

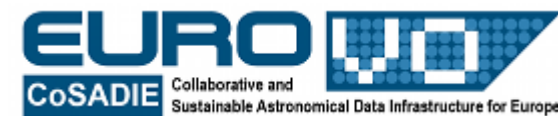


ObstapQuery, a TAP interface plugin in Aladin:

application to an experimental Obstap service for images in VizieR

M.Marcot and F.Bonnarel

Acknowledgements to L.Michel,
P.Fernique, S.Derrière, T.Boch, G.Landais



Experimental Obstop service for images in VizieR

- ▶ Images associated to catalogues in Vizier.
- ▶ Images integrated in Saada database.
- ▶ 61 catalogues, 9925 images with FITS WCS
 - Development of a Python script to populate the ObsCore table from the Saada image database (FITS Keywords stored in the database)
 - Fast development in parallel to the development presented by Gilles Landais in Saada
 - TAP interface provided by Saada

Querying ObsTap service from Aladin

- ▶ Create a plugin able to retrieve TAP_SCHEMA from any TAP service
- ▶ Choose the table
- ▶ Select output Fields
- ▶ Guided construction of ADQL query constraints
 - From examples
 - By position
 - By generic field constraint generation

ObsTAP Query

File Option Help

Select

- Select all
- dataproduct_type
- calib_level
- target_name
- target_class
- obs_id
- obs_collection
- obs_creator_name
- obs_publisher_did
- bib_reference
- data_rights
- access_url
- access_format
- access_estsize
- DataLink
- s_ra
- s_dec
- s_fov
- s_region
- s_resolution
- s_ucd
- t_min
- t_max
- t_exptime
- t_resolution
- t_calib_status
- t_stat_err
- em_unit
- em_min

Constraints

obs_collection = VI/112 Remove

Examples

Preselected fields for only cube datasets
Preselected fields for datasets with central position in a north cap of 10 degrees radius (s_dec > +80)
Preselected fields for datasets with observation date between modified julian day 55000 and 55100
Preselected fields for datasets with minimal wavelength between 2E-4 and 9E-4
Preselected fields for datasets with observation date between modified julian day 53000 and 54000, m

OK Cancel

Resulting query

Click on 'Generate query', modify the query, then perform it.


```
SELECT *
FROM ivoa.ObsCore
WHERE obs_collection = 'VI/112';
```

Generate query
Perform query
Clear all
Help

Examples
Position
Add a constraint on position
Generic field's constraint


From

ivoa.ObsCore



FR 16:05 12/10/2014

A couple of queries

- ▶ Load all the images obscure records
 - ▶ Display the Obscore Table in Aladin for a subset of Images
 - ▶ Load an image
 - ▶ Load images obscure records using an example
- 

ObsTAP Query

File Option Help

Select

- Select all
- dataproduct_type
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- target_name
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- access_url
- access_format
- access_estsize
- DataLink
- s_ra
- s_dec
- s_fov
- s_region
- s_resolution
- s_ugd
- t_min
- t_max

Constraints

Examples

Position

Generic field's constraint

Resulting query

Click on 'Generate query', modify the qu...

```
SELECT *
FROM ivoa.ObsCore;
```

Generate query

Perform query

Clear all

Help

From

ivoa.ObsCore

Frame XY im...

