ASTRODEEP

Unveiling the power of the deepest images of the Universe

WP7 – Dissemination

Sébastien Derriere

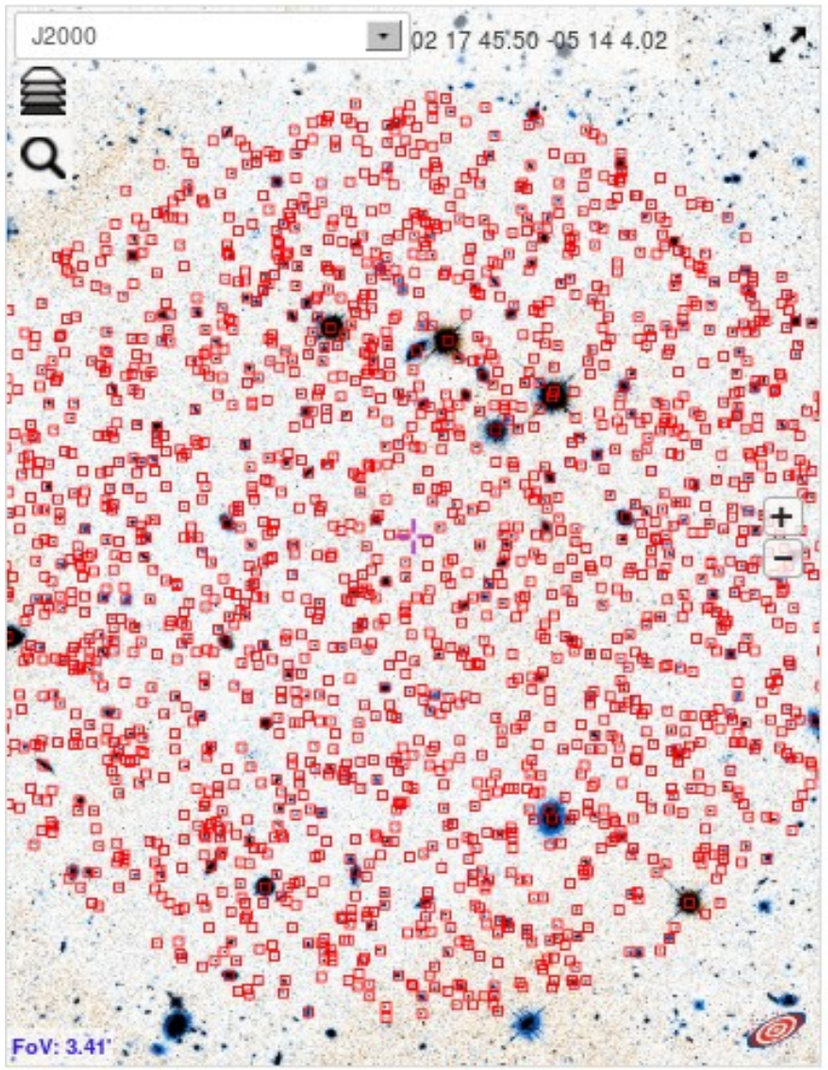
ASTRODEEP data dissemination

- Through CDS services (VizieR catalogues)
- Dedicated portal (interactive widgets)
- VO technologies

