Ingrid J. Daubar

CURRICULUM VITAE

Contact Information

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Education

Doctor of Philosophy, Planetary Sciences
University of Arizona, August 2014
Dissertation: *New Dated Craters on Mars and the Moon: Studies of the Freshest Craters in the Solar System*

Master's of Science, Planetary Sciences
University of Arizona, August 2002
Thesis: *Northwest Africa 482: A Lunar Meteorite from the Highlands*

Bachelor of Arts, Astronomy
Cornell University, May 1999

Selected Honors and Awards

- JPL Group Achievement Award, Juno Mission Re-Design, 2018
- JPL Voyager Award, 2017
- JPL Team Award, Juno Radiation Monitoring Investigation Team, 2017
- JPL Team Award, Europa Clipper Investigation Scientists, 2017
- Editors' Citation for Excellence in Refereeing, Journal of Geophysical Research-Planets, 2016
- NASA Postdoctoral Program Fellowship, 2014-2015
- Wiley-Blackwell Award, 2014
- Nininger Meteorite Award, 2014
- Emily Krauz Staff Endowment Fund Scholarship, 2014
- Shandel Education Plus Fund award, 2012
- University of Arizona College of Science Galileo Circle Scholar, 2011
- Group Achievement Award, MRO HiRISE Science Team, 2011
- University of Arizona College of Science Graduate Student Award for Outstanding Service/Outreach, 2011
- Lunar & Planetary Laboratory Career Staff Excellence Award, 2008
- Graduate Teaching Excellence Award, Spring 2000

Mission Experience

2014-current: InSight mission
- Co-Lead for the Impacts Science Theme Working Group
- Deputy Lead, Instrument Site Selection Working Group
- Landing site certification and safety assessment
- Impact detection and localization
- Science planning

2016-current: Europa mission
- Investigation Scientist for the Europa Imaging System (EIS)

- Requirements development
- Mission planning and operations concept development

2017-current: HiRISE camera on Mars Reconnaissance Orbiter (MRO)
- Co-Investigator
- Impact Cratering Science Theme Lead

2016-2018: Juno mission
Radiation Monitoring (RM) Investigation:
- Observation planning
- PDS archiving
- Data analysis

2013: NASA Planetary Summer School, Principal Investigator role
- Designed a mission concept from scratch working with Team X, a concurrent engineering team at the NASA Jet Propulsion Laboratory.
- Successfully presented mission proposal to a panel of experts.
- Mission for Uranus Science and Exploration (MUSE) presented at OPAG and LPSC; paper summarizing lessons learned for future mission design in preparation.

2005-2013: HiRISE camera on Mars Reconnaissance Orbiter (MRO)
Uplink operations:
- Targeted, planned, and commanded 7,000+ high-resolution observations of Mars.
- Supervised uplink group consisting of seven Targeting Specialists.
- Contributed to camera calibration, software development, and operational procedures development.
- Assisted with special sequence commanding and instrument engineering activities.
- Participated in outreach efforts such as public talks on a volunteer basis.

Research Experience

2019-current: Senior Research Associate
Brown University; Earth, Environmental, and Planetary Sciences
- Current cratering on Mars: seismic detectability of impacts, atmospheric interactions with surface
- Dust devil tracks: lifetimes and dust deposition rates, global staistics of occurrences
- Short-term (seasonal and shower-related) variability of impact rate on Mars and the Moon

2015-current: Research Scientist
Jet Propulsion Laboratory, California Institute of Technology
- Current cratering on Mars: geospatial characteristics of new impacts, crater clusters, seismic detectability of impacts
- Albedo effects around landed missions
- Secondary cratering statistics and chronology issues
- Dust devil tracks: lifetimes and dust deposition rates
- Dust mobility and albedo

2014-2015: NASA Postdoctoral Fellow
Jet Propulsion Laboratory, California Institute of Technology
Dr. Matthew Golombek, Senior Research Scientist
- Current cratering on Mars: seasonal variability of impact rates, seismic detectability of impacts, small crater morphology
- InSight landing site assessment and operations
- Albedo effects around new impacts

2009-2014: Research Assistant
University of Arizona; Department of Planetary Sciences
Dr. Alfred McEwen, Professor of Planetary Geology
- Morphology and statistics of small recent craters on Mars and the Moon

- Implications for current cratering rates, planetary chronologies, target material properties, and modification rates

1999-2002: Research Assistant
University of Arizona; Department of Planetary Sciences
Dr. David Kring, Associate Professor of Planetary Geology and Cosmochemistry

- Thermal modeling of impact-induced hydrothermal systems.
- Petrology and mineralogy of shocked meteorites and samples from terrestrial craters.
- Classification of new meteorites, including mesosiderites, chondrites, and a lunar meteorite.

1998-1999: Research Assistant
Cornell University, Department of Astronomy
Dr. Joseph Veverka, Professor of Astronomy

- Catalogued instances of dark streaks in MOC images of the Martian surface.

