

Mars Through Time International Conference

Oral and Poster Program

October 13-17, Paris, France

The allocated time (13' for regular talks, 20' for a few keynote talks,) **does not** include questions and discussions (at least 5' per talk are included on average)

Monday, October 13, 2025

Monday 18:00 - 20:00: Welcome reception at the top of the **Zamansky tower** at Sorbonne University (the tallest building in the area: great view over Paris...), Place Jussieu, a few meters from the Workshop venue.

Tuesday, October 14, 2025

Registration and posters setup: 8:15 - 9:00

Tuesday: 9:00 - 10:30 Chair: Mike Wolff

Welcoming remarks 10'

Introductory Reviews: "Mars water through Time"

[The Dynamic Habitability of Mars: Key Findings and Needed Measurements](#) (keynote: 20')

Ehlmann, B. and R. Wordsworth

[Hydrologic System and Cycle Throughout Mars History: A Combined System Science Approach \(Hydrosphere, Atmosphere, Cryosphere, Lithosphere, Geologic History\).](#) (keynote: 20')

Head, J., R. Wordsworth and J. Fastook

[The History of Water on Mars During The Hesperian and Amazonian](#) (keynote: 20')

Jakosky B. M., N. R. Alsaed, E. M. Cangi1, M. S. Chaffin, J. Deighan, M. E. Landis, M. T. Mellon and E. M. B. Thiemann.

Coffee Break: 10:30 - 11:00

Tuesday: 11:00 - 12:15 Chair: Chris Edwards

Early Mars Climate Modelling

[Constraints on Hydrological Climates on Ancient Mars from Formation and Persistence of Crater Paleolakes](#) (13')

Mischna, M., A. Soto and G. Stucky De Quay

[3-D Global modelling of the early martian climate under a dense CO₂+H₂ atmosphere and for a wide range of surface water inventories](#) (13')

Turbet, M. and F. Forget

[Exploring Early Mars Climate and Habitability with 3D Generic PCM Simulations: Impacts of Ocean Heat Transport and Photochemistry](#) (13')

Kuzucan, A., E. Bolmont, M. Turbet, M. Maurice, Y. Jaziri and S. Bhatnagar

[Milankovitch Cycles and Climate - Fluvial Interactions on Early Mars!](#) (13')

Kamada, A., T. Kuroda, T. Kodama, T. Yoshida, R. Greve, Y. Kasaba, N. Terada, and T. Usui

Lunch Break: 12:15 - 14:00

Tuesday: 14:00 - 15:30

Chair: Ashwin Braude

[Ancient Mars Climate with a Polar Ocean and Ice Sheet Dynamics](#) (13')

Schmidt, F., M. J. Way, A. Quiquet, I. Aleinov and C. Dumas

[Constraining Early Mars Climate Through Coupled Hydrological Modeling and Comparison with Geomorphological Evidence](#) (13')

Gauvain A., F. Forget, M. Turbet and J.B. Clement

[Not enough H₂O₂ to warm early Mars](#) (13')

Maurice, M., F. Forget, E. Millour, Y. Luo, F. Lefevre, A. Stolzenbach, Y. Jaziri and A. S. Braude

[Organic matter formation from formaldehyde on Mars through time](#) (13')

Koyama, S., A. Kamada, T. Yoshida, N. Terada, Y. Furukawa, Y. Nakamura, Y. Ueno, T. Kuroda and A. C. Vandaele

[Simulating Formaldehyde Production and Fluvial Transport on Early Mars using a Global Climate and River Model](#) (13')

Kamada, A., S. Koyama, Y. Furukawa, T. Kuroda, T. Yoshida, T. Kodama, Nakamura Yuki, Y. Kasaba and N. Terada

Coffee Break: 15:30 - 16:00

Tuesday: 16:00 - 17:30

Chair: Jim Bell

[Sulfur's Decisive Role in Driving Early Mars Climate Evolution](#) (13')

