SHARON A. WILSON PURDY

Smithsonian Institution | National Air and Space Museum | Center for Earth and Planetary Studies
6th St. and Independence Ave., SW | MRC 315 | Washington, DC 20013-7012
(p) 202.633.2489 (f) 202.786.2566 (e) purdys@si.edu
Website | Google Scholar Profile | ResearchGate Profile

EDUCATION

Ph.D., University of Virginia, 2017, Department of Environmental Sciences (Geosciences)
Fluvial Landforms and the Post-Noachian Environment on Mars, 219 p.
Advisor: Professor Alan D. Howard

M.S., University of Virginia, 2006, Department of Environmental Sciences (Geosciences)
The geomorphic and stratigraphic analysis of layered deposits in Terby crater, Mars, 152 p.
Advisor: Professor Alan D. Howard

B.A., Middlebury College, 2001, *Magna cum laude*, Department of Geology
The geochemical analysis of Siluro-Devonian mafic dikes in the 15' Woodsville quadrangle, east-central Vermont, 112 p., Advisor: Professor Ray Coish

PROFESSIONAL EXPERIENCE

2005–present **Smithsonian Institution**, National Air and Space Museum, Washington, DC
Research, Image Targeting, and Processing Scientist

2006–2007 **George Washington University**, Geological Sciences, Washington, DC
Instructor: Environmental Geology Lab

2006 **NOVA Community College**, Math, Science & Engineering Div., Alexandria, VA
Instructor: Historical Geology Lecture and Lab

2003–2005 **University of Virginia**, Department of Environmental Sciences, Charlottesville, VA
Lab Teaching Assistant: Planetary Geology (2005), Physical Geology (2003-2004)

2001–2003 **Smithsonian Institution**, National Air and Space Museum, Washington, DC
Physical Sciences Technician

2001–2002 **Abt Associates, Inc**., Bethesda, MD
Research Assistant & Environmental Consultant

2001 **Smithsonian Institution**, National Museum of Natural History, Washington, DC
Research Training Program

NASA PLANETARY MISSION EXPERIENCE

2005–present Mars Reconnaissance Orbiter (MRO) High Resolution Imaging Science Experiment (HiRISE)

2012–present Mars Science Laboratory (MSL) Rover, Science Operations Working Group and Science Team

NASA RESEARCH GRANTS

2016–2019 Defining the Geologic History and Record of Potentially Habitable Environments in Gale Crater. John Grant, PI, Smithsonian Institution, NASA MSL PSP (Graduate Student)

2015–2018 Evolution and Environment of Martian Alluvial Fans. Alan Howard, PI, University of Virginia, Mars Data Analysis Program (Co-Investigator)

2013–2017	Geologic Mapping to Constrain the Sources and Timing of Fluvial Activity in Western Ladon Basin, Mars. Catherine Weitz, PI, PSI, Planetary Geology and Geophysics Program (Co-Investigator)
2013–2016	Fresh Shallow Valleys and the Post Noachian Fluvial and Climatic History of Mars. Jeffrey M. Moore, PI, NASA AMES Research Center, Mars Data Analysis Program (Co-Investigator)
2012–2015	Defining the Geologic Setting and Identifying Science Targets during the MSL Mission. John Grant, PI, Smithsonian Institution, NASA PSP (Graduate Student)
2011–2016	Geologic Mapping in Southern Margaritifer Terra to Determine the Timing and Origin of Valleys and Fans. John Grant, PI, Planetary Geology and Geophysics Program (Co-Investigator)

HONORS AND AWARDS

2017	University of Virginia Maury Prize (Highest Departmental Honor)
2017	NASA Group Achievement Award: *MSL Extended Mission-1 Science and Operations Team*
2015	NASA Group Achievement Award: *MSL Prime Mission Science Team*
2013	Lunar and Planetary Institute (LPI) Career Development Award
2011	NASA Group Achievement Award: *MRO HiRISE Science Team*
2005	University of Virginia Arthur A. Pegau Geology Award
2005	University of Virginia Governor's Fellowship
2001	Vermont Geological Society Charles Doll Award
2001	Middlebury College John M. White '52 Memorial Award
2000	Howard Hughes Medical Institute (HHMI) Grant
1997–2001	Middlebury College Dean's List or College Scholar

