Supplementary Information for MSXXXX

Title: Effects of the COVID-19 Pandemic on Authors and Reviewers of *American Geophysical Union* Journals

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| --- | --- | --- | --- | --- | --- |
| **Person Role** | **Known/ Assumed Gender** | **Known Age** | **Known/ Assumed Gender and Known Age** | **Known Ethnicity** | **Known Ethnicity- U.S. only** |
| Submitting/ Corresponding Authors | 81% | 50% | 49% | 13% | 36% |
| First Authors | 74% | 43% | 43% | 11% | 32% |
| All Authors | 70% | 43% | 43% | 7% | 36% |

Table S1: Percent known demographics of distinct authors from all countries of submissions from January 2018- March 2021.

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| --- | --- | --- | --- | --- | --- |
| **Person Role** | **Known/ Assumed Gender** | **Known Age** | **Known/ Assumed Gender and Known Age** | **Known Ethnicity** | **Known Ethnicity- U.S. only** |
| Invited Reviewer | 87% | 42% | 41% | 14% | 33% |
| Agreed Reviewer | 89% | 50% | 49% | 18% | 39% |

Table S2: Percent known demographics of invited and agreed reviewers for manuscripts submitted January 2018- February 2021 and sent to review.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Distinct Author Population** | **Gender from AGU Member Database** | **Gender from Gender API** | **No Identification** | **Total** | **% of Total** |
| Women | 3739 | 1922 |  | 5661 | 22% |
| Men | 9936 | 5589 |  | 15525 | 62% |
| Non-Binary | 2 |  |  | 2 | 0.01% |
| Prefer Not Answer/ Unknown | 6 |  | 4005 | 4005 | 16% |

Table S3: Distinct corresponding author population by gender and source of gender information.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Distinct Reviewer Population** | **Gender from AGU Member Database** | **Gender from Gender API** | **No Gender Identified** | **Total** | **% of Total** |
| Women | 7528 | 4989 |  | 12517 | 21% |
| Men | 22226 | 14986 |  | 37212 | 64% |
| Non-Binary | 2 |  |  | 2 | 0.003% |
| Prefer not to Answer/Unknown | 83 |  | 8681 | 8764 | 15% |

Table S4: Distinct invited reviewer population by gender and source of gender information.

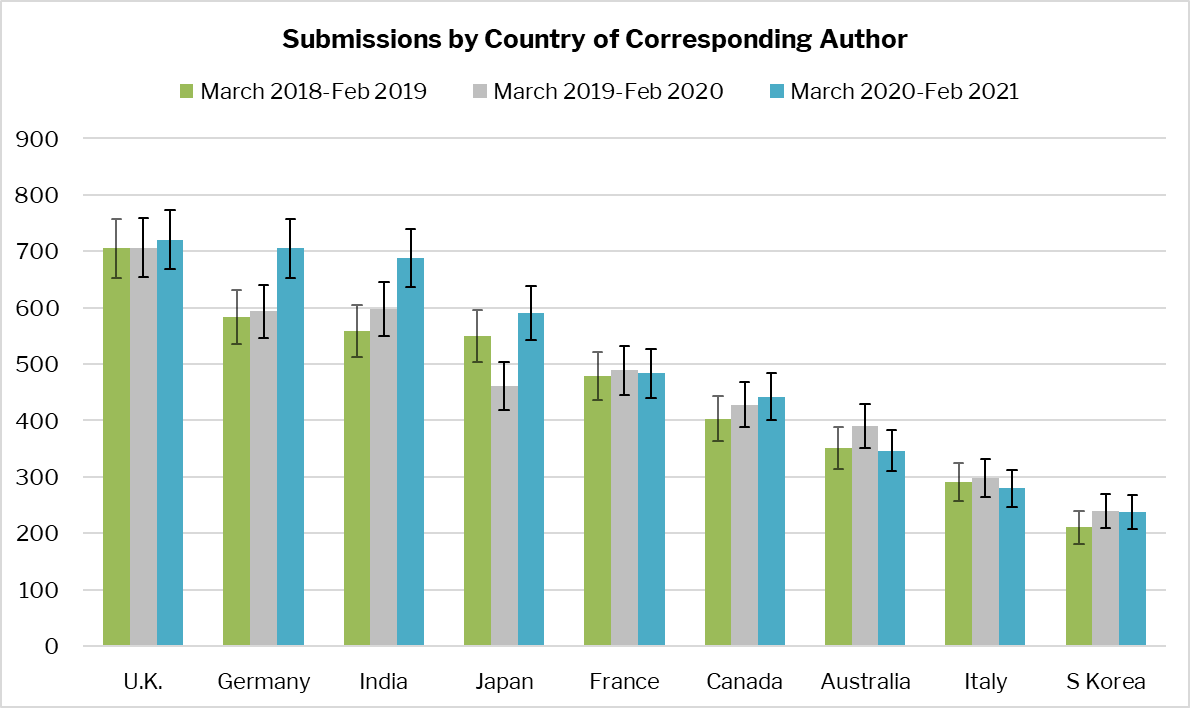


Figure S1: Counts of submissions from top-submitting countries each in two years before the pandemic and year of the pandemic. United States and China not shown.

