

# From submission to publication: How your paper is published in the *Journal of the AAVSO*

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## 1 Scientific publication in the *Journal of the AAVSO*

There are many reasons for the existence of the *Journal of the AAVSO*, which have been described at length in the *JAAVSO* itself and elsewhere. For the purposes of this note, I will cover only the process by which *scholarly research* articles are published. The *JAAVSO* publishes letters to the Editor, book reviews, AAVSO Meeting minutes, and other short pieces, and those are largely processed and published on an individual basis. Scholarly articles have their own road from submission to publication, which involves an intermediate editorial process. This road is a multi-staged effort involving the author(s), the editorial staff, and *referees* tasked by the editorial staff to assess the research content of the work. These stages take some time to complete, but the procedure ensures that scientific and other scholarly articles of the *JAAVSO* meet the highest standards of quality and integrity.

## 2 The submission process

The instructions for submitting an article to the *JAAVSO* are outlined in each issue, on the inside of the front cover. These instructions are similar to those given by other well-known astronomical journals. The *JAAVSO* accepts articles in plain text and the Microsoft Word formats, as well as the LaTeX text processing language used in other astronomical journals. The *JAAVSO* does not have a preset style (e.g. a LaTeX “style file”) as many journals do, but we *do* require that the editorial instructions regarding language, general style, and graphics be followed.

As you will be told at this workshop, your article’s progress through the editorial process can be hastened by adherence to these submission guidelines. Please follow them to the best of your abilities, both for your own sake, and ours!

## 3 The refereeing process

### 3.1 The selection of referees

As with all other astronomical research journals, the *JAAVSO* uses *referees* to insure the research outlined in all submitted papers was explained thoroughly, conducted according to standard scientific procedures, and is both novel and of value to the scientific community. The referee is someone selected by the Editor of the *JAAVSO*, Dr. Charles Whitney, in consultation with the editorial staff who is recognized as being knowledgeable in the field of research covered in the work. For example, a paper on eclipsing binaries will be refereed by an astronomer with a substantial research and publication record in eclipsing binaries. While referees can be either amateur or professional astronomers, they typically have many years of research experience in their given field and have a substantial record of publication.

The selection of referees is an important step in the publication process. It requires that the Editor can clearly discern the topic of the paper, and that the AAVSO can call upon members of the astronomical research community to serve as referees. Often, referees are members or affiliates of the AAVSO, but we also call upon astronomers and other scholars outside of the AAVSO to review submissions. In all cases, the referee is expected to be both knowledgeable of their field, and impartial and objective in the assessment of your work.

Note that refereeing is done on a *voluntary basis*, and referees are not compensated for their work. Instead, the refereeing of scholarly articles is considered a necessary part of the professional activities of researchers – it is as much a part of what we do as our own research. It may take some time for the editorial staff to find a referee willing and able to review your paper, but this step is vital to maintain the scientific integrity of the *JAAVSO*.

### 3.2 The outcomes of the refereeing process

When a referee completes the analysis of a submitted work, he or she returns a *referee's report* to our editorial office, assessing the quality and value of the paper. Responses typically fall into one of three types: recommendation of acceptance with only minor changes, a request for revision, or a recommendation of rejection. The first is (for you and us) the desired outcome, and indicates that the referee understood and found no fault in your work, and that it has value for the scientific and/or academic community. The second indicates that the referee does believe your work has value to the scientific community, but that they take issue with one or more scientific aspects of your paper. These concerns can range from a lack of discussion or interpretation of your results, to minor results and interpretations that they believe to be incorrect. This does *not* mean that the referee believes your results are controversial, simply that they have found errors or inconsistencies in your work. The third is the least desirable outcome, because it means that the referee does not believe your work has met the standards for scholarly scientific work and cannot reach those standards without complete revision. This can be due to things such as fundamental and repeated errors in the observational or analysis procedures, faulty interpretation or overinterpretation of data, and unclear or faulty expression of your results.

