

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Space Culture – Public Engagement in Space through Culture (9)

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UNISTELLAR EVSCOPES: SMART, PORTABLE AND EASY-TO-USE TELESCOPES FOR
EXPLORATION, INTERACTIVE LEARNING, AND CITIZEN ASTRONOMY

Abstract

Unistellar has developed the eVscope, a compact telescope that amplifies light so users can finally see hundreds of nebulae and galaxies directly through its eyepiece. It can also pinpoint and identify objects in the sky, making amateur astronomy fun and more accessible to the public.

Thanks to its sensitivity, the eVscope is a powerful tool capable of generating data that can be used by scientists to search for transient events like supernovae, near-earth asteroids, and comets. Because of the larger field of regard provided by a constellation of small, smart telescopes, our network could provide additional data to the few existing large telescopes. Unistellar initiated a partnership with the SETI Institute to identify and develop scientific applications for our network of telescopes.

We will summarize the technology behind the telescope and its real-time data processing, then show several applications, including asteroid occultations, lightcurves and astrometry of asteroids accessible to the users. Finally, we will discuss Unistellar network's potential to make citizen astronomy a reality by offering all users (newbie or experienced) a tool to explore the night sky with a powerful and reliable instrument while they contribute to scientific investigations.