German Martinez
Curriculum Vitae: Dec 2025

Contact Information

Centro de Astrobiología
Ctra de Torrejón a, km 4,
28850, Ajalvir, Madrid, Spain

Tel.: (+1) 7343584324 and (+34) 614385820
E-mail: gmm@cab.inta-csic.es
E-mail: gemartin@umich.edu

Education

- Ph.D. Physics, *Universidad Complutense de Madrid* (UCM), Spain, 2010.
  Title: Characterization of the Martian Planetary Boundary Layer.
- Certificado de Aptitud Pedagógica (equivalent to a M.Ed.), *UCM*, Spain, 2007.
- M.S., Atmospheric Sciences, *UCM*, Spain, 2007.
- B.S., Physics, *UCM*, Spain, 2005.

Professional Experience

- Profesor de Investigación, *Centro de Astrobiología, Spain, Sept 2024 – present.*
- Manager and Sr. Scientist, *Lunar and Planetary Institute, USA*, Sept 2022 – *Aug 2024*.
- Staff Scientist, *Lunar and Planetary Institute, USA*, July 2019 – Aug 2022.
- Adjunct Associate Research Scientist, *University of Michigan, USA*, July 2019 – present.
- Assistant Research Scientist, *University of Michigan, USA*, Jan 2013 – June 2019.
- Postdoctoral Research Fellow, *University of Michigan, USA*, Feb 2011 – Dec 2012.
- Visiting Scientist, *University of Bergen*, *Norway*, Aug 2010 – Jan 2011.
- Research Assistant, *Universidad Complutense de Madrid, Spain*, Nov 2007 – July 2010.
- Research Assistant, *Universidad Politécnica de Catalunya, Spain*, Aug 2007 – Oct 2007.
- Research Assistant, *Universidad Complutense de Madrid, Spain*, Oct 2005 – July 2007.

Missions

Participation

- NASA's Mars 2020, 2014 – *present*.
  Role: Deputy PI of the MEDA environmental suite; Co-lead of the Atmospheric Working Group.
- NASA's Mars Science Laboratory, 2005 – 2007 and 2013 – *present*.
  Role: Team member of REMS; Led the recalibration of REMS UV fluxes.
- ESA's Hydration and Regolith Penetration Observatory On Mars (HARPOON), ESA's Mini-F Mission, 2025 – *present.*
  Role: Science Team Member. Status: In Review.
- NASA's Mars Phoenix, 2019.
  Role: Led the recalibration of the MECA/TECP relative humidity measurements.
- ESA's Hydrological Cycle and Habitability Explorer (HydraX), ESA's F Mission, 2018.
  Role: Project Scientist. Status: Declined.

Data Contributed to NASA PDS

- UV fluxes, Mars Science Laboratory REMS, 2019 – *present*.
- Relative Humidity, Mars Phoenix MECA/TECP, 2019.

Instrument Development

- **Modern Aqueous Habitat Reconnaissance Suite (MAHRS)**, 2016 – *present*.
  Role: Helped define science objectives.
- **Thermal Infrared Sensor** onboard NASA's Mars 2020 mission, 2013 – *present*.
  Role: Co-led scientific design, instrument reviews and calibration activities.

Grants

Current

- **PI**, "ESP2016-79612-C3-1-R: Ciencia y tecnología de la instrumentación espacial para la caracterización del entorno marciano en el marco de múltiples misiones de NASA - V: De REMS a MEDA y más allá", Ministerio de Ciencia e Innovación, Spain, 2026 – 2029.

Past

- **PI**, "Mars 2020 Mars Environmental Dynamics Analyzer (MEDA), Phase D/E", Jet Propulsion Laboratory, 10/1/19 – 9/30/24.
- **PI**, "MSL Science Operations: Supporting REMS", University of Michigan through Jet Propulsion Laboratory, 10/1/19 – 9/30/24.
- **Co-I**, "Support for Planetary Sample Science (SPSS)", NASA; PI: Dr. Walter Kieffer, 11/01/23 – 10/31/26.
- **Co-I**, "Effects of Global Dust Storms on Water Vapor in the Martian South Polar Region", Mars Data Analysis Program; PI: L. K. Tamppari (JPL), 07/26/2021 – 07/26/2024.
- **PI**, "Mars 2020 Mars Environmental Dynamics Analyzer (MEDA)", Jet Propulsion Laboratory, 10/29/14 – 6/30/19.
- **PI**, "Recalibration and Analysis of the Phoenix Mission's Thermal and Electrical and Conductivity Probe (TECP) Relative Humidity Data", Mars Data Analysis Program, 6/10/15 – 6/9/19.
- **Co-I**, "Consolidating the pathway towards a rigorous Observing System Simulation Experiment (OSSE) infrastructure for Mars", USRA Internal Research and Development funds; PI: O. Reale, 10/1/20 – 9/30/21.
- **Co-I**, "Investigating the Martian near-surface water exchange: Insights from comparisons at polar and equatorial latitudes", Mars Data Analysis Program; PI: E. G. Rivera-Valentín, 9/1/18 – 8/30/19.
- **Coll.**, "Measuring Molecular Oxygen, Water Vapor, and Aerosols with ChemCam Passive Sky Observations", Mars Data Analysis Program; PI: T. H. McConnochie, 8/1/19 – 7/31/22.
- **Coll.**, "*Caracterización de los ciclos del polvo y del agua en el sistema climático marciano*", Ministerio de Ciencia e Innovación, Spain; PI: Daniel Toledo Carrasco, 2022.
- **Coll.**, "ESP2016-79612-C3-1-R: Ciencia y tecnología de instrumentos espaciales para la caracterización del ambiente marciano en múltiples misiones de NASA - II: REMS (Fase E),

TWINS (Fase E) y MEDA (Fase D)", Ministerio de Economía y Competitividad, Spain; PI: José Antonio Rodríguez-Manfredi, 2016 – 2018.

- Coll., "ESP2015-68281-C4-1-R: Ciencia y tecnología de instrumentos espaciales para la caracterización del ambiente marciano en múltiples misiones de NASA: REMS, TWINS y MEDA. Fase C/D", Ministerio de Economía y Competitividad, Spain; PI: José Antonio Rodríguez-Manfredi, 2016 – 2017.
- Coll., "ESP2014-54256-C4-1-R", Ministerio de Economía y Competitividad, Spain; PI: José Antonio Rodríguez-Manfredi, 2015.
- Coll., "A Miniature Sensor for Measuring Soil Wetness and Searching for Brines on Mars and Beyond", NASA Exobiology Program; PI: N. O. Renno, 10/01/12 – 7/31/19.

Profession Activities and Service

Advisory Committees

- Member of NASA's Mars Exploration Program Analysis Group (MEPAG), 2023 – *present*. Representative of Goal II (Climate).

Editorial Activities

- Associate Editor of JGR-Planets, 2020 – *present*.
- Translator of LPI's Planetary News into Spanish, 2019 – 2023.
- Guest Associate Editor of JGR-Planets for special collection, 2019.

Review Panels

- Panelist and Proposal Reviewer for NASA's MDAP, SSW, FINESST, HW, EXOB, ICAR and PS Programs.
- Panelist for ESA's Directorate of Human and Robotic Exploration and several Europlanet Programs.
- Group Chief for 3 NASA Programs.
- External Reviewer for NSF and National Programs in Chile and Italy.

PhD Committee Activity

- PhD Thesis Advisory Committee Member for Asier Munguira, 2025.
  Title: Characterization of the Planetary Boundary Layer of Mars with MEDA Data from the Perseverance Rover: Universidad del País Vasco, Bilbao, Spain.
- PhD Thesis Advisory Committee Member for Carolina Martín Rubio, 2025.
  Title: Characterization of Dust Storms on Mars Using Satellite Measurements: Universidad Complutense de Madrid, Madrid, Spain.
- PhD Thesis Advisory Committee Member for Carlos Gary Bicas, 2023.
  Title: Thermal Infrared Perspectives of Subsurface, Surface and Surface-to-Atmosphere Phenomena on Mars. Institution: Stony Brook University, USA.
- PhD Thesis External Reviewer for Laura M. Parro, 2020.
  Title: Mars and Europa: Analysis of its thermal state, structure and internal evolution. Institution: Universidad Complutense de Madrid, Madrid, Spain.
- PhD Thesis External Reviewer for Hao Chen-Chen, 2019.

Title: Study of Martian dust aerosol with Mars Science Laboratory Rover engineering Cameras. Institution: Universidad del País Vasco, Spain.

- PhD Thesis Advisory Committee Member for Iñaki Ordóñez-Etxeberría, 2018.
  Title: Meteorología de la atmósfera de Marte durante la misión Mars Science Laboratory: Dust devils y tormentas de polvo. Institution: Universidad del País Vasco, Spain.
- PhD Thesis Advisory Committee Member for Erik Fischer, 2018.
  Title: Experimental Study of the Formation of Liquid Saline Water on Mars. Institution University of Michigan, USA.
- PhD Thesis Advisory Committee Member for Deepak Singh, 2016.
  Title: Radiative Impact of Cryosphere on the Climate of Earth and Mars. Institution: University of Michigan, USA.

Conferences

- Organizational Committee Member of the 51st, 52nd, 55th, and 56th Lunar and Planetary Science Conference, 2020, 2021, 2024, and 2025.
- Chair of the session “Dynamics and Processes in the Martian Atmosphere”, The Tenth International Conference on Mars, 2024.
- Chair of the session “The Inner Solar System”, AGU Fall meeting, 2022.
- Chair of the session "Atmospheres: Dynamics, Evolution, and Composition", 52nd Lunar and Planetary Science Conference, 2021.
- PhD Candidates Committee Member, Climate and Space Sciences and Engineering, University of Michigan, 2014 – 2019.
- Chair of the session "Mars Atmosphere", 49th Lunar and Planetary Science Conference, 2018.
- Chair of the session "The Dynamical Martian Atmosphere", Division for Planetary Sciences and European Planetary Science Congress, 2016.

Referee for Journals

- Nature Astronomy, Space Science Reviews, Reviews of Geophysics, Scientific Reports, Communications Earth & Environment, Geophysical Research Letters, Journal of Geophysical Research, Icarus, Quarterly Journal of the Royal Meteorological Society, Astrobiology, Planetary and Space Science, AAS' Planetary Science Journal, Advances in Space Research, Monthly Notices of the Royal Astronomical Society, Canadian Journal of Physics, and Geoscientific Instrumentation, Methods and Data Systems, among others.

White Papers in the NASA Planetary Science and Astrobiology Decadal Survey 2023-2032

- E.G. Rivera-Valentín, G. M. Martinez, J. Filiberto, K. Lynch, V.F. Chevrier, R.V. Gough, M. Tolbert, J. Hanley, K.M. Primm, A. Soto, and D. Stillman. Resolving the Water Cycle on a Salty Mars: Planetary Science and Astrobiology Exploration Strategies for the Next Decade.
- S. Guzewich et al., including G. M. Martinez. Measuring Mars Atmospheric Winds from Orbit.

- C. E. Newman et al., including **G. M. Martinez**. Toward more realistic simulation and prediction of dust storms on Mars.
- I. B. Smith et al., including **G. M. Martinez**. A Case for Mars Polar Science in the Solar System.

Teaching

- **CLASP 749: Climate and Space Sciences Seminar**, Fall 2016 and Winter 2017.
  1 credit graduate upper-level course, University of Michigan.
- **AOSS 350: Atmospheric Thermodynamics**, Winter 2013 and 2014.
  4 credit undergraduate upper-level course, University of Michigan.
- **Climate Risks and Environmental Impacts**, 2010.
  M.S. course offered by the Spanish Meteorology Agency, Spain.
- **Physics and Chemistry**, 2007.
  High School introductory course, Murcia, Spain.

Mentoring

PhD Advisor

- **Erik Fischer**, University of Michigan, 2014 – 2018.
  Published 3 articles in top journals under my supervision. Currently, Assistant Research at the University of Michigan.
- **Álvaro Vicente Retortillo**, Universidad Complutense de Madrid, 2014 – 2017.
  Published 2 articles in top journals under my supervision. Currently, Postdoctoral Researcher at Centro de Astrobiología in Madrid, Spain.

Postdoctoral Advisor

- **Erik Fischer**, University of Michigan, 2020 – 2023.
  Published 1 article in a top journal under my supervision.
- **Hartzel Gillespie**, Lunar and Planetary Institute, Sep 2021 – June 2023.
  1 article in preparation. Currently, Researcher at JPL.
- **Álvaro Vicente Retortillo**, University of Michigan, 2017 – 2019.
  Published 2 articles in top journals under my supervision.

Graduate and Undergraduate Mentor

- **Alejandro Salinas Sola**, Universidad Alcalá de Henares, Madrid, Spain, Feb 2025 – *present*
  Bachelor's Thesis entitled 'Acoplamiento Energético Superficie-Atmósfera en Marte'.
- **Anja Sheppard**, University of Michigan, June 2023 – *present*.
  Funded to help in surface operations of the Mars 2020 Perseverance rover.
- **Ariana Bueno**, University of Michigan, July 2021 – *present*.
  Funded to help in surface operations of the Mars 2020 Perseverance rover.
- **Pragya Raghav**, Aligarh Muslim University, 2023.
  LPI Summer Internship; Investigation to be submitted to LPSC 2024.
- **Antonio Joaquín Segura-García**, Pompeu Fabra, Spain 2022.

Master's Advisor; Thesis: Unsupervised Machine Learning Models of Mars Subsurface Neutrons Emissions. Presented work at AGU 2020.

- Jacob Gambrill, Embry–Riddle Aeronautical University, 2022.
  LPI Summer Internship; Investigation presented in LPSC 2023; Currently, graduate student at Texas A&M.
- Simon Mendenhall, University of South Florida, 2021.
  LPI Summer Internship; Investigation presented in LPSC 2022; Currently, graduate student at UT San Antonio Physics/SwRI.
- Cauê Borlina, University of Michigan, 2013 – 2016.
  Co-authored 2 articles as an undergraduate student under my supervision. Currently, Blaustein Postdoctoral Fellow at Johns Hopkins University.

Honors and Awards

- Journal of Geophysical Research: Planets, 2024.
  Top cited article among work published in 2023.
- NASA's Mars 2020 Prelanding Strategic Science, Group Achievement Award, 2023.
  For outstanding contributions to the strategic science effort that maximized the scientific return of the early Mars 2020 surface mission and sample collection.
- NASA's Mars 2020 MEDA instrument, Group Achievement Award, 2023.
  For outstanding achievements in the development and successful operation of the MEDA instrument that enables unique environmental studies on Mars.
- NASA's Mars 2020 Atmospheric Science Team, Group Achievement Award, 2023.
  For multi-instrument observations to understand Mars' dust cycle, and provide environmental context for engineering and sampling, during the COVID-19 pandemic.
- NASA's Mars 2020 Instrument Operations Team, Group Achievement Award, 2021.
  For outstanding achievements in instrument operations development activities.
- USRA Spot Award, 2021.
  For exceptional work supporting Lunar and Planetary Institute Education and Public Engagement.
- Spanish La7 TV "Premios Fénix" Award, 2019.
  Given to individuals from La Región de Murcia, Spain, who have excelled in cultural, scientific, social, sport and musical spheres in an exemplary and meritorious manner.
- Cadena SER "Calle Radio Murcia" Award, 2018.
  Spain's prime radio network award given to individuals who have excelled in cultural, scientific, or technical spheres in an exemplary and meritorious manner.
- NASA's Mars Science Laboratory extended mission, Group Achievement Award, 2017.
- NASA's Mars Science Laboratory mission, Group Achievement Award, 2015.
- UCM-EEA Abel Predoc Grant, European Economic Area, 2010.
- Universidad Complutense de Madrid "Exención de tasas" Award, 2005 and 2006
  Fellowship covering full tuition for the PhD program. Awarded to 5% of applicants.
- High School Graduation Award as best student, Murcia, Spain, class 1995.

Invited Talks (excluding conferences)

- International Planetary Probe Workshop, Stuttgart, Germany, 2025.
- Planetary Exploration Workshop, Saariselkä, Finland, 2024.
- MIT Department of Earth, Atmospheric, and Planetary Sciences, Cambridge, MA, 2024.
- JPL/Caltech, Pasadena, CA, 2024.
- Universidad Complutense de Madrid, Summer Course, Ages of Mars, 2022.
- Johnson Space Center Astronomical Society, TX, 2021.
- Texas A&M, Geology and Geophysics Society, TX, 2019.
- Lunar and Planetary Institute/USRA, TX, 2019.
- JPL/Caltech, Pasadena, CA, 2018.
- Southwest Research Institute, Boulder, CO, 2017.
- American Institute of Aeronautics and Astronautics at the University of Michigan, 2015.
- Centro de Astrobiología, Madrid, Spain, 2013.
- Geophysical Institute, University of Bergen, Bergen, Norway, 2010.
- National Renewable Energy Center (CENER), Pamplona, Spain, 2010.
- Facultad de Matemáticas, Universidad Complutense de Madrid, Madrid, Spain, 2009.
- Istituto Nazionale di Astrofisica Osservatorio di Capodimonte, Naples, Italy, 2009.
- Finnish Meteorological Institute, Helsinki, Finland, 2007.

Media Coverage (selected)

- Interviewed and quoted in Spain's national newspapers (elDiario.es, Agencia EFE), radio stations (Cadena SER, Cadena COPE,), and international magazines (Sky&Telescope, Forbes Mexico), on co-authored investigation published in *Nature* about the first in situ detection of triboelectric discharges on Mars, 2025.
- Interviewed in Spain's regional radio network (Onda Regional de Murcia) on involvement in NASA's exploration of Mars, 2025.
- Quoted in EOS, a science news magazine published by AGU, on how Martian Dust Devils Reveal Dynamic Surface Winds, 2025.
- Quoted in Spain's national (ABC) newspaper on Mars Human Exploration, 2024.
- Quoted in Radio Televisión Española and highlighted in USRA News on co-authored investigation published in Nature Geoscience about the meteorology of NASA's Mars 2020 landing site, 2023.
- Quoted in CBS News, AlJazeera, Smithsonian Magazine, ABC News, Los Angeles Times, TeleMundo, Univision, etc, on co-authored investigation published in *Nature Communications* about the sound of dust devils on Mars, 2022.
- Quoted in Universe Today, ScienceDaily, and PR Newswire and highlighted in USRA News on co-authored investigation published in *PNAS* about dust storms and energy imbalance on Mars, 2022.
- Highlighted by EuroPlanet Media and quoted in Phys.org, Infobae and Europa Press (among others) on contribution sent to the European Planetary Science Conference about future human exploration of Mars, 2021.
- Quoted in Spain's national (ABC) newspaper on Mars 2020 Helicopter, 2021.

- Wrote a column for Spain's national (ABC) newspaper on first results of the Mars 2020 mission, 2021.
- Quoted in Spain's national (ABC) newspaper on Mars 2020 Helicopter, 2021.
- Interviewed in Spain's regional radio network (Onda Regional de Murcia) on NASA's exploration of Mars, 2021.
- Interviewed by Hispanic TV channels (Univisión Chicago, Telemundo 51 Miami, Cuatro TV España), Radio stations (FM RCN Colombia), and press (ABC España) on the flight of the helicopter (Ingenuity) onboard the Mars 2020 mission, 2021.
- Interviewed by Hispanic TV channels (Noticias Telemundo y Univision Nueva York), Radio stations (e.g., Radio Nacional de España), and featured by NASA en español on the Mars 2020 mission landing, 2021.
- Interviewed in Spain's national (ABC) and regional (La Verdad) newspapers on the Mars 2020 mission, 2020.
- Quoted in Spain's national newspaper (El Español) as one of the most influential people born in Murcia, Spain, 2020.
- Interviewed by Accuweather Inc. on the weather on Mars and its predictability, 2020.
- Interviewed in ScienceNews on how NASA's Mars 2020 mission will help predict dust storms on Mars, 2020.
- Quoted in Nature Astronomy, Astrobiology, PR Newswire and Spanish TV channel "La Sexta" on the habitability potential in Martian brine, 2020.
- Interviewed in New Scientist on current water on Mars and the expected challenges in future human exploration of the Red Planet, 2020.
- Interviewed and quoted in National Geographic on involvement in a study of oxygen on Mars, 2019.
- Results of NASA's MDAP project (Recalibration and Analysis of the Phoenix Mission's Thermal and Electrical and Conductivity Probe (TECP) Relative Humidity Data) advertised on the Astrobiology webpage of NASA, 2019.
- Quoted in PBS Nova, Chemistry World, and MIT Technology Review on a paper published in Nature Astronomy about Martian habitability, 2019.
- Interviewed in Spain's national newspaper (El Español) on involvement in NASA's exploration of Mars, 2018.
- Interviewed in Spain's national tech magazine (Nobbot) on involvement in NASA's exploration of Mars, 2018.
- Interviewed in Spain's national prime radio network (Cadena SER) on involvement in NASA's exploration of Mars, 2018.
- Quoted in Spain's national newspaper (20 Minutos) on award given by Spain's premier radio network Cadena SER "Calle Radio Murcia", 2018.
- Interviewed in Spain's regional newspapers (Grupo Vocento) on involvement in NASA's exploration of Mars, 2018.
- Interviewed in Spain's regional newspaper (La Verdad) on involvement in NASA's exploration of Mars, 2018.
- Interviewed in Spain's regional radio network (Onda Regional de Murcia) on involvement in NASA's exploration of Mars, 2018.

- Quoted in Spain's regional radio (Radio Euskadi) on involvement in NASA's Mars 2020 mission, 2017.
- Interviewed and quoted in a NASA's press release on Seasonal Cycles in Curiosity's First Two Martian Years, 2016.
- Quoted in Astronomy, Phys.org, and Scientific American on Mars Curiosity Rover's findings, 2016.
- Former PhD Student quoted in Spain's national newspaper (La Vanguardia) on research about a new Martian radiative model, 2015.
- Quoted in Spain's national (ABC) and regional (La Verdad) newspapers on research about water on Mars, 2014.

Outreach

- Primary School Capuchinos, Murcia, Spain. Invited talk on Space Exploration, 2025.
- Motivational talk on the Mars 2020 mission given to Zola High School, Madrid, Spain, 2025.
- Wrote a blog for Eos, a science news magazine published by AGU, about how wind vibrations measured by NASA's InSight mission seismometer are mapped into wind speed and direction, 2025.
- Wrote a blog for Eos, a science news magazine published by AGU, about a unified model to calculate evaporation rates on rocky bodies with atmospheres, 2024.
- Middle School Escola Mestral, Vilanova de la Barca, Catalunya, Spain. Invited talk on Space Exploration, 2024.
- Wrote a blog for Eos, a science news magazine published by AGU, about the InSight Lander on Mars, 2023.
- Wrote a blog for Eos, a science news magazine published by AGU, about the first flights of a helicopter on another planet (Mars), 2023.
- Invited speaker at "Alcanzando Las Estrellas", a webinar in Spanish about Planetary Science and career paths. Title "A los Mandos del Perseverance", 2022.
- Wrote a blog for Eos, a science news magazine published by AGU, about the relation between ozone, water vapor, and temperatures as measured by TGO, 2022.
- Invited speaker at "The Road to Mission Science: Seminars for Students and Early Career Researchers", focused on how to get involved in current planetary missions, 2022.
- Wrote a blog for Eos, a science news magazine published by AGU, about the mystery of Methane on Mars, 2022.
- Wrote a blog for Eos, a science news magazine published by AGU, about the thermal properties of Martian soil as measured by the InSight lander, 2021.
- Invited by NASA *en Español* during the landing of the Perseverance Mars 2020 rover to answer questions in social media, 2021.
- Motivational talk on the Mars 2020 mission given to the *Instituto Alfonso X el Sabio* High School, Murcia, Spain, 2021.
- Motivational talk on the Exploration of Mars given to the scholar association *Talentos-Altas Capacidades Intelectuales Región de Murcia,* Murcia, Spain, 2021.