select
pan
dist
phot
draw
tag
filter
cross
xy
rgb

sync?REQUEST=dc
DSS colored

epoch - [] +
size - [] +
opac - [] +
zoom - [] +

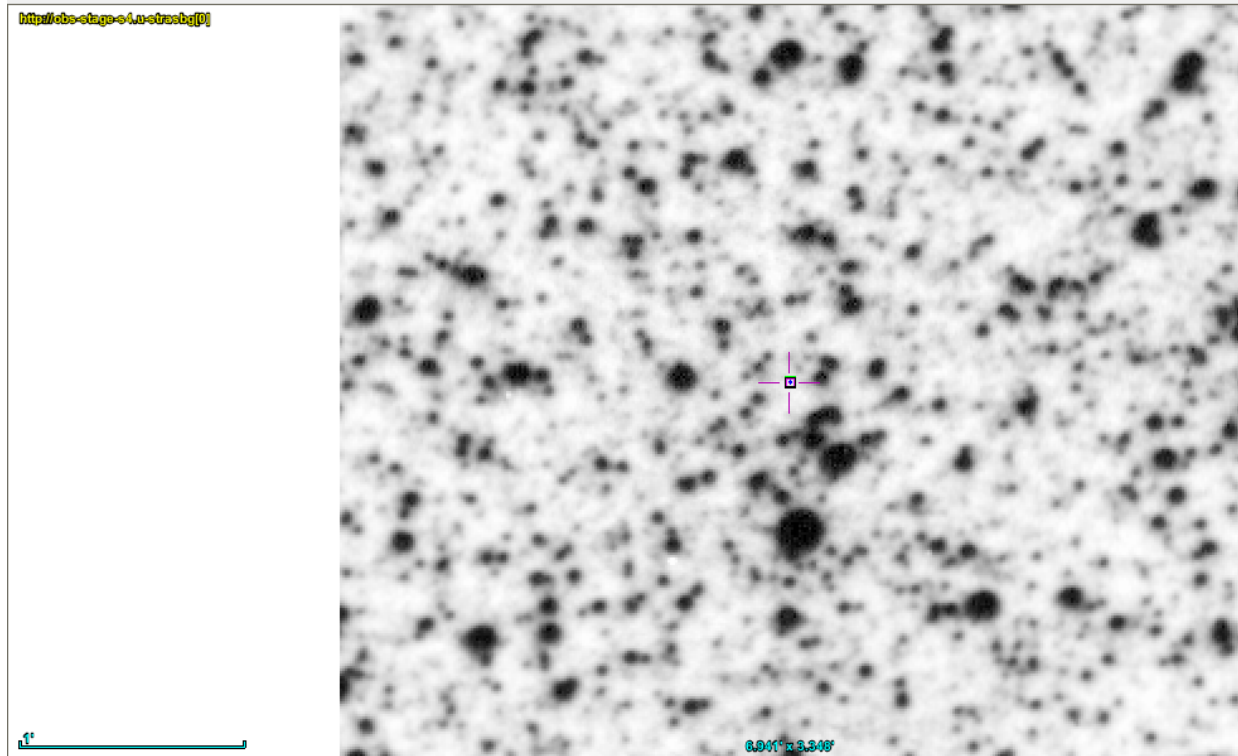
Frame: XY image

+180 +90
-90 -180

00:47:28.66 -30:56:19.5
261.1° x 125.4°

Search []

obs coll...	obs crea...	obs publ...	bib refe...	data rig...	access url	access f...	access e...	datalink	s ra	s dec
V/127A		ivo://cd...		public	http://o...	image/fits	35802		267.1736...	-25.1927...
V/127A		ivo://cd...		public	http://o...	image/fits	454557		267.7515...	-29.5640...
V/127A		ivo://cd...		public	http://o...	image/fits	488926		272.8344...	-25.9595...
V/127A		ivo://cd...		public	http://o...	image/fits	520373		267.9339...	-30.2130...



Tools and filters panel:

- select, pan, dist, phot, draw, tag, filter, cross, xy, rgb, epoch, size, opac, crop, zoom
- Layers:
 - http://obs-stage-s4
 - http://obs-stage-s4
 - http://obs-stage-s4
 - http://obs-stage-s4
 - sync?REQUEST=dc
 - DSS colored
- cont, pixel, prop, del

	oidsaada	sky pixe...	dataprod...	calib le...	target name	target c...	obs id	obs coll...	obs crea...	obs publi...	bib refe...	data rig...	access url	access f...	access e...	datalink	s ra	s dec	
<input type="checkbox"/>	http://o...	14173999	image	1			1761 ha	V/127A		ivo://cd...		public	http://o...	image/fits	511144		272.0265...	-29.2199...	0.1
<input type="checkbox"/>	http://o...	14178624	image	1			1777 sr	V/127A		ivo://cd...		public	http://obs-stage-s4.u-strasbg.fr:8080/vizier2/getproduct?oid=8810169				269.8003...	-26.5065...	0.1
<input type="checkbox"/>	http://o...	13826982	image	1			1683 ha	V/127A		ivo://cd...		public	http://o...	image/fits	451032		264.5678...	-27.8022...	0.1
<input type="checkbox"/>	http://o...	13824012	image	1			1531 ha	V/127A		ivo://cd...		public	http://o...	image/fits	451032		264.5678...	-27.8022...	0.1

ObsTAP Query

File Option Help

Select

- s_fov
- s_region
- s_resolution
- s_ucd
- t_min
- t_max
- t_exptime
- t_resolution
- t_calib_status
- t_stat_err
- em_unit
- em_min
- em_max
- em_res_power
- em_resolPower_min
- em_resolPower_max
- em_resolution
- em_stat_err
- o_ucd
- o_calib_status
- o_stat_err
- pol_stat
- facility_name
- instrument_name

Constraints

t_min BETWEEN 55000 AND 55100 Remove

Examples

Resulting query

Click on 'Generate query', modify the query, then perform it.

```
SELECT dataproduct_type, target_name, obs_id, obs_collection, access_url,
FROM ivoa.ObsCore
WHERE t_min BETWEEN 55000 AND 55100;
```

