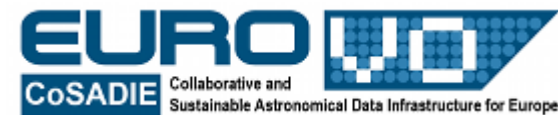




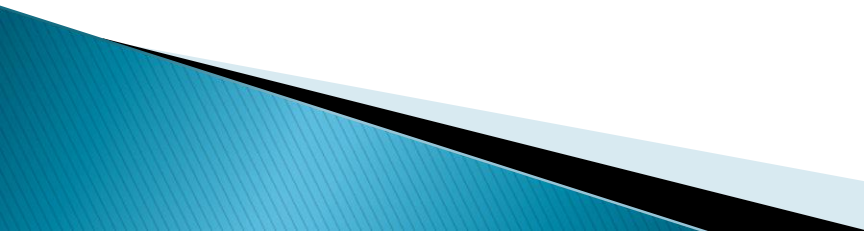
CDS Prototypes for cube Access protocols

F.Bonnarel



SIAV2 prototype for Cubes At CDS: Bodega collection

Courtesy of IAA – JE Ruiz

- Collection of 29 CO radio cubes
 - Obscure description
 - Acces_reference gives access to DataLink web service (no direct retrieval)
 - POS works with CIRCLE
 - POL and TIME
 - SPATRES, FOV not yet implemented
- 

SIIV2 ALADIN INTERFACE



Server selector

Others

Image servers

- Aladin images
- SkyView
- UKIDSS
- Sloan
- AcDatSIA2
- AlalA2
- DSS...
- VLA...
- Archives...
- Others...

Catalog servers

- All VizieR
- Surveys
- Missions
- Simbad
- NED
- SkyBot
- Others..

Experimental SIA2 Aladin Server ?

Target (XY image, name)

BAND

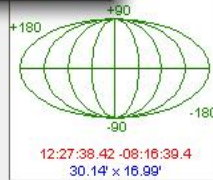
TIME

POL

```

Creator: null null
  BODEGA 0.0" x 0.0"
  
```

Reset Clear ?



SIAV2 Obscure metadata

Data Info Frame

Display

BODEGA

Field name	Value
dataproduct_type	cube
calib_level	1
obs_collection	http://aladi...
obs_id	image/fits
obs_publisher_did	SIA2
access_url	4000000
access_format	BODEGA_C...
access_estsize	BODEGA_C...
target_name	BODEGA
s_dec	atlas
s_fov	ivo://cds/B...
s_region	7009-08-28

Stick FoV in stack LOAD Close

Server selector

Others

Image servers

- Aladin images
- SkyView
- UKIDSS
- Sloan
- AcDatSIA2
- AlaiA2
- DSS...
- VLA...
- Archives...
- Others...

Experimental SIA2 Aladin Server

Target (XY image, name)

BAND

TIME

POL

```

  Creator: null null
  BODEGA 0.0" x 0.0"
  
```

Reset Clear ?

