Author Correction: Ice velocity and thickness of the world's glaciers

Correction to: *Nature Geoscience* https://doi.org/10.1038/s41561-021-00885-z, published online 7 February 2022.

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In Table 1, we noted that some RGI areas were wrongly reported from the RGI 6.0 documentation. The ice area of "N. Asia" should be 2×10^3 km^2 (not 3×10^3 km^2) and "Asia" should be 98×10^3 km^2 (and not 118×10^3 km^2, as initially reported). Consequently, the total ice area is 706×10^2 km^2 (not 727×10^2 km^2). Another typographical error was noted for the ice volume of Asia, which should be $9.4 \pm 3.7\,10^3$ km^3 instead of $9.6 \pm 3.7\,10^3$ km^3. We also noted some rounding inconsistencies for Region 11, where the sea-level equivalent (SLE) should be 0.29 ± 0.1 mm (as correctly used in Supplementary Table 1) and not 0.30 ± 0.1 mm. Similarly, the SLE of RGI-5 should be 26.9 ± 9.5 mm instead of 26.8 ± 9.5 mm, and the one of RGI-16 should be 0.18 ± 0.1 mm instead of 0.16 ± 0.1. For RGI-12, the volume should be $0.05 \pm 0.03\,10^3$ km^3 instead of $0.06 \pm 0.03\,10^3$ km^3 (note that the SLE remains correct). For RGI-10, the volume should be $0.11 \pm 0.03\,10^3$ km^3 instead of $0.09 \pm 0.03\,10^3$ km^3. Corresponding SLE, and regional differences were corrected accordingly and we provide online a version of Table 1 showing these corrections. Note that these changes remain within initial error margins and have no impact on the conclusions and analysis of the paper.

The main text has been updated to reflect these changes. In the text now reading, "Using the new constraint provided by the surface velocity, the global volume of ice within the RGI is estimated at (140.6 ± 40.4)…," "140.6" replaces "140.8" while in the text now reading "By comparison, the ice volume in the high mountains of Asia is (9.4 ± 3.7)x10^3 km^3 or 7% of the global estimate", "9.4" replaces "9.6". Note that the percentage is unchanged. Further, in the text now reading "While our estimates are generally lower, we find in Asia an ice volume 34% larger than that in ref. [9] but only 3% larger than that in ref. [7]," "34%" replaces "37%," while "3%" replaces "5%". In the abstract, for the text now reading "At low latitudes, our findings highlight notable changes in freshwater resources, with 34% more ice in the Himalayas," "34%" replaces 37%". Finally, to avoid misinterpretation, the sentence in the abstract now reading "After reallocating volume connected to the Antarctic ice sheet, the results suggest that the world's glaciers have a potential contribution to sea-level rise of 257 ± 85 mm, which is 20% less than previously estimated" has been updated from "The results suggest that the world's glaciers have a potential contribution to sea-level rise of 257 ± 85 mm, which is 20% less than previously estimated."

We have also corrected Supplementary Table 1 accordingly (see revised Supplementary information in the original article). We wanted to bring some clarifications on the caption of Supplementary Table 1, and the differences between the column "Farinotti 2019"[1], which was calculated using Supplementary Table 2 from their study, and "Consensus 2019", which was calculated by converting their volume estimates (Table 1 from their study) into sea-level equivalent using the same ice density that was used in our study (i.e., 0.9167 Gt/km^3)[2]. Hence, we provide a clarified caption of Supplementary Table 1 accompanying the original article.

We would like to acknowledge Fabien Maussion at the University of Innsbruck and Regine Hock at the University of Oslo for carefully notifying us about these inconsistencies.

References

1. Farinotti, D. et al. A consensus estimate for the ice thickness distribution of all glaciers on Earth. *Nat. Geosci.* **12**, 168–173 (2019).
2. Millan, R., Mouginot, J. & Rabatel, A. et al. Ice velocity and thickness of the world's glaciers. *Nat. Geosci.* **15**, 124–129 (2022).