Generate query

Perform query

Clear all

Help

Examples

Preselected fields for only cube datasets

Preselected fields for datasets with central position in a north cap of 10 degrees radius (s_dec > +80)

Preselected fields for datasets with observation date between modified julian day 55000 and 55100

Preselected fields for datasets with minimal wavelength between 2E-4 and 9E-4

Preselected fields for datasets with observation date between modified julian day 53000 and 54000, m

OK Cancel

Frame: XY im...

select, pan, dist, phot, draw, tag, filter, cross, xy, rgb, sync?REQUEST=dc, DSS colored

epoch, size, opac, zoom

Frame: XY image

cont, pixel, prop, del

00:47:28.66 -30:56:19.5
261.1° x 125.4°

Search

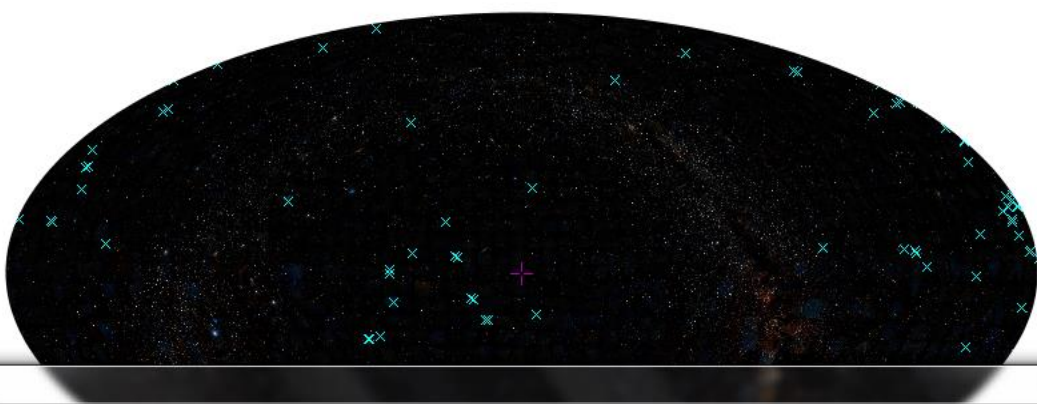
rig...	access url	access f...	access e...	datalink	s ra	s dec
ic	http://o...	image/fits	35802		267.1736...	-25.1927...
	http://o...	image/fits	454557		267.7515...	-29.5640...
	http://o...	image/fits	488926		272.8344...	-25.9595...
	http://o...	image/fits	520373		267.9339...	-30.2130...

TIP: Adjust the contrast easily => click&drag right mouse button

DEMO

- ▶ Select records of Obscore for catalog (collection) VI/112 . It's a table of image of galaxies.
- ▶ Load one of the image within Aladin.

DSS colored



Aladin toolbar icons:

- select
- pan
- dist
- phot
- draw
- tag
- filter
- cross
- xy
- rgb
- epoch
- size
- opac
- crop
- zoom
- cont
- pixel
- prop
- del

sync?REQUEST=dc
 sync?REQUEST=dc
 DSS colored

ObsTAP Query

Select

- Select all
- dataproduct_type
- calib_level
- target_name
- target_class
- obs_id
- obs_collection
- obs_creator_name
- obs_publisher_id
- bib_reference
- data_rights

From

Constraints

obs_collection = VI/112 Remove

Examples

Position

Generic field's constraint

Resulting query

Click on 'Generate query', modify the query, then perform it.

```
SELECT dataproduct_type, target_name, obs_id, obs_collection, access_url, access_format
FROM ivoa.ObsCore
WHERE obs_collection = 'VI/112';
```

