

Hydrodynamic Escape from Disks formed by Giant Impacts

Hidenori Genda[1], Yutaka Abe[2]

[1] Dep. of Earth and Planetary Sci., Tokyo Univ., [2] Earth Planetary Sci., Univ. Tokyo

Because a circumterrestrial disk formed by a giant impact is likely very hot and close to isothermal, it can escape from the Earth's gravity. In this paper, we performed a numerical simulation for an idealized hot disk. We found that the outer part of the disk is lost and a compact disk is formed with the timescale of 100 days.