

Public justification (visible to the public if the article is accepted and published):

Dear authors,

thank-you for your updated manuscript and response to the reviewers. Of course it's difficult to cite papers published after yours is submitted! But thank-you for updating them anyway. And I absolutely agree about fastest-finger-first publishing.

I just have a few technical corrections:

Fig 1 - please consider using the same colour scale for the two time panels.

Done!

All figures, please consider your choice of colormap very carefully. I leave it to your judgement, personally I like rainbow colormaps, and they are ok for figures like fig 3e, where the shape clarifies meaning. But in eg fig 2c the red and green dots in the Pacific may be hard to distinguish for some readers.

Thanks for the advice and suggestions. We elected here to change the background of the maps to make the dots more readable. I wanted to use the full spectrum on this plot, so I hope it is distinct enough to read now.

Fig 3 - please add a legend to the figures to assist colour assessability (ie don't rely on the reader being able to identify orange & magenta named in the caption). Nice figure otherwise.

Same for fig S1, and please check all the others.

We have added some legends in Figure 3 and Figure S1, and I also decided to change the second thin line in 3a to be green instead of magenta, which appeared too close to orange.

Typesetting - several places discussing amplification, X is not the right symbol for β . Anyway, as β is a ratio you don't really need the \times .

Great, thanks again for catching that. I think I found and removed all the unneeded "X"s from the manuscript now. Please let me know if I missed any.

Please indicate any placenames used on a map somewhere in the paper wherever possible. Eg Kushimoto could be added to fig 8a.

That is a good idea, thank you! Most plots have too much going on to add too many labels, but I had some room on Figure 8 to add place names for all examples given in

Figures 3, 4, 5 (minus the Chilean station not visible on these maps), and Figure 6.

Fig 5 scalograms fonts have lost quality. Also (all scalogram figures) I'm not sure why the window for long periods is different between different scalograms. It might be an artefact of available data but just check you've got the hours labelled correctly.

Thanks for noticing this. However, I can't notice any difference between the scalogram plots in Figure 5 from the others, though I admit the fontsize is a bit small. I also double-checked all of these plots, and the hours are all standardized with reference to the actual eruption of the volcano. Some differences might be seen for tide gauge analyses and buoy analyses (which only recorded at different times). . In any case, I have higher-resolution figure files that I will be submitting with this revision. Hopefully this will be clearer.

Fig 6 - I like the way you've expanded each key wave in sub panels. Even though it's small figure it's really clear. I might use that!

Thanks! This took quite a long time to get right!

Section 3.3 - I think from the Appendix that when you say "detide" you mean "remove all low frequencies"? The caption for S3 should say this, otherwise the residual includes storm surges that happened the same day, etc.

Yes, that is the better way of saying it. I have made changes where required.

Please ensure all references have dois.

I have spent a lot of time finding all DOIs that exist. Some of the citations do not have any DOIs to find no matter how much I search, like the Green paper from 1838, and the Press paper from 1956, and the Shufeldt note from 1888. Then, a few of my citations are books, which I believe I reported correctly. Everything else should have a DOI

I noticed that your figures 1, 2, 8 and some figures in the Supplement contain maps. For the next revision, I kindly ask you to clarify if you have created the maps or were they created by a map provider? If the maps were not created by you, please provide in your revised file that the copyright is denoted in the figure itself. If this is not possible, please provide it in the caption. If you are the originator, you can simply inform us. Please see the section "Manuscript composition" in our manuscript preparation guidelines:

https://publications.copernicus.org/for_authors/manuscript_preparation.html

I already discussed this point with you in a previous email. All map figures now have a short statement saying: "Maps made in MATLAB using data from Natural Earth."