

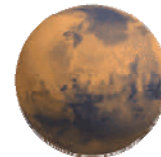
Mars Exploration Science Monthly Newsletter

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

September 2013

Mars Science News

Notice of Intent to Release Mars 2020 Announcement of Opportunity



The National Aeronautics and Space Administration (NASA) Science Mission Directorate (SMD) intends to release an Announcement of Opportunity (AO) entitled Mars 2020 Investigations to solicit proposals for investigations for a space flight mission to Mars, to be launched in July/August 2020. The target date for release of the AO is no earlier than (NET) September 16, 2013. Upon release, the full text of the AO and any appendices will be available electronically at the NASA Solicitation and Proposal Integrated Review and Evaluation System website (<http://nspires.nasaprs.com/>). Links to the AO and additional information about the intent and the capabilities of the Mars 2020 Rover will be located at the Mars 2020 Acquisition Website (<http://soma.larc.nasa.gov/mars2020>).

The SMD budget for Phases A-D is expected to be approximately \$100 million in real year (RY) dollars. Investigations comprised of individual instruments or multiple instruments (suites) may respond to the overall Mars 2020 science objectives to explore and quantitatively assess Mars as a potential habitat for life, to search for signs of past life, and to collect carefully selected samples for possible future return to Earth. Proposals that address objectives for advancing knowledge or technologies for future robotic and/or human exploration of Mars will also be solicited.

The report of the Science Definition Team (SDT) and SDT Frequently Asked Questions (FAQs) for the Mars 2020 mission are available from the Mars 2020 Acquisition Website. The SDT has defined strawman payloads of instruments that could achieve the scientific knowledge and technology objectives. The list of candidate instrument types is a “proof-of-concept” – examples of potentially viable instruments. The list does not in any way restrict the possible approaches, nor is the list intended to preclude consideration of investigations that propose other instruments or combinations of instruments that can provide the necessary observations.

The Mars 2020 Investigations AO will solicit flight investigations for which each Principal Investigator is responsible for a complete space

flight investigation, including instrument hardware, all mission operations, and data analysis.

Participation in this AO will be open to all categories of organizations (U.S. and non-U.S.), including educational, industrial, and not-for-profit organizations, Federally Funded Research and Development Centers, University Affiliated Research Centers, NASA centers, the Jet Propulsion Laboratory, and other Government agencies. Principal Investigators are responsible for, and may assemble their investigation teams from, any of these organizations.

A preproposal conference will take place, approximately 2-3 weeks after AO release, via video/teleconference from Washington, DC. Notices of Intent (NOIs) will be required no later than one week after the preproposal conference. Proposals will be due AO release + 90 days. Any target dates in this notice may change. The total payload resources, including mass, power, and data for the instrument complement, will be provided in a Payload Information Package (PIP) posted to the Mars 2020 Acquisition Website. Note that the Mars 2020 Investigations AO may contain provisions that differ from this notice, in which case those in the AO will take precedence.

Questions or comments about the planned solicitation may be addressed to the NASA Program Scientist for Mars 2020 given below within 14 days of this posting (Friday August 23rd) in order to be considered for the final AO. The character string “Mars 2020 AO” must be included in the subject line of all communications.

Point of Contact:
Dr. Mitchell D. Schulte
Program Scientist,
Telephone: (202) 358-2127
Fax: (202) 358-3097

E-mail: mars2020-ao@lists.nasa.gov

Mars Critical Data Products Program (Round VIII) - Comet Siding Spring Modeling

The Mars Exploration Program has issued, in August 2013, a Request for Proposal for round VIII of the Mars Critical Data Products program. This RFP provides support of the modeling the dust and particle environment of Comet 2013 AI (Siding Spring) during its encounter with Mars in October 2014. The intent is to provide data products useful for risk assessment and mitigation strategy development for the Mars orbiter missions, due to possible impacts from dust and ion tail particles as this comet encounters Mars. Proposals are due on Wednesday, September 11, 2013.

Details of the RFPs are posted at: <https://acquisition.jpl.nasa.gov/RFP/MJ-2692-072413/default.htm> or <https://acquisition.jpl.nasa.gov/bizops/>.

Photogrammetric Processing of Planetary Stereo Imagery using ISIS and SOCET SET®

September 23-25, 2013

Call for Participation - Training Opportunity

The Planetary Photogrammetry Guest Facility (PPGF) at the Astrogeology Science Center of the U.S. Geological Survey would like to announce a new Call for Participation for a training opportunity on September 23-25, 2013, on Photogrammetric Processing of Planetary Stereo Imagery using ISIS and SOCET SET®. This session has already been announced earlier and most of the seats are already assigned. We are offering the opportunity to compliment the current list, as well as be on a waiting list in case of a cancellation. We also have initial plans on offering another training session either in November or December, 2013 on the same topic. If these dates are more convenient for your attendance, please let us know as well.

