

All four reviewers state that this is an important article, but one that needs to be revised. My view is that your article is extremely important, and that it needs some considerable revision, even more so as the topic is so crucial, not just for the cloud phys community (CPC), but for all of geoscience. Indeed, I would argue that no science, particularly geoscience, can achieve its rightful fulfilment and do its work satisfactorily if DEI is not also a foundational pillar of the science. Fully-implemented DEI needs to be achieved if the scientific aspirations are to be achieved.

Before I get to the more specific reviewer comments, I would like to interject some suggestions. None of the following needs to take more than a short paragraph each, unless you think that it would need more space. I suggest that you situate your DEI work within:

- the broader areas of DEI in the geosciences more broadly (eg, has DEI research been conducted in other-than-CPC fields?);
- the broad area of DEI research in general;
- the general failure of society to uphold DEI in any meaningful manner; and
- the literature and knowledge of geoethics, injustice, human rights and sociology. You probably know that the EGU now has a Working Group on Geoethics – see <https://www.geoethics.org>.

Possibly the greatest damage of no or low DEI is to be found in gender discrimination and sexual harassment; about which much has been published, but for which little improvement seems to have been achieved. In many ways, discrimination and lack of DEI ‘begin life’ in the fleeting verbal and non-verbal exchange in everyday settings, which is rarely recorded, except for research purposes. Underlying this are attitudes, identities and attributions derived from intergroup behaviour – see the groundbreaking work by Tajfel, Turner, Billig, Hewstone, Giles and colleagues. More recent references include those placed at the end of this synthesis. Towards the end, it would be useful to have a section discussion directions for future research.

In your rebuttals, you have already agreed with many of the reviewers’ suggestions. I appreciate very much your effort to take reviewers’ comments on board. As a result, what you propose as changes, will likely make a great improvement to the article as a whole. All four reviewers produced excellent reports that provide you with some great help to improve your MS in a significant manner. It would be good, if you felt like it, to thank the reviewers for their tremendous help, even though they chose to be anonymous. (If you also wish to pass on your thanks in a more personal way, I am happy to do that for you. Just send me an email.)

Finally, congratulations on tackling such an important and complex area. If you work hard on revising the article, it could become a major reference in the area (good for you) and contribute strongly to making the situation better for many 1000s of (geo)scientists suffering from a lack of DEI and aspiring for a better world (good for others). After all, they know what it is like, they have been for far too long on the receiving end of injustice that they do not deserve. In that sense, your article is more important than a piece of research; it could and should be a catalyst for positive change.

Below, I will attempt to synthesize the reviewers’ comments in the expectation that this will also help you to revise your article. In the table below, the first two columns are self-explanatory. Col 3 indicates which reviewer, 1, 2, 3 and 4, as indicated here <https://egusphere.copernicus.org/preprints/2025/egusphere-2025-4499/#discussion>. I assume that the numbers will be the same as yours. The last column is a rough indication of how ‘sever’ the problem is and thus how important it is to revise. 1 is low, 3 is high.

My comments below are based mostly on the four reviews received, but also include a few more personal views. Some revisions are very important and others less so; I have tried to indicate what I consider the importance of each suggested revision. Also, some revisions do not appear to be possible at this stage, and they

should be noted in a section titled ‘limitations’ and/or discussed in a section on ‘implications for future research’.

