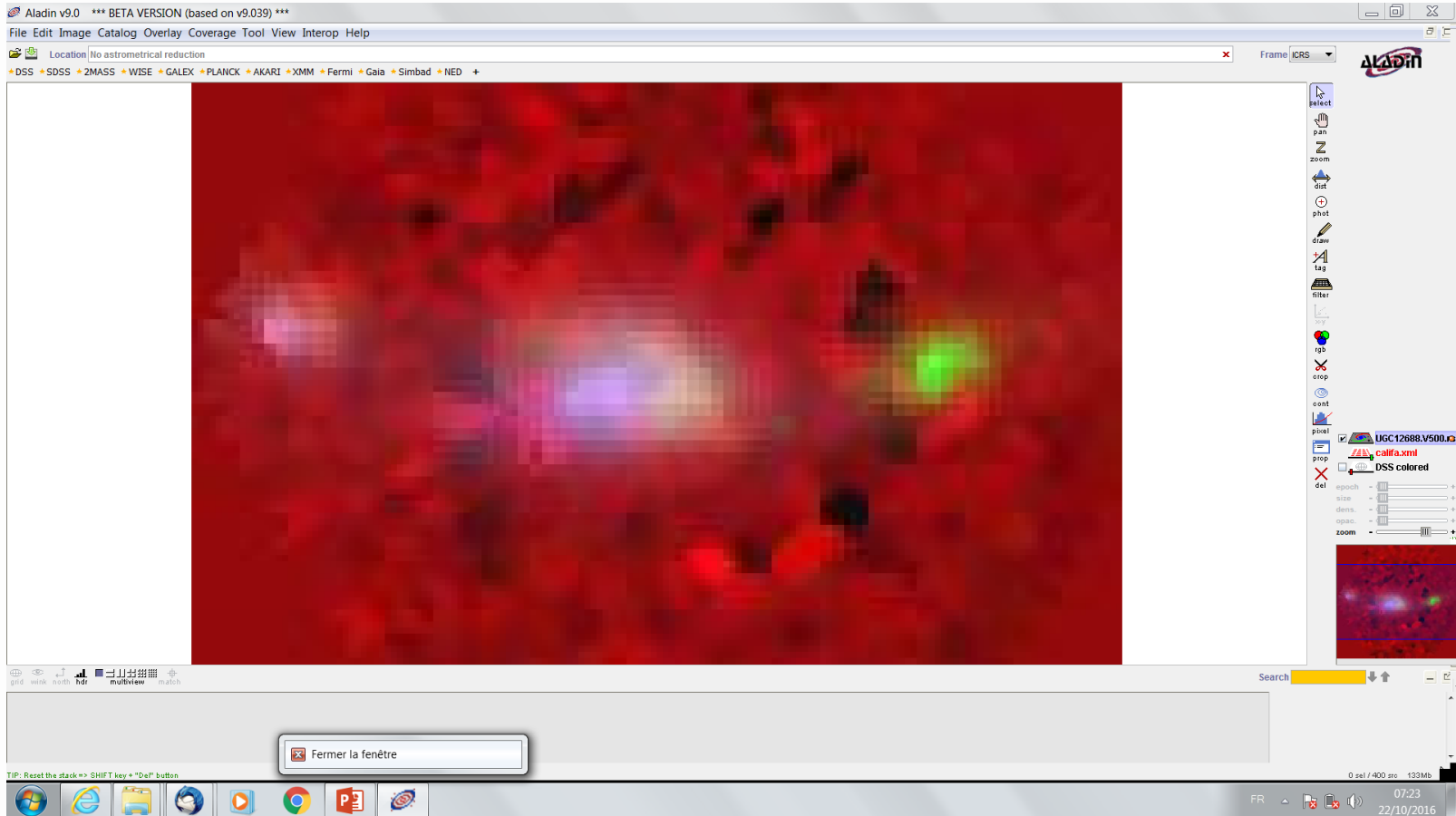
cube file	t min	Observat...	t max	Observat...	t exptime	t resolu...	em min	Spectral...	em max	Spectral...	em rc
15829.07...	2012-07...	56132.06...	2012-07...	2700.0	0.0	0.0	1.0E-6	1um	852.1		
55829.87...	2011-09...	55829.84...	2011-09...	2700.0	0.0	0.0	1.0E-6	1um	764.6		
55829.90...	2011-09...	55829.88...	2011-09...	2700.0	0.0	0.0	1.0E-6	1um	776.0		
56135.08...	2012-07...	56135.06...	2012-07...	2700.0	0.0	0.0	1.0E-6	1um	866.		
56211.94...	2012-10...	56211.91...	2012-10...	2700.0	0.0	0.0	1.0E-6	1um	769.6		

Warning: Aladin is running in low memory configuration (37MB)

20 sel / 400 stro / 210Mb

07:01
22/10/2016

□ Preview has been selected



Recursive DataLink display and access to full datacube

The screenshot shows the Aladin v9.0 interface with a central datacube visualization. A context menu is open over the datacube, listing various data products and their sizes. The menu items are:

- This cube in Data Release 2 medium resolution (V1200) (size 10000 bytes)
- This cube in Data Release 2 low resolution (V500) (size 10000 bytes)
- This cube in Data Release 1 medium resolution (V1200) (size 10000 bytes)
- This cube in Data Release 1 low resolution (V500) (size 10000 bytes)
- Retrieve data from this cube using the califadr3.fluxposv500 and califadr3.fluxposv1200 tables (size -1 bytes)
- Metadata (size -1 bytes)
- Metadata (size -1 bytes)
- The full dataset. (size 147672000 bytes)
- A preview for the dataset. (size -1 bytes)

The interface also shows a table of data products at the bottom:

dataprod.	obs title	obs publ.	obs crea.	access url	target n.	target c.	s ra	s dec	s fov	s region	t min	Observat...	t max	Observat...	t exptime
<input type="checkbox"/>	CALIFA V...	1702//02...		https://								2...		5400.0	
<input type="checkbox"/>	CALIFA V...	1702//02...		https://								3...		2700.0	

□ CADC observations around NGC 6946

- Select via ObsTAP (Aladin generic TAP Interface)
- Field of view display
- Select cutout in DataLink
- Select full display of jcmt measurements

CADC ObsTAP selection around NGC 6946

Aladin v9.0 *** BETA VERSION (based on v9.039) ***

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location: 20:38:14.46 +60:26:53.5

DSS + SDSS + 2MASS + WISE + GALEX + PLANCK + AKARI + XMM + Fermi + Gaia + Simbad + NED +

DSS colored

Server selector

Others: File all VO Watch FoV... Tools...

Image servers: Aladin Images SkyView UKIDSS Sloan DSS... VLA... Archives... Others...

Catalog servers: All VizierR Surveys Missions SIMBAD NED MOC TAP SkyBot Gaia Others...

Construct your query, verify and execute.

Table: /voa.ObsCore

Select: All Constraints: Add new Max rows: 100

Target: 20 36 08.22 +58 56 28.4

Radius: 14' CIRCLE

Ra= 308.73025 Dec= 60.1362777777778 Radius= 2.865

Write... Check... Set ra, dec

SELECT TOP 100 * FROM /voa.ObsCore WHERE CONTAINS(POINT(ICRS: s_ra, s_dec), CIRCLE(ICRS, 308.73025, 60.1362777777778, 2.865)) = 1

Reset Clear SUBMIT Close

Data are being downloaded... look at the "stack"

Observed	t_exptime	t_resolu.	t_xel	em_min	Spectral	em_max	Spectral	em_res p.	em_xel	em_ucl	pol_states	pol
caoa:JCM NGC6946 308.7137 60.15391 0.160091 FoV 54377.27 2007-10-...	54377.28	2007-10-...	45.67258	1	8.647137	346,7043	8.694137	344,8300		1919		
caoa:JCM NGC6946 308.7137 60.15494 0.158643 FoV 54377.27 2007-10-...	54377.28	2007-10-...	45.66358	2	8.646455	346,7316	8.694827	344,8027		1975		
caoa:JCM NGC6946 308.7117 60.15492 0.157233 FoV 54377.27 2007-10-...	54377.28	2007-10-...	45.66358	1	8.646455	346,7316	8.671443	345,7325		1023		
caoa:JCM NGC6946 308.7117 60.15492 0.157233 FoV 54377.27 2007-10-...	54377.28	2007-10-...	42.28063	1	8.647430	346,6926	8.694432	344,8183		1919		
caoa:JCM NGC6946 308.7117 60.15492 0.157233 FoV 54377.27 2007-10-...	54377.28	2007-10-...	45.89757	1	8.647137	346,7043	8.694137	344,8300		1919		

Warning: Aladin is running in low memory configuration (98MB)

84 sel / 100 src 1fps / 199Mb

07:41 22/10/2016

DataSet Field of View

Aladin v9.0 *** BETA VERSION (based on v9.039) ***

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location: 20:41:28.39 +59:54:37.6

Frame: ICRS

DSS colored

2.993° x 1.342°

Data are being downloaded... look at the "stack"

obs	publ	target n.	s ra	s dec	s fov	s region	t min	Observat...	t max	Observat...	t exptime	t resolu...	t xel	em min	Spectral...	em max	Spectral...	em res p.	em xel	em ucd	pol states	pol
caoma:JCM	NGC6946	308.7162...	60.15616...	0.158643...	FoV	54377.25...	2007-10...	54377.26...	2007-10...	45.87258...	1	8.647137...	346,7043...	8.694137...	344,8300...							1919
caoma:JCM	NGC6946	308.7137...	60.15392...	0.180118...	FoV	54377.27...	2007-10...	54377.28...	2007-10...	45.66388...	2	8.646455...	346,7316...	8.694827...	344,8027...							1975
caoma:JCM	NGC6946	308.7137...	60.15591...	0.180091...	FoV	54377.27...	2007-10...	54377.28...	2007-10...	45.66388...	1	8.646455...	346,7316...	8.671443...	345,7325...							1033
caoma:JCM	NGC6946	308.7137...	60.15494...	0.158643...	FoV	54377.27...	2007-10...	54377.28...	2007-10...	42.28063...	1	8.647430...	346,6926...	8.694432...	344,8183...							1919
caoma:JCM	NGC6946	308.7117...	60.15492...	0.157233...	FoV	54377.27...	2007-10...	54377.28...	2007-10...	45.89757...	1	8.647137...	346,7043...	8.694137...	344,8300...							1919

