Solid Earth

Discussions

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Interactive comment on "Structural style and hydrocarbon trap of Karbasi anticline, in the Interior Fars region, Zagros, Iran" *by* Z. Maleki et al.

Anonymous Referee #2

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The purpose of the study is not well addressed. The manuscript is tried to address two quite different issues that affect the Karbasi Anticline. The first one is the effect of detachment zones and the second one is the effect of Nezamabad transverse fault. To discuss the effect of the detachement zones, serial cross sections based on underground data such seismic lines and exploration wells have to be presented. Since the authors have used geological map of the Karbasi Anticline that is internal report of National Iranaian Oil Company, they might have also access to seismic lines and well data. To address the effect of Nezamabad transverse fault detailed field work, recent data on the fault activity as well as data to document the basement nature of the fault is necessary. The first aim can contribute to reservoir capability of the anticline

but the second aim since does not cross the main area in which exploration target is investigated might not have direct contribution in the reservoir exploration.

Lot of names for the structure of the region is presented in the text but not addressed to maps or figures.

Different rock formations are addressed in the MS but no stratigraphic chart or column is presented.

Lot of work have been done on the effect of detachment horizon on fold style on Zagross which are neglected in the ms (e.g. Page 3; Line 15-20: lot of work have been done so far on the effect on detachment fold on fold style which directly effect reservoir exploration. Some of these reference are addressed on line 20-25).

Detailed data on kinematics of the Karbasi Anticline is not presented but is emphesied on its complexity (i.e., Page 4; line 23-25: the anticline complexity has to be proven by presenting data). In addition, the geometry and kinematics of the Nezamabad fault which is the main fault under investigation in this study has not presented (i.e., Page 7: lines 8-10, where just the fault location is addressed).

The structure of the presented data has to be improved and discussion section has to be written in a way that discusses the main purpose of the study.

The MS Language is poor and need to be improved substantially not only in its English but also in its scientific style of writing.

In conclusion, The Ms need substantial corrections and thus can not be accepted in its present form. I would suggest the authors to deeply revised the manuscript and in a way that be interested for international reader.

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