Mars Exploration Science Monthly Newsletter

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

OPPORTUNITY: 2004-2018

March 2019

Mars Science News

MEPAG Virtual Meeting #4 Presentations and Summary available

The 4th MEPAG Virtual Meeting was held on February 25, 2019. Presentations on recent MEPAG activities and a status update from NASA Headquarters were provided, including information on the recent NRA call for Planetary Mission Concept Studies. A preliminary report on the Ice and Climate Evolution Science Analysis Group (ICE-SAG) activities was given, as well as a preliminary discussion about Decadal Survey white paper preparations. Presentations and a meeting summary are available on the <u>MEPAG web site</u> (<u>https://mepag.jpl.nasa.gov/meetings.cfm</u>).

The next MEPAG Virtual Meeting is tentatively scheduled for the week of May 6, 2019, and the next MEPAG face-to-face meeting will be held directly after the <u>Ninth International Conference on Mars</u>, on July 26, 2019.

LPSC 2019: MEPAG Discussion of Decadal Survey Preparation March 18, 12:00PM – 1:00PM Room: Waterway Ballroom 6-8

All members of the Mars Community are invited to meet with representatives from the Mars Exploration Program Analysis Group (MEPAG) Executive and Goals Committees. The main purpose of this meet-andgreet is to discuss MEPAG's preparations for developing inputs to the Decadal Survey committee (in anticipation of a potential call for white papers). Note that this informal event is not a MEPAG meeting, but instead is a supplemental opportunity to interact with MEPAG leadership. Further discussion on these topics will occur at the next MEPAG virtual and face-to-face meetings.

LPSC 2019: Mars Sample Return Science Planning: Updates and Community Forum March 20, 12:00PM – 1:00PM Location: Montgomery Ballroom A-C

This Town Hall meeting will be focused on giving an update to the community on the current status of Mars Sample Return (MSR particularly) <u>science planning</u>, particularly as conducted through the work of the MSR Science Planning Group (MSPG). MSPG has been established by NASA and ESA to help develop a stable foundation for international scientific cooperation for the purposes of analyzing samples returned from Mars. MSPG's approach is to formulate and propose mechanisms through which the international scientific community can achieve shared scientific objectives. The agenda for this meeting will include: 1) a reprisal of MSPG's activities and the pathways available for the community to participate; 2) a review of the recent workshop "Science in Containment" and the resulting report; 3) Expectations for future science-related MSR workshops; 4) time for community feedback and input. This event is open to the public.

ROSES-2018 Soliciting Proposals to Program Element C.15 Planetary Protection Research

ROSES-18 Amendment 62 solicits proposals for Planetary Protection Research via program element C.15, which had previously been listed as "Not solicited this year". Notices of Intent are requested by April 12, 2019 and proposals are due by May 10, 2019.

More information about this amendment to the NASA Research Announcement "Research Opportunities in Space and Earth Sciences (ROSES) 2018" (NNH18ZDA001N) are available at: http://nspires.nasaprs.com/ and appear on the RSS feed at: https://science.nasa.gov/researchers/sara/grant-solicitations/roses-2018/

Questions concerning this program element may be directed to <u>HQ-PPR@mail.nasa.gov</u>.

New NASA Research Announcement for Pre-Decadal Mission Concept Studies

On February 21, NASA's Science Mission Directorate released ROSES-18 Amendment 64: New Opportunity in <u>C.30 Planetary Mission Concept Studies</u> (updated on March 13) This call is part of preparations for the 2023 Planetary Science Decadal Survey, specifically for providing appropriate input regarding medium/large-size mission concepts. To this end, NASA is soliciting proposals to conduct mission concept studies in planetary science. Results of the selected studies will be provided by NASA as input to the 2023 Decadal Survey. For this call, mandatory NOIs are due by April 1, 2019, and the due date for 15-page proposals is May 31, 2019. A 10-page list of Frequently Asked Questions is also available on the NSPIRES web page. Questions that are not addressed by the FAQs may be directed to Doris.Daou@nasa.gov.

