

EDITORIAL—SUBJECT AREAS IN AMS JOURNALS

A concept of the individual natures of the AMS journals is essential both to readers in electing which ones to subscribe to, and to authors who wish to publish articles where they will reach the largest segment of the appropriate audience. A fresh look at the distinctions among the journals has been prompted by AMS assumption (in January 1974) of the publication of *Monthly Weather Review*, upon its relinquishment by NOAA. Over the years, MWR has contained articles in subject areas represented in *Journal of the Atmospheric Sciences* (JAS), *Journal of Applied Meteorology* (JAM), and *Journal of Physical Oceanography* (JPO).

New directions in Society publications, aimed toward defining areas of emphasis for the four journals and better serving the varied interests of AMS members, were discussed in the August 1973 issue of *Bulletin of the American Meteorological Society* (pp. 772–775). As pointed out by former President Kellogg, for various reasons the needed changes in the makeup of the journals have to be “evolutionary rather than revolutionary.” Putting into effect the Policy Guide outlined by Publications Commissioner Hilst is complicated by the interdisciplinary population of readers and authors, by author customs in submitting articles to journals in light of their traditions, and by the necessity to draw upon a variety of subject areas in treating many research problems and applications. The establishment of rigid guidelines is not possible, and would also be counter-productive to good communication. Present efforts are, rather, directed toward an assessment of the needs and desires of the Society’s members, and an attempt to provide some indicators of the types of articles appropriate to each of the journals.

We visualize the following audiences: JAS—research-oriented scientists in the broad field of atmospheric science; MWR—analysis- and forecast-oriented scientists, including not only forecasters but also scientists who develop techniques applicable to forecasting problems, and analyses that clarify the structure and behavior of the atmosphere; JAM—applications-oriented scientists in fields such as instrumentation, weather modification, atmospheric pollution, agriculture and forestry, transportation and commerce, and other human activities where a substantial meteorological input is required; JPO—scientists in the broad field of oceanography and those dealing with aspects of marine meteorology which are involved with ocean physics and dynamics.

Many papers might well be appropriate for either of two or more journals. In such cases both the author’s

desires and the editor’s judgment will be the criteria for selecting the most appropriate journal. The following guidelines are intended to assist—not restrict—authors in deciding where to submit a paper. The subject areas mentioned are certainly not all-inclusive and many questions remain unanswered. It is our intent to work both among ourselves and with the authors to provide the most appropriate and expeditious medium for publication.

1. Papers describing a new or modified meteorological instrument with potential but unrealized applications should ordinarily be submitted to JAM. (Instrument articles, generally going into less technical detail and intended for a broad audience, are also published in a special Instrumentation Issue of *Bulletin of the American Meteorological Society* each September.)
2. Similarly, papers which describe a proposed or existing measuring program (without principal emphasis on analysis of the measurements) should ordinarily be sent to JAM, unless of very clear interest to the MWR audience, but in any case not to JAS.
3. JAM should publish weather-modification papers, including those on cloud seeding. More fundamental papers on cloud microphysics ordinarily go to JAS.
4. MWR, as well as JAS, is a suitable outlet for articles on cloud structure, circulation and dynamics.
5. Papers on basic statistical theory and techniques (e.g., hypothesis testing, data handling methods, decision theory) are probably most appropriate to JAM.
6. Statistical forecasting techniques and verification procedures may be reported in MWR. Those statistical techniques incorporating atmospheric dynamics and relevant to an understanding of atmospheric behavior may appear in JAS.
7. Analyses of meteorological data to produce general circulation statistics, and studies designed primarily to describe atmospheric phenomena, may be suitable for either MWR or JAS depending on the intended audience.
8. Atmospheric chemistry and aerosol papers should appear in JAM or JAS, not MWR.
9. Models on urban or similar scale, with application to the spread of pollutants, generally belong in JAM, unless clearly aimed at the field forecaster, in which case they may be submitted to MWR.

10. Articles on numerical techniques of interest to modelers, and on objective analysis and data assimilation, ordinarily go to MWR, but might be appropriate for JAS in some cases when they are primarily directed to a theoretically-oriented audience.

11. MWR is the proper journal for papers on numerical models with direct application to forecasting.

12. Journal choice for articles dealing with climate studies depends on the emphasis and intended audience. Numerical simulations or diagnoses of the present-day atmospheric structure and circulation may be submitted to JAS or MWR. Papers presenting the results of numerical experiments on climate change are suitable for JAM, but expositions of the theory of climate or climate change might be more appropriate for JAS.

13. JPO publishes a broad scope of studies, both observational and theoretical, dealing with such topics as ocean thermal structure, ocean circulation, surface waves, internal waves and upwelling. Theoretical studies include numerical as well as analytical models of ocean dynamics. Normally, instrumentation papers are not encouraged; exceptions are made for unique new methodologies which are clearly demonstrated to yield new and exciting kinds of information.

14. Air-sea interaction studies are also appropriate for JPO but, depending on the intended audience, could be more suitable for JAS or, if directed toward atmospheric forecasting modelers, MWR.

15. Papers on the planetary boundary layer and surface budget studies, as examples of subjects related to many areas of theory and application, may appear in any of the four journals, depending on content and intended audience.

The above guidelines were developed in consultations among the editors, with advice from others engaged in

the publication process. A study was made of the contents of past issues of the Journals (for a period essentially unaffected by the 1973 Policy Guide), of subject areas in relation to the intended emphases of the journals, and of the effect upon balance of articles among the journals, that will result from adherence to the new policy. As expected, the journals that are most affected are JAM and MWR. Realignment of their contents will result both in a truer reflection of their intended roles, and a more equitable volume of articles published in each.

The editor to whom an article is sent will endeavor to judge, at the time of its receipt, whether it is appropriate for his journal. If he is uncertain, the desirability of transfer will, when feasible, be discussed with the author. In some cases, referees may suggest that another journal is more suitable. In this event, the author will also be notified and an attempt will be made to effect the transfer without undue delay in processing (generally honoring reviews that are in hand, if these appear to be adequate). The editors take the view that, where the boundary lines between the journals are ill-defined in respect to a specific article, the best procedure is to try to place it in the particular journal wherein it will best reach the intended audience. Authors should, and generally do, make this judgment when they submit articles. We hope that this editorial will assist them in making this sometimes-difficult choice.

The purposes presently specified for *Bulletin of the American Meteorological Society* and for *Meteorological Monographs* are unaffected by statements in this editorial; as a general policy, the *Bulletin* and the *Monographs* do not publish articles that are appropriate for JAS, JAM, JPO or MWR. The tables of contents of each issue of JAS, JAM, JPO and MWR are reproduced in the *Bulletin*.

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