Metz C. O., C. Li and N. F. Wogan

Early Mars environment: New inputs from mineralogy and sedimentology

Lessons from Curiosity and Perseverance:

[What do the >3.8 Ga rocks studied so far at Jezero crater tell us about the past climate of Mars?](#) (keynote : 20')

Quantin-Nataf, C., Dehouck E., N. Mangold, L. Mandon, E. Clave, C. Royer, P. Beck, O. Forni, C. Bedford, L. Mayhew, E. Ravanis, F. Poule, J. Johnson, A. Cousin, R. Wiens, J. L. Simon and K. Stack-Morgan

[What do the fluvio-lacustrine sedimentary records at Gale and Jezero craters tell us about the past climate of Mars?](#) (keynote: 20')

Mangold N., G. Caravaca, S. Gupta, E. Dehouck, O. Gasnault, A. Cousin, W. Rapin, L. Le Deit, S. Le Mouelic, K. M. Stack, J. Grotzinger, R. M. E. Williams, E. Clave, L. Kah, C. Fedo, W. Dietrich, K. Siebach, N. Randazzo, J.F. Bell III and R.C. Wiens.

[Mars through the clay-sulfate transition as recorded in Gale crater stratigraphy](#) (13')

Rapin, W., G. Dromart, J. Schieber, B. Clark, L. Kah, D. Rubin, G. Caravaca, C. A. Mondro, S. Gupta, A. Roberts, N. Mangold, L. Edgar, R. Sheppard, M. Loche, E. Dehouck, P. Beck, Le S. Mouelic, E. Kite, B. Tutolo, A. Bryk, W. Dietrich, J. Frydenvang, P. Gasda, O. Gasnault and L. Nina

Free evening

Wednesday, October 15, 2025

Conference site open: 8:30

Wednesday: 9:00 - 10:30

Chair: Maxime Pineau

Early Mars environment: Inputs from Mineralogy and sedimentology (continued)

Learning from clays:

[Deciphering Mars's Early Aqueous Environments: Ferromagnesian Clay Diversity across the Crustal Dichotomy](#) (13')

Brossier, J., M-C De Sanctis, F. Altieri, A. Frigeri, M. Ferrari, S. De Angelis, E. Bruschini, A. Apuzzo, M. Rasmussen, and J. Trisic Ponce

[Noachian Mars: Clay Continuity between Oxia Planum and Mawrth Vallis.](#) (13')

Torres, I., J. Carter, C. Quantin-Nataf, M. Volat and D. Loizeau

[Compositional Clay Stratigraphies as Indicators of Paleoclimate on Early Mars](#) (13')

Horgan, B., A. Klidas, A. Broz, S. Olson, R. Moore, T. Goudge and W. Farrand

[Signatures of Weathering on Ancient Mars: A Global Spectral Database of Martian Compositional Clay Stratigraphies](#) (13')

Klidas, A., B. Horgan, S. Olson, W. H. Farrand, A. Broz, T. Goudge and C. Albright

[Aluminum phyllosilicate and jarosite-alunite formation from probable volcanic ash deposits across Mars](#) (13')

Baker, S. and B. Ehlmann

Coffee Break: 10:30 - 11:00

Wednesday: 11:00 - 12:30

Chair: Erwin Dehouck

More intriguing observations and scenarios:

[Mineralogical evidence for Pre-Noachian and Noachian surface liquid water in the Black Beauty Martian meteorite and rover data](#) (13')

Beyssac, O., V. Malarewicz, B. Zanda, R. Hewins, P. Beck and A. Cousin

[Was Hellas Planitia a Noachian Sea?](#) (13')

Carter, J., V. Ansan and N. Mangold

[Hydrothermal systems on Martian crater rims: Type example at Ritchey crater and comparison to NW-Isidis crater rims](#) (13')

Deahn, M., L. Zeng and B. Horgan

[Manganese \(Hydr\)Oxides Record the Dynamic Evolution of a Million-Year Hesperian Ocean in Utopia Planitia, Mars](#) (13')

