

# Datalink and TAP in Aladin

# Contents

## SIASV2/SODA/Datalink handling in Aladin

1. Demo for CADC
2. CFHT Vizier
3. Conclusions

## Aladin's TAP clients

4. Generic tap client
5. Glu tap client
6. TAP Asynchronous queries
7. Loading TAP from directory tree
8. Conclusions

# SIAV2/SODA/Datalink in Aladin

The screenshot displays the Aladin astronomical software interface. The main window shows a star field with a scale bar indicating  $6.021^\circ \times 4.882^\circ$ . The interface includes a toolbar with various tools like zoom, dist, phot, draw, tag, filter, cross, crop, and del. A search bar is located at the bottom right. A data table is visible at the bottom left, listing object information.

ID	access url	service def	error message	semantics	description	content type	content length	readable
caom:CFHT/1.021	v2icske69a6u...			#this		application/fits	289776960	true
caom:CFHT/1.021		soda-0420a3e4...		#cutout		application/fits		true
caom:CFHT/1.021		soda-7ba83967...		#cutout		application/fits		true

2017 Université de Strasbourg/CNRS - by CDS - Distributed under GNU GPL v3

# Contents

## SIASV2/SODA/Datalink handling in Aladin

1. Demo for CADC
2. CFHT Vizier
3. Conclusions

## Aladin's TAP clients

4. Generic tap client
5. Glu tap client
6. TAP Asynchronous queries
7. Loading TAP from directory tree
8. Conclusions

# SIAV2/SODA/Datalink in Aladin

The screenshot displays the Aladin software interface. The main window shows a star field with a coordinate system at the bottom center indicating a field of  $6.021^\circ \times 4.882^\circ$ . A toolbar on the right side contains various icons for navigation and data manipulation, including zoom, distance measurement, photo, drawing, tagging, spectral analysis, filtering, crosshair, coordinate systems (x-y, rgb), association, cropping, contouring, pixel inspection, and property viewing.

At the bottom of the interface, there is a search bar and a table of data. The table has the following columns: ID, access url, service def, error message, semantics, description, content type, content length, and readable. The table contains three rows of data:

ID	access url	service def	error message	semantics	description	content type	content length	readable
caom:CFHT/1.021	v2icske69a6u..			#this		application/fits	289776960	true
caom:CFHT/1.021		soda-0420a3e4		#cutout		application/fits		true
caom:CFHT/1.021		soda-7ba83967		#cutout		application/fits		true

At the bottom left, there is a 'select' dropdown menu and a 'from' dropdown menu set to '-- All collections --'. At the bottom right, there is a 'datalog (2)' panel showing 'DSS colored' and a small map of the field with a red dot indicating the current view position.

# SIAV2/SODA/Datalink in Aladin

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Data access → 2 / 19454

Location  Frame  Projection

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

**DSS colored**

Collections → 2 / 19454  
 Unsupervised → 2 / 2035  
 Image by SIA → 1 / 233  
   cadc.nrc.ca → 1  
     **CADC Image Search (SIA)**  
 Catalog by CS, TAP → 1 / 1680  
   cadc.nrc.ca → 1  
     CADC Table Query (TAP) Service

5°

35.04° x 22.46°

grid 
  study 
  wink 
  north 
  hor 
  multiview 
  match

CADC SIAv2 - access\_url - URL to download the data

Search

id	em ucd	pol states	pol xel	o ucd	access url	access format	access estsize	core id	lastModified
1				phot.count	<a href="http://www.cadl...">http://www.cadl...</a>	application/x-vot		00000000-0000+	2013-08-21T17:4
1				phot.count	<a href="http://www.cadl...">http://www.cadl...</a>	application/x-vot		00000000-0000+	2013-08-21T17:4
1				phot.count	<a href="http://www.cadl...">http://www.cadl...</a>	application/x-vot		00000000-0000+	2015-07-01T19:4
1				phot.count	<a href="http://www.cadl...">http://www.cadl...</a>	application/x-vot		00000000-0000+	2015-07-01T20:0
1				phot.count	<a href="http://www.cadl...">http://www.cadl...</a>	application/x-vot		00000000-0000+	2016-01-07T10:2
1				phot.count	<a href="http://www.cadl...">http://www.cadl...</a>	application/x-vot		00000000-0000+	2015-07-01T19:3
1				phot.count	<a href="http://www.cadl...">http://www.cadl...</a>	application/x-vot		00000000-0000+	2016-01-07T10:2
1				phot.count	<a href="http://www.cadl...">http://www.cadl...</a>	application/x-vot		00000000-0000+	2016-01-07T10:4

select  from

filter 
  coll 
  inside 
  scan

select  
 pan  
 zoom  
 dist  
 phot  
 draw  
 tag  
 spect  
 filter  
 cross  
 x-y  
 rgb  
 assoc  
 crop  
 cont  
 pixel  
 prop  
 del

Mouse controls:  
 • Left: source selection.  
 • Middle: quick panning.  
 • Right: contrast adjustment.  
 • Wheel: quick zoom on the reticle.  
 • Simple-clip: move the reticle.  
 • Double-clip: re-center.  
 Let you mouse pointer on an object for discovering associated Simbad data.

CADC SIAv2  
 cadc.nrc.ca/sia  
 DSS colored

epoch -  
 size -  
 dens. -  
 opac. -  
 zoom -

Frame: ICRS  
 05 22 19.18 -09 56 24.3  
 35.04° x 22.46°

This dataset (size 1008000 bytes)  
Get cutout  
Get cutout

# SIAV2/SODA/Datalink in Aladin

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Data access Location  Frame ICRS Projection Sinus

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

Collections → 19589

- Image → 301
- Data base → 2
- Catalog → 17184
- Cube → 6
- Outreach → 1
- Unsupervised → 2095

CDS/P/DSS2/color

5° 28.03° x 16.05°

Mouse controls:

- Left: source selection.
- Middle: quick panning.
- Right: contrast adjustment.
- Wheel: quick zoom on the reticle.
- Simple-clic: move the reticle.

CADC SIAV2  
 I170B4H0?runid=u2wmyfstck  
 CDS/P/DSS2/color

Click to show/hide this plane in the projection of the current view

filter opac. zoom

cross

rgb

assoc

crop

cont

pixel

prop

del

[Plane @2] - I170B4H0?runid=u2wmyfstck06cewi

Search

em xel	em ucd	pol states	pol xel	o ucd	access url	access format	access estsize	core id	lastModified
1				phot.count	<a href="http://www.cad">http://www.cad</a>	application/x-vot		00000000-0000+	2013-08-21T17:4
1				phot.count	<a href="http://www.cad">http://www.cad</a>	application/x-vot		00000000-0000+	2013-08-21T17:4
1				phot.count	<a href="http://www.cad">http://www.cad</a>	application/x-vot		00000000-0000+	2013-08-21T17:4
1				phot.count	<a href="http://www.cad">http://www.cad</a>	application/x-vot		00000000-0000+	2013-08-21T17:4

select

from -- All collectio... +

filter exp inside scan

05:22:22 15 -09:57:11.0  
28.03° x 16.05°

# SIAMV2/SODA/Datalink in Aladin

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location  Frame  Projection

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

CDS/P/DSS2/color

Basic controls:  
 -Type any object name or coordinates for moving on it.  
 -Select catalog sources for displaying associated data measurements.