MEPAG Facilitation of Community Communication about Proposals for the Pre-Decadal Mission Concept Studies NRA

MEPAG has set up a google doc to facilitate communication within the Mars community about mission concepts that may be submitted to the recent <u>NASA Research Announcement (NRA)</u> soliciting for Planetary Mission Concept Studies:

https://docs.google.com/spreadsheets/d/1Y2kgSExZWPZpqMkIns8wdaAIAxWINvQzNwOkK23ewi0/edit?usp=sharing.

This google doc is intended to help people with complementary interests and expertise connect with each other. Also included is a list of potentially useful reports that describe Mars science objectives and past studies of mission concepts (and additions are welcome). This doc will be open for entries from 3/1 to the NOI deadline (April 1), and will remain viewable through the proposal deadline (May 31).

Ninth International Conference on Mars First Announcement Soon to be Posted

The Ninth International Conference on Mars will be held at the California Institute of Technology (Caltech) in Pasadena, California, beginning the morning of Monday, July 22, and ending after a full day on Thursday, July 25. The first announcement is expected this week, and the Call for Abstracts is expected during the first week of April. Abstracts will be due May 7th. For more information on 9th Mars, including the full list of deadlines, see https://www.hou.usra.edu/meetings/ninthmars2019/.

As announced by MEPAG Chair Jeff Johnson during the virtual meeting VM4, a MEPAG meeting is tentatively scheduled at Caltech for Friday, July 26, following the Ninth International Conference on Mars.

Upcoming Mars Special Issues Welcoming Paper Submissions

1. The joint *JGR* special issue, "Studies of the 2018/Mars Year 34 Planet-Encircling Dust Storm", is accepting submissions until June 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

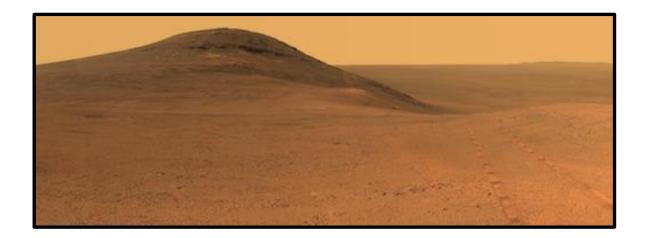
- Icarus Special Issue on Current and Recent Landscape Evolution on Mars is accepting papers starting March 1, 2019. Articles that address the debate on plausible agents of Mars landscape change under current or relatively-recent conditions are welcome. This special issue was prompted by the recent Late Mars Workshop (https://www.hou.usra.edu/meetings/latemars2018/). More information on the call for papers is available at: <u>https://www.journals.elsevier.com/icarus/call-for-papers/current-recent-landscapeevolution-on-mars</u>
- 3. The *Planetary and Space Science* special issue on "Amazonian Mars: Climate & Processes," is now accepting submissions through April 15. 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. Lead guest editor is John Moores (York University, cc'd). More information is available at: https:// www.journals.elsevier.com/planetary-and-space-science/call-for-papers/special-issue-on-amazonian-mars-climate-processes.

NASA's Opportunity Rover Mission Completed

Congratulations to the Opportunity Rover team for 15 years of Mars exploration. Designed to last just 90 Martian days and travel 1,100 yards (1,000 meters), Opportunity vastly surpassed all expectations in its endurance, scientific value and longevity. In addition to exceeding its life expectancy by 60 times, the rover traveled more than 28 miles (45 kilometers) by the time it reached its most appropriate final resting spot on Mars - Perseverance Valley.

The Opportunity rover stopped communicating with Earth when a planet-encircling dust storm blanketed its location in June 2018. After more than a thousand commands to restore contact, engineers in the Space Flight Operations Facility at NASA's Jet Propulsion Laboratory (JPL) made their last attempt to revive Opportunity on February 12. The solar-powered rover's final communication was received June 10.

