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ASTERICS: A Tool for the ExploRation and Integration of omiCS data

Élise Maigné, Céline Noirot, Jérôme J. Mariette, Yaa Adu Kesewaah, Sébastien Dejean, Camille Guilmineau, Julien Henry, Arielle Krebs, Laurence Liaubet, Fanny Mathevet, et al.

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ASTERICS web application

Explore, integrate and visualize your omics data.

backend

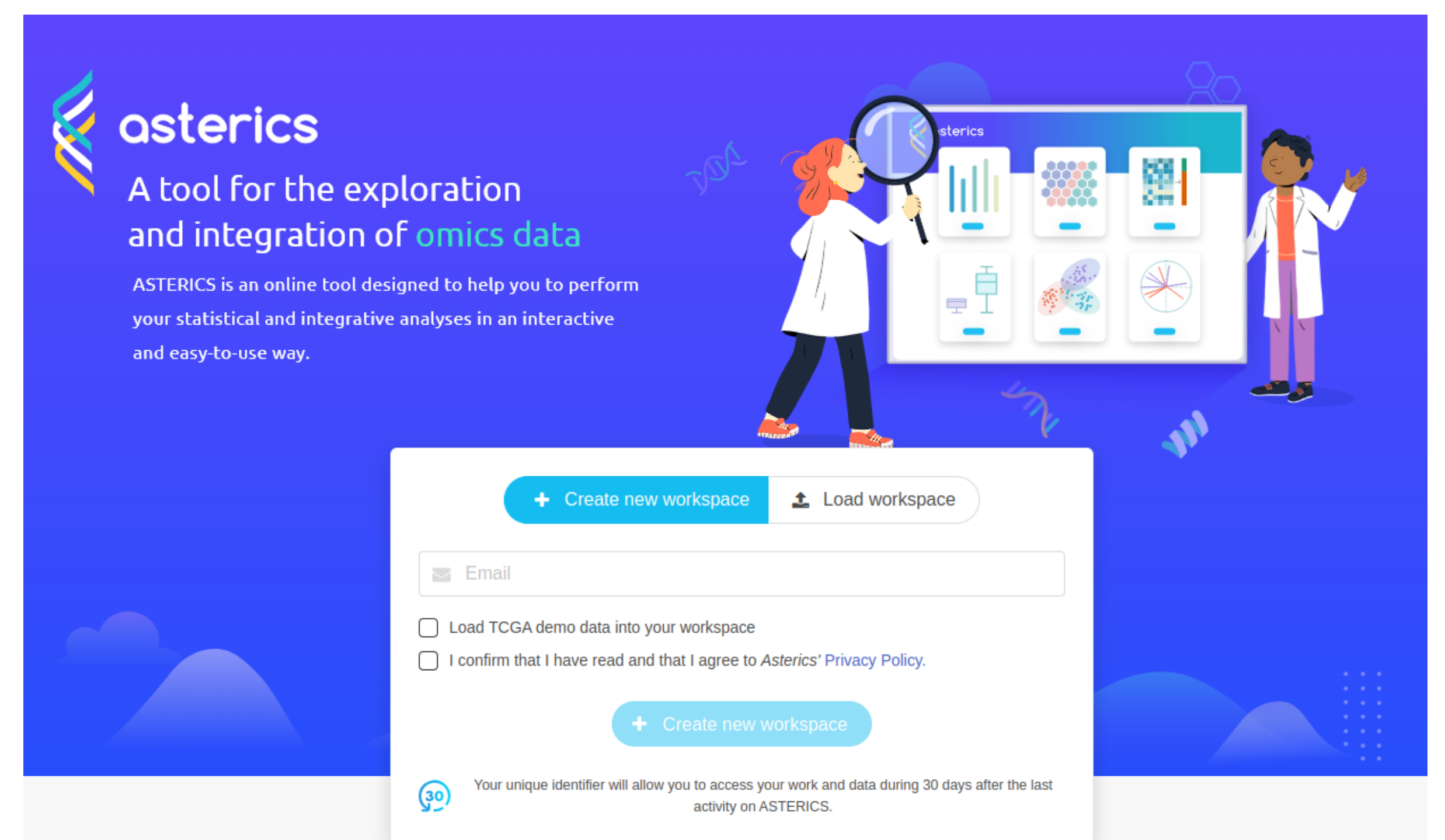


PyRserve
Flask

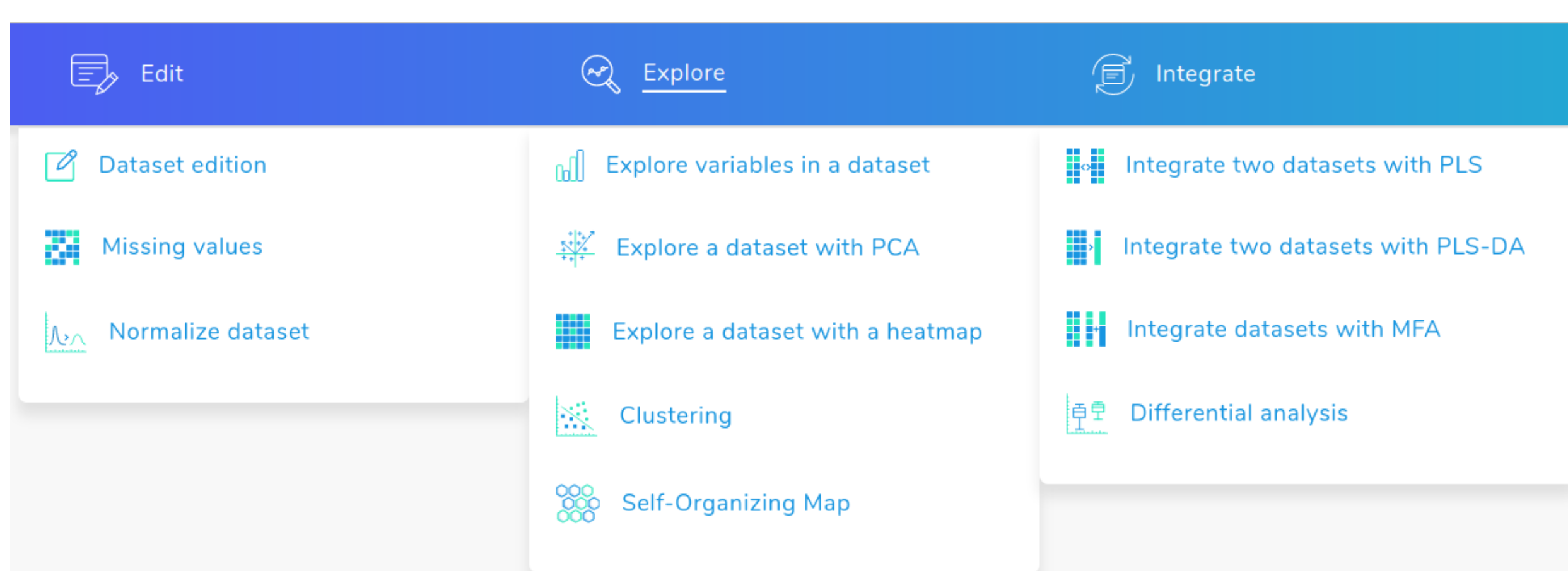
frontend



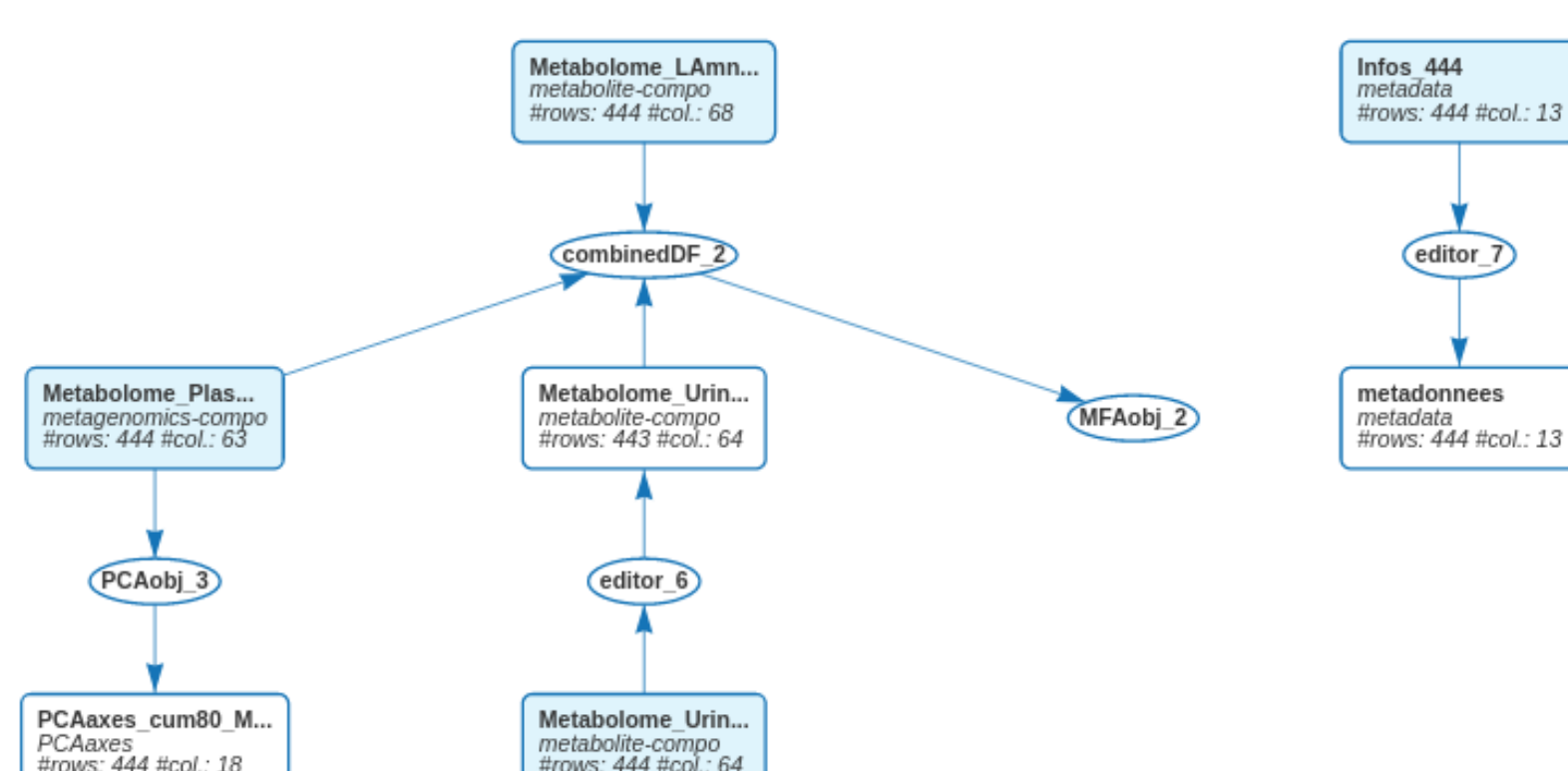
- Available at: <http://asterics.miat.inrae.fr>
- Source code (GPLv2): <https://forgemia.inra.fr/asterics/asterics>



