

## Heterogeneous impact processes and shock scale problem

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Shock processes are time-, space-, and initial state-dependent so that they display complicated and non-equilibrium phenomena. In order to understand them from the meteorites that experienced impacts, it is not so simple as we can imagine based on the detailed observations of meteorites. We need to develop more models to help us to know the basis of shock-induced chemical, mineralogical, and physical processes of various states of meteorite materials. Heterogeneous conditions generated by shock wave are to be characterized by the initial state of pre-impact body. Local temperature rise due to local energy deposition makes more difficult to interpret the phenomena. We consider some heterogeneous heating mechanism during shock process.

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