- Invited speaker on "Follow Perseverance to Mars!" live webcast organized by the STAR Library Network's *NASA@ My Library* program in partnership with the Lunar and Planetary Institute, the American Library Association, and the American Museum of Natural History, 2020. Live webcast and flyer.
- Interviewed by College of Dupage's student newspaper *The Courier* on NASA's Mars 2020 mission, 2020.
- Invited Speaker on the Space Exploration Educator's Conference (SEEC) program aimed at pairing SEEC Crew members with Space Exploration Experts to help educators develop new lessons and activities, 2020.
- Primary School Capuchinos, Murcia, Spain. Invited talk on Space Exploration, 2020.
- Pasadena Public Library, Pasadena, TX. Invited talk on Space Exploration to celebrate the Hispanic Heritage Month, 2019.

Journal Publications (h/i10-index = 35/68; Google scholar)

In Review

6. Ollila, A. M., O. Beyssac, A. Fau, O. Forni, E. Clavé, P. Beck, C. Bedford, V. Payre, E. Dehouck, S. A. Connell, J. A. Manrique, P. Pilleri, O. Gasnault, **G. M. Martínez**, A. Udry, S. Bernard, P. Gasda, T. Acosta-Maeda, R. B. Anderson, T. S. J. Gabriel, F. Calef, J. F. Bell III, J. Maki, S. Schröder, C. Quantin-Nataf, J. R. Johnson, B. Chide, K. Rammelkamp, F. Poulet, C. Royer, M. Rock, N. L. Lanza, S. K. Sharma, G. Lopez-Reyes, T. Fouchet, J. Comellas, A. Zastrow, E. Cloutis, R. C. Wiens, A. Cousin, S. Maurice, S. Clegg, P. Bernardi, T. Nelson, Corundum Discovered by SuperCam and the Perseverance Rover at Jezero Crater, Mars, *Geophysical Research Letters* (in review), 2025.
5. Savijärvi, H., **G. M. Martínez**, M. Paton, J. Polkko, J. Leino, A.-M. Harri, Aspects of thermal radiation from the atmosphere in Jezero crater, Mars, through observations and model results: an aphelion case study, *Icarus* (in review), 2025.
4. Alberini, A., T. Fornaro, C. García-Florentino, G. Poggiali, S. Biancalani, F. Renzi, T. Grazioso, N. Tasinato, D. Alvarado Jiménez, Á. Vicente-Retortillo, E. A. Cloutis, S. Connell, G. Famiglini, A. Cappiello, **G. M. Martínez**, M. Battistuzzi, C. Lorenz, A. Steele, J. Martínez-Frías, F. Gómez, R. C. Wiens, K. P. Hand & J. R. Brucato, Photostability of Polycyclic Aromatic Hydrocarbons (PAHs) in hydrated magnesium sulfate under Martian-like UV irradiation to assist organics detection on Mars, *Scientific Reports* (in review), 2025.
3. Stott, A. E., N. Murdoch, M. Gillier, **G. M. Martínez**, T. Bertrand, R. Lorenz, C. Newman, R. Hueso, M. de la Torre-Juárez, D. Banfield, S. Maurice, B. Chide, J. A. Rodriguez-Manfredi, D. Mimoun, The dissipation regime of turbulence on Mars with Microphone data from the Perseverance rover, *Geophysical Research Letters* (in review), 2025.
2. Franz, H. B., C. R. Webster, G. J. Flesch, P. R. Mahaffy, E. Raaen, M. Kahre, B. Prats, B. L. Ehlmann, S. K. Atreya, D. G. Burtt, C. H. House, D. Y. Lo, J. C. Stern, M. G. Trainer, P. Douglas Archer, Jr., M. de la Torre Juarez, D. J. Des Marais, S. Guzewich, **G. M. Martínez**, C. A. Malespin, J. Pla-Garcia, S. Rafkin, A. Steele, A. R. Vasavada, D. Viudez-Moreiras, M. H. Wong, M.-P. Zorzano. A decadal record of isotopic trends in martian atmospheric CO2. *Nat. Astro* (in review), 2025.

1. de la Torre Juárez, M., S. D. Guzewich, E. L. Mason, J. M. Battalio, C. E. Newman, **G. M. Martínez**, S. Zurita Zurita, S. J. VanBommel, T.H. McConnochie, Mars surface landers observe contemporaneous changes in atmospheric composition and Hadley circulation, *Geophysical Research Letters* (in review), 2025.

Published

101. Connell, S. A., R. C. Wiens, L. Mandon, C. C. Bedford, S. Siljeström, S. Schröder, **G. M. Martínez**, Á. Vicente-Retortillo, E. A. Cloutis, D. M. Applin, A. Broz, C. Royer, J. R. Johnson, J. Van Beek, T. Nelson, E. Clavé, F. Poulet, P. Beck, E. Dehouck, T. Fornaro, 9 T. Fouchet, A. Jones, A. Alberini, A. Cousin, K. Hand, K. Uckert, J. A. Rodríguez-Manfredi, K. M. Stack, and the Mars 2020 team, Abrasion Patch Dehydration Experiment at Bright Angel, Jezero Crater, 4 using SuperCam onboard the Mars 2020 Perseverance Rover, *Journal of Geophysical Research: Planets* (in press), 2025.
100. Chide, B., R. D. Lorenz, F. Montmessin, S. Maurice, Y. Parot, R. Hueso, **G. M. Martínez**, A. Vicente-Retortillo, X. Jacob, M. Lemmon, B. Dubois, P.-Y. Meslin, C. Newman, T. Bertrand, G. Deprez, D. Toledo, A. Sánchez-Lavega, A. Cousin, R. C. Wiens, Sparks on Mars: detection of triboelectric discharges during dust events, *Nature* (in press), 2025.
99. Polkko, J., H. Savijärvi, A. Munguira, R. Hueso, T. Bertrand, **G. M. Martínez**, M. Smith, J. Leino, M. Lemmon, D. Viudez-Moreiras, M. de la Torre Juarez, L. Tamppari, F. Gomez, A.-M. Harri, M. Hieta, I. Jaakonaho, T. McConnochie, M. Paton, J. Pla-Garcia, J. A. Rodriguez-Manfredi, A. Sanchez-Lavega, M. P. Zorzano, Annual evolution of water vapor at Jezero crater based on observations and modeling. *Journal of Geophysical Research: Planets*, 130(10), e2025JE009124, 2025.
98. Vicente-Retortillo, A., **G. M. Martínez**, C. E. Newman, M. T. Lemmon, J. R. Johnson, E. L. Mason, N. O. Renno and J. A. Rodriguez-Manfredi, Dust Lifting and Deposition over six Mars Years at Gale Crater, Mars, from REMS Observations and Mesoscale Simulations. *Journal of Geophysical Research: Planets*, 130(6), e2024JE008888, 2025.
97. Sebastián, E., **G. M. Martinez**, M. D. Smit, V. Peinado, L. Mora, Á. de Vicente-Retortillo, and J. A. A. Rodríguez-Manfredi, Model update and surface operation performance of the MEDA-TIRS radiometer onboard NASA's Mars2020 Perseverance rover, *Space Science Reviews*, 221(5), 1-29, 2025.
96. Hieta, M., I. Jaakonaho, J. Polkko, H. Savijärvi, M. Genzer, A.-M. Harri, A. Lorek, S. Garland, J.-P. de Vera, **G. M. Martínez**, E. Fischer, E. Sebastián, J. A. Rodríguez-Manfredi, L. Tamppari, M. de la Torre Juárez, T. McConnochie, REMS-H Revisited: Updated calibration and results of the humidity sensor of the MSL Curiosity, *Space Science Reviews*, 221(5), 582025.
95. Munguira, A., R. Hueso, A. Sánchez-Lavega, T. del Rio-Gaztelurrutia, T. Bertrand, **G. M. Martínez**. Nighttime and early morning atmospheric waves and transient turbulence at Jezero, Mars, observed by the Perseverance rover. *Journal of Geophysical Research: Planets* 130.7: e2025JE009114, 2025.
94. Sánchez-Lavega, A., E. Larsen, T. del Rio-Gaztelurrrutia, J. Hernández-Bernal, I. Ordóñez-Etxebarría, R. Hueso, B. Tanguy, M. Lemmon, M. de la Torre Juarez, **G. M. Martínez**, A. Munguira, J. A. Rodríguez-Manfredi, A.-M. Harri, J. Pla-García, D. Toledo, Martian atmospheric disturbances from orbital images and Surface pressure at Jezero Crater, Mars,

during Martian Year 36. *Journal of Geophysical Research: Planets*, 130.1, e2024JE008565, 2025.

93. Sebastián, E., **G. M. Martínez**, M. Ramos, M. D. Smith, V. Peinado, L. Mora1, M. T. Lemmon, A. Vicente -Retortillo, J. de Lucas, R. Ferrandiz, and José A. Rodriguez-Manfredi, In-flight calibration of the MEDA-TIRS instrument onboard NASA's Mars2020 mission. *Acta Astronautica*, 226, 791-802, 2025.
92. Smith, M. D., **G. M. Martínez**, E. Sebastián, M. T. Lemmon, S. A. Atwood, D. Toledo, D. Viúdez-Moreiras, A. Stcherbinine, J. A. Rodriguez-Manfredi, M. de la Torre Juárez, The diurnal variation of dust and water ice aerosol optical depth at Jezero Crater observed by MEDA/TIRS over a full Martian year. *Icarus 425*, 116313, 2025.
91. Hausrath, E. M., R. Sullivan, Y. Goreva, M. P. Zorzano, A. Vaughan, A. Cousin, S. Siljeström, S. Sharma, A. Shumway, T. Kizovski, S. VanBommel, M. Tice, A. Knight, **G. M. Martínez**, A. de Vicente-Retortillo, L. Mandon, C. T. Adcock, J. M. Madariaga, I. Población, J. R. Johnson, J. Lasue, O. Gasnault, N. Randazzo, E. Cardarelli, R. Kronyak, A. Bechtold, G. Paar, A. Udry, O. Forni, C. C. Bedford, N. A. Carman, J. F. Bell III, K. Benison, T. Bosak, A. Brown, A. Broz, F. Calef, B. Clark, A. D. Czaja, T. Fouchet, T. S. J. Gabriel, M. Golombek, F. Gomez, C. D. K. Herd, K. Herkenhoff, R. S. Jakubek, L. Jandura, J. Martinez-Frias, L.E. Mayhew, F. Poulet, P. Russell, M. Sephton, D. Shuster, J. I. Simon, I. Tirona, R. C. Wiens, B. Weiss, A. Williams, K. Williford, Z. U. Wolf, and the Regolith Working Group, Collection and in situ analyses of regolith samples by the Mars 2020 rover: Implications for formation and alteration history. *Journal of Geophysical Research: Planets*, 130.2, e2023JE008046, 2025.
90. Guan, L., E. Creecy, X. Jiang, X. Wang, **G. M. Martínez**, A. Toigo, M. Richardson, A. Sánchez-Lavega, Distinct Energy Budgets of Mars and Earth. *AGU Advances*, 5(6), e2024AV001389, 2024.
89. Toledo, D., P. Rannou, V. Apestigue, R. Rodriguez, I. Arruego, **G. M. Martínez**, L. Tamppari, A. Munguira, R. Lorenz, F. Montmessin, A. Sanchez-Lavega, P. Patel, M. Smith, M. Lemmon, A. Vicente-Retortillo, C. Newman, D. Viudez-Moreiras, R. Hueso, M. Yela, M. de la Torre Juarez, and J. A. Rodriguez-Manfredi, Drying of the Martian mesosphere during aphelion induced by lower temperatures. *Communications Earth & Environment*, 5 (1), 2024.
88. Jackson, B., L. Fenton, T. Brown, A. Munguira, **G. M. Martínez**, C. Newman, D. Viudez-Moreiras, M. Golombek, R. Lorenz, M. D. Paton, and D. Conway, Profiling Near-Surface Winds on Mars Using Attitude Data from Mars 2020 Ingenuity. *Planetary Science Journal*, 6(1), 2025.
87. Savijärvi, H., J. Polkko, M. Hieta, **G. M. Martínez**, M.P. Zorzano, L. Tamppari, and A.-M. Harri, Moisture cycles and ground properties in Jezero crater, Mars. *Icarus 423*, 116283, 2024.
86. Savijärvi, H., J. Polkko, M. Hieta, **G. M. Martínez**, M.-P. Zorzano, L. Tamppari, J. Leino, M. Paton, and A.-M. Harri, Wintertime column modeling in Jezero crater, Mars: Period of near-fog and a dust event. *Icarus 421*, 116242, 2024.
85. Munguira, A., R. Hueso, A. Sánchez-Lavega, D. Toledo, M. de la Torre Juárez, A. Vicente-Retortillo, **G. M. Martínez**, T. Bertrand, T. del Rio-Gaztelurrutia, E. Sebastián, M. Lemmon, J. Pla-García, and J. A. Rodríguez-Manfredi, One Martian Year of Near-Surface Temperatures at Jezero from MEDA Measurements on Mars2020/Perseverance. *Journal of Geophysical Research: Planets*, 129.7, e2024JE008385, 2024.

84. Vicente-Retortillo, Á., M. T. Lemmon, G. M. Martínez, D. Toledo, V. Apéstigue, I. Arruego, T. Bertrand, R. Lorenz, E. Sebastián, R. Hueso, C. Newman, M. D. Smith, and J. A. Rodriguez-Manfredi, Dust Accumulation and Lifting at the Landing Site of the Mars 2020 Mission, Jezero Crater, as Observed from MEDA. *Geophysical Research Letters*, 51.11, e2023GL107975, 2024.
83. Harri, A.-M., M. Paton, M. Hieta, J. Polkko, C. Newman, J. Pla-Garcia, J. Leino, T. Määkinen, J. Kauhanen, I. Jaakonaho, A. Sanchez-Lavega, R. Hueso, M. Genzer, R. Lorenz, M. Lemmon, A. Vicente-Retortillo, L. K. Tamppari, D. Viudez-Moreiras, M. de la Torre-Juarez, H. Savijärvi, J. A. Rodríguez-Manfredi, and G. M. Martínez, Perseverance MEDA Atmospheric Pressure Observations - Initial Results. *Journal of Geophysical Research: Planets*, 129 (3), e2023JE007880, 2024.
82. Zorzano, M.-P., G. M. Martínez, J. Polkko, L. Tamppari, C. Newman, H. Savijärvi, Y. Goreva, D. Viudez, T. Bertrand, M. Smith, E. M. Hausrath, S. Siljeström, K. Benison, T. Bosak, A. D. Czaja, V. Debaille, C. D. K. Herd, L. Mayhew, M. A. Sephton, D. Shuster, J. I. Simon, B. Weiss, N. Randazzo, L. Mandon, A. Brown, M. H. Hecht, J. Martínez-Frías, Present-day thermal and water activity environment of the Mars Sample Return collection, *Scientific Reports*, 14 (1), 2024.
81. Abdelmoneim, N., D. Dhuri, D. Atri, and G. M. Martínez, Interpretable Machine Learning for Modeling Relative Humidity: Expanding Mars Climate Modeling, *Planetary Science Journal*, 5(4), 2024.
80. Leung, C. W. S., L. K. Tamppari, D. Kass, G. M. Martínez, E. Fischer, M. Smith, Seasonal Vertical Water Vapor Distribution at the Mars Phoenix Lander Site, *Icarus*, 408: 115820, 2024.
79. Pankine, A. A., C. Leung, L. Tamppari, G. M. Martínez, M. Giuranna, S. Piqueux, M. Smith, A., Trokhimovskiy, Effects of Global Dust Storms on Water Vapor in the Southern Polar Region of Mars. *Journal of Geophysical Research: Planets*, 128, e2023JE008016, 2023.
78. Chipera, S. J., D. T. Vaniman, E. B. Rampe, T. F. Bristow, G. M. 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, Crystallographic Investigation of Mg-sulfate at Gale Crater, Mars. *Journal of Geophysical Research: Planets*, 128.11: e2023JE008041, 2023.
77. Pla-García, J., A. Munguira, S. Rafkin, C. Newman, T. Bertrand, G. M. Martínez, R. Hueso, A. Sánchez-Lavega, T. del Río Gaztelurrutia, A. Stott, N. Murdoch, B. Chide, M. de la Torre Juárez, M. Lemmon, D. Viúdez-Moreiras, H. Savijarvi, M. Richardson, M. Marín, E. Sebastián, A. Lepinette-Malvitte, L. Mora and J.A. Rodríguez-Manfredi, Nocturnal turbulence at Jezero crater as determined from MEDA measurements and modeling, *Journal of Geophysical Research: Planets*, 128, e2022JE007607, 2023.
76. Toledo, D., L. Gomez, V. Apestigue, I. Arruego, M. Smith, A. Munguira, G. M. Martínez. P. Patel, A. Sanchez-Lavega, M. Lemmon, and others, Twilight mesospheric clouds in Jezero as observed by MEDA Radiation and Dust Sensor (RDS), *Journal of Geophysical Research: Planets*, 128, e2023JE007785, 2023.
75. Torre Juárez, M., A. Chavez, L. K. Tamppari, A. Munguira, G. M. Martínez, R. Hueso, B. Chide, N. Murdoch, A. Stott, S. Navarro, A. Sánchez-Lavega, G. S. Orton, D. Viúdez, D. Banfield, J. A.

Rodríguez-Manfredi, Diurnal cycle of air temperature fluctuations at Jezero crater, *Journal of Geophysical Research: Planets*, 128(7), e2022JE007458, 2023.

74. Chide, B., X. Jacob, A. Petculescu, R. D. Lorenz, S. Maurice, F. Seel, S. Schröder, R. C. Wiens, M. Gillier, N. Murdoch, N. Lanza, T. Bertrand, P. Pilleri, D. Mimoun, M. de la Torre Juarez, R. Hueso, A. Munguira, A. Sánchez-Lavega, **G. M. Martínez**, C. Larmat, J. Lasue, C. Newman, J. Pla-Garcia, P. Bernardi, A-M. Harri, M. Genzer, A. Lepinette, Measurements of sound propagation in Mars' lower atmosphere, *Earth and Planetary Science Letters*, 615, 118200 , 2023.
73. Stott, A. E., N. Murdoch, M. Gillier, D. Banfield, T. Bertrand, B. Chide, M. de la Torre-Juárez, R. Hueso, R. Lorenz, **G. M. Martínez**, A. Munguira, L. Mora-Sotomayor, S. Navarro, C. Newman, P. Pilleri, J. Pla-García, J. A. Rodríguez-Manfredi, A. Sánchez-Lavega, M. Smith, D. Viúdez Moreiras, N. Williams, S. Maurice, R. C. Wiens, and D. Mimoun, Wind and turbulence observations with the Mars microphone on Perseverance, *Journal of Geophysical Research: Planets*, 128.5: e2022JE007547, 2023.
72. Vicente-Retortillo, A., **G. M. Martínez**, M. T. Lemmon, R. Hueso, J. R Johnson, R. Sullivan, C. E. Newman, E. Sebastián, D. Toledo, V. Apéstigue, I. Arruego, A. Munguira, A. Sánchez-Lavega, N. Murdoch, L. Mora-Sotomayor, T. Bertrand, L. K. Tamppari, M. de la Torre Juárez, and J.-A. Rodríguez-Manfredi, Dust Lifting Through Changes in Albedo at Jezero Crater, Mars, *Journal of Geophysical Research: Planets*, e2022JE007672, 2023.
71. Gough, R. V., D. L. Nuding, **G. M. Martínez**, E. G. Rivera-Valentín, K. M. Primm, M. A. Tolbert, Laboratory studies of brine growth kinetics relevant to deliquescence on Mars, *Planet. Sci. J.*, 4.3, 2023.
70. Hausrath, E. M., C. T. Adcock, A. Bechtold, P. Beck, K. Benison, A. Brown, E. L. Cardarelli, N. A. Carman, B. Chide, J. Christian, B. C. Clark, E. Cloutis, A. Cousin, O. Forni, T. S. J. Gabriel, O. Gasnault, M. Golombek, F. Gómez, T. L. J. Henley, J. Huidobro, J. Johnson, M. W. M. Jones, T. V. Kizovski, A. Knight, J. A. Lasue, S. Le Mouélic, J. M. Madariaga, J. Maki, L. Mandon, **G. M. Martínez**, J. Martínez-Frías, T. McConnochie, P-Y. Meslin, M-P. Zorzano Mier, G. Paar, C. Royer, S. Siljeström, M. E. Schmidt, S. Schröder, M. A. Sephton, R. Sullivan, N. Turenne, A. Udry, S. VanBommel, A. Vaughan, R. C. Wiens, N. Williams, the SuperCam team and the Regolith working group, An Examination of Soil Crusts on the Floor of Jezero crater, Mars, *Journal of Geophysical Research: Planets*, e2022JE007433, 2023.
69. Polkko, J., M. Hieta, A.-M. Harri, L. Tamppari, **G. M. Martínez**, D. Viúdez-Moreiras, H. Savijärvi, P. Conrad, M.P. Zorzano Mier, M. De La Torre Juárez, R. Hueso, A. Munguira, J. Leino, F. Gómez, I. Jaakonaho, E. Fischer, M. Genzer, V. Apéstigue, I. Arruego, D. Banfield, A. Lepinette, M. Paton, J.A. Rodríguez-Manfredi, A. Sánchez Lavega, E. Sebastián, D. Toledo, A. Vicente-Retortillo, and MEDA team, Initial results of the relative humidity observations by MEDA instrument onboard the Mars 2020 Perseverance Rover, *Journal of Geophysical Research: Planets*, e2022JE007447, 2023.
68. Rodríguez-Manfredi, J. A., M. de la Torre Juárez, A. Sánchez-Lavega, R. Hueso, **G. M. Martínez**, M. T. Lemmon, C. E. Newman, A. Munguira, ..., and the MEDA team, The diverse meteorology of Jezero crater over the first 250 sols of Perseverance on Mars, *Nature Geoscience*, 1-10, 2023.
67. **Martínez, G. M.**, E. Sebastián, A. Vicente-Retortillo, M. D. Smith, J. R. Johnson, E. Fischer, H. Savijärvi, D. Toledo, R. Hueso, L. Mora-Sotomayor, H. Gillespie, A. Munguira, A. Sánchez-

Lavega, M. T. Lemmon, F. Gómez, J. Polkko, L. Mandon, V. Apéstigue, I. Arruego, M. Ramos, P. Conrad, C. E. Newman, M. de la Torre-Juárez, F. Jordan, L. K. Tamppari, T. H. McConnochie, A.-M. Harri, M. Genzer, M. Hieta, M.-P. Zorzano, M. Siegler, O. Prieto, A. Molina, and J. A. Rodríguez-Manfredi, Surface Energy Budget, Albedo and Thermal Inertia at Jezero Crater, Mars, as Observed from the Mars 2020 MEDA Instrument, *Journal of Geophysical Research: Planets*, e2022JE007537, 2023.