PROFESSIONAL SERVICE

2018	Geological Society of America, Planetary Geology Division, 1st Vice Chair
2018	Session Co-Chair, *Early Mars Surface Processes II: Alluvial Fans and Paleolakes*, 49th Lunar and Planetary Science Conference, The Woodlands, TX
2018	Session Organizer and Co-Chair: *Geomorphology and Landscape Evolution of Mars* and *The G.K. Gilbert Award Session*, Fall Meeting of the Geological Society of America, Indianapolis, IN
2017	Geological Society of America, Planetary Geology Division, 2nd Vice Chair
2017	Session Organizer and Co-Chair: *Geomorphology and Landscape Evolution of Mars: The G.K. Gilbert Award Session I and II* (T206), Fall Meeting of the Geological Society of America, Seattle, WA
2017	Lunar and Planetary Science Conference (LPSC) Program Committee
2017	Lunar and Planetary Science Conference (LPSC) Dwornik Award Coordinator
2016	Geological Society of America, Planetary Geology Division, Secretary/Treasurer
2013	Hosted the *Annual Planetary Geologic Mappers Meeting*, Air and Space Museum
2008–present	NASA Review Panels: Mars Data Analysis Program (MDAP), Planetary Data Archiving, Restoration, and Tools (PDART)
2007–present	Journal reviews: *Journal of Geophysical Research (Planets), Geophysical Research Letters, Icarus, Earth and Planetary Science Letters, Planetary and Space Science, Springer,* U.S. Geological Survey planetary mapping
2006–2008	Co-Proposed Terby crater as a landing site for the Mars Science Laboratory rover

INVITED TALKS

2016 NASA Ames Research Center, Planetary Systems Branch, *A Cold-Wet Mid-Latitude Environment on Mars during the Hesperian Amazonian Transition: Evidence from Northern Arabia Valleys and Paleolakes*, Mountain View, CA

2014 Smithsonian Institution's National Air and Space Museum, Smithsonian's Stars Lecture Series, *River Deposits on Mars*, Washington, DC

WORKSHOPS AND FIELD STUDIES

2009 CRISM Workshop, Houston, TX
2008 Smithsonian Institution Second Workshop on Mars Valley Networks, Moab, UT
2006 NASA Planetary Space Summer School, Mars rover mission, JPL, Pasadena, CA
2005 Planetary Geology and Geophysics Volcanology Field Workshop, Kilauea, HI
2005 THEMIS Workshop, Arizona State University
2000 Geology Field Mapping Course, University of Otago, Dunedin, New Zealand
1998 Geology Field Mapping Course, Middlebury College, Death Valley/Mojave Desert

Australia (Simpson Desert): fluvial and aeolian processes, Mars analogue studies
Island of Hawaii (Ka'u Desert): fluvial and aeolian processes, Mars analogue studies

MEDIA AND PUBLIC OUTREACH

Camera interviews: PBS SciTech Now (2016); *Fairfax County Public School* (2014); *Smithsonian Channel Interview with an Expert*: Women in Science (2011); *Alabama Public TV* (2011)

Print/Media/Website: NASA-JPL Press Release: *Some Ancient Mars Lakes Came Long After Others* (2016); EOS Earth & Space Science News Research Spotlight*: Mars's Climate May Have Been Wet Much Later Than Thought* (2016); *The Guardian* (2015); *Eos.org* (2015); HiRISE Team: 4Q&A (2015); *Smithsonian Women in Science Wednesdays* (2015); National Geographic *Mars up Close: Inside the Curiosity Mission* (2014); *Smithsonian Science Research News* (2012); *Smithsonian Sun/Earth Day Tweet-Up* (2011); *University of Virginia President's Annual Report* (2007)

