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Interactive comment on "Extrusion dynamics of deep-water volcanoes" *by* Qiliang Sun et al.

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Sun et al. describe a study into offshore volcanoes in the South China Sea using seismic reflection data in order to better understand eruption dynamics in such settings. Overall, the study seems to be generally well thought out and suitable for publication in Solid Earth. In my opinion, the Introduction, Geological setting and Data and Methods sections provide adequate background information. In addition, the results are clearly and logically presented, and the discussion and conclusions seems to be backed up appropriately by the results. I would therefore like to offer a supportive comment on this discussion paper, and I look forward to seeing a final version of the paper published in Solid Earth.

The following minor points would possibly improve the manuscript:

-Figure 1a would benefit from a key (i.e. the red, green and blue symbols that are

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described in the caption).

-On Figure 2 some of the text for the different logs is very small and difficult to read, particularly the units. I suggest making these larger.

-In the caption for Figure 5, the mentions of '(a)' and '(b)' could be better placed to describe the figure. As it is they are both at the start of the caption which reads a little awkwardly. Also, Figure 5a might be better with a colour bar.

-There is a minor grammatical error in the acknowledgements (the 2nd "have" isn't necessary).

Finally, another good example of a seismic reflection study on offshore volcanoes that may be of interest to the authors is by Keen et al. (2014) on the Charlie-Gibbs Volcanic Province.

References

Keen, C.E., Dafoe, L.T., and Dickie, K., 2014, A volcanic province near the Western termination of the Charlie-Gibbs Fracture Zone at the rifted margin, offshore northeast Newfoundland: Tectonics, v. 33, no. 6, p. 1133–1153, doi: 10.1002/2014TC003547.

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