Problem or issue	Possible remedy, but you decide if and how much to implement	Reviewers	Severity
Small sub-samples. $N=198$ seems rather small for reliable sub-group analysis (gender/ethnicity/region).	You cannot change the numbers, so maybe include a cautionary note in your text and/or discuss in limitations.	1 3 4	2
Overstated claims. Disagreement with claims of "global representativeness" (30–47% of the community).	Reword.	3, 4	2
Vague questioning. Terms like "feel included" or "sensitive to gender issues" are poorly defined and open to interpretation.	Reword		1
Response rates. Denominators are missing; unclear how many actually received the survey vs. responded.	Indicate if at all possible, or elaborate on why it is not possible.	3	2
Anonymity anomaly. You say that you know specific regional trends (e.g., Indian respondents), but also that your data is anonymous.	Not sure about this one. Maybe a quick note to explain, eg, you may have collected names, but they are kept secret?	3	1
Stat Assumptions. Chi-square tests used where cell counts are <5 ; lack of Fisher’s exact tests or power calculations. “A standard rule of thumb credited to Cochran advises against using the Chi-square test when more than 20% of cells have expected frequencies below 5, or when any cell has an expected frequency below 1”. https://psychology.town/statistics/key-assumptions-chi-square-test/	Best option: Redo the stats. Use Fisher’s exact test for small N ; report effect sizes and power calculations. It may well be that the indication turns out to be (almost) the same, in which case not too much to change in your text. If the exact test shows very different results, then you will have to change your text.	4	3
Metadata exclusion. Excluding 97 non-English papers silences the Global South (or a part of) the very population being studied. It may well be that non-EN authors suffer more from lack of DEI than their EN counterparts, simply because lack of EN is a disadvantage in science and publishing. If your topic was different (eg, cloud formation, not DEI), then this would matter less.	The most satisfactory option would be to include these and redo your stats, maybe comparing EN and non-EN authors, but this may entail a large and/or lengthy process, which would be difficult at this stage. The most realistic option would be to include an explanation. In my view, claiming that translation is not possible would be seen as a feeble excuse, esp given that translation tools are easily available on the web.	4	3
Attrition proxy. "Years since last paper" will be seen a weak proxy for leaving the field; it does not account for career pauses (more prevalent for women), long projects, different pressures/needs to publish, resources for ACPs or database lag.	This issue certainly weakens any statistical inference that you can draw, simply because the initial data are unrepresentative. If you have no way in which you can tighten up this indicator, then it would be a good idea to explain this and its impact on your results in a limitations section?	4	2

Problem or issue	Possible remedy, but you decide if and how much to implement	Reviewers	Severity
Inconsistent reporting. Missing effect sizes, ($n=xx$) values, and clarity on descriptive vs. inferential stats.	This seems important to specify if you possibly can.	3, 4	3
Data source bias. Scopus-only search inherently limits Global South visibility. Impact factor (IF) use is biased.	Limiting visibility by data source could skew your results and analysis. If you can bring in other sources, that would be good. Otherwise mention in limitations? IF is strongly contested (see, eg, https://occamstypewriter.org/scurry/2012/08/13/sick-of-impact-factors/). Is there any way in which you could bring in one or two additional indicators? If not, then a discussion about how the use of (solely) IF, is only partially representative but provides an idea of tendency.	4	2
"Tropical". Conflates geography with socio-economics; described as exoticizing and a "false dichotomy."	You suggest "scientist working in a tropical country". It might be less unwieldy to use an expression like "scientist working in the tropics". In any case, it would be important to explain clearly what this category includes. Does it include both westerners working in the tropics and tropical locals working there? My question then is: Would it not make sense to distinguish between these two groups, as they probably come from two different cultures or cultural backgrounds (and culture plays a major role in our live (see, eg, E T Hall, F Trompenaars, Y Y Kim, G Hofstede, T Toomey), and thus in our DEI activity.	1, 2, 3, 4	3
"Minority". Imprecise term; reviewers prefer "marginalised", "underrepresented".	You say that you will use the term "historically excluded". However, the presupposition in that term is 'not included any more', 'outside'. I would think that 'marginalised' would be more accurate. However, if you wish to use your term, then it would be important to specify that the exclusion is still ongoing today. Maybe a term like "historically and currently excluded", but then maybe simply "excluded", but that is stronger than "marginalised". Excluded implies that they have been banished to outside, whereas marginalised implies they they have been pushed to the side, but are still in to a certain extent. Maybe a short lit rev of these terms is warranted? Maybe use the two terms for two distinct groups?	1, 2, 3, 4	3
White-default binary. "White vs. non-White" grouping obscures intra-group diversity and centres whiteness, reinforcing white supremacy frameworks.	I have had misgivings about the term 'non-white' for quite a while now. What do Africans say? 'Non-black'? Here are some suggestions: dark-skinned and clear skinned, "People of Colour (POC)", 'Black, Indigenous and People of Colour (BIPOC)', "Racialized groups". It might be worth asking a DEI specialist. Maybe best to use groupings like East Asian, South Asian, Indigenous / Native American, Hispanic/Latino, Middle Eastern/North African, White.	4	2
Geographic error. Misclassifies Australia (Global North) as	I should think that some small tweaks would correct that.	2	1 or 2

