

# Mars Exploration Science Monthly Newsletter

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

August 2013

## Mars Science News

### **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**

(Corrected from previous version)

We are well into the 2<sup>nd</sup> 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 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://journaldescription.cws_home/505620/authorinstructions)

Please contact the editorial office at [icarus@astro.cornell.edu](mailto:icarus@astro.cornell.edu) with any questions.

## Near-term Due Dates (next three months)

Due	Project
August 16th	<b>Hayabusa 2013: Symposium of Solar System Materials</b> Abstracts deadline
August 29th	<b>Workshop on Planetesimal Formation and Differentiation</b> Abstracts deadline
August 31st	<b>Venus Express VIRTIS and VMC Data Workshop</b> Registration deadline
September 3rd	<b>45th Meeting of the American Astronomical Society</b> Late abstract deadline
September 5th	<b>45th Meeting of the American Astronomical Society</b> Registration deadline
September 13th	<b>2nd International Congress of Astrobiology in Colombia</b> Abstract and registration deadline
September 16th	<b>Origin of the Moon - Challenges and Prospects</b> Abstract deadline
September 23rd	<b>Geological Society of America Annual Meeting</b> Registration deadline
September 26th	<b>International Scientific Workshop on Golden Spike Human Lunar Expeditions</b> Registration deadline
September 27th	<b>Lunar Exploration Analysis Group Meeting</b> Registration deadline
September 30th	<b>Fourth Moscow International Solar System Symposium</b> Registration deadline
October 14th	<b>Workshop on Planetesimal Formation and Differentiation</b> Registration Deadline

## Upcoming Conferences and Workshops in 2013

Third Quarter, 2013		
	August 5-8, 2013 Sudbury, Ontario CANADA	<b>Large Meteorite Impacts and Planetary Evolution V Conference</b> <a href="http://www.lpi.usra.edu/meetings/sudbury2013">http://www.lpi.usra.edu/meetings/sudbury2013</a>
	August 5-7, 2013 Washington, DC USA	<b>Analog Sites for Mars Missions II: Past, Present and Future Missions to Mars</b> Note online discussion already started at: <a href="http://planetsonearth.com/forums/general-discussion">http://planetsonearth.com/forums/general-discussion</a> <a href="http://planetsonearth.com">http://planetsonearth.com</a>
	August 12-16, 2013 Pasadena, CA, USA	<b>25th Annual NASA Planetary Science Summer School</b> <a href="http://pscischool.jpl.nasa.gov">http://pscischool.jpl.nasa.gov</a>
	August 14-16, 2013 Flagstaff, AZ, USA	<b>4th Planetary Crater Consortium Meeting</b> For more information, contact <a href="mailto:Nadine.Barlow@nau.edu">Nadine.Barlow@nau.edu</a> <a href="http://www.planetarycraterconsortium.nau.edu">http://www.planetarycraterconsortium.nau.edu</a>
	August 15-18, 2013 Boulder, CO, USA	<b>2013 International Mars Society Convention</b> Convened by the Mars Society space advocacy group. Hear from dozens of key scientists, experts and policymakers about Mars exploration, including updates on NASA's Curiosity rover and MAVEN spacecraft scheduled for launch this November, as well as planning for humans-to-Mars missions. <a href="http://www.marssociety.org">http://www.marssociety.org</a>
	August 16-25, 2013 Kuressaare, ESTONIA	<b>Summer Course: "Impacts and their Role in the Evolution of Life"</b> <a href="http://www.nordicastrobiology.net/Impacts2013/">http://www.nordicastrobiology.net/Impacts2013/</a>
	August 25-30, 2013 Florence, ITALY	<b>2013 Goldschmidt Conference</b> Session 026: "Martian Evolution: Ancient Messengers and Modern Measurements" <a href="http://goldschmidt.info/2013/index">http://goldschmidt.info/2013/index</a>

