

February 2024 Newsletter

Happy 2024, Friends!

Somehow, it's already mid-February in the new year, but your Planetary Sciences Section leadership is just getting started. We have some exciting updates to share!

First, it's nominations season again—and I'm not talking about the Oscars. Nominations are open for AGU Union-level awards, Fellows, and Section-level awards. You can find information on all three categories below, together with their submission deadline:

- [Union Medals, Awards, and Prizes](#): **1 March**
- [Union Fellows](#): **27 March**
- [Planetary Sciences Section-level Awards](#): **27 March**

A big change this year is that AGU has overhauled its nominations process for Union-level medals, awards and prizes; those changes include a move to a two-step process, anonymizing submissions in the first step and allowing self nominations. You can find details of these changes, together with FAQs, here:

<https://www.agu.org/honors/umap-updates>

In parallel with AGU updating its nominations procedure, the Planetary Sciences Section has also changed how it will approach award nominations going forward. We have folded the role of canvassing for Union- and Section-level awards (including Fellows) into the responsibility of the Executive Committee, aided by (ex officio canvassing member) AGU Fellow Phil Christensen. If you're planning to nominate a colleague for a Union- or Planetary Sciences Section-level award, feel free to reach out to us—we'll be happy to help!

As a reminder, the members of the PS Section Executive Committee are listed at the end of this message, together with their email addresses. I'll also take this opportunity to update you on the membership of our other Section Committees:

Awards Committee (for evaluating but not soliciting nominations):

- Nicole Zellner
- Wendy Calvin
- Julie Castillo
- Michael Mischna
- Bill McKinnon

AGU Annual Meeting Program Committee:

- Sarah Horst
- Wes Patterson
- Catherine Neish

Each of these committees requires a considerable amount of effort, and I am very grateful to everyone listed here for their volunteer service. My thanks, too, to Amanda Hendrix, who has rotated off the Annual Meeting Program Committee as she takes on her new role as the JGR: Planets Editor-in-Chief.

Last but not least, we are finally (!) in the process of updating the AGU Planetary sciences Section website. We'll put these newsletter notices on the front page, and will be revising and refreshing the other tabs on the site, starting with the Committees page.

As always, if you have questions, concerns or comments, don't hesitate to reach out at paul.byrne@wustl.edu. And if you have any deadlines, events or announcements you would like to share, please email [Sarah Hörst](#).

Paul

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(1) Exoplanets In Our Backyard III

We are happy to announce the Exoplanets in our Backyard III workshop scheduled for 13–15 November, 2024 at the Muhammad Ali Center in Louisville, KY USA. The workshop format will be in-person only.

Exoplanets in Our Backyard focuses on the collaborative exploration of exoplanets, uniting researchers from various scientific disciplines to share knowledge and expertise, particularly in the detection and characterization of exoplanet atmospheres. Emphasizing discussion and cross-disciplinary research, this workshop aims to inspire and educate participants of all experience levels in the collective effort to understand distant worlds and their formation processes.

To be added to the mailing list to receive additional information about this conference, submit an [indication of interest](#).

You can find more information on the [meeting website](#).

SOC Members: Thomas Fauchez (Co-Chair), Erika Kohler (Co-Chair), Raphael Attié, Elsa Ducrot, Sarah Moran, Stephanie Olson, Eddie Schwieterman

LOC Members: Timothy Dowling (Chair), Gerard Williger, Benne Holwerda

(2) Journal of Geophysical Research: Planets, Volume 129, Issue 1

<https://agupubs.onlinelibrary.wiley.com/toc/21699100/2024/129/1>

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1. (OA) On the Response of Chondrites to Diurnal Temperature Change—Experimental Simulation of Asteroidal Surface Conditions, by Markus Patzek, Ottaviano Rüşch, Jamie L. Molaro, <https://doi.org/10.1029/2023JE007944>
2. MAVEN/IUVS Observations of OH Prompt Emission: Daytime Water Vapor in the Thermosphere of Mars, by M. H. Stevens, E. M. Cangi, J. Deighan, S. K. Jain, M. S. Chaffin, J. S. Evans, S. Gupta, J. T. Clarke, N. M. Schneider, S. M. Curry, <https://doi.org/10.1029/2023JE007982>
3. (OA) Unraveling the Tectonic History of the Tharsis Rise on Mars: Plume Migration and Critical Taper Dome, by Oguzcan Karagoz, Thomas Kenkmann, Stefan Hergarten, <https://doi.org/10.1029/2023JE007965>

