



Data extraction and easy visualization with galaxy climate science workbench

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Sticky Notes

1. Status indicators

-  Green: Used to indicate your progress
-  Pink: Put on your screen if you need help



2. End-of-day feedback

-  Green: what did you like?
-  Pink: what could we improve tomorrow / next time?
- Leave them on the whiteboard at the end of the day



*your sticky notes may be different colours | [back to start](#)



I have heard of Galaxy before



YES



NO



I have used Galaxy before




YES



NO


Galaxy Climate workbench

<https://live.usegalaxy.eu>

 **Galaxy / Live**

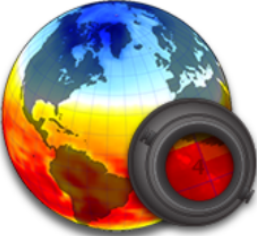
Analyze Data Workflow Visualize Shared Data Help User

Using 8%




jupyter

Jupyter lab for ocean /
atmosphere / land /
climate python
ecosystem



Panoply netCDF Data
Viewer



HiGlass

History

search datasets

**Copernicus Climate Adaptation
Use Case**

24 shown, 25 deleted, 28 hidden

323.73 MB

77: Panoply outputs
a list

57: Panoply outputs
a list with 7 items

56: Panoply outputs
a list with 12 items

55: ecv_2018.nc

54: ecv_1979.nc

49: Panoply outputs
a list with 4 items

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[Edit this page on GitHub](#) [✉ galaxy@informatik.uni-freiburg.de](mailto:galaxy@informatik.uni-freiburg.de) [usegalaxy-eu](#) [galaxyproject](#) [Subscribe via RSS \(UseGalaxy.eu Feed\)](#)

Set up for workshop

- Register and log in to <https://climate.usegalaxy.eu>
 - You may receive an e-mail with an activation link
- Go to the following URL:
<https://usegalaxy.eu/join-training/c3s> to join the c3s training group
 - Give us higher priority for running

Panoply in Galaxy

- Go to <https://climate.usegalaxy.eu/>
 - Upload sample dataset
 - Paste/Fetch data

Download from web or upload from disk

Regular Composite Collection Rule-based

You added 1 file(s) to the queue. Add more files or click 'Start' to proceed.

Name	Size	Type	Genome	Settings	Status
<input type="text" value="New File"/>	105 b	Auto-de...	----- Additional S...		0%

Download data from the web by entering URLs (one per line) or directly paste content.

https://zenodo.org/record/3697454/files/ecv_1979.nc
https://zenodo.org/record/3697454/files/ecv_2018.nc

Type (set all): Auto-detect Genome (set all): ----- Additional S...

Click here

Galaxy / Climate

Tools

Download from URL or upload files from disk

Welcome to the climate science community

History

57: Panoply outputs

56: Panoply outputs

55: ecv_2018.nc

54: ecv_1979.nc

49: Panoply outputs

48: sea_ice_1981.nc

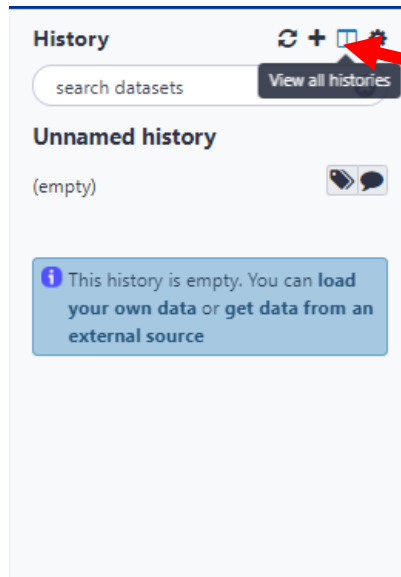
42: Panoply outputs


https://zenodo.org/record/3697454/files/ecv_1979.nc
https://zenodo.org/record/3697454/files/ecv_2018.nc

Click here

Start Panoply in Galaxy

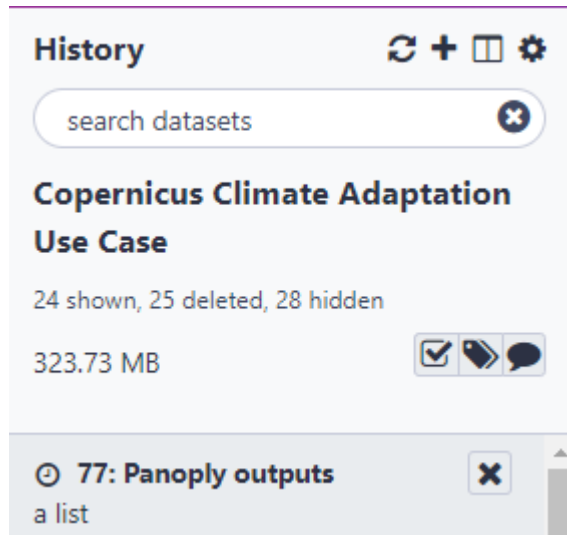
- Go to [Start Panoply](#)
- Select dataset `ecv_1979.nc` and press **Execute**
 - *If you do not see `ecv_1979.nc` in your history (right panel), make sure to switch to the history that contains your dataset.*



