

The astropy package contains key functionality and common tools needed for performing astronomy and astrophysics with Python. It is at the core of the [Astropy Project](http://www.astropy.org/about.html), which aims to enable the community to develop a robust ecosystem of [affiliated packages](https://www.astropy.org/affiliated/) covering a broad range of needs for astronomical research, data processing, and data analysis.

Important (https://docs.astropy.org/en/stable/)

If you use Astropy for work presented in a publication or talk please help the project via proper [citation or acknowledgement](https://www.astropy.org/acknowledging.html). This also applies to use of software or [affiliated packages](https://www.astropy.org/affiliated/) that depend on the astropy core package.

**Getting Started**

* [Installation](https://docs.astropy.org/en/stable/install.html)
* [What’s New in Astropy 5.1?](https://docs.astropy.org/en/stable/whatsnew/5.1.html)
* [Importing astropy and Sub-packages](https://docs.astropy.org/en/stable/importing_astropy.html)
* [Getting Started with Sub-packages](https://docs.astropy.org/en/stable/importing_astropy.html#getting-started-with-sub-packages)
* [Example Gallery](https://docs.astropy.org/en/stable/generated/examples/index.html)
* [Tutorials](https://learn.astropy.org/)
* [Get Help](http://www.astropy.org/help.html)
* [Contribute and Report Problems](http://www.astropy.org/contribute.html)
* [About the Astropy Project](http://www.astropy.org/about.html)

**User Documentation**

**Data structures and transformations**

* [Constants (astropy.constants)](https://docs.astropy.org/en/stable/constants/index.html)
* [Units and Quantities (astropy.units)](https://docs.astropy.org/en/stable/units/index.html)
* [N-Dimensional Datasets (astropy.nddata)](https://docs.astropy.org/en/stable/nddata/index.html)
* [Data Tables (astropy.table)](https://docs.astropy.org/en/stable/table/index.html)
* [Time and Dates (astropy.time)](https://docs.astropy.org/en/stable/time/index.html)
* [Time Series (astropy.timeseries)](https://docs.astropy.org/en/stable/timeseries/index.html)
* [Astronomical Coordinate Systems (astropy.coordinates)](https://docs.astropy.org/en/stable/coordinates/index.html)
* [World Coordinate System (astropy.wcs)](https://docs.astropy.org/en/stable/wcs/index.html)
* [Models and Fitting (astropy.modeling)](https://docs.astropy.org/en/stable/modeling/index.html)
* [Uncertainties and Distributions (astropy.uncertainty)](https://docs.astropy.org/en/stable/uncertainty/index.html)

**Files, I/O, and Communication**

* [Unified File Read/Write Interface](https://docs.astropy.org/en/stable/io/unified.html)
* [FITS File Handling (astropy.io.fits)](https://docs.astropy.org/en/stable/io/fits/index.html)
* [ASCII Tables (astropy.io.ascii)](https://docs.astropy.org/en/stable/io/ascii/index.html)
* [VOTable XML Handling (astropy.io.votable)](https://docs.astropy.org/en/stable/io/votable/index.html)
* [Miscellaneous: HDF5, YAML, ASDF, Parquet, pickle (astropy.io.misc)](https://docs.astropy.org/en/stable/io/misc.html)
* [SAMP (Simple Application Messaging Protocol) (astropy.samp)](https://docs.astropy.org/en/stable/samp/index.html)

**Computations and utilities**

* [Cosmological Calculations (astropy.cosmology)](https://docs.astropy.org/en/stable/cosmology/index.html)
* [Convolution and Filtering (astropy.convolution)](https://docs.astropy.org/en/stable/convolution/index.html)
* [Data Visualization (astropy.visualization)](https://docs.astropy.org/en/stable/visualization/index.html)
* [Astrostatistics Tools (astropy.stats)](https://docs.astropy.org/en/stable/stats/index.html)

**Nuts and bolts**

* [Configuration System (astropy.config)](https://docs.astropy.org/en/stable/config/index.html)
* [I/O Registry (astropy.io.registry)](https://docs.astropy.org/en/stable/io/registry.html)
* [Logging system](https://docs.astropy.org/en/stable/logging.html)
* [Python warnings system](https://docs.astropy.org/en/stable/warnings.html)
* [Astropy Core Package Utilities (astropy.utils)](https://docs.astropy.org/en/stable/utils/index.html)
* [Astropy Glossary](https://docs.astropy.org/en/stable/glossary.html)
* [Optional Packages’ Glossary](https://docs.astropy.org/en/stable/glossary.html#optional-packages-glossary)

**Developer Documentation**

The developer documentation contains instructions for how to contribute to Astropy or affiliated packages, install and test the development version, as well as coding, documentation, and testing guidelines.

To read the developer documentation, you will need to go to the [latest developer version of the documentation](https://docs.astropy.org/en/latest/index.html#developer-docs).

* [Full Changelog](https://docs.astropy.org/en/stable/changelog.html)

**Project details**

* [Major Release History](https://docs.astropy.org/en/stable/whatsnew/index.html)
* [LTS Backport Policy](https://docs.astropy.org/en/stable/lts_policy.html)
* [Known Issues](https://docs.astropy.org/en/stable/known_issues.html)
* [Authors and Credits](https://docs.astropy.org/en/stable/credits.html)
* [Licenses](https://docs.astropy.org/en/stable/license.html)

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