



VAO prototype integration inside Aladin

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VAO SIAV2 server ALMA test data



Antennae galaxies. A
Combined Picture made with
ALMA CO Millimeter and
submillimeter band and HST
image

VAO server contains test
ALMA Server within this area

Aladin: Colored DSS Hips Zoom on Antennae galaxies

The screenshot displays the Aladin v8.0 software interface. The main window shows a zoomed-in view of an Antennae galaxy (NGC 4038) with a DSS colored overlay. The interface includes a menu bar (File, Edit, Image, Catalog, Overlay, Coverage, Tool, View, Interop, Help) and a toolbar with various tool icons (select, pan, dist, phot, draw, tag, filter, cross, xy, rgb, assoo, crop, cont, epoch, size, opac, zoom, prop, del). The right-hand control panel shows a list of layers, including 'DSS colored' and 'DSS co... 90%'. The main image area shows the galaxy with a red crosshair and a zoomed-in view of the central region. The status bar at the bottom indicates 'Data are being downloaded... look at the "stack"'. The Windows taskbar at the bottom shows the system tray with the time 21:37 and date 10/10/2014.

Aladin v8.0

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location [] x Frame XY im... ▾

DSS SDSS ZMASS WISE GALEX PLANCK XMM Fermi Simbad NED +

DSS colored

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

Cube /
Cube /
Cube /-6
Cube /-5
Cube /-4
Cube /-3
Cube /-2
Cube /-1
Cube /
Cube /
Cube /
DSS co... 90%

epoch
size
opac
zoom
prop

Frame: XY image

+180
+90
-90
-180

12:01:56.58 -18:52:33.2
56.36' x 31.76'

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

Search []

0 sel / 0 src 6fps / 77Mb

FR 21:37 10/10/2014

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Interface to VAO SIAV2 server

The screenshot displays the Aladin v8.0 software interface. The main window shows a star field with a central galaxy. A 'Server selector' dialog box is open in the foreground, listing various image servers. The 'VAO SIAV2 prototype' server is selected, and its parameters are displayed in a form. The parameters are: POS (180.48 -18.88 0.001), RAND (0.0008 / 0.0009), TIME (55709.2), POL, and MODE (ARCHIVAL CUTOUT). A text box at the bottom of the dialog box contains the text 'Standard parameters Proto MODE parameter'. The Windows taskbar at the bottom shows the system tray with the date 11/10/2014 and time 06:29.

Aladin v8.0

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location [] Frame XY im...

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

DSS colored

select
pan
dist

Server selector

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

Image servers

Aladin images

CubeSIA2

SkyView

UKIDSS

Sloan

DSS...

VLA...

Archives...

Others...

VAO SIAV2 prototype ?

Fill in all these fields and press the SUBMIT button

POS 180.48 -18.88 0.001

RAND 0.0008 / 0.0009

TIME 55709.2

POL

MODE ARCHIVAL CUTOUT

Standard parameters
Proto MODE
parameter

Reset Clear SUBMIT Close ?

43.4' x 24.46'

grid wink north multiview match

Search []

0 sel / 0 stro 5fps / 132Mb

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FR 06:29 11/10/2014

Query response

Obscure metadata for full images and cubes or cutouts interfaces. CO3 cube and moment images

The screenshot displays the Aladin v8.0 software interface. The main window shows a metadata table for the file "ALMA test data: Antennae_South.CO3_2Line.Clean.pcal1.image.mom.weighted_coord.fits". A blue arrow points to the "UCD" column header. The table contains the following data:

Field name	UCD	UType	Value
access_url	meta.ref.url	sia:Access.Reference	http://voa-a-v11.aoc.nrao.edu/voa-dal/siapv2-va0/sync?REQUEST=accessData&FORMAT=image/fts&PubID=ivo%3A%2F%2Fnrao%2Fvo%23siav2model%3A373
access_format		sia:Access.Format	image/fts
access_estsize	meta.number	sia:Access.Size	2367.0kB
calib_level		sia:Dataset.CalibLevel	2
dataset_length	meta.number	sia:Dataset.Length	562500
im_nsubarrays	meta.number	sia:Image.Nsubarrays	1
im_naxes	meta.number	sia:Image.Naxes	2
im_naxis	meta.number	sia:Image.Naxis	750 750
im_pixtype		sia:Image.Pixtype	float
im_wcsaxes		sia:Image.WCSAxes	RA---SIN DEC--SIN FREQ STOKES
im_scale		sia:Image.Scale	0.13"
obs_title	meta.title;meta.dat...	sia:DataID.Title	ALMA test data: Antennae_South.CO3_2Line.Clean.pcal1.image.mom.weighted_coord.fits
Title	meta.id	Observation/Identifier	ALMA test data: Antennae_South.CO3_2Line.Clean.pcal1.image.mom.weighted_coord.fits
obs_creator_name	meta.curation	sia:DataID.Creator	NRAO
obs_collection		sia:DataID.Collection	ivo://nrao/alma

Below the table are buttons for "Stick", "FoV in stack", "LOAD", and "Close".

The interface also includes a "SkyView" panel on the left with icons for KIDSS, Sloan, DSS..., YLA..., Archives..., and Others... On the right, there is a "Missions" panel with icons for SIMBAD, NED, SkyBot, and Others... The bottom status bar shows "0 sel / 0 src 7fps / 77 Mb" and the system clock "21:47 10/10/2014".

AccessData interface to the loaded CO3 cube. Standard parameters

The screenshot displays the Aladin v8.0 software interface. The main window shows a dark astronomical image with a white rectangular region of interest (ROI) overlaid on a star cluster. The ROI is labeled with a red crosshair. The interface includes a menu bar (File, Edit, Image, Catalog, Overlay, Coverage, Tool, View, Interop, Help) and a toolbar with various icons. A 'Server selector' dialog box is open in the foreground, showing a list of image servers on the left and a form for selecting a server on the right. The selected server is 'VAO Cube AccessData prototype'. The form contains the following fields:

Field	Value
POS	180.48 -18.88 0.001
BAND	0.00085 / 0.00087
TIME	55709.2
POL	
SECTION	

At the bottom of the Aladin window, there is a status bar with the text '5.841' x 3.292'' and a search bar. The Windows taskbar at the bottom shows the system tray with the date '11/10/2014' and time '06:36'.

AccessData interface to the loaded CO3 cube. Prototype pixel cutout parameter

The screenshot displays the Aladin v8.0 software interface. The main window shows a blurred astronomical image in movie mode, with a red play button and a timeline indicator at the top. A 'Server selector' dialog box is open in the foreground, featuring a list of image servers on the left and a form for selecting a subcube. The form includes fields for POS, BAND, TIME, POL, and SECTION, with the SECTION field containing the value [150:350,350:550,25:45]. The dialog also has 'Reset', 'Clear', 'SUBMIT', and 'Close' buttons. A blue arrow points from the 'SECTION' label in the dialog to the 'parameter' part of the main title.

Aladin v8.0

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location Frame XY im...

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

706080.336 ▶▶▶ +/- 001

select
pan
dist
phot

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

Server selector

Others

Image servers

- Aladin images
- CubeSIA2
- SkyView
- UKIDSS
- Sloan
- DSS...
- VLA...
- Archives...
- Others...

Catalog servers

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

VAO Cube AccessData prototype ?

Fill in all these fields and press the SUBMIT button

POS

BAND

TIME

POL

SECTION

Reset Clear SUBMIT Close ?

LOADDED SUBCUBE in movie mode
200x200x20 Channel 1

20.10" x 11.38"

26.13" x 26.13"

Search

0 sel / 0 src 19Mb

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05:56 11/10/2014

LOADED SUBCUBE in movie mode Channel 4

The screenshot shows the Aladin v8.0 software interface. The main window displays a grayscale image of a subcube in movie mode, with a red play button and a red line indicating the current frame (004). The interface includes a menu bar (File, Edit, Image, Catalog, Overlay, Coverage, Tool, View, Interop, Help) and a toolbar with various icons. A 'Server selector' dialog box is open, showing the 'VAO Cube AccessData prototype' configuration. The dialog box has a 'SUBMIT' button and a 'Close' button. The main window also shows a 'Location' field and a 'Frame' dropdown menu. The bottom status bar displays the coordinates 40.57" x 22.75" and the date 11/10/2014.

