



Planetary Sciences

November 2020 Newsletter

Greetings from Your Planetary Sciences Section Leadership!

Preparations for the AGU (virtual) Fall meeting are well underway and we are all busy recording talks and making posters. A virtual meeting is certainly a different experience and there are things that won't work as well. For example, we have decided not to hold a Section reception this year, but look forward to seeing colleagues in person next year. Our Section will take part in a virtual student/early career event and our student and early career reps, Ashley and Sam, are working to organize a fun event.

I'd like to take this opportunity to thank our corporate sponsors, Ball and Lockheed Martin. Your generous and continued support is deeply appreciated.

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We will "see" you all at Fall AGU. Stay safe.

Rosaly Lopes, **President**

Michael Mischna, **President-Elect**

David Williams, **Secretary**

Sam Birch, **Early Career Representative**

Ashley Schoenfeld, **Student Representative**

Sarah Stewart, **Past President**

Upcoming Deadlines & Events

For the latest Planetary Sciences updates and events, please visit the section calendar.

Upcoming Deadlines (Delays because of COVID-19 Coronavirus National Emergency in RED)

- ROSES-2020: Solar System Workings, Step-1 proposals: Due November 13, 2020.
- ROSES-2020: Mars Data Analysis, Step-2 proposals: Due November 20, 2020.
- ROSES-2020: Planetary Instrument Concepts for the Advancement of Solar System Observations (PICASSO), Step-2 proposals: Due November 20, 2020.
- ROSES-2020: Lunar Data Analysis, Step-1 proposals: **Due December 1, 2020.**
- ROSES-2020: Planetary Science Early Career Awards proposals: **Due December 8, 2020.**

Upcoming Conferences (2020) (All October conferences made virtual because of COVID-19)

- **Nov 16-17:** VEXAG Annual Meeting [Virtual Meeting]
- **Nov 17-19:** 3rd Interstellar Probe Exploration Workshop [Virtual Meeting]
- **Dec 7-11:** Fall AGU Meeting [Virtual Meeting]

Planetary Sciences Announcements/Updates

1. Late-Breaking Session, Fall AGU Meeting 2020: Phosphine in the Venusian Atmosphere: Observations and Implications

Conveners: Alexander Thelen [NASA/GSFC], David Grinspoon [PSI], Colin Wilson [Oxford University], Sanjay Limaye [University of Wisconsin - Madison]

Session Chairs: Sushil Atreya [University of Michigan], Arielle Moullet [SOFIA/USRA]

The recent observations suggesting the possible presence of phosphine on Venus, previously considered as a potential biosignature for exoplanetary atmospheres, presents a challenge for existing models of atmospheric chemistry and possibly supports the case for an aerial ecosystem in an otherwise hyperacidic, oxidizing atmosphere. In this session, we invite presentations regarding current and past observations and interpretations of phosphine in the Venusian atmosphere; surface-

atmosphere interactions and chemistry relevant to the phosphine cycle; design considerations for upcoming spacecraft and instruments; and other work inspired by these recent events.

2. NASA Expands Planet Contract to All Researchers

NASA has expanded their subscription with Planet to provide access to Planet imagery to all researchers receiving funding from NASA for their work. Planet acquires near-daily coverage of the entire landmass of the Earth at 3–5 m through its constellation of ~150 satellites, totalling over 13 TB of imagery downlinked every day. Through the agreement with NASA, all NASA-funded researchers can access imagery from the PlanetScope constellation (subject to 30 day latency unless otherwise approved by NASA), as well as the RapidEye 6.5 m archive. Each user is granted an initial 5 million sq km quota, with exceptions made on a case-by-case basis at the discretion of NASA.

For more information on this program and instructions on how to gain access, please visit the NASA Commercial SmallSat Data Acquisition Program (CSDAP) [website](#).

For any university-based researchers interested in Planet data access but not funded by NASA, data access is available through the [Planet Education and Research Program](#). The Basic program provides free access to 5,000 sq km of PlanetScope and RapidEye imagery per month per user. For larger scale access, departmental and campus licenses are also available.

For any questions about data access through Planet's NASA or Education and Research Programs, contact Dr. Tanya Harrison at tanya.harrison@federal.planet.com.

3. Job Title: Research Scientist II, Planetary and Exoplanetary Atmospheres. Location: Pasadena, CA

The Jet Propulsion Laboratory, California Institute of Technology, invites applications for a staff Scientist position in observational studies of the atmospheres of the Gas and Ice Giant planets from ground-based and airborne facilities. It is expected that the successful candidate will develop an independently funded research program and will pursue new lines of research focusing on the dynamics and chemistry of the giant planets of the solar system.

The position requires a Ph.D. in planetary science, planetary physics, astronomy, or related scientific discipline, along with demonstrated experience in conducting observations with large ground-based or airborne telescopes, with a successful track record and strong interest in applying those efforts to problems related to planetary science. The successful candidate will have a demonstrated professional reputation as a productive researcher with a track record of publications in peer-reviewed journals.

Please visit [here](#), for a full description and to apply.

Applications received by November 23, 2020, will receive full consideration.

4. RFI for NASA Planetary Data Ecosystem Review

The NASA Planetary Science Division is conducting an independent review of the Planetary Data Ecosystem (PDE), defined as the ad hoc connected framework of activities and products that are built upon and support the data collected by planetary space missions and research programs which are primarily NASA funded. Many familiar tools and databases are part of the PDE, including (but not limited to): ADS, AstroMat, DAPs, data policies & standards, JMars, JPL Horizons, MAPSIT, NASA Github, PDS, Planetary Geologic Mapping, Planetary Photojournal, Quickmap, RPIFs, and USGS Astrogeology ISIS3. The PDE Independent Review Board will review the current state of the PDE and provide findings and prioritized, actionable recommendations that will be used to develop an optimal PDE long-term strategy.

To this end, NASA is seeking information and gathering community feedback on the PDE via a Request for Information (RFI), with responses due November 9, 2020. We encourage the planetary sciences community to provide input via this RFI. The full text of the RFI and response instructions can be found [here](#).

Responses to this RFI are due November 9, 2020.