

Mars Exploration Science Monthly Newsletter

A publication of the Mars Program Office and the Mars Exploration Program Analysis Group (MEPAG)

December 2018

Mars Science News

Congratulations to the Mars InSight and MarCO Teams

Congratulations to the Mars InSight Team for successful touchdown on November 26. We look forward to their science results, advancing our understanding of the Martian interior.

We also congratulate the MarCO Team on the successful relay of InSight's telemetry. The twin communications CubeSats, MarCO-A and MarCO-B, are the first CubeSats designed to operate beyond Earth orbit, and their proof of concept portends exciting possibilities for future planetary research.

Mars InSight news and updates are available at: <https://mars.nasa.gov/insight/>.

Further information about Mars Cube One (MarCO) is available at: <https://www.jpl.nasa.gov/cubesat/missions/marco.php>

Mars 2020 Rover Landing Site Chosen

Five years after the 1st Mars 2020 Rover Landing Site Workshop, Jezero Crater [has been chosen](#) as the landing site for the Mars 2020 rover mission. This ancient lake-delta is a geologically diverse region that offers promising sampling targets, useful for addressing questions pertaining to planetary evolution and astrobiology. The latest information on the Mars 2020 mission can be found at: <https://mars.nasa.gov/mars2020/>. Landing site presentation, including contents of all Mars 2020 Rover Landing Site Workshops, is available at: <https://marsnext.jpl.nasa.gov>.

Congratulations to the Mars Exploration Programs Student Travel Grant Recipients for 2018

Congratulations to the following students who were selected via competitive peer review for conference travel awards:

2nd International Mars Sample Return Conference

Andrew Gangidine University of Cincinnati

Mars Workshop on Amazonian and Present Day Climate

Ali Bramson University of Arizona

Stefano Nerozzi University of Texas at Austin

Alyssa Pascuzzo Brown University

Late Mars Workshop

Stefano Nerozzi University of Texas at Austin

Melissa Thomas University of Arizona

4th Landing Site Workshop for the Mars 2020 Rover Mission

Benjamin Cardenas University of Texas at Austin

Zachary Gallegos University of New Mexico

Jesse Tarnas Brown University

AGU Town Hall: Updates and Current Status of Planning for Mars Sample Return

Date: Friday, December 14, 2018

Time: 12:30-1:30pm

Location: Marriott Marquis – Capitol/Congress Ballroom

There will be a lunch time Town Hall on the topic of Mars Sample Return (MSR) at the AGU Fall Meeting. This Town Hall will include presentations on the scientific importance of MSR, the status of international cooperation on future MSR missions, and a status update on the current state of engineering for the return missions with time for Q&A. A focused discussion on future planning issues related to sample receiving and handling and optimizing the science value of the samples, if and when they are returned, will follow. All AGU attendees are invited to participate.

MEPAG Email Announcements

To receive MEPAG announcements, including this newsletter, please sign-up for the MEPAG email list at <https://mepag.jpl.nasa.gov/emailnewsletters.cfm>. This web page is a new, simpler interface to our mailing list. No updates are required for those already on the list.

Mars Extant Life:What's Next? Conference

Program Available: December 18, 2018

Early Registration Deadline: December 31, 2018

Conference: January 29 – February 1, 2019; Carlsbad, NM, USA <https://www.hou.usra.edu/meetings/lifeonmars2019/>

This conference will focus on understanding and discussing strategies for exploring for extant life on Mars. Sessions will focus on environmental niches for hypothesized Mars extant lifeforms, measuring signatures of present life as we know it (or as we don't know it), instrument and mission concepts related to the search for extant life, strategies for life detection that account for potential forward contamination, and other related topics. See the conference website for more details (<https://www.hou.usra.edu/meetings/lifeonmars2019/>)

Upcoming Mars Special Issues Welcoming Paper Submissions

Planetary and Space Science has approved a special issue on "Amazonian Mars: Climate & Processes," with submissions accepted November 1, 2018 to February 28, 2019. Papers that describe the climate history as well as geological and environmental processes that pertain to the Amazonian period of Mars' history which includes the present-day are solicited. The Amazonian period encompasses the most recent 3 billion years of Mars history, which has strongly shaped the evolution of the surface that we observe today. This special issue was prompted by the recent Mars Workshop on Amazonian and Present-day Climate (<https://www.hou.usra.edu/meetings/amazonian2018/>); submissions are welcome from the community and the lead guest editor is John Moores (York University). More information is available at: <https://www.journals.elsevier.com/planetary-and-space-science/call-for-papers/special-issue-on-amazonian-mars-climate-processes>

