

THE ASTROPY PROJECT: A “SELF-HERDING CATS” DEVELOPMENT MODEL

Erik Tollerud

Yale University

Astropy Coordinating Committee Member

Hubble Fellow



astropy-powered
astropy.org

THE ASTROPY PROJECT: A “SELF-HERDING CATS” DEVELOPMENT MODEL

Erik Tollerud

Yale University

Astropy Coordinating Committee Member

Hubble Fellow



astropy-powered
astropy.org

WHAT IS ASTROPY?

A  python astronomy library for and by astronomers, meant to address a problem:

Q. How do I use python to convert from J2000 to Galactic coordinates (as of 2011)?

A. Use any of:

- pyast
- Astrolib
- Astropysics
- Kapteyn
- EphemPy
- PyAst
- PyAstro
- Probably more...

Lots of wasted effort!

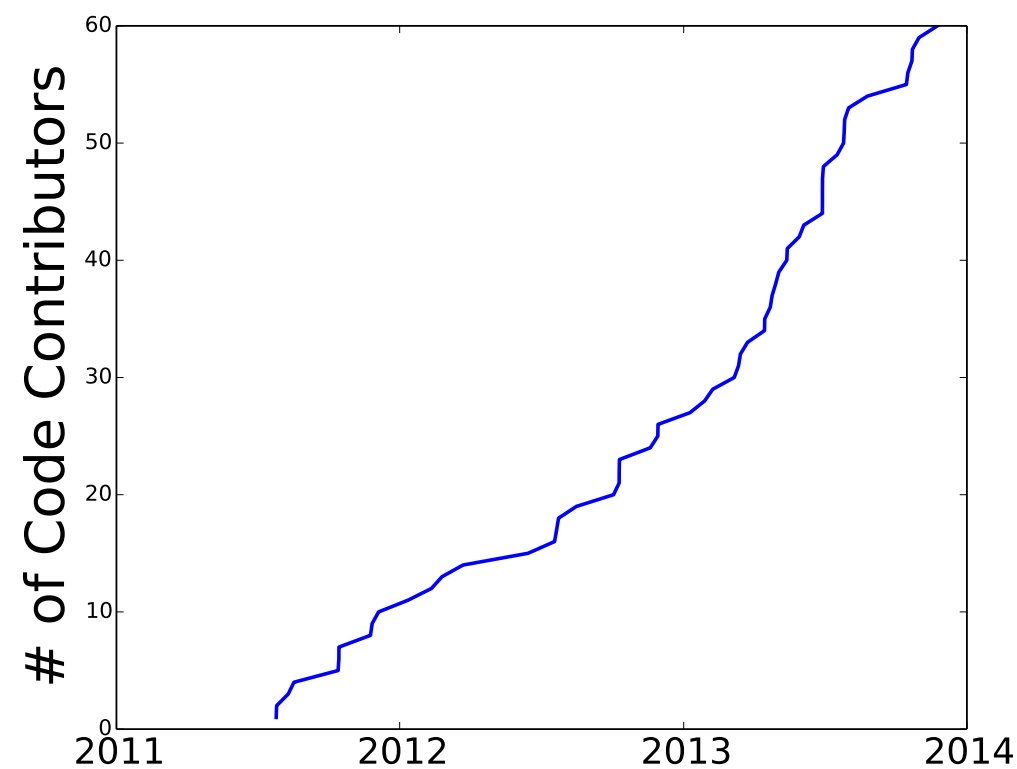
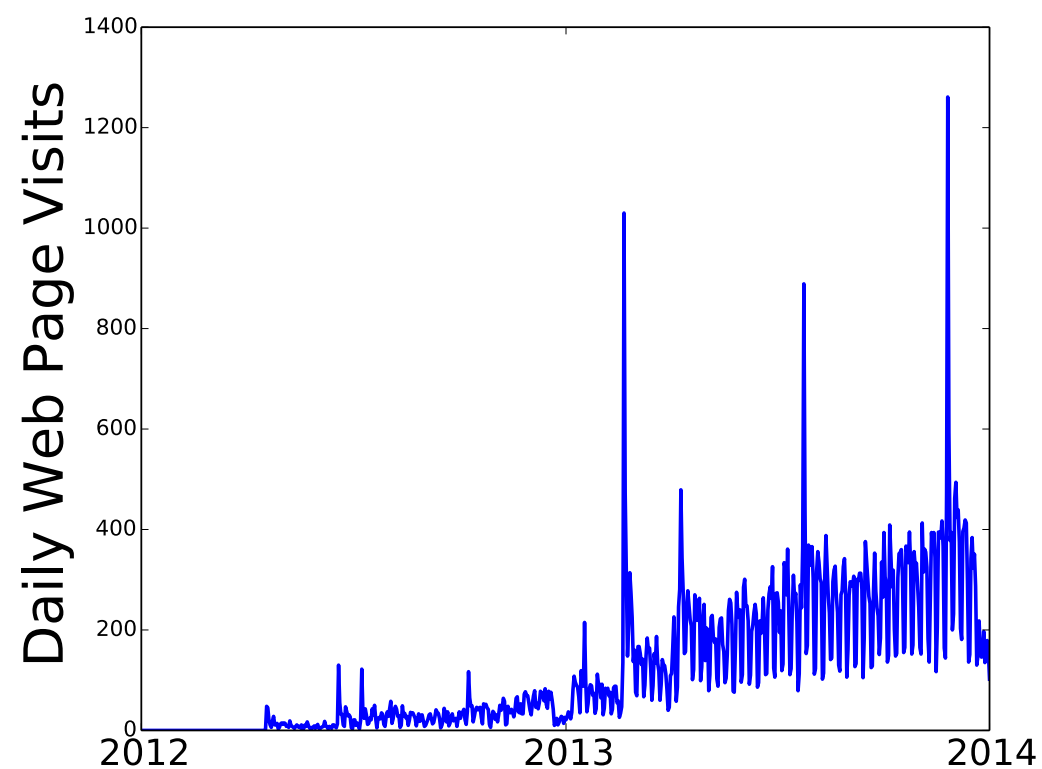
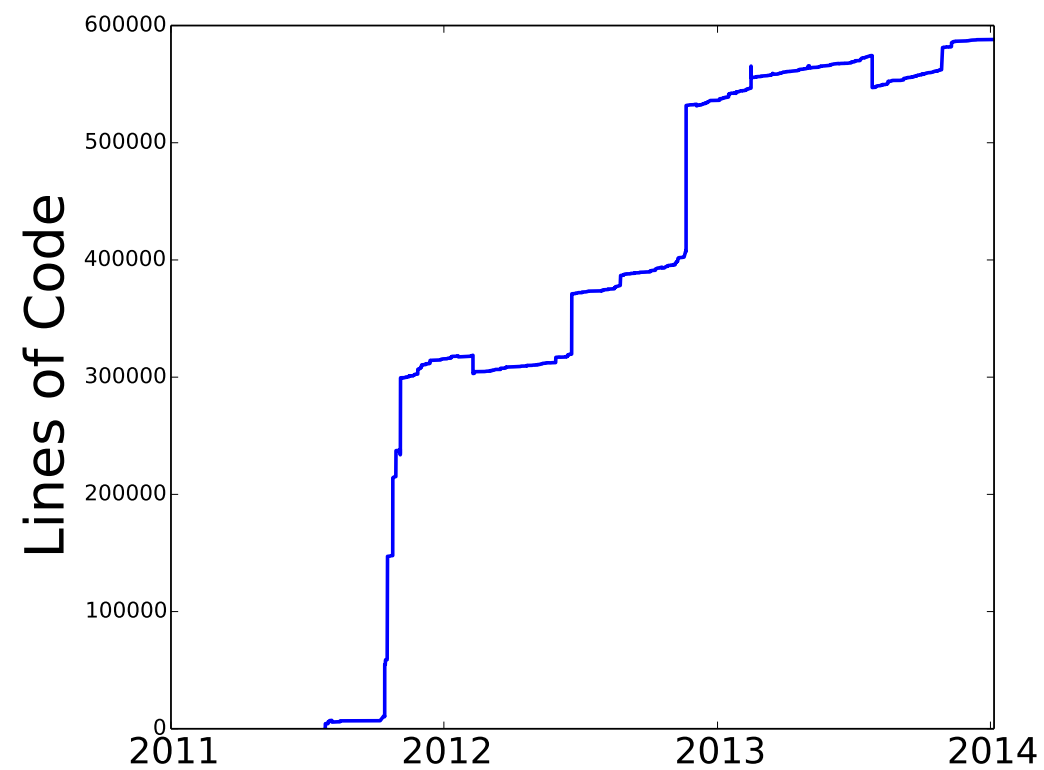
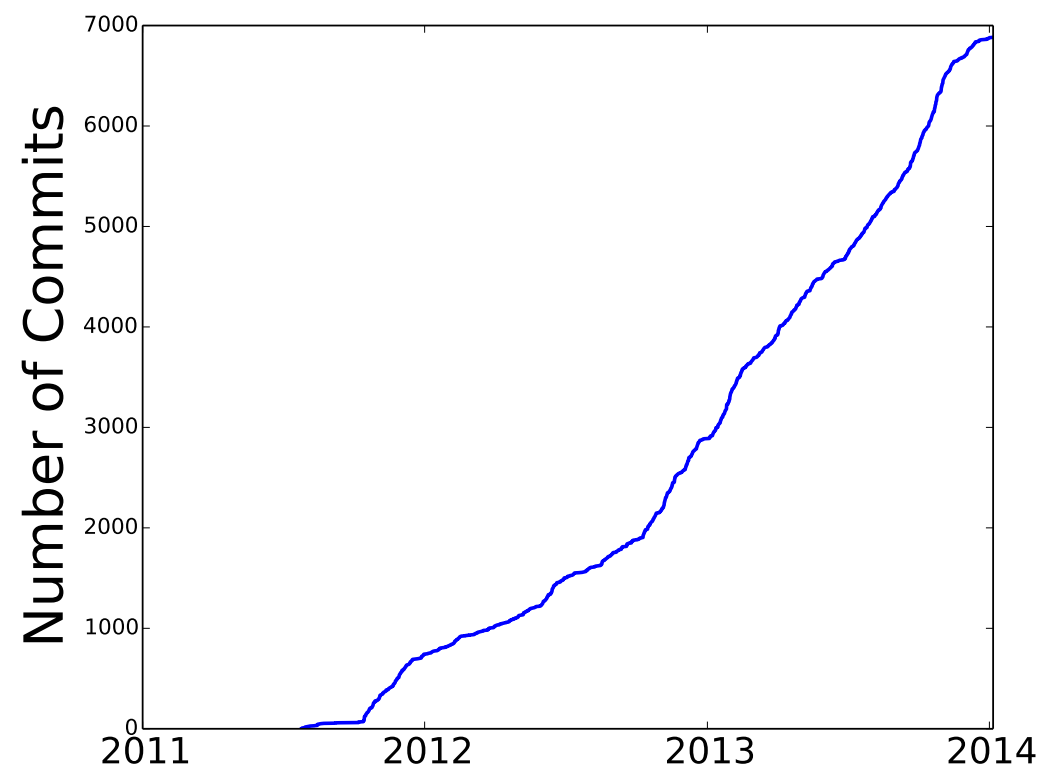
Mutually incompatible!