Radio: *National Public Radio* (2010)

Public Lectures: *University of Virginia*: Fluvial landforms on Mars: Insight into the "late" climate history of the red planet (2017); *Walter Reed Senior Center*: Results from the Mars Science Laboratory Mission (2013)

School & Student Presentations: Interview with student at elementary school in Dairen, Wisconsin (2016); Microsoft student interview (2015), TV Video conferences about rovers on Mars with Ohio public school (2014), GW student interview (2014)

Museum Outreach: Smithsonian Mars (or Moon) Day! (2005–present); Smithsonian Geography Week (2005–present); Smithsonian Folklife Festival mediator for 'Rocket Scientists' and 'Why We Explore,' (2008)

PROFESSIONAL SOCIETIES

2003–present Member of the American Geophysical Union
2004–present Member of the Geological Society of America

PUBLICATIONS (Peer-Reviewed Journal Articles and Book Chapters)

29. **Wilson, S. A.** and J. A. Grant (2018), Geologic map of MTM 20037, -25037, -30037 and -30032 quadrangles, northwestern Noachis Terra region of Mars, *U.S. Geol. Surv. Sci. Inv. Map*, scale 1:1,000,000, *in preparation*.
28. Grant, J. A., M. P. Golombek, **S. A. Wilson**, K. A. Farley, K. H. Williford, A. Chen (2018), The science process for selecting the landing site for the 2020 Mars rover, *Planetary Space Science, in review.*
27. **Wilson, S. A.**, J. A. Grant, A. D. Howard and D. L. Buczkowski (2018), The nature and distribution of deposits in Uzboi Vallis on Mars, *J. Geophys. Res., in revision*.
26. Kite, E. S., J. Sneed, D. P. Mayer and **S. A. Wilson** (2017), Persistent or repeated surface habitability on Mars during the Late Hesperian–Amazonian, *Geophys. Res. Lett.*, 44, doi:10.1002/2017GL072660.
25. Grant, J. A. and **S. A. Wilson** (2017), The nature and emplacement of distal aqueous-rich ejecta deposits from Hale crater, Mars, *Meteoritics & Planetary Science*, DOI: 10.1111/maps.12843.
24. **Wilson, S. A.**, A. D. Howard, J. M. Moore and J. A. Grant (2016), A cold-wet mid-latitude environment on Mars during the Hesperian-Amazonian transition: Evidence from northern Arabia valleys and paleolakes, *J. Geophys. Res. Planets*, *121*, 1667–1694, doi:10.1002/2016JE005052.
