

Community comment 3 - Tom Matthews

[CC3-1] As a co-author on Potocki et al. (2022) and on the comment by Mayewski et al. (this Discussion), I would like to re-iterate the query expressed in the latter for Brun et al. to communicate/explore uncertainty in the 1984 DEM (and hence the DEM of difference) in more detail. For example, does the uncertainty analysis presented by the authors fully consider positional errors in the 1984 image (see comments about the camera's departure from nadir)? Is the uncertainty (in dH) independent of surface slope? Might it be, for example, that the very large dH in the (steep) upper Khumbu and Rongbuk glacier sections reflects such positional errors, rather than a redistribution of mass within the glacier. This request for more attention on uncertainty quantification was perhaps covered by reviewer Ann Rowan who advocated for greater clarity of the methods used, but has not been mentioned again by the other reviews. Given the importance of the DEM analysis -- to reach an important conclusion about an such an "iconic" location -- I hope that Brun et al. will attend to this request in their revision.

[ACC3-1] We refer to ACC1-4b for more information about the processing of the 1984 DEM and the hypothesized 'positional errors' mentioned in CC1-4b and CC3-1 here. Please refer to ARC1-2 regarding uncertainty in the DEM difference analysis.