

Newsletter #113, January 29th 2020

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

News from the front: SEDM reports (Richard Walters)

SEDm will be offline April 6th-12th 2020 for maintenance on the Palomar 60inch. Plans are to recoat the primary mirror at that time and to rebuild the secondary mirror assembly.

News from the GROWTH marshal (Ashot Bagdasaryan)

"We have updated the starlist on the observing run page for DBSP. Also, there is a beta version of ingestion ZUDS sources by ID through ingert_zuds_id.cgi."

News from working groups

Solar System: "We detected the outburst of 155P/Shoemaker 3 brightening by about 0.2 magnitudes and followed up with the SEDM. The traces of CN gas and water tracer molecules are seen in the spectrum. Our discovery rate of NEOs has been increasing. We have discovered 10 new NEOs so far this year, giving us a discovery rate of 2.5 new NEOs/week, a factor of double the average discovery rate during 2018/2019."

AGNs and TDEs: "Our first TDE of 2020 will likely be ZTF20aabqihu (aka Gilly), stay tuned as we gather more multi-wavelength data for this source. We are current working with the Ampel and ZUDS team to get our nuclear transient filter working for the ZUDS co-add stream. Proposal news: our Swift program for TDE followup got accepted (160 ksec, PI: Gezari)"

Machine Learning: "ZUDS rb classifier continues to perform well. Currently a cut-off of 0.3 is being used (Credits: Dima/Danny). We are waiting for more data to collect, and then we will inspect rb < 0.3 candidates for false negatives and determine if re-training is required. That may be useful especially for the i-band data. At this Thursdays ML meeting (2 PM PT) Bryce will discuss possible ML projects with Solar System data. We encourage other groups also to propose projects that we can help with. Get in touch with Ashish Mahabal <aam at astro.caltech.edu>."

Physics of supernovae and relativistic explosions: "Ofer gave a presentation about the Transient Name Server (<u>TNS</u>), <u>WISEREP</u>, and how to use their features. For example, the TNS is now officially keeping a record of FRBs. The improved version of WISREP allows you to do simple blackbody fits and the measure the equivalent width of spectral features. The slides of the presentation with examples can be found <u>here</u>."

The papers corner:

There are two new installments (first one can be found <u>here</u>) on the "ZTF Early Observations of Type Ia Supernovae" series!

- Adam Miller et al., "<u>ZTF Early Observations of Type Ia Supernovae II: First Light, the Initial Rise,</u> and Time to Reach Maximum Brightness"
- Mattia Bulla et al., "<u>ZTF Early Observations of Type Ia Supernovae III: Early-Time Colors as a</u> <u>Test for Explosion Models and Multiple Populations</u>"

Please keep us updated about your submitted/published papers, they will be advertised here. Please send Joy Painter, the Astronomy Librarian at Caltech, links to papers as soon as they are published. They will be kept track of <u>here</u>.

Spring ZTF collaboration meeting:

The spring 2020 collaboration meeting will take place March 23-25 in Berlin. Please have a look at the <u>meeting page</u> and register if you have not done so already. More information regarding the real-time multi-messenger workshop we will host after the collaboration meeting can be found <u>here</u>.

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 <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! <u>https://twitter.com/ztfsurvey</u> Re-tweet @ztfsurvey!
- To use the **url shortener**(e.g. during telecons, talks, in emails), navigate to <u>http://zwicky.tf/shorten</u> (username: ztf password:16chips) and type in the URL you want shortened.

- The **Wiki page** is active! Check it out at <u>http://zwicky.tf/wiki</u>. To request access, please email us at ZTF.communication.coordinators@gmail.com

"Early is on time and on time is late" Bo Schembechler

Have a great and productive week! Igor and Erik