The training is free to participants, and will cover end-to-end, hands-on photogrammetric procedures for surface extraction from Mars Reconnaissance Orbiter HiRISE image pairs. The topics include:

- An introduction to photogrammetric procedures and surface generation techniques;
- Overview of HiRISE imagery
- Workflow and data exchange between ISIS and SOCET SET

The hands-on training will include ISIS preprocessing, SOCET SET import of image and reference data, orientation procedures, triangulation and bundle adjustment, manual and automated surface extraction of digital terrain models (DTM), editing, and data export.

If you are interested in participating in this opportunity, please send an email to Dr. Raad Saleh (PlanetaryPhotogrammetry@usgs.gov) with the following specific information: your name, title, affiliation, address, full contact information, and a short statement describing

your interest in the training. Please note that remaining seating for this session is very limited, so please express your interest as soon as possible.

Dynamic Mars from long-term observations

We are well into the 2nd decade of continuous Mars observations that began with MGS and have continued with ODY, MEX, MRO, and our landed spacecraft. Bridged to earlier times by spacecraft observations from the 1960s onwards, and a continuous telescopic campaign, our view of Mars is now one of a planet on which surface and atmospheric changes occur at frequencies of days, years, and decades, a testament to long-term monitoring that continues to this day. At this time, it is appropriate that this record, with implications for Martian geology, climate, atmospheric dynamics, and other processes, be integrated into a journal special section, submitted to *Icarus* by November 15, 2013.

This special issue is for for papers that:

- Include surface, sub-surface, and atmosphere observations, or model results, that are new and a unique outcome of the long-term data acquisition provided by Mars spacecraft and telescopes
- Highlight the long-term implications of processes that are observed and ongoing now
- Are *not* reviews of previous work

Author guidelines for preparation of manuscript can be found at

<http://www.elsevier.com/wps/find/>

[journaldescription.cws_home/505620/authorinstructions](http://www.elsevier.com/wps/find/journaldescription.cws_home/505620/authorinstructions)

Please contact the editorial office at icarus@astro.cornell.edu with any questions.

Near-term Due Dates (next three months)

Due	Project
September 3rd	45th Meeting of the American Astronomical Society Late abstract deadline
September 5th	45th Meeting of the American Astronomical Society Registration deadline
September 13th	2nd International Congress of Astrobiology in Colombia Abstract and registration deadline
September 16th	Origin of the Moon - Challenges and Prospects Abstract deadline
September 23rd	Geological Society of America Annual Meeting Registration deadline
September 26th	International Scientific Workshop on Golden Spike Human Lunar Expeditions Registration deadline
September 27th	Lunar Exploration Analysis Group Meeting Registration deadline
September 30th	Fourth Moscow International Solar System Symposium Registration deadline
October 14th	Workshop on Planetesimal Formation and Differentiation Registration deadline
October 25th	2014 IEEE Aerospace Conference Abstract deadline
October 31st	First COSPAR Symposium on “Planetary Systems of Our Sun and Other Stars, and the Future of Space Astronomy Registration deadline
November 8th	AGU Fall Meeting Early Registration deadline

Upcoming Conferences and Workshops in 2013

Third Quarter, 2013		
	September 8-13, 2013 London, UK	European Planetary Science Conference (EPSC 2013) http://www.epsc2013.eu
	September 23-24, 2013 London, UK	Origin of the Moon http://royalsociety.org/events/2013/origin-moon/
	September 24-28, 2013 Medellin, COLOMBIA	2nd International Congress of Astrobiology in Colombia http://www.planetariomedellin.org/programacion/ii-congreso-internacional-de-astrobiologia/#.UZIWI1dhkk9k
	September 25-26, 2013 Chicheley, UK	Origin of the Moon - Challenges and Prospects http://royalsociety.org/events/2013/moon-origin-satellite/

