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Newsletter #101, October 11th 2019

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News from the front: engineering reports (from Reed Riddle and Richard Dekany)

“ROS update 0.99.7 was installed on October 3, revising the instrument sensor software to allow it control and monitor the sensor system better and alert to any operational issues. This included many updates of the component monitors, including the Pfeiffer pressure gauge, window heater, and Optitemp chiller, among the rest. Other updates in this new software release include:

- Revised configuration file and handling to get the individual CCD gain and amplifier information into the FITS header for each CCD quadrant.
- Changed nightly startup procedure to check for any system failures before initializing the filter exchanger; the exchanger only gets initialized if everything else starts properly.
- Reworked thread grouping for start and stop of stages of robotic operations to fix a memory leak issue
- Revised monitor daemon to handle each of the sensor hardware devices in parallel. This outputs bad data whenever hardware has an issue, monitors for errors in the sensor output, and flags when systems fail so they can be restarted. This is expected to increase reliability of the system against hardware glitches and support reliable restart of monitor under all conditions.”

News from the GROWTH Marshal (Ashot Bagdasaryan)

“Last week avro packet formatting was updated on the source server of the Marshal's ingestion process. As a result several functions, candidate scanning, manual ingestion, and updating ZTF photometry were unavailable for a few days. Everything is now back to working order.”

News from Calibration & DQA

“The calibration group has derived corrections to remove small systematic trends in the g and r-band photometry with the sky level, the number of photometric calibrators, etc. These photometric corrections will be applied to future versions of the matchfiles.”

News from working groups

EM/GW and neutrino counterparts: “(1) we followed up on the high-energy neutrino alert IceCube-191001A (<https://gcn.gsfc.nasa.gov/gcn3/25913.gcn3>). We found a young SN, which turned out to be a Type Ia (i.e. not an interesting high-energy neutrino source) and a known TDE "Bran Stark", which peaked 150 days ago (<http://www.astronomerstelegam.org/?read=13160>). The TDE group triggered X-ray and radio observations for the TDE. (2) We used ZTF to follow-up the NS-BH candidate S190930t.

The event is interesting because, if it is indeed an astrophysical source, it is particularly close (108+-38 Mpc), significantly closer than other NS-BH candidates detected to date. The LIGO/Virgo localization was very coarse (90% probability is spread across 24,220 deg²), however we complemented the regular ZTF survey with ToO observations and managed to cover about 55% of the integrated probability area. Interesting candidates were announced and followed up with several facilities including P200, although an electromagnetic counterpart has yet to be identified.”

Galactic Science: “Earlier this year, Zach Vanderbosch discovered (using ZTF public data) the second white dwarf with transiting comets around it. He has been monitoring the system with LCO telescopes, and reported that the comets are transiting the white dwarf again. Followup is encouraged.”

Physics of Supernovae and relativistic explosions: “(1) Christoffer presented the draft of the first paper from the Bright Transient Survey. This paper presents the classification of 761 SNe and discusses the redshift completeness fraction, which has, for instance, important implications for the search of electromagnetic counterparts of GW sources. Cristina gave an overview of the PTF stripped-envelope core-collapse supernova sample. (2) Christoffer spoke about the Target and Observations Manager (TOM) Workshop. We also discussed the AT2018cow-like event ZTF19acctwpz.”

Jobs:

- From OKC: “We are announcing [several postdoc position at OKC](#) covering several research topics, including multi-messenger and time-domain astronomy.
- From the DIRAC Institute: “The Data Intensive Research in Astrophysics and Cosmology (DIRAC) Institute at the University of Washington is accepting applications for a 3-year postdoctoral fellowship. We're looking for promising, early-career researchers who are interested in working on scientific research that complements or extends the current active research programmes at DIRAC (Solar System science, Milky Way structure, the Variable and Transient Universe, Extragalactic Science, Cosmology, Astronomical Software).<https://apply.interfolio.com/69817>“

The papers corner:

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 [here](#).

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 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

A mix of Rosh Hashana (Jewish new year) and Diwali (Hindu festival of light) quotes!

“May our year be sweet like apples dipped in honey. May our good deeds this year be as numerous as the grains of a pomegranate ”

“May the festival of light illuminate your life with the glow of happiness and the sparkle of joy”

Have a great and productive week!

Thomas and Maayane