

The future of Astronomy in Ukraine: EARG's and TESS space telescope

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Our team are professional astronomers who are currently focused on saving and rebuilding Astronomy in Ukraine, where this science is in a terrible state right now. Our first step was to create experimental astronomical research groups (EARG). Those EARG's mostly consists of students aged 15-25 and their aim is to implement brand new methods of astronomical research, as well as publish articles in peer-reviewed journals. Inside those EARG's our students work individually, studying theory, choosing their objects of interest, processing photometric data of TESS space telescope, making discoveries, creating the paper and submitting to the journal. As the objects of interest, we chose variable stars as relatively simple and highly-demanded type of research (especially in the fields of asteroseismology and exoplanet search). Due to high level of methods and algorithm unification it is possible for each professor to make research with up to 15 students simultaneously. After 5+ month each student who succeeded, receives: basic knowledge about variable stars in general, advanced knowledge about a specific type of stars, an article in a peer-reviewed journal and an oral contribution on a local conference. Our first project called "TESS-UA-2022" attracted 11 students (7 finished). Now we improved it and scaled up to 56 students ("TESS-UA-2023A").

Those EARG's are under constant development and if successful years later they might be adjusted and used to improve astronomical education in many developing countries of Africa and Central Asia.

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