

## **TFOP WG Publication Policy**

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#### **Introduction**

This document describes the policies and guidelines governing the publication of scientific and technical results from the NASA Transiting Exoplanet Survey Satellite Follow-up Observing Program Working Group (TFOP WG). In addition, all publications that use data products provided by or funded by the TESS Mission must also comply with the overall TESS Mission Publication Policy.

Responsibility for this document and oversight of publications emerging from the TFOP WG rests with the TFOP WG Steering Committee (TFOP WG SC) and ultimately with the TESS Science Council through the TESS Mission Publication Policy.

#### **Intellectual Property**

Members of the TFOP WG have agreed to upload the results of their follow-up observations to ExoFOP-TESS at NExScI. When members of the TFOP WG upload results to ExoFOP-TESS, they can request password protection so that only other members of the TFOP WG have access to those results. Password protection is limited to one year from the time of upload. Members are expected to ensure that results submitted to ExoFOP without password protection are suitably validated and verified. The thinking here is that preliminary results, or flawed data, or data vulnerable to misinterpretation by the community can be worse than no data.

If a TFOP WG result has not yet appeared in a refereed publication, then the person or team who provided the result should be invited to join as an author on any publication that uses those results for the first time, and the results should be reported explicitly in that publication. By joining as an author, the person or team who provided those results is vouching for the reliability of those results. In particular, these papers should follow the guidelines for Contributed Papers as defined in the TESS Mission Publication Policy and supplemented by details in the Publication Page on the TESS Wiki.

To ensure good communication between follow-up groups, an author preparing a paper that reports a mass measurement should follow these steps in addition to the guidelines for Contributed Papers:

1. Check the TFOP tools (spreadsheets and ExoFOP-TESS) for other groups with data or interest in the system, and contact them to discuss plans for publication.
2. Send an email to the TFOP Spectroscopic Steering Committee (SpecSC) mailing list as soon as the result is deemed publishable, and before an abstract is posted to the TESS Wiki. This allows all groups with data or interest in the system to settle upon a publication plan together.

If a publication on the atmospheric characterization of TESS planets or planet candidates is based on observations from successful observing proposals that made use of data or

results obtained through TFOP (and unpublished at the time the proposal was submitted), then the person or team who provided the data or result should be invited to join as an author on that publication, and the guidelines for Contributed Papers should be followed.

The new Research Notes of the American Astronomical Society (RNAAS) will count as a refereed publication for TFOP WG results for the purposes of this Publication Policy. Uploading to ExoFOP-TESS will not count as a refereed publication.

After results have appeared in a refereed publication, there is no obligation to invite the provider to join as an author on a subsequent paper. Of course, such invitations are not prohibited.

TFOP WG members who contribute results that are useful to promote a candidate to the next level of follow-up should also be invited to join as an author if the candidate is ultimately published. An example is time-series photometry of a target that does not detect a shallow transit in the target, but does show that no detectable events occur in nearby stars that contaminate the TESS aperture. Another example is reconnaissance spectroscopy that eliminates stellar companions as the source of the transit light curves and/or provides improved stellar parameters. A third example is high-resolution imaging that contributes to the validation of a transiting planet. Lead authors are encouraged to check Exo-FOP-TESS for any follow-up data of specific targets included in their papers. They can also check with the TFOP SG leads.

Some of the Sub Groups of the TFOP WG will produce null results that are important for identifying candidates that are false positives, but may not justify publication in a refereed journal. Examples are identification of nearby eclipsing binaries by members of SG-1 using seeing-limited photometry, and detection of stellar companions responsible for transit-like events by members of SG-2 using radial velocities derived from recon spectra. The contributions of such TFOP WG members may be recognized from time to time by authorship on papers, even if their results did not contribute directly to that paper. The guidelines for such authorship shall be developed by the individual Sub Groups. As an example, the guideline proposed for SG-1 is included here. Guidelines for other Sub Groups will be added as they are developed and get reviewed.

SG-1: If a member submits 25 consecutive null results before his/her contributions have been recognized by authorship on a paper, then the member will be extended the option of authorship on a compensatory TFOP WG member-led paper, even if none of the member's results contributed directly to that paper. Null contributions can include submitted data that result in the promotion of a candidate to the next level of follow-up (generally a change to any SG priority), but the subsequent follow-up ultimately results in the candidate being confirmed as a false positive. Null contributions can also include submitted data that directly confirm that a candidate is a false positive.

Contributions that add no new information to previously submitted data, and contributions that do not provide the precision or event coverage needed to promote a candidate to the next level of follow-up or confirm a false positive do not qualify as a consecutive null contribution. The null result counter will reset to zero if the observer is

awarded authorship on a paper related to contributed results. Members desiring to take advantage of this option are responsible for tracking their own consecutive null results and notifying the steering committee when the threshold is reached. The steering committee is responsible for assigning authorship on an upcoming publication. The thinking here is that TFOP WG members should not have an expectation that all submitted results will be publishable. However, we do want to recognize the dedicated effort of members that happen to submit a significant number of consecutive null contributions with authorship on a compensatory paper.

### **Institutional Property and Collaboration Commitments**

Even when the TESS Mission or NASA provides funding to help with obtaining follow-up observations, it is often the case that institutions own and provide access to needed facilities and pay the salaries of support staff. In some cases, institutions will provide all the resources required to obtain follow-up observations. There are two ways to ensure that institutions get appropriate credit for their contributions. One is mention of the contributions in the acknowledgements, the other is inclusion of co-authors who made key contributions. This can include observers and support staff.

Follow-up observations obtained in the context of other formal collaborations or even other space missions will often have constraints on the release and sharing of data before publication.

In cases such as these, the Steering Committee of the TFOP WG should be consulted for guidance on how to provide suitable credit to institutions and collaborations.