

## Edwin Kite

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U.S. permanent resident, U.K. citizen.

### Appointments:

**University of Chicago: January 2015 –**  
Assistant Professor.

**Princeton University: January 2014 – December 2014**  
Harry Hess Prize Fellow. Joint postdoc, Astrophysics and Geoscience departments.

**California Institute of Technology: January 2012 – January 2014**  
O.K. Earl Prize Fellow, Division of Geological & Planetary Sciences

### Education:

*M.Sci & B.A.*     **Cambridge University: June 2007**  
M.Sci Natural Sciences Tripos (Geological Sciences). First Class.  
B.A. Natural Sciences Tripos (Geological Sciences). First Class.

*Ph.D.*     **University of California, Berkeley: December 2011**  
Berkeley Fellowship.

### Awards and Distinctions:

National Academy of Sciences - Committee on Astrobiology and Planetary Science 2017-  
American Geophysical Union - Greeley Early Career Award in Planetary Science 2016.  
National Academy of Sciences - CAS Forum for New Leaders in Space Science 2015-2016.  
Princeton University Astrophysics/Geoscience Fellowship 2014.  
Caltech O.K. Earl Postdoctoral Fellowship 2012-2013 (Division-wide prize fellowship).  
AAAS Newcomb Cleveland Prize 2009 (most outstanding *Science* paper; shared).  
Berkeley Fellowship 2007-2009.  
Harkness Prize (first-placed geologist, Cambridge University).  
High-school leaving examination results (A-levels) among the top five in England.

### Papers

— = *mentee*

34. Spencer, J., Nimmo, F., Ingersoll, A., Hurford, T.A., **Kite, E.S.**, Rhoden, A., Schmidt, J., & Howett, C.J.A., “Plume origins and plumbing (ocean to surface),” accepted for publication in: Schenk, P., et al., eds., *Enceladus and the Icy Moons of Saturn*, University of Arizona Press.
33. **Kite, E.S.**, Mischna, M., Gao, P., & Yung, Y., “Mars climate optimum initiated by atmospheric collapse,” in review.
32. **Kite, E.S.**, Gao, P., Goldblatt, C., Mischna, M., Mayer, D.P., & Yung, Y., “Duration and rapid shutdown of post-Noachian lake-forming climates on Mars explained by methane bursts,” *Nature Geoscience*, accepted & in press.
31. Mansfield, M., **Kite, E.S.**, & Mischna, M., “Effect of Mars atmospheric loss on snow melt potential in a 3.5-Gyr climate evolution model,” in review.
30. Holo, S., **Kite, E.S.**, & Robbins, S.J., “Mars obliquity history constrained by elliptic crater orientations,” submitted.
29. Gabasova, L., & **Kite, E.S.**, “Compaction and sedimentary basin analysis on Mars,” minor revisions requested.
28. **Kite, E.S.**, Sneed, J., Mayer, D.P., & Wilson, S.A., 2017, “Persistent or repeated surface habitability on Mars during the Late Hesperian - Amazonian,” *Geophysical Research Letters*, doi:10.1002/2017GL072660.
27. **Kite, E.S.**, & Rubin, A., 2016, “Sustained eruptions on Enceladus explained by turbulent dissipation in tiger stripes,” *Proceedings of the National Academy of Sciences*, doi:10.1073/pnas.1520507113.