4. EBSD Analysis of Iron-Nickel Metal in L Type Ordinary Chondrites: 1. The Microstructural Shock Signatures, by Yexin Luo, Hongyi Chen, Sky Beard, Xiaojia Zeng, Sen Hu, Zhimao Du, Lei Jin, Jiahui Liu, Shaolin Li, Xiaoping Zhang, <https://doi.org/10.1029/2023JE007938>
5. EBSD Analysis of Iron-Nickel Metal in L Type Ordinary Chondrites: 2. Formation of Net, Acicular, Duplex, and Pearlitic Plessite, by Yexin Luo, Hongyi Chen, Sky Beard, Xiaojia Zeng, Sen Hu, Lei Jin, Jiahui Liu, Shaolin Li, Xiaoping Zhang, <https://doi.org/10.1029/2023JE007940>
6. (OA) Deciphering Martian Flood Infiltration Processes at Hebrus Valles: Insights From Laboratory Experiments and Remote Sensing Observations, by F. Costard, J. A. P. Rodriguez, E. Godin, A. Séjourné, J. S. Kargel, <https://doi.org/10.1029/2023JE007770>
7. Evolution of a Lake Margin Recorded in the Sutton Island Member of the Murray Formation, Gale Crater, Mars, by S. Gwizd, C. Fedo, J. Grotzinger, S. Banham, F. Rivera-Hernández, S. Gupta, K. M. Stack, L. A. Edgar, A. R. Vasavada, J. Davis, L. C. Kah, <https://doi.org/10.1029/2023JE007919>
8. (OA) A New Mechanism for Stishovite Formation During Rapid Compression of Quartz and Implications for Asteroid Impacts, by Christoph Otzen, Hanns-Peter Liermann, Falko Langenhorst, <https://doi.org/10.1029/2023JE008126>
9. (OA) The Global Shape, Gravity Field, and Libration of Enceladus, by R. S. Park, N. Mastrodemos, R. A. Jacobson, A. Berne, A. T. Vaughan, D. J. Hemingway, E. J. Leonard, J. C. Castillo-Rogez, C. S. Cockell, J. T. Keane, A. S. Konopliv, F. Nimmo, J. E. Riedel, M. Simons, S. Vance, <https://doi.org/10.1029/2023JE008054>
10. (OA) Pressure Deficit in Gale Crater and a Larger Northern Polar Cap After the MY34 Global Dust Storm, by Manuel de la Torre Juárez, Sylvain Piqueux, David M. Kass, Claire E. Newman, Scott D. Guzewich, <https://doi.org/10.1029/2023JE007810>
11. Mars Hot Oxygen Density and Effective Temperature Derived From the MAVEN IUVS Observations, by Jianqi Qin, Hang Liu, Zhen Xu, <https://doi.org/10.1029/2023JE007853>
12. (OA) Discovery of a Dust Sorting Process on Boulders Near the Reiner Gamma Swirl on the Moon, by Ottaviano Rüsçh, Marcel Hess, Christian Wöhler, Valentin T. Bickel, Rachael M. Marshal, Markus Patzek, Hans L. F. Huybrighs, <https://doi.org/10.1029/2023JE007910>
13. Parameter Regimes of Hemispherical Dynamo Waves in a Spherical Shell From 3D MHD Simulations, by Yifan Wu, Wieland Dietrich, Xin Tao, <https://doi.org/10.1029/2023JE007976>
14. (OA) Buoyant Impact Partial Melts on Ancient Mars, B. A. Black, S. Marchi, <https://doi.org/10.1029/2023JE008040>
15. Comparing Atmospheric Temperature Fluctuations Across Landed Missions, by Emily L. Mason, Michael D. Smith, Mark I. Richardson, Scott D. Guzewich, <https://doi.org/10.1029/2023JE007750>
16. (OA) Sub-Diurnal Methane Variations on Mars Driven by Barometric Pumping and Planetary Boundary Layer Evolution, by J. P. Ortiz, H. Rajaram, P. H. Stauffer, K. W. Lewis, R. C. Wiens, D. R. Harp, <https://doi.org/10.1029/2023JE008043>