66. Munguira, A., R. Hueso, A. Sánchez-Lavega, M. de la Torre-Juárez, **G. M. Martínez**, C. E. Newman, E. Sebastián, A. Lepinette-Malvite, A. Vicente-Retortillo, B. Chide6, M. T. Lemmon, T. Bertrand, R. Lorenz, D. Banfield, J. Gómez-Elvira, J. Martín-Soler, S. Navarro, J. Pla-García, J. A. Rodríguez-Manfredi, J. Romeral, M. D. Smith, and J. Torres, Near Surface Atmospheric Temperatures at Jezero from Mars 2020 MEDA measurements, *Journal of Geophysical Research: Planets*, e2022JE007559, 2023.
65. Hueso, R., C. E. Newman, T. del Río-Gaztelurrutia, A. Munguira, A. Sánchez-Lavega, D. Toledo, V. Apéstigue, I. Arruego, A. Vicente-Retortillo, **G. M. Martínez**, M. Lemmon, R. Lorenz, M. Richardson, D. Viúdez-Moreiras, M. de la Torre-Juárez, J. A. Rodríguez-Manfredi, L. K. Tamppari, N. Murdoch, S. Navarro-López, J. Gómez-Elvira, M. Baker, J. Pla-García, A. M. Harri, M. Hieta, M. Genzer, J. Polkko, I. Jaakonaho, T. Makinen, A. Stott, D. Mimoun, B. Chide, E. Sebastián, D. Banfield, and A. Lepinette-Malvite, Convective vortices and dust devils detected and characterized by Mars 2020, *Journal of Geophysical Research: Planets*, e2022JE007516, 2023.
64. Smith, M. D., **G. M. Martínez**, E. Sebastián, M. T. Lemmon, M. J. Wolff, V. Apéstigue, I. Arruego, D. Toledo-Carrasco, D. Viúdez-Moreiras, J. A. Rodríguez-Manfredi, and M. de la Torre Juárez, Diurnal and Seasonal Variations of Aerosol Optical Depth Observed by MEDA/TIRS at Jezero Crater, Mars, *Journal of Geophysical Research: Planets*, e2022JE007560, 2023.
63. Toledo, D., V. Apéstigue, I. Arruego, M. Lemmon, L. Gómez, A. de F. Montoro, R. Hueso, C. Newman, M. Smith, D. Viúdez-Moreiras, **G. M. Martínez**, R. Lorenz, A. Vicente-Retortillo, A. Sánchez-Lavega, M. de la Torre Juárez, J. A. Rodríguez-Manfredi, I. Carrasco, M. Yela, J. J. Jiménez, E. García-Menendez, S. Navarro, F. J. Gómez-Elvira, A.-M. Harri, J. Polkko, M. Hieta, M. Genzer, N. Murdoch, E. Sebastián, Dust devil frequency of occurrence and radiative effects at Jezero crater, Mars, as measured by MEDA Radiation and Dust Sensor (RDS), *Journal of Geophysical Research: Planets*, e2022JE007494, 2023.
62. Savijärvi, H. I., **G. M. Martínez**, and A.-M. Harri, Surface energy fluxes and temperatures at Jezero crater, Mars, *Journal of Geophysical Research: Planets*, e2022JE007438, 2023.
61. Sánchez-Lavega, A., T. del Rio-Gaztelurrutia, R. Hueso, M. de la Torre Juárez, **G. M. Martínez**, A.-M. Harri, M. Genzer, M. Hieta, J. Polkko, J. A. Rodríguez-Manfredi, M. T. Lemmon, J. Pla-García, D. Toledo, A. Vicente-Retortillo, D. Viúdez-Moreiras, A. Munguira, L. K. Tamppari, C. Newman, J. Gómez-Elvira, S. Guzewich, T. Bertrand, V. Apéstigue, I. Arruego, M. Wolff, D. Banfield, I. Jaakonaho, T. Mäkinen, Mars 2020 Perseverance rover studies of the Martian atmosphere over Jezero from pressure measurements, *Journal of Geophysical Research: Planets*, e2022JE007480, 2023.
60. Murdoch, N., A. E. Stott, M. Gillier, R. Hueso, M. Lemmon, **G. M. Martínez**, V. Apéstigue, D. Toledo, R. D. Lorenz, B. Chide, A. Munguira, A. Sánchez-Lavega, A. Vicente-Retortillo, C. E. Newman, S. Maurice, T. Bertrand, D. Banfield, S. Navarro, M. Marin, J. Torres, J. Gómez, J. A.

Rodríguez Manfredi, M. de la Torre Juárez, R. C. Wiens and D. Mimoun, The Sound of a Martian Dust Devil, *Nature Communications*, 13(1), 7505, 2022.

59. Battalio, M., **G. M. Martínez**, C. Newman, M. de la Torre-Juárez, A. Sánchez-Lavega, and D. Viúdez-Moreiras, Planetary Waves Traveling between Mars Science Laboratory and Mars 2020, *Geophysical Research Letters*, e2022GL100866, 2022.
58. Hieta, M., M. Genzer, J. Polkko, I. Jaakonaho, S. Tabandeh, A. Lorek, S. Garland, J. P. de Vera, E. Fischer, **G. M. Martínez**, A.-M. Harri, L. Tamppari, H. Haukkaa, M. Meskanena, M. de la Torre Juárez, J. A. Rodríguez Manfredi, MEDA HS: Relative humidity sensor for the Mars 2020 Perseverance rover, *Planetary and Space Science*, 105590, 2022.
57. Chide, B., T. Bertrand, R. D. Lorenz, A. Munguira, R. Hueso, A. Sánchez-Lavega, **G. M. Martínez**, A. Spiga, X. Jacob, M. de la Torre Juárez, M. T. Lemmon, D. Banfield, C. E. Newman, N. Murdoch, A. Stott, D. Viúdez-Moreiras, J. Pla-García, C. Larmat, N. L. Lanza, J. A. Rodríguez-Manfredi, R. C. Wiens, Acoustics reveals short-term air temperature fluctuations near Mars' surface, *Geophysical Research Letters*, e2022GL100333, 2022.
56. Lemmon, M. T., M. D. Smith, D. Viúdez-Moreiras, M. de la Torre-Juárez, A. Vicente- Retortillo, A. Munguira, A. Sánchez-Lavega, R. Hueso, **G. M. Martínez**, B. Chide, R. Sullivan, D. Toledo, L. Tamppari, T. Bertrand, J.F. Bell, C. Newman, M. Baker, D. Banfield, J.A. Rodríguez-Manfredi, J.N. Maki, V. Apéstigue, Dust, Sand, and Winds within an Active Martian Storm in Jezero Crater*, Geophysical Research Letters*, *49*(17), e2022GL100126, 2022.
55. Apéstigue, V., A. Gonzalo, J. J. Jiménez, J. Boland, M. Lemmon, J. R. de Mingo, E. García, J. Rivas, J. Azcue, L. Bastide, N. Andrés, J. Martínez-Oter, M. González-Guerrero, A. Martin-Ortega, D. Toledo, F. Serrano, R. López-Heredero, I. Carrasco, Á. Carretero, M. Ángeles-Alcacera, D. R. MacDonald, L. B. Moore, J. A. Fernández-Viguri, M. Yela, M. Álvarez, P. Manzano, J. A. Martín, J. C. del Hoyo, M. Reina, R. Urqui, J. A. Rodríguez-Manfredi, L. Gómez-Martin, E. Cordoba, C. Hernandez, R. Leiter, A. Thompson, S. Madsen , M. D. Smith, D. Viúdez, A. Saiz-Lopez, **G. M. Martínez**, A. Sánchez-Lavega, M. de la Torre, F. J. Gómez-Elvira and I. Arruego, Radiation and Dust Sensor for Mars Environmental Dynamic Analyzer onboard M2020 rover, *Sensors* 22.8:2907, 2022.
54. Newman, C. E., R. Hueso, M. T. Lemmon, A. Munguira, A. Vicente-Retortillo, V. Apéstigue, **G. M. Martínez**, D. Toledo, R. Sullivan, K. Herkenhoff, M. de la Torre Juárez, M. I. Richardson, A. Stott, N. Murdoch, A. Sánchez-Lavega, M. Wolff, I. Arruego Rodríguez, E. Sebastián, S. Navarro, J. Gómez-Elvira, L. Tamppari, D. Viúdez-Moreiras, A.-M. Hari, M. Genzer, M. Hieta, R. D. Lorenz, P. Conrad, F. Gómez-Gómez, T. McConnochie, D. Mimoun, C. Tate, T. Bertrand, J. Bell, J. Maki, J. A. Rodríguez-Manfredi, R. Wiens, B. Chide, S. Maurice, M.-P. Zorzano, L. Mora, M. Baker, D. Banfield, J. Pla-García, O. Beyssac, A. Brown, B. Clark, A. Lepinette, F. Montmessin, E. Fischer, P. Patel, T. del Rio-Gaztelurrutia, T. Fouchet, R. Francis, S. Guzewich, and the Mars 2020 Atmospheric Science Working Group, The dynamic atmospheric and aeolian environment of Jezero crater, Mars, *Science Advances*, *8*(21), eabn3783, 2022.
53. Hallet, B., R. S. Sletten, M. Malin, N. Mangold, A. G. Fairén, A. H. Treiman, **G. M. Martínez**, M. Baker, R. J. Sullivan, J. Schieber and J. Martin-Torres, Active ground patterns near Mars' equator in the Glen Torridon region of Gale Crater, *J. Geophys. Res.:Planets*, e2021JE007126, 2022.
52. Creecy, E., L. Liming, X. Jiang, M. Smith, A. Kleinboehl, D. Kass, **G. M. Martínez**, Mars' Emitted Energy, *PNAS*, *119*(21), e2121084119, 2022.

51. Savijärvi, H., **G. M. Martínez**, A. Vicente-Retortillo and A.-M. Harri, Surface energy budget at Curiosity through observations and column modeling, *Icarus*,114900, 2022.
50. Fernanders, M. S., R. V. Gough, V. F. Chevrier, Z. Schiffman, S. B. Ushijima, **G. M. Martínez**, E. G. Rivera-Valentín, M. A. Tolbert, Water uptake by chlorate salts under Mars-relevant conditions, *Icarus*, 371, 114715, 2022.
49. Cooper, B., M. de la Torre Juárez, M. Mischna, M. Lemmon, **G. M. Martínez**, D. Kass, A. Vasavada, C. Campbell, J. Moores, Thermal Forcing of the Near Surface Environment by Martian Water Ice Clouds, *J. Geophys. Res.: Planets,* e2020JE006737, 2021.
48. **Martínez, G. M.**, A. Vicente-Retortillo, A. R. Vasavada, C. Newman, E. Fischer, N. O. Rennó, H. Savijärvi, M. de la Torre-Juárez, I. Ordóñez-Etxeberria, M. T Lemmon, S. D. Guzewich, T. McConnochie, E. Sebastián, R. Hueso and A. Sánchez-Lavega, The Surface Energy Budget at Gale Crater during the first 2500 Sols of the Mars Science Laboratory Mission, *J. Geophys. Res.:Planets*, 126(9), e2020JE006804, 2021.
47. Cabo-García, A., A. Delgado, **G. M. Martínez**, J. Pla-García, M. B. Pérez-Lancho, Prediction of Mars meteorological variables using artificial neural networks, *Revista DYNA Ingenieria e Industria*, https://doi.org/10.6036/NT10369, 2022.
46. Temel, O., O. Karatekin, M. Mischna, C. B. Senel, **G. M. Martínez** and T. Van Hoolst, Strong seasonal and regional variations in the evaporation rate of liquid water on Mars, *J. Geophys. Research:Planets*, 126(10), e2021JE006867, 2021.
45. Lorenz, R. D., **G. M. Martínez**, A. Spiga, A. Vicente-Retortillo, C. E. Newman, N. Murdoch, F. Forget, E. Millour, T. Pierron, Lander and rover histories of dust accumulation on and removal from solar arrays on Mars, *Planetary and Space Science*, 105337, 2021.
44. Renno, N., E. Fischer, **G. M. Martínez**, J. Hanley, Complex Brines and their Implications for Habitability, *Life*, 11(8), 847, 2021.
43. Sweeney, D., C. Ao, P. Vergados, N. Renno, D. Kass, **G. M. Martínez**, Enabling Mars Radio Occultation by Smallsats, IEEE, 50100, 1-15, 2021.
42. Sebastián, E., **G. M. Martínez**, M. Ramos, I. Pérez-Grande, J. Sobrado, J. A. Rodríguez, Thermal calibration of the MEDA-TIRS radiometer onboard NASA's Perseverance rover, *Acta Astronautica*, 182,144-159, 2021.
41. Rodríguez-Manfredi, J. A., A. Alonso, V. Apéstigue, I. Arruego, D. Banfield, J. Boland, J. Ceballos, A. Cobos, P. Conrad, E. Cordoba, T. del Rio, M. Domínguez-Pumar, S. Espejo, A. Fernández, R. Ferrándiz, E. Fischer, M. Genzer, J. Gómez-Elvira, F. Gómez-Gómez, A.-M. Harri, C. Hernandez, M. Hieta, R. Hueso, J. J. Jiménez, V. Jiménez , A. Larman, A. Lepinette, M. Lemmon, S. Madsen, T. Mäkinen, M. Marin, J. Martín Soler, **G. M. Martínez**, A. Molina, L. Mora, J. Moreno, S. Navarro, C.E. Newman, C. Ortega, V. Peinado, A. Peña, I. Pérez-Grande, S. Pérez-Hoyos, J. Pla, J. Polkko, O. Prieto, M. Ramos, J. Romeral, A. Saiz-Lopez, A. Sánchez-Lavega, I. Sard, J.T. Schofield, E. Sebastián, M. D. Smith, R.E. Sullivan, L. K. Tamppari, A. Thomson, F. Torrero, J. Torres, R. Urqui, T. Velasco, D. Viúdez-Moreiras and M. de la Torre Juárez, The Mars Environmental Dynamics Analyzer, MEDA. A suite of environmental sensors for the Mars 2020 mission, *Spa. Sci. Rev.*, 217(3), 1-86, 2021.
40. Farley, K. A., K. H. Williford, K. M. Stack, R. Bhartia, A. Chen, M. de la Torre-Juárez, K. Hand, Y. Goreva, C. D. K. Herd, R. Hueso, Y. Liu, J. N. Maki, **G. M. Martínez**, R. C. Moeller, A. Nelessen, C. E. Newman, D. Nunes, A. Ponce, N. Spanovich, P. A. Willis, L. W. Beegle, J. F. Bell III, A. J.

Brown, S.-E. Hamran, J. A. Hurowitz, S. Maurice, D. A. Paige, J. A. Rodríguez-Manfredi, M. Schulte, and R. C. Wiens, Mars 2020 Mission Overview, *Spa. Sci. Rev*., 216(8), 1-41, 2020.

39. Pla-García, J., S. C. R. Rafkin, **G. M. Martínez**, Á. Vicente-Retortillo, C. E. Newman, H. Savijärvi, M. de la Torre, J. A. Rodríguez-Manfredi, F. Gómez, A. Molina, D. Viúdez-Moreiras, A.-M. Harri, et al. Meteorological predictions for Mars2020 Perseverance rover landing site at Jezero crater, *Spa. Sci. Rev*., 216(8), 1-21, 2020.
38. Vicente-Retortillo, A., **G. M. Martínez**, N. Renno, M. Lemmon, J. Gómez-Elvira, In situ UV measurements by MSL/REMS: Dust deposition and angular response corrections, *Space Sci. Rev.*, 216(5), 1-19, 2020.
37. Sebastián, E., **G. M. Martínez**, M. Ramos, F. Haenschke, R. Ferrándiz, M. Fernández, and J. A. Rodríguez, Radiometric and angular calibration tests for the MEDA-TIRS radiometer onboard NASA's Mars 2020 mission, *Measurement*, 107968, 2020.
36. Rivera-Valentín, E. G., V. F. Chevrier, A. Soto, and **G. M. Martínez**, Distribution and habitability of (meta)stable brines on present-day Mars, *Nature Astronomy*, 1-6, 2020.
35. Savijärvi, H., **G. M. Martínez**, E. Fischer, N. O. Renno, L. K. Tamppari, A. Zent, and A.-M. Harri, Humidity observations and column simulations for a warm period at the polar Mars Phoenix lander site, *Icarus* 343, 113688, 2020.
34. Savijärvi, H., **G. M. Martínez**, A.-M. Harri, M. Paton, Curiosity observations and column model integrations for a Martian global dust event, *Icarus*, 337, 113515, 2020.
33. Newman, C. E., M. I. Richardson, H. Kahanpää, **G. M. Martínez**, A. Vicente-Retortillo, M. Lemmon, MarsWRF convective vortex and dust devil predictions for Gale crater over 3 Mars years and comparison with MSL-REMS observations, *J. Geophys. Res.: Planets*, https://doi.org/10.1029/2019JE006082, 2019.
32. Trainer, M. G., M. H. Wong, T. H. McConnochie, H. B. Franz, S. K. Atreya, R. Becker, P. G. Conrad, F. LeFèvre, P. R. Mahaffy, C. A. Malespin, H. L. K. Manning, J. Martín-Torres, **G. M. Martínez**, C. P. McKay, R. Navarro-González, R. O. Pepin, A. Vicente-Retortillo, C. R. Webster, M.-P. Zorzano, Seasonal variations in atmospheric composition as measured in Gale Crater, Mars, *J. Geophys. Res.: Planets*, 124, https://doi.org/ 10.1029/2019JE006175, 2019.
31. Fischer, E., **G. M. Martínez**, N. Renno, L. K. Tamppari and A. Zent, Relative Humidity on Mars: New Results from the Phoenix TECP Sensor, *J. Geophys. Res.: Planets*, 124, https://doi.org/10.1029/ 2019JE006080, 2019.
30. Lemmon, M. T., S. D. Guzewich, T. McConnochie, A. Vicente-Retortillo, **G. M. Martínez**, M. D. Smith, J. F. Bell III, D. Wellington, and S. Jacobs, Large Dust Aerosol Sizes Seen During the 2018 Martian Global Dust Event by the Curiosity Rover, *Geophys. Res. Lett*., 46, 9448–9456, 2019.
29. Moores, J. E., P. L. King, C. L. Smith, **G. M. Martínez**, C. E. Newman, S. D. Guzewich, P.-Y. Meslin, C. R. Webster, P. R. Mahaffy, S. K. Atreya, A. C. Schuerger, The methane diurnal variation and micro-seepage flux at Gale crater, Mars as constrained by the ExoMars Trace Gas Orbiter and Curiosity observations, *Geophys. Res. Lett*., 46, 9430–9438, 2019.
28. Viúdez-Moreiras, D., C. E. Newman, M. de la Torre, **G. M. Martínez**, S. Guzewich, M. Lemmon, J. Pla-García, M. D. Smith, A.-M. Harri, M. Genzer, A. Vicente-Retortillo, A. Lepinette, J. A. Rodríguez-Manfredi, A. Vasavada, J. Gómez-Elvira Effects of the MY34/2018 Global Dust Storm as Measured by MSL REMS in Gale Crater, *J. Geophys. Res.: Planets*, 124(7), 1899-1912, 2019.

27. Renno, N., R. Backhus, C. Cooper, J. M. Flatico, E. Fischer, L. C. Greer, M. J. Krasowski, T. Kremic, G. M. Martínez, N. F. Prokop and A. Vicente-Retortillo, A Simple Instrument Suite for Characterizing Habitability and Weathering: The Modern Aqueous Habitat Reconnaissance Suite (MAHRS), *Astrobiology*, 19(7), 2019.
26. Moores, J. E., R. Gough, G. M. Martínez, P.-Y. Meslin, C. Smith, S. Atreya, P. Mahaffy, C. Newman, C. Webster, Methane seasonal cycle at Gale Crater on Mars consistent with regolith adsorption and diffusion, *Nature Geosciences*, 12(5), 321, 2019.
25. Guzewich, S. D., M. Lemmon, C. L. Smith, G. M. Martínez, A. Vicente-Retortillo, C. E. Newman, M. Baker, C. Campbell, B. Cooper, J. Gómez-Elvira, A.-M. Harri, D. Hassler, F. J. Martín-Torres, T. McConnochie, J. E. Moores, H. Kahanpää, A. Khayat, M. I. Richardson, M. D. Smith, R. Sullivan, M. de la Torre-Juárez, A. R. Vasavada, D. Viúdez-Moreiras, C. Zeitlin, M.-P. Zorzano, Mars Science Laboratory Observations of the 2018/Mars Year 34 Global Dust Storm, *Geophys. Res. Lett.*, 46 (1), 71-79, 2019.
24. Gough, R. V., K. M. Primm, E. G. Rivera-Valentin, G. M. Martínez, M. A. Tolbert, Solid-solid hydration and dehydration of Mars-relevant chlorine salts: Implications for Gale Crater and RSL Locations, *Icarus*, 321, 1-13, 2019.
23. Vicente-Retortillo, A., G. M. Martínez, N. Renno, C. E. Newman I. Ordóñez-Etxeberría, M. T. Lemmon, M. I. Richardson, R. Hueso and A. Sánchez-Lavega, Seasonal Deposition and Lifting of Dust on Mars as Observed by the Curiosity Rover, *Scientific Reports*, 8(1), 17576, 2018.
22. Primm, K. M., R. V. Gough, J. Wong, E. G. Rivera-Valentin, G. M. Martínez, J. V. Hogancamp, P. D. Archer, D. W. Ming, M. A. Tolbert, The Effect of Mars-relevant soil analogs on the Water Uptake of Magnesium Perchlorate and Implications for the Near-Surface of Mars, *J. Geophys. Res.: Planets*, 123(8), 2076-2088, 2018.
21. Webster, C. R., P. R. Mahaffy, S. K. Atreya, J. Moores, G. J. Flesch, C. Malespin, C. McKay, G. M. Martínez, C. L Smith, F. J. Martin-Torres, J. Gómez-Elvira, M.-P. Zorzano, M. H. Wong, M. G. Trainer, J. L. Eigenbrode, D. P. Glavin, A. Steele, D. Archer Jr., B. Sutter, P. J. Coll, C. Freissinet, P.-Y. Meslin, A. Pavlov, D. Keymeulen, L. E. Christensen, R. V. Gough, S. P. Schwenzer, R. Navarro-Gonzalez, J. Pla-García, S. C. R. Rafkin, A. Vicente-Retortillo, H. Kahanpää, D. Viúdez-Moreiras, M. D. Smith, A.-M. Harri, M. Genzer, D. Hassler, M. Lemmon, J. Crisp, S. P. Sander, R. W. Zurek and A. Vasavada, Background levels of methane in Mars' atmosphere show strong seasonal variations, *Science* 360(6393), 1093-1096, 2018.
20. Valentín-Rivera, E. G., R. Gough, V. Chevrier, K. M. Primm, G. M. Martínez, M. Tolbert, Constraining the potential liquid water environment at Gale crater, Mars, *J. Geophys. Res.: Planets*, 123, 1156-1167, 2018.
19. Vaniman, D. T., G. M. Martínez, E. B. Rampe, T. F. Bristow, D. F. Blake, A. H. Yen, D. W. Ming, W. Rapin, P.-Y. Meslin, J. M. Morookian, R. T. Downs, S. J. Chipera, R. V. Morris, S. M. Morrison, A. H. Treiman, C. N. Achilles, J. P. Grotzinger, R. M. Hazen, J. A. Crisp, Gypsum, bassanite, and anhydrite at Gale crater, Mars, *American Mineralogist*, 103(7), 1011-1020, 2018.
18. Pérez-Izquierdo, J., E. Sebastián, G. M. Martínez, A. Bravo, M. Ramos, J. A. Rodríguez-Manfredi, The Thermal Infrared Sensor (TIRS) of the Mars Environmental Dynamics Analyzer (MEDA) Instrument onboard Mars 2020, A general description and performance analysis, *Measurement*, 122, 432-442, 2018.

