Comment on nhess-2020-408
Sylvain Barbot

Community comment on "Three-dimensional deformation field analysis of the 2016 Kumamoto Mw 7.1 earthquake" by Qingyun Zhang et al., Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2020-408-CC1, 2021

The paper "Three-dimensional deformation field analysis of the 2016 Kumamoto Mw 7.1 earthquake" by Zhang et al. provides a technical, straightforward methodology to combine either multiple InSAR data or heterogeneous InSAR and geodetic datasets to build a 3-component displacement map for earthquakes. The technique is well known, being used for almost two decades. The paper is technically correct, but its novelty is questionable.

Line 55, azimuthal InSAR is also described in


Line 356: I do not see a justification for the vertical fault. Modeling of the deformation indicates north-dipping faults. See