23. Grotzinger, J. P., S. Gupta, M. C. Malin, D. M. Rubin, J. Schieber, K. Siebach, D. Y. Sumner, K. M. Stack, A. R. Vasavada, R. E. Arvidson, F. Calef III, L. Edgar, W. F. Fischer, J. A. Grant, J. Griffes, L. C. Kah, M. P. Lamb, K. W. Lewis, N. Mangold, M. E. Minitti, M. Palucis, M. Rice, R. M. E. Williams, R. A. Yingst, D. Blake, D. Blaney, P. Conrad, J. Crisp, W. E. Dietrich, G. Dromart, K. S. Edgett, R. C. Ewing, R. Gellert, J. A. Hurowitz, G. Kocurek, P. Mahaffy, M. J. McBride, S. M. McLennan, M. Mischna, D. Ming, R. Milliken, H. Newsom, D. Oehler, T. J. Parker, D. Vaniman, R. C. Wiens, **S. A. Wilson** (2015), Deposition, exhumation, and paleoclimate of an ancient lake deposit, Gale Crater, Mars, *Science*, *350*, 6257, DOI: 10.1126/science.aac7575.
22. Grant, J. A., T. J. Parker, L. S. Crumpler, **S. A. Wilson**, M. P. Golombek and D. W. Mittlefehldt (2015), The degradational history of Endeavour crater, Mars, *Icarus*, *doi:10.1016/j.icarus.2015.08.019.*
21. Craddock R. A., S. Tooth, J. R. Zimbelman, **S. A. Wilson**, T. A. Maxwell and C. Kling (2015), Temporal observations of a linear dune located in the Simpson Desert, Central Australia, *J. Geophys. Res*, DOI: 10.1002/2015JE004892.
20. **Wilson**, **S. A.** (2015), Transverse aeolian ridge (TAR), in *Encyclopedia of Planetary Landforms*, Akos Kereszturi and Henrik Hargitai, Eds., Springer, 2370 pp.
19. **Wilson, S. A.** (2015), Aeolian Ripple, in *Encyclopedia of Planetary Landforms*, Akos Kereszturi and Henrik Hargitai, Eds., Springer, 2370 pp.
18. Grotzinger, J. P., D. Y. Sumner, L. C. Kah, K. Stack, S. Gupta, L. Edgar, D. Rubin, K. Lewis, J. Schieber, N. Mangold, R. Milliken, P. G. Conrad, D. Des Marais, J. Farmer, K. Siebach, F. Calef, III, J. Hurowitz, S. M. McLennan, D. Ming., D. Vaniman, J. Crisp, A. Vasavada, K. S. Edgett, M. Malin, D. Blake, R. Gellert, P. Mahaffy, R. C. Wiens, S. Maurice, J. A. Grant, **S. Wilson**, R. C. Anderson, L. Beegle, R. Arvidson, B. Hallet, R. S. Sletten, M. Rice, J. Bell, III, Griffes, J., Ehlmann, B., Anderson, R. B., Bristow, T. F., Dietrich, W. E., Dromart, G., J. Eignebrode, A. Fraeman, C. Hardgrove, K. Kerkenhoff, L. Jandura, G. Kocurek, S. Lee, L. A. Leshin, R. Leveille, D. Limonadi, J. Maki, S. McCloskey, M. Meyer, M. Minitti, H. Newsom, D. Oehler, A. Okon, M. Palucis, T. Parker, S. Rowland, M. Schmidt, S. Squyres,

