

Findings & Recommendations



**NASA Annual Planetary
Geologic Mappers' Meeting
Knoxville TN
June 12-13, 2018**

Purpose & Summary

- Annual meeting 'required' for NASA-funded planetary geologic mappers
 - Report progress on mapping projects
 - Discuss problems or issues in our community
- This meeting's statistics
 - 19 oral science presentations + 5 technical talks
 - 11 poster presentations
 - Three community discussion sections
- SS objects' maps presented
 - Mercury, Venus, Mars, Moon, Vesta, Ceres, Europa, Triton, Charon

Guiding Principal

- The planetary geologic mapping community appreciates NASA's continuing, long-term support of the infrastructure (e.g., USGS) and the funding opportunities to maintain planetary geologic mapping as part of PSD activities
- We encourage and commit to continued communication between planetary geologic mapping discipline scientists and both the broader planetary community and NASA program managers to ensure a continued high return on NASA's investments

Recommendation

- Identify how to improve communication among various stakeholders in planetary geologic mapping

Findings

Finding 1

- The diverse community of planetary geologic map consumers will benefit from decreasing, where possible, the amount of time between NASA selection and USGS printing of planetary geologic maps
 - One area that the planetary geologic mapping community and USGS recognize a potential time savings is in Technical Review, as long as any time savings can be made without sacrificing the quality and objectivity of the final product

Recommendation

- The USGS will continue to track timeframes per mapping phase per project and report on those times at the annual PGM Meeting, starting in 2019. With this information, the community will annually consider how to best mitigate delays in the mapping process
- The community requests that USGS:
 - Conduct a mock Technical Review at the PGM Meeting 2019 as a means to educate – in an open, discussion-based forum – both authors and map reviewers about the requirements of Technical Review
 - Assess the logistical manner by which a single Technical Review for planetary geologic maps might be compiled by an “on-site” panel, and report such assessments to the community at the PGM Meeting 2019
 - Assess the logistical manner by which a single Technical Review for planetary geologic maps is created by having the USGS collate multiple “off-site” reviews, and report such assessments to the community at the PGM Meeting 2019
- The USGS requests that all map authors and reviewers become familiar with and adhere to existing procedures, requirements, and timelines regarding the accurate submission of Map Packages and Technical Reviews

Findings

Finding 2

- The PGM community is concerned that an appropriate level of expertise and institutional knowledge is not being sufficiently maintained, which has the potential to severely undercut the creation and use of planetary geologic maps as framework data products in the short- and long-term

Recommendations

- An ad-hoc committee has been formed to study goals, requirements, and logistics of a periodic, summer Planetary Geologic Mapping Workshop (modeled after the Hawaii Planetary Volcanology Summer Workshop), and the information required to propose such a Workshop to NASA. Members: B. Garry, D.A. Williams, D. Buczkowski, S. Robbins. Committee will report to community at 2019 PGMM
- We develop an “Educator’s Exchange” to share materials and exercises to teach planetary geologic mapping to students. Recommend we begin with specific PGM educator abstracts & session at next PGMM
 - All community educators that have instructional material will bring this to PGM Meeting 2019 and do a knowledge inventory and assessment. We will figure out storage at PGM 2019. Consider submitting abstracts under “education” and have a specific session at PGM Meeting 2019

Findings

Finding 3

- There is a clear knowledge gap regarding options for publishing GIS files/projects outside of USGS maps
 - Issue 1: What are viable alternative non-USGS publication venues for planetary geologic maps?
 - Issue 2: If you have peer-reviewed, non-USGS geologic map GIS files, where can those be hosted for public access?
 - Issue 3: Do we need more than one USGS publication venue?

Recommendation

- Mapping Community will investigate alternative publication venues for non-USGS planetary map GIS files. Need to form a committee or working group
 - Possibilities to be studied include: Shapefiles as SOM in peer-reviewed journals, JPL Planet-Treks, RPIF nodes as alternative storage places, etc.

Other Issues

- Reminder: On all flyers and websites, state that PGMM is open to all planetary mappers, regardless of map type or funding
- Next Meeting: Week of June 10-14, 2019 in Flagstaff (Host: USGS)
- Next meeting recommended to include: 2-day meeting & 3rd day: half-day Arc-Pro review (M. Hunter), and/or half-day mock Map Technical Review panel