

AGU Publications Webinar

Peer-Review Essentials: How to Write Exceptional and Respectful Reviews

Tuesday, August 8th @ 8 am PST / 11 am EST publications@agu.org





- This event is being recorded; the recording will be made available after the session. Check your spam folder if you can't find it. It will also be made available on the AGU website with the slides.
- Use the Chat function to message AGU staff
- Use the Questions/ Q&A function to submit questions, which will be addressed during the Q&A. We'd love to hear from you!
- Enable Live Transcript (captions) by selecting [CC] button.



ADVANCING EARTH AND SPACE SCIENCE

Today's agenda

- The peer review process
- How to write exceptional and respectful reviews
- Tips to get involved
- Q&A



Presenters









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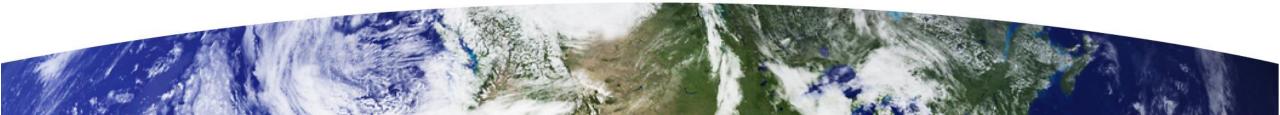


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AGU Journals







The Peer Review Process: What Is It?



Why publish? Why review?



Peer review and scientific publications are:

- A shared responsibility among researchers, reviewers, editors, and publishers for science and to society
- A fundamental aspect of the integrity and accountability of science, as well as its advancement
- Increasingly important for society, and the use of the scientific literature in laws and regulations is growing



The purpose of peer review



- Help editors select the best possible papers for advancing science within the scope of the journal
- Help guide editors and authors in what needs to be done to improve and communicate the work
- Strong need for diverse reviewer pool in both demographics and interdisciplinary topics

Some manuscripts can't be changed enough to meet the criteria of the journal, or may be better suited elsewhere. These get rejected.

Various types of peer review



Identity transparency:

- All identities visible (author, reviewer, editor identities visible to all)
- Single anonymized (author is visible to reviewer, reviewer is not visible to author, both author and reviewer visible to editor)
- Double anonymized (author is not visible to reviewer, reviewer is not visible to author, both author and reviewer visible to editor)
- Triple anonymized (no identities are visible)

Review information published:

Varies by journal from no information is published with the paper to complete information published (reviewer reports, reviewer and editor identities, decision letters, summaries of the process, etc.)

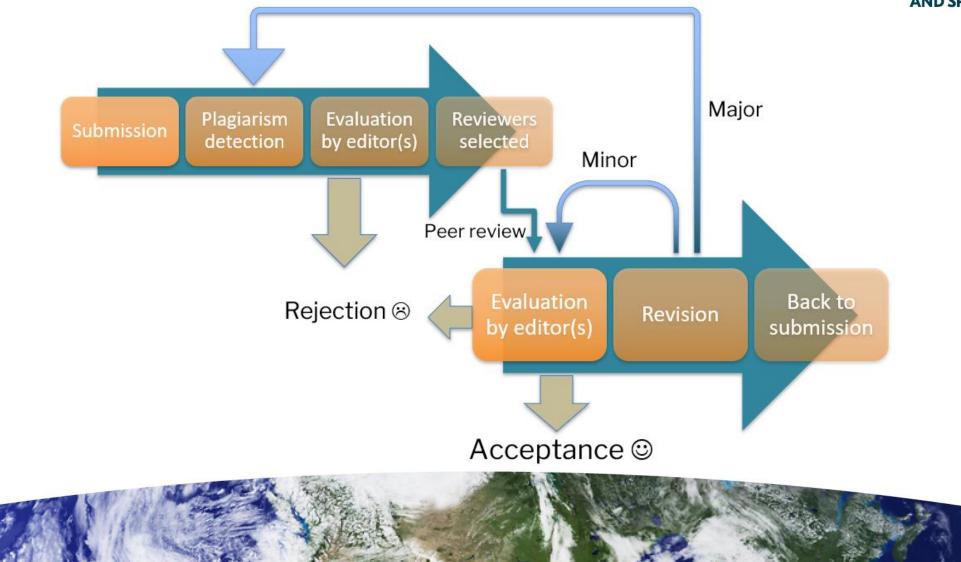
Best to check the journal website (under editorial or reviewer policies)

More info:

<u>https://www.niso.org/standards-</u> <u>committees/peer-review-terminology</u>

General peer review workflow

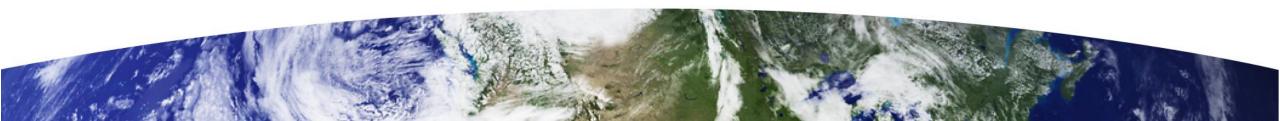




Some general guidelines



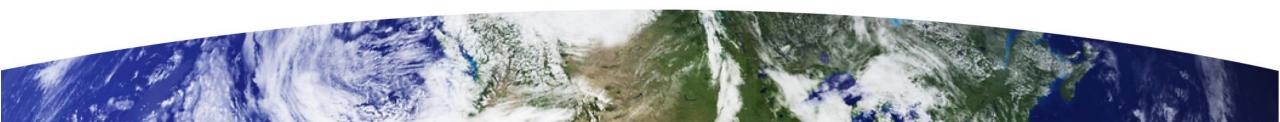
- Treat others (authors, reviewers, editors) as you would like to be treated
- Manuscripts, correspondence, and reviews are confidential. These are provided to you in good faith. Do not post reviews or make them public without permission
- Minimize the influence of unconscious biases by:
 - Focusing on the research in the article, not the author's attributes such as their name, language, institutional affiliation, nationality, and gender
 - Being aware of potential unconscious biases that you may have
 - Carefully considering the reasons for your recommendation



Reviewers...



- Are asked to provide an overall evaluation and detailed comments in a timely manner
- Can provide confidential comments to the editor
- Must keep the manuscript confidential and not share or discuss manuscript with others (unless under specific journal programs like Co-Reviewer program – more on this later)
- Need to be professional and comment on the science and its communication (personal criticism of the authors is not acceptable; dissent without explanation is not OK)



Ethical considerations



- A reviewer should be sensitive even to the appearance of **a conflict of interest** when the manuscript is closely related to the reviewer's work in progress or in a published work.
- A reviewer should not evaluate a manuscript authored by a person with whom the reviewer has a personal or professional connection if the relationship would bias judgment of the manuscript.
- When in doubt, the reviewer should return the manuscript promptly without review, disclosing to the editor of the conflict of interest or bias.
- AGU Publications Ethical Obligations for Reviewers: <u>https://www.agu.org/publish-with-agu/publish/agu-publications-scientific-ethics-and-integrity</u>



Editorial decisions



- Editors (associate editors or editors) synthesize reviews, make recommendations (reject, major revision, minor revision, publish); Editors make final decision
- Manuscripts are almost never accepted at first submission
- Revisions may be sent for another round of review
- You can contact the editor or AGU staff if you have questions





How to Write Exceptional and Respectful Reviews



What to evaluate?



Here are example questions from the AGU journals, reviewer evaluation sheet:

General Evaluation (drop down menu of answers):

- Is the paper significant and convincing?
- Do the methods, data, and analysis support the conclusions?
- Is the referencing appropriate?
- Is the presentation high quality?
- Are the information on how the data can be accessed, per AGU's Data/Software policy?
- Are the key points accurate and supported by the results shown in the manuscript?
- What is your overall recommendation (publish as is, revision, reject, etc.)?

Detailed Review (free text):

• This formal review is the most important part of the assessment

A thorough and constructive review will...



- summarize the paper's main findings, including objectives and links between data and interpretations
- summarize strengths and weaknesses, identifying areas where improvement is needed.
- include a summary paragraph followed by detailed comments (with reference to line numbers or specific figures)



Questions to answer in your review



- Are interpretations supported by the evidence presented? Are assumptions valid, are methods sound, is evidence adequate, and do the conclusions logically follow?
- Is the study presented in appropriate literature context, building on previous theory and published work? Is the manuscript topically appropriate for the journal?
- Are all parts of the text, references, graphics, tables necessary and clear?
- Are potential impacts clear is the paper's novelty and significance explained?



Constructive and respectful language (1)



AGU's <u>Reviewer Tone Table</u> has suggestions on phrasing to avoid and ways to frame constructive comments:

Not Constructive	More Constructive	Category	Explanation
"This paper is unreadable. You didn't proofread at all."	"This paper would benefit from a close reading, there are many errors that take away from the clarity of the argument."	Vague statement	This statement is not constructive. A better statement would elaborate on what needs to change without making judgements about the authors' effort.
"You need to"	"The authors should"	Command	Reviews are best written in third person (e.g., "they" statements instead of "you"), as the tone in this example can be construed as accusatory.
"The writing is too emotional."	"The authors are encouraged to use more concise and focused language to underscore the importance of their conclusions."	Gendered	This statement is derogatory and focuses on gender stereotypes instead of the science. It also does not offer any constructive guidance on how to adjust the language the reviewer finds problematic.
"The paper needs to be edited by a native English speaker."	This paper contains numerous grammatical and spelling errors throughout. The authors should consider having the paper reviewed by an editing service. [It is useful to highlight a few examples to illustrate your point, but you should not copyedit the entire paper.]	Culturally insensitive	The stage at which a language is learned does not indicate technical proficiency. Providing a few examples of the types of errors found in the paper will allow the authors to understand and address the errors. Please note that you are not expected to point out every error; providing a few (3-5) examples should be sufficient.

