Point-by-point Response

Reply to:

29 Oct 2024, Topic editor decision: Publish subject to minor revisions (review by editor), by Yang Chu

Comment: I only have several comments. One is that I don't find replies to the comments from the reviewer.

Reply: Thanks for the comments. We have tried to find the comments from the last reviewer, and compensate the reply.

Comment: Second, define the Bohai sea basin. Bohaibay basin has its tectonic meaning, but the bohai sea basin doesn't. What are the strata and boundaries of this new basin? Please give the details to show the necessity of this new basin.

Reply: Okay. We have defined the Bohai sea basin in the text. This is not a newly defined basin. The Bohai sea basin is defined as a Cenozoic basin bounded by the Jiaodong Peninsula, North China Plain, Yanshan Mountains, Liaohe Bay Plain and Liaodong Peninsula. It is mainly composed of the Bohai Sea area. We have added one reference for this (Wang, T., Pan, X., and Hao, F.: Hydrocarbon accumulation and distribution prediction in Bohai Basin [in Chinese], Beijing, China, Geological Publishing House, 1–492, 2016).

Comment: Third, Delete figure 5c and 6c because they are not useful to show any additional information.

Reply: Okay. We have deleted figures 5c and 6c.

Comment: Lastly, delete the block boundary lines in figure 3. Sedimentary contact cannot define the boundary between blocks. For example, we never attribute the boundary of the North China Craton to the boundary of the Cenozoic Bohai bay basin.

Reply: Okay. We have deleted the block boundary lines in figure 3.

Compensating reply to the last reviewer:

Report #1: (Submitted on 13 Sep 2024, Anonymous referee #1)

1) Scientific significance, Good.

- 2) Scientific quality, Good.
- 3) Presentation quality, Good.

For final publication, the manuscript should be accepted subject to: minor revision.

Were a revised manuscript to be sent for another round of reviews: I would not be willing to review the revised manuscript.

Suggestions for revision or reasons for rejection: Minor revision.

Reply: Thank you very much for the review. We will make careful revision for the MS.