Further information on Mars Opportunity can be found at: <u>https://www.jpl.nasa.gov/missions/mars-exploration-rover-opportunity-mer/</u>



Near-Term Due Dates (next three months)

Due	Project			
March 14	The Pluto System After New Horizons (PSANH) - Indication of Interest Deadline			
March 15	234th Meeting of the American Astronomical Society - Early Registration Deadline			
March 15	Royal Astronomical Society 2019 National Astronomy Meeting - Abstract Deadline			
March 16	50th Lunar and Planetary Science Conference - Registration Deadline			
March 18	The Space Astrophysics Landscape for the 2020s and Beyond - Registration Deadline			
March 19	International Meeting on Paleoclimate: Changes and Adaptation - Abstract Deadline			
March 19	234th Meeting of the American Astronomical Society - Abstract Deadline			
March 22	10th Joint Meeting of the Space Resources Roundtable (SRR) and the Planetary and Terrestrial Mining Sciences Symposium (PTMSS) - Abstract Deadline			
March 28	2nd European Physics Conference - Registration Deadline			
March 30	International Association of Sedimentologists (IAS)) 2019 - Abstract Deadline			
March 31	13th IAA Low-Cost Planetary Missions Conference - Abstract Deadline			
April 3	2019 IAA Planetary Defense Conference - Paper Submission Deadline			
April 4	4th Planetary Data Workshop - Abstract Deadline			
April 4	Annual Meeting of Planetary Geologic Mappers - Abstract Deadline			
April 7	European Lunar Symposium - Early Registration Deadline			
April 7	13th IAA Low-Cost Planetary Missions Conference - Early Registration Deadline			
April 8	International Venus Conference 2019 - Registration and Poster Abstract Deadline			
April 12	50th Annual Meeting of the Division of Dynamical Astronomy (DDA) of the AAS - Abstract and Early Registration Deadline			
April 15	Planetary Exploration Horizon 2061: Synthesis Workshop - Abstract and Early Registration Deadline			
April 15	Planetary Dynamics 2019 - Deadline for applying for contributed talk			
April 16	234th Meeting of the American Astronomical Society - Registration Deadline			
April 19	The Planetary CubeSats Symposium - Abstract Deadline			
April 19	Global Conference on Space for Emerging Countries (GLEC) 2018 - Registration Deadline			
April 22	Ocean Worlds 4 - Early Registration Deadline			
April 22	First International Orbital Debris Conference (IOC) - Abstract Deadline			
April 23	NASA Exploration Science Forum 2019 - Abstract Deadline			
April 25	European Lunar Symposium - Registration Deadline			
April 28	European Week of Astronomy and Space Science (EWASS 2019) - Early Registration Deadline			
April 29	Applied Space Environments Conference (ASEC) 2019 - Registration Deadline			
April 30	The Humans to Mars Summit - Registration Deadline			
April 30	The 4th COSPAR Symposium: Small Satellites for Sustainable Science and Development - Abstract Deadline			
April 30	International Meeting on Paleoclimate: Changes and Adaptation - Early Registration Deadline			
May 1	Lunar ISRU 2019 - Developing a New Space Economy Through Lunar Resources and Their Utilization - Abstract Deadline			
May 1	234th Meeting of the American Astronomical Society - Poster Abstract Deadline			

Near-Term Due Dates (next three months) - continued

Due	Project			
May 2	The Pluto System After New Horizons (PSANH) - Abstract Deadline			
May 3	10th Joint Meeting of the Space Resources Roundtable (SRR) and the Planetary and Terrestrial Mining Sciences Symposium (PTMSS) - Registration Deadline			
May 4	International Planetary Probe Workshop 2019 - Early Registration Deadline			
May 8	Joint Meeting: 51st Meeting of the AAS Division for Planetary Sciences - joint with the European Planetary Science Congress (EPSC) - Abstract Deadline			
May 8	Japan Geoscience Union (JpGU) 2019 - Early Registration Deadline			
May 9	The First Billion Years: Habitability: Producing Conditions Conducive to Life - Indication of Interest Deadline			
May 10	Ocean Worlds 4 - Standard Registration Deadline			
May 10	International Venus Conference 2019 - Final Registration Deadline			
May 15	The Planetary CubeSats Symposium - Registration Deadline			
May 17	234th Meeting of the American Astronomical Society - Late Registration Deadline			
May 20	4th Planetary Data Workshop - Early Registration Deadline			
May 20	Royal Astronomical Society 2019 National Astronomy Meeting - Registration Deadline for Presenting Authors			
May 20	Planetary Exploration Horizon 2061: Synthesis Workshop - Registration Deadline			
May 21	16th Annual Meeting of the Asia Oceania Geosciences Society (AOGS) - Early Registration Deadline			
May 24	Large Meteorite Impacts and Planetary Evolution VI (LMI VI) - Indication of Interest Deadline			
May 25	Planetary Dynamics 2019 - Deadline for General Participation			
May 30	13th IAA Low-Cost Planetary Missions Conference - Online Registration Deadline			
May 30	International Association of Sedimentologists (IAS)) 2019 - Early Registration Deadline			