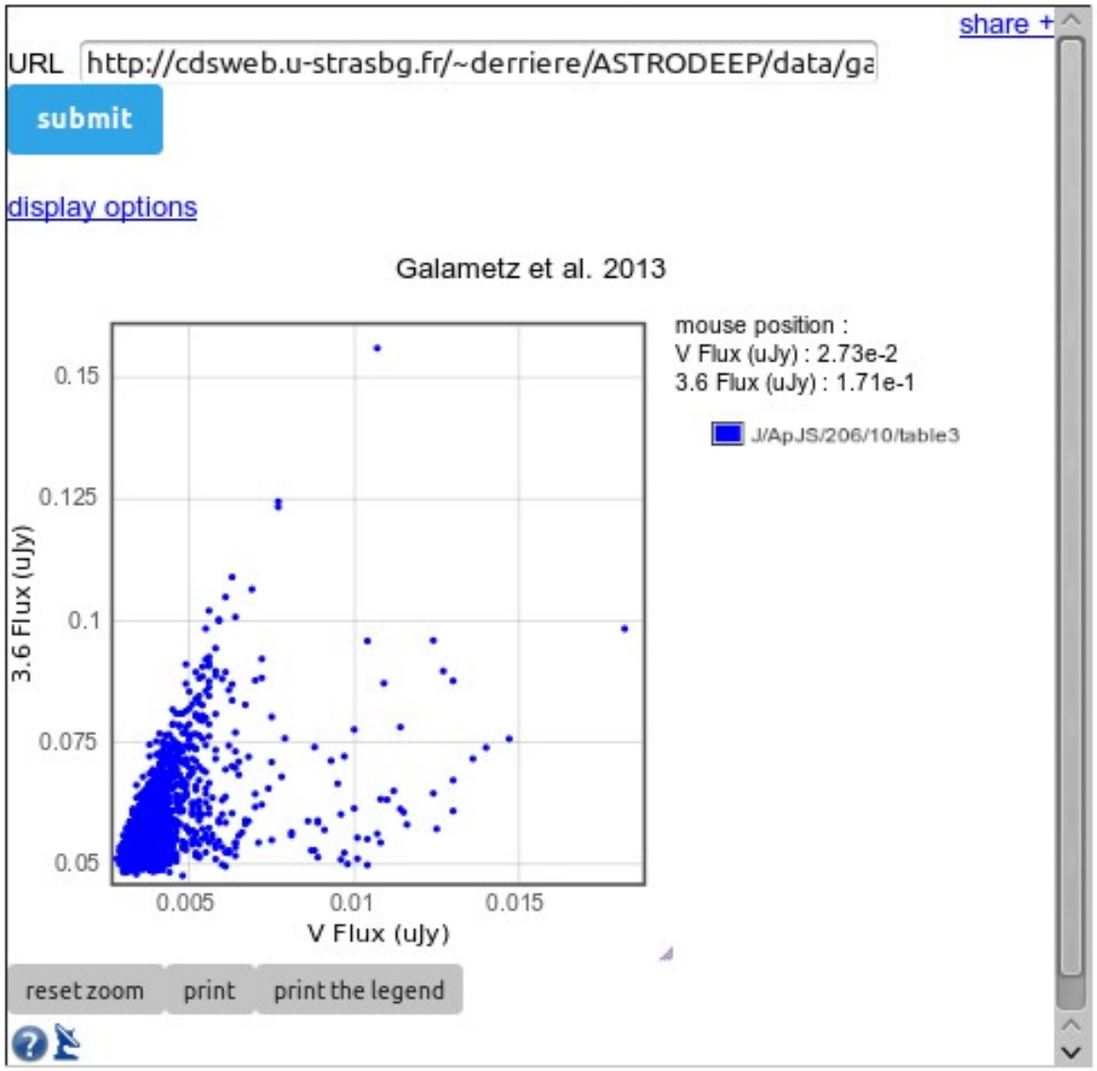
Preliminary tests in 1st RP

Analysis of CANDELS data

This page demonstrates how various kind of data can be integrated in the same web page for data analysis, quality checking, exploration, ... UDS Field



Various image surveys can be displayed as HiPS surveys. Higher resolution details get downloaded as we zoom in on the view.



Full	_r arcmin	_RAJ2000 deg	_DEJ2000 deg	recno	Seq	RAJ2000 deg	DEJ2000 deg	Hlim mag	Q	CStar	SED	uFlux uJy	e_ uJy	BFlux uJy	e_ uJy	VF u
1	0.0180	034.445931	-05.237783	6762	6762	034.4459305	-05.2377832	28.2217	0	0.070	SED	0.1082	0.0076	0.1232	0.0040	0.13
2	0.0802	034.445896	-05.238835	6652	6652	034.4458960	-05.2388351	28.3169	0	0.000	SED	0.3953	0.0077	0.5218	0.0040	0.56
3	0.0878	034.444457	-05.238012	6684	6684	034.4444573	-05.2380124	28.3090	0	0.370	SED	0.0025	0.0066	0.0486	0.0033	0.07
4	0.1022	034.446013	-05.235807	7112	7112	034.4460129	-05.2358069	28.0995	0	0.880	SED	0.0118	0.0066	0.0208	0.0035	0.03