17. Modal Petrology and Mineral Chemistry of the <1 mm Size Fraction of Lunar Regolith in Apollo 17 Drive Tube Section 73002, by S. B. Simon, M. J. Cato, C. K. Shearer, the ANGSA Science Team, <https://doi.org/10.1029/2023JE007991>
18. Crater Populations of the Saturnian Satellites Mimas, Rhea, and Iapetus, by Stuart J. Robbins, Edward B. Bierhaus, Luke Dones, <https://doi.org/10.1029/2023JE007941>
19. (OA) Evidence of Sulfate-Rich Fluid Alteration in Jezero Crater Floor, Mars, by Sandra Siljeström, Andrew D. Czaja, Andrea Corpolongo, Eve L. Berger, An Y. Li, Emily Cardarelli, William Abbey, Sanford A. Asher, Luther W. Beegle, Kathleen C. Benison, Rohit Bhartia, Benjamin L. Bleefeld, Aaron S. Burton, Sergei V. Bykov, Benton Clark, Lauren DeFlores, Bethany L. Ehlmann, Teresa Fornaro, Allie Fox, Felipe Gómez, Kevin Hand, Nikole C. Haney, Keyron Hickman-Lewis, William F. Hug, Samara Imbeah, Ryan S. Jakubek, Linda C. Kah, Lydia Kivrak, Carina Lee, Yang Liu, Jesús Martínez-Frías, Francis M. McCubbin, Michelle Minitti, Kelsey Moore, Richard V. Morris, Jorge I. Núñez, Jeffrey T. Osterhout, Yu Yu Phua, Nicolas Randazzo, Joseph Razzell Hollis, Carolina Rodriguez, Ryan Roppel, Eva L. Scheller, Mark Sephton, Shiv K. Sharma, Sunanda Sharma, Kim Steadman, Andrew Steele, Michael Tice, Kyle Uckert, Scott VanBommel, Amy J. Williams, Kenneth H. Williford, Katherine Winchell, Megan Kennedy Wu, Anastasia Yanchilina, Maria-Paz Zorzano, <https://doi.org/10.1029/2023JE007989>

(3) Journal of Geophysical Research: Planets, Volume 128, Issue 12

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1. UV Reflectance of Spacecraft Materials and Analog Soils: Implications for Bioburden Reductions on the Undersides of Mars Rovers, by Andrew C. Schuerger, John E. Moores, <https://doi.org/10.1029/2023JE007975>
2. Lunar Impact Craters: New Perspectives From Full-Polarimetric Analysis of Chandrayaan-2 Dual-Frequency SAR Data, by Deepak Putrevu, Tathagata Chakraborty, Jayanta Mukhopadhyay, Tajdarul Hassan Syed, Sriram S. Bhiravarasu, Anup Das, Dharmendra Kr. Pandey, Arundhati Misra, <https://doi.org/10.1029/2023JE007745>
3. (OA) Boulder Diversity in the Nightingale Region of Asteroid (101955) Bennu and Predictions for Physical Properties of the OSIRIS-REx Sample, by Erica R. Jawin, Ronald-L. Ballouz, Andrew J. Ryan, Hannah H. Kaplan, Timothy J. McCoy, Manar M. Al Asad, Jamie L. Molaro, Benjamin Rozitis, Lindsay P. Keller, <https://doi.org/10.1029/2023JE008019>
4. (OA) Heterogeneous Processes in the Atmosphere of Mars and Impact on H₂O₂ and O₃ Abundances, by Frank Daerden, John N. Crowley, Lori Neary, Michael D. Smith, Mark J.