A. Steele, E. Stolper, R. Summons, A. Treiman, R. Williams, A. Yingst, and MSL Science Team (2014), A habitable fluvio-lacustrine environment at Yellowknife Bay, Gale crater, Mars: *Science*, 342, doi:10.1126/science.1242777.

17. Grant, J. A. and **S. A. Wilson**, N. Mangold, Fred Calef III and J. P. Grotzinger (2014), The timing of alluvial activity in Gale crater, Mars, *Geophys. Res. Lett*., *41*, 1142-1149.
16. Grant, J. A. and **S. A. Wilson** (2014), Understanding the Red Planet: Conditions right for life on Mars? *International Innovation*, 144, 51-53, ISSN 2054-6254.
15. Morgan, A., A. D. Howard, D. E. J. Hobley, J. M. Moore, W. E. Dietrich, R. M. E. Williams, D. M. Burr, J. A. Grant, **S. A. Wilson** and Y. Matsubara (2014), Sedimentology and climatic environment of alluvial fans in a Martian Seheki crater and a comparison with terrestrial fans in the Atacama Desert, *Icarus*, 229, 131-156.
14. Grant, J. A. and **S. A. Wilson** (2012), A possible synoptic source of water for alluvial fan formation in southern Margaritifer Terra, Mars, *Planetary Space Sci*., 72, 44-52.
13. Grant, J. A. and **S. A. Wilson** (2011), Late alluvial fan formation in southern Margaritifer Terra, Mars, *Geophys. Res*. *Lett.*, *38*, doi: 10.1029/2011GL046844.
12. Grant, J. A., M. P. Golombek, J. Grotzinger, **S. A. Wilson**, M. M. Watkins, A. R. Vasavada, J. L. Griffes and T. J. Parker (2011), The science process for selecting the landing site for the 2011 Mars Science Laboratory, *Planetary Space Science*, 59, 11-12, http://dx.doi.org/10.1016/ j.pss.2010.06.016.
11. Grant, J. A., R. P. Irwin, **S. A. Wilson**, D. Buczkowski and K. Siebach (2011), A lake in Uzboi Vallis and implications for Late Noachian-Early Hesperian climate on Mars, *Icarus*, 110-122, doi:10.1016/j.icarus.2010.11.024.
10. **Wilson, S. A.**, J. M. Moore, A. D. Howard and D. E. Wilhelms (2010), Evidence for ancient lakes in the Hellas region, in *Lakes on Mars*, Eds. N. Cabrol and E. Grin, pp. 195-223, Elsevier, Oxford, UK.
9. Grant, J. A., R. P. Irwin, III and **S. A. Wilson** (2010), Aqueous depositional settings in Holden crater, Mars, *Lakes on Mars*, Eds. N. Cabrol and E. Grin, pp. 323-346, Elsevier, Oxford, UK.
8. Grant, J. A., **S. A. Wilson**, E. Noe Dobrea, R. L. Fergason, J. L. Griffes, J. M. Moore and A. D. Howard (2010), HiRISE views an enigmatic deposit in the Sirenum Fossae region of Mars, *Icarus*, 205 (1), 53-63, doi: 10.1016/j.icarus.2009.04.009.
7. Grant, J. A., **S. A. Wilson**, C. M. Fortezzo, and D. A. Clark (2009), Geologic map of MTM -20012 and -25012 quadrangles, Margaritifer Terra region of Mars, *U. S. Geol. Sur*., Scientific Investigations Map 3041, scale 1:1,000,000.
6. Grant, J. A., **S. A. Wilson**, B. A. Cohen, M. P. Golombek, P. E. Geissler, R. J. Sullivan, R. L. Kirk and T. J. Parker (2008), Degradation of Victoria crater, Mars, *J. Geophys. Res*., 113, E11010, doi:10.1029/2008JE003155.
5. **Wilson, S. A.**, A. D. Howard, J. M. Moore, and J. A. Grant (2007), Geomorphic and stratigraphic analysis of Crater Terby and layered deposits north of Hellas basin, Mars, *J. Geophys. Res.*, *112*, E08009, doi:10.1029/2006JE002830.
4. Rankin, D. W., R. A. Coish, R. D. Tucker, Z. X. Peng, **S. A. Wilson** and A. Rouff (2007), Silurian extension in the upper Connecticut Valley, United States and the origin of Middle Paleozoic basins in the Québec Embayment, *American Journal of Science, 307*, 216-264.
3. Grant, J. A., **S. A. Wilson**, S. W. Ruff, M. P. Golombek and D. L. Koestler (2006), Distribution of rocks on the Gusev Plains and on Husband Hill, Mars, *Geophys. Res. Lett*., 33, L16202, doi:10.1029/2006GL026964.

2. **Wilson, S. A.** and J. R. Zimbelman (2004), Latitude-dependent nature and physical characteristics of transverse aeolian ridges on Mars, *J. Geophys. Res*., 109, E10003, doi:10.1029/2004JE002247.

1. Vicenzi, E. P., M. R. Fisk, A. Treiman and **S. Wilson** (2002), Comparison of clay minerals produced during low-temperature alteration of mafic rocks from Earth and Mars. Supplement to *Meteoritics & Planetary Science*, *37*, 7, p A144.

CONFERENCES and MEETINGS

72. **Wilson, S. A**., A. D. Howard and J. A. Grant (2018), Alluvial Fans in Roddy Crater on Mars, *49th Lunar and Planetary Science Conference*, The Woodlands, TX, Abstract 2649, talk.

