



Explorer™ EW Seminar

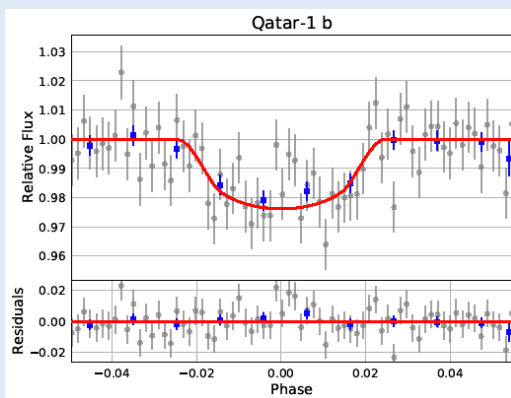
Do exoplanet observations and learn photometry. In this seminar, you will learn how to observe and measure exoplanets, drill down into astro databases, reduce data to submit observations to the JPL/NASA Exoplanet Watch program, do your own observation, analyze and present your results. Boyce-Astro will lead you through your project and provide the telescope time for the seminar and for your own exoplanet observations projects. You will be prepared for exoplanet discovery and variable star photometry.



BOYCE-ASTRO ONLINE SEMINARS			
SPRING 2025			
EXPLORATION™ for the EXOPLANET WATCH PROGRAM			
MODULE	TOPICS	ASSIGNMENT FOR NEXT CLASS	DATE
0	Seminar Orientation and Photometry Overview	Complete IntroSTARS™ and IntroSTARS™ Quiz before Module 1 (not required for students who have completed this before)	29-Jan or 2-Feb
1	Variable stars, exoplanets, NASA and other programs Recommended reading and websites	Videos about photometry and variable stars - start self-paced photometry Get Observer Code, Slacks, Google account, Classroom, download tools	19-Feb
2	Aperture and differential photometry overview Transit method, Exoplanet Watch and EXOTIC	Do an example exoplanet light curve using JPL's EXOTIC	26-Feb
3	How to submit your results to AAVSO and NASA/JPL Equipment needed for observations	Receive an unreported observation file and reduce it using EXOTIC Submit your EXOTIC results to AAVSO / JPL	5-Mar
4	Factors to consider in exoplanet target selection How to set up your own exoplanet observation	Do your own observation request to LCO, BARO, or BARON observatories (your observation data will be sent to you after success)	19-Mar
5	What observations mean, exoplanet parameters Exoplanet databases	Finish your observation data reduction and submit your results Submit your results to AAVSO / JPL	9-Apr
6	Discuss your observation results	Quiz on observing time series photometry and exoplanets Short presentation about your target and how your results stand up	23-Apr
7	Present your results in Class (Slides or PowerPoint) Publication opportunities	Draft a Research Note for your observation	7-May
8	Explorer™ TESS Program introduction Future photometry project opportunities	Join the Explorer™ TESS seminar if desired More exoplanet or variable star observations with Boyce-Astro	21-May

ALL CLASSES ARE HELD ON WEDNESDAY NIGHT AT 7:00 TO 8:00 PM PACIFIC TIME ON ZOOM

Prerequisites: IntroSTARS™ is our self-paced online introductory course in stellar astrophysics. It takes 5 to 10 hours to complete depending on your current experience and knowledge. Students must have completed IntroSTARS™ and its final Quiz before taking this course. **Sign up on the Wait List below and then go to <http://boyce-astro.org/introstars-your-step-1/> to sign up to do IntroSTARS on your own schedule.** Your answers to the final quiz will be due one week before Module 1.



Students at affiliated schools can attend according to their school's requirements. There is \$49 fee due before Module 1 for Boyce-Astro students not at an affiliated school. Class size is limited. Preference will be given to graduates of other Boyce-Astro seminars followed by those having the highest score on the IntroSTARS™ final Quiz.

To be invited to the Zoom Orientations, please

Get on our Wait List -- [Click Here](#)

ORIENTATIONS January 29 or February 3

at 7:00 PM Pacific Time on Zoom