Loeffler, R. Todd Clancy, Michael J. Wolff, Shohei Aoki, Hideo Sagawa, <https://doi.org/10.10292023JE008014>

5. (OA) Ephemeral Ice Clouds in the Upper Mesosphere of Venus, by Benjamin. J. Murray, Thomas. P. Mangan, Anni Määttänen, John. M. C. Plane, <https://doi.org/10.10292023JE007974>
6. (OA) Jupiter's Multi-Year Cycles of Temperature and Aerosol Variability From Ground-Based Mid-Infrared Imaging, by Arrate Antuñano, Leigh N. Fletcher, Glenn S. Orton, Henrik Melin, Pdraig T. Donnelly, Michael T. Roman, James A. Sinclair, Yasumasa Kasaba, Thomas Momary, Takuya Fujiyoshi, <https://doi.org/10.10292022JE007693>
7. (OA) Ultraviolet and Visible Reflectance Spectra of Phobos and Deimos as Measured by the ExoMars-TGO/NOMAD-UVIS Spectrometer, by J. P. Mason, M. R. Patel, M. Pajola, E. D. Cloutis, J. Alday, K. S. Olsen, C. Marriner, J. A. Holmes, G. Sellers, N. Thomas, M. Almeida, M. Read, H. Nakagawa, I. R. Thomas, B. Ristic, Y. Willame, C. Depiesse, F. Daerden, A. C. Vandaele, J. J. Lopez-Moreno, G. Bellucci, <https://doi.org/10.10292023JE008002>
8. The Heat and Momentum Budgets of Titan's Middle Atmosphere, by N. A. Lombardo, J. M. Lora, <https://doi.org/10.10292023JE008061>
9. Thin Ice Lithospheres and High Heat Flows on Europa From Large Impact Structure Ring-Graben, by K. N. Singer, W. B. McKinnon, P. M. Schenk, <https://doi.org/10.10292023JE007928>
10. (OA) Magnetism of the Acapulco Primitive Achondrite and Implications for the Evolution of Partially Differentiated Bodies, by Elias N. Mansbach, Benjamin P. Weiss, Neesha R. Schnepf, Eduardo A. Lima, Cauê S. Borlina, Nilanjan Chatterjee, Jérôme Gattacceca, Minoru Uehara, Huapei Wang, <https://doi.org/10.10292023JE008076>
11. (OA) Effects of Global Dust Storms on Water Vapor in the Southern Polar Region of Mars, by Alexey A. Pankine, Cecilia Leung, Leslie Tamppari, German Martinez, Marco Giuranna, Sylvain Piqueux, Michael Smith, Alexander Trokhimovskiy, <https://doi.org/10.10292023JE008016>
12. The Missing Craters and Basin Rings Beneath the Lunar Maria, by Weigang Liang, Jeffrey C. Andrews-Hanna, Alexander J. Evans, <https://doi.org/10.10292023JE007876>
13. (OA) Mid-Infrared Spectroscopy of Sulfidation Reaction Products and Implications for Sulfur on Mercury, by Christian J. Renggli, Aleksandra N. Stojic, Andreas Morlok, Jasper Berndt, Iris Weber, Stephan Klemme, Harald Hiesinger, <https://doi.org/10.10292023JE007895>
14. (OA) A Complex Region of Europa's Surface With Hints of Recent Activity Revealed by Juno's Stellar Reference Unit, by Heidi N. Becker, Jonathan I. Lunine, Paul M. Schenk, Meghan M. Florence, Martin J. Brennan, Candice J. Hansen, Yasmina M. Martos, Scott J. Bolton, James W. Alexander, <https://doi.org/10.10292023JE008105>
15. Volumetric Changes of Mud on Mars: Evidence From Laboratory Simulations, by P. Brož, O. Krýza, V. Patočka, V. Pěnkavová, S. J. Conway, A. Mazzini, E. Hauber, M. E. Sylvest, M. R. Patel, <https://doi.org/10.10292023JE007950>