26. Melwani Daswani, M., & **Kite, E.S.**, 2017, "Paleohydrology on Mars constrained by mass balance and mineralogy of pre-Amazonian sodium chloride lakes: Deep groundwater not required", *Journal of Geophysical Research – Planets*, doi:10.1002/2017JE005319.
25. **Kite, E.S.**, Sneed, J., Mayer, D.P., Lewis, K.W., Michaels, T.I., Hore, A., & Rafkin, S.C.R., 2016, "Evolution of major sedimentary mounds on Mars," *Journal of Geophysical Research - Planets*, doi:10.1002/2016JE005135.
24. **Kite, E.S.**, & Mayer, D.P., 2017, "Mars sedimentary rock erosion rates constrained using crater counts, with applications to organic-matter preservation and to the global dust cycle," *Icarus*, doi:10.1016/j.icarus.2016.10.010.
23. **Kite, E.S.**, Fegley, B., Schaefer, L., & Gaidos, E., 2016, "Atmosphere-interior exchange on hot rocky exoplanets," *Astrophysical Journal*, 828, 80, 20 pp, doi:10.3847/0004-637X/828/2/80
22. Richter, F., Chaussidon, M., Mendybaev, R., & **Kite, E.S.**, 2016, "Reassessing the cooling rate and geologic setting of Martian nakhlite meteorites, with special emphasis on MIL 03346 and NWA 817," *Geochimica et Cosmochimica Acta*, 182, 1-23, doi:10.1016/j.gca.2016.02.020.
21. **Kite, E.S.**, Howard, A., & Lucas, A., 2015, "Resolving the era of river-forming climates on Mars using stratigraphic logs of river-deposit dimensions," *Earth & Planetary Science Letters*, 420, 55-65.
20. **Kite, E.S.**, Howard, A., Lucas, A., Armstrong, J.C., Aharonson, O., & Lamb, M.P., 2015, "Stratigraphy of Aeolis Dorsa, Mars: stratigraphic context of the great river deposits," *Icarus*, 253, 223-242.
19. Borlina, C., Ehlmann, B.L., & **Kite, E.S.**, 2015, "Modeling the thermal and physical evolution of Mount Sharp's sedimentary rocks, Gale Crater, Mars," *Journal of Geophysical Research – Planets*, doi:10.1002/2015JE004799.
18. **Kite, E.S.**, Williams, J.-P., Lucas, A., & Aharonson, O., 2014, "Low palaeopressure of the Martian atmosphere estimated from the size distribution of ancient craters," *Nature Geoscience*, 7, 335-339.
17. **Kite, E.S.**, Lewis, K.W., Lamb, M.P., Newman, C.E., & Richardson, M.I., 2013, "Growth and form of the mound in Gale Crater, Mars: Slope-wind enhanced erosion and transport," *Geology*, 41, 543-546, doi:10.1130/G3309.1 (Science "Highlight of the Meeting": Science, 338, 1522).
16. **Kite, E.S.**, Halevy, I., Kahre, M.A., Manga, M., & Wolff, M., 2013, "Seasonal melting and the formation of sedimentary rocks on Mars," *Icarus*, 223, 181-210, doi:10.1016/j.icarus.2012.11.034
15. **Kite, E.S.**, Lucas, A., & C.I. Fassett, 2013, "Pacing Early Mars river activity," *Icarus*, 225, 850-855.
14. Šrámek, O., McDonough, W., **Kite, E.S.**, Lekić, V., Zhong, S.T., & Dye, W.F., 2013, "Geophysical and geochemical constraints on geoneutrino fluxes from Earth's mantle," *Earth & Planetary Science Letters*, doi:10.1016/j.epsl.2012.11.001. (Nature Geoscience "Research Highlight": Nature Geoscience, 4, 580).
13. Manga, M., Patel, A., Dufek, J., & **Kite, E.S.**, 2012. "Wet surface and dense atmosphere on early Mars inferred from the bomb sag at Home Plate, Mars," *Geophysical Research Letters*, doi:10.1029/2011GL050192
12. Mangold, N., **Kite, E.S.**, Kleinhans, M., Newsom, H.E., Ansan, V., Hauber, E., Kraal, E., Quantin-Nataf, C. & K. Tanaka, 2012, "The origin and timing of fluvial activity at Eberswalde Crater, Mars," *Icarus*, 220, 530-551, doi:10.1016/j.icarus.2012.05.026.

