Toyz and Astro-Toyz

Fred Moolekamp and Eric Mamajek



Motivation

- Image file sizes are growing
- Analysis of larger data sets requires new visualization tools and remote storage
- Many existing tools lack GUI interfaces
- Impractical to use open source tools in a classroom settings due to difficulty of install

Toyz Architecture

Server

Python Tornado Web Application Client

HTML/
Javascript

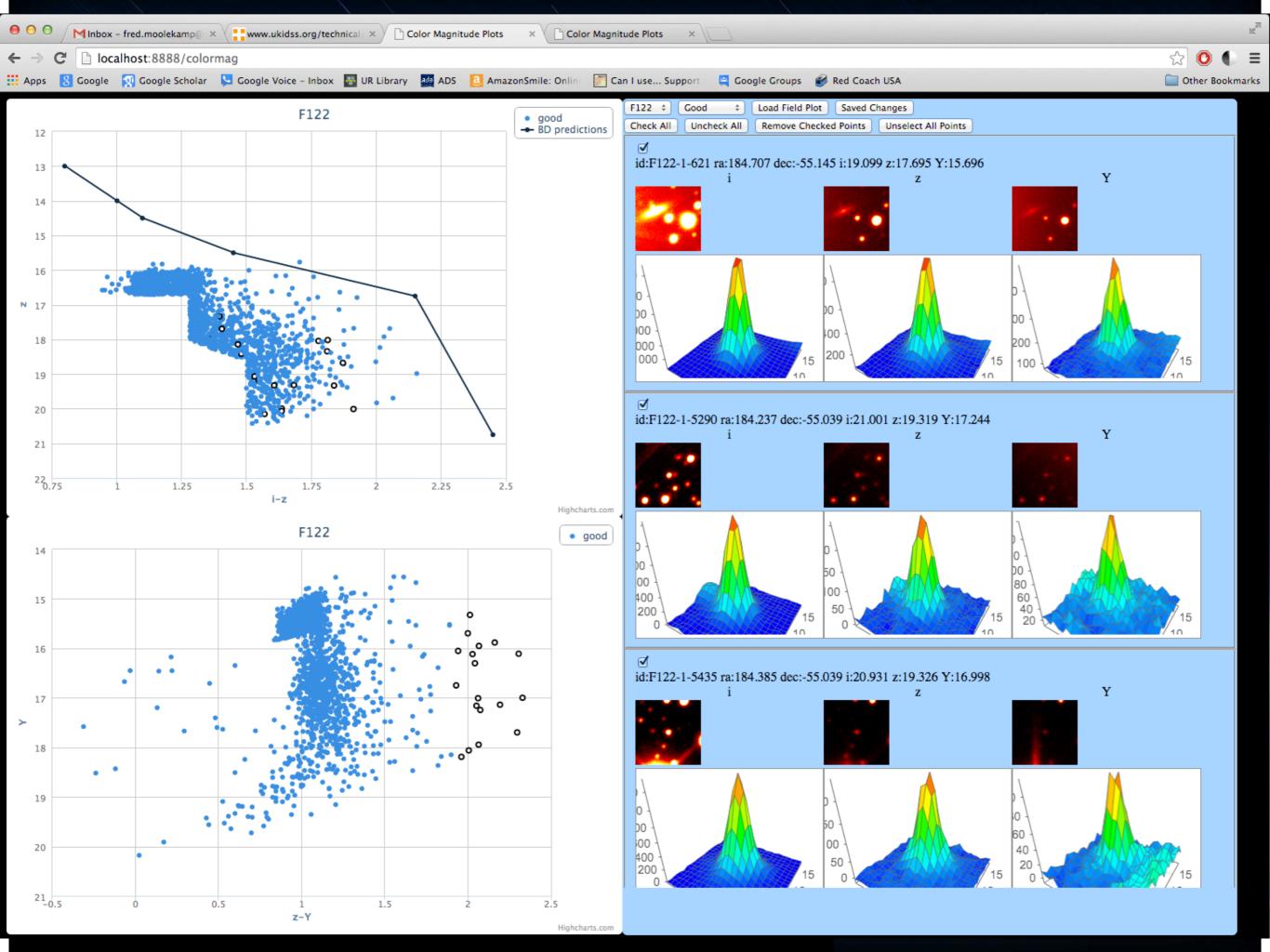
Guiding Principles

- Toyz should be easy to install
- Toyz should use modern languages (python, javascript, C++)
- Toyz should be as platform (and browser) independent as possible
- Minimal size on disk
- API should be as general as possible

