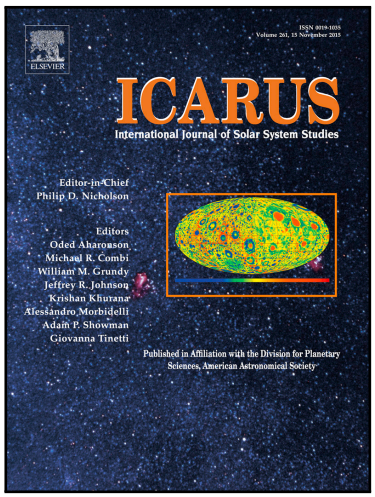

Modeling the evolution of the parent body of acapulcoites and lodranites: A case study for partially differentiated asteroids

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Highlights

- We model the thermo-chemical evolution of the acapulcoite-lodranite parent body.
- We fit the thermo-chronological data and the differentiation degree of meteorites.
- We derive optimized parameters (size, formation time, etc.) for the parent body.
- Final structure: Core, mantle, partially differentiated, and primordial layer.
- Primitive achondritic and differentiated material on a common parent body.