

Peer-reviewed Publications

- **Rubanenko, L.**, et al., Automatic Detection of Lightning from the International Space Station Using a Convolutional Neural Network (in prep.)
- **Rubanenko, L.**, Directional Emissivity of Rough Airless Surfaces in the Presence of Shadows (in prep.).
- **Rubanenko, L.**, Constraints on the Inventory of Ice in Micro Cold Traps on the Moon (in review).
- Williams, J.P. and **Rubanenko, L.**, 2024. Cold-trapped ices at the poles of Mercury and the Moon. In *Ices in the Solar-System* (pp. 1-29). Elsevier.
- Prieur, N.C., Amaro, B., Gonzalez, E., Kerner, H., Medvedev, S., **Rubanenko, L.**, Werner, S.C., Xiao, Z., Zastrozhnov, D. and Lapôtre, M.G., 2023. Automatic Characterization of Boulders on Planetary Surfaces From High-Resolution Satellite Images. *Journal of Geophysical Research: Planets*, 128(11).
- **Rubanenko, L.**, Gunn, A., Pérez-López, S., Fenton, L.K., Ewing, R.C., Soto, A. and Lapôtre, M.G.A., 2023. Global surface winds and Aeolian sediment pathways on Mars from the morphology of barchan dunes. *Geophysical Research Letters*, 50(18).
- **Rubanenko, L.**, Lapôtre, M.G., Ewing, R.C., Fenton, L.K. and Gunn, A., 2022. A distinct ripple-formation regime on Mars revealed by the morphometrics of barchan dunes. *Nature Communications*, 13.
- Gunn, A., **Rubanenko, L.** and Lapôtre, M.G.A., 2022. Accumulation of windblown sand in impact craters on Mars. *Geology*.
- Williams, J.P., Greenhagen, B.T., Bennett, K.A., Paige, D.A., Kumari, N., Ahrens, C.J., **Rubanenko, L.**, Powell, T.M., Prem, P., Blewett, D.T. and Russell, P.S., 2022. Temperatures of the Lacus Mortis region of the Moon. *Earth and Space Science*, 9(2).
- **Rubanenko, L.**, Perez-Lopez, S., Schull, J. and Lapotre, M. Automatic Detection and Segmentation of Barchan Dunes on Mars and Earth Using a Convolutional Neural Network. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* (2021).
- **Rubanenko, L.**, Powell, T.M, Williams, J.-P., Daubar, I., Edgett, K. S., Paige, D. A., Challenges in crater chronology on Mars as Reflected in Jezero crater, in Soare R. J. (ed.), Conway, S. J. (ed.), Oehler, D. (ed.), Williams, J.-P. (ed.) *Mars Geological Enigmas: From the Late Noachian Epoch to the Present Day*. Elsevier (2021).
- Powell, T.M, **Rubanenko, L.**, Williams, J.-P., Paige, D. A., The Role of Secondary Craters on Martian Crater Chronology, in Soare R. J. (ed.), Conway, S. J. (ed.), Oehler, D. (ed.), Williams, J.-P. (ed.) *Mars Geological Enigmas: From the Late Noachian Epoch to the Present Day*. Elsevier (2021).
- **Rubanenko, L.**, Schorghofer, N., Grennhagen, B. T., Paige, D.A., The Equilibrium Temperature Distribution and Emissivity of Sunlit Gaussian Surfaces with Applications to the Moon. *JGR:Planets* (2020).
- **Rubanenko, L.**, Venkatraman, J., Paige, D.A., Thick ice deposits in shallow simple craters on the Moon and Mercury, *Nature Geoscience* (2019).
- **Rubanenko, L.**, Mazarico, E., Neumann, G.A. and Paige, D.A., Ice in Micro Cold Traps on Mercury: Implications for Age and Origin. *JGR: Planets*, 123(8), (2018).
- **Rubanenko, L.**, & Aharonson, O., Stability of ice on the Moon with rough topography. *Icarus*, 296 (2017).
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- Yair, Y., **Rubanenko, L.**, Mezuman, K., Elhalel, G., Priente, M., Glickman-Pariente, M., Ziv, B., Takahashi, Y., and Inoue, T., New color images of transient luminous events from dedicated observations on the International Space Station. *Journal of Atmospheric and Solar-Terrestrial Physics*, 102, 140-147 (2013).