Enhancing Peer Review: A Perspective from AGU

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Council of Science Editors
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AGU Publishing

• 19 Journals– largest major publisher in the Earth and space sciences
• 3 gold open access journals: JAMES, Earth’s Future, Earth and Space Science
• Rapid publication journal: Geophysical Research Letters
• Over 13,000 papers submitted and 6,000 papers published in 2015
• Submissions up about 12% so far in 2016
Peer review at AGU

- Optional single-blind peer review
- Over 13,000 submitted manuscripts per year
- Over 28,000 reviews per year
- Process managed using GEMS (Geophysical Electronic Manuscript System) powered by eJournal Press
- Over 100 Editors and 450 Associate Editors supported by 22 in-house staff
Peer review at AGU

• Fast peer review without sacrificing quality
  – Average time to first decision less than 60 days for most journals
  – Average time to first decision less than 30 days for rapid publication journal

• Make process easy for authors, Editors, and reviewers
  – Click through in GEMS to accept/decline invitation to review
  – Simple review form for each manuscript type to guide authors through review
Peer review at AGU

- Editors choose potential reviewers based on their own knowledge of the field, expertise, author suggestions, and references.
- Staff contacts reviewers via email with a request to review.
- Potential reviewers click link in email to accept or decline the review and provide an alternative date if they cannot make the deadline requested.
- Staff monitors reviewer status and sends reminders as needed; if reviewer does not respond within 48 hours, an alternate reviewer is contacted.
- Staff notifies Editor when at least two reviews are received so that decision can be made quickly.
- Reviewers are notified of final decision by email.
Engaging in peer review helps build careers

• Awareness of Editors and other scientists and leaders
• Can lead to collaborations
• Advance look at relevant science
• Recognition in community
• Improved writing and presentation skills
• Leads to leadership positions (AEs, Editors)
Expanding the reviewer pool

• To address reviewer overload
  – Average AGU reviewer reviews 2 to 3 papers per year
  – In 2015, over 550 reviewers reviewed more than 5 papers and 75 reviewed 10 or more papers

• To address the need for international reviewers
  – Most reviewers in North America and Europe
  – More papers from China, Japan, and South America

• To address age and gender bias
  – Reviewer pool predominantly male and over 40
International Distribution of reviewers

2015 Count of Refs by Country

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Expanding the reviewer pool

• Use expertise and key words to help Editors find appropriate reviewers in GEMS database
  – Automated search identifies authors of papers with similar key words
  – Search identifies reviewers by expertise
• Encourage reviewers to update their profile upon login
• Encourage authors to complete expertise profile
• Invite AGU Fall Meeting presenters to complete profile
Educating reviewers

- Resources for reviewers on AGU website
  - Ethical guidelines for reviewing
  - Review criteria
- Eos article on writing a solid peer review
- Workshops on reviewing at AGU Fall Meeting and other conferences
- Workshops at universities in US, China, and Japan
- Editor one-on-ones with potential reviewers
Evaluating reviewers

• Editors rate reviewer timeliness and quality in GEMS
  – Rated on a scale of 1 to 5 stars
  – Viewable by other Editors across AGU portfolio

• Editors can also see a reviewer’s history of accepting or declining requests to review

• Staff can add notes regarding any issues experienced with a reviewer
Recognizing reviewers

• Very important to recognize and reward reviewers for their service to the community
• AGU recognizes reviewers by
  – Sending review information to ORCID for inclusion in a reviewer’s profile
  – Sending review acknowledgement letters upon request (e.g. for immigration or employment purposes)
  – Thanking reviewers publicly in the journal each year
  – Hosting reviewer appreciation receptions at AGU Fall Meeting and other conferences
  – Providing complimentary personal subscriptions to an AGU journal of the reviewer’s choice to top reviewers
Care and feeding of reviewers

• Pay attention to your reviewers and appreciate their value-- the peer review process depends on reviewer participation and review quality
• Proactively seek out new reviewers to avoid overloading your best reviewers
• Encourage quality reviews by educating your reviewers on the journal’s criteria for acceptance and making the review process easy to complete
• Provide feedback to reviewers to allow them to grow in reviewing skill
Questions?

• Feel free to contact me by email at mwarner@agu.org