17. McConnochie, T. H., M. D. Smith, M. J. Wolff, S. Bender, M. Lemmon, R. C. Wiens, S. Maurice, O. Gasnault, A.-M. Harri, M. Genzer, O. Kemppinen, **G. M. Martínez**, J. Lasue, L. DeFlores, D. Blaney, D. R. Johnson, J. F. Bell III, Retrieval of Water Vapor Column Abundance and Aerosol Properties from ChemCam Passive Sky Spectroscopy, *Icarus*, 307, 294-326, 2018.
16. Vicente-Retortillo, A., **G. M. Martínez**, N. O. Renno, M. Lemmon, and M. de la Torre-Juárez, Determination of dust aerosol particle size at Gale Crater using REMS UVS and Mastcam measurements, *Geophys. Res. Lett*., 44(8), 3502-3508, 2017.
15. **Martínez, G. M.**, C. N. Newman. A. Vicente-Retortillo, E. Fischer, N. Renno, M. Richardson, A. Fairén, M. Genzer, S. D. Guzewich, R. M. Haberle, A.-M. Harri, O. Kemppinen, M. Lemmon, M. D. Smith, M. de la Torre-Juárez and A. Vasavada, The Modern Near-surface Martian Climate: A Review from In-situ Meteorological data from Viking to Curiosity, *Space Sci. Rev*., 212(1-2), 295-338, 2017.
14. Vicente-Retortillo, A., M. Lemmon, **G. M. Martínez**, F. Valero, L. Vázquez, and M. L. Martín, Seasonal and interannual variability of solar radiation at Spirit, Opportunity and Curiosity landing sites, *Física de la Tierra*, 28, 111-127, 2016.
13. **Martínez, G. M.**, M. de la Torre-Juárez, A. Vicente-Retortillo, O. Kemppinen, N. Renno and M. Lemmon, An overview of the environmental conditions at Gale Crater from MSL/REMS measurements, *Física de la Tierra* (Invited), 28, 163-179, 2016.
12. Fischer, E., **G. M. Martínez** and N. O. Renno, Formation and Persistence of brine on Mars: Experimental simulations throughout the diurnal cycle at the Phoenix landing site, *Astrobiology*, 16(12), 937-948, 2016.
11. Rapin, W., P.-Y. Meslin, S. Maurice, D. Vaniman, M. Nachon, N. Mangold, S. Schröder, O. Gasnault, O. Forni, R. C. Wiens, **G. M. Martínez**, A. Cousin, V. Sautter, J. Lasue and D. Archer, Hydration state of calcium sulfates in Gale Crater: identification of bassanite veins, *Earth Planet. Sci. Lett*., 452, 197-205, 2016.
10. **Martínez, G. M.**, E. Fischer, N. O. Rennó, E. Sebastián, O. Kemppinen, N. Bridges, C. S. Borlina, P.-Y. Meslin, M. Genzer, A.-M. Harri, A. Vicente-Retortillo, M. Ramos, M. de la Torre-Juárez, F. Gómez, J. Gómez-Elvira and the REMS Team, Likely frost events at Gale crater: Analysis from MSL/REMS measurements, *Icarus*, 280, 93-102, 2016.
9. Vicente-Retortillo, A., F. Valero, L. Vázquez, and **G. M. Martínez**, A model to calculate solar radiation fluxes on the Martian surface, *Journal of Space Weather and Space Climate*, 5, A33, 2015.
8. **Martínez, G. M.**, N. O. Renno, E. Fischer, C. S. Borlina, B. Hallet, M. de la Torre-Juárez, A. Vasavada, M. Ramos, V. Hamilton, J. Gómez-Elvira, R. M. Haberle and the REMS Team, Surface Energy Budget and Thermal Inertia at Gale Crater: Calculations from Ground-Based Measurements, *J. Geophys. Res.: Planets* 119.8: 1822-1838, 2014.
7. Fischer, E., **G. M. Martínez**, H. Elliott and N. O. Renno, Experimental evidence for the formation of liquid saline water on Mars, *Geophys. Res. Lett*., 41, 2014.
6. **Martínez, G. M.**, F. Valero, L. Vázquez and H. Elliott, The Martian Planetary Boundary Layer: Turbulent Kinetic Energy and Fundamental Similarity Scales, *Solar System Research* (Invited), 47(6), 446-453, 2013.
5. **Martínez, G. M.** and N. O. Renno, Water and Brines on Mars: Current Evidence and Implications for MSL, *Space Sci. Rev.*, 75(1-4), 29-51, 2013.

4. **Martínez, G. M.**, N. O. Renno and H. Elliott, The Evolution of the Albedo of Dark Spots Observed on Mars Polar Region, *Icarus*, 221, 816-830, 2012.
3. **Martínez, G. M.**, F. Valero, and L. Vázquez, The TKE budget in the convective Martian planetary boundary layer, *Q. J. R. Meteorol. Soc.*, 137(661), 2194-2208, 2011.
2. **Martínez, G. M.**, F. Valero and L. Vázquez, Characterization of the Martian Convective Boundary Layer, J. *Atmos. Sci*., 66, Issue 7, 2044–2058, 2009.
1. **Martínez, G. M.**, F. Valero and L. Vázquez, Characterization of the Martian Surface Layer, *J. Atmos. Sci*., 66, Issue 1, 187–198, 2009.

Conference Publications

Orals

138. **Martínez, G. M.**, J. A. Rodríguez-Manfredi, M. de la Torre-Juarez, V. Apéstigue, F. Gomez, M. Genzer, A.-M. Harri, M. Hieta, R. Hueso, M. Lemmon, T. McConnochie, A. Munguira, C. Newman, J. Pla-Garcia, J. Polkko, A. Sanchez-Lavega, E. Sebastian, L. K. Tamppari, D. Toledo, and Á. Vicente-Retortillo, MEDA on Mars 2020: Environmental Data and Sensor Insights through Sol 1450, EPSC-DPS, 2025.
137. Dong, E., J. Moores, M. Walters, G. Bischof, **G. M. Martínez**, and M. Gordon, Diffusion of Martian Methane in Concert with Destruction Via Adsorption Onto UV-Activated Perchlorate in Martian Dust, EPSC-DPS Joint Meeting 2025.
136. Hueso, R., C. Newman, D. Toledo, **G. M. Martínez**, A. Munguira, V. Apéstigue, Á. Vicente-Retortillo, A. Sánchez-Lavega, and T. del Río-Gaztelurrutia, An Updated Catalog of Vortices and Dust Devils on Jezero Crater, Mars from MEDA data, EPSC-DPS, 2025.
135. Rodriguez-Veloso, R., D. Toledo, V. Apestigue, I. Arruego, M. T. Lemmon, M. D. Smith, **G. M. Martínez**, Á. Vicente-Retortillo, J. J. Jiménez-Martín, E. García-Menéndez, D. Viudez-Moreiras, A. Sanchéz-Lavega, M. de la Torre-Juárez, and J. A. Rodríguez-Manfredi, Aerosol optical properties observed by MEDA Radiation and Dust Sensor (RDS) at Jezero Crater, Mars, EPSC-DPS, 2025.
134. Polkko, J., H. Savijärvi, A. Munguira, R. Hueso, T. Bertrand, **G. M. Martínez**, M. Smith, J. Leino, M. Lemmon, D. Viúdez-Moreiras, M. de la Torre Juarez, L. Tamppari, F. Gómez, A.-M. Harri, M. Hieta, I. Jaakonaho, T. McConnochie., M. Paton, J. Pla-García, J. A. Rodríguez-Manfredi, A. Sánchez-Lavega, M.-P. Zorzano, Annual Water Cycle at Jezero Crater Based on Observations and Column modeling, EPSC-DPS, 2025.
133. Alberini, A., T. Fornaro, C. García Florentino, G. Poggiali, M. Biczysko, I. Poblacion, J. Aramendia, J. M. Madariaga, A. Vicente-Retortillo, T. Grazioso, G. Famiglini, A. Cappiello, N. Tasinato, D. Alvarado Jiménez, K. C. Benison, S. Siljeström, S. Biancalani, C. Lorenz, M. Battistuzzi, F. Renzi, I. Bergamo, **G. M. Martinez**, E. A. Cloutis, D. M. Applin, F. Gómez, A. Steele, A. Cousin, R. C. Wiens, K. P. Hand & J. R. Brucato, The potential of hydrated magnesium sulfates to preserve organics on Mars: spectroscopic analysis under simulated Martian UV exposure, EPSC-DPS, 2025.
132. Lorenz, R. D., B. Chide, F. Montmessin, S. Maurice, Y. Parot, R. Hueso, **G. M. Martínez**, A. Vicente-Retortillo, X. Jacob, M. Lemmon, B. Dubois, Meslin, P.-Y., C. Newman, T. Bertrand, A. Cousin, R. C. Wiens, Evidence for Triboelectric Charging of Sand and Dust on Mars, 8th International Planetary Dunes Workshop, 2025.

131. Chide, B., R. D. Lorenz, F. Montmessin, S. Maurice, Y. Parot, R. Hueso, **G. M. Martínez**, A. de Vicente-Retortillo, X. Jacob, M. Lemmon, B. Dubois, P.-Y. Meslin, C. Newman, T. Bertrand, A. Cousin, R. C. Wiens, Search for in situ signatures of electric activity on Mars. EGU, Vienna, Austria, 2025.
130. Chide, B., R. D. Lorenz, F. Montmessin, S. Maurice, Y. Parot, R. Hueso, **G. M. Martínez**, A. de Vicente-Retortillo, X. Jacob, M. Lemmon, B. Dubois, P.-Y Meslin, C. Newman, T. Bertrand, J. Lasue, A. Cousin, R. C. Wiens, Search for in situ signatures of electric activity on Mars. 56th Lunar and Planetary Science Conference, The Woodlands, USA, 2025.
129. Connell, S. A., R. C. Wiens, C. Royer, C. C. Bedford, L. Mandon, S. Siljeström, S. Schroeder, **G. M. Martínez**, Á. de Vicente-Retortillo Rubalcaba, J. R. Johnson, J. Van Beek, T. Nelson, P. Beck, F. Poulet, E. Dehouck, E. A. Cloutis, D. M. Applin, A. Broz, T. Fornaro, E. Clavé, T. Fouchet, A. Cousin, K. Hand, K. Uckert, J. A. Rodríguez-Manfredi, K. M. Stack, K. Farley, and the Mars 2020 team, Abrasion Dehydration Experiment at Bright Angle, Jezero Crater, Using Supercam Onboard Perseverance. 56th Lunar and Planetary Science Conference, The Woodlands, USA, 2025.
128. (Invited) **Martínez, G. M.**, E. Sebastian, A. Vicente-Retortillo, E. Hausrath, H. Savijärvi, M. Smith, E. Fischer, D. Toledo, V. Apestigue, I. Arruego, A. Munguira, R. Hueso, A. Sanchez-Lavega, L. K. Tamppari, M. T. Lemmon, C. E. Newman, G. Paar, A. Stott, M. P. Zorzano, M. de la Torre-Juarez, and J. A. Rodriguez-Manfredi, Environmental Characterization of Three Forks and Estimation of Water-related Properties of the Regolith Sample Collected by the Mars 2020 Perseverance Rover. AGU, 2024.
127. Jackson, B., L. Fenton, T. Brown, A. Munguira, G. M. Martinez, C. Newman, D. Viudez Moreiras, M. Golombek, R. Lorenz, M. Paton, D. Conway, Estimating Near-Surface Martian Winds Using the Ingenuity Helicopter's Attitude. AGU, 2024.
126. McConnochie, T. H., S. J. VanBommel, D. Y. Lo, E. W. Knutsen, F. Montmessin, T. Bertrand, T. Fouchet, C. Royer, S. Maurice, A. Cousin, R. C. Wiens, M. T Lemmon, M. J. Wolff, M. D. Smith, A. S. J. Khayat, M. G. Trainer, H. B. Franz, O. Gasnault, J. Lasue, N. Lanza, S. K. Atreya, **G. M. Martínez**, F. Lefèvre, F. Daerden, M. H. Hecht, M.-P. Zorzano, D. Viudez-Moreiras, Comparing the Unexplained Variability of Molecular Oxygen in the Martian Atmosphere to Water Vapor and Argon. The Tenth International Conference on Mars, Pasadena, CA, US, 2024.
125. Tamppari, L. K., **G. M. Martínez**, J. A. Rodríguez-Manfredi, M. de la Torre-Juárez, J. Polkko, M. Hieta, I. Jaakonaho, M. Genzer, A.-M. Harri, H. Savijärvi, T. Bertrand, J. Holmes, T. McConnochie, F. Montmessin, M. Smith, M. Wolff, E. Fischer, P. Conrad, F. Gómez, M.-P. Zorzano, P. Patel, M. Lemmon, E. W. Knutsen, J. Pla-García, and the MEDA Team. Water vapor behavior in Jezero Crater. The Tenth International Conference on Mars, Pasadena, CA, US, 2024.
124. Tamppari, L. K., A. Pankine, C. W. S. Leung, **G. M. Martínez**, M. Giuranna, S. Piqueux, M. D. Smith, and A. Trokhimovskiy, Decreased Water Vapor Abundances in the Southern Polar Atmosphere of Mars Following Global Dust Storms, 8th International Conference on Mars Polar Science and Exploration, Yukon, Canada, 2024.
123. Temel, O. O. Karatekin, V. Apéstigue, D. Toledo, I. Arruego, F. Franchi, **G. M. Martínez**, and C. B. Senel, Turbulence statistics of terrestrial Mars-analog and Martian dust devils. EGU, Vienna, Austria, 2024.

122. **Martínez, G. M.**, A. Vicente-Retortillo, E. Sebastián , E. Fischer, M. Smith, H. Savijärvi, D. Toledo, V. Apéstigue, I. Arruego, A. Munguira, R. Hueso, A. Sánchez-Lavega, L. K. Tamppari, M. T. Lemmon, L. Mandon, Y. Leseigneur, C. E. Newman, A. Stott, J. R. Johnson, M. de la Torre-Juárez, and J. A. Rodríguez-Manfredi, Albedo and Thermal Inertia for the First 777 Sols of the Mars 2020 Mission. 55th Lunar and Planetary Science Conference, The Woodlands, USA, 2024.

121. **Martínez, G. M.**, A. Stott, C. Newman, M. Wolff, M. de la Torre Juarez, J. Rodriguez-Manfredi, M2020 Atmospheric Science: Main Results and Key Priorities Moving Forward, AGU, 2023.

120. Vaniman, D., S. Chipera, E. Rampe, T. Bristow, D. Blake, A. Fraeman, D. Ming, R. Downs, P. Craig, N. Castle, R. Morris, A. Pandey, A. Yen, C. Achilles, S. Morrison, S. Simpson, M. Thorpe, V. Tu, B. Tutolo, A. Treiman, R. Hazen, D. Des Marais, B. Clark, **G. M. Martínez**, Sulfate Mineral Suites at Gale Crater, Mars, by X-ray Diffraction, AGU, 2023.

119. Newman, C., A. Vicente-Retortillo, R. Lorenz, R. Hueso, C. Charalambous, M. Lemmon, D. Toledo, V. Apestigue, I. Arruego, R. Sullivan, A. Munguira, M. Golombek, A. Spiga, A. Chatain, C. Perrin, S. Rodriguez, S. Navarro, J. Gomez-Elvira, J. Pla-García, M. Ruíz-Pérez, M. Richardson, T. Bertrand, A. Stott, **G. M. Martínez**, N. Murdoch, R. A. Yingst, D. Viudez-Moreiras, M. Baker, Using surface mission data to investigate dust lifting on Mars, AGU, 2023.

118. McConnochie, T., T. Bertrand, E. Knutsen, F. Montmessin, T. Fouchet, C. Royer, S. Maurice, R. Wiens, M. Lemmon, M. Wolff, M. Smith, A. Khayat, M. Trainer, H. Franz, O. Gasnault, J. Lasue, N. Lanza, D. Lo, S. Atreya, **G. M. Martínez**, F. Lefèvre, F. Daerden, M. Hecht, M.-P. Zorzano, Sky Spectroscopy from the Perseverance and Curiosity Rovers: latest results and implications for explaining molecular oxygen variability, AGU, 2023.

117. Smith, M., K. Badri, S. Atwood, **G. M. Martínez**, E. Sebastian, M. Wolff, M. Lemmon, Á. Vicente-Retortillo, J. Rodriguez-Manfredi, J. Pla-García, C. Edwards, The Diurnal and Seasonal Variation of Aerosols Observed by the Perseverance Rover and Emirates Mars Mission, AGU, 2023.

116. Abdelmoneim, N., D. Dhuri, D. Atri, **G. M. Martínez**, Expanding Mars climate modeling: Interpretable machine learning for modeling relative humidity utilizing Curiosity rover measurements at Gale Crater (Mars), AGU, 2023.

115. **Martínez, G. M.**, E. Sebastian, M. Smith, H. Savijärvi, H. Gillespie, A. Vicente-Retortillo, A. Munguira, R. Hueso, D. Toledo, L. Tamppari, C. Newman, A. Sanchez-Lavega, M. Lemmon, V. Apestigue, I. Arruego, E. Fischer, J. Pla-Garcia, L. Mora, M. de la Torre Juarez, and J. A. Rodriguez-Manfredi, One Martian Year of MEDA/TIRS observations at the Mars 2020 landing site, EGU, Vienna, Austria, 2023.

114. Hueso, R., C. Newman, T. del Río-Gaztelurrutia, A. Munguira, A. Sánchez-Lavega, D. Toledo, M. Lemmon, **G. M. Martínez**, R. Lorenz, M. de la Torre-Juarez, J. A. Rodríguez-Manfredi, J. Pla-García, N. Murdoch, and B. Chide, Vortices and Dust Devils at Jezero crater after one year of measurements with MEDA on Mars 2020, EGU, Vienna, Austria, 2023.

113. Munguira, A., R. Hueso, A. Sánchez-Lavega, M. De la Torre-Juarez, **G. M. Martínez**, T. del Río-Gaztelurrutia, M. Smith, M. Lemmon, J. A. Rodríguez-Manfredi, A. Lepinette, E. Sebastián, and D. Banfield, Seasonal evolution of near surface atmospheric temperatures at Jezero as measured by the MEDA instrument on Mars 2020, EGU, Vienna, Austria, 2023.

112. Toledo, D., L. Gomez, V. Apéstigue, I. Arruego, M. Lemmon, M. Smith, P. Patel, A. Munguira, A. Sanchez-Lavega, M. Yela, D. Viudez-Moreiras, **G. M. Martínez**, A. Vicente-Retortillo, C. Newman, M. de la Torre Juarez, and J. A. Rodríguez-Manfredi, Mesospheric clouds in Jezero as observed by MEDA Radiation and Dust Sensor (RDS) at twilight, EGU, Vienna, Austria, 2023.
111. del Río Gaztelurrutia, T., A. Sanchez-Lavega, R. Hueso, A. Munguira, M. T. Lemmon, M. D. Smith, **G. M. Martinez**, J. Pla-Garcia, C. Newman, D. Viudez, M. de la Torre-Juarez, and J. A. Rodriguez-Manfredi, Daily and Seasonal Behavior of Fast Pressure Fluctuations at Jezero Crater, EGU, Vienna, Austria, 2023.
110. Martínez, G. M., J. Lasue, P.-Y. Meslin, B. Chide, G. Caravaca, G. Lopez-Reyes, L. K. Tamppari, O. Beyssac, J. Polkko, M. Hieta and others, The First Frost Detection Campaign by the Mars 2020 Perseverance Rover: Implementation and Results, 54th Lunar and Planetary Science Conference, The Woodlands, USA, 2023.
109. Vicente-Retortillo, A., M. T. Lemmon, **G. M. Martínez**, D. Toledo, V. Apestigue, I. Arruego, and J. A. Rodriguez-Manfredi, Dust Accumulation from MEDA Measurements at Jezero Crater, Mars, 54th Lunar and Planetary Science Conference, The Woodlands, USA, 2023.
108. Guzewich, S. D., **G. M. Martínez**, A. Innanen, J. Pla-Garcia, M. Ruiz-Perez, M. Torre-Juarez, C. E. Newman, M. Lemmon, G. Bischof, M. I. Richardson, and others, 10 Years of Environmental Science in Gale Crater, 54th Lunar and Planetary Science Conference, The Woodlands, USA, 2023.
107. Martínez, G. M., R. Gough, W. Rapin, P.-Y. Meslin, O. Gasnault, S. Schröder, T. McConnochie, H. Savijärvi, E. Fischer, S. Guzewich, C. Newman, J. Battalio, A. Vasavada, M. de la Torre, R. Wiens, and N. Lanza, Frost Detection Campaigns by the Mars Science Laboratory Mission: Results and Lessons for the Mars 2020 mission, AGU, 2022.
106. Murdoch, N., D. Mimoun, K. Hurst, R. D. Lorenz, A. E. Stott, M. Gillier, A. Spiga, E. Marteau, M. Golombek, R. F. Garcia, C. Perrin , R. Widmer-Schnidrig, S. Rodriguez, N. Compaire, N. H. Warner, K. Onodera, T. Kawamura, P. Delage, D. Banfield, R. Hueso, M. Lemmon, **G. M. Martínez**, V. Apéstigue, D. Toledo, B. Chide, A. Munguira , A. Sánchez-Lavega, A. Vicente-Retortillo, C. E. Newman, S. Maurice, M. de la Torre Juárez, T. Bertrand, S. Navarro, M. Marin, J. Torres, J. Gomez-Elvira, X. Jacob, A. Cadu, A. Sournac, A. Trebi-Ollennu, J.A. Rodriguez-Manfredi, R. C. Wiens, P. Lognonné, and W. B. Banerdt, In-situ investigations of Martian regolith using seismic and acoustic measurements, Japan Geoscience Union Meeting, 2023.
105. Gillespie, H., **G. M. Martínez**, E. Sebastián, M. Smith, R. Hueso, A. Munguira, H. Savijärvi, A. Sánchez-Lavega, M. de la Torre, J. A. Rodríguez-Manfredi, Combining Mars 2020/MEDA, MRO/MCS, and EMARS Reanalysis Datasets to Produce Temperature Profiles in Jezero Crater, Mars, AGU, 2022.
104. Lemmon, M., M. Smith, D. Viúdez-Moreiras, M. de la Torre, A. Vicente-Retortillo, A. Munguira, A. Sánchez-Lavega, R. Hueso, **G. M. Martínez**, B. Chide, R. Sullivan, D. Toledo, L. Tamppari, T. Bertrand, J. Bell, C. Newman, M. Baker, D. Banfield, J. A. Rodríguez-Manfredi, J. Maki, and V. Apéstigue, Dust, Sand, and Winds within an Active Martian Storm in Jezero Crater, AGU, 2022.
103. Vicente-Retortillo, A., **G. M. Martínez**, M. Lemmon, R. Hueso, J. Johnson, R. Sullivan, C. Newman, E. Sebastián, D. Toledo, V. Apéstigue, I. Arruego, A. Munguira, A. Sánchez-Lavega, N. Murdoch, M. Giller, A. Stott, L. Mora, T. Bertrand, L. Tamppari, M. de la Torre, J. A.