Constructive and respectful language (2)



Not Constructive	More Constructive	Category	Explanation
"The authors have no understanding of the literature (or X topic)."	"I recommend reading the following papers, which could better inform the authors' findings: [list citations]."	Makes assumptions	The statement calls the authors' qualifications into question instead of elaborating on where the science or writing is lacking.
"This paper contributes nothing to the field."	"Although this paper's findings are relevant to the field, these findings have already been explored in previous work. The authors are encouraged to review [list citations] to determine a novel approach to their topic."	Inflammatory	This statement makes assumptions about the paper instead of offering guidance to the authors on how they can broaden their research so it may contribute something to the field.
"You're wrong [or any other negative adjective like stupid, useless, etc.]" "This was a waste of my time" "You're making ridiculous claims."	These types of comments should be withheld, as they are not constructive.	Inflammatory	These comments do not provide feedback authors can use to revise their work. Review comments should give the authors actionable feedback. Review comments should avoid inflammatory and personal attacks.
Bringing personal issues into a review: e.g., "These authors have a history of doing X, this study is useless just like their previous study on Y."	Personal attacks should always be withheld. Reviews must be objective and unbiased. If a reviewer cannot ensure this, then they should recuse themselves from the review.	Personal attack	Reviews should be unbiased, respectful, and constructive. Personal attacks that call an author's character into question should never be included in a peer review.

More guidance



- There are free self-paced online training you can take, we will share in the next section
- What would you like to ask me? Remember to put questions in the Q&A box



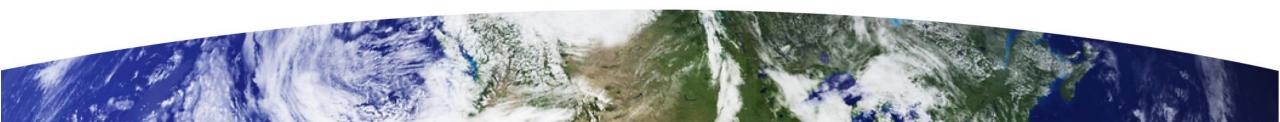
How to Get Involved



Tips on getting started as a reviewer



- Have a web presence: create a Google Scholar page (if it's accessible from your country).
- Register for an ORCID iD and link it to your profile on other platforms .
- Create a profile in the journal submission/peer review system in the journals you want to review for, add your expertise/keywords. Make sure your institution and email address is up-to-date.
- Create a profile on <u>Web of Science Reviewer Recognition Services</u> (formerly Publons).
- Get your work known by submitting to major journals and presenting at major meetings.
- Be a responsible and respectful author.
- Contact editors in your discipline, especially at meetings.
- When asked to review, be a responsible and timely reviewer.
- Participate in co-review with a mentor



AGU Journals Co-Reviewer Program



- Co-reviewing is available for all AGU Journals (700 co-reviewers in 2022!)
- Intended as a learning experience for 1-2 students/postdocs/early career researchers
- Co-reviewers are thanked in end of year editorial and added to the system as reviewers
- Let your senior colleagues know, that you're interested in serving as a co-reviewer if they get invited to review

Review Collaboration: If you have received assistance with this review from a colleague (e.g. graduate student, postdoc, or other early career researcher), please provide the colleague's information below.

Please enter the last name of each person you want to include, then press the 'Find Person' button to see if the person is already listed in our database. If not listed, please fill in the First Name, E-mail, and Institution.

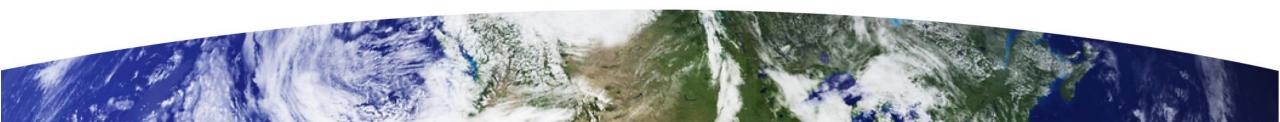
First N	ame	Last Name	Email	Institution	
#1					Find Person
#2					Find Person

Thank you for reviewing for AGU!

Resources



- Free Peer Review Training
 - Wiley Step by Step Guide: <u>How to Peer Review</u>
 - Elsevier Researcher Academy: <u>Certified Peer Reviewer Course</u>
 - Taylor & Francis Excellence in Peer Review: <u>Online training modules</u>
 - Institute of Physics (IOP) Publishing: <u>Peer Review Excellence online course</u>
- Other resources
 - Eos <u>Quick Guide</u> to Writing a Solid Peer Review
 - More on Wiley website <u>https://authorservices.wiley.com/Reviewers/journal-reviewers/tools-and-resources/index.html</u>









Thank You!

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