Problem or issue	Possible remedy, but you decide if and how much to implement	Reviewers	Severity
"Tropical" and ignores subtropical Egypt/South Africa.			
Gender essentialism. Strictly binary (men/women) erases trans and non-binary individuals. Bias of genderize.io.	I am not sure what you can do about this, short of redoing all your data and stats. Probably best to provide an explanation in a limitations section.	1, 2, 3, 4	2
Systemic framing. Lack of clarity concerning your use of 'bias'.	Maybe you can reframe "bias" as intentional structural design, rather than just skewed individual cognition. But best to look at some of the extensive literature on bias, especially intergroup bias, eg, Fiske, S. T. (2015). Intergroup Biases : A Focus on Stereotype Content. <i>Current Opinion in Behavioral Sciences</i> , 3, 45–50. https://doi.org/10.1016/j.cobeha.2015.01.010 . Grigoryan, L., et al (2022). Multiple categorization and intergroup bias : Examining the generalizability of three theories of intergroup relations. <i>Journal of Personality and Social Psychology</i> , 122(1), 34–52. https://doi.org/10.1037/pspi0000342 . Tajfel, H., et al (1971). Social Categorization and Inter-Group Behavior . <i>European Journal of Social Psychology</i> , 1, 149–178. https://doi.org/10.1002/ejsp.2420010202 . In-group favoritism . (2026). In <i>Wikipedia</i> . https://en.wikipedia.org/w/index.php?title=In-group_favoritism&oldid=1354643693 . Plenty of others too.	3 & 4	2
Post-hoc intersectionality. Intersectionality is mentioned in passing rather than serving as the study's foundational framework.	At this stage, I doubt that you could change this to make intersectionality the main framework of your study. If you had strong reasons for avoiding intersectionality, then they should be mentioned. Maybe (for future researchers) you can speculate briefly on what difference it would have made if you had done your study fully with an intersectional approach.	4	2
Ability/disability. This fails to address the overrepresentation of able-bodied individuals or systemic barriers for disabled peers.	I am not sure how important this is. Maybe it does not change any of your results/stats?	3	1
Parachute science.	You should to explicitly link "parachute science" to colonialism and cite FAIR data practices. Is this possible in your ms; I imagine yes.	4	2
Historical context. This ignores the disciplinary origins of cloud physics and the geopolitical shifts over the 50-year metadata period.	I would be really good if you can include something on this. After all, all our social interactions and decisions take place in the context of historical developments.	3 & 4	2
Literature review	Both 3 & 4 suggest that you update with sources from the last five" years, and include disability and Berhe et al. (2024). See also the biobibliography that I included below.	3 & 4	2
Visual errors (Fig 1)	Fix the colour palette – do not use the same colour (purple) for two different data categories.		2

Some additional comments as I looked dthrough your ms.

Graphics. You should spruce up your graphics. Here are a few suggestions.

You will find a range of excellent graphics in this article: Leisner, M., de Paula, D., Vasconcelos, Y. et al. Coastal cliff research trends and future directions. *Discov Geosci* 4, 6 (2026). <https://doi.org/10.1007/s44288-025-00370-9>

Your fig 1. A). Brighten up the colours. It would be clearer, in my view, if you grouped by type of person, eg, three histograms of women, then men, then all. Each of the 4v or 5 -not clear which) graphs should have a title. Did you discuss the reasons for the prominence of the four 'big' countries? Put women before men in col sequence! Try and show to a colleague to see what they say.

Fig 2. A) Same as above. If you used the term 'feel included' in your questionnaire, then put in quote marks in the graph. B) C) & D) Same – group by women (yes & no in one column), then by men (in a second col). Easier to compare visually. Title should be **your**, not you. It is unclear to what graph each heading belongs. Best to have no more than two related graphs in a figure. For E) did you include – check on – how respondents' answers stand up to reality? Eg, Was their, whoever ('they' is), report of low citations supported in the data and stats? Ie, did they over or under estimate the effect on citations?