71. Grant, J. A. and **S. A. Wilson** (2018), Possible Geomorphic and Crater Density Evidence for Late Aqueous Activity in Gale Crater, *49th Lunar and Planetary Science Conference*, The Woodlands, TX, Abstract 2102, talk.

70. Morgan, A. M., **S. A. Wilson**, A. D. Howard, R. A. Craddock and J. A. Grant (2018), Global Distribution of Alluvial Fans and Deltas on Mars, *49th Lunar and Planetary Science Conference*, The Woodlands, TX, Abstract 2219, talk.

69. Hughes, M. N., R. E. Arvidson, J. A. Grant, **S. A. Wilson** and A. D. Howard (2018), Degradation of Endeavour Crater Based on Orbital and Rover-Based Observations together with Landscape Evolution Modeling, *49th Lunar and Planetary Science Conference*, The Woodlands, TX, Abstract 1563, talk.

68. **Wilson, S. A.**, A. D. Howard and J. A. Grant (2017), Geologic mapping and stratigraphic analysis of alluvial fans in Roddy crater on Mars, *Geol. Soc. Of America*, Seattle, WA, October 22-25, Abstract 319-7, talk.

67. Grant, J. A. and **S. A. Wilson** (2017), Impact craters as a tool for measuring the amount and processes of degradation on Mars, *Geol. Soc. Of America*, Seattle, WA, October 22-25, Abstract 244-1, talk.

66. **Wilson, S. A**., J. A. Grant and D. L. Buczkowski (2017), Geologic mapping in Southern Margaritifer Terra and the evolution of Nirgal Vallis on Mars, *Annual Planetary Geologic Mappers Meeting*, Flagstaff, AZ, talk and poster.

65. Weitz, C. M., **S. A. Wilson**, R. P. Irwin III and J. A. Grant (2017), Geologic mapping to constrain the sources and timing of fluvial activity in western Ladon basin, Mars, *Annual Planetary Geologic Mappers Meeting*, Flagstaff, AZ, talk and poster.

64. **Wilson, S. A.**, J. A. Grant and D. L. Buczkowski (2017), The evolution of Nirgal Vallis, Mars, *48th Lunar and Planetary Science Conference*, Houston, TX, Abstract 2663, poster.

63. Hughes, M. N., R. E. Arvidson, J. A. Grant and **S. A. Wilson** (2017), Additional evidence of early fluvial dissection of endeavor crater's rim, *48th Lunar and Planetary Science Conference*, Houston, TX, Abstract 1483, poster.

62. Kite, E. S., J. Sneed, D. P. Mayer, **S. Wilson** (2017), Mars alluvial fan formation during the Amazonian and late Hesperian spanned >10 Myr, *48th Lunar and Planetary Science Conference*, Houston, TX, Abstract 2699.

61. Grant, J. A. and **S. A. Wilson** (2016), Distal Aqueous-Rich Ejecta Deposits from Hale Crater, Mars, *AGU Fall Meeting*, 12-16 December, San Francisco, CA, Abstract P21C-2129.

60. Kite, E. S., C. Goldblatt, P. Gao, D. P. Mayer, J. Sneed and **S. A. Wilson** (2016), A Narrowing Target for Early Mars Climate Models: Which Models Survive Confrontation with Improved Hydrology Constraints?, *AGU Fall Meeting*, 12-16 December, San Francisco, CA, Abstract P23E-07.