16. Disentangling Photoelectrons and Penetrating Solar Wind Electrons in the Dayside Martian Upper Atmosphere, by Y. T. Cao, J. Cui, H. Gu, X.-S. Wu, W.-J. Liang, H.-Y. Lu, <https://doi.org/10.10292023JE008180>
17. (OA) Spectral Analysis of Mare Ingenii Basin (Lunar Farside), by Giulia Salari, Gloria Tognon, Francesca Zambon, Cristian Carli, Federico Tosi, Lorenza Giacomini, Jean-Philippe Combe, Riccardo Pozzobon, Sergio Fonte, Matteo Massironi, Giovanna Rinaldi, <https://doi.org/10.10292023JE007963>
18. Unraveling the Fate of Impacted Ice Particles and the Consequences for Plume Fly-Through Missions, by Valerie Scott, Hao Jiang, Bo Li, Sally E. Burke, Morgan E. C. Miller, Robert E. Continetti, Amy E. Hofmann, <https://doi.org/10.10292023JE007830>
19. Three-Dimensional Global Hybrid Simulations of Mercury's Disappearing Dayside Magnetosphere, by Jin Guo, San Lu, Quanming Lu, James A. Slavin, Weijie Sun, Junyi Ren, Xueyi Wang, Yu Lin, Rajkumar Hajra, Rongsheng Wang, <https://doi.org/10.10292023JE008032>
20. (OA) Mercury's Exosphere as Seen by BepiColombo/PHEBUS Visible Channels During the First Two Flybys, by R. Robidel, E. Quémerais, J. Y. Chaufray, D. Koutroumpa, F. Leblanc, A. Reberac, I. Yoshikawa, K. Yoshioka, G. Murakami, O. Korablev, D. Belyaev, M. G. Pelizzo, A. J. Corso, <https://doi.org/10.10292023JE007808>
21. (OA) Revealing Elysium Planitia's Young Geologic History: Constraints on Lava Emplacement, Areas, and Volumes, by J. R. C. Voigt, C. W. Hamilton, G. Steinbrügge, M. S. Christoffersen, S. Nerozzi, L. Kerber, J. W. Holt, L. M. Carter, <https://doi.org/10.10292023JE007947>

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1. Orbital and In Situ Observation of Transverse Aeolian Ridges at Zhurong Landing Site, by Jia Liu, Yang Liu, Wenhui Wan, Xiang Zhou, Zhenxing Zhao, Yuchun Wu, Chaolin Zhang, Xiyu Wang, Xing Wu, Yongliao Zou, <https://doi.org/10.1029/2023JE007857>
2. Relationship Between Explosive and Effusive Volcanism in the Montes Apenninus Region of the Moon, by L. M. Pigue, K. A. Bennett, B. H. N. Horgan, L. R. Gaddis, <https://doi.org/10.1029/2023JE007861>
3. (OA) A 3D Petrofabric Examination of Martian Breccia NWA 11220 via X-Ray Computed Microtomography: Evidence for an Impact Lithology, by A. Goodwin, R. Tartèse, R. J. Garwood, N. V. Almeida, <https://doi.org/10.1029/2023JE007916>
4. (OA) Early Nitrogen Budget of the Martian Atmosphere and Its Evolution, by Heshani Pieris, Bruce M. Jakosky, <https://doi.org/10.1029/2023JE007934>

