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Core flow estimates and inner-core growth patterns

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Seismological observations suggest that the inner core is anisotropic, having a slow western hemisphere and a fast eastern hemisphere. Several explanations have been proposed for this, the most recent of which suggest that the answer to the seismic anisotropy could lie in the growth process of the inner-core.
We looked at several surface and bulk core flows estimated from inversions of the magnetic field and secular variation and compared these patterns with the above recent model for inner-core growth. We found that core flows estimated from magnetic data are compatible with the thermal convection associated with a lopsided growth of the inner-core.