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### Third Quarter, 2013



	August 27-31, 2013 Paris, FRANCE	<b>IAG/AIG International Conference on Geomorphology</b> <a href="http://www.geomorphology-iag-paris2013.com/en">http://www.geomorphology-iag-paris2013.com/en</a>
	September 8-13, 2013 London, UK	<b>European Planetary Science Conference (EPSC 2013)</b> <a href="http://www.epsc2013.eu">http://www.epsc2013.eu</a>
	September 23-24, 2013 London, UK	<b>Origin of the Moon</b> <a href="http://royalsociety.org/events/2013/origin-moon/">http://royalsociety.org/events/2013/origin-moon/</a>
	September 24-28, 2013 Medellin, COLOMBIA	<b>2nd International Congress of Astrobiology in Colombia</b> <a href="http://www.planetariomedellin.org/programacion/ii-congreso-internacional-de-astrobiologia/#.UZ1W1dhkk9k">http://www.planetariomedellin.org/programacion/ii-congreso-internacional-de-astrobiologia/#.UZ1W1dhkk9k</a>
	September 25-26, 2013 Chicheley, UK	<b>Origin of the Moon - Challenges and Prospects</b> <a href="http://royalsociety.org/events/2013/moon-origin-satellite/">http://royalsociety.org/events/2013/moon-origin-satellite/</a>

### Fourth Quarter, 2013

	October 3-4, 2013 Houston, TX, USA	<b>International Scientific Workshop on Golden Spike Human Lunar Expeditions</b> <a href="http://www.lpi.usra.edu/meetings/gs2013">http://www.lpi.usra.edu/meetings/gs2013</a>
	October 6-11, 2013 Denver, CO, USA	<b>45th Meeting of the American Astronomical Society Division for Planetary Sciences (DPS 2013)</b> <a href="http://aas.org/meetings/45th-meeting-division-planetary-sciences">http://aas.org/meetings/45th-meeting-division-planetary-sciences</a>
	October 14-16, 2013 Laurel, MD, USA	<b>Lunar Exploration Analysis Group Meeting</b> <a href="http://www.lpi.usra.edu/meetings/leag2013">http://www.lpi.usra.edu/meetings/leag2013</a>
	October 14-18, 2013 Moscow, RUSSIA	<b>Fourth Moscow International Solar System Symposium</b> <a href="http://ms2013.cosmos.ru">http://ms2013.cosmos.ru</a>
	October 16-18, 2013 Sagamihara, Kanagawa JAPAN	<b>Hayabusa 2013: Symposium of Solar System Materials</b> <a href="http://hayabusao.isas.jaxa.jp/symposium">http://hayabusao.isas.jaxa.jp/symposium</a>
	October 20-25, 2013 Les Houches, FRANCE	<b>Planet Mars 4 Workshop</b> <a href="http://www.sciops.esa.int/mars4">http://www.sciops.esa.int/mars4</a>
	October 21-24, 2013 Madrid, SPAIN	<b>Venus Express VIRTIS and VMC Data Workshop</b> <a href="http://www.rssd.esa.int/index.php?project=PSA&amp;page=vex_workshop">http://www.rssd.esa.int/index.php?project=PSA&amp;page=vex_workshop</a>
	October 27-30, 2013 Denver, CO, USA	<b>Geological Society of America Annual Meeting</b> 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. Abstract deadline August 6, 2013. <a href="http://community.geosociety.org/2013AnnualMeeting/Home/">http://community.geosociety.org/2013AnnualMeeting/Home/</a>
	October 27-29, 2013 Washington, DC, USA	<b>Workshop on Planetary Formation and Differentiation</b> Abstract submission due August 29, 2013, 5:00 PM (CDT) Registration deadline on October 14, 2013, 5:00 PM (CDT) <a href="http://www.hou.usra.edu/meetings/planetary2013">http://www.hou.usra.edu/meetings/planetary2013</a>
	November 11-15, 2013 Bangkok, THAILAND	<b>First COSPAR Symposium on "Planetary Systems of Our Sun and Other Stars, and the Future of Space Astronomy"</b> <a href="http://www.cospar2013.gistda.or.th/">http://www.cospar2013.gistda.or.th/</a>

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## Fourth Quarter, 2013

	November 18, 2013	<b>MAVEN Launch Period Opens</b>
	November 19-21, 2013 Washington, DC, USA	<b>Venus Exploration Analysis Group (VEXAG) Meeting</b> Contact Lori Glaze ( <a href="mailto:lori.s.glaze@nasa.gov">lori.s.glaze@nasa.gov</a> )
	December 9-13, 2013 San Francisco, CA, USA	<b>AGU Fall Meeting</b>

## Future Conferences and Workshops

### 2014





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

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## 2015

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

## 2016

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

### 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

### Editors

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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](mailto: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>