5. (OA) Murchison Meteorite Analysis Using Tetramethylammonium Hydroxide (TMAH) Thermochemolysis Under Simulated Sample Analysis at Mars (SAM) Pyrolysis-Gas Chromatography-Mass Spectrometry Conditions, by A. Mojarro, A. Buch, J. P. Dworkin, J. L. Eigenbrode, C. Fressinet, D. P. Glavin, C. Szopa, M. Millan, A. J. Williams, R. E. Summons, <https://doi.org/10.1029/2023JE007968>
6. (OA) Evidence of Topographic Change Recorded by Lava Flows at Atete and Aruru Coronae on Venus, by Wesley S. Tucker, Andrew J. Dombard, <https://doi.org/10.1029/2023JE007971>
7. (OA) Mineralogical Investigation of Mg-Sulfate at the Canaima Drill Site, Gale Crater, Mars, by S. J. Chipera, D. T. Vaniman, E. B. Rampe, T. F. Bristow, G. Martínez, V. M. Tu, T. S. Peretyazhko, A. S. Yen, R. Gellert, J. A. Berger, W. Rapin, R. V. Morris, D. W. Ming, L. M. Thompson, S. Simpson, C. N. Achilles, B. Tutolo, R. T. Downs, A. A. Fraeman, E. Fischer, D. F. Blake, A. H. Treiman, S. M. Morrison, M. T. Thorpe, S. Gupta, W. E. Dietrich, G. Downs, N. Castle, P. I. Craig, D. J. Des Marais, R. M. Hazen, A. R. Vasavada, E. Hausrath, P. Sarrazin, J. P. Grotzinger, <https://doi.org/10.1029/2023JE008041>
8. (OA) Tectono-Magmatic Evolution of Asymmetric Coronae on Venus: Topographic Classification and 3D Thermo-Mechanical Modeling, by Anna J. P. Gülcher, Ting-Ying Yu, Taras V. Gerya, <https://doi.org/10.1029/2023JE007978>
9. Impact of Mars GDS 2018 on the Chemistry of Water, Nitrogenated and Deuterated Cluster Ions: NOMAD Observations, by Siddhi Y. Shah, S. A. Haider, O. Korablev, <https://doi.org/10.1029/2023JE007993>
10. Simulating Radiative Heat Transfer in Multi-Scattering Irregular Surfaces: Application to Snow and Ice Morphologies on Europa, by Anthony Carreon, Antonio Macias, Andy Hsu, Daniel F. Berisford, David B. Goldstein, Philip Varghese, Laurence Trafton, Kevin P. Hand, Jordan Steckloff, Arnaud Mahieux, <https://doi.org/10.1029/2023JE007800>
11. (OA) Silica-Bearing Mounds and Strata in the Southwest Melas Basin, Valles Marineris, Mars: Evidence for a Hydrothermal Origin, by Emma R. Rogers, Briar R. Qualizza, Joseph R. Heidenreich, Henry G. Dawson, Briony H. N. Horgan, <https://doi.org/10.1029/2023JE007881>
12. (OA) Martian Atmospheric Aerosols Composition and Distribution Retrievals During the First Martian Year of NOMAD/TGO Solar Occultation Measurements: 1. Methodology and Application to the MY 34 Global Dust Storm, by Aurélien Stolzenbach, Miguel-Angel López Valverde, Adrian Brines, Ashimananda Modak, Bernd Funke, Francisco González-Galindo, Ian Thomas, Giuliano Liuzzi, Gerónimo Villanueva, Mikhail Luginin, Shohei Aoki, Udo Grabowski, José Juan Lopez Moreno, Julio Rodríguez Gómez, Mike Wolff, Bojan Ristic, Frank Daerden, Giancarlo Bellucci, Manish Patel, Ann-Carine Vandaele, <https://doi.org/10.1029/2022JE007276>
13. (OA) Martian Atmospheric Aerosols Composition and Distribution Retrievals During the First Martian Year of NOMAD/TGO Solar Occultation Measurements: 2. Extended Results, End of MY 34 and First Half of MY 35, by Aurélien Stolzenbach, Miguel-Angel López Valverde, Adrian Brines, Ashimananda Modak, Bernd Funke, Francisco González-Galindo, Ian Thomas, Giuliano Liuzzi, Gerónimo Villanueva, Mikhail Luginin, Shohei Aoki, Udo Grabowski, José Juan Lopez

Moreno, Julio Rodriguez-Gomez, Mike Wolff, Bojan Ristic, Frank Daerden, Giancarlo Bellucci, Manish Patel, Ann-Carine Vandaele, <https://doi.org/10.1029/2023JE007835>