Catalog servers

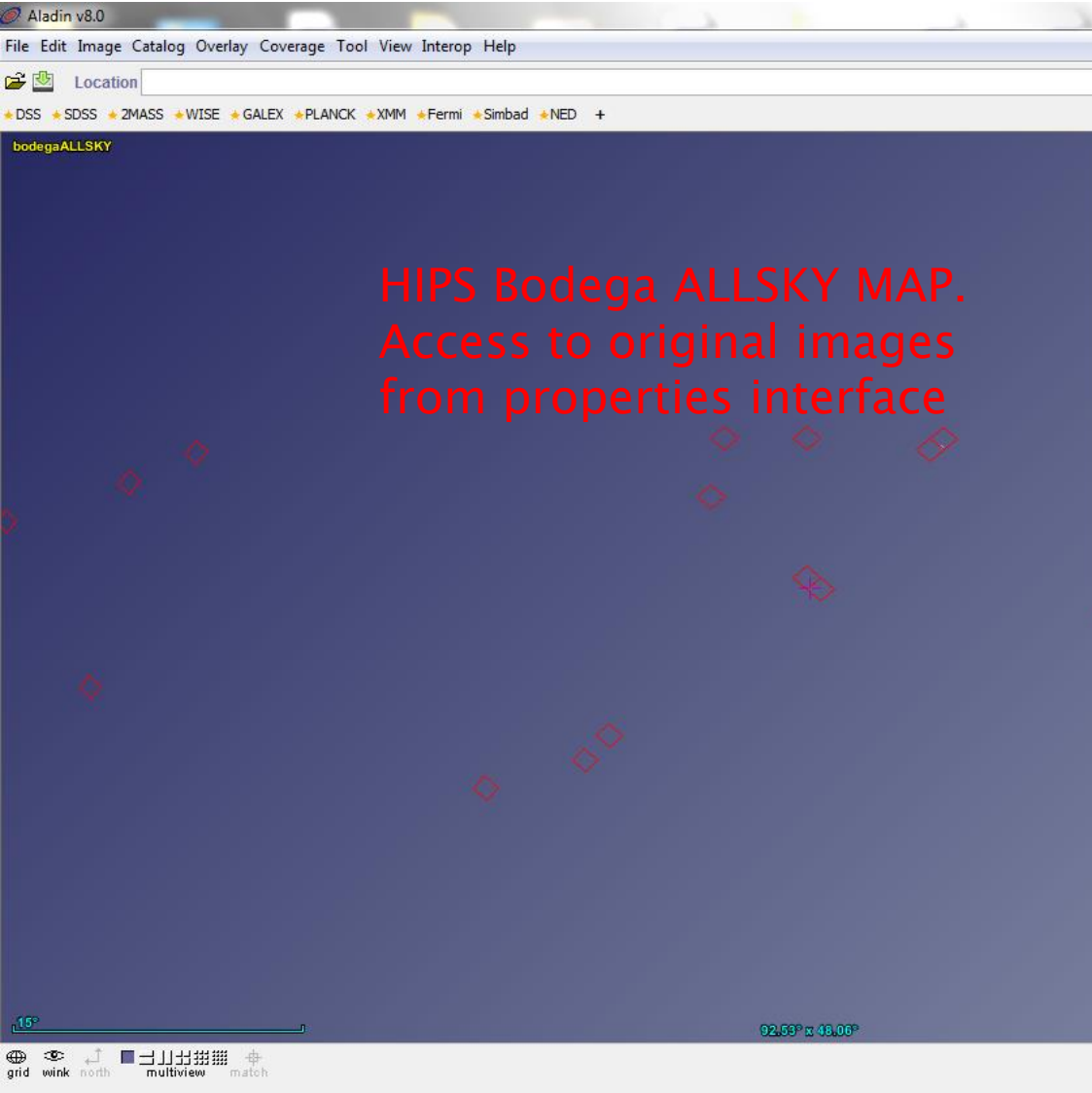
- All VizieR
- Surveys
- Missions
- SIMBAD
- NED
- SkyBot
- Others..



Warning: Aladin is running in low memory configuration (24MB)

DataLinks

- Link Web Service
- Three Links per dataset
 - 2D map
 - ObsCore metadata
 - AccessData service
- Service accessible from SIAV2 query response (via access_reference)
- Service accessible from Aladin Hips interface (Aladin Version 8)
- No « Service description » in SIAV2 query response at the moment



HIPS Bodega ALLSKY MAP.
Access to original images
from properties interface

Properties

Properties of the plane "bodegaALLSKY"

PlaneID:
Format: Hierarchical Progressive Survey (HIPS)
Transparency:

HEALPix tessellation properties

Best pixel resolution: 805.2mas
Tile format: FITS true pixels (BITPIX=32)
Tile width: 512 pix (2⁹)
HEALPix NSide: 262144 (2¹⁸)

HEALPix Coordsys: ICRS

More info:

Used projection

.projection center: 12 27 38.61 -08 16 42.2
.method:
.frame:

Basic controls:

- Type any object name or coordinates for moving on it.
- Select catalog sources for displaying associated data measurements.
- Display simultaneously several views via the "multiview" controller.