Upcoming Conferences and Workshops

Notes about NASA travel forecasting for the events in this calendar:

- Beginning January 7, 2019, only domestic NASA sponsored conferences and foreign conferences will need to be submitted into the NASA Conference Tracking System (NCTS).
- Please do not assume our noting of NCTS numbers is complete. If you are unsure about the NCTS number, a forecasting deadline or whether an event is classified as a "conference", please consult with your NASA Center.
- Missing NCTS numbers and forecasting deadline updates can be sent to Barbara Saltzberg (<u>Barbara.A.Saltzberg@jpl.nasa.gov</u>)
- If no deadline is noted, it is usually 60 days in advance for domestic meetings. It may be further in advance for "Heavily Attended" conferences.

First Quarter, 2019				
March 16-17, 2019 The Woodlands, TX, USA	Microsymposium 60: Forward to the Moon to Stay: Undertaking Transformative Lunar Science with Commercial Partners			
	http://www.planetary.brown.edu/html_pages/micro60.htm			
March 18-22, 2019	50th Lunar and Planetary Science Conference, NCTS 35124-19			
The Woodlands, TX, USA	https://www.hou.usra.edu/meetings/lpsc2019/			
March 25-29, 2019	Life3E: Search for Life, from Early Earth to Exoplanets, NCTS 37411-19			
Quy Nhon, Vietnam	https://icisequynhon.com/conferences/2019/search-for-life/			
March 26-28, 2019	NASEM's Committee on Astrobiology and Planetary Science (CAPS)			
Washington, DC, USA	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	The Space Astrophysics Landscape for the 2020s and Beyond, NCTS 36044-19
Potomac, MD, USA	https://www.hou.usra.edu/meetings/landscape2019/
April 7-12, 2019 Vienna, Austria	European Geosciences Union General Assembly 2019, NCTS 34792-19 * Research Topic GM1.5/PS1.2: Planetary Geomorphology
	https://egu2019.eu/
April 8-10, 2019	NASA Fundamental Physics Workshop, NCTS 37189-19
Washington, DC, USA	http://www.cvent.com/events/nasa-fundamental-physics-workshop-2019/event-
	summary-1184d1a484b14e4ca66c889e9dfecbbd.aspx
April 23-24, 2019 Washington, DC, USA	Outer Planets Assessment Group (OPAG) Meeting
	https://www.lpi.usra.edu/opag/meetings/upcoming/
April 24-26, 2019	Global Conference on Space for Emerging Countries (GLEC) 2019
Marrakech, Morocco	http://www.iafastro.org/events/global-series-conferences/glec-2019/
April 29-May 3, 2019	2019 IAA Planetary Defense Conference, NCTS 36743-19
Washington, DC, USA	http://pdc.iaaweb.org/
May 12-17, 2019	Applied Space Environments Conference (ASEC) 2019, NCTS 35845-19
Los Angeles, CA, USA	https://sti.usra.edu/ASEC2019/

