

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

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Editor-In-Chief: Solid Earth Dear Top editor and Referee 2 Thank you very much for your kind email and useful comments. We have improved the article by applying invaluable comments of the reviewers. All modifications are marked as red in the text and our responses to reviewer's comments are: Reply to review - 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. Some explanations are added and revised is done. Also all modifications are marked as red in the text.

C1001

- To discuss the effect of the detachment 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 Iranian Oil Company, they might have also access to seismic lines and well data. In the study area, not provided seismic data to analysis by National Iranian Oil Company. Also we used well data and results of field work for some explanations in this research.

- 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. - In this paper, the main aim of this paper is determination of structural style and hydrocarbon trap of the Karbasi anticline in the Fars region. Also some explanations are added.

- 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. It is added accordingly.

- Lot of work have been done on the effect of detachment horizon on fold style on Zagros 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 references are addressed on line 20-25). In this section, some of more important researches have been briefly introduced.

- Detailed data on kinematics of the Karbasi Anticline is not presented but is emphasized 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). In the chapter 8, part of descrip-

C1002

tion of folds, some explanations are added. Also in this paper, we have been calculated and analyzed description of fold, geometry and structural style of the Karbasi anticline

- 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. Some explanations are added and revised is done.

- The MS Language is poor and need to be improved substantially not only in its English but also in its scientific style of writing. - Revised is done and some explanations are added.

Please also note the supplement to this comment:

<http://www.solid-earth-discuss.net/6/C1001/2014/sed-6-C1001-2014-supplement.pdf>

Interactive comment on Solid Earth Discuss., 6, 2143, 2014.

C1003