

# Accepted Manuscript

## The Formation and Stability of Buried Polar CO<sub>2</sub> Deposits on Mars

Curtis V. Manning, Carver Bierson, Nathaniel E. Putzig,  
Christopher P. McKay

PII: S0019-1035(18)30236-7  
DOI: <https://doi.org/10.1016/j.icarus.2018.07.021>  
Reference: YICAR 12970

To appear in: *Icarus*

Received date: 6 April 2018  
Revised date: 22 June 2018  
Accepted date: 26 July 2018

Please cite this article as: Curtis V. Manning, Carver Bierson, Nathaniel E. Putzig, Christopher P. McKay, The Formation and Stability of Buried Polar CO<sub>2</sub> Deposits on Mars, *Icarus* (2018), doi: <https://doi.org/10.1016/j.icarus.2018.07.021>



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## HIGHLIGHTS

- The Clancy effect allows burial of CO<sub>2</sub> deposits to preserve them during higher obliquity phases.
- Further stabilization of buried CO<sub>2</sub> occurs at depth by close-off of pore space.
- The deepest CO<sub>2</sub> deposits approach the triple point temp. making basal melting possible.

Download English Version:

<https://daneshyari.com/en/article/9953761>

Download Persian Version:

<https://daneshyari.com/article/9953761>

[Daneshyari.com](https://daneshyari.com)