SODA sync  
 CADC SIAMV2  
 I170B4H0?runid=u2wmyfstck  
 CDS/P/DSS2/color

epoch -  
 spect size -  
 filter dens. -  
 opac. -  
 zoom -

ad:IRIS/I170B4H0

28.03° x 16.05°

Search

05:25:39.32 -10:37:12.9



# SIASV2/SODA/Datalink in Aladin

```
<VALUES>
  <MAX value="74.40891177132141 -3.663936776303487 74.10746861021302 -16.038010233095207
86.99090120499388 -16.100350844693992 86.81225899553195 -3.7233925881787684"/>
</VALUES>
</PARAM>
</GROUP>
</RESOURCE>
<RESOURCE type="meta" ID="soda-664f36c1-66c6-4263-866b-6b54156482a1" utype="ad hoc:service">
  <PARAM name="resourceIdentifier" datatype="char" arraysize="20" value="ivo://cauc.mrc.ca/caom2ops/" />
  <PARAM name="standardID" datatype="char" arraysize="33" value="ivo://ivoa.net/std/SODA#async-1.0"/>
  <PARAM name="accessURL" datatype="char" arraysize="50" value="http://www.cauc-ccda.hia-hia.mrc-
cnrc.gc.ca/caom2ops/async"/>
  <GROUP name="inputParams">
    <PARAM name="ID" datatype="char" ucd="" arraysize="" value="ad:IRIS/I170B1H0"/>
    <PARAM name="POS" datatype="char" ucd="obs.field" arraysize="" value="" />
    <PARAM name="CIRCLE" datatype="double" ucd="obs.field" unit="deg" xtype="circle" arraysize="3"
value="">
      <VALUES>
        <MAX value="80.58001555602195 -9.940800624635642 8.7697185954716"/>
      </VALUES>
    </PARAM>
    <PARAM name="POLYGON" datatype="double" ucd="obs.field" unit="deg" xtype="polygon" arraysize=""
value="">
      <VALUES>
        <MAX value="74.40891177132141 -3.663936776303487 74.10746861021302 -16.038010233095207
86.99090120499388 -16.100350844693992 86.81225899553195 -3.7233925881787684"/>
      </VALUES>
    </PARAM>
  </GROUP>
</RESOURCE>
</VOTABLE>
```

Server selector

DataLink Cutout

○ Cutout service ?

Fill in all these fields and press the SUBMIT button

ID

POS

CIRCLE

POLYGON

Reset Clear SUBMIT Close ?

datalink (4)

Show all X

# SIASV2/SODA/Datalink in Aladin

```
<VALUES>
  <MAX value="74.40891177132141 -3.663936776303487 74.10746861021302 -16.038010233095207
86.99090120499388 -16.100350844693992 86.81225899553195 -3.7233925881787684"/>
</VALUES>
</PARAM>
</GROUP>
</RESOURCE>
<RESOURCE type="meta" ID="soda-664f36c1-66c6-4263-866b-6b54156482a1" utype="adhoc:service">
  <PARAM name="resourceIdentifier" datatype="char" arraysize="26" value="ivo://cadc.nrc.ca/caom2ops"/>
  <PARAM name="standardID" datatype="char" arraysize="33" value="ivo://ivoa.net/std/SODA#async-1.0"/>
  <PARAM name="accessURL" datatype="char" arraysize="58" value="http://www.cadc-ccda.hia-ihp.nrc-
  ca/eng/eng/caom2ops/async"/>
  <GROUP name="inputParams">
    <PARAM name="ID" datatype="char" ucd="" arraysize="*" value="ad:IRIS/I170B1H0"/>
    <PARAM name="POS" datatype="char" ucd="obs.field" arraysize="*" value=""/>
    <PARAM name="CIRCLE" datatype="double" ucd="obs.field" unit="deg" xtype="circle" arraysize="3"
    value="">
      <VALUES>
        <MAX value="80.58001555602195 -9.940800624635642 8.7697185954716"/>
      </VALUES>
    </PARAM>
    <PARAM name="POLYGON" datatype="double" ucd="obs.field" unit="deg" xtype="polygon" arraysize="*"
    value="">
      <VALUES>
        <MAX value="74.40891177132141 -3.663936776303487 74.10746861021302 -16.038010233095207
86.99090120499388 -16.100350844693992 86.81225899553195 -3.7233925881787684"/>
      </VALUES>
    </PARAM>
  </GROUP>
</RESOURCE>
</VOTABLE>
```

Server selector

DataLink Cutout

○ Cutout service ?

Fill in all these fields and press the SUBMIT button

ID	<input type="text" value="ad:IRIS/I170B1H0"/>
POS	<input type="text"/>
CIRCLE	<input type="text"/>
POLYGON	<input type="text"/>

Reset Clear SUBMIT Close ?

# Contents

## SIAS2/SODA/Datalink handling in Aladin

1. Demo for CADC
2. CFHT Vizier
3. Conclusions

## Aladin's TAP clients

4. Generic tap client
5. Glu tap client
6. TAP Asynchronous queries
7. Loading TAP from directory tree
8. Conclusions

# SIAV2/SODA/Datalink in Aladin

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Data access → 33 / 1958:

Location 05:50:39.94 -12:05:08.7

Frame ICRS

Projection Sinus



- The CFHTLS Deep Survey
- The CFHTLS Wide Survey
- External databases, regular Log of CFHT Exposures (CAC)
- The CFHT Observation Log
- The CFHT Observation Log table → 27 / 15697
- A+A → 9 / 4144
- CFHT validation stars (table)
- Galaxy clusters in the CFHTLS
- Candidate clusters detected
- Galaxy clusters in the 4 CFHTLS
- VIPERS photometric catalog
- VIPERS spectroscopic catalog
- Herschel-WDS-CFHTLS
- Grade-A and grade-B near-IR
- Our grade-C candidates
- ApJ → 2 / 2610
- CFHT adaptive optics observations
- AGN photometry. II. A catalog
- ApJ → 11 / 3185
- Positions and optical photometry
- Positions and IR photometry
- BI Photometry for M10 stars
- GALEX and CFHTLS candidates
- CFHT M33 extended sources
- K2-detected clusters in the CFHTLS
- CFHTLS-SL25-ARCS strong lensing
- CFHTLS galaxies with failed mergers
- Catalog of XMM-CFHTLS
- Catalog of RASS-CFHTLS
- CFHT/MegaCam catalog
- ApJS → 1 / 1428
- CFHT RCS patches (table)
- MNRAS → 4 / 2544
- CFHT MOS Sample Galaxies
- CFHT MOS sample definition
- Optical CFHTLS, near-IR
- Extended X-ray sources in the CFHTLS
- supervised → 2 / 2095
- Catalog by CS, TAP → 2 / 1729
- nasa.heasarc → 1 / 909
- XMM-Newton CFHTLS W1
- org.gavo.dc → 1 / 84
- Gravitational arc candidates



select  
pan  
dist  
phot  
draw  
tag  
moc

<http://www.cadc-ccda.hia-ia>  
CDS/B/cfht/obscore  
SODA sync  
CADC SIaV2  
I170B4H0?runid=u2wmyfstck  
CDS/P/DSS2/color

epoch  
spect  
size  
dens.  
filter opac.  
zoom

cross  
x-y  
rgb  
assoc  
crop  
cont  
pixel  
prop  
del

Frame: ICRS

access	estsize	access format	access url	calib level	core id	dataproduc t...	em max	em min
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	2	00000000-0000	spectrum	1.048E-6	3.69986E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	2	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	1	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	2	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	2	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	1	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	2	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	2	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	2	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	1	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	2	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	1	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	2	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	1	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	2	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	1	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	2	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	1	00000000-0000	image	6.955E-7	5.542E-7
+		application/x-votable+xml; content=datalink	<a href="http://www.cad...">http://www.cad...</a>	2	00000000-0000	image	6.955E-7	5.542E-7

select cfht  
from My working l...  
filter coll inside scan

05:21:07.87 -15:14:03.9  
28.03° x 16.05°

# SIAV2/SODA/Datalink in Aladin

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Data access → 33 / 1958: Location **23:56:53.03 -05:50:06.3** Frame **ICRS** Projection **Sinus**

