



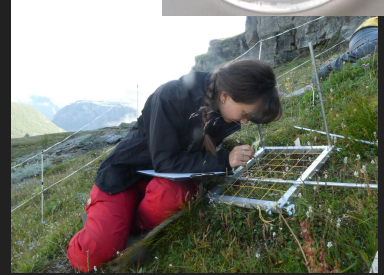
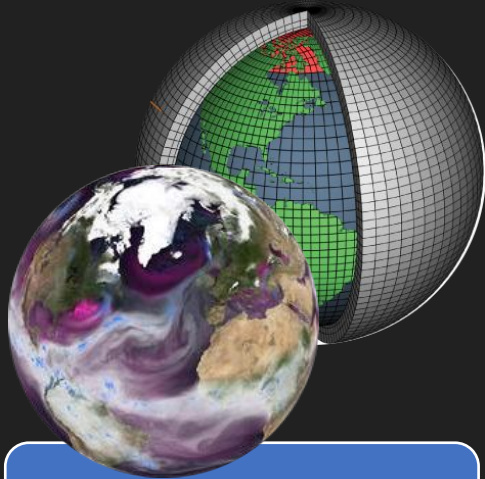
Climate JupyterLab as an interactive tool in Galaxy

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Peter Horvath, Anders Bryn



Motivation

Developing climate models requires close interactions between modellers and ecologists/physiologists with observations, but...



Climate
Modellers

Field
Ecologists





GALAXY CLIMATE VIRTUAL LABORATORY


The screenshot shows the Galaxy / Climate web interface. The main content area features the text: *Galaxy is an open, web-based platform for accessible, reproducible, and transparent computational research.* Below this is a circular image of a globe and a paragraph describing the Climate Science workbench as a comprehensive set of analysis tools and consolidated workflows. A list of content links is provided, with 'Interactive tools' highlighted in orange. The left sidebar contains a 'Tools' menu with 'Interactive tools' also highlighted in orange. The right sidebar shows a 'History' panel with a list of datasets and notebooks.

Galaxy / Climate Analyze Data Workflow Visualize Shared Data Help User Using 44%

Tools search tools

- Get Data
- Collection Operations
- GENERAL TEXT TOOLS
- Text Manipulation
- Filter and Sort
- Join, Subtract and Group
- Convert Formats
- Graph/Display Data
- GIS Data Handling
- Climate Analysis
- Interactive tools**

Galaxy is an open, web-based platform for accessible, reproducible, and transparent computational research.



The Climate Science workbench is a comprehensive set of analysis tools and consolidated workflows. The workbench is based on the [Galaxy framework](#), which guarantees simple access, easy extension, flexible adaption to personal and security needs, and sophisticated analyses independent of command-line knowledge.

The current implementation comprises a few tools dedicated to different research areas of climate science. More tools are coming soon!

The list of tools is maintained by [Anne!!!](#)

Content

- [Welcome to the climate science community](#)
- [Get started](#)
- [Training](#)
- [Available tools](#)

1. [Interactive tools](#)

History search datasets

CLM-FATES input data
13 shown, 1 deleted
186.21 MB

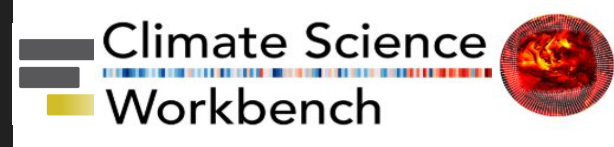
- 14: Executed Climate Notebook
- 12: inputdata_version1.1_SUB4.tar
- 11: inputdata_version1.1_SUB3.tar
- 10: inputdata_version1.1_SUB2.tar
- 9: inputdata_version1.1_SUB1.tar
- 8: inputdata_version1.1_BOR4.tar
- 7: inputdata_version1.1_BOR3.tar

