

Newsletter #30, May 17th 2018
#####

Last news from the front (Engineering and Data Quality status):

Shutter and filter exchanger issues are still being worked out
Starflat and skyflat analyses are making good progress
Guide/focus CCD system work is ongoing
Cuts on some parameters (S/N, detection mag, FWHM) are planned for the future to reduce the number of boguses in the alert stream

The following cuts go in tonight:

snr (from 1.085736/sigmapsf) ≥ 5 and

rb ≥ 0 and

magpsf ≤ 23.5 and

nbad ≤ 4 and

fwhm ≤ 7 and

elong ≤ 1.6 and

magdiff ≥ -0.4 and

magdiff ≤ 0.75

Public alert stream aimed for June 4.

Help (still) needed with ZTF monitoring:

There have not been enough people subscribing for monitoring the telescope.

It is an important task with a high ratio of (learning)/(time spent) !

Please sign up at the Doodle: <https://doodle.com/poll/fticdw8zihkmr46a>

And see the instruction http://noir.caltech.edu/twiki_ptf/bin/view/ZTF/WatchingP48

For further discussions, there is now a Slack channel: #monitoring-ztf

News from AMPEL:

Focus in the AMPEL team last week was set on understanding the implications of the stress test and on improving the reported metrics for robust longterm monitoring . We have repeatedly ingested the full previous alert stream to verify the DB performance up to the point of hosting millions of transients simultaneously (much more than is expected from ZTF at any time). Besides testing channels, a number of science filters have been running, including filters based on catalog matching and selecting nuclear transients.

The interested can have a look at one of the overview (for the archiving) at:

<https://snapshot.raintank.io/dashboard/snapshot/bM7RStilq7zmKwwtN8JXIHYChpOnJhLc?orgId=2>

Next week will focus on further developing the tools for exporting candidate information to external systems.

New (and less new) codes!

Please see the new codes by Matteo Giomi, also available on the [Twiki section](#)

- extcats (<https://github.com/MatteoGiomi/extcats>)

is a python module to ingest catalogs into a mongo database and run fast positional queries on them.

- dataslicer (<https://github.com/MatteoGiomi/dataslicer>)

python module to work with source tables (sextractor and psffit photometry catalogs). It is based on pandas DataFrame for efficiency and has several tools to cluster, match, select and transform the data built in.

While extcats is mature now, the dataslicer is still in development, but is in more than usable state at the moment.

catsHTML: there is now a paper (accepted by PASP): <https://arxiv.org/abs/1805.02666>

Reminder: MSIP alert usage:

We intend to start the public stream of alerts from MSIP programmed survey fields on June 4, Monday. Prior to this date, MSIP alerts can be reviewed for QA purposes (verifying alert quality, tuning marshal filters, defining training sets for RB, etc.). If a MSIP alert is rated as scientifically interesting during this period (deserving of followup) then it needs to be made public via TNS or ATEL before any followup observations can be taken. The date on which the alerts will start will be confirmed as we get closer to this date. Once the stream goes public the partnership may use MSIP alerts without restriction.

Please sign up to the next collaboration meeting:

We would like all of you who are planning to attend the meeting in August to sign up ASAP. Directions to near-by hotels have now been added to the registration page by the organisers:

<http://agenda.albanova.se/confRegistrantsDisplay.py/list?confid=6506>

Reminder: 2018 ZTF summer school:

The registration is now open for the 2018 ZTF Summer School. Please advertise at your institutes.

<http://www.ztf.caltech.edu/page/summer-school>

News from working groups

Machine learning: “A new set of parameters cuts will be deployed on Friday. This will reduce the number of bogus candidates considerably.

Last week too very few people contributed to Zooniverse classifications (only three really). A new set is now in. Though most objects there are bogus (by design) that still helps the process. Please spare a few minutes during the week and contribute.”

AGNs and TDEs: “The ZTFbh SWG is excited to report the discovery of our second TDE candidate, “Jon Snow”, as well as a couple more CLAGNs. We also made a decision to reduce our nuclear cut from 0.8 arcsec to 0.5 arcsec, given the astrometric performance so far of the confirmed nuclear transients in our reports page. We are working on writing up the discovery paper for our first TDE “Ned Stark””

SNe and relativistic explosions: “Similar to last week, the Supernovae and Relativistic Explosions working group is working on their filters. We discussed two MoUs and interesting transients. Noteworthy are the IIb SN ZTF18aalrxas with its well sampled double-peaked light curve and the luminous Ib SN ZTF18aahpbwz.”

Galactic/M31: “The Galactic working group discussed machine learning applications based on archival lightcurves (e.g. variable star classification) and added some contribution to the machine learning paper. Preparing to look at the lightcurves from the first matchfiles.”

Reminders:

- 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

“My main focus is to remain focused” (unknown)

Have a great and productive week!

Thomas and Maayane