Fourth Quarter, 2013

	October 3-4, 2013 Houston, TX, USA	International Scientific Workshop on Golden Spike Human Lunar Expeditions http://www.lpi.usra.edu/meetings/gS2013
	October 6-11, 2013 Denver, CO, USA	45th Meeting of the American Astronomical Society Division for Planetary Sciences (DPS 2013) http://aas.org/meetings/45th-meeting-division-planetary-sciences
	October 14-16, 2013 Laurel, MD, USA	Lunar Exploration Analysis Group Meeting http://www.lpi.usra.edu/meetings/leag2013
	October 14-18, 2013 Moscow, RUSSIA	Fourth Moscow International Solar System Symposium http://ms2013.cosmos.ru
	October 16-18, 2013 Sagamihara, Kanagawa JAPAN	Hayabusa 2013: Symposium of Solar System Materials http://hayabusaa0.isas.jaxa.jp/symposium
	October 20-25, 2013 Les Houches, FRANCE	Planet Mars 4 Workshop http://www.sciops.esa.int/mars4
	October 21-24, 2013 Madrid, SPAIN	Venus Express VIRTIS and VMC Data Workshop http://www.rssd.esa.int/index.php?project=PSA&page=vex_workshop
	October 27-30, 2013 Denver, CO, USA	Geological Society of America Annual Meeting Mars exploration is revealing a wealth of information regarding the early evolution of the terrestrial planets. We encourage contributions from across the Mars Geoscience community focused on geology and geomorphology in Gale crater as discerned from analysis of data collected by the Curiosity rover and from orbiting spacecraft. http://community.geosociety.org/2013AnnualMeeting/Home/
	October 27-29, 2013 Washington, DC, USA	Workshop on Planetary Formation and Differentiation http://www.hou.usra.edu/meetings/planetesimal2013
	November 11-15, 2013 Bangkok, THAILAND	First COSPAR Symposium on "Planetary Systems of Our Sun and Other Stars, and the Future of Space Astronomy" http://www.cospar2013.gistda.or.th/
	November 18, 2013	MAVEN Launch Period Opens
	November 19-21, 2013 Washington, DC, USA	Venus Exploration Analysis Group (VEXAG) Meeting http://www.lpi.usra.edu/vexag/ http://www.cvent.com/events/vexag-meeting/event-summary-1fbaf7d9d48f47a4b25499139371edb2.aspx?i=b6024020-67fe-4a9d-9369-7745c399ccac Registration in-advance is strongly encouraged
	December 9-13, 2013 San Francisco, CA, USA	AGU Fall Meeting http://fallmeeting.agu.org/2013/





Future Conferences and Workshops

2014

New!	January 2014	Mars Express Science Working Team Meeting Contact: Olivier Witasse (owitasse@rssd.esa.int)
New!	March 1-8, 2014 Big Sky, MT, USA	IEEE Aerospace Conference http://www.aeroconf.org/
Updated	March 17-21, 2014 Woodlands, TX, USA	45th Lunar and Planetary Science Conference http://www.hou.usra.edu/meetings/lpsc2014/
	June 16-21, 2014 Noordwijk,	48th ESLAB Symposium: New Insights to Volcanism Across the Solar System http://congrexprojects.com/2014-events/48-ESLAB/
	July 6-11, 2014 Nara, JAPAN	ORIGINS 2014 http://www.origin-life.gr.jp/origins2014/index.html
New!	July 14-18, 2014 Pasadena, CA, USA	8th International Conference on Mars
	July 21-25, 2014 Lanzhou, CHINA	Eighth International Conference on Aeolian Research (ICAR VIII) Special session on extra-terrestrial Aeolian research
	August 2-10, 2014 Moscow, RUSSIA	40th COSPAR 2014 and Associated Events http://www.cospar-assembly.org/
	September 22, 2014	MAVEN Mars Orbit Insertion (MOI)
	October 19-22, 2014 Vancouver, British Columbia, CANADA	Geological Society of America Annual Meeting
	November 9-14, 2014 Tucson, AZ, USA	46th Meeting of the American Astronomical Society Division of Planetary Sciences (DPS 2014) http://dps.aas.org/meetings
	December 15-19, 2014 San Francisco, CA, USA	AGU Fall Meeting

2015

	March 2015	46th Lunar and Planetary Science Conference
	November 1-4, 2015 Baltimore, MD, USA	Geological Society of America Annual Meeting

2016		
	January 7, 2016	20-Day ExoMars Launch Period Opens
	March 8, 2016	20-Day Insight Launch Window Opens
	September 20, 2016	Insight Arrival at Mars
	October 16, 2016	ExoMars Arrival at Mars

Special holidays to consider when scheduling conferences/workshops/meetings:

Good Friday	3/29/2013	4/18/2014	4/3/2015	4/6/2016	4/14/2017
Rosh Hashanah	9/5/2013	9/25/2014	9/14/2015	9/16/2016	9/20/2017
Yom Kippur	9/14/2013	10/4/2014	9/23/2015	9/25/2016	9/29/2017
(Note that Jewish holidays start at sundown the previous evening)					
Thanksgiving Day, U.S.	11/28/2013	11/27/2014	11/26/2015	11/22/2016	11/23/2017
Thanksgiving Day, Canada	10/14/2013	10/13/2014	10/12/2015	10/8/2016	10/9/2017
Christmas Day	12/25/2013	12/25/2014	12/25/2015	12/25/2016	12/25/2017

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

Carla de la Paz at paz@jpl.nasa.gov, 818-354-3160.

All announcements listed in this newsletter will be posted on the MEPAG website, available at:

<http://mepag.jpl.nasa.gov>