

CEPS Publications - FY2016

1. Banks, Maria E., Xiao, Zhiyong, Watters, Thomas R., Strom, Robert G., Braden, Sarah E., Chapman, Clark R., Solomon, Sean C., Klimczak, Christian, and Paul K. Byrne, 2015. Duration of Activity on Lobate-Scarp Thrust Faults on Mercury, *Journal of Geophysical Research (Planets)*, 120(11): 1751–1762, doi:10.1002/2015JE004828.
2. Banks, Maria E., Korteniemi, Jarmo, and Hargitai, Henrik 2015. Sinuous Ridge. In Hargitai, H. and Kereszturi, A. (Eds), *Encyclopedia of Planetary Landforms*, Springer Reference, pp. 1975-1980. ISBN 978-1-4614-3133-6.
3. Biswas, Ananya, Zimbelman, James R., and Hargitai, Henrik 2015. Zibar. In Hargitai, H. and Kereszturi, A. (Eds), *Encyclopedia of Planetary Landforms*, Springer Reference, pp. 2383-2386. ISBN 978-1-4614-3133-6.
4. Byrne, Paul K., Ostrach, Lillian R., Fassett, Caleb I., Chapman, Clark R., Denevi, Brett W., Evans, Alexander J., Klimczak, Christian, Banks, Maria E., Head, James W., Solomon, Sean C. 2016. Widespread Effusive Volcanism on Mercury likely ended by about 3.5 Ga. *Geophysical Research Letters*, 43(14): 7408-7416. doi:10.1002/2016GL069412.
5. Campbell, Bruce A. 2016. Planetary Geology with Imaging Radar: Insights from Earth-based Lunar Studies, 2001-2015. *The Astronomical Society of the Pacific*, 128(062001): 20 pp. doi:10.1088/1538-3873/128/964/062001.
6. Campbell, Bruce A. and Watters, Thomas R. 2016. Phase Compensation of MARSIS Subsurface Sounding Data and Estimation of Ionospheric Properties: New Insights From SHARAD Results. *Journal of Geophysical Research (Planets)*, 121(2): 180-193, doi:10.1002/2015JE004917.
7. Campbell, Bruce A. and Morgan, Gareth A. 2016. "Hand-building Radar Systems." *The National Air and Space Museum Stories*. <https://airandspace.si.edu/stories/editorial/hand-building-radar-systems>
8. Cartwright, Samuel F. A. 2016. "Exploring Colorado's Great Sand Dunes: A Towering Red Planet Analog." *The National Air and Space Museum Stories*. <https://airandspace.si.edu/stories/editorial/exploring-colorados-great-sand-dunes>
9. Craddock, Robert A. and Golombek, Matthew P. 2016. Characteristics of Terrestrial Basaltic Rock Populations: Implications for Mars Lander and Rover Science and Safety. *Icarus*, 274: 50-72, doi: 10.1016/j.icarus.2016.02.042.
10. Craddock, Robert A., Tooth, Stephen, Zimbelman, James R., Wilson, Sharon A., Maxwell, Ted A., and Kling, Corbin 2015. Temporal Observations of a Linear Sand Dune in the Simpson Desert, Central Australia: Testing Models for Dune Formation on Planetary Surfaces, *Journal of Geophysical Research (Planets)*, 120(10): 1736–1750, doi:10.1002/2015JE004892.
11. Dauber, I. J., Dundas, C. M., Byrne, S., Geissler, P., Bart, G., McEwen, A. S., Russell, Patrick S., Chojnacki, M., and Golombek, M. P. 2016. Changes in Blast Zone Albedo Patterns Around New Martian Impact Craters. *Icarus*, 267: 86-105, doi:10.1016/j.icarus.2015.11.032.
12. Fairén, Alberto G., Dohm, James M., Rodríguez, J. Alexis P., Uceda, Esther R., Kargel, Jeffrey, Soare, Richard, Cleaves, H. James, Oehler, Dorothy, Schulze-Makuch, Dirk, Essefi, Elhoucine, Banks, Maria E., Komatsu, Goro, Fink, Wolfgang, Robbins, Stuart, Yan, Jianguo, Miyamoto, Hideaki, Maruyama, Shigenori, and Baker, Victor R. 2016. The Argyre Region as a Prime Target for in situ Astrobiological Exploration of Mars. *Astrobiology*, 16(2): 143-158. doi:10.1089/ast.2015.1396.

