We discuss natural and experimental evidences on impact phenomena, which had played essential roles in the process of early planetary evolution. Recent analytical and experimental developments reveal a new prospective on the effects of shock-compression process of planetary materials. For deeper understanding of such shock effects, it is necessary to evaluate the detailed shock conditions from the observations of naturally-shocked planetary materials, as well as to compare them with the results of shock-compression experiments of these materials obtained at laboratory conditions.

Keywords: discussion