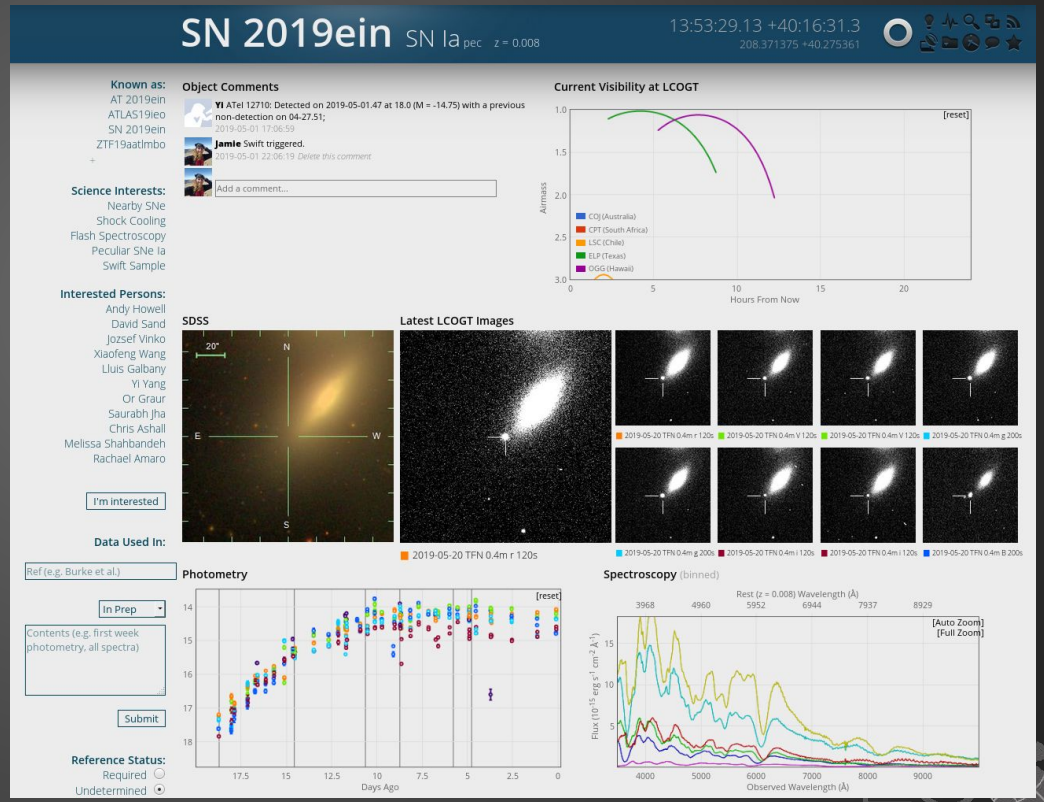
SNEx 2.0

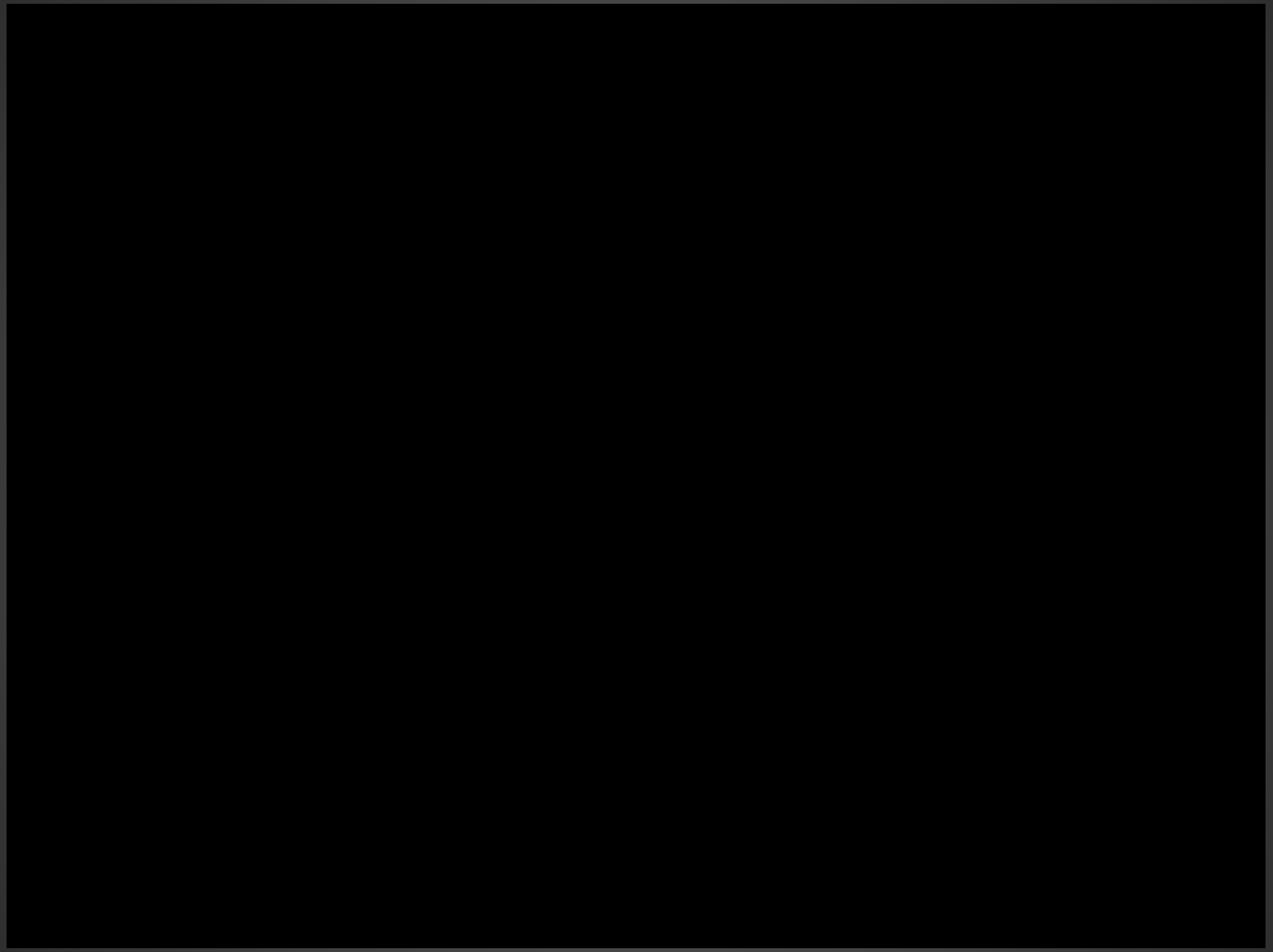
-Jamison Burke & Curtis McCully

Background: the Supernova Exchange (SNEx)

- Proto-TOM used by the SN group
  - Written by Iair Arcavi
  - Web interface (https://supernova.exchange)