Rodríguez-Manfredi, Aeolian Activity at Jezero Crater during the Mars 2020 Mission: A Multi-instrument Analysis, AGU, 2022.

102. Giller, M., N. Murdoch, A. Stott, R. Hueso, M. Lemmon, **G. M. Martínez**, V. Apéstigue, D. Toledo, R. Lorenz, B. Chide, A. Munguira, A. Sánchez-Lavega, A. Vicente-Retortillo, C. Newman, S. Maurice, T. Bertrand, D. Banfield, J. A. Rodríguez-Manfredi, M. de la Torre, R. Sullivan, R. Wiens, D. Mimoun, Acoustic Measurements of Saltation on Mars made by Perseverance, AGU, Chicago, 2022.
101. Rodríguez-Manfredi and the MEDA team, including **G. M. Martínez**, Observations of the climate near the surface of Jezero over a half Mars year, AGU, 2022.
100. Munguira, A., R. Hueso, A. Sánchez-Lavega, M. de la Torre, **G. M. Martínez**, A. Lepinette, E. Sebastián, J. A. Rodríguez-Manfredi, M. Lemmon, B. Chide, T. Bertrand, R. Lorenz, and M. Smith, Mars 2020 MEDA Measurements of Near Surface Atmospheric Temperatures at Jezero, AGU, 2022.
99. Priya, P., A. Coates, L. Tamppari, M. de la Torre, M. Lemmon, D. Toledo, J. Moores, C. Campbell, **G. M. Martínez**, M. Wolff, and A. Brown, First look at the Martian Water Ice Clouds observed by the NavCam instrument on board Mars2020 Rover, Perseverance, AGU, 2022.
98. del Río-Gaztelurrutia, T., A. Sánchez-Lavega, M. de la Torre, N. Murdoch, R. Hueso, A. Munguira, J. Pla-García, A. Vicente-Retortillo, **G. M. Martínez**, and C. Newman, Seasonal and Daily Evolution of Fast Pressure Fluctuations at Jezero, AGU, 2022.
97. Bischof, G., S. Guzewich, M. Lemmon, E. Mason, C. Newman, M. Richardson, M. de la Torre, and G**. M. Martínez**, Elevation Dependent Meteorology in Gale Crater, AGU, 2022.
96. Battalio, J., **G. M. Martínez**, C. Newman, M. de la Torre, A. Sánchez-Lavega, D. Viúdez-Moreiras, Joint Observation of Planetary Waves from the Curiosity and Perseverance Rovers, AGU, 2022.
95. Newman, C., M. Richardson, M. Lemmon, R. Hueso, R. Sullivan, M. de la Torre, A. Vicente-Retortillo, A.-M. Harri, S. Navarro, J. Gómez-Elvira, V. Apéstigue, D. Toledo, **G. M. Martínez**, A. Munguira, I. Arruego, E. Sebastián, A. Lepinette, A. Toigo, C. Lee, D. Viúdez-Moreiras, and J. Pla-García, Modeling the effect of a regional dust storm in Jezero crater using MarsWRF mesoscale and large eddy simulations, AGU, 2022.
94. Creecy, E., L. Li, X. Jiang, M. Smith, **G. M. Martínez**, Spatio-Temporal Variations of Mars' Radiation Budget, AGU, 2022.
93. Smith, M., K. Badri, S. Atwood, **G. M. Martínez**, E. Sebastián, V. Apéstigue, I. Arruego, D. Toledo, D. Viúdez, J. A. Rodríguez-Manfredi, C. Edwards, N. Smith, C. Wolfe, M., Wolff, P. Christensen, S. Anwar, M. Lemmon, E. AlTunaiji, and M. de la Torre, The diurnal and seasonal variation of dust observed by the Perseverance rover and Emirates Mars Mission, EPSC, 2022.
92. Toledo, D., V. Apéstigue, I. Arruego, M. Lemmon, F. Montoro, M. Yela, A. Sánchez-Lavega, P. Patel, D. Viúdez-Moreiras, **G. M. Martínez**, M. D. Smith, A. Vicente-Retortillo, M. de la Torre Juárez, J. A. Rodríguez-Manfredi, and R. Rodríguez, Detection and characterization of clouds at twilight by MEDA-RDS for the first 365 sols, EPSC, 2022.
91. Hueso, R., T. del Río-Gaztelurrutia, A. Munguira, A. Sánchez-Lavega, N. Murdoch, C. Newman, M. Lemmon, V. Apéstigue, D. Toledo, I. Arruego, D. Viúdez-Moreiras, Á. de Vicente-Retortillo, M. de la Torre-Juárez, R. Lorenz, **G. M. Martínez**, J. A. Rodríguez-Manfredi, L. Tamppari, S.

Navarro, J. Gómez-Elvira, and A.-M. Harri and the Mars 2020 ATM team, Physical characterization of dust devils at Jezero crater from Mars2020/MEDA data, EPSC, 2022.

90. Ruíz-Pérez, M., J. Pla-García, S. Rafkin, **G. M. Martínez**, M. de la Torre, J. Gómez-Elvira, and J. A. Rodríguez-Manfredi, Interpretation of the Meteorological Environment Changes Experienced by MSL During Mission Traverse Using REMS and MRAMS, Seventh International Workshop on the Mars Atmosphere: Modelling and Observations, 2022.
89. Munguira, A., R. Hueso, A. Sánchez-Lavega, M. de la Torre-Juárez, **G. M. Martínez**, C. Newman, D. Banfield, A. Lepinette, J. Pla-García, Á. Vicente-Retortillo, J. A. Rodríguez-Manfredi, B. Chide, T. Bertrand, M. Lemmon, E. Sebastián, J. Gómez-Elvira, and R. Lorenz and the CAB Team, Mars 2020 MEDA Measurements of Near Surface Atmospheric Temperatures at Jezero, EPSC, 2022.
88. Pla-García, J., A. Munguira, S. C. R. Rafkin, R. Hueso, A. Sánchez-Lavega, M. de la Torre, D. Viúdez-Moreiras, C. Newman, T. Bertrand, T. del Río, N. Murdoch, **G. M. Martínez**, H. Savijarvi, B. Chide, M. Richardson, and J. A. Rodríguez-Manfredi, Nocturnal turbulence at Jezero driven by the onset of a low-level jet as determined from MRAMS modeling and MEDA measurements, EPSC, 2022.
87. **(Invited) Martínez, G. M.**, Present Capabilities and Results in Planetary Surface Volatile Investigations, Optimizing Planetary in Situ Surface-Atmosphere Interaction for Investigations workshop, 2022.
86. Rivera-Valentin, E. G., A. Soto, **G. M. Martínez**, J. Hanley, K. Lynch, and J. Filiberto, Optimizing Measurements of the near-surface water cycle on Mars: Insights for Habitability, Optimizing Planetary in Situ Surface-Atmosphere Interaction for Investigations workshop, 2022.
85. **Martínez, G. M.**, B. Aponte-Hernández, and E. G. Rivera-Valentín, Reaching the Spanish-Speaking Audience through Planetary News Written in Spanish: Challenges and Importance, Advancing Inclusion, Diversity, Equity, and Accessibility (IDEA) in Planetary Science, 2022.
84. Tamppari, L. K., **G. M. Martínez**, J. A. Rodríguez-Manfredi, M. de la Torre-Juárez, M. Hieta, J. Polkko, I. Jaakonaho, M. Genzer, A.-M. Harri, T. McConnochie, F. Montmessin, M. Smith, M. Wolff, E. Fischer, P. Conrad, F. Gómez, M.-P. Zorzano, D. Viúdez-Moreiras, P. Patel, M. Lemmon and the MEDA Team, Relative Humidity and Vapor Amount at Jezero Crater, Mars atmosphere: Modelling and observations, 2022.
83. Torre Juárez, M., J. A. Rodríguez-Manfredi, **G. M. Martínez**, C. E. Newman, M. T. Lemmon, R. Hueso, A. Munguira, L.K. Tamppari, A. Sánchez-Lavega, V. Apéstigue, and the MEDA Team, Overview of Near-Surface Atmospheric Processes at Jezero from Meda Observations, Mars atmosphere: Modelling and observations, 2022.
82. Newman, C. E., R. Hueso, M. T. Lemmon, A. Munguira, A. Vicente-Retortillo, V. Apéstigue, **G. M. Martínez**, D. Toledo Carrasco, R. Sullivan, K. Herkenhoff, M. De La Torre Juárez, M. I. Richardson, A. Stott, N. Murdoch, A. Sánchez-Lavega, M. Wolff, I. Arruego Rodríguez, E. Sebastián, S. Navarro, J. Gómez-Elvira, L. Tamppari, D. Viúdez-Moreiras, J. Pla-García, The Dynamic Atmospheric and Aeolian Environment of Jezero Crater, Mars, Mars atmosphere: Modelling and observations, 2022.
81. Hueso, R. A. Munguira, A. Sánchez-Lavega, C. E. Newman, M. Lemmon, T. del Río-Gaztelurrutia, M. Richardson, V. Apéstigue, D. Toledo, A. Vicente-Retortillo, M. de la Torre-Juárez, J. A. Rodríguez-Manfredi, L. K. Tamppari, I. Arruego, N. Murdoch, **G. M. Martínez**, S. Navarro, J. Gómez-Elvira, M. Baker, R. Lorenz, J. Pla-García, A.M. Harri, M. Hieta, M. Genzer,

J. Polkko, I. Jaakonaho, T. Mäkinen, A. Stott, D. Mimoun, B. Chide, E. Sebastián, D. Viúdez-Moreiras, D. Banfield, A. Lepinette-Malvite, Vortex and Dust Devil Activity on Jezero Crater from Mars2020/MEDA Data and Physical Characterization of Selected Events, Mars atmosphere: Modelling and observations, 2022.

80. Pla-García, J., A. Munguira, S. Rafkin, R. Hueso, A. Sánchez-Lavega, M. de la Torre, D. Viúdez-Moreiras, C. Newman, T. Bertrand, Teresa del Río, N. Murdoch, G. M. Martínez, H. Savijarvi, B. Chide, M. Richardson, J.A. Rodríguez-Manfredi, Nocturnal Turbulence at Jezero Driven by the Onset of a Low-level Jet as Determined from MRAMS Modeling and MEDA Measurements, Mars atmosphere: Modelling and observations, 2022.
79. Stott, A. E., N. Murdoch, R. F. García, M. Gillier, D. Mimoun, A. Spiga, R. Lorenz, D. Banfield, T. Bertrand, B. Chide, A. Chavez, M. De La Torre Juárez, R. Hueso, G. M. Martínez, L. Mora Sotomayor, A. Munguira, S. Navarro, C. Newman, P. Pillieri, J. Pla-García, J. A. Rodríguez-Manfredi, A. Sánchez-Lavega, D. Viúdez-Moreiras, N. Williams, S. Maurice, R. C. Wiens, P. Lognonné, Martian Wind Sensing with Seismometers and Microphones, Mars atmosphere: Modelling and observations, 2022.
78. Murdoch, N. A. E. Stott, A. Spiga, O. Temel, A. Chatain, T. Bertrand, S. Maurice, B. Chide, C. Newman, D. Banfield, J. Pla-García, R. García, M. Gillier, M. De La Torre Juárez, A. Chavez, A. Munguira, R. Hueso, A. Sánchez Lavega, G. M. Martínez, L. Lange, J. Rodríguez-Manfredi, R. Wiens, P. Lognonné, D. Mimoun, Studying Martian Turbulence Using High Frequency Pressure Fluctuations Observed by Insight and Perseverance, Mars atmosphere: Modelling and observations, 2022.
77. Leung, C. W. S., L. Tamppari, D. Kass, M. Smith, G. M. Martínez, E. Fischer, Seasonal Vertical Water Vapor Distribution at the Phoenix Landing Site, Mars atmosphere: Modelling and observations, 2022.
76. Newman, C., M. Richardson, R. Hueso, M. Lemmon, R. Sullivan, K. Herkenhoff, and others, including G. M Martínez, Interpreting Atmospheric and Aeolian Observations in Jezero Crater with Mars Atmospheric Modeling, AAS/Division for Planetary Sciences Meeting Abstracts, 2022.
75. Munguira, A., R. Hueso, A. Sánchez-Lavega, M. de la Torre-Juárez, A. Chavez, G. M. Martínez, C. Newman, D. Banfield, A. Lepinnette, J. Pla-García, J. A. Rodríguez-Manfredi, B. Chide, E. Sebastián, S. Navarro, J. Gómez-Elvira, M. Lemmon, L. Tamppari, J. Torres, J. M. Soler, J. Romeral, R. Lorenz, D. Viúdez-Moreiras and the MEDA Team, Mars 2020 MEDA ATS Measurements of Near Surface Atmospheric Temperatures at Jezero, EGU, 2022.
74. Hueso, R. C. Newman, A. Munguira, A. Sánchez-Lavega, M. Lemmon, T. del Río-Gaztelurrutia, M. Richardson, V. Apéstigue, D. Toledo, Á. Vicente- Retortillo, M. de la Torre-Juárez, J. A. Rodríguez-Manfredi, L. Tamppari, I. Arruego, N. Murdoch, G. M. Martínez, S. Navarro, J. Gómez-Elvira, M. Baker, R. Lorenz, and the Mars 2020 Atmosphere Team, Seasonal variation of vortex and dust devil activity on Jezero and physical characterization of selected events, EGU, 2022.
73. Sánchez-Lavega, A., T. del Rio-Gaztelurrutia, R. Hueso, M. de la Torre, A.-M. Harri, M. Genzer, M. Hieta, J. Polkko, J. A. Rodríguez-Manfredi, L. K. Tamppari, C. Newman, A. Munguira, G. M. Martínez, A. Vicente-Retortillo, M. Lemmon, J. Pla-García, S. Guzewich, D. Toledo, V. Apéstigue, and D. Viúdez-Moreiras and the Additional Team members, Weather at Jezero, Mars from pressure measurements by the rover Perseverance, EGU, 2022.

72. Torre Juárez, J. A. Rodríguez-Manfredi, A. Sánchez-Lavega, V. Apéstigue, I. Arruego, M. Baker, D. Banfield, J. Boland, J. Ceballos, P. G. Conrad, T. del Río, A. de Vicente-Retortillo, M. Domínguez-Pumar, S. Espejo, A. G. Fairen, R. Ferrándiz, E. Fischer, M. Genzer, S. Giménez, J. Gómez-Elvira, F. Gómez, S. D. Guzewich, A.-M. Harri, M. H. Hecht, M. Hieta, R. Hueso, I. Jaakonaho, J. J. Jiménez, V. Jiménez, A. Lepinette, M. T. Lemmon, T. Mäkinen, M. Marín, C. Martín-Rubio, J. Martín-Soler, **G. M. Martínez**, T. McConnochie, A. Molina, F. Montmessin, L. Mora-Sotomayor, A. Munguira, S. Navarro, C. E. Newman, V. Peinado, I. Pérez-Grande, S. Pérez-Hoyos, J. Pla-García, J. Polkko, O. Prieto, M. Ramos, M. I. Richardson, J. Romeral, C. Romero, K. D. Runyon, H. Savijärvi, A. Saiz-Lopez, J. T. Schofield, E. Sebastián, M. Siegler, M. D. Smith, R. J. Sullivan, L. K. Tamppari, C. Tate, D. Toledo, J. Torres, R. Urquí, D. Viúdez-Moreiras, M. Wolff, M. P. Zorzano, S. Zurita, and the MEDA team, Half a Martian Year of Observations of the Climate near the Surface of Jezero, COSPAR, 2022.
71. Mendenhall, S. M., **G. M. Martínez**, H. Savijärvi, S. Aoki, A. C. Vandaele, and F. Daerden, Constraining the vertical distribution of water vapor on Mars: Implications for the Martian Water Cycle, 53rd Lunar and Planetary Science Conference, 2022.
70. Siegler, M. A., M. N. White, S. Brovoll, S. Hamran, P. Russell, M. Mellon, T. Berger, D. A. Paige, E. Hausrath, **G. M. Martínez**, and the RIMFAX and Mars 2020 team, Passive radiometry of subsurface temperatures using the Mars 2020 RIMFAX instrument, 53rd Lunar and Planetary Science Conference, 2022.
69. **Martínez, G. M.**, E. Sebastián, M. Smith, A. Vicente-Retortillo, E. Fischer, M. Ramos., D. Toledo, V. Apéstigue, I. Arruego, R. Hueso, C. Newman, M. de la Torre-Juárez, H. Savijärvi, F. Jordan, M. Lemmon, L. Tamppari, T. McConnochie, A. Sánchez-Lavega, F. Gómez, L. Mora, A.-M. Harri, M. Genzer, M. Hieta, M.-P. Zorzano, M. Hecht, M. Siegler, P. Conrad, L. Mandon, J. A. Rodríguez-Manfredi, First Results of the Surface Energy Budget, Thermal Inertia and Albedo at Jezero Crater, Mars, as obtained from the Mars 2020 MEDA Instrument, AGU, 2021.
68. Newman, C. E., J. Pla-García, D. Viúdez-Moreiras, R. Hueso, S. Navarro, J. Gómez Elvira, J. Torres, M. Marin, M. T. Lemmon, M. Baker, K. E. Herkenhoff, R. J. Sullivan, J. A. Rodríguez-Manfredi, M. Torre-Juárez, D. J. Banfield, **G. M. Martínez**, A. Sánchez-Lavega, L. K. Tamppari and D. Toledo, The Winds of Jezero Crater, Mars, AGU, 2021.
67. Ravanis, E. M., S. A. Fagents, B. Horgan, C. E. Newman, A. J. Brown, L. Mandon, M.-P. Zorzano, and **G. M. Martínez**, Sources of Potential Tephra Deposits in the Jezero Crater Region on Mars from Ash Dispersal Modeling, AGU, 2021.
66. Sánchez-Lavega, A., R. Hueso, M. de la Torre-Juárez, A.-M. Harri, M. Genzer, M. Hieta, J. Polkko, J. A. Rodríguez-Manfredi, L. K. Tamppari, C. E. Newman, T. del Rio Gaztelurrutia, A. Munguira, **G. M. Martínez**, J. Gómez-Elvira, J. Pla-García, S. Guzewich, D. Toledo, V. Apéstigue, M. J. Wolff, M. T. Lemmon, D. J. Banfield, and D. Viúdez-Moreiras, Perseverance/Mars2020 measurements of the daily pressure cycle at Jezero, AGU, 2021.
65. Rodríguez-Manfredi, J. A., M. de la Torre Juárez, A. Sánchez-Lavega, V. Apéstigue, I. Arruego, M. Baker, D. J. Banfield, J. Boland, J. Ceballos, P. G. Conrad, T. del Rio-Gaztelurrutia, A. Vicente-Retortillo, M. Domínguez-Pumar, S. Espejo, A. G. Fairén, R. Ferrándiz, F. Ferri, E. Fischer, R. Francis, M. García-Villadangos, M. Genzer, S. Gimenez, J. Gómez-Elvira, F. Gómez, S. Guzewich, A.-M. Harr, M. Hieta, R. Hueso, I. Jaakonaho, J. J. Jiménez-Martin, V. Jiménez, A. Lepinette-Malvite, M. T. Lemmon, T. Mäkinen, M. Marin, C. Martín-Rubio, J. Martin-Soler, **G.**

M. Martínez (Presenter), T. McConnochie, A. Molina-Jurado, L. Mora, S. Navarro, C. E. Newman, M. C. Parrondo, V. Peinado, I. Pérez-Grande, S. Pérez-Hoyos3 J. Pla-García, J. Polkko, M. Postigo, O. Prieto, S. C. R. Rafkin, M. Ramos, M. I. Richardson, J. Romeral-Planello, C. Romero, K. Runyon, A. Saiz-Lopez, .J. T. Schofield, E. Sebastián, M. D. Smith, R. J. Sullivan, L. K. Tamppari, C. Tate, D. Toledo, J. Torres, R. Urqui, D. Viúdez-Moreiras, M. J. Wolff, M.-P. Zorzano, S Zurita-Zurita and the MEDA team, Overview of MEDA results aboard Perseverance over the first sols on Mars, AGU, 2021.

64. McConnochie, T. H., A. S. J. Khayat, M. D. Smith, M. T. Lemmon, G. M. Martínez, M. G. Trainer, F. Lefèvre, S. Guzewich, C. E. Newman, H. B. Franz, M. J. Wolff, F. Daerden, A. Fedorova and A. Trokhimovskiy, Latest results from ChemCam Passive Sky Spectroscopy at Gale Crater, Mars, AGU, 2021.
63. Apéstigue, V. D. Toledo, I. Arruego, M. D. Smith, M. T. Lemmon, L. Gómez, M. Yela, J. J. Jiménez-Martin, E. García, J. Gómez-Elvira, S. Navarro, G. M. Martínez, E. Sebastián, A. Vicente-Retortillo, A. Sánchez-Lavega, R. Hueso, A.-M. Harri, M. Genzer, M. Hieta, J. Polkko, C. E. Newman, R. D. Lorenz, M. de la Torre Juárez, and J. A. Rodríguez-Manfredi, Dust lifting detection and characterization at Jezero using MEDA radiance observations, AGU, 2021.
62. Hueso, R., C. E. Newman, M. T. Lemmon, L. K. Tamppari, A. Sánchez-Lavega, V. Apéstigue, D. Toledo, I. Arruego, J. Pla-García, M. de la Torre-Juárez, J. A. Rodríguez-Manfredi, N. Murdoch, A.-M. Harri, M. Genzer, M. Hieta, J. Polkko, M. Baker, A. Stott, D. Mimoun, B. Chide, A. Munguira, S. Navarro, J. Gómez-Elvira, D. Viúdez-Moreiras, R. D. Lorenz, G. M. Martínez, A. Vicente-Retortillo, E. Sebastián, D. J. Banfield, A. Lepinette-Malvite, Convective vortices and dust devils on Jezero observed by Mars 2020, AGU, New Orleans, US, 2021.
61. Hausrath, E., A. J. Brown, E. Cardarelli, A. Cousin, F. Gómez, Y. Goreva, J. Lasue, C. Legett, J. M. Madariaga, L. Mandon, G. M. Martínez, J. Martínez-Frías, T. H. McConnochie, P.-Y. Meslin, M.-P. Zorzano, S. Siljeström, S. Schröder, S. K. Sharma, A. Steele, R. J. Sullivan, A. Udry, R. C. Wiens, S. Shkolyar and SuperCam Team and Regolith Working Group, Examining Soil Surface Processes at Jezero crater, Mars, AGU, 2021.
60. (Invited) Martínez, G. M., Brine Studies Enabled Through Surface-Based Measurements on Mars, Brines Across the Solar System, Modern Brines Conference, 2021.
59. Rivera-Valentín, E. G., V. F. Chevrier, A. Soto, G. M. Martínez, Formation of (meta)stable brines on present-day Mars: Implications for Habitability, Brines Across the Solar System, Modern Brines Conference, 2021.
58. Fischer, E., G. M. Martínez, N. O. Rennó, Raman Spectroscopy as a Tool to Identify Brine Formation, Brines Across the Solar System, Modern Brines Conference, 2021.
57. Martínez, G. M., A. J. Segura, M. D. Smith, E. Fischer, and N. O. Renno. Looking for Non-Polar Shallow Subsurface Water Ice in the Preparation for Future Human Exploration of Mars, EPSC, 2021.
56. Newman, C. V. Apéstigue, I. Arruego, M. Baker, D. Banfield, J. Bell, B. Chide, P. Conrad, M. De La Torre Juárez, T. del Rio-Gaztelurrutia, J. Gómez-Elvira, E. Fischer, T. Fouchet, R. Francis, F. Gómez, K. Herkenhoff, R. Hueso, M. Lemmon, R. Lorenz, J. Maki, G. M. Martínez, T. McConnochie, D. Mimoun, F. Montmessin, N. Murdoch, S. Navarro, P. Patel, J. Pla-García, J.A. Rodríguez-Manfredi, A. Sánchez-Lavega, A. Stott, R. Sullivan, L. Tamppari, C. Tate, A. Vicente-Retortillo, D. Viúdez-Moreiras, R. Wiens, M. Wolff, M.-P. Zorzano, D. Toledo, and the Mars

2020 Atmospheric Science Working Group, The Dynamic Environment of Jezero Crater, Mars, AAS/Division for Planetary Sciences Meeting, 2021.

