A Brief Guide for Authors

AMS STAFF American Meteorological Society, Boston, Massachusetts Version 20050518

1. Introduction

This document provides essential information required by authors to submit manuscripts to American Meteorological Society (AMS) journals or the *Bulletin of the American Meteorological Society* (*BAMS*). It is intended to serve as a quick reference for frequently needed information and as an easily printed supplement to the full *AMS Authors' Guide* (*AG*), which is available on the AMS Web site: http://www.ametsoc.org.

Frequent reference to the AG is made in this document (as well as to the AMS Web site, whose address is given above), and authors are encouraged to use it for more complete and more up-to-date information on AMS style, the publication process, and descriptions of all AMS journals.

Note that *BAMS* now only accepts manuscripts after the editors have approved a proposal for an article. Prospective authors for *BAMS* are encouraged to go to

http://www.ametsoc.org/PUBS/bams.html on the AMS Web site.

2. Author disclosure and transfer of copyright

When a manuscript is submitted, the author must inform the chief editor of that publication if it has been previously published in any language or if it is under consideration for publication by another journal. The author must also promptly inform the chief editor if it is submitted for publication elsewhere before its disposition by the journal. This information can be put in the cover letter that accompanies the submitted manuscript.

Each manuscript must be accompanied by a statement transferring copyright from the authors (or other holder of the copyright) to the American Meteorological Society. The appropriate form for the transfer of the copyright to AMS is available on the AMS Web site, and it is also printed near the back of the December and/or January issue of AMS journals or can be obtained from the chief editor's office or from the Society. The written, signed transfer of the copyright is required under U.S. Copyright Law (Title 17 USC, as revised by P.L. 94-553) in order for AMS to have valid rights to continue its wide dissemination of research results and other scientific information. Editorial action on a manuscript that is not accompanied by the completed copyright transfer form, signed by all authors, will be delayed until the form is received. Peer review can begin after receipt of faxed or scanned versions, but the originals must be provided as soon as possible and before accepted manuscripts can enter the production process. All authors need to sign a copyright transfer form for the manuscript that is submitted, but it is acceptable for each author to provide a separate form with

his or her signature rather than requiring a single form signed by all, which greatly eases the logistical problems associated with collaborations among authors of different institutions.

3. Manuscript preparation

Each manuscript must be complete and final when submitted. Article length should be less than 7500 words (including appendixes but not references or figure captions) or about 26 double-spaced typed pages. Unless submitting electronically (see section 5), *five copies of the text and photocopies of large drawings are required*. All copy (including tables, references, and list of figure captions) must be *double spaced*, *on one side only*, and have wide margins, and all pages must be numbered consecutively. The font used should be no smaller than 12 point and the line spacing should be no more than three lines per 2.5 cm, as measured from anywhere on the page. Note that AMS now encourages electronic submission and in many cases can use files prepared in Microsoft Word, WordPerfect, TeX or LaTeX, and other formats directly in the typesetting process.

a. Components of a manuscript

Each manuscript should include the following components, which should be presented in the order shown.

- 1) *Title, name and affiliation of each author, dateline, any current or additional affiliations, and corresponding author address and e-mail.* These items should appear on the first page by themselves, with the abstract beginning on page 2. The date of receipt of the manuscript will be supplied by the editors.
- 2) Abstract. A concise (#250 words) abstract is required at the beginning of each article and, at the discretion of the chief editors, at the beginning of appropriate shorter contributions. Authors should summarize their conclusions and methods in the abstract. First person construction should not be used in the abstract, and references should be omitted because they are not available per se to abstracting services.
- Text. The text should be divided into sections, each with a separate heading and numbered consecutively. The section/subsection headings should be typed on a separate line [e.g., 1. Introduction, a. Data, 1) RADIOSONDE, and (i) Experiment 1].
- 4) *Acknowledgments*. Omit the word "number" from grant or contract acknowledgments.
- 5) *Appendix*. Lengthy, mathematical analyses whose details are subordinate to the main theme of the paper should normally appear in an appendix. Each appendix should have a title.
- 6) *References*. References should be arranged alphabetically without numbering. The text citation should consist of the

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author's name and year of publication, [e.g., "according to Rossby (1945)," or "as shown by an earlier study (Rossby 1945)"]. When there are two or more papers by the same author in the same year, the distinguishing suffix (a,b, etc.) should be added. More information on preparing and arranging references is provided in section 3d of this document.

