Thin-skinned tectonics holds in the back-arc region of Northeast Japan?

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In the back-arc region of Northeast Japan, large contractive deformation occurred since Pliocene time (e.g., Sato, 1989). Recently, Okada and Ikeda (2011) compiled seismic reflection, gravity, and surface geologic data and estimate the mechanism of this contractive deformation. They claim that the thin-skinned tectonics holds for the back-arc region of Northeast Japan, but several observations appear to be inconsistent with this model.

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