

Interactive comment on “Tempo-spatial variation of the late Mesozoic volcanism in Southeast China testing the western Paleo-Pacific Plate subduction models” by Xianghui Li et al.

Anonymous Referee #2

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The manuscript does a good effect in reviewing the Late Mesozoic volcanic rocks in SE China. I am glad to recommend it to be published on Solid Earth. Meanwhile I hope to point out several issues and suggestions that may help the authors improve their manuscript.

(1) There do exist some studies using zircon U-Pb ages to construct tectonic model for SE China during the Late Mesozoic time. They should be introduced in the first part of manuscript. (2) Systematic review and analysis of the chronological data across the whole SE China is necessary to build a good model for tectonic and magmatic evolution of the study region. However, it does not mean putting all zircon U-Pb ages

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together. Some previous studies, focusing on individual regions, are actually trying to show the “diachronous” evolutionary trend. (3) The configurations and processes of the active continental margin appear to be constrained simply by chronological data. I suggest some geochemical data should be appended to give further constraints. For instance, why some volcanic (4) Some studies connect the Late Mesozoic tectono-magmatic processes to the Early Mesozoic ones in South China. Show the reasons to separate the two orogenies (Indosinian and Yanshanian orogenies). (5) The authors argue previous studies only involve a limited geographic region and compile data from more areas. However, show the region why Yangtze Block and western Taiwan is omitted from this study. (6) In the coastal region of Zhejiang University, there are many Early Cretaceous intermediate intrusive rocks, which have good age constraints. The authors may consider discussing these data.

A few specific comments:

Properly use hyphen and dash in the text. Check through the whole text. Use proper decimal places for zircon U-Pb ages.

Line 24: show what are CZ and CHTB first. Line 90: show the reference or evidence for the starting time. Line 286: 74.0 ± 0.6 Figure 7: show the vertical scale.

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