

Newsletter #64, January 13th 2019

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

News from the engineering team (Report by Roger Smith)

The cryocoolers are stable and delivering a robust power margin.

Focus CCD read noise and non-linearity have been substantially improved, so that read noise on 3 CCDs is now below sky shot noise, at last. Incorporation of the 4th sensor on the far side of focus is still in progress as this CCD has always misbehaved in mysterious ways. Real time flat fielding and SNR cut for focus CCDs undergoing daytime testing. A range of small observing efficiency improvements are being studied in more detail.

News from the brokers

The ANTARES event broker is now live and actively filtering ZTF alerts. Users can register at antares.noao.edu. The initial set of filters includes alerts near extragalactic sources, high amplitude changes, bright sources, high significance detections, nuclear transients, and events in M31. These streams are available via the web site, Kafka streams, or the ANTARES Slack channel.

We will soon add a search function for the alert database, watch lists for objects of interest, and custom filter integration.

Jobs related to ZTF

We are looking to hire a post-doc. If interested, please see our job add.

News from AMPEL

The real-time propagation of MSIP extragalactic transient to the TNS has now reached a stable, high-quality level. Please help spreading the word to the community that anyone interested in objects such as supernovae and galaxy core variables already can find these through a standard TNS query.

News from working groups

Machine Learning: "A new RB version (t15_f5_c3) has now been implemented. It is substantially better than the previous version (t12) that was in force. The new 1% FPR is at 0.51 i.e. only 1 in 100 sources with RB > 0.51 is likely to be bogus. As always, if you see anything unexpected and different after this implementation, do get in touch with us. Still waiting on the Zooniverse team to make our project public. Should happen any day now."

Cosmology with Type Ia SNe: "The cosmology group is now working on creating and evaluating a year 1 "golden" Type Ia supernovae sample. A series of papers is planned to be written based on this."

The papers corner: Please let us know one a paper has been accepted!

Reminder: March collaboration meeting:

A kind reminder to please register to the coming ZTF meeting if you plan to attend (this is not committing and no costs involved). The meeting website is <u>here</u>. For registration go <u>here</u>. Also, the organisers would like to start to collect and organise the potential contributions, so please begin sending in your proposed talks (via your meeting account or by replying to this email), even if there's no abstract yet.

As mentioned in Ofer Yaron's email, the talks will be scheduled to the following general sessions:

- Survey engineering/technical updates, operations and methodologies
- Pipelines and utilities
- Reviews from the various working groups
- Scientific highlights & results (incl. session on unique events; e.g. 18cow)
- Future activities/plans
- Workshops/discussions (Friday potential sessions)

Reminder: IMPORTANT: We (still) need your help for the ZTF FAQs page! (and would love to remove this item from the newsletter)

During several weeks, we have listed the questions that people across the collaboration would like to have in the <u>FAQs</u> page. Now it is time to add answers. Please help us fill the voids (and elaborate on the answers already there).

More reminders:

- Public Alerts: 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 <u>twiki</u>. 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://zwicky.tf/shorten (username: ztf password:16chips) and type in the URL you want shortened.
- The **Wiki page** is active! Check it out at http://zwicky.tf/wiki. To request access, please email us at ztr.communication.coordinators@gmail.com

"In the midst of winter, I found there was, within me, an invincible summer". Albert Camus

Have a great and productive week!
Thomas and Maayane