

Newsletter #37, July 6th 2018
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If the newsletter does not look good in your email, check the pdf [here!](#)

Low Galactic latitude Zooniverse campaign is on (HELP needed):

Richard Walters has set up a low Galactic latitude campaign so that the training sample there can be improved, Please classify!:

<https://zooniverse.org/projects/rswcit/ztf-rb-project/>

This is still an internal (to ZTF) campaign. We have not had time to change the tutorial, so ignore the extragalactic examples there.

Constraints used (in addition to Frank's stringent MSIP cuts) are:

$|b| < 10$, Mix of RB scores:

~500 with $RB < 0.2$ (should be really bogus)

~500 with $RB > 0.8$ (should be really real)

~3000 with RB between 0.3 and 0.65) (this is where we need more discrimination)

Reminder: ZTF summer school:

A preliminary agenda and local details are now up for the summer school. Please continue to advertise it at your local institute or among collaborators, colleagues, etc.

Reminder: In preparation of the collaboration meeting, send us the questions you would like to discuss:

To help the organisers manage the discussion on the most important topics, please let us know if you have the answer to/have been investigating already one of the above questions, and if there are other important subjects you find particularly important to discuss:

1. What is the RB distribution of transients saved by scanners. Where can we put the Cut?
2. How good is the Photometry? Comparisons to other pipelines or other surveys, for different magnitudes slots.
3. How complete are we? Do we find all/some/most of the SNe reported in ATELS?

News from working groups

SN Ia cosmology: "We have created our first Hubble diagram of SNe Ia based on the g/R lightcurves on the marshal. At this point we already have more than 80 SNe that make our cuts and another 40 that may be good but do not have data in both g and R yet because of lacking references. We are currently determining how many have sufficient i-band coverage as well."

SNe and relativistic explosions: "The Supernova and Relativistic Explosions working group are excited to have found our first infant supernova with flash spectroscopy features, ZTF18abeajm!! After discovery through our infant supernova filter SEDM was triggered, and the spectrum shows high-ionization features such as CIV. A WHT spectrum taken the next night confirms the features seen in the SEDM spectrum. Swift has been triggered and further follow-up is underway. "

AGNs and TDEs: “The ZTFbh SWG is filtering with GROWTH and AMPEL, ranking TDE candidates for spectroscopic follow-up, and investigating the use of Gaia for the most complete and pure star galaxy separation to be used in conjunction with sgscore. We have some early science papers underway, and look forward to discussing our findings in Sweden.”

Solar system “Several ZTF SSWG team members are participating in the LSST Solar System Science Collaboration readiness sprint at UW, 10-12 Jul. Agenda items include LSST alert stream and cadence, and our experience with solar system objects in ZTF data will benefit the sprint.”

Reminder: Zooniverse field guide: Help us help you

We are in the process of building a field guide that non-experts can use to help us improve RB scores. Based on reals and bogus candidates marked so far, Richard has created two webpages:

<http://skyvision.caltech.edu/ztf/zoo/rb/?type=real>

<http://skyvision.caltech.edu/ztf/zoo/rb/?type=bogus>

We need only a few examples from each science group.

On the right hand side of each candidate you will find a “Send Message” button. If you find candidates representative of your science working group, please click the corresponding “Send Message” button. It will pop-up a dialogue box - please annotate it saying if it is a good/bad example of your science case, a line or two of why you think so, and your name.

If this helps us get twenty good reals, and twenty good bogus examples, we will be in business soon to get help from outside to create a good/large training set for the ML classifiers. If you have questions, email us at aam@astro.caltech.edu

For those of you who already sent some examples, thank you very much!

Note: In some cases we may need to zoom in to just the central few pixels to improve contrast, and we are exploring that possibility. For now, ignore all the bad ones, and just pick a few good ones per science case.

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 [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://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 ZTF.communication.coordinators@gmail.com

Special 4th of July quote!

“Liberty, when it begins to take roots, is a plant of rapid growth” (G. Washington)

Have a great and productive week!
Thomas and Maayane