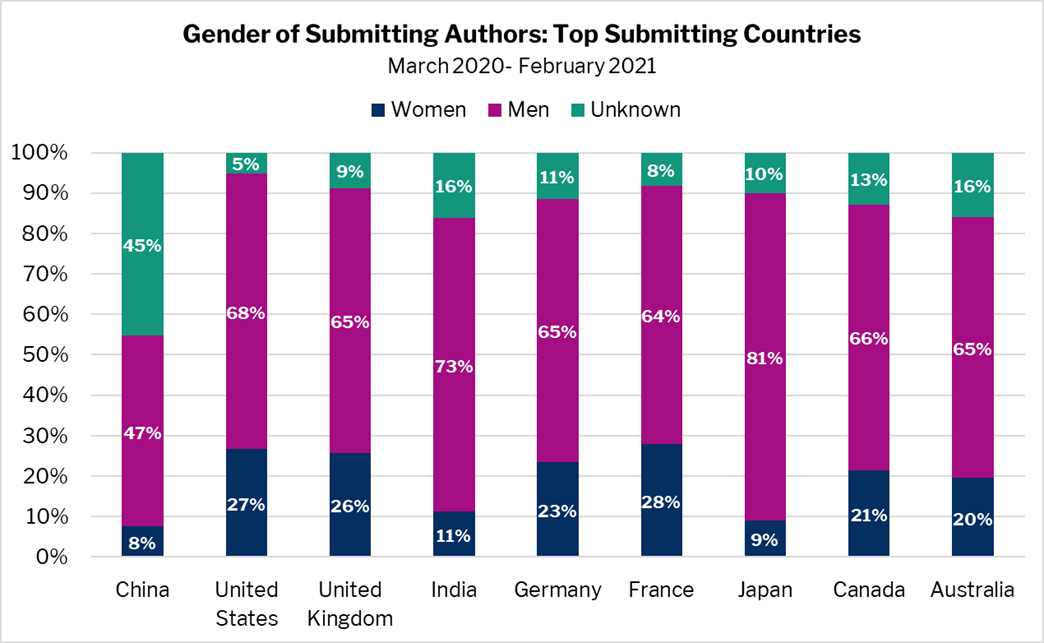
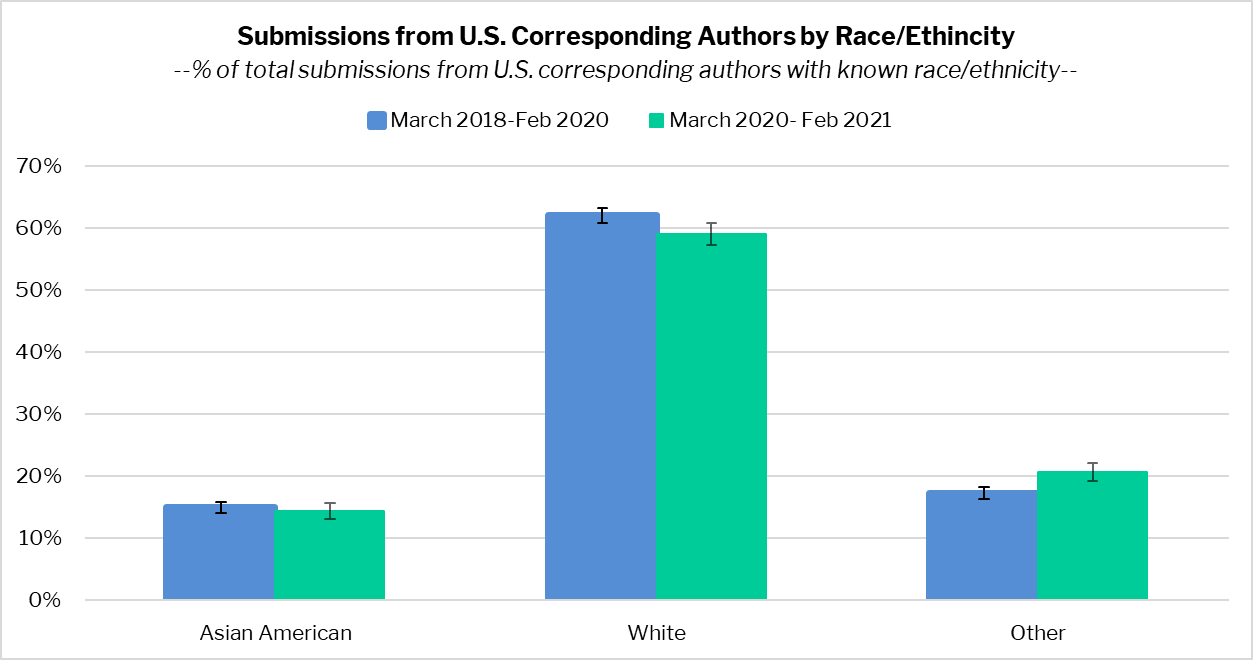


Figure S2: Proportion of submissions during the pandemic by gender of corresponding author from countries with the most submissions.