WHAT IS ASTROPY?

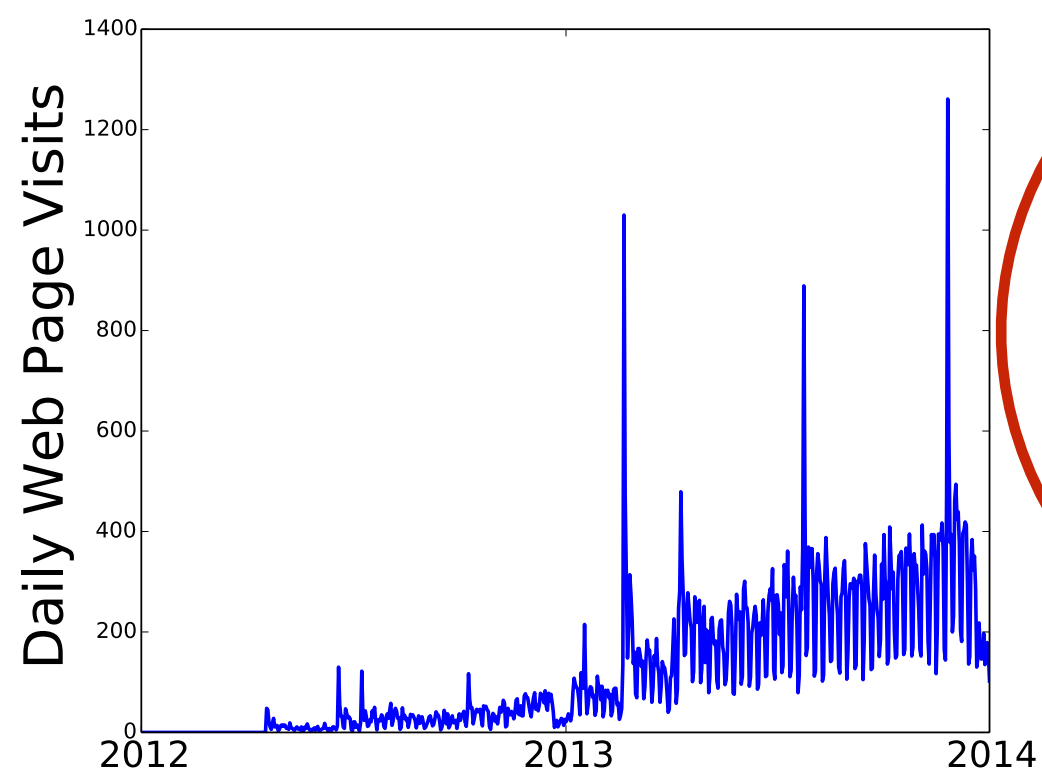
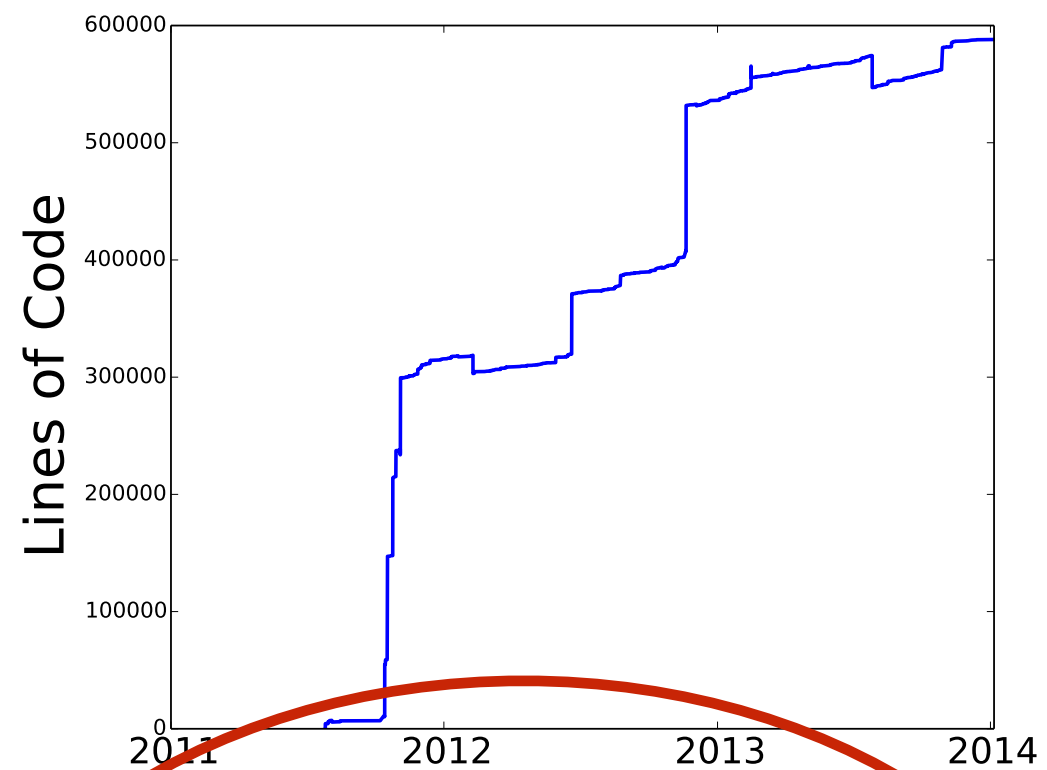
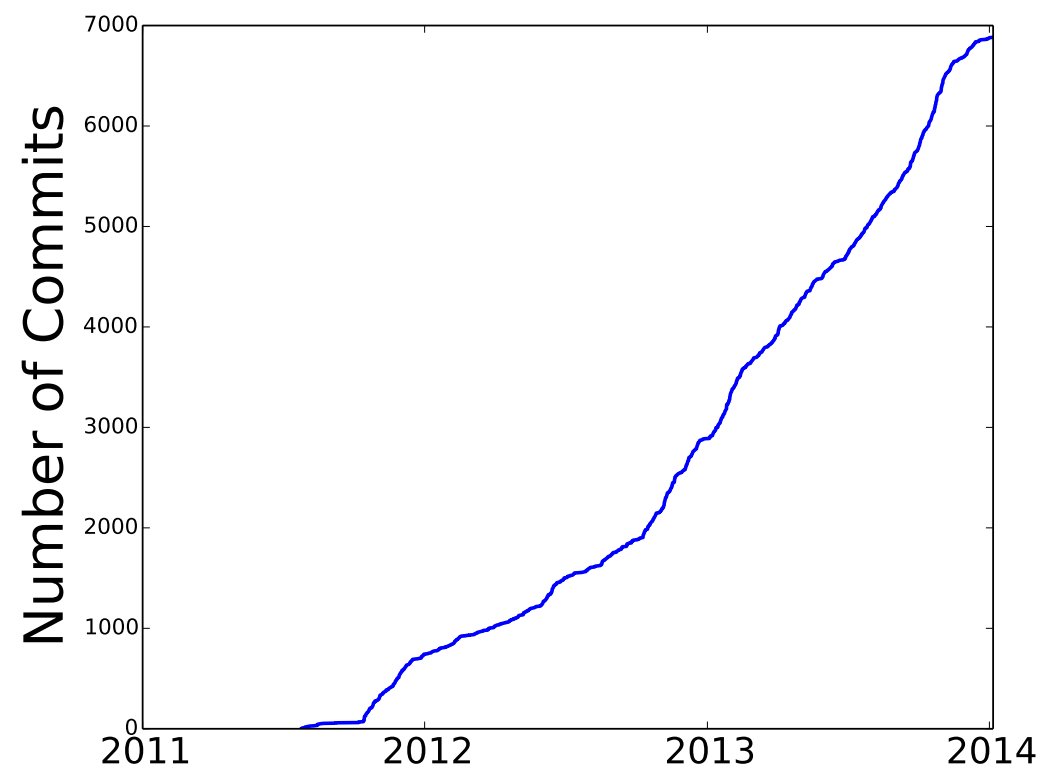
- Everyone agreed this was bad.
- (Agreement ends up *crucial* to shared development.)
- A “grassroots” discussion started in June 2011, followed by a series of votes (~100 astronomers).
- The Result:  astropy