11. **Kite, E.S.**, Rafkin, S.C.R., Michaels, T.I., Dietrich, W.E., & Manga, M., 2011. "Chaos terrain, storms, and past climate on Mars," *Journal of Geophysical Research – Planets*, 116, E10002, 26 pp., doi:10.1029/2010JE003792 ("Research Highlight" at Nature Geoscience).
10. **Kite, E.S.**, Michaels, T.I., Rafkin, S.C.R., Manga, M., & W.E. Dietrich, 2011. "Localized precipitation and runoff on Mars," *Journal of Geophysical Research – Planets*, 116, E07002, 20 pp. doi:10.1029/2010JE003783. (Reported by "New Scientist").
9. **Kite, E.S.**, Gaidos, E. & M. Manga, 2011. "Climate instability on tidally locked exoplanets," *Astrophysical Journal*, 743, 41, 12 pp, doi:10.1088/0004-637X/743/1/41.
8. Rappaport, S., Levine, A., Chiang, E., El Mellah, I., Jenkin, J., Kalomeni, B., **Kite, E.S.**, Kotson, M., Nelson, L., Rousseau-Nepton, & Tran, K., 2012, "Possible disintegrating short-period Super-Mercury orbiting KIC 12557548," *Astrophysical Journal*, 752.
7. Chiang, E., **Kite, E.**, Kalas, P., Graham, J. R., & Clampin, M., 2009. "Fomalhaut's Debris Disk and Planet: Constraining the Mass and Orbit of Fomalhaut b Using Disk Morphology," *Astrophysical Journal*, 693, 734-749, doi:10.1088/0004-637X/693/1/734
6. **Kite, E.S.**, Matsuyama, I., Manga, M., Perrofin, J.T., & Mitrovica, J.X., 2009, "True polar wander driven by late-stage volcanism and the distribution of paleopolar deposits on Mars," *Earth Planet. Sci. Lett*, 280, 254–267, doi:10.1016/j.epsl.2009.01.040.
5. **Kite, E.S.**, Manga, M., & Gaidos, E., 2009. "Geodynamics and rate of volcanism on massive Earth-like planets," *Astrophysical Journal*, 700, 1732-1749, doi:10.1088/0004-637X/700/2/1732.
4. Kalas, P., Graham, J. R., Chiang, E., Fitzgerald, M. P., Clampin, M., **Kite, E. S.**, Stapelfeldt, K., Marois, C., & Krist, J., 2008. "Optical Images of a Planet 25 Light Years from Earth," *Science*, 322, 1345-1348, doi:10.1126/science.1166609. (*Science* #2 "Breakthrough of the Year).
3. **Kite, E.S.**, & R.C.A. Hindmarsh, 2007. "Did ice streams shape the largest channels on Mars?," *Geophysical Research Letters*, 34, L19202, doi:10.1029/2007GL030530.
2. **Kite, E.S.**, 2004. "Jupiter exploration: high risks and high rewards," *EoS: Trans. AGU*, 85(50), 544

### Group Papers

1. Ehlmann, B., and 46 others including Kite, E.S., 2016. "The Sustainability of Habitability on Terrestrial Planets: Insights, Questions, and Needed Measurements from Mars for Understanding the Evolution of Earth-like Worlds," *Journal of Geophysical Research - Planets*, doi: 10.1002/2016JE005134.

### In preparation

- **Kite, E.S.**, & E. Ford, "Cycle-independent planetary habitability on ocean-covered planets."
- **Kite, E.S.**, & Gaidos, E., "Valuing life detection missions."
- **Kite, E.S.**, "Global oceans on icy satellites sustained by differential libration and nonuniform freezing."
- **Kite, E.S.**, "Emergence of two types of ocean planet in the habitable zone."