Fig 3. Again I would regroup by white women, non-white women, white men, non-white men. It might be that some categories bully more than others, eg I would suggest: biggest bullies → white men – non-white men – white women – non-white women ← least bullies. Cut you need to check the literature to see if that is correct. Then that raises that question of whether your sample reflects the wider population. In any case, you should change the category names to better ones than white/non-white (as mentioned by the reviewers).

Fog 4. Do you have figures for 'first author woman tropical', 'first author man tropical', etc? Would they be worth showing on a second graph? Do you have such figures for geoscience as a whole, and for science as a whole? It would be good to compare in a series of graphs these various lines.

Fig 8. I understand the general idea of what you are doing here. However, it is not crystal clear for me. Can you see if you can make these clearer. I would separate c) and put it in another Fig.

Fig 6 needs to be made much clearer. Maybe separate women and men, and juxtapose the two graphs. X axis is labelled "Years until last registered paper". I do not know what this means. Years from when? What is meant by "registered"? Rewrite the caption, maybe include an example, eg, take one or two data points and say what they really indicate.

Put your final recommendations in a whole new section. Maybe from time to time indicate the place or result in your study which gives rise to a particular recommendation. In other words, justify your recommendations, especially by your results. They sound excellent, but the reader will want to know what motivates you to make, and what underlies, the recommendation.

A few more – sorry.

L 31. You mention ethical. It would be excellent to bring in the geoethical dimension or implications of your already excellent work. See eg <https://www.geoethics.org/>.

L 33. "Diverse teams improve the quality of scientific research" – this could be strengthened by a couple of refs supporting the notion.

L 70. It would be good if you might speculate (or even report literature) o, why "geosciences are among the least diverse fields, in which women and underrepresented groups are exposed to systemic bias that prevents them from equal progress and recognition". What are the root causes?

L 165. in a language different **than** English → different from. Please check for other instances.

L 299 onwards – next whole paras. It would be good to summarise the salient figures in tables.

L 325. "Although there is a consensus (67% of total 326 respondents) that collaborating with colleagues and institutions from developing countries (no latitudinal definition was given for this question) is key for the development of the cloud physics field, a large fraction of the survey participants (60%) are not planning to do so."

Avoid ‘there us/are’ structures. The above may be reworded something like:

We find a consensus (67% of total 326 respondents) that collaborating with colleagues and institutions from developing countries (no latitudinal definition was given for this question) is key for the development of the cloud physics field. However, a large fraction of the survey participants (60%) are not planning to avail themselves of the opportunity.

Throughout your article, keep your sentences short: if necessary, split a long one into two and use a connector. The easier you make it for readers to understand, the more your work will be appreciated and cited. In addition to the Copernicus guides, look at this <https://oceansclimate.wixsite.com/oceansclimate/writing-guide>.

L. 350. led by women are better balanced – balanced in what?

L. 354. **Always** a , before but.

L. 355. it implies that one route to increase women co-authorships is to have women authors in the lead. Yes, but **how???** How do you put women as lead author? Who does it? Based on what criteria? Etc?

L 382. “to note that the lower rates of English proficiency and the apparent “narrow impact” of some tropical studies (based on e.g., desk rejections by Editors), could pressure authors to publish some of their studies in local (mostly non-indexed) journals with low visibility” – It would be important to clarify language skill and marginalisation. How do the two intersect? What is the relationship? The literature in applied linguistics and sociolinguistics will help here.

L 447. “It was found that” ➔ We found

L 451. “Again, it is obvious that...” Why is it ‘obvious’?

L 484. “The absence of leadership and engagement from tropical academics” – do you have some refs to support this?

L 566. “collabo- ration”. Check for other instances?

