## ZTF 2020 Spring/Summer Call for Proposals (CfP) Announcement of Opportunity: 3 January 2020 Proposal Submission Deadline: 7 February 2020

The Science Steering Committee (SSC) of the Zwicky Transient Facility (ZTF) solicits observing strategy proposals for the P48 telescope from the partnership for the period covering 1 April 2020<sup>1</sup> through the end of ZTF partnership operations (currently planned for 30 September 2020).

The ZTF partnership has access to 40% of the P48 observing time over the period covered by this call. Based on numbers from 2019 (<u>http://www.astro.caltech.edu/~tb/ztfops/sky/</u>), this corresponds to nightly allocations ranging from 3.9 hours (early April) to 3.0 hours (late June) to 4.1 hours (late September).

Current project policies regarding P48 observing time are expected to remain in place for this period. These include the requirement that the partnership usage not exceed the partnership allocation of 40% *each night*, and observing programs should be schedulable in individual blocks no shorter than 30 minutes and no longer than 2 hours. As per the partnership Collaboration Agreement, target-of-opportunity programs may not exceed 10% of the partnership allocation. Questions about adherence to project policies should be addressed in advance to the Project Scientist and ZTF SSC Chair.

For the remainder of the P48 observing time, the 40% allocated to the MSIP program is anticipated to continue as currently operating: nightly g+r imaging of the currently visible TESS sector, and ~ 3 day g+r imaging of the visible Northern sky<sup>2</sup>. If/when plans for the MSIP program are modified, the collaboration will be notified promptly. Some plots of the cadence and areal coverage for the Northern Sky Survey (NSS) are provided below. (Note that in the areal coverage plot, the blue vertical line corresponds to the time when MSIP began monitoring TESS fields.)

<sup>&</sup>lt;sup>1</sup> Note that the exact start date for the Spring observing season is still TBD; however proposers are invited to assume the earliest possible start date of 1 April 2020.

<sup>&</sup>lt;sup>2</sup> Note that the current TESS observing plan implies a change to the Southern hemisphere starting on 5 July 2020 - see <u>https://tess.mit.edu/observations/</u>.



*Proposal Contents and Format:* While we will not enforce strict page limits, we encourage the following general format:

2 Pages: Science Justification and Figures. This should include at a minimum: a) the scientific objectives of the proposal, with a comparison to state-of-the-art in the given field, b) how the proposed observations will be utilized to achieve the science objectives, c) how ZTF is uniquely suited to address the scientific objectives, and d) an estimate of anticipated P60 usage.<sup>3</sup>

1 Page: Technical description. This should include at a minimum: a) the requested fields or anticipated constraints on those fields, b) the requested filter(s) to be used, c) the requested observing cadence and image depth, and d) an estimate of the total time required for the proposal.

1 Pages: References

*Evaluation Process:* The SSC will evaluate the proposals based primarily on the scientific merit of the proposed investigation and likelihood of success. Other factors such as breadth of partner interest and past track record will be considered secondarily. Strong cases for continuing established mode of operations (including target-of-opportunity observations) as well as new observing modes which make use of the flexibility of ZTF will both be considered.

The SSC intends to announce final recommendations for the period covering April-June, and provisional recommendations for the period July-September, to the collaboration by the end of February 2020. In May a second call for final proposals will be issued, which may either be a request to continue unchanged the proposals submitted in this call, minor updates to these proposals, or entirely new proposals. In response to these, the SSC will issue recommendations for the period from July-September to ensure optimal usage of the final months of ZTF/P48 (Phase 1).

We strongly encourage coordination with any and all relevant Science Working Groups, to ensure as broad participation in the process as possible. However, this is not required for proposal submission.

<sup>&</sup>lt;sup>3</sup> Note that a separate call will be released for P60 usage will be released in early 2020, with a deadline after results for P48 usage are announced. We request a very brief summary of any anticipated P60 usage so that we can plan accordingly - this is not considered to be final nor will be it used to evaluate the P48 proposals.

*Proposal Deadline and Submission:* The proposal deadline is **7 February 2020**. Barring a force majeure, this deadline will not be extended. Proposals should be uploaded to the following URL:

http://www.oir.caltech.edu/twiki\_ptf/bin/view/ZTF/SurveyStrategy2020

*Questions:* Should be addressed to the ZTF SSC Chair (<u>brad.cenko@nasa.gov</u>) and the Project Scientist (<u>mjg@caltech.edu</u>).