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Effective Elastic Thickness beneath the Japanese Islands deduced from Coherence between Gravity Anomalies and Topography, Part II

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The topography and gravity anomalies over the Japanese Islands can be modelled as the sum of the effects of surface and subsurface loading of an elastic plate. Assuming surface and subsurface loading are independent processes, the observed coherence between the 2-D Fourier transforms of Bouguer gravity and topography provides a constraint on the effective elastic thickness of the plate (Forsyth,1985). We will report about variations in effective elastic thickness beneath the Japanese Islands.