Frame: XY image

0 sel / 0 src 52fps / 45Mb

FR 16:27 20/05/2014

Location 12:27:38.62 -08:16:42.0

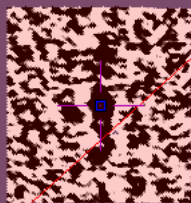
Frame ICRS



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

bodegaALLSKY

BODEGA HIPs VIEW OF NGC 4433 and Original image information. Pointer to DataLinks



11.42' x 5.676'

Mouse controls:

- Left: source selection.
- Middle: quick panning.
- Right: contrast adjustment.
- Wheel: quick zoom on the reticle.
- Simple-click: move the reticle.
- Double-click: re-center.

Let your mouse pointer on an object for discovering associated Simbad data.

bodegaALLSKY P
 bodegaALLSKY M
 bodegaALLSKY C

epoch - [slider]
 size - [slider]
 crop - [slider]
 zoom - [slider]

cont
 pixel
 prop
 del

Frame: ICRS

12:27:38.61 -08:16:42.4
11.42' x 5.676'

grid wink north multiview match

bodega details - access - Load original this original image

Search [input] [up] [down]

RAJ2000	DEJ2000	id	access	FoV
186.91090	-8.27833	ivo:cds/BODEGA#ngc4433	DataLink ngc4433DataLink...	FoV

Warning: Aladin is running in low memory configuration (16MB)

1 sel / 1 src 100fps / 47Mb

Datalinks: NGC 4433 SIAV2 obscure metadata Link

Server selector

Others:

Image servers: Aladin images, SkyView, UKIDSS, Sloan, AcDatSIA2, AlalA2, DSS..., VLA..., Archives..., Others...

Catalog servers: All vizier, Surveys, Missions, SIMBAD, NED, SkyBot, Others..

User data access (image/table/script/dir) ?

Specify a filename or an URL and press the SUBMIT button

C:\Users\bonnarel\Documents\Aladin\bodegaALLSKY\

- Obsid: ivo://cds/BODEGA/C021#COMBINEDNGC4433-090405-04-23-56LIN
 - BODEGA SIAV2/ObsCore metadata 0.0" x 0.0"
 - BODEGA Cubes AccessData service
 - Cube 2D preview

Mouse controls:

- Left: source selection.
- Middle: quick panning.
- Right: constrain adjustment.
- Wheel: quick zoom on the reticle.
- Simple-clip: move the reticle.
- Double-clip: re-center.

Let your mouse pointer on an object for discovering associated Simbad data.

bodegaALLSKY PY
 bodegaALLSKY MO
 bodegaALLSKY

epoch - +
 size - +
 opac. - +
 zoom - +

Frame: ICRS

12:27:38.61 -08:16:42.4
11.42' x 5.676"

RAJ2000	DEJ2000	id	access	FoV
186.91090	-8.27833	ivo:cds/BODEGA#ngc4433	DataLink ngc4433DataLink..	FoV

Warning: Aladin is running in low memory configuration (26MB)

Datalinks: NGC 4433 Cube2D preview Link

Aladin v8.0

File Edit Image Catalog Overlay Coverage Tool View Intro Help

Location Frame ICRS

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

ngc4433

Basic controls:
-Type any object name or coordinates for moving on

Server selector

Others HIPS File all-VO Watch FoV... Tools...

Image servers

- Aladin images
- SkyView
- UKIDSS
- Sloan
- AcDatSIA2
- Alala2
- DSS...
- VLA...
- Archives...
- Others...

Catalog servers

- All VizieR
- Surveys
- Missions
- Simbad
- NED
- SkyBot
- Others..

User data access (image/table/script/dir) ?