Hou, H., H. Sun, X. Bai and L. Y. Li

[Recent Aqueous Alteration Associated to Sedimentary Volcanism in Acidalia Planitia, Mars](#) (13')

Pineau, M., J. Carter, A. Lagain, E. Ravier, N. Mangold, L. Le Deit, C. Quantin-Nataf and A. Zanella

Lunch Break: 12:30 - 14:00

Wednesday: 14:00 - 15:30

Chair: Maxime Maurice

[Interrogating the origin of Kasei Valles, from flow to form \(13'\)](#)

Grau Galofre, A., N. Mahoume, S. Carpy and G. Choblet

Mars Redox Through time:

[Unlocking Early Mars Redox Conditions: Evidence from Planetary-Scale Iron Oxide Deposits \(13'\)](#)

Valantinas, A., J. Mustard, V. Chevrier, L. Ojha and S. Ranjan

[The Evolution of Iron Redox on Mars: From Fe-rich Crust to Ferric Dust \(13'\)](#)

Zhao, Y-Y. S.

[Climate Transition and Atmospheric Redox evolution of Early Mars Revealed by Surface Iron Mobility \(13'\)](#)

Liu, J. and J. Michalski

Escape, isotopes & the evolution of the Martian atmosphere

[First detections of atmospheric sputtering: past and present \(13'\)](#)

Curry, S. M., T. Hara, F. Leblanc, J. G. Luhmann, R. Jolitz, R. Modolo

Coffee Break: 15:30 - 16:00

Wednesday: 16:00 - 17:15

Chair: Thomas Gautier

[CO₂-N₂-H₂ Atmosphere and Transient Habitability on Ancient Mars Indicated by C, N, Ar, and H isotopes \(keynote: 20'\)](#)

Hu, R., Y. Yung and B. Ehlmann

[Unraveling the Evolution of Mars' Atmosphere through Isotopic Measurements of Hydrogen, Oxygen, and Carbon with ACS on ExoMars TGO \(13'\)](#)

Alday, J., F. Montmessin, O. Korablev, A. Trokhimovskiy, A. Fedorova, K. Olsen and the ACS Science Team

[Comparative Analysis of Tropospheric Water Isotope Distributions on Mars and Earth: Insights into Ice Cloud Microphysical Processes and Storm Dynamics \(13'\)](#)

Wang, D., F. Montmessin, C. Risi, G. Petzold, M. Vals, E. Gourion, S. Fan and L. Tian

Posters session: 17:30-20h

Thursday, October 16, 2025

Conference site open: 8:30

Thursday: 9:00 - 10:30

Chair: Noé Le Becq

Early Mars environment (continued)

[Did Early Mars Self-Regulate as a Desert Planet? New Models Motivated by New Data from Mars Science Laboratory \(keynote: 20'\)](#)

Kite, E. S., B. M. Tutolo, M. L. Turner, H. B. Franz, D. G. Burt, T. F. Bristow, W. W. Fischer, R. E. Milliken, A. A. Fraeman and D. Y. Zhou.

Mars "Recent" environments (Amazonian)

[Recovering Mars' orbital elements beyond the horizon of predictability through the analysis of the Earth's sedimentary records](#) (**keynote: 20'**)

Laskar, J.

[The Challenge of Modelling the Recent Evolution of the Martian Environment at other Obliquities and Orbits](#) (13')

Forget F., J-B Clement, L. Lange, Y. Luo, E. Millour, J. Naar, T. Pierron, A. Spiga, E. Vos.

