



## **Imaging the Lithosphere beneath Cameroon and implications to the origin of the Cameroon Volcanic Line**

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The origin of the Cameroon Volcanic Line (CVL), a N30E lineament of Cenozoic volcanism that extends from the Gulf of Guinea to Lake Chad (West Africa), is still an important science question. Among the models that have been proposed to explain its origin the latest based on body wave tomography, suggested the edge-flow convection as the viable model to explain its linearity. In this work, we explore the similarities and differences between various existing geophysical and geodetic models computed at various regional scales and provide a new topography of the Lithosphere, based on surface wave tomography and the joint inversion of surface wave group velocities and receiver functions. The data used in this study were obtained from a temporary deployment of a network of 32 temporary seismic stations deployed between January 2005 and January 2007.