

## **The Seismic Lithosphere-Asthenosphere Boundary**

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Several recent studies have imaged discontinuities interpreted as the lithosphere-asthenosphere boundary using receiver function methods. These are exciting results since this boundary is fundamental and yet relatively elusive. Its location is not well imaged nor are its properties well understood. The receiver function method provides high depth resolution, and the multitude of studies using this method has increased lateral resolution. A better global understanding of the location and nature of the boundary may be near, and this may have implications for mantle dynamics and planetary evolution. However, these new results do not necessarily lead to clarity, but may introduce new complexities and questions. In some cases apparent contradictions may represent unmodeled Earth structure. Overall, interpretation and synthesis requires careful consideration of the approaches and sensitivities of individual studies.