Answer to the editor

Dear authors,

Thanks for revising your manuscript and for taking into account my comments. I must say I was a bit disappointed that some typos remained at this stage. See list below, they need to be corrected.

The Copernicus copy-editor will maybe help to improve some of the phrasing but I urge you to read the text carefully again.

Yet, I am pleased to accept your study for publication in TC.

Thanks for choosing our journal to publish your work,

Best regards,

Etienne Berthier

Thank you very much for your big efforts in handling our manuscript. We apologise for the remaining errors, which we have fixed. We also re-checked the whole text and corrected some other issues. We are glad that you accept our manuscript for publication. Thank you again for your support.

Typos (line numbers from the tracked change version of the article)

L269 : « glaciers » misspelled. Also with the changes made, this sentence is not anymore grammatically correct. To be fixed.

The statement is now "Overall, considering the thirty glaciers we investigated in this study, the monthly velocity values range from 30-40 m yr^{-1} "

Figure 6. Authors need to indicate what are the grey dots and the vertical bars (they are hard to visualize consider darkening them) and what are the continuous lines in the legend (the figure needs to be self consistent without referring to the text)

We expanded the legend, which now says: "Fig. 6. Time series of monthly glacier surface velocities over the 2016-2024 period. Monthly raw data and corresponding uncertainty are depicted as grey dots and bars, while the solid black lines represent the LOWESS interpolation. The robust linear trends are represented in dashed black lines. The background colour of the glaciers' names denotes their size: white, green and blue are for small, medium and large glaciers, respectively. The velocity seasonality is indicated with markers: brown diamonds (low seasonality), orange circles (average seasonality) and pink rectangles (high seasonality)."

Figure 8. Avoid acronym in the figure legend (here PC). Against with the aim of making the figures self-consistent.

Done

L359. Why are the linear trend of annual velocity so much lower for this common period? Maybe because of the seasonality from Feb. to December? Consider extracting the linear trend of a full year period (Dec 2016 to Dec 2021 for example) to avoid this seasonal effect which will be disturbing for the reader.

We made a mistake in the last version and calculated the trend in metres month-2 (basically, the values have to be multiplied by 12 to have them expressed in metres year $^{-2}$). Considering only the period December 2016 – December 2021, the trends of Brenva are 10 m yr $^{-2}$ (Rabatel et al) and 15 m yr $^{-2}$ (this study). They are so large because the strong acceleration of 2020-2022 significantly influences the acceleration. As you correctly noted, the values are quite different from the "reference" ones, thus they could be confusing. Therefore, we decided not to report these data in the main text, but we reported them only in the Supplementary.

L361. Berthier as an « h »... and « high » is misspelled

Done

L373. « Highlighting » repeated twice and not very well used in this context.

The sentence is now "It is worth noting that the three glaciers with high winter accelerating trends in Fig. 9 (Bionassay (IT), Aig Tré la Tete and Freney) are near to each other and located in a small part of the massif on its southeast side."

L429. The accent is mislocated.

Correct

Figure 11. Millan et al. (no cap letter for Al)

We will provide a corrected high-resolution image.

L491. No cap letter for « World »

Correct