State of the art & Portal requirements

- Report on available CDS widgets (S. Derriere, April 2014) : 2D plots, AladinLite, ConeSearch, SIA, SEDs
- Requirements for database document (R. Amorin, July 2014)
- Work meeting in Strasbourg (November 2014), test datasets on GOODS-South field

Image data

- Multi-wavelength (8 bands) image data for GOODS-South

Survey	Image name(s)	HiPS
ACS_B435_V3	B435_V3.fits	HiPS_ACS_B435_V3
VIMOS	Bv2.fits	HiPS_VIMOS_Bv2
ACS_I814	I814.fits	HiPS_ACS_I814
HUGS_K	GOODS.fits	HiPS_HUGS_K
CANDELS_UDF_F125W	gs_all_candels_ers_udf_f125w_v0.5_drz.fits	HiPS_UDF_F125W
CANDELS_UDF_F160W	gs_all_candels_ers_udf_f160w_v0.5_drz.fits	HiPS_UDF_F160W
IRAC CH1	GOODSS_S1CH1_bksubplus0.000510365.fits GOODSS_S2CH1_bksubplus0.000530099.fits	HiPS_IRAC_CH1
IRAC CH2	GOODSS_S1CH2_bksubplus0.000526191.fits GOODSS_S2CH2_bksubplus0.000387634.fits	HiPS_IRAC_CH2

Image data

- Processing of images : conversion to HiPS format (hierarchical multi-resolution progressive survey)
  - Generated with Aladin
  - FITS (full flux values) and JPEG/PNG versions (lighter, display in any browser with AladinLite)
- Associated MOC (multi-order coverage maps)
  - Compute intersections, unions...
  - Query catalogues by MOC

Image data distribution

- Hosted on dedicated virtual machine
  - http://astrodeep.u-strasbg.fr
- Can be used
  - In Aladin
    - Load one survey
    - Load ASTRODEEP dictionary
  - Embed dedicated AladinLite in any web page