14. Constraining Changes in Surface Dust Thickness on Mars Using Diurnal Surface Temperature Observations From EMIRS, by Chris A. Wolfe, Christopher S. Edwards, Michael D. Smith, Philip R. Christensen, <https://doi.org/10.1029/2023JE007794>
15. Wave Velocities and Poisson Ratio in a Loose Sandy Martian Regolith Simulant Under Low Stresses: 1. Laboratory Investigation, by J. P. Castillo Betancourt, P. Delage, B. Caicedo, P. Lognonné, B. Banerdt, <https://doi.org/10.1029/2023JE007988>
16. Wave Velocities and Poisson Ratio in a Loose Sandy Martian Regolith Simulant Under Low Stresses: 2. Theoretical Analysis, by B. Caicedo, J. P. Castillo Betancourt, P. Delage, P. Lognonné, B. Banerdt, <https://doi.org/10.1029/2023JE008008>
17. (OA) Automatic Characterization of Boulders on Planetary Surfaces From High-Resolution Satellite Images, by Nils C. Prieur, Brian Amaro, Emiliano Gonzalez, Hannah Kerner, Sergei Medvedev, Lior Rubanenko, Stephanie C. Werner, Zhiyong Xiao, Dmitry Zastrozhnov, Mathieu G. A. Lapôtre, <https://doi.org/10.1029/2023JE008013>
18. Insight Into Geological Evolution of the Mesosiderite Parent Body From Olivine Alteration and Merrillite Pb-Pb Age in Dong Ujimqin Qi, by Jingyou Chen, Ying Wang, Ai-Cheng Zhang, Shiyong Liao, Shaolin Li, Sky Beard, Meng-Hua Zhu, <https://doi.org/10.1029/2023JE007954>
19. (OA) The Long-Term Flux of the Solar Wind Suprathermal Ions That Precipitate on the Lunar Surface, by Q. Nénon, J. M. Raines, A. R. Poppe, <https://doi.org/10.1029/2023JE007958>
20. (OA) Latitudinal Variations in Methane Abundance, Aerosol Opacity and Aerosol Scattering Efficiency in Neptune's Atmosphere Determined From VLT/MUSE, by P. G. J. Irwin, J. Dobinson, A. James, M. H. Wong, L. N. Fletcher, M. T. Roman, N. A. Teanby, D. Toledo, G. S. Orton, S. Pérez-Hoyos, A. Sánchez-Lavega, A. Simon, R. Morales-Juberias, I. de Pater, <https://doi.org/10.1029/2023JE007980>
21. Variable Salinity and Hydrogen Production in Europa's Ocean, by E. M. Spiers, B. E. Schmidt, <https://doi.org/10.1029/2023JE008028>
22. (OA) Spatial and Temporal Variation of Mars South Polar Ice Composition From Spectral Endmember Classification of CRISM Mapping Data, by S. F. A. Cartwright, W. M. Calvin, F. P. Seelos, K. D. Seelos, <https://doi.org/10.1029/2023JE008044>
23. Martian Crustal Model From a Joint Inversion of Receiver Functions and Apparent Shear Wave Velocity, by Mingwei Dai, Daoyuan Sun, <https://doi.org/10.1029/2022JE007702>
24. (OA) Impact of the Core Deformation on the Tidal Heating and Flow in Enceladus' Subsurface Ocean, by Burak Aygün, Ondřej Čadek, <https://doi.org/10.1029/2023JE007907>
25. (OA) Divergent Behavior of Hydrothermal Plumes in Fresh Versus Salty Icy Ocean Worlds, by Suyash Bire, Tushar Mittal, Wanying Kang, Ali Ramadhan, Philip J. Tuckman, Christopher R. German, Andreas M. Thurnherr, John Marshall, <https://doi.org/10.1029/2023JE007740>

26. (OA) Formation and Quasi-Periodic Variation of Equatorial Jet Caused by Planetary-Scale Waves in the Venusian Lower Cloud Layer, by Masahiro Takagi, Hiroki Ando, Masataka Imai, Norihiko Sugimoto, Yoshihisa Matsuda, <https://doi.org/10.1029/2023JE007922>
27. Modeling the Evolution of Lunar Regolith: 2. Growth Rate and Spatial Distribution, by Mingwei Zhang, Wenzhe Fa, Emily M. Barnard, Vincent R. Eke, <https://doi.org/10.1029/2023JE008035>
28. (OA) Water Vapor Vertical Distribution on Mars During Perihelion Season of MY 34 and MY 35 With ExoMars-TGO/NOMAD Observations, by A. Brines, M. A. López-Valverde, A. Stolzenbach, A. Modak, B. Funke, F. G. Galindo, S. Aoki, G. L. Villanueva, G. Liuzzi, I. R. Thomas, J. T. Erwin, U. Grabowski, F. Forget, J. J. Lopez-Moreno, J. Rodriguez-Gomez, F. Daerden, L. Trompet, B. Ristic, M. R. Patel, G. Bellucci, A. C. Vandaele, <https://doi.org/10.1029/2022JE007273>

(5) Fieldwork Culture Survey

Join us in shaping the fieldwork culture in the Earth and space sciences! Please take 5-15 minutes to share your experiences conducting fieldwork. Your insights will help shape a practical strategy to make field environments more inclusive and supportive for everyone involved. [Submit your survey by 1 March.](#)