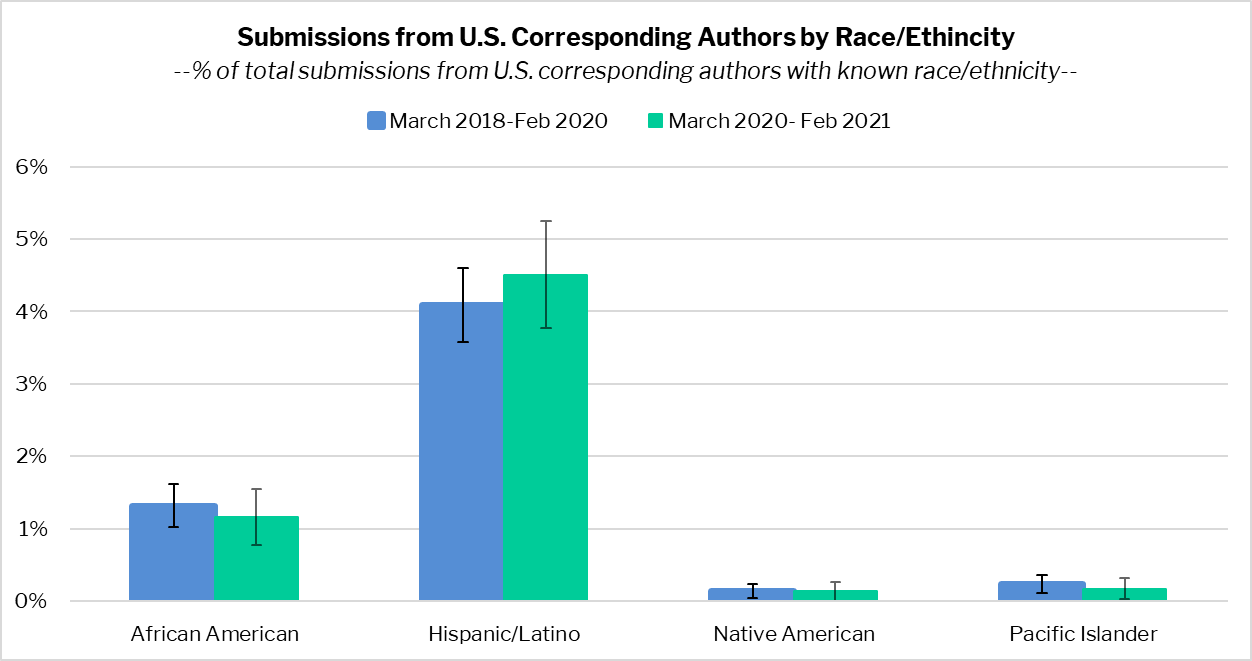


Figure S3: Proportion of U.S. corresponding author by race/ethnicity before and during the pandemic, calculated as a percentage of total U.S. corresponding authors with known race/ethnicity. Graphs are divided into two to better show details of the smallest groups.

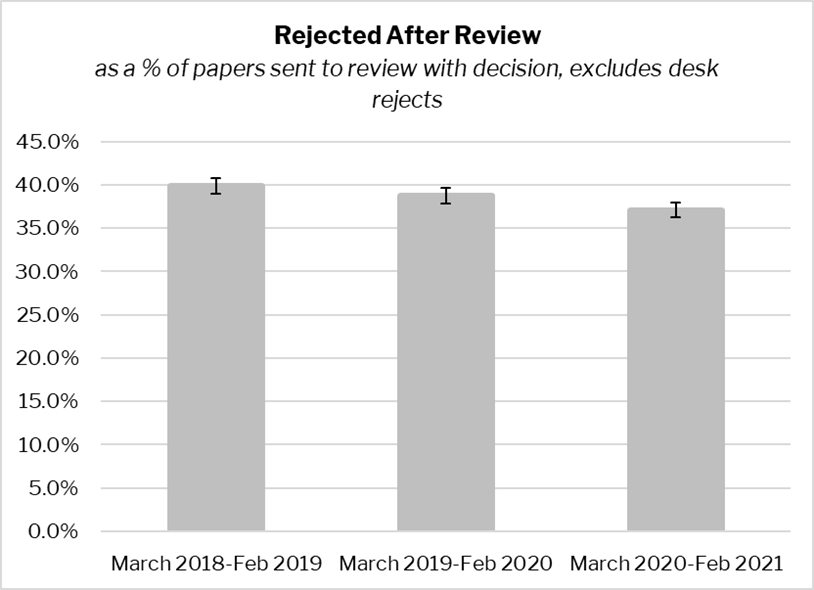


Figure S4: Proportion of manuscripts rejected after review two periods before and during pandemic, excluding desk rejects.