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

**CDS/P/DSS2/color**

select  
pan  
dist  
phot  
draw  
tag  
moc

epoch  
size  
dens.  
filter  
zoom

cross  
x-y  
rgb  
assoc  
crop  
cont  
pixel  
prop  
del

Search

ID	access url	service def	error message	semantics	description	content type	content length	readable
caom:CFHT/1 287	<a href="http://www.cad">http://www.cad</a>			#this		application/fits	18998855	true
caom:CFHT/1 287		soda-ad3ea2b7		#cutout		application/fits		true
caom:CFHT/1 287		soda-6cfd0ca3-7		#cutout		application/fits		true

select: cfht  
from: -- My working l... +

filter coll inside scan

00:00:00.00 +00:00:00.0  
28.03° x 16.05°

# SIASV2/SODA/Datalink in Aladin

```
<TD>  
http://www.cadc-ccda.hia-ihp.nrc-cnrc.gc.ca/caom2ops/datalink?runid=ox66cf6nd5wsfxx6&ID=caom%3AIRIS%2Ff170h000%2FIRAS-100um  
</TD>  
<TD>application/x-votable+xml;content=datalink</TD>  
</TD>  
<TD>f170h000</TD>
```

Value = application/x-votable+xml;content=datalink

	Visible	Coo	Name	Description	Unit	Datatype	UCD	Utype	Wi...	Arr...	Pr...
26	<input checked="" type="checkbox"/>		<b>em_max</b>	stop spectral coordinate v...	m	double	em.wl;stat.max	obscure:Char.SpectralAxis....			
27	<input checked="" type="checkbox"/>		<b>Spectral co...</b>	stop spectral coordinate v...	m	double	em.wl;stat.max	obscure:Char.SpectralAxis....			
28	<input checked="" type="checkbox"/>		<b>em_res_power</b>	typical spectral resolution		double	spect.resolution	obscure:Char.SpectralAxis....			
29	<input checked="" type="checkbox"/>		<b>em_xel</b>	dimensions (number of pix...		long	meta.number	obscure:Char.SpectralAxis....			
30	<input checked="" type="checkbox"/>		<b>em_ucd</b>	UCD describing the spectr...		char	meta.ucd	obscure:Char.SpectralAxis....			32*
31	<input checked="" type="checkbox"/>		<b>pol_states</b>	polarization states presen...		char	meta.code;ph...	obscure:Char.PolarizationA...			32*
32	<input checked="" type="checkbox"/>		<b>pol_xel</b>	dimensions (number of pix...		long	meta.number	obscure:Char.PolarizationA...			
33	<input checked="" type="checkbox"/>		<b>o ucd</b>	UCD describing the obser...		char	meta.ucd	obscure:Char.ObservableA...			32*
34	<input checked="" type="checkbox"/>		<b>access_url</b>	URL to download the data		char	meta.ref.url	obscure:Access.Reference			*
35	<input checked="" type="checkbox"/>		<b>access_format</b>	Format of the data file(s)		char	meta.code.mi...	obscure:Access.Format			128*
36	<input checked="" type="checkbox"/>		<b>access_estsi...</b>	estimated size of the dow...	kbyte	long	phys.size;meta...	obscure:Access.Size			
37	<input checked="" type="checkbox"/>		<b>core_id</b>	primary key		char					36
38	<input checked="" type="checkbox"/>		<b>lastModified</b>	timestamp of last modifica...		char					*

Select all Unselect all - Parsing report Coord. columns - Close

# SI/V2/SODA/Datalink in Aladin

```
<TD>  
http://www.cadc-ccda.hia-ihp.nrc-cnrc.gc.ca/caom2ops/datalink?runid=ox66cf6nd5wsfx6&ID=caom%3AIRIS%2Ff170h000%2FIRAS-100um  
</TD>  
<TD>application/x-votable+xml;content=datalink</TD>  
</TD>  
<TD>f170h000</TD>
```

Value = application/x-votable+xml;content=datalink

	Visible	Coo	Name	Description	Unit	Datatype	UCD	Utype	Width	Arrays...	Precis...
1	<input checked="" type="checkbox"/>		<b>access_estsize</b>	? estimated size of the do...		int	meta.number			1	
2	<input checked="" type="checkbox"/>		<b>access_format</b>	Format of the data file (\o...		char	meta.note			*	
3	<input checked="" type="checkbox"/>		<b>access_url</b>	? URL to download the da...		char	meta.ref.url			*	
4	<input checked="" type="checkbox"/>		<b>calib_level</b>	[1,2] calibration level (\ori...		short	phot.calib;ant...			1	
5	<input checked="" type="checkbox"/>		<b>core_id</b>	primary key (\original{cor...		char	meta.id.part;...			36	
6	<input checked="" type="checkbox"/>		<b>dataproduct_type</b>	type of product (\original{...		char	meta.note			*	
7	<input checked="" type="checkbox"/>		<b>em_max</b>	? stop spectral coordinat...	m	float	instr.bandpass			1	
8	<input checked="" type="checkbox"/>		<b>Spectral coordinate ...</b>	? stop spectral coordinat...	m	float	instr.bandpass			1	
9	<input checked="" type="checkbox"/>		<b>em_min</b>	? start spectral coordinat...	m	float	instr.bandpass			1	
10	<input checked="" type="checkbox"/>		<b>Spectral coordinate s...</b>	? start spectral coordinat...	m	float	instr.bandpass			1	
11	<input checked="" type="checkbox"/>		<b>em_res_power</b>	? typical spectral resoluti...		float	spect.resoluti...			1	
12	<input checked="" type="checkbox"/>		<b>em_ucd</b>	? UCD describing the spec...		char	meta.number			*	
13	<input checked="" type="checkbox"/>		<b>em_xel</b>	? dimensions (number of ...		int	phys.size			1	
14	<input checked="" type="checkbox"/>		<b>em_xel</b>	? dimensions (number of ...		int	phys.size			1	

Select all Unselect all - Parsing report Coord. columns - Close

# Conclusions

1. Need to resolve issues with Aladin and implement handling of more usecases
2. Need a distinctive way to identify a datalink
  - Addition of UCD to access format(Asterics Tech Forum March 2017)
  - appropriate obscure utypes for access url and format columns
3. Better description of services



# SIAV2/SODA/Datalink in Aladin

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Data access Location: 00:41:28.03 +25:29:57.8 Frame: ICRS Projection: Sinus

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

califa.xml

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

★ dataproduct t...	dataproduct su...	calib level	obs collection	obs id	obs title	obs publisher ...	obs creator did	access url
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://dc.zah.u...
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://dc.zah.ur...
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://dc.zah.ur...
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://dc.zah.ur...
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://dc.zah.ur...
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://dc.zah.ur...
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://dc.zah.ur...
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://dc.zah.ur...
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://dc.zah.ur...
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://dc.zah.ur...
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://dc.zah.ur...
cube			CALIFA	califa/datadr3/CC	CALIFA COMB N...	ivo://org.gavo.dc/		http://dc.zah.ur...

select: [input field]  
from: -- All collectio... +

filter exp inside scan

100 sel / 100 src 261Mb

This cube, larger coverage lower resolution (size -1 bytes)

