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Newsletter #114, February 5th 2020

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If the newsletter does not look good in your email, check the pdf here! (note that today the newsletter includes a GIF that you may be able to see only in your email)

News from the front: Engineering reports (Richard Dekany)

The ZTF engineering team are doing an inventory of the dust spots in the system. Specifically looking at the detector with and without the filter using an in-band LED. Our goal is to inform future maintenance schedule and techniques, by measuring the accumulation of dust versus time in the closed telescope and quantifying its impact on flat field behavior.

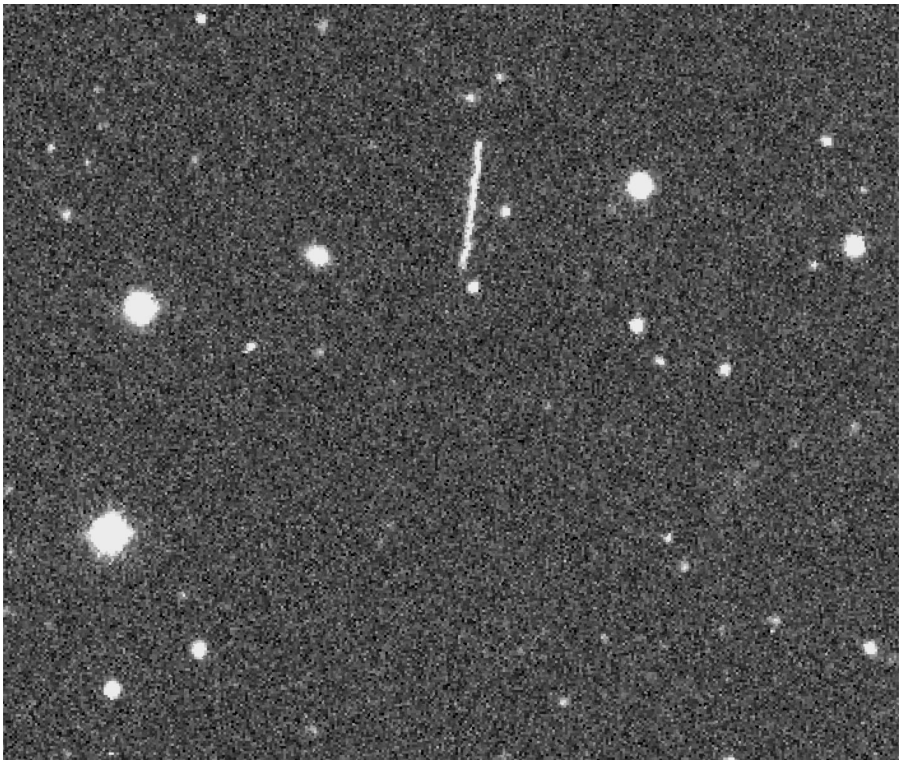
Spring ZTF collaboration meeting hotel reservations (Jakob Nordin):

The spring 2020 collaboration meeting will take place March 23-25 in Berlin. Please have a look at the meeting page. More information regarding the real-time multi-messenger workshop we will host after the collaboration meeting can be found here.

The bulk hotel reservations we made at Motel One will expire February 7, see the conference page for more details. **If you are coming and have not registered, please do so as we will now start constructing the schedule!**

News from working groups

Solar System: "NEO 2020VJ was recently discovered by ZTF in multiple bandpass images with different exposure times: one 30 s g band exposure and one 30 s r band exposure and two 90 s i band exposures. One can see the trail length of the object's detections tripling in length during the 90 s i band images as seen in the gif below (end of the newsletter, does not work in pdf). ZTF also discovered a second NEO, bringing our total NEO discovery count to 11 so far in 2020. In addition, 163 comet observations were made, with one, 124P being a possible outburst."



AGNs and TDEs: “One of our most extreme AGN (ZTF19abvgxrq) is now starting to flatten its light curve. This observation, together with the X-ray detections, is not consistent with a SN+AGN interpretation, which was suggested based on the smooth light curve, that is unlike normal AGN variability. The mechanism that is driving this flare remains unknown (ideas welcome). With the detection of two more examples (eg, ZTF19aagwzod), we are starting to uncover a rare population of AGN with well-defined, high-amplitude flares (nicknamed the Baratheons).”

Physics of supernovae and relativistic explosions: “Last week, we discussed the survey strategy for Year 3 and the need for continuing high-cadence observations. In Year-3, we aim to detect SNe not within 1-2 days but hours after the explosions. Anna gave an overview about her recent paper on the broad-lined Type Ic SN ZTF18aaqjovh.”

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

"Old men and comets have been reverenced for the same reason:
their long beards, and pretences to foretell events"
Jonathan Swift

Have a great and productive week!
Igor and Erik