59. **Wilson, S. A.** (2016), Fresh shallow valleys and the post-Noachian fluvial climate history of Mars, *MRO PSG #38*, 4 November, Caltech, Pasadena, CA, talk.
58. **Wilson, S. A.** and J. A. Grant (2016), Evidence for Late Hesperian fluvial activity in Nirgal Vallis on Mars, *Geol. Soc. of America Abstracts with Programs,* Denver, CO, 24-28 September, Abstract 283852.
57. Weitz, C. M., **S. A. Wilson**, J. A. Grant and R. P. Iwrin III (2016), Geologic mapping to constrain the sources and timing of fluvial activity in western Ladon basin, Mars, *Geol. Soc. of America Abstracts with Programs,* Denver, CO, 24-28 September, Abstract 279478.
56. **Wilson, S. A**. and J. A. Grant (2016), The timing of fluvial activity in Nirgal Vallis on Mars, *HiRISE Team meeting*, 11-13 July, Flagstaff, AZ, talk.
55. Weitz, C. M., **S. A. Wilson**, R. P. Irwin III and J. A. Grant (2016), Geologic mapping to constrain the sources and timing of fluvial activity in western Ladon basin, Mars, *Annual Planetary Geologic Mappers Meeting*, Flagstaff, AZ, Abstract 7025.
54. **Wilson, S. A.** and J. A. Grant (2016), Geologic Mapping in Southern Margaritifer Terra on Mars: Constraining the Timing of Fluvial Activity in Nirgal Vallis, *Annual Planetary Geologic Mappers Meeting*, Flagstaff, AZ, Abstract 7034, talk and poster.
53. **Wilson, S. A.** and J. A. Grant (2016), Geologic mapping in Margaritifer Terra on Mars and a closer look at the confluence of Nirgal and Uzboi Valles, *47th Lunar and Planetary Science Conference*, Houston, TX, Abstract 2505, poster.
52. Grant, J. A. and **S. A. Wilson** (2016), The nature and extent of aqueous deposits related to the Hale impact crater on Mars, *47th Lunar and Planetary Science Conference*, Houston, TX, Abstract 2530.
51. **Wilson, S. A**., A. D. Howard, J. M. Moore and J. A. Grant (2016), A Cold-Wet Mid-Latitude Environment during the Hesperian Amazonian Transition: Evidence from Northern Arabia Channels and Lakes, *HiRISE Team meeting*, 13-16 February, Desert Studies Center, Zzyzzx, CA, talk.
50. **Wilson, S. A.**, et al., (2015), Fresh Shallow Valleys in Northern Arabia Terra: Evidence for a Late, Widespread Period of Aqueous Activity on Mars, *Fall AGU*, San Francisco, CA, 14-18 December, Abstract 74047, poster.
49. Grant, J. A., T. Parker, L. S. Crumpler, **S. Wilson**, M. P. Golombek, D. W. Mittlefehldt and B. Jolliff (2015), The degradational history of Endeavour crater, Mars, *GSA Annual meeting*, Baltimore, MD, 1-4 November, Abstract 265977.
48. **Wilson, S. A**., J. A. Grant, D. L. Buczkowski and C. M. Weitz (2015), Geologic mapping in southern Margaritifer Terra on Mars: Constraining the timing and origin of fluvial activity, *Planetary Geology Mappers Meeting*, 22-24 June, Honolulu, HI, talk and poster.
47. Weitz, C. M., **S. A. Wilson**, R. P. Irwin and J. A. Grant (2015), Geologic mapping to constrain the sources and timing of fluvial activity in western Ladon Basin, Mars, *Planetary Geology Mappers Meeting*, 22-24 June, Honolulu, HI.
46. Grant, J. A. and **S. A. Wilson** (2015), Aqueous deposits related to formation of Hale crater in southern Margaritifer Terra, Mars, *46th Lunar and Planetary Science Conference*, Houston, TX, Abstract 2538, poster.
45. **Wilson, S. A**., J. A. Grant, D. L. Buczkowski and C. M. Weitz (2015), Geologic mapping and the gradational history of southern Margaritifer Terra on Mars, *46th Lunar and Planetary Science Conference*, Houston, TX, Abstract 2492, poster.
44. Grant, J. A., L. S. Crumpler, T. J. Parker, M. P. Golombek, **S. A. Wilson** and D. W. Mittlefehldt (2015), Degradation of Endeavour Crater, Mars, *46th Lunar and Planetary Science Conference*, Houston, TX, Abstract 2017, poster.