**Advising**

PhD program: currently advising Samuel Holo (UChicago, 2021-anticipated) & Megan Mansfield (UChicago, 2021-anticipated).  
PhD thesis advisory committee for Predrag Popovic (UChicago, 2019-anticipated), Jennika Greer (UChicago, 2021-anticipated), Matous Ptacek (UChicago, 2021-anticipated), Jade Checlair (UChicago, 2021-anticipated), & Andrew Malone (UChicago, 2017).  
MSci thesis advisory committee for Nathan Baskin (UChicago, 2015-2016).  
Summer project advisor for Leila Gabasova (University of Paris) (2015) & Bowen Fan (Peking University) (2017).  
Visiting graduate student advisor for Gaia Stucky de Quay (Imperial College London) (starts 3/2018).  
Postdoctoral advisor for Mohit Melwani Daswani (UChicago, 2015-2017) & Liam Steele (UChicago, 2017-).

**Teaching:**

*As instructor:* GEOS 38600. Earth and Planetary Surface Processes. (University of Chicago: Winter 2017; Fall 2018). New class.

GEOS 32060 / GEOS 22060 / ASTR 45900, What makes a planet habitable? (University of Chicago: Winter 2016; Spring 2018). Entirely revamped class.

*As assistant:* Teaching Assistant for EPS 109, “Computer simulations in Earth and Planetary Sciences,” UC Berkeley, Fall 2008. This was a new course with a new professor, and students with a wide range of programming experience.

Field Assistant for EPS 115, “Advanced Stratigraphy and Tectonics,” UC Berkeley, Fall 2008. Assisted Professor Walter Alvarez with field trip to Utah (~30 students)

Teaching Assistant for EPS 102, “History and Evolution of Planet Earth,” UC Berkeley, Spring 2010. Sole TA (46 students).

With one other graduate student, ran geology field trip to Death Valley and Mojave Desert for 8 undergraduates. (Non-credit substitute for course cancelled due to professor’s illness).

*Other:* Published 6 introductory-level science outreach / education articles in *Astronomy Now*, *Chemistry Review*, *Earth Space Review*, and *Spaceflight Now*.

Invited speaker at public events for Adler Planetarium, student science societies, University of Chicago Physical Science Division.

**Invited talks**

University of Bern (4/2017); AGU Fall Meeting (12/2016); Enceladus Focus Group (Berkeley, 6/2016); Arizona State University (2/2016); McGill University (10/2015); NIU (9/2015); University of Washington (5/2015); Planetary and Space Sciences Research Institute (UK) (2/2015); Kavli Institute of Theoretical Physics (2/2015); University of Illinois (1/2015), NOAA GFDL (12/2014); Rice University (9/2014); Columbia University / Earth Institute (3/2014); Weizmann Institute of Science (Israel) (6/2013); University of Arizona (4/2013); Princeton (3/2013); Johns Hopkins (3/2013); University of Chicago (3/2013); UCLA (11/2012); U. T. Austin (10/2012); iPLEX (10/2012); JPL Science Division (7/2012); Purdue (4/2012); UC Santa Cruz (10/2011); Space Sciences Laboratory (11/2010)f; JPL Mars Exploration Directorate (11/2010); AGU Fall Meeting (12/2009); SETI Institute (5/2009); UC Santa Cruz (5/2009).

**Major external grant support:**

PI, NASA Solar System Workings grant (geomorphology), 2015-2018.  
PI, NASA Exoplanet Research Program grant (water-rock reactions), 2016-2019.  
PI, NASA Mars Data Analysis Program grant, 2016-2019.  
PI, NASA Solar System Workings grant (climate science), 2016-2019.  
Co-I, NASA Mars Data Analysis Program grant, 2016-2019.

