

Vissage:

a JVO-ALMA Desktop Application

Wataru Kawasaki

NAOJ Chile Observatory

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Vissage stands for

VISualisation Software for Astronomical Gigantic data cubEs

A brand-new FITS browser for viewing FITS data
on your LOCAL ENVIRONMENT

Its main aims include:

- to view FITS data cubes in a variety of expressions (cuts)
- to search for other data via JVO based on the data displayed
- to view multiple images in a free layout
- to replace **9 :)
- etc.

Requirement:

- Java Runtime Environment (JRE) Version 6 or 7
- .NET (for Windows)

To Launch Vissage:

- Download the tarball from the ARC Twiki page
<http://almajtwiki.mtk.nao.ac.jp/twiki/bin/view/ARC/WeeklyReport20120820>
- Unzip the tarball to get the executables (vissage.jar and vissage-fe.exe) together with JVO-ALMA sample FITS files

(For Windows Users)

- Put the folder containing 'vissage.jar' and 'vissage-fe.exe' anywhere you like
- Double-clicking the icon of 'vissage-fe.exe' will run vissage with an empty view.
- Dropping icons of FITS data on the icon of 'vissage-fe.exe' will execute vissage and open the dropped files.

(For UNIX/Mac Users)

- Type 'java -jar /path/to/vissage.jar' to run vissage with an empty view.
- Add FITS files names after the above command to run vissage and open the given data files (ex. % java -jar vissage.jar foo.fits bar.fits baz.fits ...).

Functionality implemented so far:

- Integrated intensity map
- 1st / 2nd moment map
- Flipbook (as **9 shows)
- Channel map
- P-V diagram
- Several color sets / color scales available
- Dragging image, Zoom-in&out
- Connect with JVO ALMA Web Quick Look Service

Functionality to be implemented in the near future:

- 2D view for arbitrary combination of data cube axes
- Moment maps (of arbitrary order), line ratio map
- Colourbar
- Images from other telescopes including Subaru, HST, Spitzer, etc.
- Overlaying two or more images
- Contour expression
- Connecting other VO services
- File output (GIF/JPEG/PDF/EPS/... + movie also?)
- etc.

How to use:

- Single-clicking the left mouse button on image: the clicked point will become the center
- Image can be dragged by dragging with the left mouse button:
- Double-clicking the left mouse button on image: back to the original position with the center of the data at the image center
- Single-clicking the right mouse button will open a menu
- Shifting/stretching colourbar is available by dragging with mouse right button just like you can with ds9
- Double-clicking the right mouse button on image will set the colourbar to the original status
- Integration range along the frequency axis can be set with the two sliders at the top-right side
- To view a P-V diagram, (1) view any other 2D images, (2) select 'P-V ...' in the menu shown by single-clicking the right mouse button, (3) Press 'space' key and click the left mouse button. P-V cut will be set by clicking two points in the image and integration range will be set by clicking the third point.
- Layout of images can be changed by dragging just outside images after increasing x-/y-division of the main window (by right-click menu)

The developer (complaints department):

Wataru Kawasaki

Room 207 (2F) of ALMA-J bldg.
E-mail: wataru.kawasaki@nao.ac.jp

Inquiries, requests and/or bug reports (especially for Mac, since
vissage is not yet tested on them) are highly appreciated.

Thank you for your cooperation.