

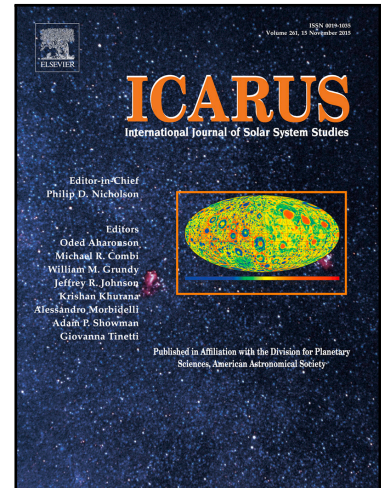
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Coupled orbital-thermal evolution of the early Earth-Moon system
with a fast-spinning Earth

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Highlights

- The early lunar orbital evolution is coupled with lunar magma ocean evolution.
- Evection resonance is unstable due to overheating of the Moon.
- The limit cycle reduces Earth-Moon's angular momentum without overheating the Moon.
- A large tidal Q of the early Earth facilitates the system's angular momentum loss.

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