13. Foroutan, M. and Zimbelman, James R. 2016. Mega-ripples in Iran: A New Analog for Traverse Aeolian Ridges on Mars. *Icarus*, 274: 99-105, doi:10.1016/j.icarus.2016.03.025.
14. Ghent, Rebecca R., Carter, Lynn M., Bandfield, J. L., Tai Udovici, C. J., and Campbell, B. A. 2016. Lunar Crater Ejecta: Physical Properties Revealed by Radar and Thermal Infrared Observations. *Icarus*, 273: 182-195. doi:10.16/j.icarus.2015.12.014.
15. Grotzinger, J. P., Gupta, S., Malin, M. C., Rubin, D. M., Schieber, J., Siebach, K., Sumner, D. Y., Stack, K. M., Vasavada, A. R., Arvidson, R. E., Calef III, F., Edgar, L., Fischer, W. F., Grant, J.A., Griffes, j., Kah, L. C., Lamb, M. P., Lewis, K. W., Mangold, N., Minitti, M. E., Palucis, M., Rica, M., Williams, R. M. E., Yingst, R. A., Blake, D., Blaney, D., Conrad, P., Crisp, J., Dietrich, W. E., Dromart, G., Edgett, K. S., Ewing, R. C., Gellert, R., Hurowitz, J. A., Kocurek, G., Mahaffy, P., McBride, M. J., McLennan, S. M., Mischna, M., Ming, D., Milliken, R., Newsom, H., Oehler, D., Parker, T. J., Vaniman, D., Wiens, R. C., and Wilson, S. A. 2015. Deposition, Exhumation, and Paleoclimate of an Ancient Lake Deposit, Gale Crater, Mars. *Science*, 350(6257), doi:10.1126/science.aac7575.
16. Hargitai, Henrik and Zimbelman, James R. 2015. Stealth Feature (Radar, Mars). In Hargitai, H. and Kereszturi, A. (Eds), *Encyclopedia of Planetary Landforms*, Springer Reference, pp. 2082-2084. ISBN 978-1-4614-3133-6.
17. Johnston, Andrew K. 2016. "Adjusting Our Atomic Clock for the Leap Second." *The National Air and Space Museum Stories*. <https://airandspace.si.edu/stories/editorial/adjusting-our-atomic-clock-leap-second>
18. Johnston, Andrew K. 2016. "A "Box of Time" in the Time and Navigation Exhibition." *The National Air and Space Museum Stories*. <https://airandspace.si.edu/stories/editorial/%E2%80%9Cbox-time%E2%80%9D-time-and-navigation-exhibition-0>
19. Kereszturi, Akos, Hargitai, Henrik, and Zimbelman, James R. 2015. Lava Flow. In Hargitai, H. and Kereszturi, A. (Eds), *Encyclopedia of Planetary Landforms*, Springer Reference, pp. 1171-1181. ISBN 978-1-4614-3133-6.
20. Korteniemi, Jarmo, Walsh, Lisa S., and Hughes, Scott S. 2015. Wrinkle Ridge. In Hargitai, H. and Kereszturi, A. (Eds), *Encyclopedia of Planetary Landforms*, Springer Reference, pp. 2356-2364. ISBN 978-1-4614-3133-6.
21. Lapotre, M. G. A., Ewing, R. C., Lamb, M. P. Fischer, W. W., Grotzinger, J. P., Rubin, D. M., Lewis, K. W., Ballard, M. J., Day, M., Gupta, S., Banham, S. G., Bridges, N. T., Des Marais, D. J., Fraeman, A. A., Grant, John A., Herkenhoff, K. E., Ming, D. W., Mischna, M. A., Sumner, D. A., Vasavada, A. R., Yingst, R. A. (2016), Large Wind Ripples on Mars: A Record of Atmospheric Evolution. *Science*, 353(6294): 55-58, doi: 10.1126/science.aaf3206.
22. Martin, Emily S. 2016. The Distribution and Characterization of Strike-Slip Faults on Enceladus. *Geophysical Research Letters*, 43(6): 2456–2464, doi:10.1002/2016GL067805.
23. Morgan, Gareth A., Campbell, Bruce A., Campbell, D. B., and Hawke, B. R. 2016. Investigating the Stratigraphy of Mare Imbrium Flow Emplacement with Earth-based Radar. *Journal of Geophysical Research (Planets)*, 121(8): 1498-1513. doi: 10.1002/2016JE005041.
24. Paton, M. D., Harri, A. M., Savijärvi, H., Mäkinen, T., Hagermann, A., Kempainen, O. and Johnston, Andrew K. 2016. Thermal and microstructural properties of fine-grained material at the Viking Lander 1 site. *Icarus*, 271: 360-374. doi:10.1016/j.icarus.2016.02.012.