**Reviewer for:** NASA SMD (panelist for HW, EW, MDAP)

NASA Astrobiology Institute  
NASA HEOMD  
NASA Postdoctoral Program  
*Science*  
*Nature Geoscience*  
*Astrophysical Journal Letters*  
*Earth and Planetary Science Letters*  
*Geophysical Research Letters*  
*Journal of Geophysical Research – Planets*  
*Icarus*  
*Physics of the Earth and Planetary Interiors*  
*Meteoritics & Planetary Science*  
*Planetary and Space Science*  
*Geochemistry Geophysics Geosystems*  
*Aeolian Research*  
*Astrobiology*  
*Journal of Maps*  
Fonds de recherche du Québec  
Hungarian Science Agency  
European Research Council  
Oxford University Press.

**Research or mission design experience at locations other than college or graduate school:**

*Visiting Associate at JPL* (2012-2015): Multiple projects.  
*Weizmann Institute, Israel* (2013): Visiting scholar.  
*Keck Institute for Space Studies* (2012): Study on instrumentation for an asteroid mission.  
*JPL Planetary Science Summer School* (2010): As PI, led 19 graduate students and post-docs in mission design exercise (Io Explorer).  
*Carl Sagan Center, SETI Institute, Mountain View* (2010): Stereo topography.  
*Ganymede Observer New Frontiers 3 proposal* (2009):  
Participated in mission concept work responsive to NASA AO.  
*Kavli Institute for Theoretical Physics* (2008): Deep Earth Summer School.  
*Planetary and Space Sciences Research Institute* (2006):  
Prize internship. Worked on chondrite Raman spectroscopy, and Mars meteoritics.  
*Caltech* (2004): Summer Undergraduate Research Fellowship.  
*MIT* (2004): Undergraduate exchange student.  
*Centro de Astrobiología, CSIC/INTA, Madrid* (2003): Mass spectroscopy.  
*Summer Science Program* (2001): Asteroid orbit determination. Ojai campus.

**Telescope experience:**

*Hubble Space Telescope:* Co-I on GO/DD Program 11818 (PI: Paul Kalas).

*Spitzer Space Telescope:* Warm IRAC phase curves of exoplanet HAT-P-7b (PI: Heather Knutson).

+ assisted with observing at Shane Telescope, Mt. Hamilton Observatory.

**Field experience:**

Central India (Proterozoic paleobiology). Greece, SE Spain, England, Scotland, California, Hawaii (fieldwork, mapping courses). NW Spain (independent mapping project, 6 weeks). Utah (GSI for Professor W. Alvarez).

**First-authored presentations at conferences, workshops, e.t.c.:**

**Kite, E.S.**, 2017, “Geologic Tests for Snowmelt Runoff on Early Mars,” talk, *for presentation at AGU Fall Meeting*.

**Kite, E.S.**, “An ice-and-snow hypothesis for Early Mars, and the runoff-production test,” talk, *for presentation at Fourth International Conference on Early Mars*.

**Kite, E.S.**, Gao, P., Mischna, M., Mayer, D.P., Goldblatt, C., & Yung, Y., “Methane burst climate scenarios for Early Mars rivers and lakes,” *for presentation at Fourth International Conference on Early Mars*.

**Kite, E.S.**, Mischna, M., Gao, P., & Yung, Y., 2017, “Climate optimum on Mars initiated by atmospheric collapse?,” talk, *48th Lunar and Planetary Science Conference*.

**Kite, E.S.**, Sneed, J., Mayer, D.P., Wilson, S., 2016, “Mars alluvial fan formation during the Amazonian and Late Hesperian spanned >10 Myr,” *48th Lunar and Planetary Science Conference*.

**Kite, E.S.**, Sneed, J., Mayer, D.P., Lewis, K.W., Michaels, T.I., Hore, A., & Rafkin, S.C.R., 2016, “Making major mounds on Mars: shaping by wind-terrain feedbacks,” invited talk, *AGU Fall Meeting*.

**Kite, E.S.**, Goldblatt, C., Gao, P., Mayer, D.P., Sneed, J., & Wilson, S.A., 2016, “A Narrowing Target for Early Mars Climate: Which Models Survive the Confrontation with Improved Hydrology Constraints?,” talk, *AGU Fall Meeting*.