OPEN CHAT

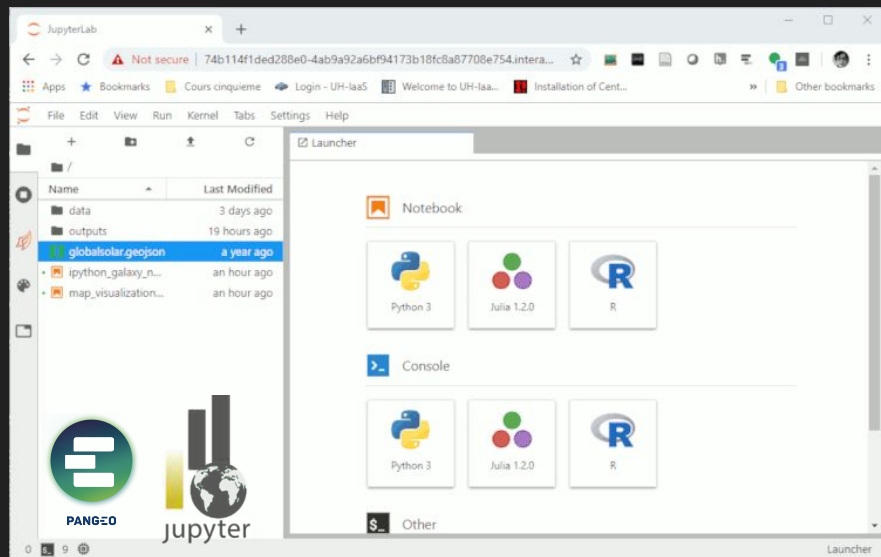
<https://climate.usegalaxy.eu/>



GALAXY CLIMATE JUPYTERLAB



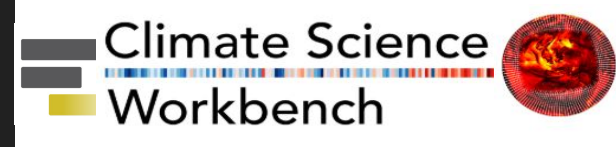
A co-design platform



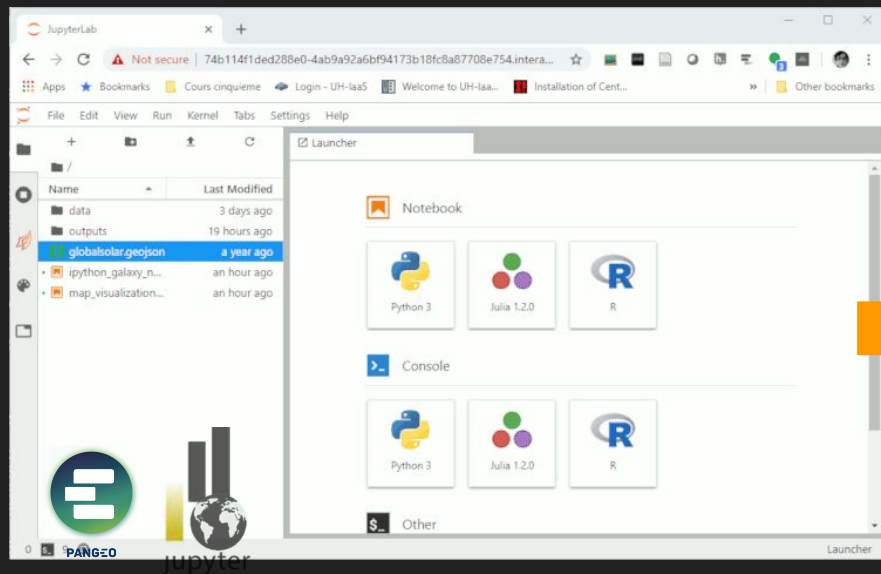
*Eventually we would like to offer new **Galaxy tools**, **Voilà dashboards** and **parameterized notebooks (papermill)** deployed for the **Climate community** and run as a **Galaxy workflow** for **reproducible research**.*



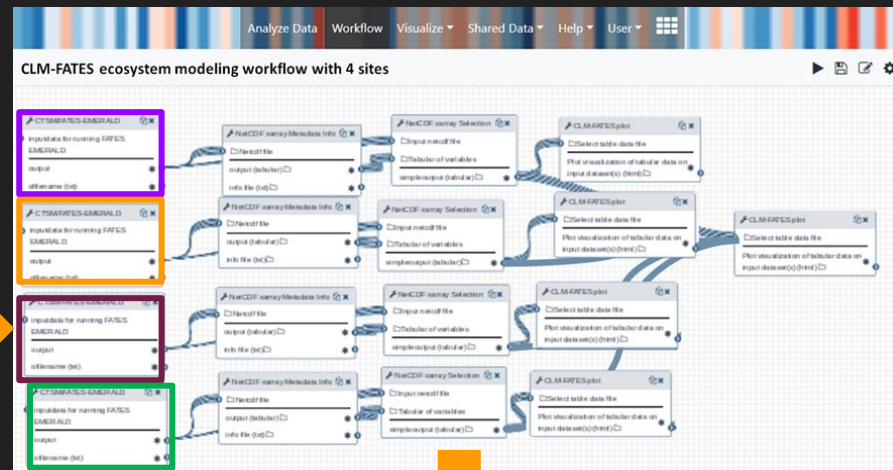
GALAXY CLIMATE JUPYTERLAB



A co-design platform



Execute & Publish Workflow



<https://workflowhub.eu/>

Questions, comments AND



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Github: [annefou](https://github.com/annefou)

Help & support are very much welcome!