[Modelling very recent ice ages on Mars with the Planetary Climate Model](#) (13')

Naar, J., F. Forget, E. Millour, E. Vos, L. Lange and J-B. Clement

Coffee Break: 10:30 - 11:00

Thursday: 11:00 - 12:30

Chair: Lonneke Roelofs

[Stratified ice and dust flow dynamics of the NPLD, a possible explanation for its lack of observable flow](#) (13')

Grau Galofre, A. and I. Smith

[A Planetary Evolution Model for simulating Mars' past environments: preliminary applications to the Polar Layered Deposits](#) (13')

Clement, J-B., F. Forget, E. Vos, L. Lucas and E. Millour

[A 120,000-Year Simulation of Mars Undergoing an Obliquity Cycle up to 45 degrees and back](#) (13')

Vos, E., F. Forget, J-B. Clement, L. Lange and E. Millour

[Increased Hydrogen Escape from Mars Atmosphere during Periods of High Obliquity](#) (13')

Gilli, G., F. Gonzalez-Galindo, J-Y. Chaufray, E. Millour, F. Forget, F. Montmessin, F. Lefevre, J. Naar, Y. Luo, M. Vals, L. Rossi, M. A. Lopez-Valverde and A. Brines.

[Seasonal and Perennial Carbon Dioxide Deposits on Mars in the Early Amazonian](#) (13')

Kreslavsky, M. A. (CANCELLED: Abstract only)

Lunch Break: 12:30 - 14:00

Thursday: 14:00 - 15:30

Chair: Eran Vos

[CO₂ Cycle Dampened by the Radiative Effect of Water Ice Clouds in the Late Amazonian: Implications for the Formation of Gullies](#) (13')

Lange, L., F. Forget, J. Naar, E. Vos, J.-B. Clement, E. Millour and D. Elad

[Cyroclastic flows on Mars - granular flows driven by the sublimation of ices and their implications for Martian surface processes in the Late Amazonian](#) (13')

Roelofs L., S. J. Conway and T. de Haas

[A Survey in Space and Time of Dust Lofted by CO₂-sublimation-triggered Mass Wasting on Martian Sand Dunes](#) (13')

Kefa, M., S. Conway and L. Roelofs

[Steep-fronted ice-rich deposits in the Alba Mons region \(Mars\): Morphology, distribution, and potential terrestrial analogues](#) (13')

Le Becq, N., L. Scordia, S. Conway, A. Grau Galofre, C. Morino, V. Bickel, S. Byrne and N. Mangold

[Polythermal Glacial Physiochemical Alteration: Implications for the Compositional Record of Past Mars Climate](#) (13')

Rutledge, A. M., C. L. De Anda, B. H. N. Horgan, J. R. Havig, I. Marrs and M. R. Salvatore.

Coffee Break: 15:30 - 16:00

Thursday: 16:00 - 17:30

Chair: Scott Rafkin

[Mars Reconnaissance Orbiter Mars Climate Sounder Shallow Water Ice and Regolith Overburden Mapping in the Northern Hemisphere](#) (13')

Piqueux, S., A. Kleinboehl, D. Kass, M. Slipski, P. Hayne and J. Schofield

[The Martian Mid-Latitude Subsurface Ice is the Remnant of a Past Ice Sheet](#) (13')

Vos E., F. Forget, L. Lange, J. Naar, J-B. Clement and E. Millour

[Global Simulation of Shallow Subsurface Water Sources on Mars with Adsorption Effects](#) (13')

Kobayashi, M., A. Kamada, T. Kuroda, H. Kurokawa, S. Aoki, H. Nakagawa and N. Terada.

[Oscillations in Martian Atmospheric Composition and Oxidizing Capacity Driven by Obliquity Variations](#)

(keynote: 20')

Luo, Y., F. Lefevre and F. Forget

Conference Dinner on the boat "Le Zouave" cruising on the Seine River (included in the registration fee).

Meeting point: "Port de la Conference - Pont de l'Alma". Boarding at 19:45 (until about 23:00).

Friday, October 17, 2025

Conference site open: 8:30

Friday: 9:00 - 10:30

Chair: Aurelien Stcherbinine

Mars "Recent" environments (Amazonian) (Continued)

Lessons from ESA orbiters

[ESA's Mars Orbiters: contributions to Mars atmosphere & climate science](#) (keynote: 20')

Wilson, C.

