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Newsletter #25, April 12th 2018  
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**Last news from the front (Engineering and Data Quality status):**

- 3 good nights in R produced almost 1.5 million alerts
- Ongoing work with the shutter
- Issue with the filter exchanger over the weekend - hope to have it back in use in the next few days.

**News from the GROWTH Marshal:**

- The Marshal developers have been hard at work and are pleased to report the following new features:
  - (i) AVRO packets can now be ingested by ID. If you have a complex filter that runs on your machine that generates a list of AVRO packet IDs, you can now submit these for direct ingestion into the scanning page of your science program.
  - (ii) Light Curves will be updated with new photometry from P48 as it streams in.
  - (iii) Offsets from nucleus are now being computed and offset plots generated.
  - (iv) A list of partnership programs and PI names is available on the "info" tab on the marshal home page, so that you know who to contact to join a science program.
  - (v) Sources can be shared or transferred between science programs

-We have re-ingested all alerts through 2018-03-27.

-As the S/N threshold has been lowered to 5, a very large number of candidates are passing your filters. This is a great opportunity for you to sort by your parameter annotation by clicking on it and then selecting new thresholds on various parameters. Remember to change the limit of 200 candidates to a larger number.

-To address the load on the scanners, the ZTF Science Validation filter was just modified this morning to ignore candidates with a nearby star brighter than 15 mag (i.e. if any of srmag1 or srmag2 or srmag3 is < 15).

-Please remember to save as many candidates as possible as bogus or real, to help with re-training the classifiers.

-Reminder that the marshal FAQ page is on the twiki in this [link](#)

-Reminder that we are set up to receive automated annotations on sources and documentation is linked from above twiki link.

**Updated layout slide for all your future ZTF presentations:**

An updated version of the generic presentation layout was uploaded to the twiki. Please use this one since the previous one is missing some logos.

**The Newsletters are now on the twiki!**

In case you missed one :-)

**ZTF summer school:**

We will have our first ZTF summer school between July 18th - 20th. Help is urgently needed. Please email Matthew Graham ([mjg@caltech.edu](mailto:mjg@caltech.edu)) if you can and want to help.

### **News from working groups**

**Machine learning:** "Have you found a real object that had a low Real-Bogus (RB) score, or a bogus artifact that had a high RB score? Please let [Umaa.D.Rebbapragada@jpl.nasa.gov](mailto:Umaa.D.Rebbapragada@jpl.nasa.gov) and [aam@astro.caltech.edu](mailto:aam@astro.caltech.edu) know. The first zooniverse campaign is now on. It will last for a week, so please go ahead classify a handful of objects. Should take you only a few minutes. You will find many bogus objects there, but we want those low SNR ones. If an object foxes you, click on 'Skip'. More details can be found on the ML campaigns page: [http://noir.caltech.edu/twiki\\_ptf/bin/view/ZTF/ZooniverseWorkflows](http://noir.caltech.edu/twiki_ptf/bin/view/ZTF/ZooniverseWorkflows)"

**Physics of Supernovae and Relativistic Explosions:** "The Supernovae and Relativistic Explosions working group is happy that alerts are flowing again, and busy sifting through potential supernova candidates and marking bogus sources. We have also classified ~20 SNe in the past week in between runs at P200, APO, and LT, which we hope to release in an ATel shortly."

**Solar system:** "ZTF found another NEA on Apr 10 -- 2018 GN1, a decameter-sized Apollo-type asteroid. This was found on its way out, with closest approach of about 2 lunar distance in the late hours of Apr 9. More test and verification of findStreaks, the detection efficiency has now increased to about 80%. ML model upgrades underway."

**Multi-messengers:** "After an outage due to a stuck solar panel, Fermi-GBM is back online and finding GRBs. Both short GRB and neutrino follow-up programs have been granted one ToO trigger (until ToO proposals are reviewed). Progress is made on the ToO marshal."

**Galactic and M31:** "We are getting ready for Gaia DR2. Less than two weeks to go..."

### **Reminders:**

- **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](mailto:ztf.communication.coordinators@gmail.com)
- **Archive GUI** now ready! The interactive image search, filtering and visualization tool is now ready (see previous newsletters).
- 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)

*"There is a crack in everything, that's how the light gets in"* (Leonard Cohen)

Have a great and productive week!

Thomas and Maayane