

Structure of small scale flow in the Earth's core

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The flow in the core of Earth is driven by compositional buoyancy which is due to solidification of outer core material to the inner core. The length scale of the buoyancy is considered to be of order 1-10 kilometers, which is very small in the core. We have been studying the structure of the flow driven by the buoyancy with the purpose to understand the global scale flow as an ensemble of the small scale flow. Structure of the small scale flow and associated magnetic field will be presented, and the dynamics of the fluid core is discussed.

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