Partnering for preprints in climate research

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Since January 2023, authors submitting to PLOS Climate, PLOS Sustainability and Transformation, and PLOS Water have been able to opt in at submission to have their manuscript automatically sent to EarthArXiv to be considered for posting as a preprint [1]. EarthArXiv (https://eartharxiv.org) is a community-led preprint server established in 2017 that covers the earth and environmental sciences. Our partnership saves authors the job of preparing a separate submission to EarthArXiv, allowing them to access the benefits of preprint posting with no more additional effort than simply checking a box.

We have been really encouraged by the level of uptake of this service among PLOS Climate authors. So far this year, over 25% of submitting Research Article authors have used this option, and we hope to see this proportion grow over time as we continue to discuss and explore the benefits of preprints with our community.

Whilst some of our authors will be quite familiar with preprints and their benefits, others work in areas where preprint posting is not yet as widely known or practised. So it’s not surprising that the share of Research Articles published in PLOS Climate that are associated with a preprint, 18%, is slightly lower than the average for all PLOS journals. We recognise that not everyone will be ready to try preprint posting when they first submit to PLOS Climate. That’s why our facilitated preprint posting service is optional, and why we continue to talk to researchers in fields right across PLOS Climate’s scope about how to unlock the potential of preprints. However, we—and the wider PLOS community—firmly believe that preprint posting can offer advantages to authors in any field of research, geographical location, or career stage.

Climate research is particularly (and necessarily) fast-moving. Findings are constantly being updated, and form the basis for interventions, decisions and policy (including international negotiations). In this context, preprints offer a means of rapidly communicating updated research findings to help accelerate collective scientific and societal progress. Preprints are Open Access and therefore fully visible to a global audience—an advantage they share with peer-reviewed articles published in PLOS journals. Preprints are also immediately citable, being assigned a DOI, and are increasingly cited not just in other primary scientific publications, but also in international assessment reports such as those produced in the recently completed IPCC AR6 cycle. These reports tend to have fairly tight deadlines, and the growing tendency for report authors to consider preprints can provide an important opportunity for late-breaking research to be included in reports. Preprints allow researchers to point to a concrete output, and have been used to highlight very recent work at conferences, workshops, COPs, and other fora. This can help with recognition, particularly for early career researchers building their profiles and making connections. Preprinted work and associated datasets also tend to attract more attention, citations, and reuse [2].

Importantly, sharing a preprint doesn’t prevent future peer-reviewed publication. Whether your preprint is shared on EarthArXiv or elsewhere, most journals—including PLOS Climate—
are happy to consider submissions of previously preprinted work for peer review. If you opt in to our facilitated preprint posting service, you can receive early community feedback on your preprinted work on EarthArXiv, even while peer review at *PLOS Climate* is underway. Your preprint can also be updated with revisions and amendments to create a freely accessible documented record of the paper’s evolution. In the interests of transparency, preprints on EarthArXiv are clearly labelled as such, so that readers are aware that the preprint itself has not been subject to peer review.

Preprints are only one part of the wider ecosystem of Open Research practices, and we encourage our authors to consider preprint posting alongside sharing research data, materials and code. Although EarthArXiv has, like *PLOS Climate*, been designed to be broad in scope, some of our authors may prefer to preprint on another server—and that is absolutely fine! We encourage preprint posting on whichever platform makes sense to you, but we hope that our partnership with EarthArXiv will offer an especially straightforward and attractive option for authors across our multidisciplinary community.

**Author Contributions**

Conceptualization: Emma Archer, Jamie Males.

Writing – original draft: Emma Archer, Jamie Males.

Writing – review & editing: Emma Archer, Jamie Males.

**References**