[Recent observations of the Martian climate and trace gases with ExoMars Trace Gas Orbiter](#) (13')

Olsen, K., B. S. Gregory, F. Montmessin, O. I. Korablev, A. A. Fedorova, A. Trokhimovskiy, J. Alday and the ACS Science Team

Liquid water and possible habitats recently on Mars.

[A case for possible late glaciofluvial activity on Eastern Hellas basin: Valley morphologies and glacial signatures](#) (13')

Blanc, E., A. Grau Galofre, N. Mangold, S. Berquez and N. Le Becq

[On the Possibility of Melting Water Ice to Initiate/Promote Gully Activity during the Recent Past of Mars](#) (13')

Lange, L. and F. Forget

Coffee Break: 10:30 - 11:00

Friday: 11:00 - 12:30

Chair: Yann Leseigneur

[Laboratory Sediment Flow Experiments Suggest Observable Geomorphic Indicators of Mars Paleopressure](#) (13')

Adler J., F. Rivera-Hernandez, S. Thompson and P. Broz

[Modeling Martian Mudflows: Morphologic Evolution and Environmental Sensitivity](#) (13')

Frizzell, K. and J. Adler

The present and past dust cycle and aeolian transport

[The challenge of modeling present and past dust cycles: An Offline Model for long-term Martian Dust Storm Simulations](#) (13')

Pierron, T, F. Forget and T. Bertrand

[Atmospheric and Terrain Factors Influencing Martian Dust Devils](#) (13')

Betton, Q., S. J. Conway, V. T. Bickel, L. K. Fenton, M. R. Patel, H. C. Carson, A. Blouin, J. Crevier, E. Blanc, N. Nguyen, J. A. Holmes, B. Jackson and L. Roelofs

[Global surface wind patterns on Mars recorded by transverse aeolian ridges](#) (13')

*Wei, Z., Y. Wang, C. Sun, J. Cai and **S. Fan***

Lunch Break: 12:30 - 14:00

Friday: 14:00 - 15:30

Chair: Tanguy Bertrand

[Transverse Aeolian Ridges at the Beagle 2 Landing Site](#) (13')

Paton, M., P. Grindrod, T. Bertrand, J. Davis, A-M. Harri, H. Savijarvi and C. Segonne

[Oxidation of Halite \(NaCl\) during Global Dust Storms on Mars](#) (13')

Salgado, W. P., E. Hirai and Y. Sekine

An hypothetical future : Terraforming Mars

[Mars Climate Warming Mechanisms and Suitability for Life, Past and Future](#) (13')

Kite, E., A. Kling, A. S. Braude, M. A. Mischna and F. Sharipov

[Modelling the conceptual feasibility and impact of future artificial warming of Mars using manufactured aerosols](#) (13')

Braude, A., E. S. Kite, M. I Richardson, S. Ansari, H. Mohseni, B. Fan, R. Ramirez, M. A. Mischna, M. H. Hecht, L. J. Steele and F. Sharipov

Discussions about Terraforming Mars.

Coffee Break: 15:30 - 16:00

Friday: 16:00 - 17:30

Chair: Christopher Edwards

Closing session: "Major outstanding questions concerning Mars Through Time and future observations to plan"

- Round table with panelists
 - Anna Grau Galofre (LPG, Nantes, France)
 - Arihiro Kamada (ELSI, Tokyo, Japan)
 - Lucas Lange (JPL, USA)
 - William.Rapin (IRAP, Toulouse, France)
 - Lonneke Roelofs (Utrecht University, Netherlands)
 - Alicia Rutledge (NAU, Flagstaff, USA)
- Debate with the audience

Final remarks

Friday, 17:30: End of the conference

Posters

- **Posters will be up all week**
- **A dedicated poster session is planned on Wednesday, October 15, 17:30 - 20:00**