- 7) Figure captions. Each figure must be provided with an adequate caption; all captions should be listed together, double spaced, for typesetting. Authors must include single-spaced captions directly on the figures used for the reviewer copies, but the figure originals should *not* have captions on them.
- 8) *Illustrations and tables*. Each figure and table must be cited specifically in the text. The figure number will be typeset and should not be part of the illustration. Authors should label figure panels with lowercase lettering, preferably in the upper-left corner within the figure panel. All tables should have a double-spaced caption, and table text and headers also should be double spaced.

b. Figures

All figures printed in the journal are placed on the composed page as an electronic image file. The highest quality of reproduction is possible if authors supply electronic files of any images that were originally created in an electronic form. Instructions for transmitting both the original and review (captioned) versions of figure files are provided on the AMS manuscript upload page at the AMS Web site. If the original files change in number or content during the review process and have already been uploaded, they can be uploaded again. Authors must still send at least one set of high-quality hard-copy versions of the original figures to the field editor before a paper can be fully accepted and passed on to AMS Headquarters, even if some or all are available in electronic form, because they aid in evaluating the quality of the typeset figures and serve as a backup for scanning if the electronic files have problems. If a field editor needs hard copy versions of the peer-review (captioned) figures for any reason, the author will be notified. More information on electronic figure submission is available on the AMS Web site. Illustrations and photographs that were not originally produced electronically should be submitted as high-quality hard copies that can be electronically scanned by the printer for optimal reproduction.

The print-quality original electronic figure files must be in EPS or TIF format. Authors who wish to check in advance whether their files may cause problems at typesetting can use the Digital Expert software found at our printer's (The Sheridan Press) Web site: <u>http://dx.sheridan.com</u>. This software can detect minor problems such as fonts that are not embedded, RGB instead of CYMK color, and low resolution as well as more major problems that will render a figure unusable.

Halftone reproductions of photographs and dense

stippling patterns do not scan well and should be avoided. Authors should strive to submit their figures at the size they will appear (but do not submit photocopy reductions in place of larger, higher-quality originals), with the understanding that the technical editors will reduce the figures to the maximum extent possible while still preserving legibility. Note any unusual layout requirements. Multiple-panel figures should be combined into a single electronic file and/or hard copy when possible in order to avoid additional handling charges. The printing of color figures in the journal represents a significant additional expense that is passed on to authors in the form of increased author charges (see section 6).

c. Mathematical formulas, units, and time and date

Authors should attempt to visualize mathematical expressions as they will appear in print. Avoid built-up fractions and other complicated equation structures in text. Instead, have complicated expressions appear as display equations, that is, as equations centered on their own line. Display equations are usually numbered consecutively to facilitate their citation in text, which is done by using the equation number in parentheses set flush right.

Because of AMS typesetting requirements, authors who use Microsoft Word to prepare their manuscripts are asked to use MathType version 5 to prepare their display equations, rather than making entries from the keyboard, and to avoid the use of MathType entirely in running text, using the keyboard exclusively except to create overbarred variables or variables with stacked super/subscripts that cannot be easily created from the keyboard. Following this practice will greatly reduce production time for mathematics-heavy papers.

Authors can facilitate the correct typesetting of their equations by using the correct typeface for variables. Scalar variables are set as italic (with the exception of multiple-character variables, e.g., RH or SST), vectors are set as boldface roman (e.g., **V**), and matrices and tensors are set as boldface sans serif (e.g., **A**). If the author cannot reproduce these typefaces, he or she should indicate vectors with a single wavy line under the character and matrices and tensors with a double wavy line under the character (in print versions) or provide a list of variable types (if submitting electronically). No other mathematical symbols should be underlined. Subscripts or superscripts are usually set as lightface, even when applied to vectors or matrices, and are set italic unless the subscript or superscript is an acronym or abbreviation (e.g., T_L , T_{LCL} , \mathbf{V}_g , \mathbf{V}_{obs}).

Units should be SI with the exception of a few approved non-SI units of wide meteorological or oceanographic usage that are described in the *AG*. Units should be set in roman font using exponents rather than the solidus (/) and with a space between each unit in a compound set (e.g., m s⁻¹ rather than m/s or ms⁻¹).

Day, month, and year are written in the form "26 May 1998" in AMS publications. Do not abbreviate the names of months except in figure captions or tables. The recommended time zone annotation system is universal time and is abbreviated UTC. Time, time zone, day, month, and year are written in the form "1619 UTC 26 May 1998." The use of other time zones is permissible—for instance, EST, EDT, PST, LST (local standard time), or LT (local time). Do not use Z or GMT in place of UTC. Astronomical or military time (i.e., a 24-hour clock) is required.

d. References

A complete "Guidelines for Preparing References" may be obtained from AMS Headquarters or online in the *AG*. A few of the most common reference types are shown here. In order for the cross-reference linking now possible through the AMS Journals Online to work properly, references must be complete and properly formatted. Authors are encouraged to invest the time needed to prepare the references according to AMS style.

