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

"News from the front": Engineering Update (Richard Dekany)

The Oschin Telescope declination axis limit was recently increased to 87.5 degrees, allowing pointing to the North Celestial Pole. Previously, a noticed oscillation in the telescope drive precluded high north, but this constraint has been lifted and ZTF software updated to support these observations. Reference images, if not already obtained (requiring relatively little time), will be necessary in order to establish real-time alerts in this area of sky.

ZTF PUBLIC DATA RELEASE 1: Available May 8, 2019.

The Zwicky Transient Facility (ZTF) and IPAC at the California Institute of Technology announce the first ZTF Public Data Release. ZTF is an optical time-domain survey covering the northern sky visible from Palomar Observatory. This release includes data products from the public portion of the survey spanning March to December, 2018. The products include ~3.4 million single-exposure images, ~102 thousand co-added images, accompanying source catalog files containing ~63 billion sources detected from those images, and ~2 billion lightcurves constructed from the single-exposure extractions. Note: transient alerts extracted from difference-images commenced public distribution on June 4, 2018. These alerts continue to be generated and distributed as the public survey proceeds.

A guide to ZTF Data Release 1, with data access instructions and supporting documentation is available at https://www.ztf.caltech.edu/page/dr1

Access to the data products is available via the on-line and API services of the NASA/IPAC Infrared Science Archive (IRSA) at https://irsa.ipac.caltech.edu/Missions/ztf.html

News from working groups

Multimessenger, EM/GW and Neutrino Counterparts: "We received two high-energy neutrino alerts on Friday and Saturday (IceCube-190503A and IceCube-190504A). We followed up on the first one with two 300 sec exposures. The second one was in the South and too close to the Sun. Candidates were inspected with AMPEL and the GROWTH marshal, but we did not find any convincing optical counterpart candidates. An ATel was sent out."

Machine Learning: "Deep Streaks paper has been published, and work has begun on Deep RB paper. RF RB will be updated soon (t17). Now that MSIP DR1 is out, there is increased activity on cross-matches, putting together datasets etc. There is a near-term emphasis on stellar variability. Come join the fun at the ML meetings on Thursdays at 2 PM PT."

Supernovae and relativistic explosions: "This week, we discussed updates on the search for orphan afterglows, preliminary results on SN rates from the first six months of the RCF project, and the extremely peculiar SN Ic ZTF19aamsetj. We are also very excited for the first data release and finally having access to the MSIP images -- for example, the full rise of the superluminous SN2018ibb is captured in both filters in MSIP data, even if alerts were not issued until peak due to transient flux in the reference images."

Solar System: "(1) ZTF found an interesting asteroid last week -- 2019 JX1, it has a period of 361 days, almost synchronized with the Earth. This could be a rare Earth co-orbital but more study is needed. (2) ZTF got mentioned a few times at the Planetary Defense Conference held at UMD last week."

Galactic and M31 Science: "We are enthusiastically analyzing the new lightcurves that have become available with the release of ZTF-DR1. With full coverage of the northern hemisphere, we're finding large samples of all many kinds of interesting variables; sdB binaries, WD-dM systems and also a few new short period double WD eclipsing binaries. Another highlight; a long period eclipsing white dwarf found in the partnership data turned out to be a AM CVn system; a nice surprise.

AGNs and TDEs: "The ZTFbh SWG has two new TDEs, one mysterious, luminous, featureless TDE candidate: DavosSeaworth (ZTF19aaniqrr) brought to our attention by Dan Perley, and an old TDE discovered by ASAS-SN that is detected by ZTF in the r band, but the transient is caught in the g band reference: GendryBaratheon (ZTF18acpdvos). Our poster child TDE, JaimeLannister (ZTF17aaazdba) is still very bright (g=16.6 mag), and we are continuing to monitor it with a 3 day cadence in the UV and X-rays with Swift. If you are at a telescope, and want a fun, bright target to take a spectrum of, please do! We would love to have an excellent spectral sequence for this source."

The papers corner:

Please send us your published papers, they will be advertised here.

Please send Joy Painter, the Astronomy Librarian at Caltech, links to papers as soon as soon as they are published. They will be kept track of here.

Reminder: Save the date! September 3-5: ZTF fall collaboration meeting

Please save the date for the fall ZTF collaboration meeting, to be held on the University of Washington campus September 3-5. Space will be available on September 6 for further breakouts and hack sessions.

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 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 tohttp://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

"Data that is loved tends to survive." – Kurt Bollacker

Have a great and productive week!

Thomas and Maayane