Response to the Anonymous Referee #1's Interactive comment on **"Relative Timing of Uplift along the Zagros Mountain Front Flexure Constrained by Geomorphic Indices and Landscape Modelling, Kurdistan Region of Iraq"**

by Zebari et al. The responses are given in "*Italic*" font style.

Anonymous Referee #1

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The authors of this manuscript try to use geomorphic indices and results of landscape modelling to constrain the relative timing of uplift of three anticlines. In general, the topic is interesting, and it will be a substantial contribution to the journal. Nevertheless, the revisions including the methodology and discussion, as well as the rearrangements of sections are still needed before publication. Major comments and suggestions are listed below.

1. Introduction: the authors should clearly state the importance of this study. Why the detailed spatial and temporal distribution of deformation ... is not yet well understood? Due to the lack of subsurface data, and/or this region is inaccessible for field surveys?

Authors: It is not well understood due to the lack of comprehensive studies, insufficient surface and subsurface data, as well as access problems because of geopolitical conflicts. The clarification is given in new version of the manuscript (Section 1, Page2, Lines 6-7).

2. Section 3.1.1: with aim of assessing landscape maturity along thrust-related anticlines, hypsometric curves and integrals have often been used for (sub-) drainage basins. The methodology differs from the three incomplete hypsometric curves displayed in Fig. 7. Actually, the authors did not extract drainage basins even if the stream channels of the Harir anticline have been shown in Fig. 6a.

Authors: The hypsometric curves are now recalculated following the method of Pérez-Peña et al. (2009) as total weighted mean of hypsometric curves for all drainage basins that have an area of more than 0.25 km^2 within each anticline. This recalculation is given in the new version of the manuscript (Section 3.1.1, Page 5, Lines 7-10).

3. Section 3.1.5 Digital elevation models: this section does not belong to the 3.1 geomorphic indices.

Authors: Resolved by renumbering the sections (Section 3.2, Page 7, Lines 10-28).

4. Section 5.1: the authors just described the rock erodibility. They should be included in geological setting, instead of discussion part. Here, the authors stated, "the stratigraphic column in the area consists of rocks with different erodibility" (page 11, line 29), and also mentioned in the conclusion "Due to the similarity in the lithology, structural setting and climate" (page 15, line 23-24). They should clearly state whether the difference exists or not.

Authors: We removed this section. Information on rock erodibility is now included in the section describing the geological setting. In Section 5.1 (page 11, line 29) we mean that there is vertical variation in the rock erodibility in the stratigraphic columns. We have resistant Cretaceous and Paleogene interval of carbonate rocks and less resistant Upper Cretaceous-Tertiary intervals of clastic rocks. In the conclusion (page 15, line 23-24), we refer to the lateral extent of these stratigraphic units along the three anticlines, which is similar. We made the distinction between vertical variations in the rock erodibility and the lateral similarity in the exposed rock units clear in the new version of the manuscript to prevent confusion.