The Astropy Project: A "Self-herding cats" Development Model

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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
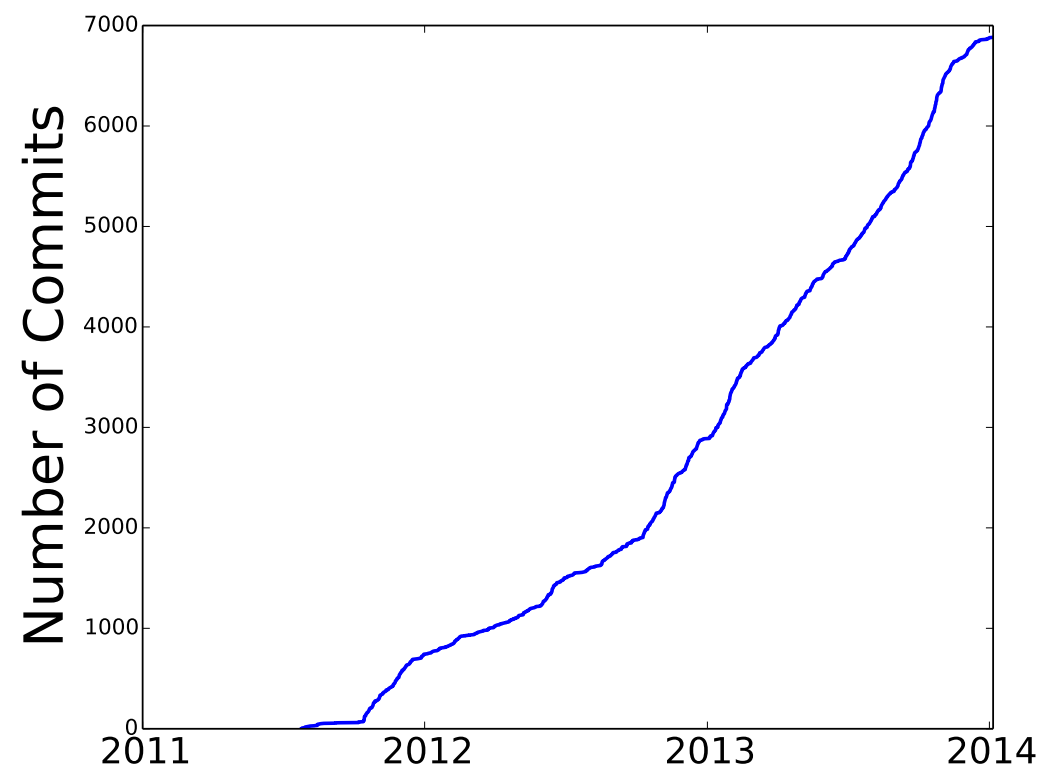- PyAstro
- Probably more...

