Crustal Structure across the Western Afar Margin from the Uplifted Plateau to the Rift Axis using Receiver Functions

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Résumé

Imaging the crust in Afar and its surrounding regions provides an opportunity to understand how rifting has evolved from the continental extension to the incipient oceanic spreading segments. Using the Receiver Functions calculated at 28 stations installed along 2 profiles across the western margin of Afar, we focus on the spatial evolution of the Moho depth and the crustal properties involved over the rift evolution. We evidence distinct types of crustal thinning along these profiles, with beta larger in the North where the rifting segments are more evolved.

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