Image data

- Dedicated metadata dictionary

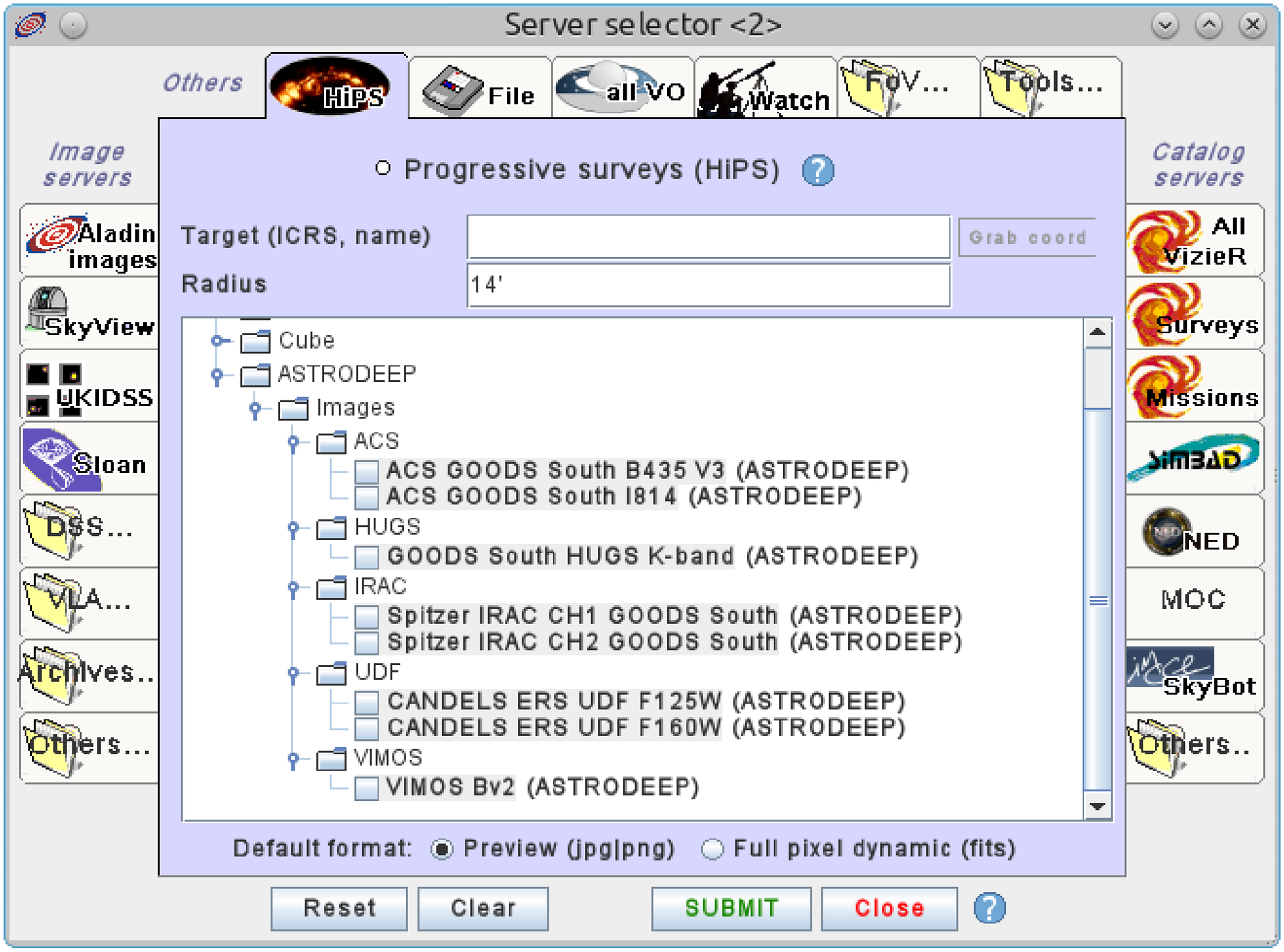
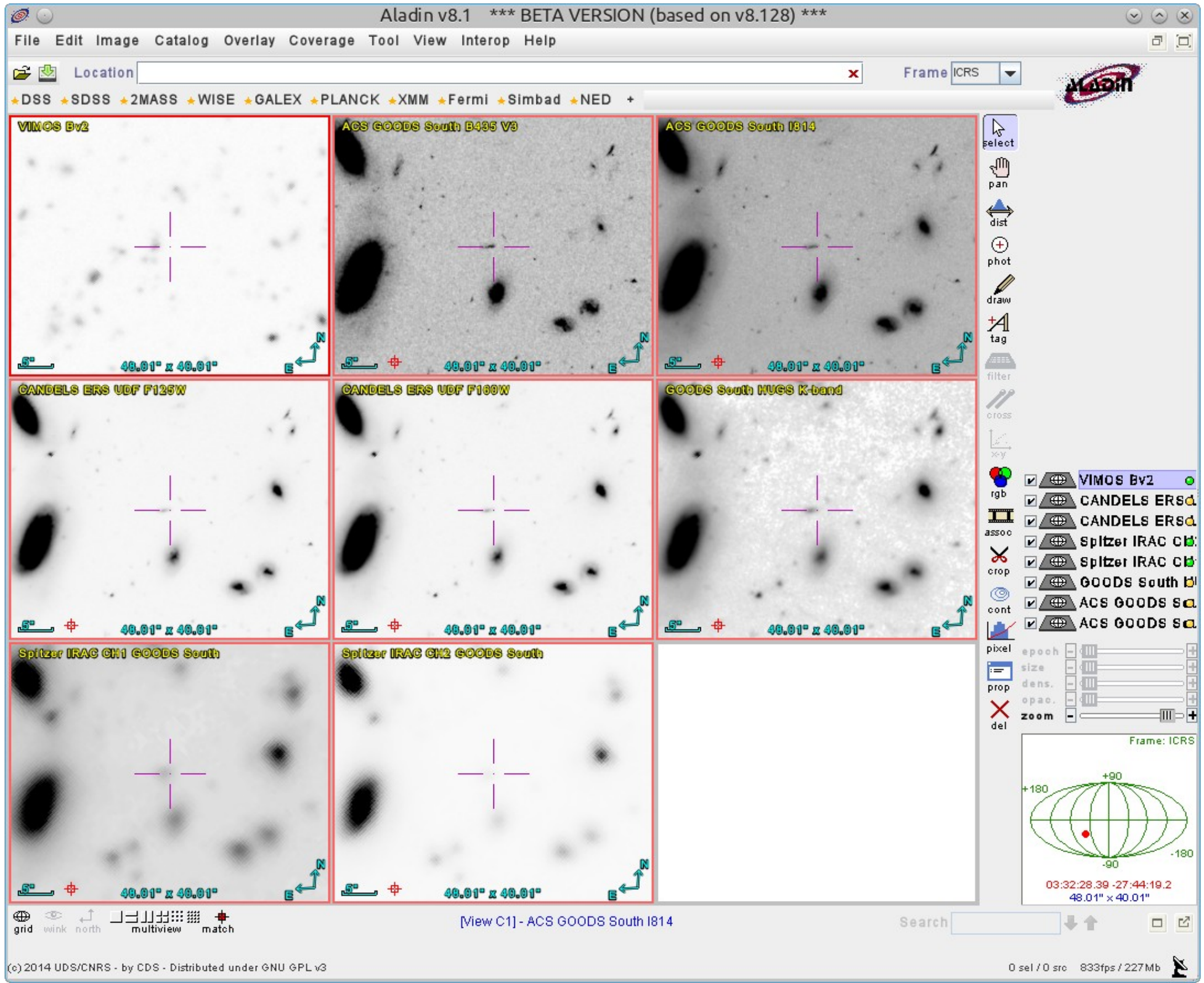


