

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

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Received and published: 18 June 2019

The manuscript ‘Extrusion dynamics of deep-water volcanoes’ by Sun et al. presents the 3D structures of deep-water volcanoes and explores their extrusion dynamics in an unprecedented way, using high-resolution three-dimensional reflection seismic data. This study also highlights that we likely underestimate the true volume of the erupted materials just based on the volcano edifices. In general, this study is very interesting and well written, and I think it will be a great contribution to the volcano community. I recommend a minor revision for this manuscript. Here, I list the minor comments below: 1. Line 45: change ‘volume’ to ‘volumes’; 2. Line 65: only the volcanoes that presently stand out the seabed can be imaged by the bathymetry and remote sensing data. Therefore, please add ‘present’ before ‘deep-water volcanoes’; 3. Line 120: add ‘edifice’ after volcano; 4. Line 205: change ‘volcano’ to ‘volcano edifice’ or ‘volcano construction’. V1 is a volcano edifice and don’t include the lava flows; 5. Line 236:

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Please label the age of V1 here; it is easier for the author to compare the ages of V1 and V2; 6. Line 259: Same to above; please label the age of latest Pliocene? 2.58 Ma? 7. Lines 671-683: please carefully check the figure captions and make it clearer. For example, Ds is marked in the Figure 1a. However, it is not interpreted in the figure caption; 8. Line 690: revise ‘refection’ to ‘reflection’; 9. Please mention A-A’ and B-B’ are the locations of Figure 6 and 7 in the caption

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Interactive comment on Solid Earth Discuss., <https://doi.org/10.5194/se-2019-87>, 2019.

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