1) FOR A JOURNAL ARTICLE

Reference must consist of last name and initials of author(s), year of publication of journal, title of paper, title of journal (italicized or underlined and abbreviated—see appendix C of the AG), volume of journal (boldface), number of issue (only if required for identification), and first and last page numbers of the paper. For example:

Charney, J. G., and A. Eliassen, 1964: On the growth of the hurricane depression. J. Atmos. Sci., 21, 68–75.

2) For a book

Reference must consist of last name and initials of author(s), year of publication of book, title of book (italicized or underlined), publisher's name, and total pages. For example:

Wallace, J. M., and P. V. Hobbs, 1977: Atmospheric Science: An Introductory Survey. Academic Press, 350 pp.

3) FOR A CHAPTER IN A BOOK

For a book or monograph that is a collection of papers written by independent authors, the reference must be made to the authors of a particular chapter and consist of last name and initials of author(s), year of publication of book, title of the chapter, title of book (italicized or underlined), name of editor(s), publisher's name, and inclusive pages for the chapter. For example:

Anthes, R. A., 1986: The general question of predictability. *Mesoscale Meteorology and Forecasting*, P. S. Ray, Ed., Amer. Meteor. Soc., 636–656.

For a chapter in a book that is part of a monograph series, the format is similar but includes the volume and number of the monograph. For example:

Arakawa, A., 1993: Closure assumption in the cumulus parameterization problem. The Representation of Cumulus Convection in Numerical Models, Meteor. Monogr., No. 46, Amer. Meteor. Soc., 1-16.

4) CONFERENCE PREPRINT OR PROCEEDINGS

Reference must consist of last name and initials of author(s); year of publication; title of paper; indication of the publication as a preprints, proceedings, or extended abstracts volume; name of conference volume (italicized or underlined); city and state where conference was held; conference sponsor's name; and pages of the paper. For example:

Kalnay, E., and Z. Toth, 1994: Removing growing errors in the analysis cycle. Preprints, *10th Conf. on Numerical Weather Prediction*, Portland, OR, Amer. Meteor. Soc., 212–215.

References should be to peer-reviewed literature whenever possible. Technical reports, conference proceedings, and other "gray literature" should be referenced only when no other source of the material is available, and an "available at" address should be provided for reports and dissertations.

4. Manuscript submission

When choosing which AMS journal is most appropriate for the publication of his or her manuscript, authors should use the mission statements for each journal provided in the full AG, as well as review the contents of recent issues of the journals for guidance. All AMS journals are available online through the AMS Web site, and authors are encouraged to browse the tables of contents to help to determine the scope of each journal. When an author has decided which journal is most appropriate, the manuscript should be submitted to AMS through online submission at the AMS Web site. If submission is through hard copies, use the address shown on the inside cover of a recent issue, which is also provided at the journal home pages on the AMS Web site. Note that hard copy manuscripts and related material for the Journal of Climate, Monthly Weather Review, and Weather and Forecasting are now submitted directly to AMS Headquarters. If a manuscript meets the AMS submission qualifications (described in the table below), it will be turned over to the chief editor's office to begin peer review. The chief editor and the journal's editorial board will oversee the peer review of the manuscript and will correspond directly with the author concerning the disposition of the submission.

The submission must include the following components: 1) a cover letter that includes the manuscript title and full contact information, including mailing address, phone and fax numbers, and e-mail address, for one of the authors (usually the lead author), as well as any additional information required for the manuscript (see section 2); 2) the copyright transfer form signed by all authors (see section 2), and, 3) if submission is by hard copy rather than online, five complete copies of the manuscript and figures with captions below (three for *J. Phys. Oceanogr.*). In addition, AMS still requires at least one set (two if electronic files are not available) of

original figures without captions by the time the paper is accepted. A summary of requirements for successful qualification of manuscripts is given at the end of this document. For online submission requirements, see the next section.

