The Role of the ADS in Software Discovery and Citation

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ADS Core Responsibilities

● Maintaining a comprehensive, timely and complete database of scholarly papers in Astronomy
● Tracking citations to scholarly papers
● Integrating in its database bibliographies and links to data products
● Providing discovery services and metrics to researchers, librarians, collaborators
ADS Core Responsibilities v1.1

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ADS Core Responsibilities v1.1

- Maintaining a comprehensive, timely and complete database of scholarly papers and works in Astronomy
- Tracking citations to scholarly papers and content
- Integrating in its database bibliographies and links to data products and software
- Providing discovery services and metrics to researchers, librarians, collaborators
How ADS selects and ingests content

In order for some work to be considered for inclusion in ADS it must be:

- Scholarly in nature
- Related to Astronomy
- Published and (ideally) available online
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➔ If you want a record for your software included in ADS, publish it in a known repository or register it in ASCL
How ADS awards citations ("A cites B")

- The citing work A is in ADS
- ADS has the full-text or reference section of A available for analysis
- The reference to B has been successfully identified
- The cited work B is in ADS
How ADS awards citations ("A cites B")

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- ADS has the full-text or reference section of A available for analysis
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If you want your software citation to count, make sure it appears as a formal citation via a unique identifier.
DAOPHOT: A COMPUTER PROGRAM FOR CROWDED-FIELD STELLAR PHOTOMETRY

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5071 West Saanich Road, Victoria, British Columbia V8X 4M6, Canada
Received 1986 October 13, revised 1986 December 5

ABSTRACT

The difficult art of stellar photometry in crowded fields is currently undergoing a surge of popularity, and a number of different computer programs for deriving photometric information from two-dimensional digital images are currently in use. This paper describes one such program, DAOPHOT, which was written and continues to be developed at the Dominion Astrophysical Observatory. Emphasis is placed on the various types of philosophical and technical complications which arise when accurate photometry is sought for blended stellar images, and on the mathematical algorithms with which DAOPHOT attempts to deal with these complications, rather than on details of the coding. Some ways in which DAOPHOT resembles or differs from other similar programs are mentioned, and a discussion is presented of known shortcomings of the current program as well as possibilities for future improvement.

Key words: data-handling techniques—photometry (general)

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Software “publishing” and citation in 1997

The IRAF FTP archive is the main distribution point for all software and documentation. We also archive all traffic on the ADASS newsgroups and provide lists

iraf.noao.edu

- README - Overview of network archive.
- NOTES - Log of all changes to the archive.
- Iraf - IRAF software and documentation
- FAQ - Frequently Asked Questions (text version)
- INSTALLATION - Order a rapid distribution
- REGISTER - Register your site
- iiraf - ADASS Conference materials
- docs - Main documentation directory. The README file serves as a Table of Contents.
- extsrc-v1.2 - External packages for IRAF V2.12. The README file serves as a Table of Contents.
- extsrc-v2.1 - External packages for IRAF V2.1. The README file serves as a Table of Contents.
- misc - Miscellaneous software (e.g. NAXimage, ctd, etc)
- v2.12 - V2.12 distribution directory (all platforms).
- v2.11 - V2.11 distribution directory (all platforms).
- v2.10 - V2.10 distribution directory (all platforms). Contains the system Baglog.
- v2.8 - V2.8 distribution directory (all platforms)
- v2.7 - V2.7 distribution directory (CONVEX only)
- x11mrd - X11term, Xlinalg etc. Binaries, source, utilities.
- contrib - User contributed software, STSDAS/TABLES binaries, etc.
- misc - Miscellaneous
- ic - Network archive utilities
- In IRAF - Index to the files in the archive (compressed)
- In IRAF - Index to the files in the archive (GNU compressed)
- In-IRAF - Same, sorted by time

Archive file search patterns: [Substring?]

Last updated: 16May2002

reduced using the standard routines in the IRAF echelle reduction guide (Wilmarth & Barnes 1994; Massey 1997). The remaining

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Software “publishing” and “citation” in 2010

1 The full compendium of code and ancillary files needed to reproduce the present paper is available from the first author. Cosmological calculations were made with the CosmoPy package. The EnrichPy package encapsulates our enrichment model. These resources are available at http://www.astro.phys.ethz.ch/kramer/, http://roban.github.com/CosmoPy/, and http://roban.github.com/EnrichPy/.
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1 The full compendium of code and ancillary files needed to reproduce the present paper is available from the first author. Cosmological calculations were made with the COSMOLoPy package. The ENRICHPy package encapsulates our enrichment model. These resources are available at http://www.astro.phys.ethz.ch/kramer/, http://roban.github.com/CosmoloPy/, and http://roban.github.com/ENRICHPy/.
Software “publishing” and citation in 2012

Starlink

The Starlink Project was a long running UK Project supporting astronomical data processing. It was shut down in 2005 but the Astronomy Centre until March 2015, and is now maintained by the East Asian Observatory. The code is open source.

