VeSPA: The SuperWASP Variable Star Photometry Archive

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Version: Poster
VeSPA: The SuperWASP Variable Star Photometry Archive

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Abstract
SuperWASP Variable Stars is a Zooniverse citizen science project in which the public label photometric light curve plots showing potential variations in stellar brightness. The volunteers label each plot as one of several types of variable star, or as “unknown” or “junk”. Their labels are combined to produce an aggregated classification. We are publishing the first data release from the project via an interactive website called VeSPA. The results can be searched, filtered, and exported in CSV format. Raw FITS data is available to download.

What is VeSPA?
The Variable Star Photometry Archive, or VeSPA, is a website where we are publishing the results from the project so far. The first data release comprises consensus classifications of 190,063 light curves (see above, left): 25,730 pulsators; 56,582 rotators; 36,382 contact eclipsing binaries; 29,882 detached eclipsing binaries; and, 41,541 unknown sources which seem to have periodic variations. The archive can be searched by coordinates or by object name, and a range of filtering options can be applied to restrict results to only those objects which are of interest (see right). Results can be exported in CSV format for offline use and we encourage other astronomers to make use of this data.

To read more about our results see Thiemann+ 2021 (doi.org/10.1093/mnras/stab140).

Available soon at superwasp.org