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](http://www.astropy.org) for more info)
Astropy is growing quickly.
Astropy Is Growing Quickly

Most of these people have never met each other!
You Just Need The Right Tools

Anyone can submit code for review
You Just Need The Right Tools

- Python ecosystem
  - NumPy
  - SciPy
  - Cython

- Testing
  - py.test

- Documentation
  - Sphinx
  - Read the Docs
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)