

# Accepted Manuscript

Inverted stream channels in the Western Desert of Egypt: synergistic remote, field observations and laboratory analysis on Earth with applications to Mars

Abdallah S. Zaki , Colin F. Pain , Kenneth S. Edgett , Robert Giegengack

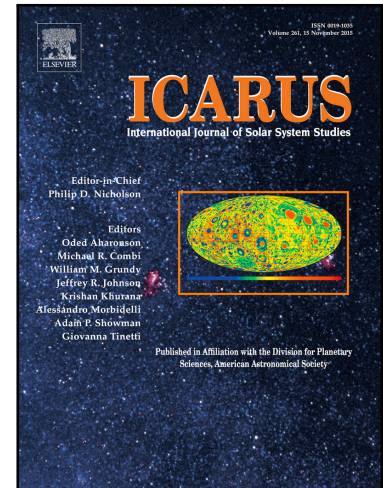
PII: S0019-1035(17)30112-4  
DOI: [10.1016/j.icarus.2018.03.001](https://doi.org/10.1016/j.icarus.2018.03.001)  
Reference: YICAR 12825

To appear in: *Icarus*

Received date: 7 February 2017  
Revised date: 26 February 2018  
Accepted date: 1 March 2018

Please cite this article as: Abdallah S. Zaki , Colin F. Pain , Kenneth S. Edgett , Robert Giegengack , Inverted stream channels in the Western Desert of Egypt: synergistic remote, field observations and laboratory analysis on Earth with applications to Mars, *Icarus* (2018), doi: [10.1016/j.icarus.2018.03.001](https://doi.org/10.1016/j.icarus.2018.03.001)

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**

- We use satellite images to identify seven sites at which inverted fluvial channels of various scales and generations occur in Egypt that previously were relatively unknown to the Earth and Mars sciences.
- Field access is presently limited; for the two sites we could visit, our geochemical and grain size analyses provide new data regarding sedimentology, mineralogy, and cement composition.
- We identify inverted channels that developed via sediment induration, surface armouring and a potential example of sediment lithification.
- The inverted channels in the Western Desert of Egypt record incision and inversion episodes that occurred during the last 0.1 to 94 Ma.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/8134052>

Download Persian Version:

<https://daneshyari.com/article/8134052>

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