This cube, smaller coverage higher resolution (size -1 bytes)

SODA#sync-1.0 (size -1 bytes)

SODA#async-1.0 (size -1 bytes)

The full dataset. (size 143527680 bytes)

A preview for the dataset. (size -1 bytes)

98.12° x 98.12°

http://dc.zah.uni-heidelberg.de/getproduct?key=califa/datadr3/COMB/NGC0214.COMB.rscube.fits

# Contents

## SIASV2/SODA/Datalink handling in Aladin

1. Demo for CADC
2. CFHT Vizier
3. Conclusions

## Aladin's TAP clients

4. Generic tap client
5. Glu tap client
6. TAP Asynchronous queries
7. Loading TAP from directory tree
8. Conclusions

# Aladin's TAP clients

The screenshot displays the Aladin web interface. At the top, there is a menu bar with options: File, Edit, Image, Catalog, Overlay, Coverage, Tool, View, Interop, Help. Below the menu, a 'Data access' section shows a 'Location' field and a list of astronomical surveys: DSS, SDSS, 2MASS, WISE, GALEX, PLANCK, AKARI, XMM, Fermi, Gaia, Simbad, NED. The main view shows a large image of a galaxy with a white crosshair in the center. A 'Server selector' dialog box is open in the foreground, titled 'SIMBAD\_TAP'. It contains a 'Table' dropdown set to 'flux', 'Set ra, dec', 'Join', and 'Upload' buttons. The 'Select' section has a checked 'All' checkbox and 'Constraints: Add new' and 'Max rows: 100' options. A list of fields includes 'oidref', 'filter', 'flux', and 'flux\_prec', with 'flux' selected. Below this is a 'Refresh query' button, 'Check..', 'SYNC', and 'Async jobs>>' buttons. A SQL query is shown: 'SELECT TOP 100 \* FROM flux'. At the bottom of the dialog are 'Reset', 'Clear', 'SUBMIT', 'Close', and a help icon. On the right side, there is a vertical toolbar with icons for 'select', 'pan', 'dist', 'phot', 'draw', 'tag', 'moc', 'epoch', 'size', 'dens.', 'filter', 'zoom', 'cross', 'x/y', 'rgb', 'assoc', 'crop', 'cont', 'pixel', 'prop', and 'del'. To the right of the toolbar is a text box titled 'Imagine your eye looking through a stack of planes...' and a small map showing a coordinate grid. At the bottom right, there is a coordinate display: '19.29 52.70 +47.11.42.9' and '16.65' x 13.28'.

# Aladin's TAP clients

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Data access Location  Frame **ICRS** Projection **Sinus**

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

CDS/P/DSS2/color

Stack controls:

- select: the icon: show/hide a plane
- pan: size: change object size
- dist: zoom: adjust field size.
- phot: Opacity: adjust transparency.

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

server selector

Others File Watch FoV... Tools...

**SIMBAD\_TAP** ?

Construct your query, verify and execute.

Table: basic Set ra, dec Join Upload

Select:  All Constraints: Add new Max rows: 100

oid main\_id nbref otype\_txt otype

Target: 13 29 52.70 +47 11 39.7 Grab

Radius: 5.823' CIRCLE Add

Ra= 202.46958333333333 Dec= 47.19436111111111 Radi

Refresh query Check.. SYNC Async jobs>>

```
SELECT TOP 100 * FROM basic WHERE CONTAINS(POINT('ICRS', ra, dec),
CIRCLE('ICRS', 202.46958333333333, 47.194361111111111,
0.097050000000000001)) = 1
```

Reset Clear **SUBMIT** Close ?

16.65' x 10.79'

Search

coo bibcode	coo err angle	coo err maj	coo err maj pr...	coo err min	coo err min pr...	cd	coord	cd	dec	dec prec	qald
2008AJ....135.1...	32767		65535		65535	D	POSITION 202.48101		47.268616	8	
2008AJ....135.1...	32767		65535		65535	D	POSITION 202.50101		47.27734	8	
2008AJ....135.1...	32767		65535		65535	D	POSITION 202.50101		47.276955	8	
2003yCat.2246...	90	60.0	0	60.0	0	B	POSITION 202.49101		47.266167	6	
2008AJ....135.1...	32767		65535		65535	D	POSITION 202.49101		47.256634	8	
2008AJ....135.1...	32767		65535		65535	D	POSITION 202.43101		47.23032	8	
2008AJ....135.1...	32767		65535		65535	D	POSITION 202.45101		47.231064	8	
2008AJ....135.1...	32767		65535		65535	D	POSITION 202.46101		47.234024	8	
2008AJ....135.1...	32767		65535		65535	D	POSITION 202.44101		47.230105	8	

select from  All collectio... +

filter exp inside scan

18 23 55.51 +47 12 57.4  
16.65' x 10.79'

(c) 2017 Université de Strasbourg/CNRS - by CDS - Distributed under GNU GPL v3

100 sel / 100 src 38fps / 320Mb

# Contents

## SIASV2/SODA/Datalink handling in Aladin

1. Demo for CADC
2. CFHT Vizier
3. Conclusions

## Aladin's TAP clients

4. Generic tap client
5. Glu tap client
6. TAP Asynchronous queries
7. Loading TAP from directory tree
8. Conclusions

# Aladin's TAP clients

## A little about GLU...

The screenshot shows the 'Server selector' window in Aladin. The 'Image servers' panel on the left lists various servers, with 'Sloan' selected. The main area displays the 'SLOAN SDSS DR12 catalog' with a search form containing 'SAO70467' in the 'Target (ICRS, name)' field and '3°' in the 'Radius' field. A 'SUBMIT' button is visible. A modal window on the right provides details for the selected catalog:

**SLOAN SDSS DR12**

Description : SLOAN SDSS DR12 catalog  
Type : Catalog  
More info : <http://skyserver.sdss.org/dr12/en/tools/search/radial.aspx>  
Status :  
Identifier : SDSS-DR12.cat

GLU record:  
%A SDSS-DR12.cat  
%D SLOAN SDSS DR12 catalog  
%O CDS\*SLOAN  
%Z ALADIN  
%N 1473775682 2016/09/13 16:08:02  
%U [http://skyserver.sdss.org/dr12/en/tools/search/x\\_results.aspx?searchtool=Radial&cool](http://skyserver.sdss.org/dr12/en/tools/search/x_results.aspx?searchtool=Radial&cool)  
%P.D 1:Right Ascension  
%P.D 2:Declination  
%P.D 3:Radius (arcmin)  
%P.K 1:Target(RAd)  
%P.K 2:Target(DEd)  
%P.K 3:Field(RADIUS)  
%R Mime(text/xml)

Buttons at the bottom of the modal include 'More info...' and 'Close'.

# Aladin's TAP clients

- Glu

%Param.Description 5:Plx [mas](ex: >50)

%Param.DataType 5=char(OP,"I/337/gaia","I/337/tgasptyc")

%ADQL.Where 5=parallax \$5

%ADQL.Where

%ADQL.Select

%ADQL.From

Etc..

# Aladin's TAP clients

ALADIN

Data access Location  Frame  Projection

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

CDS/P/DSS2/color

Server selector

Others File Watch FOV... Tools...

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

Catalog servers: All, VizieR, SIMBAD, NED, TAP, SkyBot, Gaia, VO, Others..

Mode

Target (ICRS, name)  Grab co...

