## 15 years and a pandemic

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This month marks the 15-year anniversary of *Nature Geoscience*, a milestone reached after weathering three years of pandemic-related global disruption. We reflect on the burden on peer review over this period and the resilience of the geoscience community.

t seems like only yesterday we were celebrating the journal reaching a decade in age1, but time flies during a pandemic and here we are at 15. The past three years have been anything but normal for research publishing. In 2020, with many geoscientists around the world working from home and shut out from labs and field sites, the journal received more submissions than ever before and faced disruptions at every stage of the peer review process as authors, reviewers, and journal staff grappled with pandemic-related challenges in their personal and professional lives. As we begin 2023, we reflect on the many contributions to the journal through the COVID-19 pandemic that have helped us to reach 15 years of publishing exceptional geoscience research.

From 2020 through 2022, we published 375 primary research papers, an acceptance rate of about 7% of all submissions received during that three-year period. More than 800 papers were sent to review, many of which underwent more than one round of review. With each paper having at least two, and most commonly three, reviewers involved, we have relied on the services of an enormous number of reviewers to keep peer review running through the pandemic. In the same three-year period, over 2,900 individuals have completed at least one review assignment. Despite difficulties in securing reviewers, we have continued to try not to rely on individual reviewers too often, with the most reports completed over the past three years by any individual reviewer being five (including for revisions).

At its peak, with so many geoscientists facing hardship, conducting peer review was often fraught with difficulties. In 2020, we saw a 30% increase in the number of reviewers who had to be withdrawn compared to the



previous year. And during months when lock-downs were prevalent across the globe – when both the quantity and quality of submissions we received were unprecedentedly high – we struggled to recruit women, who may have been disproportionately affected by additional caring responsibilities, to review for us.

Despite these challenges, geoscientists have continued to participate in peer review and our editors have continued to try to increase (or at least maintain) reviewer diversity. The makeup of our reviewer pool has changed very little over the past three years. Of the more than 90% of our reviewers who have opted to provide this information, 70% are men and 30% are women, 68% are some sort of professor and 14% are postdoctoral researchers, with the vast majority based in North America (45%) and Europe and the Middle East (39%).

The published papers in *Nature Geoscience* are the legacy of efforts by so many people to keep the peer review process running despite challenging circumstances. Papers published since the start of 2020 have garnered over 7,000 citations in total thus far (with the caveat that citations are just one of many indicators of a study's scientific value). We published the initial science results from NASA's

Mars InSight mission², suites of papers on soil organic carbon³, land use change⁴ and megathrusts in subduction zones⁵, insights into the impact of COVID-19 on  $CO_2$  emissions⁶, and many other highlight-worthy papers. In addition to research papers, opinion pieces about racism७, decolonization⁶ and inclusion⁶ in the geosciences have struck a chord with geoscientists, perhaps ignited by the disproportionate impact of COVID-19 on marginalised people. These pieces have fuelled difficult, yet important, conversations amongst colleagues and on social media.

The past few years have been challenging for humanity, not to mention geoscience. Each of our journeys — personally, professionally, and the oft-intertwined interface between these — has been unique. For some, recent months have been increasingly normal; for others, such as vulnerable groups and people in China, COVID-19-related fears remain a part of daily life.

To the >2,900 geoscientists who reviewed for us over the pandemic and the many others that could not but helped direct us to a colleague who could, the >800 corresponding authors and their co-authors who worked with us through a sometimes disrupted peer review process, the many thousands more authors whose work we had the pleasure of reading and referring to another journal in the *Nature Portfolio*, to our production team, our editorial assistants, and the eleven editors who worked for *Nature Geoscience* over this period across three continents, it has been a team effort. To all of you, we say thank you.

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