Aladin v8.0

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location Frame XY in...

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

021706.746

004

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

Server selector

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

Image servers

- Aladin images
- CubeSIA2
- SkyView
- UKIDSS
- Sloan
- DSS...
- VLA...
- Archives...
- Others...

Catalog servers

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

VAO Cube AccessData prototype ?

Fill in all these fields and press the SUBMIT button

POS

BAND

TIME

POL

SECTION [150:350,350:550,25:45]

Reset Clear SUBMIT Close ?

grid wink north multiview match

Blink control: Next image

Search

0 sel / 0 src 33Mb

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FR 05:59 11/10/2014

LOADED SUBCUBE in movie mode Channel 7

Aladin v8.0

Edit Image Catalog Overlay Coverage Tool View Interop Help

Location 69 37 Frame XY im...

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

7067.166

|| ▶ ◀ +/- 007

select
pan
dist
phot

Imagine your eye looking through a set of planes. Each plane contains its own data set: images, catalogs, graphical overlays...

Server selector

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

Image servers

- Aladin images
- CubeSIA2
- SkyView
- UKIDSS
- Sloan
- DSS...
- VLA...
- Archives...
- Others...

VAO Cube AccessData prototype ?

Fill in all these fields and press the SUBMIT button

POS	<input type="text"/>
BAND	<input type="text"/>
TIME	<input type="text"/>
POL	<input type="text"/>
SECTION	[150:350,350:550,25:45]

Reset Clear SUBMIT Close ?

40.57" x 22.75" 26.13" x 26.13"

LOADED SUBCUBE in movie mode Channel 11

Aladin v8.0

File Edit Image Catalog Overlay Coverage Tool View Interop Help

Location 107 68

Frame XY im...

1304078.6

011

-0.006799

40.97" x 22.79"

26.13" x 26.13"

Blink control: Next image

Search

0 sel / 0 src 32Mb

FR 06:01 11/10/2014

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.

Cube /

epoch - [] +

size - [] +

opac - [] +

zoom - [] +

del

LOADED SUBCUBE in movie mode Channel 16

The screenshot displays the Aladin v8.0 software interface. The main window shows a grayscale astronomical image in movie mode, with a central crosshair and a red play button. The top menu bar includes File, Edit, Image, Catalog, Overlay, Coverage, Tool, View, Interop, and Help. The location is set to 78 27. A toolbar at the top lists various astronomical surveys: DSS, SDSS, 2MASS, WISE, GALEX, PLANCK, XMM, Fermi, Simbad, and NED. A right-hand panel contains navigation tools (select, pan, dist, phot) and a text box that reads: "Imagine your eye looking through a stack of planes. Each plane contains its own data set: image, catalog, graphical overlays...".

A "Server selector" dialog box is open in the foreground. It features a toolbar with icons for "Others", "File", "all VO", "Watch", "Fov...", and "Tools...". The dialog is divided into "Image servers" and "Catalog servers". Under "Image servers", "Aladin images" is selected, and "CubeSIA2" is expanded to show fields for POS, BAND, TIME, POL, and SECTION. The SECTION field contains the value "[150:350,350:550,25:45]". Under "Catalog servers", "All VizieR" is selected, with sub-options for "Surveys", "Missions", "Simbad", "NED", "SkyBot", and "Others..". The dialog includes "Reset", "Clear", "SUBMIT", and "Close" buttons.

At the bottom of the Aladin window, there are navigation controls (grid, wink, north, multiview, match) and a status bar showing coordinates "40.57° x 22.75°". The Windows taskbar at the very bottom shows the system tray with the date "11/10/2014" and time "06:02".