

## ***Interactive comment on “Linking Alpine deformation in the Aar Massif basement and its cover units – the case of the Jungfrau-Eiger Mountains (Central Alps, Switzerland)” by David Mair et al.***

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We thank the reviewer for the constructive and insightful comments, and the general positive review of our work (“Although the area is highly challenging for geological work, these structures are well documented and a succession of structures is established, which are related in part to established phases. [...] The manuscript is well written, the data are after my knowledge new and contribute to the interpretation of root zone of Helvetic nappes.”). We carefully addressed all comments and followed the suggestions to improve the manuscript (see line by line response in the Supplement to this com-

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ment). We gladly follow the reviewer’s recommendation to provide more discussion on the geochronological constraints of the deformation phases to appeal to a broader audience (“The arguments for timing of all these phases are not well constrained in the manuscript itself, particularly [...] Consequently, I recommend add a few sentences on which geochronological and/or sedimentary data the timing of these phases is based.”). We do so by weaving the methods used for in the literature in Sects. 1 and 2, and by expanding the scope of the discussion Sect. 5.4, where we now discuss the chronological constraints on the deformation phases. To those we only we link our relative deformation patterns, as we did not produce chronological data, and the scope of the paper is to present the new and spectacular structures and their relative chronology.

For our line-by-line response we refer to the Supplementary of this comment and for the changes made to the manuscript we refer to the Supplementary to the response to reviewer comment 1.

Please also note the supplement to this comment:

<https://www.solid-earth-discuss.net/se-2018-49/se-2018-49-AC1-supplement.pdf>

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Interactive comment on Solid Earth Discuss., <https://doi.org/10.5194/se-2018-49>, 2018.

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