**Kite, E.S.**, Goldblatt, C., & Gao, P., 2016, “Cadence and cause of lake-forming climates on Mars,” *American Astronomical Society Division for Planetary Sciences / European Planetary Science Congress*, Pasadena, California.

**Kite, E.S.**, 2016, “Sustained Eruptions on Enceladus Explained by Turbulent Dissipation in Tiger Stripes,” talk, *Conference on Enceladus and the Icy Moons of Saturn*, Boulder, Colorado.

**Kite, E.S.**, 2016, “Sustaining cryovolcanic eruptions via turbulence on Enceladus,” talk, *Enceladus Focus Group*, Berkeley, California.

**Kite, E.S.**, Armstrong, J.C., Goldblatt, C., Gao, P., & Mayer, D.P., 2016, “Cadence and cause of lake-forming climates on Mars,” talk, *47th Lunar and Planetary Science Conference*, abstract #1312.

**Kite, E.S.**, Fegley, B., Schaefer, L., & Gaidos, E., 2016, “Volcanism on Magma Planets: Extreme Volcanism is Regulated by Planet Mass, Temperature, and Initial Composition,” *47th Lunar and Planetary Science Conference*, abstract #1601.

**Kite, E.S.**, “Sustaining cryovolcanic eruptions via turbulence on Enceladus,” talk, *National Academy of Science - Chinese Academy of Science Forum for New Leaders in Space Science*, Shanghai, China.

**Kite, E.S.**, “Crater count constraints on radiolysis of complex organic matter at 2020 candidate sites,” talk, *2nd Landing Site Selection Workshop for the Mars 2020 Rover Mission*, Pasadena, CA

**Kite, E.S.**, 2015, “Unscrambling Noachian crater erosion on Mars,” talk, *Workshop on Issues in Crater Studies and the Dating of Planetary Surfaces*, Laurel, MD.

**Kite, E.S.**, 2015, “Extending the reach of Mars rover drills by targeting high-erosion-rate sites identified using orbiter imagery and wind-erosion models,” talk, *Astrobiology Science Conference 2015*, Chicago, IL.

**Kite, E.S.**, Armstrong, J.C., Wordsworth, R., & Forget, F., 2015, “Late bursts of habitability on Mars-like planets,” talk, *46th Lunar and Planetary Science Conference*, abstract #2674.

**Kite, E.S.**, Rubin, A., 2015, “Sustained eruptions on Enceladus explained by turbulent dissipation in tiger stripes,” talk, *46th Lunar and Planetary Science Conference*, abstract #1247.

**Kite, E.S.**, Lucas, A., Howard, A.D., Armstrong, J.C., & Lamb, M.P., 2014, “Characterizing and modeling late episodes of surface liquid water on Mars,” *Binghamton Workshop on Planetary Geomorphology*.

**Kite, E.S.**, Lucas, A., Armstrong, J.C., Aharonson, O., & Lamb, M.P., 2014, “Resolving the era of river-forming climates on Mars,” talk, *8th International Conference on Mars*, abstract no. 1148.

**Kite, E.S.**, Lucas, A., Armstrong, J.C., Aharonson, O., & Lamb, M.P., 2014, “Resolving the great drying of Mars: paleo-climate versus time from river deposits in Aeolis Dorsa,” talk, *45th Lunar and Planetary Science Conference*.

**Kite, E.S.**, Lucas, A., Armstrong, J., & Aharonson, O., 2013, “Resolving the great drying of Mars: sequence stratigraphy of the Aeolis-Zephyria trough,” talk, *Annual Meeting of the American Astronomical Society Division for Planetary Sciences*.