Summer 1998: Undergraduate Summer Internship
Arecibo Observatory, National Astronomy and Ionosphere Center
Dr. Michael Nolan, Planetary Radar

- Participated in the first radar observations performed with upgraded system.
- Observations of many types of objects, including NEAs, comets, and Mercury.
- Analyzed observations to determine physical properties of targets.
- Studied broadband radio continuum spectra and variability of OH/IR stars.

1997-1998: Research Assistant
Cornell University, Department of Astronomy
Dr. Joseph Burns, Professor of Astronomy and Irving Porter Church Professor of Engineering

- Analyzed images of the Jovian ring system taken by the Galileo spacecraft.

Research Grants

2019 - Solar System Workings: "Modeling and Measuring Variations in the Inner Solar System Impact Rate"
P.I. I. J. Daubar, Brown University.

2019 - JPL Strategic Research and Technology Development program: "Mars Science Helicopter System"
Co-Investigator, Science Lead; P.I. T. Tzanetos, JPL.

2019 - JPL Research and Technology Development program: "Responsive Onboard Science for Europa Clipper"
Co-Investigator; P.I. K. Wagstaff, JPL.

2019 - JPL Research and Technology Development program: "An Ultra-Light Weight Perching System for Sloped or Vertical Rough Surfaces on Mars"
Co-Investigator; P.I. A. Kalantari , JPL.

2018 - InSight Participating Scientist: "Localization and Characterization of Seismically Detected Impact Craters."
P.I. I. J. Daubar, JPL.

2018 - Mars Data Analysis Program: "Blasting Mars: Surface Halos Produced by Current Impact Cratering."
Co-Investigator; P.I. G. Bart, U. Idaho.

2017 - Mars Data Analysis Program: "Martian Dust Devil Tracks: Albedos, Lifetimes, and Dust Deposition Rates."
P.I. I. J. Daubar, JPL.

2014 - NASA Postdoctoral Program Research Fellowship: "Seasonal Variation in the Martian Impact Rate"
Research Advisor M. Golombek, JPL.

2013 - Mars Fundamental Research Program: "Utilizing Morphometric Properties of Craters to Characterize the Seismological Signature of Recent Impact Events on Mars"
Co-Investigator; P.I. N. Schmerr, U. Maryland.

2013 - University of Arizona Commission on the Status of Women: Mini Grant for Lunar and Planetary Laboratory Women.
Co-Proposer with K. Block, U. Arizona.

2011 - Mars Data Analysis Program: "Martian Surface Structure and Age from Impact Crater Analysis."
Collaborator; P.I. G. Bart, U. Idaho.

Teaching and Mentoring

- *Mentor to JPL Interns, 2014-2018:* Colin Bloom, Elizabeth Bondi, Ronald Domholdt, Claire Schwartz, Michelle Wray, April Davis, Marshall Trautman, Sydney Melady, Carol Hundal, Rachel Hausmann
- *Space Grant Mentor, 2009-2010:* Stephanie Craig
- *Undergraduate student employee supervisor, 2009-2013:* Amber Keske, George Amaya, Eric Sahr
- *Teaching Assistant positions:*
    - 1999, Natural Science 101: Evolution of a Habitable World, Prof. Jonathan Lunine
    - 2000, Planetary Sciences 206: Golden Age of Planetary Exploration, Prof. Uwe Fink
    - 2002, Planetary Sciences 206: Golden Age of Planetary Exploration, Prof. Michael Drake

Field Experience

2011 August, Meteor Crater, Arizona - Ground-penetrating radar studies of subsurface ejecta blocks. P.I.: P. Russell, Smithsonian-CEPS.

1999-2013, Various locations. Planetary Geology Field Studies - departmental field practicum course, taken nine times in locations throughout the southwestern US.

Professional Training

- Bystander Intervention Training, 2018
- Science Mission Interface (SMI) Workshop 3 on Proposal Development and Science Communication, JPL, 2018
- Small Science and Technology Research Proposal Writing, JPL, 2017
- Cost Effective Space Mission Operations, JPL, 2015
- Science Mission Interface (SMI) Workshop 2 on Scientist Roles in Missions, JPL, 2015
- Successful Supervisor Series, University of Arizona, 2009
- University Leadership Institute, University of Arizona, 2008
- 360^{O} Management Development Assessment, University of Arizona, 2008

Professional Memberships

- American Astronomical Society, Division of Planetary Sciences
- American Geophysical Union
- The Planetary Society
- Association of Women in Science
- Meteoritical Society
- Geological Society of America, Planetary Geology Division

Community Service

- Scientific Organizing Committee for the 9th International Conference on Mars.
- Peer reviewer for journal articles (eight in the last three years). Icarus Outstanding Reviewer Status.
- Served on proposal review panels for various ROSES calls, on panels and as external reviewer
- Organizer of the Women in Planetary Science (WPS) group at JPL, 2015-present
- Elected Board Member of the JPL New Researchers' Support Group (NRSG), 2016-2017
- Floor safety warden, 2017-present