43. **Wilson, S. A.**, A. D. Howard, J. M. Moore and J. A. Grant (2015), Fresh Shallow Valleys in Northern Arabia Terra, Mars: Implications for the Post-Noachian Climate, *American Geophysical Union Spring Joint Assembly Meeting*, Montreal, Canada, 3-7 May, Abstract 34304, talk.
42. **Wilson, S.A.**, and J. A. Grant (2014), Alluvial fans on Mars, *HiRISE Team meeting*, February 25-26, Tucson, AZ, talk.
41. **Wilson, S. A.**, A. D. Howard and J. M. Moore (2014), Fresh Shallow Valleys (FSVs) in Northern Arabia Terra, Mars, *American Geophysical Union Fall Meeting*, San Francisco, CA, 15-19 December, Abstract P33A-4026, talk.
40. Grant, J. A., **S. A. Wilson**, N. Mangold, F. Calef, J. P. Grotzinger (2014), The timing of alluvial activity in Gale crater, Mars, *45th Lunar and Planetary Science Conference*, Houston, TX, Abstract 1487, poster.
39. **Wilson, S. A.**, J. A. Grant, C. M. Weitz, R. P. Irwin (2014), Geologic Mapping of Vinogradov Crater on Mars: Ancient Phyllosilicates to Alluvial Fans, *45th Lunar and Planetary Science Conference*, Houston, TX, Abstract 2382, poster.
38. **Wilson, S.A.**, and J. A. Grant (2014), Geologic mapping in MTM quadrangles -20037, -25037, -30037, -30032 in southern Margaritifer Terra, Mars, *Planetary Geology Mappers Meeting*, 23-25 June, Flagstaff, AZ, talk and poster.
37. Grant, J. A., **S. A. Wilson** and F. Calef and the MSL Science Team (2013), The relative timing of alluvial activity in Gale crater, Mars, *Geol. Soc. of America Abstracts with Programs*, Denver, CO, 45 (7), p.37, Paper No. 6-2, 27-30 October, talk by J. Grant.
36. Howard, A. D., A. M. Morgan, D. E. J. Hobley, J. M. Moore, W. E. Dietrich, R. M. E. Williams, D. M Burr, J. Grant, **S. A. Wilson** and Y. Matsubara (2013), Sedimentology and climatic environment of alluvial fans in the Martian Saheki crater and a comparison with terrestrial fans in the Atacama Desert, *Geol. Soc. of America Abstracts with Programs*, 45 (7), p.639, October 27-30.
35. Weitz, C. M., J. A. Grant, R. P. Irwin, **S. A. Wilson** (2013), Clay-bearing Fluvial Deposits in Western Ladon Basin, Mars, *American Geophysical Union Fall Meeting*, San Francisco, CA, 15-19 December, Abstract P23F-1839.
34. **Wilson, S. A.,** and J. A. Grant (2012), Mapping in Margaritifer Terra, Mars, *Planetary Geology Mappers Abstracts*, 20-23 June, Flagstaff, AZ, talk.
33. **Wilson, S. A.**, J. A. Grant and A. D. Howard (2012), Distribution of Intracrater Alluvial Fans and Deltaic Deposits in the Southern Highlands of Mars, *43rd Lunar and Planetary Science Conference*, Houston, TX, Abstract 2062, poster.
32. Grant, J. A. and **S. A. Wilson** (2012), A Synoptic Source of Water for Late Alluvial Fan Activity in Southern Margaritifer Terra, Mars?, *43rd Lunar and Planetary Science Conference*, Abstract 2064, Houston, TX, talk
31. Howard, A. D., R. P. Irwin III, J. M. Moore, R. A. Craddock, Y. Matsubara, **S. Purdy** and D. E. J. Hobley (2012), Implications of fluvio-lacustrine landforms to the climate evolution of Mars, *Comparative Climatology of Terrestrial Planets*, 25-28 June, Boulder, Colorado.
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