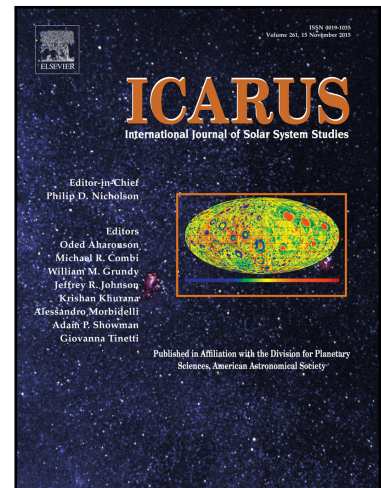


REFRACTORY AND SEMI-VOLATILE ORGANICS AT THE SURFACE OF COMET 67P/CHURYUMOV-GERASIMENKO: INSIGHTS FROM THE VIRTIS/ROSETTA IMAGING SPECTROMETER



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Highlight

- The surface of comet 67P/CG has been imaged by the VIRTIS instrument aboard ROSETTA.
- Refractory polyaromatic organics mixed with opaque minerals account for the low albedo.
- Semi-volatiles organics (solid at 220 K) induce a broad band centered at 3.2 μm .
- Laboratory photolytic/thermal residues formed from interstellar ice analogs are fair analogs.
- No hydrated minerals are detected, suggesting no link with carbonaceous chondrites.

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