- Organizer of the Mars Forum biweekly JPL seminar series
- Communications Chair for the Caltech Postdoctoral Association
- Public Outreach: Numerous talks, tours, and events presenting HiRISE, InSight, and Mars science to the local community; various JPL public tours and outreach events
- LPL Alumni Association Liaison
- Co-organizer of Women at LPL organization
- Judge for Dwornik Student Award, Planetary Geology Division of the Geological Society of America
- Judge for UA Graduate and Professional Student Council Travel Grant Awards
- Contributor, Encyclopedia of Planetary Landforms (Henrik Hargitai and Akos Kereszturi, eds.)

Peer-Reviewed Publications

Daubar, I. J., M. E. Banks, N. C. Schmerr, and M. P. Golombek (2019) Recently Formed Crater Clusters on Mars. Journal of Geophysical Research (Planets) 124, 958-969. doi:10.1029/2018JE005857

Bart, G. D., **I. J. Daubar**, B. A. Ivanov, C. M. Dundas, and A. S. McEwen (2019) Dark halos produced by current impact cratering on Mars. Icarus 328, 45-57. doi:10.1016/j.icarus.2019.03.004

Lognonné et al. (2019) SEIS: Insight's Seismic Experiment for Internal Structure of Mars. Space Science Reviews 215, 12. doi:10.1007/s11214-018-0574-6

Daubar, I. J. *et al.* (2018) Impact-Seismic Investigations of the InSight Mission. Space Science Reviews 214: 132. https://doi.org/10.1007/s11214-018-0562-x

Viviano, C. E., S. L. Murchie, **I. J. Daubar**, M. F. Morgan, F. P. Seelos, and J. B. Plescia (2019) Composition of Amazonian volcanic materials in Tharsis and Elysium, Mars, from MRO/CRISM reflectance spectra. Icarus 328, 274-286. doi:10.1016/j.icarus.2019.03.001

Karakostas, F., V. Rakoto, P. Lognonne, C. Larmat, **I. Daubar**, and K. Miljkovic; (2018) Inversion of Meteor Rayleigh Waves on Earth and Modeling of Air Coupled Rayleigh Waves on Mars. Space Science Reviews 214, 127. doi:10.1007/s11214-018-0566-6

Golombek, M., M. Grott, G. Kargl, J. Andrade, J. Marshall, N. Warner, N. A. Teanby, V. Ansan, E. Hauber, J. Voigt, R. Lichtenheldt, B. Knapmeyer-Endrun, **I. J. Daubar**, D. Kipp, N. Muller, P. Lognonné, C. Schmelzbach, D. Banfield, A. Trebi-Ollennu, J. Maki, S. Kedar, D. Mimoun, N. Murdoch, S. Piqueux, P. Delage, W. T. Pike, C. Charalambous, R. Lorenz, L. Fayon, A. Lucas, S. Rodriguez, P. Morgan, A. Spiga, M. Panning, T. Spohn, S. Smrekar, T. Gudkova, R. Garcia, D. Giardini, U. Christensen, T. Nicollier, D. Sollberger, J. Robertsson, K. Ali, B. Kenda, and W. B. Banerdt (2018) Geology and Physical Properties Investigations by the InSight Lander. Space Science Reviews 214, 84. doi:10.1007/s11214-018-0512-7

Spiga, A., D. Banfield, N. A. Teanby, F. Forget, A. Lucas, B. Kenda, J. A. Rodriguez Manfredi, R. Widmer-Schnidrig, N. Murdoch, M. T. Lemmon, R. F. Garcia, L. Martire, Ouml;. Karatekin, S. Le Maistre, B. Van Hove, V. Dehant, P. Lognonné, N. Mueller, R. Lorenz, D. Mimoun, S. Rodriguez, Eacute;. Beucler, **I. Daubar**, M. P. Golombek, T. Bertrand, Y. Nishikawa, E. Millour, L. Rolland, Q. Brissaud, T. Kawamura, A. Mocquet, R. Martin, J. Clinton, E. Stutzmann, T. Spohn, S. Smrekar, and W. B. Banerdt (2018) Atmospheric Science with InSight. Space Science Reviews 214, 109. doi:10.1007/s11214-018-0543-0

Clinton, J., D. Giardini, M. Bose, S. Ceylan, M. van Driel, F. Euchner, R. F. Garcia, S. Kedar, A. Khan, S. C. Stahler, B. Banerdt, P. Lognonne, E. Beucler, **I. Daubar**, M. Drilleau, M. Golombek, T. Kawamura, M. Knapmeyer, B. Knapmeyer-Endrun, D. Mimoun, A. Mocquet, M. Panning, C. Perrin, and N. A. Teanby (2018) The Marsquake Service: Securing Daily Analysis of SEIS Data and Building the Martian Seismicity Catalogue for InSight. Space Science Reviews 214, 133. doi:10.1007/s11214-018-0567-5

