The chapters in this book are grouped into sections comprising plates & plumes, convection & seismology, heat & temperature, geochronology & reference frames, oceanic and continental melting anomalies, planetary volcanism, education, and platonics & plumacy. Many of the chapters are followed by a block of formal discussion.

Individual chapters were formally reviewed by two or more external reviewers and by both of the volume editors. The review process for chapters authored by one of the editors was handled by the other editor. We sought reviewers expected to advocate contrasting viewpoints, to expose authors to the most challenging criticisms possible and to encourage the confrontation of difficulties.


Chapters were posted on the world wide web as they were accepted, and formal discussion of them was open to the public from November 2006 until the end of January 2007. Contributions were posted rapidly as they were submitted. To the Editors’ knowledge, this is the first time such an exercise has been conducted. Our experience was that it was extremely successful. Response was vigorous and many emails of appreciation were received from both participants and observers.

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