55. Hueso, R., M. de la Torre-Juárez, D. Banfield, A. Sánchez-Lavega, A. Munguira, A. Chavez, A. Lepinnette, J.A. Rodríguez-Manfredi, **G.M. Martínez**, S. Navarro and J. Gómez-Elvira, 2021 Mars 2020 MEDA Measurements of Near Surface Atmospheric Temperatures at Jezero, AAS/Division for Planetary Sciences Meeting, 2021.
54. Toledo D., V. Apéstigue, I. Arruego, M. D. Smith, M. Lemmon, M. Yela, **G. M. Martínez**, A. Vicente-Retortillo, A. Sánchez-Lavega, R. Hueso, L. Gómez, J. Jiménez, E. García, M. de la Torre-Juárez and J. A. Rodríguez-Manfredi, Aerosol optical properties derived by Perseverance MEDA-RDS for the first 100 sols observations, AAS/Division for Planetary Sciences Meeting, 2021.
53. Apéstigue, V., D. Toledo, I. Arruego, M. D. Smith, M. Lemmon, L. Gómez, M. Yela, J. J. Jiménez, E. García, J. Gómez-Elvira, S. Navarro, **G. M. Martínez**, E. Sebastián, Á. de Vicente-Retortillo, A. Sánchez-Lavega, R. Hueso, A.-M. Harri, M. Genzer, M. Hieta, J. Polkko, C. Newman, M. de La Torre Juárez, J. A. Rodríguez-Manfredi, Dust devils detection and characterization at Jezero using MEDA radiance observations, AAS/Division for Planetary Sciences Meeting, 2021.
52. Hieta, M., M. Genzer, J. Polkko, I. Jaakonaho, A. Lorek, S. Garland, J.P. de Vera, **G. M. Martínez**, E. Fischer, J. A. Rodríguez Manfredi, and L. Tamppari, Calibration and first results of relative humidity sensor MEDA HS on board M2020 rover, EGU General Assembly Conference, 2021.
51. Vicente-Retortillo, A., **G. M. Martínez**, M.T. Lemmon, N.O. Renno and J.A. Rodríguez-Manfredi. Diurnal Variations in Atmospheric Opacity at Gale Crater, Mars, 52nd Lunar and Planetary Science Conference, 2021.
50. Rodríguez-Manfredi, J.A., M. de la Torre Juárez, V. Apéstigue, I. Arruego, D. Banfield, J. Boland, J. Ceballos, P.G. Conrad, T. Del Río, M. Domínguez-Pumar, S. Espejo, A.G. Fairen, F. Ferri, R. Ferrándiz, E. Fischer, M. Genzer, S. Giménez, J. Gómez-Elvira, F. Gómez, S.D. Guzewich, A.-M. Harri, M. Hieta, R. Hueso, M.T. Lemmon, A. Lepinette, M. Marin, J. Martin-Soler, **G. M. Martínez**, A. Molina, L. Mora, S. Navarro, C. Newman, V. Peinado, S. Pérez-Hoyos, J. Pla-García, O. Prieto-Ballesteros, S.C.R. Rafkin, M. Ramos, J. Romeral, K. Runyon, A. Saiz-Lopez, A. Sánchez-Lavega, E. Sebastián, M.D. Smith, R.J. Sullivan, L.K. Tamppari, D. Toledo, J. Torres, R. Urqui, Á. Vicente-Retortillo, D. Viúdez-Moreiras, S. Zurita and MEDA team. First Observations with MEDA: The Environmental and Meteorological Package for Mars 2020, 52nd Lunar and Planetary Science Conference, 2021.
49. **Martínez, G. M.**, A. Vicente-Retortillo, A. R. Vasavada, C. E. Newman, E. Fischer N. O. Renno, H. Savijärvi, M. de la Torre-Juárez, M. T. Lemmon, S. D. Guzewich, and E. Sebastián, The Surface Energy Budget during the first 4 Martian Years of the Mars Science Laboratory mission, AGU Fall Meeting, 2020.
48. Segura, A., **G. M. Martínez**, and M. Smith, Temporal and Spatial Variations of the Hydrogen Content in the Martian Subsurface as Measured by the Neutron Spectrometer onboard Mars Odyssey: The Hellas Planitia Case, AGU Fall Meeting, 2020.
47. Hieta, M., M. Genzer, J. Polkko, I. Jaakonaho, A. Lorek, S. Garland, J.-P. de Vera, **G. M. Martínez**, and E. Fischer, Humidity calibration of relative humidity devices in Martian conditions, EGU General Assembly Conference, 2020.

46. Vicente-Retortillo, A., G. M. Martínez, N. Renno, M. Lemmon, J. Gómez-Elvira, A New Dataset of UV Fluxes at Gale Crater from REMS Measurements, 51st Lunar and Planetary Science Conference, The Woodlands, US, 2020.
45. Gough, R. V., W. Rapin, G. M. Martínez, P.-Y. Meslin, O. Gasnault, S. Schröder, R. C. Wiens, Possible Detection of Water Frost by the Curiosity Rover, 51st Lunar and Planetary Science Conference, The Woodlands, US, 2020.
44. Lemmon, M. T., C. Campbell, B. Cooper, D. Ellison, S. D. Guzewich, T. Kubacki, G. M. Martínez, C. Newman, J. van Beek, A. Vicente-Retortillo and D. Viúdez-Moreiras, Nacreous clouds on Mars: imaging cloud formation with the Curiosity rover, AGU Fall Meeting, San Francisco, CA, US, 2019.
43. Moores, J. E., P. King, C. L. Smith, G. M. Martínez, C. Newman, S. D. Guzewich, P.-Y. Meslin, S. Atreya, C. Webster, P. Mahaffy, and A. C. Schuerger, A diurnal cycle in near-surface methane concentration from micro-seepage as constrained by TLS and TGO, EPSC-DPS Joint Meeting, Geneva, Switzerland, 2019.
42. Lemmon, M. T., S. D. Guzewich, T. H. McConnochie, G. M. Martínez, A. Vicente-Retortillo, M. D. Smith, J. F. Bell III, D. Wellington, S. Jacobs, Martian Dust Particle Size During the 2018 Planet-Encircling Dust Storm as Measured by the Curiosity Rover, The Ninth International Conference on Mars, Pasadena, California, USA, 2019.
41. (Invited) Martínez, G. M., E. Fischer, and N. O. Renno, Exploring Brine Formation on Mars and the Icy Worlds: Laboratory Experiments and Instrument Development, AbSciCon, Bellevue, Washington, USA, 2019.
40. Vicente-Retortillo, A., G. M. Martínez, N. Renno, C. Newman, M. Lemmon, M. Richardson, and A. Vasavada, Dust Deposition and Lifting at Gale Crater during the 2018 Global Dust Storm, EGU General Assembly, Vienna, Austria, 2019.
39. Harri, A.-M., M. Genzer, J. Gómez-Elvira, H. Savijarvi, T. McConnochie, M. Hieta, M. de la Torre, J. Polkko, G. M. Martínez, T. Nikkanen, M. Paton, and L. Vázquez, Three full martian years of in situ humidity at Gale crater through MSL/REMS observations, EGU General Assembly, Vienna, Austria, 2019.
38. Viúdez-Moreiras, D., J. Gómez-Elvira, G. M. Martínez, S. Guzewich, C. Newman, J. Pla-García, M. de la Torre-Juárez, A. Vicente-Retortillo, M. D. Smith, A.-M. Harri, M. Genzer, M. Lemmon, J. A. Rodríguez-Manfredi, Effects of the MY34/2018 Global Dust Storm in the Gale Crater Environment as Measured by REMS, AGU Fall Meeting, Washington, D.C., US, 2018.
37. Guzewich, S. D., M. Lemmon, C. L. Smith, G. M. Martínez, A. Vicente-Retortillo, C. E. Newman, M. Baker, C. Campbell, B. Cooper, J. Gómez-Elvira, A.-M. Harri, D. Hassler, F. J. Martín-Torres, T. McConnochie, J. E. Moores, H. Kahanpää, A. Khayat, M. I. Richardson, M. D. Smith, R. Sullivan, M. de la Torre-Juárez, A. R. Vasavada, D. Viúdez-Moreiras, C. Zeitlin, M.-P. Zorzano, Mars Science Laboratory Observations of the 2018/Mars Year 34 Global Dust Storm, AGU Fall Meeting, Washington, D.C., US, 2018.
36. Moores, J. E., R. Gough, G. M. Martínez, P.-Yves Meslin, C. L. Smith, S. Atreya, P. Mahaffy, C. Newman, and C. Webster, Regolith Adsorptive-diffusive Control of the Methane Seasonal Cycle at Gale Crater, Mars, AAS/Division for Planetary Sciences Meeting Abstracts# 50, vol. 50, pp. 303-01, 2018.
35. Rivera-Valentín, E., V. F. Chevrier, R. V. Gough, K. M. Primm, G. M. Martínez and M. Tolbert, Atmosphere-regolith interactions with a salty Martian regolith: The role of hydration and

deliquescence on the Martian water cycle, Mars Workshop on Amazonian Climate, Colorado, US, 2018.

34. Moores, J. E., R. Gough, **G. M. Martínez**, P.-Y. Meslin, C. L. Smith, S. Atreya, P. Mahaffy, C. Newman, and C. Webster, The methane seasonal cycle at Gale Crater, Mars suggests adsorption-mediated microseepage, Mars Workshop on Amazonian Climate, Colorado, US, 2018.
33. **Martínez, G. M.**, M. Giuranna, T. McConnochie, L. K. Tamppari, M. D. Smith, A. Vicente-Retortillo, N. O. Renno, J. L. Kloos, J. E. Moores and S. D. Guzewich, Interannual variability of water ice opacity at Gale crater from ground-based Curiosity and orbital Mars Express observations, 49th Lunar and Planetary Science Conference, The Woodlands, US, 2018.
32. Fischer, E., **G. M. Martínez** and N. O. Renno, The Phoenix Lander's relative humidity sensor recalibration: New results and analysis, 49th Lunar and Planetary Science Conference, The Woodlands, US, 2018.
31. Vicente-Retortillo, A., **G. M. Martínez**, N. O. Renno and M. T. Lemmon, Dust deposition and removal from the Mars Science Laboratory UV Sensor, 49th Lunar and Planetary Science Conference, The Woodlands, US, 2018.
30. Harri, A.-M., M. Genzer, T. H. McConnochie, H. Savijarvi, M. D. Smith, **G. M. Martínez**, M. de la Torre-Juárez, R. M. Haberle, J. Polkko, J. Gómez-Elvira, N. O. Renno, O. Kemppinen, M. Paton, M. I. Richardson, C. E. Newman, T. Siili and T. Mäkinen, Surface-atmospheric water cycle at Gale crater through multi-year MSL/REMS observations, AGU Fall Meeting, New Orleans, US, 2017.
29. Webster, C. R., P. R. Mahaffy, S. K. Atreya, G. Flesch, C. Malespin, C. McKay, **G. M. Martínez**, J. Moores, C. L. Smith, F. J. Martin-Torres, J. Gómez-Elvira, M.-P. Zorzano, M. H. Wong, M. G. Trainer, J. L. Eigenbrode, D. P. Glavin, A. Steele, D. Archer Jr., B. Sutter, P. J. Coll, C. Freissinet, P.-Y. Meslin, A. Pavlov, D. Keymeulen, L. E. Christensen, R. V. Gough, S. P. Schwenzer, R. Navarro-Gonzalez, J. Pla-García, S. C. R. Rafkin, A. Vicente-Retortillo, H. Kahanpää, D. Viúdez-Moreiras, M. D. Smith, A.-M. Harri, M. Genzer, D. Hassler, M. T. Lemmon, J. A. Crisp, R. W. Zurek and A. R. Vasavada, Mars Methane at Gale Crater Shows Strong Seasonal Cycle: Updated Results from TLS-SAM on Curiosity, AGU Fall Meeting, New Orleans, US, 2017.
28. Fischer, E., **G. M. Martínez**, D. Neamati, N. O. Renno, The Formation of Frost and Liquid Brines on Spacecraft Materials at Mars Environmental Conditions, Division for Planetary Sciences Meeting 49, Provo, US, 2017.
27. Sebastián, E., J. Pérez, A. Bravo, R. Ferrándiz, M. Fernández, J. A. Rodríguez-Manfredi, **G. M. Martínez**, A. Peña, D. González, J. Moreno, J. de Lucas, P. Hernández, I. Pérez-Grande, A. Chamorro and M. Ramos, Performance analysis of the MEDA's Thermal InfraRed Sensor (TIRS) on board the Mars 2020, Metrology for AeroSpace (MetroAeroSpace), pp. 85-92, IEEE, 2017.
26. Pérez-Izquierdo, J., E. Sebastián, A. Bravo, A. Molina, R. Ferrándiz, M. Fernández, G. Jiménez, J. A. Manfredi, F. J. Meca-Meca, M. Ramos, F. Hänschke, E. Kessler, **G. M. Martínez**, A. Peña, D. González and J. Moreno, The Thermal Infrared Sensor (TIRS) of the Mars Environmental Dynamics Analyzer (MEDA) instrument onboard Mars 2020, Metrology for AeroSpace (MetroAeroSpace), pp. 79-84, IEEE, 2017.
25. Ari-Matti Harri, M. Genzer, J. Gómez-Elvira, H. Savijarvi, T. McConnochie, M. de la Torre-Juárez, **G. M. Martínez**, R. Haberle, J. Polkko, M. Paton, C. Newman, T. Makinen, and L.

Vazquez, Humidity cycle at Gale crater through MSL/REMS observations, EGU General Assembly, Vienna, Austria, 2017.

24. Fischer, E., **G. M. Martínez**, and N. Renno, Recalibration and analysis of the Phoenix relative humidity sensor data, 48th Lunar and Planetary Science Conference, The Woodlands, US, 2017.
23. Vaniman, D.T., **G. M. Martínez**, E. B. Rampe, T. F. Bristow, D. F. Blake, A. H. Yen, D. W. Ming, W. Rapin, P.-Y. Meslin, J. M. Morookian, R. T. Downs, S. J. Chipera, R. V. Morris, S. M. Morrison, A.H. Treiman, C. N. Achilles, J. P. Grotzinger, R. M. Hazen, J. A. Crisp, Calcium sulfates at Gale crater and limitations on gypsum stability, 48th Lunar and Planetary Science Conference, The Woodlands, US, 2017.
22. **Martínez, G. M.**, A. Vicente-Retortillo, A. Fairén, E. Fischer, S. D. Guzewich, R. M. Haberle, O. Kemppinen, M. Lemmon, C. Newman, N. Renno, M. Richardson, M. D. Smith, M. de la Torre-Juárez and A. Vasavada, An overview of the dust, CO2 and water cycle on Mars as revealed from in-situ environmental data from the Viking to the Curiosity Rover, Sixth International Workshop in the Mars Atmosphere: Modelling and Observations, Granada, Spain, 2017.
21. Vicente-Retortillo, A., **G. M. Martínez**, N. Renno, M. Lemmon, and M. Torre-Juárez, Variability of dust aerosol particle size at Gale Crater using Mastcam and REMS UV measurements, Sixth International Workshop in the Mars Atmosphere: Modelling and Observations, Granada, Spain, 2017.
20. Fischer, E., **G. M. Martínez**, N. Renno, Experimental recreation of the diurnal cycle at the Phoenix landing site - Investigating the formation and persistence of brine, Sixth International Workshop in the Mars Atmosphere: Modelling and Observations, Granada, Spain, 2017.
19. Gómez-Elvira, J., I. Carrasco, A. Lepinette, M. Marín, L. Mora, S. Navarro, V. Peinado, J. Pla-García, J. Torres, D. Viúdez-Moreiras, R. Urqui, M. de la Torre, C. Newman, **G. M. Martínez**, A-M. Harri. M. Genzer, and the REMS team, Gale Atmospheric Evolution along the first two years on Mars using REMS-MSL Data, Sixth International Workshop in the Mars Atmosphere: Modelling and Observations, Granada, Spain, 2017.
18. McConnochie, T. M, M. Smith, M. Wolff, S. Bender, M. Lemmon, S. Maurice, O. Gasnault, J. Lasue, P.Y. Meslin, A. M. Harri, M. Genzer, O. Kemppinen, **G. M. Martínez**, L. Deflores, J. R. Johnson and J. F. Bell II, Water vapor and aerosols from Chemcam passive sky observations, Sixth International Workshop in the Mars Atmosphere: Modelling and Observations, Granada, Spain, 2017.
17. Rodríguez-Manfredi, J. A., F. Gómez, J. Gómez-Elvira, S. Navarro, O. Prieto-Ballesteros, E. Sebastián, M. de la Torre, J. T. Schofield, L. K. Tamppari, I. Arruego, N. T. Bridges, P. G. Conrad, M. Smith, M. Genzer, A-M. Harri, M. Lemmon, **G. M. Martínez**, C. Newman, A. Sánchez-Lavega, M. Ramos, A. Saiz-Lopez, and the MEDA team, Atmospheric Science with the Mars 2020 rover - The MEDA Instrument, Sixth International Workshop in the Mars Atmosphere: Modelling and Observations, Granada, Spain, 2017.
16. Guzewich, S. D., C. E. Newman, M. de la Torre, M. Lemmon, E. Mason, M. Battalio, M. P. Zorzano Mier, J. Moores, C. A. Moore, J. L. Kloos, and **G. M. Martínez**. The Mars science laboratory dust storm campaign." In 6th International Workshop on the Mars Atmosphere: Modelling and Observations, Granada, Spain, 2017.
15. **Martínez, G. M.**, A. Vicente-Retortillo, O. Kemppinen, E. Fischer, A. Fairén, S. D., Guzewich, R. M. Haberle, H. Kahanpää, M. Lemmon, C. Newman, N. Renno, M. Richardson, M. D. Smith,

M. de la Torre-Juárez and A. Vasavada, Interannual, seasonal and diurnal Mars surface environmental cycles observed from Viking to Curiosity, DPS EPSC 11, Pasadena, US, 2016.

14. Vicente-Retortillo, A., **G. M. Martínez**, N. Renno, M. Lemmon, E. L. Mason, M. Torre-Juárez, Temporal evolution of UV opacity and dust particle size at Gale Crater from MSL/REMS measurements, DPS 48/EPSC 11, Pasadena, US, 2016.
13. Rodríguez-Manfredi, J.A., M. de la Torre, J. S. Boland, N. T. Bridges, P. Conrad, F. Ferri, M. Genzer, F. Gómez-Gómez, J. Gómez-Elvira, A-M. Harri, O. Kemppinen, M. Lemmon, **G. M. Martínez**, S. Navarro, C. Newman, S. Pérez-Hoyos, O. Prieto, M. Ramos, A. Saiz-López, A. Sánchez-Lavega, J.T. Schofield, E. Sebastián, M. Smith, L. K. Tamppari, and the MEDA team, MEDA: The Mars Environmental Dynamics Analyzer from Mars 2020, 3rd International Workshop on Instrumentation for Planetary Missions, Pasadena, US, 2016.
12. Renno, N. O., E. Fischer, and **G. M. Martínez**, Experimental confirmation of liquid brines on Mars, AGU Fall Meeting, San Francisco, US, 2015.
11. **Martínez, G. M.**, E. Fischer, H. Elliott, C. S. Borlina and N. O. Renno, Physisorbed liquid-like Water in Mars Gale Crater? Abgradcon, Troy, NY, US, 2014.
10. **Martínez, G. M.**, N. O. Renno, E. Fischer, C. S. Borlina, B. Hallet, M. de la Torre-Juárez, A. Vasavada and J. Gómez-Elvira, Ground-Atmosphere Interactions at Gale: Determination of the Surface Energy Budget, Thermal Inertia and Water Sorption on the Regolith, EGU General Assembly, Vienna, Austria, 2014.
9. Ramos, M., A. Molina, **G. M. Martínez**, V. Hamilton, M. A. de Pablo, E. Sebastián, N. O. Renno and J. Gómez-Elvira, Heat flux into the soil surface on crater Gale (Mars) from ground (GTS) and air (ATS) temperatures measures by REMS-MSL mission, 4th European Conference on Permafrost, Évora, Portugal, 2014.
8. **Martínez, G. M.**, N. O. Renno, J. H. Hoffman, H. Elliott, and E. Fischer, Near Surface Water Vapor Pressure and Relative Humidity on Mars: New Values obtained from the Phoenix Mass Spectrometer, 44th Lunar and Planetary Science Conference, The Woodlands, US, 2013.
7. **Martínez, G. M.**, N. O. Renno, H. Elliott and E. Fischer, Present-Day Liquid Water on Mars: Theoretical Expectations, Observational Evidence, and Preferred Locations, The Present-Day Mars Habitability Conference, Los Angeles, US, 2013.
6. **Martínez, G. M.**, N. O. Renno and H. Elliott, Composition of Dark Spots in Mars Richardson Crater from the Analysis of HiRISE Images, EGU General Assembly, Vienna, Austria, 2012.
5. Elliott, H., G. M. Martínez and N. O. Renno, Characterization of liquid brines under Mars ambient conditions, Concepts and Approaches for Mars Exploration, Houston, US, 2012.
4. **Martínez, G. M.**, F. Valero and L. Vázquez, Turbulent Kinetic Energy on Mars: Derivation from ground-based Data, Fourth International Workshop on the Mars Atmosphere: Modeling and Observations, Paris, France, 2011.
3. **Martínez, G. M.**, J. Silva, F. Valero, and L. Vázquez, TKE Budget in the Convective Martian PBL, European Science Planetary Congress, Rome, Italy, 2010.
2. **Martínez, G. M.**, F. Valero and L. Vázquez, Martian Mixed Layer during Pathfinder Mission, European Planetary Science Congress, Munster, Germany, 2008.
1. **Martínez, G. M.**, F. Valero and L. Vázquez, Mars Surface Layer Characterization, EGU General Assembly, Vienna, Austria, 2008.

