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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Insights into the recurrent energetic eruptions on Awu, one of the deadliest volcano on earth" *by* Philipson Bani et al.

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In this paper, the authors present a broad overview of Mount Awu in Indonesia; it's eruptive history, magma composition, current degassing mechanism and potential hazard. It is a combination of interesting thoughts and observations but there is a lack of focus and thus it reads more like an almost random collection of ideas rather than a targeted study. It is a largely unstudied, yet hazardous volcano, thus this attempt at characterizing it is valid and important. Below are some suggestions and key points to be addressed. Specific comments regarding the text were inserted in the pdf directly.

1. In the introduction, please provide more information about the purpose of this study

and the focal point of the manuscript. Did you compile all the info in Table 1? If so, it would be worth highlighting explicitly. Why did you obtain whole-rock analyses? Was it just to know the average composition of Awu lavas (assuming that the current dome is representative), or was it needed to compute gas ratios? Why did you analyse the volatile flux and gas ratios, i.e. how does it fit with the rest of the data presented here and why report it here rather than in Bani et al., submitted (what is the title and where was it submitted?)? You have to tie in these types of information a bit better to strengthen this contribution.

2. The interpretation of the geochemical data is overstretched. From your 2 whole-rock analyses, you cannot conclude that the peculiar tectonic setting of Sangihe is at the origin of the recurring strong activities at Awu. There are recurring violent eruptions at other volcanoes in Indonesia or the rest of the world, which are in very different tectonic settings, and Kelud (cited in this paper as an analogue of Awu's alternating dome – explosive activity) is a good example. Please revise the interpretation, and provide more information regarding the sampling location, sample descriptions, and analytical methods.

3. The flow of the text is good but the English can be improved. I made some suggestions in the PDF.

Please also note the supplement to this comment:
https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2020-27/nhess-2020-27-RC2-supplement.pdf

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