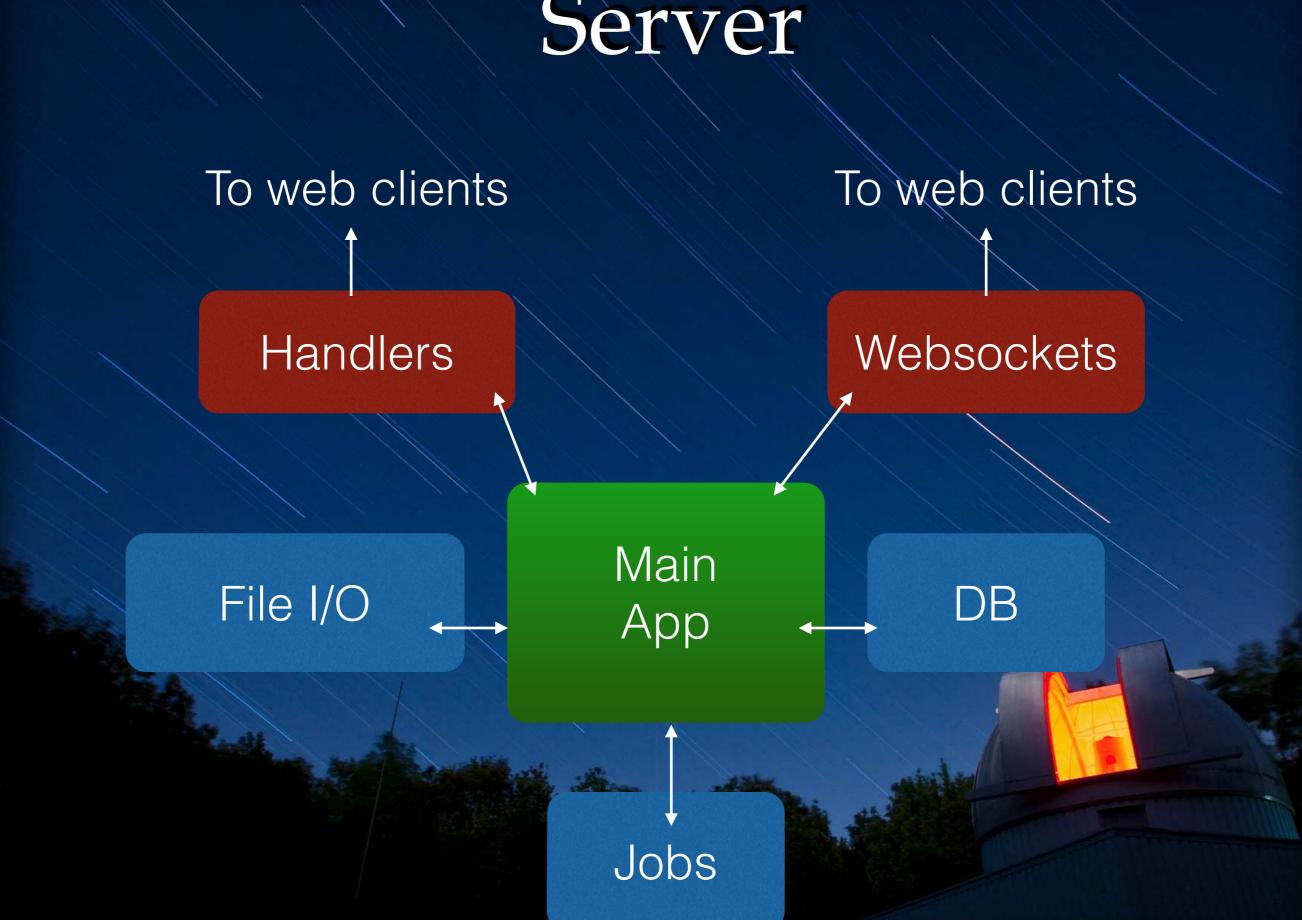
Guiding Principles

- Toyz should be integrated with as many existing codes as possible
- Easy to use GUI interface
- Toyz is a framework, not an application
- Goal: A new undergraduate should be able to start analyzing data on his/her first day!





Server



To Server

Toyz Core

Websocket

File Dialog

Client

Homepage (management console)

GUI

Image Viewer

Highcharts API

Workspaces

Data Sources

Tiles

Conclusion

- Toyz is still a work in progress
- Download Toyz at:

https://github.com/fred3m/toyz

Download Astro-Toyz at:

https://github.com/fred3m/astro-toyz

Thank You