25. Prissel, Tabb C., Whitten, Jennifer L., Parman, Stephen W., Head, James W. 2016. On the Potential for Lunar Highlands Mg-suite Extrusive Volcanism and Implications Concerning Crustal Evolution. *Icarus*, 277: 319-329.
26. Selvans, Michelle 2015. Faulted Band (Europa). In Hargitai, H. and Kereszturi, A. (Eds), *Encyclopedia of Planetary Landforms*, Springer Reference, pp. 761-763. ISBN 978-1-4614-3133-6.
27. Schroder, C., Bland, P. A., Golombek, M. P., Ashley, J. W., Warner, N. H., and Grant, John A. 2016. Amazonian Chemical Weathering Rate Derived from Stony Meteorite finds at Meridiani Planum on Mars. *Nature Communications*, 7(13459) doi:10.1038/ncomms13459.
28. Smith, David E., Zuber, Maria T., Neumann, Gregory A., Mazarico, Erwan, Lemoine, Frank G., Head III, James W., Lucey, Paul G., Aharonson, Oded, Robinson, Mark S., Sun, Xiaoli, Torrence, Mark H., Barker, Michael K., Oberst, Juergen, Duxbury, Thomas C., Mao, Dandan, Barnouin, Olivier S., Jha, Kopal, Rowlands, David D., Goossens, Sander, Baker, David, Bauer, Sven, Glaser, Philipp, Lemelin, Myriam, Rosenber, Margaret, Sori, Michael M., Whitten, Jennifer L., and McClanahan, Timothy 2017. Summary of the Results from the Lunar Orbiter Laser Altimeter after Seven Years in Lunar Orbit. *Icarus*, 283: 70-91. doi:10.1016/j.icarus.2016.06.006.
29. Stern, S. A., Bagenal, F., Ennico, K., Gladstone, G. R., Grundy, W. M., McKinnon, W. B., Moore, J. M., Olkin, C. B., Spencer, J. R., Weaver, H. A., Young, L. A., Andert, T., Andrews, J., Banks, M. E., Bauer, B., Bauman, J., Barnouin, O. S., Bedini, P., Beisser, K., Beyer, R. A., Bhaskaran, S., Binzel, R. P., Birath, E., Bird, M., Bogan, D. J., et al. 2015. The Pluto System: Initial Results from Its Exploration by New Horizons. *Science*, 350(6258), doi:10.1126/science.aad1815.
30. Strain, Priscilla L. 2016. "The Long Journey of our Lunar Touchrock." *The National Air and Space Museum Stories*. <https://airandspace.si.edu/stories/editorial/long-journey-our-lunar-touchrock>
31. Sturman, C. M., Osinski, G. R., Holt, J. W., Levy, J. S. Brothers, T. C., Kerrigan, M., and Campbell, Bruce A. 2016. SHARAD Detection and Characterization of Subsurface Water Ice Deposits in Utopia Planitia, Mars. *Geophysical Research Letters*, 43(18): 9484-9491. doi: 10.1002/2016GL070138.
32. Thompson, Thomas W., Campbell, Bruce A., and Bussey, D. Benjamin J. 2016. 50 Years of Arecibo Lunar Radar Mapping. *Radio Science Bulletin*, 357: 23-35.
33. Watters, Thomas R. 2016. "The Incredible, Still Shrinking Mercury." *The National Air and Space Museum Stories*. <https://airandspace.si.edu/stories/editorial/incredible-still-shrinking-mercury>
34. Whitten, Jennifer L. 2016. "Observing the Surface of Venus with the Arecibo Telescope." *The National Air and Space Museum Stories*. <https://airandspace.si.edu/stories/editorial/observing-surface-venus-arecibo-telescope>
35. Whitten, Jennifer L. and Campbell, Bruce A. 2016. Recent Volcanic Resurfacing of Venusian Craters. *Geology*, 44: 519-512, doi:10.1130/G37681.1.
36. Wilson, Sharon A. 2015. Aeolian Ripple. In Hargitai, H. and Kereszturi, A. (Eds), *Encyclopedia of Planetary Landforms*, Springer Reference, pp. 18-22. ISBN 978-1-4614-3133-6.
37. Wilson, Sharon A. 2015. Transverse Aeolian Ridge (TAR). In Hargitai, H. and Kereszturi, A. (Eds), *Encyclopedia of Planetary Landforms*, Springer Reference, pp. 2207-2215. ISBN 978-1-4614-3133-6.

38. Wilson, Sharon A., Howard, A. D., Moore, J. M., and Grant, John A. 2016. A Cold-Wet Middle-Latitude Environment on Mars During the Hesperian-Amazonian Transition: Evidence from Northern Arabia Valleys and Paleolakes, *Journal of Geophysical Research (Planets)*, 121(9); 1667–169., doi:10.1002/2016JE005052.
39. Zimbelman, James R., Scheidt, S. P., de Silva, S. L., Bridges, N. T., Spagnuolo, M. G., Neely, E. M. 2016. Aerodynamic Roughness Height for Gravel-mantled Megaripples, with Implications for Wind Profiles near TARs on Mars. *Icarus*, 266: 306-314.
40. Zimbelman, James R. and Johnson, Molly B. 2016. Surface Slope Effects for Ripple Orientation on Sand Dunes in López Crater, Terra Tyrrhena region of Mars. *Aeolian Research*, in press.