



***MTpy* - Python Tools for Magnetotelluric Data Processing and Analysis**

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We present the Python package *MTpy*, which provides functions for the processing, analysis, and handling of magnetotelluric (MT) data sets.

MT is a relatively immature and not widely applied geophysical method in comparison to other geophysical techniques such as seismology. As a result, the data processing within the academic MT community is not thoroughly standardised and is often based on a loose collection of software, adapted to the respective local specifications. We have developed *MTpy* to overcome problems that arise from missing standards, and to provide a simplification of the general handling of MT data.

MTpy is written in Python, and the open-source code is freely available from a GitHub repository. The setup follows the modular approach of successful geoscience software packages such as GMT or Obspy. It contains sub-packages and modules for the various tasks within the standard work-flow of MT data processing and interpretation. In order to allow the inclusion of already existing and well established software, *MTpy* does not only provide pure Python classes and functions, but also wrapping command-line scripts to run standalone tools, e.g. modelling and inversion codes.

Our aim is to provide a flexible framework, which is open for future dynamic extensions. *MTpy* has the potential to promote the standardisation of processing procedures and at same time be a versatile supplement for existing algorithms.

Here, we introduce the concept and structure of *MTpy*, and we illustrate the workflow of MT data processing, interpretation, and visualisation utilising *MTpy* on example data sets collected over different regions of Australia and the USA.