

Longitudinal dependence of CO₂ supersaturation during northern winter in the Martian atmosphere

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Using the temperature profiles of MGS radio occultation measurements (1998-2007), we show the strong longitudinal dependence of CO₂ supersaturation during northern winter in the Martian high-latitude (60-80N) atmosphere. The CO₂ supersaturation appears more frequently in the longitudes of 90-180E and 270-360E at the pressure levels of 400-30 Pa. The areas of CO₂ supersaturation overlap with zonal temperature minima.

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