Early Mars (Noachian & Hesperian) posters

[Cyclic alternations of clay and sulfate beds in the Equatorial Layered Deposits of Meridiani Planum, Mars: origin, development, and climatic implications](#)

Baschetti, B., A. Tullo, M. Massironi, C. Carli, F. Altieri, A. Breda, F. Tateo, R. Pozzobon and M. Baroni

[Orbital stratigraphic analysis of the Eberswalde sedimentary fan: comparison with Jezero delta, Mars](#)

Carlot, N., F. Salese, N. Mangold, G. Ori Gian, F. Zennaro, R. Maitan, M. Ghinassi and I. Martini

[Origin of Late Noachian-Early Hesperian Valley Networks on Mars: Insights from an Integrated Multi-Analysis Technique Approach](#)

*Karpenko, K., J. Fastook, **J. Head**, A. Howard, C. Fassett, J. Dickson, K. Scanlon and B. Boatwright*

[Ausonia Cavus and Environs - A geologic record of early Mars climate conditions](#)

Hamilton, J.

[Warm and wet conditions on early Mars achieved by a return of hydrogen from the core](#)

Hirai, T., Y. Sekine, S. Kadoya, R. Wordsworth and K. Hirose

[Modelling of Ground Water Transport on Ancient Mars](#)

Chaffard, F., A. Kamada, T. Kuroda and N. Terada

[Modeling the hydrological evolution of Jezero's crater lake and its deltaic deposit](#)

Villette, J., N. Mangold, E. Kite, S. Conway and L. Le Deit

[Future in situ investigation of Noachian Fe/Mg phyllosilicates, fluvial and deltaic deposits as part of the ExoMars rover's science sampling strategy: implications for early Martian climates and aqueous environments](#)

Ligeza, G., E. Sefton-Nash and J. L. Vago

"Recent Mars" (Amazonian) posters

[Ice-Rich Crater Fills in the Martian Mid-Latitudes: Morphology, Distribution, and Implications for Mid-Latitude Ice Stability](#)

Bijoy, H., T. Ruj, J. Kameda, and T. Sako

[Crater-Associated Irregular Cellular Structures on Mars: A New marker for the detection and the study of Debris-Covered Glaciers.](#)

Scordia L., S. J. Conway and A. Johnsson

Present-day Mars posters

About atmospheric dust:

[More Than Two Mars Years of Atmospheric Dust Characterization from Jezero Crater using Mars 2020 Mastcam-Z Direct Imaging of the Sun, Sky, and Calibration Targets](#)

Bell III, J. F., M. Lemmon and M. J. Wolff

[Simulation of Dust Weather in the Zhurong Traverse Area Using Mul-tiscale Numerical Models](#)

Wang, C., X. Long, X. Tong, Z. Li, X. Huan, Y. Feng, X. Xu and Y. Xu

[The Impact of Local Dust Storms on Meteorological Conditions: Fully Interactive Dust - Sensitivity Experiments with the MarsWRF Model](#)

Xiao, J. and K-C. Chow

[Rapid decay of Martian Global Dust Storms driven by small-scale deposition processes in the lower planetary boundary layer](#)

Li, L., C. Sun, S. Fan, C. Zhao, Y. Zhao, T. Li and C. E. Newman

[History of Martian dust storm observations: Possible links between ancient Chinese records and Martian dust storms](#)

Fan, K., M. Fraenz, Y. Wei,

[Planetary Wave-Dust Coupling During Regional Dust Storms: Implications for Solar-Powered Mars Missions](#)

Wang, Y., Y. Wei¹, S. Fan, C. Sun, Z. Wu, K. Fan, Z. Rong, F. He

Water cycle and clouds;

[Diurnal Variations in the Vertical Distribution of Water Ice in the Martian Aphelion Cloud Belt \(Abstract only\)](#)

Kahre, M., M. J. Wolff and R. A. Urata

[Water transport driven by the barometric pumping on Mars](#)

