

## *Icarus Journal—Mars Science Discoveries from Surface and Orbital Information*



*Icarus* publishes original work in the field of Solar System studies. The December 2016 issue (volume 280) contains eight papers on the exploration of Mars by researchers using the combined, multi-scale assets from rover instrument suites and orbital remote sensing instruments and imagers. The special section is called "MicroMars to MegaMars" and is edited by Nathan Bridges (Applied Physics Laboratory), Colin Dundas, and Lauren Edgar (both from U. S. Geological Survey, Flagstaff). Though a subscription, individual or institutional, is needed to access the articles online, the [Icarus Table of Contents and Abstracts](#) are available to everyone. Articles:

**"Comparing Orbiter and Rover Image-based Mapping of an Ancient Sedimentary Environment, Aeolis Palus, Gale crater, Mars"** by K.M. Stack, C.S. Edwards, J.P. Grotzinger, S. Gupta, D.Y. Sumner, F.J. Calef III, L.A. Edgar, K.S.

Edgett, A.A. Fraeman, S.R. Jacob, L. Le Deit, K.W. Lewis, M.S. Rice, D. Rubin, R.M.E. Williams, K.H. Williford, p. 3-21, doi: 10.1016/j.icarus.2016.02.024.

**"The Degradational History of Endeavour crater, Mars"** by J.A. Grant, T.J. Parker, L.S. Crumpler, S.A. Wilson, M.P. Golombek, D.W. Mittlefehldt, p. 22-36, doi: 10.1016/j.icarus.2015.08.019.

**"Observations of an Aeolian Landscape: From Surface to Orbit in Gale crater"** by M. Day and G. Kocurek, p. 37-71, doi: 10.1016/j.icarus.2015.09.042.

**"Characteristics of Pebble and Cobble-sized Clasts along the Curiosity Rover Traverse from sol 100 to 750: Terrain Types, Potential Sources, and Transport Mechanisms"** by R.A. Yingst, K. Cropper, S. Gupta, L.C. Kah, R.M.E. Williams, J. Blank, F. Calef III, V.E. Hamilton, K. Lewis, J. Shechet, M. McBride, N. Bridges, J. Martinez Frias, H. Newsom, p. 72-92, doi: 10.1016/j.icarus.2016.03.001.

**"Likely Frost Events at Gale crater: Analysis from MSL/REMS Measurements"** by G.M. Martínez, E. Fischer, N.O. Rennó, E. Sebastián, O. Kempainen, N. Bridges, C.S. Borlina, P.-Y. Meslin, M. Genzer, A.-H. Harri, A. Vicente-Retortillo, M. Ramos, M. de la Torre Juárez, F. Gómez, J. Gómez-Elvira, the REMS Team, p. 93-102, doi: 10.1016/j.icarus.2015.12.004.

**"The Meteorology of Gale crater as Determined from Rover Environmental Monitoring Station Observations and Numerical Modeling. Part I: Comparison of Model Simulations with Observations"** by J. Pla-García, S.C.R. Rafkin, M. Kahre, J. Gómez-Elvira, V.E. Hamilton, S. Navarro, J. Torres, M. Marín, A.R. Vasavada, p. 103-113, doi: 10.1016/j.icarus.2016.03.013.

**"The Meteorology of Gale crater as Determined from Rover Environmental Monitoring Station Observations and Numerical Modeling. Part II: Interpretation"** by S.C.R. Rafkin, J. Pla-García, M. Kahre, J. Gómez-Elvira, V.E. Hamilton, M. Marín, S. Navarro, J. Torres, A. Vasavada, p. 114-138, doi: 10.1016/j.icarus.2016.01.031.

**"Automated Localisation of Mars Rovers using Co-registered HiRISE-CTX-HRSC Orthorectified Images and Wide Baseline Navcam Orthorectified Mosaics"** by Y. Tao, J.-P. Muller, W. Poole, p. 139-157, doi: 10.1016/j.icarus.2016.06.017.

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