Exoplanet Watch: You Can Help NASA Observe Other Worlds!

Rob Zellem

NASA's Universe of Learning's Exoplanet Watch

(https://exoplanets.nasa.gov/exoplanet-watch/about-exoplanet-watch/overview/) is a citizen science project, currently geared toward amateur astronomers and astronomy students at colleges and universities, to observe transiting exoplanets — planets outside our solar system — with small telescopes. A transiting exoplanet is a planet outside of our solar system that periodically passes in front of its host star, causing the star to appear to slightly dim (typically by ~1%). Observing exoplanet transits is important, as they provide direct measurement of a planet's radius and composition. Ground-based observations, particularly with small telescopes (<1 meter) constrain the exoplanet's orbital period (how quickly a planet orbits around its host star) which in turn provides better mass measurements. Exoplanet Watch will help increase the efficiency of exoplanet studies by large telescopes to characterize exoplanet atmospheres by reducing uncertainty about the predicted timing of transit events.