Lots of wasted effort!
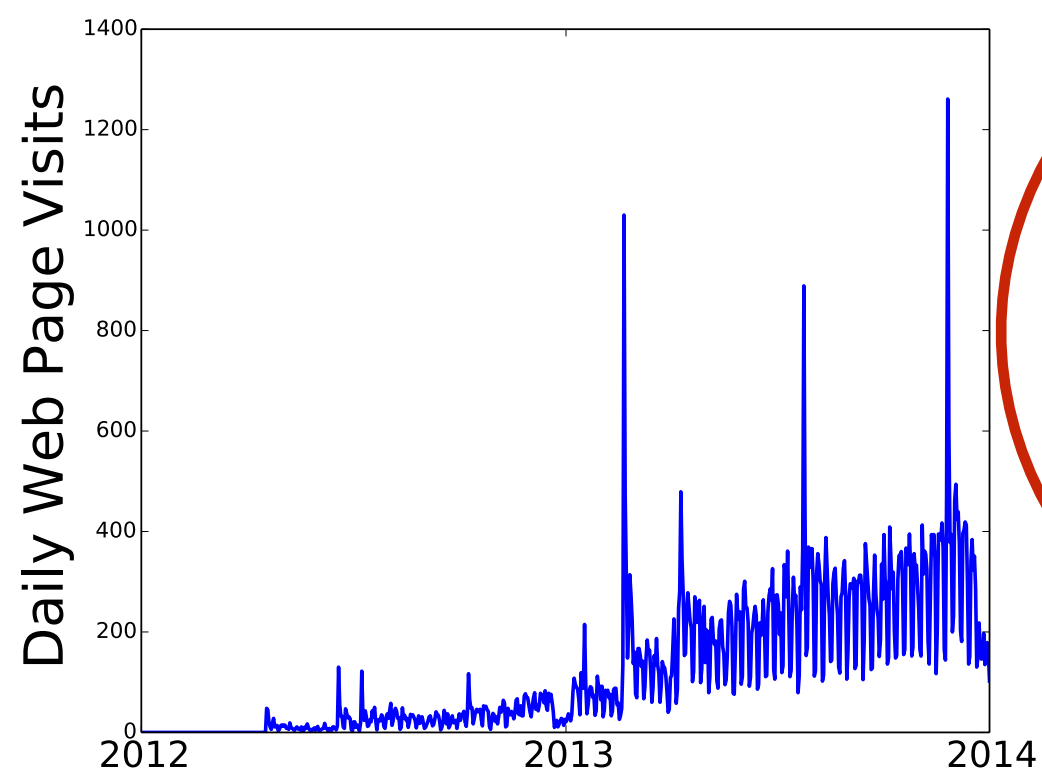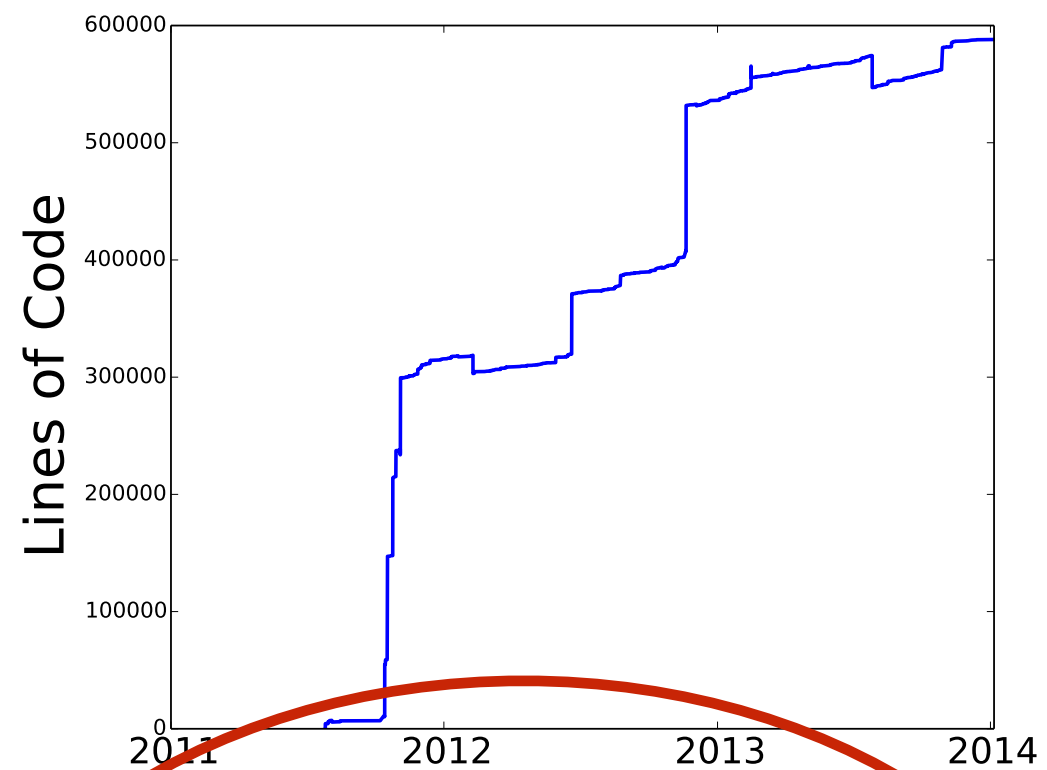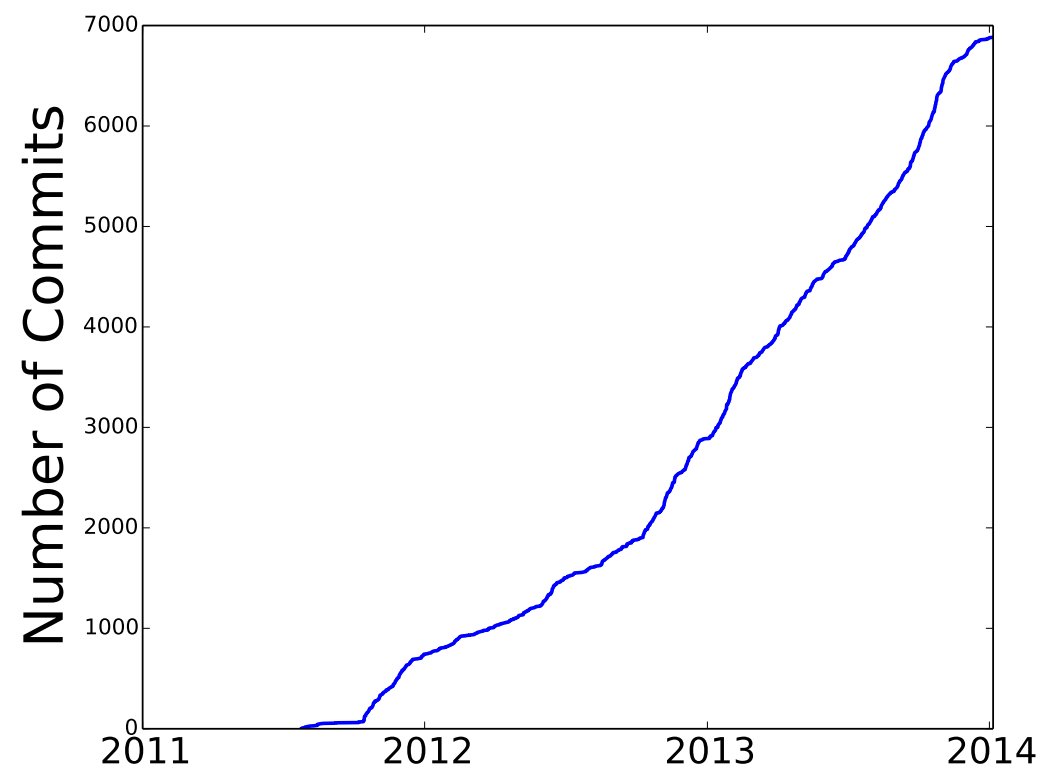
Mutually incompatible!