  - Manages targets and observations



SNEx



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- SN group could not function without it
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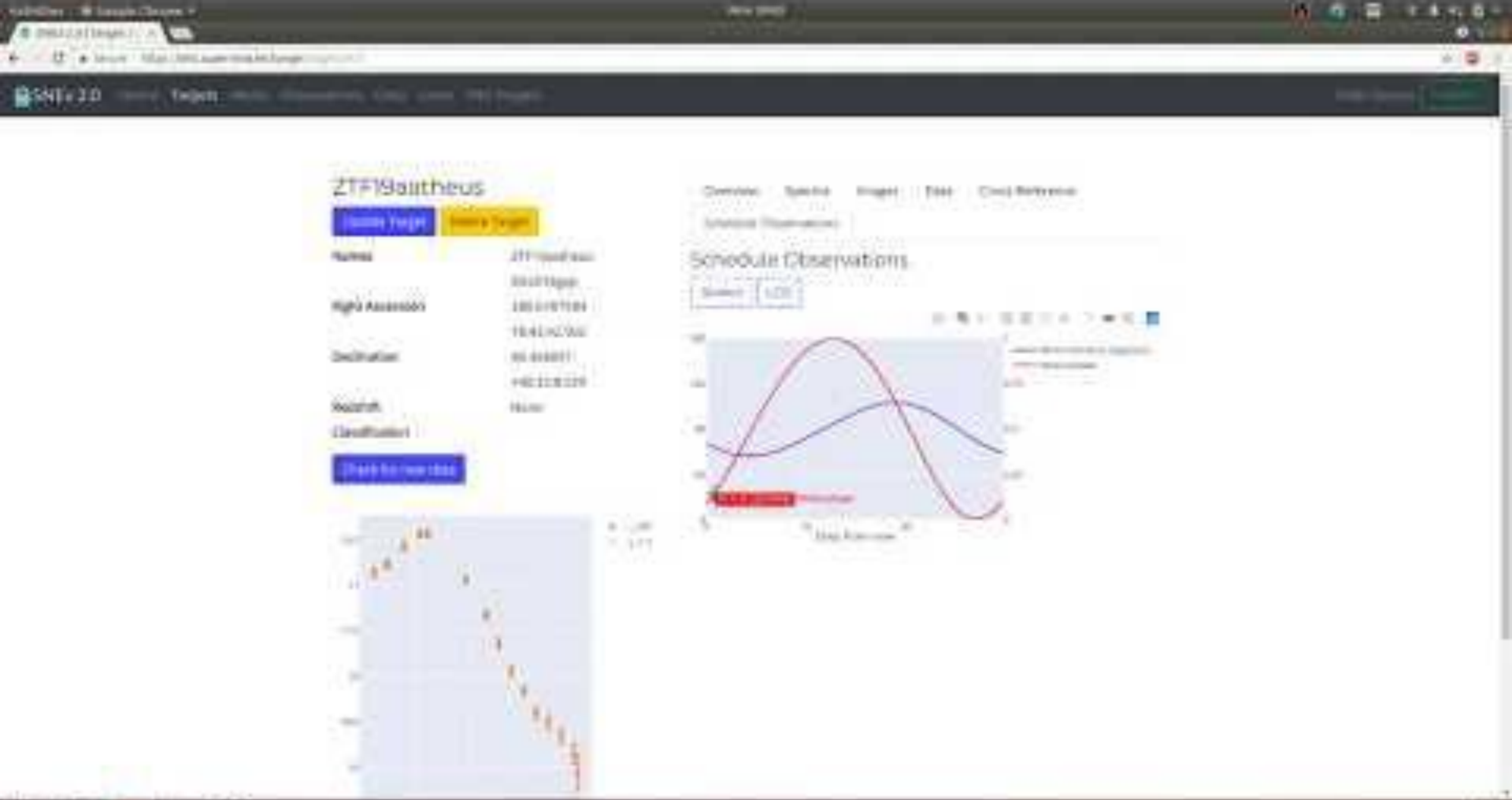
Cons:

- Lead developer left to a faculty position and development slowed significantly
- Can be difficult to develop, often pushing changes live, testing in production
- Intuitive front-end but un-intuitive back-end with no documentation
  - 869,152 lines of code in 2,035 files 😬
  - From-scratch mixture of Python, Javascript, and HTML, Python 2!
  - I (Jamie) still don't know how it actually works

Make SNEx 2.0 using the TOM Toolkit!


SNEx 2.0
ZTF19aaitheus
Schedule Observations

SNEx 2.0

Recent targets from the TNS

Filter

Results

Name	Coordinates	Discovered By	Recent discovery mag (filter) days ago	Last non-detection mag (filter) days ago	In TDSS?
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	No
[illegible]	[illegible]	[illegible]	[illegible]	Archival	No
[illegible]	[illegible]	[illegible]	[illegible]	Archival	No
[illegible]	[illegible]	[illegible]	[illegible]	Archival	No
[illegible]	[illegible]	[illegible]	[illegible]	Archival	No
[illegible]	[illegible]	[illegible]	[illegible]	Archival	No

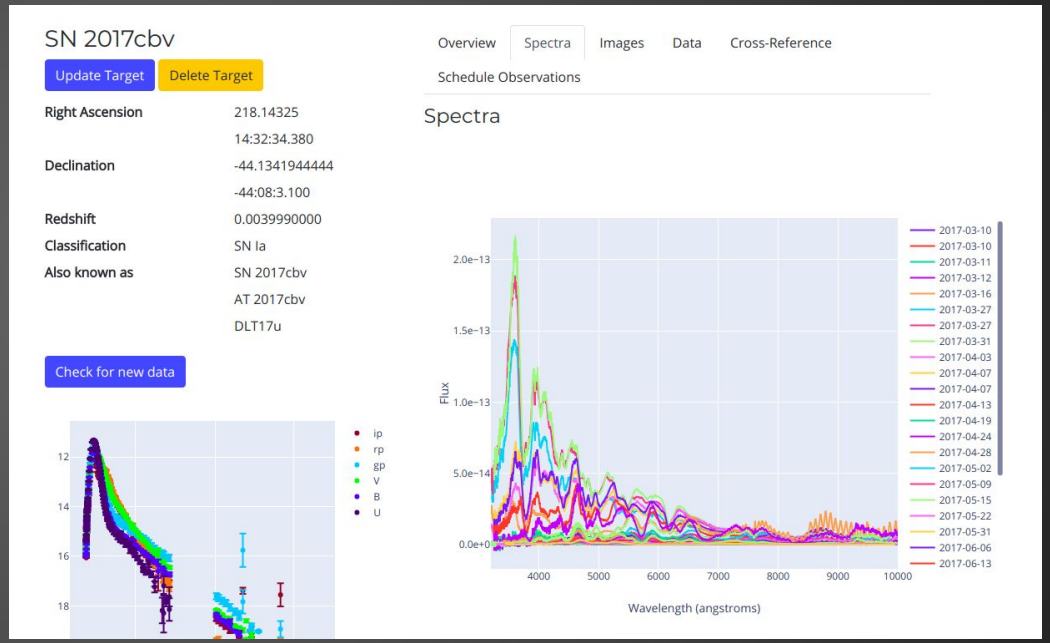
Public Version of SNEx 2: millisnex

Live at
http://millisnex.herokuapp.com/

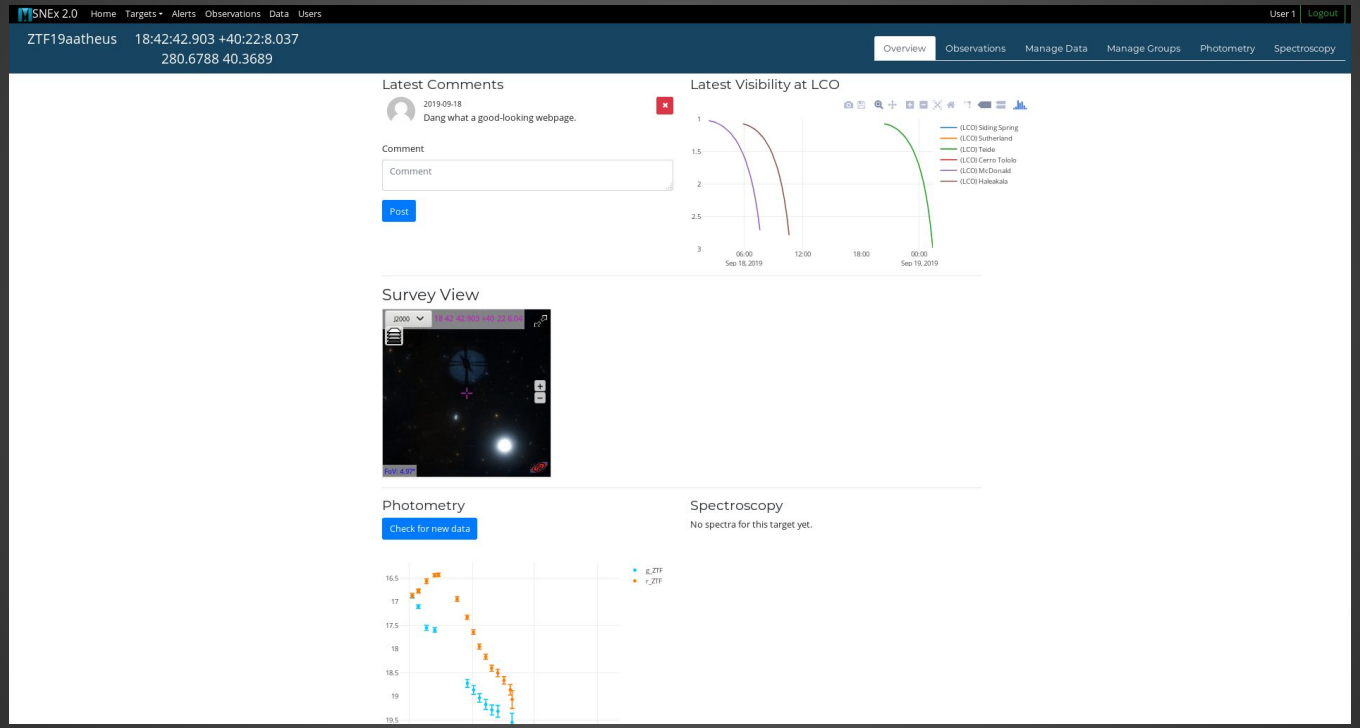
Log-in credentials on home page:

Username: millisnex

Password: mellon



TOMs Are Customizable



Future: Lines of Code Comparison

Old SNEx:

-2,035 files

-869,152 lines of code

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SNEx 2.0:

-47 files

-2,334 lines of code

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github.com/jfrostburke/snex2

Future: Assessment of TOM Toolkit/SNEx 2.0

Pros:

- Can start a new project extremely quickly
- Easy to start up a test instance
- Documentation (TOM + Django) helps a lot
-

Cons:

- Tough to interface with existing databases
- Still working on UX
- Missing some key features (but still in development)
  - No support for cadenced observations (yet)
  - Can't plot spectral lines to ID supernovae (yet)

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Thanks! Questions?

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