(See <http://www.astropy.org> for more info)

ASTROPY IS GROWING QUICKLY



ASTROPY IS GROWING QUICKLY



YOU JUST NEED THE RIGHT TOOLS

github
SOCIAL CODING



- *Anyone* can submit code for review

Open jiffyclub wants to merge 2 commits into `astropy:master` from `jiffyclub:pytest2.3.3` 5,002 ■ ■ ■ ■ #462

Discussion Commits 2 Files Changed 2

jiffyclub opened this pull request 5 hours ago Edit

Updating the bundled pytest to 2.3.3.

No one is assigned ⚙️ No milestone ⚙️

Updated `astropy/extern/pytest.py` to version 2.3.3 for #446.

✓ Good to merge — The Travis build passed ([Details](#))

2 participants ■ ■

■ jiffyclub added some commits 6 hours ago

- jiffyclub Updating the bundled pytest to 2.3.3. ● 7490329
- jiffyclub Updated the minimum pytest version to 2.3.3 in setup.cfg. ● 559e2d5

■ eteq commented 3 hours ago ✎ ✕

Looks good to me - and the fact that the tests pass is very promising... @taldcroft, can you double-check that this works with your PR that needed the fixtures support?

Good to merge — The Travis build passed ([Details](#))

ℹ️ This pull request can be automatically merged. Merge pull request

YOU JUST NEED THE RIGHT TOOLS

- Python ecosystem



- Testing

py.test



- Documentation



SPHINX

PYTHON DOCUMENTATION GENERATOR



Read the Docs

Create, host, and browse documentation.

KEY ELEMENTS OF THE CAT RANCH

- The scientists agree on the problem!
- Infrastructure (**GitHub** or similar, testing tools, and documentation)
- Software people who are willing to do “housekeeping” on the infrastructure
- Let scientists work on what they want, but set guidelines and expectations
- (If you build it, they will code)