The joint JGR special issue, "Studies of the 2018/Mars Year 34 Planet-Encircling Dust Storm", is accepting submissions until March 1, 2019. Papers pertaining to observations and atmospheric modelling of this particular storm, its influence on the atmosphere and surface of Mars and the physics of Martian dust storms are encouraged. Submissions are sought from mission and instrument teams and the broader scientific community. The editor is Scott Guzewich. Papers can be submitted through the GRL, JGR-Planets or JGR-Space Physics submission websites shown below:

https://grl-submit.agu.org/cgi-bin/main.plex?form_type=home

https://jgr-planets-submit.agu.org/cgi-bin/main.plex?form_type=home

https://jgr-spacephysics-submit.agu.org/cgi-bin/main.plex?form_type=home

ICARUS Special Issue on Current and Recent Landscape Evolution on Mars is accepting papers starting March 1, 2019. Articles that address the debate on plausible agents of Mars landscape change under current or relatively-recent conditions are welcome. This special issue was prompted by the recent Late Mars Workshop (<https://www.hou.usra.edu/meetings/latemars2018/>). More information on the call for papers is available at: <https://www.journals.elsevier.com/icarus/call-for-papers/current-recent-landscape-evolution-on-mars>

Near-term Due Dates (next three months) cont.

Due	Project
December 9	Women in Space, Updated Abstract deadline
December 10	233rd Meeting of the American Astronomical Society, Late Registration Deadline
December 14	Lunar ISRU 2019 - Developing a New Space Economy Through Lunar Resources and Their Utilization, Abstract Deadline
December 31	Mars Extant Life: What's Next?, Registration Deadline
December 31	Workshop on In-Situ Exploration of the Ice Giants, Abstract Deadline
January 8	50th Lunar and Planetary Science Conference, Abstract Deadline
January 10	Life3E: Search for Life from Early Earth to Exoplanets, Abstract Deadline for Posters
January 10	European Geosciences Union General Assembly 2019, Abstract Deadline
January 18	Mars Extant Life: What's Next?, Late Registration Deadline
January 24	IEEE Aerospace Conference, Registration Deadline
January 31	Workshop on In-Situ Exploration of the Ice Giants, Registration Deadline
February 8	Lunar ISRU 2019 - Developing a New Space Economy Through Lunar Resources and Their Utilization, Registration Deadline
February 8	NASA Fundamental Physics Workshop, Abstract Deadline
February 10	European Week of Astronomy and Space Science (EWASS 2019), Very Early Registration Deadline
February 12	Asia Oceania Geosciences Society (AOGS), Abstract Deadline
February 15	Ocean Worlds 4, Abstract Deadline
February 15	2019 IAA Planetary Defense Conference, Early Registration Deadline
February 28	European Geosciences Union General Assembly 2019, Early Registration Deadline
February 28	70th International Astronautical Congress (IAC), Abstract Deadline

Upcoming Conferences and Workshops

A note about "conferences" and this calendar of events

- Missing NCTS#s (and forecasting deadline, if anomalous) can be sent to Barbara Saltzberg (Barbara.A.Saltzberg@jpl.nasa.gov).
- If no deadline is noted: it is usually 60 days in advance for domestic meetings — sometimes further in advance if the conference is "Heavily Attended."
- Please do not assume our noting of NCTS# is complete. If you are unsure whether an event is a conference or not, or when the forecasting deadline may be, please consult with your NASA Center conference forecasting/travel unit.

Fourth Quarter, 2018

December 10-14, 2018 Washington, DC, USA	American Geophysical Union Fall Meeting, NCTS# 31561-19 https://fallmeeting.agu.org/2018/
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First Quarter, 2019

