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Newsletter #109, December 13th 2019

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ZTF Public Data Release 2: Available from December 11, 2019.

The Zwicky Transient Facility (ZTF) and IPAC at the California Institute of Technology announced the second ZTF Public Data Release this week! This release builds upon the first data release to include products from (i) an additional 6 months of survey operations from the public portion of the survey, giving a total observation span of March 2018 - June 2019, and (ii) data acquired under private survey time during the first ~3.4 months of the survey, spanning March 2018 - June 2018. The private surveys include observational programs awarded by Caltech and performed by the ZTF collaboration.

The products include ~6.9 million single-exposure images, ~135,000 co-added images, accompanying source catalog files containing ~106 billion sources extracted 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 2, with data access instructions and supporting documentation is available [here](#).

Access to the data products is available via the on-line and API services of the NASA/IPAC Infrared Science Archive (IRSA) [here](#)

News from working groups

AGNs and TDEs: "Our XMM proposal for follow-up of CLAGN got accepted (PI: Frederick) as well as our VLA program for TDEs (PI: van Velzen). We have a few new photometric TDE candidates (eg, ZTF19accmaxo), but unfortunately some don't have recent ZTF detections (most likely due to weather)."

Physics of supernovae and relativistic explosions: "Anna Ho gave an update on her hunt for GRB afterglows. Anna decided to change her strategy and is now filtering on host information that she extracted from the Legacy Surveys (e.g., photo-z and colour). The new approach allowed her to identify a number of candidates. She is currently working on confirming or rejecting candidates."

Galactic and M31 science: “Two papers are ready to be submitted; one by Paula Szkody on outbursting CVs found by ZTF, the other is a paper on the discovery of a new type of binary system, a white dwarf accreting from a helium-star (sdB star). In addition, DR2 is out, and we have begun to search the new data. We are still doing deep-drilling observations of the Galactic plane. We haven't gotten any useful data weeks: dark/grey time was lost due to bad weather, and during bright time our targetfields are not observable (although the weather was good the last 2 nights). We have also started to think about and discuss projects for the last 6 months of ZTF.”

Machine Learning: “ZTF DR2 is out; ML group is engaged in labeling datasets. If you have large labeled samples of any astrophysical/astronomical types, **please contribute.**”

Multimessenger: “Due to bad weather conditions, we were not able to trigger ToO follow-up observations of the NS-BH merger candidate S191205ah with ZTF. However, the ZTF public survey covered about 46% of the integrated probability in the first week after the merger, which is quite remarkable especially given the nights lost because of weather (see ZTF GCN circular [here](#)). A new low-significance binary neutron star candidate was recently found, S191213g, localized too close to the Sun to be observed these days.”

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](mailto:ZTF.communication coordinators@gmail.com)

"When in doubt, one can rarely go wrong by going public" James E Roger

Have a great and productive week!

Igor and Maayane