Posters

113. Patel, P., L. Tamppari, M. de la Torre Juarez, **G. M. Martínez**, T. McConnochie, J. Pla-Garcia, and F. Gomez, Sensitivity Analysis of Regolith-Atmosphere Water Exchange on Mars, EPSC-DPS, 2025.
112. Chide, B., S. Maurice, R. D. Lorenz, X. Jacob, P. Blanc-Benon, T. Bertrand, A. Munguira, **G. M. Martinez**, A. Cousin, and R. Wiens, Assessing diurnal and seasonal variations of near-surface turbulence through acoustic wave scintillation on Mars, EPSC-DPS, 2025.
111. Franz, H. B., C. R. Webster, G. J. Flesch, P. R. Mahaffy, E. Raaen, M. Kahre, B. Prats, S. K. Atreya, D. G. Burtt, C. H. House, D. Y. Lo, J. C. Stern, M. G. Trainer, P. D. Archer, Jr., M. de la Torre Juarez, D. J. Des Marais, B. Ehlmann, S. Guzewich, **G. M. Martínez**, C. A. Malespin, J. Pla-Garcia, S. Rafkin, A. Steele, A. R. Vasavada, D. Viudez-Moreiras, M. H. Wong, and M.-P. Zorzano, The Isotopic Composition of Martian Atmospheric CO2 at Gale Crater During Mars Years 31-37, 56th Lunar and Planetary Science Conference, The Woodlands, USA, 2025.
110. Vaniman, D., **G. M Martínez**, S. Chipera, R. V. Morris, E. Rampe, T. Bristow, D. Blake, J. Meusburger, T. Peretyazhko, D. Ming, P. Craig, N. Castle, R. T. Downs, S. Morrison, R. Hazen, A. Pandey, A.H. Treiman, A. Yen, C. Achilles, B. Tutolo, E. Hausrath, S. Simpson, M. Thorpe, V. Tu, and D.J. Des Marais. Meridianiite at Gale Crater?, 56th Lunar and Planetary Science Conference, The Woodlands, USA, 2025.
109. Vicente-Retortillo, A., **G. M. Martínez**, M. Lemmon, C. Newman, J. A. Rodriguez-Manfredi, Temporal and Spatial Variability of Dust Lifting on Mars in Preparation for Solar-powered Missions. AGU 2024.
108. Pankine, A., L. K. Tamppari, C. W. S. Leung, **G. M. Martínez**, M. Giuranna, S. Piqueux, M. D. Smith. Decreased Water Vapor Abundances in the Southern Polar Atmosphere. The Tenth International Conference on Mars, Pasadena, CA, US, 2024.
107. de la Torre Juárez, M., J. A. Rodríguez-Manfredi, **G. M. Martínez**, M. Battalio, R. Lorenz, C. E. Newman, L. K. Tamppari. Near-Surface Martian Environments as Measured by Surface Stations. The Tenth International Conference on Mars, Pasadena, CA, US, 2024.
106. Paar, G., C. Tate, F. Calef, C. Traxler, J. R. Christian, **G. M. Martínez**, J.F. Bell III, J. Maki, P. Caballo-Perucha, A. Bechtold. Where Exactly are Perseverance's Sample Tubes? – Integration Rover Localization, Structure from Motion and High-Fidelity Visualization. The Tenth International Conference on Mars, Pasadena, CA, US, 2024.
105. **Martínez, G. M.**, E. Sebastián, A. Vicente-Retortillo, H. Savijärvi, M. Smith, E. Fischer, D. Toledo, V. Apéstigue, I. Arruego, A. Munguira, R. Hueso, A. Sánchez-Lavega, L. K. Tamppari, M. T. Lemmon, C. E. Newman, A. Stott, M. de la Torre-Juárez, and J. A. Rodríguez-Manfredi. Three Forks: An Example of Thermal and Radiative Characterization for a Mars Sample Return Landing Site. The Tenth International Conference on Mars, Pasadena, CA, US, 2024.
104. Hayes, C. W., A. C. Innanen, M. T. Lemmon, **G. M. Martínez**, and J. E. Moores. Aphelion Cloud Belt Opacities over Jezero Crater Through the First 1000 Sols of the Mars 2020 Mission. The Tenth International Conference on Mars, Pasadena, CA, US, 2024.
103. Knight, A. L., S. J. VanBommel, B. Ganly, R. A. Yingst, M. E. Schmidt, **G. M. Martínez**, Á. Vicente-Retortillo, M. W. M. Jones, A. O. Shumway, B. C. Clark, Y. Liu, D. T. Flannery, A. C. Allwood, and J. A. Hurowitz. Dust Accumulation on the PIXL Calibration Target: Phosphorus Enrichment and Role of Electrostatic Effects. The Tenth International Conference on Mars, Pasadena, CA, US, 2024.

102. Vicente-Retortillo, A., M. T. Lemmon, **G. M. Martínez**, D. Toledo, V. Apéstigue, I. Arruego, T. Bertrand, R. Lorenz, E. Sebastián, R. Hueso, C. Newman, M. D. Smith, and J. A. Rodriguez-Manfredi, Implications of Dust Deposition at Jezero Crater for Mars Sample Return Science and Engineering Contexts. 55th Lunar and Planetary Science Conference, The Woodlands, USA, 2024.
101. Vaniman, D. T., S. J. Chipera, **G. M. Martínez**, W. Rapin, E. B. Rampe, T. Bristow, D. F. Blake, J. Meusberger, D. W. Ming, R. T. Downs, P. Craig, N. Castle, R. V. Morris, A. Pandey, A. S. Yen, C. Achilles, S. M. Morrison, S. Simpson, M. Thorpe, V. Tu, B. M. Tutolo, A. H. Treiman, G. Downs, J. Berger, R.M. Hazen, D. Des Marais, L. Hausrath, T. Gabriel, and J. Grotzinger, Near-Surface Dehydration of salt hydrates at Gale Crater Mars. 55th Lunar and Planetary Science Conference, The Woodlands, USA, 2024.
100. del Rio-Gaztelurrutia, T., A. Sánchez-Lavega, A. Munguira, R. Hueso, M. Smith, M. Lemmon, **G. M. Martínez**, C. Newman, J. Pla-García, M. de la Torre Juarez, J. Rodriguez-Manfredi, Turbulence at Jezero crater from MEDA pressure data: A comparison of different seasons and locations, AGU, 2023.
99. Munguira, A., R. Hueso, A. Sánchez-Lavega, **G. M. Martínez**, M. de la Torre Juarez, T. del Rio-Gaztelurrutia, Á. Vicente-Retortillo, J. Pla-García, M. Lemmon, A. Lepinette, M.-P. Zorzano, More than One Martian Year of Near-Surface Temperature Observations with MEDA/Perseverance: Seasonal Evolution and Potential Topographical Effects, AGU, 2023.
98. Vicente-Retortillo, Á., M. Lemmon, **G. M Martínez**, D. Toledo, V. Apestigue, I. Arruego, T. Bertrand, R. Lorenz, R. Hueso, C. Newman, M. Smith, J. Rodriguez-Manfredi, Dust Accumulation at Jezero Crater: MEDA Observations, Modeling Efforts and Comparison with Other Missions, AGU, 2023.
97. Polkko, J., J. Pla-Garcia, M. Hieta, A.-M. Harri, L. Tamppari, **G. M. Martínez**, D. Viudez, H. Savijarvi, P. Conrad, M. P. Zorzano, M. de la Torre-Juarez, R. Hueso, A. Munguira, J. Leino, F. Gomez, I. Jaakonaho, E. Fischer, M. Genzer, V. Apestigue, I. Arruego, D. Banfield, A. Lepinette, M. Paton, J. A. Rodriguez-Manfredi, A. Sanchez-Lavega, E. Sebastian, D. Toledo and A. Vicente-Retortillo, One Martian year of MEDA HS humidity sensor observations and comparisons with models, EGU, Vienna, Austria, 2023.
96. Gambrill, J., **G. M. Martínez**, and E. Sebastián, Analyses of Thermal Noise in Curiosity's Ground Temperature Measurements, 54th Lunar and Planetary Science Conference, The Woodlands, USA, 2023.
95. Gillespie, H., **G. M. Martínez**, E. Sebastian, M. D. Smith, R. Hueso, A. Munguira, D. Viudez-Moreiras, H. Savijarvi, A. Sanchez-Lavega, M. Torre-Juarez, and others, Combining Mars 2020/MEDA, MRO/MCS, and EMARS Datasets to Produce Vertical Profiles of Temperature at Jezero Crater, Mars, 54th Lunar and Planetary Science Conference, The Woodlands, USA, 2023.
94. Hausrath, E. M., R. Sullivan, Y. Goreva, M. P. Zorzano, E. Cardarelli, A. Vaughan, A. Cousin, S. Siljestrom, A. Shumway, S. VanBommel, and others including G. M. Martínez, The First Regolith Sample from Mars, 54th Lunar and Planetary Science Conference, The Woodlands, USA, 2023
93. Tamppari, L., **G. M. Martínez**, J. A. Rodríguez-Manfredi, M. de la Torre, M. Hieta, Polkko, I. Jaakonaho, M. Genzer, A.-M. Harri, T. McConnochie, F. Montmessin, M. Smith, M. Wolff, E.

Fischer, F. Gómez, M.-P. Zorzano, D. Viúdez-Moreiras, P. Patel, M. Lemmon, E. Knutsen, J. Pla-García, and T. Fouchet, Water vapor at Jezero Crater, Mars, AGU, 2022.

92. Newman, C., M. Baker, R. Sullivan, C. Charalambous, M. Lemmon, M. Richardson, R. Hueso, D. Toledo, V. Apéstigue, I. Arruego, A. Vicente-Retortillo, **G. M. Martínez**, H. Kahanpää, C. Swann, B. Jackson, S. Diniega, R. Ewing, N. Murdoch, A. Stott, D. Mimoun, J. Lasue, S. Thorne, and J. Battalio, Recent insights into dust lifting and sand motion at the surface of Mars, AGU, 2022.
91. Ravanis, E., S. Fagents, C. Newman, B. Horgan, J. Nuñez, **G. M. Martínez**, L. Kah, and A. Brown, The Relationship Between the Nili Fossae Olivine-bearing Unit and Séítah in Jezero Crater, Mars, AGU, 2022.
90. Sánchez-Lavega, A., T. del Rio-Gaztelurrutia, R. Hueso, M. de la Torre, **G. M. Martínez**, A.-M. Harri, M. Genzer, M. Hieta, J. Polkko, J. A. Rodríguez-Manfredi, M. Lemmon, A. Munguira, J. Pla-García, D. Toledo, A. Vicente-Retortillo, D. Viúdez-Moreiras, L. Tamppari, C. Newman, V. Apéstigue, I. Arruego, M2020/Perseverance Study of Atmospheric Tides and Waves at Jezero, Mars, AGU, 2022.
89. **Martínez, G. M.**, E. Sebastián, A. Vicente-Retortillo, E. Fischer, D. Toledo, F. Gómez, M. D. Smith, L. Mora-Sotomayor, H. Savijärvi, J. R. Johnson, V. Apéstigue, I. Arruego, L. Mandon, R. Hueso, A. Munguira, M. Ramos, C.E. Newman, M.T. Lemmon, A. Sánchez-Lavega, L.K. Tamppari, O. Prieto, A. Molina, T. H. McConnochie, P. Conrad, F. Jordan, A.M. Harri, M. Genzer, M. Hieta, J. Poulko, M. P. Zorzano, M. Hecht, M. Siegler, M. Torre-Juárez, J.A. Rodríguez-Manfredi, Albedo and Thermal Inertia at Jezero Crater During the First 350 Sols of the Mars 2020 Mission, Mars atmosphere: Modelling and observations, Paris, France, 2022.
88. **Martínez, G. M.**, R.V. Gough, W. Rapin, P.-Y. Meslin, O. Gasnault, S. Schröder, T. H. McConnochie, H. Savijärvi, E. Fischer, S. Guzewich, C.E. Newman, A. R. Vasavada, M. De La Torre-Juárez, R. Wiens, N. Lanza, MSL Frost Detection Campaigns, Mars atmosphere: Modelling and observations, 2022.
87. Smith, M. D., **G. M. Martínez**, E. Sebastián, V. Apéstigue, I. Arruego, D. Toledo Carrasco, D. Viúdez-Moreiras, J.A. Rodríguez-Manfredi, M.T. Lemmon, M. de la Torre Juárez, Diurnal and Seasonal Variations of Aerosol Optical Depth at Jezero Crater, Mars, Mars atmosphere: Modelling and observations, 2022.
86. Vicente-Retortillo, A., **G. M. Martínez**, M. T. Lemmon, R. Hueso, R. Sullivan, C. E. Newman, E. Sebastián, D. Toledo, V. Apéstigue, I. Arruego, A. Munguira, A. Sánchez-Lavega, L. Mora-Sotomayor, T. Bertrand, L. K. Tamppari, M. De La Torre Juárez, J.-A. Rodríguez-Manfredi, Changes in Surface Albedo Induced by Dust Devils and the MY 36 Ls = 155° Dust Storm at Jezero Crater, Mars atmosphere: Modelling and observations, 2022.
85. Gillespie, H. E., **G. M. Martínez**, R. Hueso, A. Munguira, E. Sebastián, H. Savijärvi, A. Sánchez-Lavega, M. Torre-Juárez, J. A. Rodríguez-Manfredi, Integrating In-Situ, Satellite, and Reanalysis Datasets to Assess Temperature Profiles in the Martian Tropics, Mars atmosphere: Modelling and observations, 2022.
84. Ruíz-Pérez, M., J. Pla-García, S. Rafkin, **G. M. Martínez**, M. de la Torre, J. Gómez- Elvira, J. Rodríguez-Manfredi and the REMS and MSL Science team, Interpretation of the Meteorological Environment Changes Experienced by MSL During Mission Traverse Using REMS and MRAMS, Mars atmosphere: Modelling and observations, 2022.

83. Lemmon, M. T., M. D. Smith, R. Hueso, A. Munguira, A. Sánchez-Lavega, D. Viúdez-Moreiras, A. Vicente-Retortillo, J.A. Rodríguez-Manfredi, **G. M. Martínez**, C. Newman, R. Sullivan, D. Banfield, M. Baker, J. F. Bell, J. N. Maki, M. de la Torre-Juárez, L. Tamppari, V. Apéstigue, D. Toledo, Inside an Active Martian Storm in Jezero Crater, Mars atmosphere: Modelling and observations, 2022.
82. Hieta, M., J. Polkko, I. Jaakonaho, M. Genzer, A.-M. Harri, **G. M. Martínez**, L. Tamppari, M. de la Torre Juárez, J. A. Rodríguez-Manfredi, First Results of the Relative Humidity Sensor on Board M2020 Perseverance Rover, Mars atmosphere: Modelling and observations, 2022.
81. Munguira, A., R. Hueso, A. Sánchez-Lavega, M. de la Torre-Juárez, **G. M. Martínez**, C. Newman, J. Pla-García, D. Banfield, A. Vicente-Retortillo, A. Lepinette, J. A. Rodríguez-Manfredi, B. Chide, T. Bertrand, M. Lemmon, E. Sebastián, S. Navarro, J. Gómez-Elvira, J. Torres, J. Martín-Soler, J. Romeral, R. Lorenz, Mars 2020 MEDA Measurements of Near Surface Atmospheric Temperatures at Jezero, EPSC, 2022.
80. Vicente-Retortillo, A., **G. M. Martínez**, R. Hueso, C. E, Newman, M. T. Lemmon, E. Sebastián, D. Toledo, V. Apéstigue, I. Arruego, A. Munguira, A. Sánchez-Lavega, L. Tamppari, M. de la Torre Juárez, J.-A. Rodríguez-Manfredi, Dust lifting through surface albedo changes at Jezero Crater as observed from Mars 2020 MEDA measurements, 53rd Lunar and Planetary Science Conference, 2022.
79. **Martínez, G. M.**, E. Sebastián, A. Vicente-Retortillo, E. Fischer, D. Toledo, V. Apéstigue, I. Arruego, M. Ramos, O. Prieto, A. Molina, H. Savijärvi, F. Gómez, P. Conrad, L. Mandon, R. Hueso, A. Munguira, A. Sánchez-Lavega, M.D. Smith, C.E. Newman, M. Torre Juárez, F. Jordan, M.T. Lemmon, L.K. Tamppari, T.H. McConnochie, L. Mora-Sotomayor, A.-M. Harri, M. Genzer, M. Hieta, M.- P. Zorzano, M. H. Hecht, M. Siegler, and J. A. Rodríguez-Manfredi, Thermal inertia and albedo at Jezero Crater as observed from the Mars 2020 MEDA instrument, 53rd Lunar and Planetary Science Conference, 2022.
78. Hausrath, E. M., C. T. Adcock, A. Bechtold, P. Beck, A. Brown, E. L. Cardarelli, N. A. Carman, A. Cousin, O. Forni, T. S. J. Gabriel, F. Gómez, Y. Goreva, J. Lasue, C. Legett, J. M. Madariaga, L. Mandon, **G. M. Martínez**, J. Martínez-Frías, T. McConnochie, P-Y. Meslin, M-P. Zorzano Mier, M. E. Minitti, G. Paar, S. Siljeström, M. Schmidt, S. Schroeder, M. Sephton, S. Shkolyar, S. K. Sharma, A. Steele, R. Sullivan, A. Udry, A. Vaughan, R.C. Wiens, the SuperCam team and the Regolith working group, Examining soil crusts at Jezero Crater, Mars, 53rd Lunar and Planetary Science Conference, 2022.
77. Leung, C., L. K. Tamppari, E. Fischer and **G. M. Martínez**, Water Vapor Adsorption and Desorption at the Mars Phoenix Landing Site, AGU, 2021.
76. Hueso, R., M. de la Torre Juárez, D. J. Banfield, A. Sánchez-Lavega, A. Munguira, A. Lepinette-Malvite, A. Chavez, J. A. Rodríguez-Manfredi, **G. M. Martínez**, E. Sebastián, S. Navarro, J. Gómez-Elvira, C. E. Newman, J. Pla-García, L. K. Tamppari, J. Torres, J. Martin-Soler, J. Romeral-Planello, T. del Rio-Gaztelurrutia, R. D. Lorenz, D. Viúdez-Moreiras and MEDA, Mars 2020 MEDA ATS Measurements of Near Surface Atmospheric Temperatures at Jezero, AGU, 2021.
75. Toledo, D., V. Apéstigue, I. Arruego, M. D. Smith, M. T. Lemmon, M. Yela, **G. M. Martínez**, A. Vicente-Retortillo, A. Sánchez-Lavega, R. Hueso, L. Gómez, J. J. Jiménez-Martin, E. García, M. de la Torre-Juárez and J. A. Rodríguez-Manfredi, Martian dust properties and cloud detection by Perseverance MEDA-RDS: analysis for the first 150 sols, AGU, 2021.

74. Sweeney, D., C. O. Ao, P. Vergados, N. O. Renno, D. M. Kass, C. Li and **G. M. Martínez**, Benefits of a SmallSat Radio Occultation Constellation for Mars Science and Exploration, AGU Fall Meeting, New Orleans, US, 2021.
73. Conrad, P. G., F. Gómez, L. K. Tamppari, C. E. Newman, **G. M. Martínez**, E. Fischer, N. Murdoch, A. Stott, M. Torre Juárez and J. A. Rodríguez-Manfredi, Astrobiology Implications of Environmental Dynamics Observations in Jezero Crater, Mars, AGU Fall Meeting, New Orleans, US, 2021.
72. Tamppari, L., M. Hieta, J. Polkko, M. Genzer, E. Fischer, **G. M. Martínez**, J. A. Rodríguez-Manfredi, M. Torre Juárez, P. K. Patel, M. T. Lemmon, T. H. McConnochie, F. Montmessin, F. Gómez, P. Conrad, M.-P. Zorzano, D. Viúdez-Moreiras, M. Hecht and MEDA Team, First results of the Perseverance environmental station's (MEDA's) Relative Humidity Sensor, AGU, 2021.
71. Chavez, A., M. de la Torre Juárez, L. K. Tamppari, R. Hueso, B. Chide, A. Munguira, J. A. Rodríguez-Manfredi, N. Murdoch, M. D. Smith, D. J. Banfield, A. Sánchez-Lavega, A. Stott, R. D. Lorenz, and **G. M. Martínez**, Preliminary Analysis of the Diurnal Cycle of Air Temperature Fluctuations in Jezero Crater, AGU, 2021.
70. Sweeney, D, C. O. Ao, P. Vergados, N. Renno, D. Kass and **G. M. Martínez**. A Mars Smallsat Radio Occultation Mission Concept for Addressing High-Priority Mars Science and Exploration, Mars, EPSC, 2021.
69. **Martínez, G. M.**, A. Vicente-Retortillo, H. Savijärvi, A.R. Vasavada, Fischer, N.O. Renno and M.T. Lemmon, Atmospheric Thermal Forcing at Gale Crater, Mars, 52nd Lunar and Planetary Science Conference, 2021.
68. Segura, A.J., **G. M. Martínez** and M.D. Smith, Temporal and Spatial Variations of Hydrogen Content in the Martian Shallow Subsurface, 52nd Lunar and Planetary Science Conference, 2021.
67. Mischna, M.A., T. Pagano, G. Liuzzi, O. Reale, T. Fauchez, S. Desouza-Machado, **G. M. Martínez**, G. Asrar, C. Barnet, Hyperspectral Infrared Sounding for improving Weather Predictions on Mars, 52nd Lunar and Planetary Science Conference, 2021.
66. Sweeney, D., C. Ao, P. Vergados, N. Rennó, D. Kass, **G. M. Martínez**, Addressing Mars Atmospheric Science and Exploration Knowledge Gaps with Smallsat Radio Occultations, 52nd Lunar and Planetary Science Conference, 2021.
65. Cooper, B., M. de la Torre-Juárez, M. Mischna, M. T. Lemmon, **G. M. Martínez**, D. M. Kass, A. R. Vasavada, C. Campbell, and J. Moores, Thermal Forcing of Near-Surface Temperatures by Martian Water Ice Clouds, AGU Fall Meeting, 2020.
64. Leung, C., L. Tamppari, D. M. Kass, E. Fischer, **G. M. Martínez**, and M. D. Smith., Vertical Distribution of Water Vapor Using the Recalibrated TECP Relative Humidity Measurements and Coordinated MRO Observations at the Mars Phoenix Lander Site, AGU Fall Meeting, 2020.
63. Tamppari, L. K., J. A. Rodríguez-Manfredi, M. de la Torre-Juárez, M. Genzer, M. Hieta, A.-M. Harri, J. Polkko, I. Jaakonaho, **G. M. Martínez**, E. Fischer, A. Sánchez-Lavega, R. Hueso, T. del Rio-Gaztelurrutia, F. Gómez, and D. Viúdez-Moreiras, The Mars Environmental Dynamics Analyzer: Pressure and Humidity Sensors and Science, AGU Fall Meeting, 2020.
62. Harri, A.-M., M. Genzer, J. Gomez-Elvira, H. Savijärvi, T. McConnochie, M. Hieta, M. de la Torre, J. Polkko, **G. M. Martínez**, M. Paton and L. Vazquez, Water cycle at the Gale crater-

More than three Martian years of in situ humidity observations by MSL/REMS, EGU General Assembly Conference, 2020.

