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Three-dimensional radar imaging of structures and craters in the Martian polar caps

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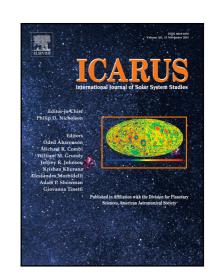
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Putzig et al.

SHARAD 3-D imaging of Martian polar caps

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Three-dimensional radar imaging of structures and craters in the Martian polar caps Nathaniel E. Putzig^a, Isaac B. Smith^a, Matthew R. Perry^a, Frederick J. Foss II^b, Bruce A. Campbell^c, Roger J. Phillips^d, and Roberto Seu^e

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Highlights:

- 3-D radar volumes give clarified views of structures within the Martian polar caps.
- 3-D map of south polar CO₂ deposits finds 16,500 km³, 11% larger than prior estimate.
- Apparent impact craters at base of northern cap are consistent with a Hesperian age.
- Radar-derived topography at 86.95–87.45° latitude extends prior laser altimetry data.

Keywords:

Mars; Mars, polar caps; Mars, climate; Mars, interior; Ices; Cratering; Radar observations

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