Radius

Table

Plx [mas](ex: >50)

Gmag (ex: 10..11)

pm limit [mas/yr]

Max records

Output columns

Plx uncertainty limit

Check... SYNC Async jobs>>

```
SELECT TOP 10 *
FROM gaiadr1.gai_source
WHERE 1=CONTAINS(POINT('ICRS', ra, dec), CIRCLE('ICRS', 202.47454166666666,
47.19291666666667, 0.0580666666666667))
```

Reset Clear **SUBMIT** Close ?

1' 16.65' x 10.79'

Adjust the visible area (click & drag + mouse wheel)

Search

source id	ra	dec	i	b	ecl lon	ecl lat	parallax	pmra	pmdec
155199062430...	202.484144	47.248132	104.885587	68.508368	175.087673	50.984074			
155199045679...	202.507075	47.241816	104.839758	68.507808	175.113608	50.988034			
155199042243...	202.498545	47.231777	104.843044	68.519335	175.115447	50.976502			
155199042243...	202.506651	47.230933	104.828377	68.517864	175.123328	50.97903			
155199042243...	202.509741	47.234572	104.827192	68.513687	175.122661	50.983209			
155199042243...	202.489942	47.234041	104.860133	68.519642	175.105815	50.974931			
155199042243...	202.503346	47.225037	104.827418	68.524164	175.125899	50.972932			
155199042243...	202.503065	47.225467	104.828372	68.523848	175.125254	50.97317			
155199042243...	202.4895	47.234743	104.854994	68.519918	175.10939	50.976811			

select  from -- All collectio... +

filter exp inside scan

epoch size dens. filter filter opac. zoom

Frame: ICRS

13 30 15.43 +47 11 36.0  
16.65' x 10.79'




# Aladin's TAP clients

**Data access** Location: 13:30:04.74 +47:13:58.6 Frame: ICRS Projection: Sinus

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

**CDSP/DSS2/color**



**Server selector**

Others | File | Watch | FoV... | Tools...

**Image servers**

- Aladin images
- SkyView
- UKIDSS
- Sloan
- DSS...
- VLA...
- Archives...
- Photo...
- Others...

**Catalog servers**

- All VizieR
- Simbad
- NED
- TAP
- SkyBot
- Gaia
- VO
- Others..

**Gaia DR1 (Gaia Collaboration, 2016)** Mode

Target (ICRS, name): 05 41 12.60 -02 15 16.8

Radius: 14'

Table: gaiadr1.gai\_source - Gaia Source data

Plx [mas](ex: >50):

Gmag (ex: 10..11):

pm limit [mas/yr]:

Max records: TOP 10 - A few

Output columns: \*- Default columns

Plx uncertainty limit:

```
SELECT TOP 10 *
FROM gaiadr1.gai_source
WHERE 1=CONTAINS(POINT('ICRS', ra, dec), CIRCLE('ICRS', 85.3025,
-2.2546666666666666, 0.23333333333333334))
```

**Server status report** TAP

Description : Gaia DR1 (Gaia Collaboration, 2016)  
 Type : Catalog  
 Status :  
 Identifier : GaiaGluTAPARI

GLU record:  
 %ActionName GaiaGluTAPARI  
 %Description Gaia DR1 (Gaia Collaboration, 2016)  
 %Owner CDS:aladin  
 %DistribDomain ALADIN  
 %Aladin.Protocol TAPv1  
 %VersionNumber 1475571165 2016/10/04 10:52:35  
 %Url http://gaia.ari.uni-heidelberg.de/tap  
 %Param.Description \$1=Target  
 %Param.DataType \$1=Target(RAD,gaiadr1.gai\_source,gaiadr1.tgas\_source)  
 %Param.Description \$2=Declination  
 %Param.DataType \$2=Target(DEd,gaiadr1.gai\_source,gaiadr1.tgas\_source)  
 %Param.Description \$3=Radius  
 %Param.DataType \$3=Field(RADIUSd,gaiadr1.gai\_source,gaiadr1.tgas\_source)  
 %ADQL.Where \$1=1=CONTAINS(POINT('ICRS', ra, dec), CIRCLE('ICRS', \$1, \$2, \$3))  
 %Param.Value \$3=0.17  
 %Param.Description \$4=Table  
 %Param.DataType \$4=Tables(gaiadr1.gai\_source,gaiadr1.tgas\_source)  
 %Param.Value \$4=gaiadr1.gai\_source - Gaia Source data  
 %Param.Value \$4=gaiadr1.tgas\_source - TGAS supplemented with BT and VT magnitudes  
 %ADQL.TAPTables gaiadr1.gai\_source gaiadr1.tgas\_source  
 %ADQL.From \$4=\$4  
 %Param.Description \$5=Plx [mas](ex: >50)  
 %Param.DataType \$5=char(OP,gaiadr1.gai\_source,gaiadr1.tgas\_source)  
 %ADQL.Where \$5=parallax \$5  
 %Param.Description \$6=Gmag (ex: 10..11)  
 %Param.DataType \$6=char(OP,gaiadr1.gai\_source,gaiadr1.tgas\_source)  
 %ADQL.Where \$6=phot\_g\_mean\_mag \$6  
 %Param.Description \$7=pm limit [mas/yr]  
 %Param.DataType \$7=char(gaiadr1.gai\_source,gaiadr1.tgas\_source)  
 %ADQL.Where \$7= SQRT(POWER(pmRA,2)+POWER(pmdec,2))>\$7  
 %Param.Description \$8=Max records  
 %Param.Value \$8=TOP 10 - A few

source id	ra	dec	l	b	plx	pmra	pmdec	g	g_p	g_r	g_b	g_bp	g_br	g_rp	g_rr	g_bp1	g_br1	g_rp1	g_rr1
155199062430..	202.484144	47.248132	104.885587	68.															
155199045679..	202.507075	47.241816	104.839758	68.															
155199042243..	202.498545	47.231777	104.843044	68.															
155199042243..	202.506651	47.230933	104.828377	68.															
155199042243..	202.509741	47.234572	104.827192	68.	51.3687	175.122681	50.983209												
155199042243..	202.489942	47.234041	104.860133	68.	51.9642	175.105815	50.974931												
155199042243..	202.503346	47.225037	104.827418	68.	5241.64	175.125899	50.972932												
155199042243..	202.503065	47.225467	104.828372	68.	523848	175.125254	50.97317												
155199042243..	202.4925	47.234742	104.854994	68.	51.9910	175.10999	50.973611												

+

filter exp inside scan

13 30 15.43 +47 11 56.0  
16.65' x 10.79'

# Aladin's TAP clients

Or choose an already submitted job:

Job URL

Delete on closing Aladin

Job details:

Job created to execute query: **null**  
Job ID: 1487864353616  
Run ID: null  
URL: **http://simbad.u-strasbg.fr:80/simbad/sim-tap/async/1487864353616**  
Owner ID: anonymous  
Phase: COMPLETED  
Quote: null  
Creation time: null  
Start time: 2017-02-23T15:39:13Z  
End time: 2017-02-23T15:39:13Z  
Execution duration: 360000  
Destruction time: 2017-04-14T21:44:17Z  
Parameters: {tapexecreport={"formattingduration":2,"uploadduration":-1,"executionduration":2,"success":true,"  
Results: {result=http://simbad.u-strasbg.fr:80/simbad/sim-tap/async/1487864353616/results/result}

Load on Aladin:

# Contents

## SIASV2/SODA/Datalink handling in Aladin

1. Demo for CADC
2. CFHT Vizier
3. Conclusions

## Aladin's TAP clients

4. Generic tap client
5. Glu tap client
6. TAP Asynchronous queries
7. Loading TAP from directory tree
8. Conclusions

Data access

Location

Frame

Projection



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

- ▼ Collections → 12154
  - Image → 300
  - Data base → 2
  - Catalog → 17110
  - Cube → 6
  - Outreach → 1
  - Unsupervised → 2035

# Aladin's TAP clients



- Loading TAP from directory tree...