Morgan, P., M. Grott, B. Knapmeyer-Endrun, M. Golombek, P. Delage, P. Lognonné, S. Piqueux, **I. Daubar**, N. Murdoch, C. Charalambous, W. T. Pike, N. Müller, A. Hagermann, M. Siegler, R. Lichtenheldt, N. Teanby, and S. Kedar (2018) A Pre-Landing Assessment of Regolith Properties at the InSight Landing Site. Space Science Reviews 214, 104. doi:10.1007/s11214-018-0537-y

Hartmann, W. K., **I. J. Daubar**, O. Popova, and E. Joseph (2018) Martian Cratering 12. Utilizing Primary Crater Clusters to Study Crater Populations and Meteoroid Properties. Meteoritics and Planetary Sciences 53, 672-686. DOI: 10.1111/maps.13042

Robbins, S. J., W. A. Watters, J. E. Chappelow, V. J. Bray, **I. J. Daubar**, R. A. Craddock, R. A. Beyer, M. Landis, L. R. Ostrach, L. Tornabene, J. Riggs, B. P. Weaver (2017) Measuring impact crater depth throughout the solar system Meteoritics and Planetary Sciences. DOI: 10.1111/maps.12956

Clinton, J. F., D. Giardini, P. Lognonne, B. Banerdt, M. van Driel, M. Drilleau, N. Murdoch, M. Panning, R. Garcia, D. Mimoun, M. Golombek, J. Tromp, R. Weber, M. BoÌˆse, S. Ceylan, **I. Daubar**, B. Kenda, A. Khan, L. Perrin, and A. Spiga. (2017) Preparing for InSight: An Invitation to Participate in a Blind Test for Martian Seismicity. Seismological Research Letters, doi:10.1785/0220170094.

Becker, H. N., D. Santos-Costa, J. L. JÃ¸rgensen, T. Denver, A. Adriani, A. Mura, J. E. P. Connerney, S. J. Bolton, S. M. Levin, R. M. Thorne, J. W. Alexander, V. Adumitroaie, E. A. Manor-Chapman, **I. J. Daubar**, C. Lee, M. Benn, J. Sushkova, A. Cicchetti, R. Noschese (2017) Observations of MeV electrons in Jupiter's innermost radiation belts and polar regions by the Juno radiation monitoring investigation: Perijoves 1 and 3. GRL, accepted.

Becker, H. N., J. W. Alexander, A. Adriani, A. Mura, A. Cicchetti, R. Noschese, J. L. Joergensen, T. Denver, J. Sushkova, A. Joergensen, M. Benn, J. E. P. Connerney, the Selex Galileo Juno SRU Team, J. Allison, S. Watts, V. Adumitroaie, E. A. Manor-Chapman, **I. J. Daubar**, C. Lee, S. Kang, W. J. McAlpine, T. Di Iorio, C. Pasqui, A. Barbis, P. Lawton, L. Spalsbury, S. Loftin, J. Sun (2017) The Juno Radiation Monitoring (RM) Investigation. Space Science Reviews. doi:10.1007/s11214-017-0345-9.

Hartmann, W. K. and **I. J. Daubar** (2017) Martian Cratering 11. Utilizing decameter scale crater populations to study Martian history. Meteoritics and Planetary Sciences 52, 493-510. doi:10.1111/maps.12807.

Stevanovic, J., N. A. Teanby, J. Wookey, N. Selby, **I. J. Daubar**, J. Vaubaillon, R. Garcia (2017) Bolide Airbursts as a Seismic Source for the 2018 Mars InSight Mission. Space Science Reviews, doi:10.1007/s11214-016-0327-3.

Golombek, M., D. Kipp, N. Warner, **I. J. Daubar**, R. Fergason, R.L. Kirk, R. Beyer, A. Huertas, S. Piqueux, N.E. Putzig, B.A. Campbell, G.A. Morgan, C. Charalambous, W.T. Pike, K. Gwinner, F. Calef, D. Kass, M. Mischna, J. Ashley, C. Bloom, N. Wigton, T. Hare, C. Schwartz, H. Gengl, L. Redmond, M. Trautman, J. Sweeney, C. Grima, I.B. Smith, E. Sklyanskiy, M. Lisano, J. Benardini, S. Smrekar, P. Lognonne, W.B. Banerdt (2017) Selection of the InSight Landing Site. Space Science Reviews 211, 5-95. doi:10.1007/s11214-016-0321-9.

Daubar, I. J., C. M. Dundas, S. Byrne, P. Geissler, G. Bart, A. S. McEwen, P. S. Russell, and M. Chojnacki (2016) Changes in Blast Zone Albedo Patterns Around New Martian Impact Craters. Icarus 267, 86-105. doi:10.1016/j.icarus.2015.11.032. *Figure selected for cover image.*

Landis, M. E., S. Byrne, **I. J. Daubar**, K. E. Herkenhoff, C. M. Dundas (2016) Resurfacing rates of the North Polar Layered Deposits of Mars. Geophys. Res. Lett. 43, 3060â€“3068. doi:10.1002/2016GL068434.

