

The all sky automated survey

G. Pojmański

*Astronomical Observatory University of Warsaw, Al. Ujazdowskie 4, 00-478
Warszawa, Poland*

Received: August 25, 2013; Accepted: January 17, 2014

Abstract. The All Sky Automated Survey (ASAS) is a realization of a Bohdan Paczynski idea of using small and inexpensive telescopes to survey and monitor bright objects in the sky. ASAS uses off-the-shelf telephoto lenses and CCD cameras attached to the custom made parallactic mounts to investigate as many objects in the sky as feasible with current technology and the available funds.

We have demonstrated that among stars brighter than 13 magnitude 80% of variable stars remained unknown. Most of these stars are too bright for a 1-meter class telescopes, so 7-15 cm diameter lenses are ideal tools for detecting and monitoring them. During over ten years of observations a huge number of photometric measurements of almost 40,000,000 stars has been collected. Only part of this dataset has been analyzed so far - we have released catalogs of 50,000 variable stars south of declination +28.

Recently, we have expanded ASAS towards fainter objects - the ASAS-SN project aims for detecting in real time supernovae in nearby galaxies as well as many transient events in the Milky Way.