**Kite, E.S.**, Lewis, K.W., Lamb, M.P., Newman, C.E., & Richardson, M.I., 2013, “Possible role for slope winds in forming Gale Crater’s mound (and other sediment mounds on Mars): the Slope Wind Enhanced Erosion and Transport hypothesis,” Mars, talk, *44th Lunar and Planetary Science Conference*.

**Kite, E.S.**, 2013, “Mass balance constraints on the sustainability of Mars’ Recurrent Slope Lineae: should RSL be an astrobiology priority?,” talk, *Conference on the Present-Day Habitability of Mars*.

**Kite, E.S.**, and Manga, M., 2012, “Seasonal snowmelt versus impact-triggered runoff in Mars’ geologic record of surface liquid water,” talk, *Third International Conference on Early Mars*.

**Kite, E.S.**, 2012, “Evidence for melt-fed meandering rivers in the Gale-Aeolis-Zephyria region,” Mars, talk, *43rd Lunar and Planetary Science Conference*.

**Kite, E.S.**, Gaidos, E., Manga, M., and Halevy, I., 2012, “(1) Climate instability on planets with large day-night temperature contrasts. (2) Magma planets,” talk, *Exoclimes 2*.

**Kite, E.S.**, Gaidos, E., & Manga, M., 2011, “Climate destabilization on tidally locked exoplanets,” talk, *AGU Fall Meeting*, P23F-03

**Kite, E.S.**, Manga, M., Halevy, I., & Kahre, M.A., 2012, “Gale as a preferred site for snowmelt-limited induration of atmospherically transported sediment,” talk, *5th MSL Landing Site Selection Workshop*.

**Kite, E.S.**, 2012, “Net assessment of the impact hypothesis for fluvial activity at Eberswalde and tests with MSL,” talk, *5th MSL Landing Site Selection Workshop*.

**Kite, E. S.**, Manga, M., & Halevy, I., 2011. “Snowmelt model of formation and distribution of sedimentary rocks on Mars: Thick atmosphere not required?,” talk, *42nd Lunar and Planetary Science Conference*.

**Kite, E. S.**, Manga, M., & Halevy, I., 2010. “Inevitability of melting at low latitudes on Mars: implications for the sedimentary rock record,” *AGU Fall Meeting*, EP43C-0762

**Kite, E. S.**, 2010. “Two new approaches to the Early Mars climate problem,” *Jet Propulsion Laboratory*, seminar.

**Kite, E.S.**, Rafkin, S.C.R., Michaels, T.I., Manga, M., & Dietrich, W.E., 2010. “Localized precipitation and channel formation on Mars: Under what conditions can one landing site be a proxy for global environments?” *4th MSL Landing Site Selection Workshop*.

**Kite, E.S.**, Rafkin, S.C.R., Michaels, T.I., & M. Manga, 2010. “Mesoscale simulation of atmospheric response to chaos formation,” talk, 41st Lunar and Planetary Science Conference, abstract #1171.

**Kite, E.S.**, Manga, M., & Gaidos, E., 2009. “Magmatic activity on Super-Earths: What do we expect to see?,” invited talk, *AGU Fall Meeting*, V21H-07.

**Kite, E.S.**, Rafkin, S.C.R., Michaels, T.I., & M. Manga, 2010. “The snows of Juventae: Mesoscale simulation of atmospheric response to chaos formation,” *AGU Fall Meeting*, EP53F-02.

**Kite, E.S.**, 2009, “True Polar Wander and Climate on Late Hesperian/Amazonian Mars”, SETI Institute Colloquium. Youtube: <http://bit.ly/bHwoZv>

**Kite, E.S.**, Manga, M. & J.T. Perron, 2009, ‘Evidence for past kilometer-scale overturn(s) in deformed, layered terrain near the deepest point on Mars’, 40th Lunar and Planetary Science Conference, abstract #1248.