Daubar, I. J., S. J. Saikia, M. J. Poston, M. Bruck Syal, M. Bunte, C. Cook-Hallett, E. Decrossas, A. Dove, D. Farnocchia, E. Jens, J. Jonsson, J. M. Mihaly, A. Ollila, M. C. Palucis, G. Vardaxis, M. S. Veto, C. Budney, K. Mitchell, and G. Orton (2015, submitted) Mission for Uranus Science and Exploration (MUSE): A NASA Planetary Science Summer School Enhanced New Frontiers Conceptual Mission Design. Planetary and Space Science, submitted.

Keske, A. L., C. W. Hamilton, A. S. McEwen, and **I. J. Daubar** (2015) Episodes of fluvial and volcanic activity in Mangala Valles, Mars. Icarus 245, 333-347. doi:10.1016/j.icarus.2014.09.040

Daubar, I. J., C. Atwood-Stone, S. Byrne, A. S. McEwen, and P. S. Russell (2014) The morphology of small fresh craters on Mars and the Moon. Journal of Geophysical Research (Planets) 119, 2320-2639. doi:10.1002/2014JE004671.

Dundas, C. M., S. Byrne, A. S. McEwen, M. T. Mellon, M. R. Kennedy, **I. J. Daubar**, and L. Saper (2014) HiRISE Observations of New Impact Craters Exposing Martian Ground Ice. Journal of Geophysical Research 119,

109-127. doi:10.1002/2013JE004482.

Daubar, I. J., A. S. McEwen, S. Byrne, M. R. Kennedy, and B. Ivanov (2013) The current martian cratering rate. Icarus 225, 506-516. doi:10.1016/j.icarus.2013.4.9.

Russell, P. S., J. A. Grant, K. K. Williams, L. M. Carter, W. Brent Garry, and **I. J. Daubar** (2013) Ground penetrating radar geologic field studies of the ejecta of Barringer Meteorite Crater, Arizona, as a planetary analog. Journal of Geophysical Research (Planets) 118, 1915-1933. doi:10.1002/jgre.20145

Oberst, J., A. Christou, R. Suggs, D. Moser, **I. J. Daubar**, A. S. McEwen, M. Burchell, T. Kawamura, H. Hiesinger, K. Wünnemann, R. Wagner, and M. S. Robinson (2012) The present-day flux of large meteoroids on the lunar surface—A synthesis of models and observational techniques. Planetary and Space Science 74, 179-193. doi:10.1016/j.pss.2012.10.5.

Burleigh, K. J., H. J. Melosh, L. L. Tornabene, B. Ivanov, A. S. McEwen, and **I. J. Daubar** (2012) Impact airblast triggers dust avalanches on Mars. Icarus 217, 194-201. doi:10.1016/j.icarus.2011.10.26.

Tamppari, L. K., D. Bass, B. Cantor, **I. Daubar**, C. Dickinson, D. Fisher, K. Fujii, H. P. Gunnlauggson, T. L. Hudson, D. Kass, A. Kleinböhl, L. Komguem, M. T. Lemmon, M. Mellon, J. Moores, A. Pankine, J. Pathak, M. Searls, F. Seelos, M. D. Smith, S. Smrekar, P. Taylor, C. Holstein-Rathlou, W. Weng, J. Whiteway, and M. Wolff (2010) Phoenix and MRO coordinated atmospheric measurements. Journal of Geophysical Research (Planets) 115, 0. doi:10.1029/2009JE003415

McEwen, A. S., M. E. Banks, N. Baugh, K. Becker, A. Boyd, J. W. Bergstrom, R. A. Beyer, E. Bortolini, N. T. Bridges, S. Byrne, B. Castalia, F. C. Chuang, L. S. Crumpler, **I. Daubar**, A. K. Davatzes, D. G. Deardorff, A. DeJong, W. Alan Delamere, E. N. Dobrea, C. M. Dundas, E. M. Eliason, Y. Espinoza, A. Fennema, K. E. Fishbaugh, T. Forrester, P. E. Geissler, J. A. Grant, J. L. Griffes, J. P. Grotzinger, V. C. Gulick, C. J. Hansen, K. E. Herkenhoff, R. Heyd, W. L. Jaeger, D. Jones, B. Kanefsky, L. Keszthelyi, R. King, R. L. Kirk, K. J. Kolb, J. Lasco, A. Lefort, R. Leis, K. W. Lewis, S. Martinez-Alonso, S. Mattson, G. McArthur, M. T. Mellon, J. M. Metz, M. P. Milazzo, R. E. Milliken, T. Motazedian, C. H. Okubo, A. Ortiz, A. J. Philippoff, J. Plassmann, A. Polit, P. S. Russell, C. Schaller, M. L. Searls, T. Spriggs, S. W. Squyres, S. Tarr, N. Thomas, B. J. Thomson, L. L. Tornabene, C. Van Houten, C. Verba, C. M. Weitz, and J. J. Wray (2010) The High Resolution Imaging Science Experiment (HiRISE) during MRO's Primary Science Phase (PSP) Icarus 205, 2-37. doi:10.1016/j.icarus.2009.04.023