5. Online manuscript submission

The AMS journals now accept manuscripts in electronic form through an online submission process. There are constraints that must be met before a manuscript can be submitted online. These constraints and the submission process itself are discussed in the complete AMS Authors' Guide and also on the AMS Web site through the "Authors' Resource Center" page. Authors who are submitting online will be asked to upload the double-spaced manuscript file(s) (usually Word, WordPerfect, or some form of TeX) with double-spaced caption list, the double-spaced table files (if they are not part of the manuscript file), the single-spaced captioned peer-review figure files (if they are not part of the manuscript file), the cover letter, any other associated files such as preliminary scanned copyright forms, and (optionally-this step can be done later) the original printquality captionless figure files. The AMS upload software will automatically create for peer review a PDF file that contains the double-spaced manuscript, the tables, and the figures with captions below. The author can view it and approve it for submission to the chief editor. At this time, however, users of TeX, LaTeX, and other file types not handled by the PDF converter will be asked to upload a peerreview-ready PDF file (as was done under the previous upload system) in addition to the raw files. The new version of the AMS upload system gives AMS control over file versions as well as access to the original electronic manuscript and captionless figures for use in production and typesetting as soon as a paper is accepted, rather than having to request the files from the authors upon delivery of the paper to AMS Headquarters.

6. Publications charges

AMS page charges are \$135 per printed page, as of 1 January 2005. An author can estimate page charges based on the typed manuscript using the following formula: (number of printed pages) . 1/3(number of manuscript pages, including tables and figure captions, + number of figures—not total panels) + an additive factor of 1–4 (4 is used by AMS staff to estimate page charges but gives a conservative result when compared with actual printed papers). Publication charges are financial contributions from authors' institutions to the cost of disseminating research results and should be regarded as an essential and proper part of the authors' research budget. They are designed to cover

the cost of editorial, composition, and related work needed to prepare an article for publication. Payment of publication charges is expected by the Society. If an author's institution is unable to pay the publication charge for a manuscript, the reason must be stated on the publication charge certification form. As stated in the editorial by the AMS president that appeared in December 2004 issues, AMS is beginning to take steps to increase compliance with page charge payment and failure to pay may result in delays in publication.

Reproduction of color figures is significantly more expensive and results in higher publication charges. Hints on reducing color publication charges are provided in the AG. The current charges for color, which are assessed in addition to the regular page charges for the article, are \$590 for the first piece, \$490 for the second piece, and \$190 for each additional piece. The higher charges for the first two pieces incorporate the costs associated with the press setup for color. The press costs for additional color production in the same article are small, and the charge per piece after the third piece reflects mostly the color separation charges for that piece. Panels (e.g., Figs. 7a and 7b) that are on separate pieces of paper each count as a piece. Two figures (e.g., Figs. 8 and 9) count as separate pieces, even if on the same piece of paper. Remakes of black and white figures not necessitated by press error cost \$21 each; for color figures the charge for a remake is \$130.

Articles published in *BAMS* are subject to a different page charge structure. See the "BAMS Online" pages of the AMS Web site for details.

Note that although the inability of an author's institution to honor page charges will not prevent publication of a paper, if color illustrations are included an attempt is made to secure a commitment to the page charges prior to processing. If the page charges cannot be honored, the technical editor of the journal may work with the author to find a suitable way to present the illustrated material in a black-and-white format.

Qualification of Manuscripts

Items that must be in place before a submitted manuscript package can begin the peer-review process:

- 1) Properly signed copyright forms from all authors (submitted individually or together). Faxed or scanned signatures are acceptable initially.
- 2) (Electronic, preferably) cover letter stating type of submission (e.g., article) and whether it has been considered previously by any other journal and containing contact information of the corresponding author.
- 3) Length of no more than 7500 words (approximately 26 double-spaced pages, counting abstract through appendixes, but not list of figure captions or references). The author is required to request chief editor approval and provide justification to obtain an exception to the length limit.
- 4) Double-spaced text [three typed lines per inch (2.5 cm) measured from anywhere on the page], including abstract through appendixes.
- 5) Type that is 12-point font or larger.
- 6) Figures (with captions below each figure for the review process) and captioned tables placed at the end of the manuscript, rather than embedded in the text.
- 7) The following elements in the proper order: title page, abstract, body text, appendixes (if any), references, figures, and tables. Some manuscript types, such as Comments and Replies, may not require an abstract. Please number all pages sequentially.

Additional items that must be in place before a manuscript can be accepted for publication and begin the production process:

- 1) Signed original copyright forms from all authors.
- 2) References and citations in proper AMS format.
- 3) Separate double-spaced figure caption lists provided.
- 4) Abstract, references, and figure caption list begin on new pages.
- 5) Double-spaced abstract, main text, appendixes, references, figure caption list, and table captions and body text.
- 6) Tables set one per page, with captions set above the table text.
- 7) One set of press-quality hard copy figures, if electronic figure files are available in eps or tiff format. If electronic figure files cannot be provided, two sets of press-quality hard copy figures are required. Captions must be removed from the press-quality figures and they must be placed one figure per page, with individual elements (e.g., panels) grouped together as much as possible in order to minimize publishing costs.