**Kite, E.S.**, Manga, M., & E. Gaidos, 2008, “Geodynamics and rate of volcanism on massive Earth-like planets”, *AGU Fall Meeting*, P13C-1327

**Kite, E.S.**, Hovius, N., Hillier, J.K., & J. Besserer, 2007, “Candidate mud volcanoes in the northern plains of Mars”, *AGU Fall Meeting*, P13C-1327

**Kite, E.S.**, Hovius, N., Hillier, J.K., & J. Besserer, 2007, “Candidate mud volcanoes in the northern plains of Mars”, *European Mars Science and Exploration Conference*, Noordwijk, The Netherlands.

**Kite, E.S.**, 2006, “Palaeo-ice streams in the Equatorial Transition Zone, Mars,” 19th UCL Astronomy Colloquium, Windsor.



**Kite, E.S.**, “Competing hypotheses for the Northwestern Slope Valleys, Mars,” in Proceedings of the Third European Workshop on Exo-Astrobiology, 18 - 20 November 2003, Madrid, Spain. Ed.: R. A. Harris & L. Ouweland. ESA SP-545, Noordwijk, Netherlands: ESA Publications Division, ISBN 92-9092-856-5, 2004, p. 219 - 220

**Selected coauthored presentations: (\* = person supervised by Kite)**

Holo, S.\* & **Kite, E.S.**, “Incision of the Jezero crater outflow channel by fluvial sediment transport,” *for presentation at AGU Fall Meeting 2017.*

Steele, L.J.\* & **Kite, E.S.**, & Michaels, T.I., “Wind erosion of layered sediments on Mars, and the role of terrain,” *for presentation at Fourth Conference on Early Mars.*

Sneed, J.\* & **Kite, E.S.**, & Mayer, D.P.\*, “Searching for indications of snowmelt-driven erosion on Early Mars”, *for presentation at Fourth Conference on Early Mars.*

Sneed, J.\* & **Kite, E.S.**, Mayer, D.P.\*, & Wilson, S.A., “Constraining the duration of Late Hesperian - Amazonian habitability via crater interbedding with alluvial fans”, *for presentation at Fourth Conference on Early Mars.*

Holo, S.\* & **Kite, E.S.**, “Incision of the Jezero crater outflow channel by fluvial sediment transport,” *for presentation at Fourth Conference on Early Mars.*

Holo, S.\* & **Kite, E.S.**, & Robbins, S.J., “Mars obliquity constrained by elliptical crater orientations,” *48th Lunar and Planetary Science Conference.*

Mansfield, M.\* & **Kite, E.S.**, “The role of obliquity in post-Noachian Martian surface conditions,” *48th Lunar and Planetary Science Conference.*

Ehlmann, B., & 18 others including **Kite, E.S.**, 2016, “Mars exploration science in 2050,” *NASA Planetary Science Vision 2050 workshop.*

Melwani Daswani, M.\* & **Kite, E.S.**, 2016, “Were chloride-bearing lakes on Mars fed by groundwater?,” *AGU Fall Meeting.*

Sneed, J.\* & **Kite, E.S.**, Mayer, D.P.\*, Wilson, S., 2016, “Constraints on the Stability of Martian Fluvial Activity from Embedded-Crater Density in Alluvial Fans,” *AGU Fall Meeting.*

Mayer, D.P.\* & **Kite, E.S.**, 2016, “Using Crater Counts to Constrain Erosion Rates on Mars: Implications for the Global Dust Cycle, Sedimentary Rocks and Organic Matter Preservation,” *AGU Fall Meeting.*

Melwani Daswani, M.\* & **Kite, E.S.**, 2016, “Chlorine deposits on Mars: chlorine from the sky, or chlorine from the rocks?,” talk, *Geological Society of America Annual Meeting.*

Sneed, J.\* Mayer, D.P.\* Lewis, K.W., & **Kite, E.S.**, 2016, “Origin of sedimentary-rock mountains on Mars constrained by layer-orientation data,” talk, *47th Lunar and Planetary Science Conference.*

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