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Laboratory Study of Adsorption and Deliquescence on the Surface of Mars

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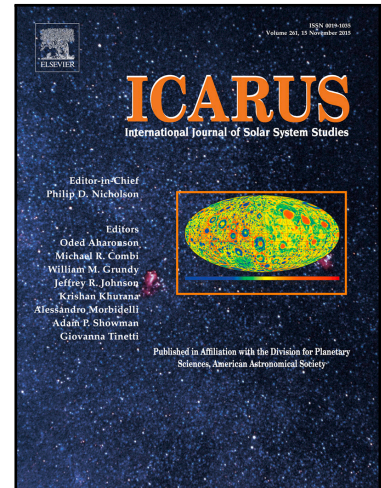
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**Highlights**

- Chabazite and perchlorate were subjected to conditions presently found on Mars.
- Chabazite simultaneously adsorbed water and carbon dioxide from the atmosphere.
- Deliquescence of perchlorate and regolith mixtures produced visual darkening.
- Adsorption and deliquescence both occurred on diurnal time scales.
- Raman spectroscopy was effective at detecting both adsorption and deliquescence.

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