**select** Imagine your eye looking through a stack of planes.

**pan** Each plane contains its own data set: image, catalog, graphical overlays...

**zoom** You see the combination of them.

**dist** Use File->Open for discovering all other data, or clic & drag your own files.

**phot**

**draw**

**tag**

**spect**

**filter**

**cross**

**x-y**

**rgb**

**assoc**

**crop**

**cont**

**pixel**

**prop**  **DSS colored**

**del**

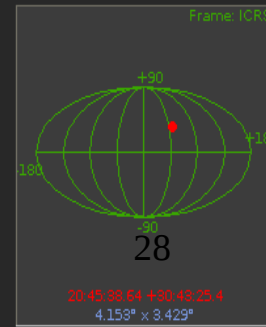
epoch -

size -

dens. -

opac. -

zoom -



select

from

Data access

Location 20:52:28.84 +30:31:50.0

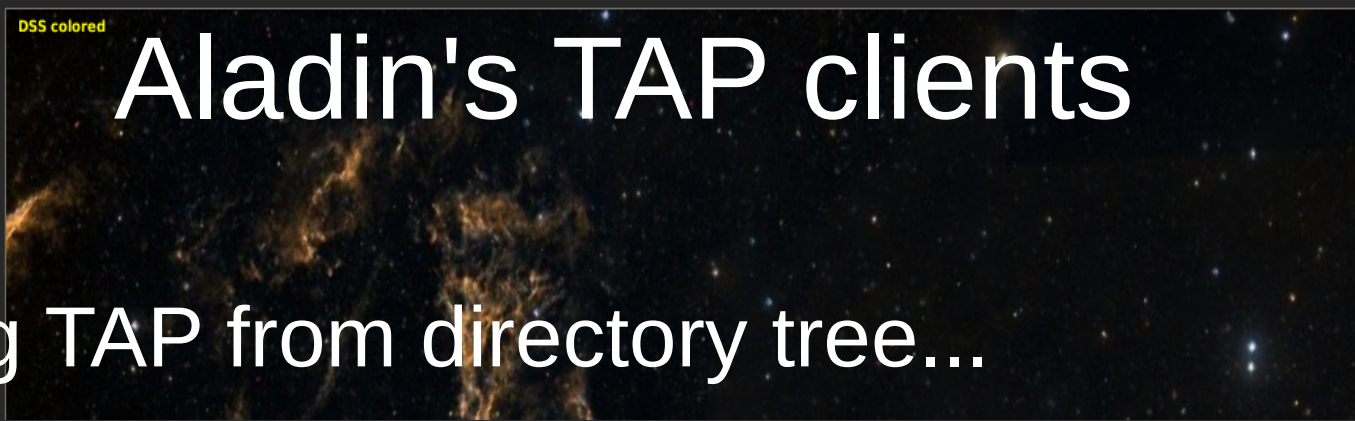
Frame ICRS

Projection Sinus



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

- Collections → 19454
  - Image → 300
  - Data base → 2
  - Catalog → 17110
  - Cube → 6
  - Outreach → 1**
  - Unsupervised → 2035



- select
  - pan
  - zoom
  - dist
  - phot
  - draw
  - tag
- Imagine your eye looking through a stack of planes.  
Each plane contains its own data set: image, catalog, graphical overlays...  
You see the combination of them.  
Use File->Open for discovering all other data, or clic & drag your own files.

# • Loading TAP from directory tree...

Directory tree

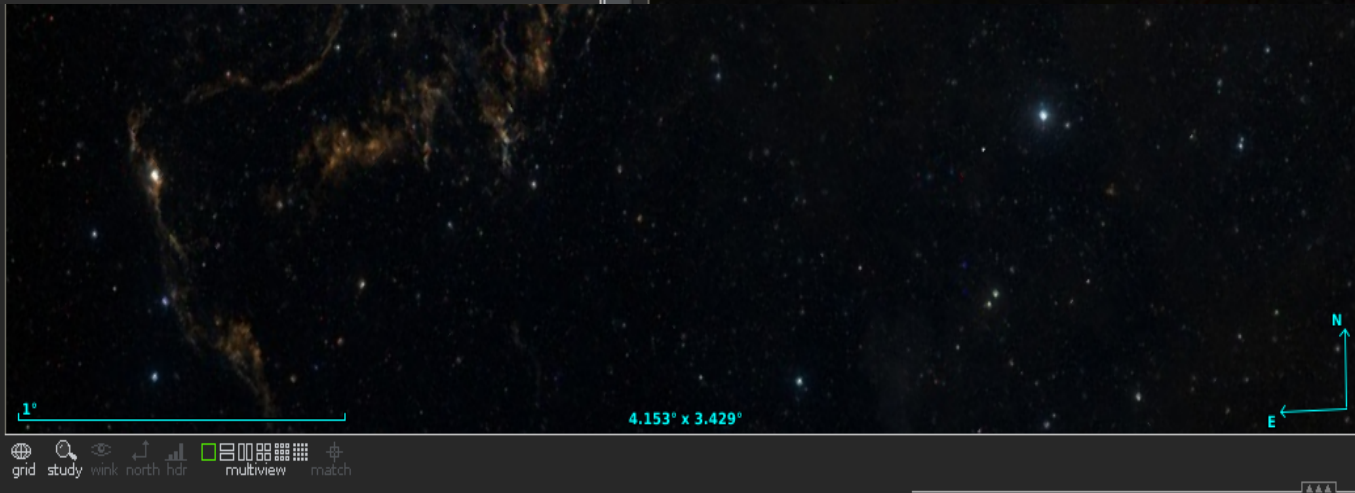
Location 10:18:26.54 -27:01:20.3

- Data collections → 159 / 19449
  - Data base → 1 / 2
    - SIMBAD Astronomical Database**
  - Catalog → 132 / 17091
    - CDS VizieR → 132 / 17091
      - II-Photometric Data
        - Photoelectric observations
      - III-Spectroscopic Data
        - Spectrophotometry
        - Radial Velocities of Cepheids
        - Catalogue of neutral He lines of B-stars
        - Catalogue of H line profiles of 235 B-F stars

**★New HiPS** **SIMBAD Astronomical Database (more...)**  
 Provenance: CNRS/Unistra  
 Sky coverage: 19.06% Pub.year: 2000

HiPS  Cone search  MOC search  TAP +  MOC

**CDS/Simbad (more...)** **(B)** **Load** **Close**



**DSS colored**

prop

epoch - [slider]

size - [slider]

dens. - [slider]

opac. - [slider]

zoom - [slider]

