

Perspective

## The Solar System's Chaotic Early Phase – Now Proved

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Asteroids in detail were examined by researchers at ETH Zurich and the National Center of Competence in Research PlanetS. They reconstructed the early history of asteroids, unlike ever before, and they found that early solar system states were chaotic, and asteroids collided violently.

Using fragments from asteroids that collided with Earth, this new research provides a timeline for a fragment of the chaos.

According to a new study, some of the turmoil can be dated back to asteroids that collided with Earth. Since their birth, some billions of years ago in the early solar system, asteroids have stayed fundamentally unaffected. There were, however, some asteroids that remained intact. The iron cores were gradually stripped from the insulating mantles, shattering into fragments as a result of several collisions. There were some fragments that fell to Earth. People were captivated by a meteorite from space. Inuit in Greenland made tools from meteorites, and King Tut was buried with a dagger made from an iron meteorite.

Scientists are now able to reconstruct important processes in the early solar system using improved laboratory measurement methods as a result of this study. The solar nebula's disappearance, for example, can be determined from these observations. During that time, planets such as Earth were still forming. By understanding how our planets came into being, we can also gain insight into planets outside of our solar system.

### KEYWORDS

Earth asteroids, asteroids, solar wind, early solar system, Inuit, NASA, Mars, early, earth science, solar system formation, astrodynamics, geochemistry, geophysics, geology, astrophysics

