Annual Report, 2013
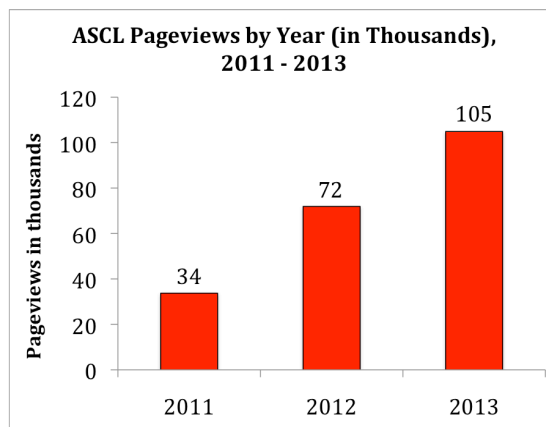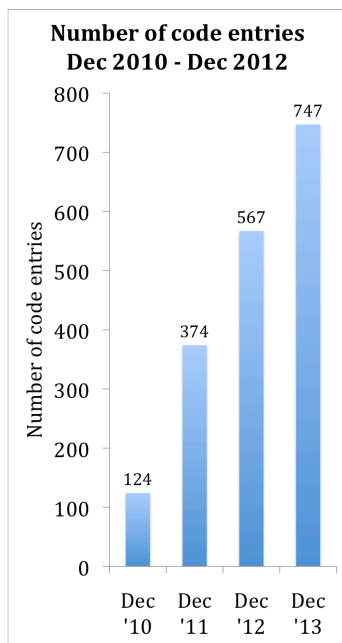## Astrophysics Source Code Library
March 31, 2014

Background
The Astrophysics Source Code Library (ASCL), founded in 1999 by Robert Nemiroff (Michigan Technological University) and John Wallin (Middle Tennessee State University), is a free online registry for source codes of interest to astronomers and astrophysicists. ASCL source codes have been used to generate results published in or submitted to a refereed journal. Code entries are housed on the discussion forum for Astronomy Picture of the Day (APOD); the home page (http://ascl.net) offers information about the resource and access to the code entries.

2013 Growth
The number of codes indexed in ASCL grew an average of 15 per month, which is down slightly from the average growth of 17 codes per month over the 2011-2012 timeframe; 180 codes were added in 2013. Use of the site in 2013 increased by 45% over 2012; the site was viewed 33,722 times in 2011, 71,924 times in 2012, and 104,897 times in 2013.

There were no changes in the Advisory Committee; the current members are:

Peter Teuben, University of Maryland, Chair
Bruce Berriman, Infrared Processing and Analysis Center/Caltech
Robert Hanisch, Space Telescope Science Institute/Virtual Astronomical Observatory
Jessica Mink, Center for Astrophysics
Robert Nemiroff, Michigan Technological University
Lior Shamir, Lawrence Technological University
Keith Shortridge, Australian Astronomical Observatory
Mark Taylor, University of Bristol, UK
John Wallin, Middle Tennessee State University

Alice Allen (Calverton, MD) and Kim DuPrie (Tokyo, Japan) serve as Editor and Associate Editor, respectively.

Funding

The ASCL remains unfunded. Three members of the Advisory Committee met Joshua Greenberg of the Sloan Foundation at a Library of Congress summit; he encouraged the ASCL to submit a brief overview of the project and a rough budget, which was done in August, 2013 and received no response, despite a number of follow-up emails.

