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Equatorial cavities on asteroids, an evidence of fission events

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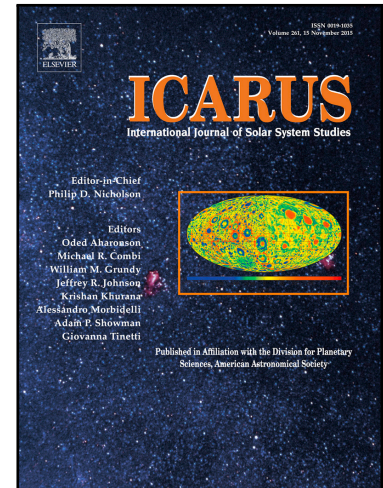
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Highlights

- The chances of creating equatorial cavities on NEOs through cratering are very low.
- Regolith filling the cavities comes in tension at high spin rates and fissions off.
- The interface cohesive strength at the moment of fission is between 1 and 10 Pa.
- This low strength can be achieved by kinetic sieving of the asteroid regolith.
- The deformation during spin-up naturally generates rocky equators and sandy tropics.

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