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Newsletter #89, July 8th 2019

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If the newsletter does not look good in your email, check the pdf here!

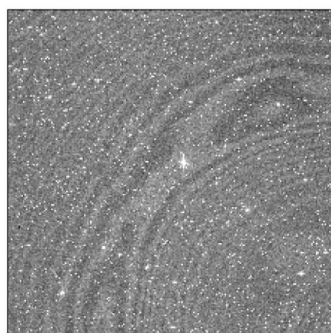
Correcting for fringing patterns in the i-band data

Wondering how you could get rid of the fringing patterns in the i-band data? Michael Medford and Peter Nugent have developed a method to do this! [This](#) is the link to the GitHub.

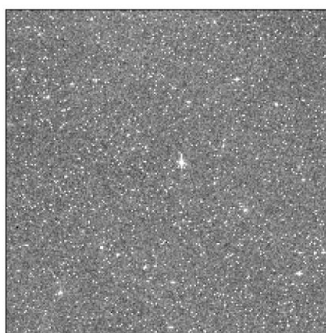
The essence of the method is to use PCA (principal component analysis) to identify the orthogonal contributions to the i-band fringing pattern, and then for each science image use these eigen-images to create a fringe model that is then subtracted to create a de-fringed image. This results in clean images. Below is an example plot generated by Danny Goldstein that both shows the qualitative effect on a single image, and then cumulative quantitative effect when combining several days worth of i-band images together into a co-addition.

The model files are available [here](#), instructions for this process, as well as generating new model images and using models to generate clean images, are all included in the README.

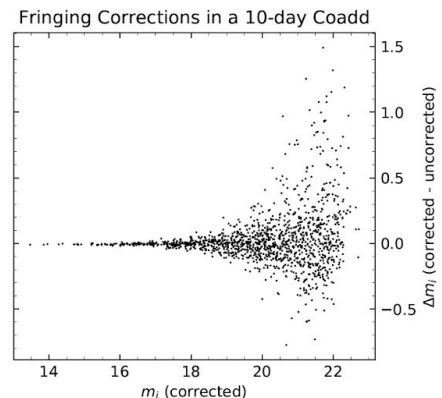
Please contact Michael (michaelmedford@berkeley.edu) if you have any questions!



No Fringing Correction



Defringed



News from working groups

Solar system: "(1) The MPC announced TWO Atira group discoveries by ZTF -- 2019 LL5 and 2019 LF6, found during the Twilight Survey. 2019 LF6 breaks the record of having the shortest "year" on any known asteroid, a record that ZTF just set earlier this year (2019 AQ3). With 3 Atira discoveries, ZTF has discovered 15% of all known Atira asteroids even though we have only been in the game for a bit more than a year! (2) The MPC also announced the second comet discovered by ZTF, C/2019 K4. It is a small comet just passed perihelion on June 17, and will not be brighter than ~18 mag."

Supernovae and relativistic explosions: "Many members of our working group gave presentations at the EWASS meeting in Lyon the last week of June, and the session on time-domain surveys (largely

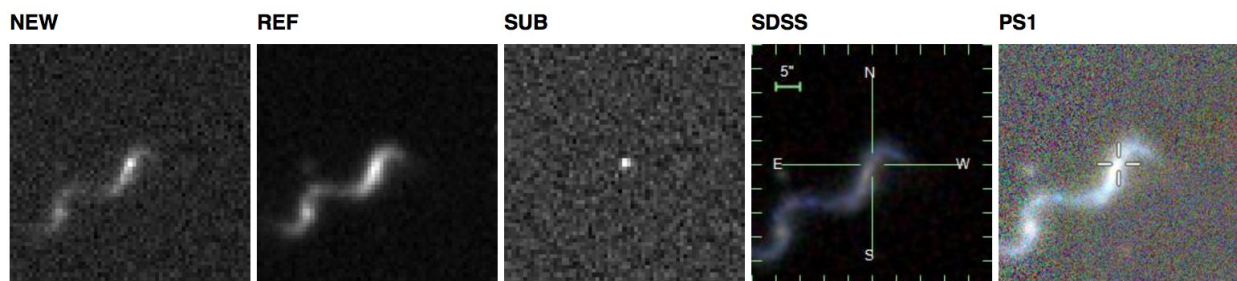
ZTF-organized) was well attended. We are also happy to report that there were (at least) two successful HST proposals from our working group, both ToO proposals to study young Type Ia SNe and circumstellar shells around SLSNe, respectively.”

Retweet the curious asteroid spotted by ZTF!

As reported above by the solar system group, ZTF spotted a curious asteroid, with the shortest “year” known for any asteroid. Here is the [tweet](#) and here is the [story](#)!

Cool SN host of the month

This month’s winner is the host of [ZTF19aamt wiz!](#) [Here](#) in the legacy survey viewer.



The papers corner:

Please send us your published papers, they will be advertised here.

Please send Joy Painter, the Astronomy Librarian at Caltech, links to papers as soon as soon as they are published. They will be kept track of [here](#).

Reminder: Save the date! September 3-5: ZTF fall collaboration meeting

Please save the date for the fall ZTF collaboration meeting, to be held on the University of Washington campus September 3-5. Space will be available on September 6 for further breakouts and hack sessions.

Reminders:

- PublicAlerts: There is a [link](#) to the alerts archive on the [website](#)!
- Please help us keeping track of all the available softwares! A preliminary list is available on the [twiki](#). Let us know if you are building a software which you think could benefit (or be relevant to) a large portion of the collaboration.
- **ZTF general slack channel:** Please join through this [link](#)!
- If you want to get access to the **ZTF data** via the IRSA interface, please request data access to the communication coordinators: ztf.communication.coordinators@gmail.com
- **Archive GUI** now ready! The interactive image search, filtering and visualization tool is now ready ().

- The **ZTF Twitter account** is now active! <https://twitter.com/ztfsurvey> Re-tweet @ztfsurvey!
- To use the **url shortener**(e.g. during telecons, talks, in emails), navigate to<http://zwickify.tf/shorten> (username: ztf password:16chips) and type in the URL you want shortened.
- The **Wiki page** is active! Check it out at <http://zwickify.tf/wiki>. To request access, please email us at [ZTF.communication.coordinators@gmail.com](mailto:ZTF.communication coordinators@gmail.com)

“One should never mistake pattern for meaning” – Iain Banks

Have a great and productive week!

Thomas and Maayane