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The Astropy Project: xx and status of the v5.0 core package

ASTROPY COLLABORATION AND ASTROPY CONTRIBUTOR 1

Submitted to ApJ

ABSTRACT

To be written...

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1. INTRODUCTION

To be written...

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The author list has three parts: the authors that made significant contributions to the writing of the paper in order of contribution, the four members of the Astropy Project coordination committee, and contributors to the Astropy Project in alphabetical order. The position in the author list does not correspond to contributions to the Astropy Project as a whole. A more complete list of contributors to the core package can be found in the [package repository](#), and at the [Astropy team webpage](#).

We would like to thank the members of the community that have contributed to Astropy, that have opened issues and provided feedback, and have supported the project in a number of different ways.

The Astropy community is supported by and makes use of a number of organizations and services outside the traditional academic community. We thank Google for financing and organizing the Google Summer of Code (GSoC) program, that has funded several students per year to work on Astropy related projects over the summer. These students often turn into long-term contributors. We also thank NumFOCUS and the Python Software Foundation for financial support. Within the academic community, we thank institutions that make it possible that astronomers and other developers on their staff can contribute their time to the development of Astropy projects. We would like acknowledge the support of the Space Telescope Science Institute, Harvard–Smithsonian Center for Astrophysics, and the South African Astronomical Observatory.

Furthermore, the Astropy packages would not exist in their current form without a number of web services for code hosting, continuous integration, and documentation; in particular, Astropy heavily relies on GitHub, Travis CI, Appveyor, CircleCI, and Read the Docs.

`astropy` interfaces with the SIMBAD database, operated at CDS, Strasbourg, France. It also makes use of the ERFA library (Tollerud et al. 2017), which in turn derives from the IAU SOFA Collection¹ developed by the International Astronomical Union Standards of Fundamental Astronomy (Hohenkerk 2011).

Software: `astropy` (Astropy Collaboration et al. 2013), `numpy` (Van der Walt et al. 2011), `scipy` (Jones et al. 2001–), `matplotlib` (Hunter 2007), `Cython` (Behnel et al. 2011), `SOFA` (Hohenkerk 2011), `ERFA` (Tollerud et al. 2017)

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