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Newsletter #145 November 11th 2020

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### **News from the front: engineering reports (Richard Dekany)**

At the outbreak of the pandemic, ZTF had two computers die; the spare computers were swapped in and the system continued to operate, but with four of the five computers running as a spare it wasn't an ideal situation. Palomar was closed to engineering visits, so we just had to hope that the computers held together until a repair trip was possible.

Fortunately, they did, and after Palomar determined it was safe to visit the observatory in person Reed Riddle set up a rescue trip. One of the four computers had a failed hard drive that was replaced, and three computers had power supplies that had failed; Reed only had one spare along so that was swapped in. That leaves ZTF with eight operational computers (including, critically, the repaired primary control computer), while the last two with dead power supplies are in Pasadena awaiting new supplies and checkout. In addition, all computers were cleaned out, CMOS batteries were replaced, and new GPS cards were installed in the control computers to monitor the shutter motion timing.

Once the two spare computers are repaired, Reed will head back up to reinstall them and work on getting the GPS cards working. This will leave us with a full set of computers ready for ZTF phase 2, plus a few spare power supplies in case we have more problems with those. The computers have run constantly for almost five years at this point, so failures are to be expected (and why we have a complete set of spare computers)...hopefully we will not have to stress the computer maintenance plan to this extreme level again.

### **News from working groups**

**Solar System:** "We've discovered an unusually long periodicity in the lightcurve of comet 398P/Boattini. Two sinusoidal peaks and a third in progress are best-fit with a 16 to 21 day period. We are working to verify the result with additional data. Most known cometary rotational periods are about a day or less."

**Galactic and M31 Science:** "We are in the process of analyzing the machine learning classifications for ZTF variable stars. Initial results are processing; the high level vnv classifier seems to be very good at separating real astrophysical variables from false positives (kind of a real bogus step). The lower level

classification also seems to work well, although there is still some confusion between classes. We also have 4 observing nights within the next week, and we will be following up many short period variable objects; dWDs, rotators, and AM CVn systems."

**Multimessenger:** "We have received a few Fermi short GRB triggers recently. Unfortunately either the fields of interest had already set, or we could not follow up with ZTF because of poor weather. However, as part of our ZTF-ReST monitoring program for kilonovae and fast transients we discovered the red and rapidly declining transient [ZTF20acozyr](#) on Thursday. We promptly circulated a GCN and Astronote to the community, after which the transient was confirmed to be the afterglow of the long GRB 201103B."

### **Reminders:**

- PublicAlerts: There is a [link](#) to the alerts archive on the [website](#)!
- Please help us keep 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](mailto: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](mailto:ZTF.communication.coordinators@gmail.com)

*"Science is a hammer for change"*

*- J. J. Brown*

Have a good and productive week!

Erik and Igor