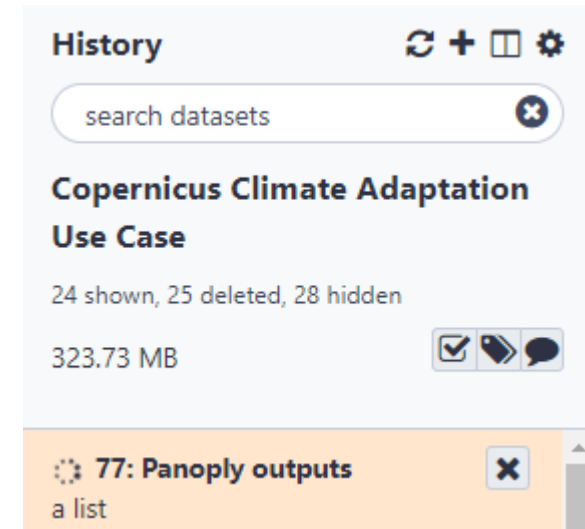
Click  , «switch to» to select the history with your dataset and then [Start Panoply](#)

Wait for Panoply to be ready

Wait in the queue





Running





- Once running go to [User → Interactive Tools](#) and click on *Panoply interactive tool* to launch it
- The use Panoply as usual.






















Start Panoply in Galaxy

- To save your plots, make sure you store them in **outputs** folder
- Quit Panoply when you are done and go back to [Analyze](#) to get your outputs (click on **Panoply outputs**)
- You can download you plot on your laptop ( and )



Panoply outputs
a list with 7 items





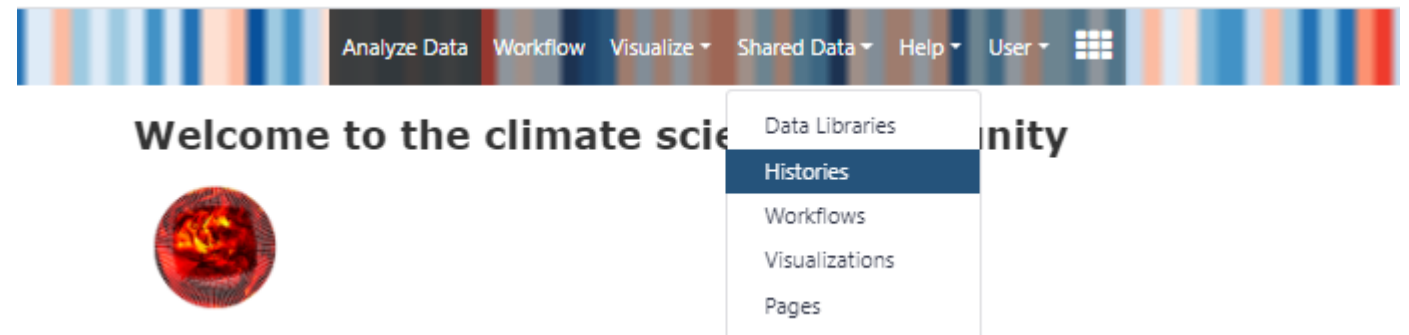
siconc_in_ecv_1979_5.mov	 
siconc_in_ecv_1979_5.png	 
85.5 KB format: png , database: ?	
    	 
Image in png format	
siconc_in_ecv_1979_6.avi	 
t2m_in_ecv_1979_2.png	 
t2m_in_ecv_1979_3.png	 
t2m_in_ecv_1979_4.png	 
version.txt	 

Pangeo JupyterLab in Galaxy

- Go to [JupyterLab for Ocean/Atmosphere/Land/Climate python ecosystem](#)
- Select dataset *ecv_1979.nc* and press **Execute**
- Go to [User → Interactive Tools](#) and click on *Climate interactive tool* to launch it
- Then you should get a jupyterLab session
- Open *ipython_galaxy_notebook.ipynb*
- To save your plots, data, etc. follow instructions given at the top of the default notebook (*get, put*)
- Quit JupyterLab when you are done and go back to [Analyze](#) to get your outputs (those you added with *put*)
- You can download your plots on your laptop ( and )

Learn more about Galaxy

- [Galaxy 101 for everyone](#)
- [Visualize Climate data with Panoply netCDF viewer](#)
- [JupyterLab in Galaxy](#)*
- Import shared histories (click on the link)
 - [Copernicus Climate Training: Panoply](#)
 - [Copernicus Climate Training: How to use climate data for Olive farming in Andalusia](#)
 - [Copernicus Climate Training: the ALPS -a dying ski tourism destination?](#)



* Make sure to use JupyterLab for [Ocean/Atmosphere/Land/Climate](#)



FEEDBACK