Starlink News was last updated August 19th 2017.

Getting the Software

The Joint Astronomy Centre and East Asian Observatory have made a number of releases. The instructions are also provided.

Please note that there was a leap second at the end of December 2016; data taken since then (or 2016A, or a development nightly version) to reduce JORT data taken from this point on.

For a cutting edge version, you can sync from the East Asian Observatory's build.

Citing the software

If you have used Starlink software in your research, please cite the software in your papers.

For the Starlink software package please use:

- Starlink citation: Currie et al 2014 2014ASPC..485..391C
- Starlink acknowledgment: “The Starlink software (Currie et al 2014) is currently supported by the East Asian Observatory.” If all of the individual packages are on the Astronomy Source Code Library, which have entries in AAS, please cite the ASCI entry. The following packages have a preferred reference you should use:
  - SMURF: http://adsabs.harvard.edu/abs/2013SPIE.8859E..10C
  - For makemack, please cite http://adsabs.harvard.edu/abs/2013SPIE.8859E..0F
  - CUPID: http://adsabs.harvard.edu/abs/2013SPIE.8859E..08C
  - The FullFinder algorithm (implemented inside Cupid’s cdf) has its own citation: 2015 ApJ 808 109
- NATO: http://adsabs.harvard.edu/abs/2015SPIE.9143E..02C
- PIAF: http://adsabs.harvard.edu/abs/2015SPIE.9143E..07C
- SURF: http://adsabs.harvard.edu/abs/2015SPIE.9143E..10C
- ASCL: http://adsabs.harvard.edu/abs/2015SPIE.9143E..14C
- SLAP: http://adsabs.harvard.edu/abs/2015SPIE.9143E..16C
- SLAB: http://adsabs.harvard.edu/abs/2015SPIE.9143E..18C
- In addition, all Starlink SUFs also have bibliographic records on ADS.

ASCL Code Record

Starlink: Multi-purpose Astronomy Software

Starlink has many applications within it to meet a variety of needs; it includes:
- a general astronomical image viewer;
- data reduction tools, including programs for reducing CCD-like data;
- general-purpose data analysis and visualization tools;
- image processing, data visualization, and manipulating NDF components;
- a flexible and powerful library for handling World Coordinate Systems (partly based on the CIAOB Library);
- a library of routines intended to make accurate and reliable positional-astronomy applications easier to write; and
- a Hierarchical Data System that is portable and flexible for storing and retrieving data.

Code site: http://adsabs.harvard.edu/abs/2014ASPC..485..391C
Preferred citation method: Currie et al 2014 2014ASPC..485..391C is currently supported by the East Asian Observatory.
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• SMURF: For makecomp (SCUBA-2 DR) please cite http://adsabs.harvard.edu/ads/2013MNRAS.436.1398S
• For makecubehydro (SCUBA-2 DR) please cite http://adsabs.harvard.edu/ads/2013MNRAS.436.1398S
• CUPID: http://adsabs.harvard.edu/ads/2013MNRAS.436.1398S
• The fullWide algorithm (implemented inside Cupid’s dumpfind) has its own citation: 20
• Berry, D S 2015 “TheWide and a dump identification algorithm” in Astronomy and Comp
• SPLAT/ADO: 2002 A&AS...143...57S
• SPLAT: ascl:1402.008
• NDF: http://adsabs.harvard.edu/ads/2015A&A...57L..33A
• PAL: http://adsabs.harvard.edu/ads/2013A&A...553A.157S
• SURF: ascl:1403.008

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{ascl:1110.012} Starlink: Multi-purpose Astronomy Software

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Software publishing and citation in 2016


Foreman-Mackey D. et al., 2016, corner.py: corner.py v2.0.0, Available at: https://doi.org/10.5281/zenodo.53155
corner.py: Scatterplot matrices in Python

Daniel Foreman-Mackey

Article details
- View review
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- Submitted: 26 May 2015
- Accepted: 08 June 2016

Cite as:

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Read the documentation.


Foreman-Mackey D. et al., 2016, corner.py: corner.py v2.0.0, Available at: https://doi.org/10.5281/zenodo.53155
How is ADS dealing with this
How is ADS dealing with this - today
How is ADS dealing with this - today
How is ADS dealing with this - today
How is ADS dealing with this - tomorrow
How is ADS dealing with this - later this year

- Software packages ingested in ADS upon the detection of a citation from the refereed literature via a DOI; citation awarded to identified (versioned) resource
- Different software versions cross-linked in detail view
- Eventually: cumulative metrics (citations, reads) available for versions of same software product
- Citation event data publicly available through API