Image data


Aladin v8.1 *** BETA VERSION (based on v8.128) ***
File Edit Image Catalog Overlay Coverage Tool View Interop Help
Location
Frame ICRS
DSS SDSS 2MASS WISE GALEX PLANCK XMM Fermi Simbad NED
VIMOS Bv2
ACS GOODS South B435 V3
ACS GOODS South I814
CANDELS ERS UDF F125W
CANDELS ERS UDF F160W
GOODS South HUGS K-band
Spitzer IRAC CH1 GOODS South
Spitzer IRAC CH2 GOODS South
40.01" x 40.01"
select
pan
dist
phot
draw
tag
filter
cross
x-y
rgb
assoc
crop
cont
pixel
prop
del
zoom
Frame: ICRS
+90
+180
-180
-90
03:32:28.39 -27:44:19.2
48.01" x 40.01"
grid
wink
north
multiview
match
[View C1] - ACS GOODS South I814
Search
(c) 2014 UDS/CNRS - by CDS - Distributed under GNU GPL v3
0 sel / 0 src
833fps / 227Mb

SAADA portal

- Integrate multiple data products in a single database, with links across data products and VO-compliants data access
  - Images and thumbnails
  - Catalogues and individual sources
  - Spectra
  - Photometric redshift fits
  - SEDs

SAADA portal

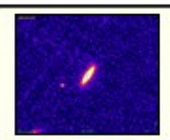
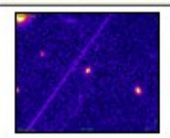
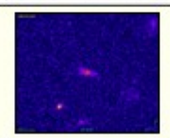
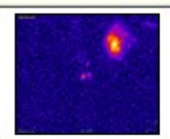
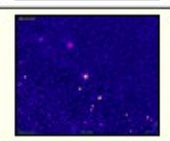
- Standard VO access
- Web SAMP

workingDB *GOODS_South>ENTRY>candels_3dhstEntry*

about Meta

- GOODS_South
  - TABLE
    - candels_3dhst
    - match_GS
    - match_VUDS_GS
  - ENTRY
  - SPECTRUM
  - MISC
  - FLATFILE

Show 10 entries Showing 1 to 10 of 160 entries

Position	Error (arcsec)	Name	Rel : ToThumbnail	Rel : ToSED	Rel : ToPZ	Rel : ToSpectr
03:32:24.41-27:57:30.4 (s)	Not Set	GOODS_South-candels_3dhstEntry03 32 24.4-27 57 30		1 links	No index!!	4 links
03:32:19.70-27:57:13.2 (s)	Not Set	GOODS_South-candels_3dhstEntry03 32 19.7-27 57 13		1 links	No index!!	4 links
03:32:17.87-27:56:58.3 (s)	Not Set	GOODS_South-candels_3dhstEntry03 32 17.9-27 56 58		1 links	No index!!	4 links
03:32:20.57-27:56:56.3 (s)	Not Set	GOODS_South-candels_3dhstEntry03 32 20.6-27 56 56		No link	No index!!	4 links
03:32:29.28-27:56:19.4 (s)	Not Set	GOODS_South-candels_3dhstEntry03 32 29.3-27 56 19		No link	No index!!	4 links