	January 6-10, 2019 Seattle, WA, USA	233rd Meeting of the American Astronomical Society , NCTS 33337-19 https://aas.org/meetings/aas233
	January 29-February 1, 2019 Carlsbad, NM, USA	Mars Extant Life: What's Next? , NCTS# 35763-19 https://www.hou.usra.edu/meetings/lifeonmars2019/
	January 29-31, 2019 Houston, TX, USA	20th Meeting of the NASA Small Bodies Assessment Group , NCTS# 35910-19 https://www.lpi.usra.edu/sbag/meetings/
	February 7-8, 2019 Scottsdale, AZ, USA	Women in Space , NCTS# 36591-19 http://www.womeninspacecon.com/
New!	February 20-22, 2019 Columbia, MD	Lunar ISRU 2019 - Developing a New Space Economy Through Lunar Resources and Their Utilization , NCTS 37120-19 https://www.hou.usra.edu/meetings/lunarisru2019/
	February 25-27, 2019 Provence, France	Workshop on In-Situ Exploration of the Ice Giants , NCTS# 36673-19 https://ice-giant-workshop.lam.fr/
	March 2-9, 2019 Big Sky, MT, USA	IEEE Aerospace Conference , NCTS# 35072-19 https://www.aeroconf.org/
	March 7-10, 2019 Norman, OK, USA	International Continental Drilling Program Workshop - Probing Continental Climate of the Late Paleozoic Icehouse-Greenhouse Transition https://www.icdp-online.org/ <i>May be of interest to researchers studying continental dust and evaporite deposits.</i>
	March 18-22, 2019 The Woodlands, TX, USA	50th Lunar and Planetary Science Conference , NCTS# 35124-19 https://www.hou.usra.edu/meetings/lpsc2019/
	March 25-29, 2019 Quy Nhon, Vietnam	Life3E: Search for Life, from Early Earth to Exoplanets , NCTS# 37411-19 https://licisequynhon.com/conferences/2019/search-for-life/
	March 26-28, 2019 Washington, DC, USA	NASEM's Committee on Astrobiology and Planetary Science (CAPS) http://sites.nationalacademies.org/SSB/SSB_067577#Meetings_and_Events
	March 31-April 5, 2019 Puerto Vallarta, Mexico	New Quests in Stellar Astrophysics IV: Astrochemistry, Astrobiology and the Origin of Life , NCTS# 36683-19 https://www.inaoep.mx/~puerto19/


Second Quarter, 2019

	April 1-3, 2019 Potomac, MD, USA	The Space Astrophysics Landscape for the 2020s and Beyond , NCTS 36044-19 https://www.hou.usra.edu/meetings/landscape2019/
	April 7-12, 2019 Vienna, Austria	European Geosciences Union General Assembly 2019 http://egu2019.eu/
New!	April 8-10, 2019 Washington, DC	NASA Fundamental Physics Workshop , NCTS 37189-19 NASA Fundamental Physics Workshop Relevant Session: PSI.5/BG7.3/GMPV7.14 Mars Sample Return - A Community Effort for a Receiving and Curation Facility GMI.5/PSI.2 Planetary Geomorphology
New!	April 29-May 3, 2019 Washington, D.C., USA	2019 IAA Planetary Defense Conference , NCTS# 36743-19 http://pdc.iaaweb.org/
New!	May 14-16, 2019 Washington, DC, USA	The Human to Mars Summit , NCTS# 37163-19
	May 20-21, 2019 Berlin, Germany	2nd European Physics Conference https://www.meetingsint.com/conferences/europhysics
	May 21-23, 2019 Houston, TX, USA	Ocean Worlds 4 , NCTS 37400-19 https://h2m.exploremars.org/

Second Quarter, 2019 cont.

	June 3-7, 2019 Heidelberg, Germany	Planetary Dynamics 2019 http://www2.mpia-hd.mpg.de/homes/dynamics2019/
New!	June 9-13, 2019 St. Louis, MO, USA	234th Meeting of the American Astronomical Survey , NCTS 36771-19 https://aas.org/meetings/aas234
	June 10-13, 2019 Boulder, CO, USA	50th Annual Meeting of the Division of Dynamical Astronomy (DDA) of the AAS NCTS# 37161-19 https://dda.aas.org/meetings/2019
New!	June 11-14, 2019 Golden, CO, USA	10th Joint Meeting of the Space Resources Roundtable (SRR) and the Planetary and Terrestrial Mining Sciences Symposium (PTMSS) , NCTS 37406-19 http://www.isruinfo.com/
	June 18-19, 2019 Coimbra, Portugal	International Meeting on Paleoclimate: Changes and Adaptation , https://paleoclimate2019.wixsite.com/paleoclimate2019 Research Topic T1: Paleoclimates in the Solar System: external forcing and divergent evolutions
New!	June 18-20, 2019 Flagstaff, AZ	4th Planetary Data Workshop https://www.hou.usra.edu/meetings/planetdata2019/
	June 24-28, 2019 Seattle, WA, USA	2019 Astrobiology Science Conference (AbSciCon) , NCTS 36103-19 https://astrobiology.nasa.gov/news/abscicon-2019-save-the-date/
	June 24-28, 2019 Lyon, France	European Week of Astronomy and Space Science (EWASS 2019) http://eas.unige.ch/EWASS2019/call.jsp
	June 30-July 4, 2019 Lancashire, England	Royal Astronomical Society 2019 National Astronomy Meeting https://nam2019.org/