Specify a filename or an URL and press the SUBMIT button

C:\Users\bonnare\Documents\Aladin\bodega\ngc4433.fits

- Obsid: ivo://cds/BODEGA/C021#COMBINEDNGC4433-090405-04-23-56LIM
 - BODEGA SIAV2/ObsCore metadata 0.0" x 0.0"
 - BODEGA Cubes AccessData service
 - Cube 2D preview

Reset Clear SUBMIT Close ?

RAJ2000	DEJ2000	id	access	FoV
186.91090	-8.27833	ivo:cds/BODEGA#ngc4433	DataLink ngc4433DataLink...	FoV

Warning: Aladin is running in low memory configuration (14Mb)

1 sel / 1 src 100fps / 49Mb

FR 16:50 20/05/2014

Datalinks: NGC 4433 AccessData service

The screenshot shows the Aladin v8.0 software interface. The main window displays a star field with a central star marked by a crosshair. A 'Server selector' dialog box is open, showing a tree view of data services. The 'BODEGA Cubes AccessData service' is selected. The dialog box also contains a text input field with the path 'C:\Users\bonnarel\Documents\Aladin\bodega\ngc4433.fits' and a 'SUBMIT' button.

Basic controls: -Type any object name or coordinates for moving on

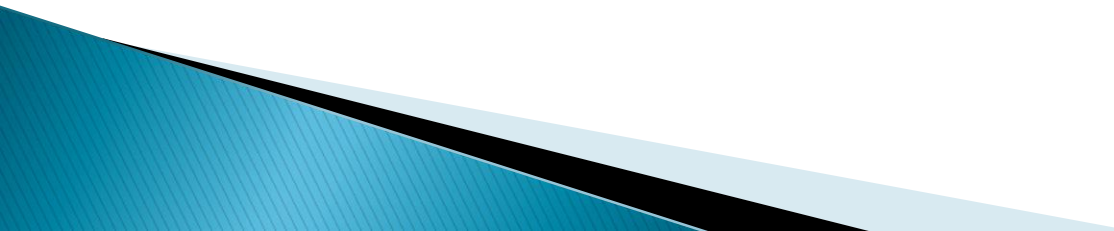
RAJ2000	DEJ2000	id	access	FoV
186.91090	-8.27833	ivo://cds/BODEGA#ngc4433	DataLink ngc4433DataLink..	FoV

Warning: Aladin is running in low memory configuration (13MB)