		Second Quarter, 2019 - continued
	May 13-17, 2019 Victoria, British Columbia, Canada	AAS New Horizon in Planetary Systems with ALMA, NCTS 36777-19 http://www.cvent.com/events/new-horizons-in-planetary-systems/event-summary- b476735da0c34d4fa62e81bf27668214.aspx
	May 14-16, 2019 Washington, DC, USA	The Humans to Mars Summit, NCTS 37163-19 https://h2m.exploremars.org/
	May 20-21, 2019 Berlin, Germany	2nd European Physics Conference https://www.meetingsint.com/conferences/europhysics
	May 21-22, 2019 Houston, TX, USA	Ocean Worlds 4, NCTS 37400-19 https://www.hou.usra.edu/meetings/oceanworlds2019/
	May 21-23, 2019 Manchester, United Kingdom	European Lunar Symposium, NCTS 37167-19 https://els2019.arc.nasa.gov
	May 26-30, 2019 Makuhari Messe, Chiba, Japan	Japan Geoscience Union (JpGU), NCTS 37098-19 http://www.jpgu.org/meeting_2019/
\bigcirc	May 31-June 3, 2019 Niseko, Japan	International Venus Conference 2019, NCTS 36941-19 https://www.cps-jp.org/~akatsuki/venus2019/
	June 3-5, 2019 Toulouse, France	13th IAA Low-Cost Planetary Missions Conference, NCTS 37764-19 http://lcpm.iaaweb.org/
	June 3-7, 2019 Heidelberg, Germany	Planetary Dynamics 2019 http://www2.mpia-hd.mpg.de/homes/dynamics2019/
	June 5-7, 2019 Toulouse, France	Planetary Exploration Horizon 2061: Synthesis Workshop https://h2061-tlse.sciencesconf.org/
	June 9-13, 2019 St Louis, MO, USA	234th Meeting of the American Astronomical Society, 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
	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 https://www.csmspace.com/events/srr/
NEW!	June 12-14, 2019 Flagstaff, AZ, USA	Annual Meeting of Planetary Geologic Mappers https://www.hou.usra.edu/meetings/pgm2019/
	June 18-19, 2019 Coimbra, Portugal	International Meeting on Paleoclimate: Changes and Adaptation * Research Topic T1: Paleoclimates in the Solar System: external forcing and divergent evolutions https://paleoclimate2019.wixsite.com/paleoclimate2019
	June 18-20, 2019 Flagstaff, AZ, USA	4th Planetary Data Workshop, NCTS 37520-19 https://www.hou.usra.edu/meetings/planetdata2019/
	June 24-28, 2019 Bellevue, WA, USA	2019 Astrobiology Science Conference (AbSciCon), NCTS 36103-19 https://connect.agu.org/abscicon/home
	June 24-28, 2019 Lyon, France	European Week of Astronomy and Space Science (EWASS 2019) http://eas.unige.ch/EWASS2019/call.jsp
	June 27-28, 2019 Greenbelt, MD, USA	The Planetary CubeSats Symposium https://cubesats.gsfc.nasa.gov/symposium.php
	June 30-July 4, 2019 Lancashire, England	Royal Astronomical Society 2019 National Astronomy Meeting https://nam2019.org/