Byrne, S., C. M. Dundas, M. R. Kennedy, M. T. Mellon, A. S. McEwen, S. C. Cull, **I. J. Daubar**, D. E. Shean, K. D. Seelos, S. L. Murchie, B. A. Cantor, R. E. Arvidson, K. S. Edgett, A. Reufer, N. Thomas, T. N. Harrison, L. V. Posiolova, and F. P. Seelos (2009) Distribution of Mid-Latitude Ground Ice on Mars from New Impact Craters. Science 325, 1674. doi:10.1126/science.1175307

Russell, P., N. Thomas, S. Byrne, K. Herkenhoff, K. Fishbaugh, N. Bridges, C. Okubo, M. Milazzo, **I. Daubar**, C. Hansen, and A. McEwen (2008) Seasonally active frost-dust avalanches on a north polar scarp of Mars captured by HiRISE. Geophysical Research Letters 35, 23204. doi:10.1029/2008GL035790

Daubar, I. J., D. A. Kring, T. D. Swindle, and A. J. T. Jull (2002) Northwest Africa 482: A crystalline impact-melt breccia from the lunar highlands. Meteoritics and Planetary Science 37, 1797-1813. doi:10.1111/j.1945-5100.2002.tb01164.x .

Lewis, B. M., B. D. Oppenheimer, and **I. J. Daubar** (2001) The Approaching Death of the OH/IR star IRAS 18455+0448. The Astrophysical Journal 548, L77-L80. doi:10.1086/318918

Ockert-Bell, M. E., J. A. Burns, **I. J. Daubar**, P. C. Thomas, J. Veverka, M. J. S. Belton, and K. P. Klaasen (1999) The Structure of Jupiter's Ring System as Revealed by the Galileo Imaging Experiment. Icarus 138, 188-213. doi:10.1006/icar.1998.6072

Selected Conference Abstracts

Daubar, I. J. et al. 2019. Studying impact processes with the InSight mission. GSA annual meeting, Abs. 340194. ***Invited talk.***

Daubar, I. J. et al. 2019. The Thrilling Impact of Craters in High Resolution. GSA annual meeting, Abs. 340261.

Daubar, I. J. et al. 2019. Impact science on the InSight mission â€“ Current status. 9th International Conference on Mars, Abs. 6198.

Hartmann, W. K., **I. J. Daubar** *et al.* 2019. Fresh Impact Craters and Clusters on Mars: What do they tell us about Mars and Asteroids? 9th International Conference on Mars, Abs. 6013.

Balaram, J. **I. J. Daubar** *et al.* 2019. Helicopters on Mars: Compelling science of extreme terrains enabled by an aerial platform 9th International Conference on Mars, Abs. 6277.

Hausmann, R., **I. J. Daubar** *et al.* 2019. The distribution and lifetimes of dust devil tracks in HiRISE images. LPSC 50, Abs. 2964.

Teanby, N. **I. J. Daubar** *et al.* 2019. Impact detection with InSight: Updated estimates using measured seismic noise on Mars. LPSC 50, Abs. 1565.

Turtle, E. P. *et al.* 2019. The Europa Imaging System (EIS): High-resolution, 3-D insight into Europaâ€™s geology, ice shell, and potential for current activity. LPSC 50, Abs. 3065.

Doran, G., K. L. Wagstaff, M. Cameron, **I. Daubar**, C. Phillips. 2019. Automatic plume detection for the Europa Imaging System. 4th Planetary Data Workshop, Abs. 7026.

Daubar, I. J. *et al.* 2018. Impact-Seismic Investigations Planned for the InSight Mission. LPSC 49, Abs. 1743.

Daubar, I. J. *et al.*. 2018. Lifetime of a Dust Devil Track and Dust Deposition Rate in Gusev Crater. LPSC 49, Abs. 1730.

Daubar, I. J. *et al.*. 2018. Impact-seismic investigations planned for the InSight mission COSPAR, Abs. B4.1-0044-18.

Daubar, I. J. *et al.*. 2018. Impact-seismic investigations planned for the InSight mission. Planetary Cratering Consortium.

F. Calef, **I. Daubar**, and N. Warner. 2018. Potential for Absolute Age Dating a Volcanic Unit for Crater Retention Age Calibration at the Mars 2020 Proposed Landing Sites. Mars 2020 Landing Site Workshop.

Daubar, I. J., *et al.* (2017) Crater Clusters on Mars: Implications for Atmospheric Fragmentation, Impactor Properties, and Seismic Detectability. Lunar and Planetary Science Conference 48, abstract 2544.