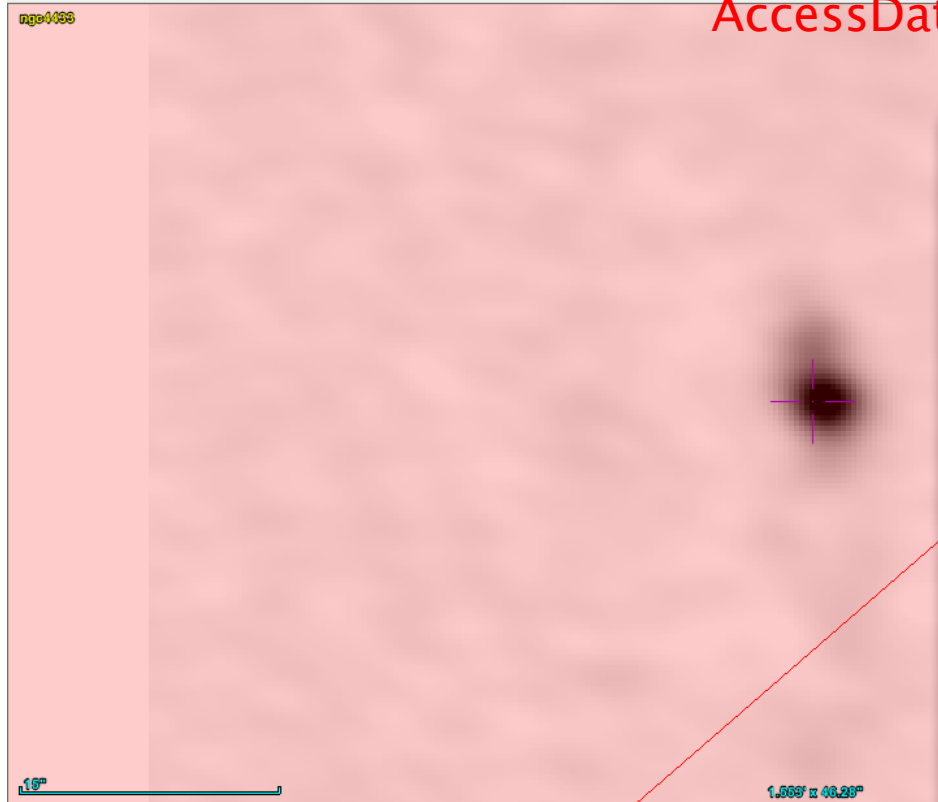
1 sel / 1 src 100fps / 50Mb

16:50
20/05/2014

Access Data

- Accessible only via DataLink (no PARAMETER description in the SIAV2 query response)
 - No SELECT and COORD parameter at the moment
 - CUTOUT IN POS and BAND
 - TIME is YES/NO answer
 - POL : always positive (no known polarization)
- 

AccessData Interface : cutout extraction



Basic controls:
 -Type any object name or coordinates for moving on

Server selector

Others

Image servers

- Aladin images
- CubeSIA2
 - POS
 - BAND
 - TIME
 - POL
- SkyView
- UKIDSS
- Sloan
- AcDatSIA2
- AlalA2
- DSS...
- VLA...
- Archives...
- Others...

Catalog servers

- All vizieR
- Surveys
- Missions
- Simbad
- NED
- SkyBot
- Others..

SIA2 BODEGA Cube AccessData ?

Fill in all these fields and press the SUBMIT button

POS: CIRCLE 186.9 -08.3 0.001

BAND: 0.01 / 0.1

TIME: 01-01-2009 / 01-01-2010

POL:

Reset Clear **SUBMIT** Close ?

RAJ2000	DEJ2000	id	access	FoV
186.91090	-8.27833	ivo:cds/BODEGA#ngc4433	Datalink ngc4433Datalink..	FoV

Warning: Aladin is running in low memory configuration (14MB)

AccessData Interface : extracted cutout cube In « movie » mode

The screenshot displays the AccessData interface. On the left, a video player shows a blurred astronomical image with a red crosshair. The video player includes a progress bar at the top and coordinates 08.99° \times 28.25° at the bottom. The main window is titled "Server selector" and contains a configuration form for "SIA2 BODEGA Cube AccessData". The form includes a "SUBMIT" button and a "Close" button. The interface also features a sidebar with "Image servers" and "Catalog servers" lists, and a bottom status bar showing "0 sel / 0 src 143tps / 55Mb" and the date "29/09/2013".

Server selector

Others [Icons]

Image servers

- Aladin images
- SkyView
- UKIDSS
- Sloan
- AcDatSIA2
- AlaI02
- DSS...
- VLA...
- Archives...
- Others...

Catalog servers

- All VizierR
- Surveys
- Missions
- SDO
- HEd
- SkyBot
- Others...

SIA2 BODEGA Cube AccessData ?

Fill in all these fields and press the SUBMIT button

PDS	CIRCLE 186.9 -08.3 0.001
BAND	0.01 / 0.1
TIME	01-01-2009 / 01-01-2010a
POL	

Reset Clear SUBMIT Close ?

Search [Input]

0 sel / 0 src 143tps / 55Mb

FR 10:35 29/09/2013

To do

- Add AccessData and DataLink descriptor in SIAV2 and get direct retrieval in acces_reference
 - Add PARAMETER description for AccessData in DataLink response
 - Implement CALIFA collection locally
 - Integrate remote SIAV2 and DataLink servers from other partners
 - Prototype SIAV2.1 and AccessData1.1 (we allready have regridding in POS / averiging in POS and BAND)
- 