	Third Quarter, 2019				
NEW!	July 7-12, 2019	82nd Annual Meeting of The Meteoritical Society (MetSoc 2019)			
	Sapporo, Japan	https://www.metsoc19-sapporo.com/			
	July 8-12, 2019	International Planetary Probe Workshop 2019, NCTS 36747-19			
	Oxford, United Kingdom	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/			
NEW!	July 15-17, 2019 Columbia, MD, USA	Lunar ISRU 2019 - Developing a New Space Economy through Lunar Resources and Their Utilization			
		https://www.hou.usra.edu/meetings/lunarisru2019/			
	July 22-26, 2019	9th International Conference on Mars, NCTS 31488-19			
	Pasadena, CA, USA	https://www.hou.usra.edu/meetings/ninthmars2019/			
-	July 23-25, 2019	NASA Exploration Science Forum 2019, NCTS 36800-19			
	Moffett Field, CA, USA	https://nesf2019.arc.nasa.gov/			
	July 28-August 2, 2019 Singapore	16th Annual Meeting of the Asia Oceania Geosciences Society (AOGS) , NCTS 36817-19			
		http://www.asiaoceania.org/aogs2019/public.asp?page=home.htm			
	August 7-9, 2019	10th Planetary Crater Consortium			
NEW!	Flagstaff, AZ, USA	www.planetarycraterconsortium.nau.edu/			
	September 8-12, 2019 Big Sky, MT, USA	The First Billion Years: Habitability: Producing Conditions Conducive to Life, NCTS 28519-20			
	https://www.hou.usra.edu/meetings/habitability2019/				
	September 10-12, 2019	NASEM's Committee on Astrobiology and Planetary Science (CAPS)			
	Irvine, CA, USA	http://sites.nationalacademies.org/SSB/SSB_067577#Meetings_and_Events			
	September 10-13, 2019 Rome, Italy	International Association of Sedimentologists (IAS) * Session 7.14 Planetary Sedimentary Geology: from remote sensing and in-situ			
		http://iasroma2019.org/			
		Joint Meeting: 51st Meeting of the AAS Division for Planetary Sciences (DPS), joint with the European Planetary Science Congress (EPSC), NCTS 37080-19			
		https://www.epsc-dps2019.eu/			
	September 22-25, 2019	2019 GSA Annual Meeting, NCTS 37526-19			
Phoenix, AZ, USA <u>https://www.geosociety.org/GSA/Events/Annual_Meeting/GSA/Events/</u>					
	September 30-October 3,	Large Meteorite Impacts and Planetary Evolution VI (LMI VI)			
	2019 Brasilia, Brazil <u>https://www.hou.usra.edu/meetings/lmi2019/</u>				

	Fourth Quarter, 2019			
	October 21-25, 2019	70th International Astronautical Congress (IAC), NCTS 36775-20		
	Washington, DC, USA	https://www.iac2019.org/		
	November 4-8, 2019 Herzliya, IsraelThe 4th COSPAR Symposium: Small Satellites for Sustainable Science and Development, NCTS 37773-20			
		http://www.cospar2019.org/		
	November 5-8, 2019 Carlsbad, NM, USA	Mars Extant Life: What's Next?		
		https://www.hou.usra.edu/meetings/lifeonmars2019/		
	December 9-12, 2019	First International Orbital Debris Conference (IOC)		
	Houston, TX, USA	https://www.hou.usra.edu/meetings/orbitaldebris2019/		
	December 9-13, 2019	2019 AGU Fall Meeting, NCTS 37409-20		
	San Francisco, CA, USA	https://fallmeeting.agu.org/2018/future-meetings/		

Seasons on Mars

	MY35	MY36	MY 37
Start of Northern Spring / Ls 0	03/23/2019	02/07/2021	12/26/2022
Start of Northern Summer / Ls 90	10/08/2019	08/25/2021	07/13/2023
Start of Northern Autumn / Ls 180	04/08/2020	02/24/2022	01/24/2024
Start of Northern Winter / Ls 270	09/02/2020	07/21/2022	06/07/2024

Special holidays to consider when scheduling conferences, workshops & meetings

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Good Friday	4/19/2019	4/10/2020	4/02/2021	4/15/2022
Rosh Hashanah	9/30/2019	9/19/2020	9/07/2021	9/26/2022
Yom Kippur	10/09/2019	9/28/2020	9/16/2021	10/05/2022
Thanksgiving, Canada	10/14/2019	10/12/2020	10/11/2021	10/10/2022
Thanksgiving, US	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

Please note that Jewish holidays start at sundown the previous evening.

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To submit Mars Community Announcements and calendar items for next month's newsletter, please email Barbara Saltzberg at <u>Barbara.A.Saltzberg@jpl.nasa.gov</u>.

The Mars Exploration Science Monthly Newsletter is available on the MEPAG website, <u>https://mepag.jpl.nasa.gov/newsletters.cfm</u>, and via electronic mailing list. To join the mailing list, which includes announcements as well as this newsletter, go to <u>https://mepag.jpl.nasa.gov/emailnewsletters.cfm</u>.

To withdraw from the mailing list, please send an email from your email account to: <u>mepag-removesignup@jpl.nasa.gov</u>