

NASA's TESS Mission Interactive Data Workshop

AAS 243 Meeting – New Orleans, LA

New Orleans Ernest N. Morial Convention Center, Room 219

Saturday Jan 06, 2024 9am - 5pm CT

NASA's TESS mission (launched in 2018) provides the community with high cadence, optical time-series across the sky, with nearly continuous observations lasting between 27 days and one year. TESS operations have been extended through at least September 2025, and so TESS will continue to provide time-series data for users on hundreds of thousands of targets, as well as Full Frame Images of >2000 square degrees of the sky each month. These observations provide valuable resources for a wide range of astronomy; the detection of exoplanets, the investigation of stellar variability, the identification of extra-galactic transient events, the study of AGN, and more.

This full day workshop is presented to the community to learn about TESS, learn how to obtain data (and research funding!) through the TESS General Investigator Program, and learn how to quickly get to work with the data, all of which is available with no exclusive access period. This workshop is ideal for both new and established users of TESS data. New users can expect to learn where to get started with obtaining and using data. More experienced users can expect to learn about the 200s observing mode and updated analysis techniques. We strongly encourage participation from scientists at all career-stages, working on extragalactic astronomy, stellar astronomy, exoplanet astronomy. We additionally encourage attendance from anyone interested in proposing for TESS observations.

The workshop will consist of; i) short talks introducing the NASA TESS mission ii) explanations of how to propose for TESS observations and obtain research funding in upcoming proposal calls iii) tutorials on working with TESS data and iv) an interactive work-with-the-experts session to show you how to work with TESS data on your own targets. Please bring a laptop for this in person interactive session!

Time	Title	Duration
9:00	Introduction to this event	10 mins
9:10	Introduction to TESS	20 mins
9:20		
9:30	Introduction to TIKE	10 mins
9:40	Beyond Exoplanet Science with TESS	20 mins
9:50		

10:00	Break	10 mins
10:10	Proposing for TESS Data and Time	40 minutes
10:20		
10:30		
10:40		
10:50	How to Find if Your Target was Observed by TESS	20 mins
11:00		
11:10	Break	10 mins
11:20	How to Access TESS Data	30 mins
11:30		
11:40		
11:50	Tutorial: Detrending Spacecraft Systematics	40 mins
12:00		
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12:30	Lunch (Not Included)	60 mins
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13:00		
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13:30	Hackathon: Work with the experts directly on your science areas!	3 hrs
13:40	In this interactive session please bring your laptops to work directly with TESS scientists and hack on your own projects. We will organize into small groups and presenters will be available to give advice, answer questions, and debug code!	
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16:40	Wrap Up	20 mins
16:50		