Editorial

Editorial in Two Parts

Nancy D. Morrison
Editor-in-Chief, *Journal of the AAVSO*

Department of Physics and Astronomy and Ritter Observatory, MS 113, The University of Toledo, 2801 W. Bancroft Street, Toledo OH 43606; jaavso.editor@aavso.org

1. Dual-anonymous review, revisited

In my previous editorial (Morrison 2020), I discussed the advantages of *JAAVSO*'s policy of having the author's and the referee's identities unknown to each other, as far as possible. If the referee does not know the author's name, affiliation, and professional status, the referee is better able to concentrate on the scientific merits of the article and provide an unbiased review. The main goal is to reframe the referee's thinking about the article. This practice is known in scientific publishing as dual anonymization.

As that editorial described, NASA has amassed much experience with dual anonymization in its peer reviews of research proposals, and it is adopting the practice broadly. NASA's research shows that the more complete the anonymization of the proposal, the more eectively bias is reduced. Even if the reviewer can guess the proposer's identity, this knowledge causes as little distraction as possible.

In *JAAVSO*'s current submission policy, we request that authors' identifying information be removed from the title/head of the article. Almost all authors comply with this policy, but many retain identifying information in the rest of the paper. Here are some guidelines for better anonymizing your article. Some of them appeared in my previous editorial, but I am repeating them here for completeness. After the AAVSO website update is complete, we will post these guidelines in the journal's web pages.

• Remove observatory identifying information if applicable. However, give enough relevant information to enable the reviewer to judge the science, such as: observatory longitude and latitude, general environment—Urban? Desert? Mountain top? and light pollution levels.

• Rather than naming the observers, use pseudonyms, for example: "Author A," "Collaborator C," etc. Make sure your and your colleagues' names are also removed from figure captions and other locations, and use the same naming convention there.

• When citing your previous work, don't acknowledge ownership. Rather than, "in previous work, we found...," say, for example: "Author (year) established...," or, "previous studies (author, year) demonstrated...."

• In acknowledgements, the only change from standard procedure should be to remove information about the roles of people who helped you, such as professor or thesis advisor. In this way, information about your student status (if applicable) will be less obvious. As always, include standard acknowledgements such as to software and data sources. If you acknowledge grant funding, you may include the name of the funding agency, but please do not include the grant number. However, I do need to know who gave you advice or other help—I need to know not to ask your mentors to referee your article!

In final revision of the paper after acceptance, you will have to make a fair amount of effort to re-insert the identifying material you previously omitted or removed. However, a last careful pass through the article will have benefits: you may well see problems that you did not notice in previous revisions. Your last-minute improvements will always be welcome.

2. Open data: the FTP archive

For many years, the AAVSO has maintained an archive where the public can access data file via FTP (File Transfer Protocol). The open availability of data that support published results has many benefits to science. It enables replication of research results, and it enables continuation of research over a long time base as published data sets are augmented. The history of the AAVSO exemplifies the fruitfulness of preserving data over long time periods.

In order for these benefits to be realized, it is essential for the data to be preserved in perpetuity. Although you may think first of depositing your data in your own archive, the probability of long-term accessibility is higher in the well-backed-up archive of an established organization, which has the obligation to preserve information openly and securely for the indefinite future. Data that you might consider depositing in the AAVSO archive include:

• Data you took

• Data already in an AAVSO archive, if you performed extensive manipulations on the data

• Computer code, although you may alternatively want to

deposit it in a public repository such as GitHub and cite the GitHub page in your article.

When you provide data for the repository, please include the precise name of the file in your article. Place it in a footnote at the bottom of the manuscript page where the data are described and in a short note following the acknowledgements. Our editorial staff will provide the complete link to the file.

JAAVSO articles sometimes include lengthy tables of reduced but unanalyzed observational data. Our practice will be to include such tables, in machine-readable format, in the FTP archive, with a short sample version of the table in the published article. When data are in a directly readable file, in a format such as text or FITS (Hanisch *et al.* 2001), they are more accessible than they are if the user has to copy and paste them from a table in a PDF-formatted article. FITS files can be read and written by data analysis software such as found at IRAF (NOAO 2019), and by R (Harris 2019), and VSTAR (Benn 2013).

We also encourage authors to provide the numerical values that went into a figure, if they are different from the data already on line. Those data would be in a separate file in the FTP archive, linked to in the figure caption.

We are constantly looking for new ways for this journal to engage the reader. If you have an idea about how you would like to use a figure or a table to communicate numerical data interactively, please contact me (jaavso.editor@aavso.org) and we'll try to find a way to make it happen.

References

Benn, D. 2013, VSTAR data analysis software (http://www.aavso.org/vstar-overview).

Hanisch, R. J., Farris, A., Greisen, E. W., Pence, W. D., Schlesinger, B. M., Teuben, P. J., Thompson, R. W., and Warnock III, A. 2001, *Astron. Astrophys.*, **376**, 359.

Harris, R. 2019, FITSio: FITS (Flexible Image Transport System) Utilities (https://cran.r-project.org/web/packages/FITSio/index.html).

Morrison, N. D. 2020, *J. Amer. Assoc. Var. Star Obs.*, **48**, 1.

NOAO (National Optical Astronomy Observatory). 2019, Image Reduction and Analysis Facility (IRAF) data analysis software (http://ast.noao.edu/data/software).