**Interactive comment on** “Multi-scale analysis and Modeling of aeromagnetic data over the Bétaré-Oya area in the Eastern Cameroon, for structural evidences investigations” by Christian Emile Nyaban et al.

**Anonymous Referee #2**

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In this manuscript, the aeromagnetic data over the Bétaré-Oya area in the Eastern Cameroon were mainly used to derive geological interpretations associated with local tectonic structures in this area. By means of several techniques, including tilt derivative, Euler deconvolution, upward continuation and the 2.75 modelling, fine magnetic maps were presented, related to the tectonic lines and faults. The results and conclusions from this manuscript were well described and fruitful. However, readers may be still interested in several additional details before this manuscript published: 1. As the only observed magnetic dataset used in this study, the original locations and intensities of the aeromagnetic data should be shown. 2. What are the new findings in this manuscript compared to previous studies? Is it that in this work the sub-surface tectonic structures were for the first time related to the magnetic data? 3. How to evaluate the error and role of the 2.75D modelling to obtain new regional results in this study?