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
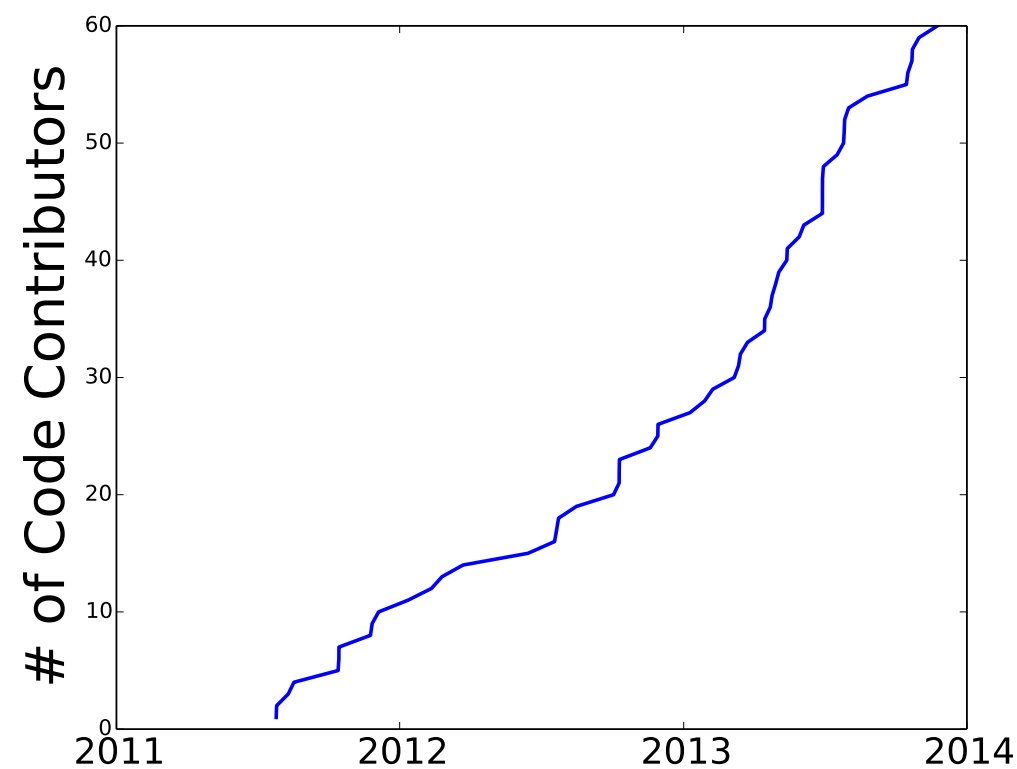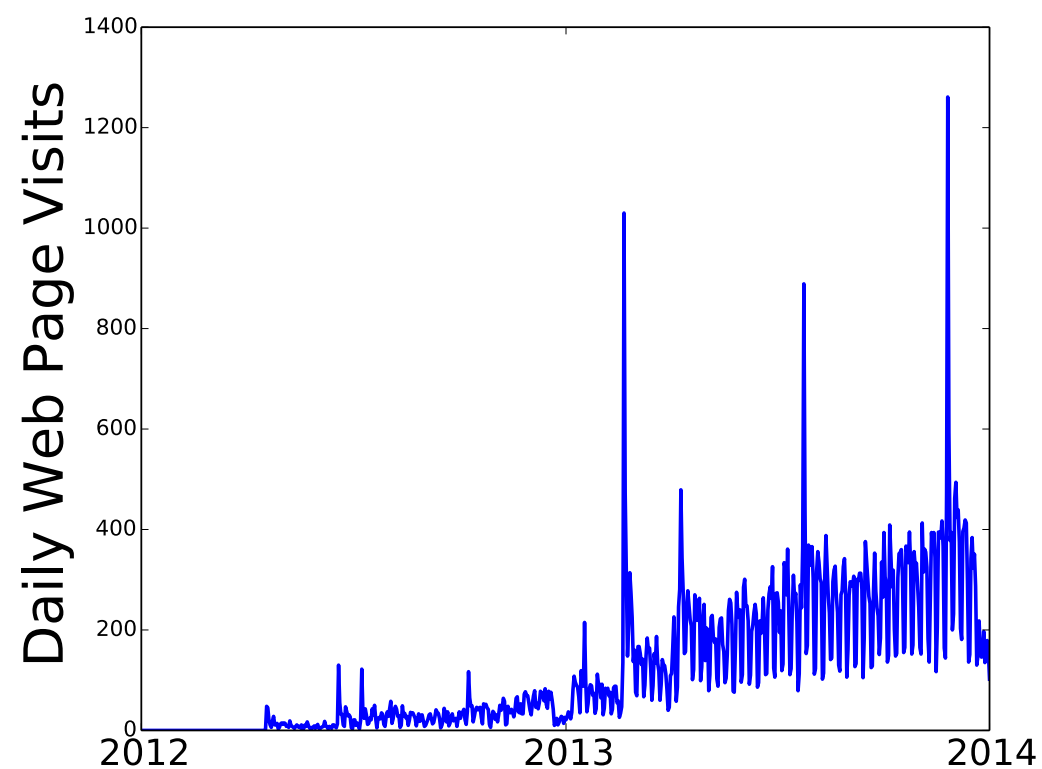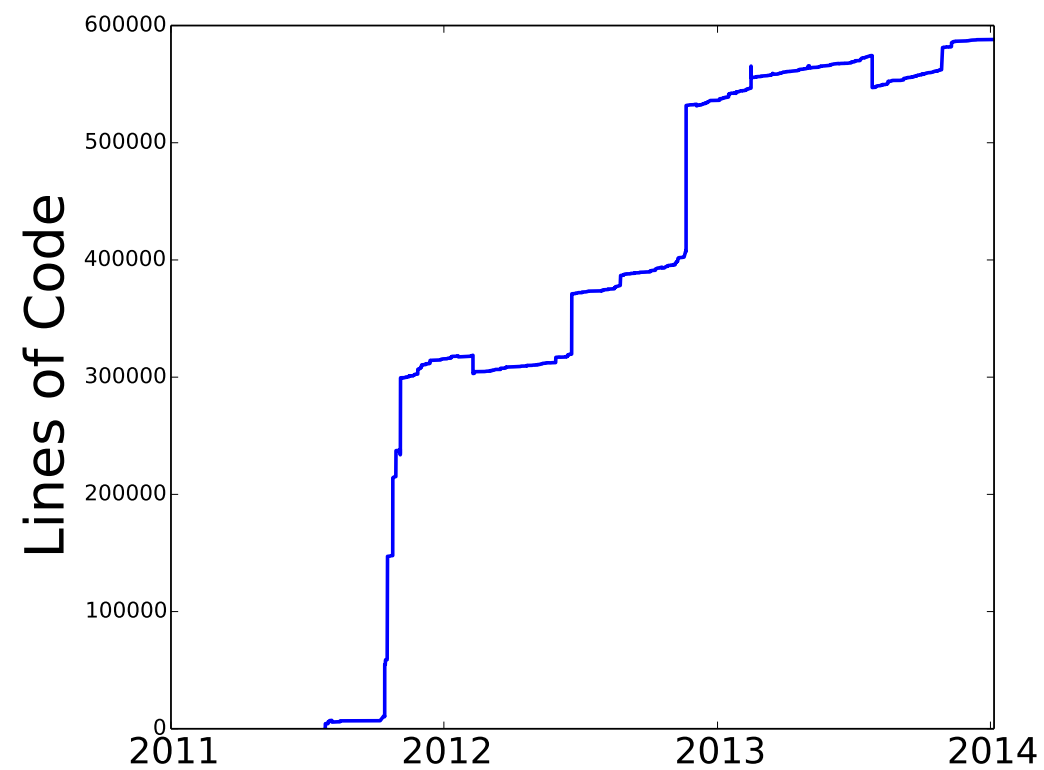
Astropy Is Growing Quickly

You Just Need The Right Tools

• *Anyone* can submit code for review

You Just Need The Right Tools

- Python ecosystem

- Testing **py.test**

- 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)