McEwen, A. S., **I. J. Daubar**, E. J. Speyerer, & M. S. Robinson (2017) New Lunar Impact Splotches: Produced by Meteoroid Streams and Secondary Impacts Lunar and Planetary Science Conference 48, abstract 2230.

Hundal, C. B., M. P. Golombek, & **I. J. Daubar** (2017) Characteristics and Superposition Relationships of Secondary Craters from Fresh Rayed Craters in Elysium Planitia, Mars Lunar and Planetary Science Conference 48, abstract 1731.

Hundal, C. B., M. P. Golombek, & **I. J. Daubar** (2017) Chronology of Fresh Rayed Craters in Elysium Planitia, Mars Lunar and Planetary Science Conference 48, abstract 1726.

Rymer, A. M. *et al.* (2017) Pioneering Outer Planet Ocean Exploration at Europa and Beyond. Planetary Science Vision 2050 Workshop, abstract 8192.

Trautmann, M., N. Williams, F. Calef, **I. J. Daubar**, *et al.* (2017) Spatial Analysis of Rock Hazards for Mars 2020 Landing Site Selection ESRI User Conference abstract, July 2017.

Daubar, I. J., *et al.* (2016) Recent Impacts on Mars: Cluster Properties and Seismic Signal Predictions. DPS/EPSC meeting abstract.

Hartmann, W. K. and **I. J. Daubar** (2016) Utilizing small impact craters to clarify the history of martian surfaces.

Meteoritical Society annual meeting abstract.

Calef III, F. J., T. J. Parker, **I. Daubar**, *et al.* (2016) Geospatial Data Georeferencing and Mosaicing for Entry, Descent, Landing, and Traverse Site Analysis. 13th International Planetary Probe Workshop abstract.

Daubar, I. J., *et al.* (2016) New Impact Modification of Corinto Secondary Craters. Lunar and Planetary Science Conference 47, abstract 2984.

Daubar, I. J., *et al.* (2016) Depth-Diameter Ratio of Corinto Secondary Craters. Lunar and Planetary Science Conference 47, abstract 2950.

Kerber, L.,*et al.* (2015) A Human Landing Site at Apollinaris Sulci: Life Inside a Yardang. First Landing Site/Exploration Zone Workshop for Human Missions to the Surface of Mars, abstract 1043.

Lucchetti, A., *et al.* (2015) Numerical modelling and ejecta distribution analysis of a martian fresh crater. AGU Fall meeting, abstract 64353.

Daubar, I. J., *et al.* (2015) Current State of Knowledge of Modern Martian Cratering. Workshop on Issues in Crater Studies and the Dating of Planetary Surfaces, abstract 9007. ***Invited plenary talk.***

G. Cremonese, *et al.* (2015) New impactor flux estimate on Mars and its application on fresh craters. Bridging the Gap III: Impact Cratering in Nature, Experiments, and Modeling conference, abstract 1044.

Daubar, I. J., *et al.* (2015) Measurement of the Current Martian Cratering Size Frequency Distribution, Predictions for and Expected Improvements from InSight. Lunar and Planetary Science Conference 46, abstract 2468.

Daubar, I. J., *et al.* (2015) Albedo Changes at Martian Landing Sites. Lunar and Planetary Science Conference 46, abstract 2225.

McEwen, A., **I. Daubar**,*et al.* (2015) Current Impact Rate on Earth, Moon, and Mars. Lunar and Planetary Science Conference 46, abstract 1854.

Milazzo, M. P., *et al.* (2015) Naaki: A Twin Cubesat Mission to the Moon. Lunar and Planetary Science Conference 46, abstract 2875.

Grott, M., A.C. Plesa, **I. Daubar**,*et al.* (2015) Retrieving the Martian Planetary Heat Flow from Measurements at Shallow Depth. Lunar and Planetary Science Conference 46, abstract 1374.

Mattson, S., *et al.* (2014) Active Mars Revealed through HiRISE DTMs and Orthoimages. AAS/Division for Planetary Sciences Meeting 46, abstract 413.04.

Daubar, I. J., *et al.* (2014). New Dated Craters on Mars: The Current Cratering Rate. Geological Society of America annual meeting, abstract 248916. ***Invited speaker.***

Daubar, I. J., *et al.* (2014). New Dated Impacts on Mars and the Current Cratering Rate. 77th Annual Meeting of the Meteoritical Society, abstract 5095.

Daubar, I. J., *et al.* (2014) New dated impacts on Mars and an updated current cratering rate. Eighth International Conference on Mars, abstract 1007.

Saikia, S. J. **I. J. Daubar**, *et al.* (2014) MUSEings on Uranus: Exploration of the Ice-Giant. 11th International Planetary Probe Workshop, abstract 8074.