Frame: ICRS

20 45 38.64 +30 43 25.4  
4.153° x 3.429°

Data access

Location

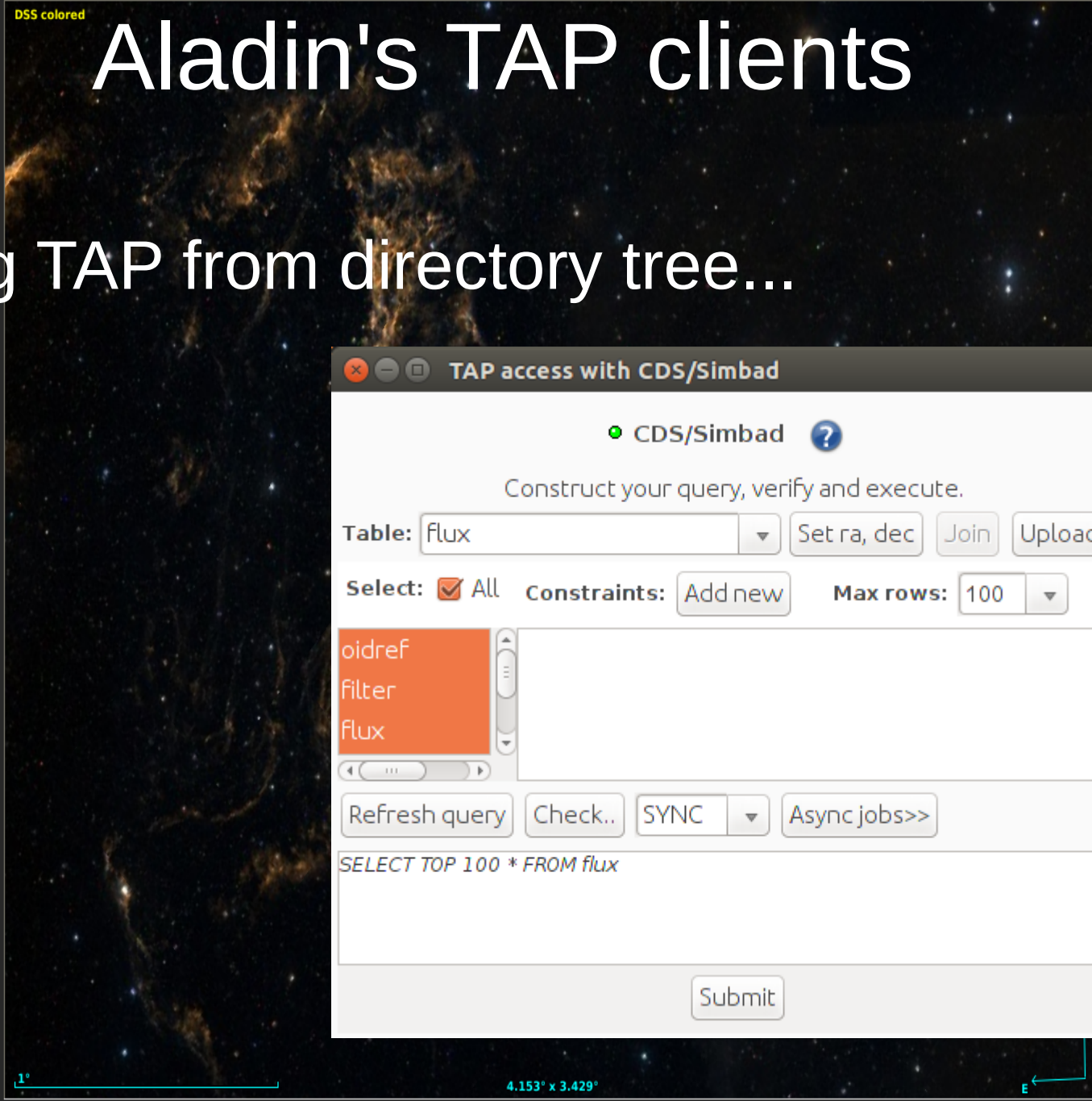
Frame

Projection



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

- Collections → 19454
  - Image → 300
  - Data base → 2
  - Catalog → 17110
  - Cube → 6
  - Outreach → 1**
  - Unsupervised → 2035



- select
  - pan
  - zoom
  - dist
  - phot
  - draw
  - tag
- Imagine your eye looking through a stack of planes.  
Each plane contains its own data set: image, catalog, graphical overlays...  
You see the combination of them.  
Use File->Open for discovering all other data, or clic & drag your own files.

- Loading TAP from directory tree...

TAP access with CDS/Simbad

● CDS/Simbad ?

Construct your query, verify and execute.

Table:

Select:  All Constraints:  Max rows:

oidref

filter

flux

SELECT TOP 100 \* FROM flux

DSS colored

epoch -

size -

dens. -

opac. -

zoom -

Frame: ICRS

+30  
+18  
-30  
30

20 45 38.64 +30 31 25.4  
4.153° x 3.429°

select

from

Data access

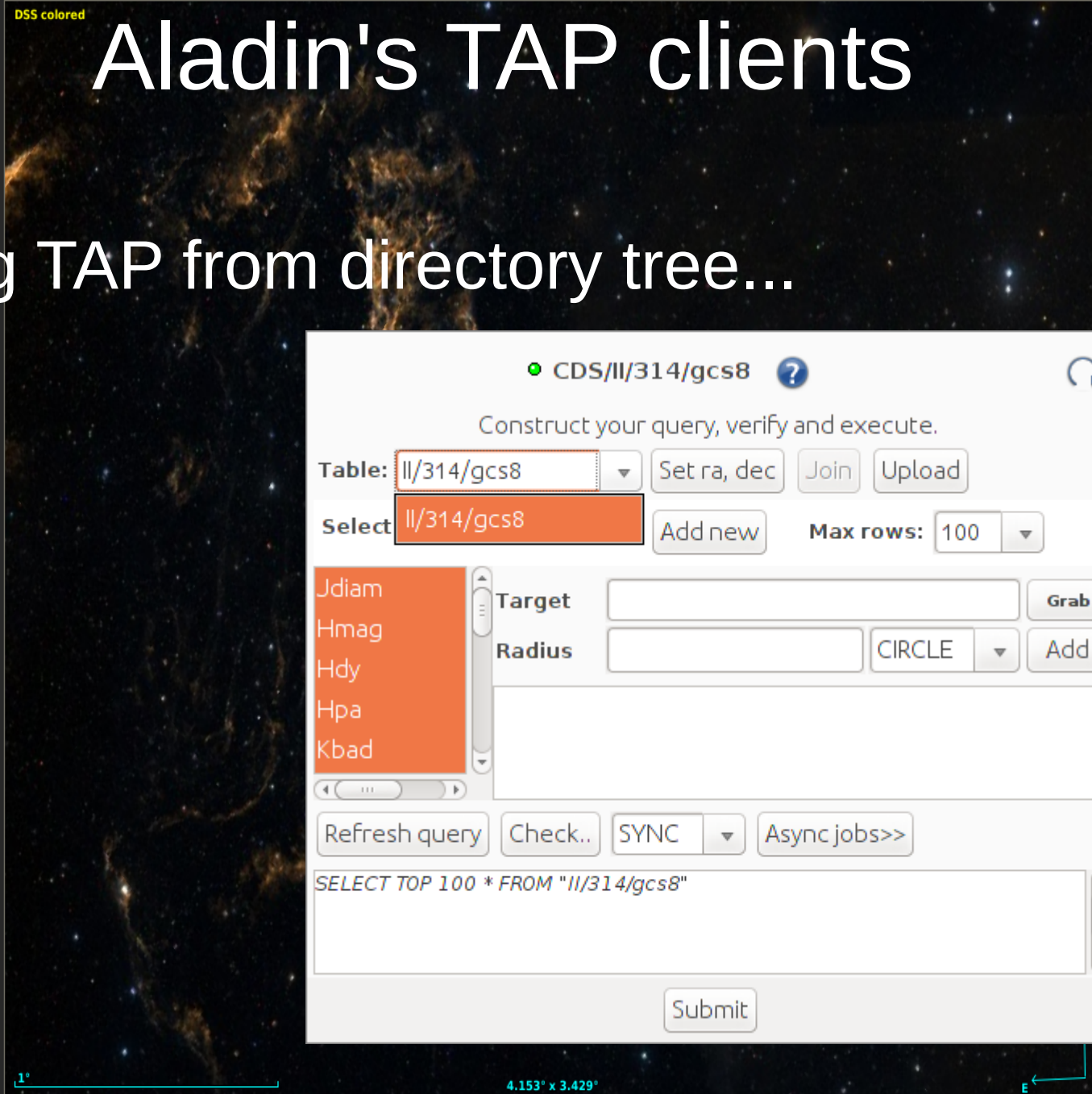
Location 20:52:28.84 +30:31:50.0

Frame ICRS

Projection Sinus

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

- Collections → 19454
  - Image → 300
  - Data base → 2
  - Catalog → 17110
  - Cube → 6
  - Outreach → 1**
  - Unsupervised → 2035



# Aladin's TAP clients

- Loading TAP from directory tree...

