

History of heavenly bodies collision of the solar system inside of the past one billion years studying from a lunar crater

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The moon preserve the record of the bodies impact history of the past 4.0 Ga as a crater, it is important the information to solution impact and orbit evolution of the bodies of the solar system.

Standard lunar cratering chronologies have been based on combining Luna and Apollo sample radiometric ages and impact crater densities. However, the bombardment history cannot be resolved in the past 3.0Ga because of the absence of samples with radiometric age ranging from 3.0 to 1.0 Ga. On the other hand, from crater density of lunar rayed craters, radiometric ages of lunar glass spherules, and statistics of terrestrial craters it has been suggested the hypothesis that the production function has increased in recent.

In this study, we determine formation ages of rayed craters using SELENE image data. Based on the finding, we will discuss a temporal variation of the cratering rate in the past 1.0 Ga.

Keywords: Moon, crater, cratering chronology