Thompson, S. D., *et al.* (2014) Discovery Of Impact Craters Formed During LRO Operations. ISPRS Technical Commission IV Symposium on Geospatial Databases and Location Based Services, Suzhou, China.

Daubar, I. J., *et al.* (2014) Changes in New Impact Blast Zones Over Three Martian Years Lunar and Planetary Institute Science Conference Abstracts 45.

Saikia, S. J., **I. J. Daubar**, *et al.* (2014) A New Frontiers Mission Concept for the Exploration of Uranus. Lunar and

Planetary Institute Science Conference Abstracts 45.

Thompson, S. D., Z. R. Bowles, R.Z. Povilaitis, **I. J. Daubar**, M. S. Robinson (2014) Recent Impacts on the Moon. Lunar and Planetary Institute Science Conference Abstracts 45.

Daubar, I. J. (2013) Designing a mission to Uranus at the NASA Planetary Science Summer School. Lunar and Planetary Laboratory Conference Abstracts.

Daubar, I. J., *et al.* (2013) How Accurately can we Date Recent Climate Change on Mars? Lunar and Planetary Institute Science Conference Abstracts 44, 2977.

Daubar, I. J., *et al.* (2012) Repeat Observations of New Impact Sites on Mars: Changes in Blast Zones. AGU Fall Meeting Abstracts.

Daubar, I. J., *et al.* (2012) Current Impact Flux at Mars. 7th European Strategic Meteor Workshop: The Meteoroid Flux in the Martian Satellite System - Models, Predictions, Observational Data, and Implications, Moscow, Russia.

Daubar, I. J., *et al.* (2012) Ongoing Impact Events on Mars: Implications for Science and Exploration. Concepts and Approaches for Mars Exploration, abstract 4301.

Daubar, I. J., *et al.* (2012) Seasonal Variation in Current Martian Impact Rate. Lunar and Planetary Institute Science Conference Abstracts 43, 2740.

Daubar, I. J., *et al.* (2011) The Current Martian Crater Production Function. EPSC-DPS Joint Meeting, 1649.

Daubar, I. J., *et al.* (2011) New Craters on Mars and the Moon. Lunar and Planetary Institute Science Conference Abstracts 42, 2232.

Geissler, P. E., **I. J. Daubar**, *et al.* (2010) Eolian Degradation of Young Martian Craters. Lunar and Planetary Institute Science Conference Abstracts 41, 2591.

Daubar, I. J., *et al.* (2010) The Current Martian Cratering Rate. Lunar and Planetary Institute Science Conference Abstracts 41, 1978.

Daubar, I. J., *et al.* (2010) New Martian Impact Events: Effects on Atmospheric Breakup on Statistics. 1st Planetary Cratering Consortium, Flagstaff, AZ.

Daubar, I. J. and A. S. McEwen (2009) Depth to Diameter Ratios of New Martian Craters from HiRISE Images. AAS/DPS Meeting 41, Abs. 35.8.

Daubar, I. J. and A. S. McEwen (2009) Depth to Diameter Ratios of Recent Primary Impact Craters on Mars. LPSC 40, Abs. 2419.

Tamppari, L. K., D. Bass, B. Cantor, **I. J. Daubar**, *et al.* (2008) Phoenix and Mars Reconnaissance Orbiter Coordinated Atmospheric Science. AGU Fall Meeting Abstracts 3.

Eliason, E. M., *et al.* (2007) HiRISE Data Processing and Standard Data Products. Lunar and Planetary Institute Science Conference Abstracts 38, 2037.

Daubar, I. J. and D. A. Kring (2001) Impact-Induced Liquid-Water Environments on Mars. Bulletin of the American Astronomical Society 33, 1104.

Daubar, I. J. and D. A. Kring (2001) Impact-induced Hydrothermal Systems: Heat Sources and Lifetimes. Lunar and Planetary Institute Science Conference Abstracts 32, 1727.

Sullivan, R., **I. Daubar**, *et al.* (1999) Mass-Movement Considerations for Dark Slope Streaks Imaged by the Mars Orbiter Camera. Lunar and Planetary Institute Science Conference Abstracts 30, 1809.

Salter, C. J., *et al.* (1998) Single-Epoch Measurements of Broadband Radio Continuum Spectra. Bulletin of the American Astronomical Society 30, abstract 107.22.

Daubar, I. J., *et al.* (1998) First Results from the Arecibo Observatory Planetary Radar. Bulletin of the American Astronomical Society 30, 1390.

Oppenheimer, B. D. and **I. J. Daubar** (1998) A Selected Survey of Main-Line OH/IR Stars with the Arecibo Dish. Bulletin of the American Astronomical Society 30, 1349.

Nolan, M. C., *et al.* (1998) First Results from the Arecibo Observatory Planetary Radar. Bulletin of the American Astronomical Society 30, 1036.

Daubar, I. J., *et al.* (1997) Galileo SAW Jupiter's Rings, Too. Bulletin of the American Astronomical Society 29, 1000.

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