61. Martínez, G. M., A. Vicente-Retortillo, A. R. Vasavada, N. O. Renno, H. Savijärvi, M. de la Torre-Juárez, E. Fischer, S. D. Guzewich, M. T. Lemmon, E. Sebastián, Atmospheric LW Radiative Forcing Along MSL Curiosity's Traverse: Implications for Dust and Water Ice Clouds, 51st Lunar and Planetary Science Conference, The Woodlands, US, 2020.
60. Sebastián, E., G. M. Martínez, M. Ramos, F. Haenschke, M. Fernández, R. Ferrándiz, M. de la Torre-Juárez, and J. A. Manfredi, The MEDA Thermal IR Radiometer (TIRS) for the MARS2020 Mission, 51st Lunar and Planetary Science Conference, The Woodlands, US, 2020.
59. de la Torre Juárez, M., J. A. Rodríguez Manfredi, V. Apéstigue, I. Arruego-Rodríguez, D. J. Banfield, J. S. Boland, P. G. Conrad, R. Ferrándiz, E. Fischer, M. Genzer, J. Gómez-Elvira, F. Gómez, S. D. Guzewich, A.-M. Harri, M. Hieta, R. Hueso, J. J. Jiménez, M. T. Lemmon, A. Lepinette, J. Martín-Soler, G. M. Martínez, A. Molina, L. Mora, J. F. Moreno, S. Navarro, C. E. Newman, C. Ortega, V. Peinado, J. Plá García, O. Prieto Ballesteros, M. Ramos, T. del Río, J. Romeral, K. Runyon, A. Saiz-López, A. Sánchez-Lavega, J. T. Schofield, E. Sebastián, M. D. Smith, R. J. Sullivan, L. K. Tamppari, J. Torres Redondo, R. Urqui, Á. de Vicente Retortillo, D. Viúdez-Moreiras, Performance of the MEDA Environmental and Meteorological Package for Mars 2020 after Integration, 51st Lunar and Planetary Science Conference, The Woodlands, US, 2020.
58. Martínez, G. M., A. Vicente-Retortillo, E. Fischer, N. O. Renno, H. Savijärvi, A. R. Vasavada, M. T. Lemmon, S. D. Guzewich, B. Cooper and J. Gómez-Elvira, Atmospheric radiative forcing at the MSL landing site during the 2018/Mars Year 34 global dust storm, AGU Fall Meeting, San Francisco, CA, US, 2019.
57. Vicente-Retortillo, A., G. M. Martínez, N. O. Renno, M. T. Lemmon and J. Gómez-Elvira, UV Fluxes at Gale Crater: Correction of three Mars Years of MSL REMS Measurements, AGU Fall Meeting, San Francisco, CA, US, 2019.
56. Cooper, B., M. de la Torre-Juárez, M. Mischna, M. T. Lemmon, G. M. Martínez, A. R. Vasavada, C. Campbell and J. E. Moores, Analysis of Warm Nighttime Surface Temperature Anomalies in Gale Crater as a Potential Signature of Nighttime Clouds, AGU Fall Meeting, San Francisco, CA, US, 2019.
55. McConnochie, T. H., M. D. Smith, M. J. Wolff, M. T. Lemmon, R. C. Wiens, A.-M. Harri, G. M. Martínez, M. G. Trainer, F. Lefèvre, A. S. J. Khayat, S. D. Guzewich and C. Newman, Recent results from ChemCam Passive Sky Spectroscopy at Gale Crater, Mars, AGU Fall Meeting, San Francisco, CA, US, 2019.
54. Rodríguez-Manfredi, J. A., V. Apéstigue, I. Arruego, D. J. Banfield, J. Boland, P. Conrad, E. Fischer, M. Genzer, J. Gómez-Elvira, F. Gómez, S. D. Guzewich, A.-M. Harri, M. Hieta, J. Jiménez-Martin, R. Hueso, M. T. Lemmon, A. Lepinette, J. F. Moreno, L. Mora, G. M. Martínez, S. Navarro, C. Newman, V. Peinado, J. Pla-García, O. Prieto-Ballesteros, M. Ramos, T. del Rio-Gaztelurrutia, K. Runyon, R. Urqui, A. Saiz-Lopez, A. Sánchez-Lavega, J. T. Schofield, J. Romeral-Planello, E. Sebastián, M. D. Smith, J. Martin-Soler, C. Ortega, R. J. Sullivan, L. Tamppari, A. Molina-Jurado, M. de la Torre Juárez, J. Torres, R. Ferrándiz, A. Vicente-Retortillo, D. Viúdez-Moreiras and the MEDA team, Mars Environmental Dynamics Analyzer (MEDA) an environmental suite of sensors for the Mars 2020 rover, AGU Fall Meeting, San Francisco, CA, US, 2019.

53. Guzewich, S. D., M. T. Lemmon, T. H. McConnochie, **G. M. Martínez**, Á. Vicente-Retortillo, M. D. Smith, J. Bell III, D. Wellington, and S. Jacobs, Martian Dust Particle Size During the 2018 Planet-Encircling Dust Storm as Measured by the Curiosity Rover, Ninth International Conference on Mars, Pasadena, US, 2019.
52. Moores J. E., P. L. King, C. L. Smith, **G. M. Martínez**, C. Newman, S. D. Guzewich, P.-Y. Meslin, S. Atreya, C. Webster, P. Mahaffy. A. C. Schuerger, A Diurnal Cycle in Near-Surface Atmospheric Methane Concentration from Microseepage as Constrained by TLS and TGO, The Ninth International Conference on Mars, Pasadena, California, USA, 2019.
51. Smith, C. L., J. E. Moores, R. Gough, **G. M. Martínez**, P.-Y. Meslin, S. K. Atreya, P. R. Mahaffy, C. Newman, and C. R. Webster, The seasonal cycle of methane at Gale Crater, Mars, replicated with methane adsorption and diffusion thought the regolith, 50th Lunar and Planetary Science Conference, The Woodlands, US, 2018.
50. Hieta, M., M. Genzer, J. Polkko, E. Fischer, and **G. M. Martínez**, Relative humidity measurements in Michigan Mars Environmental Chamber, EGU General Assembly, Vienna, Austria, 2019.
49. **Martínez, G. M.**, M. Giurana, T. H. McConnochie, N. Renno, M. Genzer, A.-M. Harri, R. V. Gough, J. Gómez-Elvira, R. Wiens, Interannual, seasonal and diurnal variability of water vapor at Gale Crater, Mars, as observed from contemporaneous MSL and MEx measurements, AGU Fall Meeting, Washington, D.C., US, 2018.
48. Vicente-Retortillo, A., **G. M. Martínez**, N. O. Renno, C. E. Newman, M. T. Lemmon, M. I. Richardson, A. R. Vasavada, Radiative environment and dust deposition and lifting at Gale Crater during the 2018 Global Dust Storm, AGU Fall Meeting, Washington, D.C., US, 2018.
47. Prats, B. D., M. G. Trainer, P. R. Mahaffy, D. Archer, C. Malespin, S. Teinturier, S. Guzewich, M. T. Lemmon, **G. M. Martínez**, K. A. Gonter, 2018 Mars Global Dust Storm – Effects of Airborne Dust and Particle Deposition on Mars Science Laboratory SAM (Sample Analysis at Mars) Instrument Inlet Cover Actuator Temperatures, AGU Fall Meeting, Washington, D.C., US, 2018.
46. Rivera-Valentín, E. G., R. V. Gough, V. F. Chevrier, K. M. Primm, **G. M. Martínez** and M. Tolbert, Constraining the potential liquid water environment at Gale crater, Mars throughout MSL's traverse, 49th Lunar and Planetary Science Conference, The Woodlands, US, 2018.
45. K. M. Primm, R. V. Gough, E. G. Rivera-Valentín, **G. M. Martínez**, and M. A. Tolbert, Hydration and dehydration of Mars-relevant chloride and perchlorate salts at Gale Crater, 49th Lunar and Planetary Science Conference, The Woodlands, US, 2018.
44. **Martínez, G. M.**, M. Giuranna, T. H. McConnochie, L. Tamppari, M. D. Smith, A. Vicente-Retortillo, N. O Renno, J. L. Kloos, J. E Moores and S. Guzewich, Interannual Variability of Water Ice Clouds at Gale Crater, AGU Fall Meeting, New Orleans, US, 2017.
43. Vicente-Retortillo, A., **G. M. Martínez**, N. O. Renno, M. T. Lemmon and J. Gómez-Elvira, The UV Sensor Onboard the Mars Science Laboratory Mission: Correction and Generation of UV Fluxes, AGU Fall Meeting, New Orleans, US, 2017.
42. Pérez-Izquierdo, J., E. Sebastián, **G. M. Martínez**, M. Ramos, A. Bravo, M. Mazo and J. A. Rodríguez-Manfredi, The Thermal Infrared Sensor onboard NASA's Mars 2020 Mission, AGU Fall Meeting, New Orleans, US, 2017.
41. Torre-Juárez, M., J. A. Rodríguez-Manfredi, V. Apéstigue-Palacio, J. Boland, M. Genzer, J. Gómez-Elvira, F. Gómez, A.-M. Harri, M. T. Lemmon, A. Lepinette, **G. M. Martínez**, S. Navarro,

C. E. Newman, O. Prieto-Ballesteros, A. Sánchez-Lavega, A. Saiz-Lopez, J. T. Schofield, E. Sebastián, M. D. Smith, L. Tamppari, J. Torres and The MEDA instrument team, Mars Environmental Analyzer, an environmental station for Mars 2020, AGU Fall Meeting, New Orleans, US, 2017.

40. McConnochie, T. H., M. D. Smith, M. J. Wolff, S. C. Bender, M. T. Lemmon, R. C. Wiens, S. Maurice, O. Gasnault, J. Lasue, P.-Y. Meslin, A.-M. Harri, M. Genzer, O. Kemppinen, G. M. Martínez, L. P. DeFlores, D. L. Blaney, J. R. Johnson, J. F. Bell III, M. G. Trainer, F. Lefèvre, S. K. Atreya, P. R. Mahaffy, M. H. Wong, H. B. Franz, S. Guzewich, G. L. Villanueva and A. S. Khayat, ChemCam Passive Sky Spectroscopy at Gale Crater, Mars: Interannual Variability in Dust Aerosol Particle Size, Missing Water Vapor, and the Molecular Oxygen Problem, AGU Fall Meeting, New Orleans, US, 2017.
39. Fischer, E., G. M. Martínez and N. O. Renno, Results of the Phoenix Relative Humidity Sensor Recalibration, AGU Fall Meeting, New Orleans, US, 2017.
38. Martínez, G. M., A. Vicente-Retortillo, N. O. Renno and J. Gómez-Elvira, Correction of MSL/REMS UV data from dust deposition and sensor's angular response, EGU General Assembly, Vienna, Austria, 2017.
37. Vicente-Retortillo, A., G. M. Martínez, N. Renno, M. Lemmon, and M. Torre-Juárez, Dust aerosol particle size at the Mars Science Laboratory landing site, EGU General Assembly, Vienna, Austria, 2017.
36. Martínez, G. M., A. Vicente-Retortillo, N. O. Renno and J. Gómez-Elvira, Generation of UV radiation data at Gale crater by correcting REMS UV measurements from dust deposition and sensor's angular response, 48th Lunar and Planetary Science Conference, The Woodlands, US, 2017.
35. Pérez-Izquierdo, J., E. Sebastián, A. Bravo, R. Ferrándiz, M. Ramos, G. M. Martínez, and J. A. Rodríguez-Manfredi, The MEDA's Radiometer TIRS for the MARS2020 Mission, DPS 48/EPSC 11, Pasadena, US, 2016.
34. Torre-Juárez, M., J. Gómez-Elvira, S. D. Guzewich, M. T. Lemmon, G. M. Martínez, E. Mason, S. Navarro, C. E. Newman, M. D. Smith, A. Vicente-Retortillo, Influence of the atmospheric opacity cycle on the near surface environment of Gale Crater on Mars, DPS 48/EPSC 11, Pasadena, US, 2016.
33. Martínez, G. M., T. McConnochie, N. O. Renno, P-Y. Meslin, E. Fischer, A. Vicente-Retortillo, C. S. Borlina, O. Kemppinen, M. Genzer, A-H. Harri, M. de la Torre-Juárez, M. P. Zorzano, J. M. Torres, N. Bridges, S. Maurice, O. Gasnault, J. Gómez-Elvira and R. Wiens, Diurnal variation of atmospheric water vapor at Gale crater: Analysis from ground-based measurements, EGU General Assembly, Vienna, Austria, 2016.
32. Harri, A.-H., M. Genzer, O. Kemppinen, J. Gómez-Elvira, T. McConnochie, H. Savijärvi, J. Polkko, M. de la Torre-Juárez, C. Newman, G. M. Martínez, M. Paton, J. Martín Torres, R. Haberle, L. Vázquez, M. Hieta, T. Makinen, W. Schmidt, T. Siili and the MSL Science Team, Water cycle at Gale Crater through MSL REMS observations, EGU General Assembly, Vienna, Austria, 2016.
31. Vicente-Retortillo, A., G. M. Martínez, N. O. Renno, M. T. Lemmon, E. L. Manson, and M. de la Torre-Juárez, A novel technique to calculate UV opacity at Gale Crater from MSL/REMS measurements, EGU General Assembly, Vienna, Austria, 2016.

30. Bridges, N., B. Ehlmann, R. Ewing, C. Newman, R. Sullivan, P. Conrad, A. Cousin, K. Edgett, M. Fisk, A. Fraeman, J. Johnson, M. Lamb, M. Lapotre, S. Le Mouélic, **G. M. Martínez**, P.-Y. Meslin, L. Thompson, J. van Beek, A. Vasavada and R. Wiens, Overview of Initial Results From Studies of the Bagnold Dune Field on Mars by the Curiosity Rover, EGU General Assembly, Vienna, Austria, 2016.
29. **Martínez, G. M.**, T. McConnochie, N. O. Renno, P.-Y. Meslin, E. Fischer, Vicente-Retortillo, C. S. Borlina, O. Kemppinen, M. Genzer, A-H. Harri, M. de la Torre-Juárez, M. P. Zorzano, J. M. Torres, N. Bridges, S. Maurice, O. Gasnault, J. Gómez-Elvira, R. Wiens and the REMS Team, Diurnal variation of near-surface atmospheric water vapor at Gale Crater: Analysis from REMS and Chemcam measurements, 47th Lunar and Planetary Science Conference, The Woodlands, US, 2016.
28. Bridges, N. T., B. L. Ehlmann, R. C. Ewing, C. E. Newman, R. Sullivan, P. G. Conrad, A. Cousin, K. S. Edgett, M. R. Fisk, A. A. Fraeman, J. R. Johnson, M. Lamb, M. Lapotre, S. Le Mouélic, **G. M. Martínez**, P.-Y. Meslin, P. Pinet, L. M. Thompson, J. van Beek, A. R. Vasavada and R. C. Wiens, Investigation of the Bagnold Dune field by the Curiosity rover: Overview of initial results from the first study of an active dune field on another planet, 47th Lunar and Planetary Science Conference, The Woodlands, US, 2016.
27. **Martínez, G. M.**, E. Fischer, N. O. Renno, E. Sebastián, O. Kemppinen, N. Bridges, C. S. Borlina, P-Y. Meslin, M. Genzer, A-H. Harri, A. Vicente-Retortillo, M. de la Torre-Juárez, M. Ramos, F. Gómez and J. Gómez-Elvira, Analysis of likely Frost Events and day-to-night Variability in near-surface Water Vapor at Gale, AGU Fall Meeting, San Francisco, US, 2015.
26. Fischer, E., **G. M. Martínez**, N. O. Renno, L. Tamppari and A. Zent, Analysis of the Phoenix Mission's Thermal and Electrical Conductivity Probe (TECP) Relative Humidity Data, AGU Fall Meeting, San Francisco, US, 2015.
25. Vicente-Retortillo, A., **G. M. Martínez**, N. O. Renno, M. Lemmon, E. Mason, and M. de la Torre-Juárez, UV Opacity at Gale Crater from MSL/REMS Measurements, AGU Fall Meeting, San Francisco, US, 2015.
24. Deepak, S., M. Flanner, E. Millour and **G. M. Martínez**, Impact of Dust on Mars Surface Albedo and Energy Flux with LMD General Circulation Model, AGU Fall Meeting, San Francisco, US, 2015.
23. Mason, E., M. Lemmon, M. de la Torre-Juárez, A. Vicente-Retortillo and **G. M. Martínez**, Constraining Atmospheric Particle Size in Gale Crater Using REMS UV Measurements and Mastcam Observations at 440 and 880 nm, AGU Fall Meeting, San Francisco, US, 2015.
22. Tamppari, L., J. Rodríguez-Manfredi, M. de la Torre-Juárez, N. Bridges, P. Conrad, M. Genzer, F. Gómez, J. Gómez-Elvira, A-H. Harri, M. Lemmon, **G. M. Martínez**, S. Navarro, C. Newman, S. Pérez-Hoyos, O. Prieto, M. Ramos, A. Saiz-López, A. Sánchez-Lavega, J. Schofield and M. Smith, The Mars Environmental Dynamics Analyzer (MEDA): A Suite of Environmental Sensors for the Mars 2020 Rover, AGU Fall Meeting, San Francisco, US, 2015.
21. **Martínez, G. M.**, N. O. Renno, E. Fischer, M. de la Torre-Juárez, P-Y. Meslin, O. Kemppinen, M. Genzer, A-M. Harri, M. Ramos, C. S. Borlina, S. Schröder, J. Gómez-Elvira and the REMS team, Potential sub-micrometer-thick frost events and soil water content at Gale Crater: Calculations from MSL/REMS measurements, 46th Lunar and Planetary Science Conference, The Woodlands, US, 2015.

20. Fischer, E., G. M. Martínez, H. Elliott and N. O. Renno, An experimental study on liquid brine formation at Gale Crater, AGU Fall Meeting, San Francisco, US, 2014.
19. Martínez, G. M., E. Fischer, N. O. Renno, M. de la Torre-Juárez, P-Y. Meslin, O. Kemppinen, M. Genzer, A-M. Harri, M. Ramos, C. S. Borlina, S. Schröder, J. Gómez-Elvira and the REMS Team, Study of potential sub-micrometer-thick frost events and soil water content at Gale Crater, AGU Fall Meeting, San Francisco, US, 2014.
18. Vicente-Retortillo, A., F. Valero, L. Vázquez, and G. M. Martínez, An approach to calculate solar radiation fluxes on the Martian surface, European Planetary Science Congress, Cascais, Portugal, 2014.
17. Harri, A-M., M. Genzer, O. Kemppinen, J. Gómez-Elvira, J. A. Rodríguez-Manfredi, T. McConnochie, H. Savijärvi, J. Polkko, M. de La Torre-Juárez, M. Mischna, M. Richardson, C. Newman, N. O. Renno, G. M. Martínez, S. Rafkin, J. Martín-Torres, M.-P. Zorzano, R. M. Haberle, L. Vázquez, P-Y. Meslin, M. Komu, T. Makinen, M. Paton, W. Schmidt, T. Siili, M. Wong and the MSL Science Team, MSL In Situ Humidity Observations - the First Martian Year, European Planetary Science Congress, Estoril, Portugal, 2014.
16. Fischer, E., G. M. Martínez, H. Elliott, C. S. Borlina and N. O. Renno, Experimental Demonstration of the Formation of Liquid Brines under Martian Polar Conditions in the Michigan Mars Environmental Chamber, EGU, Vienna, Austria, 2014.
15. Rodríguez-Manfredi, J. A., M. de la Torre-Juárez, P. Conrad, M. Lemmon, G. M. Martínez, C. Newman, M. Smith, T. Schofield, J. Gómez-Elvira, F. Gómez-Gómez, A.-M. Harri, S. Navarro, O. Prieto, M. Ramos, S. Saiz-Lopez, A. Sánchez-Lavega, E. Sebastián, M. Genzer, O. Kemppinen, S. Pérez-Hoyos and N. T. Bridges, MEDA: an environmental and meteorological package for Mars 2020, 45th Lunar and Planetary Science Conference, The Woodlands, US, 2014.
14. Rodríguez-Manfredi, J. A., M. de la Torre-Juárez, N. Bridges, P. Conrad, F. Ferri, M. Genzer, F. Gómez, J. Gómez-Elvira, A.-M. Harri, O. Kemppinen, M. Lemmon, G. M. Martínez, S. Navarro, C. Newman, S. Pérez-Hoyos, O. Prieto-Ballesteros, M. Ramos, A. Saiz-López, A. Sánchez-Lavega, J. Schofield, E. Sebastián, M. Smith and L. Tamppari, MEDA: an environmental and meteorological package for the Mars 2020 mission, International Workshop on Instrumentation for Planetary Missions (IPM), Greenbelt, Maryland, US, 2014.
13. Renno, N. O., G. M. Martínez, M. Ramos, B. Hallet, F. Gómez, I. Jun, M. Fisk, J. Gómez-Elvira, V. Hamilton, M. Mischna, R. Sletten, J. Martín-Torres, M. de La Torre-Juárez, A. Vasavada and M.-P. Zorzano, Ground-Atmosphere Interactions at Gale, AGU Fall Meeting, San Francisco, US, 2013.
12. Fischer, E., G. M. Martínez, H. Elliot, C. S. Borlina and N. O. Renno, The Michigan Mars Environmental Chamber: Preliminary Results and Capabilities, AGU Fall Meeting, San Francisco, US, 2013.
11. Martínez, G. M., N. O. Renno, H. Elliott and E. Fischer, Current Evidence of liquid water on Mars, Abgradcon, Montreal, Canada, 2013.
10. Martínez, G. M., N. O. Renno, J. H. Hoffman, H. Elliott and E. Fischer, Phoenix Mass Spectrometer: New values for the near-surface relative Humidity and water vapor pressure, EGU General Assembly, Vienna, Austria, 2013.

9. Elliott, H., **G. M. Martínez**, D. Halleaux, S. Braswell and N. O. Renno, An environmental chamber to investigate liquid saline water in the Martian polar region, EGU General Assembly, Vienna, Austria, 2012.
8. Elliott, H., **G. M. Martínez**, D. Halleaux, S. Braswell and N. O. Renno, The Michigan Mars Environmental Chamber (MMEC): Determining the conditions at which liquid brines form on Mars, 43rd Lunar and Planetary Science Congress, The Woodlands, Texas, US, 2012.
7. Elliott, H., **G. M. Martínez**, D. Halleaux and N. O. Renno, A Miniature Sensor for Measuring Soil Wetness and Searching for Brines on Mars and Beyond, AGU Fall Meeting, San Francisco, US, 2011.
6. **Martinez, G. M.**, H. Elliott, D. Halleaux, N. Renno, and J. Hoffman, J., Analysis of the Humidity Measurements at the Phoenix Landing Site: First Estimation from the TEGA Mass Spectrometer and Comparison with TECP, AGU Fall Meeting, San Francisco, US, 2011.
5. Elliott, H., **G. M. Martínez**, D. Halleaux and N. O. Renno, The University of Michigan microwave soil moisture sensor: detection of liquid brines on Mars, Fifth Mars Polar Science Conference, Fairbanks, Alaska, US, 2011.
4. **Martínez, G. M.**, H. Elliott, D. Halleaux and N. O. Renno, The Michigan Mars Environmental Chamber: Determining the environmental conditions at which liquid brines form on Mars, SPASA Advanced School of Astrobiology, Sao Paulo, Brazil, 2011.
3. **Martínez, G. M.**, F. Valero and L. Vázquez, Martian Planetary Boundary Layer Characterization under Convective Conditions, Third International Workshop on the Mars Atmosphere: Modeling and Observations, Williamsburg, Virginia, US, 2008.
2. **Martínez, G. M.**, F. Valero and L. Vázquez, Characterization of the Martian Planetary Boundary Layer at the Pathfinder Location, International Workshop on Environmental Turbulence, Baeza, Jaén, Spain, 2008.
1. **Martínez, G. M.**, F. Valero and L. Vázquez, J. Cano, A characterization of the Mars Surface Layer, European Meteorological Society, San Lorenzo del Escorial, Madrid, Spain, 2007.

Languages

- Spanish: Native language.
- English: Fluent level at speaking, reading, and writing.
- German: Intermediate level at speaking, reading, and writing.
- Italian: Basic level at speaking and reading.