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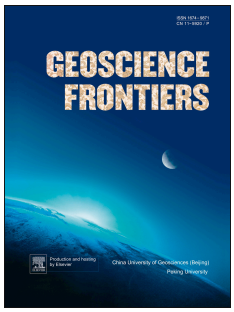

Frontiers in Early Earth History and Primordial Life- Part I

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Editorial

Frontiers in Early Earth History and Primordial Life- Part I

The history of the Early Earth is shrouded in mystery, and one of the major outcomes of the Apollo Program, lunar sampling, and the data acquired by subsequent orbiting missions, is that the Moon is an important analogue for the Hadean Earth, which includes primordial planet-forming materials. We assemble two special issues of "Geoscience Frontiers" with state-of-the-art contributions that provide insights into planetary formation, Earth's early history and primordial life. New theories show why the Earth began as a dry planetary system and was later seeded by an ocean-atmosphere system through the bombardment of carbonaceous chondrites. A combination of the information concerning the evolution of Earth, Mars, and the other terrestrial planets is important in understanding the fate of the primordial continental crustal materials and the making of habitable planets.

In this first volume of the special issue, we assemble fourteen contributions, starting with the article by Sasaki and Ebisuzaki (2017-this issue) on "Population synthesis of planet formation using a torque formula with dynamic effects" where the authors present a new torque formula for Type I migration derived through dynamic corrections. The study proposes significant slowdown of the inward migration of planet embryos and that