Generate query

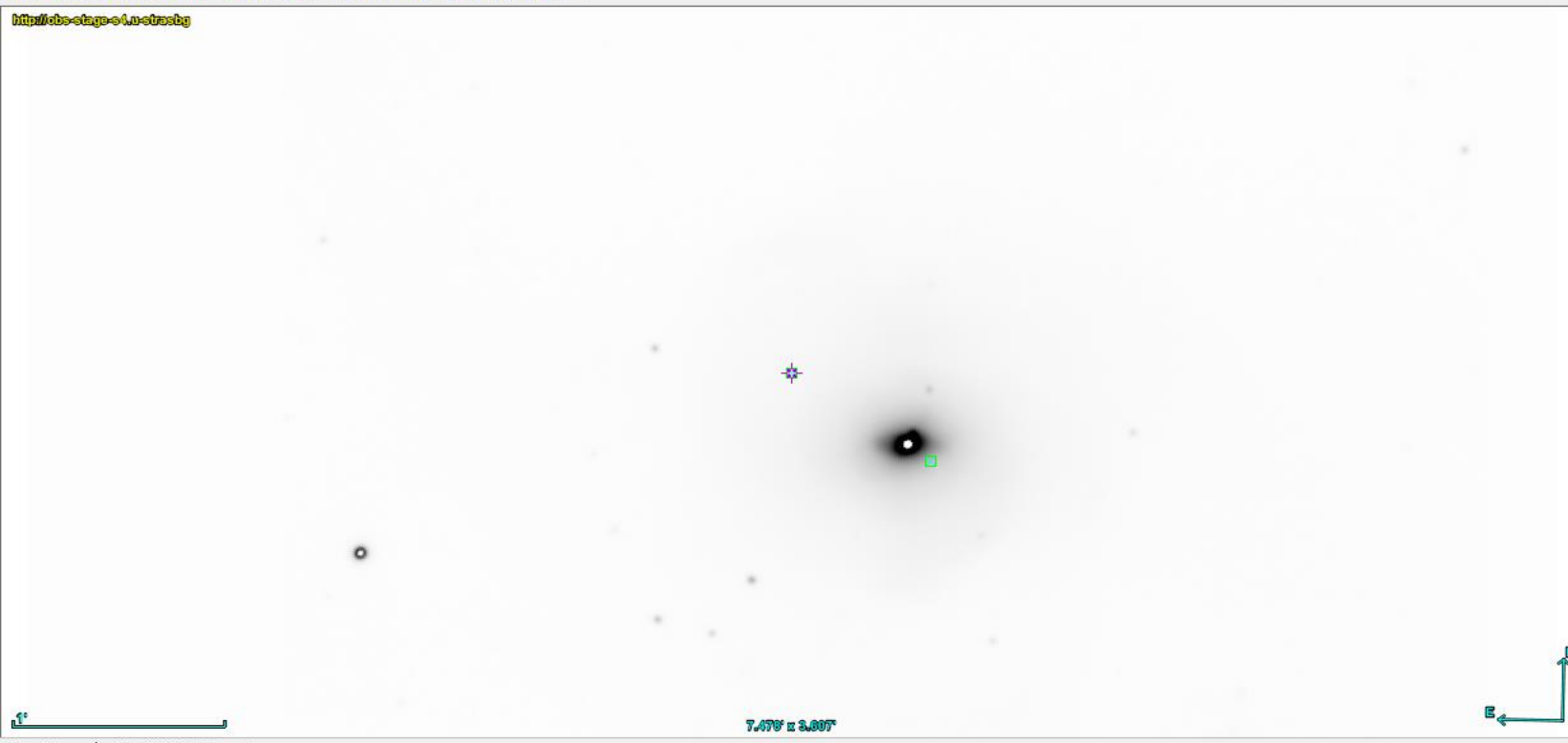
Perform query

Clear all

Location 23:39:56.49 -12:17:09.8

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

http://obs-stage-s4.u-strasbg



select
pan
dist
phot
draw
tag
filter
cross
xy
rgb
epoch - [slider]
size - [slider]
opac - [slider]
crop zoom - [slider]
cont
pibxl
prop
del

http://obs-stage-s4
sync?REQUEST=dc
sync?REQUEST=dc
DSS colored

7.225' x 7.225'

grid wink north multiview match

Results - access_url - URL used to access dataset

Search [input] [up] [down]

dataprod...	target name	obs id	obs coll...	access url	access f...	access e...	s ra	s dec	s fov	s region	s resolu...
image	ngc7727h...	VI/112	VI/112	http://o...	image/fits	7388769	354.9741...	-12.2933...	0.12042	FoV	1.338E-4
image	ngc7727h...	VI/112	VI/112	http://obs-stage-s4.u-strasbg.fr:8080/vizier2/getproduct?oid=881298409779101781			354.9741...	-12.2933...	0.12042	FoV	1.338E-4
image	ngc7727b	VI/112	VI/112	http://o...	image/fits	9008135	354.9741...	-12.2933...	0.12042	FoV	1.338E-4
image	ngc7727k	VI/112	VI/112	http://o...	image/fits	4293707	354.9741...	-12.2933...	0.12042	FoV	1.338E-4
image	ngc7727ha	VI/112	VI/112	http://o...	image/fits	11972863	354.9741...	-12.2933...	0.12042	FoV	1.338E-4

http://obs-stage-s4.u-strasbg.fr:8080/vizier2/getproduct?oid=881298409779101781

6 sel / 10277 src 3fps / 60Mb