Kobayashi Mirai, Y. Luo, F. Forget, T. Kuroda and N. Terada

[Implementation of the water ice cloud microphysics interactive with the dust cycle into DRAMATIC MGCM](#)

Kuroda,T., M. Kobayashi, A. Kamada, H. Karyu, R. Sato and N. Sugimoto

[Characterization of clouds from PFS observations and MARCI images in the Tharsis region during the dusty season](#)

Wolkenberg, P., J. Hernandez-Bernal and M. Giuranna

Mars Atmosphere dynamics

[Turbulence of Non-orographic Gravity Waves in Mars Planetary Climate Model](#)

Liu, J., E. Millour, F. Forget, F. Lott and J-Y. Chaufray

[Thermal Tides in the Martian Lower Atmosphere observed by EMM/EMIRS](#)

Sun, C., S. Fan, F. Forget, S. Guerlet, E. Millour, M. Smith, S. Atwood, T. Li, C. Yang, L. Li, K. Badri, H. Matroushi, C. Edwards and J. Deighan

[Season-dependent weather predictability barrier phenomenon in the Martian atmosphere](#)

Zhuang, Y, W. Duan, and L. Dong

[Climatology of the Residual Mean Circulation of the Martian Atmosphere and Contributions of Resolved and Unresolved Waves Based on Reanalysis Data](#)

Asumi, A., K. Sato, M. Kohma, and Y-Y. Hayashi

Mars Climate models in development:

[Coupled Simulation of the Water and Dust Cycles on Mars \(Abstract only\)](#)

Chow, K. K. C.

[Improved Treatment of Martian Polar Processes in ROCKE-3D GCM: the Exotic Ices Model](#)

Aleinov I., J. P. Perlwitz, O. Clarkson, M. J. Way, S. D. Guzewich, K. Tsigaridis and E. T. Wolf

[The Present Day Atmospheric Dust Cycle and Dust Radiative Effect on Mars in NASA GISS ROCKE-3D](#)

Perlwitz, J. P., I. Aleinov, K. Tsigaridis, S. D. Guzewich, D. M. Glaser, O. Clarkson, M. J. Way, E. T. Wolf and R. L. Miller.

Other topics;

[Nighttime Thermal Discrepancies Between EMM/EMIRS and Mars PCM during MY 36-37 \(Abstract only\)](#)

Atri, D. and P. Krishna

[Variations of Martian Proton Aurora in Different Timescales](#)

Wu, J., F. He, Y. Zhou, J. Gao, L. Yan, Z. Rong and Y. Wei

[Modelling the Influence of Oxidative Chemistry on Trace Gases in the Present-Day Atmosphere of Mars](#)

Gregory B. S., K. S. Olsen, E. Millour, M. A. J. Brown, M. R. Patel, K. Rajendran and P. M. Streeter

[Endogenous Activity at Cerberus Fossae: A Quantitative Evaluation.](#)

Lange, L., S. Piqueux, C. Edwards, C. Saluski, K. Sorli, and P. Hayne

[Photometric Properties of Soils at the Zhurong Landing Area](#)

Zhou, X., Y. Yang, X. Wu, Y. Liu, W. Wan, J. Liu and Y. Zou

[MIRS: The infrared spectro-imager aboard the Martian Moon eXploration mission to study the evolution of Phobos, Deimos and Mars.](#)

Gautier, T., Y. Leseigneur, A. Barucci, P. Bernardi, J-M. Rees, S. Fornasier, F. Merlin, A. Wagnier, G. Poggiali, G. David, A. Doressoundiram, C. Donny, V. Piou, E. Sawyer, T. Iwata, H. Nakagawa, T. Nakamura, and the MIRS team

[A study on CO₂ supersaturation in the Martian southern polar night using MGS radio occultation profiles rederived with MCS temperature climatology](#)

Noguchi, K., N., A. Kleinbohl and S. Piqueux