2013 Highlights

January:	Splinter session held at 221st AAS in Long Beach
	Poster on the ASCL presented at 221st AAS in Long Beach
	Astronomy Computing Today publishes post about the 221st AAS splinter session
February:	Practices in source code sharing in astrophysics, by Lior Shamir *et al*, appears in *Astronomy and Computing* and triggers a long discussion at YCombinator
	Short notice about the ASCL appears in AAS newsletter
	New home page goes into production
March:	The ASCL records its 600th code
	Bruce Berriman publishes a post on his Astronomy Computing Today on the ASCL
May:	Peter Teuben presents a position paper on the ASCL at the 2013 International Workshop on Software Engineering for Computational Science and Engineering in San Francisco
	With WGAS, a Special Session (*Astrophysics Code Sharing II: The Sequel*) is proposed for 223rd AAS in Washington, DC as a follow-up to the splinter meeting held at 221st AAS
	Peter Teuben, Robert Hanisch, and Alice Allen participate in *Preserving.exe: Toward a National Strategy for Preserving Software* summit at the Library of Congress; Peter Teuben presents a talk on the ASCL at the summit
July:	Proposal for Special Session at 223rd AAS meeting is accepted
August:	ASCL reaches 700 codes
September/	The ASCL participates in ADASS XXII in the following ways:
October:	Peter Teuben moderates a successful Birds of a Feather (BoF) session called *Ideas for Advancing Code Sharing (or A Different Kind of Hack Day)*
	Kimberly DuPrie presents a poster called *ASCL: Incite to Cite!*
	Alice Allen presents an oral talk titled *The Astrophysics Source Code Library: Where do we go from here?*
October:	Preserving.exe final report is released with participant report "We didn't see this coming: Our unexpected roles as software archivists and what we learned at *Preserving.exe*" by Alice Allen and Peter Teuben
November:	Wikipedia article on the ASCL is put into production
December:	Elsevier representatives José Stoop and Hylke Koers and Alice Allen discuss integration of ASCL IDs into Elsevier's *Astronomy & Computing* journal, and determine an initial workflow to incorporate the ASCL IDs
	Pre-prints of the ASCL entries for the ADASS XXIII proceedings appear on arXiv, for the Birds of a Feather session, poster, and oral presentation
	Sidebar article to IEEE Computer: Special Issue on Computing in Astronomy, to be published in September 2014, is submitted

Impact on the community
Some authors are citing codes explicitly and independent of a code paper using ASCL entries. As of March 2013, ASCL entries had 32 citations (as shown by ADS); in December 2013, 108 citations were showing for ASCL entries, growth of 70% in 10 months.

2013 Plans Revisited
The following 2013 plans for the ASCL were completed:
- Migrate to using the WordPress site as the home page of the ASCL
- Submit position paper in *Astronomy & Computing*
- Continue discussions with publishers and ADS
- Present at the 2013 International Workshop on Software Engineering for Computational Science and Engineering in May
- Participate in The Library of Congress's Preserving.exe software preservation summit in May
- Present at ADASS
- Continue adding codes at about the current rate

The following 2013 goal for the ASCL was not completed:
- Add two or three people to the Advisory Committee to get input from outside the Anglosphere; suggested additions include a contact in Tokyo, the Netherlands, Germany, Italy, or France, and possibly a South American country

The following 2013 goal for the ASCL was partially completed:
- Find ways to discover and track impact the ASCL has on the astrophysics community

2014 Plans
- Build library to reach 1000 codes by the end of 2014
- Write an editorial policy for the ASCL to better communicate the ASCL's goals to the astrophysics community
- Write a style guide to better guide the editors and help standardize practices
- Organize a session for the AAS January 2015 meeting in coordination with others, particularly Kelle Cruz and David Hogg, who had mentioned possible topics of interest at the 223rd AAS meeting, and Matt Turk, who has expertise that will be a valuable addition to topics we might cover
- Work more closely with staff at ADS to determine better ways of working together and moving data from the ASCL to ADS
- Improve the infrastructure in some visible way, perhaps by moving the ASCL forum away from Asterisk and editing the display template for a more professional appearance

Press and bibliography
Astrophysics Code Sharing? AAS Splinter Meeting, January 2013, Astronomy Computing Today, January 18, 2013
Using the Astrophysics Source Code Library, Alice Allen, P.J. Teuben, G.B. Berriman, K. DuPrie, R.J. Hanisch, J.D. Mink, R.J. Nemiroff, L. Shamir, J.F. Wallin, American Astronomical Society, AAS Meeting #221, January 2013, #240.01
Practices in source code sharing in astrophysics, Lior Shamir *et al*, Astronomy and Computing, Volume 1, February 2013, Pages 54–58, http://dx.doi.org/10.1016/j.ascom.2013.04.001; arXiv pre-print

[Astronomy Source Code Library Closes In On 600 Codes!](), Astronomy Computing Today, March 4, 2013

Ideas for Advancing Code Sharing (A Different Kind of Hack Day), Peter Teuben *et al*, Astronomical Data Analysis Software and Systems XXIII October 2013, [arXiv pre-print]() | [Blog post]() | [Working documents]()

Astrophysics Source Code Library: Incite to Cite!, Kimberly DuPrie *et al*, Astronomical Data Analysis Software and Systems XXIII October 2013, [arXiv pre-print](); [poster]()

The Astrophysics Source Code Library: Where do we go from here?, Alice Allen *et al*, Astronomical Data Analysis Software and Systems XXIII October 2013, [arXiv pre-print]()