Results from Improving the Visibility and Citability of Exoplanet Research Software

ASCL.net

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Introduction

The Astrophysics Source Code Library (ASCL) lists, and in some cases houses, software that has been used in research that has appeared in, or been submitted to, peer-reviewed publications. It assigns a unique ID, the ascl ID, to the software it registers. It now has over 4100 software entries and is indexed by NASA's SciX (Science Explorer) and Clarivate's Web of Science.

NASA's Exoplanet Modeling and Analysis Center (EMAC), established in 2020, serves in part as a catalog and repository for exoplanet research. Of its entries, 78% are for downloadable software.

Project Tasks

Add links to EMAC software entries on ASCL records

- Provides a recognized and trackable way to cite this software where none may currently exist.
- Makes it easier for researchers to find the software by expanding ways to discover it.

Send preferred citation information captured by the ASCL to SciX

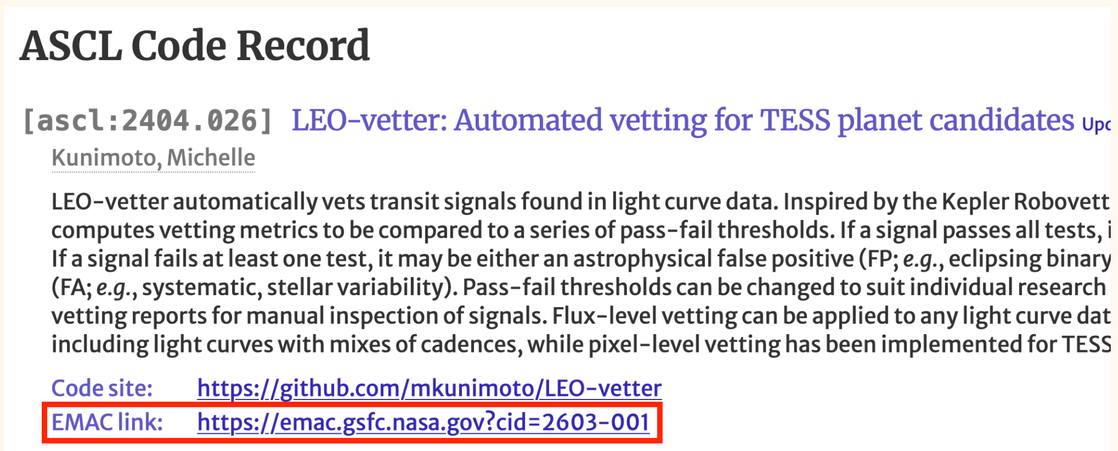
- Makes it easier to cite software as its developer(s) want it cited

Create a test set of Zenodo concept DOIs for SciX for software Zenodo and ASCL have in common

- Provides data that may be useful for improving citation statistics

Results

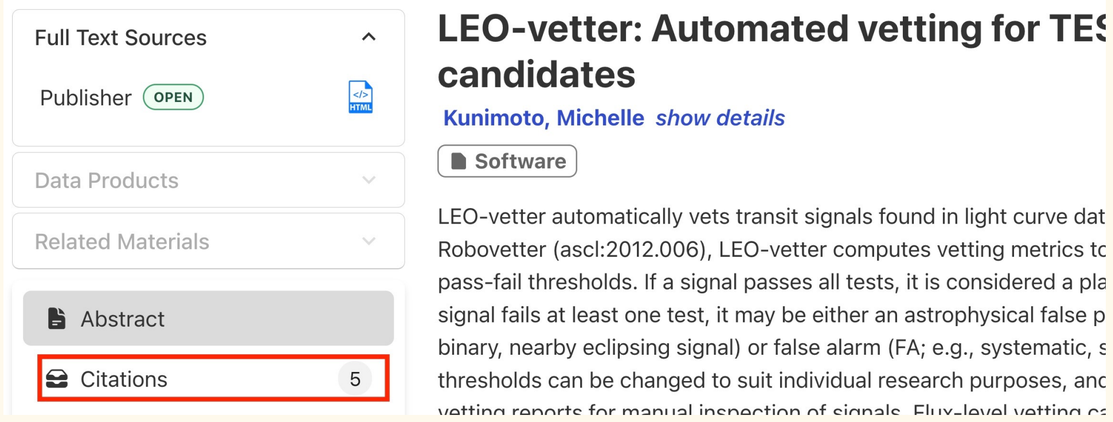
Exoplanet software resources are easier to find in the ASCL...



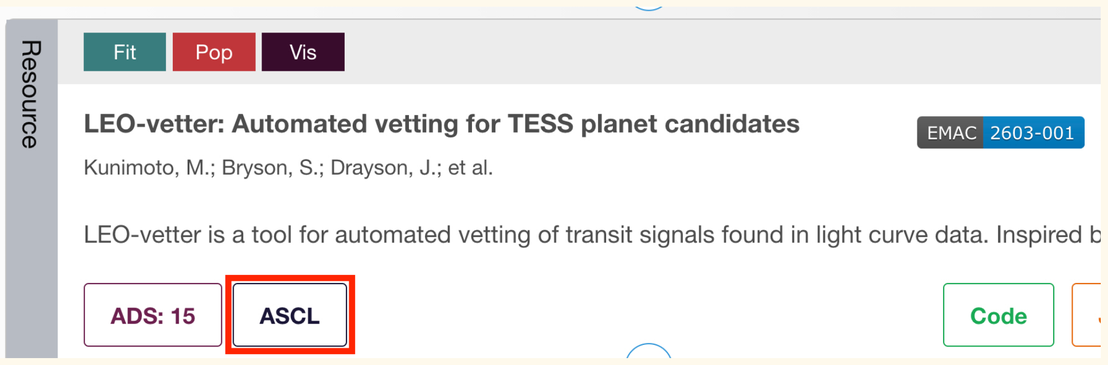
... and in SciX...



... and to cite...



... creating a circle of discovery and credit for these resources.



EMAC links added to ASCL	312
Zenodo concept DOIs provided to SciX	275
ASCL entries with preferred citations	2,106
Percentage of ASCL entries with preferred citations	51.2%

Preferred citation information is now routinely provided to SciX