Third Quarter, 2019

	July 8-12, 2019 Oxford, UK	International Planetary Probe Workshop 2019 , NCTS# 36747-19 https://ippw2019.uk/
	July 14-18, 2019 Laurel, MD, USA	The Pluto System After New Horizons (PSANH) , NCTS# 31320-19 https://www.hou.usra.edu/meetings/plutosystem2019/
	July 22-26, 2019 Pasadena, CA, USA	9th International Conference on Mars , NCTS# 31488-19 https://www.hou.usra.edu/meetings/ninthmars2019/
	July 23-25, 2019 Moffett Field, CA, USA	NASA Exploration Science Forum 2019 , NCTS# 36800-19 https://nesf2019.arc.nasa.gov/
New!	July 28-August 2, 2019 Singapore	Asia Oceania Geosciences Society (AOGS) , NCTS# 36817-19 http://www.asiaoceania.org/aogs2019/public.asp?page=home.htm Relevant Session: PS04-SE: Volcanism and Tectonism Across the Solar System
	September 8-12, 2019 Big Sky, MT, USA	The First Billion Years: Habitability: Producing Conditions Conducive to Life https://www.lpi.usra.edu/first-billion-years/
	September 10-12, 2019 Irvine, CA, USA	NASEM's Committee on Astrobiology and Planetary Science (CAPS) http://sites.nationalacademies.org/SSB/SSB_067577#Meetings_and_Events
	September 15-20, 2019 Geneva, Switzerland	51st Meeting of the AAS Division for Planetary Science https://dps.aas.org/meetings/future
	September 22-25, 2019 Phoenix, AZ, USA	2019 GSA Annual Meeting https://www.geosociety.org/GSA/Events/Annual_Meeting/GSA/Events/gsa2019.aspx
	September 30-October 3, 2019 Brasilia, Brazil	Large Meteorite Impacts and Planetary Evolution VI (LMI VI) https://www.hou.usra.edu/meetings/lmi2019/

Fourth Quarter, 2019

New!	October 21-25, 2019 Washington, DC, USA	70th International Astronautical Congress (IAC) , NCTS 36775-20 https://www.iac2019.org/
	November 4-8, 2019 Herzliya, Israel	The 4th COSPAR Symposium: Small Satellites for Sustainable Science and Development http://www.cospar2019.org/
	December 9-13, 2019 San Francisco, CA, USA	2019 AGU Fall Meeting https://fallmeeting.agu.org/2018/future-meetings/

Seasons on Mars

	MY35	MY36	MY 37
Start of Northern Spring / L_s 0	3/23/2019	2/07/2021	12/26/2022
Start of Northern Summer / L_s 90	10/08/2019	8/25/2021	7/13/2023
Start of Northern Autumn / L_s 180	4/08/2020	2/24/2022	1/12/2024
Start of Northern Winter / L_s 270	9/02/2020	7/21/2022	6/7/2024

Special holidays to consider when scheduling conferences/workshops/meetings

Good Friday	4/19/2019	4/10/2020	4/2/2021	4/15/2022
Rosh Hashanah	9/30/2019	9/19/2020	9/7/2021	9/26/2022
Yom Kippur	10/09/2019	9/28/2020	9/16/2021	10/5/2022
(Note that Jewish holidays start at sundown the previous evening)				
Thanksgiving Day, Canada	10/14/2019	10/12/2020	10/11/2021	10/10/2022
Thanksgiving Day, U.S.	11/28/2019	11/26/2020	11/25/2021	11/24/2022
Christmas Day	12/25/2019	12/25/2020	12/25/2021	12/25/2022

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Please send Mars Community Announcements and calendar items for inclusion in next month's newsletter to:

Barbara Saltzberg at Barbara.a.Saltzberg@jpl.nasa.gov

This newsletter (and all previous months') is also posted on the MEPAG website: <http://mepag.jpl.nasa.gov>

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