L 628. K r e i d e n w e i s , S . M . , P e t t e r s , M ← extra spaces

Decision. With all the revisions that you are being asked to do, I will ask you to submit a new version of your MS and for reviewers to take another look. Please make two copies, as follows:

- **File 1:** Track all the changes in Word. Use line numbering. Make a pdf. This is to comply with the publisher requirement to submit revisions showing changes.
- **File 2:** Make a clean copy of your text – ie, accept all your revisions? Make sure that the clean copy is what you want. Make a pdf. This is so that reviewers can see the revised version more easily.
- **Combined file:** Combine both above files into one pdf, in the above order. You can use ilovepdf.com. At the very top, include a note saying something like *this file contains two versions of the revised text: The first with revision mark ups; the second clean, starting on page nn**. Then submit to the GC website.
* Use the pdf page number (somewhere around the centre page of the pdf file), not the text page number.

I will then ask the reviewers to take a relatively quick look to see if they see (I hope mostly minor) things that they think should be revised further. If any questions, email me.

Some fairly recent publications on gender issues and (geo)science.

- Adams, R., & editor, R. A. E. (2026, May 8). Sexual harassment more than twice as prevalent at England's top universities, analysis finds. *The Guardian*. <https://www.theguardian.com/education/2026/may/08/sexual-harassment-statistics-england-top-universities-analysis>
- Batty, D., & Davis, N. (2018, July 7). Why science breeds a culture of sexism. *The Guardian*. <https://www.theguardian.com/science/2018/jul/07/why-science-is-breeding-ground-for-sexism>
- Belot, H. (2023, April 3). Australia's Antarctic program beset by frequent sexual harassment, second report finds. *The Guardian*. <https://www.theguardian.com/australia-news/2023/apr/03/australias-antarctic-program-beset-by-frequent-sexual-harassment-second-report-finds>
- Defranza, D., Mishra, H., & Mishra, A. (2020). *How Language Shapes Prejudice Against Women: An Examination Across 45 World Languages*. <https://doi.org/10.31234/osf.io/mrbcf>
- Diazon, S., Duran, A., Mantes, D., & Monteza, A. M. (2025). Unveiling language-based gender discrimination in fostering gender equality through discourse analysis. *European Journal of Literature Language and Linguistics Studies*, 8, 66–86. <https://doi.org/10.46827/ejll.v8i3.571>
- Holmes, J. (2014). Language and Gender in the Workplace. In *The Handbook of Language, Gender, and Sexuality* (pp. 431–451). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118584248.ch22>
- Hudson, S. T. J., Myer, A., & Berney, E. C. (2024). Stereotyping, prejudice, and discrimination at the intersection of race and gender: An intersectional theory primer. *Social and Personality Psychology Compass*, 18(2), e12939. <https://doi.org/10.1111/spc3.12939>
- Menegatti, M., & Rubini, M. (2017). Gender Bias and Sexism in Language. In M. Menegatti & M. Rubini, *Oxford Research Encyclopedia of Communication*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190228613.013.470>
- Remsö, A., Bäck, H., & Renström, E. A. (2025). A Sexist Language? Gender Differences in Attitudes and Use of Gender-Inclusive Pronouns. *Journal of Language and Social Psychology*, 44(5), 682–703. <https://doi.org/10.1177/0261927X251335305>
- Ryan, M. K. (2023). Addressing workplace gender inequality: Using the evidence to avoid common pitfalls. *British Journal of Social Psychology*, 62(1), 1–11. <https://doi.org/10.1111/bjso.12606>
- Sharma, M. (2025). Language as a Mirror of Inequality: A Psychological Analysis of Gendered Language and Sociolinguistic Harm in Nepalese Society. *Open Journal of Social Sciences*, 13(09), 330–345. <https://doi.org/10.4236/jss.2025.139020>
- Stroi, O. (2020). Gender-Biased Language of the Workplace. *Discourse*, 5, 120–131. <https://doi.org/10.32603/2412-8562-2019-5-6-120-131>
- UN Women. (2025, April 21). *How gender inequality and climate change are interconnected*. UN Women – Headquarters. <https://www.unwomen.org/en/articles/explainer/how-gender-inequality-and-climate-change-are-interconnected>
- Xiao, H. (n.d.). *Gender in language and gender in the social mind*.