04 sel / 100 src 109Mb

Available DataLinks

Aladin v9.0 *** BETA VERSION (based on v9.039) ***

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location: 308.71624 +60.15616

Frame: ICRS4

DSS colored

CADC-1

DSS co... 90%

epoch: +00
size: +
denis: +
cont: +
zoom: +

Frame: ICRS4

308.71604 +60.15367
2.993" x 1.342"

CADC-1 - access_url - URL to download the data

em	ucd	pol	states	pol	xel	o	uod	acce
							phot.count	http
							phot.count	http
							phot.count	http
							phot.count	http
							phot.count	http

This dataset (size 47534400 bytes)
Get cutout

This dataset (size 7493760 bytes)
Get cutout

This dataset (size 2079360 bytes)
Get cutout

70 sel / 100 are 182Mb

07:51
22/10/2016

Cutout interface

Aladin v9.0 *** BETA VERSION (based on v9.039) ***

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location Frame ICRS4

DSS + SDSS + 2MASS + WISE + GALEX + PLANCK + AKARI + XMM + Fermi + Gaia + Simbad + NED +

DSS colored

Server selector

DataLink **Cutout**

Cutout service ?

Fill in all these fields and press the SUBMIT button

ID

POS

CIRC

POLY

BAND

Reset Clear **SUBMIT** Close ?

2.993° x 1.342°

Data are being downloaded... look at the "stack"

fov	s region	t min	Observat	t max	Observat	t expire	t resolu	t xel	ea min	Spectral	ea max	Spectral	ea res p	ea xel	ea ucd	pol states	pol xel	o ucd	access url	core id	lastMod
L91	PoV	54378.21..	2007-10-...	54378.21..	2007-10-...	45.73524...		1	8.669704...	345,8019...	8.694827...	344,8027...		1023				phot.count	http://w...	00000000...	2015-08...
L643	PoV	54378.21..	2007-10-...	54378.21..	2007-10-...	42.68807...		1	8.647137...	346,7043...	8.694137...	344,8300...		1919				phot.count	http://w...	00000000...	2015-08...
L95	PoV	54378.21..	2007-10-...	54378.22..	2007-10-...	45.79585...		2	8.646455...	346,7316...	8.694827...	344,8027...		1975				phot.count	http://w...	00000000...	2015-08...
L065	PoV	54378.21..	2007-10-...	54378.22..	2007-10-...	45.79585...		1	8.646455...	346,7316...	8.671443...	345,7325...		1023				phot.count	http://w...	00000000...	2015-08...

Warning: Aladin is running in low memory configuration (90MB)

84 xel / 100 stro 11px / 198Mb

JCMT cube display

Aladin v9.0 *** BETA VERSION (based on v9.039) ***

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location 20:34:53.91 +60:09:30.0

+DSS +SDSS +2MASS +WISE +GALEX +PLANCK +AKARI +XMM +Fermi +Gaia +Simbad +NED +

jcmt0111028_00000_01_rdbase001_eba_000famb0-yr01(ubpp7edqaz0)

628 / 1872

obs	publ	target_n	s ra	s dec	s fov	s region	t min	Observat	t max	Observat	t expires	t resolu	t xel	em min	Spectral	em max	Spectral	em res p	em xel	em ucd	poi states	poi xel	o ucd	access url	com
caom	JCMT	JCMT0111028_00000_01_rdbase001_eba_000famb0-yr01(ubpp7edqaz0)	308.7246	60.15834	0.047140	FoW	55862.30	2011-10-...	55862.31	2011-10-...	600.0	1	8.39432	357.1840	8.416997	356.2152	2048						phot.count	https://n...	00000
caom	JCMT	JCMT0111028_00000_01_rdbase001_eba_000famb0-yr01(ubpp7edqaz0)	308.7246	60.15834	0.047140	FoW	55862.30	2011-10-...	55862.31	2011-10-...	600.0	1	8.394718	357.1293	8.416259	356.2152	2048						phot.count	https://n...	00000
caom	JCMT	JCMT0111028_00000_01_rdbase001_eba_000famb0-yr01(ubpp7edqaz0)	308.7246	60.15834	0.047140	FoW	55862.31	2011-10-...	55862.32	2011-10-...	600.0	1	8.39432	357.1840	8.416997	356.1846GHz	2048						phot.count	https://n...	00000
caom	JCMT	JCMT0111028_00000_01_rdbase001_eba_000famb0-yr01(ubpp7edqaz0)	308.7246	60.15834	0.047140	FoW	55862.31	2011-10-...	55862.32	2011-10-...	600.0	1	8.394626	357.1332	8.416167	356.2191	2048						phot.count	https://n...	00000

© 2016 Unistra/CNRS - by CDS - Distributed under GNU GPL v3

28 sel / 500 src 5fps / 206Mb