Review of "Inversion of transfer zones in salt-bearing extensional systems: insights from analogue modeling"

Authors: Elizabeth P. Wilson, Pablo Granado, Pablo Santolaria, Oriol Ferrer, and Josep Anton Muñoz

We would like to thank the editor for his work and thoughtful comments, suggestions, and corrections to our manuscript that help make our work better.

Frank Zwaan (editorial committee) -

Public justification (visible to the public if the article is accepted and published):

Dear authors,

Many thanks for your swift and detailed reply, and for the resubmission of the updated manuscript.

Congratulations on this nice modelling study. I only have a couple of minor suggestions for small corrections to the current version of the manuscript that I would like to ask you to quickly check, before I can forward your work to the executive editor for publication (see details in the uploaded PDF file).

Looking forward to receiving the final version of your manuscript,

Best regards,

Frank Zwaan

Response to comments in the annotated pdf provided by the editor -

Editor, Line 1: you could perhaps consider using for instance "offset half-grabens" instead of "accomodation zones" here, the grabens seem to be the focus of the paper, rather than the accomodation zones?

(see also highlighed terms in the abstract, "accomodation zone" only comes in rather later in the abstract)

Authors: We would prefer to keep the title with the focus on accommodation zones, as one of the key points of our work is that these structures have not been typically been the focus of recent papers, since their definition in the 1980s-1990s. The term accommodation zone has been added to the first sentence so that it is mentioned earlier in the abstract.

Editor, Line 8: consider using "offset" instead of segmented, which is a bit vague (to me) —> using "offset" clearly says the grabens are separated and not oriented in a continuous fashion

Authors: We would prefer to continue using the term, as it is the term used by Dooley and Hudec

(2020) amoung others to describe en-echelon rift systems segmented by transfer zones

Editor, Line 14: perhaps use "accomodation zone between both half-grabens" for clarity

Authors: The text has been modified.

Editor, Line 76: again, the Atlas and North Sea are not margins, but the text seems to imply they are —>

I suggest using "extensional systems" or something similar (perhaps "rifted margins and rift systems"? or

"rifts and rifted margins"?)

Authors: The text has been updated.

Editor, Line 78: see previous comment on the use of margins

Authors: The text has been updated.

Editor, Line 84: I checked Brun & Nalpas (1996), and I believe this reference should be removed here.

The reason: a seed is normally used to localize deformation. In Brun & Nalpas (1996) the silicone patches

work in the opposite way: they distribute the otherwise strong localization of the basal velocity

discontinuity. Also, the paper does not involve any offset rift system as in this paper (and the other papers

cited in this sentence). A better citation would be Schmid et al. (2023) in Solid Earth.

Authors: The reference has been removed and the text has been updated.

Editor, Lines 567-568: it would be good to specify these thicknesses somewhere (3 mm vs <1 mm or so?,

it can just be put in parantheses —> but it would also be good to shortly specify this in the methods, for

completeness

Authors: The text has been updated and these values have also been added to the methods section.

Editor, Lines 705-706: double use of "such as" -> perhaps just delete "such as salt basins and passive

margins"? (also since the Jura and Alps are mountain ranges, even though they may contain/be built on

previous basins).

Authors: The text has been updated.

Editor, Line 794: it seems that the San Juan basin is missing in this first list of basins?

Authors: The text has been updated.

Editor, Line 814: just spell out "west"?

Authors: This has been updated in the text.

Editor, Line 817: kinematic

Authors: Thank you. This has been corrected.

Editor, Line 818: perhaps use "salt" as is done elsewhere?

Authors: This has been updated.