CDS/II/314/gcs8 ?

Construct your query, verify and execute.

Table:

Select:   Max rows:

Jdiam	Target	<input type="text"/>	<input type="button" value="Grab"/>
Hmag	Radius	<input type="text"/>	<input type="button" value="Add"/>
Hdy			
Hpa			
Kbad			

```
SELECT TOP 100 * FROM "II/314/gcs8"
```

**select**  
Imagine your eye looking through a stack of planes.

**pan**  
Each plane contains its own data set: image, catalog, graphical overlays...

**zoom**  
You see the combination of them.

**dist**  
Use File->Open for discovering all other data, or clic & drag your own files.

**phot**

**draw**

**tag**

**DSS colored**

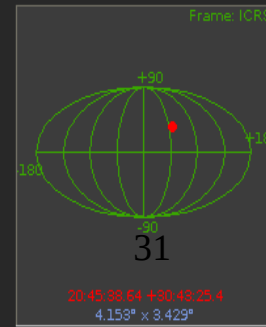
epoch -

size -

dens. -

opac. -

zoom -



# Contents

## SIASV2/SODA/Datalink handling in Aladin

1. Demo for CADC
2. CFHT Vizier
3. Conclusions

## Aladin's TAP clients

4. Generic tap client
5. Glu tap client
6. TAP Asynchronous queries
7. Loading TAP from directory tree
8. Conclusions



# Conclusions

- Improve usability
  - Using of interface and/or writing GLU records
  - Swapping between GLU and generic TAP forms
  - Different modes coming up
- Features to be added
  - Join, Glu upload
  - TAP Async query job saving
- MultiTAP

# Aladin's TAP clients

The screenshot shows the GaiaGluTAPARI web interface. At the top, there are navigation tabs: "Others", "File", "Watch", "FOV...", and "Tools...". The main window title is "GaiaGluTAPARI" with a help icon. Below the title, the instruction "Construct your query, verify and execute." is displayed. The interface includes a "Mode" dropdown menu with options "GLU" and "GENERIC". A text input field contains "gaiadr1.tgas\_source" and a "Set ra,..." button. Below this, there are controls for "Select:  All", "Constraints: Add new", and "Max rows: 100". A list of table columns is shown on the left, with "hip" selected. To the right of the list are "Target" and "Radius" input fields, a "Grab" button, and a "CIRCLE" dropdown with an "Add" button. At the bottom of the main area are buttons for "Refresh query", "Check..", "SYNC", and "Async jobs>>". A text area at the bottom contains the SQL query: `SELECT TOP 100 * FROM gaiadr1.tgas_source`. The interface is surrounded by a sidebar with "Image servers" (Aladin images, SkyView, UKIDSS, Sloan, DSS..., VLA..., archives..., Proto..., others...) and "Catalog servers" (All vizier, SIMBAD, NED, TAP, Ace SkyBot, Gaia, VO, others...). At the very bottom, there are "Reset", "Clear", "SUBMIT", "Close", and a help icon.

# Conclusions

- Improve usability
  - Using of interface and/or writing GLU records
  - Swapping between GLU and generic TAP forms
  - Different modes coming up
- Features to be added
  - Join, Glu upload
  - TAP Async query job saving
- MultiTAP

Data access

Location 20:52:28.84 +30:31:50.0

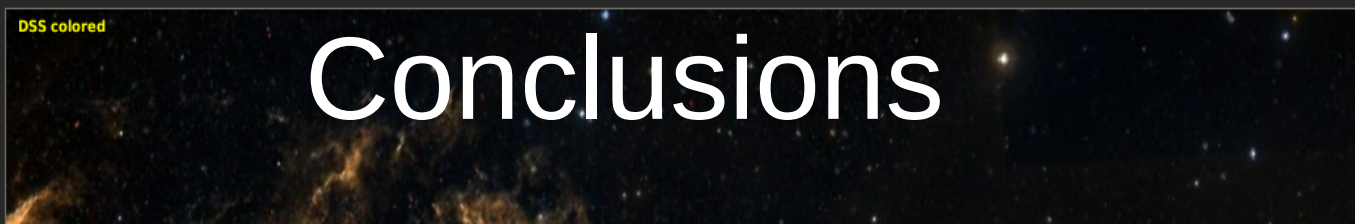
Frame ICRS

Projection Sinus



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

- ▼ Collections → 19454
  - Image → 300
  - Data base → 2
  - Catalog → 17110
  - Cube → 6
  - Outreach → 1
  - Unsupervised → 2035



Imagine your eye looking through a stack of planes. Each plane contains its own data set: image, catalog, graphical overlays... You see the combination of

select  
pan  
zoom

Aladin v9.6 \*\*\* PROTOTYPE VERSION (based on v9.620) \*\*\*

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Data access → 51 / 19589

- ▼ Collections → 51 / 19589
  - ▼ Catalog → 28 / 17184
    - ▼ II-Photometric Data → 8 / 308
      - ▼ UKIDSS-DR9 LAS, GCS and DXS Surveys (Lawrence+ 2012) → 3
        - UKIDSS-DR9 Deep Extragalactic Survey (on a total of 3,003,190 sources)
        - UKIDSS-DR9 Galactic Clusters Survey (on a total of 54,467,123 sources)
        - UKIDSS-DR9 Large Area Survey (on a total of 1,000,000 sources)
      - ▼ UKIDSS-DR8 LAS, GCS and DXS Surveys (Lawrence+ 2012) → 3
        - UKIDSS-DR8 Deep Extragalactic Survey (on a total of 3,003,190 sources)
        - UKIDSS-DR8 Galactic Clusters Survey (on a total of 54,467,123 sources)
        - UKIDSS-DR8 Large Area Survey (total of 1,000,000 sources)
      - UKIDSS-DR6 Galactic Plane Survey (Lucas+ 2011)
      - UKIDSS-DR7 Large Area Survey (Lawrence+ 2011)
    - ▼ Journal table → 20 / 15697
      - ▼ A+A → 1 / 4144
        - Stellar clusters from UKIDSS Galactic Plane Survey (Solin+, 2012) (clustered)

Location 03:06:34.20 +17:39:37.0

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



3 data sets selected

Multiple cone search +  multiMOCs  MOC union  MOC intersection

CDS/II/314/dxs8, CDS/II/314/gcs8, CDS/II/314/las8

Load Close

select

from -- All collections --



size -  
del dens. -  
opac. -  
zoom -

Frame: ICRS

36

20 45 38.64 +30 43 25.4  
4.153° x 3.429°

# Conclusions

- Improve usability
  - Using of interface and/or writing GLU records
  - Swapping between GLU and generic TAP forms
  - Different modes coming up
- Features to be added
  - Join, Glu upload
  - UWS job saving
- MultiTAP

# Thank you!

<http://aladin.u-strasbg.fr/java/AladinProto.jar>