

## ***Interactive comment on “Active tectonics of the onshore Hengchun Fault using UAS DTM combined with ALOS PS-InSAR time series (Southern Taiwan)” by Benoit Deffontaines et al.***

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Received and published: 12 April 2017

Reviewer 2 : modifications done in a comment. Thanks for the general overview of our paper. We answer below to each suggestion:

1. We have modified the Fig.3 adding the structural interpretation on it in order to be more informative and clearer for the interest of UAS DTM photo-interpretation. Moreover we precise in the text the treatments that had been processes. 2. We precise the PS short term deformation slip rate misfit with the long term slip rate (deduced from the elevation of dated marine terraces). We may interprets this (little) difference by potentially an earthquake behavior but further work (that are in progress) is needed to go farther on that point. 3. We agree that the conclusions and perspectives are long

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BUT we believe that it is important to deal in the conclusions with both the technical and methodological point of view AND the active tectonics point of view. So we precise in the text these both aspects that conclude completely this manuscript. 4. Figure 1: HeF: Hengchun Fault, KeF: Kenting Fault is added in the text. We homogenize hill, and Fig. 1c on Figure 1. 5. Figure 2: The figure is been improved. 6. The text of the different Figure captions (especially for Fig.3) is completed and clarified. 7. Figure 4 : The figure caption of Fig. 4 is modified. This figure is important as it shows to the reader the relief of the studied area (Kenting Mélange and so on). 8. Figure 5 : gives the scale (done) 9. Figure 6 : some label had been given (Checheng, Hengchun...)+ transparencies on the colors had been removed so the colors fits now with the legend. 10. We modified the text of Fig. 10 in the legend and in the text for the coherence of PS-INSAR and GPS data. As we added the error bars on PS-InSAR data, the mean velocities explain this apparent large distribution. This coherence is also seen on Fig. 11. 11. We modified the legend of Fig. 11 and 12. 12. Figure 13: This figure had been deeply modified (remove of the pink area in the lower right corner; we added the relief in 3D).

We have done all suggested modifications suggested by both reviewers, where the changes had been highlighted in blue, please see the attached file: Hengchun\_nhess\_0412.pdf.

Please also note the supplement to this comment:

<http://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2017-55/nhess-2017-55-AC2-supplement.pdf>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., doi:10.5194/nhess-2017-55, 2017.