Comment on egusphere-2022-1039
Anonymous Referee #1

Referee comment on "The effect of uncertainties in natural forcing records on simulated temperature during the last Millennium" by Lucie J. Lücke et al., EGUsphere, https://doi.org/10.5194/egusphere-2022-1039-RC1, 2022


This paper presents an interesting assessment of historical forcing reconstructions in light of paleoclimate reconstructions over the last millennium.

I only have one potentially major comment. At lines 112-114 it appears that the method for adding dating error to the volcanic forcing timeseries appears to treat each date independently. Wouldn't every incorrectly dated eruption have down-core dating impacts? If this is the case, then simply perturbing each year independently is not the appropriate process to use but rather the authors need to be using the 'BAM' model for chronological errors (Comboul et al. 2014, https://doi.org/10.5194/cp-10-825-2014) or something very similar. If the years can indeed be treated independently, then the authors need to clearly explain why this is so in the paper.

Minor comments:

l.244: Should be 'band-pass' instead of 'passband'?

l.436: 'ahmwhatelse uncertainty [if space]' ???

Figures: I think the figures are very nicely made!