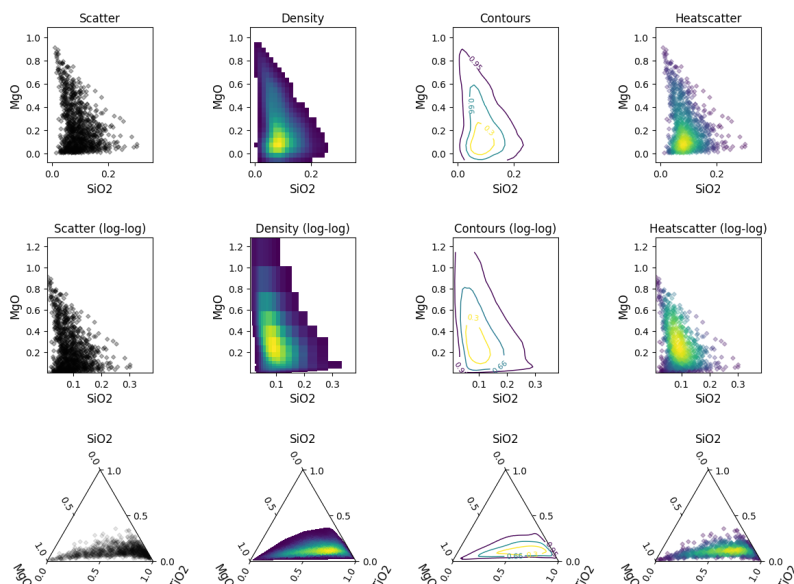# `pyrolite`

pyrolite is a set of tools for working with geochemical data. It is an open-source Python package which is under active development. The project aims to help geochemists new to Python quickly get off the ground and make use of their data. pyrolite contains a variety of functionality for the processing, transformation and visualisation of geochemical data. A short overview publication has been [published in the Journal of Open Source Software](#).
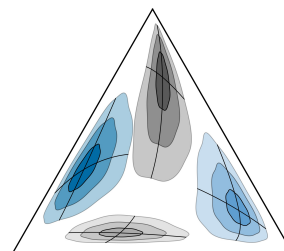
The project encourages a programmatic approach to geochemical data analysis, including the explicit definition of workflows, reuse of research code and linking into an interoperable ecosystem. With this comes a range of potential benefits - including increasing the robustness, shareability and reproducibility of our science and scalability of our workflows. We strive to make the package accessible and well documented such that it can be broadly used and reused. The project aims to eventually be community driven, and new contributors are encouraged to get involved.

Documentation

Documentation is developed alongside the package itself, and illustrates much of its functionality and how it can be used. It includes a [gallery of examples](#) in addition to API documentation for individual functions and classes. Prospective new users can dive into any of these examples as notebooks in their browser (using Binder; via the links at the base of each page, or [here](#)), which will allow them to run code remotely without needing to install Python or pyrolite locally.

Installation

To use pyrolite, users will need to have a working distribution of Python (3.6+) installed before pyrolite can be installed. We generally recommend the use of the Anaconda distributions as these tend to come with most of the required scientific Python packages, and present a ['Getting Started' guide](#) on the documentation page. To install pyrolite, new users should use `pip` to install from PyPI (`pip install pyrolite`). Alternatively, pyrolite can be installed directly from GitHub following the [development installation instructions](#). Specific releases are available on [PyPI](#), [GitHub](#) and are also [archived via Zenodo](#).

Community - Get In Touch/Involved

We maintain a simple forum on [Gitter](#) for general discussion and Q&A, and an [issue/bug tracker on GitHub](#). You can also get in touch with the principal developer via email or Twitter ([morgan.williams@csiro.au](#), [@metasomite](#)).