PLANETARY RESEARCH — A DIAMOND OPEN ACCESS JOURNAL FOR PLANETARY SCIENCE.

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Summary: *Planetary Research* is a journal that is being developed by the planetary science community as an alternative to traditional publishers that profit from publicly funded research. The journal will use the diamond open access publishing model, which means that there will be no fees for authors and no fees for readers. By eliminating financial barriers, the journal will promote inclusivity and accessibility. The journal will operate with transparent governance and will provide opportunities for researchers at all career levels to participate in its development and operations. Acknowledging the critical need to make the results of scientific research accessible to society at large, the journal will promote the work it publishes to the scientific community and general public alike. The journal is expected to launch in January 2026.

What is diamond open access? Most journals that offer open access publishing options can be classified as *Gold*, *Green*, or *Hybrid*. In Gold open-access journals, the publisher makes all articles free to readers upon publication. Green open access journals allow the author to self-archive a near-final version of an author-formatted manuscript in an open repository. Hybrid journals publish a mixture of open- and closed-access articles. In the planetary sciences, all three options require the author to pay an article processing fee that can range from \$2000 to more than \$10,000, and/or require a personal or institutional subscription to access the full journal content.

Diamond open access is a different publishing model where there are no fees for authors and no fees for readers or institutions to access the journal's content. The authors retain the copyright of their work, which is generally published under a Creative Commons license that requires attribution. Since 2018, several diamond open access journals have appeared in the Earth sciences, including Volcanica, Seismica, Tektonika, Geomorphica, and Sedimentologika. In 2025, two additional journals are expected to launch: Geodynamica and Advances in Geochemistry and Cosmochemistry. The Mars Journal (now inactive) was also published under a diamond open access model, though this term was not in use at that time. At present, there is no diamond open access journal that serves the broad field of planetary science.

How can the journal be free for authors and readers? Contrary to what commercial publishers might want us to think, it is actually quite inexpensive to run a scientific journal. Free open-source software exists to manage the peer review process and journal website (such as Open Journal Systems). Reviewers, associate editors, and editors are accustomed to volunteering their time as a community service. The authors do most of the production work by formatting their manuscripts using journal-provided templates. The scientific quality of the published articles depends on the quality of the editorial board and the editorial policies. The only real cost that remains is web hosting and the registering of digital object identifiers (DOIs) and metadata. In fact, most of the geoscience diamond open access journals report annual costs that are about \$1000.

The conversion of author-formatted manuscripts to final publication formats (PDF, XML, and HTML), however, can be time-consuming, especially when working with docx/odt manuscripts. We believe that research scientists should not be asked to volunteer their valuable time for such a task. Therefore, we plan to partner with OPUS, the Open Publishing Services of the Université Paris Cité, to provide production services and to also host the journal website. Production costs for 100 articles (our targeted number per year for the journal's first two years) are on the order of \$10,000, with the exact value depending on the ratio of LaTeX and docx/odt manuscripts.

Copyediting will be performed on a best-effort basis by the reviewers, associate editors, and editors. When language editing of a manuscript is required, it will be the author's responsibility to contact a third-party language editing service. We are currently assessing funding possibilities for the modest operational costs of the journal.

What types of manuscripts will the journal accept? The journal scope will cover all scientific topics in the broad field of planetary science, including extrasolar systems and exoplanets. The journal will welcome manuscripts based on analyses of data derived from spacecraft and Earth-based observatories, laboratory measurements of extraterrestrial materials, theoretical and numerical modeling of planetary phenomena, and terrestrial analogs.

Most original research will be presented in either long-form articles or short letters. Other article types will be provided for the specific cases of reviews, the description of planetary missions and instrumentation, numerical codes, and datasets. Commentaries that express a point of view on a topic, or that discuss issues that may be of interest to the readers of the journal, will also be welcome.

What will be the peer review process? Each manuscript will be assigned to a single editor, who will oversee its peer review. The editor is solely responsible for the decision to publish the manuscript and their name will be noted on the published article. The authors will have the choice to use either a single- or double-blind review process, and typically, each manuscript will be assessed by two external reviewers. In a single-blind review, the reviewers' identities are not communicated to the author, whereas in a double-blind review, the identities of both the authors and reviewers are withheld from each other. Appropriate reviewers will be selected based on author recommendations and through the use of a reviewer expertise database that will be similar to the Seismica reviewer database.

Associate editors from the journal's editorial board may be called upon to assist in various aspects of the peer review process, from contacting the reviewers to providing an independent assessment of the reviews and manuscript. Associate editor assessments are non-binding. To provide transparency to the peer review process, all reviews, associate editor recommendations, and editor assessments will be made available as a review report that will be linked to the published article on the journal website. Review reports for rejected manuscripts will not be made available to the public.

How will the journal promote the articles it publishes? Most academic journals do very little to promote the scientific work they publish. Exceptions include a few journals that publish editor highlights, article summaries, and perspective pieces. Nevertheless, the percentage of planetary science articles promoted by those journals is low. We intend to make the promotion of scientific articles published in our journal the rule, not the exception.

The media team of the journal, composed of volunteers from the community, will create a separate website that will be used as a blog for publishing articles that are accessible to both the broad readership of the journal and the public alike. The blog will include short (four paragraphs and a figure) author-provided summaries of articles that were published in the journal, an image of the week, and other community-provided content and announcements that would be of interest to the journal's readership. The journal will run a peertube

video server for hosting multimedia that accompanies articles published in the journal and blog. All published articles will be promoted through the journal's social media accounts.

How will the journal be governed? The journal will be governed by two main bodies: the steering committee and the editorial board. The steering committee will be responsible for overseeing all noneditorial functions of the journal, enforcing the journal's non-editorial policies, creating subcommittees when needed, and facilitating the flow of information among the various boards and subcommittees. The steering committee will be composed of five members elected by the community, the editor-in-chief, the head of the media team, and the heads of any subcommittees. To promote transparency, all members of the journal will be invited to attend the steering committee meetings in a nonvoting capacity. All journal positions will be for a term of five years.

The editorial board will consist of the editor-in-chief, editors, and associate editors. The editor-in-chief will be nominated by an editor search committee and then appointed by the steering committee. The editor-in-chief will be responsible for enforcing all journal editorial policies and for nominating additional editors that will then be appointed by the steering committee. The filling of open editor positions will be coordinated with the editor search committee, who will announce the positions to the community and encourage candidates to apply. Associate editors will be appointed by the editor-in-chief after consultation with the editorial board.

When will the journal launch? An open call for editors, associate editors, and members of the steering committee and media team will be announced at the 2025 Lunar and Planetary Science Conference. We expect to constitute both the steering committee and editorial board by the fall of 2025. After training the editorial board on the use of the Open Journal Systems software, we expect to start accepting submissions in January 2026.

How can I get involved? The journal will be run entirely by volunteers from the planetary science community and everyone is invited to participate. Most of our pre-launch discussions are occurring on an online forum, and an invitation link can be obtained on our pre-launch website. When the journal launches, the forum will allow community members to have immediate access to members of the steering committee, editorial board, and media team, as well as to engage in discussions about how the journal should evolve in the future.