Available analyses

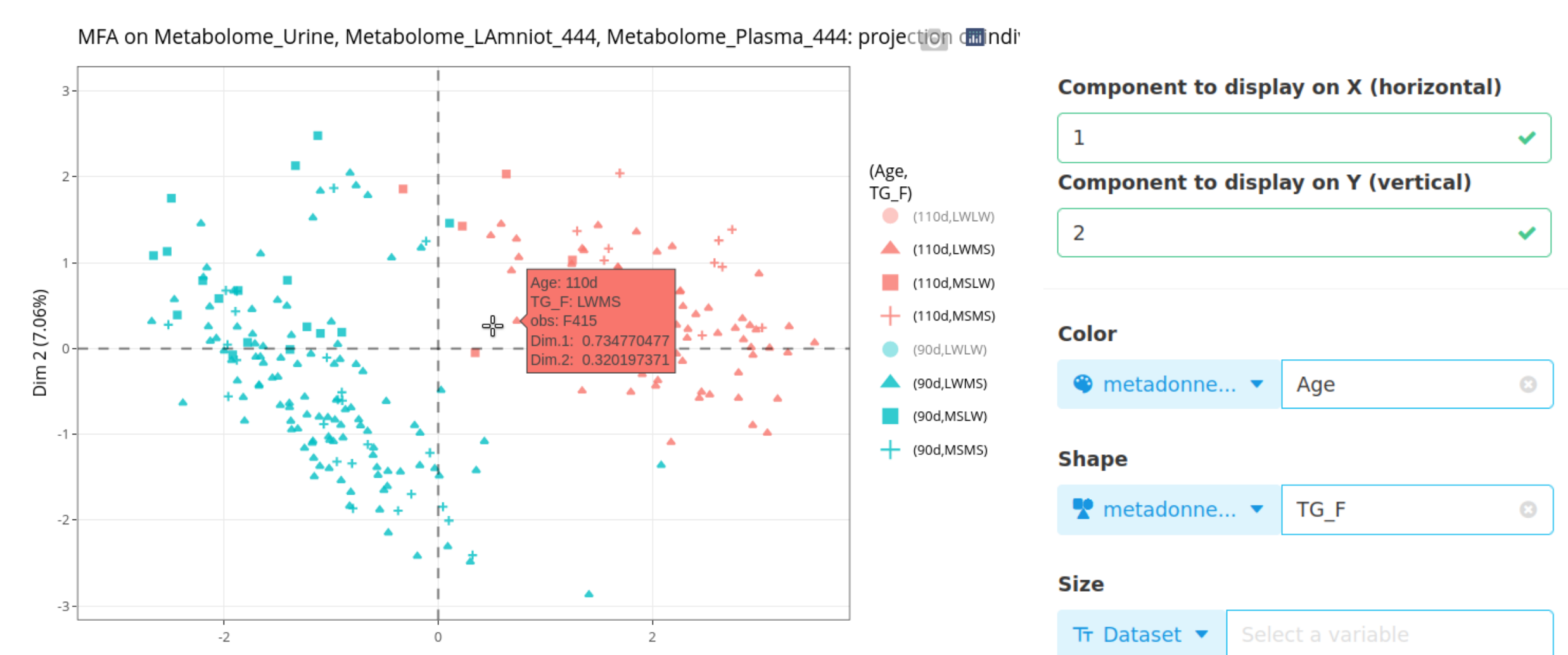


Generated datasets and analyses are navigable using a DAG:



Outputs of analyses

• Interactive and easily customizable plots:



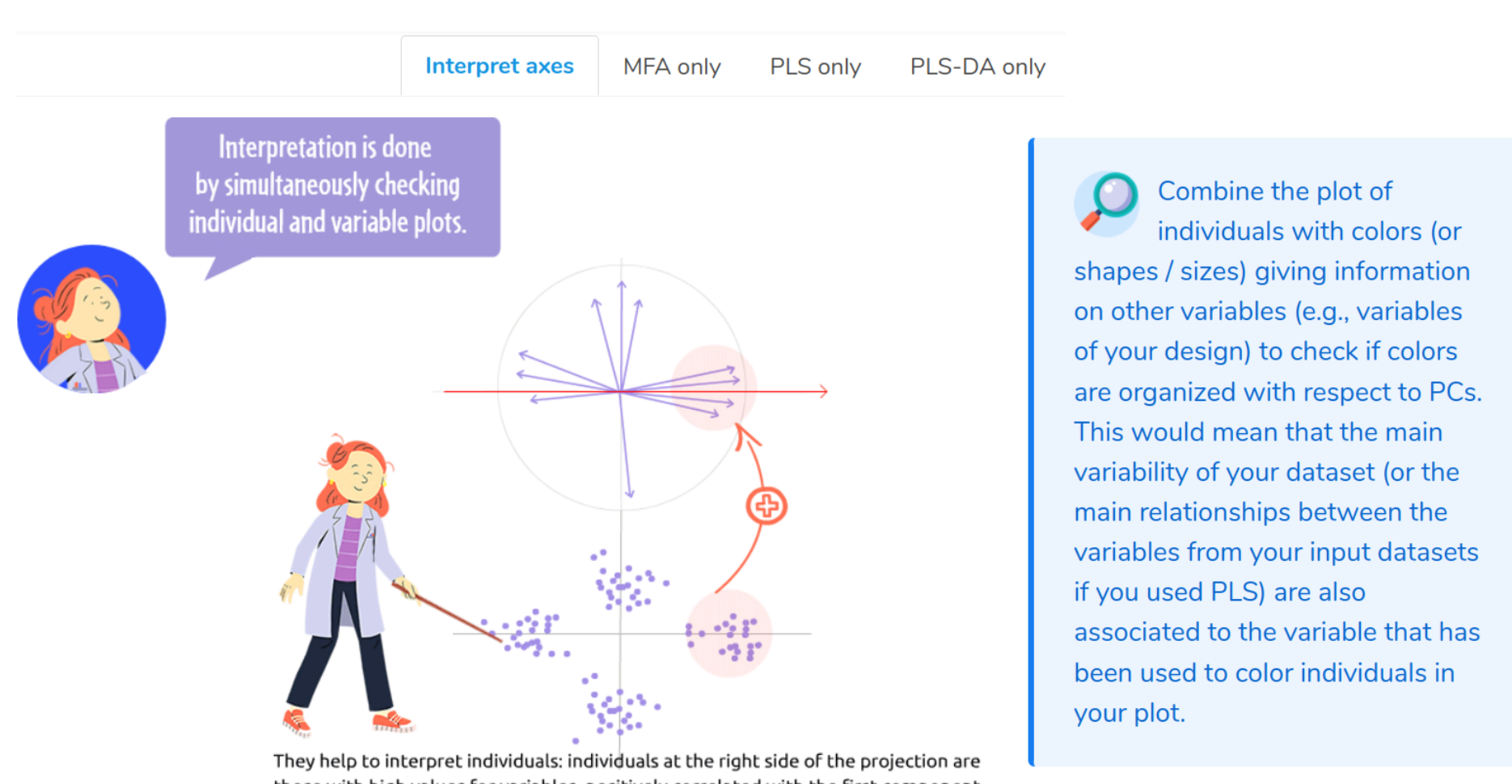
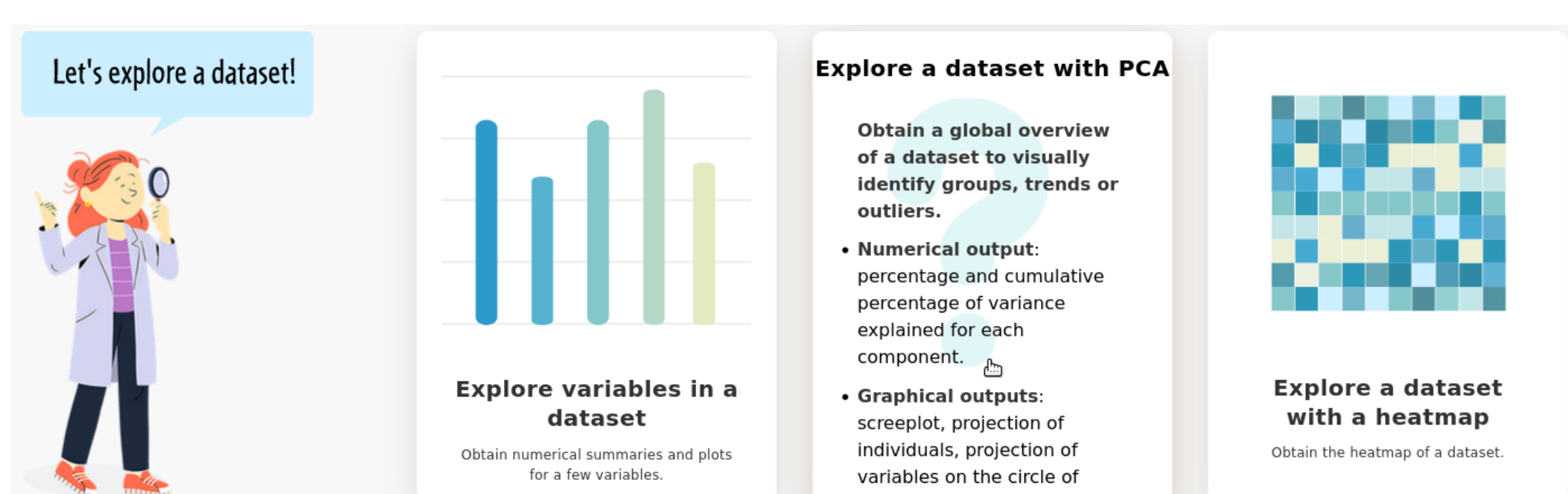
• Sortable and filterable tables:

Post-hoc test results for protein vs clinical. (Wilcoxon tests, corrected with 'BH')

Variables	Conditions	p-values	Adj. p-values	Signs
	left lower			
14.3.3_epsilon	left lower inner quadrant-left	0.6071	1	-1
14.3.3_epsilon	left lower outer quadrant-left	0.5617	1	-1
14.3.3_epsilon	left lower outer quadrant-left lower inner quadrant	0.9426	1	1
14.3.3_epsilon	left upper inner quadrant-left lower inner quadrant	0.563	1	1

Help pages

On each analysis page, **focused help pages** are available to help the user choose analysis settings or interpret the results. These pages include images and GIF animations.



Full documentation:
https://asterics.pages.mia.inra.fr/user_documentation/

Additional features

- Use your **UUID** to come back later to your analyses.
- Export the results of your analysis in **HTML reports** (using Rmarkdown).
- **Export** complex objects as RDS data or data.frame as CSV files.
- Use the online tool or use **Docker** for a local use or for deployment.

Contributors

Partners



Funding