As you will be told at this workshop, the third outcome can be avoided if you simply *write about what you know*. For example, if you do not have a background in astrophysics, you should exercise great care in interpreting your observational results beyond your level of understanding. Likewise, if you are not an observer, you should be very careful wading into observational astronomy for the first time! Many valuable papers have been written with purely observational results. The purpose of scientific publication is to share information and ideas with the broader scientific community. You may not see all of the astrophysical implications of your observations, but it is possible that there are other astronomers who will. Your work will have value to them and to the community, and your results are not lessened by the fact that you report them simply and clearly.

The best advice we can give to help you avoid a rejection is *keep it simple*.

### **3.3 Revision – the end of the refereeing process**

Once a referee has made his or her report, it will generally include at least a few suggestions that will improve the quality and readability of your work. The referee’s report (which is anonymous) will be returned to you, along with a request from the Editor to respond to the referee’s comments in detail, and revise accordingly. You may disagree with the referee’s comments, and you are welcome to do so, but remember the burden of proof lies with *you*. The author and referee “converse” through the Editor until they reach a consensus on the content of the final version of the paper. These revisions generally take a shorter period of time than the referee’s initial review, but may still take a substantial amount of time if the referee has a number of issues with your paper. Again, the best advice I can give to help you expedite this process is to keep your work simple and clear.

## **4 Pre-publication editing**

Once your paper is accepted to the *JAASO* it will undergo further revision by the Editorial staff at AASO Headquarters. Your paper is read by at least three staff members – Production Editor Dr. Michael Saladyga, Assistant Editor Dr. Matthew Templeton, and Associate Editor Elizabeth Waagen, in that order – to make sure that your article conforms to both scientific and editorial standards. Dr. Michael Saladyga is the head of the production line; he typesets all articles, handles all communications between the referee and author, and distributes the final revisions to the other editors. Dr. Matthew Templeton is the current scientific line editor, who serves as a check on the scientific content of the paper, and also performs minor general editing when possible. Elizabeth Waagen performs the final edits and review of the work, to ensure the paper is clear and conforms to the publication standards of the *JAASO*. Depending upon the length of the work and the number of papers in the production queue, this step can take as little as a few days, or as long as a few months.

## 5 Final Publication in the *JAAVSO*

The procedure for creating a print version of the *JAAVSO* is complicated, and takes anywhere from a few months to a year in special cases. Once the contents of a given volume have been set by the Editorial staff, the journal is typeset by Dr. Michael Saladyga. This typeset version is then sent to an outside contractor, who creates a set of proofs for our review, and prints the required number of copies for distribution (between 1000 and 1500 per issue). This process also takes some time. Generally one to two months elapse between the time the typeset copy is delivered to the contractor, and the time the printed journals are delivered to subscribers.

## 6 “Where is my paper?”

All of these steps put together can add up to *a year or more* between the time you first submit your paper, and the point at which you hold a bound copy of the *JAAVSO* in your hands. This time can be frustrating for authors (and for the editorial staff!) but it is often necessary to assure the *JAAVSO* maintains its high standard of quality.

The publication process has been streamlined somewhat by the institution of an electronic publication system, where your work is formally “in press” even if preparation of the print journal is delayed. The new *Electronic Journal of the AAVSO* (eJAAVSO) allows your work to appear in print for the scientific community in much shorter time than was previously possible, because it distributes your work before the final printing step (lasting 1-2 months) begins. Your paper is still fully refereed and reviewed by the Editorial staff, and still appears in online abstract services like NASA’s *ADS Abstract Service* – just not in paper form (yet). The AAVSO is working to streamline this process further, without compromising the editorial quality or scientific integrity of the *JAAVSO*.

You, as an author, have the power to expedite the publication of your work by following the guidelines laid out in the *JAAVSO*, the recommendations given during this workshop, and the suggestions I’ve laid out here. Our goal at the *Journal of the AAVSO* is to maximize the scientific value of the AAVSO data archives, and the scientific potential of the AAVSO community. I hope this note and the AAVSO Publication Workshop have facilitated both.