

Call for Community-Requested Targets: Expanded TESS-SPOC FFI Light Curve Processing

Issued by: TESS Science Support Center (TSSC) and TESS Science Processing Operations Center (SPOC)

Submission form opens: October 20, 2026

Submission form closes: December 15, 2026

Submission form link: <https://forms.gle/tLmiyNUmpUk49Ups9>

Applicable Starting: Sector 97 (anticipated processing start in January 2027)

I. Motivation

The [TESS-SPOC](#) pipeline is expanding its Full Frame Image (FFI) light curve target list by approximately 4x beginning with Sector 97. This expansion coincides with a broader upgrade of SPOC infrastructure.

Current FFI target selection follows the process described in [Caldwell et al. \(2020 RNAAS, 4, 201\)](#), summarized in three steps:

1. Select all 2-minute (and 20-second) cadence targets.
2. Select "high-value" targets with $H \text{ mag} \leq 10$ or distance $\leq 100 \text{ pc}$.
3. Select field star targets by magnitude, up to $\text{TESS mag} < 13.5$.

This selection approach will continue to serve as the primary (default) target list going forward. This call will supplement the target list with community-requested targets that may not otherwise be captured by the automated selection criteria.

We expect to process 40,000 targets per CCD in total between the default SPOC selection criteria and community targets, of which up to 30,000 per CCD are available as community targets given processing constraints (see Caldwell et al. 2020 for details on current crowding metric limits and implementation).

II. Request for Targets

We invite the TESS community to submit lists of targets that they would like included in upcoming TESS-SPOC FFI processing, beginning with Sector 97 and continuing on an approximately annual cadence going forward. Submitted target lists will remain valid for three years (see Section IV for details).

Submission guidelines:

- A complete submission is comprised of 1) a CSV of TESS Input Catalog (TIC) identifiers in a priority ranked list and 2) a brief justification for the inclusion of these targets.
- Target requests are valid beyond an individual sector (not restricted to a single sector or field). Accepted targets will be processed in every sector they are observable, subject to allocation limits described in Section IV.
- Please include a brief (1–2 paragraph) justification describing the scientific motivation for including each target/sample. This should also address whether partial inclusion of items in the list is useful (e.g. list of highly active flaring stars) or if the list strongly benefits from complete inclusion (e.g. volume-limited K-dwarf sample).

How to submit: Fill out the submission form (linked above) by the listed deadline.

III. Review Process

Submitted lists will be triaged and prioritized by the TSSC and SPOC. Targets will be evaluated on the described scientific justification, expected impact, and technical feasibility for their inclusion as part of the SPOC FFI light curve pipeline. Please note that this is an informal process, separate from the General Investigator (GI) and Director's Discretionary Target (DDT) programs because these requests are for SPOC-processed FFI data products only. No funding or fast cadence data will be made available as a part of these requests.

As future calls occur, new targets will be added to the priority list, and existing priorities may be updated accordingly. Target lists for each sector will be posted after processing to <https://archive.stsci.edu/hlsp/tess-spoc>.

IV. Important Notes and Limitations

Community targets are being solicited on an annual basis rather than sector-by-sector. Accepted target lists remain valid for three years. However, because only up to 30,000 targets per CCD are available for community requests, continued processing is not guaranteed for the full three-year period. If the target list becomes oversubscribed in a future annual solicitation, newly submitted targets may be prioritized above previously accepted targets, and some previously accepted targets may be deprioritized or dropped from processing as a result.

Targets will be allocated with consideration for SPOC processing constraints and downstream effects on photometric quality and planet search efficacy. Possible outcomes include the acceptance of all, some, or none of an individual's submitted targets.

At this time, SPOC cannot generate community-requested light curves for sectors prior to Sector 97.

V. Schedule

Submission form opens	October 20, 2026
Submission form closes	December 15, 2026

VI. Questions

For questions about this call, please contact tesshelp@bigbang.gsfc.nasa.gov.