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Newsletter #60, December 16th 2018

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News from the engineering team (Report by Roger Smith)

“ZTF is back in routine operation. We lost a clear night or two to the blockage in the southwest cold head, but most of the down time was when skies were cloudy. The cooling system is again performing well. Heater power is at 11% indicating slightly higher power margin than previously, and the cold heads are correspondingly a bit colder.

This time it was possible to clear the blocked cold head without taking the instrument off the telescope, simply by running the compressor and simultaneously keeping the cold head at 305K using the detector temperature controller. There is no reason to believe the cold head could run for over a month then contaminate itself suddenly, so we assume the contamination originated upstream. The most likely source was the hose rather than the new compressor, so we reviewed our hose cleaning procedure and found room for improvement. We have installed a different hose after rigorous cleaning and as an additional precaution, we installed a second (external) activated carbon adsorbers in the supply lines for both cold heads. We will be preparing additional spares, to reduce downtime if this problem ever recurs”.

News from the GROWTH marshal (Ashot Bagdasaryan)

The latest new features are:

- (i) Cone search on sources and candidates, accessible through a link on the home page.
- (ii) Users can save candidates from the examine page, `view_candidate.cgi`.

Accessing ZTF data

We have received several requests to refresh the procedure for accessing ZTF data, including science images, difference images, PSF catalogs.

There are three ways to access the data:

1. The [graphical user interface at IRSA](#). Note that you can download difference images by selecting an image, clicking on “Prepare Download” and selecting the relevant download option.

IRSA | DATA SETS | SEARCH | TOOLS | HELP

ZTF | Searches | History | Help | Catalogs

Search by Position M31; Type=CENTER; Region=0.0083 deg; Image Size=0.1389 deg; Product Level=sci_ref

Sci Exposure Reference Image

Prepare Download

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<input type="checkbox"/>	10.192888630000000	41.720885120000000	904030	1	1	2	zr	2017-10-27 08:31:24+00	2458053.8551389000
<input type="checkbox"/>	11.247498860000000	40.928755690000000	695	11	4	2	zr	2017-11-16 07:21:07+00	2458073.8063310000
<input type="checkbox"/>	10.800153740000000	41.676795180000000	1735	1	2	2	zr	2017-11-16 07:21:54+00	2458073.8068750000
<input type="checkbox"/>	11.248510240000000	40.916219140000000	695	11	4	2	zr	2017-11-16 09:51:53+00	2458073.9110301000
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IRSA | DATA SETS | Download Options

Download Sd Products: Yes No

Download Ancillary Files: Mask Raw images SExtractor catalog DAOPhot catalog DAOPhot PSF table

Science PSF Difference image Difference image PSF Calibration log Difference image log Summary log

Download: Specified Cutsouts

Zip File Structure: Flattened (no folders)

Also send me email with URLs to download

Email:

Prepare Download Cancel

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<input type="checkbox"/>	10.801624020000000	41.672900890000000	1735	1	2	2	zr	2017-11-21 08:00:24+00	2458078.8336110000
<input type="checkbox"/>	11.246300670000000	40.931913400000000	695	11	4	2	zr	2017-12-01 06:07:01+00	2458088.7548727000
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1. The [API](#). The list of data products (including difference images!) that you can access is [here](#).
2. ZTFquery, a tool developed by Mickael Rigault, see the [GitHub page](#) and the [FAQs](#) page for more details..

SEDM enhancement schedule and news

The last night of SEDM operations prior to the enhancement will be on **January 3rd**. We will remove the instrument on the 4th and take it back to Caltech campus for enhancements that will allow us to remove the current airmass limit of 1.8. The current plan is to re-install the SEDM within 6 weeks which would be **February 15th**.

News from AMPEL

The AMPEL team is continuing to improve the quality of the vetted ZTF alerts made public through the TNS. We are also finalizing the reanalysis of the first season of alerts. As part of this study we have been looking in detail at transients reported by other surveys that were not detected by ZTF. We hope to be able to conclude that everything that could have been detected was indeed recovered by us, but we are still tracking down the history of the last few objects.

News from working groups

SNe and Relativistic explosions: “We had two major topics: 1) SEDm proposals and 2) interesting transients. We are planning to put in two large programmes for SEDm targeting infant SNe and classifying SNe in general. There are also plans to submit smaller proposals tailored towards Type IIIn SNe and SNe in SLSN-like galaxies. Two interesting objects were discovered last week. ZTF18acrcyqw (SN2018ibb) is a slowly evolving SLSN. Steve and Avishay are going to lead a follow-up campaign for this event. ZTF18acrcyqw is a rapidly rising transient of unknown nature. We will obtain more spectra to pin down the type of ZTF18acrcyqw.”

AGNs and TDEs: “The ZTFbh SWG is continuing ranking of TDE candidates, and has several potential TDEs awaiting spectroscopic classification, as well as two new confirmed CLAGN from SEDM follow-up. We are continuing to follow-up TDE Sansa Stark (ZTF18abxftqm), and have a couple papers in prep on TDE Ned Stark and CLAGN Tyrion Lannister. We are hoping for better weather and smooth operations into the holidays.”

Solar system: “Keeping working with the ML group to improve the CNN model”

The papers corner: Please let us know one a paper has been accepted!

Reminder: March collaboration meeting:

A kind reminder to please register to the coming ZTF meeting if you plan to attend (this is not committing and no costs involved).The meeting website is [here](#). For registration go [here](#). Also, the organisers would like to start to collect and organise the potential contributions, so please begin sending in your proposed talks (via your meeting account or by replying to this email), even if there's no abstract yet.

As mentioned in Ofer Yaron’s email, the talks will be scheduled to the following general sessions:

- **Survey engineering/technical updates, operations and methodologies**
- **Pipelines and utilities**
- **Reviews from the various working groups**
- **Scientific highlights & results (incl. session on unique events; e.g. 18cow)**
- **Future activities/plans**
- **Workshops/discussions (Friday potential sessions)**

Reminder: IMPORTANT: We (still) need your help for the ZTF FAQs page! (and would love to remove this item from the newsletter)

During several weeks, we have listed the questions that people across the collaboration would like to have in the [FAQs](#) page. Now it is time to add answers. Please help us fill the voids (and elaborate on the answers already there).

More reminders:

- Public Alerts: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

This is the 60th Newsletter!

“SIXTY is only 15 in Scrabble”

Have a great and productive week!

Thomas and Maayane